

2.10 Visual Resources

The San Francisco Bay Area contains some of the most recognizable natural and built views in the world. Important views of natural features include the Pacific Coast, San Francisco Bay, Mount Tamalpais, Mount Diablo, and other peaks and inland valleys of the Coast Range. Enclosed views like those along roads winding through redwood groves, and broader views of the ocean and lowlands, such as along ridgelines, are in abundance in the Bay Area. Cityscape views offered by buildings and distinctive Bay Area bridges are also important built visual resources to the region. Both land use changes and transportation facilities proposed under Plan Bay Area have the potential to affect what is seen and how it is seen.

This chapter describes the visual resources of the Bay Area and assesses the potential the proposed Plan to affect the region's aesthetic environment. Aesthetic value is subjective, but it is typically used as a criterion for evaluating those elements that contribute to the quality that distinguishes an area. Most communities identify scenic resources as an important asset, although what is considered "scenic" may vary according to its environmental setting. It is useful to think of scenic resources in terms of "typical views" seen throughout the Bay Area because scenic resources are rarely encountered in isolation. A typical view may include several types of scenic resources, including both natural and man-made elements. The typical views seen in the Bay Area are outlined below.

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 Golden Gate Bridge or Mount Diablo, as seen from public viewing spaces, not privately-owned properties. California Environmental Quality Act (CEQA) (Pub. Resources Code, § 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 persons 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'" (California Environmental Quality Act, 2011). Therefore, for this analysis, only public views will be considered when analyzing the visual impacts of implementing the proposed Plan Bay Area.

Environmental Setting

PHYSICAL SETTING

The Bay Area is characterized by the diversity of urban development and the combination of rural and agricultural landscapes, as well as the natural beauty and wildlife provided by the surrounding mountain ranges and rich wildlife habitats. It stretches along the central northern Pacific coast of California, with several branches of the Coast Mountain Range dividing it into valleys, plains and water bodies. The largest of these valleys contains San Francisco Bay while at the eastern edge of the region is the great Central Valley, an extremely flat plain lying between the Coast Range and the Sierra Nevada Mountains. The hills of the Coast Range provide expansive views of the valleys and plains below, revealing a variety of development types, including urban areas along the Bay plains and inland valleys, agricultural lands and protected open space, and natural areas.

The landscapes of the San Francisco Bay Area are varied, unique, and recognized by many in the region and beyond. The basin formed by the coastal range, East Bay Hills, and the Bay itself are prominent physical features of the region. To the west, the Pacific Ocean and the Coastal Range dominate the visual setting, stretching from Mt. Tamalpais in the north to the Santa Cruz Mountains in the south. To the east, the Diablo Range, dramatically punctuated by Mount Diablo, provides a view of a much different character. In the north, the vineyards of Napa and Sonoma counties are unique and draw visitors from around the world. Many built features in the Bay Area, the Golden Gate and Bay Bridges and the San Francisco skyline in particular, are also of international renown. Bay Area residents and tourists alike treasure the variety and quality of the visual experiences that are found throughout the Bay Area, including from urban and rural public spaces and regional parks, as well as along many transportation corridors in the region, from heavily traveled freeways, transit lines, and ferries, to narrow country roads through secluded forests and agricultural areas. **Figure 2.10-1** depicts the locations of major scenic resources found in the Bay Area. Major land use and/or transportation projects may affect the visual experiences of travelers and the distinctive visual environment of the region.

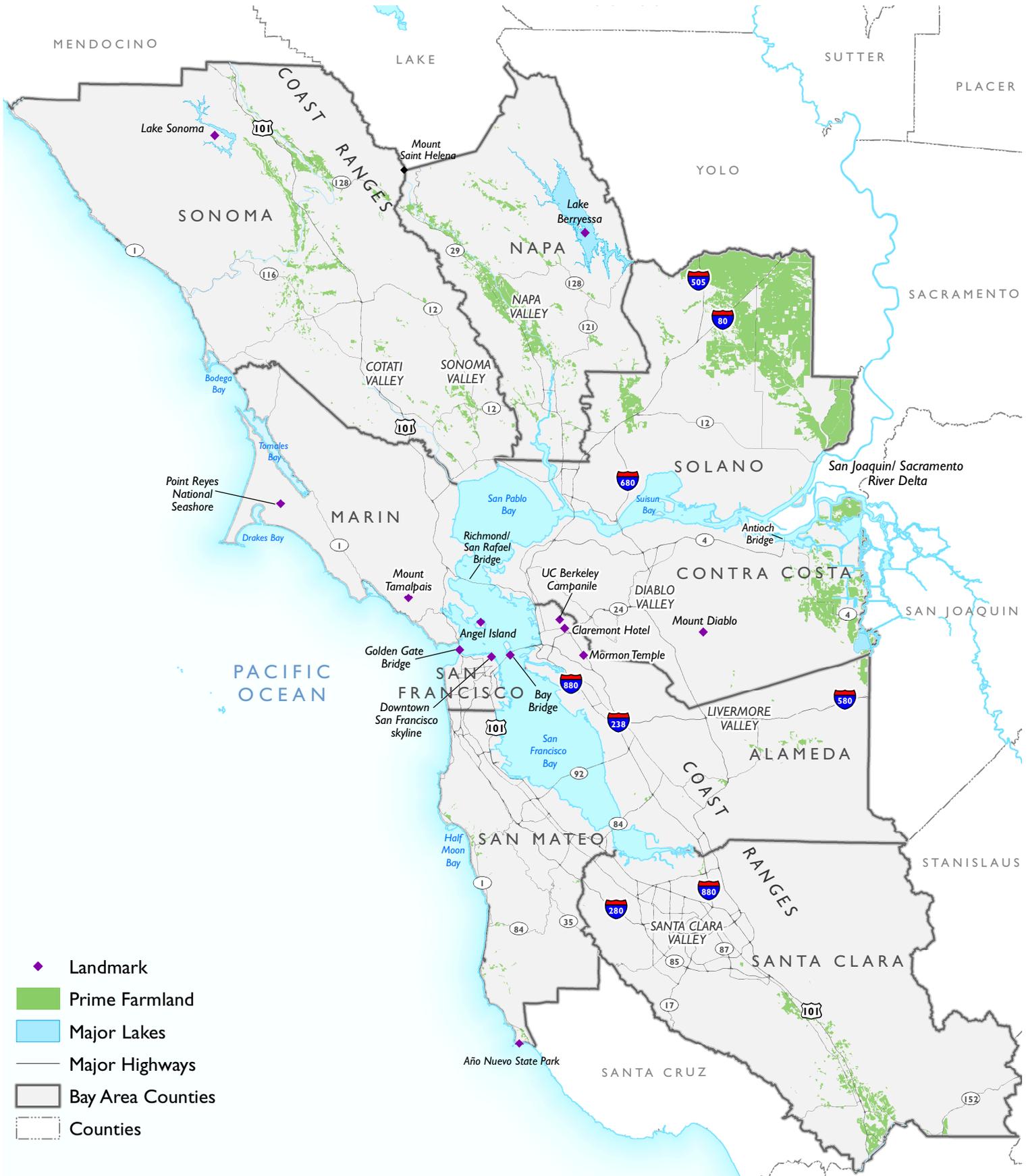
Hills and Valleys

The region contains several distinct mountain ranges and hills. Along the peninsula between the Pacific Ocean and San Francisco Bay lie the coastal hills of San Mateo, Santa Clara, and north of the Golden Gate, the hills of Marin County. The East Bay Hills rise steeply from the urbanized plain along the eastern edge of the Bay forming a several mile wide band that also defines the western edge of the Diablo and Livermore Valleys of Contra Costa and Alameda Counties. The rolling hills of the Diablo Range separate these valleys from the lowlands of the Central Valley. At the south end of the Bay Area in Santa Clara County, these hills converge. To the north, several ranges frame the Napa, Sonoma, and Cotati valleys.

Between these ranges and hills are numerous valleys, both broad and narrow. San Francisco Bay, for example, is bordered along the east and west by a narrow, heavily urbanized plain. This plain widens in the south into the Santa Clara Valley, which, until World War II, was primarily agricultural. The East Bay and coastal hills, which are visible throughout these lowlands, orient viewers and give a sense of scale to the surrounding urban areas. Likewise to the north, the hills forming the Sonoma, Napa, and Cotati valleys enclose these agricultural areas with urban pockets.

Figure 2.10-1

Major Bay Area Scenic Resources



Data Sources: California Department of Fish & Wildlife, 2012; Farmland Mapping & Monitoring Program (FMMP), Department of Conservation, State of California, 2008-2010; The Conservation Lands Network, 2012; Cal-Atlas Geospatial Clearinghouse, 2012; Tom Tom North America, 2011; Dyett & Bhatia, 2012.



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Landmarks and Gateways

Certain features of the Bay Area stand out as symbols and points of orientation (see **Figure 2.10-1**). These landmarks include the Golden Gate and Bay Bridges, San Francisco skyline, several large buildings in the East Bay Hills (the Campanile on the U.C. Berkeley campus, the Claremont Hotel and the Mormon Temple in Oakland, for example), and Mount Saint Helena at the northern end of the Napa Valley. These landmarks help visitors and residents to locate themselves within the region, and in the case of the Golden Gate Bridge, symbolize the Bay Area for the rest of the world.

Waterways

The Bay Area is home to a number of bodies of water and waterways that flow through or reside in the region. Estuaries, creeks, and man-made waterways are found throughout the region, as well as the dominant body of water, the San Francisco Bay, which reaches out to the northern and southernmost counties of the Bay Area. Most rivers and streams originating in each of the nine counties of the Bay Area flow into the San Francisco Bay, which provides access to the Pacific Ocean. There are also many smaller man-made reservoirs in the Bay Area that provide notable landscape features, as well as a few larger reservoirs, notably Lake Berryessa in Napa County and Lake Sonoma in Sonoma County.

Views from Travel Corridors

Many roadways and rail lines that intersect the landscapes of the Bay Area provide expansive, regional views of surrounding areas, often due to their wide rights-of-way, location along high points, elevation of the facilities, or a combination of these factors. Examples include I-280 along the Peninsula, Route 92 as it crosses the coastal range, I-80 near Rodeo, I-580 over the Altamont Pass and above Oakland, and the Route 24 corridor. Similarly, the rest area on I-80 above Vallejo, the west end of the Caldecott Tunnel, and "hospital curve" along US 101 in San Francisco offer dramatic views of notable Bay Area landscapes. The bridges crossing San Francisco Bay and the San Joaquin River offer similar experiences. Both the Bay and Golden Gate Bridges provide world-famous views of San Francisco while the Richmond-San Rafael Bridge includes sweeping views of the North Bay, including Mount Tamalpais and Angel Island. The Antioch Bridge allows views out over the Sacramento Delta.

Similarly, rail facilities (including BART) can provide travelers with broad views of the region or portions of it. The elevated BART lines through the East Bay, for example, give good views of the East Bay Hills and the neighborhoods of Oakland, Berkeley, El Cerrito, etc. The Amtrak rail lines along San Pablo Bay and the San Joaquin River also provide broad views of the water with the hills beyond.

Roads and rail lines also provide more intimate views of forested hills or narrow valleys. Highway 35 (along the crest of the San Mateo Peninsula) and Route 84 (through the narrows of Niles Canyon) are examples of such views. Similarly, Route 1 and Sir Francis Drake Boulevard run through the forests and grasslands of Marin County to the beaches, parks, and open space areas along the coast. Route 29 and the Silverado Trail through the Napa Valley and Route 12 through the Sonoma Valley provide dramatic views of enclosing hills, adjoining vineyards, and the wineries.

Finally, while carrying only a small portion of the region's travelers, the use of the Bay ferries can be attributed, in part, to the spectacular viewing experiences afforded by this mode of transport.

Views of Roads, Rail, and Buildings

Because the Bay Area contains a wide variety of densely populated metropolitan and urban centers, it is inevitable that roads, buildings, and railways are a part of the aesthetic landscape. Rural and natural landscapes can also be dramatically altered by the placement of roads, rail lines, and buildings. While roads and rail lines can provide access to views for travelers, these facilities can also detract from or block public views. A new or expanded roadway along a hillside can be visible from a great distance, changing the impression of the hillside for the viewer, particularly if the hillside is undeveloped. Also, new roads and rail lines are sometimes built above the level of existing development, which can overshadow nearby homes and businesses and limit views from them to the surrounding hills and valleys. Similarly, buildings can enhance or detract from the overall visual environment based on their design, location, and relationship to other structures and natural features.

REGULATORY SETTING

Federal Regulations

Moving Ahead for Progress in the 21st Century (MAP-21)

The Moving Ahead for Progress in the 21st Century Act (MAP-21) was signed into law in July 2012 and reauthorized the federal highway and public transportation programs for 2013 and 2014 for a total of \$105 billion, holding funding flat relative to prior years. However, the bill marks a notable departure from prior surface transportation acts in several respects, most notably its short duration, elimination of earmarks, consolidation of programs and introduction of performance measures into the federal transportation policy framework. While the bill retains many of the larger highway and transit programs of its predecessor—the Safe Accountable, Flexible, Efficient Transportation Equity Act, known as SAFETEA—it creates a new formula program called Transportation Alternatives that encompasses most activities funded under the Transportation Enhancements, Recreational Trails, and Safe Routes to Schools programs under SAFETEA that are related to scenic resources.

United States 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, Federal Transit Administration, and Federal Aviation Administration 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 Regulations

California Scenic Highway Program

Recognizing the value of scenic areas and the value of views from roads in such areas, the State Legislature established the California Scenic Highway Program in 1963. This legislation sees scenic highways as “a vital part of the all encompassing effort...to protect and enhance California’s beauty, amenity and quality of life.”¹ Under this program, a number of State highways have been designated as eligible for inclusion as scenic routes. Once the local jurisdictions 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 highways, 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 legislature.

As noted, a corridor protection program must be adopted by the local governments with land use jurisdiction 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 Caltrans must work together to coordinate transportation and development projects and ensure the protection of the corridor’s scenic value to the greatest extent possible.² 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:

¹ California Senate Bill No. 1467 (Farr), 1963

² State law requires the undergrounding of all visible electric distribution and communication utilities within 1,000 feet of a Scenic Highway.

- 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 Bay Area includes numerous designated or eligible State Scenic Highways. Officially-designated State Scenic Highways are illustrated in **Figure 2.10-2**. All officially-designated and eligible State Scenic Highways in the Bay Area are listed in **Table 2.10-1**.

Counties and municipalities also may have scenic route components within their individual general plans, but a separate scenic highways element is no longer required. Policies usually encourage the designation of these roadways as scenic corridors, either by local action or through the State program. Counties and municipalities may also establish regulatory programs or recommend corridor studies to determine the appropriate regulatory program to preserve scenic quality.

TABLE 2.10-1: CALIFORNIA STATE SCENIC HIGHWAY SYSTEM OFFICIALLY DESIGNATED (OD) AND ELIGIBLE (E) ROUTES IN THE BAY AREA

<i>Designation</i>	<i>Route</i>	<i>County</i>	<i>Location</i>
OD	1	San Mateo	Santa Cruz County Line to S. City Limit Half Moon Bay
OD	9	Santa Clara	Santa Cruz County line/Saratoga Gap to Blaney Plaza Saratoga
OD	9	Santa Clara	Blaney Plaza in Saratoga to Los Gatos city limit
OD	12	Sonoma	Danielli Ave E. of Santa Rosa to London Way N. Agua Caliente
OD	24	Contra Costa	E. Portal Caldecott Tunnel to I-680 N. Walnut Creek
OD	35	San Mateo	Santa Cruz county line to Santa Clara county line
OD	35	San Mateo	Santa Clara county line to Half Moon Bay Road SR 92
OD	84	Alameda	SR 238 (Mission Blvd.) to I-680 near Sunol
OD	116	Sonoma	SR 1 to S. city limit of Sebastopol
OD	280	San Mateo	Santa Clara county line to N. city limit San Bruno
OD	580	Alameda	San Joaquin county line to SR 205
OD	580	Alameda	San Leandro city limit to SR 24 in Oakland
OD	680	Alameda	Mission Blvd. in Fremont to Bernal Ave near Pleasanton
OD	680	Alameda	Bernal Ave near Pleasanton to Contra Costa County Line
OD	680	Contra Costa	Alameda County Line to SR 24
E	1	Marin/ Sonoma/ Mendocino	SR 101 Near Marin City to SR 101 near Leggett
E	1	San Francisco	SR 35 in SF to SR 101 near Golden Gate Bridge in San Francisco
E	1	San Luis Obispo / San Mateo/ San Francisco	SR 101 Near San Luis Obispo to SR 35 near Daly City
E	4	Contra Costa	SR 160 Near Antioch to SR 84 near Brentwood
E	9	Santa Clara	SR 35 to SR 17 near Los Gatos
E	12	Sonoma	SR 101 near Santa Rosa to SR 121 near Sonoma
E	17	Santa Cruz/ Santa Clara	SR 1 near Santa Cruz to SR 9 near Los Gatos
E	24	Contra Costa	Alameda/Contra Costa county line to Rte. 680 in Walnut Creek
E	29	Napa/Lake	Trancas St. in Napa to SR 20 near Upper Lake
E	29	Solano/Napa	SR 37 near Vallejo to SR 221 near Napa
E	35	Santa Clara/ SantaCruz/ San Mateo/San Francisco	SR 17 to SR 92/I-280/SR 1 in San Francisco
E	37	Marin	SR 251 near Nicasio to SR 101 near Novato
E	37	Marin/ Sonoma/ Solano	SR 101 near Ignacio to SR 29 near Vallejo

TABLE 2.10-1: CALIFORNIA STATE SCENIC HIGHWAY SYSTEM OFFICIALLY DESIGNATED (OD) AND ELIGIBLE (E) ROUTES IN THE BAY AREA

<i>Designation</i>	<i>Route</i>	<i>County</i>	<i>Location</i>
E	80	San Francisco/Alameda	I-280 near First Street in San Francisco to SR 61 in Oakland
E	92	San Mateo	SR 1 N. Half Moon Bay to I-280 N. Crystal Springs Lake
E	101	Marin	Opposite San Francisco to SR 1 in Marin City
E	101	Marin	SR 37 near Ignacio to SR 37 near Novato
E	116	Sonoma	SR 1 near Jenner to SR 101 near Cotati
E	121	Napa	SR 221 near Napa St. Hosp. to near Trancas St. Napa
E	121	Sonoma	SR 37 near Sears Point to SR 12 near Sonoma
E	152	Santa Clara/ Merced	SR 156 near San Felipe to I-5
E	156	Monterey/ San Benito/ Santa Clara	SR 1 near Castroville to SR 152 NE of Hollister
E	160	Contra Costa/ Sacramento	SR 4 near Antioch to Sacramento
E	221	Napa	SR 29 at Suscol Rd to SR 121 in Napa
E	239	Alameda/ Contra Costa	I-580 W. of Tracy to SR 4 near Brentwood
E	251	Marin	SR 37 near Nicasio to SR 1 near Point Reyes
E	280	Santa Clara/ San Mateo/ San Francisco	SR 17 to I-80 near First Street in San Francisco
E	580	San Joaquin/ Alameda	I-5 SW of Vernalis to I-80
E	680	Alameda/ Contra Costa	Santa Clara county line to SR 24 in Walnut Creek

Source: Caltrans website, <http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm>, accessed July 2012.

Figure 2.10-2

State Designated and Eligible Scenic Highways



Data Source: Scenic Highways, Caltrans HQ Landscape Architecture, CalTrans TSI/GIS Data Branch, California Department of Transportation, 2009; Cal-Atlas Geospatial Clearinghouse, 2012; Tom Tom North America, 2011; Dyett & Bhatia, 2012.



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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.

Open Space Easement Act of 1974

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 (Gov. Code, §§ 51070.-51097). According to this Act, a city or county may acquire or approve an open-space easement through a variety of means, including use of public money.

California Code of Regulations Title 24 Part 6

The California Energy Code (Cal. Code Regs., tit. 24 § 6) creates standards in an effort to reduce energy consumption. The type of luminaries and the allowable wattage of certain outdoor lighting applications are regulated.

Local Regulations

City and County General Plans

City and county general plans may include policies for protection of scenic resources, such as hillsides, natural areas, landmarks, roads, and historic districts. Such policies may restrict new development in areas that maintain scenic vistas or areas that contain important character-defining structures. Additionally, design guidelines established at the local level may establish specific standards for addressing development where local character and/or important visual resources may be impacted.

Impact Analysis

SIGNIFICANCE CRITERIA

Implementation of the proposed Plan would have a potentially significant adverse impact if it would:

- Criterion 1:** Block panoramic views or views of significant landscape features or landforms (mountains, oceans, rivers, or significant man-made structures) as seen from the transportation facility or from public viewing areas.
- Criterion 2:** Substantially damage scenic resources (such as trees, rock outcroppings, and historic buildings) that would alter the appearance of or from state- or county-designated or eligible scenic highways.
- Criterion 3:** Create significant contrasts with the scale, form, line, color and/or overall visual character of the existing community.
- Criterion 4:** Add a visual element of urban character to an existing rural or open space area or add a modern element to a historic area.
- Criterion 5:** Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.
- Criterion 6:** Cast substantial shadow in such a way as to cause a public hazard or substantially degrade the existing visual/aesthetic character or quality of a public place for a sustained period of time.

METHOD OF ANALYSIS

The regional assessment includes an emphasis on places where substantive changes to scenic public views are anticipated as a result of implementation of the proposed Plan. Land use and transportation change areas are grouped based on likely magnitude of visual change, with more visual change anticipated where non-urbanized areas are to become urbanized, where urban areas would substantially intensify, or where transportation projects are more likely to require extensive physical infrastructural change. These change areas were also evaluated based on proximity to designated or eligible State Scenic Highways. Areas undergoing changes in transportation or land use that are not likely to involve visual effects (e.g., transportation projects for seismic upgrades, safety improvements, signalization, bicycle lanes, freeway carpool lanes that do not require roadway widening, or roadway rehabilitation, as well as low density infill development) are identified as such. It is noted that aesthetics and visual resources are generally subjective by nature, and therefore the level of the proposed Plan's visual impact is impossible to quantify. In addition, it is difficult to estimate the impact future development would have on scenic resources, since individual development projects have not been designed yet and future projects could enhance the aesthetic quality of an area, if properly planned and designed. As such, this analysis was conducted qualitatively, assessing potential implications of growth following the land use framework and transportation projects in the proposed Plan.

With regard to transportation projects, the visual impacts analyzed are of two general types: changes in scenic views from public viewing areas and changes that could adversely affect a community or region's visual character. Visual impacts associated with the proposed transportation improvements are assessed by comparing the proposed Plan transportation network to existing conditions. First, transportation projects that would not involve construction or would not significantly change the physical configuration of existing transportation facilities (examples described above) were eliminated from further consideration, since such projects are unlikely to have effects on views. Next, the remaining investment projects were reviewed to determine if they are located on designated or eligible State Scenic Highways or would interfere or degrade scenic views. Both the impact of a facility on the landscape as well as the visual appearance of a facility itself are considered.³ Physical alteration may result in visual contrast, loss of vegetation, variation in design or streetscape, etc. These types of changes were also assessed for their potential effects on community and regional visual character.

While land use changes in the proposed Plan will result in new development, a land use strategy is proposed rather than site-specific projects. In order to assess the potential impacts on visual resources resulting from higher residential densities and commercial intensities, existing land uses are compared to proposed land uses to determine the general height and bulk of buildings that can be expected in areas of planned growth. Types of visual impacts are then identified that may occur at the local level. In addition, the combination of transportation improvements and land use development was assessed for impacts on visual character and scenic views, as well as light, glare and shadowing. This analysis focuses on impacts on public spaces.

SUMMARY OF IMPACTS

Many development projects and capacity-enhancing transportation improvements resulting from implementation of the proposed Plan would have an effect on the visual character of the surrounding area or on scenic views from a transportation facility itself. Projects that could significantly alter views from public viewing areas and transportation facilities in the Bay Area include new residential and commercial development, freeway and highway extensions and significant widening, grade changes, new freeway interchanges, and new rail lines (either light or heavy rail). Significant impacts would occur where the projects would block existing scenic views or alter the appearance of a scenic resource.

Implementation of the proposed Plan could result in both short-term and long-term visual impacts. The construction of proposed projects could result in short-term visual impacts from the blockage of views by construction equipment and scaffolding, the removal of landscaping, and other construction activities that impair local views, although such impacts would be temporary in nature. Long term impacts from the blockage of views are possible as a result of proposed transportation projects and where substantial land use changes are identified.

Transportation projects in the proposed Plan that would have a long-term visual impact include freeway or highway widenings on or adjacent to designated or eligible scenic highway segments, some interchange overcrossing projects, and some rail transit extensions and stations. New residential and commercial development could also have long-term visual impacts, particularly where it is adjacent to scenic highway segments, is of a large scale relative to its surroundings, and/or introduces new urban features into a scenic rural area.

³ Caltrans. *Guidelines for Official Designation of Scenic Highways*. November 1990, p. 14.

Proposed Plan projects could also create contrasts with the visual character of existing communities in both urban and rural areas. Impacts resulting from transportation projects and where substantial land use changes are identified are potentially significant.

Finally, the construction of new residences, businesses, and transportation facilities may introduce new sources of light, glare, and/or shadow into the environment. Although most of this new development will occur in existing urbanized areas or rights-of-way, which are already impacted, some light and glare impacts could occur in rural or open space areas. Additionally, public spaces in urban areas could be impacted by shadows.

IMPACTS AND MITIGATION MEASURES

Impact

2.10-1 Implementation of the proposed Plan could affect visual resources by blocking panoramic views or views of significant landscape features or landforms (mountains, oceans, rivers, or significant man-made structures) as seen from a transportation facility or from public viewing areas.⁴

Impacts of Land Use Projects

Regional Effects

As indicated in **Table 2.10-3**, development resulting from the proposed Plan will convert approximately 7,500 acres from undeveloped to urbanized land over the course of the 28-year planning period. This could permanently affect visual resources by expanding development or transportation facilities and permanently blocking public views of landforms and significant structures.

At the regional scale, development resulting from the proposed Plan could cause regional short-term visual impacts due to the blockage of significant landscapes or structures by construction equipment and scaffolding, temporary lighting, and exposed excavation and slope faces. Major projects such as high density housing and high intensity commercial projects that require large-scale equipment such as construction cranes have the potential to result in substantial visual impacts during construction at the regional scale due to their height and bulk and the fact that they may be visible from public vantage points throughout the Bay Area. Construction on such projects could take several months to several years and result in short-term impacts, which, due to their temporary nature, would be considered less than significant. Construction activities associated with low or medium density infill development projects are not expected to result in significant visual impacts at the regional scale due to their relatively small size.

The greatest potential for long-term visual impacts will result from high density housing and high intensity commercial projects located in rural or open space areas or adjacent to visually significant structures such that they block scenic views from public viewing areas. Much of the developable flat land in the Bay Area has already been converted to urban use, so development opportunities include redevelopment of existing urban land as well as some hillside sites and rural land. However, urban limit lines have been established by many Bay Area communities to protect remaining open space, which will

⁴ Per CEQA case law, blocking a private view is not an environmental impact.

limit many unanticipated consequences of development and resulting visual impacts. Likewise, many Bay Area communities have established general plan policies and ordinances to protect view sheds, and have incorporated this consideration in their project review processes. **Table 2.10-3** indicates that the proportion of total land in the region that will be developed for urban uses is only expected to increase from 17.8 to 17.9 percent, which is related to the land use pattern included in the proposed Plan. Still, some development projects are anticipated to take place in rural or open space areas as part of the proposed Plan and could block panoramic views or views of significant landscapes or structures from public viewing areas. As a result, this impact is considered potentially significant (PS). Mitigation Measure 2.10(a) is described below.

TABLE 2.10-3: URBANIZED LAND BY COUNTY

<i>County</i>	<i>Land Acres</i>	<i>2010 Urban Footprint¹</i>	<i>2010 Percent Urban Footprint</i>	<i>Increase in Urban Footprint²</i>	<i>2040 Percent Urban Footprint</i>
Alameda	470,867	146,069	31.0%	1,425	31.3%
Contra Costa	458,757	151,998	33.1%	1,979	33.6%
Marin	331,715	42,230	12.7%	311	12.8%
Napa	484,610	23,551	4.9%	162	4.9%
San Francisco	29,975	23,967	80.0%	187	80.6%
San Mateo	287,596	72,319	25.1%	643	25.4%
Santa Clara	826,500	191,402	23.2%	779	23.3%
Solano	528,208	59,436	11.3%	1,198	11.5%
Sonoma	1,009,967	75,210	7.4%	863	7.5%
Total	4,428,195	786,182	17.8%	7,547	17.9%

1. Data for San Francisco is from 2008.

2. Future urbanized footprint is based on modeled future development of over eight people per acre and/or 10 jobs per acre.

Note: numbers may not sum due to independent rounding.

Source: MTC, 2013; Urban and Built Up Land, Farmland Mapping and Monitoring Program, Department of Conservation, 2008- 2010; Census TIGER/Line Shapefiles, 2010.

Localized Effects

The construction of new development resulting from the proposed Plan could cause localized short-term visual impacts similar to those at the regional scale. Additional impacts at the local scale include the removal of landscaping, temporary traffic changes, temporary signage, and construction staging areas. Construction activities associated with low density infill development projects are expected to result in more substantial visual impacts at the local scale as compared to the regional scale due to their setting within local communities and proximity to local public viewing areas.

Long-term visual impacts resulting from development in the proposed Plan would be similar to those at the regional scale. However, most city and county general plans include policies, such as zoning and/or design guidelines, which ensure new development is visually compatible with the natural and built environments. Further, MTC and ABAG encourage the inclusion of pedestrian-oriented and human-scaled development standards and guidelines in PDA Plans funded by MTC/ABAG. Still, development resulting from the proposed Plan could result in long-term visual impacts and this impact remains potentially significant (PS). Mitigation Measure 2.10(a) is described below.

Impacts of Transportation Projects

Regional Effects

The construction of transportation projects in the proposed Plan could result in regional short-term visual impacts from the blockage of public views by construction equipment and scaffolding, temporary lighting, and exposed excavation and slope faces. Many of the transportation projects in the proposed Plan will not result in significant construction impacts, as they involve transit route improvements, road operations and maintenance, and pedestrian and bicycle improvements which all involve minimal construction, if any. However, major capital projects that require new construction have the potential to result in substantial regional visual impacts during construction due to their visibility from public vantage points throughout the Bay Area. Construction on such projects could take several months to several years. There are approximately 160 transportation investment projects in the Plan that involve some form of major new construction. Due to the short-term nature of construction-related impacts, this impact would be less than significant (LS).

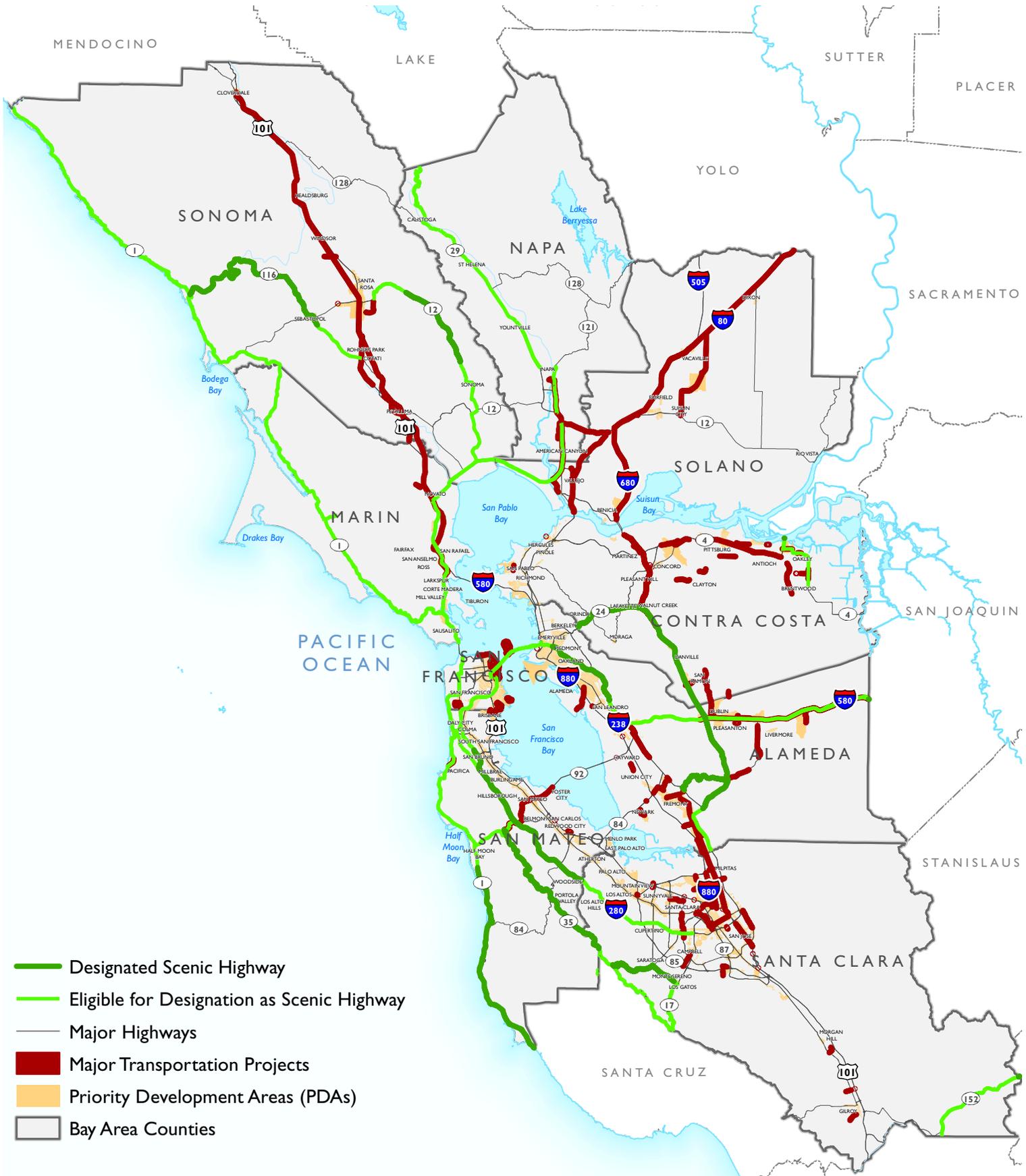
Localized Effects

Local short-term visual impacts resulting from transportation projects are similar to those at the regional scale. Additional impacts at the local scale include the removal of landscaping, temporary traffic changes, temporary signage, and construction staging areas. Transportation-related construction activities are expected to result in more significant visual impacts at the local scale as compared to the regional scale due to their setting within local communities. Although major transportation projects are proposed for each of the nine Bay Area counties, as seen in **Figure 2.10-3**, they are clustered most densely in Santa Clara County around the densely populated areas of Santa Clara, Downtown San José, and Milpitas; in central and western Alameda County; and in San Francisco. There are also numerous projects along the Highway 101 corridor in Sonoma and Marin Counties, along the Interstate 80 corridor in Solano County, and along the Highway 4 corridor in Contra Costa County.⁵

⁵ “Major projects” defined as those which are listed in the RTP as expansion projects costing \$10 million or more that include new roadway construction, road widening, or other ground-disturbing construction.

Figure 2.10-3

Proposed Major Transportation Projects, Scenic Highways, and PDAs



- Designated Scenic Highway
- Eligible for Designation as Scenic Highway
- Major Highways
- Major Transportation Projects
- Priority Development Areas (PDAs)
- Bay Area Counties

Data Source: Scenic Highways, Caltrans HQ Landscape Architecture, CalTrans TSI/GIS Data Branch, California Department of Transportation, 2009; Metropolitan Transportation Commission, 2012; Cal-Atlas Geospatial Clearinghouse, 2012; Tom Tom North America, 2011; Dyett & Bhatia, 2012.



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As noted above, the majority of the 700 transportation projects within the proposed Plan would have no impact on visual resources. **Figure 2.10-3** identifies the 160 major projects that could result in potentially significant long-term visual impacts in the region. Included are 29 extension projects, 88 road widening projects, and 34 new roadway projects, as indicated in **Table 2.10-4**. The majority of these projects are along existing rights-of-way or in existing communities, although a few would add or expand roadways in rural or open space areas particularly in Solano, Contra Costa, and Alameda counties, which would result in a significant impact. There are also numerous projects along the Highway 101 corridor in Sonoma and Marin counties, along the Interstate 80 corridor in Solano County, and along the Highway 4 corridor in Contra Costa County. Highway widening and new construction associated with major transportation projects would have the potential to affect views of rural or open space areas.

Major transportation projects in the proposed Plan could block public views of significant landscapes and structures that are important landmarks. For example, a new highway overpass could interrupt the line of sight from a public viewing area toward a local or regional landmark. As a result, this impact remains potentially significant (PS). Mitigation Measure 2.10(a) is described below.

TABLE 2.10-4: TYPES OF PROJECTS POTENTIALLY DISRUPTING VISUAL RESOURCES

<i>County</i>	<i>Type of Project in Plan</i>					<i>Total</i>
	<i>Extension</i>	<i>Intersection</i>	<i>New</i>	<i>Widening</i>	<i>Other</i>	
Alameda	4	10	7	19	-	40
Contra Costa	5	5	9	24	2	45
Marin	-	-	-	1	-	1
Napa	1	-	-	-	1	2
San Francisco	4	-	6	1	-	11
San Mateo	2	1	1	4	1	9
Santa Clara	10	11	5	17	-	43
Solano	-	3	3	4	-	10
Sonoma	1	3	-	7	-	11
Regional/Multiple Counties ¹	2	-	3	11	1	17
Total	29	33	34	88	5	189²

1. This category includes projects such as BART, and other transit projects of a regional scale.

2. Total does not equal 160 due to the fact that some projects have multiple components that are categorized under more than one project type.

Source: Metropolitan Transportation Commission 2012; Dyett & Bhatia, 2012.

Combined Effects

As discussed above, development and transportation projects both have the potential to produce significant impacts. However, even where they are not significant, impacts could aggregate to produce permanent, potentially significant (PS) impacts on visual resources. Mitigation Measure 2.10(a) is described below. Note that in all cases, impacts of land use and transportation projects on private views do not constitute environmental impacts under CEQA.

Mitigation Measure

Implementing agencies and/or project sponsors shall consider implementation of mitigations measures including but not limited to those identified below.

2.10(a) Mitigation measures that shall be considered by implementing agencies and/or project sponsors where feasible based on project-and site-specific considerations include, but are not limited to:

- Reduce the visibility of construction staging areas by fencing and screening these areas with low contrast materials consistent with the surrounding environment, and by revegetating graded slopes and exposed earth surfaces at the earliest opportunity.
- Site or design projects to minimize their intrusion into important viewsheds.
- Use see-through safety barrier designs (e.g. railings rather than walls) when feasible.
- Develop interchanges and transit lines at the grade of the surrounding land to limit view blockage wherever possible.
- Design landscaping along highway corridors in rural and open space areas to add significant natural elements and visual interest to soften the hard edged, linear travel experience that would otherwise occur.
- Identify, preserve, and enhance scenic vistas to and from hillside areas and other visual resources.
- Comply with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect visual resources.

Significance after Mitigation

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, as feasible, to address site-specific conditions. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore it cannot be ensured that this mitigation measure would be implemented in all cases, and this impact remains significant and unavoidable (SU).

Impact

2.10-2 Implementation of the proposed Plan could affect visual resources by substantially damaging scenic resources (such as trees, rock outcroppings, and historic buildings) that would alter the appearance of or from state- or county-designated or eligible scenic highways.

Impacts of Land Use Projects

Regional and Localized Effects

Scenic resources that contribute to the visual character of scenic highways are by nature specific to their local context, and as such, impacts on these resources resulting from the proposed Plan would occur at the local level. Therefore, regional effects are not addressed separately. Development resulting from the proposed Plan could permanently affect visual resources by substantially altering the appearance of or from state- or county-designated or eligible scenic highways.

Development adjacent to scenic highways could cause short-term visual impacts resulting from construction equipment and scaffolding, temporary lighting, and exposed excavation and slope faces. In general, construction-related impacts to scenic highways would be the same as those under Impact 2.10-1 relating to the blockage of views. Large projects are most likely to have significant impacts on scenic highways, but even small projects could have impacts depending on their duration. In general, however, construction impacts are less than significant due to their temporary nature.

As under Impact 2.10-1, the greatest potential for long-term visual impacts on scenic highways will result from high density housing and high intensity commercial projects located adjacent to scenic highways that damage scenic resources or create visual contrast between the project and existing conditions. As seen in **Figure 2.10-3**, numerous designated and eligible scenic highways are adjacent to PDAs, where the majority of new development in the proposed Plan will be concentrated, and as a result, could be impacted. Overall, 18 miles of scenic highway pass through or are adjacent to PDAs, while another 34 miles of highways eligible for scenic designation do so. The Scenic Highway Guidelines adopted by Caltrans to protect scenic highway corridors, which include certain limits on land uses adjacent to the roadway, are implemented at the local level and are non-binding. Additionally, most city and county general plans include policies, such as zoning and/or design guidelines, which ensure new development is visually compatible with the natural and built environments. However, development resulting from the proposed Plan could result in long-term visual impacts on scenic resources and this impact would be potentially significant (PS). Mitigation Measure 2.10 (a) is described under Impact 2.10-1 and Mitigation Measure 2.10(b) is described below.

Impacts of Transportation Projects

Regional and Localized Effects

Short- and long-term visual impacts on scenic highways resulting from transportation projects are the same as those discussed under Impact 2.10-1. Many of the transportation projects in the proposed Plan Bay Area will not result in significant construction impacts, as they involve transit route improvements, road operations and maintenance, and pedestrian and bicycle improvements which all involve minimal construction, if any. However, major capital projects that require new construction have the potential to result in substantial visual impacts during construction. Construction of such projects could take several months to several years.

As seen in **Figure 2.10-3**, proposed transportation projects overlap with approximately five miles of designated scenic highway and 47 miles of highway eligible for scenic designation. These projects would have potentially significant effects on the visual character of land adjacent to designated scenic highways or highways eligible for designation. As noted above, highway widenings could result in substantial changes to the visual resources, particularly those directly adjacent to a scenic highway and/or alter the

view as seen from a scenic highway. As a result, this impact would be potentially significant (PS). Mitigation Measure 2.10 (a) is described under Impact 2.10-1 and Mitigation Measure 2.10(b) is described below.

Combined Effects

As discussed above, development and transportation projects both have the potential to produce significant impacts. However, even where they are not significant, impacts could aggregate to produce short-term and permanent potentially significant (PS) impacts on visual resources. Mitigation Measure 2.10 (a) is described under Impact 2.10-1 and Mitigation Measure 2.10(b) is described below.

Mitigation Measure

Implementing agencies and/or project sponsors shall consider implementation of mitigations measures including but not limited to those identified below.

2.10(b) Mitigation measures that shall be considered by implementing agencies and/or project sponsors where feasible based on project-and site-specific considerations include, but are not limited to:

- Project sponsors and implementing agencies shall complete design studies for projects in designated or eligible State Scenic Highway corridors. Implementing agencies shall consider the “complete” highway system and design projects to minimize impacts on the quality of the views or visual experience that originally qualified the highway for scenic designation.
- Contouring the edges of major cut and fill slopes to provide a more natural looking finished profile that is appropriate to the surrounding context, using natural shapes, textures, colors, and scale to minimize contrasts between the project and surrounding areas.
- Complying with existing local regulations and policies that exceed or reasonably replace measures that protect visual resources where feasible based on project- and site-specific considerations

Implementation of Mitigation Measure 2.10(a) shall also be considered to reduce impacts on scenic highways.

Significance after Mitigation

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources Code sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, as feasible, to address site-specific conditions. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would normally be less than significant with mitigation (LS-M). However, there may be instances in which site-specific or project-specific conditions preclude the reduction of all project impacts to less than significant levels. For purposes of a conservative analysis, therefore, this impact remains significant and unavoidable (SU).

MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore it cannot be ensured that this mitigation measure would be implemented in all cases. Further, there may be instances in which site-specific or project-specific conditions preclude the reduction of all project impacts to less-than-significant levels. For purposes of a conservative analysis, therefore, this impact remains significant and unavoidable (SU).

Impact

2.10-3 Implementation of the proposed Plan could affect visual resources by creating significant contrasts with the scale, form, line, color, and/or overall visual character of the existing community.

Impacts of Land Use Projects

Regional Effects

Development resulting from the proposed Plan could cause significant visual impacts by creating or increasing contrasts with the visual character of an existing community. At the regional scale, the greatest impacts will result from high density housing and high intensity commercial projects located within existing communities where the visual contrast between the project and existing conditions will be the most apparent. To the extent that projects resulting from the proposed Plan, in aggregate, would result in new development that results in a substantial increase in current densities and intensities within existing communities, these projects may contribute to the cumulative regional visual resources impact. In addition, development in the proposed Plan not identified as having a direct visual impact in the regional context may result in individually minor visual impacts locally. Collectively, these individually minor visual impacts may become significant over time. As a result, this impact remains potentially significant (PS). Mitigation Measure 2.10(c) is described below.

Localized Effects

Development resulting from the proposed Plan could cause significant localized visual impacts similar to those at the regional scale. Additionally, development could impact local visual resources by visually disrupting the local character of the built environment if new development intensity and densities are substantially higher than existing development. While local standards and design guidelines (discussed below) would ultimately be the primary tools in shaping neighborhood character, changes in density would also play an important role. **Table 2.10-5** shows the existing and anticipated future densities under the proposed Plan in the 10 PDAs with the largest overall change in density. Seven of the 10 are in the major urban centers of Oakland, San Francisco, and San José while downtown and transit centers in Berkeley, Redwood City, and Millbrae round out the top 10 list. The PDA with the highest overall anticipated household density in 2040 as well as the greatest increase in density from existing conditions is the San Francisco Transbay Terminal, which could rise from five to 128 households per acre over the time horizon of the proposed Plan.

TABLE 2.10-5: HOUSEHOLD DENSITY BY PRIORITY DEVELOPMENT AREA

Priority Development Area	Density (Households per Acre)		Difference (2040 – 2010 Density)
	2010	2040	
San Francisco: Transbay Terminal	5	128	124
Redwood City: Downtown	7	46	39
Berkeley: Downtown	23	59	37
Millbrae: Transit Station Area	4	40	36
San José: Greater Downtown	8	42	34
San José: Capitol Corridor Urban Villages	4	36	32
Oakland: Downtown & Jack London Square	20	48	28
South San Francisco: Downtown	13	40	27
San José: Stevens Creek TOD Corridor	12	38	25
San Francisco: Market & Octavia	44	69	25

Source: MTC, 2012; Dyett & Bhatia, 2013.

In PDAs where density is anticipated to increase substantially, new development—and in some cases, new *types* of development—will be required to accommodate growth. Since no two neighborhoods are exactly alike in terms of their existing development and development potential, it is impossible to say precisely how new development might change the character of existing neighborhoods. Local jurisdictions maintain land use and design control over all development projects and will be responsible for approving development plans. However, MTC and ABAG do have the ability to provide input into local designs through the PDA/Station Area planning process. For example, MTC has developed a Station Area Planning Manual that includes principles—such as street-level improvements and pedestrian connectivity—meant to inform the development of station areas and PDAs and minimize community interruption.⁶ The Manual provides character profiles of place types that consider numerous physical factors—including but not limited to predominant transit mode, land use, population density, employment intensity, housing type, height, and bulk—in an effort to affect neighborhood change that is compatible with existing community fabric.

While local jurisdictions are not required to utilize the Manual, many will receive MTC funds for their PDA and Station Area planning efforts, and as a result, MTC and ABAG will be able to offer guidance to ensure compatibility with appropriate design principles described in the Manual. Further, local jurisdictions have zoning in place that will ensure development conforms to local standards, and many have design guidelines that would ensure that new development not only meets local standards, but is consistent with and contributes to local character and quality. These policies will help ensure that new development, even where overall densities change, would not adversely impact local character.

Local land use agencies are ultimately responsible for the approval of the forecast urban development that contributes to this impact. These agencies are accountable to their communities to apply development standards and guidelines to maintain compatibility with existing communities, including site coverage, building height and massing, building materials and color, landscaping, site grading, etc., in

⁶ MTC, *Station Area Planning Manual*, 2007.

visually sensitive areas. Most city and county general plans include policies, such as zoning and/or design guidelines, which ensure new development is visually compatible with the natural and built environments. However, some new development may be out of character with existing communities. Therefore, this impact is considered potentially significant (PS). Mitigation Measure 2.10 (a) is described under Impact 2.10-1 and Mitigation Measure 2.10(c) is described below.

Impacts of Transportation Projects

The majority of the 700 transportation projects in the proposed Plan would have no impact on visual resources. These projects include operations, maintenance, minor rehabilitation, signal and signage improvements, and local arterial projects, for example. However, 160 transportation projects have been identified in the proposed Plan that could result in potentially significant visual impacts in the region. As seen in **Figure 2.10-3**, these major projects span all nine Bay Area counties, but are especially clustered in Santa Clara County around the densely populated areas of Santa Clara, Downtown San José, and Milpitas; in central and western Alameda County; and in San Francisco. These new projects could potentially impact the character of an existing community, although, in general, impacts from transportation projects would not be expected to have a substantial adverse impact due to the nature of the work, as described above, or because most proposed projects will take place in existing rights-of-way. However, some transportation projects in the proposed Plan that expand or extend existing rights-of-way could impact community character by increasing visual contrast in the community and therefore would constitute a potentially significant impact (PS). Mitigation Measure 2.10 (a) is described under Impact 2.10-1 Mitigation Measure 2.10(c) is described below.

Combined Effects

As discussed above, development and transportation projects both have the potential to produce significant impacts. However, even where they are not significant, impacts could aggregate to produce potentially significant (PS) permanent impacts on visual resources. Mitigation Measure 2.10 (a) is described under Impact 2.10-1 Mitigation Measure 2.10(c) is described below.

Mitigation Measure

Implementing agencies and/or project sponsors shall consider implementation of mitigations measures including but not limited to those identified below.

2.10(c) Mitigation measures that shall be considered by implementing agencies and/or project sponsors where feasible based on project-and site-specific considerations include, but are not limited to:

- Designing projects to minimize contrasts in scale and massing between the project and surrounding natural forms and development.
- Requiring that the scale, massing, and design of new development provide appropriate transitions in building height, bulk, and architectural style that are sensitive to the physical and visual character of surrounding areas.
- Contouring the edges of major cut and fill slopes to provide a finished profile that is appropriate to the surrounding context, using shapes, textures, colors, and scale to minimize contrasts between the project and surrounding areas.

- Ensuring that new development in or adjacent to existing communities is compatible in scale and character with the surrounding area by:
 - Promoting a transition in scale and architecture character between new buildings and established neighborhoods; and
 - Requiring pedestrian circulation and vehicular routes to be well integrated.
- Complying with existing local regulations and policies that exceed or reasonably replace any of the above measures that reduce visual contrasts.

Implementation of Mitigation Measure 2.10(a) shall also be considered to reduce impacts on visual resources created by significant contrasts in community visual character.

Significance after Mitigation

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, as feasible, to address site-specific conditions. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore it cannot be ensured that this mitigation measure would be implemented in all cases, and this impact remains significant and unavoidable (SU).

Impact

2.10-4 Implementation of the proposed Plan could affect visual resources by adding a visual element of urban character to an existing rural or open space area or adding a modern element to a historic area.

Impacts of Land Use Projects

Development resulting from the proposed Plan could cause significant visual impacts by adding a visual element of urban character to an existing rural or open space area or adding a modern element to a historic area. The greatest impacts at the regional scale will result from high density housing and high intensity commercial projects located in low density, rural, or historic areas, where the visual contrast between the project and existing conditions will be the most apparent. In general, the proposed Plan focuses most new development within existing urban communities on infill sites where there would be less visual contrast with the immediate surroundings as compared to rural areas. However, as noted in **Table 2.10-3**, approximately 7,500 acres of non-urbanized land will be converted to urbanized land as a result of the proposed Plan and to the extent that land use projects, in aggregate, would result in new development adjacent to significant landscapes, these projects may contribute to the cumulative regional visual resources impact. In addition, development in the proposed Plan not identified as having a direct visual impact in the regional context may result in individually minor visual impacts locally. Further, in areas with historic districts or a large number of historic structures, density changes could result in a substantial change in local character (as discussed in Impact 2.10-3) or the introduction of a modern element to a historic area. While many local ordinances protect historic resources, these ordinances would

not in all cases reduce potential impacts from adding a modern element to a historic area. Further discussion of impacts to historic resources is included in *Chapter 2.11: Cultural Resources*. Collectively, these individually minor visual impacts may become significant over time. As a result, this impact would be potentially significant (PS). Mitigation Measure 2.10(c) is described under Impact 2.10-3, and Mitigation Measure 2.10(d) is described below.

Impacts of Transportation Projects

The majority of the 700 transportation projects within the proposed Plan would have no impact on visual resources. These projects include operations, maintenance, minor rehabilitation, signal and signage improvements, and local arterial projects, for example. However, 160 transportation projects have been identified in the proposed Plan that could result in potentially significant visual impacts in the region. As seen in **Figure 2.10-3**, these major projects span all nine Bay Area counties, but are especially clustered in Santa Clara County around the densely populated areas of Santa Clara, Downtown San José, and Milpitas; in central and western Alameda County; and in San Francisco. These new projects could potentially impact the character of a historic district or neighborhood, although, in general, impacts from transportation projects would not be expected to have a substantial adverse impact in urbanized areas due to the nature of the work, as described above, or because most proposed projects will take place in existing rights-of-way. Furthermore, many local projects seek to improve streetscape quality and usability at the local level. However, a few of the transportation projects in the proposed Plan would introduce new roadways in rural, open space, or historic areas, which would constitute a significant impact.

Soundwalls are used to reduce noise levels in residential areas surrounding transportation infrastructure, usually high-speed or high-volume segments of roadways. Two major soundwall projects in the proposed Plan are to mitigate noise impacts of freeways and highway expansion projects that would affect the visual character of the streetscapes, highway, and freeway corridors where these soundwalls are constructed. Soundwalls reduce visual interest and sense of place, while also limiting views and sunlight from adjoining areas. In general, architectural relief, landscaping, and visual screening, which are now customary requirements for new soundwall programs, would soften the contrasts associated with soundwalls. Nonetheless, views into and out of affected neighborhoods would likely be blocked. Because the full scope of these programs has not yet been established, the extent of blocked views is unknown. Since there is only one proposed soundwall project in a rural area, however, it is expected that this impact can be reduced or avoided with appropriate mitigation. Still, sound walls could result in long-term visual impacts and, as a result, this impact remains potentially significant (PS). Mitigation Measure 2.10(c) is described under Impact 2.10-3, and Mitigation Measure 2.10(d) is described below.

Combined Effects

As discussed above, development and transportation projects both have the potential to produce significant impacts. However, even where they are not significant, impacts could aggregate to produce potentially significant (PS) permanent impacts to visual resources. Mitigation Measure 2.10(c) is described under Impact 2.10-3, and Mitigation Measure 2.10(d) is described below.

Mitigation Measure

Implementing agencies and/or project sponsors shall consider implementation of mitigations measures including but not limited to those identified below.

In addition to Mitigation Measure 2.10(c), the following measure would apply to impacts on visual resources in rural or historic areas.

2.10(d) Mitigation measures that shall be considered by implementing agencies and/or project sponsors where feasible based on project-and site-specific considerations include, but are not limited to:

- Ensuring that new development in or adjacent to rural or historic areas is compatible in scale and character with the surrounding area by:
 - Promoting a transition in scale and architecture character between new buildings and established neighborhoods; and
 - Requiring pedestrian circulation and vehicular routes to be well integrated.
- Using soundwall construction and design methods that account for visual impacts as follows:
 - Use transparent panels to preserve views where soundwalls would block views from residences.
 - Use landscaped earth berm or a combination wall and berm to minimize the apparent soundwall height.
 - Construct soundwalls of materials whose color and texture complements the surrounding landscape and development.
 - Design soundwalls to increase visual interest, reduce apparent height, and be visually compatible with the surrounding area.
 - Landscape the soundwalls with plants that screen the soundwall, preferably with either native vegetation or landscaping that complements the dominant landscaping of surrounding areas.
- Complying with existing local regulations and policies that exceed or reasonably replace any of the above measures that reduce visual impacts on rural and historic areas.

Significance after Mitigation

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, as feasible, to address site-specific conditions. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore it cannot be ensured that this mitigation measure would be implemented in all cases, and this impact remains significant and unavoidable (SU).

Impact

2.10-5 Implementation of the proposed Plan could adversely affect visual resources by creating new substantial sources of light and glare.

Impacts of Land Use Projects

Regional Effects

Development resulting from the proposed Plan could create new substantial sources of light and glare at the regional scale that cause a public hazard, disrupt scenic vistas, and brighten the night sky. In portions of the region with significant existing development, increases would not cause a new public hazard or substantially degrade the visual character or quality of the area because existing sources of glare and light are already a dominant feature of the landscape. Thus, in urbanized areas,⁷ this impact is less than significant (LS). In less developed areas of the region, where existing sources of light and glare are not as prevalent, the impact of new sources would be potentially significant (PS). Mitigation Measure 2.10(e) for rural areas is described below.

Localized Effects

Development projects resulting from the proposed Plan could create new substantial sources of light and glare at the local scale similar to those at the regional scale. In addition, the introduction of new sources of light and glare could impact local visual resources by altering the local character of the built environment. High density residential and high intensity commercial development, in particular, could have potentially significant (PS) light and glare impacts at the local level. Overall, local impacts are less than significant (LS) in urbanized areas and potentially significant (PS) in rural areas. Mitigation Measure 2.10(e) for rural areas is described below.

Impacts of Transportation Projects

It is not anticipated that transportation projects will significantly increase the amount of light and glare at the regional or local level, as most improvements will take place on existing facilities that have existing sources of light and glare (see **Figure 2.10-3**), although the limited number of new proposed roadways in rural areas could introduce a new source of light and glare. The marginal increases in light and glare from additional vehicle headlights, new reflective signage, new streetlights, new intersection control devices, and other improvements are considered less than significant. In most cases, new transportation projects will be aligned with planned development projects, and existing facilities, which will help to reduce aesthetic impacts; however, several transportation projects in rural areas could introduce light and glare to areas where no sources existed previously, which would constitute a potentially significant impact (PS). Impacts in urbanized areas would be less than significant (LS). Mitigation Measure 2.10(e) is described below.

Combined Effects

As discussed above, development and transportation projects both have the potential to produce significant impacts, primarily in rural areas. Even where they are not significant, impacts could aggregate to produce potentially significant (PS) light and glare-related impacts. Mitigation Measure 2.10(e) is described below.

⁷ "Urbanized area" is defined in CEQA Guidelines, Section 15387. "Urbanized area" means a central city or a group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 persons per square mile.

Mitigation Measure

Implementing agencies and/or project sponsors shall consider implementation of mitigations measures including but not limited to those identified below.

2.10(e) Mitigation measures that shall be considered by implementing agencies and/or project sponsors where feasible based on project-and site-specific considerations include, but are not limited to:

- Designing projects to minimize light and glare from lights, buildings, and roadways facilities.
- Minimizing and controlling glare from transportation projects through the adoption of project design features that reduce glare. These features include:
 - Planting trees along transportation corridors to reduce glare from the sun;
 - Landscaping off-street parking areas, loading areas, and service areas; and
 - Shielding transportation lighting fixtures to minimize off-site light trespass.
- Minimizing and controlling glare from land use and transportation projects through the adoption of project design features that reduce glare. These features include:
 - 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; and
 - Using low-reflective glass.
- Imposing lighting standards that ensure that minimum safety and security needs are addressed and minimize light trespass and glare associated with land use development. These standards include the following:
 - Minimizing incidental spillover of light onto adjacent private properties and undeveloped open space;
 - Directing luminaries away from habitat and open space areas adjacent to the project site;
 - Installing luminaries that provide good color rendering and natural light qualities; and
 - Minimizing the potential for back scatter into the nighttime sky and for incidental spillover of light onto adjacent private properties and undeveloped open space.
- Complying with existing local regulations and policies that exceed or reasonably replace any of the above measures that reduce light and glare impacts.

Significance after Mitigation

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, as feasible, to address site-specific conditions. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore it cannot be ensured that this mitigation measure would be implemented in all cases, and this impact remains significant and unavoidable (SU).

Impact

2.10-6 Implementation of the proposed Plan could cast a substantial shadow in such a way as to cause a public hazard or substantially degrade the existing visual/aesthetic character or quality of a public place for a sustained period of time.

Impacts of Land Use Projects

Shadows are by nature location-specific, and as such, shadows resulting from the proposed Plan would occur at the local level. Therefore, regional effects are not addressed separately. Development resulting from the proposed Plan could cast shadows in such a way as to cause a public hazard or substantially degrade the existing visual/aesthetic character or quality of a public place for a sustained period of time. It is noted that the casting of shadows on private property is not considered an impact and, as such, this analysis focuses on impacts to public spaces. In general, shadows are greatest in existing urbanized areas with high densities because structures there tend to be close together and contain multiple stories. Where shadow impacts are likely, they are typically addressed through local regulations. The impact of shadows on public space is likely to increase where household density and commercial intensity increase substantially. Existing urban centers are likely to experience the greatest impact from shadows as a result of the proposed Plan since the majority of new growth is focused in PDAs, although impacts should be marginal since much of the new development will be on infill sites. In rural and suburban areas where densities will remain relatively low and most development will be in the form of low-rise structures, shadow impacts on public spaces are not anticipated to be substantial. Overall, impacts from shadow are less than significant (LS) where they would not substantially degrade the existing visual/aesthetic character or quality of a public place. However, where shadows would potentially affect the quality of a public space, the impact is potentially significant (PS). Mitigation Measure 2.10(f) is described below.

Impacts of Transportation Projects

The proposed Plan includes new overpasses, bridges, or other freeway improvements that could introduce shadows in both urban and rural areas that create a public hazard or degrade the visual character of a site. However, it is not anticipated that the majority of transportation projects will significantly increase the amount of shadow at the regional or local level, as most improvements will take place on existing facilities where shadows may already be present. Overall, impacts from shadow are less than significant (LS) where they would not substantially degrade the existing visual/aesthetic character or quality of a public place. However, where shadows would potentially affect the quality of a public space, the impact is potentially significant (PS). Mitigation Measure 2.10(f) is described below.

Combined Effects

As discussed above, land use and transportation projects could have significant shadow impacts on public spaces, particularly in urban areas. Overall, impacts from shadow are less than significant unless (LS) where they would not substantially degrade the existing visual/aesthetic character or quality of a public place. However, where shadows would affect the quality of a public space, the impact is potentially significant (PS). Mitigation Measure 2.10(f) is described below.

Mitigation Measure

Implementing agencies and/or project sponsors shall consider implementation of mitigations measures including but not limited to those identified below.

2.10(f) Mitigation measures that shall be considered by implementing agencies and/or project sponsors where feasible based on project-and site-specific considerations include, but are not limited to the following. Implementing agencies shall require project sponsors to conduct shadow studies for buildings and roadway facilities to identify and implement development strategies for reducing the impact of shadows on public open space. Study considerations shall include, but are not limited to, the placement, massing, and height of structures, surrounding land uses, time of day and seasonal variation, and reflectivity of materials. Study recommendations for reducing shadow impacts shall be incorporated into the project design as feasible based on project- and site-specific considerations. Further, implementing agencies shall require project sponsors to comply with existing local regulations and policies that exceed or reasonably replace the above measure that reduces shadow impacts where feasible based on project- and site-specific considerations.

Significance after Mitigation

Projects taking advantage of CEQA Streamlining provisions of SB 375 (Public Resources sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures described above, as feasible, to address site-specific conditions. To the extent that an individual project adopts and implements all feasible mitigation measures described above, the impact would be less than significant with mitigation (LS-M).

MTC/ABAG cannot require local implementing agencies to adopt the above mitigation measures, and it is ultimately the responsibility of a lead agency to determine and adopt mitigation. Therefore it cannot be ensured that this mitigation measure would be implemented in all cases, and this impact remains significant and unavoidable (SU).