

3.1 APPROACH TO THE ANALYSIS

3.1.1 Introduction

This chapter is organized by environmental resource topic. Each resource topic is addressed in a separate section that presents an integrated discussion of the existing conditions (including environmental setting and regulatory setting) associated with the resource, significance criteria, method of analysis, potential environmental effects of the project (including direct and indirect impacts) on the resource, and mitigation measures to reduce significant effects.

Cumulative and growth-inducing impacts are discussed in Chapter 5, “Other CEQA-Mandated Sections.”

3.1.2 Approach to the Environmental Analysis

In accordance with the State CEQA Guidelines (CCR Section 15126.2), this Draft EIR identifies and focuses on the significant direct and indirect environmental effects from the adoption and implementation of the proposed Plan. The analysis considers the short-term and long-term effects of the project based on construction and operational assumptions described below.

As described in Chapter 1, “Introduction,” this analysis focuses on those environmental resource topics for which potentially significant impacts were identified based on review of comments received during project scoping and additional research and analysis of relevant project data.

The remainder of this chapter addresses the following resource topics:

- ▶ Section 3.2, “Aesthetics and Visual Resources”
- ▶ Section 3.3, “Agriculture and Forestry Resources”
- ▶ Section 3.4, “Air Quality”
- ▶ Section 3.5, “Biological Resources”
- ▶ Section 3.6, “Climate Change, Greenhouse Gases, and Energy”
- ▶ Section 3.7, “Cultural Resources and Tribal Cultural Resources”
- ▶ Section 3.8, “Geology, Seismicity, and Mineral Resources”
- ▶ Section 3.9, “Hazards and Wildfire”
- ▶ Section 3.10, “Hydrology and Water Quality”
- ▶ Section 3.11, “Land Use, Population, and Housing”
- ▶ Section 3.12, “Noise”
- ▶ Section 3.13, “Public Services and Recreation”
- ▶ Section 3.14, “Public Utilities and Facilities”
- ▶ Section 3.15, “Transportation”

Sections 3.2 through 3.15 follow the same general format:

- ▲ **“Environmental Setting”**: This subsection presents the existing environmental conditions within the Plan area and in the surrounding area as appropriate, in accordance with State CEQA Guidelines Section 15125. The discussions of the environmental setting focus on information relevant to the issue under evaluation. The extent of the environmental setting area evaluated differs among resources, depending on the locations where impacts would be expected.

- ▲ **“Regulatory Setting”**: This subsection presents information on the laws, regulations, plans, and policies that relate to the issue area being discussed. Regulations originating from the federal, State, and local levels are each discussed as appropriate.
- ▲ **“Impact Analysis”**: This subsection presents significance criteria and discusses the potentially significant effects of the proposed Plan on the existing environment in accordance with State CEQA Guidelines Section 15126.2. The methodology for impact analysis, along with any technical study upon which the analysis relies, is described in each section. The significance criteria are defined, and criteria for which the project would have no impact are disclosed and dismissed from further evaluation. Project impacts are organized by environmental topic abbreviation in each subsection (e.g., Impact AES-1, Impact AES-2, Impact AES-3, etc.).

Each impact discussion presents the analysis, rationale, and substantial evidence upon which the conclusion is based. The determination of the impact’s level of significance is shown in bold text. A “less-than-significant” impact is one that would not result in a substantial adverse change in the physical environment. A “potentially significant” impact or “significant” impact is one that would result in a substantial adverse change in the physical environment; both are treated the same under CEQA in terms of procedural requirements and the need to identify feasible mitigation. Mitigation measures are identified, as feasible, to avoid, minimize, rectify, reduce, or compensate for significant or potentially significant impacts, in accordance with the State CEQA Guidelines Section 15126.4.

Where an existing law, regulation, or permit specifies mandatory and prescriptive actions about how to fulfill a regulatory requirement of the project, leaving little discretion in its implementation, and would avoid an impact or maintain it at a less-than-significant level, the environmental protection afforded by the regulation is considered before determining impact significance. In other words, where existing regulatory requirements or permitting requirements exist that are law and binding on responsible agencies and project sponsors, it is reasonable to assume they would be implemented, thereby reducing impacts. Where existing laws or regulations specify a mandatory permit process for future projects, performance standards without prescriptive actions to accomplish them, or other requirements that allow substantial discretion in how they are accomplished, or have a substantial compensatory component, the level of significance is determined before applying the influence of the regulatory requirements. In this circumstance, the impact would be potentially significant or significant, and the regulatory requirements would be included as a mitigation measure.

Mitigation is proposed, where feasible, to reduce potentially significant environmental impacts. For some impacts, mitigation measures are commitments by MTC and ABAG. For most impacts, MTC and ABAG do not have regulatory or approval authority over future projects. In those cases, MTC and ABAG identify specific mitigation measures for application by the lead agency. In order to rely on this EIR to streamline environmental review for an individual project, the lead agency must require the applicable mitigation measures as a part of the project-level environmental review. These commitments would obligate project sponsors to implement measures that would minimize or eliminate significant impacts pursuant to CEQA. The project sponsor or lead agency would be responsible for ensuring adherence to the mitigation measures during construction and operation of the project.

Throughout the impact analysis, it is noted where projects using the CEQA streamlining provisions of Senate Bill 375 (PRC Sections 21155.1, 21155.2, and 21159.28) must apply the mitigation measures, as feasible, to address site-specific conditions. MTC and ABAG cannot require local implementing agencies to adopt mitigation measures. It is ultimately the responsibility of a lead agency to adopt mitigation. Therefore, this EIR makes a distinction in characterizing impact significance after

mitigation to reflect whether MTC and ABAG are able to assume implementation of identified mitigation measures because they have the authority to impose the measures.

3.1.3 General Methodology and Assumptions

BASELINE AND PLAN TIMEFRAME

Under CEQA, the impacts of a proposed project must be evaluated by comparing expected environmental conditions after project implementation to conditions at a point in time referred to as the baseline. Additionally, in order to assess the environmental impacts of the proposed Plan, it is necessary to make assumptions about future environmental conditions at the time it is fully implemented. The changes in environmental conditions between those two scenarios represent the environmental impacts of the proposed Plan. The State CEQA Guidelines Section 15125 states that an EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant.

As the CEQA Guidelines make clear, ordinarily the appropriate baseline will be the actual environmental conditions existing at the time of CEQA analysis (typically when the Notice of Preparation [NOP] is published). In many cases, establishing this “existing conditions” baseline is a straightforward task. However, there may be times when a deviation from the use of the NOP date to establish the baseline is appropriate in order to present a fair and accurate description of the expected environmental impacts of a proposed project. In the case of the proposed Plan, the NOP was released on September 28, 2020, during a global pandemic caused by the COVID-19 coronavirus. From March 2020 up to, and beyond, the release of the NOP the nine-county Bay Area was in varying stages of compliance with shelter-in-place orders directed by various county health officers. These orders affected such things as commercial and office business operations, employee commutes, and travel behavior, resulting in secondary effects related to traffic and congestion, air quality, and energy use. In some cases in the following technical sections, the environmental baseline is more accurately represented as prior to March 2020. For physical conditions that were not altered by the global pandemic and shelter-in-place orders, the existing conditions for the analysis are generally September 2020. See the discussion under “Method of Analysis” for each technical section for a description of the baseline for the analysis.

The horizon year for the proposed Plan is 2050. For comparisons where 2020 data are not available, the closest available year with comprehensive datasets is used. This includes using a baseline year of 2015 in the transportation and transportation-related analyses because it is the year with the most recent data readily available from public sources or using transportation outputs from the regional travel model. An exception to this approach appears in Section 3.6, “Climate Change, Greenhouse Gases, and Energy,” which includes a 2005 baseline to satisfy statutory requirements of Senate Bill 375 for benchmarking the year used for comparison to the proposed Plan's greenhouse gas reduction targets, and a 1990 baseline for an assessment of the proposed Plan's consistency with SB 32, which calls for a statewide reduction of GHG emissions to 40 percent from 1990 levels by 2030.

As described in Chapter 2, “Project Description,” the regional growth forecast for the Bay Area projects that by 2050, the region will support an additional 2.7 million residents and 1.4 million jobs, resulting in 1.4 million new households. The proposed Plan designates growth geographies and identifies a set of land use strategies to accommodate the projected growth that result in focused housing and job growth concentrated primarily in or adjacent to existing communities and along existing transit corridors. This analysis does not consider phasing of improvements or interim stages of the proposed

Plan between 2020 and 2050, because the required 4-year update cycle of the RTP/SCS results in regular, short-term adjustments to the Plan. The one exception to this approach is Section 3.6, “Climate Change, Greenhouse Gases, and Energy,” which includes an examination of impacts in 2020, 2030, 2035, 2040, and 2050, to satisfy requirements of Senate Bill 375, the Global Warming Solutions Act of 2006 (Assembly Bill 32 [2006], Senate Bill 32 [2016]), and Executive Orders B 30-15 and EO-05-03, among other requirements.

LEVEL OF DETAIL

As a program-level EIR that addresses the entire nine-county, 101-city region, this document does not address the impacts of individual land use and transportation projects in detail; the focus of this analysis is on addressing the impacts of implementation of the Plan’s 35 strategies as a whole. The analysis considers the impacts of the proposed Plan in terms of the forecasted land use development pattern (“land use growth footprint”), sea level rise adaptation infrastructure (“sea level rise adaptation footprint”), and transportation projects and programs (“transportation projects footprint”). The impact discussions generally disclose the potential effects of the proposed Plan at three levels of geography: (1) at the regional level, which covers the Bay Area as a whole; (2) at the county level, which covers each Bay Area county; and (3) at the Transit Priority Area (TPA) level, which covers the TPAs. County totals include incorporated and unincorporated areas in each county. The portion of the land use growth footprint located outside of a TPA is captured in the county totals. The analysis is intended to assist areawide issue identification as it relates to regional transportation and land use planning and to provide a basis for future CEQA streamlined project-level environmental analysis for projects implemented under the proposed Plan. Therefore, only TPAs were isolated for reporting in this EIR.

QUANTITATIVE ANALYSES

This program-level EIR includes quantification of impacts when feasible. Quantifications are generally location based, while some quantifications result from travel patterns and corresponding emissions. Where quantitative impact analyses rely on specific industry-standard methodology and modeling (i.e., MTC’s Travel Model 1.5, CalEEMod, or EMFAC), the relevant sections include a description of the method of analysis. This section describes location-based analyses in more detail below.

Location-Based Analysis

Quantitative results are presented for the region (i.e., the entire footprint, often summarized by county) and for the portions of the land use growth footprint specifically within transit priority areas (TPAs). TPAs are presented as a subset of the regional and county totals. Information provided by county includes both incorporated and unincorporated areas in the county.

For quantitative impact assessments, a geographic information system (GIS) was used to digitally overlay the proposed Plan’s footprints associated with forecasted land use development, sea level rise adaptation infrastructure, and transportation projects onto resource-specific data.

The land use growth footprint is derived from the UrbanSim 2.0 land use model and represents the development or redevelopment of parcels of land simulated to accommodate the region’s forecasted growth of households and jobs from 2015 through 2050 through new building(s). Precise building site(s) on the parcels are not known, therefore the land use growth footprint incorporates the entire parcel. Because of this assumption, the area of potential effects tends to be overstated when considering the land use growth footprint. It should be noted that this footprint includes some areas identified for development in local land use plans that are outside of the growth geographies (See Table 2-4 in Chapter 2, “Project Description”).

The proposed Plan identifies several adaptation archetypes for regularly inundated shoreline areas, including a variety of levees, seawalls, elevated roadways, marsh restoration, and tidal gates. Not all of the archetypes would be expected to require earthmoving activities and/or have a footprint associated with implementation. For example, marsh restoration is not included in the sea level rise adaptation footprint, whereas elevated roadways, levees, sea walls, and tidal gates are included in the footprint. In addition, the precise footprints and other design details of most sea level rise adaptation infrastructure are unknown because it is in the early stages of planning. Thus, sea level rise adaptation infrastructure was spatially analyzed by estimating the potential area of effects around the center line or center point of proposed infrastructure, and includes both land and water areas. Because of these estimation assumptions, the area of potential effects tends to be overstated when considering sea level rise adaptation infrastructure.

The transportation projects footprint includes the proposed transportation projects and programs that have the greatest potential for physical impacts based on characteristics such as expansion, widening, new construction, or new configurations. The precise footprints and other design details of most proposed transportation projects are unknown because the projects are in the early stages of planning. Thus, transportation projects (e.g., road widenings, new roads, new or expanded interchanges, and new rail transit infrastructure) were spatially analyzed by estimating the potential area of effects around the center line of proposed roadway and transit projects. Because of these estimation assumptions, the area of potential effects tends to be overstated when considering transportation projects. In addition, some transportation project footprints overlap where projects are located within close proximity of each other or where alignments coincide. The transportation projects acreage reported in this EIR reflects the footprint of each project and does not discount these areas of overlap. In addition, portions of the three footprints (land use growth, sea level rise adaptation, and transportation projects) overlap because the areas of potential effects are imprecise. This overlap is relatively insignificant, ranging from 110 to 420 acres. To provide a more accurate interpretation of the potential environmental impacts, the acreages of the land use growth footprint and transportation projects footprint are not combined or analyzed as one total and instead are presented independently throughout the analysis. This could result in an overestimation of impacts.

3.1.4 Standard Terminology

This Draft EIR uses the following standard terminology:

“No impact” (“NI”) means no change from existing conditions (no mitigation is needed).

“Less-than-significant impact” (“LTS”) means no substantial adverse change in the physical environment (no mitigation is required).

“Potentially significant impact” (“PS”) means an impact that might cause a substantial adverse change in the environment (mitigation is required because potentially significant impacts are treated as significant).

“Significant impact” (“S”) means an impact that would cause a substantial adverse change in the physical environment (mitigation is required).

“Less than significant with mitigation (“LTS-M”) means an impact that would cause a substantial adverse change in the physical environment, but the impact would be reduced to a less-than-significant level with the incorporation of mitigation measures identified in this EIR.

“Significant and unavoidable impact” (“SU”) means an impact that would cause a substantial adverse change in the physical environment and that cannot be avoided, even with the implementation of all feasible mitigation.

3.1.5 Local Control

The region’s cities, towns, and counties retain local land use authority, and local jurisdictions will continue to determine where future development occurs. The proposed Plan is supported through implementation efforts, such as neighborhood-level planning grants for Priority Development Areas and local technical assistance. The proposed Plan does not mandate any changes to local zoning rules, general plans, or processes for reviewing projects, nor does the Plan provide an enforceable direct or indirect cap on development locations or targets in the region. As is the case across California, the Bay Area’s cities, towns, and counties maintain control of all decisions to adopt plans and to permit or deny development projects.

The proposed Plan also does not establish new State-mandated Regional Housing Needs Allocation (RHNA) numbers for any jurisdiction, but the RHNA is consistent with the proposed Plan. The RHNA process is conducted on an 8-year cycle, which currently coincides with this update to the region’s long-range plan.