

## 9 PROGRAM-LEVEL ANALYSIS OF GENERAL PLANS AND AREA PLANS

### 9.1 INTRODUCTION

Within this document, the terms *general plan* and *area plan* refer broadly to discretionary planning activities which may include but are not limited to the following: general plan amendments, redevelopment plans, specific plans, area plans, community plans, and annexations of lands and service areas. General and area plans present unique challenges for assessing impacts. These plans often contain development strategies for 20-year, or longer time horizons. They also provide for a wide range of potential land uses and densities that accommodate all types of development. California law requires all cities and counties to prepare comprehensive general plans addressing future development and conservation priorities. State law prescribes numerous issues that must be addressed within mandatory chapters, or elements. Required elements include land use, circulation, conservation, open space, housing, noise, and safety. Jurisdictions must address all issues stipulated within state law, but are free to reorganize the content of elements and to include optional elements that address local and regional priorities that relate to the jurisdiction's future planning. Although not required by state law, the District prefers that local jurisdictions include an air quality element to highlight the significance of air quality problems and the jurisdiction's commitment to help solve regional air quality issues. Jurisdictions may choose to include air quality related policies and strategies in required elements since air quality is intimately related to various aspects of a general plan. The tables in Section 9.4 demonstrate various air quality strategies that could be included in each of the required elements, while the following are a few examples of these air quality connections.

- Noise element – Goals and policies to reduce noise exposure may also reduce exposure to air pollution and toxics.
- Land use element – The location and mix of land uses can support the reduction of air pollution by providing neighborhoods and communities that don't require numerous and lengthy vehicle trips to access work, schools, shopping, services and recreation opportunities.
- Circulation element – Goals and policies that support infrastructure and promote the use of sustainable transportation modes lead to the reduction of vehicle trips, trip lengths and associated emissions.
- Health element - Among the more common considerations in a health element is the promotion of active transportation modes, which can reduce vehicle trips, trip lengths and associated emissions.

General plans are required to be internally consistent<sup>1</sup>, thereby ensuring each element is considerate of the other elements and supports the goals and policies throughout the plan.

---

<sup>1</sup> Sierra Club v. Kern County Board of Supervisors (1981) 126 Cal App. 3d 698, 703

For additional guidance on addressing air quality in the context of general and area plans, lead agencies may refer to the District's [Model Air Quality Element](#) and the California Air Pollution Control Officers Association's (CAPCOA's) [Model Policies for Greenhouse Gases in General Plans](#). For more information on recommended policies covering all elements of a general plan, refer to the [General Plan Guidelines](#) of the Governor's Office of Planning and Research (OPR). In October 2015, OPR released a draft update to the General Plan Guidelines.

### 9.1.1 ADDRESSING AIR QUALITY IN GENERAL AND AREA PLANS

General plan updates and large specific plans nearly always require the lead agency to prepare an Environmental Impact Report (EIR). Due to the Sacramento Valley Air Basin's (SVAB's) nonattainment status and the cumulative impacts of growth on air quality, these plans almost always have significant, unavoidable, adverse air quality impacts. The California Environmental Quality Act (CEQA) requires the lead agency to evaluate individual as well as cumulative impacts of general and area plans, and all feasible mitigation measures must be incorporated within the proposed plan to reduce significant air quality impacts.

### 9.1.2 PROGRAM-LEVEL REQUIREMENTS

This chapter provides guidance on methods to evaluate air quality and climate change impacts of general and area plans prepared within Sacramento County pursuant to CEQA. General and area plans are often subject to program-level analysis under CEQA, as opposed to project-level analysis. As a general principle, the guidance offered within this chapter should be applied to discretionary, program-level planning activities; whereas the project-level guidance offered in other chapters should be applied to discrete approvals, such as a proposed development project.

## 9.2 ANALYSIS EXPECTATIONS

The District recommends that CEQA analyses of the potential air quality impacts of general and area plans include discussion of the following:

- a) The proposed plan's consistency with the [Sacramento Regional Ozone Attainment Plan](#) (OAP) and the Sacramento Area Council of Governments' (SACOG's) [Metropolitan Transportation Plan/Sustainable Communities Strategy](#), which includes growth principles from the [Preferred Blueprint Scenario](#). (The motor vehicle emissions budget in the OAP is based on the land use assumptions and travel demand modeling from the Metropolitan Transportation Plan.);
- b) The proposed plan's construction-generated Criteria Air Pollutant (CAP) and precursor emissions;
- c) The proposed plan's operational CAP and precursor emissions;
- d) The proposed plan's Toxic Air Contaminant (TAC) emissions;
- e) Potential odor exposure related to the proposed plan;

- f) The proposed plan's greenhouse gas (GHG) emissions;
- g) A significance determination for each of items (a) through (f) above, without mitigation;
- h) A discussion of all feasible mitigation for each of items (a) through (f) above with significant impacts. The discussion may include public health co-benefits; and
- i) A discussion regarding whether the proposed mitigation would be sufficient to reduce impacts to a less-than-significant level, or if the impact would remain significant and unavoidable.

## 9.3 METHODOLOGIES

Air quality impacts from future development pursuant to general or area plans can be divided into construction-related impacts and operational-related impacts. Construction-related impacts are associated with construction activities likely to occur in conjunction with future development permitted by the plan. Operational-related impacts are associated with continued and future operation of developed land uses, including increased vehicle trips and energy use.

### 9.3.1 CONSTRUCTION-GENERATED CRITERIA AIR POLLUTANT AND PRECURSOR EMISSIONS

Construction-related emissions are described as short-term or temporary in duration. Construction-related activities most often result in emissions of criteria air pollutants and precursors from site preparation such as excavation, grading, and clearing; exhaust from off-road equipment, material delivery trucks, and worker commute vehicles; vehicle travel on paved and unpaved roads; and other miscellaneous activities such as building construction, asphalt paving, application of architectural coatings, and trenching for utility installation.

The evaluation of a proposed plan's construction-generated emissions of CAPs and precursors pertains, in part, to the following questions regarding air quality from the Environmental Checklist Form ([Appendix G](#)) of the State CEQA Guidelines:

- III.a. Would the project conflict with or obstruct implementation of the applicable air quality plan?
- III.b. Would the project violate an air quality standard or contribute substantially to an existing or projected air quality violation?
- III.c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
- III.d. Would the project expose sensitive receptors to substantial pollutant concentrations?

## ASSESSING EMISSIONS AND DETERMINING LEVEL OF SIGNIFICANCE

The construction-generated emissions associated with the build-out of a general or area plan should be evaluated in the same manner as construction emissions associated with an individual project, as discussed in [Chapter 3, Construction-Generated Air Pollutant and Precursor Emissions](#). In summary, maximum daily construction-generated emissions should be estimated and then compared to the [District's thresholds of significance](#). For construction projects that will last more than 4 years, lead agencies should assume 25% of the total land uses would be constructed in 1 single year, unless otherwise known.

General or area plans found to have a significant adverse impact shall implement all feasible mitigation measures to reduce the impact. Refer to Section 9.4 for examples of appropriate mitigation measures for construction impacts. Binding, enforceable mitigation measures should be incorporated as policies and implementation programs within the general or area plan.

### 9.3.2 OPERATIONAL CRITERIA AIR POLLUTANT AND PRECURSOR EMISSIONS

Long-term operational impacts to air quality are generally determined by continued operation of land uses pursuant to the general or area plan and vehicle travel behavior associated with these uses.

The evaluation of a proposed plan's operational emissions of CAPs and precursors pertains, in part, to the following questions regarding air quality from the Environmental Checklist Form ([Appendix G](#)) of the State CEQA Guidelines:

- III.a. Would the project conflict with or obstruct implementation of the applicable air quality plan?
- III.b. Would the project violate an air quality standard or contribute substantially to an existing or projected air quality violation?
- III.c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
- III.d. Would the project expose sensitive receptors to substantial pollutant concentrations?

Although the focus of this chapter is addressing the air quality questions from Appendix G of the State CEQA Guidelines, it is important to mention Senate Bill 743. SB 743 was adopted in 2013 and required the Governor's Office of Planning and Research (OPR) to amend the State CEQA Guidelines to provide alternative criteria to level of service (LOS) for evaluating transportation impacts. The goal of the new criteria is to promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. OPR provided [draft documents](#) which include the use of vehicle miles traveled (VMT) as the alternative criteria to LOS. Reducing VMT also reduces GHG and criteria pollutant emissions.

## ASSESSING EMISSIONS

### *Quantify Operational-Related CAPs and Precursors*

The lead agency shall quantify operational-related criteria air pollutants and precursors based on applicable District-recommended methods discussed in [Chapter 4 Operational Criteria Air Pollutant and Precursor Emissions](#). If the plan would become operational in phases, lead agencies should quantify the maximum daily operational mass emission levels of each individual phase after it becomes operational, as discussed in Section 4.2. Additionally, PM emissions have annual thresholds to consider.

## DETERMINING LEVEL OF SIGNIFICANCE

### *Evaluate Consistency with Adopted Air Quality Plans and the Metropolitan Transportation Plan/Sustainable Communities Strategy*

To evaluate plan consistency with regional air quality plans (ozone and particulate) and SACOG's [Metropolitan Transportation Plan/Sustainable Communities Strategy](#) (which includes growth principles from the [Preferred Blueprint Scenario](#)), the lead agency shall consider the following:

- The plan's consistency with air quality plans and the Metropolitan Transportation Plan/Sustainable Communities Strategy population growth projections;
- The relationship between the plan's projected vehicle miles traveled (VMT) and population growth (i.e., whether the two projections are proportional, or whether the VMT increases at a slower rate than population, indicating a successful mode shift); and
- The extent to which the plan implements adopted transportation control measures.

The [Preferred Blueprint Scenario](#) is a regional vision to accommodate the longer-term growth needs of the Sacramento region, and has been prepared as an example of how land use and transportation choices might be better integrated within the region, in part to benefit air quality. It is built on the principles of smart growth, promoting a wide range of housing products, reinvesting in already developed areas, protecting natural resource areas from urbanization, and providing transportation choices. If a project's consistency with adopted air quality plans and SACOG's Metropolitan Transportation Plan/Sustainable Communities Strategy (including growth principles from the Preferred Blueprint Scenario) is unclear in any way, lead agencies are encouraged to consult with District staff.

When analyzed at the program level, general or area plans are found to have a significant impact if they are not consistent with the adopted air quality plans. For disclosure purposes, the District recommends that program-level analyses also discuss whether the plan would be consistent with the Metropolitan Transportation Plan/Sustainable Communities Strategy (including growth principles from the Preferred Blueprint Scenario). General or area plans found to have a significant adverse impact shall implement all feasible mitigation measures to reduce the impact. Refer to Section 9.4 for examples of appropriate mitigation measures for operational impacts. Binding, enforceable mitigation measures should be incorporated as policies and implementation programs within the general or area plan.

### 9.3.3 TOXIC AIR CONTAMINANT EMISSIONS

Under the Clean Air Act, TACs are airborne pollutants that may be expected to result in an increase in mortality or serious illness or which may pose a present or potential hazard to human health. The types of adverse health effects from TACs are discussed in [Chapter 5 Toxic Air Contaminants](#). A wide range of sources, from industrial plants to households, emit TACs, which are addressed through risk management programs designed to eliminate, avoid, or minimize the risk of adverse health effects resulting from exposure. The California Air Resources Board (ARB) has listed approximately 200 toxic substances on the California Air Toxics Program's [TAC List](#).

The evaluation of a proposed plan's TAC emissions and exposure pertains to the following question regarding air quality from the Environmental Checklist Form ([Appendix G](#)) of the State CEQA Guidelines:

- III.d. Would the project expose sensitive receptors to substantial pollutant concentrations?

#### ASSESSING EXPOSURE

For TACs, impact evaluation techniques for general and area plans are identical to those employed at the project level. Refer to [Chapter 5](#) for additional guidance. General and area plans should also include language requiring that all development projects implement the District's [Basic Construction Emission Control Practices](#) to reduce diesel PM exhaust and fugitive dust emissions.

Construction-related TAC impacts should be addressed on a case-by-case basis, taking into consideration the specific construction-related characteristics of each project and proximity to off-site receptors, as applicable. Construction-related activities generally result in the generation of TACs, specifically diesel PM, from on-road haul trucks and off-road equipment exhaust emissions.

#### DETERMINING LEVEL OF SIGNIFICANCE

In addition to the guidance offered in [Chapter 5](#), for general and area plans to have a less-than-significant impact with respect to potential TACs, buffer zones should be considered around existing and proposed land uses that emit TACs. Such buffer zones should be included in proposed plan policies, land use maps, and implementing ordinances. ARB's [Land Use Handbook](#) offers advisory recommendations for buffer zones surrounding uses associated with TACs, such as freeways and high-traffic roads, commercial distribution centers, rail yards, ports, refineries, chrome platers, dry cleaners, gasoline stations, and industrial facilities, to reduce exposure of sensitive populations. The lead agency should refer to this handbook when evaluating whether the proposed general or area plan includes adequate buffer distances between TAC sources and sensitive receptors.

### 9.3.4 ODORS

While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public and can generate citizen complaints to

local governments and air districts. The adverse effects of odors on residential areas and other sensitive receptors, such as hospitals, day-care centers, and schools warrant the closest scrutiny; but consideration should also be given to other land use types where people congregate, such as recreational facilities, worksites, and commercial areas. Although the receptor(s) in question ultimately determine if a project has significant odor impacts, a number of operational and environmental factors also influence the extent to which those receptors are affected by odors.

The evaluation of a proposed plan's odor emissions pertains to the following question regarding air quality from the Environmental Checklist Form ([Appendix G](#)) of the State CEQA Guidelines:

III.e. Would the project create objectionable odors affecting a substantial number of people?

Lead agencies should consider all available pertinent information to qualitatively determine if a significant odor impact could potentially occur. This analysis should include consideration of the types of odor-emitting establishments or activities that could potentially occur in areas planned for commercial or industrial land uses (e.g., painting/coating operations associated with an industrial land use).

#### ASSESSING EXPOSURE

Impact evaluation techniques for general and area plans for odors are identical to those employed at the project level. Refer to [Chapter 7 Odors](#) for additional guidance. A potential odor impact can occur if proposed uses within the plan would generate odors that could adversely affect a substantial number of persons. Lead agencies should present all the odor parameters described in Chapter 7. The District considers this to be the minimum level of information necessary for lead agencies to make informed and accurate odor significance determinations.

#### DETERMINING LEVEL OF SIGNIFICANCE

In addition to the guidance offered in [Chapter 7](#), for general and area plans to have a less-than-significant odor impact, buffer zones should be established around proposed land uses that emit odors. Such buffer zones should be included in proposed plan policies, land use diagrams, and implementing ordinances. As identified in Chapter 7, the District has established [Recommended Odor Screening Distances](#) for evaluation of locating several types of utilities and industrial facilities. The lead agency should employ this guidance when evaluating whether the proposed general or area plan includes adequate buffer distances between odor sources and sensitive receptors.

### 9.3.5 GREENHOUSE GAS EMISSIONS

California's legislative mandate is to reduce total projected GHG emissions to 1990 levels by the year 2020 and 40 percent below 1990 levels by the year 2030. To achieve this target, future development must be planned and implemented in the most GHG-efficient manner possible. GHG-efficient development reduces VMT by supporting compact, dense, mixed-use, pedestrian- and bicycle-friendly, transit-oriented development. Development that

reduces VMT by shifting car trips to walking, biking and transit use also imparts numerous public health co-benefits, such as increases in rates of routine physical activity and corresponding reductions in rates of overweight, diabetes, hypertension, and other chronic conditions; fewer injuries and deaths from traffic collisions; and more direct visual surveillance of the urban environment, which leads to reduced rates of crime and violence. Local agencies are strongly encouraged to address GHG emissions when updating and/or adopting general and area plans. The general plan is perhaps the best venue for addressing GHG emissions in making meaningful progress toward attaining goals mandated by [Assembly Bill 32](#) (AB 32), the California Global Warming Solutions Act of 2006, while addressing CEQA requirements. On April 29, 2015, Governor Edmond Brown signed [Executive Order B-30-15](#). Executive Order B-30-15 requires that greenhouse gas emissions in California are reduced by 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050. On September 8, 2016, Governor Brown signed Senate Bill 32 (SB 32) into law which codified the mandate to reduce emissions by 40 percent below 1990 levels by 2030.

Promoted as the critical implementation tool for AB 32, [Senate Bill 375](#) (SB 375) introduced numerous changes in California's land use and transportation planning process. By firmly linking land use planning, transportation planning, affordable housing, and CEQA to GHG reductions, SB 375 places additional planning responsibilities on Metropolitan Planning Organizations (MPOs) throughout the state, which are now charged with preparing sustainable land use plans known as Sustainable Community Strategies (SCSs). The SCS is a preferred growth scenario that must be designed to achieve certain GHG reduction goals for transportation emissions, and becomes the land use allocation for transportation modeling in future Regional Transportation Plans (RTPs). Future RTP funding decisions must be consistent with the SCS, creating strong incentives for local governments to participate in these efforts in order to ensure funding for much-needed system improvements.

SB 375 also established guidelines for travel forecasting models to assure the models are responsive to development density, transit service levels, induced travel and land development, and bicycle and pedestrian travel. The California Air Resources Board (ARB) is required to review each region's SCS to verify that the land use allocation used in the RTP will achieve regional GHG reduction targets informed by the Regional Targets Advisory Committee (RTAC) and established by ARB. The Regional Housing Needs Assessment (RHNA) process has also been incorporated into the SCS by SB 375 to correspond to the GHG reduction targets.

[CEQA Guidelines Sections 15183.5\(a\) and \(b\)\(2\)](#) provide that if a general or area plan is adopted pursuant to a certified EIR that considers GHG emissions, and if the plan and its EIR incorporate development policies, standards, and mitigation measures achieving GHG reductions that result in a less-than-significant impact with respect to GHG emissions, this could alleviate the need to evaluate and mitigate GHGs at the project level for projects that are found to be consistent with the general or area plan. SB 375, when fully implemented, will provide some relief from CEQA analysis for high-density residential or mixed-use projects found to be consistent with GHG reduction measures contained within the Regional Transportation Plan/Sustainable Community Strategy EIR, as well as for Transportation Priority Projects meeting certain density and proximity-to-transit criteria.



The evaluation of GHG emissions pertains to the following questions regarding “Greenhouse Gas Emissions” from the Environmental Checklist Form ([Appendix G](#)) of the State CEQA Guidelines:

- VII.a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- VII.b. Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?

CEQA Guidelines [Section 15064.4](#) states that a lead agency should make a good faith effort, based on available information, to describe, calculate, or estimate the amount of GHG emissions resulting from a proposed general or area plan. The Guidelines give the lead agency the discretion to select the most appropriate tools based on substantial evidence.

AB 32, SB 32 and [Executive Order B-30-15](#) demonstrate California’s commitment to reducing the rate of GHG emissions and the state’s associated contribution to climate change, without intent to limit population or economic growth within the state. Thus, to achieve the goals of AB 32 and Executive Order B-30-15, which are tied to GHG emission rates of specific benchmark years (i.e., 1990), California would have to achieve a lower rate of emissions per unit of population and per unit of economic activity than it has now. Further, in order to accommodate future population and economic growth, the state would have to achieve an even lower rate of emissions per unit of population than was generated in 1990. The goal to achieve 1990 quantities of GHG emissions by 2020, emissions 40% below 1990 by 2030, and emissions 80% below 1990 by 2050 means that this will need to be accomplished in light of 30 to 60 years of population and economic growth in place beyond 1990. Thus, proposed general and area plans that would not require new development to achieve their fair share of reductions in GHG emissions would conflict with the spirit of the policy decisions contained in AB 32, SB 32 and Executive Order B-30-15, thus impeding California’s ability to comply with the mandate.

The District provides recommended [thresholds of significance for GHG emissions](#). Any general or area plan would certainly exceed the thresholds, leaving the lead agency the task of demonstrating all feasible mitigation. Lead agencies could look at other possible threshold options, such as determining whether the population and employment growth and resultant GHG emissions of the proposed plan are consistent with the State’s strategy to achieve the 2020 and future GHG emissions limits, as outlined in ARB’s *Climate Change Scoping Plan* and Executive Order. This option could employ an efficiency-based GHG metric such as per-capita emissions, per-job emissions, a “service population” metric that combines per-capita and per-job emissions, or other similar metrics.

The District’s recommendations on methodology and tools for analyzing GHG emissions related to proposed general and area plans are provided below. Lead agencies may also refer to the California Air Pollution Control Officers Association’s (CAPCOA’s) [Model Policies for Greenhouse Gases in General Plans](#) for additional guidance on addressing GHGs in the context of general and area plans, and CAPCOA’s [Quantifying Greenhouse Gas Mitigation Measures](#) for justifying GHG mitigation measures being incorporated into general and area plans.

## ASSESSING EMISSIONS

For construction impacts relative to GHGs, impact evaluation techniques for general and area plans are identical to those employed at the project level. Refer to [Chapter 6 Greenhouse Gas Emissions](#) for additional guidance.

### *Prepare GHG Emissions Inventory*

The District recommends quantifying community-wide GHG emissions from a general or area plan through development of a GHG emissions inventory and projection report. The emissions inventory should be conducted for a base year that includes existing conditions and should follow published ARB protocols for municipal and community-wide inventories. A range of tools are available to assist the lead agency to complete the inventory, including the following:

- [California Climate Action Registry's General Reporting Protocol](#);
- [ARB's Local Government Operations Protocol for the quantification and reporting of greenhouse gas emissions inventories](#); and
- [ARB's California Greenhouse Gas Emissions Inventory](#).

Direct coordination with ARB may be necessary to inventory GHG emissions from sectors not covered in the above documents.

The base year inventory should be expressed in terms of metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) emissions and account for municipal and community-wide emission sectors applicable in the jurisdiction such as transportation, commercial, residential, electricity, water use and treatment, solid waste, and agriculture.

### *Prepare GHG Emissions Projections*

The District recommends preparing a community-wide GHG emissions projection to identify expected levels for 2020, 2030 and 2050 and the projected year of general plan or area plan build-out. Two projections should be prepared for the years 2020, 2030 and 2050: a projection reflecting conditions without mitigation initiated by the lead agency, and a second projection, derived from the first, with mitigation that accounts for emissions reductions associated with proposed policies, programs, and plans included within the general or area plan. The first projection should be used as the basis for evaluation of the no-project alternative in the EIR, and should account for inherent improvements in energy and fuel efficiency, population and employment growth rates published by SACOG, planned expansions of municipal infrastructure or services, and anticipated statewide legislative requirements or mandates (e.g., Renewable Energy Portfolio, Green Building Code, Low Carbon Fuel Standard, passenger vehicle emission regulations). The second projection should be used as the basis for evaluation of the proposed project. Additional projections corresponding to plan alternatives considered within the EIR should also be prepared and included within the EIR's alternatives analysis. Examples of appropriate mitigation measures and reduction policies are included in Section 9.4.

Some GHG projections developed by lead agencies may be based on projected population growth while others may focus on projections about a community's future consumption of electricity, natural gas, water, and automotive fuels. Other projection methods may be based on expected changes in land use or growth by land use type. GIS-based planning models are available that can assist the lead agency in completing the projections. The projections should be expressed in metric tons CO<sub>2</sub>e emissions, and include the expected municipal and community-wide emissions across all sectors evaluated in the base year inventory.

The District encourages lead agencies to prepare similar projections for 2050, which is the target year by which the state's GHG emissions should be reduced to 80% below 1990 emission levels according to [Governor Schwarzenegger's Executive Order S-03-05](#) and [Governor Brown's Executive Order B-30-15](#). The lead agency should use the projected build-out emissions profile of the general or area plan as a benchmark to ensure that adoption of the plan would not preclude attainment of 2050 goals.

### *Determine Planned Population and Employment Levels*

State law requires that general plans identify the planned density and intensity of land uses for all land within the planning area established by the lead agency. These measures of density (typically dwelling units per acre) and intensity (typically floor-to-area ratios) are often translated into expected population and employment levels for estimating traffic impacts associated with the proposed plan. Most demand-based transportation models use population and employment to determine trip generation. Thus, measures of population and employment are typically available for general and area plans. If the evaluation of GHG impacts is performed using an efficiency-based metric, estimates of the number of residents and jobs permitted in the general or area plan are needed for 2020, 2030 and 2050, the build-out year of the proposed plan, the no-project alternative, and additional alternatives the lead agency is evaluating for the environmental review.

### DETERMINING LEVEL OF SIGNIFICANCE

The lead agency should compare projected emissions for 2020, 2030 and 2050 and the build-out year of the proposed plan to the District's thresholds of significance or its own established significance thresholds. Build-out years beyond 2020, 2030 and 2050 should disclose the emissions and show a downward emissions trajectory consistent with the State of California's long term GHG reduction goals. If the lead agency determines that GHG emissions associated with the proposed general or area plan would exceed the significance thresholds established by the lead agency, the general or area plan would be considered to have a significant impact with respect to GHG emissions, and mitigation would be required.

General or area plans found to have a significant impact should implement all feasible mitigation measures to reduce impacts. Refer to Section 9.4 for examples of appropriate mitigation measures for reducing operational GHG emissions. Binding, enforceable mitigation measures should be incorporated as policies and implementation programs within the general or area plan.

### *Climate Action Plan Option*

Lead agencies may choose to analyze and mitigate GHG emissions in a GHG reduction plan or similar document, sometimes referred to as a Climate Action Plan. In some cases, a plan to

reduce GHG emissions may be used in a cumulative impacts analysis. The District supports preparation of Climate Action Plans detailing the jurisdiction's approach to reducing GHGs as a companion document implementing proposed general or area plans. The District expects Climate Action Plans to cover the elements required by State CEQA Guidelines Section [15183.5\(b\)\(1\)](#), which include:

- Quantify existing and projected (over a specified time period) GHG emissions for the defined area resulting from activities within that area;
- Identify and analyze GHG emissions resulting from specific actions or categories of actions anticipated in the defined area;
- Establish a level at which emissions of GHG from the defined area would not be cumulatively considerable, based on substantial evidence;
- Specify measures or groups of measures, if implemented on a project-by-project basis, that would collectively achieve the specified GHG emissions level, demonstrated by substantial evidence;
- Establish a monitoring mechanism for the Climate Action Plan's progress at achieving the GHG emissions level and require amendments to the plan if the plan is not achieving specified levels; and
- Adopt the Climate Action Plan in a public process following environmental review.

Pursuant to CEQA Guidelines Sections [15064\(h\)\(3\)](#) and [15130\(d\)](#), a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan or mitigation program under specified circumstances. A general or area plan would be assumed to have a less-than-significant impact to GHG emissions if the lead agency has prepared and adopted a Climate Action Plan that meets the above criteria and that has been evaluated pursuant to CEQA and has a certified or approved environmental document.

State CEQA Guidelines Section [15183.5\(b\)\(2\)](#) provides specific direction for use of a "plan for the reduction of greenhouse gas emissions" by "later" projects. The Guidelines state that "an environmental document that relies on a greenhouse gas reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project."

If the lead agency has prepared and adopted a Climate Action Plan, but the Plan does not address the entirety of the general or area plan project area, the lead agency should consider amending its existing Climate Action Plan to include the additional areas or adopt a separate Climate Action Plan for the additional areas. It may be a common situation that a Climate Action Plan adopted by a city applies only to the established city limits, whereas the city's proposed general plan addresses a larger planning area encompassing the city's sphere of influence and areas beyond.

## 9.4 MITIGATION

General and area plans often have significant, unavoidable adverse air quality impacts due to the SVAB's nonattainment status and the cumulative impacts of growth to air quality. In addition, general and area plans generally have long-term time horizons of twenty years or more. For these reasons, it is essential for general and area plans to incorporate all feasible mitigation measures to reduce air quality impacts. Mitigation measures for general and area plans are often broad in scope due to the long timeframe and comprehensive nature of general and area plan policies and programs.

This section contains mitigation measures recommended for general and area plans prepared within Sacramento County. Measures are identified by state-required general plan element, planning issue, development phase, and type of air quality impact. Proposed general and area plans should incorporate mitigation measures applicable to their elements and planning issues. These measures are a consolidation of measures identified in many documents including but not limited to CAPCOA's *CEQA and Climate Change*, CAPCOA's *Model GHG Policies for General Plans*, the District's *Guide for Land Use Emission Reductions*, the District's *Model General Plan Air Quality Element*, and the State of California, Department of Justice, Office of the Attorney General's list of Global Warming Measures.

Some of the mitigation measures listed in this section also have the potential to deliver public health benefits beyond those generated by cleaner air. For example, when mitigation is employed to increase usage of active transportation, more residents will benefit from the protective qualities of regular physical activity. Mitigation measures that result in creation of farmers markets, community gardens and urban agriculture programs can lead to improved nutritional intake among residents. The planting or retaining of trees as mitigation to protect from exposure to particulates or to reduce energy consumption in buildings can also lead to lower risk of overweight, lower likelihood of asthma, and higher levels of social cohesion, which can lower crime rates.<sup>2</sup>

In the list of air quality-related mitigation measures that follows, the measures that return additional public health benefits not related to air quality are indicated.

General and area plans are the appropriate place to establish community-wide air quality policies that reinforce regional air quality plans. General and area plans present opportunities to establish requirements for new construction, future development, and redevelopment projects within a community that will assist in improving local and regional air quality. Binding, enforceable mitigation measures should be incorporated as policies and implementation programs within the general or area plan to the greatest extent feasible. Ideally, mitigation measures should be incorporated within the context of the proposed project itself, rather than introduced as corrective actions within the proposed project's EIR.

Please note that the measures list is not exhaustive. Lead agencies should also refer to the California Air Pollution Control Officers Association's (CAPCOA's) [Model Policies for Greenhouse Gases in General Plans](#) for additional guidance on addressing GHGs in the context of general and area plans and CAPCOA's [Quantifying Greenhouse Gas Mitigation](#)

<sup>2</sup> Sacramento Tree Foundation, Green Prescription Study, <http://www.sactree.com/pages/472>, accessed 6/6/2016.

Measures for justifying GHG mitigation measures being incorporated into general and area plans.

### 9.4.1 LAND USE ELEMENT

#### URBAN FORM

| Mitigation Measure or General/Area Plan Policy  | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|---|--------------|------------|------|-------|------|---------------------------|
|   | Construction | Operations |      |       |      |                           |
| Create and enhance landscaped greenway, trail, and sidewalk connections between neighborhoods, commercial areas, activity centers, and parks.                               |              | X          |      |       | X    | X                         |
| Establish an urban growth boundary, restrict urban development beyond the boundary, and streamline entitlement processes within the boundary for consistent projects.       |              |            |      |       | X    | X                         |
| Adopt policies supporting infill development in communities with established growth boundaries.   |              | X          |      |       | X    | X                         |
| Ensure that proposed land uses are supported by a multi-modal transportation system and that the land uses themselves support the development of the transportation system. |              | X          |      |       | X    | X                         |
| Designate a central city core for high-density and mixed-use development.   |              | X          |      |       | X    | X                         |
| Discourage high-intensity office and commercial uses from locating outside of designated centers or downtowns, or far from residential areas and transit stations.          |              | X          |      |       | X    | X                         |
| Provide financial incentives and density bonuses to entice development within the designated central city.  |              | X          |      |       | X    | X                         |
| Provide public education about benefits of well-designed, higher-density housing and relationships between land use and transportation.                                     |              | X          |      |       | X    | X                         |

#### COMPACT DEVELOPMENT

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Achieve a jobs/housing balance or improve the jobs/housing ratio within the plan area.   |              | X          |      |       | X    | X                         |
| Create incentives to attract mixed-use projects to older commercial and industrial areas.  |              | X          |      |       | X    | X                         |
| Adopt incentives for the concurrent development of retail, office, and residential land uses within mixed-use projects or areas. Require mixed-use development to include ground-floor retail. |              | X          |      |       | X    | X                         |
| Provide adaptive re-use alternatives and incentives to demolition of historic buildings.   | X            | X          |      |       | X    |                           |

| Mitigation Measure or General/Area Plan Policy  | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|---|--------------|------------|------|-------|------|---------------------------|
|   | Construction | Operations |      |       |      |                           |
| Facilitate lot consolidation that promotes integrated development with improved pedestrian and vehicular access.  |              | X          |      |       | X    | X                         |
| Reinvest in existing neighborhoods and promote infill development as a preference over new, greenfield development.   |              | X          |      |       | X    | X                         |
| Adopt ordinances enabling use of Transferrable Development Rights (TDRs) to facilitate density transfers to mixed-use projects within urban areas from outlying properties beyond urban areas.  |              |            |      |       | X    | X                         |
| Provide for zone districts that enable complete, walkable neighborhoods, such as supermarkets, parks and recreational facilities, schools, and small-scale offices.   |              | X          |      |       | X    | X                         |
| Ensure that new development finances the full cost of expanding public infrastructure and services to provide an economic incentive for incremental expansion. Where feasible, scale development fees to promote desired density and development site criteria. |              | X          |      |       | X    | X                         |
| Require new developments to extend sewer and water lines from existing systems or to be in conformance with a master sewer and water plan.  | X            | X          |      |       | X    |                           |

### TRANSIT-ORIENTED DENSITY AND DESIGN

| Mitigation Measure or General/Area Plan Policy  | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|---|--------------|------------|------|-------|------|---------------------------|
|   | Construction | Operations |      |       |      |                           |
| Require all development projects proposed within 2,000 feet of an existing or planned light rail transit, commuter rail, express bus, or transit corridor stop to incorporate site design measures that enhance the efficiency of the transit system. |              | X          |      |       | X    | X                         |
| Develop transit/pedestrian-oriented design guidelines. Identify and designate appropriate sites during general plan updates and amendments.   |              | X          |      |       | X    | X                         |
| Plan areas within ¼ and ½ mile of locations identified as transit hubs and commercial centers for higher-density development.   |              | X          |      |       | X    | X                         |
| Develop zoning standards that facilitate successful development of projects meeting density and proximity-to-transit criteria established for SB 375 Transportation Priority Projects.  |              | X          |      |       | X    | X                         |
| Promote transit-oriented development of brownfield sites and other underutilized properties near existing public transportation.  |              | X          |      |       | X    | X                         |

## SUSTAINABLE DEVELOPMENT

| Mitigation Measure or General/Area Plan Policy  | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|---|--------------|------------|------|-------|------|---------------------------|
|   | Construction | Operations |      |       |      |                           |
| Ensure new construction complies with California Green Building Code Standards and local green building ordinances.   |              | X          |      |       | X    | X                         |
| Promote re-use of previously developed property, construction materials, and/or vacant sites within a built-up area.  |              | X          |      |       | X    |                           |
| Avoid development of isolated residential areas near hillsides or other areas where such development would require significant infrastructure investment or adversely impact biological resources.  |              |            |      |       | X    | X                         |
| Require orientation of buildings to maximize passive solar heating during cool seasons, avoid solar heat gain during hot periods, enhance natural ventilation, and promote effective use of daylight. Orientation should optimize opportunities for on-site solar generation. |              | X          |      |       | X    | X                         |
| Provide land area zoned for commercial and industrial uses to support a mix of retail, office, professional, service, and manufacturing businesses.   |              | X          |      |       | X    | X                         |
| Provide permitting incentives for energy efficient building projects.   |              | X          |      |       | X    |                           |
| Develop a joint powers agreement or other legal instrument that provides an incentive for counties to discourage urban commercial development in unincorporated areas and promote urban infill and redevelopment projects.  |              | X          |      |       | X    | X                         |

## ACTIVITY CENTERS

| Mitigation Measure or General/Area Plan Policy  | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|---|--------------|------------|------|-------|------|---------------------------|
|   | Construction | Operations |      |       |      |                           |
| Provide pedestrian amenities, traffic-calming features, plazas and public areas, attractive streetscapes, shade trees, lighting, and retail stores at activity centers. |              | X          |      |       | X    | X                         |
| Provide for a mix of complementary retail uses to be located together to create activity centers and commercial districts serving adjacent neighborhoods.               |              | X          |      |       | X    | X                         |
| Permit upper-story residential and office uses in neighborhood shopping areas.  |              | X          |      |       | X    | X                         |
| Provide pedestrian links between commercial districts and neighborhoods.  |              | X          |      |       | X    | X                         |
| Provide benches, streetlights, public art, and other amenities in activity centers to attract pedestrians.  |              | X          |      |       | X    | X                         |



## GREEN ECONOMY AND BUSINESSES

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Work with businesses to encourage employee transit subsidies and shuttles from transit stations.                       |              | X          |      |       | X    | X                         |
| Encourage businesses to participate in local green business programs.  |              | X          |      |       | X    | X                         |
| Offer incentives to attract businesses to city core and infill areas.  |              | X          |      |       | X    | X                         |
| Work to attract green businesses and promote local green job training programs.  |              | X          |      |       | X    |                           |
| Support regional collaboration to strengthen the green economy.  |              | X          |      |       | X    |                           |
| Provide outreach and education to local businesses on energy, waste, and water conservation benefits and cost savings. |              | X          |      |       | X    |                           |
| Support innovative energy technology companies.  |              | X          |      |       | X    |                           |

## 9.4.2 CIRCULATION ELEMENT

## LOCAL CIRCULATION

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Create or reinforce a grid street pattern with small block sizes and maintain high connectivity within the roadway network.  |              | X          |      |       | X    | X                         |
| Require development of “Complete Streets” that provide equal access for all users in the roadway design.   |              | X          |      |       | X    | X                         |
| Reduce required road width standards where feasible to calm traffic and encourage use of alternative transportation.   |              | X          |      |       | X    | X                         |
| Implement circulation improvements that reduce vehicle idling, such as signal timing systems and controlled intersections.   |              | X          | X    |       | X    |                           |
| Consider alternatives such as increasing public transit or improving bicycle or pedestrian travel routes before funding transportation improvements that increase VMT. |              | X          |      |       | X    | X                         |
| Require payment of transportation impact fees and/or roadway and transit improvements as a condition upon new development.   |              | X          |      |       | X    | X                         |
| Minimize use of cul-de-sacs and incomplete roadway segments. Identify opportunities to improve pedestrian and bicycle connectivity in areas with existing cul-de-sacs. |              | X          |      |       | X    | X                         |

| Mitigation Measure or General/Area Plan Policy  | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|---|--------------|------------|------|-------|------|---------------------------|
|   | Construction | Operations |      |       |      |                           |
| Actively promote walking as a safe mode of local travel, particularly for children attending local schools.   |              | X          |      |       | X    | X                         |
| Consult with school districts, private schools, and other operators to coordinate local busing, to expand ride-sharing programs, and to replace older diesel buses with low- or zero-emission vehicles.             |              | X          | X    |       | X    | X                         |
| Evaluate all busing options as a preferential strategy to roadway improvements in the vicinity of schools to ease congestion.   |              | X          |      |       | X    | X                         |
| Establish public/private partnerships to develop satellite and neighborhood work centers for telecommuting.   |              | X          |      |       | X    |                           |
| Employ traffic calming methods such as median landscaping and provision of bike or transit lanes to slow traffic, improve roadway capacity, and address safety issues.  |              | X          |      |       | X    | X                         |
| Develop infrastructure to support the use of zero-emission vehicles and clean alternative fuels, such as development of electric vehicle charging facilities and conveniently located alternative fueling stations. |              | X          |      |       | X    |                           |
| Establish ordinances or permit conditions limiting deliveries to commercial and industrial locations to off-peak hours in high-traffic areas.   |              | X          |      |       | X    |                           |

## REGIONAL TRANSPORTATION

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Ensure that submittals of transportation improvement projects to be included in regional transportation plans (RTP, RTIP, CMP, etc.) are consistent with the air quality goals and policies of the general plan. |              | X          |      |       | X    |                           |
| Consult with adjacent jurisdictions to address the impacts of regional development patterns on the circulation system.   |              | X          |      |       | X    | X                         |
| Prioritize transportation projects that contribute to a reduction in per-capita vehicle miles traveled.  |              | X          |      |       | X    | X                         |
| Adopt a (or implement an existing) Transportation Demand Management Ordinance.   |              | X          |      |       | X    | X                         |
| Create financing programs for the purchase or lease of vehicles used in employer ride-sharing programs.  |              | X          |      |       | X    |                           |
| Consult with adjacent jurisdictions to maintain adequate service levels at shared intersections and to provide adequate capacity on regional routes for through traffic.   |              | X          |      |       | X    |                           |
| Work to provide a strong paratransit system that promotes the mobility of all residents and educate residents about local mobility choices.  |              | X          |      |       | X    | X                         |
| Designate sites for park-and-ride lots. Consider funding of the park-and-ride lots as mitigation during CEQA review of residential development projects.   |              | X          |      |       | X    |                           |

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Consult with appropriate transportation agencies and major employers to establish express buses and vanpools to increase the patronage of park-and-ride lots.      |              | X          |      |       | X    | X                         |
| Allow developers to reach agreements with auto-oriented shopping center owners to use commercial parking lots as park-and-ride lots and multimodal transfer sites. |              | X          |      |       | X    | X                         |

### PARKING

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Reduce parking for private vehicles while increasing options for alternative transportation.   |              | X          |      |       | X    | X                         |
| Reduce or eliminate minimum parking requirements for new buildings.  |              | X          |      |       | X    | X                         |
| Establish commercial district parking fees and/or parking benefit districts. Invest meter revenues in pedestrian infrastructure and transit amenities. |              | X          |      |       | X    | X                         |
| Require that parking is paid separately and is not included in rent for residential or commercial space.   |              | X          |      |       | X    | X                         |
| Encourage parking sharing between different land uses.   |              | X          |      |       | X    | X                         |
| Encourage businesses to offer parking cash-outs to employees.  |              | X          |      |       | X    | X                         |
| Establish incentives and requirements to reduce on-site parking demand and promote ride-sharing and use of public transit for special events.          |              | X          |      |       | X    | X                         |
| Require new commercial and retail developments to provide prioritized parking for electric vehicles and vehicles using alternative fuels.              |              | X          |      |       | X    |                           |

### BICYCLES AND PEDESTRIANS

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Provide safe and convenient pedestrian and bicycle connections to and from activity centers, commercial districts, offices, neighborhoods, |              | X          |      |       | X    | X                         |

| Mitigation Measure or General/Area Plan Policy  | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|---|--------------|------------|------|-------|------|---------------------------|
|   | Construction | Operations |      |       |      |                           |
| schools, other major activity centers.  |              |            |      |       |      |                           |
| Ensure that non-motorized transportation systems are connected and not interrupted by impassable barriers, such as freeways.                |              | X          |      |       | X    | X                         |
| Provide pedestrian pathways that are well-shaded and pleasantly landscaped to encourage use.  |              | X          |      |       | X    | X                         |
| Consult with transit providers to increase the number of bicycles that can be accommodated on buses.  |              | X          |      |       | X    | X                         |
| Provide crosswalks and sidewalks along streets that are accessible for people with disabilities and people who are physically challenged.   |              | X          |      |       | X    | X                         |
| Prohibit on-street parking to reduce bicycle/automobile conflicts in appropriate target areas.  |              | X          |      |       | X    | X                         |
| Prohibit projects that impede bicycle and walking access.   |              | X          |      |       | X    | X                         |
| Retrofit abandoned rail corridors as segments of a bikeway and pedestrian trail system.   |              | X          |      |       | X    | X                         |
| Require commercial developments and business centers to include bicycle amenities such as bicycle racks, showers, and lockers in buildings. |              | X          |      |       | X    | X                         |

## REGIONAL TRANSIT

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Support regional rail service and consult with rail operators to expand services.  |              | X          |      |       | X    | X                         |
| Create activity centers and transit-oriented development projects near transit stations.   |              | X          |      |       | X    | X                         |
| Support programs to provide neighborhood electric vehicles for short trips to and from rail transit stops and transit centers.   |              | X          |      |       | X    |                           |
| Give funding preference to investment in public transit over investment in infrastructure for private automobile traffic.  |              | X          |      |       | X    | X                         |
| Develop access management plans to reduce conflicts between transit vehicles and other vehicles.   |              | X          |      |       | X    |                           |
| Establish transit signal priority and bypass lanes where feasible.   |              | X          |      |       | X    | X                         |
| Establish a local shuttle service to connect neighborhoods, commercial centers, and public facilities to rail transit.   |              | X          |      |       | X    | X                         |
| Provide seniors and those with physical disabilities who desire maximum personal freedom and independence of lifestyle with unimpeded access to public transportation. |              | X          |      |       | X    | X                         |

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Provide transit shelters that are comfortable attractive, and provide accommodation for transit riders. Ensure that shelters provide shade, route information, benches and lighting.                         |              | X          |      |       | X    | X                         |
| Design all arterial and collector streets that are planned as transit routes to allow for the efficient operation of public transit.   |              | X          |      |       | X    | X                         |
| Require transit providers to coordinate intermodal time schedules.   |              | X          |      |       | X    | X                         |
| Develop a uniform regional fare system to reduce the number of required passes and tickets.  |              | X          |      |       | X    | X                         |
| Provide riders with real-time arrival and departure times at transit stops.  |              | X          |      |       | X    | X                         |
| Develop and implement an online trip-planning program.   |              | X          |      |       | X    | X                         |
| Implement a guaranteed-ride-home program for those who commute using alternative modes. Require employers subject to a TDM ordinance to subscribe and participate. Encourage other employers to participate. |              | X          |      |       | X    | X                         |

### 9.4.3 CONSERVATION ELEMENT

#### MUNICIPAL OPERATIONS

| Mitigation Measure or General/Area Plan Policy  | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|---|--------------|------------|------|-------|------|---------------------------|
|   | Construction | Operations |      |       |      |                           |
| Replace existing City vehicles with ultra-low or zero-emission vehicles and purchase new low-emission vehicles.   |              | X          |      |       | X    |                           |
| Require that all new government buildings, and all major renovations and additions, meet identified green building standards.   |              | X          |      |       | X    |                           |
| Require that new municipal employment and service facilities are located on transit corridors, unless their use is incompatible with other uses located along the corridor. |              | X          |      |       | X    | X                         |
| Install cost-effective renewable energy systems in all city buildings and purchase remaining electricity from renewable sources.  |              | X          |      |       | X    |                           |
| Support the use of teleconferencing in lieu of city/county employee travel to conferences and meetings when feasible.   |              | X          |      |       | X    |                           |
| Require city/county departments to set up telecommuting programs as part of their trip reduction strategies.  |              | X          |      |       | X    |                           |
| Install energy efficient lighting retrofits and occupancy sensors, and institute a “lights out at night” policy.  |              | X          |      |       | X    |                           |
| Require environmentally responsible government purchasing. Require or give preference to products that reduce or eliminate indirect GHG emissions.                          |              | X          |      |       | X    |                           |

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Investigate the feasibility of using solar (photovoltaic) street lights instead of conventional street lights that are powered by electricity. |              | X          |      |       | X    |                           |
| Support investment in cost-effective land use and transportation modeling and geographic information system technology.                        |              | X          | X    | X     | X    |                           |
| Install LED lighting for all traffic light systems.  |              |            |      |       | X    |                           |
| Implement a timed traffic light system to reduce idling.   |              | X          |      |       | X    |                           |
| Use native and drought-tolerant plants, proper soil preparation, and efficient irrigation systems for landscaping.                             |              |            |      |       | X    |                           |

### AIR QUALITY – SENSITIVE RECEPTORS

| Mitigation Measure or General/Area Plan Policy  | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|---|--------------|------------|------|-------|------|---------------------------|
|   | Construction | Operations |      |       |      |                           |
| Require residential development projects and projects categorized as sensitive receptors to be located an adequate distance from existing and potential sources of TACs and odors.  |              |            | X    | X     |      |                           |
| Require new air pollution point sources such as, but not limited to, industrial, manufacturing, and processing facilities to be located an adequate distance from residential areas and other sensitive receptors.        | X            | X          | X    | X     |      |                           |
| Consult with the District to identify TAC sources and determine the need for and requirements of a health risk assessment for proposed developments.  |              |            | X    | X     |      |                           |
| Consult with project proponents during the pre-application review process to avoid inappropriate uses at affected sites and during the environmental review process for general plan amendments and general plan updates. |              | X          | X    | X     |      |                           |
| Require project proponents to prepare health risk assessments in accordance with District-recommended procedures as part of environmental review when the proposed project has associated air-toxic emissions.            |              |            | X    |       |      |                           |
| Designate adequate industrial land in areas downwind and well-separated from sensitive uses.  |              |            | X    | X     |      |                           |
| Designate non-sensitive land uses for areas surrounding industrial sites.   |              | X          | X    | X     |      |                           |
| Protect vacant industrial sites from encroachment by residential or other sensitive uses through appropriate zoning.  |              | X          | X    | X     |      |                           |
| Require indoor air quality equipment, such as air filters, to be installed at schools, residences, and other sensitive receptor uses located near pollution sources.  |              |            | X    | X     |      |                           |

| Mitigation Measure or General/Area Plan Policy  | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|---|--------------|------------|------|-------|------|---------------------------|
|   | Construction | Operations |      |       |      |                           |
| Quantify the existing and added health risks to new sensitive receptors or for new sources. |              |            | X    |       |      |                           |
| Utilize pollution-absorbing trees and vegetation in buffer areas.                           |              | X          | X    |       | X    | X                         |

### AIR QUALITY – PARTICULATE MATTER AND DUST CONTROL

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Include PM <sub>10</sub> and PM <sub>2.5</sub> control measures as conditions of approval for subdivision maps, site plans, and grading permits.   | X            | X          |      |       |      |                           |
| Minimize vegetation removal required for fire prevention.  | X            | X          |      |       |      | X                         |
| Require alternatives to discing, such as mowing, to the extent feasible. Where vegetation removal is required for aesthetic or property maintenance purposes, encourage or require alternatives to discing.                          | X            | X          |      |       | X    | X                         |
| Require subdivision designs and site planning to minimize grading and use landform grading in hillside areas.  | X            |            |      |       |      |                           |
| Condition grading permits to require that graded areas be stabilized from the completion of grading to commencement of construction.   | X            |            |      |       |      |                           |
| Require all access roads, driveways, and parking areas serving new commercial and industrial development to be constructed with materials that minimize particulate emissions and are appropriate to the scale and intensity of use. | X            |            |      |       |      |                           |
| Develop a street-cleaning program aimed at removing heavy silt loadings from roadways that result from sources such as storm water runoff and construction sites.  | X            | X          |      |       |      |                           |
| Pave shoulders and pave or landscape medians. Curb and gutter installation may provide additional benefits where paving is contiguous to the curb.   | X            | X          |      |       | X    |                           |

## WATER CONSERVATION

| Mitigation Measure or General/Area Plan Policy  | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|---|--------------|------------|------|-------|------|---------------------------|
|   | Construction | Operations |      |       |      |                           |
| Require residential remodels and renovations to improve plumbing fixture and fixture-fitting water efficiency by an established amount above the California Building Standards Code water efficiency standards. |              |            |      |       | X    |                           |
| Provide water use audits to identify conservation opportunities and financial incentives for adopting identified efficiency measures.   |              |            |      |       | X    |                           |
| Establish requirements to install high-efficiency plumbing fixtures and tankless water heaters in new development and residential remodels and renovations.   |              |            |      |       | X    |                           |
| Require use of native and drought-tolerant plants, proper soil preparation, and efficient irrigation systems for landscaping.   |              |            |      |       | X    |                           |
| Maximize use of native, low-water plants for landscaping of areas adjacent to sidewalks or other impermeable surfaces.  |              |            |      |       | X    |                           |
| Increase use of recycled and reclaimed water for landscaping projects.  |              |            |      |       | X    |                           |
| Adopt a water-efficient landscaping ordinance.  |              |            |      |       | X    |                           |
| Provide public water conservation education.  |              |            |      |       | X    |                           |
| Reduce pollutant runoff from new development through use of Best Management Practices.  | X            | X          | X    |       | X    |                           |
| Minimize impervious surfaces and associated urban runoff pollutants in new development and reuse projects.  | X            | X          | X    |       | X    |                           |
| Utilize permeable surfaces and green roof technologies where appropriate.   |              | X          | X    |       | X    |                           |

## ENERGY CONSERVATION

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Adopt a local green building ordinance that requires new development and redevelopment projects for both residential and commercial buildings to incorporate sufficient green building methods and techniques to qualify for the equivalent of a current LEED Certified rating, Build It Green, or equivalent rating system. |              |            |      |       | X    |                           |
| Adopt energy efficiency performance standards for buildings that achieve a greater reduction in energy and water use than otherwise required by state law.   |              |            |      |       | X    |                           |
| Conduct energy efficiency audits of existing buildings by checking, repairing, and readjusting heating, ventilation, air conditioning, lighting,   |              |            |      |       | X    |                           |



| Mitigation Measure or General/Area Plan Policy  | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|---|--------------|------------|------|-------|------|---------------------------|
|   | Construction | Operations |      |       |      |                           |
| water heating equipment, insulation and weatherization. Offer financial incentives for adoption of identified efficiency measures.  |              |            |      |       |      |                           |
| Require implementation of energy-efficient design features in new development, including appropriate site orientation, use of light-color roofing and building materials, and use of evergreen and wind-break trees to reduce heating and cooling fuel consumption. |              |            |      |       | X    | X                         |
| Adopt residential and commercial energy efficiency retrofit ordinances that require upgrades as a condition of issuing permits for renovations or additions, and on the sale of residences and buildings.   |              |            |      |       | X    |                           |
| Facilitate cooperation between neighboring development projects to use on-site renewable energy supplies or combined heat and power co-generation facilities.   |              |            |      |       | X    |                           |
| Develop a comprehensive renewable energy financing and informational program for residential and commercial uses.   |              |            |      |       | X    |                           |
| Partner with community services agencies to fund energy efficiency projects for low-income residents.   |              |            |      |       | X    |                           |
| Encourage the installation of energy efficient fireplaces in lieu of normal open-hearth fireplaces. Prohibit installation of wood-burning devices.  | X            | X          |      |       | X    |                           |
| Provide natural gas lines or electrical outlets to backyards to encourage the use of natural gas or electric barbecues, and electric gardening equipment.   | X            | X          |      |       |      |                           |
| Implement Community Choice Aggregation (CCA) for renewable electricity generation.  |              |            |      |       | X    |                           |
| Establish standards for new development and for large redevelopment or rehabilitation to reduce exterior heat gain for non-roof, impervious site landscape features, including roads, sidewalks, courtyards, parking lots, and driveways.                           |              |            |      |       | X    |                           |
| Adopt a heat island mitigation plan that requires use of cool roofs and pavements and shade trees. Inspect and enforce state requirements for cool roofs on non-residential re-roofing projects.  |              |            |      |       | X    | X                         |

## SOLID WASTE

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Achieve established local and regional waste-reduction and diversion goals. Adopt more stringent waste reduction goals.                |              |            |      |       | X    |                           |
| Establish programs that enable residents to donate or recycle surplus furniture, old electronics, clothing, and other household items. |              |            |      |       | X    |                           |
| Establish methane recovery in local landfills and wastewater treatment plants to generate electricity.                                 |              |            |      |       | X    |                           |

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Adopt a construction and demolition waste recovery ordinance, requiring building projects to recycle or reuse a minimum percentage of unused or leftover building materials. |              | X          |      |       | X    |                           |
| Implement waste-to-energy projects where characteristics meet criteria for effective energy generation.  |              |            |      |       | X    |                           |
| Participate in or initiate a composting program for restaurants and residences.  |              |            |      |       | X    |                           |
| Implement recycling programs for businesses and construction waste.  | X            | X          |      |       | X    |                           |
| Prohibit the distribution of styrofoam containers and plastic bags by businesses.  |              | X          |      |       | X    |                           |

#### 9.4.4 OPEN SPACE ELEMENT

##### COMMUNITY FORESTRY

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Require inclusion of trees and landscaping for all new development projects.   |              |            |      |       | X    | X                         |
| Require that trees larger than a specified diameter that are removed to accommodate development must be replaced at a set ratio.   |              |            |      |       | X    | X                         |
| Provide adequate funding to manage and maintain the existing community forest, including sufficient funds for tree planting, pest control, scheduled pruning, and removal and replacement of dead trees. |              |            |      |       | X    | X                         |
| Provide public education regarding the benefits of street trees and the community forest.  |              |            |      |       | X    |                           |
| Include the planting of street trees whenever feasible on all new or rehabilitated roads.  |              |            |      |       | X    | X                         |

## SUSTAINABLE AGRICULTURE

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Require agricultural practices be conducted in a manner that minimizes harmful effects on soils, air and water quality, and marsh and wildlife habitat. Sustainable agricultural practices should be addressed in the Climate Action Plan to address climate change effects. | X            | X          |      |       | X    |                           |
| Preserve forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas and other open spaces that provide carbon sequestration benefits.  | X            | X          |      |       | X    | X                         |
| Establish a mitigation program for establishing conservation areas. Impose mitigation fees on development of such lands and use funds generated to protect existing, or create replacement, conservation areas.  | X            | X          |      |       | X    |                           |
| Require no-till farming, crop rotation, cover cropping, and residue farming.   | X            | X          |      |       | X    |                           |
| Require the use of appropriate vegetation within urban-agricultural buffer areas.  |              |            |      |       | X    | X                         |
| Protect grasslands from conversion to non-agricultural uses.   | X            | X          |      |       | X    |                           |
| Support energy production activities that are compatible with agriculture, including biogas, wind and solar.   |              |            |      |       | X    |                           |
| Allow alternative energy projects in areas zoned for agriculture or open space where consistent with primary uses.   |              |            |      |       | X    |                           |
| Provide spaces within the community suitable for farmers markets.  |              |            |      |       | X    | X                         |
| Promote local produce and garden programs at schools.  |              |            |      |       | X    | X                         |
| Establish an urban agriculture or community garden program to increase local food security and provide local recreation amenities.   |              |            |      |       | X    | X                         |

## PARKS AND RECREATION

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Expand and improve community recreation amenities including parks, pedestrian trails and connections to regional trail facilities.                           |              |            |      |       | X    | X                         |
| Require payment of park fees and/or dedication and provision of parkland, recreation facilities and/or multi-use trails as a condition upon new development. |              |            |      |       | X    | X                         |
| Encourage development of pocket parks in neighborhoods. Improve equal accessibility to park space across communities.  |              |            |      |       | X    | X                         |

| Mitigation Measure or General/Area Plan Policy                                  | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|---|--------------|------------|------|-------|------|---------------------------|
|   | Construction | Operations |      |       |      |                           |
| Encourage joint use of parks with schools and community centers and facilities. |              |            |      |       | X    | X                         |

## 9.4.5 HOUSING ELEMENT

### AFFORDABLE HOUSING

| Mitigation Measure or General/Area Plan Policy  | CAPs         |            | TACs | Odors | GHGs | Public Health Co-benefits |
|---|--------------|------------|------|-------|------|---------------------------|
|   | Construction | Operations |      |       |      |                           |
| Ensure a portion of future residential development is affordable to low- and very-low-income households and mix affordable housing units with market-rate units.  |              |            |      |       | X    | X                         |
| Target local funds, including redevelopment and Community Development or Energy Efficiency Block Grant resources, to assist affordable housing developers in incorporating energy-efficient designs and features. |              |            |      |       | X    | X                         |
| Adopt minimum residential densities in areas designated for transit-oriented, mixed-use development to ensure higher density in these areas.  |              | X          |      |       | X    | X                         |
| Consult with the Housing Authority, transit providers, and developers to facilitate construction of low-income housing developments that employ transit-oriented and pedestrian-oriented design principles.       |              | X          |      |       | X    | X                         |
| Offer density-bonus incentives for projects that provide for infill, mixed use, and higher-density residential development.   |              | X          |      |       | X    | X                         |

## 9.4.6 SAFETY ELEMENT

### TRAFFIC SAFETY

| Mitigation Measure or General/Area Plan Policy   | CAPs         |            | TACs | Odors | GHGs | Public Health Co-Benefits |
|--|--------------|------------|------|-------|------|---------------------------|
|  | Construction | Operations |      |       |      |                           |
| Facilitate traffic safety for motorists and pedestrians through proper street design and traffic monitoring. |              | X          |      |       | X    | X                         |

| Mitigation Measure or General/Area Plan Policy  | CAPs         |            | TACs | Odors | GHGs | Public Health Co-Benefits |
|---|--------------|------------|------|-------|------|---------------------------|
|   | Construction | Operations |      |       |      |                           |
| Require traffic control devices, crosswalks, and pedestrian-oriented lighting in design of streets, sidewalks, trails, and school routes. |              | X          |      |       | X    | X                         |

#### 9.4.7 CLIMATE ACTION PLANS

| Mitigation Measure or General/Area Plan Policy  | CAPs         |            | TACs | Odors | GHGs | Public Health Co-Benefits |
|---|--------------|------------|------|-------|------|---------------------------|
|   | Construction | Operations |      |       |      |                           |
| Develop and adopt a comprehensive Climate Action Plan that includes baseline inventory of greenhouse gas emissions from all sources; greenhouse gas emissions reduction targets; and enforceable measures to reduce GHG from community, municipal and business activities.  |              |            |      |       | X    |                           |
| Include enforcement and monitoring tools within the Climate Action Plan to ensure that progress toward the emission reduction targets is reviewed regularly, that progress is reported to the public and responsible agencies, and that the plan is revised as appropriate. |              |            |      |       | X    |                           |
| Participate in the SB 375 Sustainable Communities Strategy/Regional Blueprint Planning effort and ensure that Climate Action Plans and general or area plans are consistent with the Regional Plan.   |              |            |      |       | X    |                           |