

4.1 AESTHETICS AND VISUAL RESOURCES

This section evaluates the aesthetics and visual resources impacts of the proposed Plan.

4.1.1 EXISTING CONDITIONS

The following discussion provides information on the character of the existing visual landscape, including the visual character of the region, scenic vistas and visual resources such as natural landforms, scenic highways, light, glare, and dark skies.

REGIONAL CHARACTER

The San Diego region is a visually diverse landscape rich in natural open space, topographic resources, scenic highways, scenic vistas, and other distinct aesthetic resources. Its adjacency to the Pacific Ocean also contributes to the natural setting of the San Diego region. The topography contributes greatly to the overall character and quality of the existing visual setting. In general terms, the San Diego region is characterized by four physiographic areas: the low-lying coastal plain, foothills, mountains, and lowlands of the desert. The visual character of each is described briefly below. The coastal plain ranges in elevation from sea level to approximately 600 feet above mean sea level (AMSL) and includes beaches; bays; shoreline; coastal canyons; and the many rivers, streams, and other watercourses that drain inland areas, eventually reaching the coastal environment and waters. The coastal plain provides expansive views of scenic resources in all directions, with the coastline visible from regional transportation facilities including the Los Angeles–San Diego–San Luis Obispo (LOSSAN) rail corridor and Interstate (I-) 5. Much of the coastal plain is developed with urban land uses and generally includes a dense development pattern consisting of a mix of single- and multifamily development on varying-sized lots with supporting commercial uses, including office space and neighborhood-serving or regional retail establishments, along major corridors. The circulation systems within these coastal communities are essentially based around a grid system with more curvilinear street patterns occurring along the hillsides. Agricultural uses within the coastal area include row crops, field flowers, and greenhouses.

The foothills of the San Diego region range in elevation from 600 to 2,000 feet AMSL and are characterized by rolling to hilly uplands that contain frequent narrow, winding valleys. This area is traversed by several rivers, as well as a number of intermittent drainages. Several side canyons have incised the coastal plain and created major drainages that generally flow westward toward the coast. Major rivers within the San Diego region include the Santa Margarita, San Luis Rey, San Dieguito, San Diego, Sweetwater, Otay, and Tijuana Rivers. Major coastal waterbodies include Buena Vista Lagoon, Agua Hedionda Lagoon, Batiquitos Lagoon, San Elijo Lagoon, San Dieguito Lagoon, Los Peñasquitos Lagoon, Mission Bay, San Diego Bay, Tijuana River Estuary, and the Pacific Ocean. Playas/inundation areas/washes include areas surrounding Lake Henshaw, Lake Cuyamaca, Moreno Reservoir, and Lake Hodges. The foothills are also developed with various suburban to semi-rural development land uses. Most contain a mix of single-family and low-scale multifamily suburban style development as well as some commercial and employment uses intended to support the residential uses. Agriculture consists of citrus and avocado orchards as well as row crops.

The mountain region features steep-sided mountains that are typically covered with granitic boulders. Lower slopes feature chaparral vegetation. Higher elevations are host to oak woodlands and coniferous forest. Elevations range from 2,000 to 6,000 feet AMSL. The mountain areas are generally undeveloped with low density, rural communities scattered throughout such as Alpine, Pine Valley, Campo, Ramona, and Julian.

The eastern portion of the San Diego region is within the desert zone. Elevations range from sea level to 3,000 feet AMSL and the terrain includes mountains, alluvial fans, and desert floor. The majority of this region is part of the Anza-Borrego Desert State Park. The desert region is generally undeveloped and sparsely populated in scattered towns such as the unincorporated community of Borrego Springs. The desert region provides expansive views of the surrounding area, which is characterized by dramatic landforms and native desert habitats.

PANORAMIC VIEWS

The varied topography and wide range of visual features found throughout the San Diego region provide for many areas containing panoramic views. Viewsheds include views of mountains, beaches, the Pacific Ocean, bays, lagoons, canyons, and valleys, as well as human-made features such as city skylines, rural communities, parks, and golf courses.

SIGNIFICANT LANDSCAPE FEATURES

The coastal plain, foothills, mountains, and desert regions each contain numerous scenic resources and significant landscape features that contribute to the San Diego region's overall scenic quality. Major scenic resources within the coastal areas include views of the Pacific Ocean, beaches, bays, lagoons, and harbors. Notable features include San Diego Bay, Mission Bay Park, Los Peñasquitos Lagoon, Batiquitos Lagoon, Agua Hedionda Lagoon, Buena Vista Lagoon, San Elijo Lagoon, and Oceanside Harbor. Coastal parks, including Border Field State Park, the Tijuana estuary, Silver Strand State Beach, and Torrey Pines State Reserve and Beach, and prominent land and water features, such as Cabrillo National Monument on Point Loma, Sunset Cliffs, La Jolla Cove, Soledad Mountain, and the offshore Coronado Islands, are also visual resources along the coast.

Within the foothills, the prominent visual resources include rivers, lakes, open bodies of water, and parks such as the Otay River, Sweetwater River, San Diego River, Upper and Lower Otay Lakes, Sweetwater Reservoir, Lake Hodges, San Vicente Reservoir, Mission Trails Regional Park, Santee Lakes Regional Park, Tecolote Canyon, Los Peñasquitos Canyon Preserve, Old Town State Historic Park, and Presidio Park. Within the mountain region, scenic resources include large park areas such as the Cleveland National Forest, Agua Tibia Wilderness Area, San Mateo Canyon Wilderness, Santa Rosa Mountains State Wilderness, Palomar Mountain State Park, and Cuyamaca Rancho State Park, as well as large water bodies such as El Capitan Reservoir, Barrett Lake, Lake Morena, and Lake Cuyamaca.

The desert region is primarily located within Anza-Borrego Desert State Park, which is the largest of the California State Parks. The desert region includes expansive scenic views, dramatic landforms, desert valleys, and native desert habitat. The wide range of visual features in the desert region helps to define communities, provides visual relief from urban development, and offers recreational opportunities.

In addition to the visual resources described above, there are numerous golf courses, city and community parks, and large primarily undeveloped landholdings that contribute to the scenic quality of the San Diego region.

OPEN SPACE AND PROTECTED AREAS

A significant part of the San Diego region's visual character can be attributed to the large amount of open space and protected areas (see Figure 4.15-1 in Section 4.15, *Public Services and Utilities*). Approximately 45 percent of the lands in the San Diego region have been conserved as open space or parks (San Diego Foundation 2010). These lands include state and regional parks, habitat conservation areas, resource conservation areas,

U.S. Forest Service lands, and rural open space. The San Diego region also contains large areas of undeveloped military land at Marine Core Base Camp Pendleton and Marine Corps Air Station Miramar, which are not accessible to the general public but do contribute to the overall undeveloped nature of those portions of the San Diego region. The western third of the San Diego region contains the bulk of the region's population and urban areas, although open spaces are interspersed within this area as well.

STATE SCENIC HIGHWAYS

The San Diego region includes several officially designated scenic highways protected by the California Scenic Highway Program, administered by the California Department of Transportation (Caltrans). Designated scenic highways are located in areas of outstanding natural beauty and are provided with special conservation treatment to keep the natural views protected. The San Diego region also contains several highways identified by the program as eligible scenic highways, meaning that the highway is considered a scenic resource, but the local jurisdiction has not adopted a scenic corridor protection program or applied to Caltrans for official designation. The highways in the San Diego region officially designated or identified as eligible scenic highways by Caltrans are listed in Table 4.1-1 and shown in Figure 4.1-1.

**Table 4.1-1
Caltrans Designated or Eligible Scenic Highways in the San Diego Region**

Officially Designated	
SR 52	From near Santo Road to near Mast Boulevard
SR 75	San Diego-Coronado Bay Bridge and the Silver Strand extending from Avenida del Sol in Coronado south to the Imperial Beach city limit
SR 78	From the west to the east boundary of Anza Borrego State Park
SR 163	From the north to the south boundary of Balboa Park
SR 125	From I-8 south to SR 94
Eligible for Scenic Designation	
I-5	From the international border near Tijuana to SR 75 (Palm Avenue) at the south end of San Diego Bay and from San Diego opposite Coronado to SR 74 near San Juan Capistrano (Orange County)
I-8	From Sunset Cliffs Boulevard to SR 98 near Coyote Wells (Imperial County).
I-15	From SR 76 near San Luis Rey to SR 91 near Corona (Riverside County).
SR 52	From I-5 east of La Jolla to SR 67 near Santee
SR 75	From I-5 in Palm City/Nestor to 9th Street in Imperial Beach
SR 76	From I-5 near Oceanside to SR 79 near Lake Henshaw
SR 78	From SR 79 near Santa Ysabel to SR 86 passing Julian
SR 79	From I-8 near Descanso to SR 78 near Julian and from SR 78 near Santa Ysabel to SR 371 near Aguanga (Riverside County)
SR 94	From SR 125 near Spring Valley to I-8 west of Jacumba
SR 163	From Ash Street to I-8
SR 209	From Point Loma to I-5

Source: Caltrans 2018a.

SR = State Route; I- = Interstate.

OTHER SCENIC ROUTES

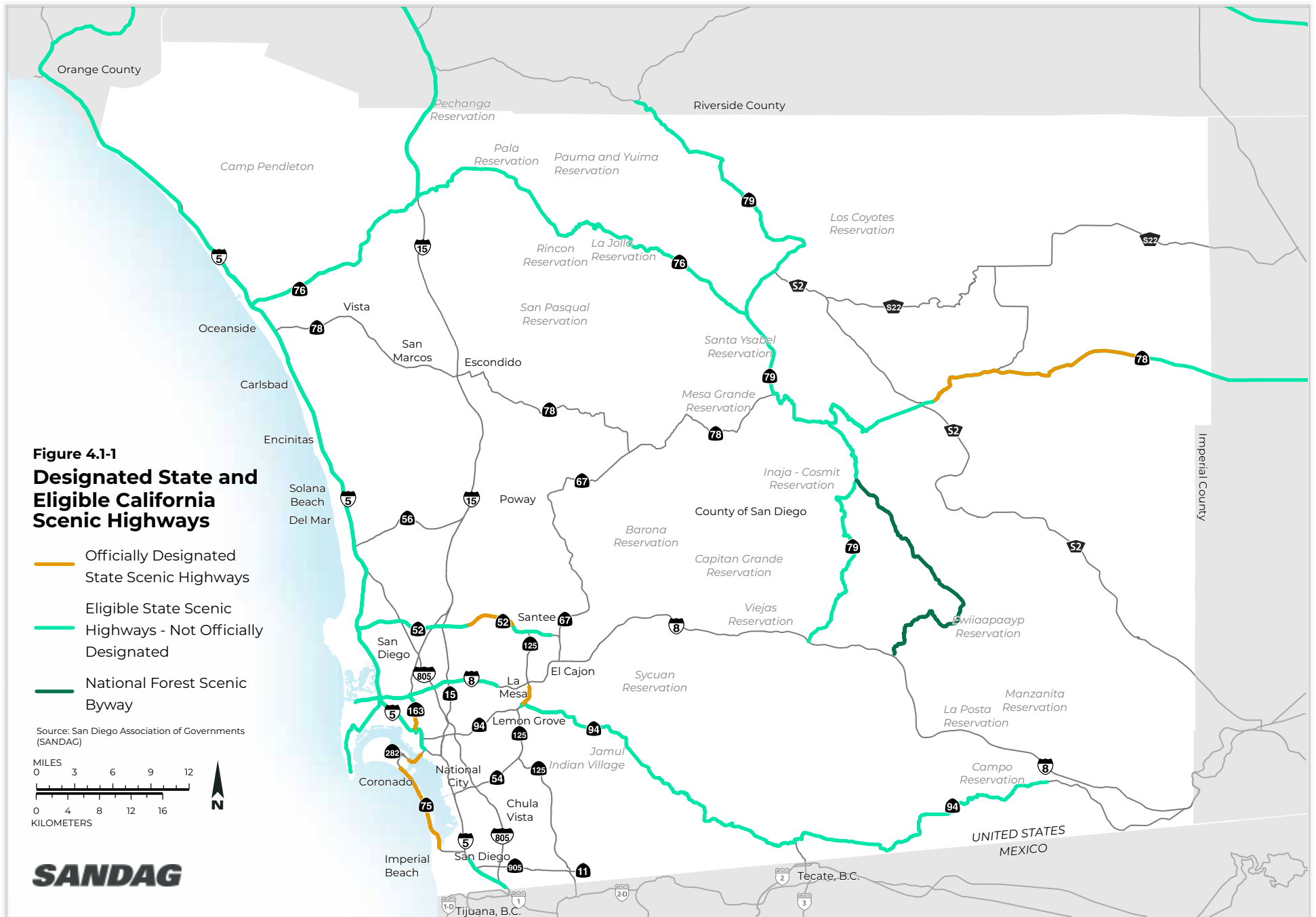
In addition to the state scenic highways, the County of San Diego General Plan Conservation and Open Space Element (County of San Diego 2011) identifies other scenic roadways and highways worthy of protection in the unincorporated County. A list of these highway segments is found in Table 4.1-2.

**Table 4.1-2
County Scenic Highway System**

Route	Segment
SR 78	Wynola Road east to Imperial County line (excluding portion in Anza-Borrego Desert State Park)
SR 125	SR 94 to I-8
I-5	Oceanside city limits north to Orange County line
I-8	El Cajon city limits to SR 79
I-15	Escondido City limits north to Riverside County line
SR 67	Santee city limits to SR 78 (excluding portion in City of Poway)
SR 76	Oceanside city limits east to I-15
SR 76	I-15 east to SR 79
Bear Valley Parkway and SR 78	Escondido city limits southwest to Via Rancho Parkway
SR 78	Via Rancho Parkway to SR 79, except portions within the City of San Diego
SR 79	Riverside County line to SR 76
SR 94	SR 125 to I-8
SR 188 (Tecate Road)	U.S./Mexico border north to SR 94
Sunrise Highway (S1)	Old Highway 80 to SR 79 through the Cleveland National Forest
Old Overland Stage Route (S-2)	Imperial County line north to SR 78
Lilac Road and Valley Center Road (S6)	SR 76 to SR 76
San Felipe Road, Montezuma Valley Road, Pal Canyon Road, Peg Leg Road, and Borrego Salton Seaway (S-22)	SR 79 east to Imperial County line
Avocado Boulevard	SR 94 to El Cajon city limits
Bonita, San Miguel, Guajolote, and Sweetwater River Road	I 805 North to SR 94 (excluding portion within City of Chula Vista)
Buckman Springs Road	Lake Morena Drive to SR 94
Camino del Rey west to Lilac Road	Oceanside city limits east to Vista Way
Dehesa Road	El Cajon city limits to Tavern Road
Elfin Forest Road/Harmony Grove Road	San Marcos city limits to Escondido city limits
El Monte Road	El Capitan Reservoir to Lake Jennings Park Road
Fuerte Drive	I-8 to Chase Avenue
Gird, Reche, Live Oak Park, and Mission Roads	SR 76 north and east to I-15
Harbison Canyon Road	Arnold Way to Dehesa Road

Route	Segment
Highland Valley Road	San Diego city limits to SR 67
Honey Springs Road	SR 94 north to Lyons Valley Road
Japatul Road	Lyons Valley Road to I-8
La Cresta Road	Greenfield Drive to La Cresta Boulevard
Lake Wohlford Road	Valley Center Road east (Escondido city limits) to Valley Center Road (excluding portion within the City of Escondido)
Lake Morena Drive	Buckman Springs Road north to Morena Lake
Lyons Valley Road	SR 94 to Cleveland National Forest
Mission and Green Canyon Roads	SR 76 north and east to Reche Road
Mountain View Road/Francis Drive	Boulevard to Harbison Canyon Road
Oak Drive	Lake Morena Drive north to Buckman Springs Road
Old Highway 80	SR 79 (Pine Valley) to I-8 (Jacumba)
Olive Hill Road	SR 76 to planning area boundary
Otay Lakes Road	Chula Vista city limits to SR 94
Potrero Valley Road	SR 94 to Potrero County Park
San Vicente and Ramona Oaks Road	SR 78 to Cleveland National Forest

County of San Diego 2011.



Sunrise Highway is a U.S. Forest Service Scenic Highway designated under the National Scenic Byway (NSB) Program. Sunrise Highway is located between the Cuyamaca Reservoir and Laguna Junction and provides views of mountain meadows, forests, and the Anza-Borrego Desert. It is the only nationally designated roadway in the San Diego region.

The City of San Diego also maintains scenic routes throughout the city to afford scenic views of the community as well as to link points of visitor interest. Some of the other local jurisdictions within the San Diego region have adopted scenic highway general plan elements or programs.

LIGHT AND GLARE

There are two typical types of light intrusion. First, light emanates from the interior of structures and passes out through windows. Second, light produced from exterior sources, such as street, security, and landscape lighting. *Light spillover* is typically defined as the presence of unwanted or misdirected light on properties adjacent to the property being illuminated. Light spillover can be a nuisance to adjacent areas and can diminish views of the clear night sky. Lighting effects often occur when new nighttime sources of lighting are introduced into an area (County of San Diego 2009).

Glare is described as the distraction, discomfort, or impairment of vision caused by extreme contrasts in the field of vision, where light sources such as sunlight, lamps, luminaries, or reflecting surfaces are excessively bright in relation to the general brightness of surroundings. Glare also results from sunlight reflecting off flat building surfaces, with glass typically contributing the highest degree of reflectivity.

The existing light and glare conditions in the San Diego region vary depending on the area. The more urbanized areas tend to produce high levels of nighttime light; daytime glare from reflective materials such as glass building façades and wide stretches of asphalt roads; and shadows on adjacent outdoor land uses from tall buildings and structures. Suburban areas tend to produce high levels of nighttime light and daytime glare but lower levels of shadows on shade-sensitive uses due to lower building heights. Rural areas tend to produce low levels of nighttime light; low to moderate levels of daytime glare, as agricultural structures and paved roads produce some glare; and very low levels of shadows from taller structures due to the distance between structures (County of San Diego 2011).

DARK SKIES

Dark skies are a natural resource in San Diego County and are essential to the study of the celestial bodies. Rural areas of the San Diego region contain dark skies with little light pollution from urban areas, making it an ideal location for astronomical research. Two world-class observatories, Palomar Observatory and Mount Laguna Observatory, are located in the San Diego region and are considered two of the best such facilities in the United States. The type of research conducted at these facilities has contributed to a greater understanding of our solar system; supported advances in space travel; improved telecommunication systems, defense and surveillance systems, and advanced weather forecasting and atmospheric physics; and provided insight to energy production. In addition, dark skies are an important aspect of the character of rural areas in the San Diego region (County of San Diego 2011).

ANTICIPATED EFFECTS FROM CLIMATE CHANGE

Climate change may threaten aesthetics and visual resources due to sea-level rise altering coastline views, and may have impacts on vegetation, such as negative effects of higher temperatures and higher incidence of

wildfire. The San Diego region is likely to experience sea level rise of up to 1.2 feet by 2050 and up to 4.6 feet by 2100, more intense heat waves, and annual average temperatures increases of up to 4.8°F by 2050, more intense precipitation events that could lead to flooding, and a longer and less predictable fire season. More details on future climate projections are available in Appendix C.

There are limited studies on the effects of climate change on aesthetics, so it is difficult to draw firm conclusions about how climate change will affect aesthetics and visual resources in the San Diego region. Sea-level rise could affect coastline appearance through enhanced coastal erosion and coastal flooding. However, it is not possible to draw specific conclusions on this effect or determine whether this aesthetic impact would be positive or negative. In addition, many local communities in California, including several in the San Diego region, are exploring options for protecting coastlines in response to sea-level rise. In general, adaptation options range from beach nourishment, to establishing natural barriers, to building seawalls or other barriers, to managed retreat from the coastline. Each of these options involves significant investment, negotiation, or consideration of impacts on residents and the natural environment. Seawalls and other engineered adaptation measures could alter coastline views.

Climate change could damage scenic natural resources such as trees and vegetation, including those within state scenic highways. The SANDAG region's natural scenic resources attract tourism and contribute to the health and well-being of residents and visitors.

4.1.2 REGULATORY SETTING

FEDERAL LAWS, REGULATIONS, PLANS, AND POLICIES

National Scenic Byway Program

The NSB Program was established by the Federal Highway Administration within the adoption of the Intermodal Surface Transportation Efficiency Act of 1991 (23 USC 162). The NSB Program is a grassroots collaborative intended to recognize, preserve, and enhance selected roads throughout the United States. This voluntary program establishes All-American Roads based on their archaeological, cultural, historic, natural, recreational, and scenic qualities. There are 150 designated roads, including the Sunrise Highway, located in 46 states.

U.S. Department of Transportation Act, Section 4(f)

The U.S. Department of Transportation Act, Section 4(f) established the requirement for consideration of impacts on park and recreational lands, wildlife and waterfowl refuges, and historic sites in transportation project development. Section 4(f) properties include publicly owned public parks, recreation areas, and wildlife or waterfowl refuges, or any publicly or privately owned historic sites listed or eligible for listing in the National Register of Historic Places. The Section 4(f) evaluation is required to discuss a project's impact on the Section 4(f) property, including visual intrusions. (49 USC 303) Under Section 4(f), the Federal Highway Administration and other Department of Transportation agencies cannot approve the "use" of land from Section 4(f) properties unless there is no feasible and prudent avoidance alternative to the use of land, and the action includes all possible planning to minimize harm to the property resulting from such use; or unless the agency determines that the use of the property will have a de minimis impact.

STATE LAWS, REGULATIONS, PLANS, AND POLICIES

California Energy Code

The California Energy Code (California Code of Regulations, Title 24, Part 6) creates standards to reduce energy consumption. The type of luminaries and the allowable wattage of certain outdoor lighting applications are regulated which can have an effect on the amount of light and glare related to lighting in new development.

Scenic Highway Program

Recognizing the growing need to protect the state's scenic beauty, the California State legislature established the Scenic Highway Program in 1963. This program was added to the California Streets and Highways Code (Sections 260 et seq.) with the intent to protect and enhance California's beauty, amenity, and quality of life. The program is administered by Caltrans and consists of laws, incentives, and guidelines that are intended to protect the scenic, historic, and recreational resources within designated scenic highway corridors. A scenic highway corridor is defined by Caltrans as the area of land generally adjacent to and visible from the highway (Caltrans 2008). It is usually limited by topography and/or jurisdictional boundaries.

A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. When a city or county nominates an eligible scenic highway for official designation, it must identify and define the scenic corridor of the highway. Because a scenic corridor is the land generally adjacent to and visible from the highway, it is identified using a motorist's line of vision. A reasonable boundary is selected when the view extends to the distant horizon.

The corridor protection program does not preclude development but seeks to encourage quality development that does not degrade the scenic value of the corridor. Jurisdictional boundaries of the nominating agency are also considered. The agency must also adopt ordinances to preserve the scenic quality of the corridor or document such regulations that already exist in various portions of local codes. These ordinances constitute the scenic corridor protection program.

State goals for scenic highways include the following (Caltrans 2008):

1. Preserve and enhance the unique visual, biological, and ecological resources of the Scenic Highway Corridor.
2. Prevent and eliminate (when reasonably possible) conditions that detract from or compromise the quality of the aesthetic resources of the Scenic Highway Corridor.
3. Encourage the development and maintenance of park and recreational facilities that contribute to the aesthetic quality of the Scenic Highway Corridor.
4. Encourage preservation of historical landmarks adjacent to the Scenic Highway Corridor.
5. Encourage community civic groups to create programs that increase community interest in the visual assets of the Scenic Highway Corridor and facilitate the implementation of such programs.

California Coastal Act

Under the California Coastal Act of 1976 (Public Resources Code Sections 30000 et seq.), scenic and visual qualities of coastal areas are considered and protected as a visual resource. One of the primary objectives of

the Coastal Act is the protection of scenic and visual resources, particularly as viewed from public places. Section 30251 requires that development be sited and designed to protect views to and along the ocean and other scenic coastal areas. New development must minimize the alteration of natural landforms. This policy also requires that development is sited and designed to be visually compatible with the character of surrounding areas. Where feasible, development must include measures to restore and enhance visual quality in visually degraded areas.

LOCAL LAWS, REGULATIONS, PLANS, AND POLICIES

County Scenic Highway System

The San Diego County General Plan Conservation and Open Space Element identifies scenic roadways in the unincorporated areas worthy of additional protection status but not covered by the State Scenic Highway Program. A highway may be designated as “scenic” depending upon how much of the natural landscape can be seen by travelers, the aesthetic quality of the landscape, and the extent to which development intrudes upon the traveler’s enjoyment of the view. (County of San Diego 2011)

Dark Sky Ordinance

Sections 59.101 through 59.115 of the San Diego County Code, known as the Light Pollution Code or Dark Sky Ordinance, were adopted “to minimize light pollution for the enjoyment and use of property and the night environment by the citizens of San Diego County and to protect the Palomar and Mount Laguna observatories from the impacts related to light pollution that have a detrimental effect on astronomical research by restricting the permitted use of outdoor light fixtures on private property” (Section 59.101). The Ordinance also includes the minimization of light pollution to reduce impacts on wildlife. The Ordinance regulates types of outdoor light fixtures and hours of outdoor lighting. Under the Ordinance, all areas within 15 miles of either observatory are designated as Zone A, and all other areas within the San Diego region are designated as Zone B. Areas within Zone A are subject to more stringent outdoor lighting restrictions. These restrictions would apply to any new outdoor lighting fixtures, including those associated with both land development and transportation improvements.

Local Design Review Programs

Local jurisdictions typically have design review programs in place, which include guidelines to maintain and enhance the character and identity of local communities. Approved design guidelines address issues such as architectural character, view corridor protection, landscaping, parking design, signage, and lighting and glare.

Local Visual Plans and Regulations

Table 4.1-3 details the visual plans and regulations in the San Diego region. Many local jurisdictions in the San Diego region have included policies in their general plans to protect and enhance designated scenic highway corridors. For example, the County’s Scenic Highway Program is included within the Conservation and Open Space Element of the County’s General Plan. The goals of the County’s program are implemented via zoning, building, and grading ordinances. The Scenic Preservation Overlay Zone regulates area, height, and design of signs; requires site plan approval by the Director of Planning; and regulates grading within the overlay zone. The Scenic Area Regulations contained in the County Zoning Ordinance (Part 5, Section 5200) are intended to ensure exclusion of incompatible uses and structures, and to preserve and enhance the scenic resources present in adjacent areas. Another example is the City of Coronado, which also has a Scenic Highway Element

in its General Plan and provides implementing measures via the Sign Ordinance and the Scenic Highway Overlay Zone, and has established the Scenic Highway 75 Beautification and Restoration Project.

**Table 4.1-3
Visual Resource Protection Plans and Regulations Governing Scenic Quality in the San Diego Region by
Local Jurisdiction**

Jurisdiction	Visual Plan or Regulation	Local Scenic Resources
Carlsbad	Scenic Preservation Overlay Zone from the Municipal Code designates areas to preserve or enhance outstanding views, flora, and geology, or other unique natural attributes, and historical and cultural resources of Carlsbad. Currently, the overlay zone is applied to the El Camino Real corridor (City of Carlsbad Municipal Code [MC], Chapter 21.40).	The following resources were identified in the Carlsbad Draft Local Coastal Program (City of Carlsbad 2019): <ul style="list-style-type: none"> • Coastal corridor/El Camino Real • Buena Vista Lagoon • Agua Hedionda • Batiquitos Lagoon • Agricultural fields (Flower Field/ Strawberry Field)
Chula Vista	Scenic Resources and Open Space Network in the General Plan designates Scenic Roadways and open space, including resources that make up most of the Chula Vista Greenbelt (City of Chula Vista MC, Chapter 17).	The following resources were identified in the Chula Vista General Plan (City of Chula Vista 2005): <ul style="list-style-type: none"> • Otay River • Sweetwater River • Upper + Lower Otay Lakes • Sweetwater Reservoir • San Miguel Mountains • San Diego Bay • Rice Canyon • Long Canyon
Coronado	Scenic Highway Overlay Zone from the Municipal Code is designed to eliminate unsightly conditions, to protect views from scenic highways, and to retain unusual and attractive natural and human-made features within the scenic corridor (City of Coronado MC, Chapter 86.44).	The following resources were identified in the City of Coronado Local Coastal Program Plan (City of Coronado 2005) and Scenic Resources Element (City of Coronado 1999): <ul style="list-style-type: none"> • Coronado Bay Bridge • Silver Strand • San Diego Bay • Pacific Ocean • Coastal beaches
Del Mar	Trees, Scenic Views, and Sunlight protection measures recognize that trees, scenic views, and plentiful sunlight contribute to the special character of Del Mar and to the overall quality of life enjoyed by residents, property owners, and visitors. Provides a process by which persons may seek to restore said resources (City of Del Mar MC, Chapter 2330.512 2330.512). <u>Bluff, Slope, and Canyon Overlay Zone is designed to protect the health, safety, and</u>	The following resources were identified in the City of Del Mar Community Plan (1999); and Local Coastal Program (1993) <u>and Implementing Ordinances (2001)</u> : <ul style="list-style-type: none"> • Coastal beaches • Pacific Ocean • San Dieguito River/Floodplain • Crest Canyon • Peñasquitos Creek

Jurisdiction	Visual Plan or Regulation	Local Scenic Resources
	<u>general welfare, and to control the development of properties within the designated zone to preserve the scenic sandstone bluffs and related canyons and steep slopes which characterize the area within the zone. The unique landforms within the zone provide visual relief and diversity within the City, and they define and separate neighborhoods, enhance the overall quality of Del Mar's local coastal environment, and preserve the economic integrity of Del Mar's visitor-oriented community (City of Del Mar MC, Chapter 30.52).</u>	<ul style="list-style-type: none"> • Sandstone Bluffs • Beach Bluffs • <u>Canyons and Steep Slopes</u>
El Cajon	Hillside Overlay Zone from the Municipal Code is designed to minimize the disturbance of the natural terrain and thereby conserve the aesthetic qualities afforded by those areas (City of El Cajon Zoning Ordinance, Chapter 17.170).	The following resources were identified in the City of El Cajon General Plan (2001): <ul style="list-style-type: none"> • Valley floors • Hillsides
Encinitas	Scenic/Visual Corridor Overlay designation identifies those areas of Encinitas where significant aesthetic and visual resources need to be considered before new development proceeds to ensure that significant viewsheds are retained (City of Encinitas MC, Section 30.34).	The following resources were identified in the City of Encinitas General Plan, Resource Management Element (2001): <ul style="list-style-type: none"> • San Elijo Lagoon • Pacific Ocean • Cardiff Beach/Coastal beaches • Coast Highway 101 • Manchester Avenue
Escondido	Viewshed Protection is designed to preserve and protect existing internal and external view corridors in Escondido, with particular emphasis on ridgelines, unique landforms, and visual gateways and edges of the community (City of Escondido MC, Section 33-1067).	<ul style="list-style-type: none"> • The following resources were identified in the City of Escondido General Plan (2012): • Lake Wohlford • San Dieguito River • Elfin Forest Recreation Park • Bear Ridge
Imperial Beach	Open Space Zone in the Municipal Code provides for land set aside for the protection of sensitive and fragile natural resources and is intended to limit and control access and intensity of uses in these areas, specifically relating to the Tijuana River Valley (City of Imperial Beach MC, Chapter 19.29).	The following resources were identified in the City of Imperial Beach General Plan (2019): <ul style="list-style-type: none"> • Tijuana River Estuary • Pacific Ocean • Ream Field • Salt Evaporation Ponds • San Diego Bay • Coastal/Beach area
La Mesa	Scenic Preservation Overlay Zone in the Municipal Code establishes regulations for the recognized scenic areas within the city, the character of which could be permanently damaged by actions involving the	The following resources were identified in the City of La Mesa General Plan Land Use and Urban Design Element (2012): <ul style="list-style-type: none"> • SR 125/SR 94/I-8 corridor

Jurisdiction	Visual Plan or Regulation	Local Scenic Resources
	development and use of land without special regulations to prevent or mitigate such damage (City of La Mesa MC Chapter 29).	<ul style="list-style-type: none"> • Hillsides • Rural neighborhoods
Lemon Grove	The Open Space Zone in the Municipal Code establishes regulations for usable open space necessary to fulfill needs for outdoor leisure and recreation, to preserve valuable natural resources, and to improve the amenity of residential living (City of Lemon Grove MC, Chapter 17.24).	<ul style="list-style-type: none"> • The following resource was identified in the Chollas Creek Feasibility Study (Groundwork San Diego 2015): • Chollas Creek
National City	Viewshed protection in the General Plan is designed to preserve scenic resources and significant viewsheds of San Diego Bay, open space, creeks, and other distinctive scenic resources (City of National City General Plan 2012).	The following resources were identified in the City of National City General Plan, Land Use Element (2011): <ul style="list-style-type: none"> • San Diego Bay • Hillsides
Oceanside	Scenic Park Overlay District of the Zoning Ordinance is implemented to conserve and protect valuable natural resources of recreational and scenic areas in and adjacent to the Guajome Regional Park and other public parks (City of Oceanside Zoning Ordinance, Article 15).	The following resources were identified in the City of Oceanside General Plan, Land Use Element (2002): <ul style="list-style-type: none"> • Pacific Ocean • Coastal /Beach area • Guajome Regional Park • San Luis Rey River • Buena Vista Lagoon
Poway	Open Space-Resource Management Zone in the Municipal Code preserves open space for the conservation of natural and cultural resources and maintains the natural character of the land (City of Poway MC, Chapter 17.24).	The following resources were identified in the City of Poway General Plan, Natural Resources Element (1991): <ul style="list-style-type: none"> • Twin Peaks • Kent Hill • Vandan Park • Tooth Rock • Goat Peak • Iron Mountain
San Diego	Coastal Overlay Zone from the Municipal Code protects and enhances the quality of public access and coastal resources (City of San Diego MC, Chapter 13). Height limits are restricted to 30 feet by the Coastal Zone. Additionally, the City's Environmentally Sensitive Regulations (ESL) of the Development Code were developed to protect, preserve and, where damaged, restore, the environmentally sensitive lands of San Diego and the viability of the species supported by those lands. These regulations are intended to assure that development, including, but not limited to coastal development in the Coastal Overlay Zone, occurs in a manner that protects the overall quality of the resources and the natural	The following resources were identified in the City of San Diego General Plan (2008): <ul style="list-style-type: none"> • Pacific Ocean, beaches • San Diego Bay • Mission Bay Park • Los Peñasquitos Lagoon • Border Field State Park • Torrey Pines State Reserve • Cabrillo National Monument • Sunset Cliffs • La Jolla Cove • Soledad Mountain • San Diego River • Lake Hodges

Jurisdiction	Visual Plan or Regulation	Local Scenic Resources
	and topographic character of the area, encourages a sensitive form of <i>development</i> , retains biodiversity and interconnected habitats, maximizes physical and visual public access to and along the shoreline (City of San Diego 2018).	<ul style="list-style-type: none"> • San Vicente Reservoir • Mission Trails Regional Park • Santee Lakes Regional Park • Tecolote Canyon • Los Peñasquitos Canyon Preserve • Old Town State Historic Park • Presidio Park
San Marcos	The City's Zoning Code has a Ridgeline Protection and Management Overlay Zone to protect natural viewsheds and unique natural resources in San Marcos, especially hillsides and ridgelines. It also has restrictions on nighttime lighting in commercial areas to limit the amount of light that spills onto adjacent properties or reflects into the sky (City of San Marcos Zoning Code, Chapter 20.260).	The following resources were identified in the City of San Marcos General Plan, Conservation and Open Space Element (2012): <ul style="list-style-type: none"> • San Marcos Mountains • Merriam Mountains • Mount Whitney • Cerro de La Posas • Double Peak • Owens Peak • Franks Peak
Santee	Park/Open Space Districts as defined in the Municipal Code promotes a balanced mix of open space uses with development throughout the city in order to provide the enhancement of visual resources, avoidance of hazards, and conservation of resources (City of Santee MC, Chapter 17.16).	The following resources were identified in the City of Santee General Plan, Conservation Element (2003): <ul style="list-style-type: none"> • Mission Trails • Santee Lakes • San Diego River Park • Goodan Ranch • Sycamore Creek • Forester Creek • Rattlesnake Creek
Solana Beach	View Assessment Ordinance in the Municipal Code preserves the existing character of established residential neighborhoods, and the desire to protect public and private views, and aesthetics (City of Solana Beach MC, Section 17.63). Scenic Area Overlay Zone regulates development in areas of high scenic value to preserve and enhance the scenic resources present within and adjacent to such areas (City of Solana Beach MC, Section 17.48). <u>Exterior Lighting Regulations (Dark Sky Overlay) controls excessive or unnecessary outdoor light emissions which produce unwanted illumination of adjacent premises within the city and prescribes standards for the maintenance of designated "dark sky" neighborhoods (City of Solana Beach MC, Section 17.60.060). Chapter 5, Section C. of the City's LCP/LUP establishes policies related to the protection of scenic and visual resources.</u>	The following resources were identified in the City of Solana Beach General Plan, Conservation and Open Space Element (2013): <ul style="list-style-type: none"> • San Elijo Lagoon • Highway 101/Pacific Coast Highway • Lomas Santa Fe • Coastal/Beach area

Jurisdiction	Visual Plan or Regulation	Local Scenic Resources
Vista	No visual resource protection plans or specific regulations have been established at this time.	N/A
County of San Diego	San Diego County's Resource Protection Ordinance protects sensitive lands and prevents their degradation and loss by requiring the Resource Protection Study for certain discretionary projects.	<p>The following resources were identified in the County of San Diego General Plan Conservation and Open Space Element (2011):</p> <ul style="list-style-type: none"> • El Capital Reservoir and El Cajon Mountain • Viejas Mountain • Sweetwater River Canyon • Loveland Reservoir • Horsethief Creek/Pine Valley Creek Region • Gaskill Peak Region • Bells Mountain • Gopher Canyon • San Marcos Mountains • Boulder Creek Basin • Descanso Valley • Guatay Mountain • Lake Cuyamaca and Meadows • Crouch Valley • Buckman Springs Meadow • Pine Valley • McGinty/Dehesa/Sequan • Harbison Canyon • North Fork of the Sweetwater River • Lancaster Mountain • Lawson Peak • Mother Grundy • Tecate Peak/Cottonwood Creek • San Miguel/Jamul Mountains • El Cajon Mountain/El Capitan Reservoir • Jesmond Dene Oaks • Valley Center Ridge • Burnt Mountain • San Marcos Mountains • Mesa Grande • Palomar Mountain/Aqua Tibia Wilderness • Volcan Mountain • Otay Mountain/Lower Otay Lake • San Luis Rey River • Mount Olympus

Jurisdiction	Visual Plan or Regulation	Local Scenic Resources
		<ul style="list-style-type: none"> • Rainbow Oak Woodland Areas • Goose Valley Ridge • SR 78 Corridor • Mussey Grade Road • Mount Woodson • Batiquitos Lagoon Region • Oak Crest Park Site • San Elijo Lagoon/San Dieguito Park Area • Sweetwater Community Planning Area • Eucalyptus Groves 1, 2, and 3. • Mother Miguel Mountain. • Valley Center Ridge. • Chaparral Ridge. Keys Creek

4.1.3 SIGNIFICANCE CRITERIA

Appendix G of the CEQA Guidelines provides criteria for determining the significance of a project’s environmental impacts in the form of Initial Study checklist questions. Unless otherwise noted, the significance criteria specifically developed for this EIR are based on the checklist questions that address the criteria in CEQA Guidelines Appendix G. In some cases, SANDAG has combined checklist questions, edited their wording, or changed their location in the document in an effort to develop significance criteria that reflect the programmatic level of analysis in this EIR, and the unique characteristics of the proposed Plan.

Checklist questions for aesthetic and visual resources impacts are provided in Section I of the State CEQA Guidelines Appendix G. Appendix G criterion I (a) is addressed in AES-1 and criterion I (b) is addressed in AES-2. For purposes of this EIR, the CEQA Guidelines Appendix G, criterion I (c) and criterion (d) have been combined as AES-3.

For the purposes of this EIR, implementation of the proposed Plan would have a significant aesthetic and visual resources impact if it would:

- AES-1** Have a substantial adverse effect on a scenic vista.
- AES-2** Substantially damage scenic resources, including but not limited to, trees, rocks, outcroppings, and historic structures within a state scenic highway.
- AES-3** Substantially degrade the existing visual character or quality of public views of the site and its surroundings, including adding a visual element of urban character to an existing rural or open space area, conflicting with regulations governing scenic quality.
- AES-4** Substantially degrade the existing visual character or quality of public views of the site and its surroundings by creating a new source of substantial light or glare that would adversely affect day or nighttime views.

4.1.4 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

AES-1 HAVE A SUBSTANTIAL ADVERSE EFFECT ON A SCENIC VISTA

ANALYSIS METHODOLOGY

The following analysis evaluates impacts of forecasted regional growth and land use change or planned transportation network improvements that would have a substantial adverse effect on a scenic vista by blocking panoramic views or impeding or detracting from public views of major landscape features or landforms, such as the coast, bays, lagoons, canyons, mesas, and natural vegetation; historic or unique structures; water resources such as reservoirs, lakes, and streams; and large open spaces including preserves and regional parks. The analysis considers the location of new growth and land use change in the region, and the role of local visual protection programs in reducing impacts from the new growth and land use change. A significant impact on scenic vistas would occur when forecasted regional growth and land use change associated with the proposed Plan is proposed in new locations or an increase in the intensity of existing development is planned that would block or otherwise substantially disrupt or detract from panoramic views or views of major landscape features or landforms as seen from public viewing areas.

The analysis of transportation network improvements focuses on the proposed Plan's new infrastructure or facilities that would result in both short-term and/or long-term impacts by impeding, blocking, or detracting from views from scenic vistas throughout the region. Those improvements and programs involving only operational changes would not substantially affect scenic vistas. The analysis generally considers the location of planned transportation network improvements, their proximity to scenic vistas, and the likelihood of the improvement—given scale and typical design characteristics—to impact views.

IMPACT ANALYSIS

2025

Regional Growth and Land Use Change

By 2025, the region is forecasted to increase by 161,338 people, 97,661 housing units, and 115,328 jobs. As shown in Figure 2-17 of Chapter 2, *Project Description*, regional land use and development changes would be evident by 2025 when compared to existing baseline conditions. The increased density can be seen when comparing the existing housing density to the 2025 housing density, as shown in Figures 2-9 and 2-10, respectively, of Section 4.14, *Population and Housing*. Approximately 79 percent of the 2025 population growth would occur within the City of San Diego (58 percent), City of Chula Vista (12 percent), and City of Escondido (9 percent). These three jurisdictions accommodate over 78 percent of new housing units, while the City of San Diego, City of National City, City of Chula Vista accommodate approximately 78 percent of new jobs in the region by 2025. New development caused by regional growth and land use change would include new housing units, services, commercial areas, industrial centers, schools, and civic uses. Concentrated growth is also expected to occur around the planned Mobility Hubs throughout the region. Some growth would be in the form of new developments or communities, such as in the City of San Diego communities of Mission Valley West and East (San Diego State University [SDSU] West and Aztec Stadium) and in eastern Chula Vista and East Otay Mesa. However, a substantial portion of new growth would occur within existing established communities such as the City of San Diego communities of the, Downtown, Midway-Pacific Highway, and University Center, the cities of Chula Vista and Escondido, and in rural communities in the unincorporated County such as North County

Metro and Otay (refer to Tables 2-2 through 2-4 in Chapter 2, which present base year and forecasted population, employment, and housing units by each jurisdiction).

Scenic vistas in the North County area that would be affected by new development include the long-range views of the coastal mountain ranges and habitat preserves; unobstructed views of the Pacific Ocean from the Pendleton-De Luz area; and views of highly scenic lagoons and waterways such as Batiquitos, Agua Hedionda, Buena Vista, San Elijo, and Los Peñasquitos Lagoons, and the San Dieguito and San Luis Rey Rivers along the I-5 corridor. Scenic vistas that would be affected in the South Bay area include the Otay River, Sweetwater River Valley, upper and lower Otay Lakes, the Sweetwater Reservoir, and San Diego Bay. In the East County, scenic resources that would be affected include large open space parks, preserves, mountain ranges, and reservoirs.

Density of new development would increase by 2025, and some currently developed areas would be infilled, such as City of San Diego communities; inland areas such as Vista, San Marcos, and Escondido; and communities in La Mesa, Santee, Lemon Grove, Spring Valley, and El Cajon. New development would be located on hillsides and along the ocean, bays, or rivers, which in some locations would impede or block panoramic views or views of major landscape features or landforms as seen from public viewing areas (coastlines, bays, lagoons, canyons, mesas, natural vegetation, and historic or unique structures; water resources such as reservoirs, lakes, and streams; and large open spaces including preserves and regional parks).

The introduction of new development in some areas would also result in short-term construction impacts related to scenic vistas, creating temporary views of earth-moving activities, denuded slopes, large construction equipment and vehicles, and staging areas. Regarding more permanent impacts, future development must comply with adopted policies that regulate the design of new buildings and protect the existing visual quality of the local jurisdiction. For example, as listed in Table 4.1-3, local jurisdictions have adopted visual regulations that require all development to adhere to standards that address bulk, mass, articulation, height, and transition issues (such as the interface with surrounding or adjacent development and uses), and minimize negative impacts on the community. Visual policies also ensure exclusion of incompatible uses and structures, and preserve and enhance the scenic resources present in adjacent areas. In addition, all development or redevelopment projects would undergo further environmental and design review on a project-by-project basis to ensure that substantial adverse effects on scenic vistas are identified and avoided or reduced to the extent feasible. Development in the Coastal Zone would need to adhere to the California Coastal Act and local coastal plans, while typical measures in local plans require development to be sited and designed to protect views to and along the ocean and other scenic coastal areas.

These measures would reduce adverse effects on scenic vistas. However, even with implementation of such measures, it cannot be guaranteed that substantial adverse effects on scenic vistas would be avoided or reduced for all projects. Some new development would obstruct, interrupt, or detract from a scenic vista. Therefore, regional growth and land use change would cause a significant impact.

Transportation Network Improvements and Programs

Planned transportation network improvements by 2025 include the 5 Big Moves as described in Chapter 2, *Project Description*. These improvements include the development of Complete Corridors, Transit Leap, Mobility Hubs, Flexible Fleets and Next Operating Systems. Complete corridor improvements incorporate roadway, highway, active transportation, transit, and technology enhancements throughout the San Diego region. The major corridors include the following: South Bay to Sorrento, Central Mobility Hub, SR 125, I-15, I-5 North Coast Corridor, SR 94, I-8, Coast, Canyons, and Trails, SR 56, and San Vicente. Major corridor improvements include portions of the LOSSAN rail corridor double-tracking, continued improvement of

Managed Lanes on I-5, new toll lanes on SR 11 to the Otay Mesa Port of Entry (POE), and interchange and arterial operational improvements at SR 94 and SR 125.

Some of the improvements in the proposed Plan by 2025 would involve only operational changes that would not require construction of new transportation or transit facilities, such as increasing service frequencies or new transit routes within existing right-of-way. These changes would generally not lead to impacts on scenic vistas. However, improvements that would involve construction of new infrastructure or facilities that could impact scenic vistas include highway improvements (such as lane expansions) and construction of new Managed Lanes as part of the Complete Corridors program, new infrastructure as part of the Mobility Hubs, and commuter rail upgrades as part of the Transit Leap Program which would require grading and other ground-disturbing activities.

As part of the Complete Corridors Program, improvements along the I-5 corridor from Manchester Avenue to Vandegrift, include the addition of new Managed Lanes that would obstruct views to scenic resources. New Managed Lanes on existing highway facilities, with the exception of the I-5 Managed Lanes described above, would involve relatively minor impacts on scenic vistas because of their location in developed urban environments. However, visual impacts due to the obstruction, interruption, or detracting from a scenic vista would occur when proposed alignments or facilities require large cut-and fill slopes or sound attenuation barriers that impede or block public views. Careful alignment and design, collaboration with local jurisdictions, and conformance with local grading ordinances would reduce scenic vista impacts. However, some transportation network improvements are located in areas where scenic vista impacts cannot be avoided.

Mobility Hubs are communities with a high concentration of people, destinations, and travel choices. Most Mobility Hub improvements would occur within urban areas, and would not obstruct, interrupt, or detract from a scenic vista. However, development of some Mobility Hubs may result in major improvements that would change the visual character of the surrounding area. New construction could impede or block public views of scenic vistas. Significant changes to the visual character of the Central Mobility Hub and San Ysidro Mobility Hub surrounding areas would occur.

Transit Leap improvements consist of improvements to existing transit services- such as the Trolley, COASTER, SPRINTER, and Rapid. These improvements may include additional rail tracks and more frequent service. Based on the LOSSAN Program EIR/EIS (U.S. Dept. of Transportation 2007), the coastal rail double-tracking along the I-5 corridor would occur in highly scenic areas along the corridor, and the visual impact would be dependent on the sensitivity of the landscape and compatibility with existing visual features. Although the LOSSAN corridor extends through a highly scenic area, traversing several coastal lagoons, the addition of a new tracks to the single track would not obstruct, interrupt, or detract from a scenic vista. Short-term visual impacts would occur during construction.

The planned transportation improvements in 2025 also include various improvements to regional arterials, including new travel lanes, bike lanes, sidewalks, trails, and new and replacement bridges. Such projects are located in the cities of Carlsbad, Chula Vista, and Escondido, and in unincorporated San Diego County. Most of these improvements would be minor and occur on existing facilities. However, construction activities in some locations would obstruct, interrupt, or detract from a scenic vista due to the presence of construction equipment, scaffolding, and earthmoving, and temporary removal of existing vegetation.

The proposed Plan includes active transportation investments, such as safe routes to transit at all new Mobility Hubs and major corridors, and development of various types of bikeways throughout the region. Additionally,

the proposed Plan anticipates transit service improvements in 2025, including the development of rapid transit service throughout the more densely populated areas of the San Diego region. Increases in transit service and the development of an active transportation network would not obstruct, interrupt, or detract from a scenic vista.

Short-term effects on scenic vistas would occur during construction of transportation network improvements, blocking panoramic views or impeding public views of major landscape features or landform with construction equipment, scaffolding, temporary signage, and construction staging areas. Long-term scenic vista impacts would also occur following construction in some locations; for example, transportation network improvement projects in or within view of floodplains, wetlands, wooded areas, coastal bluffs, lagoons, reservoirs, regional parks, recreational areas, agricultural lands, or in areas that include steep slopes would have substantial adverse effects on scenic vistas by blocking or impeding public views of scenic vistas. Transportation network improvements would thus have a significant impact.

2025 Conclusion

Development associated with regional growth and land use change, as well as transportation network improvements, would have substantial adverse effects on scenic vistas. Therefore, this impact (AES-1) in the year 2025 is significant.

2035

Regional Growth and Land Use Change

From 2026 to 2035, regional population is forecasted to increase by 149,500 people; housing by 121,650 units; and employment by 159,728 jobs. As shown in Figure 2-18 of Chapter 2, regional land use and development changes would be evident by 2035 when compared to existing baseline conditions. The increased density can be seen when comparing the existing housing density to the 2035 housing density, as shown in Figures 2-10 and 2-11, respectively, of Section 4.14. In terms of growth in total jobs over the forecasted time period, the majority of job growth is expected to occur in the City of San Diego (71 percent), City of National City (7 percent), and City of Chula Vista (2 percent) and. The community planning areas in the City of San Diego that show the highest growth in jobs are Downtown, Mission Valley, Kearny Mesa, and Midway Pacific Highway. The highest proportions of forecasted job increases are in the communities of Downtown, Kearny Mesa, University City, and Otay Mesa (refer to Tables 2-2 through 2-4 in Chapter 2, which presents base year and forecasted population, employment, and housing units by each jurisdiction).

Areas of increased residential density by 2035 are projected within existing established communities such as the City of San Diego communities of Downtown, Kearny Mesa, Midway-Pacific Highway, Otay Mesa, University Center, and Mission Valley. Established communities in Chula Vista and San Marcos, are also expected to see increased density. By 2035, some regional growth would be accommodated in the northern and eastern, rural areas of the region, including Lakeside, North County Metro and Otay. Development in these areas would take place mostly along highway corridors, such as I-5, SR 76, SR 78, I-15, I-805 east of Chula Vista, and SR 11, and generally within San Diego County community planning areas.

Scenic vistas as discussed in the 2025 analysis may be affected by regional growth and land use change projected to occur in 2035. Impacts on scenic vistas include blocking or impeding panoramic views and views of major landscape features during development and redevelopment activities. Construction of new development in some areas would also result in short-term construction impacts related to scenic vistas,

creating temporary views of earth-moving activities, denuded slopes, large construction equipment and vehicles, and staging areas.

As discussed in the 2025 analysis, various jurisdictions have adopted visual regulations that require all development to adhere to standards that address bulk, mass, articulation, height, and transition issues (such as the interface with surrounding or adjacent development and uses), and reduce negative impacts on the community. Adherence to these measures, including the Coastal Act, would reduce adverse effects on scenic vistas. However, even with implementation of such measures, it cannot be guaranteed that substantial adverse effects on scenic vistas would be avoided or reduced for all projects. Some new development would obstruct, interrupt, or detract from a scenic vista. Therefore, regional growth and land use change would cause a significant impact.

Transportation Network Improvements and Programs

By 2035, additional transportation network improvements would occur in the San Diego region as part of the proposed Plan. Some of the improvements in the proposed Plan completed by 2035 would involve only operational changes that would not require construction of new transportation or transit facilities, such as increasing service frequencies or creating new transit routes, and therefore, would have little impact on scenic vistas. However, implementation of the Big 5 Moves as described in Section 2, Project Description, include Complete Corridor improvements consisting of continued double-tracking at certain locations on the LOSSAN rail corridor, increased in COASTER frequencies, and grade separation at Leucadia Blvd. The 2035 phase also includes a major new commuter rail line (Route 582) from Sorrento Mesa to National City via UTC, Kearny Mesa, and University Heights; and commuter rail service from Oceanside to Downtown, including a tunnel in Del Mar, and stations at Central Mobility Hub and Camp Pendleton (CR 398). Double and third-tracking and rail grade separations include the Blue Line, Green Line and Orange line through the South Bay and East County communities. The construction of commuter rail service into new areas, between Oceanside and Downtown and Sorrento Mesa to National City via UTC, Kearny Mesa, and University Heights would impair or detract from scenic vistas with the introduction of a new infrastructure, including tracks, station platforms, overhead catenary wire, and other features such as above-grade guideways and overcrossings. The addition of a second or third track to existing tracks along the COASTER and SPRINTER corridors and a second or third track to existing tracks along the South Bay and East County corridors would not substantially obstruct, interrupt, or detract from a scenic vista.

In 2035, the Complete Corridor Program includes new Managed Lanes and Managed Lane Connectors on the SR 15, SR 94, SR 78, SR 163, SR 125, I-5, I-8, and I-805 corridors that would involve relatively minor impacts on scenic vistas because of their location in urban environments. Improvements along SR 52 include highway widening that may potentially affect a designated scenic vista. Adverse scenic vista impacts would occur for alignments and facilities that require large cut-and-fill slopes or noise barriers, whether in previously undeveloped areas or developed urban areas. Careful alignment and design, collaboration with local jurisdictions, and conformance with local grading ordinances to ensure compatibility with surrounding development would reduce impacts. Improvements to the I-5 corridor that involve installing soundwalls would obstruct views to scenic resources from private residences located at an elevation higher than the freeway. Two new Managed Lanes on SR 78 would not obstruct, interrupt, or detract from a scenic vista, such as views of the Batiquitos Lagoon, Pacific Ocean, and steep rugged terrain near the Twin Oaks to I-15 corridor. However, the locations of some transportation network improvements and certain design features (e.g., above-grade facilities, retaining walls, sound attenuation walls, cut-and-fill activities) cannot avoid physical changes that have substantial adverse effects on scenic vistas, including blocking panoramic views or views of major landscape features or landforms. Transportation network improvements would cause a significant impact. The

proposed Plan contains four transportation network improvements on the arterial roadway system in 2035. These projects include addition of new lanes, and Class II bicycle lanes along Carlsbad Boulevard in the City of Carlsbad, new travel lanes and bicycle lanes and pedestrian pathways in the community of Ramona, bridge widening, new ramps and realignment of existing ramps at Palm Avenue/SR 805 in the South Bay, and new interchange and roadway improvements at SR 78. Scenic views along these corridors are of the coast along Carlsbad Boulevard and rolling hills and valleys in Ramona and SR 78. Road widening and bikeway improvements would result in change in the visual environment that would obstruct, interrupt, or detract from a scenic vista, during both construction and operation and result in a substantial adverse effect.

Active transportation improvements by 2035 include development of various bikeways throughout the region, including bikeway improvements to the Coastal Rail Trail and the Bayshore Bikeway. Transit service improvements to be constructed by 2035 include increases in service for the COASTER and SPRINTER, extensions and increases in service of the Trolley, new commuter rail service, Mobility Hub centers, and several new rapid transit routes. Increases in transit services and the development of an active transportation network would not substantially obstruct, interrupt, or detract from a scenic vista.

2035 Conclusion

Development associated with regional growth and land use change, as well as transportation network improvements, would have substantial adverse effects on scenic vistas. Therefore, this impact (AES-1) in the year 2035 is significant.

2050

Regional Growth and Land Use Change

From 2036 to 2050, regional population is forecasted to increase by 125,725 people, 61,433 housing units, and 164,843 jobs. The 2050 regional land use pattern is shown in Figure 2-19. Approximately 78 percent of the 2050 population would occur in the City of San Diego (37 percent), City of Chula Vista (28 percent), and City of San Marcos (13 percent). As shown in Figure 2-19 of this EIR, regional land use and development changes are evident by 2050. The increased density can be seen when comparing the existing housing density to the 2050 housing density, as shown in Figures 2-11 and 2-12 respectively. Similar to buildout conditions in 2035, areas of increased residential density by 2050 are expected within existing established communities such as the City of San Diego communities of Downtown, Midway Pacific Highway, and Uptown. The highest proportions of forecasted job increases are in the communities of Downtown, Otay Mesa, Kearny Mesa, and University City.

New development is also projected in the north coastal corridor between Del Mar and Marine Corps Base (MCB) Camp Pendleton, the area between MCB Camp Pendleton and I-15, the corridor along SR 78 between Vista and San Marcos, northeast of I-15 and Escondido, the SR 56 corridor, and along Carmel Valley and Poway. In the South Bay, development is expected adjacent to SR 125 in the Otay Ranch area, SR 11 in East Otay Mesa, and along the SR 94 and I-8 corridors. Regional growth is projected in the unincorporated areas of Lakeside, North County Metro and Valle de Oro. There are no housing units built in the unincorporated area after 2035. The only significant increase in jobs over that period are in Otay.

Scenic vistas as discussed in the 2025 analysis may be affected by regional growth and land use change projected to occur in 2035. Landforms consisting of steep mountain ranges and rural valleys dominate the scenic vistas in the inland regions. As shown in Figure 4.1-1, these areas are located northeast of Escondido to SR 76, east of MCB Camp Pendleton, and north and south of the SR 78 corridor. Large pockets of land currently used for agricultural purposes would be developed with spaced, rural residential uses. New development

would be located on hillsides, and along the ocean, bays, or rivers, which in some locations would impede or block panoramic views or views of major landscape features or landforms as seen from public viewing areas (coastlines; bays; lagoons; canyons; mesas; natural vegetation; historic or unique structures; water resources such as reservoirs, lakes, and streams; and large open spaces including preserves and regional parks). Construction of new development in some areas would also result in short-term impacts related to scenic vistas, creating temporary views of earthmoving activities, denuded slopes, large construction equipment and vehicles, and staging areas.

As discussed in the 2025 analysis, while existing visual regulations, development codes, and laws would reduce impacts on scenic vistas upon implementation of the proposed, it cannot be guaranteed that substantial adverse effects on scenic vistas would be avoided or reduced for all future projects. Some new development would obstruct, interrupt, or detract from a scenic vista. Therefore, regional growth and land use change would cause a significant impact.

Transportation Network Improvements and Programs

By 2050, additional transportation network improvements would occur in the San Diego region as part of the proposed Plan. Implementation of the Big 5 Moves as described in Section 2, Project Description, include Complete Corridor improvements consisting of continued double-tracking at certain locations on the LOSSAN rail corridor, increases in COASTER frequencies, construction of the Sorrento Mesa and UTC tunnels and a new station at Balboa Avenue. The 2050 phase also includes three new major commuter rail lines. These include the completion of commuter rail service from Sorrento Mesa to National City via UTC, Kearny Mesa, and University Heights (CR 582); Oceanside to downtown San Diego via Sorrento Mesa and UTC tunnels and stations at Balboa Avenue (CR 398); commuter rail service from the Central Mobility Hub to the U.S. border via downtown San Diego (CR 583); and commuter rail service from downtown San Diego to El Cajon via SDSU and La Mesa (CR 581). The SPRINTER rail lines would be extended from Escondido to the ~~North County Fair~~ Westfield North County Shopping Center.

The extension of new commuter rail lines would largely extend through highly urbanized corridors in North County, South Bay, and East County and would pass through communities that have scenic vistas of the Pacific Ocean, San Diego Bay, Otay River, Sweetwater River, and San Diego River, preserves, canyon lands, and parks. Portions of the new commuter rail lines would impair or detract from scenic vistas in these communities with the introduction of new infrastructure, including tracks, station platforms, overhead catenary wire, and other features such as above-grade guideways and overcrossings.

Major transportation network improvements by 2050 include additional Managed Lanes and ramp improvements along portions of I-5, SR 15 and I-15, I-805, SR 52, SR 54, SR 56, SR 94, SR 163, SR 125, and SR 905; rural highway improvements along I-8, SR 94, SR 76, SR 79 would consist of intersection improvements and shoulder widening. Roadway improvements also include goods movement support with Harbor Drive multimodal corridor improvements and the Otay Mesa POE pedestrian bridge. By 2050, active transportation projects include buildout of the San Luis Rey River Trail and bikeway trails in the Encinitas–San Marcos corridor; Camp Pendleton Trail; I-15 Bikeway; SR 56 Bikeway; SR 52 Bikeway; I-8 Corridor Trail; I-805 corridor; SR 905 corridor; El Camino Real Bike Lanes; Carlsbad to San Marcos corridor; Mira Mesa corridor; Mid-County Bikeway; Central Coast corridor; downtown San Diego to Southeast San Diego corridor; San Diego River Bikeway; Kearney Mesa to Beaches corridor; and several enhanced bike lanes through Santee, El Cajon, La Mesa, and unincorporated San Diego County.

Improvement of existing highway facilities along SR 15, SR 52, SR 94, and SR 54, which largely consist of new Managed Lanes, would result in relatively minor impacts on scenic vistas because of their location in urban environments. Improvements along portions of SR 125 and SR 52, which include ramp improvements and new Managed Lanes, may potentially affect highly scenic vistas. Adverse impacts would occur for alignments and facilities that require large cut-and-fill slopes or noise barriers, whether in undeveloped areas or developed urban areas. Careful alignment and design, collaboration with local jurisdictions, and conformance with local grading ordinances to ensure compatibility with surrounding development would reduce scenic vista impacts. Improvements to the I-5 corridor that involve installing soundwalls would obstruct views to scenic resources from private residences located at an elevation higher than the freeway. Thus, the locations of some transportation network improvements and certain design features (e.g., above-grade facilities, retaining walls, sound attenuation walls, cut-and-fill activities) cannot avoid physical changes that have substantial adverse effects on scenic vistas, including blocking panoramic views or views of major landscape features or landforms. Transportation network improvements and programs would cause a significant impact.

2050 Conclusion

Development associated with regional growth and land use change, as well as transportation network improvements, would have substantial adverse effects on scenic vistas. Therefore, this impact (AES-1) in the year 2050 is significant.

Exacerbation of Climate Change Effects

The proposed Plan is not expected to exacerbate climate change effects on scenic vistas. While both the proposed Plan and climate change could result in effects to scenic vistas, the proposed Plan is not expected to interact with climate change in a way that would worsen the climate change effects.

MITIGATION MEASURES

AES-1 HAVE A SUBSTANTIAL ADVERSE EFFECT ON A SCENIC VISTA

2025, 2035, and 2050

AES-1a Protect Public Views of Scenic Vistas for Transportation Network Improvements. During planning, design, project-level CEQA review, and construction of transportation network improvements, SANDAG shall, and other transportation project sponsors can and should, ensure that projects protect public views of scenic vistas. Construction and operational measures include, but are not limited to, the following:

- Site construction staging areas away from scenic vistas. Where infeasible, reduce the visibility of construction staging areas. Fence and screen these areas with low contrast materials consistent with the surrounding environment.
- Avoid permanent obstruction of scenic vistas from public viewing areas when selecting alignments and the grade of new infrastructure (i.e., above, at, or below grade).
- Use transparent safety barrier designs (e.g., railings) rather than walls.

AES-1b Protect Public Views of Scenic Vistas for Development Projects. During planning, design, project-level CEQA review, and construction of development projects, the County of San Diego, cities, and other local jurisdictions can and should incorporate scale and massing measures, including those listed under mitigation

measure AES-1a as well as measures specific to development projects. These measures include, but are not limited to, the following:

- Ensure building siting, height, and mass protect views of scenic vistas.
- Design projects to minimize contrasts in scale and massing between the project and surrounding natural forms and developments. Avoid large cuts and fills when the visual environment (natural or urban) would be substantially disrupted. Site or design of projects should minimize their intrusion into important viewsheds and use contour grading to better match surrounding terrain.
- Screen development adjacent to natural features as appropriate so that development does not appear visually intrusive, or interfere with the experience within the scenic vista. The provision of enhanced landscaping adjacent to natural features could be used to soften the appearance of or buffer development from the natural features.
- Require development within visually sensitive areas to minimize visual impacts and to preserve unique or special visual features, particularly in rural areas, through the following:
 - Creative site planning.
 - Integration of natural features into the project.
 - Appropriate scale, materials, and design to complement the surrounding natural landscape.
 - Minimal disturbance of topography.
 - Clustering of development to preserve a balance of open space vistas, natural features, and community character.
 - Creation of contiguous open space network.

SIGNIFICANCE AFTER MITIGATION

2025, 2035, and 2050

Implementation of mitigation measures AES-1a and AES-1b would reduce significant impacts on scenic vistas caused by blocking panoramic views or impeding public views of major landscape features or landforms. However, some of the development associated with regional growth and land use change and transportation network improvements would be located in areas where substantial adverse effects on scenic vistas cannot be avoided. It cannot be guaranteed that all future project-level impacts can be mitigated to a less-than-significant level. Therefore, substantial adverse impacts on scenic vistas would remain significant and unavoidable.

AES-2 SUBSTANTIALLY DAMAGE SCENIC RESOURCES, INCLUDING BUT NOT LIMITED TO, TREES, ROCKS, OUTCROPPINGS, AND HISTORIC STRUCTURES WITHIN A STATE SCENIC HIGHWAY

ANALYSIS METHODOLOGY

This analysis examines how forecasted regional growth and land use or planned transportation network improvements and programs would damage two types of scenic resources: (1) scenic resources within a state scenic highway, and (2) other scenic resources identified in local plans, including local scenic routes. Damage to scenic resources within a scenic highway or other scenic resources, including local scenic routes, would occur if development were to detract or diminish the elements that contribute to the scenic corridor of the

route. For example, in some locations, a modern office building or retail center located along such a highway/route would be incongruous with the surrounding scenic nature if not properly shielded from view.

Areas identified for forecasted regional growth and land use change or planned transportation network improvements under the proposed Plan were considered for their proximity to designated scenic highways and roads in the region. In those areas, the impacts on scenic resources are evaluated given the scale and typical design characteristics of the development or improvements that are included in the proposed Plan. A significant impact on scenic resources would occur if forecasted regional growth and land use change or planned transportation network improvements associated with the proposed Plan would occur in new locations, or an increase in the intensity of existing development is planned that would block or otherwise substantially disrupt views of scenic resources within a state scenic highway.

IMPACT ANALYSIS

2025

Regional Growth and Land Use Change

The proposed Plan forecasts a general intensification of existing land uses within urban communities and along major transportation corridors. New development caused by regional growth and land use change would include new housing units, services, commercial areas, industrial centers, schools, and civic uses. Concentrated growth is also expected to occur around the planned Mobility Hubs throughout the region, including the Central Mobility Hub and San Ysidro Mobility Hub. While some growth would be in the form of new developments or communities, such as in the City of San Diego communities of Mission Valley West and East (SDSU West and Aztec Stadium) and in eastern Chula Vista and East Otay Mesa, a substantial portion of new growth also would occur within existing established communities such as the City of San Diego communities of the Downtown Area, Midway-Pacific Highway, Kearny Mesa, and University Center; the cities of Chula Vista and Escondido; and in rural communities in the unincorporated County such as North County Metro, and Otay.

The proposed Plan would result in adverse aesthetic and visual resource impacts related to implementation of regional growth and land use change along eligible and designated scenic highways as well as local scenic routes and protected public viewsheds. New development associated with regional growth in the north coastal area between Del Mar and Oceanside would occur adjacent to and visible from vehicles traveling on state-eligible scenic highways such as I-5 and SR 76. Scenic resources along the I-5 coastal corridor include views of local beaches and the ocean; various estuaries and lagoons such as Buena Vista, Agua Hedionda, and Batiquitos Lagoon; the agricultural fields in Carlsbad; San Dieguito River; and Peñasquitos Lagoon.

Along the SR 76 corridor, scenic resources include Guajome Regional Park, San Luis Rey River, and Buena Vista lagoon. Growth in the La Mesa and Lemon Grove communities would be adjacent to SR 94, an eligible scenic highway, and SR 125, a designated state highway. Scenic resources along these corridors include trees, rock outcroppings, canyon lands, and ridgelines. New growth in Santee would occur adjacent to SR 52, of which the area between I-15 east and Santo Road is a designated state scenic highway and the area east of Santo Road to SR 67 is designated as an eligible scenic highway, and includes scenic resources such as San Diego River, Mission Trails, Santee Lake, and Sycamore and Rattlesnake Creeks. Development would also occur adjacent to scenic resources identified in local plans (local scenic routes and protected public viewsheds) such as the forecasted growth in Oceanside, Carlsbad, and Encinitas. Scenic resources include the coastal beaches, ocean, estuaries, and lagoons. The planned regional growth and land use change in 2025 would damage scenic resources including, but not limited to, trees, rocks, and outcroppings, within a state scenic highway and other

local scenic resources and protected public viewsheds identified in local plans. This impact would be significant.

Transportation Network Improvements and Programs

Planned transportation network improvements by 2025 include the 5 Big Moves as described above and include the development of Complete Corridors, Transit Leap, Mobility Hubs, Flexible Fleets and Next Operating Systems. The planned transportation improvements in 2025 also include various improvements to regional arterials, including new travel lanes, bike lanes, sidewalks, trails, and new and replacement bridges. Local scenic resources identified in local plans (local scenic routes, protected public viewsheds) are identified in Table 4.1-3. Potential impacts on scenic resources and public viewsheds could occur with planned transportation improvements in the northern coastal communities. Scenic resources include the coastal corridor with views of local beaches and the ocean; various estuaries and lagoons such as Buena Vista, Agua Hedionda, and Batiquitos Lagoon; the agricultural fields in Carlsbad; San Dieguito River; and Peñasquitos Lagoon. Scenic resources or public viewsheds would be affected by the regional arterial projects in the City of Carlsbad, and include views of local beaches and oceans and estuaries from I-5, a state-eligible scenic highway. Table 4.1-4 lists the scenic highways in the San Diego region that would be affected by implementation of the 2025 transportation network improvements in the proposed Plan.

**Table 4.1-4
Transportation Network Improvements Relative to Designated or Eligible Scenic Highways (2025)**

Scenic Route	Proposed Improvement	Impact
I-5 (E)	LOSSAN rail double-tracking, additional Managed Lanes, roadway widening, Mobility Hubs including: Carlsbad Palomar, Carlsbad Village, Carmel Valley, Encinitas, La Jolla, Oceanside, Pacific Beach, and Solana Beach.	Cut-and-fill activities may cause substantial damage to scenic resources, such as trees, rocks, and outcroppings
SR 76 (E)	Managed Lanes	Cut-and-fill activities may cause substantial damage to scenic resources, such as trees, rocks, and outcroppings
SR 75 (D)	Arterial improvements, Mobility Hubs including Coronado and Imperial Beach.	New construction may impede or block scenic resources (local beaches and bay views)

(E) = Eligible for designation as a scenic highway; (D) = Officially designated as a scenic highway

While there are no restrictions on modifications to scenic highways, local agencies and Caltrans must work together to coordinate projects and ensure the protection of the scenic value (Section 260 et seq.). For example, State law requires the undergrounding of all visible electricity distribution lines within 1,000 feet of a scenic highway. In some cases, local governments have their own land use and site planning regulations to protect scenic values along a given corridor. The proposed Plan’s 2025 transportation network improvements would damage scenic resources including, but not limited to, trees, rocks, and outcroppings, within a state scenic highway and other local scenic resources and protected public viewsheds identified in local plans. This impact would be significant.

2025 Conclusion

Implementation of regional growth and land use change and transportation network improvements would substantially damage scenic resources within a state scenic highway and other local scenic resources and

protected public viewsheds identified in local plans. Therefore, this impact (AES-2) in the year 2025 is significant.

2035

Regional Growth and Land Use Change

Areas of increased residential density by 2035 are projected within existing established communities such as the City of San Diego communities of Downtown, Kearny Mesa, Midway-Pacific Highway, Otay Mesa, and Mission Valley. Established communities in Chula Vista, San Marcos, and Escondido are also expected to see increased density. By 2035, some regional growth would be accommodated in the northern and eastern rural areas of the region, including North County Metro and Otay. Development in these areas would take place mostly along highway corridors, such as I-5, I-15, I-805 east of Chula Vista, SR 11, SR 76, and SR 78, and generally within San Diego County community planning areas.

Local scenic resources and public viewsheds within a state scenic highway, as discussed in the 2025 analysis, may be affected by regional growth and land use change projected to occur in 2035.

Within these growth areas and others, there would be adverse scenic resources impacts related to development of land use projects along eligible and designated scenic highways and scenic resources identified in local plans and protected public viewsheds. Impacts would occur if development detracts or diminishes the elements that contribute to the scenic nature of the highway, including damage to trees, rocks, outcroppings, and historic bridges within a state scenic highway and local scenic routes and protected public viewsheds. Therefore, regional growth and land use change would cause a significant impact.

Transportation Network Improvements and Programs

Planned transportation network improvements by 2035 include the 5 Big Moves as described above and include the development of Complete Corridors, Transit Leap, Mobility Hubs, Flexible Fleets and Next Operating Systems. The proposed Plan includes the construction of new rail and transit facilities by 2035, such as the development of commuter rail service from Sorrento Mesa to National City via UTC, Kearny Mesa, and University Heights (CR 582); and commuter rail service from Oceanside to Downtown, including a tunnel in Del Mar, and stations at the Central Mobility Hub and Camp Pendleton (CR 398). Improvements also include an Automated People Mover at the Central Mobility Hub and an additional anchor mobility hub at the San Ysidro Transit Center (San Ysidro Mobility Hub). The proposed Plan also includes double-tracking and several grade separation projects in 2035 for the LOSSAN, SPRINTER, and Trolley. Double and third-tracking and rail grade separations include the Blue Line, Orange Line, and Green Line through the South Bay and East County communities. New commuter rail service between Oceanside and Downtown would occur adjacent to and be visible from vehicles traveling on state-eligible scenic highways such as I-5.

Active transportation improvements by 2035 include development of various bikeways throughout the region, including bikeway improvements to the Coastal Rail Trail and the Bayshore Bikeway. Transit service improvements to be constructed by 2035 include increases in service for the COASTER, extensions and increases in service of the Trolley, and several new rapid transit routes. Increases in transit services and the development of an active transportation network would be visible from vehicles traveling along SR 76, which is a state-eligible scenic highway. The addition of a second track to an existing single track along the COASTER corridor would not detract or impair views from I-5, a state-eligible scenic highway. The proposed trolley improvements in the South Bay and East County would not occur in proximity to state-designated or eligible scenic highways.

The proposed Plan contains four transportation network improvements on the arterial roadway system in 2035. These projects include addition of new lanes, and Class II bicycle lanes along Carlsbad Boulevard in the City of Carlsbad, new travel lanes and bicycle lanes and pedestrian pathways in the community of Ramona, bridge widening, new ramps and realignment of existing ramps at Palm Avenue/SR 805 in the South Bay, and new interchange and roadway improvements at SR 78. Arterial improvements in northern inland communities would impact scenic resources and public viewsheds along SR 78, a local scenic roadway designated by the City of San Marcos and I-5, an eligible scenic highway. Road widening and bikeway improvements in Ramona and South Bay would not occur in proximity to any state-designated or eligible scenic highway.

Most of the Managed Lane improvements planned by 2035 are located in the more urbanized areas of the San Diego region such as I-5, I-15, segments of I-8 and SR 94, and I-805. Highway improvements would be visible to vehicles traveling along SR 52, SR 125, and in the I-8 and SR 94 rural corridors, which are state-designated and eligible scenic highways. Table 4.1-5 lists the scenic highways in the San Diego region that would be affected by implementation of the 2035 transportation projects in the proposed Plan, identifies the proposed improvements, and includes the impact that would occur.

**Table 4.1-5
Transportation Network Improvements Relative to Designated or Eligible Scenic Highways (2035)**

Scenic Route	Proposed Improvement	Impact
I-5 (E)	LOSSAN rail double-tracking, additional Managed Lanes, roadway widening, Mobility Hubs including: Carlsbad Palomar, Carlsbad Village, Carmel Valley, Encinitas, La Jolla, Oceanside, Pacific Beach, and Solana Beach.	Cut-and-fill activities may cause substantial damage to scenic resources, such as trees, rocks, and outcroppings
I-8 (E)	Interchange/intersection improvements	Cut-and-fill activities may cause substantial damage to scenic resources, such as trees, rocks, and outcroppings
SR 52 (E) (D)	Roadway widening, Managed Lanes	Cut-and-fill activities may cause substantial damage to scenic resources, such as trees, rocks, and outcroppings
SR 94 (E)	Freeway connections, Managed Lanes, roadway widening	Cut-and-fill activities may cause substantial damage to scenic resources, such as trees, rocks, and outcroppings
SR 76 (E)	Managed Lanes	Cut-and-fill activities may cause substantial damage to scenic resources, such as trees, rocks, and outcroppings
SR 78 (D)	Arterial improvements, Mobility Hubs including Escondido.	New construction may impede or block scenic resources
SR 125 (D)	Managed Lanes	Cut-and-fill activities may cause substantial damage to scenic resources, such as trees, rocks, and outcroppings

(E) = eligible for designation as a scenic highway; (D) = officially designated as a scenic highway

The potential for transportation network improvements and programs to impact trees, rocks, outcroppings, or other scenic elements such as historic resources also exists. As discussed above, many of the improvements are in areas with designated scenic resources, including historic structures and scenic rock outcroppings. Therefore, there is potential for transportation network improvements to affect these scenic resources. Due to

the location of these transportation network improvements along scenic highways and affecting associated scenic resources, this would be a significant impact.

2035 Conclusion

Implementation of regional growth and land use change and transportation network improvements would result in new development and infrastructure affecting scenic resources, including trees, rocks, outcroppings, and historic structures within a state scenic highway and local scenic routes and protected public viewsheds. Therefore, this impact (AES-2) in the year 2035 is significant.

2050

Regional Growth and Land Use Change

From 2035 to 2050, regional population is forecasted to increase by 125,725 people, 61,433 housing units, and 164,843 jobs. As shown in Figure 2-19, regional land use and development changes are evident by 2050. The increased density can be seen when comparing the existing housing density to the 2050 housing density, as shown in Figures 2-11 and 2-12, respectively. Similar to buildout conditions in 2035, areas of increased residential density by 2050 are projected within existing established communities such as the City of San Diego communities of Downtown, Kearny Mesa, Midway Pacific Highway, Mission Valley, and University Center. New development is also expected in the north coastal corridor between Del Mar and MCB Camp Pendleton; the area between MCB Camp Pendleton and I-15; the corridor along SR 78 between Vista and San Marcos; northeast of I-15 and Escondido; the SR 56 corridor; and along Carmel Valley and Poway. In the South Bay, development is projected adjacent to SR 125 in the Otay Ranch area, SR 11 in East Otay Mesa, and along the SR 94 and I-8 corridors. Regional growth is expected in the unincorporated areas of North County Metro and Otay, but will decrease in the unincorporated communities of Alpine, Ramona, Valley, Lakeside, and Fallbrook.

Local scenic resources and public viewsheds within a state scenic highway, as discussed in the 2025 analysis, may be affected by regional growth and land use change projected to occur in 2050. This regional growth and land use change would result in adverse visual impacts related to implementation of projects along eligible and designated scenic highways and local scenic routes and protected public viewsheds. Impacts would occur where development detracts from or diminishes the elements that contribute to the scenic nature of the highway, including trees, rocks, outcroppings, and historic bridges and structures within a state scenic highway corridor or local scenic routes and protected public viewsheds. Therefore, regional growth and land use change would cause a significant impact.

Transportation Network Improvements and Programs

Planned transportation network improvements by 2050 include the 5 Big Moves as described above and include the development of Complete Corridors, Transit Leap, Mobility Hubs, Flexible Fleets and Next Operating Systems. By 2050, additional transportation network improvements would occur in the San Diego region as part of the proposed Plan. The proposed Plan includes the construction of new rail and transit facilities by 2050, such as the completion of commuter rail service from Sorrento Mesa to National City via UTC, Kearny Mesa, and University Heights (CR 582); Oceanside to downtown San Diego via Sorrento Mesa and UTC tunnels and stations at Balboa Avenue (CR 398); commuter rail service from the Central Mobility Hub to the U.S. border via downtown San Diego (CR 583); and commuter rail service from downtown San Diego to El Cajon via SDSU and La Mesa (CR 581). The SPRINTER rail lines would be extended from Escondido to the Westfield North County Fair Shopping Center. The extension of the new commuter rail lines would largely extend through highly urbanized corridors in the North County, South Bay, and East County. New commuter rail service

between Oceanside and Downtown and Downtown San Diego to El Cajon, would occur adjacent to and be visible from vehicles traveling on state-eligible scenic highways such as I-5 and portions of I-8.

Major transportation network improvements by 2050 include additional Managed Lanes and ramp improvements along portions of I-5, SR 15 and I-15, I-805, SR 52, SR 54, SR 56, SR 94, SR 163, SR 125, and SR 905; rural highway improvements along I-8, SR 94, SR 76, and SR 79 would consist of intersection improvements and shoulder widening. Roadway improvements also include goods movement support with Harbor Drive multimodal corridor improvements and the Otay Mesa POE pedestrian bridge. By 2050, active transportation projects include buildout of the San Luis Rey River Trail and bikeway trails in the Encinitas–San Marcos corridor; Camp Pendleton Trail; I-15 Bikeway; SR 56 Bikeway; SR 52 Bikeway, I-8 Corridor Trail; I-805 corridor; SR 905 corridor; El Camino Real Bike Lanes; Carlsbad to San Marcos corridor; Mira Mesa corridor; Mid-County Bikeway; Central Coast corridor; downtown San Diego to Southeast San Diego corridor; San Diego River Bikeway; Kearney Mesa to Beaches corridor; and several enhanced bike lanes through Santee, El Cajon, La Mesa, and unincorporated San Diego County.

Potential impacts on scenic resources and public viewsheds would occur with planned transportation improvements in the northern coastal communities. Scenic resources include the coastal corridor with views of local beaches and the ocean; various estuaries and lagoons such as Buena Vista, Agua Hedionda, and Batiquitos Lagoons; the agricultural fields in Carlsbad; San Dieguito River; and Peñasquitos Lagoon. Highway improvements along SR 54, SR 67, SR 94, and SR 125 would occur in proximity to local scenic resources and public viewsheds with views of trees and rock outcroppings.

Transportation improvements are planned on three designated and five eligible scenic highways. Table 4.1-6 lists the scenic highways in the San Diego region that would be affected by implementation of the 2050 transportation projects provided in the proposed Plan, identifies the proposed improvements, and includes the impact that would occur.

**Table 4.1-6
Transportation Network Improvements Relative to Designated or Eligible Scenic Highways (2050)**

Scenic Route	Proposed Improvement	Impact
I-5 (E)	LOSSAN rail double-tracking, commuter rail, additional Managed Lanes, roadway widening, freeway connector, and Mobility Hubs including: Carlsbad Palomar, Carlsbad Village, Carmel Valley, Encinitas, La Jolla, Oceanside, Pacific Beach, and Solana Beach.	Cut-and-fill activities may cause substantial damage to scenic resources, such as trees, rocks, and outcroppings
I-8 (E)	Interchange/intersection improvements	Cut-and-fill activities may cause substantial damage to scenic resources, such as trees, rocks, and outcroppings
SR 52 (E) (D)	Roadway widening, Managed Lanes	Cut-and-fill activities may cause substantial damage to scenic resources, such as trees, rocks, and outcroppings
SR 94 (E)	Freeway connections, Managed Lanes, roadway widening	Cut-and-fill activities may cause substantial damage to scenic resources, such as trees, rocks, and outcroppings

Scenic Route	Proposed Improvement	Impact
SR 76 (E)	Facility improvements, intersection improvements, straightening	Cut-and-fill activities may cause substantial damage to scenic resources, such as trees, rocks, and outcroppings
SR 78 (D)	Arterial improvements, Mobility Hubs including Escondido	New construction may impede or block scenic resources
SR 125 (D)	Managed Lanes, direct access routes	Cut-and-fill activities may cause substantial damage to scenic resources, such as trees, rocks, and outcroppings

(E) = eligible for designation as a scenic highway; (D) = officially designated as a scenic highway

The proposed Plan's 2050 transportation network improvements would damage scenic resources, including, but not limited to trees, rock outcroppings, and historic sites within a state scenic highway and local scenic routes and protected public viewsheds. Due to the location of these transportation network improvements along scenic highways and affecting local scenic resources and public viewsheds, this would be a significant impact.

2050 Conclusion

Implementation of regional growth and land use change and transportation network improvements would result in new development and infrastructure affecting scenic resources, including trees, rock outcroppings, and historic structures within a state scenic highway, and local scenic routes and protected public viewsheds. Therefore, this impact (AES-2) in the year 2050 is significant.

Exacerbation of Climate Change Effects

Implementation of the proposed Plan has the potential to exacerbate climate change effects on scenic resources. The proposed Plan would result in increased development and thus increased impervious surfaces, which could worsen flooding that is already expected to intensify under climate change. The proposed Plan could also result in more development in high fire-risk areas, increasing wildfire risk due to the higher chance of ignitions from human sources. Both increased flooding and wildfire risk can destroy vegetation, exacerbate erosion, and damage scenic resources like trees, rocks, outcroppings, and historic structures within a state scenic highway.

MITIGATION MEASURES

AES-2 SUBSTANTIALLY DAMAGE SCENIC RESOURCES, INCLUDING BUT NOT LIMITED TO, TREES, ROCKS, OUTCROPPINGS, AND HISTORIC STRUCTURES WITHIN A STATE SCENIC HIGHWAY

2025, 2035, and 2050

Implementation of mitigation measure **AES-1a** as discussed under Impact AES-1 will also reduce impacts to scenic resources.

AES-2a Reduce Impacts on Scenic Resources within a State Scenic Highway and Local Scenic Resources for Transportation Network Improvements. During planning, design, and project-level CEQA review of transportation network improvements within eligible or designated state scenic highways and local scenic

resources, SANDAG shall, and other transportation project sponsors can and should, ensure that projects are designed to minimize damage to scenic resources.

The following measures would reduce the significant effects related to damage of scenic resources within a state scenic highway or other scenic resource or a local scenic route that are in the jurisdiction and responsibility of Caltrans or other public agencies. Where a project has the potential for significant effects, mitigation measures shall ensure compliance with regulations for Caltrans scenic vistas, requirements of the Coastal Act, and policies within county and city general plans. Such measures may include the following:

- Use a palette of colors, textures, and building materials that are graffiti-resistant, and/or plant materials that complement the surrounding landscape and development.
- Use contour grading to better match surrounding terrain. Contour edges of major cut-and-fill to provide a more natural looking finished profile.
- Use alternating façades to “break up” large façades and provide visual interest.
- Design new corridor landscaping to respect existing natural and human-made features and to complement the dominant landscaping of the surrounding areas.
- Replace and renew landscaping along corridors with road widenings, interchange projects, and related improvements.
- Retain or replace trees bordering highways, so that clear-cutting is not evident.
- Provide new corridor landscaping that provides appropriate transition to existing natural and human-made features and is complementary to the dominant landscaping or native habitats of surrounding areas.
- Prohibit planting or seeding of invasive plant species that appear on the most recent version of the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory.
- Avoid, if possible, large cuts and fills when the visual environment (natural or urban) would be substantially disrupted. Site or design of projects should minimize their intrusion into important viewsheds and use contour grading to better match surrounding terrain.

AES-2b Reduce Impacts on Scenic Resources within a State Scenic Highway and Local Scenic Resources for Development Projects. During planning, design, and project-level CEQA review of development projects, the County of San Diego, cities, and other local jurisdictions can and should incorporate measures that ensure that projects are designed to reduce impacts on scenic resources within eligible and designated state scenic highways, coastal areas, and local scenic resources. Measures include, but are not limited to, the following:

- Avoid damaging, moving, or removing trees, rock outcroppings, historic structures, and other scenic resources from eligible or designated state scenic highway corridors and local scenic resources and public viewsheds, where those scenic resources are relevant to the designation or eligibility for designation as a state scenic highway or are identified as a protected visual resource in local plans. For projects within or adjacent to designated or eligible state scenic highway corridors, and local scenic resources and public viewsheds identified in local approved plans, prior to project approval, complete visual resources studies. If a significant impact on scenic resources is identified, the study would require site-specific mitigation measures, which may include those identified below.
- Apply development standards and guidelines to maintain compatibility with surrounding natural areas, including site coverage, building height and massing, building materials and color, landscaping, and site grading.

- Ensure vegetation used as screening and landscaping blends in and complements the natural landscape.
- Retain or replace trees within scenic resources so that clear-cutting is not evident.
- Ensure grading blends with the adjacent landforms and topography.
- Prohibit planting or seeding of invasive plant species that appear on the most recent version of the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory.

SIGNIFICANCE AFTER MITIGATION

2025, 2035, and 2050

Implementation of mitigation measures AES-1a, AES-2a, and AES-2b would reduce significant impacts on scenic resources, including resources within a state scenic highway and local scenic routes and protected public viewsheds. However, some of the growth and land use change, and transportation network improvements are located in areas where damage, movement, or removal of trees, rocks, outcroppings, and other scenic resources cannot be avoided, such as improvements on state-designated SR 52 and SR 125, and eligible scenic highways I-5, SR 76, SR 52, I-8, and SR 94. It cannot be guaranteed that all future project-level impacts can be mitigated to a less-than-significant level. Therefore, this impact (AES-2) would remain significant and unavoidable.

AES-3 SUBSTANTIALLY DEGRADE THE EXISTING VISUAL CHARACTER OR QUALITY OF PUBLIC VIEWS OF THE SITE AND ITS SURROUNDINGS, INCLUDING ADDING A VISUAL ELEMENT OF URBAN CHARACTER TO AN EXISTING RURAL OR OPEN SPACE AREA, CONFLICTING WITH REGULATIONS GOVERNING SCENIC QUALITY.

ANALYSIS METHODOLOGY

This analysis provides a description of the existing visual character of areas that would experience forecasted regional growth and land use change or planned transportation network improvements under the proposed Plan and describes how the proposed Plan would affect the visual character of these areas. Visual changes are described for areas where forecasted regional growth and land use change or planned transportation network improvements are proposed, including adding a visual element of urban character to an existing rural or open space area. Visual regulations and policies governing scenic quality (refer to Table 4.1-3) are analyzed for their ability to reduce visual impacts. A significant impact on the visual character or the quality of public views of the site and its surroundings would occur when forecasted regional growth and land use change or planned transportation network improvements associated with the proposed Plan would result in a substantial negative visual effect or otherwise degrade the existing visual character and quality of the project sites and/or their surroundings as viewed from public areas.

IMPACT ANALYSIS

2025

Regional Growth and Land Use Change

By 2025, the region is forecasted to increase by 161,338 people, 97,661 housing units, and 115,328 jobs. New development caused by regional growth and land use change would include new housing units, services, commercial areas, industrial centers, schools, and civic uses. Concentrated growth is also expected to occur around the planned Mobility Hubs throughout the region. While some growth would be in the form of new

developments or communities, such as in the City of San Diego communities of Mission Valley West and East (SDSU West and Aztec Stadium) and in eastern Chula Vista and East Otay Mesa, a substantial portion of new growth also would occur within existing established communities such as the City of San Diego communities of the College Area, Midway-Pacific Highway, Kearny Mesa, and University Center, and the cities of National City, Chula Vista, Escondido, and San Marcos, and in rural communities in the unincorporated County such as North County Metro and Otay.

Scenic vistas that would be affected by new development include the long-range views of the coastal mountain ranges and habitat preserves; unobstructed views of the Pacific Ocean from the Pendleton-De Luz area; and views of highly scenic lagoons and waterways such as Batiquitos, Agua Hedionda, Buena Vista, San Elijo, and Los Peñasquitos Lagoons, and the San Dieguito and San Luis Rey Rivers along the I-5 corridor. Scenic vistas in the South Bay area include the Otay River, Sweetwater River Valley, upper and lower Otay Lakes, the Sweetwater Reservoir, and San Diego Bay. In the East County, scenic resources include large open space parks, preserves, mountain ranges, and reservoirs.

Development of these communities would change the visual character throughout the region, both in beneficial and adverse ways. Most of the new land development that would result from regional growth and land use change by 2025 would occur within and adjacent to areas that are currently urbanized. Infill development occurs in highly urbanized areas and affects the character of existing communities (e.g., increased densities, scale and bulk, and height of buildings), resulting in viewshed character changes or light and shadow impacts. Some intensification of development would occur in some of the more outlying communities, such as Vista, Escondido, Poway, Santee, Ramona, El Cajon, La Mesa, and Lemon Grove. In these areas, there would be some conversion of undeveloped lands, as well as infill in already developed areas of the communities. Visual character changes would occur because the infill developments are larger than those that currently exist in the communities and have the potential to transform the surrounding community from existing rural to more urban. Local jurisdictions have general plan policies, zoning ordinances, other ordinances, and additional regulations/policies such as design guidelines in place to protect visual character and quality within their jurisdictions. As listed in Table 4.1-3, various jurisdictions have adopted visual regulations that require all development to adhere to standards that address bulk, mass, articulation, height, and transition issues (such as the interface with surrounding or adjacent development and uses) and reduce negative impacts on the community. Visual policies also ensure exclusion of incompatible uses and structures, and preserve and enhance scenic resources present in adjacent areas. While some infill development projects would cause adverse visual character impacts in urban areas, the policies and regulations presented in Table 4.1-3 would assure there would be no substantial degradation of visual character.

While some of the land development projects associated with the proposed Plan are located in areas where they would not substantially change surrounding visual character, those in some outlying and less urbanized areas would substantially degrade the visual character of an area, including adding a visual element of urban character to an existing rural or open space area. Therefore, impacts of regional growth and land use change on visual character would be significant.

Transportation Network Improvements and Programs

Planned transportation network improvements by 2025 include the 5 Big Moves as described in Chapter 2. Major corridor improvements include portions of the LOSSAN rail corridor double-tracking, continued improvement of Managed Lanes on I-5, new toll lanes on SR 11 to the Otay Mesa POE, interchange and arterial operational improvements at SR 94 and SR 125.

Some of the improvements in the proposed Plan by 2025 would involve only operational changes that would not require construction of new transportation or transit facilities, such as increasing service frequencies or new transit routes within existing right-of-way. These changes would generally not lead to impacts on the visual character of a project area.

Most of the planned transportation improvements would be minor and involve enhancements to existing facilities, so permanent visual changes would be limited. The proposed Plan includes active transportation projects, with improvements such as safe routes to transit at all new transit stations, and development of various bikeways throughout the region. Additionally, the proposed Plan identifies transit service improvements in 2025; however, these improvements do not require major infrastructure development, so they would not have a substantial effect on the visual character of the surrounding areas.

Regional arterial improvements on existing local roadways in Carlsbad and Chula Vista would involve relatively minor impacts on visual character because of their location in generally urban environments. However, adverse impacts would occur if proposed alignments or facilities require large cut-and-fill slopes or sound attenuation barriers, whether in previously undeveloped areas or already developed urban areas. Roadway widening in the rural parts of the region near SR 67, Ramona, and Otay Lakes Road would affect rural vistas or change the character of existing views. Careful alignment and design, collaboration with local jurisdictions and conformance with local grading ordinances to ensure compatibility with surrounding development would reduce visual character impacts. In urbanized areas, roadways and ancillary improvements, such as soundwalls, introduced by transportation network improvements and programs would result in adverse visual character impacts, depending on the scale of improvements and location of sensitive viewers, including the driving public; users of gathering places, rest areas, and vista points; and a large number of residents who live around resources. Depending on location, new Managed Lanes and park-and-ride lots would result in some loss of existing freeway landscaping. Although the above transportation network improvements generally occur in urbanized environments, they would substantially degrade the visual character of an area, depending upon the nature of the improvements and the location of sensitive viewers. Therefore, impacts of transportation network improvements on visual character would be significant.

2025 Conclusion

By 2025, regional growth and land use change and transportation network improvements would substantially degrade visual character, including adding visual elements of urban character to existing rural or open space areas. Therefore, this impact (AES-3) in the year 2025 is significant.

2035

Regional Growth and Land Use Change

From 2025 to 2035, regional population is forecasted to increase by 149,500 people; housing by 121,650 units; and employment by 159,728 jobs. As shown in Figure 2-18, regional land use and development changes are evident by 2035. The community planning areas in the City of San Diego that show the highest growth in jobs are Downtown, Kearny Mesa, and Otay Mesa. However, in terms of percent growth, Chula Vista and San Marcos are forecasted to grow by 50 percent or more. Areas of increased residential density by 2035 are projected within existing established communities such as the City of San Diego communities of Downtown, Kearny Mesa, Midway-Pacific Highway, Otay Mesa, and Mission Valley. Established communities in Chula Vista, San Marcos, and Escondido are also expected to see increased density. By 2035, some regional growth would be accommodated in the northern and eastern rural areas of the region including North County Metro and Otay. Development in these areas would be located mostly along highway corridors, such as I-5, SR 76, SR 78, I-15,

I-805 east of Chula Vista, and SR 11, and generally within San Diego County community planning areas. Regional growth and land use change would include some conversion of undeveloped lands, although there would be a focus on infill development within the existing communities, all of which would change visual character. Urban centers in the western third of the San Diego region would have most available land developed with single- and multi-family uses, commercial and office uses, and industrial uses. Consistent with the goals of the proposed Plan, the dense growth within existing urban centers with high accessibility to transit options allows for the creation of communities that are more sustainable, walkable, transit-oriented, and compact.

In more urbanized areas, changes in visual character would also occur, as remaining undeveloped properties are developed and infill occurs. Visual character changes would occur because the infill developments are larger than those that currently exist surrounding the communities and have the potential to transform the surrounding community from existing rural to more urban. Local jurisdictions have general plan policies, zoning ordinances, other ordinances, and additional regulations/policies such as design guidelines in place to protect visual character and quality within their jurisdictions. As listed in Table 4.1-3, various jurisdictions have adopted visual regulations that require all development to adhere to standards that address bulk, mass, articulation, height, and transition issues such as the interface with surrounding or adjacent development and uses, and reduce negative impacts on the community. Visual policies also ensure exclusion of incompatible uses and structures, and preserve and enhance scenic resources present in adjacent areas. While some infill development projects would cause adverse visual character impacts in urban areas, these policies and regulations would assure there would be no substantial degradation of visual character. Some of the regional growth and land use change associated with the proposed Plan is located in areas where it would not substantially affect the surrounding visual character. However, regional growth and land use change in outlying and less urbanized areas would substantially degrade the visual character of an area, including adding a visual element of urban character to an existing rural or open space area. Therefore, impacts related to the degradation of visual character would be significant.

Transportation Network Improvements and Programs

Planned transportation network improvements by 2035 include the 5 Big Moves as described above and include the development of Complete Corridors, Transit Leap, Mobility Hubs, Flexible Fleets and Next Operating Systems. The proposed Plan includes the construction of new rail and transit facilities by 2035, such as the development of commuter rail service from Sorrento Mesa to National City via UTC, Kearny Mesa, and University Heights (CR 582); and commuter rail service from Oceanside to Downtown, including a tunnel in Del Mar, and stations at the Central Mobility Hub and Camp Pendleton (CR 398). Improvements also include an Automated People Mover at the Central Mobility Hub and an additional anchor mobility hub at the San Ysidro Transit Center (San Ysidro Mobility Hub). The proposed Plan includes double-tracking and several grade separation projects in 2035 for the LOSSAN, SPRINTER, and Trolley. Double and third-tracking and rail grade separations include the Blue Line, Orange Line, and Green Line through the South Bay and East County communities. New commuter rail service between Oceanside and Downtown would occur adjacent to scenic resources and could result in the degradation of visual character along this corridor.

Active transportation improvements by 2035 include development of various bikeways throughout the region, including bikeway improvements to the Coastal Rail Trail and the Bayshore Bikeway. Transit service improvements to be constructed by 2035 include increases in service for the COASTER, extensions and increases in service of the Trolley, and several new rapid transit routes. Due to the highly urbanized nature of the area surrounding these improvements, degradation of visual character would not occur.

The proposed Plan contains four transportation network improvements on the arterial roadway system by 2035. These projects include addition of new lanes and Class II bicycle lanes along Carlsbad Boulevard in the City of Carlsbad; new travel lanes and bicycle lanes and pedestrian pathways in the community of Ramona; bridge widening, new ramps, and realignment of existing ramps at Palm Avenue/SR 805 in the South Bay; and new interchange and roadway improvements at SR 78. Impacts related to visual character would occur along these roadways. Adverse visual character impacts would occur in these rural areas because roadway widening would introduce visual elements of urban character to an existing rural area such as Ramona and the inland communities along SR 78.

In urbanized areas, roadways and ancillary improvements, such as soundwalls, introduced by transportation network improvements may also result in adverse visual character impacts depending on the scale of improvements and location of sensitive viewers, including the driving public; users of gathering places, rest areas, and vista points; and a large number of residents who live around resources.

Although the transportation network improvements and programs described above would generally occur in urbanized environments, they would substantially degrade the visual character of an area, depending upon nearby sensitive viewers. Transportation network improvements would cause a significant impact.

2035 Conclusion

By 2035, implementation of the proposed Plan would result in regional growth and land use change and transportation network improvements that would substantially degrade visual character, including adding visual elements of urban character to existing rural or open space areas. Therefore, this impact (AES-3) in the year 2035 is significant.

2050

Regional Growth and Land Use Change

From 2035 to 2050, regional population is forecasted to increase by 125,725 people, 61,433 housing units, and 164,843 jobs. As shown in Figure 2-19, regional land use and development changes are evident by 2050. The increased density can be seen when comparing the existing housing density to the 2050 housing density, as shown in Figures 2-11 and 2-12 respectively. Similar to buildout conditions in 2035, areas of increased residential density by 2050 would be apparent within existing established communities such as the City of San Diego communities of Downtown, Kearny Mesa, Midway Pacific Highway, Mission Valley, and University Center. New development is also projected in the north coastal corridor between Del Mar and MCB Camp Pendleton; the area between MCB Camp Pendleton and I-15; the corridor along SR 78 between Vista and San Marcos; northeast of I-15 and Escondido; the SR 56 corridor; and along Carmel Valley and Poway. In the South Bay, development is expected to occur adjacent to SR 125 in the Otay Ranch area, SR 11 in East Otay Mesa, and along the SR 94 and I-8 corridors. Regional growth is projected in the unincorporated areas of North County Metro and Otay, but is expected to decrease in the unincorporated communities of Alpine, Ramona, Valley, Lakeside, and Fallbrook.

Regional growth and land use change by 2050 would include some conversion of undeveloped lands, although there would be a focus on infill development within the existing communities, all of which would change visual character.

In more urbanized areas, changes in visual character would also occur, as remaining undeveloped properties are developed and infill occurs. Local jurisdictions have general plan policies, zoning ordinances, other ordinances, and additional regulations/policies such as design guidelines in place to protect visual character

and quality within their jurisdictions. As listed in Table 4.1-3, various jurisdictions have adopted visual regulations that require all development to adhere to standards that address bulk, mass, articulation, height, and transition issues (such as the interface with surrounding or adjacent development and uses), and reduce negative impacts on the community. Visual policies also ensure exclusion of incompatible uses and structures, and preserve and enhance scenic resources present in adjacent areas. While some infill development projects would cause adverse visual character impacts in urban areas, these policies and regulations would assure there would be no substantial degradation of visual character.

Some of the regional growth and land use change associated with the proposed Plan is located in areas where it would not substantially change the surrounding visual character. However, in outlying and less urbanized areas regional growth and land use change would substantially degrade the visual character of an area, including adding a visual element of urban character to an existing rural or open space area. Therefore, impacts related to the degradation of visual character would be significant.

Transportation Network Improvements and Programs

Planned transportation network improvements by 2050 include the 5 Big Moves as described above and include the development of Complete Corridors, Transit Leap, Mobility Hubs, Flexible Fleets and Next Operating Systems. The proposed Plan includes the construction of new rail and transit facilities by 2050, such as the completion of commuter rail service from Sorrento Mesa to National City via UTC, Kearny Mesa, and University Heights (CR 582); Oceanside to downtown San Diego via Sorrento Mesa and UTC tunnels and stations at Balboa Avenue (CR 398); commuter rail service from the Central Mobility Hub to the U.S. border via downtown San Diego (CR 583); and commuter rail service from downtown San Diego to El Cajon via SDSU and La Mesa (CR 581). The SPRINTER rail lines would be extended from Escondido to the Westfield North County Fair Shopping Center. The extension of the new commuter rail lines would largely extend through highly urbanized corridors in the North County, South Bay, and East County. New commuter rail service between Oceanside and Downtown and Downtown San Diego to El Cajon, would occur adjacent to local scenic resource and may lead to visual degradation of the area.

Major transportation network improvements by 2050 include additional Managed Lanes and ramp improvements along portions of I-5, SR 15 and I-15, I-805, SR 52, SR 54, SR 56, SR 94, SR 163, SR 125, and SR 905; rural highway improvements along I-8, SR 94, SR 76, SR 79 would consist of intersection improvements and shoulder widening. By 2050, active transportation projects include buildout of the San Luis Rey River Trail and bikeway trails in the Encinitas–San Marcos corridor; Camp Pendleton Trail; I-15 Bikeway; SR 56 Bikeway; SR 52 corridor, I-8 corridor Trail; I-805 corridor; SR 905 corridor; El Camino Real Bike Lanes; Carlsbad to San Marcos corridor; Mira Mesa corridor; Mid-County Bikeway; Central Coast corridor; downtown San Diego to Southeast San Diego corridor; San Diego River Bikeway; Kearney Mesa to Beaches corridor; and several enhanced bike lanes through Santee, El Cajon, La Mesa, and unincorporated San Diego County. Increases in transit service on existing operating transit modes would not result in an adverse change in visual character to the communities as the facilities already exist and the community is adapted to the transit mode passing through the area.

Proposed improvements to existing facilities and construction of new highways, roadways, and other transit facilities would create adverse visual impacts by adding visual elements of urban character to existing rural or open spaces. This would occur where new alignments or improvements to existing facilities would pass through primarily rural, agricultural, and/or open space areas, and the contrast would result in substantial degradation of visual character. These generally would occur along the I-5 corridor, north of Oceanside, along

SR 76, east of the I-15 to Couser Canyon, on I-15 between SR 78 and SR 76, along SR 56, along SR 67, on SR 94 east of SR 125, and along SR 125 south of SR 54.

In urbanized areas, roadways and ancillary improvements such as soundwalls introduced by transportation network improvements and programs may also result in adverse visual character impacts depending on the scale of improvements and location of sensitive viewers, including the driving public; users of gathering places, rest areas, and vista points; and a large number of residents who live around such visual resources. Highway widening and the construction of Managed Lanes may result in some loss of existing freeway landscaping. Although the above transportation network improvements generally occur in urbanized environments, they would substantially degrade the character of an area, depending upon nearby sensitive viewers. Transportation network improvements would cause a significant impact.

2050 Conclusion

By 2050, implementation of the proposed Plan would result in regional growth and land use change and transportation network improvements that would substantially degrade the region's visual character, including adding visual elements of urban character to existing rural or open space areas. Therefore, this impact (AES-3) in the year 2050 is significant.

Exacerbation of Climate Change Effects

The proposed Plan is not expected to exacerbate climate change effects on the existing visual character and quality of the public views in the region. While both the proposed Plan and climate change could result in effects to existing visual character and quality, the proposed Plan is not expected to interact with climate change in a way that would worsen the climate change effects.

MITIGATION MEASURES

AES-3 SUBSTANTIALLY DEGRADE THE EXISTING VISUAL CHARACTER OR QUALITY OF PUBLIC VIEWS OF THE SITE AND ITS SURROUNDINGS, INCLUDING ADDING A VISUAL ELEMENT OF URBAN CHARACTER TO AN EXISTING RURAL OR OPEN SPACE AREA, CONFLICTING WITH REGULATIONS GOVERNING SCENIC QUALITY.

2025, 2035, and 2050

Implementation of mitigation measures **AES-1a**, **AES-2a**, and **AES-2b** discussed under Impact AES-1 and AES-2 would also reduce impacts related to degradation of existing visual character.

AES-3a Reduce Impacts on Visual Character for Transportation Network Improvements. During planning, design, and project-level CEQA review of transportation network improvements, SANDAG shall, and other transportation project sponsors can and should, incorporate measures that ensure that projects are designed to reduce significant impacts on visual character. Measures include, but are not limited to, the following:

- Use contour grading to match surrounding terrain and existing natural, and human-made features of the area.
- Revegetate graded slopes and exposed earth surfaces prior to completion of construction.
- Prohibit planting or seeding of invasive plant species that appear on the most recent version of the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory.

- Construct permanent barriers (e.g., soundwalls, safety barriers, retaining walls) of materials whose color and texture or treatment (e.g., landscaping cover) complements the surrounding landscape and development. Break up large barrier façades using techniques that include, but are not limited to, color, texture, landscaping, see-through safety barriers, and alternating façades.

AES-3b Reduce Impacts on Visual Character for Development Projects. During planning, design, and project-level CEQA review of development projects the County of San Diego, cities, and other local jurisdictions can and should incorporate measures that ensure that projects are designed to reduce significant impacts on visual character. Measures include, but are not limited to, the following:

- Use contour grading to match surrounding terrain and existing natural, and man-made features of the area.
- Revegetate graded slopes and exposed earth surfaces prior to completion of construction.
- Construct permanent barriers (e.g., soundwalls, safety barriers, retaining walls) of materials whose color and texture or treatment (e.g., landscaping cover) complements the surrounding landscape and development. Break up large barrier façades using techniques that include, but are not limited to, color, texture, landscaping, see-through safety barriers, and alternating façades.
- Apply development standards and design guidelines to maintain compatibility with surrounding development, including site coverage, building height and massing, building materials and color, landscaping, and site grading.

SIGNIFICANCE AFTER MITIGATION

2025, 2035, and 2050

Implementation of mitigation measures AES-1a, AES-2a, AES-2b, AES-3a, and AES-3b would reduce significant impacts associated with the degradation of visual character. However, while these mitigation measures reduce changes in visual character, it would be infeasible to prevent all instances of substantial degradation of visual character caused by regional growth and land use change as well as transportation network improvements. It cannot be guaranteed that all future project-level impacts can be mitigated to a less-than-significant level. Therefore, substantial degradation of visual character would remain significant and unavoidable.

AES-4 SUBSTANTIALLY DEGRADE THE EXISTING VISUAL CHARACTER OR QUALITY OF PUBLIC VIEWS OF THE SITE AND ITS SURROUNDINGS BY CREATING A NEW SOURCE OF LIGHT AND GLARE THAT WOULD ADVERSELY AFFECT DAY OR NIGHTTIME VIEWS.

ANALYSIS METHODOLOGY

This section analyzes impacts from light and glare. In regards to forecasted regional growth and land use change, additional sources of light and glare may come from development in outlying communities or conversion of undeveloped lands to more urban uses. Relevant policies and ordinances are analyzed for their ability to reduce light and glare impacts. A significant impact could occur if the introduction of these new lighting or glare sources would shed substantial light onto adjacent, light-sensitive property or land use; would emit a substantial amount of ambient light into the nighttime sky or areas with existing dark skies; would create a new source of substantial glare that would affect daytime views; or would adversely alter the visual character of the area. Uses considered sensitive to nighttime light include, but are not limited to, residential uses, some commercial and industrial uses, observatories, and natural areas (see Section 4.4, *Biological Resources*, for a

discussion on the impacts of light and glare on biological resources). Therefore, the analysis considers if regional growth and changes in land use would create new lighting sources that would result in the generation of a substantial amount of light onto adjacent, light-sensitive property or land use, or would emit a substantial amount of ambient light into the nighttime sky or areas with existing dark skies.

Transportation network improvement projects (which include improvements or lane additions) may also result in additional vehicles on the roadways and in additional street lights, intersection control devices, reflective signage, and reflective roadway materials that increase the total amount of illumination or glare in an area in such a way as to degrade day or nighttime views, which would result in a significant impact related to substantial light or glare. A qualitative analysis of impacts is provided by assessing the location of proposed major transportation network improvement projects in relationship to areas with low levels of nighttime lighting, including areas with dark skies.

IMPACT ANALYSIS

2025

Regional Growth and Land Use Change

By 2025, new development described above would result in additional sources of light and glare, which in some locations would result in adverse impacts on the region's dark skies. Lighting requirements are guided by standards set by local jurisdictions. Typical measures include the use of downward-directed low-pressure sodium vapor lighting. Such requirements aid in the preservation of dark-sky conditions, which are essential for local observatories to operate. New development would be required to comply with the applicable lighting standards, and the location, type, and direction of the lighting. A lighting plan is typically required to be submitted to planning departments during the development review process to show illumination levels and point of intersection between fixtures, as well as use of low-pressure sodium vapor exterior lighting. However, adherence to lighting standards may not be applicable to all types of development projects, and dark skies impacts may occur in some areas. As such, impacts would be significant.

Transportation Network Improvements and Programs

Planned transportation network improvements by 2025 include the 5 Big Moves as described in Chapter 2. Major corridor improvements include portions of the LOSSAN rail corridor double-tracking, continued improvement of Managed Lanes on I-5, new toll lanes on SR 11 to the Otay Mesa POE, and interchange and arterial operational improvements at SR 94 and SR 125. As discussed above, most of the planned transportation improvements would be minor and involve enhancements to existing facilities, so permanent visual changes related to light and glare would be limited. Active transportation and transit service improvements in 2025 are also not likely to require major infrastructure development, so they would not have a substantial effect on light and glare in the surrounding areas. However, projects that include improvements of freeways, toll roads, Mobility Hubs, and the East Otay Mesa POE would likely add new lighting components that in some locations would adversely affect dark skies. Additionally, projects with lane additions and improvements that would increase traffic on roadways would experience additional light sources from vehicle headlights at night, which in some more rural locations would adversely affect dark skies, resulting in a significant impact.

Indirect impacts to sensitive species, and wildlife corridors in proximity to locations of transportation network improvements could occur as a result of additional light sources. New lighting components and additional sources of light from vehicle headlights could affect the habitat value for some species, particularly for nocturnal species by modifying predation rates, obscuring lunar cycles, and by causing direct habitat

~~avoidance. These impacts are discussed in more detail in Section 4.4, *Biological Resources*. Mitigation measure BIO-2a includes design, minimization, and avoidance measures for special status animal species, including measures to minimize lighting impacts during construction and operation and maintenance measures. Mitigation measure BIO-3, which is intended to facilitate wildlife movement and reduce identified significant impacts to movement of fish or wildlife species or established native resident or migratory wildlife corridors, includes design measures to minimize lighting in areas near corridors. Impacts to sensitive species and wildlife corridors are identified as significant and unavoidable, as there is no assurance that mitigation measures identified in Section 4.4, *Biological Resources* would be implemented for all projects or equally effective due to the wide variety of circumstances, complexity of some sites, and complexity of impacts on them.~~

2025 Conclusion

By 2025, regional growth and land use changes as well as transportation network improvements would create new light sources from new development and vehicle headlights at night that would adversely affect dark skies in some locations. Therefore, this impact (AES-4) in the year 2025 is significant.

2035

Regional Growth and Land Use Change

By 2035, the regional growth and land use changes described above would result in additional sources of light and glare. Lighting requirements are guided by standards set by local jurisdictions. Typical measures include the use of downward-directed low-pressure sodium vapor lighting. Such requirements aid in the preservation of dark-sky conditions, which are essential for local observatories to operate. New development would be required to comply with the applicable lighting standards regarding the location, type, and direction of the lighting. A lighting plan is typically required to be submitted to planning departments during the development review process to show illumination levels and point of intersection between fixtures, as well as the use of low-pressure sodium vapor exterior lighting. However, adherence to lighting standards may not be applicable to all types of development projects, and dark skies impacts may occur in some areas. As such, impacts would be significant.

Transportation Network Improvements and Programs

Active transportation improvements by 2035 include development of various bikeways throughout the region, including bikeway improvements to the Coastal Rail Trail and the Bayshore Bikeway. Transit service improvements to be constructed by 2035 include increases in service for the COASTER, extensions and increases in service of the Trolley, and several new rapid transit routes. Other rail improvements would include the Del Mar Tunnel and the associated inland rail relocation and bluff restoration, and increases in Amtrak and freight rail service. Due to the highly urbanized nature of the area surrounding these improvements, substantial sources of additional lighting and glare would not occur.

Two new Managed Lanes along SR 78 from I-5 to Twin Oaks Road would be added, which would result in new sources of light and glare. The proposed Plan also features four transportation network improvements on the arterial roadway system in 2035. These projects include the addition of new lanes and Class II bicycle lanes along Carlsbad Boulevard in the City of Carlsbad; new travel lanes and bicycle lanes and pedestrian pathways in the community of Ramona; bridge widening, new ramps, and realignment of existing ramps at Palm Avenue/SR 805 in the South Bay; and new interchange and roadway improvements at SR 78. Impacts related to additional lighting would occur along these roadways. Additionally, transportation improvements in the community of Ramona and the more rural area near SR 78 would result in a noticeable increase in light sources at night, which would adversely affect dark skies. However, projects with lane additions and improvements

that would increase traffic on roadways would experience additional light sources from vehicle headlights at night, which in some more rural locations would adversely affect dark skies, resulting in a significant impact.

2035 Conclusion

By 2035, regional growth and land use changes as well as transportation network improvements would create new light sources from new development and vehicle headlights at night that would adversely affect dark skies in some locations. Therefore, this impact (AES-4) in the year 2035 is significant.

2050

Regional Growth and Land Use Change

Regional growth and land use change by 2050 would include some conversion of undeveloped lands, although there would be a focus on infill development within the existing communities, all of which would change visual character. This would also result in additional sources of light and glare, which would have significant impacts on the region's dark skies. However, adherence to lighting standards may not be applicable to all types of development projects, and dark skies impacts may occur in some areas. As such, impacts would be significant.

Transportation Network Improvements and Programs

Proposed improvements to existing facilities and construction of new highways, roadways, and other transit facilities would create additional sources of light and glare. This would occur where new alignments or improvements to existing facilities would pass through primarily rural, agricultural, and/or open space areas, and the contrast would result in the introduction of new light and glare sources. These generally would occur along the I-5 corridor north of Oceanside, along SR 76 east of the I-15 to Couser Canyon, on I-15 between SR 78 and SR 76, along SR 56, along SR 67, on SR 94 east of SR 125, and along SR 125 south of SR 54. However, projects with lane additions and improvements that would increase traffic on roadways would experience additional light sources from vehicle headlights at night, which in some more rural locations would adversely affect dark skies, resulting in a significant impact.

2050 Conclusion

By 2050, regional growth and land use changes as well as transportation network improvements would create new light sources from new development and vehicle headlights at night that would adversely affect dark skies in some locations. Therefore, this impact (AES-4) in the year 2050 is significant.

Exacerbation of Climate Change Effects

The proposed Plan is not expected to exacerbate climate change effects on light and glare as there are no projected impacts of climate change on light and glare.

MITIGATION MEASURES

AES-4 SUBSTANTIALLY DEGRADE THE EXISTING VISUAL CHARACTER OR QUALITY OF PUBLIC VIEWS OF THE SITE AND ITS SURROUNDINGS BY CREATING A NEW SOURCE OF LIGHT AND GLARE THAT WOULD ADVERSELY AFFECT DAY OR NIGHTTIME VIEWS.

2025, 2035, and 2050

AES-4a Minimize Effects of Light and Glare for Transportation Network Improvements. During planning, design, project-level CEQA review, and construction of transportation network improvements, SANDAG shall, and other transportation project sponsors can and should, ensure that projects avoid or minimize the effects of light and glare on routes of travel for motorists, cyclists, and pedestrians, or on adjacent properties, and limit expanded areas of shade and shadow to areas that would not adversely affect open space or outdoor recreation areas.

Where SANDAG and other transportation project sponsors have identified that a project has the potential for significant effects, they can and should adopt mitigation measures to ensure consistency with the goals and policies within county and city general plans, as applicable. Construction and operational measures include, but are not limited to, the following:

- Minimize and control glare from transportation projects through the adoption of project design features that reduce glare, such as those listed below:
 - Planting trees along transportation corridors to reduce glare from the sun.
 - Landscaping off-street parking areas, loading areas, and service areas.
 - Limiting the use of reflective materials, such as metal.
 - Using non-reflective material, such as paint, vegetative screening, matte finish coatings, and masonry.
 - Screening parking areas by using vegetation or trees.
 - Using low-reflective glass.
- Impose lighting standards that ensure that minimum safety and security needs are addressed and minimize light trespass and glare associated with transportation network improvements. These standards include the following:
 - Minimizing incidental spillover of light onto adjacent private properties and undeveloped open space.
 - Directing luminaries away from habitat and open space areas adjacent to the project site.
 - Installing luminaries that provide good color rendering and natural light qualities.
 - Minimizing the potential for back scatter into the nighttime sky and for incidental spillover of light onto adjacent private properties and undeveloped open space.

AES-4b Minimize Effects of Light and Glare for Development Projects. During planning, design, project-level CEQA review, and construction of development projects, the County of San Diego, cities, and other local jurisdictions can and should ensure that projects avoid or minimize the effects of light and glare on routes of travel for motorists, cyclists, and pedestrians, or on adjacent properties, and limit expanded areas of shade and shadow to areas that would not adversely affect open space or outdoor recreation areas. Where a project has the potential for significant effects, mitigation measures shall ensure consistency with the goals and policies within county and city general plans, as applicable. Such measures may include, but are not limited to, the following:

- Use lighting fixtures that are adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties.
- Restrict the operation of outdoor lighting for construction from the hours of 7:00 p.m. to 7:00 a.m.

- Use high pressure sodium vapor and/or cut-off fixtures including LED lights, instead of typical mercury-vapor fixtures for outdoor lighting.
- Use unidirectional lighting to avoid light trespass onto adjacent properties.
- Provide structural and/or vegetative screening from light-sensitive uses.
- Shield and direct all new street and pedestrian lighting away from light-sensitive offsite uses.
- Use non-reflective glass or glass treated with a non-reflective coating for all exterior windows and glass used on building surfaces.

SIGNIFICANCE AFTER MITIGATION

2025, 2035, and 2050

Implementation of mitigation measures AES-4a, and AES-4b, would reduce significant impacts associated with the introduction of new light and glare sources. However, while these mitigation measures reduce light and glare impacts, it would be infeasible to prevent all instances of new light and glare sources caused by regional growth and land use change as well as transportation network improvements, particularly from additional light sources from vehicle headlights at night. It cannot be guaranteed that all future project-level impacts related to light and glare can be mitigated to less-than-significant levels. Impacts would remain significant and unavoidable.