



## MEMORANDUM

DATE: 25 April 2013

TO: Planning Commission

FROM: John Swiecki *JAS*  
Community Development Director

**SUBJECT: Draft *Plan Bay Area***

The Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC) have prepared the Draft *Plan Bay Area*, the proposed Sustainable Communities Strategy (SCS) and Regional Transportation Plan (RTP) for the 9-County Bay Area region. A draft environmental impact report (DEIR) has also been prepared for the Plan. The public comment period on the draft plan and DEIR is open until May 16, 2013.

The intent of this report is to provide some background on the draft plan and related DEIR, and provide the Planning Commission the opportunity to provide comments to the City Council as it deems appropriate. The City Council is scheduled to consider this matter at its May 6, 2013 meet to ensure that City comments can be finalized and submitted before the close of the comment period.

The entire Draft *Plan Bay Area*, related DEIR and other supporting documents are available at <http://onebayarea.org/regional-initiatives/plan-bay-area.html>.

### **Background:**

The Draft *Plan Bay Area* represents a 25-year regional land use/transportation strategy intended to achieve state-mandated goals for the 9-county Bay Area region as set forth in SB 375 which took effect in 2009. SB 375 requires each metropolitan region in the state to develop a sustainable communities strategy (SCS) which includes the following:

1. a projected regional land use/transportation pattern which achieves regional transportation emission reduction targets established by the state. The target for the Bay Area is a 7 percent per capita reduction by 2020 and a 15 percent per capita reduction by 2035.

2. identification of areas within the region sufficient to house the entire projected population of the region, including all economic segments.
3. identification of a transportation network to serve the transportation needs of the region.

The SCS process is further intended to more closely align land use patterns with transportation investments. Transportation investments as set forth in the RTP will support the land use patterns promoted by the SCS, and Regional Housing Needs Allocation (RHNA) numbers used for Housing Element preparation will align with the SCS as well.

ABAG and MTC have been actively involved in preparation of the draft *Plan Bay Area* since 2011, a process which has involved extensive outreach to and input from the local communities, residents, businesses, environmental groups and other stakeholders. This process involved the identification of plan performance targets and development of several alternative “vision scenarios,” culminating in the identification of a preferred scenario which was the basis for the draft *Plan Bay Area* as now proposed and analyzed in the DEIR.

### **Draft Plan Bay Area**

#### Overall Strategy

The introduction to the Draft *Plan Bay Area* is attached for information. In summary the Draft *Plan Bay Area* promotes compact, mixed-use development that combines both residential and commercial uses and is located close to public transit, jobs, schools, shopping, parks, recreation and other amenities. Much of the regional growth is projected to occur within the existing urban centers of the Bay Area (San Francisco, San Jose, Oakland) . Targeted growth is also anticipated to occur within Priority Developments Areas (PDAs), locations which local jurisdictions have identified as being suitable for housing and/or employment growth and approved by ABAG. PDAs typically include locations near transit centers (such as BART or Caltrain stations) or along corridors served by transit and suitable for additional residential development such as El Camino Real. The approach of emphasizing infill development as the primary means of accommodating anticipated growth greatly decreases the amount of undeveloped lands required to accommodate projected growth over time. PDAs encompass approximately 3% of the Bay Area’s land mass, but are projected to accommodate 77% of the region’s required new housing and 63% of its anticipated new employment. This emphasis on PDA-based infill as a means to accommodate growth is paired with an emphasis of conserving regionally important open space and agricultural lands identified as Priority Conservation Areas (PCAs), and working to ensure that PCAs remain as open space or in agricultural production.

#### Underlying Growth Assumptions

*Plan Bay Area* projects the following:

**Population:** By 2040 the Bay Area is projected to add 2.1 million people, increasing the regional population by 30%, from 7.2 million to 9.3 million.

**Employment:** The number of jobs is anticipated to grow by 1.1 million between 2010 and 2040, an increase of 33%.

**Housing:** Between 2010 and 2040 the number of households is expected to increase by 27% to 700,000, and the number of housing units is expected to increase by 24% to 660,000.

There are some noteworthy demographic trends that accompany these projections. In regard to jobs, knowledge-based and service industries are anticipated to lead job growth. Nearly 75% of new jobs are forecast in the fields of professional services, health, education, leisure and hospitality. Knowledge-based jobs show a preference to cluster together in urban locations with good transit access, a trend which is anticipated to continue over time. Since these industries generally do not require large land area, they have little incentive to base location decisions on the cost or availability of land. Service jobs will be generated in close proximity to the business or residential populations that they serve.

From a population perspective, the region is forecast to grow more ethnically diverse, as the percentage of Latino and Asian population increases. The population of seniors 65 years of age and over will increase substantially. These changes are anticipated to influence housing trends, as a more diverse and aging population is anticipated to drive demand for housing that is walkable to daily services and proximate to transit, which represents a departure from the auto-oriented detached single family housing type which is predominant today.

Plan Performance Results

As noted in the background section of this report, a component of the planning process for *Plan Bay Area* was to establish a series of performance targets against which to evaluate the plan.

The identified targets and results are summarized below:

Topic	Target	Plan Performance
*Climate Protection	Reduce per capita CO2 emissions from cars and light trucks by 15% by 2040	Exceeds target-reduces per capita emissions of CO2 by 18% by 2040
*Housing	House 100% of the region's projected growth by income level without displacing current low-income residents	Meets target
Healthy and Safe Communities	Reduce premature deaths from exposure to fine particulates by 10%	Exceeds target- reduces premature deaths from exposure to fine particulates by 71%
	Achieve greater reductions in highly impacted areas	Meets target
	Reduce coarse particulate emissions by 30%	Falls short of target, reduces coarse particulate emissions by 17%

Open Space and Ag Lands	Direct all non-ag development within the 2010 urban footprint	Meets target
Economic Vitality	Increase gross regional product (GRP) by 110% (2% average annual growth rate)	Exceeds target- projects 119% increase in GRP
Active Transport	Increase average daily walking and/or biking time per person by 70 percent (to average 15min/person/day)	Falls short of target but boosts per person active time by 17%
Transportation System Effectiveness	Increase non-auto mode share by 10% (to 26% of trips)	Falls short of target but increases non-auto mode share to 20%
	Decrease per capita automobile vehicle miles travelled (VMT) by 10%	Falls short of target but reduces per capita VMT by 9%.
	Increase index (PCI) to 75 or better	Falls short of target but improves local road pavement condition to a PCI of 68
	Decrease distressed lane miles of regional highways to less than 10% of total lane miles	Moves in opposite direction of target- increases distressed lane miles of regional highways to 44%
	Reduce the share of transit assets past their useful life to 0%.	Moves in opposite direction of target- increases the share of transit assets past their useful life to 24%
Reduce Injuries and Fatalities from Collisions	Reduce by 50% the number of injuries and fatalities from all collisions (including bike and ped)	Moves in opposite direction of target- injury and fatality collisions are projected to increase by 18%
Equitable Access	Decrease by 10% (from 66% to 56%) the share of low and lower-middle income resident's household incomes consumed by transportation and housing	Moves in opposite direction of target- share of household income to cover transportation and housing rise to 69%

\*statutorily required by SB 375

In addition to the performance targets identified above, a number of Social Equity Performance Measures were also established related to impacts on low income and minority populations. These measures relate to housing and transportation costs as a percentage of income, potential for displacement in forecast high growth areas, exposure to heavily traveled roadways, commuting travel time, and travel time for non-work trips. In summary for most of these measures the plan does not show improvement for the targeted

population, but it does perform better than 2040 projections based upon continuation of the status quo.

Local Considerations

The Draft *Plan Bay Area* projects future employment and housing down to the local jurisdiction-level, including a breakout by PDA. This data for San Mateo County, including Brisbane, is included as an attachment to this report. In summary, projected employment and housing growth within San Mateo County is concentrated within existing PDAs such as the El Camino Real corridor, and downtown PDAs within the cities of San Mateo, Redwood City and South San Francisco.

Throughout the extensive process of developing the Draft *Plan Bay Area* the City of Brisbane has been actively involved to ensure that the long term growth projections for Brisbane are reasonable and appropriate. Previous City correspondence is attached for information.

Brisbane growth projections shown in the draft *Plan Bay Area* reflect limited housing growth and modest employment gains as shown below:

City of Brisbane	2010	2040	Change 2010-2040
<b>Housing Units</b>			
Non-PDA	1,930	2,180	+250
PDA	0	0	0
<b>Employment</b>			
Non-PDA	6,670	7,180	+510
PDA	550	1,100	+550

This is reflective of the direction provided previously by the City in reviewing previous scenarios developed by ABAG and MTC. It should be noted that the major issue associated with Brisbane projections have been assumptions associated with the Baylands PDA. Previous scenarios developed by ABAG/MTC assumed certain land patterns for the Baylands, failing to recognize that the planning process for the Baylands is ongoing and it would be inappropriate and premature for ABAG to project what the outcome of the City's land use process will be. Once the City raised this concern, ABAG revised the projections as shown above to attribute minimal growth to the Baylands. This approach is appropriate and accurately recognizes the current uncertainty regarding the final land use plan for the Baylands. ABAG/MTC is obligated to update *Plan Bay Area* in 4 years, and the City expects that any land use decisions made for the Baylands will be reflected in the next update to *Plan Bay Area*.

Regional Transportation Plan

*Plan Bay Area* is linked with the Regional Transportation Plan (RTP), which sets forth a program for allocating anticipated transportation funds that will be received in the region through 2040. A synopsis of RTP funding issues is attached to this report. Funding through

the life of the RTP is anticipated to total approximately 289 billion dollars, and approximately 80 percent of these funds are committed to dedicated purposes. The remainder of these funds (approximately 57 billion dollars) are discretionary. In the allocation of these limited funds, the RTP seeks to strike a balance between maintaining the existing transportation and transit networks while providing funding for transportation and transit programs and projects which align with and support the land use pattern set forth in the draft *Plan Bay Area*. The RTP also establishes a process and set of criteria for competitively ranking proposed transportation and transit projects and prioritizing those which are scored as high performing. Projects within San Mateo County that fall within the high performing category include Caltrain electrification and operational improvements, El Camino Real Bus Rapid Transit, Highway 101 interchange improvements and the Redwood City ferry. The RTP also includes the One Bay Area Grant (OBAG) program, which is a new funding strategy intended to align transportation investments with land use. The OBAG program is skewed heavily toward supporting transit and transportation investments within PDAs that will facilitate new housing and employment production and ultimately will reward jurisdictions where housing production occurs within PDAs.

### **Plan Bay Area Draft Environmental Impact Report (DEIR)**

A programmatic Draft EIR has been prepared for the Draft *Plan Bay Area*. As a programmatic document it presents an analysis of the entire set of projects and programs within the Plan. The programmatic EIR does not include a project-specific analysis of individual program components. Individual projects and activities will be subject to separate project-specific environmental review. The DEIR executive summary is attached for information. Among other things it includes a brief summary of the alternatives evaluated in the DEIR. The alternatives evaluated in the EIR do not distribute projected housing and employment down to the local jurisdictional level, so there is no basis to compare Draft *Plan Bay Area's* projections for Brisbane to the EIR alternatives.

The Executive Summary further indicates that for most of the topics evaluated in the DEIR (Transportation, Air Quality, Land Use, Climate Change, Noise, Biological Resources, Visual Resources, Historic Resources, Public Utilities and Facilities, Hazards, and Public Services) impacts associated with Draft *Plan Bay Area* would be significant and unavoidable. Impacts associated with Energy, Geology & Seismicity, and Water Resources are either less than significant or can be mitigated to a less than significant level. In considering many of the Significant Unavoidable impacts identified for the draft *Plan Bay Area*, it is important to recognize that many of the identified impacts are associated with the physical construction of individual projects within the program which will be undertaken by others. In many of these cases the Program EIR identifies mitigation measures which could reduce physical impacts. However, since ABAG/MTC will not be responsible for the physical construction of these projects, it cannot guarantee with certainty that the recommended mitigation measures will be imposed and implemented. As such, for purposes of the programmatic DEIR these impacts are identified as significant and unavoidable.

### **Recommendation**

As noted above, this represents the Planning Commission's opportunity to provide input to the City Council regarding the draft *Plan Bay Area* and related DEIR. Given the volume of material and short time the documents have been available for public review staff is still in

the process of reviewing the documents and will be offering comments for City Council consideration at the May 6 meeting as well.

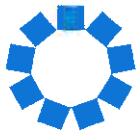
**Attachments**

Draft *Plan Bay Area*- Introduction  
Plan Statistics- Brisbane and San Mateo County Jurisdictions  
City Of Brisbane- Previous Correspondence  
RTP Funding Synopsis  
*Plan Bay Area* DEIR Executive Summary

# Strategy for a Sustainable Region

## Draft BayArea Plan

March 2013



Association of  
Bay Area  
Governments



Metropolitan  
Transportation  
Commission

Introduction





# Draft Plan Bay Area

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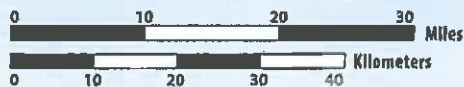
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# San Francisco Bay Area: Transportation and Land Uses

## Legend

- Urbanized area
  - Open space
  - Priority Development Area (PDA)
  - Priority Conservation Area (PCA)
- ROADS**
- Freeway
  - Major Road
- RAIL SYSTEM**
- Altamont Corridor Express
  - Amtrak
  - BART
  - Caltrain
  - Light Rail (Muni & VTA)
  - Cable Car (Muni)
- Oakland**
- |                       |
|-----------------------|
| > 350,000             |
| Novato 50,000–350,000 |
| Palo Alto <50,000     |

San Francisco Bay Area - Transportation and Land Uses | 3.20 13



# Introducing Plan Bay Area: Strategy for a Sustainable Region

Most of us living in the nine counties that touch San Francisco Bay are accustomed to saying we live in “the Bay Area.” This simple phrase speaks volumes — and underscores a shared regional identity. The 7 million of us who call the nine-county San Francisco Bay Area home have a strong interest in protecting the wealth of features that make our region a magnet for people and businesses from around the globe.

The Bay Area is, after all, the world’s 21st-largest economy. The natural beauty of San Francisco Bay and the communities surrounding it,

*“The Bay Area has made farsighted regional planning a top priority for decades.”*

our Mediterranean climate, extensive system of interconnected parks and open space, advanced mass transit system, top-notch educational institutions, and rich cultural heritage continue to draw people who seek better opportunities. Yet we cannot take for granted that we will be able to sustain and improve our quality of life for current and future generations.

With our region’s population projected to swell to some 9 million people by 2040, Plan Bay Area charts a course for accommodating this growth while fostering an innovative, prosperous and competitive economy; preserving a healthy and safe environment; and allowing all Bay Area residents to share the benefits of vibrant, sustainable communities connected by an efficient and well-maintained transportation network.

## A Legacy of Leadership

Plan Bay Area, while comprehensive and forward-reaching, is an evolutionary document. The Bay Area has made farsighted regional planning a top priority for decades. Previous generations recognized the need for a mass transit system, including regional systems such as BART and Caltrain that have helped make our region the envy of other metropolitan areas. Our transbay bridges add cohesion to the regional transportation system by connecting communities across the bay. Likewise, we owe our system of parks and open space to past generations of leaders who realized that a balance between urbanized areas and open space was essential to a healthy environment and vibrant communities.

Plan Bay Area extends this legacy of leadership, doing more of what we've done well while also mapping new strategies to face new challenges. Among the new challenges are the requirements of California's landmark 2008 climate law (SB 375, Steinberg): to decrease greenhouse gas emissions from cars and light trucks, and to accommodate all needed housing growth within our nine counties. By coordinating future land uses with our long-term transportation investments, Plan Bay Area meets these challenges head on — without compromising local control of land-use decisions. Each of the Bay Area's nine counties and 101 cities must decide for themselves what is best for their citizens and their communities.



## Building Upon Local Plans and Strategies

For over a decade, local governments and regional agencies have been working together to encourage the growth of jobs and production of housing in areas supported by amenities and infrastructure. In 2008, the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) created a regional initiative to support these local efforts called FOCUS. In recent years, this initiative has helped to link local community development aspirations with regional land use and transportation planning objectives. Local governments have identified Priority Development Areas (PDAs) and Priority Conservation Areas (PCAs), and these form the implementing framework for Plan Bay Area.

PDAs are areas where new development will support the day-to-day needs of residents and workers in a pedestrian-friendly environment served by transit. While PDAs were originally established to address housing needs in infill communities, they have been broadened to advance focused employment growth. Local jurisdictions have defined the character of their PDAs according to existing conditions and future expectations as regional centers, city centers, suburban centers or transit town centers, among other place types. PCAs are regionally significant open spaces for which there exists broad consensus for long-term protection but

## California Senate Bill 375: Linking Regional Plans to State Greenhouse Gas Reduction Goals

Plan Bay Area grew out of “The California Sustainable Communities and Climate Protection Act of 2008” (California Senate Bill 375, Steinberg), which requires each of the state’s 18 metropolitan areas — including the Bay Area — to reduce greenhouse gas emissions from cars and light trucks. Signed by former Gov. Arnold Schwarzenegger, the law requires that the Sustainable Communities Strategy (SCS) promote



compact, mixed-use commercial and residential development. To meet the goals of SB 375, Plan Bay Area directs more future development in areas that are or will be walkable and bikable and close to public transit, jobs, schools, shopping, parks, recreation and other amenities. Key elements of SB 375 include the following.

- The law requires that the Bay Area and other California regions develop a Sustainable Communities Strategy (SCS) — a new element of the regional transportation plan (RTP) — to strive to reach the greenhouse gas (GHG) reduction target established for each region by the California Air Resources Board. The Bay Area’s target is a 7 percent per capita reduction by 2020 and a 15 percent per capita reduction by 2035. Plan Bay Area is the region’s first RTP subject to SB 375.
- In the Bay Area, the Association of Bay Area Governments (ABAG) is responsible for the land use and housing assumptions for the SCS, which adds three new elements to the RTP: (1) a land use component that identifies how the region could house the region’s entire population over the next 25 years; (2) a discussion of resource and farmland areas; and (3) a demonstration of how the development pattern and the transportation network can work together to reduce GHG emissions.
- Extensive outreach with local government officials is required, as well as a public participation plan that includes a minimum number of workshops in each county as well as three public hearings on the draft SCS prior to adoption of a final plan.
- The law synchronizes the regional housing need allocation (RHNA) process — adopted in the 1980s — with the regional transportation planning process.
- Finally, SB 375 streamlines the California Environmental Quality Act (CEQA) for housing and mixed-use projects that are consistent with the SCS and meet specified criteria, such as proximity to public transportation.

nearer-term development pressure. PDAs and PCAs complement one another because promoting development within PDAs takes development pressure off the region’s open space and agricultural lands.

Building upon the collaborative approach established through FOCUS, local input has driven the set of alternative scenarios that preceded and informed the development of Plan Bay Area.

The non-profit and business communities also played a key role in shaping the plan. Business groups highlighted the need for more affordable workforce housing, removing regulatory barriers to infill development, and addressing infrastructure needs at rapidly growing employment centers. Environmental organizations emphasized the need to improve transit access, retain open space, provide an adequate supply of housing to limit the number of people commuting into the region from nearby counties, and direct discretionary transportation funding to communities building housing in PDAs. Equity organizations focused on increasing access to housing and employment for residents of all income categories throughout the region, and establishing policies to limit the displacement of existing residents as PDAs grow and evolve. All of these diverse voices strengthened this plan.

## Setting Our Sights

Developing a long-range land use and transportation plan for California's second-largest metropolitan region, covering about 7,000 square miles across nine Bay Area counties, is no simple task. We set our sights on this challenge by emphasizing an open, inclusive public outreach process and adopting objective performance standards based on federal and state requirements to measure our progress during the planning process.

## Reaching Out

We reached out to the people who matter most — the 7 million people who live in the region. Thousands of people participated in stakeholder sessions, public workshops, telephone and internet surveys, and more. Befitting the Bay Area, the public outreach process was boisterous and contentious. Key stakeholders also included the region's 101 cities and nine counties; our fellow



regional agencies, the Bay Conservation and Development Commission and the Bay Area Air Quality Management District; community-based organizations and advocacy groups, and some three dozen regional transportation partners. (See "Plan Bay Area Prompts Robust Dialogue on Transportation and Housing," in Chapter 1.)

## Establishing Performance Targets

Before proposing a land use distribution approach or recommending a transportation investment strategy, planners must formulate in concrete terms the hoped-for outcomes. For Plan Bay Area, performance targets are an essential means of informing and allowing for a discussion of quantitative metrics. After months of discussion and debate, ABAG and MTC adopted 10 targets in January 2011, reflecting input from the broad range of stakeholders engaged in the process.

Two of the targets are not only ambitious; they are also mandated by state law. The first mandatory target addresses climate protection by requiring the Bay Area to reduce its per-capita CO<sub>2</sub> emissions from cars and light-duty trucks by 15 percent by 2040. The second mandatory target addresses adequate housing by requiring the region to house 100 percent of its projected population growth by income level. Plan Bay Area achieves both these major milestones.

The eight voluntary targets seek to promote healthy and safe communities by reducing premature deaths from air pollution, reducing injuries and fatalities from collisions, increasing the amount of time people walk or cycle for transportation, and protecting open space and agricultural lands. Other targets address equity concerns, economic vitality and transportation system effectiveness. Plan Bay Area meets some, but not all, of the voluntary targets. (See Chapter 1, Table 1 for a summary of all the Plan Bay Area performance targets.)

## Taking Equity Into Account

About one-fifth of the Bay Area's total population lives in areas with large numbers of low-income and minority populations. Promoting these people's access to housing, jobs and transportation not only advances Plan Bay Area's objective to advance equity in the region, it also increases our chances of meeting the other performance targets. MTC and ABAG adopted five Equity Analysis measures to evaluate equity concerns: housing and transportation affordability, potential for displacement, healthy communities, access to jobs, and equitable mobility. (See Chapter 1, Table 2: "Plan Bay Area Equity Performance Measures.")



## Planning Scenarios Take Aim at Performance Targets

Taken together, the Plan Bay Area performance targets outline a framework that allows us to better understand how different projects and policies might affect the region's future. With the targets clearly identified, MTC and ABAG formulated possible scenarios — combinations of land use patterns and transportation investments — that could be evaluated together to see if (and by how much), they achieved (or fell short of) the performance targets. An iterative process of scenario-testing begun in 2010 yielded preferred alternatives, both for transportation investments and a land use strategy. Adopted by the boards of MTC and ABAG in May 2012, they form this draft Plan Bay Area.

## Looking Toward the Future

ABAG and MTC track and forecast the region's demographics and economic trends to inform and guide Plan Bay Area investments and policy decisions. The forecasts reflect the best picture we have of what the Bay Area may look like in 2040, so that today's decisions may align with tomorrow's expected transportation and housing needs. These forecasts form the basis for developing the regional land use plan for Plan Bay Area's Sustainable Communities Strategy (SCS), and, in turn, the region's transportation investment strategy.



## Project-Level Performance Assessment of Transportation Projects

By developing the preferred land use and transportation investment strategies, ABAG and MTC were able to answer many big picture questions about the Bay Area's future. For example, should the region focus on expanding the transportation system or on maintaining what we have already built? And should the Bay Area invest more in transit for future generations or emphasize highway projects to improve the commutes of today's drivers? And how should our transportation investments support future growth in employment and housing?

Plan Bay Area also is based on a commitment to evaluate individual transportation projects to make sure dollars are being allocated to the most cost-effective projects. In order to take a closer look at major transportation projects, MTC performed a project performance assessment, examining billions of dollars of potential transportation projects to identify the highest-performing investments across the region. This enabled funding prioritization for the highest-performing projects. Most



of them focused on leveraging existing assets and improving their efficiency, while supporting future development. Notable projects include BART Metro, which will increase service frequencies on the highest-demand segment of the BART system, and San Francisco's congestion pricing initiatives. (See Chapter 5 for a list of high-performing projects.)

Projections in three main areas informed development of the plan: population, employment and housing. Here are some highlights of each.

- **Population:** By 2040 the San Francisco Bay Area is projected to add 2.1 million people, increasing total regional population from 7.2 million to 9.3 million, an increase of 30 percent or roughly 1 percent per year. This growth means the Bay Area will continue to be California's second-largest population and economic center.
- **Employment:** The number of jobs is expected to grow by 1.1 million between 2010 and 2040, an increase of 33 percent. This is a slower rate of job growth than previous forecasts.
- **Housing:** During this same time period the number of households is expected to increase by 27 percent to 700,000, and the number of housing units is expected to increase by 24 percent to 660,000.

The demographic implications of these topline numbers are far-reaching, and some trends in particular weighed heavily in the development of Plan Bay Area. These are touched on below and examined in greater detail in Chapter 2.

## Aging Baby Boomers Expected to Change Travel and Development Patterns

The U.S. Census Bureau defines baby boomers as people who were born between 1946 and 1964 during the post-World War II baby boom. By 2040 the oldest baby boomers will be in their 90s and the youngest will be in their 70s. Today, people who are 65 and over represent 12 percent of the Bay Area's total population, but by 2040 the number of seniors will increase to 22 percent. That's more than 1 in 5 people in our region. It is expected that many of these seniors will relocate to smaller homes in more urban locations to have easier access to essential services and amenities and the Bay Area's extensive transit system.

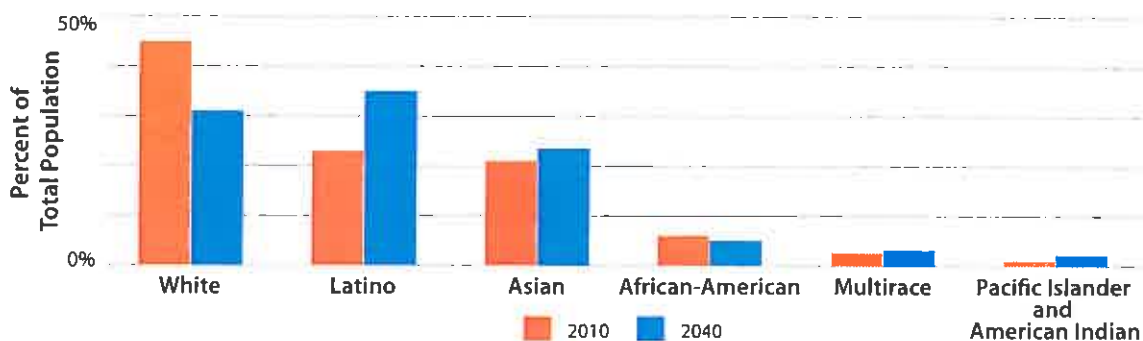
Mobility will be a special challenge for seniors who lose their ability to drive. MTC's Lifeline Transportation Program supports projects that address mobility and accessibility needs of low-income and disabled people throughout the region. Between 2006 and 2012, roughly \$172 million was invested to support about 220 projects. Closely related are MTC programs that provide funding to sustain and improve mobility for elderly and disabled persons in accordance with and even beyond the requirements of the Americans with Disabilities Act (ADA). These types of projects have included travel training, sidewalk and bus stop improvements, supportive ride programs and other community initiatives. Plan Bay Area reaffirms the importance of Lifeline and Elderly & Disabled programs by adding over \$800 million in discretionary funding for the Lifeline program, and almost \$240 million for the Elderly & Disabled programs over the 28-year period of the plan.



## Increased Racial and Ethnic Diversity Will Increase Demand for Multifamily Housing

The Bay Area and California are at the forefront of one of the greatest demographic changes in our nation's history: growth in the Latino population. In January 2013 the California Department of Finance projected that the state's Hispanic population will equal the non-Hispanic

**Figure 1 Share of Population by Race and Ethnicity, 2010 and 2040**



Sources: 2010 Census, California Department of Finance, ABAG

white population by mid-2013. By early 2014 it expects that California's Hispanic population will have become a plurality for the first time in state history.

This state forecast aligns with Plan Bay Area's projection that by 2040 the Bay Area population will become substantially more racially and ethnically diverse. Latinos will emerge as the largest ethnic group, increasing from 23 percent to 35 percent of the total population. The number of Asians also will increase, growing from 21 percent to about 24 percent of the population. Both population groups have demonstrated an historic preference for multifamily housing, and they form multigenerational households at a higher rate than the general population. This is expected to drive higher demand for multifamily housing, in contrast to the historic development pattern of building primarily single-family homes. Likewise, many Latinos and Asians rely more on public transit than non-Hispanic whites. This, too, is expected to increase demand for a robust transit system that makes it easier for people who don't own cars to commute, shop and access essential services.

## Demand for Multi-Unit Housing in Urban Areas Close to Transit Expected to Increase

Single-family homes represent the majority of housing production in recent decades, but recent trends suggest that cities once again are becoming centers of population growth. Construction of multifamily housing in urban locations in the Bay Area increased from an average of 35 percent of total housing construction in the 1990s to nearly 50 percent in the 2000s. In 2010 it represented 65 percent of all housing construction.



*The Crossings, Mountain View*

As discussed above, demand for multifamily housing is projected to increase as seniors downsize and seek homes in more urban locations. The growing numbers of Latino and Asian households will create a similar shift in the housing market. Finally, population growth of those aged 34 and younger is expected to have a similar effect, as this demographic group also demonstrates a greater preference for multifamily housing. All told, the number of people per Bay Area household is expected to increase from 2.69 in 2010 to 2.75 in 2040. Market demand for new homes will tilt toward townhomes, condominiums and apartments in developed areas near transit, shops and services.

## Building a Development Pattern That Aligns With Where We Live and Work

Plan Bay Area provides a vision for how to retain and enhance the qualities that make the Bay Area a great place to live, work, and play. It builds on the legacy of leadership left to us by previous generations. In fact, many of the attributes that make the Bay Area special — a strong

economy, protected natural resources, a network of diverse neighborhoods — would not have been possible without our predecessors’ forward-thinking actions.

Looking ahead to the growth expected in the Bay Area over the next several decades, we face many similar problems as past generations, while also confronting new challenges that threaten the region’s economic vitality and quality of life. Our economy is still recovering from the Great Recession of 2007-2009, which has resulted in uneven job growth throughout the region, increased income disparity, and high foreclosure rates. At the same time, housing costs have risen for renters and, to a lesser degree, for home buyers close to the regions’ job centers. Finally, Bay Area communities face these challenges at a time when there are fewer public resources available than in past decades for investments in infrastructure, public transit, affordable housing, schools and parks.

## A More Focused Future

The planning scenarios and land use and transportation investment strategies developed during the Plan Bay Area process seek to address the needs and aspirations of each Bay Area jurisdiction, as identified in locally adopted general plans and zoning ordinances. They also aim to meet the Plan Bay Area performance targets and equity performance standards. The framework for developing these scenarios consisted largely of the Priority Development Areas (PDAs) and Priority Conservation Areas (PCAs) recommended by local governments. The preferred land use scenario identified in Chapter 3 is a flexible blueprint for accommodating growth over the long term. Pairing this development pattern with the transportation investments described in Chapter 4 is what makes Plan Bay Area the first truly integrated land use transportation plan for the region’s anticipated growth.



*Richmond Transit Village*

## 2040 Employment Distribution Highlights

Plan Bay Area’s distribution of jobs throughout the region is informed by changing trends in the locational preferences of the wide range of industry sectors and business place types in the Bay Area. These trends capture ongoing geographic changes, as well as changes in the labor force composition and workers’ preferences. The employment distribution directs job growth toward the region’s larger cities and Priority Development Areas with a strong existing employment base and communities with stronger opportunities for knowledge-sector jobs.

**Table 1 SF Bay Area Total Job Growth 2010-2040, Top 15 Cities**

Rank	Jurisdiction	Total Jobs		2010-2040 Job Growth	
		2010	2040	Total Growth	Percentage Growth
1	San Francisco	568,720	759,470	190,740	34%
2	San Jose	375,360	522,050	146,680	39%
3	Oakland	190,250	275,490	85,240	45%
4	Santa Clara	112,460	145,560	33,100	29%
5	Fremont	89,900	119,870	29,970	33%
6	Palo Alto	89,370	119,030	29,650	33%
7	Santa Rosa	75,460	103,930	28,470	38%
8	Berkeley	77,020	99,220	22,210	29%
9	Concord	47,520	69,310	21,790	46%
10	Hayward	69,100	89,900	20,800	30%
11	Sunnyvale	74,610	95,320	20,710	28%
12	San Mateo	52,930	73,460	20,530	39%
13	Redwood City	58,340	77,830	19,490	33%
14	Walnut Creek	41,650	57,300	15,650	38%
15	Mountain View	47,800	63,380	15,570	33%

Source: Jobs-Housing Connection Strategy, ABAG, 2012

Almost 40 percent of the jobs added from 2010 to 2040 will be in the region’s three largest cities — San Jose, San Francisco and Oakland — which accounted for about one-third of the region’s jobs in 2010. Two-thirds of the overall job growth is anticipated to be in PDAs throughout the region. Due to the strength of the knowledge sector, nine of the 15 cities expected to experience the greatest job growth are in the western and southern part of the region surrounding Silicon Valley. The remaining communities expecting high levels of job growth are in the East Bay and North Bay, owing to their strong roles in the current economy, diverse employment base, and their proximity to a large base of workers. The 15 cities expected to experience the most job growth will account for roughly 700,000 jobs, or just over 60 percent of the new jobs added in the region by 2040. (See Table 1 above.)

## 2040 Housing Distribution Highlights

The Plan Bay Area housing distribution is guided by the policy direction of the ABAG Executive Board, which voted in July 2011 to support equitable and sustainable development by “maximizing the regional transit network and reducing GHG emissions by providing convenient access to employment for people of all incomes.” This was accomplished by distributing total housing growth numbers to: 1) job-rich cities that have PDAs or additional areas that are PDA-like; 2) areas connected to the existing transit infrastructure; and 3) areas that lack sufficient affordable housing to accommodate low-income commuters. The housing distribution directs growth to locations where the transit system can be utilized more efficiently, where workers can be better connected to jobs, and where residents can access high-quality services.

**Table 2 SF Bay Area Total Housing Unit Growth 2010-2040, Top 15 Cities**

Rank	Jurisdiction	Total Housing Units		2010-2040 Housing Unit Growth	
		2010	2040	Total Growth	Percentage Growth
1	San Jose	314,040	443,210	129,170	41%
2	San Francisco	376,940	469,350	92,410	25%
3	Oakland	169,710	221,200	51,490	30%
4	Sunnyvale	55,790	74,780	18,990	34%
5	Concord	47,130	65,170	18,040	38%
6	Fremont	73,990	91,610	17,620	24%
7	Santa Rosa	67,400	83,420	16,020	24%
8	Santa Clara	45,150	58,920	13,770	30%
9	Milpitas	19,810	32,430	12,620	64%
10	Hayward	48,300	60,580	12,290	25%
11	Fairfield	37,180	48,280	11,100	30%
12	San Mateo	40,010	50,180	10,160	25%
13	Richmond	39,330	49,020	9,690	25%
14	Livermore	30,340	40,020	9,670	32%
15	Mountain View	33,880	43,270	9,390	28%

Source: Jobs-Housing Connection Strategy, ABAG, 2012

Substantial housing production is expected on the Peninsula and in the South Bay, where eight of the top 15 cities expected to experience the most housing growth are located. Two-thirds of the region’s overall housing production is directed to these 15 cities, leaving the more than 90 remaining jurisdictions in the region to absorb only limited growth. This development pattern preserves the character of more than 95 percent of the region by focusing growth on less than 5 percent of the land. (See Table 2 above.)

# Transportation Investments

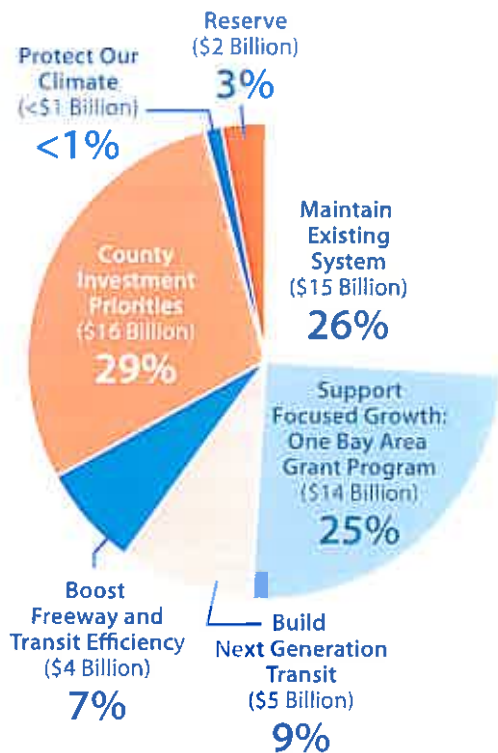


Caltrain Baby Bullet train

Plan Bay Area structures an infrastructure investment plan in a systematic way to support the region’s long-term land use strategy, relying on a performance assessment of scenarios and individual projects. The plan makes investments in the region’s transportation network that support job growth and new homes in existing communities by focusing the lion’s share of investment on maintaining and boosting the efficiency of the existing transit and road system. Plan Bay Area also takes a bold step with strategic investments that provide support for focused growth in Priority Development Areas, including the new One Bay Area Grant program.

Plan Bay Area transportation revenue forecasts total \$289 billion over the 28-year period. Over two-thirds (68 percent) of these funds are from regional and local sources, primarily dedicated sales tax programs and bridge tolls. Making up the remainder of the pie are state and federal revenues (mainly derived from fuel taxes). Of the total revenues, \$57 billion are “discretionary,” or available for assignment to projects and programs through Plan Bay Area.

**Figure 2 Plan Bay Area — Discretionary Investment Summary**  
(in year-of-expenditure \$)



The plan invests those discretionary funds via six key investment strategies, as shown in Figure 2 and presented in greater detail in Chapter 4. (See Table 3 for a look at the “big-ticket” plan investments, overall.) The first two discretionary strategies merit special mention.

## *Maintain Our Existing System*

Though its fund sources are many and varied, Plan Bay Area’s overriding priority in investing those funds can be stated quite simply: “Fix It First.” First and foremost, this plan should help to maintain the Bay Area’s transportation system in a state of good repair. Plan Bay Area’s focus on “fix it first” ensures that we maintain existing transportation assets, primarily concentrated in the region’s core, which reinforces the plan’s focused growth strategy.

## “Top 10” Plan Bay Area Investments, by Project

(includes Committed and Discretionary funds)

**Table 3** Ten Largest Plan Bay Area Investments

Rank	Project	Investment (YOE* Millions \$)
1	BART to Warm Springs, San Jose, and Santa Clara	\$8,341
2	MTC Regional Express Lane Network	\$6,657
3	Transbay Transit Center/Caltrain Downtown Extension (Phases 1 and 2)	\$4,185
4	Integrated Freeway Performance Initiative (FPI)	\$2,259
5	Presidio Parkway/ Doyle Drive US 101 seismic replacement	\$2,053
6	Caltrain Electrification and Service Frequency Improvements	\$1,718
7	SF MUNI Central Subway: King St to Chinatown	\$1,578
8	Valley Transportation Authority (VTA) Express Lane Network	\$1,458
9	San Jose International Airport Connector	\$753
10	Hunters Point and Candlestick Point: New Local Roads	\$722

\* YOE = Year of Expenditure

In total, Plan Bay Area dedicates 87 percent of all available funding (committed and discretionary) to sustaining the existing transportation network. Given the age of many major assets — BART turned 40 last year and S. F. Muni turned 100 — this should come as no surprise.

### Support Focused Growth — One Bay Area Grant Program

The OneBayArea Grant (OBAG) Program is a new funding approach that better integrates the region’s transportation funding program with SB 375 and the land use pattern outlined in Chapter 3. The OBAG program rewards jurisdictions that focus housing growth in Priority Development Areas (PDAs) through their planning and zoning policies, and actual production of housing units. The OBAG program allows flexibility to invest in a community’s transportation infrastructure by providing funding for Transportation for Livable Communities, bicycle and pedestrian improvements, local streets and roads preservation, and planning activities, while also providing specific funding opportunities for Safe Routes to Schools projects and Priority Conservation Areas.

## Plan Bay Area Achieves Key Performance Targets

As described earlier, Plan Bay Area was developed within a framework of objective performance standards, both mandatory and voluntary or aspirational. As has been the case in past long-term transportation plans, no single strategy is able to achieve all the plan’s performance targets. An analysis of the 10 main targets and five sub-targets (for a total of 15 performance measures) clearly bears this out. Specifically, the draft plan meets or exceeds six targets, including the statutory greenhouse gas emissions and housing targets, narrowly misses three targets, falls well short of two targets and unfortunately moves in the wrong direction on four of the targets. In other words, the draft plan makes great progress on nine of 15 performance



measures, which represents a solid first effort. The region will need to focus future attention on conceptualizing breakthrough strategies to achieve the four targets where we are falling behind. For a more detailed discussion of the plan's performance as measured against each individual target, please see Chapter 5.

## A Plan to Build On

Plan Bay Area is a work in progress that will be updated every four years to reflect new initiatives and priorities. It builds upon the work of previous initiatives, complements ongoing work and lays the groundwork for closer examination of certain critical issues that can further prepare the region to meet the future head-on. The plan highlights the relationship between transportation investments and land use planning, and represents the region's newest effort to position itself to make the most of what the future will bring.

No single level of government can be expected to address all the critical components needed to create a stronger and more resilient Bay Area. It will take a coordinated effort among diverse partners to promote regional economic development, adapt to climate change, prepare for natural disasters, get creative about how to provide affordable housing for all Bay Area residents, ensure clean and healthy air for our communities, and prepare for emerging technologies that will change the way people work and get around. Further steps will be needed to fully realize the Plan Bay Area vision and implement some of its forward-looking plans and policies. (See Chapter 6 for a discussion of some needed "next steps.")

But we have made a strong start. Look closely at Plan Bay Area, and you will see a plan that takes great strides toward:

### **Tackling problems that cross boundaries and require regional solutions**

Housing, air quality, traffic, jobs, economic development, open space preservation — the list is a long one.

### **Embodying local visions**

Priority Development Areas were recommended by local governments, and land use and transportation strategies are linked to local input and priorities; different kinds of investments and development are envisioned for different parts of the region.

### **Helping to ensure a vibrant and healthy region for our children and grandchildren**

Cleaner air, fewer greenhouse gas emissions, more housing options, improved infrastructure, better access to jobs, and access to open space and recreation — these are the building blocks of a better future.

### **Making Bay Area businesses more competitive**

A well-constructed, sustainable regional plan can help us attract private sector investment and compete for federal and state funding.

### **Providing a range of housing and transportation choices**

A greater variety of multifamily and single family housing will be available in places with better transit access, and improved walking conditions and local services.

### **Stretching tax revenues through smart investments**

By making the most of existing infrastructure, using a performance-based approach to transportation investments and coordinating the location of future housing and jobs with major transportation investments, we can get more bang for our buck in public expenditures.

### **Preserving open spaces, natural resources, agriculture and farmland**

By developing in existing downtowns, main streets and neighborhoods, we don't need to develop on open spaces or in places that over-utilize our water supply, energy resources and road capacity.

### **Helping to create healthy communities**

More people will be able to live in neighborhoods where they can walk to shops, transit and local parks because of the groundwork laid in this plan.

Plan Bay Area cannot guarantee these outcomes, of course, but we believe it can greatly boost the region's odds of achieving them. For surely we must work together as a region to promote sustainability, and to leave a better Bay Area for our children and grandchildren. By helping to harmonize local decision-making and regional goals, by better integrating transportation investment and land use planning, by more closely aligning our policies with our vision — in short, by creating a strategy for a sustainable region — Plan Bay Area gives us a chance to do that.



Ken Noyes

MTC and ABAG welcome your comments on this draft Plan Bay Area. An extensive outreach effort is planned during the spring of 2013 to provide ample opportunity for the region's residents to make their views known. Please see "What's Next for Plan Bay Area" at the end of this plan for details, or visit <http://onebayarea.org>

# Growth by County

Plan Bay Area - San Mateo County data

County	Employment			Housing Units			
	2010	2040	2010-2040 Total	2010*	2040	2010-2040 Total	
							%
Alameda	694,450	947,630	253,190	582,550	730,530	147,980	29%
Contra Costa	344,920	467,000	122,080	400,260	480,400	80,130	23%
Marin	110,730	129,130	18,390	111,210	118,720	7,510	9%
Napa	70,650	89,530	18,880	54,760	60,810	6,050	15%
San Francisco	568,720	759,470	190,740	376,940	469,350	92,410	29%
<b>San Mateo</b>	<b>345,200</b>	<b>445,310</b>	<b>100,110</b>	<b>271,030</b>	<b>326,730</b>	<b>55,700</b>	<b>22%</b>
Santa Clara	926,260	1,229,800	303,530	631,920	843,110	211,190	36%
Solano	132,350	179,900	47,560	152,700	175,520	22,820	19%
Sonoma	192,010	257,450	65,430	204,570	236,440	31,870	19%
<b>REGION</b>	<b>3,385,300</b>	<b>4,505,220</b>	<b>1,119,920</b>	<b>2,785,950</b>	<b>3,445,940*</b>	<b>660,000*</b>	<b>27%</b>

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**Housing Unit Growth  
(2010-2040)**

San Mateo	10,160
Redwood City	8,720
South San Francisco	6,920
San Mateo County	5,080
San Bruno	4,460
Daly City	4,300
Burlingame	4,300
Millbrae	3,020
Menlo Park	1,990
San Carlos	1,780
Belmont	1,120
Foster City	890
East Palo Alto	860
Pacifica	600
Hillsborough	310
Half Moon Bay	260
Brisbane	250
Colma	240
Atherton	220
Portola Valley	130
Woodside	90

**Job Growth  
(2010-2040)**

San Mateo	20,980
Redwood City	19,370
South San Francisco	11,270
Burlingame	8,840
Menlo Park	6,130
Daly City	5,910
San Mateo County	5,450
San Bruno	4,330
San Carlos	3,630
Foster City	3,610
Belmont	2,280
Millbrae	2,140
Pacifica	1,250
East Palo Alto	1,030
Brisbane	1,030
Half Moon Bay	1,020
Atherton	560
Hillsborough	440
Colma	420
Woodside	310
Portola Valley	280

## Household Growth by PDA and Jurisdiction

### San Mateo County

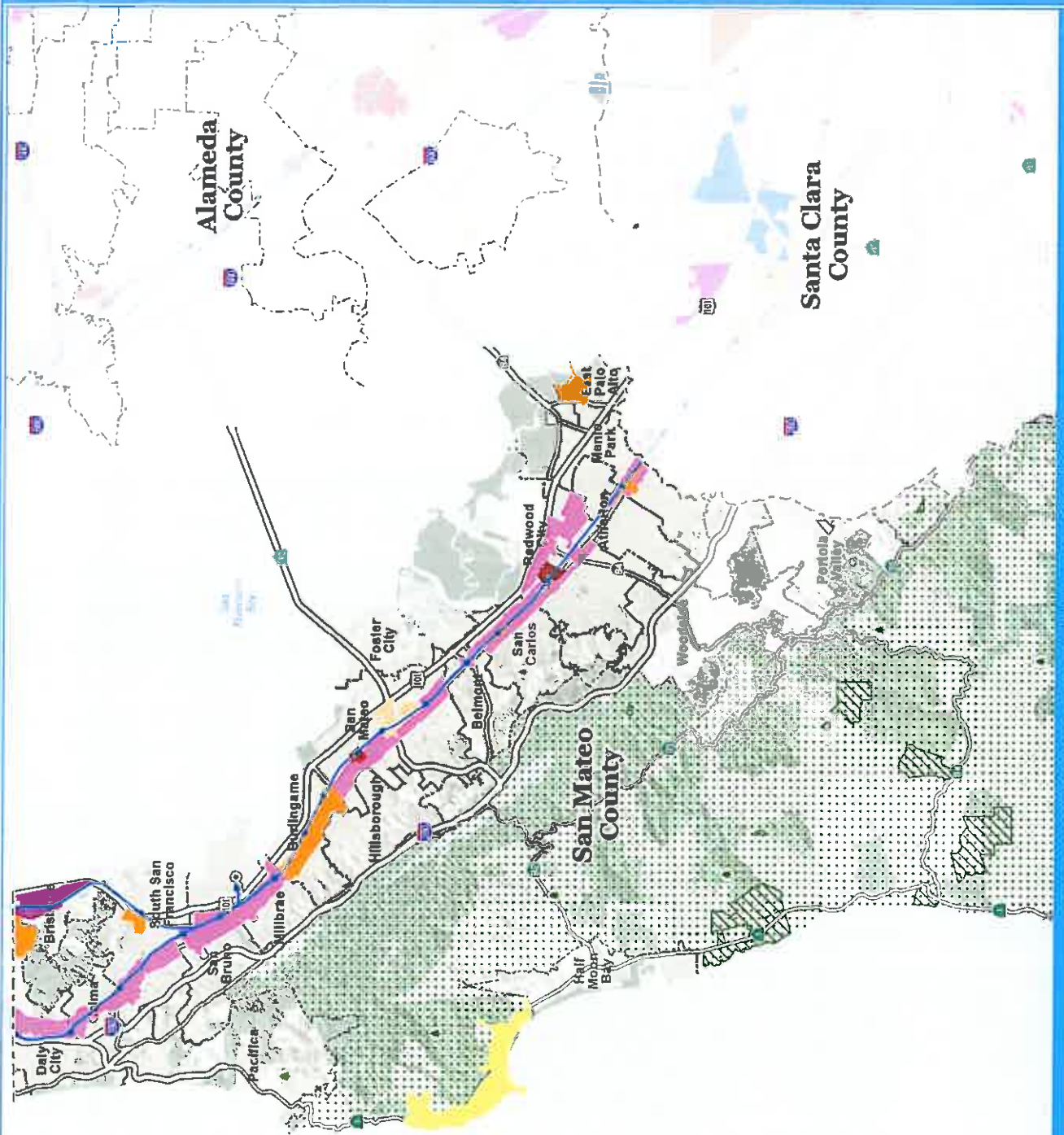
Jurisdiction or Area Name	Place Type	HOUSING UNITS				HOUSEHOLDS			
		2010	2040	2010-2040	% Growth	2010	2040	2010-2040	% Growth
<b>Atherton</b>		2,530	2,750	220	9%	2,330	2,580	250	11%
<b>Belmont</b>		11,030	12,150	1,120	10%	10,580	11,790	1,210	11%
<i>Villages of Belmont</i>	<i>Mixed-Use Corridor</i>	920	1,830	910		890	1,780	900	
<b>Brisbane</b>		1,930	2,180	250	13%	1,820	2,090	270	15%
<i>San Francisco/San Mateo Bi-County Area (with San Francisco)</i>	<i>Suburban Center</i>	0	0	0		0	0	0	
<b>Burlingame</b>		13,030	17,320	4,300	33%	12,360	16,780	4,420	36%
<i>Burlingame El Camino Real</i>	<i>Transit Town Center</i>	7,610	10,870	3,260		7,170	10,530	3,360	
<b>Colma</b>		590	830	240	41%	560	810	240	43%
<b>Daly City</b>		32,590	36,890	4,300	13%	31,090	35,770	4,680	15%
<i>Bayshore</i>	<i>Transit Town Center</i>	1,590	3,580	1,990		1,550	3,510	1,960	
<i>Mission Boulevard</i>	<i>Mixed-Use Corridor</i>	2,270	3,310	1,050		2,070	3,210	1,140	
<b>East Palo Alto</b>		7,820	8,670	860	11%	6,940	8,340	1,400	20%
<i>Ravenswood</i>	<i>Transit Town Center</i>	1,030	1,880	860		970	1,830	860	
<b>Foster City</b>		12,460	13,350	890	7%	12,020	12,940	920	8%
<b>Half Moon Bay</b>		4,400	4,660	260	6%	4,150	4,410	260	6%
<b>Hillsborough</b>		3,910	4,230	310	8%	3,690	4,010	320	9%
<b>Menlo Park</b>		13,090	15,080	1,990	15%	12,350	14,510	2,160	17%
<i>El Camino Real Corridor and Downtown</i>	<i>Transit Town Center</i>	1,130	2,050	910		1,010	1,980	970	
<b>Millbrae</b>		8,370	11,390	3,020	36%	7,990	11,050	3,060	38%
<i>Transit Station Area</i>	<i>Mixed-Use Corridor</i>	280	2,710	2,420		270	2,650	2,380	
<b>Pacifica</b>		14,520	15,120	600	4%	13,970	14,640	670	5%
<b>Portola Valley</b>		1,900	2,020	130	7%	1,750	1,900	150	9%
<b>Redwood City</b>		29,170	37,880	8,720	30%	27,960	36,850	8,890	32%
<i>Downtown</i>	<i>City Center</i>	1,060	6,300	5,240		990	6,180	5,190	
<i>Broadway/Veterans Boulevard Corridor</i>	<i>Mixed-Use Corridor</i>	770	2,300	1,530		730	2,250	1,520	
<b>San Bruno</b>		15,360	19,820	4,460	29%	14,700	19,170	4,470	30%
<i>Transit Corridors</i>	<i>Mixed-Use Corridor</i>	4,330	7,660	3,330		4,140	7,450	3,310	
<b>San Carlos</b>		12,020	13,800	1,780	15%	11,520	13,390	1,860	16%
<i>Railroad Corridor</i>	<i>Transit Town Center</i>	460	1,230	770		440	1,200	760	
<b>San Mateo</b>		40,010	50,180	10,160	25%	38,230	48,600	10,370	27%
<i>Downtown</i>	<i>City Center</i>	540	1,610	1,070		500	1,560	1,060	
<i>El Camino Real</i>	<i>Mixed-Use Corridor</i>	880	2,080	1,200		840	2,030	1,200	
<i>Rail Corridor</i>	<i>Transit Neighborhood</i>	520	5,540	5,030		500	5,440	4,940	
<b>South San Francisco</b>		21,810	28,730	6,920	32%	20,940	27,900	6,960	33%
<i>Downtown</i>	<i>Transit Town Center</i>	1,590	4,700	3,120		1,510	4,590	3,090	
<b>Woodside</b>		2,160	2,250	90	4%	1,980	2,080	100	5%
<b>San Mateo County Unincorporated</b>		22,350	27,440	5,080	23%	20,910	26,130	5,220	25%
<b>City County Association of Governments of San Mateo County</b>									
<i>El Camino Real</i>	<i>Mixed-Use Corridor</i>	2,840	6,530	3,690		2,610	6,360	3,740	

## Employment Growth by PDA and Jurisdiction

### San Mateo County

Jurisdiction or Area Name	Place Type	JOBS			% Growth
		2010	2040	2010-2040	
Atherton		2,610	3,170	560	21%
<b>Belmont</b>		<b>8,220</b>	<b>10,500</b>	<b>2,280</b>	<b>28%</b>
<i>Villages of Belmont</i>	<i>Mixed-Use Corridor</i>	<i>1,260</i>	<i>2,510</i>	<i>1,260</i>	
Brisbane		7,220	8,280	1,060	15%
<i>San Francisco/San Mateo Bi-County Area (with San Francisco)</i>	<i>Suburban Center</i>	<i>550</i>	<i>1,100</i>	<i>540</i>	
<b>Burlingame</b>		<b>30,420</b>	<b>39,210</b>	<b>8,790</b>	<b>29%</b>
<i>Burlingame El Camino Real</i>	<i>Transit Town Center</i>	<i>12,480</i>	<i>18,460</i>	<i>5,980</i>	
Colma		2,790	3,210	420	15%
Daly City		21,000	26,910	5,900	28%
<i>Bayside</i>	<i>Transit Town Center</i>	<i>1,110</i>	<i>3,260</i>	<i>2,160</i>	
<i>Mission Boulevard</i>	<i>Mixed-Use Corridor</i>	<i>3,790</i>	<i>5,240</i>	<i>1,450</i>	
<b>East Palo Alto</b>		<b>2,720</b>	<b>3,750</b>	<b>1,020</b>	<b>38%</b>
<i>Ravenswood</i>	<i>Transit Town Center</i>	<i>810</i>	<i>1,230</i>	<i>430</i>	
Foster City		13,890	17,490	3,600	26%
<b>Half Moon Bay</b>		<b>5,110</b>	<b>6,120</b>	<b>1,010</b>	<b>20%</b>
Hillsborough		2,190	2,620	430	20%
<b>Menlo Park</b>		<b>28,990</b>	<b>35,110</b>	<b>6,120</b>	<b>21%</b>
<i>El Camino Real Corridor and Downtown</i>	<i>Transit Town Center</i>	<i>5,630</i>	<i>7,680</i>	<i>2,050</i>	
<b>Millbrae</b>		<b>6,950</b>	<b>9,410</b>	<b>2,460</b>	<b>35%</b>
<i>Transit Station Area</i>	<i>Mixed-Use Corridor</i>	<i>1,350</i>	<i>3,400</i>	<i>2,060</i>	
Pacifica		5,920	7,170	1,250	21%
<b>Portola Valley</b>		<b>1,510</b>	<b>1,780</b>	<b>270</b>	<b>18%</b>
<b>Redwood City</b>		<b>58,340</b>	<b>77,830</b>	<b>19,490</b>	<b>33%</b>
<i>Downtown</i>	<i>City Center</i>	<i>10,470</i>	<i>14,110</i>	<i>3,640</i>	
<i>Broadway/Veterans Boulevard Corridor</i>	<i>Mixed-Use Corridor</i>	<i>8,540</i>	<i>11,980</i>	<i>3,440</i>	
<b>San Bruno</b>		<b>12,930</b>	<b>17,250</b>	<b>4,320</b>	<b>33%</b>
<i>Transit Corridors</i>	<i>Mixed-Use Corridor</i>	<i>6,750</i>	<i>10,710</i>	<i>3,960</i>	
<b>San Carlos</b>		<b>16,170</b>	<b>19,790</b>	<b>3,620</b>	<b>22%</b>
<i>Railroad Corridor</i>	<i>Transit Town Center</i>	<i>1,950</i>	<i>3,110</i>	<i>1,160</i>	
<b>San Mateo</b>		<b>52,930</b>	<b>73,460</b>	<b>20,530</b>	<b>39%</b>
<i>Downtown</i>	<i>City Center</i>	<i>4,440</i>	<i>7,050</i>	<i>2,610</i>	
<i>El Camino Real</i>	<i>Mixed-Use Corridor</i>	<i>2,270</i>	<i>5,680</i>	<i>3,410</i>	
<i>Rail Corridor</i>	<i>Transit Neighborhood</i>	<i>8,840</i>	<i>18,700</i>	<i>9,870</i>	
<b>South San Francisco</b>		<b>46,170</b>	<b>57,400</b>	<b>11,230</b>	<b>24%</b>
<i>Downtown</i>	<i>Transit Town Center</i>	<i>2,670</i>	<i>6,920</i>	<i>4,250</i>	
Woodside		1,770	2,070	310	18%
<b>San Mateo County Unincorporated</b>		<b>17,350</b>	<b>22,790</b>	<b>5,440</b>	<b>31%</b>
<i>City County Association of Governments of San Mateo County</i>					
<i>El Camino Real</i>	<i>Mixed-Use Corridor</i>	<i>4,590</i>	<i>6,840</i>	<i>2,270</i>	

F.1.30



**Priority Development Area Place Type**

- City Center
- Suburban Center
- Mixed-Use Corridor
- Transit Town Center
- Transit Neighborhood
- Rural Corridor
- Existing Rail Transit Routes and Stations
- Priority Conservation Area
- Protected Open Space
- Conservation Easement
- Policy Protected Open Space
- Within Urban Footprint
- Within Urban Growth Limits

Source: Regional Map of 2008, December 11, 2007  
 Prepared on a data from City of San Mateo and  
 San Mateo County, 2008  
 Date of map: 12/11/07  
 AMAO 2008-01-01

Scale: 1" = 1 mile

# OneBayArea

Place Type for Priority Development Areas in San Mateo County





## CITY OF BRISBANE

50 Park Place  
Brisbane, California 94005-1310  
(415) 508-2100  
Fax (415) 467-4989

April 18, 2012

Ken Kirkey  
Association of Bay Area Governments  
P.O. Box 2050.  
Oakland, CA 94604-2050

Re: SCS- Jobs-Housing Connection Scenario

Dear Mr. Kirkey:

Thank you for the opportunity to comment on the above-referenced document. We appreciate the importance of regional efforts to address transportation- related emissions and housing, and recognize the complexity of the task. ABAG's efforts in working in partnership with local jurisdictions in these efforts are noted and appreciated.

In regard to the Jobs-Housing Connection Scenario and the preferred scenario to be designated for EIR analysis by ABAG/MTC the City of Brisbane offers the following comments:

**1. The preferred scenario should include no residential units within the Brisbane portion of the Bi-County PDA.** The Brisbane portion of the PDA encompasses the Brisbane Baylands Specific Plan area. The Brisbane General Plan currently prohibits residential development within the Brisbane Baylands, based primarily on safety and community character considerations. The City of Brisbane is currently engaged in an extensive planning and environmental review process evaluating multiple land use scenarios for the Baylands, one of which includes a significant residential component and others which do not. The City anticipates this planning process will not culminate in a final land use decision until 2014 at the earliest. It would be inappropriate and premature for the preferred SCS to assume that any amount of housing will be approved through the City's planning process, and strongly urges the SCS to reflect the City's adopted General Plan and the existing prohibition of housing within the Brisbane Baylands. The City appreciates ABAG's assurances that the SCS process will not usurp local land use control, but the inclusion of a residential component within the Brisbane Baylands could be perceived as an attempt to unduly pressure the City's independent planning process before the required environmental and public review process has been completed.

The City would further note that the Bi-County PDA is unique in that it encompasses adjacent properties within two jurisdictions that are being planned to function as an integrated place. Given the amount of residential development approved with the San Francisco portion of the PDA, the PDA as a whole will function as a vital and active mixed use center with jobs and housing in close proximity to transit, irrespective of the precise arrangement of land uses by jurisdiction.

**2. The City concurs with the Non-PDA housing projections for Brisbane as set forth in the Jobs-Housing Connection Scenario.** Given the City's limited developable land base, relatively poor access




to transit, and open space lands which provide regionally important recreation opportunities as well as protected habitat for federally-listed endangered species, the growth projections for 250 additional housing units by 2040 are realistic and appropriate.

**3. The City concurs with the PDA and Non-PDA employment projections for Brisbane as set forth in the Jobs-Housing Connection Scenario.** The City would note that market forces far beyond the City's control will ultimately drive future employment. Additionally, the loss of redevelopment as a tool to finance transportation, transit and infrastructure to accommodate future employment growth could be a significant constraint to the City's ability to accommodate the levels of projected employment. The City looks forward to working with regional entities such as ABAG and MTC to help overcome these obstacles.

Lastly, the City recognizes that the SCS will need to be revisited in several years, and we look forward to working with ABAG to ensure that the results of the City's planning process for the Brisbane Baylands PDA are incorporated into future iterations of the SCS to ensure that the City's land use patterns and policies help the region achieve its environmental and sustainability goals pursuant to SB 375.

Thank you for your consideration in this matter. Please contact John Swiecki, Brisbane Community Development Director at 415.508.2120 should you have any questions regarding this matter.

Sincerely,



Cliff Lentz  
Mayor

c: Sepi Richardson, Councilmember and ABAG Boardmember  
Richard Napier, CCAG  
Clay Holstine, City Manager  
John Swiecki, Community Development Director



## CITY OF BRISBANE

50 Park Place  
Brisbane, California 94005-1310  
(415) 508-2100  
Fax (415) 467-4989

May 17, 2011

Marisa Raya  
Association of Bay Area Governments  
P.O. Box 2050.  
Oakland, CA 94604-2050

Re: Bay Area Plan- Initial Vision Scenario

Dear Ms. Raya:

Thank you for the opportunity to comment on the above-referenced document. We appreciate the importance of regional efforts to address transportation-related emissions and housing, and recognize the complexity of the task. ABAG's efforts in working in partnership with local jurisdictions in these efforts are noted and appreciated. While the City supports both the targets related to emission reductions and housing and the concept of focusing employment and housing growth in infill locations areas served by existing and/or planned transit, we do have comments on IVS pertaining to the City of Brisbane as discussed below.

**Housing in the Bi County PDA** The Initial Vision Scenario proposes approximately 3,100 new residential units within the Brisbane Baylands portion of the Bi County PDA. As you are aware, the City of Brisbane General Plan currently prohibits housing on the Brisbane Baylands. The City is currently preparing an environmental impact report (EIR) for the Baylands Specific Plan, which encompasses virtually the entire Brisbane portion of the Bi-County PDA. Partially in response to regional strategies to emphasize infill housing and employment near transit, the EIR is analyzing an alternative with a substantial residential component. However, in recognition of existing General Plan, other policy constraints and potential environmental issues with establishing housing on a brownfield, the EIR is also studying a land use alternative with no residential component. Without the results of this environmental analysis and subsequent community dialogue regarding the appropriate land uses for the Baylands, it is premature for the City of Brisbane to endorse the inclusion of any residential units within the Brisbane portion of the Bi County PDA at this time.

While the City understands and recognizes the rationale for including a substantial residential component in the Brisbane Baylands for the IVS, it is important for the SCS process to recognize the possibility that the future development program for the Baylands which does not include a residential component. **The City strongly recommends that the one alternate scenario developed for further analysis for the SCS exclude residential uses within the Brisbane Baylands.**

This would reflect existing City General Plan policy and would be respectful of the City's ongoing planning process by reflecting the range of alternatives under consideration by the City. An analysis of scenarios with and without housing would further provide a basis for the public and decisionmakers to better understand the regional implications to the SCS resulting from the land use alternatives under consideration. The City anticipates that with/without housing scenarios would illustrate the implications on achieving compliance with established targets, as well as the distribution of employment and

household across the Bi-County PDA, the non-PDA portion of Brisbane, and the San Mateo County subregion. This information would be valuable for the SCS process as it moves forward.

The City would further point out that a non-residential project on the Baylands would be fully consistent with the original Bi-County PDA. The Brisbane Baylands was not considered as a suitable stand-alone PDA because of policy constraints and unresolved environmental concerns which currently preclude housing. Rather, it was included with the larger Bi-County PDA precisely because that the collective developments on both sides of the Brisbane/San Francisco boundary provide an opportunity for robust employment and housing in close proximity in a transit-rich environment that achieves regional goals, irrespective of the existing geopolitical boundaries or the precise arrangement of uses by jurisdiction. This still holds true whether or not the Brisbane Baylands includes a housing component. Evaluating the Brisbane portion of the Bi-County PDA as a stand-alone entity in isolation from the San Francisco portion of the PDA is inconsistent with the underlying premise of the Bi-County PDA.

In regard to the question of transportation improvements which would help support development within the Bi-County PDA, there are two particular areas of concern. First and foremost is adequate funding for the electrification and long-term operational sustainability of Caltrain. The electrification of Caltrain to reduce the environmental impacts on intensified land uses along the Caltrain is an important human health and sustainability consideration. More fundamentally, the concept of focused development along the Caltrain is predicated upon the long term availability of a robust and effective commuter rail system. Uncertainty regarding the long term viability of this system will only serve to discourage investment in transit-dependent projects along the corridor.

The second transportation issue is availability of resources required to upgrade the transit and transportation infrastructure within the Bi-County PDA. A Bi-County transportation study is currently under preparation which will identify transit and transportation investments required to support planned development within the PDA. Aligning the RTP and other infrastructure investments with the needs identified in the Bi-County study would be a valuable step in facilitating development within the Bi-County PDA.

Thank you for the opportunity to comment on the IVS. The City of Brisbane looks forward to our continued involvement in the evolution of the SCS. Please contact John Swiecki, Community Development Director at 415.508.2120 or [jswiecki@ci.brisbane.ca.us](mailto:jswiecki@ci.brisbane.ca.us) should you have any further questions regarding this matter.

Sincerely,

  
Cyril G. Bologoff  
Mayor

c: Richard Napier, CCAG  
Clay Holstine, City Manager



## CITY OF BRISBANE

50 Park Place  
Brisbane, California 94005-1310  
(415) 508-2100  
Fax (415) 467-4989

August 15, 2011

Marisa Raya  
Association of Bay Area Governments  
P.O. Box 2050.  
Oakland, CA 94604-2050

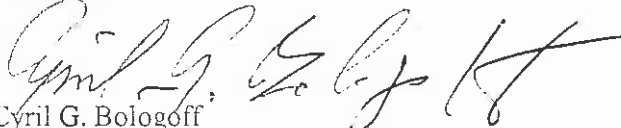
Re: Bay Area Plan- Sustainability

Dear Ms. Raya:

As a followup to the City of Brisbane's previous comments on the Initial Vision Scenario for the Sustainable Communities Strategy (SCS), the Brisbane City Council would like to point out that the concept of "Sustainability" goes far beyond the scope of the SCS mandated by SB 375. While we understand the SCS is somewhat constrained by these mandates, we urge ABAG not to lose sight of larger sustainability goals for the region. In that context the Brisbane City Council offers the attached comments developed by the City of Brisbane's Open Space and Ecology Committee for ABAG's consideration. The City understands that many of the concepts discussed in the attached go beyond the scope and mandate of the SCS currently being developed, but we believe they are important in broadening the regional discussion of sustainability.

Thank you for your consideration.

Sincerely,

  
Cyril G. Bologoff  
Mayor

cc: Clay Holstine, City Manager

## MEMO

**FROM:** Open Space and Ecology Committee  
**TO:** Honorable Mayor and City Council  
**DATE:** May 9, 2011  
**RE:** Sustainable Communities Strategy

### Open Space and Ecology Committee Comments on the SCS Initial Vision Scenario

The Open Space and Ecology Committee respectfully submits the following comments and recommendations to the City Council regarding the Initial Vision Scenario of the Sustainable Communities Strategy (SCS). The Committee believes that the notion of ecologically sustainable communities, as put forward in the SCS Initial Vision Scenario, is narrowly defined and must be broadened to address a range of related issues. There are several aspects that the Committee wishes to bring to the attention of the City Council.

- I. The Sustainable Communities Strategy is a regional growth plan that relies on conventional measures of growth. It measures economic vitality as increasing gross regional product, a subset of gross domestic product (GDP). In doing so, the SCS fails to consider alternative measures to evaluate sustainable growth, such as the Genuine Progress Indicator (GPI), developed by the nonprofit Redefining Progress.

The GDP is the dominant indicator of economic “progress” used to score the country’s economic vibrancy. It is a calculation of all goods and services bought and sold, with no distinctions between transactions that add to human or ecological well-being, and those that diminish it. This conventional approach does not take into account the costs of the negative effects resulting from economic activities, such as pollution or resource depletion. Climate change, nuclear waste, and the degradation of wetlands, for example, are externalities that are not factored in to ordinary economic accounting. The GDP does not take into consideration whether growth is necessarily desirable or sustainable.

Employing alternative metrics to analyze and evaluate economic growth help to correct limitations of conventional economics, and offer a more comprehensive measure of sustainability. Similar to the Genuine Progress Indicator, True Cost Accounting is another

approach that factors in environmental, social, and economic costs and benefits. This framework considers the “triple bottom line” by expanding traditional economic parameters to take into account ecological values and social criteria, in addition to financial performance.

The development of the Sustainable Communities Strategy would be improved by utilizing metrics that incorporate economic, social, and environmental sustainability, rather than relying solely on conventional GDP indicators.

- II. The SCS focuses largely on reducing emissions from cars and light trucks. While the transportation sector accounts for a significant percentage of California emissions, the SCS does not consider other major contributors to greenhouse gas emissions that must be addressed in order to reach the objectives established by AB 32, the Global Warming Solutions Act.

AB 32 aims to reduce GHG emissions in California to 1990 levels by 2020. This represents a reduction of approximately 30 percent from business-as-usual projected emissions levels, followed by 80 percent reduction below 1990 levels by 2050. The main strategies for achieving these reductions are outlined in the AB 32 Scoping Plan, the state’s roadmap to reach the targeted GHG reduction goals.

The AB 32 Scoping Plan covers a myriad of diverse strategies for accomplishing the emissions reduction targets. Reduction in greenhouse gases from the transportation sector focus on land-use planning to reduce vehicle miles traveled as well low carbon fuel standards, and alternative vehicles. While these efforts are crucial to achieve the state’s GHG reduction objectives, there are several other key arenas that must be addressed in order to reduce the carbon footprint of cities and create truly sustainable communities.

The second largest contributor to the state’s GHG emissions after transportation is buildings, including their construction, operation and demolition. Upgrading or replacing the current stock of buildings with energy, water and waste efficient structures is one of the most important avenues to sustainability.

- III. While Brisbane recognizes that promoting densely populated mixed-use development in the Bay Area may be reasonable from an environmental perspective, a substantial increase in the number of housing units in Brisbane would raise serious local health and safety concerns for the community. (Among a hundred Bay Area cities, the IVS targets Brisbane for the largest percentage of growth in housing units.) Planners should also consider existing housing within close proximity to prospective new commercial and retail development.

Attention should focus not only on projected new housing numbers, but to their form and size. Construction of homes with less square footage usually represents a smaller carbon footprint. Additionally, much of the existing housing stock in the region could be

upgraded and neighborhoods rezoned to promote sustainability and reduce the amount of vehicle miles travelled. Finally, with regards to “affordable housing”, it is critical to consider not only the high cost of housing, but the stagnation of incomes and growing disparity in the distribution of wealth.

IV. The Sustainable Communities Strategy would be strengthened by taking a more comprehensive approach to sustainability and emissions reductions by promoting:

- Green and zero-carbon buildings
- Clean, locally-produced renewable energy
- Water conservation, efficiency and recycling
- Open space, wetlands, agricultural and forest preservation and restoration
- Waste reduction, recycling, and composting to reduce methane emissions from landfills, save energy, and conserve natural resources
- Public transportation systems that are coordinated, accessible, and affordable
- Increases in well-funded public services and amenities to reduce private consumption

Many of these approaches are incorporated into sustainability frameworks that identify and measure the factors that comprise a sustainable community. The Open Space and Ecology Committee has carefully reviewed the standards developed by Bioregional’s One Planet Living, the ICLEI Star Community Index, and Ecocity Builders. A summary of each of these systems is attached.

### Conclusion

The development of the Bay Area’s Initial Vision Scenario presents a unique opportunity to shape a vision for the region for decades to come. The Open Space and Ecology Committee recommends that the City Council put forward a broader concept of sustainable communities—one that addresses not only land-use and transportation planning, but embraces a holistic range of ecological issues that will foster a truly sustainable Brisbane and Bay Area.

## ATTACHMENT

### One Planet Living

The 10 One Planet Living principles offer a framework to create model projects where people can live and work within a fair share of the planet's resources. The ten principles are:

- Zero Carbon

Achieve net CO<sub>2</sub> emissions of zero by implementing energy efficiency in buildings and infrastructure, supplying energy from on-site renewable sources, and new off-site renewables where necessary.

- Zero Waste

Eliminate waste flows to landfill and for incineration by reducing waste generation, encouraging re-use, recycling and composting, and generating energy from waste cleanly.

- Sustainable Transport

Reduce reliance on private vehicles and reduce CO<sub>2</sub> emissions from transport by providing transport systems and infrastructure that reduce dependence on fossil fuels, and offset carbon emissions from car and air travel.

- Local and Sustainable Materials

Transform materials supply to the point where it has a net positive impact on the environment and local economy by using local, reclaimed, renewable and recycled materials in construction and products.

- Local and Sustainable Food

Transform food supply to point where it has a net positive impact on the environment, local economy and peoples' well-being by supporting local food production that provides healthy, quality food in an environmentally beneficial manner.

- Sustainable Water

Achieve a positive impact on local water resources and supply by implementing water use efficiency measures, re-use and recycling, minimizing water extraction and pollution, and fostering sustainable water and sewage management.

- Natural Habitats and Wildlife

Regenerate degraded environments and halt biodiversity loss by protecting or regenerating existing natural environments and the habitats they provide to fauna and flora.

- Culture and Heritage



Protect and build on local cultural heritage and diversity by celebrating and reviving cultural heritage and the sense of local and regional identity.

- Equity and Fair Trade

Ensure that One Planet Living community's impact on other communities is positive by promoting equity and fair trading relationships to ensure a beneficial impact on places both locally and globally, notably disadvantaged communities.

- Health and Happiness

Increase health and quality of life of community members and others by promoting healthy lifestyles and physical, mental and spiritual well-being through well-designed structures and community engagement.

For an example of the application of these principles, please see the last chapter of the Environmental Impact Report prepared for the Sonoma Mountain Village Project.

### STAR Community Index

ICLEI (Local Governments for Sustainability) launched the STAR Community Index in October 2010. Its purpose is to establish sustainability goals and guiding principles for local governments. In the next two years, ICLEI plans to develop a national rating system that will offer cities and counties a standard by which to measure sustainability and a roadmap for creating healthy, inclusive, and prosperous communities.

According to ICLEI, "STAR takes an integrated approach, addressing the three intertwining facts of sustainability – economy, environment, and society." They are working to identify and define specific sustainability goals and metrics and to set performance levels and evaluation standards.

STAR's 10 Guiding Principles are: Think – and act – systemically; Instill resiliency; Foster innovation; Redefine progress; Live within means; Cultivate collaboration; Ensure equity; Embrace diversity; Inspire leadership; and Continuously improve.

STAR's Environmental Sustainability Goals are focused on three areas:

- Natural Systems:

Natural resource planning and inventory; Green infrastructure; Land Use in watersheds; Water quality and supply; Agriculture and aquaculture; Resource lands; Biodiversity and invasive species; Ambient noise and light; and Waste minimization

- Planning & Design:

Comprehensive planning; Excellence in design; Interconnected land use; Compact and complete communities, Design for people; Housing; Public spaces; Transportation and mobility; Land conservation; Historic preservation and cultural heritage; Code barriers; and Public engagement and participation.

- Energy & Climate:  
Greenhouse gas mitigation; Climate adaptation; Energy supply; Energy use; Resource efficient buildings; Alternative fuels and infrastructure; Industrial sector energy use; and Agricultural climate impacts.

### International Ecocity Standards

The International Ecocity Standards (IES) is a project under development by the nonprofit Ecocity Builders. They define an ecocity as “an ecologically healthy human settlement modeled on the self-sustaining resilient structure and function of natural ecosystems and living organisms.” The aspiration is to create a comprehensive rating system to apply not to buildings, but rather to entire cities.

The IES framework provides a diagnostic tool for cities to measure progress toward ecocity objectives. It expects to enable the user to chart a direction moving from existing conditions toward a threshold ecocity standard.

The following attributes have been identified as central to the development of the International Ecocity Standards. The draft scale ranges from -10 (unhealthy city) to +10 (healthy city). The biological and physical features in the ecocity approach include:

- Access by Proximity – not accessible to complete access by foot, bicycle, transit
- Air – pollutes to purifies
- Biodiversity – endangered to abundant
- Carry Capacity – overshoot to within the biosphere’s limits
- Energy – nonrenewable to clean and renewable
- Food – not provided to nutritious and abundant
- Resources & Materials – depletes to sustains
- Soils – destroys to restores
- Water – pollutes and wastes to purifies



## Overall Approach

# Six Strategies for Reaching Our Goals

1. Incentives to Cities for Infill Development:  
OneBayArea Grant Program
2. Fix-It First
3. Fund High-Performing Projects
4. Squeeze More From Our Existing System
5. Make Transit Sustainable
6. Close the Gap to Reach our Emissions Reduction  
Target

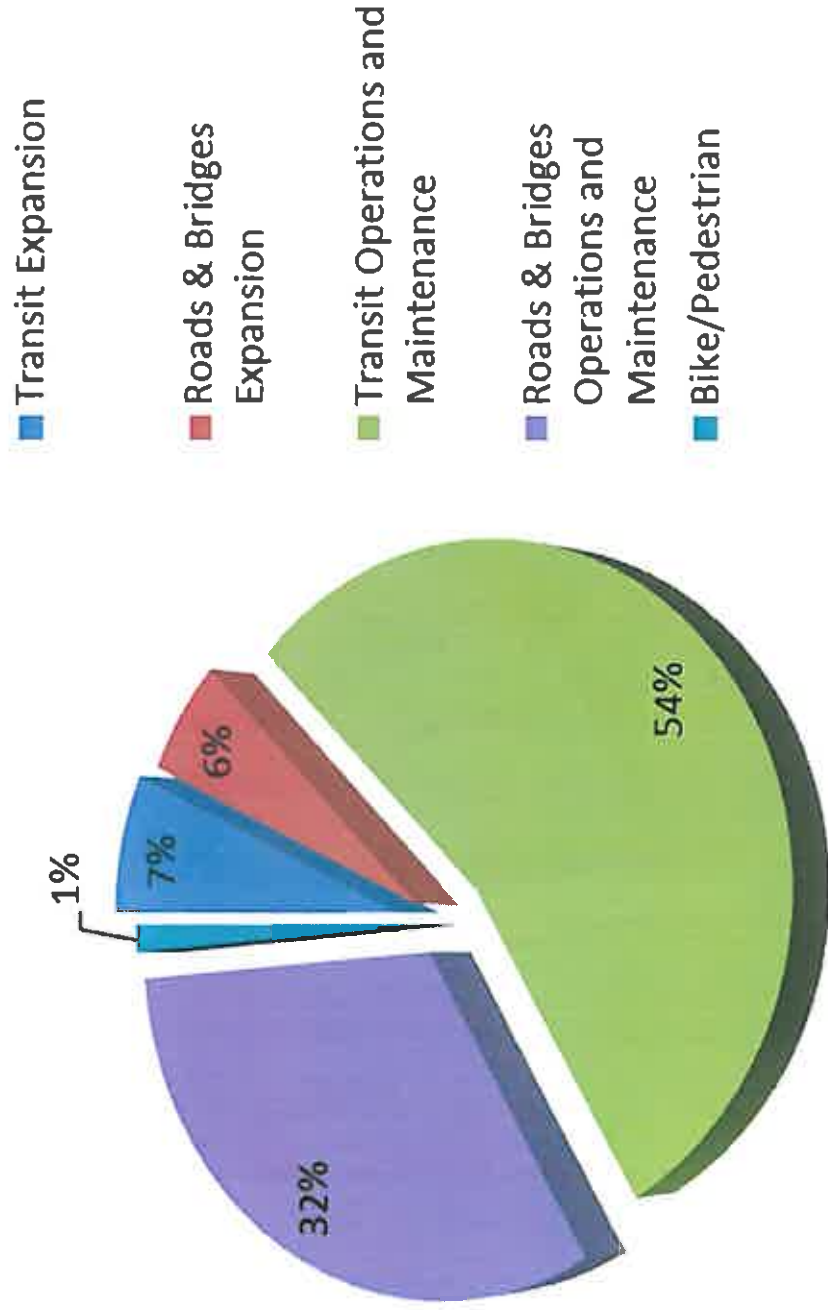
RTP

F.1.43

Draft Investment Summary

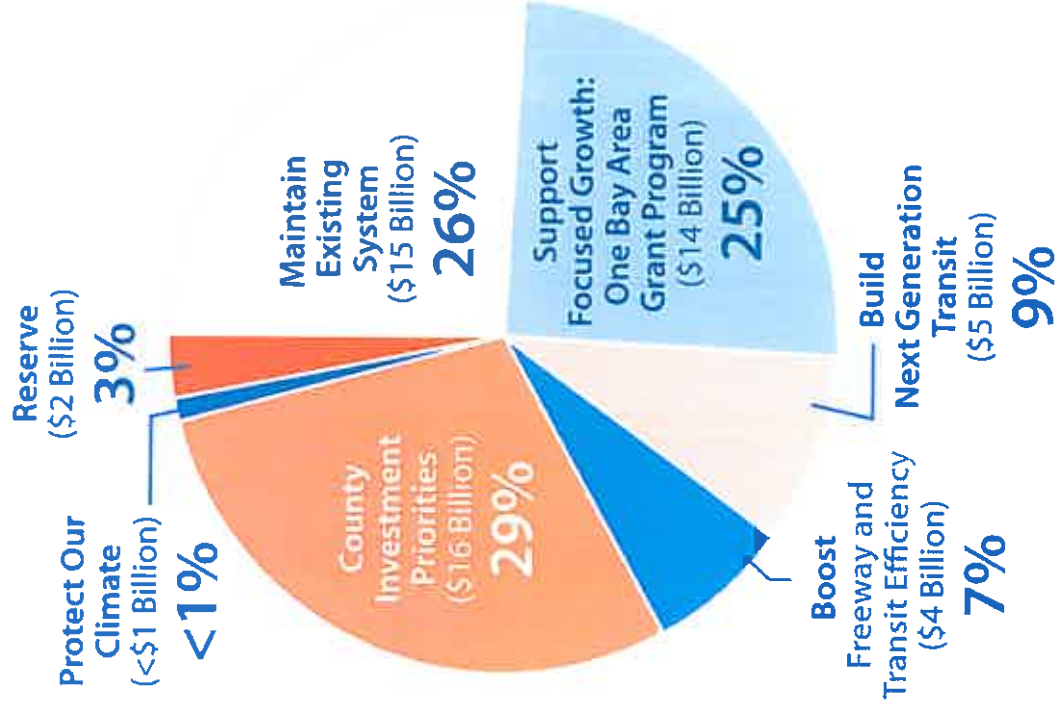
# Total Transportation Investments

## Total Funding - \$286 Billion



# Discretionary Investments

**Discretionary Revenue – \$57 Billion**



F.1.45

# Key Investments in San Mateo County

1. Caltrain electrification and frequency improvements
2. \$2.67 million One Bay Area Grant Funding (2012-2016; 75% dedicated to PDA projects and plans)
3. El Camino Real Bus Rapid Transit
4. Highway 101 interchange improvements
5. Redwood City ferry

F.1.46

# Draft Bay Area Plan

April 2013

Strategy for a  
Sustainable  
Region



Association of  
Bay Area  
Governments



Metropolitan  
Transportation  
Commission

Environmental Impact Report  
Plan Bay Area  
Draft

State Clearinghouse No. 2012062029

PLAN BAY AREA

**DRAFT**

**ENVIRONMENTAL**

**IMPACT REPORT**

STATE CLEARINGHOUSE NO. 2012062029

*Prepared for*

Metropolitan Transportation Commission and  
Association of Bay Area Governments

*by*

**DYETT & BHATIA**  
Urban and Regional Planners

*In association with*

Environmental Science Associates and AECOM

April 2013

F.1.48



## Executive Summary

This program Environmental Impact Report (EIR) has been prepared on behalf of the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) in accordance with the California Environmental Quality Act (CEQA). This EIR analyzes the potential significant impacts of the adoption and implementation of the proposed Plan Bay Area (proposed Plan), which is the update to the 2009 Regional Transportation Plan (RTP) and the new Sustainable Communities Strategy (SCS) for the San Francisco Bay Area.

### MTC, ABAG, and Plan Bay Area

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MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area (which includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties). Created by the State Legislature in 1970, MTC functions as both the regional transportation planning agency (RTPA)—a state designation—and for federal purposes, as the region's metropolitan planning organization (MPO).

As required by State legislation (Government Code Section 65080 et seq.) and by federal regulation (Title 23 USC Section 134), MTC is responsible for preparing the RTP for the San Francisco Bay Area Region. An RTP is a long-range plan that identifies the strategies and investments to maintain, manage, and improve the region's ground transportation network. In 2009, MTC adopted its most recent RTP, known as the Transportation 2035 Plan for the San Francisco Bay Area. Development and environmental analysis of regional airport and seaport plans occur in separate processes.

ABAG is a joint powers agency formed in 1961 pursuant to California Government Code §§ 6500, et seq., and is the council of governments (COG) for the San Francisco Bay Area. ABAG conducts regional population and employment projections and the regional housing needs allocation (RHINA) processes (Government Code Section 65584 et seq.). Plan Bay Area is a joint effort led by MTC and ABAG and completed in partnership with the Bay Area's other two regional government agencies, the Bay Area Air Quality Management District (BAAQMD), and the Bay Conservation and Development Commission (BCDC). It meets the requirements of the Sustainable Communities and Climate Protection Act of 2008, Senate Bill 375 (SB 375; Steinberg, 2008), which requires California's 18 metropolitan planning organizations to develop an SCS as a new element of their federally mandated RTP. The SCS demonstrates how the region will meet its greenhouse gas (GHG) reduction targets established by the California Air Resources Board (ARB) through integrated land use, housing and transportation planning, a planning effort requiring the authority and powers vested in both MTC and ABAG.

Plan Bay Area, which covers the period through 2040, is the first Bay Area RTP that is subject to the requirements of SB 375. SB 375 requires that the SCS be integrated into the MPO's RTP and once

adopted will be reviewed by ARB to determine whether it would, if implemented, achieve the GHG emission reduction target for its region. If the combination of measures in the SCS will not meet the region's target, the MPO must then prepare an alternative planning strategy (APS) that will do so.

Plan Bay Area is the region's first integrated long-range land use and transportation plan. Plan Bay Area calls for focused housing and job growth around high-quality transit corridors, particularly within areas identified by local jurisdictions as Priority Development Areas (PDAs). This land use strategy is intended to enhance mobility and economic growth by linking housing/jobs with transit, thus offering a more efficient land use pattern around transit and a greater return on existing and planned transit investments. The proposed Plan specifies the strategies and investments to maintain, manage, and improve the region's transportation network – which includes bicycle and pedestrian facilities, local streets and roads, public transit systems, and highways. The Plan proposes a set of transportation projects and programs that will be implemented with reasonably anticipated revenue available for the planning period. The proposed Plan must be updated every four years, ensuring a constantly evolving plan through regular updates throughout the planning period.

## Introduction to the EIR

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### PURPOSE

This environmental assessment of the proposed Plan Bay Area—which may also be referred to as the “proposed Plan” throughout this document—has been prepared in compliance with CEQA and the CEQA Guidelines. It is designed to:

- Analyze the potential environmental effects of the adoption and implementation of the proposed Plan;
- Inform decision-makers, responsible and trustee agencies, and members of the public as to the range of the environmental impacts of the proposed Plan;
- Recommend a set of feasible measures to mitigate any significant adverse impacts; and
- Analyze a range of reasonable alternatives to the proposed Plan.

The EIR process also provides an opportunity to identify environmental benefits of the proposed Plan that might balance some potentially significant adverse environmental impacts. The final EIR will include a Mitigation Monitoring Program that identifies who will be responsible for implementing the measures.

As the joint lead agencies for preparing this EIR, MTC and ABAG will rely on the EIR analysis of potential environmental effects in their review of the proposed Plan prior to taking action on Plan Bay Area.

### SCOPE

This is a program EIR, defined in Section 15168 of the CEQA Guidelines as: “[An EIR addressing a] series of actions that can be characterized as one large project and are related either: (1) Geographically; (2) As logical parts in the chain of contemplated actions; (3) In connection with the issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or (4) As

individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental impacts which can be mitigated in similar ways.”

Program EIRs can be used as the basic, general environmental assessment for an overall program of projects developed over a multi-year planning horizon. A program EIR has several advantages. For example, it provides a basic reference document to avoid unnecessary repetition of facts or analysis in subsequent project-specific assessments. It also allows the lead agency to consider the broad, regional impacts of a program of actions before its adoption and eliminates redundant or contradictory approaches to the consideration of regional and cumulative impacts.

As a programmatic document, this EIR presents a region-wide assessment of the potential impacts of the proposed Plan Bay Area. It focuses on the entire set of projects and programs contained in the proposed Plan. Individual transportation and development project impacts are not addressed in detail, although the impacts of some possible projects are discussed as appropriate; rather the focus of this EIR is to address the impacts of a program of projects, which, individually or in the aggregate, may be regionally significant. However, it does not evaluate subcomponents of the proposed Plan nor does it assess project-specific impacts of individual projects. For example, the general physical impacts of major regional transportation expansion projects are addressed, while potential impacts on specific wetlands or a specific species habitat by an individual interchange reconstruction project is not discussed, unless information currently exists or it can be surmised that the effect would be large or otherwise regionally significant. This approach does not relieve local jurisdictions of the responsibility for evaluating project-specific, locally significant impacts. All impacts of individual projects will be evaluated in future environmental review, as relevant, by the appropriate implementing agency as required under CEQA and/or NEPA prior to each project being considered for approval, as applicable.

This EIR evaluates potentially significant environmental impacts, and cumulative impacts, and includes mitigation measures to offset potentially significant effects. This EIR provides the basis for subsequent tiered CEQA documents for project-specific or site-specific environmental reviews that will be conducted by implementing agencies as land use and transportation projects in the proposed Plan are more clearly defined and more detailed studies prepared. Specific analysis of localized impacts in the vicinity of individual projects is not included in this program level EIR.

## **EIR Organization**

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The EIR is organized into four parts, outlined below. This Executive Summary outlines the proposed Plan and alternatives and includes a review of the potentially significant adverse regional environmental impacts of the proposed Plan Bay Area and the measures recommended to mitigate those impacts. The executive summary also indicates whether or not those measures mitigate the significant impacts to a less than significant level. The executive summary also identifies the environmentally superior alternative among the alternatives analyzed.

### **PART ONE: INTRODUCTION AND PROJECT DESCRIPTION**

Part One includes two chapters. Chapter 1.1 describes the relationship between the proposed Plan Bay Area and the EIR, the organization of the EIR, and the basic legal requirements of a program level EIR. It discusses the level of analysis and the alternatives considered as well as how this EIR is related to other

environmental documents and the EIR's intended uses. Chapter 1.2 introduces the purpose and objectives of the proposed Plan Bay Area and summarizes specific information to describe the proposed Plan and complete the EIR analysis. This includes a description of the existing regional setting, an outline of the Bay Area's projected population and employment growth rates and proposed development patterns through the 2040 planning horizon year, and all proposed transportation projects and programs. State and federal planning regulations guiding the development of the RTP and SCS are also described.

## **PART TWO: SETTING, IMPACTS, AND MITIGATION MEASURES**

Part Two describes the existing physical and regulatory settings for each of the environmental issue areas analyzed in the EIR, the potential impacts of the proposed Plan on these environmental issue areas, and measures to mitigate the potential impacts identified. Each issue area is analyzed in a separate chapter. Each chapter is organized as follows:

- Physical Setting;
- Regulatory Setting;
- Impact Significance Criteria;
- Method of Analysis;
- Summary of Impacts; and
- Impacts and Mitigation Measures.

## **PART THREE: ALTERNATIVES AND CEQA REQUIRED CONCLUSIONS**

Part Three includes a description of the alternatives to the proposed Plan and an assessment of their potential to achieve the objectives of the proposed Plan while reducing potentially significant adverse regional environmental impacts. Part Three also includes a comparison summary table of regional environmental impacts associated with the alternatives. As required by CEQA, an environmentally superior alternative is identified. Finally, Part Three includes an assessment of the impacts of the proposed Plan and alternatives in several subject areas required by CEQA, including:

- Significant irreversible environmental changes;
- Significant unavoidable impacts;
- Growth-inducing impacts;
- Cumulative impacts; and
- Impacts found to be not significant.

## **PART FOUR: BIBLIOGRAPHY AND APPENDICES**

Part Four includes a bibliography and the EIR appendices. Appendix A includes the Notice of Preparation (NOP) of this EIR and Appendix B provides reference to the comments received on the NOP and at the scoping meetings (a full set of comments can be found on the project website, [www.onebayarea.org](http://www.onebayarea.org)). Appendix C includes detailed lists of the transportation projects included in the proposed Plan and the alternatives studied in the EIR. Appendix D summarizes scoping comments received on the alternatives. Appendix E outlines the Air Quality analysis methodology and mitigation

measure effectiveness. Appendices F through I include detailed supporting data on impact analyses for geology, water, biology and hazards, respectively.

## Plan Bay Area Regional Setting

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The Bay Area region consists of nine counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma. In a ranking of Combined Statistical Areas (CSAs), the San José-San Francisco-Oakland CSA population was the sixth largest in the nation in 2010, behind New York-Newark-Bridgeport, Los Angeles-Long Beach-Riverside, Chicago-Naperville-Michigan City, Washington-Baltimore-Northern Virginia, and Boston-Worcester-Manchester CSAs.<sup>1</sup> In 2010, the San Francisco Bay Area population was nearly 7.2 million according to the 2010 Census. According MTC, as of 2010 only about 18 percent of the region's approximately 4.4 million acres of land has been developed. The Bay Area transportation network includes interstate and state freeways, county expressways, local streets and roads, bike paths, sidewalks, and a wide assortment of transit technologies (heavy rail, light rail, intercity rail, buses, trolleys and ferries).

## Plan Bay Area Overview

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The proposed Plan Bay Area meets the requirements of SB 375 by developing an integrated transportation and land use plan and attains the per-capita GHG emission reduction targets of -7 percent by year 2020 and -15 percent by year 2035 from 2005 levels. Under the proposed Plan, emission reductions continue on a downward trajectory through 2050. The proposed Plan reinforces land use and transportation integration per SB 375 and presents a vision of what the Bay Area's land use patterns and transportation networks might look like in 2040. The adopted goals of the proposed Plan are:

- Climate Protection
- Adequate Housing
- Healthy and Safe Communities
- Open Space and Agricultural Preservation
- Equitable Access
- Economic Vitality
- Transportation System Effectiveness

The Plan objectives are reflected in the following performance targets that measure the region's progress towards meeting these goals and are consistent with the requirements of SB 375:

- Reduce per-capita CO<sub>2</sub> emissions from cars and light-duty trucks by 15 percent.

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<sup>1</sup> Census 2010. A Combined Statistical Area is a census defined metropolitan region that consists of two or more adjacent Core Based Statistical Areas (CBSAs) that have substantial employment interchange. The CBSAs that combine to create a CSA retain separate identities within the larger CSA.

- House 100 percent of the region’s projected 25-year growth by income level without displacing current low-income residents.

These goals and performance targets are more fully explored in Chapter 1.2. An alternative that performs substantially worse than the proposed Plan with respect to meeting the plan goals and these performance targets would not achieve even the basic objectives of the proposed Plan.

## FORECASTED GROWTH

Looking ahead to 2040, the horizon year for the proposed Plan, it is forecast by ABAG that the Bay Area’s population will grow another 30 percent from the 2010 level (over 2.1 million more residents) and employment will increase by 33 percent (over 1.1 million additional jobs). To house the future population, it is estimated that 660,000 new housing units would be built in the same timeframe. Forecasted growth from 2010 through 2040 is shown in **Table ES-1**.

**TABLE ES-1: TOTAL PROJECTED GROWTH FOR THE BAY AREA, 2010-2040**

	2010	2040	Growth 2010 - 2040	% Change	Annual Growth Rate
Population	7,151,000	9,299,000	2,148,000	30%	0.9%
Households	2,608,000	3,308,000	700,000	27%	0.8%
Housing Units	2,786,000	3,446,000	660,000	24%	0.7%
Jobs	3,385,000	4,505,000	1,120,000	33%	1.0%

Source: Association of Bay Area Governments, Plan Bay Area Jobs-Housing Connection Strategy, revised May 16, 2012.

## LAND USE STRATEGY

To plan for this future growth, the proposed Plan calls for focused housing and job growth around high-quality transit corridors, particularly within areas identified by local jurisdictions as Priority Development Areas (PDAs). Opportunities for focused growth development in Transit Priority Project (TPP)-eligible areas, as defined by SB 375 in Public Resources Code section 21155, which often overlap with PDAs, are also encouraged and facilitated by the proposed Plan. This land use strategy enhances mobility and economic growth by linking housing/jobs with transit and existing transportation infrastructure, thus offering a more efficient land use pattern around transit and a greater return on existing and planned transit investments. Beyond the emphasis on transit-oriented development, the proposed Plan’s land use strategy broadly calls for new housing and jobs in locations that expand existing communities and build off of all existing transportation investments.

## TRANSPORTATION

The proposed Plan includes a financially constrained transportation investment plan as required by State and federal planning regulations. It includes transportation projects and programs that would be funded through existing and future revenues that are projected to be reasonably available to the region over the timeframe covered by the proposed Plan. A total of \$289 billion in revenues is available for the financially constrained Plan Bay Area. That is, the proposed Plan and alternatives evaluated in the EIR are financially constrained to be within the \$289 billion envelope.

A more detailed description of the proposed Plan is included in *Chapter 1.2: Overview of the Proposed Plan Bay Area*.

## Alternatives

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A full description of the alternatives analyzed in this EIR and the alternative selection process is provided in Part 3. The alternatives are as follows:

### **ALTERNATIVE 1: NO PROJECT**

The No Project alternative consists of two elements: (a) the existing 2010 land uses plus continuation of existing land use policy as defined in adopted general plans, zoning ordinances, etc. from all jurisdictions in the region and (b) the existing 2010 transportation network plus highway, transit, local roadway, bicycle and pedestrian projects that have either already received full funding or are scheduled for full funding and received environmental clearance by May 1, 2011.

### **ALTERNATIVE 2: PROPOSED PLAN**

Alternative 2 is the proposed Plan analyzed in this EIR. This alternative assumes a land use development pattern that concentrates future household and job growth into Priority Development Areas (PDAs) identified by local jurisdictions. It pairs this land development pattern with MTC's Preferred Transportation Investment Strategy, which dedicates nearly 90 percent of future revenues to operating and maintaining the existing road and transit system. A more detailed overview of the proposed Plan is in Chapter 1.2.

### **ALTERNATIVE 3: TRANSIT PRIORITY FOCUS**

This alternative includes the potential for more efficient land uses in Transit Priority Project (TPP) areas, as defined by Senate Bill 375 (PRC section 21155), and would be developed at higher densities than existing conditions to support high quality transit. The transportation investment strategy in this alternative tests a slightly reduced express lane network that focuses on HOV lane conversions and gap closures, as well as increased funding for the implementation of recommendations from the Comprehensive Operations Analysis of BART and AC Transit above what is included in the Preferred Transportation Investment Strategy. This alternative also includes a Regional Development Fee based on development in areas that generate high levels of vehicle miles travelled, and a higher peak period toll on the San Francisco-Oakland Bay Bridge.

### **ALTERNATIVE 4: ENHANCED NETWORK OF COMMUNITIES**

This alternative seeks to provide sufficient housing for all people employed in the Bay Area with no commuters from other regions and allows for more dispersed growth patterns than the proposed Plan, although development is still generally focused around PDAs. The transportation investment strategy is consistent with the Preferred Transportation Investment Strategy, also used in the proposed Plan, and includes a higher peak period toll on the San Francisco-Oakland Bay Bridge.

## ALTERNATIVE 5: ENVIRONMENT, EQUITY AND JOBS

This alternative seeks to maximize affordable housing in opportunity areas in both urban and suburban areas through incentives and housing subsidies. The suburban growth is supported by increased transit service to historically disadvantaged communities and a reduced roadway network. This alternative includes imposing a Vehicle Miles Traveled (VMT) tax and a higher peak period toll on the San Francisco-Oakland Bay Bridge to fund transit operations.

## Key EIR assumptions

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The following key assumptions were used in the impact analysis:

- The base year or existing conditions for the land use and transportation impact analysis is 2010, as this year provides the most recent best data available for land use, transportation, and demographics. The only exception appears in *Chapter 2.5: Greenhouse Gases and Climate Change*, which uses a 2005 baseline per the CARB target setting process to determine impacts under Criterion 1 related to achieving the requirements of SB 375.
- The total amount of growth projected for the Bay Area through 2040 is based on ABAG's Plan Bay Area Forecast of Jobs, Population and Housing (the forecasts used to develop the Jobs-Housing Connection) that is available for review on the project website (<http://www.onebayarea.org>); this amount of growth is assumed in the proposed Plan, which identifies a land use pattern to accommodate the projected growth.
- This analysis does not consider phasing of improvements or interim stages of the proposed Plan Bay Area between 2010 and 2040, as the purpose of the analysis is to evaluate the Plan as a whole. The one exception to this approach appears in *Chapter 2.5: Greenhouse Gases and Climate Change*, which includes an examination of impacts in 2020 and 2035 as compared to a 2005 baseline per the ARB target setting process to determine impacts relating to achieving the statutory requirements of Senate Bill 375.
- As a program-level EIR, individual project impacts are not addressed; rather, this analysis focuses on the aggregate impacts of the proposed Plan that may be regionally significant.

## CUMULATIVE IMPACT ASSUMPTIONS

Section 15130 of the CEQA Guidelines requires that an EIR evaluate potential environmental impacts that are individually limited but cumulatively significant. CEQA defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines § 15355). “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects” (CEQA Guidelines § 15065(a)(3)). This means that cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Plan Bay Area, which includes region-wide transportation improvements and land use development patterns in the Bay Area to accommodate projected regional growth through 2040, is a cumulative plan by definition. As such, the environmental analysis included in this EIR throughout Part Two is a



cumulative analysis compliant with the requirements of CEQA and the CEQA Guidelines. Furthermore, this EIR contains analysis of cumulative regional impacts, as differentiated from more generalized localized impacts for every identified impact area.

## Plan Impacts

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The analysis emphasizes the impacts of the proposed Plan Bay Area as a complete program, rather than as detailed analysis of the individual transportation improvements and land use strategy included in the proposed Plan. Individual improvements and development projects must still independently comply with the requirements of CEQA. As required by CEQA, this EIR identifies three types of impacts:

- Short-term impacts;
- Long-term impacts; and
- Cumulative impacts.

The EIR addresses regional impacts as well as generalized localized impacts. It also, to the extent feasible, distinguishes between impacts caused by transportation improvements and impacts related to proposed land use patterns.

**Table ES-2** summarizes the impact conclusions and recommended mitigation measures identified in this EIR. The impacts are organized by environmental impact issue area in the order in which they appear in Part Two.

## Environmentally Superior Alternative

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CEQA Guidelines require each EIR to identify the environmentally superior alternative among the alternatives analyzed. If the No Project alternative is identified as the environmentally superior alternative, then the EIR must identify another alternative from among the alternatives analyzed. According to the analysis in Chapter 3.1, Alternative 5 would result in the lowest level of environmental impacts, but only marginally lower, as compared to all alternatives (including the proposed Plan), and therefore is identified as the environmentally superior alternative. Alternative 3 results in similar impacts to the proposed Plan, and Alternative 4 and the No Project alternative have mixed environmental outcomes. Overall, variations in environmental impacts among alternatives are minor. This determination does not factor in other benefits of the proposed Plan outside of environmental effects. More specifically:

- In **Transportation**, Alternative 3 has the least environmental impact as it features shorter commute travel times (three percent shorter than the proposed Plan) and a lesser amount of congested VMT (14 percent fewer VMT at LOS F as compared to the proposed Plan) and the least potential for transit vehicle crowding (30 percent utilization of public transit systems, the same as the No Project alternative, and three percent less than the proposed Plan). These results are due to shifting regional growth to the Transit Priority Project eligible areas, with the greatest emphasis on growth in the urban core close to high-frequency transit.

- In **Air Quality**, Alternative 5 has the least environmental impact as it results in the lowest criteria pollutant emissions (1.7 percent fewer criteria pollutant emissions as compared to the proposed Plan) as well as lowest TAC emissions of all of the alternatives (1.9 percent fewer TAC emissions as compared to the proposed Plan). This is a result of placing a greater emphasis than the other alternatives on aligning compact land use development with transit service and increasing transit capacity.
- In **Energy**, Alternative 4 would result in the lowest per capita energy use (3.3 percent less than the proposed Plan and 2.7 percent less than Alternative 5), and would therefore have the least environmental impact.
- In **Greenhouse Gas Emissions**, the proposed Plan and Alternative 5 perform equally in regard to meeting SB 375 emission reduction targets in 2035 (both achieving a 16.4 percent reduction, one percent better than Alternative 3, 1.6 percent better than Alternative 4, and 9.6 percent better than the No Project alternative). Alternative 5 performs slightly better in terms of total emissions reductions (achieving a 17 percent reduction from 2010 to 2040, one percent better than Alternative 3 and two percent better than the proposed Plan).
- In **Sea Level Rise**, the No Project alternative includes the fewest transportation projects exposed to midcentury sea level rise inundation (the No Project alternative includes 15 projects, Alternative 5 includes 21 projects, and the proposed Plan, Alternative 3, and Alternative 4 include 32 projects exposed to midcentury sea level rise inundation). Alternative 5 includes the fewest residents (12 percent less than the proposed Plan), and new residential development (10 percent less than under the proposed Plan) exposed to midcentury sea level rise inundation because it distributes growth to areas farther from the Bay.
- In **Land Use (conversion of agricultural and forest land)**, Alternative 4 results in the fewest acres of important agricultural and open space land converted to urbanized use, as well as the fewest acres of forest and timberland converted to urbanized use.
- In **Noise** the No Project alternative has the fewest environmental impacts since it results in the lowest number of roadway miles exposed to noise levels at or above 66 dBA. It also includes the fewest transit extension projects, resulting in the smallest increase in transit noise and vibration compared to other alternatives.
- In **Biological Resources, Water Resources, Cultural Resources, and Visual Resources**, Alternative 5 combines compact development with low transportation infrastructure development, resulting in fewer physical impacts tied to these resources. It is noted that in terms of land use development-related impacts alone (excluding transportation projects), the proposed Plan is the most compact and would have the least impact on these resources.
- In **Geology, Public Utilities, Public Services, and Hazardous Materials**, Alternatives 1, 2 (proposed Plan), 3 and 5 are comparable and have fewer impacts than Alternative 4. Alternative 4 includes the most growth, thereby inherently exposing the most people to geologic and hazards risks, and resulting in the greatest impacts on existing public service, recreation, and utility systems. One exception to this is in regard to wastewater treatment, where Alternative 4 has the least impact because of limited growth in San Francisco, which has likely inadequate wastewater treatment capacity under all other alternatives.
- For **Historic Resources and Land Use (community disruption or displacement, alteration and separation)**, all alternatives perform similarly. Since all alternatives include growth in

urbanized areas where historic resources are likely to exist, impacts on historic resources would be similar. For land use, impacts related to community disruption or displacement and alteration and separation would be highly localized and similar across the alternatives.

While Alternative 5 is the environmentally preferred alternative due to its overall GHG emissions reductions and estimated reduction in criteria and TAC emissions, the proposed Plan does include some benefits over Alternative 5. For instance, the proposed Plan results in the lowest VMT per capita (the same as Alternative 4), with one percent fewer daily VMT per capita than Alternative 5. Alternative 5 also exhibits congested VMT levels 18 percent higher in the AM peak, seven percent higher in the PM peak, and 11 percent higher over the course of a typical weekday as compared to the proposed Plan. Finally, the proposed Plan results in fewer acres of agricultural and open space conversion as compared to Alternative 5 (though more than Alternative 4), and the fewest acres of important farmland (excluding grazing land) of all alternatives.

Another important consideration is that the proposed Plan was developed through extensive coordination with local jurisdictions. Alternative 5 assumes residential growth at levels that some local jurisdictions may be unlikely to implement, since it includes growth in areas that local jurisdictions have not planned for or do not currently anticipate.

In addition, there are some important unanswered questions about the feasibility of Alternative 5 that the ABAG Board and the MTC Commissioners will address during deliberations on this EIR. Specifically, implementation of the VMT tax, which is a key component of Alternative 5, may prove to be infeasible because it would require legislative approval and, in light of Proposition 26 (the “Stop Hidden Taxes” initiative), may require approval by a two-thirds supermajority vote of the Legislature. While there is currently a large majority of Democrats in the Legislature, and authorizing legislation may therefore be easier to achieve at this time, the difficulty of predicting whether new legislation will actually be enacted may make Alternative 5 infeasible.

Policy makers will be required to judge the relative importance of the various issue areas in making their final decision.

## **Areas of Known Controversy**

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Section 15123 of the CEQA Guidelines requires that an EIR identify areas of controversy which are known to the Lead Agency, including issues raised by other agencies and the public. Areas of controversy associated with the proposed Plan are made known through comments received during the Notice of Preparation (NOP) process, as well as input solicited during public scoping meetings and an understanding of the community issues in the study area. Some areas of known controversy, including issues raised by some members of the community, related to the proposed Plan Bay Area and EIR include:

- Whether the proposed Plan’s assumptions of future land use development patterns are feasible given that MTC and ABAG cannot regulate land uses at a regional or local level.
- Concerns about whether the degree and scale of growth proposed within existing communities would alter their appearance, quality of life, and affordability, and whether it would conflict with the existing plans and regulations of the local jurisdiction.

- Determining whether the proposed Plan's emphasis on maintaining and sustaining the existing regional transportation system will be adequate to serve the Bay Area's anticipated population and employment growth.
- Assessing whether the proposed transportation investment strategy can reduce GHG emissions and exposure to air pollutants even as the region's population and economic base continue to grow.
- Determining whether and where sea level rise impacts will occur and how best to minimize those impacts.
- Concerns that increased concentrations of population in focused areas would overwhelm existing public services and utilities, such as parks, police and fire services, water supply, etc.

This EIR acknowledges these known controversies as reported during the NOP scoping period and ongoing agency consultation. To the extent these areas of controversy relate to environmental impacts, they are analyzed at the regional level in Part Two of this EIR.

## Issues to be Resolved

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CEQA Guidelines section 15123(b)(3) requires that an EIR contain a discussion of issues to be resolved and whether or how to mitigate significant effects. Issues to be resolved include:

- How to address potential impacts from the proposed land development pattern that must be mitigated by the local land use authority, since neither MTC nor ABAG have jurisdiction over land use regulations.
- The degree to which MTC and ABAG can provide adequate incentives for implementation of changes to land use policy.
- How best to require mitigations that can be enacted by project sponsors and/or implementing agencies in a manner to ensure CEQA streamlining for qualifying projects, per SB 375, can occur.

When adopting the proposed Plan Bay Area, the MTC Commission and ABAG Board must decide whether specific overriding economic, legal, social, technological or other benefits of the project outweigh the significant environmental impacts that cannot be feasibly avoided or substantially reduced through implementation of feasible mitigation or alternatives. If so, they would adopt a Statement of Overriding Considerations.

## Summary Table of Impacts and Mitigation Measures

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Table ES-2 summarizes impacts, mitigation measures, and significance conclusions after mitigation (far right column), by issue area. Note that implementing agencies and/or project sponsors shall consider implementation of mitigations measures including but not limited to those identified in the table below. For more details, please see *Part Two: Settings, Impacts, and Mitigation Measures*.

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
<b>Transportation</b>			
2.1-1	Implementation of the proposed Plan could result in a substantial increase in per-trip travel time for commute travel by any mode over existing conditions. A substantial increase in per-trip travel time is defined as greater than 5 percent.	None required.	Less than Significant
2.1-2	Implementation of the proposed Plan could result in a substantial increase in per-trip travel time for non-commute travel by any mode over existing conditions. A substantial increase in per-trip travel time is defined as greater than 5 percent.	None required.	Less than Significant
2.1-3	Implementation of the proposed Plan could result in a substantial increase in per capita VMT on facilities experiencing level of service (LOS) F compared to existing conditions during AM peak periods, PM peak periods, or during the day as a whole (LOS F defines a condition on roads where traffic substantially exceeds capacity, resulting in stop-and-go conditions for extended periods of time). A substantial increase in LOS F-impacted per capita VMT is defined as greater than 5 percent.	<p><b>2.1(a)</b> MTC, in its role as the Bay Area Toll Authority (BATA), shall pursue an additional peak period bridge toll on the San Francisco Oakland Bay Bridge to discourage vehicle travel during weekday peak periods, shifting travelers to other times of day or other modes.</p> <p><b>2.1(b)</b> MTC and the BAAQMD shall proceed with implementation of the region's commute benefit ordinance authorized by Senate Bill 1339, which affects all major employers (with more than 50 employees), and discourages auto-based commute travel.</p> <p><b>2.1(c)</b> MTC shall pursue a policy that requires the implementation of ramp metering throughout the region's highway network as a condition of discretionary funding.</p>	Significant and Unavoidable
2.1-4	Implementation of the proposed Plan could result in a substantial increase in per capita VMT compared to existing conditions. A substantial increase in per capita VMT is defined as greater than 5 percent.	None required.	No Adverse Impact

F.1.61

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.1-5	Implementation of the proposed Plan could result in increased percent utilization of regional transit supply resulting in an exceedance of transit capacity at AM peak hours, at PM peak hours, or for the day. An exceedance is defined as passenger seat-mile demand for any transit technology being greater than 80 percent of passenger seat-miles supplied by transit operators.	None required.	No Adverse Impact
<b>Air Quality</b>			
2.2-1(a)	Implementation of the proposed Plan could conflict with or obstruct implementation of the primary goals of an applicable air quality plan.	None required.	Less than Significant
2.2-1(b)	Implementation of the proposed Plan could conflict with or obstruct implementation of applicable control measures of an applicable air quality plan.	None required.	Less than Significant
2.2-1(c)	Implementation of the proposed Plan could conflict with or obstruct implementation of any control measures in an applicable air quality plan.	None required.	Less than Significant
2.2-2	Implementation of the proposed Plan could result in a substantial net increase in construction-related emissions.	2.2(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 best management practices (BMPs), such as the following: <sup>2</sup>	Significant and Unavoidable *CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation

<sup>2</sup> Adapted from BAAQMD, CEQA Air Quality Guidelines (May 2011)

F.1.62

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<p><b>Construction Best Practices for Exhaust</b></p> <ul style="list-style-type: none"> <li data-bbox="358 527 618 800">• The applicant/general contractor for the project shall submit a list of all off-road equipment greater than 25 hp that will be operating for more than 20 hours over the entire duration of the construction activities at the site, including equipment from subcontractors, to BAAQMD for review and certification. The list shall include all of the information necessary to ensure the equipment meets the following requirement:                             <ul style="list-style-type: none"> <li data-bbox="618 527 894 800">– All off-road equipment shall have: 1) engines that meet or exceed either USEPA or ARB Tier 2 off-road emission standards; and 2) engines are retrofitted with an ARB Level 3 Verified Diesel Emissions Control Strategy (VDECS), if one is available for the equipment being used.<sup>3</sup></li> </ul> </li> <li data-bbox="894 527 976 800">• Idling time of diesel powered construction equipment and trucks shall be limited to no more than two minutes. Clear signage shall be provided for construction workers at all access points.</li> <li data-bbox="976 527 1057 800">• All construction equipment shall be maintained and properly tuned in accordance with the manufacturers' specifications.</li> <li data-bbox="1057 527 1138 800">• Portable diesel generators shall be prohibited. Grid power electricity should be used to provide power at construction sites; or propane and natural gas generators may be used when grid power electricity is not feasible.</li> </ul>	<p><i>Measures: Less than Significant with Mitigation</i></p>
		<p><b>Construction Best Practices for Dust</b></p> <ul style="list-style-type: none"> <li data-bbox="1170 527 1252 800">• All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. For projects over 5 acres of size, soil moisture</li> </ul>	

<sup>3</sup> Equipment with engines meeting Tier 4 Interim or Tier 4 Final emission standards automatically meet this requirement, therefore a VDECS would not be required.

F.1.63

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<p>should be maintained at 12 percent. Moisture content can be verified by lab samples or moisture probe.</p> <ul style="list-style-type: none"> <li>All haul trucks transporting soil, sand, or other loose material off-site shall be covered.</li> <li>All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping should be done in conjunction with thorough watering of the subject roads.</li> <li>All vehicle speeds on unpaved roads shall be limited to 15 mph.</li> <li>All roadway, driveway, and sidewalk paving shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading.</li> <li>All construction sites shall provide a posted sign visible to the public with the telephone number and person to contact at the Lead Agency regarding dust complaints. The recommended response time for corrective action shall be within 48 hours. BAAQMD's Complaint Line (1-800 334- 6367) shall also be included on posted signs to ensure compliance with applicable regulations.</li> <li>All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.</li> <li>Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.</li> <li>Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.</li> </ul>	

F.1.64



**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.2-3(a)	Implementation of the proposed Plan could cause a net increase in emissions of criteria pollutants ROG, NO <sub>x</sub> , CO, and PM <sub>2.5</sub> from on-road mobile sources compared to existing conditions.	<ul style="list-style-type: none"> <li>• The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.</li> <li>• All trucks and equipment, including their tires, shall be washed off prior to leaving the site.</li> <li>• Site accesses to a distance of 100 feet from the paved road shall be treated with a six- to 12-inch compacted layer of wood chips, mulch, or gravel.</li> <li>• Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than 1 percent.</li> </ul>	No Adverse Impact
2.2-3(b)	Implementation of the proposed Plan could cause a net increase in emissions of PM <sub>10</sub> from on-road mobile sources compared to existing conditions.	<p><b>2.2(b) MTC and ABAG, in partnership with BAAQMD, and other partners who would like to participate, shall work to leverage existing air quality and transportation funds and seek additional funds to continue to implement BAAQMD and ARB programs aimed at retrofits and replacements of trucks and locomotives.</b></p> <p><b>2.2(c) MTC and ABAG, in partnership with BAAQMD and the Port of Oakland, and other partners who would like to participate, shall work together to secure incentive funding that may be available through the Carl Moyer Memorial Air Quality Standards Attainment Program to reduce port-related emissions.</b></p> <p>Mitigation Measures 2.1 (a), 2.1(b), and 2.1 (c) (included in Chapter 2.1, Transportation) as well as 2.2 (d) and 2.2 (e) (included below</p>	Significant and Unavoidable

T. 1. 65

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.2-4	Implementation of the proposed Plan could cause a cumulative net increase in emissions of diesel PM, 1,3-butadiene, and benzene (toxic air contaminants) from on-road mobile sources compared to existing conditions.	None required.	No Adverse Impact
2.2-5(a)	Implementation of the proposed Plan could cause a localized net increase in sensitive receptors located in Transit Priority Project (TPP) corridors where TACs or fine particulate matter (PM <sub>2.5</sub> ) concentrations result in a cancer risk greater than 100/million or a concentration of PM <sub>2.5</sub> greater than 0.8 µg/m. <sup>3</sup>	Implement Mitigation Measure 2.2(d) under Impact 2.2-5(b).	Significant and Unavoidable
2.2.5(b)	Implementation of the proposed Plan could cause a localized net increase in sensitive receptors located in Transit Priority Project (TPP) corridors within set distances (Table 2.2-10) to mobile or stationary sources of TAC or PM <sub>2.5</sub> emissions.	<p><b>2.2(d)</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 best management practices (BMPs), such as the following:</p> <ul style="list-style-type: none"> <li>• Installation of air filtration to reduce cancer risks and PM exposure for residents, and other sensitive populations, in buildings that are in close proximity to freeways, major roadways, diesel generators, distribution centers, railyards, railroads or rail stations, and ferry terminals. Air filter devices shall be rated MERV-13 or higher. As part of implementing this measure, an ongoing maintenance plan for the building's HVAC air filtration system shall be required.</li> <li>• Phasing of residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible.</li> </ul>	Significant and Unavoidable

F.1.66

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> <li>• Sites shall be designed to locate sensitive receptors as far as possible from any freeways, roadways, diesel generators, distribution centers, and railyards. Operable windows, balconies, and building air intakes shall be located as far away from these sources as feasible. If near a distribution center, residents shall not be located immediately adjacent to a loading dock or where trucks concentrate to deliver goods.</li> <li>• Limiting ground floor uses in residential or mixed-use buildings that are located within the set distance of 500 feet to a non-elevated highway or roadway. Sensitive land uses, such as residential units or day cares, shall be prohibited on the ground floor.</li> <li>• Planting trees and/or vegetation between sensitive receptors and pollution source, if feasible. Trees that are best suited to trapping PM shall be planted, including one or more of the following: Pine (<i>Pinus nigra</i> var. <i>maritima</i>), Cypress (<i>X Cupressocyparis leylandii</i>), Hybrid poplar (<i>Populus deltoides</i> X <i>trichocarpa</i>), and Redwoods (<i>Sequoia sempervirens</i>).</li> <li>• Within developments, sensitive receptors shall be separated as far away from truck activity areas, such as loading docks and delivery areas, as feasible. Loading dock shall be required electrification and all idling of heavy duty diesel trucks at these locations shall be prohibited.</li> <li>• If within the project site, diesel generators that are not equipped to meet ARB's Tier 4 emission standards shall be replaced or retrofitted.</li> <li>• If within the project site, emissions from diesel trucks shall be reduced through the following measures:</li> </ul>	

F.1.67

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.2-5(c)	Implementation of the proposed Plan could cause a localized net increase in sensitive receptors located in Transit Priority Project (TPP) corridors where TACs or fine particulate matter (PM <sub>2.5</sub> ) concentrations result in noncompliance with an adopted Community Risk Reduction Plan.	<ul style="list-style-type: none"> <li>- Installing electrical hook-ups for diesel trucks at loading docks.</li> <li>- Requiring trucks to use Transportation Refrigeration Units (TRU) that meet Tier 4 emission standards.</li> <li>- Requiring truck-intensive projects to use advanced exhaust technology (e.g. hybrid) or alternative fuels.</li> <li>- Prohibiting trucks from idling for more than two minutes as feasible.</li> <li>• Establishing truck routes to avoid residential neighborhoods or other land uses serving sensitive populations. A truck route program, along with truck calming, parking and delivery restrictions, shall be implemented to direct traffic activity at non permitted sources and large construction projects.</li> </ul>	Less than Significant
2.2-6	Implementation of the proposed Plan could result in a localized larger increase or smaller decrease of TACs and or PM <sub>2.5</sub> emissions in disproportionately impacted communities compared to the remainder of the Bay Area communities.	<p><b>2.2(e)</b> MTC/ABAG shall partner with BAAQMD to develop a program to install air filtration devices in existing residential buildings, and other buildings with sensitive receptors, located near freeways or sources of TACs and PM<sub>2.5</sub>.</p> <p><b>2.2(f)</b> MTC/ABAG shall partner with BAAQMD to develop a program to provide incentives to replace older locomotives and trucks in the region to reduce TACs and PM<sub>2.5</sub>.</p> <p>In addition, Mitigation Measures 2.1 (a), 2.1(b), and 2.1 (c) (included in Chapter 2.1, Transportation) and 2.2 (d) (included under Impact</p>	Significant and Unavoidable

F. 1. 68

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures 2.2-5(b)) could help reduce TAC and PM <sub>2.5</sub> emissions.	Significance After Mitigation
<b>Land Use and Physical Development</b>			
2.3-1	Implementation of the proposed Plan could result in residential or business disruption or displacement of substantial numbers of existing population and housing.	<p><b>2.3(a)</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:</p> <ul style="list-style-type: none"> <li>• Regulating construction operations on existing facilities to minimize traffic disruptions and detours, and to maintain safe traffic operations.</li> <li>• Ensuring construction operations are limited to regular business hours where feasible.</li> <li>• Controlling construction dust and noise. See "Construction Best Practices for Dust" under Mitigation Measure 2.2(a) in Chapter 2.2: Air Quality.</li> <li>• Controlling erosion and sediment transport in stormwater runoff from construction sites. See "Construction Best Practices for Dust" under Mitigation Measure 2.2(a) in Chapter 2.2: Air Quality.</li> <li>• Complying with existing local regulations and policies that exceed or reasonably replace any of the above measures that reduce short-term disruption and displacement.</li> </ul> <p>Mitigation Measure 2.2(a) in Chapter 2.2: Air Quality includes additional applicable measures related to this impact, and is included here by reference.</p> <p><b>2.3(b)</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:</p>	<p>Significant and Unavoidable</p> <p>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</p>

F.1.69

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.3-2	Implementation of the proposed Plan could result in permanent alterations to an existing neighborhood or community by separating residences from community facilities and services, restricting access to commercial or residential areas, or eliminating community amenities.	<ul style="list-style-type: none"> <li>• Developing pedestrian and bike connectors across widened sections of roadway;</li> <li>• Using sidewalk, signal, and signage treatments to improve the pedestrian connectivity across widened sections of roadway;</li> <li>• Using site redesign or corridor realignment, where feasible, to avoid land use disruption; and</li> <li>• Complying with existing local regulations and policies that exceed or reasonably replace any of the above measures that reduce long-term disruption and displacement.</li> </ul> <p><b>2.3(c)</b> Through regional programs, such as MTC/ABAG's Priority Development Area (PDA) Planning Program, MTC/ABAG shall continue to support the adoption of local zoning and design guidelines that encourage pedestrian and transit access, infill development, and vibrant neighborhoods.</p> <p><b>2.3(d)</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 the following. All new transportation projects shall be required to incorporate design features such as sidewalks, bike lanes, and bike/pedestrian bridges or tunnels that maintain or improve access and connections within existing communities and to public transit. Implementing agencies shall require project sponsors to comply with existing local regulations and policies that exceed or reasonably replace measures that reduce community separation.</p> <p><b>2.3(e)</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 the following. New development projects shall be required to provide connectivity for all modes such that new development does not separate existing uses, and improves access</p>	<p><i>Significant and Unavoidable</i></p> <p><i>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</i></p>

F.1.70

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<p>where needed and/or feasible, by incorporating 'complete streets' design features such as pedestrian-oriented streets and sidewalks, improved access to transit, and bike routes where appropriate. Implementing agencies shall require project sponsors to comply with existing local regulations and policies that exceed or reasonably replace measures that reduce community separation.</p> <p><b>2.3(f)</b> Through regional programs such as the OneBayArea Grants (OBAG), MTC/ABAG shall continue to support planning efforts for locally sponsored traffic calming and alternative transportation initiatives, such as paths, trails, overcrossings, bicycle plans, and the like that foster improved neighborhoods and community connections.</p> <p>Mitigation Measures 2.3(a), 2.3(b), and 2.3(c) outlined for Impact 2.3-1 would also reduce community separation impacts.</p>	
2.3-3	<p>Implementation of the proposed Plan could conflict substantially with the land use portion of adopted local general plans or other applicable land use plans, including specific plans, existing zoning, or regional plans such as coastal plans or the Bay Plan.</p>	<p>None required.</p>	<p>Less than Significant</p>
2.3-4	<p>Implementation of the proposed Plan could convert substantial amounts of important agricultural lands and open space or lands under Williamson Act contract to non-agricultural use.</p>	<p><b>2.3(g)</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:</p> <ul style="list-style-type: none"> <li>• Requiring project relocation or corridor realignment, where feasible, to avoid farmland, especially Prime Farmland;</li> <li>• Acquiring conservation easements on land at least equal in quality and size as partial compensation for the direct loss of agricultural land;</li> </ul>	<p>Significant and Unavoidable</p>

F.1.71

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> <li>• Maintain and expand agricultural land protections such as urban growth boundaries;</li> <li>• If a Williamson Act contract is terminated, a ratio greater than 1:1 of land equal in quality shall be set aside in a conservation easement, as recommended by the Department of Conservation;</li> <li>• Instituting new protection of farmland in the project area or elsewhere in the County through the use of less than permanent long-term restrictions on use, such as 20-year Farmland Security Zone contracts (Government Code Section 51296 et seq.) or 10-year Williamson Act contracts (Government Code Section 51200 et seq.);</li> <li>• Assessing mitigation fees that support the commercial viability of the remaining agricultural land in the project area, County, or region through a mitigation bank that invests in agricultural infrastructure, water supplies, marketing, etc.;</li> <li>• Minimizing severance and fragmentation of agricultural land by constructing underpasses and overpasses at reasonable intervals to provide property access;</li> <li>• Requiring agricultural enhancement investments such as supporting farmer education on organic and sustainable practices, assisting with organic soil amendments for improved production, and upgrading irrigation systems for water conservation;</li> <li>• Requiring berms, buffer zones, setbacks, and fencing to reduce use conflicts between new development and farming uses and to protect the functions of farmland; and</li> <li>• Requiring other conservation tools available from the California Department of Conservation's Division of Land Resource Protection.</li> </ul>	

F.1.72



**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.3(h)	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:	<ul style="list-style-type: none"> <li>• Requiring compliance with existing local regulations and policies that exceed or reasonably replace any of the above measures that reduce farmland conversion.</li> <li>• Requiring project relocation or corridor realignment, where feasible, to avoid protected open space.</li> <li>• Requiring conservation easements on land at least equal in quality and size as partial compensation for the direct loss of protected open space.</li> <li>• Maintain and expand open space protections such as urban growth boundaries.</li> <li>• Requiring compliance with existing local regulations and policies that exceed or reasonably replace any of the above measures that reduce open space conversion.</li> </ul>	
2.3-5	Implementation of the proposed Plan could result in the loss of forest land, conversion of forest land to non-forest use, or conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.	<p><b>2.3(i)</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:</p> <ul style="list-style-type: none"> <li>• Requiring project relocation or corridor realignment, where feasible, to avoid timberland or forest land.</li> <li>• Requiring conservation easements on land at least equal in quality and size as partial compensation for the direct loss of timberland or forest land.</li> <li>• Requiring compliance with existing local regulations and policies that exceed or reasonably replace any of the above measures that reduce forest land conversion.</li> </ul>	Significant and Unavoidable

F. 1. 73

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
<b>Energy</b>			
2.4-1	Implementation of the proposed Plan could result in an increase in per-capita direct and indirect energy consumption compared to existing conditions.	None required.	Less than Significant
2.4-2	Implementation of the proposed Plan could be inconsistent with adopted plans or policies related to energy conservation.	None required.	No Adverse Impact
<b>Climate Change and Greenhouse Gases</b>			
2.5-1	Implementation of the proposed Plan could fail to reduce per capita passenger vehicle and light duty truck CO <sub>2</sub> emissions by 7 percent by 2020 and by 15 percent by 2035 as compared to 2005 baseline, per SB 375.	None required.	No Adverse Impact
2.5-2	Implementation of the proposed Plan could result in a net increase in direct and indirect GHG emissions in 2040 when compared to existing conditions.	None required.	No Adverse Impact
2.5-3	Implementation of the proposed Plan could substantially impede attainment of goals set forth in Executive Order S-3-05 and Executive Order B-16-2012.	None required.	Less than Significant

F.1.74

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.5-4	Implementation of the proposed Plan could substantially conflict with any other applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.	None required.	No Adverse Impact
2.5-5	Implementation of the proposed Plan may result in a net increase in transportation investments within areas regularly inundated by sea level rise by midcentury.	<p><b>2.5(a)</b> MTC and ABAG shall continue coordinating with BCDC, in partnership with the Joint Policy Committee and regional agencies and other partners who would like to participate, to conduct vulnerability and risk assessments for the region's transportation infrastructure. These assessments will build upon MTC and BCDC's Adapting to Rising Tides Transportation Vulnerability and Risk Assessment Pilot Project focused in Alameda County. Evaluation of regional and project-level vulnerability and risk assessments will assist in the identification of the appropriate adaptation strategies to protect transportation infrastructure and resources, as well as land use development projects, that are likely to be impacted and that are a priority for the region to protect. The Adaptation Strategy subsection found at the end of this section includes a list of potential adaptation strategies that can mitigate the impacts of sea level rise. In most cases, more than one adaptation strategy will be required to protect a given transportation project or land use development project, and the implementation of the adaptation strategy will require coordination with other agencies and stakeholders. As MTC and ABAG conduct vulnerability and risk assessments for the region's transportation infrastructure, the Adaptation Strategy subsection should serve as a guide for selecting adaptation strategies, but the list should not be considered all inclusive of all potential adaptation strategies as additional strategies not included in this list may also have the potential to reduce significant impacts.</p> <p><b>2.5(b)</b> MTC and ABAG shall work with the Joint Policy Committee to create a regional sea level rise adaptation strategy for the Bay Area.</p>	<p>Significant and Unavoidable</p> <p>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</p>

F.1.75

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<p>Implementing agencies and/or project sponsors shall consider implementation of mitigations measures including but not limited to those identified below.</p>	
		<p><b>2.5(c)</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 the following. The project sponsors and implementing agencies shall coordinate with BDC, Caltrans, local jurisdictions (cities and counties), and other transportation agencies to develop Transportation Asset Management Plans (TAMPs) that consider the potential impacts of sea level rise over the asset's life cycle.</p>	
		<p><b>2.5(d)</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 the following. Executive Order S-13-08 requires all state agencies, including Caltrans, to incorporate sea level rise into planning for all new construction and routine maintenance projects; however, no such requirement exists for local transportation assets and development projects. Implementing agencies shall require project sponsors to incorporate the appropriate adaptation strategy or strategies to reduce the impacts of sea level rise on specific transportation and land use development projects where feasible based on project- and site-specific considerations. Potential adaptation strategies are included in the Adaptation Strategy subsection found at the end of this section.</p>	

F.1.76

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.5-6	Implementation of the proposed Plan may result in a net increase in the number of people residing within areas regularly inundated by sea level rise by midcentury.	Implement Mitigation Measures 2.5(b) and 2.5(d).	Significant and Unavoidable
2.5-7	Implementation of the proposed Plan may result in an increase in land use development within areas regularly inundated by sea level rise by midcentury.	Implement Mitigation Measures 2.5(b) and 2.5(d).	Significant and Unavoidable
<b>Noise</b>			
2.6-1	Implementation of the proposed Plan could result in exposure of persons to or generation of temporary construction noise levels and/or groundborne vibration levels in excess of standards established by local jurisdictions or transportation agencies.	<p><b>2.6(a)</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 the following. Implementing agencies shall require one or more of the following set of noise attenuation measures under the supervision of a qualified acoustical consultant:</p> <ul style="list-style-type: none"> <li>• Restricting construction activities to permitted hours as defined under local jurisdiction regulations;(e.g.; Alameda County Code restricts construction noise to between 7:00 am and 7:00 pm on weekdays and between 8:00 am and 5:00 pm on weekends)</li> <li>• Properly maintaining construction equipment and outfitting construction equipment with the best available noise suppression devices (e.g. mufflers, silencers, wraps);</li> <li>• Prohibiting idling of construction equipment for extended periods of time in the vicinity of sensitive receptors;</li> <li>• Locating stationary equipment such as generators, compressors, rock crushers, and cement mixers as far from sensitive receptors as possible;</li> </ul>	<p>Significant and Unavoidable</p> <p>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</p>

F.1.77

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> <li>• Erecting temporary plywood noise barriers around the construction site when adjacent occupied sensitive land uses are present within 75 feet;</li> <li>• Implementing “quiet” pile-driving technology (such as pre-drilling of piles and the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;</li> <li>• Using noise control blankets on building structures as buildings are erected to reduce noise emission from the site; and</li> <li>• Using cushion blocks to dampen impact noise from pile driving.</li> </ul> <p><b>2.6(b)</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 the following vibration attenuation measures under the supervision of a qualified acoustical consultant if pile-driving and/or other potential vibration-generating construction activities are to occur within 60 feet of a historic structure.</p> <ul style="list-style-type: none"> <li>• The project sponsors shall engage a qualified geotechnical engineer and qualified historic preservation professional and/or structural engineer to conduct a pre-construction assessment of existing subsurface conditions and the structural integrity of nearby (within 60 feet) historic structures subject to pile-driving activity. If recommended by the pre-construction assessment, for structures or facilities within 60 feet of pile-driving activities, the project sponsors shall require groundborne vibration monitoring of nearby historic structures. Such methods and technologies shall be based on the specific conditions at the construction site such as, but not limited to, the pre-construction surveying of</li> </ul>	

F.1.78

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.6-2	Implementation of the proposed Plan could result in increased traffic volumes that could result in roadside noise levels that approach or exceed the FHWA Noise Abatement Criteria.	<p>potentially affected historic structures and underpinning of foundations of potentially affected structures, as necessary.</p> <ul style="list-style-type: none"> <li>The pre-construction assessment shall include a monitoring program to detect ground settlement or lateral movement of structures in the vicinity of pile-driving activities and identify corrective measures to be taken should monitored vibration levels indicate the potential for building damage. In the event of unacceptable ground movement with the potential to cause structural damage, all impact work shall cease and corrective measures shall be implemented to minimize the risk to the subject, or adjacent, historic structure.</li> </ul> <p><b>2.6(c)</b> To mitigate pile-driving vibration impacts related to human annoyance, the implementing agency shall require project sponsors to implement Mitigation Measure 2.6(a) above where feasible based on project- and site-specific considerations.</p> <p><b>2.6(d)</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:</p> <ul style="list-style-type: none"> <li>Adjustments to proposed roadway or transit alignments to reduce noise levels in noise sensitive areas. For example, below-grade roadway alignments can effectively reduce noise levels in nearby areas.</li> <li>Techniques such as landscaped berms, dense plantings, reduced-noise paving materials, and traffic calming measures in the design of their transportation improvements.</li> <li>Contributing to the insulation of buildings or construction of noise barriers around sensitive receptor properties adjacent to the transportation improvement;</li> </ul>	<p>Significant and Unavoidable</p> <p>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</p>

F.1.79

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.6-3	Implementation of the proposed Plan could result in increased noise exposure from transit sources that exceed FTA exposure thresholds.	<ul style="list-style-type: none"> <li>• Use land use planning measures, such as zoning, restrictions on development, site design, and buffers to ensure that future development is noise compatible with adjacent transportation facilities and land uses;</li> <li>• Construct roadways so that they are depressed below-grade of the existing sensitive land uses to create an effective barrier between new roadway lanes, roadways, rail lines, transit centers, park-n-ride lots, and other new noise generating facilities; and</li> <li>• Maximize the distance between noise-sensitive land uses and new noise-generating facilities and transportation systems.</li> </ul>	Significant and Unavoidable
		<p><b>2.6(e)</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 the following. When finalizing a development project's site plan, the implementing agency shall require that project sponsors locate noise-sensitive outdoor use areas away from adjacent noise sources and shield noise-sensitive spaces with buildings or noise barriers whenever possible to reduce the potential significant impacts with regard to exterior noise exposure for new sensitive receptors.</p>	
		<p><b>2.6(f)</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 the following. When finalizing a land use development's site plan or a transportation project's design, the implementing agency shall ensure that sufficient setback between occupied structures and the railroad tracks is provided.</p>	
		<p><b>2.6(g)</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</p>	

F.1.80



**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.6-4	Implementation of the proposed Plan could result in increased vibration exposure from transit sources that exceed FTA exposure thresholds.	<p>not limited to the following. Prior to project approval, the implementing agency for a transportation project shall ensure that the transportation project sponsor applies the following mitigation measures to achieve a site-specific exterior noise performance standard as indicated in Figure 2.6-6 at sensitive land uses, as applicable for rail extension projects:</p> <ul style="list-style-type: none"> <li>• Using sound reduction barriers such as landscaped berms and dense plantings;</li> <li>• Locating rail extension below grade;</li> <li>• Using methods to resilient damped wheels;</li> <li>• Using vehicle skirts;</li> <li>• Using under car acoustically absorptive material; and</li> <li>• Installing sound insulation treatments for impacted structures.</li> </ul>	<p><b>2.6(h)</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 the following. When finalizing a development or transportation project's site plan, the implementing agency shall ensure that sufficient setback between occupied structures and the railroad tracks is provided. To meet the 72 VdB limit for the maximum measured train vibration level, residential buildings should be setback a minimum of 65 feet from the center of the nearest track. Alternatively, a reduced setback may be attainable if the project sponsor can demonstrate a project-specific vibration exposure meeting a performance standard of 72 VdB. Depending on specific project conditions, this standard may be attainable without additional mitigation measures or may require applied mitigation such as use of elastomeric pads in the building foundation.</p>

F.1.81

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.6-5	Implementation of the proposed Plan could result in increased noise exposure from aircraft or airports.	<p><b>2.6(i)</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 the following. Prior to project approval the implementing shall ensure that project sponsors apply the following mitigation measures to achieve a vibration performance standard of 72 VdB at residential land uses, as feasible, for rail extension projects:</p> <ul style="list-style-type: none"> <li>• Using high resilience (soft) direct fixation fasteners for embedded track;</li> <li>• Installing Ballast mat for ballast and tie track.</li> </ul> <p>None required.</p>	Less than Significant
<b>Geology and Seismicity</b>			
2.7-1	Implementation of the proposed Plan may expose people or structures to substantial risk of property loss, injury or death related to fault rupture.	<p><b>2.7(a)</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 the following. To reduce impacts related to fault rupture, implementing agencies shall require project sponsors to comply with provisions of the Alquist-Priolo Act (Act) for project sites located within or across an Alquist-Priolo Hazard Zone. Project sponsors shall prepare site-specific fault identification investigations conducted by licensed geotechnical professionals in accordance with the requirements of the Act as well as any existing local or Caltrans regulations and policies that exceed or reasonably replace any of the Act requirements. Structures intended for human occupancy (defined as a structure that might be occupied a minimum of 2,000 hours per year) shall be located a minimum distance of 50 feet from any identified active fault traces. For the purposes of this mitigation, less than significant means consistent</p>	Less than Significant with Mitigation

F1.82

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.7-2	Implementation of the proposed Plan may expose people or structures to substantial risk related to ground shaking.	<p>with federal, state, and local regulations and laws related to development in an Alquist-Priolo Hazard Zone.</p> <p><b>2.7(b)</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 the following. To reduce impacts related to ground shaking, implementing agencies shall require project sponsors to comply with the most recent version of the California Building Code (CBC). Proposed improvements shall comply with Chapter 16, Section 1613 of the CBC which provides earthquake loading specifications for every structure and associated attachments that must also meet the seismic criteria of Associated Society of Civil Engineers (ASCE) Standard 07-05. In order to determine seismic criteria for proposed improvements, geotechnical investigations shall be prepared by state licensed engineers and engineering geologists to provide recommendations for site preparation and foundation design as required by Chapter 18, Section 1803 of the CBC. Geotechnical investigations shall also evaluate hazards such as liquefaction, lateral spreading, landslides, and expansive soils in accordance with CBC requirements and Special Publication 117A, where applicable. Recommended corrective measures, such as structural reinforcement and replacing native soils with engineered fill, shall be incorporated into project designs. For the purposes of this mitigation, less than significant means consistent with federal, state, and local regulations and laws related to building construction.</p>	Less than Significant with Mitigation
2.7-3	Implementation of the proposed Plan may expose people or structures to substantial risk from seismic-related ground failure, including liquefaction.	Implement Mitigation Measure 2.7(b).	Less than Significant with Mitigation

F.1.83

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance After Mitigation</i>
2.7-4	Implementation of the proposed Plan may expose people or structures to substantial risk related to landslides.	Implement Mitigation Measure 2.7(b).	Less than Significant with Mitigation
2.7-5	Implementation of the proposed Plan may result in substantial soil erosion or the loss of topsoil.	<p><b>2.7(c)</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 the following. To reduce the risk of soil erosion, implementing agencies shall require project sponsors to comply with National Pollution Discharge Elimination System (NPDES) General Construction Permit requirements. Implementing agencies shall require project sponsors, as part of contract specifications with contractors, to prepare and implement best management practices (BMPs) as part of a Storm Water Pollution Prevention Plan that include erosion control BMPs consistent with California Stormwater Quality Association Handbook for Construction. For the purposes of this mitigation, less than significant means consistent with federal, state, and local regulations and laws related to construction practices.</p>	Less than Significant with Mitigation
2.7-6	Implementation of the proposed Plan may locate a subsequent development project on a geologic unit or soil that is unstable, contains expansive properties, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.	Implement Mitigation Measure 2.7(b).	Less than Significant with Mitigation

F.1.84

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
<b>Water Resources</b>			
2.8-1	Implementation of the proposed Plan may violate water quality standards or waste or stormwater discharge requirements.	<p><b>2.8(a)</b> To reduce the impact associated with potential water quality standards violations or waste or stormwater discharge requirement violations, implementing agencies shall require project sponsors to comply with the State, and federal water quality regulations for all projects that would alter existing drainage patterns in accordance with the relevant regulatory criteria including but not limited to the National Pollution Discharge Elimination System (NPDES) program, Provision C.3, and any applicable Stormwater Management Plans. Erosion control measures shall be consistent with NPDES General Construction Permit requirements including preparation and implementation of a Stormwater Pollution Prevention Plan, and final drainage plans shall be consistent with the San Francisco Regional MS4 NPDES permit or any applicable local drainage control requirements that exceed or reasonably replace any of these measures to project receiving waters from pollutants.</p> <p>Implementing agencies shall require project sponsors to commit to best management practices (BMPs) that would minimize or eliminate existing sources of polluted runoff during both construction and operational phases of the project. Implementing agencies shall require projects to comply with design guidelines established in the Bay Area Stormwater Management Agencies Association's Using Start at the Source to Comply with Design Development Standards and the California Stormwater Quality Association's California Stormwater Best Management Practice Handbook for New Development and Redevelopment to minimize both increases in the volume and rate of stormwater runoff, and the amount of pollutants entering the storm drain system. For the purposes of this mitigation, less than significant means consistent with federal, state, and local regulations and laws related to water quality or stormwater management.</p>	Less than Significant with Mitigation

F.1.85

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<p>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:</p> <p><b>Construction</b></p> <ul style="list-style-type: none"> <li>Limiting excavation and grading activities to the dry season (April 15 to October 15) to the extent possible in order to reduce the chance of severe erosion from intense rainfall and surface runoff, as well as the potential for soil saturation in swale areas.</li> <li>Regulating stormwater runoff from the construction area through a stormwater management/erosion control plan that may include temporary on-site silt traps and/or basins with multiple discharge points to natural drainages and energy dissipaters if excavation occurs during the rainy season. This control plan should include requirements to cover stockpiles of loose material, divert runoff away from exposed soil material, locate and operate sediment basin/traps to minimize the amount of offsite sediment transport, and removing any trapped sediment from the basin/ trap for placement at a suitable location on-site, away from concentrated flows, or removal to an approved disposal site.</li> <li>Providing temporary erosion control measures until perennial revegetation or landscaping is established and can minimize discharge of sediment into receiving waterways.</li> <li>Providing erosion protection on all exposed soils either by revegetation or placement of impervious surfaces after completion of grading. Revegetation shall be facilitated by mulching, hydroseeding, or other methods and initiated as soon as possible after completion of grading and prior to the onset of the rainy season (by October 15).</li> </ul>	

F.1.86

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> <li>• Using permanent revegetation/landscaping, emphasizing drought-tolerant perennial ground coverings, shrubs, and trees.</li> <li>• Ensuring BMPs are in place and operational prior to the onset of major earthwork on the site. The construction phase facilities shall be maintained regularly and cleared of accumulated sediment as necessary.</li> <li>• Storing hazardous materials such as fuels and solvents used on the construction sites in covered containers and protected from rainfall, runoff, and vandalism. A stockpile of spill cleanup materials shall be readily available at all construction sites. Employees shall be trained in spill prevention and cleanup, and individuals should be designated as responsible for prevention and cleanup activities.</li> </ul>	
		<p><b>Operation</b></p> <ul style="list-style-type: none"> <li>• Designing drainage of roadway and parking lot runoff, wherever possible to run through grass median strips which are contoured to provide adequate storage capacity and to provide overland flow, detention, and infiltration before runoff reaches culverts, or into detention basins. Facilities such as oil and sediment separators or absorbent filter systems should be designed and installed within the storm drainage system to provide filtration of stormwater prior to discharge and reduce water quality impacts whenever feasible.</li> <li>• Implementing an erosion control and revegetation program designed to allow re-establishment of native vegetation on slopes in undeveloped areas as part of the long-term sediment control plan.</li> <li>• Using alternate discharge options to protect sensitive fish and wildlife populations in areas where habitat for fish and other wildlife would be threatened by transportation facility discharge.</li> </ul>	

F.1.87

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.8-2	Implementation of the proposed Plan may substantially interfere with or reduce rates of groundwater recharge due to the increased amount of impervious surfaces, such that there would be a net deficit in aquifer volume or a lowering of the groundwater table.	<p>Maintenance activities over the life of the project shall include use of heavy-duty sweepers, with disposal of collected debris in sanitary landfills to effectively reduce annual pollutant loads where appropriate. Catch basins and storm drains shall be cleaned and maintained on a regular basis.</p> <ul style="list-style-type: none"> <li>Using Integrated Pest Management techniques (methods that minimize the use of potentially hazardous chemicals for landscape pest control and vineyard operations) in landscaped areas. The handling, storage, and application of potentially hazardous chemicals shall take place in accordance with all applicable laws and regulations.</li> </ul> <p>None required.</p>	Less than Significant
2.8-3	Implementation of the proposed Plan may increase erosion by altering the existing drainage patterns of a site, contributing to sediment loads of streams and drainage facilities, and thereby affecting water quality.	Implement Mitigation Measure 2.8(a)	Less than Significant with Mitigation
2.8-4	Implementation of the proposed Plan may increase non-point pollution of stormwater runoff due to litter, fallout from airborne particulate emissions, or discharges of vehicle residues, including petroleum hydrocarbons and metals that would impact the quality of receiving waters.	Implement Mitigation Measure 2.8(a)	Less than Significant with Mitigation

F.1.88



**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.8-5	Implementation of the proposed Plan may increase non-point-source pollution of stormwater runoff from construction sites due to discharges of sediment, chemicals, and wastes to nearby storm drains and creeks.	Implement Mitigation Measure 2.8(a)	Less than Significant with Mitigation
2.8-6	Implementation of the proposed Plan may increase rates and amounts of runoff due to additional impervious surfaces, higher runoff values for cut-and-fill slopes, or alterations to drainage systems that could cause potential flood hazards and effects on water quality.	Implement Mitigation Measure 2.8(a)	Less than Significant with Mitigation
2.8-7	Implementation of the proposed Plan may place within a 100-year flood hazard area structures which would impede or redirect flows.	<p><b>2.8(b)</b> To reduce the impact of flood hazards, implementing agencies shall conduct or require project-specific hydrology studies for projects proposed to be constructed within floodplains to demonstrate compliance with Executive Order 11988, the National Flood Insurance Program, National Flood Insurance Act, Caltrans Highway Design Manual, Cobey-Alquist Floodplain Management Act, as well as any further Federal Emergency Management Agency (FEMA) or State requirements that are adopted at the local level. These studies shall identify project design features or mitigation measures that reduce impacts to either floodplains or flood flows to a less than significant level such as requiring minimum elevations for finished first floors, typically at least one foot above the 100-year base flood elevation, where feasible based on project- and site-specific considerations. For the purposes of this mitigation, less than significant means consistent with these federal, State, and local regulations and laws related to development in the floodplain. Local jurisdictions shall, to the extent feasible, appropriate, and consistent with local policies, prevent development in flood hazard areas that do not have demonstrable protections.</p>	Less than Significant with Mitigation

F.1.89

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.8-8	Implementation of the proposed Plan may expose people to a significant risk of loss, injury, or death involving flooding (including flooding as a result of the failure of a levee or dam), seiche, tsunami, or mudflow.	None required.	Less than Significant
<b>Biological Resources</b>			
2.9-1a	Implementation of the proposed Plan could have a substantial adverse effect, either directly or through habitat modifications, on species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	<p><b>2.9(a)</b> Implementing agencies shall require project sponsors to prepare biological resources assessments for specific projects proposed in areas containing, or likely to contain, habitat for special-status plants and wildlife. The assessment shall be conducted by qualified professionals pursuant to adopted protocols and agency guidelines. Where the biological resources assessment establishes that mitigation is required to avoid direct and indirect adverse effects on special-status plant and wildlife species, mitigation shall be developed consistent with the requirements of CEQA, USFWS, and CDFW regulations and guidelines; in addition to requirements of any applicable and adopted HCP/NCCP or other applicable plans developed to protect species or habitat. 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:</p> <ul style="list-style-type: none"> <li>• In support of CEQA, NEPA, CDFW and USFWS permitting processes for individual Plan Bay Area projects, biological surveys shall be conducted as part of the environmental review process to determine the presence and extent of sensitive habitats and/or species in the project vicinity. Surveys shall follow established methods and shall be undertaken at times when the subject species is most likely to be identified. In cases where impacts to State- or federal-listed plant or wildlife species are possible, formal protocol-level surveys may be required on a species-by-species basis to determine the local distribution of these species. Consultation with the USFWS and/or CDFW shall</li> </ul>	Significant and Unavoidable

F.1.90

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<p>be conducted early in the planning process at an informal level for projects that could adversely affect federal or State candidate, threatened, or endangered species to determine the need for further consultation or permitting actions. Projects shall obtain incidental take authorization from the permitting agencies as required prior to project implementation.</p> <ul style="list-style-type: none"> <li>• Project designs shall be reconfigured, whenever practicable, to avoid special-status species and sensitive habitats. Projects shall minimize ground disturbances and construction footprints near sensitive areas to the extent practicable.</li> <li>• Where habitat avoidance is infeasible, compensatory mitigation shall be implemented through preservation, restoration, or creation of special-status wildlife habitat. Loss of habitat shall be mitigated at an agency approved mitigation bank or through individual mitigation sites as approved by USFWS and/or CDFW. Compensatory mitigation ratios shall be negotiated with the permitting agencies. Mitigation sites shall be monitored for a minimum of five consecutive years after mitigation implementation or until the mitigation is considered to be successful. All mitigation areas shall be preserved in perpetuity through either fee ownership or a conservation easement held by a qualified conservation organization or agency, establishment of a preserve management plan, and guaranteed long-term funding for site preservation through the establishment of a management endowment.</li> <li>• Project activities in the vicinity of sensitive resources shall be completed during the period that best avoids disturbance to plant and wildlife species present (e.g., May 15 to October 15 near salmonid habitat and vernal pools) to the extent feasible.</li> </ul>	

F.1.91

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> <li data-bbox="358 590 472 1241">• Individual projects shall minimize the use of in-water construction methods in areas that support sensitive aquatic species, especially when listed species could be present.</li> <li data-bbox="472 590 651 1241">• In the event that equipment needs to operate in any watercourse with flowing or standing water, a qualified biological resource monitor shall be present at all times to alert construction crews to the possible presence of California red-legged frog, nesting birds, salmonids, or other aquatic species at risk during construction operations.</li> <li data-bbox="651 590 862 1241">• If project activities involve pile driving or vibratory hammering in or near water, interim hydroacoustic threshold criteria for fish shall be adopted as set forth by the Interagency Fisheries Hydroacoustic Working Group, as well as other avoidance methods to reduce the adverse effects of construction to sensitive fish, piscivorous birds, and marine mammal species.</li> <li data-bbox="862 590 1073 1241">• Construction shall not occur during the breeding season near riparian habitat, freshwater marshlands, and salt marsh habitats that support nesting bird species protected under the Endangered Species Act, Migratory Bird Treaty Act, or California Fish and Game Code (e.g., yellow warbler, tricolored blackbird, California clapper rail, etc.).</li> <li data-bbox="1073 590 1187 1241">• A qualified biologist shall locate and fence off sensitive resources before construction activities begin and, where required, shall inspect areas to ensure that barrier fencing, stakes, and setback buffers are maintained during construction.</li> <li data-bbox="1187 590 1334 1241">• For work sites located adjacent to special-status plant or wildlife populations, a biological resource education program shall be provided for construction crews and contractors (primarily crew and construction foremen) before construction activities begin.</li> </ul>	

F.1.92

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> <li>• Biological monitoring shall be particularly targeted for areas near identified habitat for federal- and state-listed species, and a “no take” approach shall be taken whenever feasible during construction near special-status plant and wildlife species.</li> <li>• Efforts shall be made to minimize the negative effects of light and noise on listed and sensitive wildlife.</li> <li>• Compliance with existing local regulations and policies, including applicable HCP/NCCPs, that exceed or reasonably replace any of the above measures protective of special-status species.</li> </ul>	
2.9-1b	Implementation of the proposed Plan could have substantial adverse impacts on designated critical habitat for federally listed plant and wildlife species.	<p><b>2.9(b)</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:</p> <ul style="list-style-type: none"> <li>• Informal consultation with the USFWS and/or NMFS shall be conducted early in the environmental review process to determine the need for further mitigation, consultation, or permitting actions. Formal consultation is required for any project with a federal nexus.</li> <li>• Project designs shall be reconfigured to avoid or minimize adverse effects on the primary constituent elements of designated critical habitats when they are present in a project vicinity.</li> <li>• Compliance with existing local regulations and policies, including applicable HCP/NCCPs, that exceed or reasonably replace any of the above measures protective of critical habitat. Additionally, implementation of Mitigation Measure 2.9(a), above, which includes an initial biological resource assessment and, if</li> </ul>	Significant and Unavoidable

F.1.93

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.9-1c	Implementation of the proposed Plan could result in construction activities that could adversely affect non-listed nesting raptor species considered special-status by CDFW under CDFW Code 3503.5 and non-listed nesting bird species considered special-status by the USFWS under the federal Migratory Bird Treaty Act, and by CDFW under CDFW Code 3503 and 3513.	<p>necessary, compensatory mitigation for loss of habitat, is expected to reduce impacts on critical habitat.</p> <p><b>2.9(c)</b> Implementing agencies shall require project sponsors to conduct a pre-construction breeding bird surveys for specific projects proposed in areas containing, or likely to contain, habitat for nesting birds. The survey shall be conducted by appropriately trained professionals pursuant to adopted protocols agency guidelines. Where a breeding bird survey establishes that mitigation is required to avoid direct and indirect adverse effects on nesting raptors and other protected birds, mitigation will be developed consistent with the requirements of CEQA, USFWS, and CDFW regulations and guidelines, in addition to requirements of any applicable and adopted HCP/NCCP or other applicable plans developed to protect species or habitat. 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:</p> <ul style="list-style-type: none"> <li>• Perform preconstruction surveys not more than two weeks prior to initiating vegetation removal and/or construction activities during the breeding season (i.e., February 1 through August 31).</li> <li>• Establish a no-disturbance buffer zone around active nests during the breeding season until the young have fledged and are self-sufficient, when no further mitigation would be required. Typically, the size of individual buffers ranges from a minimum of 250 feet for raptors to a minimum of 50 feet for other birds but can be adjusted based on an evaluation of the site by a qualified biologist in cooperation with the USFWS and/or CDFW.</li> <li>• Provide buffers around nests that are established by birds after construction starts. These birds are assumed to be habituated to and tolerant of construction disturbance. However, direct take of nests, eggs, and nestlings is still prohibited and a buffer must be</li> </ul>	<p>Significant and Unavoidable</p> <p>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</p>

F.1.94

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.9-2	<p>Implementation of the proposed Plan could have a substantial adverse effect on riparian habitat, federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.), or other sensitive natural communities identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service, through direct removal, filling, hydrological interruption, or other means.</p>	<p>established to avoid nest destruction. If construction ceases for a period of more than two weeks, or vegetation removal is required after a period of more than two weeks has elapsed from the preconstruction surveys, then new nesting bird surveys must be conducted.</p> <ul style="list-style-type: none"> <li>• Comply with existing local regulations and policies, including applicable HCP/NCCPs, that exceed or reasonably replace any of the above measures protective of nesting birds.</li> </ul> <p><b>2.9(d)</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:</p> <ul style="list-style-type: none"> <li>• Implementing agencies shall require project sponsors to prepare biological resource assessments for specific projects proposed in areas containing, or likely to contain, jurisdictional waters and/or other sensitive or special-status communities. The assessment shall be conducted by qualified professionals in accordance with agency guidelines and standards. The assessment shall identify specific mitigation measures for any impact that exceeds significant impact thresholds and said measures shall be implemented. Mitigation measures shall be consistent with the requirements of CEQA and wetland permitting agencies, and/or follow an adopted HCP/NCCP or other applicable plans promulgated to protect jurisdictional waters or other sensitive habitats.</li> <li>• In keeping with the “no net loss” policy for wetlands and other waters, project designs shall be configured, whenever possible, to avoid wetlands and other waters and avoid disturbances to wetlands and riparian corridors in order to preserve both the habitat and the overall ecological functions of these areas.</li> </ul>	<p>Significant and Unavoidable</p>

F.1.95

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<p>Projects shall minimize ground disturbances and construction footprints near such areas to the extent practicable.</p> <ul style="list-style-type: none"> <li data-bbox="391 569 488 800">• Where avoidance of jurisdictional waters is not feasible, project sponsors shall minimize fill and the use of in-water construction methods, and only place fill with express permit approval from the appropriate resources agencies (e.g., Corps, RWQCB, CDFW, BCDC, and CCC) and in accordance with applicable existing regulations, such as the Clean Water Act or local stream protection ordinances.</li> <li data-bbox="488 506 927 800">• Project sponsors shall arrange for compensatory mitigation in the form of mitigation bank credits, on-site or off-site enhancement of existing waters or wetland creation in accordance with applicable existing regulations and subject to approval by the Corps, RWQCB, CDFW, BCDC, and CCC. If compensatory mitigation is required by the implementing agency, the project sponsor shall develop a restoration and monitoring plan that describes how compensatory mitigation will be achieved, implemented, maintained, and monitored. At a minimum, the restoration and monitoring plan shall include clear goals and objectives, success criteria, specifics on restoration/creation/enhancement (plant palette, soils, irrigation, etc.), specific monitoring periods and reporting guidelines, and a maintenance plan. The following minimum performance standards (or other standards as required by the permitting agencies) shall apply to any wetland compensatory mitigation:             <ul style="list-style-type: none"> <li data-bbox="927 506 1385 800">– Compensation shall be provided at a <i>minimum</i> 1:1 ratio for restoration and preservation, but shall in all cases be consistent with mitigation ratios set forth in locally applicable plans (e.g., general plans, HCP/NCCPs, etc.), or in project-specific permitting documentation. Compensatory mitigation may be a combination of onsite restoration/creation/enhancement, offsite restoration,</li> </ul> </li> </ul>	

F.1.96



**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<p>preservation and/or enhancement, or purchase of mitigation credits. Compensatory mitigation may also be achieved through Regional Advance Mitigation Planning (RAMP) banking, as deemed appropriate by the permitting agencies.</p> <ul style="list-style-type: none"> <li>- In general, any compensatory mitigation shall be monitored for a minimum of five years and will be considered successful when at least 75 percent cover (or other percent cover considered appropriate for the vegetation type) of installed vegetation has become successfully established.</li> <li>• In accordance with CDFW guidelines and other instruments protective of sensitive or special-status natural communities, project sponsors shall avoid and minimize impacts on sensitive natural communities when designing and permitting projects. Where applicable, projects shall conform to the provisions of special area management or restoration plans, such as the Suisun Marsh Protection Plan or the East Contra Costa County HCP, which outline specific measures to protect sensitive vegetation communities.</li> <li>• If any portion of a special-status natural community is permanently removed or temporarily disturbed, the project sponsor shall compensate for the loss. If such mitigation is required by the implementing agency, the project sponsor shall develop a restoration and monitoring plan that describes how compensatory mitigation will be achieved, implemented, maintained, and monitored. At a minimum, the restoration and monitoring plan shall include clear goals and objectives, success criteria, specifics on restoration/creation/enhancement (plant palette, soils, irrigation, etc.), specific monitoring periods and reporting guidelines, and a maintenance plan. The following minimum performance standards (or other standards as required by the permitting agencies) shall apply to any compensatory mitigation for special-status natural communities:</li> </ul>	

F.1.97

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> <li>- Compensation shall be provided at a <i>minimum</i> 1:1 ratio for restoration and preservation, but shall in all cases be consistent with mitigation ratios set forth in locally applicable plans (e.g., general plans, HCP/NCCPs, etc.) or in project-specific permitting documentation. Compensatory mitigation may be a combination of onsite restoration/creation/enhancement, offsite restoration, preservation and/or enhancement, or purchase of mitigation credits. Compensatory mitigation may also be achieved through Regional Advance Mitigation Planning (RAMP) banking, as deemed appropriate by the permitting agencies.</li> <li>- In general, any compensatory mitigation shall be monitored for a minimum of five years and will be considered successful when at least 75 percent cover (or other percent cover considered appropriate for the vegetation type) of installed vegetation has become successfully established.</li> <li>• Compliance with existing local regulations and policies, including applicable HCP/NCCPs, that exceed or reasonably replace any of the above measures protective of jurisdictional wetlands or special-status natural communities.</li> </ul>	
2.9-3	Implementation of the proposed Plan could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridor, or impede the use of native wildlife nursery sites.	<p><b>2.9(e)</b> Mitigation measures to reduce impacts on wildlife corridors that shall be required by implementing agencies where feasible based on project- and site- specific considerations include, but are not limited to the following. Implementing agencies shall require project sponsors to prepare detailed analyses for specific projects affecting ECA lands within their sphere of influence to determine what wildlife species may use these areas and what habitats those species require. Projects that would not affect ECA lands but that are located within or adjacent to open lands, including wildlands and agricultural lands, shall also assess whether or not significant wildlife corridors are present, what wildlife species may use them, and what</p>	Significant and Unavoidable

F.1.98

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance After Mitigation</i>
		<p>habitat those species require. The assessment shall be conducted by qualified professionals and according to any applicable agency standards. Mitigation shall be consistent with the requirements of CEQA and/or follow an adopted HCP/NCCP or other relevant plans developed to protect species and their habitat, including migratory linkages.</p> <p>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:</p> <ul style="list-style-type: none"> <li>• Constructing wildlife friendly overpasses and culverts;</li> <li>• Fencing major transportation corridors in the vicinity of identified wildlife corridors;</li> <li>• Using wildlife friendly fences that allow larger wildlife such as deer to get over, and smaller wildlife to go under;</li> <li>• Limiting wildland conversions in identified wildlife corridors; and</li> <li>• Retaining wildlife friendly vegetation in and around developments.</li> <li>• Compliance with existing local regulations and policies, including applicable HCP/NCCPs, that exceed or reasonably replace any of the above measures protective of jurisdictional wetlands or special-status natural communities.</li> </ul>	
2.9-4	<p>Implementation of the proposed Plan could conflict with adopted local conservation policies, such as a tree protection ordinance, or resource protection and conservation plans, such as a Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other adopted local, regional, or state habitat</p>	<p><b>2.9(f)</b> Implementing agencies shall require project sponsors to prepare biological resources assessments for specific projects proposed in areas containing, or likely to contain, protected trees or other locally protected biological resources. The assessment shall be conducted by qualified professionals in accordance with adopted protocols, and standards in the industry. Mitigation shall be consistent with the requirements of CEQA and/or follow applicable ordinances or plans developed to protect trees or other locally</p>	<p><i>Less than Significant with Mitigation</i></p>

F.1.99

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance After Mitigation</i>
	conservation plan.	<p>significant biological resources. 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:</p> <ul style="list-style-type: none"> <li>• Mitigation shall be implemented when significance thresholds are exceeded. Mitigation shall be consistent with the requirements of CEQA and/or follow applicable ordinances or plans developed to protect trees or other locally significant biological resources.</li> <li>• Implementing agencies shall design projects such that they avoid and minimize direct and indirect impacts to protected trees and other locally protected resources where feasible.</li> <li>• At a minimum, qualifying protected trees (or other resources) shall be replaced at 1:1, or as otherwise required by the local ordinance or plan, in locally approved mitigation sites.</li> <li>• As part of project-level environmental review, implementing agencies shall ensure that projects comply with the most recent general plans, policies, and ordinances, and conservation plans. Review of these documents and compliance with their requirements shall be demonstrated in project-level environmental documentation.</li> </ul> <p><b>2.9(g)</b> During the design and CEQA review of individual projects under Plan Bay Area, implementing agencies and project sponsors shall modify project designs to ensure the maximum feasible level of consistency with the policies in adopted HCPs, NCCPs, or other approved local, regional, or state conservation plans, in areas where such plans are applicable. These measures apply to projects covered by the plans in question (i.e., projects assessed during plan environmental review), as well as non-covered projects within the Plan area. Mitigation measures that shall be considered by</p>	

F.1.100

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<p>implementing agencies and/or project sponsors where feasible based on project-and site-specific considerations include, but are not limited to:</p> <ul style="list-style-type: none"> <li data-bbox="391 842 423 1262">• If the project results in impacts on covered species habitat, or other habitat protected under the plan, the project sponsor shall coordinate with USFWS, CDFW, and the appropriate local agency to provide full compensation of acreage and preserve function. Projects shall follow adopted procedures to process an amendment to the conservation plan(s) if necessary. In addition, all habitat based mitigation required by the conservation plans shall be provided at ratios or quantities specified in the plans.</li> <li data-bbox="423 842 456 1262">• Project design and implementation shall minimize impacts on covered species through implementation of Mitigation Measures 2.9(a), 2.9(b), 2.9(c), 2.9(d), and 2.9(e).</li> <li data-bbox="456 842 488 1262">• Avoidance, minimization, and mitigation measures for covered species, consistent with adopted HCP and/or NCCPs, shall also be implemented as specified during project-specific environmental review and permitting. Avoidance and minimization measures to covered species and their habitats shall include adherence to land use adjacency guidelines as outlined in adopted HCP and/or NCCPs.</li> </ul> <p><b>2.9(h)</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 the following. Implementing agencies and project sponsors whose projects are located within the Coastal Zone or within BCDC jurisdiction shall carefully review the applicable local coastal program or San Francisco Bay Plan for potential conflicts, and involve the California Coastal Commission or BCDC as early as possible in the project-level EIR process.</p>	

F.1.101

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
<b>Visual Resources</b>			
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.	<p><b>2.10(a)</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:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Site or design projects to minimize their intrusion into important viewsheds.</li> <li>• Use see-through safety barrier designs (e.g. railings rather than walls) when feasible.</li> <li>• Develop interchanges and transit lines at the grade of the surrounding land to limit view blockage wherever possible.</li> <li>• 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.</li> <li>• Identify, preserve, and enhance scenic vistas to and from hillside areas and other visual resources.</li> <li>• Comply with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect visual resources.</li> </ul>	Significant and Unavoidable *CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation
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	<p><b>2.10(b)</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:</p>	Significant and Unavoidable

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**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.10-3	<p>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.</p>	<p>alter the appearance of or from state- or county-designated or eligible scenic highways.</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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</li> <li>• Implementation of Mitigation Measure 2.10(a) shall also be considered to reduce impacts on scenic highways.</li> </ul>	<p>Significant and Unavoidable</p> <p>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</p>
2.10-3	<p>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.</p>	<p>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:</p> <ul style="list-style-type: none"> <li>• Designing projects to minimize contrasts in scale and massing between the project and surrounding natural forms and development.</li> <li>• 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.</li> </ul>	<p>Significant and Unavoidable</p> <p>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</p>

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**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> <li>• 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.</li> <li>• Ensuring that new development in or adjacent to existing communities is compatible in scale and character with the surrounding area by:               <ul style="list-style-type: none"> <li>– Promoting a transition in scale and architecture character between new buildings and established neighborhoods; and</li> <li>– Requiring pedestrian circulation and vehicular routes to be well integrated.</li> </ul> </li> <li>• Complying with existing local regulations and policies that exceed or reasonably replace any of the above measures that reduce visual contrasts.</li> </ul> <p>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.</p>	
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.	<p><b>2.10(d)</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:</p> <ul style="list-style-type: none"> <li>• Ensuring that new development in or adjacent to rural or historic areas is compatible in scale and character with the surrounding area by:               <ul style="list-style-type: none"> <li>– Promoting a transition in scale and architecture character between new buildings and established neighborhoods; and</li> <li>– Requiring pedestrian circulation and vehicular routes to be well integrated.</li> </ul> </li> </ul>	<p>Significant and Unavoidable</p> <p>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</p>

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**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.10-5	Implementation of the proposed Plan could adversely affect visual resources by creating new substantial sources of light and glare.	<ul style="list-style-type: none"> <li>• Using soundwall construction and design methods that account for visual impacts as follows:                             <ul style="list-style-type: none"> <li>- Use transparent panels to preserve views where soundwalls would block views from residences.</li> <li>- Use landscaped earth berm or a combination wall and berm to minimize the apparent soundwall height.</li> <li>- Construct soundwalls of materials whose color and texture complements the surrounding landscape and development.</li> <li>- Design soundwalls to increase visual interest, reduce apparent height, and be visually compatible with the surrounding area.</li> <li>- Landscape the soundwalls with plants that screen the soundwall, preferably with either native vegetation or landscaping that complements the dominant landscaping of surrounding areas.</li> </ul> </li> <li>• 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.</li> </ul>	Significant and Unavoidable
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:	<ul style="list-style-type: none"> <li>• Designing projects to minimize light and glare from lights, buildings, and roadways facilities.</li> <li>• Minimizing and controlling glare from transportation projects through the adoption of project design features that reduce glare. These features include:                             <ul style="list-style-type: none"> <li>- Planting trees along transportation corridors to reduce glare from the sun;</li> </ul> </li> </ul>	*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation

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**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> <li>- Landscaping off-street parking areas, loading areas, and service areas; and</li> <li>- Shielding transportation lighting fixtures to minimize off-site light trespass.</li> <li>• Minimizing and controlling glare from land use and transportation projects through the adoption of project design features that reduce glare. These features include:               <ul style="list-style-type: none"> <li>- Limiting the use of reflective materials, such as metal;</li> <li>- Using non-reflective material, such as paint, vegetative screening, matte finish coatings, and masonry;</li> <li>- Screening parking areas by using vegetation or trees; and</li> <li>- Using low-reflective glass.</li> </ul> </li> <li>• 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:               <ul style="list-style-type: none"> <li>- Minimizing incidental spillover of light onto adjacent private properties and undeveloped open space;</li> <li>- Directing luminaries away from habitat and open space areas adjacent to the project site;</li> <li>- Installing luminaries that provide good color rendering and natural light qualities; and</li> <li>- Minimizing the potential for back scatter into the nighttime sky and for incidental spillover of light onto adjacent private properties and undeveloped open space.</li> </ul> </li> </ul>	

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**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
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.	<ul style="list-style-type: none"> <li>Complying with existing local regulations and policies that exceed or reasonably replace any of the above measures that reduce light and glare impacts.</li> </ul> <p><b>2.10(f)</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 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.</p>	<p><i>Significant and Unavoidable</i></p> <p><i>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</i></p>
<b>Cultural Resources</b>			
2.11-1	The proposed Plan could have the potential to cause a substantial adverse change in the significance of a historic resource such that the significance of the resource would be materially impaired.	<p><b>2.11(a)</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:</p> <ul style="list-style-type: none"> <li>Realign or redesign projects to avoid impacts on known historic resources where possible.</li> <li>Requiring an assessment by a qualified professional of structures greater than 45 years in age within the area of potential effect to</li> </ul>	<p><i>Significant and Unavoidable</i></p> <p><i>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</i></p>

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**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<p>determine their eligibility for recognition under State, federal, or local historic preservation criteria.</p> <ul style="list-style-type: none"> <li data-bbox="451 508 651 1192">• When a project has been identified as potentially affecting a historic resource, a historical resources inventory should be conducted by a qualified architectural historian. The study should comply with CEQA Guidelines section 15064.5(b), and, if federal funding or permits are required, with section 106 of the National Historic Preservation Act (NHPA) of 1966 (16 U.S.C. § 470 et seq.). Study recommendations shall be implemented.</li> <li data-bbox="678 508 878 1192">• If avoidance of a significant architectural/built environment resource is not feasible, additional mitigation options include, but are not limited to, specific design plans for historic districts, or plans for alteration or adaptive re-use of a historical resource that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitation, Restoring, and Reconstructing Historic Buildings.</li> <li data-bbox="906 508 992 1192">• Complying with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect historic resources.</li> </ul>	
2.11-2	<p>The proposed Plan could have the potential to cause a substantial adverse change in the significance of a unique archaeological resource.</p>	<p><b>2.11(b)</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:</p> <ul style="list-style-type: none"> <li data-bbox="1154 529 1333 1192">• Pursuant to Government Code Sections 65351 and 65352, in-person consultation shall be conducted with Native American tribes and individuals with cultural affiliations where the project is proposed to determine the potential for, or existence of, cultural resources, including cemeteries and sacred places, prior to project design and implementation stages.</li> </ul>	<p>Significant and Unavoidable *CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</p>

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**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> <li data-bbox="358 464 602 779">Prior to construction activities, project sponsors shall retain a qualified archaeologist to conduct a record search at the appropriate Information Center of the California Archaeological Inventory to determine whether the project area has been previously surveyed and whether resources were identified. When recommended by the Information Center, project sponsors shall retain a qualified archaeologist to conduct archaeological surveys prior to construction activities.</li> <li data-bbox="602 464 748 779">Preparation of a research design and testing plan should be developed in advance of implementation of the construction project, in order to efficiently facilitate the avoidance of cultural sites throughout the development process.</li> <li data-bbox="748 464 959 779">If record searches and field surveys indicate that the project is located in an area rich with archaeological resources, project sponsors should retain a qualified archaeologist to monitor any subsurface operations, including but not limited to grading, excavation, trenching, or removal of existing features of the subject property.</li> <li data-bbox="959 464 1089 779">Written assessments should be prepared by a qualified tribal representative of sites or corridors with no identified cultural resources but which still have a moderate to high potential for containing tribal cultural resources.</li> <li data-bbox="1089 464 1252 779">Upon "late discovery" of prehistoric archaeological resources during construction, project sponsors shall consult with the Native American tribe as well as with the "Most-Likely-Descendant" as designated by the Native American Heritage Commission pursuant to PRC 5097.</li> <li data-bbox="1252 464 1356 779">Preservation in place is the preferred manner of mitigating impacts on archeological sites because it maintains the relationship between artifacts and the archeological context, and</li> </ul>	

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**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<p>it may also avoid conflict with religious or cultural values of groups associated with the site. This may be achieved through incorporation within parks, green-space, or other open space by re-designing project using open space or undeveloped lands. This may also be achieved by following procedures for capping the site underneath a paved area. When avoiding and preserving in place are infeasible based on project- and site-specific considerations, a data recovery plan may be prepared according to CEQA Section 15126.4. A data recovery plan consists of: the documentation and removal of the archeological deposit from a project site in a manner consistent with professional (and regulatory) standards; the subsequent inventorying, cataloguing, analysis, identification, dating, and interpretation of the artifacts; and the production of a report of findings.</p> <ul style="list-style-type: none"> <li>• Complying with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect archaeological resources.</li> </ul>	
2.11-3	The proposed Plan could have the potential to destroy, directly or indirectly, a unique paleontological resource or site or unique geologic feature.	<p><b>2.11(c)</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:</p> <ul style="list-style-type: none"> <li>• Prior to construction activities, project sponsors should retain a qualified paleontologist to conduct a record search using an appropriate database, such as the UC Berkeley Museum of Paleontology to determine whether the project area has been previously surveyed and whether resources were identified. As warranted, project sponsors should retain a qualified paleontologist to conduct paleontological surveys prior to construction activities.</li> <li>• Preparation of a research design and testing plan should be developed in advance of implementation of the construction</li> </ul>	<p>Significant and Unavoidable</p> <p>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</p>

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**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.11-4	The proposed Plan could have the potential to disturb human remains, including those interred outside formal cemeteries.	<p>project, in order to efficiently facilitate the avoidance of cultural sites throughout the development process.</p> <ul style="list-style-type: none"> <li>• If record searches and field surveys indicate that the project is located in an area rich with paleontological, and/or geological resources, project sponsors should retain a qualified paleontologist to monitor any subsurface operations, including but not limited to grading, excavation, trenching, or removal of existing features of the subject property.</li> <li>• Complying with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect paleontological or geologic resources.</li> </ul> <p><b>2.11(d)</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:</p> <ul style="list-style-type: none"> <li>• Under Section 7050.5 of the California Health and Safety Code, as part of project oversight of individual projects, project sponsors can and should, in the event of discovery or recognition of any human remains during construction or excavation activities associated with the project, in any location other than a dedicated cemetery, cease further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of the county in which the remains are discovered has been informed and has determined that no investigation of the cause of death is required.</li> <li>• Under California Public Resources Code 5097.98, if any discovered remains are of Native American origin: <ul style="list-style-type: none"> <li>- The coroner shall contact the Native American Heritage Commission in order to ascertain the proper descendants</li> </ul> </li> </ul>	Less than Significant with Mitigation

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<p>from the deceased individual. The coroner should make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods. This may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains; or</p> <ul style="list-style-type: none"> <li>- If the Native American Heritage Commission is unable to identify a descendant, or the descendant failed to make a recommendation within 24 hours after being notified by the Commission, the landowner or their authorized representative shall obtain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance where the following conditions occur: <ul style="list-style-type: none"> <li>- The Native American Heritage Commission is unable to identify a descendant;</li> <li>- The descendant identified fails to make a recommendation; or</li> <li>- The landowner or their authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.</li> </ul> </li> </ul> <p>For the purposes of this mitigation, less than significant means consistent with federal, state, and local regulations and laws related to human remains.</p>	

F.1.112



**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
<b>Public Utilities and Facilities</b>			
2.12-1	The proposed Plan could result in insufficient water supplies from existing entitlements and resources to serve expected development.	<p><b>2.12(a)</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:</p> <ul style="list-style-type: none"> <li>• Implementing water conservation measures which result in reduced demand for potable water. This could include reducing the use of potable water for landscape irrigation (such as through drought-tolerant plantings, water-efficient irrigation systems, the capture and use of rainwater) and the use of water-conserving fixtures (such as dual-flush toilets, waterless urinals, reduced flow faucets).</li> <li>• Coordinating with the water provider to identify an appropriate water consumption budget for the size and type of project, and designing and operating the project accordingly.</li> <li>• Using reclaimed water for non-potable uses, especially landscape irrigation. This strategy may require a project to be located in an area with existing reclaimed water conveyance infrastructure and excess reclaimed water capacity. If a location is planned for future reclaimed water service, projects should install dual plumbing systems in anticipation of future use. Large developments could treat wastewater onsite to tertiary standards and use it for non-potable uses onsite.</li> <li>• Complying with existing local regulations and policies that exceed or reasonably replace any of the above measures that reduce demand for potable water.</li> </ul> <p><b>2.12(b)</b> MTC shall require the construction phase of transportation projects to connect to reclaimed water distribution systems for non-potable water needs, when feasible based on project- and site-specific considerations.</p>	<p><i>Significant and Unavoidable</i></p> <p><i>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</i></p>

F.1.113

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.12-2	The proposed Plan could result in inadequate wastewater treatment capacity to serve new development.	<p><b>2.12(c)</b> MTC shall require transportation projects with landscaping to use drought-resistant plantings or connect to reclaimed water distribution systems for irrigation and other non-potable water needs when available and feasible based on project- and site-specific considerations.</p> <p><b>2.12(d)</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:</p> <ul style="list-style-type: none"> <li>• Undertaking environmental assessments of land use plans and developments to determine whether sufficient wastewater treatment capacity exists for a proposed project. These environmental assessments must ensure that the proposed development can be served by its existing or planned treatment capacity, and that the applicable NPDES permit does not include a Cease and Desist Order or any limitations on existing or future treatment capacity. If adequate capacity does not exist, the implementing agency must either adopt mitigation measures or consider not proceeding with the project as proposed.</li> <li>• Complying with existing local regulations and policies that exceed or reasonably replace the above measure in a manner that reduces impacts on wastewater treatment capacity.</li> </ul> <p>Implementing agencies shall also require compliance with Mitigation Measure 2.12(a), and MTC shall require implementation of Mitigation Measures 2.12(b), and/or 2.12(c) listed under Impact 2.12-1, as feasible based on project- and site-specific considerations, which will help reduce water usage and, subsequently, wastewater flows.</p> <p>Transportation projects could only cause impacts on wastewater treatment capacity in the case of excess stormwater runoff into a</p>	<p>Significant and Unavoidable</p> <p>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</p>

F.1.114

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.12-3	Development under the proposed Plan could require and result in the construction of new or expanded stormwater drainage facilities, which could cause significant environmental impacts.	<p>combined wastewater/stormwater conveyance system. Therefore, mitigation of stormwater drainage system capacity impacts will also mitigate wastewater treatment capacity impacts. Mitigation for stormwater runoff into wastewater systems from transportation projects is discussed under Impact 2.12-3; mitigation measures 2.12(f) and 2.12(g) will mitigate these impacts.</p> <p><b>2.12(e)</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:</p> <ul style="list-style-type: none"> <li>• Complying with all existing applicable federal and State regulations, including Provision C.3 of the EPA's Interpretive Policy Memorandum on Reapplication Requirements for Municipal Separate Storm Sewer Systems, NPDES permit requirements, the submission of and adherence to a Storm Water Pollution Prevention Plan, Water Quality Control Policy for Siting, Design, Operation, and Maintenance of onsite Wastewater Treatment Systems, and/or other relevant current State Water Resource Control Board policy adopted for the purpose of reducing stormwater drainage impacts.</li> <li>• For projects less than one acre in size, reducing stormwater runoff caused by construction by implementing stormwater control best practices, based on those required for a Storm Water Pollution Prevention Plan.</li> <li>• To the extent possible, siting or orienting the project to use existing stormwater drainage capacity.</li> <li>• Constructing permeable surfaces, such as stormwater detention facilities, playing fields, landscaping, or alternative surfaces (vegetated roofs, pervious paving).</li> </ul>	<p>Significant and Unavoidable</p> <p>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</p>

F.1.115

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> <li>• Modeling and implementing a stormwater management plan or site design that prevents the post-development peak discharge rate and quantity from exceeding pre-development rates.</li> <li>• Capturing rainwater for on-site re-use, such as for landscape irrigation or inside non-potable uses such as toilet flushing.</li> <li>• Capturing and infiltrating stormwater runoff on site with rain gardens, vegetated swales, constructed wetlands, etc.</li> <li>• Complying with existing local regulations and policies that exceed or reasonably replace any of the above measures in reducing impacts on stormwater drainage facilities.</li> </ul>	
		<p><b>2.12(f)</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 the following. Transportation projects shall incorporate stormwater control, retention, and infiltration features, such as detention basins, bioswales, vegetated median strips, and permeable paving, early into the design process to ensure that adequate acreage and elevation contours are planned. Implementing agencies shall require project sponsors to comply with existing local regulations and policies that exceed or reasonably replace measures that reduce stormwater drainage impacts.</p>	
		<p><b>2.12(g)</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 the following. All transportation projects constructed, operated, or funded by MTC shall adhere to Caltrans' Stormwater Management Plan, which includes best practices to reduce the volume of stormwater runoff and pollutants in the design, construction and maintenance of highway facilities.</p>	

F.1.116

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.12-4	Development under the proposed Plan could require and result in the construction of new or expanded water and wastewater treatment facilities, which could cause significant environmental impacts.	<p><b>2.12(h)</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 the following. For projects that could increase demand on water and wastewater treatment facilities, project sponsors shall coordinate with the relevant service provider to ensure that the existing public services and utilities could be able to handle the increase in demand. If the current infrastructure servicing the project site is found to be inadequate, infrastructure improvements for the appropriate public service or utility shall be identified in each project's CEQA documentation. The relevant public service provider or utility shall be responsible for undertaking project-level review as necessary to provide CEQA clearance for new facilities.</p> <p>All of the mitigation measures listed under Impact 2.12-1 and Impact 2.12-2 will help reduce water demand and wastewater generation, and subsequently help reduce the need for new or expanded water and wastewater treatment facilities. The mitigation measures listed under Impact 2.12-3 will also help mitigate the impact of additional stormwater runoff from land use and transportation projects on existing wastewater treatment facilities.</p>	<p>Significant and Unavoidable</p> <p>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</p>
2.12-5	Development under the proposed Plan could exceed wastewater treatment requirements of the RWQCBs.	None required.	Less than Significant
2.12-6	The proposed Plan could result in insufficient landfill capacity to serve new development while complying with applicable regulations.	<p><b>2.12(i)</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 the following. Countywide Integrated Waste Management Plans and Source Reduction and Recycling Elements shall take the growth patterns projected by the proposed Plan into account in their evaluation of landfill disposal capacity and determination of strategies to implement to enhance capacity.</p>	<p>Significant and Unavoidable</p> <p>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than</p>

F.1.117

**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<p><b>2.12(j)</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:</p> <ul style="list-style-type: none"> <li>• Providing an easily accessible area that is dedicated to the collection and storage of non-hazardous recycling materials, where feasible.</li> <li>• Maintaining or re-using existing building structures and materials during building renovations and redevelopment, where feasible.</li> <li>• Using salvaged, refurbished or reused materials, to help divert such items from landfills, where feasible.</li> <li>• Diverting construction waste from landfills, where feasible, through means such as:                             <ul style="list-style-type: none"> <li>– The submission and implementation of a construction waste management plan that identifies materials to be diverted from disposal.</li> <li>– Establishing diversion targets, possibly with different targets for different types and scales of development.</li> <li>– Helping developments share information on available materials with one another, to aid in the transfer and use of salvaged materials.</li> </ul> </li> <li>• Applying the specifications developed by the Construction Materials Recycling Association (CMRA) to assist contractors and developers in diverting materials from construction and demolition projects, where feasible.<sup>4</sup></li> </ul>	Significant with Mitigation

<sup>4</sup>The CMRA specifications are available on the CalRecycle website at: [www.calrecycle.ca.gov/conDemo/specs/CMRA.htm](http://www.calrecycle.ca.gov/conDemo/specs/CMRA.htm)

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**TABLES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
<b>Hazards</b>			
2.13-1	Implementation of the proposed Plan could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	<ul style="list-style-type: none"> <li>Complying with existing local regulations and policies that exceed or reasonably replace any of the above measures in reducing impacts on landfills.</li> </ul> <p><b>2.13(a)</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 the following. To reduce the impacts associated with the routine transit, use, or disposal of hazardous materials, implementing agencies shall require project sponsors to comply with the Resource Conservation and Recovery Act, Title 22 of the California Code of Regulations, California Hazardous Waste Control Law, Cal/EPA requirements, HAZMAT training requirements, and any local regulations such as city or county Hazardous Materials Management Plans regulating the generation, transportation, treatment, storage, and disposal of hazardous materials and waste. For the purposes of this mitigation, less than significant means consistent with federal, state, and local regulations and laws related to the transport, use, or disposal of hazardous materials.</p>	<i>Less than Significant with Mitigation</i>
2.13-2	Implementation of the proposed Plan may create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	<p><b>2.13(b)</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 the following. To reduce the impacts associated with the release of hazardous materials into the environment, implementing agencies shall require project sponsors to comply with Senate Bill 1889, Accidental Release Prevention Law/California Accidental Release Prevention Program (CalARP) regulating the generation, transportation, treatment, storage, and disposal of hazardous materials and waste. In addition, project sponsors shall comply with United States Department of Transportation regulations regarding the transport of hazardous materials and</p>	<i>Less than Significant with Mitigation</i>

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**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<p>wastes such that accidental upset conditions are minimized. For the purposes of this mitigation, less than significant means consistent with federal, state, and local regulations and laws related to upset and accident conditions involving the release of hazardous materials into the environment.</p>	
2.13-3	<p>Implementation of the proposed Plan could result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.</p>	<p><b>2.13(c)</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 the following. To reduce the impacts associated with handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed schools, implementing agencies shall require project sponsors to comply with DTSC School Property Evaluation and Cleanup Division regulations regarding the cleanup of existing contamination at school sites and requirements for the location of new schools that would minimize potential exposure of hazardous emissions to students, staff, and visitors to existing and planned school sites. For the purposes of this mitigation, less than significant means consistent with federal, state, and local regulations and laws related to hazardous materials near schools.</p>	<p>Less than Significant with Mitigation</p>
2.13-4	<p>Implementation of the proposed Plan could result in projects located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.</p>	<p><b>2.13(d)</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:</p> <ul style="list-style-type: none"> <li>• Determining whether specific land use and transportation project sites are listed as a hazardous materials and/or waste site pursuant to Government Code Section 65962.5.</li> <li>• Requiring preparation of a Phase I ESA in accordance with the American Society for Testing and Materials' ASTM E-1527-05 standards for any listed sites or sites with the potential of residual hazardous materials and/or waste as a result of location and/or prior uses. For work requiring any demolition or renovation, the</li> </ul>	<p>Significant and Unavoidable *CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</p>

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**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	<i>Impact</i>	<i>Mitigation Measures</i>	<i>Significance After Mitigation</i>
		<p>Phase I ESA shall make recommendations for any hazardous building materials survey work that shall be done.</p> <ul style="list-style-type: none"> <li>• Implementing recommendations included in a Phase I ESA prepared for a site.</li> <li>• If a Phase I ESA indicates the presence or likely presence of contamination, the implementing agency shall require a Phase II ESA, and recommendations of the Phase II ESA shall be fully implemented.</li> <li>• For work requiring any demolition or renovation, the Phase I ESA shall make recommendations for any hazardous building materials survey work that shall be done.</li> <li>• Requiring construction contractors to prepare and implement soil management contingency plans which provide procedural guidance on the handling, notification, and protective measures to be taken in the event of encountering suspected contamination or naturally occurring asbestos.</li> </ul>	
2.13-5	<p>Implementation of the proposed Plan could result in a safety hazard for people residing or working in the planning area for projects located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport.</p>	<p><b>2.13(e)</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 the following. To reduce the impacts associated with people residing or working in the planning area for projects located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, implementing agencies shall require project sponsors to comply with any applicable Airport Land Use Compatibility Plan requirements as well as any Federal Aviation Administration (14 CFR Part 77) requirements. Projects shall not be approved by local agencies until project design plans have been reviewed and approved by the Airport Land Use Commission such that proposed projects would not adversely affect subject airport operations. For</p>	<p><i>Less than Significant with Mitigation</i></p>

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**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
2.13-6	Implementation of the proposed Plan could result in a safety hazard for people residing or working in the planning area for projects within the vicinity of a private airstrip.	<p>the purposes of this mitigation, less than significant means consistent with federal, state, and local regulations and laws related to development near a public airport.</p> <p><b>2.13(f)</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 the following. To reduce impacts associated with people residing or working in the planning area for projects within the vicinity of a private airstrip implementing agencies shall require project sponsors to comply with any applicable local land use regulations and federal aviation guidelines as well as any Federal Aviation Administration (14 CFR Part 77) requirements applicable to projects located within two miles of a private airstrip. Projects shall not be approved by local agencies until project design plans can demonstrate compliance with subject airstrip, local and federal aviation requirements. For the purposes of this mitigation, less than significant means consistent with federal, state, and local regulations and laws related to development near a private airstrip.</p>	Less than Significant with Mitigation
2.13-7	Implementation of the proposed Plan could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	None required.	Less than Significant
2.13-8	Implementation of the proposed Plan could expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.	<p><b>2.13(g)</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 the following. To reduce wildland fire impacts, implementing agencies shall require project sponsors to comply with safety measures that minimize the threat of fire as stated in the California Fire Code as well as compliance with Title 14 of the California Code of Regulations, Division 1.5 to minimize exposing people and structures to loss, injury, or death and damage. Projects</p>	Less than Significant with Mitigation

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**TABLE ES-2: SUMMARY OF IMPACTS AND MITIGATION**

#	Impact	Mitigation Measures	Significance After Mitigation
		<p>shall not be approved by local agencies until project design plans can demonstrate compliance with fire safety requirements. For the purposes of this mitigation, less than significant means consistent with federal, state, and local regulations and laws related to wildfire hazards.</p>	
<b>Public Services and Recreation</b>			
2.14-1	<p>Implementation of the proposed Plan could result in the need for expanded facilities, the construction of which causes significant environmental impacts, in order to maintain adequate schools, emergency services, police, fire, and park and recreation services.</p>	<p><b>2.14(a)</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:</p> <ul style="list-style-type: none"> <li>• Ensuring that adequate public services, and related infrastructure and utilities, will be available to meet or satisfy levels identified in the applicable local general plan or service master plan prior to approval of new development projects.</li> <li>• Complying with existing local regulations and policies that exceed or reasonably replace measures that reduce public service impacts.</li> </ul>	<p>Significant and Unavoidable</p> <p>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</p>
2.14-2	<p>Implementation of the proposed Plan could result in increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.</p>	<p><b>2.14(b)</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:</p> <ul style="list-style-type: none"> <li>• Ensuring that adequate parks and recreational facilities will be available to meet or satisfy levels identified in the applicable local general plan or service master plan prior to approval of new development.</li> <li>• Complying with existing local regulations and policies that exceed or reasonably replace measures that reduce impacts on recreational facilities.</li> </ul>	<p>Significant and Unavoidable</p> <p>*CEQA Streamlining Projects Under SB 375 That Implement All Feasible Mitigation Measures: Less than Significant with Mitigation</p>

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