

4.1 Aesthetics/Visual Resources

This section describes the existing visual characteristics within the region, identifies the regulatory framework with respect to regulations that address aesthetic resources, and evaluates the significance of the potential changes in the visual character and quality that could result from development of the proposed Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS). In addition, mitigation measures are identified as appropriate and feasible to reduce identified impacts.

The RTP/SCS plan area consists of transportation routes, including highways, rail alignments, bicycle trails, roads, and Caltrans right-of-way in San Joaquin County. The aesthetic appearance of San Joaquin County is a function of both the natural landscape and man-made elements that create an urban and rural character and design. Because transportation facilities can have a major influence on human perception of the visual environment, this section addresses the general aesthetic landscape of the region and assesses the potential impacts from region-wide construction of at- and above-grade transportation facilities. The SCS component of the RTP would influence urban development in San Joaquin County and therefore patterns of development are assessed.

4.1.1 Setting

a. Environmental Setting

The aesthetic value of an area is a measure of its visual character and quality, combined with the viewer response to the area. Scenic quality can best be described as the overall impression that an individual viewer retains after driving through, walking through, or flying over an area. Viewer response is a combination of viewer exposure and viewer sensitivity. Viewer exposure is a function of the number of viewers, number of views seen, distance of the viewers, and viewing duration. Viewer sensitivity relates to the extent of the public's concern for a particular viewshed. These terms and criteria are described in detail below.

SJCOG's planning area is predominantly rural, with urban development at the seven incorporated cities, with scattered rural development throughout the agricultural inland valley. The specific characteristics that contribute to and define the aesthetic value of San Joaquin County are described below.

Visual Character

San Joaquin County is located at the north end of the San Joaquin Valley, part of California's vast agricultural heartland. There are urban communities within the County which are surrounded by agricultural and vacant lands. The density and intensity of development varies, with the higher majority of density development located in or near the incorporated cities and unincorporated urban communities. Incorporated cities within San Joaquin County include the cities of Escalon, Lathrop, Lodi, Manteca, Ripon, Stockton, and Tracy. The proposed transportation improvement projects within the 2018 RTP/SCS are located on state highways, regionally significant roads, local streets, railroad rights-of-way, and public lands.

The County contains a combination of metropolitan and rural areas with a long history of agricultural activities. A vast majority of the 1,440 square miles that comprise the County are relatively level terrain with agriculturally productive lands (see Section 4.2, *Agriculture and Forestry Resources* for a further discussion of agriculture within the planning area). The foothills of the Sierra

Nevada mountain range lie along the County's eastern boundary, and the foothills of the Diablo Range define the southwest corner of the County. With few exceptions, the flat topography is not conducive to views of the Delta region in the western portion of the County. The County has a predominantly rural character, when compared to the urban centers of the nearby San Francisco Bay or Sacramento metropolitan areas, with some taller buildings in Downtown Stockton. Generally, most structures are low to medium rise, with residential development consisting primarily of mobile home parks, older single-family detached residences, newer tract homes, and scattered high-density apartments. There are vast open areas, orchards, and agricultural land which add to the small town image of established communities in the area. Most segments of major highways are located at a higher elevation than surrounding lands for flood protection, providing motorists with views of the adjacent developments, agriculture, and open land.

Scenic Views and Visual Resources

Visual resources are generally classified into two categories: scenic views and scenic resources. Scenic views are elements or components of the broader viewshed such as mountain ranges, valleys, and ridgelines. They are usually mid-ground or background elements of a viewshed that can be seen from a range of viewpoints, often along a roadway or other corridor. Scenic resources are specific features of a viewing area (or viewshed) such as trees, rock outcroppings, and historic buildings. They are specific features that act as the focal point of a viewshed and are usually foreground elements.

Aesthetically significant features occur in a diverse array of environments within the region, ranging in character from urban centers to rural agricultural lands to natural woodlands. The extraordinary range of visual features in the region is afforded by the mixture of climate, topography, and flora and fauna found in the natural environment, and the diversity of style, composition, and distribution of the built environment.

Natural features throughout the County include waterways, riparian habitat, wildlife habitat and wetlands, significant oak groves, and hillsides. Natural features of the County are clustered in the Sacramento-San Joaquin Delta area in the western half of the County. County policies specify that these natural features, as elements of the visual environment, should be protected from unwarranted or premature urban encroachment.

From a regional perspective, views of the Delta and foothills of the Diablo Range and Sierra Nevada are considered valuable visual resources. San Joaquin County General Plan open space policies establish protection of outstanding views of waterways, hilltops, and oak groves from public land and public roadways (Policy NCR-7.2: Views from Public Lands and Roadways).

Features of the built environment which may also hold visual significance include individual or groups of structures that are distinctive due to their aesthetic, historical, social, or cultural significance or characteristics. Examples of the visually significant built environment may include bridges or overpasses, architecturally appealing buildings or groups of buildings, landscaped freeways, and a location where a historic event occurred.

The following sub-sections provide a description of the scenic resources within the County. The descriptions are included in the County's 2009 General Plan Background Report and are summarized below.

Agricultural Land

The County's rural area has a high scenic value although it has been intensively developed, modified, and manipulated for agricultural purposes. The predominant characteristic of San Joaquin County's rural areas are primarily agricultural, including a mix of pasture, row crops, vineyards, and orchards with limited accessory buildings (barns, residences, sheds) scattered throughout. Viewers are offered expansive views over row crops and pastures, while orchards and vineyards create a focused line of sight. Most highways and roadways throughout the non-urbanized San Joaquin County provide some extent of rural agricultural landscape views.

The Delta, Marshes, and Wetlands

Reservoirs, creeks, rivers, ponds, and marshes comprise the main wetland resources in the County. Of these wetland resources, the Delta is the most prominent scenic resource. The Delta and Suisun Marsh form the largest estuary on the west coast of North America (USFW 2017). Further, the Suisun Marsh represents 10 percent of California's remaining wetlands (USDOI 2010). According to the Delta Vision Blue Ribbon Task Force 2, "The Delta is a regional, state, and national treasure. Its unique combination of estuary, water supply, recreation and tourism, aesthetics, lifestyle, and rural character make it a special place that we must recognize and protect." As stated in the Delta Vision Strategic Plan, "The Delta is one of the state's most distinct regions, combining a unique physical geography of islands and river channels with a cultural heritage as enduring as any in California. The Delta possesses natural, historical, and recreational resources of statewide and even national significance" (Blue Ribbon Task Force 2008).

Marshes locally are restricted primarily to the Delta, although small areas of marsh are located in the southeast portion of the County. Views of the Delta are predominantly from state highways, such as State Route (SR)-4 and SR-12 west of Stockton and Lodi and locally designated scenic roads, such as Eight Mile Road, Empire Tract Road, Lower Roberts Island Road, and Bacon Island Road.

River Corridors

The Stanislaus River, Mokelumne River, Calaveras River, and Dry Creek corridors, including their tributaries and creeks, provide scenic waterways and areas of riparian forest in the County. In addition, the lower Stanislaus and Mokelumne Rivers are the only areas left in the County with significant riparian woodland vegetation, heightening the importance of these areas. Less significant amounts of riparian vegetation also exist within the Delta and along portions of Old River, Bear Creek, and Dry Creek. Views of river corridors can be seen briefly from state highways and local roads, along bikeways and trails, and by recreationists along the rivers. Major public viewpoints of these resources are limited to road and highway crossings because the wide floodplains have hindered the development of roads and other viewpoints. A locally designated scenic roadway, River Road, provides views of the Stanislaus River corridor in the far southeast County. The riparian corridor of the lower Stanislaus River can be viewed from Caswell State Park, as well as local roadways in the vicinity.

Rangelands

Rangelands within the County are the prototypical California landscape in this area of the state. Verdant green from late winter to early summer, these landscapes evolve to the dried grass brown of late summer and fall. Though some areas of rangeland are composed of oak savannah, they are predominantly made up of expansive grasslands interspersed with vernal pools and ephemeral streams. Development within these areas tends to be infrequent and consist of small-scale

agricultural improvements. Rangelands are the primary landscape type in the eastern area of the County, and west of I-5, I-205, and I-580. Primary viewpoints of rangelands include I-5, I-205 and I-580 and SR-33 in the western County, and SR-4, SR-12, SR-26, SR-88 and SR-120, Shelton Road, Clements Road, Liberty Road, and Mackville Road in eastern San Joaquin County.

Scenic Panoramas

Coastal range and Sierra Nevada foothill views from the wide valley floor constitute the majority of scenic vistas in the County. These ranges are most often viewed from roadways. The coastal Diablo Range borders San Joaquin County on the west and is composed of gently to steeply rolling hills. Views of the Diablo Range can be seen along the I-5 and I-580 corridor, from portions of SR-33, and Corral Hollow Road. The foothills of the Sierra Nevada border San Joaquin County on the east, and are composed of gently rolling hills leading to the sharper terrain of the Sierra in the background. The dominant colors of the mountains and hills vary with the season, with golden brown hues through most of the year replaced by the green of vegetation in response to the winter rains. Due to poor air quality within the County, views of these scenic panoramas are often obscured, with views of the Sierra Nevada limited.

Scenic Water Resources and Wild and Scenic Rivers

Water resources are important visual resources that draw tourists to the area for recreational opportunities. The most visually significant water bodies in the area are part of the Sacramento-San Joaquin River Delta.

Scenic Corridors and Highways

Corridors

A scenic corridor is the view from the road that may include a distant panorama and/or the immediate roadside area. A scenic corridor encompasses the outstanding natural features and landscapes that are considered scenic. It is the visual quality of the man-made or natural environments within a scenic corridor that are responsible for its scenic value. Commonly, the physical limits of a scenic corridor are broken down into foreground views (0 to 0.25 mile) and distant views (over 0.25 mile). In addition to distinct foreground and distant views, the visual quality of a scenic corridor is defined by special features, which include:

- **Focal points:** prominent natural or man-made features which immediately catch the eye
- **Transition areas:** locations where the visual environment changes dramatically
- **Gateways:** locations which mark the entrance to a community or geographic area

Highways

A scenic highway is generally defined by Caltrans as a public highway that traverses an area of outstanding scenic quality, containing striking views, flora, geology, or other unique natural attributes. 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.

The status of a proposed state scenic highway changes from eligible to officially designated when the local governing body applies to Caltrans for scenic highway approval, adopts a Corridor Protection Program, and receives notification that the highway has been officially designated a

Scenic Highway. San Joaquin County has also designated scenic routes as valuable in enhancing the recreational experience for County residents and non-residents. The designation of scenic routes is based on County General Plan Policy NCR-7.3 Designate Scenic Routes, which states that the criteria for selection of scenic routes should specify that the route has one or more of the following characteristics:

- It leads to a recreational area
- It provides a representative sampling of the scenic diversity within the County
- It exhibits unusual natural or manmade features of interest
- It provides opportunities to view activities outside the normal routine of most people
- It provides a route for people to view the Delta waterways
- It links two scenic routes or connects with scenic routes of cities or other counties

As presented in Table 2, there are two officially designated scenic highways in San Joaquin County and located along stretches of I-580 and I-5.

Table 2 Officially Designated State Scenic Highways – San Joaquin County

Highway	Location	Length (miles)
Interstate 580	From Interstate 5 to the Alameda County Line	15.40
Interstate 5	From the Stanislaus County Line to Interstate 580	0.70

Source: California Department Of Transportation, 2013.

As shown in Table 3, San Joaquin County currently has 26 Designated Scenic Routes. The County and state designated scenic highways within the 2018 RTP/SCS planning area are shown in Figure 5.

Table 3 San Joaquin County Designated Routes

Road Name	Segment Begin	Segment End	Configuration	Scenic Resources
Liberty Road	SR 88	Amador County Line	East/west two-lane rural road	Range/grazing land; Camanche Reservoir
Collier Road	Mackville Rd	SR 88	East/west two-lane rural road	Range/grazing land
Mackville Road	SR-12/88	Collier Road	North/south two-lane rural road	Community of Clements; cropland; aggregate mine; park; Mokelumne River
Jahant Road	Tully Road	Mackville Road	East/west two-lane rural road	Range/grazing land; rural residences
Tully Road	Jahant Road	Peltier Road	North/south two-lane rural road	Cropland; rural residences
Peltier Road	Elliott Road	Tully Road	East/west two-lane rural road	Cropland; rural residences
Elliott Road	SR-12/88	Peltier Road	North/south two-lane rural road	Community of Lockeford; cropland; Mokelumne River; rural residences
Jack Tone Road	Eight Mile Road	SR-12/88	North/south two-lane rural road	Community of Lockeford; cropland; orchards; rural residences

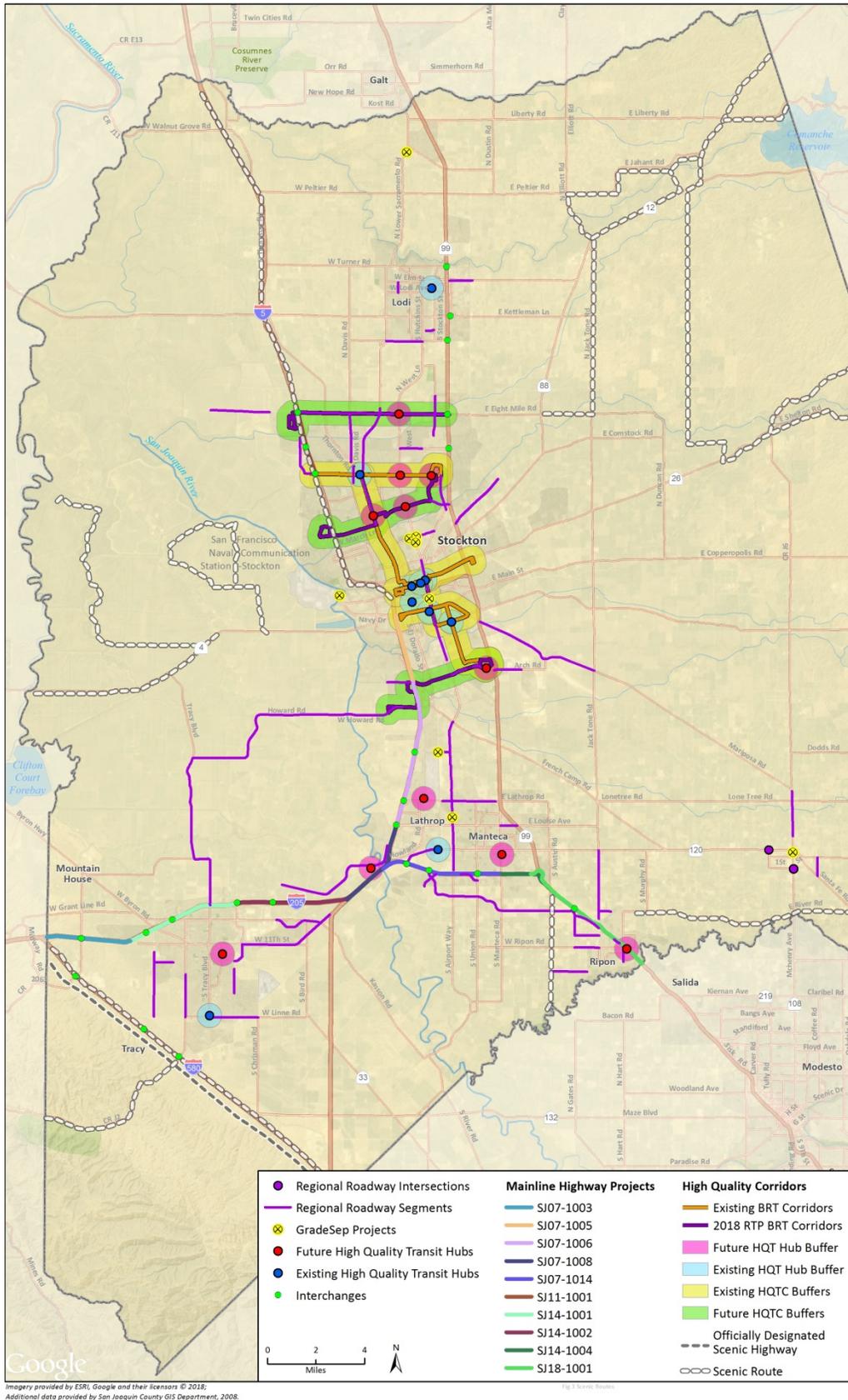
San Joaquin Council of Governments
2018 Regional Transportation Plan/ Sustainable Communities Strategy

Road Name	Segment Begin	Segment End	Configuration	Scenic Resources
Eight Mile Road	SR 88	Jack Tone Road	East/west two-lane rural road	Cropland; orchards; rural residences
Clements Road	Comstock Road	SR-12/88	North/south two-lane rural road	Cropland; range/grazing land
Comstock Road	Clements Road	Fine Road	East/west two-lane rural road	Orchards
Fine Road	SR 26	Comstock Road	North/south two-lane rural road	Orchards
SR 26	Fine Road	Calaveras County Line	East/west two-lane rural highway	Orchards; Mormon Slough; range/grazing land
Shelton Road	SR 26	Calaveras County Line/Wimer Road	North/south two-lane rural road	Calaveras River; orchards; range/grazing land
Shelton Road	Calaveras County Line/Wimer Road	SR 26	North/south two-lane rural road	Orchards and range/grazing land
Interstate 5	SR 4	Sacramento Co. Line	North/south six- to four-lane rural freeway	Cropland; Mokelumne River; riparian vegetation
Eight Mile Road	Empire Tract	Thorton Road	East/west two-lane rural road	Cropland; riparian vegetation; Delta waterways
Empire Tract Perimeter Roads	Eight Mile Road	Eight Mile Road	two-lane rural road	Cropland; riparian vegetation; Delta waterways
Inland Drive	SR 4	McDonald Road	Two-lane rural road	Cropland
McDonald Road	Inland Drive	Neugebauer Road	Two-lane rural road	Cropland
Neugebauer Road	McDonald Road	Holt Road	Two-lane rural road	Cropland; riparian vegetation; Delta waterways
Holt Road	Neugebauer Road	McDonald Road SR 4	Two-lane rural road	Cropland
SR 4	Contra Costa Co. Line	Trappers Road	East/west two-lane rural highway	Cropland; riparian vegetation; Delta waterways
Bacon Island Road	SR 4	Connection Slough	Two-lane rural road	Cropland; riparian vegetation; Delta waterways
Corral Hollow Road	Alameda Co. Line	Interstate 580	East/west two-lane rural road	Range; Diablo Range foothills; Corral Hollow canyon
Austin Road	Stanislaus Co. Line	SR 99	North/south two-lane rural road	Cropland
River Road	Ripon Road	Santa Fe Road	East/west two-lane rural road	Cropland; orchards; riparian vegetation; Stanislaus River

Wild and Scenic Rivers

Federal agencies have jurisdiction, under the Wild and Scenic Rivers Act, to designate rivers or river sections to “be preserved in free-flowing condition and protected for the benefit and enjoyment of present and future generations.” Currently, there are no rivers in San Joaquin County designated under the National Wild and Scenic Rivers System (Wild and Scenic Rivers Council 2017).

Figure 5 RTP/SCS Projects and San Joaquin County Designated Scenic Routes



b. Regulatory Setting

Federal

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

Section 4(f) of the Department of Transportation Act (DOT Act) of 1966 (49 U.S.C. § 303) was enacted to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. Section 4(f) requires a comprehensive evaluation of all environmental impacts resulting from federal-aid transportation projects administered by the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and Federal Aviation Administration (FAA) that involve the use, or interference with use, of the following types of land:

- Public park lands;
- Recreation areas;
- Wildlife and waterfowl refuges; and
- Publicly- or privately-owned historic properties of federal, state, or local significance.

This evaluation, called the Section 4(f) statement, must be sufficiently detailed to permit the U.S. Secretary of Transportation to determine that:

- There is no feasible and prudent alternative to the use of such land;
- The program includes all possible planning to minimize harm to any park, recreation area, wildlife and waterfowl refuge, or historic site that would result from the use of such lands; or
- That if there is a feasible and prudent alternative, a proposed project using Section 4(f) lands cannot be approved by the Secretary; or if there is no feasible and prudent alternative, the proposed project must include all possible planning to minimize harm to the affected lands.

Detailed inventories of the locations and likely impacts on resources that fall into the Section 4(f) category are required in project-level environmental assessments.

In August 2005, Section 4(f) was amended to simplify the process for approval of projects that have only minimal impacts on lands affected by Section 4(f). Under the new provisions, the U.S. Secretary of Transportation may find such a minimal impact if consultation with the State Historic Preservation Officer (SHPO) results in a determination that a transportation project will have no adverse effect on the historic site or that there will be no historic properties affected by the proposed action. In this instance, analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete.

State

California Scenic Highway Program

Recognizing the value of scenic areas and view from roads in such areas, the State Legislature established the California Scenic Highway Program in 1963. This legislation preserves and protects scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. The goal of the Scenic Highway Program is to preserve and enhance the natural beauty of California. Under this program, a number of State Routes have been designated as eligible for inclusion as scenic routes. Once the local jurisdiction through which the roadway passes has established a corridor protection program and the Departmental Transportation Advisory Committee recommends designation of the roadway, the State may officially designate roadways as

scenic routes. Interstate highways, State Routes, and county roads may be designated as scenic under the program. The Master Plan of State Highways Eligible for Official Scenic Highway Designation maps designated highway segments, as well as those that are eligible for designation. Changes to the map require an act of the State Legislature.

As noted, a corridor protection program must be adopted by the local governments with land use jurisdiction over the area through which the roadway passes as the first step in moving a road from “eligible” to “designated” status. Each designated corridor is monitored by the State and designation may be revoked if a local government fails to enforce the provisions of the corridor protection program. While there are no restrictions on scenic highway projects, local agencies and the California Department of Transportation (Caltrans) must act together to coordinate transportation and development projects and ensure the protection of the corridor’s scenic value to the greatest extent possible, including undergrounding all visible electric distribution and communication utilities within 1,000 feet of a Scenic Highway. In some cases, local governments have their own land use and site planning regulations in place to protect scenic values along a designated corridor. At a minimum, each corridor protection program must include:

- Regulation of land use and density of development,
- Detailed land and site planning,
- Control of outdoor advertising devices,
- Control of earthmoving and landscaping, and
- Regulation of the design and appearance of structures and equipment.

The Master Plan of State Highways Eligible for Official Scenic Highway Designation requires that proposed realignments and route improvements be evaluated for their impact on the scenic qualities of the corridor.

Caltrans Adopt-a-Highway Program

Caltrans administers the Adopt-a-Highway program to improve and maintain the visual quality of California highways which was established in 1989. The program provides an avenue for individuals, organizations, or businesses to help maintain sections of roadside within California’s State Highway System. Groups have the option to participate as volunteers or to hire a maintenance service provider to perform the work on their behalf. Adoptions usually span a two-mile stretch of roadside, and permits are issued for five-year periods. Since 1989, more than 120,000 California residents have kept 15,000 shoulder miles of state roadways clean by engaging in litter removal, tree and flower planting, graffiti removal, and vegetation removal.

Regional and Local

City and County General Plans

The general plans and zoning ordinances of the cities within the San Joaquin County area regulate design and the built environment within those communities, while the general plan for each county performing the same function within unincorporated areas. In all cases, the general plans and zoning typically prescribe visual resource policies, and in some cases, require development review of projects. In general, little direction is provided regarding the design of roadways, which are typically subject to adopted Caltrans or local engineering standards related to safety and capacity, rather than aesthetics.

Most local planning guidelines to preserve and enhance visual quality and aesthetic resources of urban and natural areas are established in a jurisdiction's General Plan. Cities and counties can use open space easements as a mechanism to preserve scenic resources, if they have adopted open-space plans, as provided by the Open Space Easement Act of 1974 and codified in California Government Code (Section 51070 et seq.). According to the Act, a city may acquire or approve an open-space easement through a variety of means, including use of public money.

4.1.2 Impact Analysis

a. Methodology and Significance Thresholds

Methodology

Environmental assessment of a proposed project's impacts to the aesthetic and visual resources of a site begins with identification of the existing visual resources on and off that site, including the site's physical attributes, its relative visibility, and its relative uniqueness. The assessment of aesthetic impacts involves a qualitative analysis that is inherently subjective in nature. Different viewers react to viewsheds and aesthetic conditions differently. This evaluation measures the existing visual resource against the proposed action, analyzing the nature of the anticipated change.

It is important to distinguish between public and private views. Private views are those views seen from privately-owned land, including views from private residences, and are typically enjoyed by individuals. Public views are experienced by the collective public. These include views of significant landscape features such as the Coastal ranges and the Sierra Nevada foothills, as seen from public viewing space, not privately-owned properties. California Environmental Quality Act (CEQA) (PRC §21000 et seq.) case law has established that only public views, not private views, need be analyzed under CEQA. For example, in *Association for Protection etc. Values v. City of Ukiah (1991) 2 Cal. App. 4th 720 [3 Cal. Rptr.2d 488]* the court determined that "we must differentiate between adverse impacts upon particular persons and adverse impacts upon the environment of person in general." As recognized by the court in *Topanga Beach Renters Assn. v. Department of General Services (1976) 58 Cal. App.3d 188 [129 Cal. Rptr. 739]*: "[A]ll government activity has some direct or indirect adverse effect on some persons. The issue is not whether [the project] will adversely affect particular persons but whether [the project] will adversely affect the environment of persons in general." Therefore, for this analysis, only public views will be considered when analyzing the visual impacts of implementing the 2018 RTP/SCS.

Significance Thresholds

Appendix G of the State CEQA Guideline identifies the following criteria for determining whether a project's impacts would have a significant impact related to aesthetics/visual resources:

1. Have a substantial adverse effect on a scenic vista;
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
3. Substantially degrade the existing visual character or quality of the site or its surroundings; and/or
4. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

b. Project Impacts and Mitigation Measures

The analysis assesses the potential impacts to visual resources that could result from implementation of the proposed RTP/SCS. Impacts to aesthetic resources are assessed in terms of both land use and transportation changes that could occur under the 2018 RTP/SCS. By 2042, implementation of the proposed RTP/SCS will result in a land use pattern and transportation network that is different from existing conditions. Unless otherwise stated, “existing conditions” refers to conditions in the year 2018.

Due to the programmatic nature of the 2018 RTP/SCS, a precise, project-level analysis of the specific impacts associated with individual transportation and land use projects is not possible at this time. In general, however, implementation of proposed transportation improvements and future projects under the land use scenario envisioned by the 2018 RTP/SCS could result in the impacts as described in the following section.

Threshold 1: Have a substantial adverse effect on a scenic vista
Threshold 2: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway

IMPACT AES-1 PROPOSED TRANSPORTATION IMPROVEMENT PROJECTS AND LAND USE PATTERNS ENVISIONED BY THE 2018 RTP/SCS MAY IMPAIR PUBLIC VIEWS ALONG DESIGNATED SCENIC CORRIDORS, INCLUDING STATE SCENIC HIGHWAYS. THIS WOULD BE A SIGNIFICANT AND UNAVOIDABLE IMPACT.

Scenic Resources

Within the RTP/SCS plan area, views of scenic resources, including the Sierra Nevada foothills, the Diablo Range, and the Sacramento-San Joaquin River Delta can be seen from highways and roadways, including scenic corridors, throughout the County. Implementation of the transportation improvements and changes to land use patterns identified in the proposed 2018 RTP/SCS could result in visual impacts by blocking or impeding views of significant landscape features. In general, the potential to impact panoramic views and landscapes (both natural and man-made) varies by the location of transportation improvement projects. Panoramic views are found both in open space areas and in developed urban areas.

Improvements to existing transportation infrastructure, resulting from the implementation of the proposed 2018 RTP/SCS, such as roadway widening, bridge replacements, signal installation, and road rehabilitation, could result in modification of the foreground of the various scenic viewsheds throughout the County. There is also potential for the 2018 RTP/SCS transportation projects, such as new roadways and bridges, to affect scenic resources within the area. This would include RTP/SCS transportation projects that are located adjacent to a broad viewshed such as the mountain ranges, rangelands, valleys, ridgelines, or water bodies along roadways, or adjacent to the focal point of the forefront of the broad viewshed, such as visually important trees, rocks, or historic buildings.

Both changes to land use patterns and transportation improvements have the potential to change the view of the middle ground or background elements of broad viewsheds through the conversion of open space uses to transportation use and/or urban use, or through the removal of visually important resources (such as trees, rocks, or historic buildings). RTP/SCS transportation projects could include features, such as sound walls, substantial grading, or structures (for example bridges, elevated passenger/commercial rail tracks) that could disrupt views.

Changes in land use patterns would introduce a variety of urban uses in to existing open space land and increase density in existing urban areas. Changes in land use patterns and individual RTP/SCS transportation projects could cause intermittent interruption in views to users of the highways, roadways, and rail system. Such changes to views would result in significant impacts. In some cases, impacts to visual resources can be reduced to less than significant levels by avoiding certain high-profile improvements and/or by minimizing alterations, and/or designing new structures so that they do not impede the scenic landscape and/or view.

Scenic Highways

As discussed in the setting and shown in Table 2 and Table 3, there are two officially designated state scenic highways and numerous County-designated scenic view corridors in the SJCOG region. Visual resource impacts from construction on or adjacent to these roadways could include: blockage of views by construction equipment and staging areas; disruption of views by temporary signage; and exposure of slopes and removal of vegetation. These effects would be temporary during the construction phase. In the long-term, implementation of the 2018 RTP/SCS would generally result in modification of existing transportation facilities within existing highway, roadway, or railroad rights-of-way. Further, many of the proposed projects are at-grade with the surrounding environment. As such, most of the road and highway investment are not likely to result in massive obstructions or blockages of surrounding views nor modify or substantially alter existing scenic resources viewed from a scenic vista or state scenic highway. Similarly, land use development envisioned by the 2018 RTP/SCS would be focused primarily in urban infill areas. Scenic vistas and designated scenic highways are generally located in undeveloped, rural areas, such that most future land use development envisioned in the 2018 RTP/SCS would not be expected to block or substantially alter scenic vistas.

Portions of I-580 and I-5 are state-designated scenic highways in the County. These state-designated corridors are protected under the Corridor Protection Programs that safeguard scenic corridors from encroaching development. When a city or county nominates a roadway for designation it must also adopt ordinances, zoning and/or planning policies to preserve the scenic quality of the corridor or document that such regulations already exist in various portions of local codes. In particular, Corridor Protection Programs must include (1) regulation of land uses and density of development (2) detailed land use and site planning (3) control of outdoor advertising (4) careful attention to and control of earthmoving and landscaping, and (5) the design and appearance of structures and equipment. The 2018 RTP/SCS includes transportation projects and development projects (such as interchange improvements) which are located on state-designated scenic highway portions of the I-580 or I-5 in San Joaquin County. Figure 5 shows the location of the RTP/SCS projects in relation to the County's state designated scenic highways and scenic routes. Thus, as development could take place near state-designated scenic highways, existing panoramic views, and views of significant landscape features or landforms could be affected. Although urban areas already have substantial existing transportation infrastructure and a variety of development (such as the San Joaquin Regional Transit District's (SJRTD) Bus Rapid Transit (BRT) system and the Downtown Transit Center located in Stockton), additional infrastructure in these areas proposed by the RTP/SCS would potentially impede or change the existing panoramic views or landscape features in the County.

While each jurisdiction in which land use and transportation improvements may be located has policies related to the protection of scenic resources and views, the potential remains for removal of scenic features and/or the addition of obstructing features, particularly those that would be in the foreground of scenic viewsheds and vistas. The permanent removal or addition of infrastructure

affecting scenic vistas or development within scenic highways would result in impacts to views or views of significant features. Changes related to land use and/or transportation projects are considered significant and unavoidable. Mitigation Measures AES-1(a) through AES-1(c), described below would reduce to the extent feasible but not necessarily eliminate potential significant adverse impacts.

Mitigation Measures

For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures. These mitigation measures have been developed for the 2018 RTP/SCS program where applicable for transportation projects that would potentially degrade scenic vistas and/or scenic resources within a state scenic highway. Municipalities in the SJCOG region can and should implement these measures, where relevant to land use projects implementing the 2018 RTP/SCS.

AES-1(a) Regional Planning Efforts

Impacts to aesthetic resources shall be minimized through cooperation, information sharing, and SJCOG's ongoing regional planning efforts.

AES-1(b) Alternative Design

Project sponsors shall identify and protect panoramic views and significant landscape features or landforms and implement project-specific mitigation as applicable. If it is determined that a project would significantly obstruct scenic views, implementing and local agencies can and should consider alternative designs that seek to avoid and/or minimize obstruction of scenic views to the extent feasible. Project-specific design measures may include reduction in height of improvements or width of improvements to reduce obstruction of views, or relocation of improvements to reduce obstruction of views. Implementing local agencies can and should consider taking the following (or equivalent) actions:

- Require that the scale and massing of new development in higher-density areas provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of adjoining neighborhoods that have lower development intensities and building heights; ensure building heights stepped back from sensitive adjoining uses to maintain appropriate transitions in scale and to protect scenic views;
- Avoid siting electric towers, solar power facilities, wind power facilities, communication transmission facilities and/or above ground lines along scenic roadways and routes, to the maximum feasible extent;
- Prohibit projects and activities that would obscure, detract from, or negatively affect the quality of views from designated scenic roadways or scenic highways; and comply with other local general plan policies and local control related to the protection of panoramic or scenic views or views of significant landscape features or landforms.

Significance After Mitigation

Although identified mitigation would help reduce impacts related to state-designated scenic highway corridors and scenic resources, individual transportation infrastructure projects as well as land use development included in the 2018 RTP/SCS could still result in obstructions to panoramic views and views of important landscape features or landforms (mountains, deltas, marshes,

wetlands, rivers, rangelands, or important man-made structures) as seen from public viewing areas. Given the extent of planned land use development and the potential for site-specific visual obstructions from future land use and transportation projects, impacts related to the obstruction of scenic vistas from public viewing areas and impacts to state-designated scenic highway corridors and scenic resources would be significant and unavoidable. No additional mitigation measures to reduce this impact to less-than-significant levels are feasible.

Threshold 3: Substantially degrade the existing visual character or quality of the site or its surroundings
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IMPACT AES-2 PROPOSED TRANSPORTATION IMPROVEMENT PROJECTS AND LAND USE PATTERNS ENVISIONED BY THE 2018 RTP/SCS MAY SUBSTANTIALLY DEGRADE EXISTING VISUAL CHARACTER IN THE SJCOG REGION. THIS WOULD BE A SIGNIFICANT AND UNAVOIDABLE IMPACT.

The proposed 2018 RTP/SCS includes improvements to existing facilities such as road widenings and extensions, intersection or interchange improvements (ex. roundabouts), auxiliary and transition lanes, highway maintenance, and other improvements. The 2018 RTP/SCS would include new road and highway facilities such as new interchanges, new roadways and overcrossings, and road extensions. Most road and highway projects would occur in areas where transportation infrastructure is already a dominant feature of the landscape. Such transportation projects would not likely degrade the existing visual character of the region because transportation infrastructure is already a dominant feature of the landscape in those areas. In less developed areas of the region, adding new transportation infrastructure would add an element of urban character to previously undeveloped lands. New and extended roadways would alter the character of agricultural areas, such as the widening projects in Lathrop, Lodi, and Manteca. This change in character is primarily due to conversion of farmland and introducing paved surfaces. Ancillary features constructed along new or existing roads (such as lighting, bus shelters, and signs) would further contribute to the trend toward a more suburban visual character. Depending on the design and siting of transportation projects, this could be considered a degradation of the visual character or quality of an area.

The 2018 RTP/SCS envisions infill development and development near existing transportation corridors, which are generally located in urbanized areas of cities and unincorporated communities. Infill development can be favorable in terms of visual character, as it occurs in areas already designated for and receiving growth and precludes growth in undeveloped and/or agricultural and rural areas. However, when compared to existing conditions, the 2018 RTP/SCS land use scenario would intensify the built environment within existing urban areas through the implementation of infill and transit-oriented development (TOD) projects, thereby resulting in an overall change in the character of existing urbanized areas to a denser development pattern. In addition, land use projects that do occur in rural or agricultural areas would introduce urban development to areas that were previously undeveloped. Depending on the design and siting of these projects, the resulting change could potentially be seen as a degradation of the visual character or quality of the region.

Projects implemented under the 2018 RTP/SCS would be subject to existing regulations that would help to minimize impacts to visual character. For example, in visually sensitive areas, local land use agencies would 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. Nevertheless, even with compliance with these standards, the overall visual effect of planned roadway projects and envisioned land use patterns would

contribute to an incremental, but irreversible transformation in visual character from rural or semi-rural to more urban or suburban throughout the SJCOG region. Mitigation measures are available to reduce impacts to the extent feasible, and are listed below. Although mitigation is required, impacts on visual character resulting from implementation of the 2018 RTP/SCS would remain potentially significant.

Mitigation Measures

For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measure developed for the 2018 RTP/SCS program where applicable for transportation projects that would substantially degrade visual character. Municipalities in the SJCOG region can and should implement this measure, where relevant to land use projects implementing the 2018 RTP/SCS.

AES-2 Design Measures for Visual Compatibility

The project sponsor shall require measures that minimize contrasts in scale and massing between the project and surrounding natural forms and developments. Strategies to achieve this include but are not limited to:

- Siting or designing projects to minimize their intrusion into important viewsheds;
- Avoiding large cuts and fills when the visual environment (natural or urban) would be substantially disrupted;
- Ensuring that re-contouring provides a smooth and gradual transition between modified landforms and existing grade;
- Developing transportation systems to be compatible with the surrounding environments (e.g., colors and materials of construction material; scale of improvements);
- Protecting or replacing trees in the project area;
- Designing and installing landscaping to add natural elements and visual interest to soften hard edges, as well as to restore natural features along corridors where possible after widening, interchange modifications, re-alignment, or construction of ancillary facilities. The implementing agency shall provide a performance security equal to the value of the landscaping/irrigation installation to ensure compliance with landscaping plans; and
- Designing new structures to be compatible in scale, mass, character, and architecture with existing structures.

Significance After Mitigation

Implementation of the above mitigation measure would reduce project-specific impacts to the extent feasible. Nevertheless, the incremental alteration of current rural or semi-rural character to a more suburban environment is a significant and unavoidable impact.

Threshold 4: Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area

IMPACT AES-3 TRANSPORTATION IMPROVEMENT PROJECTS AND LAND USE PATTERNS ENVISIONED IN THE 2018 RTP/SCS WOULD RESULT IN INCREASED LIGHTING FROM NEW LIGHTPOLES, SECURITY LIGHTING, LANDSCAPE AND STRUCTURE LIGHTING, AND LIGHTS ON VEHICLES. LAND USE PROJECTS ENVISIONED IN THE 2018 RTP/SCS WOULD ALSO INTRODUCE NEW OR INTENSIFIED SOURCES OF LIGHTING. THIS LIGHTING MAY ADVERSELY AFFECT VIEWS IN THE AREA AND WOULD BE A SIGNIFICANT BUT MITIGABLE IMPACT.

New or intensified lighting from land use development envisioned in the 2018 RTP/SCS, which is focused on infill and TOD development, would be concentrated in areas with existing sources of light and glare. In these infill areas, such increases may not adversely affect nighttime views because existing sources of light, glare, and shadow are already a dominant feature of the urban landscape. However, the intensity of light and glare in these urban areas could increase as a result of infill and TOD projects under the 2018 RTP/SCS, depending on site-specific conditions and lighting design associated with new structures. Because of the potential for increased lighting affecting nighttime views, impacts from land use development would be potentially significant.

Improvements to existing roadways and highways would not significantly increase the amount of light and glare in an area, as these improvements would take place on existing facilities that have existing sources of light and glare. Increases in light and glare from new reflective signage, streetlights, intersection control devices and other improvements would be relatively minor compared to existing conditions. However, the expansion and widening of existing roadways or construction of new roadways would allow a greater volume of vehicles to travel through a given segment of roadway or highway throughout the day, or introduce vehicles into a new area, which would have the potential to introduce new or additional vehicle headlights as new light sources. In addition, some of the new transportation facilities included in the 2018 RTP/SCS would directly introduce light, including: new rail cars for ACE service expansion, the replacement of existing lighting at the Stockton Municipal Airport, construction of pedestrian lighting along various City streets, and installation of lighting along bike paths in San Joaquin County. The introduction of light and glare could adversely affect day or nighttime views.

New transportation investments would be aligned with planned developments, which would help to reduce aesthetic impacts; however, these projects could potentially introduce glare, light, and shadow to areas where previously no sources of glare, light, and shadow existed. Impacts from glare, light, and shadow related to transportation projects and changes to land use patterns from implementation of the 2018 RTP/SCS are considered potentially significant.

Mitigation Measures

For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures for transportation projects that would result in light and glare impacts. Municipalities in the SJCOG region can and should implement these measures, where relevant to land use projects implementing the 2018 RTP/SCS.

AES-3(a) Roadway Lighting

Roadway lighting shall be minimized to the extent possible, consistent with safety and security objectives, and shall not exceed the minimum height requirements of the local jurisdiction in which

the project is proposed. This may be accomplished through the use of back shields, hoods, low intensity lighting, and using as few lights as necessary to achieve the goals of the project.

AES-3(b) Lighting Design Measures

As part of planning, design, and engineering for projects, project sponsors shall ensure that projects proposed near light-sensitive uses avoid substantial spillover lighting. Potential design measures include, but are not limited to, the following:

- Lighting shall consist of cutoff-type fixtures that cast low-angle illumination to minimize incidental spillover of light into adjacent properties and undeveloped open space. Fixtures that project light upward or horizontally shall not be used.
- Lighting shall be directed away from habitat and open space areas adjacent to the project site.
- Light mountings shall be downcast and the height of the poles minimized to reduce potential for backscatter into the nighttime sky and incidental spillover of light onto adjacent private properties and undeveloped open space. Light poles will be 20 feet high or shorter. Luminary mountings shall have non-glare finishes.
- Exterior lighting features shall be directed downward and shielded in order to confine light to the boundaries of the subject project. Where more intense lighting is necessary for safety purposes, the design shall include landscaping to block light from sensitive land uses, such as residences.

AES-3(c) Glare Reduction Measures

Implementing agencies shall minimize and control glare from transportation and infill development projects near glare-sensitive uses through the adoption of project design features such as:

- Planting trees along transportation corridors to reduce glare from the sun;
- Creating tree wells in existing sidewalks;
- Adding trees in new curb extensions and traffic circles;
- Adding trees to public parks and greenways;
- Landscaping off-street parking areas, loading areas, and service areas;
- Limiting the use of reflective materials, such as metal;
- Using non-reflective material, such as paint, vegetative screening, matte finish coatings, and masonry;
- Screening parking areas by using vegetation or trees;
- Using low-reflective glass; and
- Complying with applicable general plan policies, municipal code regulations, city or local controls related to glare
- Tree species planted to comply with this measure shall provide substantial shade cover when mature. Utilities shall be installed underground along these routes wherever feasible to allow trees to grow and provide shade without need for severe pruning.

Significance After Mitigation

In the absence of regulations specifically addressing light and glare impacts, the aforementioned mitigation measures would limit the use of reflective building materials and the potential spillage of light both upward and onto adjacent properties from exterior lighting fixtures. As a result, in areas

lacking existing dark sky ordinances or similar regulations, or where such regulations are insufficient, the implementation of the identified mitigation measures would reduce impacts related to light and glare to a less than significant level.

c. Cumulative Impacts

The analysis in this section examines impacts of the 2018 RTP/SCS on aesthetics/visual resources throughout the SJCOG region and is cumulative in nature. Some types of impacts to aesthetic resources are localized and not cumulative in nature. For example, the creation of glare or shadows at one location is not worsened or caused by glare or shadows created at another location. Rather these effects are independent, and the determination as to whether they are adverse is specific to the project and location where they are created. Projects that block a view or affect the visual quality of a site also result in localized impacts. The impact occurs specific to a site or area and remains independent from another project elsewhere that may block a view or degrade the visual environment of a specific site.

There are two types of aesthetic impacts that may be additive in nature and thus cumulative: night sky lighting and overall changes in the visual environment as the result of increasing urbanization of large areas. As development in one area, such as a relatively large city adjoining agricultural land on fringe of the County (especially adjacent to Sacramento County), increases and possibly expands over time and meets or connects with development in an adjoining ex-urban area, the effect of night sky lighting experienced outside of the region may increase in the form of larger and/or more intense nighttime glow in the viewshed. Although growth anticipated in the 2018 RTP/SCS is primarily focused on infill areas, development outside of those geographies with long-distance views may result in nighttime lighting becoming more visible, covering a larger area, and/or appearing in new areas as a result of projected development under the 2018 RTP/SCS.

With regard to the visual environment experienced throughout the cumulative impact analysis area, as planned cumulative development occurs over time the overall visual environmental will change. Whether this overall change in land use is experienced as an adverse or beneficial outcome is highly subjective. However, the combination of forecasted development in the SJCOG region and planned development in neighboring counties will result in a different visual environment than currently exists. For the purposes of this analysis, the cumulative impacts associated with night sky lighting and changes in the visual environment are considered potentially significant and the contribution of the 2018 RTP/SCS to these impacts is cumulative considerable.