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## 4.1 Visual Resources

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This section evaluates potential impacts to visual resources from development facilitated by the proposed 2022 RTP/SCS.

### 4.1.1 Setting

#### a. Visual Character of the Region

The SJCOG region is within the greater San Joaquin Valley, with the Delta and vast, flat agricultural land and concentrated urban development framed by the foothills of the Diablo Range to the west and the foothills of the Sierra Nevada mountains to the east. Agricultural uses make up approximately 83 percent of the unincorporated lands within the SJCOG region (San Joaquin County 2014). Urban development is concentrated in the seven incorporated cities within the SJCOG region, primarily within the urban centers of Stockton, Manteca and Tracy.

Mature trees, development, utility structures, and other vertical forms are highly visible in the SJCOG region due to the flat terrain; however, where such vertical elements are absent, views are expansive. Much of the SJCOG region is developed at low densities with buildings not exceeding two stories, with the exception of urban centers within the incorporated cities. Large expanses of agricultural land are often broken up by small areas of scattered development. The aesthetic quality of the SJCOG region is altered by various forms of transportation, including highways, freeways, and transcontinental railroads.

The visual character of the SJCOG region consists of the following: the Delta, river corridors, agricultural lands and rangelands, significant oak groves, hillsides and ridges, and parklands (San Joaquin County 2014). The transportation network will be discussed further below in Primary Viewing Corridors.

#### *The Delta*

The Delta, a term applied to the greater Sacramento-San Joaquin River Delta, is the convergence of the Sacramento and San Joaquin Rivers. The Delta serves as a main deliverance for California's water system, with the State pumping fresh water from the Delta south to San Joaquin Valley farms and Southern California cities. A system of levees is interwoven throughout the Delta region, and much of the Delta are within the SJCOG region is used for agricultural production. The Delta is characterized by estuary habitat and marshlands that provide habitat to many birds, fish, and mammals. The Delta also serves as a source of recreation and unique scenery for boaters and fishermen throughout the SJCOG region.

#### *River Corridors*

The main waterways throughout the SJCOG region consist of the Stanislaus River, San Joaquin River, Mokelumne River, Dry Creek, and Old River. Many of these river corridors are lined with thick riparian vegetation, forming a strong visual contrast to adjoining agricultural and grazing lands. As such, these rivers provide visual resources within the SJCOG region.

### *Agricultural Lands and Rangelands*

The SJCOG region includes large expanses of agricultural lands that are irrigated for row crops, vineyards, orchards, and field crops. These agricultural lands can take on visual characteristics such as fallow lands to vibrant fruit trees, depending on the season. Rolling hills in the eastern SJCOG region are composed of dry grasses that become green after winter and spring rains. Additionally, grazing occurs on flat agricultural lands and rolling hills throughout the SJCOG region.

### *Oak Groves*

Oak groves are found in the southwestern corner of the SJCOG region, and scattered between the cities of Stockton and Lodi, as well as a small portion of the northeastern SJCOG region surrounding the Camanche Reservoir. The oak groves form a contrast to the majority grass-covered terrain.

### *Hillsides and Ridges*

The foothills in the southwestern portion of the SJCOG region and along the eastern boundary add contrast to predominantly level terrain associated with agricultural operations and urbanized development. Hillsides are visible from numerous locations across the SJCOG region.

### *Parklands*

There are many state and regional parks throughout the SJCOG region with many of these containing visual features such as oak groves and rivers. Parklands include the Carnegie State Vehicle Recreation Area, Caswell State Park, and local parks within incorporated cities.

## **b. Primary Viewing Corridors**

There are two officially designated State Scenic Highways in the SJCOG region, according to the California Department of Transportation (Caltrans) California Scenic Highway Mapping System (Caltrans 2019):

- Interstate 580 (I-580) from the Interstate 5 (I-5) junction to the Alameda County Line
- I-5 from the Stanislaus County Line to I-580

An extension of the I-580 Scenic Highway is eligible for a Scenic Highway Designation:

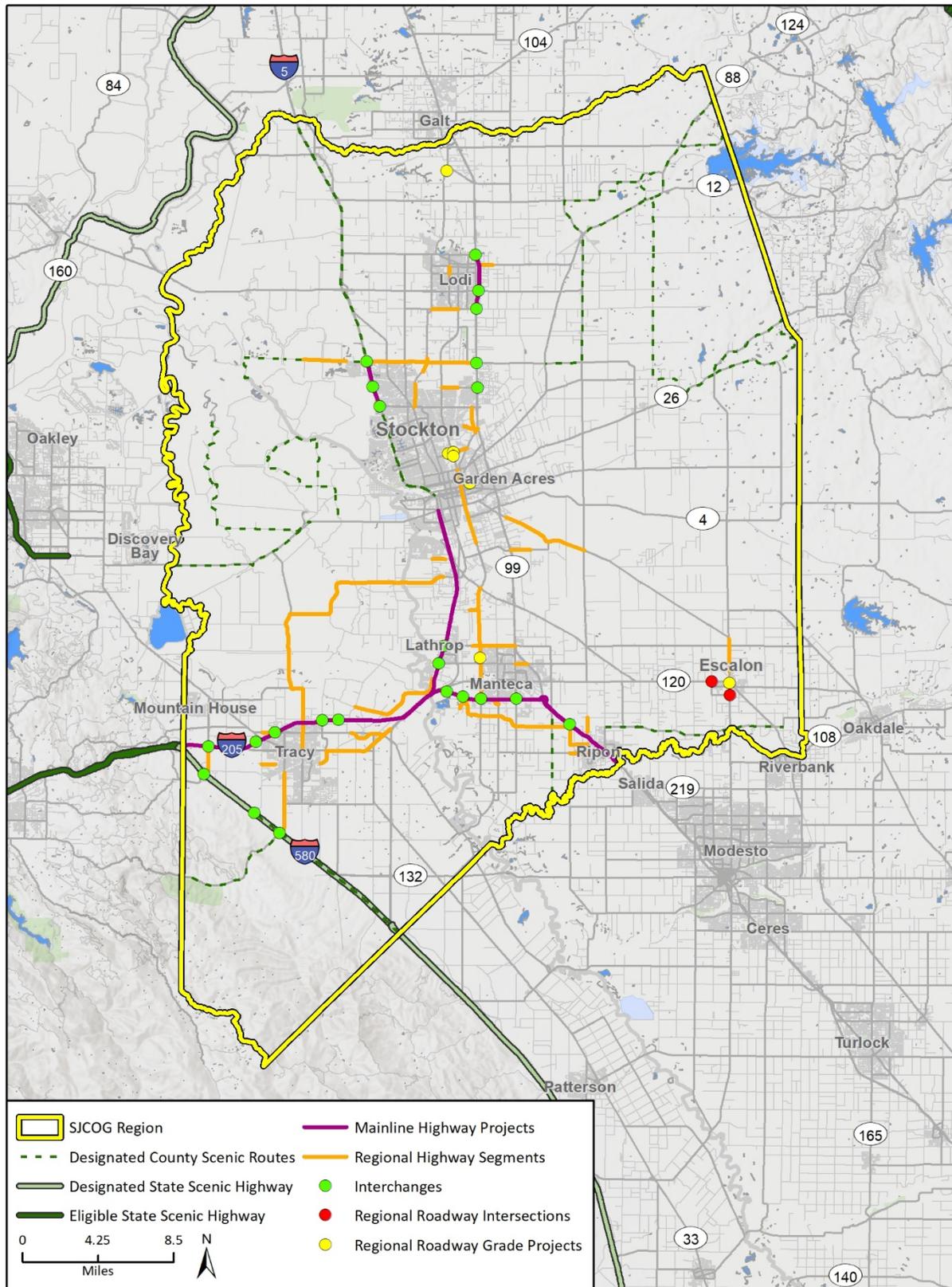
- I-580, from the I-5 Southwest of Vernalis/I-80 to the city of San Leandro in Alameda County

The I-580 to Alameda County Line Scenic Highway travels parallel to the foothills of the Diablo Range qualifying it as a scenic route. In addition to State designations, the San Joaquin County General Plan identifies the following 26 routes as County-designated local scenic routes (San Joaquin County 2016). Figure 4.1-1 depicts the location of these highways and routes.

- Liberty Road from State Route (SR) 88 to the Amador County Line
- Collier Road from Mackville Road to SR-88
- Mackville Road from SR-12/88 to Collier Road
- Jahan Road from Tully Road to Mackville Road
- Tully Road from Jahant Road to Peltier Road
- Peltier Road from Elliot Road to Tully Road
- Elliot Road from East Hammond Street to Peltier Road

- Jack Tone Road from Comstock Road to East Hammond Street
- Comstock Road from SR-88 to Jack Tone Road
- Clements Road from Comstock Road to SR-12/88
- Comstock Road from Clements Road to Fine Road
- Fine Road from SR-26 to Clements Road
- SR-26 from Fine Road to the Calaveras County Line
- Shelton Road from SR-26 to the Calaveras County Line
- I-5 from SR-4 to the Sacramento County Line
- Eight Mile Road from Empire Tract to Thornton Road
- Empire Tract Perimeter Roads from Eight Mile Road to Eight Mile Road
- Inland Drive from SR-4 to McDonald Road
- McDonald Road from Inland Drive to Neugebauer Road
- Neugebauer Road from McDonald Road to Holt Road
- Holt Road from Neugebauer Road to McDonald Road
- SR-4 from the Contra Costa County Line to Trappers Road
- Bacon Island Road from SR-4 to Connection Slough
- Corral Hollow Road from the Alameda County Line to I-580
- Austin Road from the Stanislaus County Line to SR-99
- River Road Ripon Road to Santa Fe Road

**Figure 4.1-1 Scenic Roadways in the SJCOG Region**



Basemap provided by Esri and its licensors © 2022.  
 Additional data provided by Caltrans, 2015; San Joaquin General Plan, 2016

Fig 4.1-1 Scenic Highway Designation in the SJCOG Region

## 4.1.2 Regulatory Setting

### a. Federal Laws, Regulations, and Policies

#### *National Scenic Byway Program*

The National Scenic Byway Program was established to preserve and protect the nation's scenic and less-traveled roads in an effort to promote tourism. For designation as a National Scenic Byway a road must have one of the following six intrinsic qualities: scenic, natural, historic, cultural, archeological, or recreational. Within California, there are eight federally designated byways (FHWA 2021).

#### *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. 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.

### b. State Laws, Regulations, and Policies

#### *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 (Streets and Highways Code Sections 260 et seq). 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 have 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 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. The SJO CG area includes designated and eligible State Scenic Highways, as seen in Figure 4.1-1.

#### *Caltrans Corridor Highway Program*

Caltrans offers cities and counties a nomination process for eligible scenic highways to become officially designated. The jurisdiction must identify and define the scenic corridor of the highway. Scenic corridors are defined as corridors that possesses highly scenic and natural features, as viewed from the highway. Topography, vegetation, viewing distance, and/or jurisdictional lines determine the corridor boundaries. The CPP summarizes the city or county ordinances, zoning and/or planning policies (collectively called “visual quality protection measures”) that preserve the scenic quality of the corridor. The visual quality protection measures and the CPP should be written in sufficient detail as to avoid broad discretionary interpretation; and need to demonstrate a concise strategy to effectively maintain the scenic character of the corridor. If the visual quality protection measures do not already exist at that local level, additional protection measures would need to be adopted by the local government(s) in order to fulfill the five elements required by legislation defined in the Streets and Highways Code.

The five elements include five legislatively required areas:

- 1 Regulation of land use and density of development;
- 2 Detailed land 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.

#### *California Building Energy Efficiency Standards*

California Code of Regulations Title 24, Part 6 contains California’s Energy Efficiency Standards for Residential and Non-residential Buildings. California Building Energy Efficiency Standards were established by CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California’s energy consumption and provide energy efficiency standards for residential and

nonresidential buildings. The 2019 Energy Code contains standards to reduce energy consumption for outdoor lighting application in residential and non-residential developments. Mandatory measures for outdoor lighting and glare are specified in §110.9, §130.0, and §130.2 of the 2019 Energy Code.

### *Caltrans Adopt-a-Highway Program*

To improve and maintain the visual quality of California highways, Caltrans administers the Adopt-a-Highway program, 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.

## **c. Regional and Local Laws, Regulations, and Policies**

### **San Joaquin County General Plan**

The San Joaquin County General Plan, Natural and Cultural Resource Element Goal NCR-7 sets out to protect and enhance the unique scenic features of San Joaquin County. To do so, the following policies are included (San Joaquin County 2016).

- NCR-7.1: The County shall protect the visual character of designated scenic roadways
- NCR-7.2: The County shall ensure that views of waterways, hilltops, and oak groves from public land and public roadways are protected and public access is provided to them whenever possible.
- NCR-7.3: The County shall preserve scenic views from roadways by designating scenic routes based on the following criteria:
  - Leads to a recreational area;
  - Provides a representative sampling of the scenic diversity within the County;
  - Exhibits unusual natural or man-made features of interest;
  - Provides opportunities to view activities outside the normal routine of most people;
  - Provides a route for people to view the Delta waterways; and
  - Links two scenic routes or connects with scenic routes of cities or other counties.
- NCR-7.4: The County shall require new development adjacent to scenic resources to be sited and designed to visually complement those resources, except in MR-Z designated areas.
- NCR-7.5: The County shall require landscape plans for new development along State- or County-designated scenic routes.
- NCR-7.6: The County shall ensure that ridgelines and major hill tops remain undeveloped.
- NCR-7.7: The County shall encourage project designs, lighting configurations, and operational practices that reduce light pollution and preserve view of the night sky.
- NCR-7.8: The County shall require all new electric and communication distribution facilities adjacent to scenic routes to be placed underground, whenever feasible. Where overhead utility

lines are unavoidable, every effort should be made to reduce the visual impacts through elements of design.

## **City General Plans and Regulations**

### *City of Escalon General Plan*

The City of Escalon General Plan Community Design Element addresses the conservation and enhancement of the visual quality of the Escalon environment. The Community Design Element specifically addresses the protection of natural resources, preservation and enhancement of the historical character of the community, the incorporation of new development into existing public and private development, and the maintenance of a small-town, rural atmosphere. Policies and Standards specifically related to aesthetics include preservation of the Sierra Nevada and foothill views from the City of Escalon's major roadways, and the implementation of a special design overlay for the State Highway 120 corridor (City of Escalon 2019).

### *City of Lathrop Comprehensive General Plan*

The City of Lathrop Comprehensive General Plan includes policies to assure quality in aesthetic characteristics of new development. To achieve this, the Comprehensive General Plan implements policies which require land use designations along freeway section to take visual impacts into consideration, require the inclusion of bodies of water as components of urban development, require outdoor storage areas to be visually screened, and implements a landscaped buffer strip along freeways for visual screening (City of Lathrop 1991). The city is currently undergoing a general plan update expected to be completed later this year.

### *City of Lodi General Plan*

The City of Lodi General Plan aims to maintain its small-town atmosphere and provide compact urban form, promoting infill development downtown and along key corridors. Policies within the Community Design & Livability chapter emphasize maintaining the visual character of the City of Lodi. Policy CD-P27 requires new development to exhibit architectural variety and visual interest. Policy CD-P28 implements methods to minimize the visual impacts of automobiles in residential areas including reducing garage frontage, minimizing curb cuts, and providing narrow roads. Policy P-P11 of the Parks, Recreation, and Open Space Chapter of the General Plan encourages planting of native trees, shrubs, and grassland to preserve the visual integrity of the landscape (City of Lodi, 2010).

### *City of Manteca General Plan*

The City of Manteca General Plan 2023 Community Design Element contains policies that are used to maintain the visual character of the city. Policy CD-P-9 requires the design standards for Yosemite Avenue and Main Street as a means of visually upgrading commercial development along these streets. Policy CP-P-10 requires the establishment of gateway features at intersection such as Lathrop Road and SR-99, or Yosemite Avenue and SR-99. Policy CD-P-11 requires the establishment of a landscape program and design standards that provide views of the city along SR-99 and SR-120 (City of Manteca 2003). The city is currently undergoing a general plan update expected to be completed later this year.

### *City of Ripon General Plan*

The City of Ripon General Plan Circulation and Transportation Chapter has the goal of providing a circulation system correlated with existing and proposed land used that contributes to efficient and safe movement of persons, goods, and services within and through Ripon. To fulfill this goal, Policy A4 is included which states the City of Ripon will consider visual aesthetics and safety aspects in future developments, including landscaping requirements and setback requirements (City of Ripon 2006).

### *City of Stockton General Plan*

The City of Stockton Envision Stockton 2040 General Plan Land Use Element Policy LU-1.3 aims to improve the visual quality of the urban environment to be more welcoming and inviting at key gateway and travel corridors into the city. Actions LU-1.3A through LU-1.3C implement Policy LU-1.3 by creating a “gateway district” program for major corridor entries, collaborating with transportation agencies to improve maintenance, code enforcement, screening, and landscaping of viewsheds along rail corridors, Highway 99, Highway 4, and Interstate 5, and requiring the incorporation of scenic views into design of the built environment (City of Stockton 2018).

### *City of Tracy General Plan*

The City of Tracy General Plan Land Use Element contains policies specific to transportation corridors in the city. Specifically, the Land Use Element states special attention should be given to areas around the Interstate 205 off-ramps to ensure development is visually attractive. Appropriate setbacks and landscaping along Interstate 205 shall be provided to create an aesthetically pleasing visual entryway into the City of Tracy. Setbacks and landscaping shall also be required along the Eleventh Street edge of the Urban Reserve 4 boundary of the City of Tracy (City of Tracy 2011).

## 4.1.3 Impact Analysis

### **a. Methodology and Significance Thresholds**

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 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 Sierra Nevada Mountain range, 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. See *Association for Protection etc. Values v. City of Ukiah* (1991) 2 Cal. App. 4th 720 and *Topanga Beach Renters Assn. v. Department of General Services* (1976) 58 Cal. App. 3d 188. Therefore, for this analysis, only public views will be considered when analyzing the visual impacts of implementing the proposed 2022 RTP/SCS.

Appendix G of the State CEQA Guidelines identifies the following criteria for determining whether a project’s impacts would have a significant impact related to 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 In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site or its surroundings; if the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality; 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 following section discusses potential impacts and mitigation measures that may be associated with transportation projects and the land use scenario contained within the proposed 2022 RTP/SCS. Section 4.1.3.c summarizes the impacts associated with capital improvement projects proposed in the 2022 RTP/SCS. Due to the programmatic nature of the proposed 2022 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 2022 RTP/SCS could result in the impacts as described in the following section.

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

Impact AES-1

#### **THE PROPOSED TRANSPORTATION IMPROVEMENTS AND LAND USE PROJECTS ENVISIONED BY THE PROPOSED 2022 RTP/SCS WOULD HAVE A SUBSTANTIAL ADVERSE EFFECT ON SCENIC VISTAS AND SUBSTANTIALLY DAMAGE SCENIC RESOURCES WITHIN A STATE SCENIC HIGHWAY. IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.**

As discussed previously, there are two officially designated state scenic highways and numerous County-designated scenic routes in the SJCOG region. Visual resource impacts from construction on or adjacent to these roadways would 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 proposed 2022 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 investments 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 proposed 2022 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 proposed 2022 RTP/SCS would be unlikely to block or substantially alter scenic vistas.

While most transportation and land use projects would not result in significant impacts to scenic vistas or scenic resources within a state scenic highway, some projects have the potential to result

in substantial adverse effects. For example, interchange projects would occur on I-580, a designated scenic highway. These projects would change existing visual conditions of the area within which they are proposed through modification or removal of existing vegetation or the introduction of new structures that could block existing views from the roadway. In some areas, higher density infill development would obstruct scenic views of the Sierra Nevada Mountain range or foothills.

Both the proposed transportation and land use development near state-designated scenic highway corridors would be minimized to some extent through compliance with the Caltrans Corridor Protection Program, which requires that the local jurisdiction adopt ordinances, zoning and/or planning policies to preserve the scenic quality of the state-designated scenic highway corridor or document such regulations that already exist in various portions of local codes. Many local jurisdictions also have their own general plan policies related to the protection of scenic vistas and resources such as Action LU-1.3C in the Envision Stockton 2040 General Plan which requires incorporation of scenic views into design of the built environment. These policies would limit the amount or type of development in designated scenic corridors or require special design guidelines when developing in certain areas. However, because scenic vistas and scenic resources are protected unevenly among the various jurisdictions in the SJCOG region, the proposed 2022 RTP/SCS would result in a substantial adverse effect on a scenic vista or substantially damage scenic resources within a state scenic highway.

Similarly, the future land use scenario envisioned by the proposed 2022 RTP/SCS is intended to encourage in-fill development and development near existing transportation corridors. This type of development would help to avoid the loss of scenic resources overall by concentrating development within existing urbanized areas when compared to a future scenario without the proposed 2022 RTP/SCS. This land use scenario would intensify the built environment within existing urban areas through planned in-fill development. In addition, this land use scenario would concentrate development near transportation corridors in urban areas, which would further increase the visibility of future in-fill and transit-oriented development from these corridors and potentially impact views of background scenic resources. However, not all projects and development included in the proposed 2022 RTP/SCS would be infill projects in urbanized areas, and some projects would inevitably be located in rural and other areas in the SJCOG region. Therefore, the proposed 2022 RTP/SCS could also result in a substantial adverse effect on a scenic vista or substantially damage scenic resources within an eligible scenic highway or a locally identified scenic highway in rural areas of the SJCOG region. The following mitigation measures would reduce this impact.

## **Mitigation Measures**

For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures where applicable for transportation projects implementing the proposed 2022 RTP/SCS that would result in impacts to scenic vistas and resources. Cities and the County can and should implement these measures, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

### *AES-1(a) Tree Protection and Replacement*

Implementing agencies shall, or can and should, ensure new roadways, extensions and widenings of existing roadways, bridge replacement and enhancements, trails and facility improvement projects shall avoid the removal of existing mature trees to the extent possible consistent with adopted local

City and County policies as applicable. The implementing agency of a particular proposed 2022 RTP/SCS project shall replace any trees lost at a minimum 2:1 basis and incorporate them into the landscaping design for the roadway when feasible, or as required by local or County requirements. The implementing agency also shall ensure the continued vitality of replaced trees through periodic maintenance.

*AES-1 (b) Discouragement of Architectural Features that Block Scenic Views*

Implementing agencies shall, or can and should, design projects to minimize contrasts in scale and massing between the project and surrounding natural forms and development. Setbacks and acoustical design of adjacent structures shall be preferentially used as mitigation for potential noise impacts arising from increased traffic volumes associated with adjacent land development. The use of sound walls, or any other architectural features that could block views from the scenic highways or other view corridors, shall be discouraged to the extent possible. Where use of sound walls is found to be necessary, walls shall incorporate offsets, accents and landscaping to prevent monotony. In addition, sound walls shall be complementary in color and texture to surrounding natural features.

**IMPLEMENTATION AGENCIES AND TIMING**

Implementing agencies for transportation projects are SJCOG and transportation project sponsor agencies. Implementing agencies for land use projects are cities and the County. These mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction where appropriate.

**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 proposed 2022 RTP/SCS could still result in obstructions to panoramic views and views of important landscape features or landforms (mountains, wetlands, rivers, or important man-made structures) as seen from public viewing areas. And because this EIR evaluates impacts at the programmatic level, all project circumstances are not foreseeable, and these mitigation measures may not be feasible or effective for some projects. Therefore, 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 areas 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:** In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site or its surroundings; in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality

**THE PROPOSED TRANSPORTATION IMPROVEMENTS AND LAND USE PROJECTS ENVISIONED BY THE PROPOSED 2022 RTP/SCS WOULD IN NON-URBANIZED AREAS, SUBSTANTIALLY DEGRADE THE EXISTING VISUAL CHARACTER OR QUALITY OF PUBLIC VIEW OR THE SITE OR ITS SURROUNDINGS; IN AN URBANIZED AREA, CONFLICT WITH APPLICABLE ZONING AND OTHER REGULATIONS GOVERNING SCENIC QUALITY. IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.**

Impact AES-2

The proposed 2022 RTP/SCS includes improvements to existing facilities such as road widenings, intersection or interchange improvements, railroad crossing safety, highway maintenance and other improvements. The proposed 2022 RTP/SCS would include some 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 is already a dominant feature of the landscape and therefore would not likely degrade the existing visual character of the region. In less developed areas of the region, adding new transportation infrastructure would alter the character of previously undeveloped lands, particularly those in unincorporated San Joaquin County, by introducing more paved surfaces than what already exists. Ancillary facilities 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. A complete listing of transportation projects with the potential to alter the rural character of the SJCOG region is included in Table 4.1-1.

The proposed 2022 RTP/SCS emphasizes 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 uses.

However, when compared to existing conditions, the proposed 2022 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 that could conflict with applicable zoning and other regulations governing scenic quality. For example, development along Interstate 205 in the city of Tracy would result in a built environment that could conflict with the City of Tracy General Plan goals to create an aesthetically pleasing visual entryway into its city limit. In addition, land use projects that would 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 would degrade the visual character or quality of their surroundings. Some projects would inevitably be located in the more rural areas of the SJCOG region surrounding Escalon, and to the north of Tracy and southeast of Stockton.

Projects implemented under the proposed 2022 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 projects 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. Therefore, the impact

of visual character resulting from implementation of the proposed 2022 RTP/SCS would be significant. The following mitigation measures would reduce this impact.

### **Mitigation Measures**

For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures where applicable for transportation projects implementing the proposed 2022 RTP/SCS that would result in impacts to visual character. Cities and the County can and should implement these measures, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

#### *AES-2 Design Measures for Visual Compatibility*

The implementing agency shall, or can and should, require measures that minimize contrasts in scale and massing between the project and surrounding natural forms and developments. Strategies to achieve this include:

- 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);
- 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.

### **IMPLEMENTATION AGENCIES AND TIMING**

Implementing agencies for transportation projects are SJCOG and transportation project sponsor agencies. Implementing agencies for land use projects are cities and the County. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction where appropriate.

### **Significance After Mitigation**

Implementation of mitigation measures AES-2 would reduce project -specific impacts to the extent feasible. Mitigation Measure AES-1(a) and AES-1(b), discussed above for Impact AES-1, would also reduce impacts associated with visual character. Nevertheless, the incremental alteration of current rural or semi-rural character to a more suburban environment is considered a significant and unavoidable impact because mitigation measure may not be feasible for all projects. No additional mitigation measures to reduce this impact to less than significant levels are feasible.

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

**THE PROPOSED TRANSPORTATION IMPROVEMENTS AND LAND USE PROJECTS ENVISIONED BY THE PROPOSED 2022 RTP/SCS WOULD RESULT IN NEW SOURCES OF SUBSTANTIAL LIGHT OR GLARE THAT WOULD ADVERSELY AFFECT DAYTIME OR NIGHTTIME VIEW IN THE AREA. IMPACTS ARE SIGNIFICANT AND UNAVOIDABLE.**

Existing sources of light and glare within the SJCOG region are primarily focused in cities, towns, and other urban development boundary areas. New or intensified lighting from land use development envisioned in the proposed 2022 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 would increase as a result of infill and TOD projects under the proposed 2022 RTP/SCS, depending on site specific conditions and lighting design associated with new structures. Additionally, interchange construction and improvement projects in rural areas could increase lighting in rural areas that are characterized by dark night skies. Exterior lighting in some areas would be limited by compliance with existing lighting regulations, as discussed in Section 4.1.2, *Regulatory Setting*.

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 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 projects included in the proposed 2022 RTP/SCS would directly introduce light, including the construction and improvement of bus and transportation facilities, installation of traffic signals, and construction of lighting along bike paths. The introduction of light and glare could adversely affect daytime or nighttime views.

Overall, light and glare impacts from transportation improvements and infill and TOD development envisioned under the proposed 2022 RTP/SCS would be significant because there would be new sources of substantial light or glare. The following mitigation measures would reduce this impact.

### **Mitigation Measures**

For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures where applicable for transportation projects implementing the proposed 2022 RTP/SCS that would result in impacts to daytime or nighttime views. Cities and the County can and should implement these measures, where relevant to land use projects implementing the proposed 2022 RTP/SCS. Project specific environmental documents may adjust these mitigation measures as necessary to respond to site specific conditions.

*AES-3(a) Roadway Lighting*

Implementing agencies shall, or can and should, minimize roadway lighting 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, or can and should, 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, or can and should, minimize and control glare from transportation and land use 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.

**IMPLEMENTATION AGENCIES AND TIMING**

Implementing agencies for transportation projects are SJCOG and transportation project sponsor agencies. Implementing agencies for land use projects are cities and the County. This mitigation measure shall, or can and should, be applied during permitting and environmental review and implemented during construction where appropriate.

**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. However, mitigation measures maybe not be feasible for all projects. Therefore, this impact would remain significant and unavoidable.

**c. Specific Projects That May Result in Impacts**

Table 4.1-1 identifies proposed 2022 RTP/SCS projects that may result in impacts to visual resources as discussed above. Given the large number of projects envisioned across the SJCOG region in the proposed 2022 RTP/SCS, the table shows a representative rather than comprehensive list of projects that would generate these impacts. Listed projects are representative of the types of impacts and the types of projects that could be affected in different localities. Mitigation measures discussed above would apply to these specific projects as well as any other proposed 2022 RTP/SCS projects that would result impacts to visual resources.

**Table 4.1-1 Proposed 2022 RTP/SCS Projects that May Result in Visual Resource Impacts**

Project Jurisdiction and Location	Improvement	Potential Impact
<b>Caltrans</b>		
On SR-120 from Main Street (P.M. 5.13) to SR-99 and on SR-99 from SR-120 to Olive Avenue (P.M. 6.22)	(Widen the eastbound SR 120 to southbound SR 99 connector ramp from one-lane to two-lanes; Remove the Austin Road overcrossing and replace with a new 4 lane structure spanning SR 99 and UPRR; Add a new connecting road from Austin Road to Woodward Ave and Moffat Blvd and modify the existing UPRR gated crossing at Woodward Ave;Temporarily close the Austin Road northbound entrance and southbound exit ramps, resulting in a partial interchange.)	AES-1, AES-2, AES-3
Alameda County Line to Eleventh Street	Widen from 6 to 8 lanes (inside/outside)	AES-1, AES-2, AES-3
Eleventh Street to MacArthur Drive	Widen from 6 to 8 lanes (inside/outside)	AES-1, AES-2, AES-3
MacArthur Drive to I-5	Widen from 6 to 8 lanes (inside/outside)	AES-1, AES-2, AES-3
I-205 to Louise Avenue (P.M. 12.5/R 16.5)	Widen to add HOV lanes with HOV Connector Ramps to I-205 and SR-120	AES-1, AES-2, AES-3
I-5 to Main Street (P.M. 5.13)	Widen 4 to 6 lanes (inside)	AES-1, AES-2, AES-3
SR-120 to Stanislaus County Line	Widen 6 to 8 lanes (inside/outside), including reconstruction of SR-99/Main Street and SR-99/Wilma Avenue interchanges and pedestrian overcrossing	AES-1, AES-2, AES-3

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<b>Project Jurisdiction and Location</b>	<b>Improvement</b>	<b>Potential Impact</b>
On SR-120 from Main Street (P.M. 5.13) to SR-99 and on SR-99 from SR-120 to Olive Avenue (P.M. 6.22)	Widen the northbound SR 99 to westbound SR 120 connector ramp from one-lane to two-lanes; Add an auxiliary lane in the existing median of westbound SR 120 from Main Street to SR 99; Convert the existing 99/120 separation structure to two lanes and construct a new separation structure to serve the eastbound 120 to northbound 99 connector ramp.)	AES-1, AES-2, AES-3
Hammer Lane to North of Eight Mile Road	Widen from 6 to 8 lanes (inside median) including auxiliary lanes	AES-1, AES-2, AES-3
French Camp Road to Charter Way	Widen 6 to 8 lanes (inside)	AES-1, AES-2, AES-3
Louise Avenue to French Camp Road	Widen 6 to 8 lanes (inside)	AES-1, AES-2, AES-3
On SR-120 from Main Street (P.M. 5.13) to SR-99 and on SR-99 from SR-120 to Olive Avenue (P.M. 6.22)	Add braided off ramps from SR 99 and SR 120 to Austin Road; Add loop on ramp from Austin Road to northbound SR 99 and to westbound SR 120; Add auxiliary lane on eastbound SR 120 from Main Street to SR 99; Add an auxiliary lane in each direction on SR 99 from SR 120 to approximately 1.7 mile south of Austin Road and relocate the frontage road.	AES-1, AES-2, AES-3
Harney Lane to Turner Road	Widen 4 to 6 lanes (inside)	AES-1, AES-2, AES-3
<b>City of Escalon</b>		
Intersection of Ullrey Avenue and McHenry Avenue including UPRR railroad crossing.	Reconstruct intersection, including addition of turn pockets, improvement of traffic signal and installation of train pre-emption system for UPRR railroad crossing.	AES-1, AES-2, AES-3
<b>City of Lathrop</b>		
I-5 at Louise Avenue	Reconstruct interchange (PM 16.4-16.8)	AES-1, AES-2, AES-3
I-5 at Lathrop Road	Reconstruct interchange (P.M. 17.3/17.8)	AES-1, AES-2, AES-3
SR 120 at Yosemite Ave/Guthmiller Road	Reconstruct interchange	AES-1, AES-2, AES-3
Along Northwest side of I-5 from Brookhurst Blvd to Stewart Road	Construct new roadway parallel to I-5, 2 lanes from Brookhurst Blvd to Stewart Road	AES-1, AES-2, AES-3
Along Northwest side of I-5 from Stewart Road to Paradise Road	Construct new roadway parallel to I-5, 4 lanes from Stewart Road to Paradise Road	AES-1, AES-2, AES-3
Along Northwest side of I-5 from Brookhurst Blvd to Stewart Road	Widen from 2 to 4 lanes, from Brookhurst Blvd to Stewart Road	AES-1, AES-2, AES-3
<b>City of Lodi</b>		
SR-99 at SR-12 West (Kettleman Lane)	Reconstruct interchange and widen to free-flowing interchange	AES-1, AES-2, AES-3
SR-99 at Harney Lane	Reconstruct interchange to provide 6 through lanes on SR 99, 4 lanes on Harney between Reynolds Ranch Pkwy and SR 99 and modify on-ramps and off-ramps	AES-1, AES-2, AES-3
SR-99 at Turner Road	Reconstruct interchange to provide operational and safety improvements on SR 99 at Turner Road (PM 31.3/31.6)	AES-1, AES-2, AES-3
Hutchins Street to Lower Sacramento Road	Widen from 2/3 lane collector to 4 lane divided arterial	AES-1, AES-2, AES-3

<b>Project Jurisdiction and Location</b>	<b>Improvement</b>	<b>Potential Impact</b>
Between SR 99 to Central California Traction railroad tracks.	Widen from 2 to 4 lanes. Add center dual left turn lane, turn pockets at intersections and median separation with landscape	AES-1, AES-2, AES-3
From Lodi Avenue to Elm Street	Widen 2/3 lanes to 4 lanes	AES-1, AES-2, AES-3
<b>City of Manteca</b>		
SR-120 at McKinley Avenue	Construct new interchange	AES-1, AES-2, AES-3
SR-120 at Airport Way	Reconstruct interchange	AES-1, AES-2, AES-3
SR-120 at Main Street	Reconstruct interchange	AES-1, AES-2, AES-3
SR-99 at Raymus Expressway	Construction of new interchange	AES-1, AES-2, AES-3
East of Airport Way to Union Road	Construct new 4 lane roadway (gap closure)	AES-1, AES-2, AES-3
SR-120 to Yosemite Ave.	Widen from 2 to 4 lanes	AES-1, AES-2, AES-3
Lathrop Road to Roth Road	Widen from 2 to 4 lanes	AES-1, AES-2, AES-3
Main Street to SR-99	Widen from 2 to 4 lanes	AES-1, AES-2, AES-3
McKinley Ave to West of Airport Way	Construct new 4 lane roadway	AES-1, AES-2, AES-3
From East of UPRR to SR-99	Widen from 2 to 4 lanes	AES-1, AES-2, AES-3
Main Street to SR-99	Construct new 4-lane expressway	AES-1, AES-2, AES-3
Yosemite Ave. to Lathrop Road	Widen from 2 to 4 lanes	AES-1, AES-2, AES-3
SR-120 to Woodward Ave	Construct new 2 lane expressway	AES-1, AES-2, AES-3
Woodward Ave to McKinley Ave	Construct new 4 lane roadway	AES-1, AES-2, AES-3
Woodward Ave to Main Street	Construct new 2 lane expressway	AES-1, AES-2, AES-3
SR 120 to Lathrop Road	Widen from 4 to 6 lanes	AES-1, AES-2, AES-3
<b>City of Ripon</b>		
Santos Road to South Clinton Avenue	Widen from 2 to 6 lanes	AES-1, AES-2, AES-3
Maple Avenue to 500 ft east of Acacia Avenue	Construct 2-lane extension of Garrison Road.	AES-1, AES-2, AES-3
Jack Tone Road to Olive Expressway	Widen from 2 to 6 lanes	AES-1, AES-2, AES-3
Jack Tone Road to Olive Expressway	Construct 4-lane extension of Canal Boulevard	AES-1, AES-2, AES-3
Canal Boulevard to Raymus Expressway	Construct 6-lane Olive Expressway	AES-1, AES-2, AES-3
<b>San Joaquin County</b>		
Tracy Blvd to Matthews Road	Passing lanes and channelization	AES-1, AES-2, AES-3
Tracy City Limits to 11th Street	Realign roadway and widen from 2 to 4 lanes with operational and safety improvements	AES-1, AES-2, AES-3
I-205 to Howard Road	Passing lanes and channelization	AES-1, AES-2, AES-3
Tracy City Limits to I-5	Operational and safety improvements along corridor and at intersections	AES-1, AES-2, AES-3
UPRR to Airport Way	Widen from 2 to 4 lanes with shoulders)	AES-1, AES-2, AES-3
Roth Road to French Camp Road	Widen from 2 to 4 lanes	AES-1, AES-2, AES-3
Escalon City limits to Mariposa Road	Widen from 2 to 4 lanes with shoulders	AES-1, AES-2, AES-3

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<b>Project Jurisdiction and Location</b>	<b>Improvement</b>	<b>Potential Impact</b>
Austin Road to Jack Tone Road	Widen roadway from 2 to 3 lanes and widen BNSF railroad grade separation from 2 to 4 lanes	AES-1, AES-2, AES-3
<b>City of Stockton</b>		
Miner Avenue and Filbert Street Signal – City of Stockton	Install new traffic signal at the Miner Ave and Filbert St. intersection including EVP, ADA ramps, signs and striping	AES-1, AES-2, AES-3
Swain Road and Montauban Roundabout Installation – City of Stockton	Construct roundabout at Swain Road and Montauban Avenue including PTZ cameras, ADA ramp, signs, striping, and streetlights	AES-1, AES-2, AES-3
Tam O’Shanter Drive and Castle Oaks Drive Roundabout – City of Stockton	Install roundabout at intersection of Tam O’Shanter Drive and Castle Oaks Drive	AES-1, AES-2, AES-3
BRT Phase V – Stockton Metropolitan Area	Costs associated with installation of signal prioritization equipment for BRT Phase 5 operations on Weber Ave, Miner Ave, Wilson Way, Fremont Street, Filbert Street, and Main Street	AES-1, AES-2, AES-3
BRT Phase 1-B – Stockton Metropolitan Area	Costs associated with installation of signal prioritization equipment for BRT operations on Pacific Avenue and Madison Street. Replace signalized intersection at Miner Avenue and San Joaquin Street with a roundabout	AES-1, AES-2, AES-3
I-5 at Otto Drive	Construction of a new interchange and auxiliary lanes (PM 33.3/34.2)	AES-1, AES-2, AES-3
I-5 at Eight Mile Road	Modification of interchange (P.M. 34.7/35.9)	AES-1, AES-2, AES-3
SR-99 at Eight Mile Road	Reconstruct Interchange (PM 35.1-35.5)	AES-1, AES-2, AES-3
SR-99 at Morada	Reconstruct interchange (PM 23.5-24.5)	AES-1, AES-2, AES-3
I-5 at Hammer Lane	Interchange modification and auxiliary lanes (PM 32.6)	AES-1, AES-2, AES-3
West Ln to UPRR	Widen from 3 to 6 lanes	AES-1, AES-2, AES-3
UPRR (SPRR) to Wilson Way	Widen from 2 to 4 lanes with a middle turn lane. Construct curb, gutter, sidewalks and driveways.	AES-1, AES-2, AES-3
Fite Court to Frontier Way	Widen from 2 to 6 lanes	AES-1, AES-2, AES-3
Frontier Way to SR-99	Widen from 2 to 6 lanes	AES-1, AES-2, AES-3
March Ln to Hammer Ln	Construction of new 4 lane road	AES-1, AES-2, AES-3
Wilson Way to March Ln	Construction of new 4 lane road	AES-1, AES-2, AES-3
Armor Dr to Morada Ln	Widen from 4 to 6 lanes	AES-1, AES-2, AES-3
Marlette Rd to Pixley Slough	Widen from 2 to 6 lanes	AES-1, AES-2, AES-3
Morada Ln to Hammer Ln	Widen from 4 to 6 lanes	AES-1, AES-2, AES-3
Harding Way to Industrial Rd	Intersection and operational improvement	AES-1, AES-2, AES-3
New Road D to New Road F	Widen from 2 to 4 lanes	AES-1, AES-2, AES-3
New Road F to New Road E	Widen from 2 to 4 lanes	AES-1, AES-2, AES-3
I-5 to Thornton Rd	Widen from 5 to 6 lanes	AES-1, AES-2, AES-3
Thornton Road to Lower Sacramento Rd	Widen from 2 to 4 lanes	AES-1, AES-2, AES-3
Lower Sacramento Rd to West Lane	Widen from 2 to 6 lanes	AES-1, AES-2, AES-3
West Ln to Holman Rd	Widen from 2 to 6 lanes	AES-1, AES-2, AES-3

<b>Project Jurisdiction and Location</b>	<b>Improvement</b>	<b>Potential Impact</b>
Holman Rd to SR 99	Widen from 2 to 6 lanes	AES-1, AES-2, AES-3
Newcastle Rd to Fite Court	Widen from 2 to 6 lanes	AES-1, AES-2, AES-3
Wolfe Rd to Manthey Rd	Widen from 2 to 6 lanes	AES-1, AES-2, AES-3
Holman Rd to SR 99	Construction of new 8 lane road	AES-1, AES-2, AES-3
Stagecoach Road to Austin Road	Widen from 2 to 4 lanes	AES-1, AES-2, AES-3
<b>Port of Stockton</b>		
Rough & Ready Island Rail Bridge – City of Stockton	Construct new rail bridge (double-track) to replace existing deficient structure	AES-1, AES-2, AES-3
<b>City of Tracy</b>		
Corral Hollow Road and Valpico Road Traffic Signal – Corral Hollow Road and Valpico Road	Intersection signalization	AES-1, AES-2, AES-3
I-205/Lammers Road/Eleventh Street	Construct Interchange I-205 at Eleventh street realign and widen Eleventh Street to 6-lanes north of Grant Line to Byron Road. Construct Aux lane Hansen to Eleventh; in WB I-205 Eleventh Street to Grant Line Road	AES-1, AES-2, AES-3
I-205 at Mountain House Parkway	Reconstruct interchange	AES-1, AES-2, AES-3
I-580 at International Parkway/Patterson Pass Road	Reconstruct interchange	AES-1, AES-2, AES-3
I-205 at Grant Line Road	Modification of existing interchange	AES-1, AES-2, AES-3
I-205 at Chrisman Rd	Phase 1: Construct new interchange east-west ramps	AES-1, AES-2, AES-3
At MacArthur (PM 7.8 -PM 8.5)	Modification of existing interchange	AES-1, AES-2, AES-3
I-580 at Coral Hollow Road	Modification of existing interchange	AES-1, AES-2, AES-3
I-580 at Lammers Road	Modification of existing interchange	AES-1, AES-2, AES-3
I-580 at Iron Horse	Modification of existing interchange	AES-1, AES-2, AES-3
I-205 to I-580	Widen from 2 to 4 lanes, including reconstruction of Delta-Mendota Canal and California Aqueduct bridges	AES-1, AES-2, AES-3
Parkside Drive to Linne Road	Widen from 2 to 4 lanes	AES-1, AES-2, AES-3
Faith Lane (San Marco Subdivision limits) to Lammers Road	Extend 4 lane roadway	AES-1, AES-2, AES-3
Naglee Road to Lammers Road	Widen from 5 to 6 lanes	AES-1, AES-2, AES-3
Linne Road to I-580	Widen 2 to 4 lanes including ROW and construction of two bridges	AES-1, AES-2, AES-3
Mt. Diablo Road to Eleventh Street	Extend 4 lane roadway on new alignment and construct railroad grade separation	AES-1, AES-2, AES-3
I-205 to Eleventh Street	Widen from 4 lane minor arterial to 4 lane major arterial	AES-1, AES-2, AES-3

#### 4.1.4 Cumulative Impacts

The cumulative impact analysis area for visual resources consists of the SJCOG region and adjoining counties. Information regarding these adjoining counties can be found in Section 3, *Environmental Setting*. Future development in this region that could impact visual resources is considered in the analysis. This cumulative extent is used to evaluate potential direct and indirect, permanent and

temporary impacts to scenic vistas, scenic resources, visual character, and light and glare within the context of the cumulative impact analysis area.

Some types of aesthetic resources are localized and would not be cumulative in nature. For example, the creation of light, glare, or shadows at one location would not be worsened by light, glare, or shadows created at another location. Rather, these effects are independent, and the determination as to whether they are adverse would be specific to the characteristics of the project and location of the site where they would occur.

Conversely, two types of aesthetic impacts 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 in the SJCOG region. Development in one area, such as a relatively large city adjoining agricultural land like Stockton, could increase and possibly expand over time and meet or connect with development in an adjoining ex-urban area. This type of growth and expansion would have the potential to affect night sky lighting experienced both within and outside of the region and lighting may increase in the form of larger and/or more intense nighttime glow in the viewshed. Regarding the visual environment experienced throughout the cumulative impact analysis areas, as planned cumulative development occurs over time the overall visual environment will change, and existing visual character could be degraded. 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. Thus, cumulative impacts to night sky lighting and changes in the visual environment are significant.

Although growth envisioned in the proposed 2022 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 because of projected development under the proposed 2022 RTP/SCS. Additionally, planned transportation improvements and the land use scenario envisioned in the proposed 2022 RTP/SCS would alter the existing visual environment from its baseline conditions. Mitigation measures described earlier in this section would reduce impacts to aesthetics; however, even with implementation of mitigation measures, impacts would be significant and would be cumulatively considerable.