

## GENERAL PLAN GUIDELINES

# CHAPTER 4: Required Elements

---

This document contains the updated Environmental Justice Element Section in Chapter 4 of the General Plan Guidelines. Please note: formatting has been changed in order to improve the readability and functionality of this document.



JUNE 2020

# 4.8 Environmental Justice Element

---

## I. Overview

---

This Environmental Justice (EJ) element section within Chapter 4 of the General Plan Guidelines includes:

- » A brief history of EJ in California
- » A summary of Senate Bill 1000 (2016), which established EJ requirements for general plans under Government Code Section 65302(h);
- » A summary of the regulatory and policy context related to EJ;
- » Guidance for determining whether an EJ element or equivalent is required in a local jurisdiction, including identifying the location of disadvantaged communities (as defined in Gov. Code, § 65302, subd. (h)(4)(A)) as well as the nature of their environmental burdens, health risks, and needs;
- » Guidance for community engagement when addressing EJ and disadvantaged communities; and
- » Guidance for developing EJ goals, policies, and programs that address the unique and compounded health risks in disadvantaged communities and prioritize improvements and programs that meet the needs of disadvantaged communities.

## II. Environmental Justice in California: A Brief History

---

Long before the term “environmental justice” was coined, communities across California experienced discrimination through unjust land use policies and practices. In the 1700s, California’s Native American Tribes were the first peoples in the state to experience systemic oppression as Spanish colonizers institutionalized the Mission system and intentionally disrupted tribal culture and environmental stewardship<sup>i</sup>. In the 1800s, State sponsored policies further dismantled tribes’ relationship with the land. For example, the [Act for the Government and Protection of Indians](#) made it illegal to practice prescribed burning- the intentional ignition of small fires that helped many tribes maintain healthy landscapes<sup>ii</sup>. The following

100+ years of fire suppression policy not only placed tribal cultural resources at risk, but also led to forest densification and heightened risk for catastrophic wildfires which continues to threaten communities today<sup>iii</sup>.

Other groups in the state have also been disproportionately impacted by environmental laws and regulations. For example, persons of Chinese descent living in San Francisco in 1890 were required to relocate to an area that had been previously reserved for “slaughterhouses, tallow factories, hog factories and other businesses thought to be prejudicial to the public health or comfort” through the passage of the Bingham Ordinance<sup>iv</sup>. While this early segregation attempt was quickly

overturned, other racially motivated policies followed. In 1913, California's [Alien Land Law](#) targeted Japanese Americans, preventing them from owning property. Moreover, during the 1930s, the practice of redlining effectively segregated cities and led to disinvestment in “detrimental” areas that largely consisted of Black, Brown, and low-income communities<sup>v</sup>. Though this practice was deemed illegal in 1968, its effects persist. For instance, one recent study found that “historically redlined census tracts have significantly higher rates of emergency department visits due to asthma, suggesting that this discriminatory practice might be contributing to [current] racial and ethnic asthma health disparities”<sup>vi</sup>.

Rural communities, too, have suffered from inequitable health burdens. In the 1960s, farmworkers, in particular, were exposed to dangerous pesticide levels and poor working conditions. In response to the environmental and social inequities faced by laborers, leaders—including Larry Itliong, Dolores Huerta, and Cesar Chavez—organized the Delano Grape Strike<sup>vii</sup> and bargained for worker protections, including access to clean water and a ban on DDT<sup>viii</sup>, a chemical commonly found in pesticides. Environmental advocates and [California's Department of Pesticide Regulation](#) continue to monitor the use of pesticides and take action to protect vulnerable populations.

During the 1980s the formal environmental justice movement began to gain traction in the United States, sparked by grassroots organizers in Warren County, North Carolina<sup>ix</sup>. This movement “brought to light the concept of ‘environmental racism’ in which low-income and racial minority communities tend to be located closer in proximity to environmentally hazardous or degraded environments than the general population”<sup>x</sup> and advocated for the fair distribution of environmental burdens and benefits.

Using this framework, many communities across California continued to call for change. One notable success occurred in Kettleman City, an area located near the nation's 4<sup>th</sup> largest hazardous waste facility at the time<sup>xi</sup>. In 1988, when residents learned that Chem Waste planned to construct a toxic waste incinerator at the dump site, they organized against the proposal, filed a lawsuit, and successfully pressured the company to withdraw its plans<sup>xii</sup>. This event gave rise to additional EJ initiatives across the state.

EJ provided, and continues to provide, a specific lens through which to advance equity and protect human health. While the EJ movement traditionally focused on environmental contamination and degradation, the scope has broadened over time to include additional policy topics such as food access and physical activity. The State of California has adopted several laws and programs that promote EJ and incorporate EJ into decision-making (see Section IV). Currently, the State defines EJ in section 65040.12(e) of California Government Code as “the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.”<sup>1</sup>

In recognition that the planning profession has power to influence health and equity outcomes across communities, lawmakers passed Senate Bill 1000 in order to integrate EJ principles into the planning process and improve public participation. Several jurisdictions across the state have already taken action to address EJ and examples are located in the accompanying set of [EJ case studies](#) and well as section VIII of this guidance. These resources are intended to assist jurisdictions as they work toward a more just future.

---

1 Also see Government Code section 65040.12, subdivision (e)(2), which further defines what environmental justice includes.

## SB 1000 - Government Code Section 65302(h)

- (1) An environmental justice element, or related goals, policies, and objectives integrated in other elements, that identifies disadvantaged communities within the area covered by the general plan of the city, county, or city and county, if the city, county, or city and county has a disadvantaged community. The environmental justice element, or related environmental justice goals, policies, and objectives integrated in other elements, shall do all of the following:
  - (A) Identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities by means that include, but are not limited to, the reduction of pollution exposure, including the improvement of air quality, and the promotion of public facilities, food access, safe and sanitary homes, and physical activity.
  - (B) Identify objectives and policies to promote civic engagement in the public decision-making process.
  - (C) Identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities.
- (2) A city, county, or city and county subject to this subdivision shall adopt or review the environmental justice element, or the environmental justice goals, policies, and objectives in other elements, upon the adoption or next revision of two or more elements concurrently on or after January 1, 2018.
- (3) By adding this subdivision, the Legislature does not intend to require a city, county, or city and county to take any action prohibited by the United States Constitution or the California Constitution.
- (4) For purposes of this subdivision, the following terms shall apply:
  - (A) "Disadvantaged communities" means an area identified by the California Environmental Protection Agency pursuant to Section 39711 of the Health and Safety Code or an area that is a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation.
  - (B) "Public facilities" includes public improvements, public services, and community amenities, as defined in subdivision (d) of Section 66000.
  - (C) "Low-income area" means an area with household incomes at or below 80 percent of the statewide median income or with household incomes at or below the threshold designated as low income by the Department of Housing and Community Development's list of state income limits adopted pursuant to Section 50093.

## III. Introduction to Senate Bill 1000

---

Senate Bill 1000 (Leyva, 2016) amended Government Code Section 65302 to require that both cities and counties that have disadvantaged communities<sup>2</sup> incorporate EJ policies into their general plans, either in a separate EJ element or by integrating related goals, policies, and objectives throughout the other elements upon the adoption or next revision of two or more elements concurrently. The purpose of the legislation is to address the “unique or compounded health risks” in disadvantaged communities by decreasing pollution exposure, increasing community assets, and improving overall health.<sup>3</sup>

This EJ guidance includes information on the statutory requirements for EJ in Government Code sections

65040.12(d) and 65302(h), along with recommendations for complying with statutory requirements and incorporating EJ into the general plan. Government Code section 65302(h) includes several specific EJ requirements, which should be viewed as a starting point. Additional resources should be consulted, such as those listed in section VIII of this guidance. Moreover, considerations touching upon EJ and equity are also set forth in the [Community Engagement and Outreach](#), [Healthy Communities](#), and [Equitable and Resilient Communities](#) Chapters as well as the [Air Quality](#) and [Safety element](#) sections within this Required Elements Chapter. To reduce duplication, citations to these other sections or chapters of the General Plan Guidelines are provided throughout this document for further reference.

---

2 Disadvantaged communities are defined in Gov. Code, § 65302, subd. (h)(4)(A). See also descriptions and guidance on identifying disadvantaged communities under Section IV below.

3 See Gov. Code, § 65302(h)(1)(A).

## IV. Policy Framework

---

This section provides an overview of federal and state laws and policies that are related to EJ and the general plan. It is not an exhaustive accounting of all EJ-related laws or policies that may exist.

### Federal Policy Framework

The basis for EJ lies in the Equal Protection Clause of the U.S. Constitution. The Fourteenth Amendment expressly provides that the states may not “deny to any person within [their] jurisdiction the equal protection of the laws” (U.S. Constitution, amend. XIV, §1). On February 11, 1994, President Clinton signed Executive Order (E.O.) 12898, titled “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.” The executive order followed a 1992 report by the U.S. Environmental Protection Agency (U.S. EPA) indicating that “[r]acial minority and low-income populations experience higher than average exposures to selected air pollutants, hazardous waste facilities, and other forms of environmental pollution.”

Among other things, E.O. 12898 directed federal agencies to incorporate EJ into their missions. In a memorandum accompanying E.O. 12898, President Clinton underscored existing federal laws that can be used to further EJ. These laws include Title VI of the Civil Rights Act of 1964, which prohibits any recipient (state or local entity or public or private agency) of federal financial assistance from discriminating on the basis of race, color, or national origin in its programs or activities; and, the National Environmental Policy Act (NEPA), which requires environmental review for federal actions or federally-funded actions.

### State Policy Framework

Anti-discrimination laws existed in California prior to the passage of the first State EJ legislation in 1999. For example, the California Constitution prohibits discrimination in the operation of public employment, public education, or public contracting (Article I, § 31). State law further prohibits discrimination under any program or activity

## AB 1553 - Government Code Section 65040.12(d)

The guidelines developed by the [Office of Planning and Research] pursuant to subdivision (c) shall recommend provisions for general plans to do all of the following:

- (1) Propose methods for planning for the equitable distribution of new public facilities and services that increase and enhance community quality of life throughout the community, given the fiscal and legal constraints that restrict the siting of these facilities.
- (2) Propose methods for providing for the location, if any, of industrial facilities and uses that, even with the best available technology, will contain or produce material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant hazard to human health and safety, in a manner that seeks to avoid over-concentrating these uses in proximity to schools or residential dwellings.
- (3) Propose methods for providing for the location of new schools and residential dwellings in a manner that seeks to avoid locating these uses in proximity to industrial facilities and uses that will contain or produce material that because of its quantity, concentration, or physical or chemical characteristics, poses a significant hazard to human health and safety.
- (4) Propose methods for promoting more livable communities by expanding opportunities for transit-oriented development so that residents minimize traffic and pollution impacts from traveling for purposes of work, shopping, schools, and recreation.

that is funded or administered by the State (Gov. Code, § 11135). The Planning and Zoning Law prohibits any local entity from denying any individual or group of the enjoyment of residence, land ownership, tenancy, or any other land use in California due to the race, sex, gender, color, religion, ethnicity, national origin, ancestry, lawful occupation, or age, among other bases, of the individual or group of individuals (Gov. Code, § 65008, subd. (a)). The Fair Employment and Housing Act (FEHA) specifically prohibits housing discrimination on the basis of race, color, religion, sex, sexual orientation, marital status, national origin, ancestry, familial status, disability, or source of income (Gov. Code, § 12900, et seq.).

In 1999, the Legislature approved and the Governor signed SB 115 (Chapter 690, Statutes of 1999) into law, defining EJ in statute and establishing OPR as the coordinating agency for State EJ programs (Gov. Code,

§ 65040.12). AB 1553 (Chapter 762, Statutes of 2001) subsequently required OPR to develop guidance for general plans by 2003. Since 2003, the General Plan Guidelines have provided guidance on incorporation of EJ considerations for local jurisdictions pursuant to Government Code section 65040.12(c)-(d). With the passage of SB 1000 in 2016, EJ is now a mandatory element or topic that must be addressed in jurisdictions with disadvantaged communities. Accordingly, this updated EJ guidance provides expanded guidance regarding the EJ requirements of SB 1000 and codified at Gov. Code, § 65302(h).

The State of California also addresses EJ through various programs and initiatives that may be relevant for the general plan. For example, The California Environmental Protection Agency (CalEPA) maintains an **EJ Program** and an **EJ Task Force** that coordinates compliance and enforcement work of CalEPA's boards,

departments and offices in areas of the state that are burdened by multiple sources of pollution and are disproportionately vulnerable to its effects. The Task Force’s mission is to facilitate the use of environmental justice considerations in compliance and enforcement programs and enhance communications with community members to maximize benefits in disproportionately impacted areas. CalEPA was given the responsibility for identifying disadvantaged communities with the

passage of SB 535 (2012, de Leon). This legislation further directed that 25 percent of the proceeds from the Greenhouse Gas Reduction Fund must be spent on projects that provide a benefit to disadvantaged communities. AB 1550 (2016, Gomez) further requires that 25 percent of proceeds from the fund be spent on projects located in disadvantaged communities. Additional programs and initiatives are highlighted in other sections of this document where applicable.

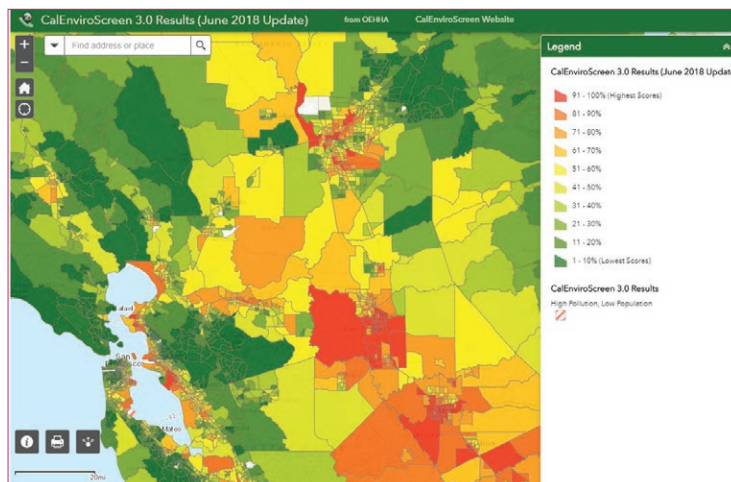
## California Communities Environmental Health Screening Tool: CalEnviroScreen

The California Communities Environmental Health Screening Tool (“CalEnviroScreen”) is a data tool developed by CalEPA’s Office of Environmental Health Hazard Assessment (OEHHA) pursuant to Health and Safety Code Section 39711 and other statutory requirements. CalEnviroScreen provides statewide data that can be used to identify communities disproportionately impacted by, or vulnerable to, environmental pollution and contaminants. The mapping tool contains 12 indicators related to pollution burden and 8 indicators that track population characteristics and other vulnerabilities.

CalEnviroScreen is used by CalEPA and its boards and departments to aid in administering environmental justice grants, promote compliance with environmental laws, prioritize site-cleanup activities and identify opportunities for sustainable economic development. It is also being used to identify disadvantaged communities in California pursuant to SB 535 and AB 1550 and Health and Safety Code Section 39711.

CalEnviroScreen is available at:

<https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>



# V. Integrating EJ into the General Plan

Local jurisdictions may address EJ by creating a new stand-alone EJ element or integrating EJ as a cross-cutting topic throughout their general plan. Some jurisdictions may choose to pursue a hybrid approach that does both. Regardless of approach, the EJ policies must meet the internal consistency rule for general plans set forth in Government Code section 65300.5.

A separate EJ element may make it easier for the public and decision-makers to see EJ policies in one place and help demonstrate a jurisdiction’s commitment to EJ. Alternatively, an integrated approach allows for EJ issues to be incorporated into policies throughout elements that are already required to address EJ-related topics. Examples of an integrated approach include: addressing the reduction of pollution exposure in both the circulation and land use elements; promoting physical activity or improving access to safe and affordable drinking water in both the conservation and open space elements; or addressing the protection of vulnerable and disadvantaged communities from natural and climate change induced

hazards such as wildfire, extreme heat, flooding, and drought in the safety element.

Ultimately, the best format will depend on the local context, community input and engagement, as well as the practicality of updating future general plans, and should complement the current update and vision. Whether incorporated into a separate element, addressed throughout the general plan elements, or completed as a hybrid combining both approaches, the update must incorporate analysis, goals, policies and programs that address all EJ topics and statutory requirements in Government Code 65302(h).

Although only jurisdictions with disadvantaged communities are required to incorporate EJ goals, policies, and programs, all communities are impacted by land use and other planning decisions that impact health. It is good planning practice for all jurisdictions to consider integrating EJ policies and adopting a more holistic planning approach in the general plan or other local planning documents to promote equity and protect human health from environmental hazards.

## Relationship Among Elements

	Land Use	Circulation	Housing	Conservation	Open Space	Noise	Safety
Environmental Justice	Related	Related	In Statute	Related	Related	Related	Related



## National City and Jurupa Valley

National City, in San Diego County, was the first jurisdiction to adopt an EJ element in California in 2011. The City's Health and Environmental Justice (HEJ) Element has goals and policies on a range of EJ and Health issues such as:

- » Environmental Justice
- » Land Use
- » Safety
- » Open Space and Agriculture
- » Education and Public Participation
- » Respiratory Health and Air Quality
- » Circulation
- » Physical Activity
- » Healthy Foods
- » Access to Health Care
- » Lead Based Paint and other contaminants

A few years later, Jurupa Valley, in Riverside County, became the second jurisdiction to adopt an EJ element. In November 2014, the city, with almost 100,000 community members and a history of high pollution burden, created the element to address:

- » Community Engagement
- » Mobility and Active Living
- » Air Pollution and Other Environmental Hazards
- » Healthy and Affordable Housing

## V. Guidance for Determining EJ Requirements

---

Local jurisdictions are required to incorporate EJ in their general plan if they have a disadvantaged community and are concurrently adopting or revising two or more elements of their general plan. This is in addition to preexisting federal and State laws reviewed above. OPR strongly encourages jurisdictions without formally-defined disadvantaged communities to consider creating an optional EJ element in order to promote equity and protect human health in their community.

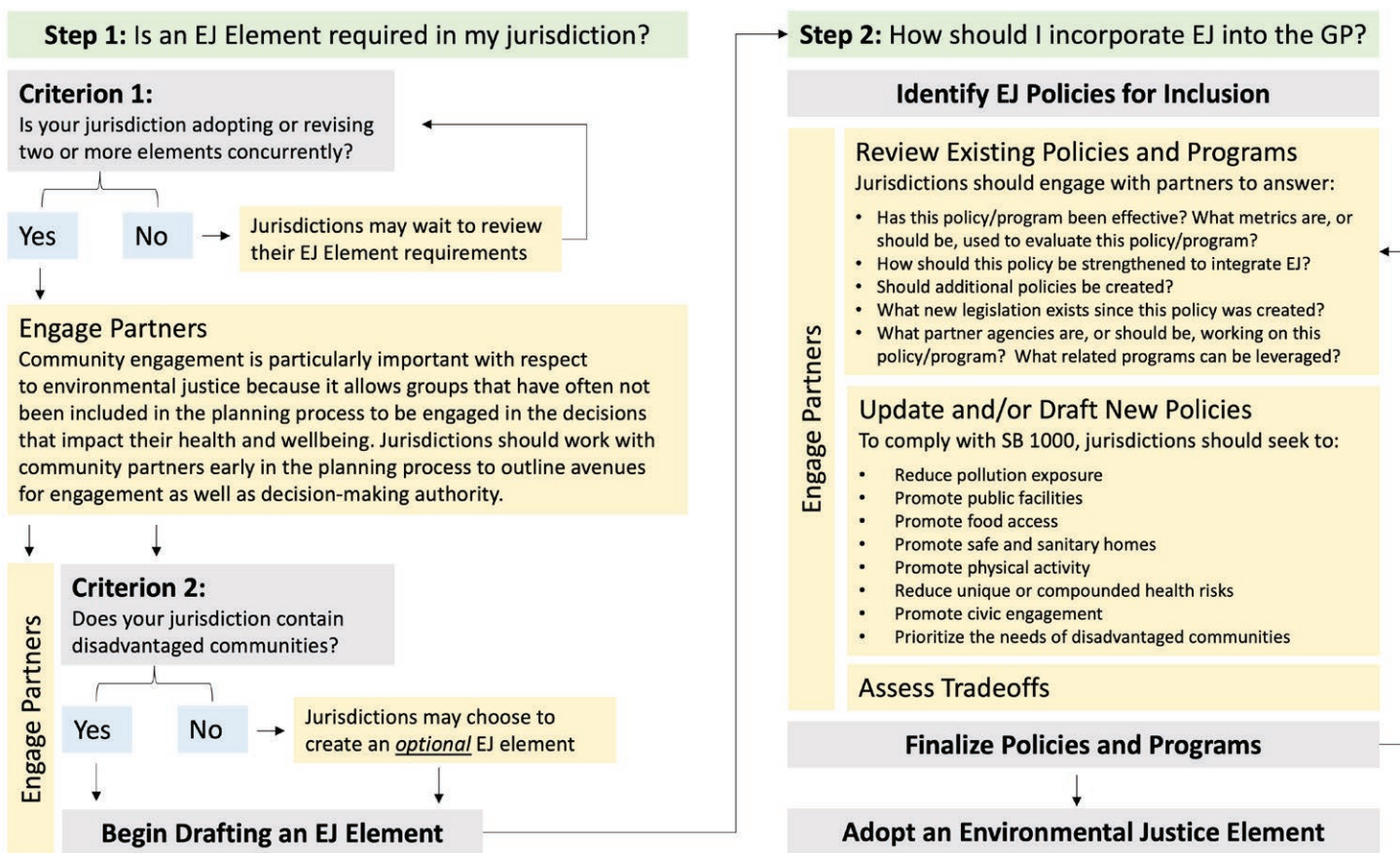
The following steps may be helpful in determining 1) whether the EJ element is mandatory for a specific jurisdiction; and, if so, 2) pathways for compliance. Note

that both steps may be utilized by any jurisdiction wishing to develop or improve their EJ policies, regardless of whether such action is required by State law.

- » Step 1: Is an EJ element required in my jurisdiction?
- » Step 2: How should I incorporate EJ into the General Plan?

An overview of each step is presented in Figure 1. In addition, detailed guidance for determining how to meet EJ requirements is provided in this section and Section VII of this document.

**Figure 1: Process for Determining and Addressing EJ Requirements**



**Step 1: Is an EJ element required in my jurisdiction?**

The first step a jurisdiction should take when preparing to update their general plan is to determine if Government Code section 65302(h) applies to them. While section 65302(h) establishes the minimum requirements for EJ, jurisdictions may also choose to voluntarily include EJ or expand upon what is in statute. The two specific criteria that both must be used to determine whether compliance is required include:

**Criterion #1:**

The jurisdiction will be adopting or revising two or more elements concurrently on or after January 1, 2018. (Gov. Code, § 65302, subd. (h)(2)).

**Criterion #2:**

The city, county, or city and county has a disadvantaged community within its planning area. (Gov. Code, § 65302, subd. (h)(1)). “Disadvantaged community” is specifically defined as follows:<sup>4</sup>

*“Disadvantaged communities” means an area identified by the California Environmental Protection Agency Pursuant to Section 39711 of the Health and Safety Code or an area that is a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation.” (Gov. Code, § 65302, subd. (h)(4)(A)).*

4 SB 1000 and SB 244 define a disadvantaged community differently. For jurisdictions with fringe or island communities, also see the OPR guidance on SB 244. The Government Code uses a slightly different definition to identify “disadvantaged unincorporated communities” that must be addressed in the general plan’s land use element pursuant to section 65302.10.

The statute further defines “low-income area” to mean “an area with household incomes at or below 80 percent of the statewide median income or with household incomes at or below the threshold designated as low income by the Department of Housing and Community Development’s list of state income limits<sup>5</sup> adopted pursuant to Section 50093.” (Gov. Code, § 65302, subd. (h)(4)(C)).

Based on the statutory language in Government Code section 65302(h), there are essentially three potential definitions for a disadvantaged community. Jurisdictions have discretion to choose which definitions to apply. Local jurisdictions should consider doing a thorough screening analysis of their planning area using all three definitions and then verify the findings with local or regional agencies and community input to ensure that disadvantaged communities are properly identified prior to beginning their planning process.

OPR recommends the following methods for the disadvantaged community screening analysis (see Figure 2 which illustrates this process):

1. Use CalEnviroScreen to examine whether the planning area for the general plan contains **census tracts that have a combined score of 75% or higher**.<sup>6</sup>
2. Map the household median incomes by census tract in the planning area at or below **statewide median income** and examine for disproportionate pollution burden.
3. Map the household median incomes by census tract in the planning area at or below the **Department**

---

5 The California Air Resources Board (CARB) has created a map of low-income communities by statewide median income and HCD State Income Limits. The State limits change annually. If using the map created by CARB, check to ensure the data is the most up to date. Available at: <https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/communityinvestments.htm>

6 Pursuant to Health and Safety Code Section 39711, CalEPA designates a census tract that scores at or above 75 percent on the agency’s CalEnviroScreen tool as a disadvantaged community. For more information on how the CalEnviroScreen tool relates to CalEPA’s designation of disadvantaged communities visit: <https://oehha.ca.gov/calenviroscreen/sb535>

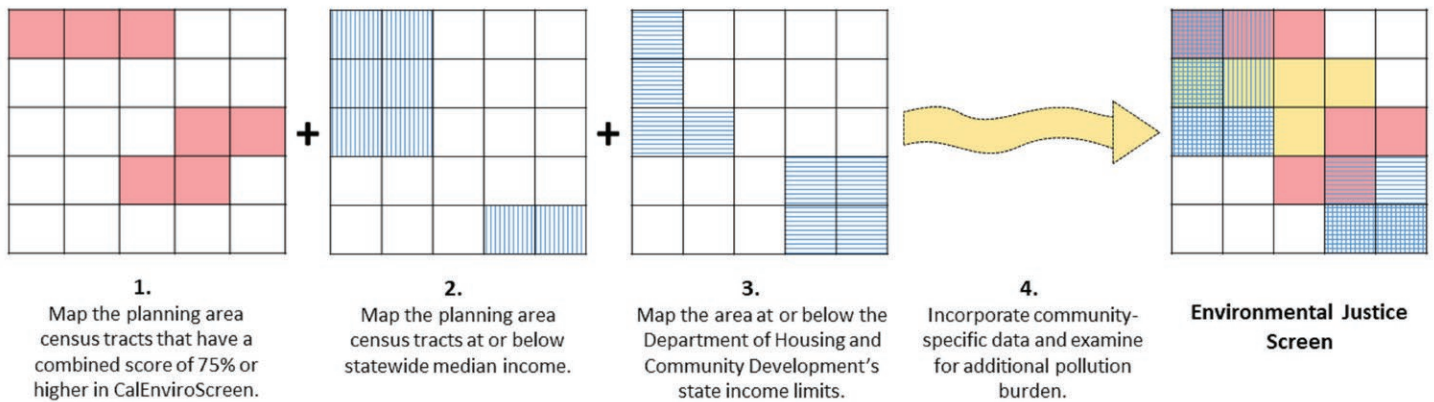
of Housing and Community Development’s state income limits and examine for disproportionate pollution burden.

4. Incorporate and analyze community-specific data and examine for additional pollution burden and health risk factors.

### Health and Safety Code § 39711.

- (a) The California Environmental Protection Agency shall identify disadvantaged communities for investment opportunities related to this chapter. These communities shall be identified based on geographic, socioeconomic, public health, and environmental hazard criteria, and may include, but are not limited to, either of the following:
  - (1) Areas disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation.
  - (2) Areas with concentrations of people that are of low income, high unemployment, low levels of homeownership, high rent burden, sensitive populations, or low levels of educational attainment.
- (b) The California Environmental Protection Agency shall hold at least one public workshop prior to the identification of disadvantaged communities pursuant to this section.
- (c) Chapter 3.5 (commencing with Section 11340) of the Part 1 of Division 3 of Title 2 of the Government Code does not apply to the identification of disadvantaged communities pursuant to this section.

**Figure 2: Recommended Screening Process for Identifying Disadvantaged Communities**



As part of the screening analysis, local governments should evaluate whether low-income areas are disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation. The statute does not include a definition or process for determination of disproportionate pollution burden or other hazards. However, it is important that local jurisdictions broadly analyze possible disproportionate burdens to further the protective intent of Government Code section 65302(h).

One approach is to use the data layers available in CalEnviroScreen that approximate pollution burden and overlay that data with the two low-income area definitions. The [CalEnviroScreen website](#) provides access to numerous **individual layers** that can help to characterize pollution burden, including air pollutants, pesticides, water and groundwater pollutants, hazardous waste, solid waste sites and facilities, and others. These individual layers can inform a local agency’s determination of disproportionate pollution burden even when the census tract or area does not meet the definition of “disadvantaged community” under Health and Safety Code section 39711. For example, a low-income area may be considered disproportionately burdened if it has a high pollution burden for one type of pollutant, even when

the overall CalEnviroScreen score is less than 75 percent. It is important to note that data layers can change over time, and thus local agencies should verify and document the source and year of data referenced when commencing the screening analysis process.

Local jurisdictions should also consider issues unique to their communities, which might or might not be reflected in the statewide data sets, such as local climate vulnerability as well as regional cost of living. Government Code section 65302(h) does not define the geographic level of a “low-income area.” Depending on the data and information available, local governments should consider whether there are disadvantaged communities in geographic units that are smaller than a census tract to ensure that all disadvantaged communities are recognized.

Jurisdictions should contact other local agencies, such as public health departments, water districts, air districts, local agency formation commissions, and metropolitan planning organizations to determine whether additional, localized data is available that could inform its evaluation of potential disproportionate burdens that may have been missed in larger statewide data sets. Often, local agencies have more granular data concerning air or water quality, data on environmental issues not tracked on a statewide basis (for example, illegal dumping), or more specific local planning data.

With respect to air quality and air pollution exposure, jurisdictions should consult with local air districts or local agencies participating in the AB 617 **Community Air Protection Program**, which is administered by the California Air Resources Board (CARB). This is a statewide program designed specifically to identify and reduce pollution exposure in disadvantaged communities most impacted by air pollution. The insights and data obtained through this program should be leveraged during the screening process.

Moreover, during the screening process, OPR recommends that jurisdictions conduct early community engagement, particularly with low-income communities, communities of color, sensitive populations, tribal governments<sup>7</sup>, as well as organizations focused on public health and EJ. This can help to ensure that the location of disadvantaged communities as well as the nature of their environmental burdens, concerns, and needs are accurately identified. Based on the screening analysis referenced above, some jurisdictions may have significant portions of their community designated as a disadvantaged community. Community input can help clarify or narrow the focus in these areas. For instance, input could be obtained through a community advisory committee or working group that includes representatives from disadvantaged communities with local or experienced knowledge of environmental challenges. Additional and more specific guidance regarding community engagement in disadvantaged communities is discussed later in this EJ guidance document. For more detailed guidance on community engagement and outreach as it pertains to the general plan process more broadly, see **Chapter 3: Community Engagement**.

When identifying disadvantaged communities, it can be beneficial for local jurisdictions to evaluate historical trends, contextualize current patterns of development, and assess how the community might change over time, with respect to EJ. A jurisdiction may contain geographic areas where communities can be defined as disadvantaged, yet because of various factors, such as

7 When consulting tribes, refer to Section V of the 2005 **Tribal Consultation Guidelines**, Supplement to the GPG.

gentrification and potential displacement over time, the location and character of disadvantaged communities may not be static throughout the planning period of the general plan. Therefore, the screening analysis and identification of disadvantaged communities should reflect their dynamic and potentially evolving characteristics over time. Temporal shifts should also be considered during later stages of policy development as well.

Upon completion of the screening process, the location of disadvantaged communities as well as the nature of their environmental burdens, health risks, and needs should be defined clearly in the general plan. Local agencies can incorporate maps, descriptions, or a combination thereof either directly into the policy document or in technical background documentation that is adopted with the policy document. Importantly, if the latter approach is taken, references to or definitions of disadvantaged communities within the policy document should clearly reference and summarize more detailed maps and/or descriptions in separate technical documentation, such that disadvantaged communities are properly identified and referenced consistently across different general plan documents. As jurisdictions begin the next step of identifying policies for inclusion in their general plan, other types of data can be used to measure health risks and underlying causal factors. These data are recommended in each section throughout this chapter.

## Step 2: Identify EJ Policies for Inclusion in the General Plan

After completing the screening process for identification and characterization of disadvantaged communities under Step 1, OPR recommends that local agencies take the next step of developing specific goals, policies, objectives, and implementation programs that are both responsive to and prioritize the needs of disadvantaged communities.

Under Step 2, OPR recommends that local agencies review the Completeness Checklist and Statutory Requirements for the policies portion of the EJ element, and take the following measures when preparing EJ goals, policies, objectives, and implementation programs for inclusion in the EJ element or equivalent.



## Review Existing EJ Policies and Programs

Although Government Code section 65302(h) is a relatively new statutory requirement, some jurisdictions have already incorporated EJ or related goals, policies, and objectives into their current general plans through healthy community, social equity, or EJ frameworks. Before starting a revision, it is good practice to engage with community partners to determine which policies and programs already exist in the current general plan in order to inform EJ policy development. While not required, this step may be helpful for determining what existing policies have worked in the past, where there are gaps, and where improvement is needed. Jurisdictions should conduct an analysis of existing policies and programs that are either directly related to required EJ topics, or that may have some relationship to EJ, as shown in the list below (see Completeness Checklist and discussion under Section VII for a specific breakdown of what is required in statute).

- » Pollution exposure including air quality, water quality, and land use compatibility
- » Public facilities
- » Food access
- » Safe and sanitary homes including housing location, quality, and affordability
- » Physical activity including accessibility to public transit, employment, and services
- » Additional unique or compounded health risks including climate vulnerability (i.e., high fire threat areas, sea level rise, high flood or seismic risk areas, etc.)
- » Civic or community engagement
- » Prioritization of improvements for disadvantaged communities

It may be helpful to use a series of questions during the policy review process to identify gaps in existing policies. Examples of review questions could include the following:

- » Has this policy/program been effective? What metrics are, or should be, used to track and evaluate this policy/program?
- » Does the policy/program address the equitable distribution of benefits and environmental burdens? Has it been effective in managing pollution exposure risks, and/or facilitating well-rounded services in disadvantaged communities? Has it facilitated the development of parks and green space, food markets, safe active transportation routes, etc. in disadvantaged communities?
- » How can existing policies/programs be strengthened to integrate themes of health, resilience, equity, and EJ?
- » Are there additional policies/programs that should be created to reduce pollution, environmental health risks, and/or other impacts to EJ communities?
- » What partner agencies are, or should be, working on this policy/program? What related policies/programs can be leveraged?
- » What new legislation exists since this policy/program was created? Are there new mandates that help further the reach? (For example, [SB 1383](#) requires implementation of food recovery programs to improve food access.)
- » Are the actors responsible for implementation specified in the policy/program? (e.g., department of public health for policies to increase awareness of health risks)? Are there specific timelines identified for implementation?

## Conduct a Program and Partner Analysis

Government Code section 65302(h) requirements touch on some health-related topics that are not traditionally covered in planning, including issues of food access and physical activity. To help address these topics, jurisdictions should consider reaching out to external agencies or organizations as early as possible in the planning process to understand existing local programs or initiatives that may already address EJ broadly or specific EJ-related issues. Example partners could include EJ organizations,

faith-based organizations, food policy councils, active transportation organizations, transit operators, non-profits focused on park access and green space creation, and organizations focused on climate mitigation and adaptation. Additionally, other internal agency departments or local or state agencies may be pursuing EJ policies, and alignment and inclusion is important for consistency within and across agencies. Regional agencies such as metropolitan planning organizations (MPOs), air districts, or quasi-public regional alliances such as regional climate collaboratives can also help align interests and achieve consistency across similar initiatives in a region. Partnership is encouraged with organizations that have strong relationships with local community members or other related organizations.

### **Develop Draft EJ Goals, Objectives, Policies, and Programs**

Based on the findings from the Step 1 screening process as well as the program and policy review and partner analysis, local agencies should develop draft goals, objectives, policies, and programs that reduce unique or compounded health risks and associated issues with the aim to reduce disparate outcomes and ensure the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins. The range of policies developed to address and reduce these risks should be comprehensive and address all applicable issues identified in the Completeness Checklist (in section VII) . Local agencies should also ensure that the specific risks or issues identified will be reduced as a result of actionable EJ policies and programs, rather than simply acknowledged or discussed in broad strokes. Accordingly, local agencies must also include specific policies that prioritize improvements and programs that address the needs of disadvantaged communities.

Community engagement during the policy development and vetting process is critical to ensuring that policies or programs intended to address the specific issues and needs of disadvantaged communities have community buy-in and support. More specific discussion regarding community engagement is included later in this chapter.

Each of the specific topical requirements for the EJ policies is discussed in greater detail below under Statutory Requirements, and examples are also provided under Potential Strategies.

### **Assess Impacts and Tradeoffs**

As jurisdictions conduct outreach, perform technical analysis, and consider existing baseline conditions and policies to improve the health of the community, it is important they consider all potential consequences of the suite of policies considered. Some may have unintended consequences. For example, if there is an area where a childcare facility is near an incompatible land use, a policy could be adopted to limit siting of childcare facilities. However, many low-income communities may be sited in the area and need childcare. Without a more holistic evaluation, a jurisdiction could end up decreasing local, affordable childcare, or working parents may need to travel farther distances for services.

The suite of policies should also be evaluated for cumulative impacts, impacts on neighboring jurisdictions, and additional non-environmental burdens.<sup>xiii</sup> Through these analyses, jurisdictions should not only seek to promote the fair distribution of environmental burdens and benefits within the community but also avoid the creation of new disadvantaged communities outside of their jurisdiction. During this impact and tradeoff assessment, engagement with local and regional partners is encouraged.

# VI. Statutory Requirements

Each of the required components of **Government Code section 65302(h)** are outlined in the Completeness Checklist. Guidance is also provided in the following section.

## Completeness Checklist

Statutory Citation	Brief Description of Requirement
Gov. Code § 65302(h)(1)	Identify disadvantaged communities within the area covered by the general plan. (Note: see guidance provided earlier under Step 1)
Gov. Code § 65302(h)(1)(A)	Identify objectives and policies to reduce exposure to pollution including improving air quality in disadvantaged communities.
Gov. Code § 65302 (h)(1)(A)	Identify objectives and policies to promote public facilities in disadvantaged communities.
Gov. Code § 65302(h)(1)(A)	Identify objectives and policies to promote food access in disadvantaged communities.
Gov. Code § 65302(h)(1)(A)	Identify objectives and policies to promote safe and sanitary homes in disadvantaged communities.
Gov. Code § 65302(h)(1)(A)	Identify objectives and policies to promote physical activity in disadvantaged communities.
Gov. Code § 65302(h)(1)(A)	Identify objectives and policies to reduce any unique or compounded health risks in disadvantaged communities not otherwise addressed above.
Gov. Code § 65302(h)(1)(B)	Identify objectives and policies to promote civic engagement in the public decision-making process in disadvantaged communities.
Gov. Code § 65302(h)(1)(C)	Identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities.

### Identifying Disadvantaged Communities

As previously discussed under Step 1 (in section VI), local agencies should conduct a screening analysis and involve the community and interested stakeholders early in the process when determining the presence and characteristics of disadvantaged communities in the jurisdiction.

To meet the requirement that the local government “identify disadvantaged communities within the area covered by the general plan,” the jurisdiction should publicly release data and findings from the local agency’s analysis conducted under Step 1, including the locations and characteristics of disadvantaged communities in the jurisdiction. The local agency should explain the methods selected for identifying disadvantaged communities, describe and map their location(s) and the disproportionate pollution burdens, health risks, and needs experienced by

the community. This information should also be summarized and properly referenced in all portions of the general plan, including the policy document, technical background information or appendices, or other related documents that are considered part of the EJ element or equivalent.

### Reducing Pollution Exposure

#### Requirement Description

The general plan must identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities by reducing pollution exposure, including the improvement air quality. (Gov. Code, § 65302, subd. (h)(1)(A).) The general plan should consider both indoor and outdoor air quality.



## General Environmental Health Considerations

Exposure to various polluting substances in air, water, and soil can significantly affect health. Noise, when extreme, can also be considered a health hazard (see [Noise Element](#) section within this chapter). Diseases such as asthma, birth defects, cancer, heart disease, neurologic disorders, and reproductive disorders can be linked to pollution in the environment. Involuntary exposure to pollution such as second-hand and third-hand smoke, are also known to contribute or exacerbate symptoms to many of these diseases and illnesses. In addition, certain geographic areas and communities experience a disproportionate share of exposure to pollution. As a result, the concentration and compatibility of pollution sources should be considered in the context of housing, childcare, schools, and businesses in disadvantaged communities as identified by the jurisdiction under Government Code section 65302(h).

## Air Quality

Air quality is an important and relevant consideration for public health in disadvantaged communities. Air quality can be impacted by both existing and new mobile or stationary sources, as well as land use decisions in various contexts. General plans can set long range goals and policies that contribute to reducing pollution and improving ambient air quality in a community, as well as reducing exposure of sensitive land uses (e.g. residences, schools, child-care facilities, hospitals, senior care facilities) to poor air quality conditions. General plan goals and policies can promote improved air quality by reducing harmful emissions from fossil fuel combustion. This can be achieved by reducing vehicle miles traveled (VMT), encouraging mode shift, and improving roadway conditions and accessibility for active transportation through land use decisions, transportation system investments, or both. In addition, local air quality can be improved through policies to reduce emissions from various types of stationary sources and policies to support zero-emission or electric fleets. Improving infrastructure investments and reducing air pollution can provide multiple benefits including public health benefits from

increased mobility and active transportation and reducing greenhouse gas (GHG) emissions. Land use policies that prioritize long-range planning to promote infill development and a suite of land use tools can improve air quality jurisdiction-wide and help local governments meet GHG reduction goals.

### *Land Use and Project Siting*

Local agencies should consider incorporating general plan policies and programs that address exposure of sensitive land uses to poor air quality conditions in disadvantaged communities, using various data-driven methods that exist to identify and mitigate health risk. [Near-roadway siting guidance from CARB](#) highlights some of these methods and mitigation strategies. These strategies are important because they help communities identify potential health risks and avoid developing in a way that would expose sensitive land uses to air pollution near high-volume roadways (e.g., major arterials, freeways, and truck routes).

Local governments should also consider localized air pollution resulting from the concentration of various stationary sources in disadvantaged communities, such as freight-handling facilities, manufacturing facilities or other industrial air pollution sources. When siting new facilities that are potential sources of pollution, layout and design considerations to reduce exposure to sensitive land uses should be incorporated into the general plan. For example, policies can identify minimum standards and project review and mitigation procedures for new land uses or facilities that could expose already-impacted communities to additional health risks.

### *Low- and Zero-Emissions Technology*

Low-carbon technologies such as zero-emission vehicles, solar and wind generation, low or zero-emissions technologies in manufacturing or other stationary sources, and indoor filtration systems are also important considerations in project design and mitigation that can be addressed through general plan policies and implementation programs.

### **Tobacco Smoke**

Specific policies and programs can also reduce exposure to tobacco or other types of smoke in various land uses or public facilities and amenities. Examples such as designating smoke-free zones in parks and other public places, zoning standards to reduce density of tobacco outlets, and reduction of retail advertising have also been beneficial to protect the health of those most vulnerable in the community.

### **Pesticide Drift**

When pesticides are sprayed into an environment, they can drift away from their intended target, spreading into the surrounding area. As pesticide levels accumulate, they may pose a risk to human health, causing respiratory problems and cancer. In the general plan, jurisdictions can develop policies to restrict the use of pesticides and protect sensitive populations from the harmful effects of **pesticide drift**. Moreover, jurisdictions may promote alternatives such as **integrated pest management** and regenerative agriculture.

### **Regional and State Programs**

Many air quality management districts in California have taken a comprehensive approach to considering different sources of air pollution and mitigation measures that can be used in the preparation of general plans, or applied during environmental review under CEQA (e.g., see the **Bay Area Air Quality Management District's California Environmental Quality Act Air Quality Guidelines**).

Note that even if a jurisdiction attains state and federal air quality standards generally, individual communities within the jurisdiction may still have significant air quality problems. Thus, attainment status does not, alone, guarantee equitable exposures. Likewise, region-wide crediting and trading programs which support jurisdictional attainment may or may not directly address inequitable air pollution conditions in any particular community. A community-level focus is therefore necessary, in addition to any regional programs.

Addressing this issue, CARB established the **Community Air Protection Program** in response to AB 617 (Chapter 136, Statutes of 2017). The program is intended

to reduce exposure in communities most impacted by air pollution using statewide strategies and resources, community-specific emissions reductions programs, accelerated installation of pollution controls on industrial sources, expanded air quality monitoring within communities, increased penalties for violations of emissions control limits, and greater transparency and improved public access to air quality and emissions data through enhanced online web tools. At the local level, community groups, air districts, and other stakeholders work collaboratively with land use and transportation planning agencies to identify and implement strategies to reduce exposure to air pollution.

General plans should be updated or amended to be consistent with any AB 617 community emissions reduction programs and/or community air monitoring plans, and local agencies should consider including such policies or programs as part of the EJ element or equivalent. General plan goals and policies related to land use, circulation, healthy communities, facility siting, air quality, and pollution reporting/monitoring activities are just some of the topics that are likely to overlap with local AB 617 programs. Note that, because CARB designates only a subset of potentially-eligible AB 617 communities for plans each year, the absence of an AB 617 program in a particular jurisdiction does not mean that impacted communities with air pollution issues are not present in the jurisdiction.

Strategies for addressing concerns with overconcentration of air pollution from multiple sources are also provided in the Land Use Compatibility discussion below. An expanded discussion of air quality is also located in the **Air Quality Element** section within this chapter.

### **Water Quality, Accessibility, and Affordability**

Hundreds of communities and thousands of domestic well users across the state currently lack access to safe and affordable drinking water because activities such as over pumping, over-fertilization, and pesticide use introduce contaminants such as arsenic, nitrates, trichloropropane (TCP), and other chemicals into the water

system. Moreover, communities in coastal areas face an additional risk of saltwater intrusion due to climate induced sea-level rise combined with over pumping. Many communities served by small drinking water systems are vulnerable to water quality violations and lack the financial capacity to build, operate and maintain necessary treatment facilities.

In response to these issues, AB 685 (2012) added Section 106.3 to the California Water Code, which declares that “every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.” More recently, SB 200 (Monning, 2019) directed the State to “bring true environmental justice” to its residents, and to “begin to address the continuing disproportionate environmental burdens in the state by creating a fund to provide safe drinking water in every California community, for every Californian.” The fund is now known as the Safe and Affordable Drinking Water Fund, and in August 2019, the State Water Resources Control Board (SWRCB) announced an initial round of funding of nearly a quarter billion dollars from the fund for this purpose.

The SWRCB maintains a [Human Right to Water portal](#) that includes data, maps, grant programs, and other information that should be considered in local analyses of existing conditions and potential actions to address water quality issues in disadvantaged communities. OEHHA also recently published a [Human Right to Water tool](#) for assessing water quality, affordability, and accessibility that should be considered for use by local agencies. The tool uses 13 indicators to provide a baseline assessment that will help SWRCB track progress towards achieving the goals of AB 685. A companion report to the tool, entitled [Achieving the Human Right to Water in California: An Assessment of the State’s Community Water Systems](#), may also be a helpful resource to local agencies.

Local agencies should work with impacted and disadvantaged communities to understand existing conditions and concerns about water quality, access, and affordability, and examine solutions collaboratively. General plans in impacted communities can incorporate long-term goals, policies, and programs in the water section of the conservation element, EJ element, or other appropriate elements. For example, policies can be developed to address or support consolidation and incorporation of disadvantaged communities, who that are currently dependent on private wells, into public water systems. [Senate Bill 88](#) (Statutes 2015, Chapter 27) added sections 116680-116684 to the California Health and Safety Code, allowing the State Water Board to require certain water systems that consistently fail to provide safe drinking water to consolidate with, or receive an extension of service from, another public water system. Policies and programs can also establish point-of-entry/point-of-use filtration systems that could help to address immediate needs for safe drinking water while longer-term approaches are being implemented.

See also the [Land Use, Conservation, Open Space](#), and [Safety Element](#) sections of this chapter about water-related requirements in the mandatory general plan elements, which address the protection of water quality, coordination with water districts, and related issues. EJ policies can be incorporated into, or linkages can be established with, those elements.

## Los Angeles Clean Up Green Up

Communities can address toxic hot spots in a variety of ways. Clean Up Green Up (CUGU) emerged in Southern California from grassroots work where residents in Boyle Heights, Wilmington, and Pacoima/Sun Valley came together to address overconcentration and high exposure to pollution. Residents and community groups worked to pass an ordinance to address environmental pollution and change zoning.

The program focuses on addressing over concentration of certain polluting uses such as factories, oil operations, and warehouses. The ordinance states: “The purpose of the CUGU District is to reduce cumulative health impacts resulting from land uses including, but not limited to, concentrated industrial land use, on-road vehicle travel, and heavily freight-dominated transportation corridors, which are incompatible with the sensitive uses to which they are in close proximity, such as homes, schools and other sensitive uses.” The community is working to address the issue of compatibility and find wins for health and the environment.

<https://planning.lacity.org> Ordinance available here:

<https://www.preventioninstitute.org/blog/las-promising-clean-green-ordinance>

### Land Use Compatibility

At the general plan level, discussions about EJ involve a central land use concept: compatibility. Incompatible land uses may create health, safety, and welfare issues for the community. At the same time, traditional rigid separation of land uses results in disconnected islands of activity and contributes to sprawl. Development patterns characterized by single use result in the automobile being the only viable transportation option, which results in high environmental, economic, health, and social costs. Land use compatibility, therefore, should take into account distinct health impacts that could be presented by over-concentration of existing land uses or new land uses within specific types or sub-types of land uses, rather than focusing just on general categories. For example, some types of non-residential uses may be appropriate in a mixed-use setting with residential, whereas others would generally not be compatible.

#### ***Separation and Mitigation of Incompatible Land Uses***

Land use incompatibility can be avoided when siting new uses by ensuring physical separation of incompatible

uses when considering new land use changes or siting new projects. The general plan land use diagram may designate transitional land uses between industrial and agricultural and other sensitive land uses, such as residential areas, schools, hospitals, day care facilities, and senior care or assisted living facilities. Transitional uses may include open space, office uses, or commercial uses. Appropriate distances between incompatible uses will vary depending on local circumstances. Local agencies should consider factors such as prevailing winds, geographic features, and the types of facilities and uses allowed in industrial areas.

#### ***Industrial Facilities and Large-Scale Agricultural Lands***

A variety of agencies regulate pollution from industrial and agricultural facilities. However, cities and counties retain local land use authority and are primarily responsible for regulating the location and distribution of potentially hazardous facilities and land uses through their general plans and zoning ordinances.

Cities and counties may pursue several strategies within their general plans to address significant sources of industrial or agricultural pollution. For example, policies can reduce or mitigate the over-concentration of polluting facilities or uses, which can occur when one or more facilities or uses are located or proposed to be located in the same area that do not individually exceed acceptable regulatory standards for public health and safety, but which could pose a potential health hazard due to their cumulative effects.

Approval of certain industrial facilities or large-scale agricultural uses can also be made conditional if these are proposed within a certain distance of residential or school uses. This allows the city or county to consider the potential hazards associated with individual facilities or uses, together with potential mitigation, on a case-by-case basis. General plan policies can outline consistent standards to be used in approving, conditionally approving, or denying proposed industrial facilities and other uses that may pose a hazard to the environment, human health, or public safety. Such standards should be reflected in the zoning ordinance that implements the general plan (see [Chapter 9: Implementation](#)).

#### ***Modifying Land Use Designations in Over-concentrated Industrial Areas***

One way to address existing or potential future problems of over-concentration of industrial uses in or near disadvantaged communities is to change or modify land use designations to residential or a more appropriate mix of uses. Changing the allowable land uses in existing industrial areas could prevent new industrial land uses from being established and may affect the expansion of existing facilities and uses (depending on how local policies treat pre-existing or “legal non-conforming” land uses). An important caveat to consider is which new uses to allow in the previously industrial areas. A new EJ problem could be created if residences and schools are allowed without considering any lingering effects of industrial over-concentration, such as contaminated soil. At the same time, where over-concentration is no longer an issue and effective remediation or cleanup is possible,

so-called “**brownfield**” development is an important tool for a community’s continued sustainable development.

Local agencies can also examine and modify the types of industrial or commercial uses that are allowed in existing industrial areas in such designation changes. Many existing industrial districts historically provided jobs to adjacent neighborhoods; thus, in some cases, local agencies may wish to consider options for maintaining the supply of land for job-generating uses and allow only certain commercial uses that meet specific standards that are protective of public health, in order to continue to provide local job opportunities. Such policy changes could help address the economic needs of adjacent disadvantaged communities, while also addressing and improving public health.

#### ***Childcare Facilities and Schools***

Siting of childcare facilities and schools is particularly important because children are more susceptible to the adverse effects of pollution exposure during their developmental stages. Childcare facilities and schools are often sited in residential or mixed-use zones. Siting childcare facilities in a residential use zone is generally safer, as it avoids proximity to incompatible uses. However, exposures are still possible in residential areas and site evaluation is important. Occasionally, childcare sites are in mixed-use, commercial, agricultural, or industrial zones. If this occurs, extra precautions may be needed to avoid or minimize exposure to existing health hazards.

Government Code 65302 does not require that school siting be addressed in the general plan. Local agencies do not have jurisdiction over public school siting decisions, which are made by local school districts. However, planners are encouraged to work with their local school districts to help provide information for the location of new schools in disadvantaged communities in a manner that avoids locating these uses in proximity to industrial facilities, agricultural lands, high-volume roadways and truck routes, and/or other uses that will contain or produce materials that, because of their quantity, concentration, or physical or chemical characteristics, pose a significant hazard to human health and safety.

Due to the fragmentation of authority in the areas of land use planning and school siting and construction, it is recommended that the planning agency work closely with the school district to identify suitable school locations. See the Educational Facilities discussion within the **Land Use Element** section for more detailed guidance on school siting and land use.

### **Planning. Guidance. Protection: Choose Safe Places for Early Care and Education Guidance Manual**

In April 2017, the Agency for Toxic Substances and Disease Registry released a planning guide for stakeholders, including land-use decision makers, to improve siting of facilities for children. The guide includes:

- » background on environmental justice issues with regard to the siting of childcare facilities;
- » considerations for safe siting; and
- » case studies and models

US Department of Health and Human Services, Centers for Disease Control and Prevention, Agency for Toxic Substances and Disease Registry. (2017). *Planning. Guidance. Protection: Choose Safe Places for Early Care and Education Guidance Manual*. Retrieved from: [https://www.atsdr.cdc.gov/safeplacesforece/docs/Choose\\_Safe\\_Places\\_508\\_final.pdf](https://www.atsdr.cdc.gov/safeplacesforece/docs/Choose_Safe_Places_508_final.pdf)

## DATA TO CONSIDER DURING THE ANALYSIS OF THIS REQUIREMENT

The following analyses can help inform the development of policies and programs that promote the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins. For more specific data tools and resources please see Section VIII of this EJ guidance.

Intent of Analysis	Data for Consideration
Asthma can be worsened by environmental triggers such as poor ambient air quality (including second and third-hand smoke), poor housing quality, and climate change. Examining baseline conditions can help inform siting decisions.	Asthma (prevalence, emergency department visits, hospitalizations)
Poor ambient air quality and exposure to toxic air contaminants has direct effects on people with existing respiratory diseases and can cause various adverse health effects that lead to disease. Mapping baseline air quality conditions and sources can help inform policies around transportation, connectivity, siting, and industry.	Air quality monitoring data (ozone, pm 2.5, pesticides, toxic air contaminants) Toxic hot spots and facilities (AB 2588 program)
Preparing an inventory of contaminated sites (aka brownfields) allows for improved mitigation, siting, and monitoring of sites.	Inventory of permitted and contaminated sites
Identifying water quality, accessibility, and affordability in a community are important considerations in ensuring access to safe and clean drinking water. Mapping indicators for these three trends in a community's water systems can help determine whether disadvantaged communities are disproportionately affected.	Water contaminant exposure, water district compliance, water supply availability and reliability, water affordability ratios (see OEHHA tool and guidance)

## Promoting Public Facilities

### Requirement Description

The general plan must identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities by promoting public facilities. (Gov. Code § 65302, subd. (h)(1)(A).) Under Government Code section 65302, “public facilities” include, but are not limited to, public improvements, public services, and community amenities, as defined in [Government Code section 66000, subdivision \(d\)](#).

### General Public Facilities Considerations

Access to resources is an important component of a livable, vibrant community. Ensuring equitable access and connections to public services and community amenities such as community centers, libraries, public transit, parks and recreation facilities, and safe drinking water and wastewater services, are all important components of livable communities and neighborhoods. Additional public facilities and services could include active transportation infrastructure, flood control and water drainage, health care services such as hospitals and health clinics, broadband or internet access, and facilities and programs to improve disaster preparedness and recovery capacity.



## DATA TO CONSIDER DURING THE ANALYSIS OF THIS REQUIREMENT

The following analyses can help inform the development of policies and programs that promote the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins. For more specific data tools and resources please see Section VIII of this EJ guidance.

Intent of Analysis	Data for Consideration
Overall balance and equitable distribution of public facilities and amenities is important to create a livable community for all.	Location, distribution, and quality of public facilities and amenities such as parks, trails, sidewalks, public transit, libraries, or other infrastructure

## Promoting Food Access

### Requirement Description

The general plan must identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities by promoting food access. (Gov. Code, § 65302, subd. (h)(1)(A).)

### General Food Access and Health Considerations

People living in rural areas, low-income neighborhoods, and communities of color are more likely to have limited access to healthy and affordable foods.<sup>xiv</sup> Access to healthy food has become a greater priority given that the percentage of obese adults and children has been increasing, particularly in low-income communities. New research shows the risk of developing diabetes during an average lifespan in the US population has increased to nearly 40 percent, further supporting the need to improve nutrition.<sup>xv</sup> Health conditions related to obesity, such as high blood pressure, high cholesterol, heart disease, diabetes, and cancer, are also on the rise. Over-consumption and lack of access to of less nutritional food is a component of the problem in addition to lack of access to healthy, fresh food compound this problem. Some areas struggle with food deserts, which are areas that do not have adequate physical access to nutritious healthy foods.<sup>xvi</sup> Many Californians have experienced food insecurity, defined as a time when they could not afford enough food or had to forgo other basic life expenses to buy food.<sup>xvii</sup> Food insecurity is broadly considered to have three pillars: 1) availability, 2) access, and 3) utilization. Although individuals make foods choices, those

choices are made within the context of what is accessible, affordable, or available. Food insecure households are often the same ones that struggle with obesity.

Research shows that multi-pronged approaches are needed to support healthy food consumption and food security. Creating access without addressing affordability, for instance, will not necessarily help increase consumption of healthy food. Some jurisdictions have combined policies that address infrastructure and food access with community education and programming. Planning policies and practices can help improve access, a critical factor to better nutrition and better health.

Increasing access to healthy foods can occur in multiple ways, such as zoning, streamlining project approvals for opening grocery stores in underserved areas, providing policies to increase access to farmer's' markets, promoting community gardens and small-scale urban farms, working with local convenience stores to increase affordable fresh produce selection, and establishing food procurement policies. The American Planning Association recently completed a national scan of planning documents addressing food issues, and compiled their findings into a policy report, [Planning for Food Access and Community Based Food Systems](#). The California Department of Food and Agriculture's [Office of Farm to Fork](#) also provides information on programs to improve food access. In addition, local and regional collaboratives can help address food access issues on a larger scale by evaluating policies that cover a broad range of food system issues from production, distribution and processing, access and consumption, to waste disposal.<sup>xviii</sup>



A community food system can be defined as a system in which “food production, processing, distribution and consumption are integrated to enhance the environmental, economic, and social and nutritional health of a particular place.”<sup>xix</sup> It is important to address food access as part of the entire food system. General plans can support protecting agricultural land for production as well as establishing a framework to support and encourage local food production in the form of community gardens and supportive zoning. Regional metropolitan planning

organizations can also consider financial incentives for improving, among other things, farm to market interconnectivity and transportation needs ([Gov. Code, § 65080, subd. \(b\)\(4\)\(C\)](#)). Integrated transportation systems connecting regional networks can ensure that distribution and processing has a lower carbon footprint and is more sustainable. Improving access to locally grown food can help reduce trip generation, promote locally sourced food, and support mixed use for food retail, farmers markets, and other food stores.

## DATA TO CONSIDER DURING THE ANALYSIS OF THIS REQUIREMENT

The following analyses can help inform the development of policies and programs that promote the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins. For more specific data tools and resources please see Section VIII of this EJ guidance.

Intent of Analysis	Data for Consideration
Eating more fruits and vegetables is an individual behavior that can be supported through increased access to healthy, affordable options. Examining a baseline condition can inform policy around food systems and location of services.	Daily consumption of fresh fruits and vegetables
Having access to adequate, affordable, and healthy food is important to health. Examining a baseline condition of those suffering from food insecurity can inform policy around food systems and location of services.	Self-reported food insecurity
Creating an inventory of available vacant public and private lands can help identify lands for conversion into community gardens, urban farming, or small parks.	Number of unused or under-utilized property per tax assessor records
Mapping baseline food retail and access conditions can help identify areas that might not have adequate access and inform policy priorities and decisions for siting.	Food retail, community garden, and farmers' market locations
CalFresh is a program to address food insecurity. Understanding baseline Cal Fresh participation can inform local need in the community and inform policy development.	County-level Cal Fresh participation data
Mapping baseline food retail access to healthy foods, versus tobacco and alcohol sales, can inform policy on location of services.	County-level data from Healthy Stores for a Healthy Community

## Promoting Safe and Sanitary Homes

### Requirement Description

The general plan must identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities by promoting safe and sanitary homes. (Gov. Code § 65302, subd. (h)(1)(A).)

### General Housing and Health Considerations

Housing location, quality, affordability, and stability have health implications.<sup>xx</sup> Often, individuals who experience unique or compounding health risks face multiple, inter-related barriers to accessing safe, stable, and affordable housing.<sup>xxi</sup> The **housing element** allows jurisdictions to identify opportunities and adopt policies to promote positive health outcomes. It also provides a unique opportunity to examine existing and future housing needs with a focus on lower income and special needs households. A housing element can strategically identify capacity for future housing. State housing law, including the **Regional Housing Need Allocation (RHNA)** process, aka, “fair share” planning, fundamentally addresses equity issues, and related planning and zoning laws require regional and local governments to adopt plans for increasing, improving, and preserving the State’s housing supply for everyone.

#### Location

Location of housing plays a central role in how individuals and families engage in their communities. Neighborhoods with accessible transit and active transportation infrastructure offer opportunities for access to employment, schools, and services, which can help to reduce VMT and improve transportation options. Housing located near parks and green space provides recreational opportunities. Housing that is sited near amenities such as grocery stores can also have the co-benefit of influencing the ease of access to fresh food and produce. Location of housing can also impact exposure to environmental pollutants. A holistic approach to siting of different facilities is an important consideration to minimize exposure to pollutants (see Air Quality and Land Use Compatibility discussions above). There are many requirements within the housing element and data available for consideration

that can influence policy development to support access to safe and sanitary housing. Zoning, infrastructure, service investments and regulations, funds available, as well as data to inform historic practices are all elements of a comprehensive approach to providing housing in well-sited areas. For more guidance, see the Housing Element section of this chapter.

#### Quality

The quality of available housing stock has direct health implications. Older housing that has not been maintained or updated can lead to physically unsafe conditions such as pest infestation, water intrusion, mold, poor insulation, and exposure to toxins such as lead and second and third-hand smoke. Water intrusion, poor insulation, and mold can exacerbate respiratory illnesses such as asthma and chronic obstructive pulmonary disease. Exposure to lead, a known neurotoxin, can have lifelong health consequences for young children. Some local jurisdictions have incorporated programs to weatherize and modernize homes, along with encouraging or requiring green and sustainable building practices for new housing construction or major retrofits of existing housing; these programs provide both environmental and health benefits. Jurisdictions can also take actions to preserve existing quality housing stock in addition to pursuing a path to create additional affordable housing. Enforcing code, seeking input from community groups, providing training for local jobs in green and sustainable construction and home retrofits, and enacting programs to assist with maintenance are examples of mechanisms to ensure quality housing stock.

#### Affordability

In addition to the quality of housing, affordability is a key factor. Access to affordable housing helps alleviate undue stress suffered from unstable living conditions. Many families in disadvantaged communities often have relatively low and fixed incomes; thus, affordable housing allows them to put their remaining income toward other goods and services, health care needs, and basic necessities such as healthy food. Also, a lower housing and transportation cost burden allows for less financial

burden and can allow for more time to pursue other healthy behaviors such as exercise or cooking healthy meals. When housing prices rise, household occupancy rates often increase, which can result in overcrowded and unsafe living conditions and increase the risk of spreading infectious diseases. Rising rents can also lead to displacement of residents resulting in a disruption of social networks and school attendance and can change the fabric of the local community. Local jurisdictions are pursuing various planning mechanisms to try to prevent displacement. Given the health impacts of having access to safe, decent, and affordable housing it remains critical jurisdictions appropriately plan for variety of housing types.

Some residents are not only displaced but become marginally housed or homeless. Increased efforts across California are addressing this growing challenge with new funds allocated at the state level. The general plan

provides an opportunity to integrate protective housing policies that avoid displacement, include land use and siting considerations for special facilities for marginally housed populations, and provide integrated policy approaches that combine housing for such populations with social and wrap-around services.

In recent years, California has passed several new laws that encourage housing production and provide funding for affordable housing; streamline housing planning, permitting, and construction processes; protect renters from displacement; and preserve existing affordable housing. These new efforts can be leveraged to implement policies developed in the general plan to improve access to safe and sanitary homes. Several organizations have produced additional resources for consultation during the planning process.<sup>xxii, xxiii</sup> An additional discussion can be found in the [Housing Element](#) section of these General Plan Guidelines.

## DATA TO CONSIDER DURING THE ANALYSIS OF THIS REQUIREMENT

The following analyses can help inform the development of policies and programs that promote the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins. For more specific data tools and resources please see Section VIII of this EJ guidance.

Intent of Analysis	Data for Consideration
Housing cost burden can be assessed to track and analyze risk of displacement.	Housing cost burden
The homeless population can face unique environmental justice exposures; understanding the numbers can help for planning for improved access and programming.	Homelessness data (e.g., point-in-time count)
Understanding household characteristics such as single parent households, larger family households, age, poverty rates, etc. can help inform priority amenities in an area.	Household characteristics by household type
An inventory of age of housing stock can help inform planning for housing growth and future development.	Age of housing stock
Examining mold, plumbing, pests, and/or failed inspections can help inform planning for safe and sanitary homes.	Quality of rental housing stock, local code enforcement data
An inventory of affordable housing can help inform planning for housing growth and future development.	Affordable housing units by housing type and income level

## Promoting Physical Activity

### Requirement Description

The general plan must identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities by promoting physical activity. (Gov. Code, § 65302subd. (h)(1)(A).)

### General Physical Activity and Health Considerations

Physical inactivity is one of the key contributors to chronic disease in California.<sup>xxiv</sup> Inactivity is linked to obesity, the second leading cause of preventable death in the United States.<sup>xxv</sup> Obesity increases the risk for many chronic diseases such as diabetes, high blood pressure, high cholesterol, heart disease, and many cancers. In 2011, 30.4% of California children age 10-17 were overweight or obese.<sup>xxvi</sup> In 2014, 27% of adult Californians were obese.<sup>xxvii</sup> Increasing physical activity is one of the most important contributors to improved health; it helps control weight, reduces the risk of cardiovascular disease, type 2 diabetes, osteoporosis, and some cancers as well as improving mental health and well-being. Only half of Californians meet the recommended daily physical activity level: about thirty minutes a day for adults and one hour for children.<sup>xxviii</sup>

### Parks, Recreation, and Open Space

Access and proximity to safe places for physical activity, including parks, are significant predictors of physical activity levels.<sup>xxix</sup> Because spaces for recreation and opportunities for physical activity are not equitably distributed, not everyone has the same opportunity to be active.<sup>xxx</sup> Frequently, low-income communities and communities of color have the fewest accessible, safe, and well-maintained recreational facilities.<sup>xxxi</sup> Designing public recreational spaces to promote physical activity can improve health outcomes for individuals and communities. When promoting active lifestyles jurisdictions are encouraged to take an inclusive approach to ensure that disadvantaged communities, seniors, and persons with disabilities have adequate access to recreation opportunities through parks and open space. Parks, green space,

and recreation centers and programs are beneficial because they improve mental wellness, contribute to social cohesion and community building, and can improve air and water quality.

The EJ element or policies incorporated in various elements can identify areas in disadvantaged communities that are “park poor” and promote parks in those areas by prioritizing park improvements (such as lighting, infrastructure, no smoking policies, or other needed improvements) or identifying possible future locations for parks in those areas. In locations that have limited green space or existing infrastructure, innovative public-private partnerships or agreements such as joint use or **shared use agreements** with schools, places of worship, or other private properties can be a mechanism to increase access to safe places where the community, particularly children, can be active. Policy guidance exists specifically for working with school districts.<sup>xxxii</sup> Considering safety and social cohesion are also necessary components to supporting physical activity. See a further discussion in **Chapter 6: Healthy Communities**.

### Active Transportation

The National Household Travel Survey (2017) shows that approximately 45% of the trips people make are under 3 miles away, and over a fifth are within a mile.<sup>xxxiii</sup> Local governments can design transportation facilities and programs that increase “active transportation” options (i.e., walking and biking) to accomplish local trips. Active living incorporates physical activity into one’s daily routine such as walking to perform errands, walking or biking to work, school, or nearby open space or community centers to pursue recreation. Providing equitable infrastructure investments to support active transportation can help reduce some of the disparate health outcomes seen across California. Active transportation options also allow for less time spent in vehicles and can help to reduce vehicle miles traveled (VMT), resulting in less GHG emissions and air pollution. Many local jurisdictions have developed active design guidelines that can also complement general plan policies.

Planning connected bike and pedestrian on-street routes and pathways increases alternatives to auto

use. Both transit-oriented development (TOD) and infill development also create an opportunity for more active lifestyles. **Complete Streets** and multimodal, interconnected transit allow access to services, places of work, housing, school, open space recreation areas, and other amenities without the need for vehicles. In conjunction with a robust public transportation system, first and last mile policies – addressing the need to provide connections between destinations and the beginning or end of trips can help increase public transit usage. Additional infrastructure such as covered rest areas, shade, age friendly seating, and bike storage are important to increase utilization. Interagency cooperation with other districts or entities can allow for creative and cost-effective solutions such as easements for trail networks.

The **Sustainable Communities and Climate Protection Act of 2008 (SB 375)** promotes regional coordination of transportation, housing, and land use planning in furtherance of the State’s climate goals. Plans and policies developed by regional planning agencies help reduce vehicle miles traveled and associated GHG emissions, improve air quality, and help communities be more active. Including policies and investment strategies in general plans that prioritize active transportation improvements in disadvantaged communities can help strengthen the potential for regional transportation plans to meet GHG reduction targets established pursuant to SB 375, and support eligibility and competitiveness for several critical state transportation grant programs.

Due to recent federal legislation, the statewide funding mechanisms to support active transportation have been evolving. The **Active Transportation Program**, enacted via Senate Bill 99 (in Chapter 359, Statutes of 2013), funds pedestrian, bicycle, and **Safe Routes to School programs (SRTS)** and ensures that at least 25% of program funding benefits disadvantaged communities. In 1969, nationally, almost half of all children between the ages of 5-14 walked or biked to school, but that number has plummeted to 13% in 2009. While there may be various reasons for this, factors include the distance to school, school siting, overall safety of the areas, and unsafe conditions on the routes to school. Programs

that promote walking or biking to school help achieve daily-recommended physical activity. Improving infrastructure and safety also increases the ability of children to walk or bike to school as desired. Several resources are available to integrate SRTS policies.<sup>xxxiv, xxxv</sup>

Planning for active lifestyles also benefits older adults. The “aging in place” concept focuses on enabling seniors to stay in their own homes and communities. Also known as naturally occurring retirement communities (NORC), these areas prioritize creating walkable communities to accommodate their needs and provide access to full services such as stores, clinics, and social programming.

AARP created the Eight Domains of Livability framework to promote age-friendly communities. The Domains are as follows:

1. Outdoor Spaces and Buildings
2. Transportation
3. Housing
4. Social Participation
5. Respect and Social Inclusion
6. Civic Participation and Employment
7. Communication and Information
8. Community and Health Services

<https://www.aarp.org/livable-communities/network-age-friendly-communities/info-2015/8-domains-of-livability-resources.html>

## DATA TO CONSIDER DURING THE ANALYSIS OF THIS REQUIREMENT

The following analyses can help inform the development of policies and programs that promote the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins. For more specific data tools and resources please see Section VIII of this EJ guidance.

Intent of Analysis	Data for Consideration
Obesity is caused by many factors, but lack of access to healthy foods and physical activity are significant contributors. Examining the baseline status can help with policy decisions around active transportation, recreation priorities, and food system policies.	Obesity (child and adult) prevalence
Access to parks and trails allow for physical activity and can be helpful to reduce chronic disease. Mapping locations of existing parks and trails, along with identifying underserved areas, can help inform policy decisions around siting and funding future facilities.	Park and trail locations
Secondary diseases from obesity are caused by many risk factors. Examining baseline status can help with policy decisions around active transportation, recreation priorities, and food system policies.	Secondary diseases from obesity (high blood pressure, high cholesterol, heart disease, type 2 diabetes prevalence)
Many accidents involving pedestrians and bicycles on existing roadways could be improved through addressing inadequate pedestrian and bicycle infrastructure, design issues, and providing adequate signage. Examining baseline conditions can inform policy and planning to improve safety along transit routes and increase active transportation modes on roadways.	Unintentional injury and crash data involving pedestrians and bicycles accidents
Walking and biking are active transportation modes that benefit health and are influenced by the built environment. Examining baseline conditions of walking and bicycling trips per capita can help inform active transportation investments.	Walk and bike trips per capita
Children walking, biking, or rolling to school is a behavior that can improve health. These activities are influenced by environmental conditions such as distance to school and safety. Examining the baseline condition can inform policy priorities around active transportation, active design, school siting, and housing siting.	Percent of children who walk, bike, roll to school
Commuting decisions and mode choice also can be influenced by connectivity, safety, cost, and ease of use. Active transportation for daily commutes can have positive health benefits. Examining the baseline conditions on share of commuters using active transportation modes can inform policy priorities around active transportation, mixed-use developments, job locations, and housing locations.	Percent of commuters who use active transportation modes (walking, biking, transit)

*table continued on next page*

table continued from previous page

Intent of Analysis	Data for Consideration
Mapping baseline walking and biking routes and infrastructure conditions can help identify system gaps and opportunities to create a more connected network for improved use.	Walk and bike maps
Mapping baseline conditions related to public transit routes and stops/stations can help identify areas that could benefit from improved transit options.	Public transit facilities
Neighborhood safety can impact social stress and influence whether people will be active. Establishing a baseline condition of public perception of safety can help inform policies such as increasing the use of crime prevention through environmental design, or prioritizing investments in streetlighting .	Percent of people that feel safe in their neighborhoods

## Reducing Additional Unique or Compounded Health Risks

California communities vary significantly by type, location, and size, which impacts the nature of environmental issues they face. To fully address EJ within their community, jurisdictions may go beyond the topics outlined previously to reduce unique or compounded health risks in disadvantaged communities.

### Coordinating EJ and Climate Change Considerations

Local agencies should consider coordinating preparation of an EJ element or equivalent, as described in this section, with other statutory requirements to address climate change. Local agencies must address climate vulnerability and adaptation under the safety element, pursuant to SB 379 and codified in Government Code Section 65302(g) (see the Climate Adaptation and Resilience discussion within the **Safety Element** section of this chapter). While not specifically required in Government Code Section 65302(h), local agencies should consider that the effects of climate change will affect vulnerable and disadvantaged communities disproportionately compared to the population as a whole in California; therefore, considering climate vulnerability in disadvantaged communities when preparing the vulnerability assessment and adaptation goals, policies, and programs for the safety element would be an appropriate linkage with the EJ element or equivalent.

General plans also provide a helpful framework for identifying policies and programs to reduce GHG emissions (see also **Chapter 8: Climate Change**). Local agencies can consider coordinating the EJ element or equivalent with strategies to reduce GHG emissions, in consideration of the needs of disadvantaged communities and determining equitable approaches to climate change issues (see also **Chapter 5: Equitable and Resilient Communities**).

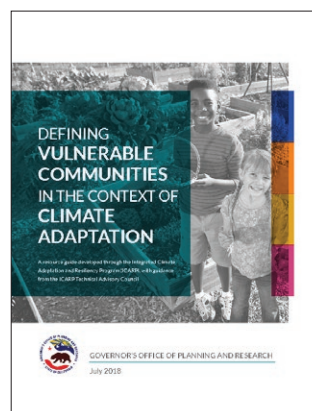
### General Climate Change, Resiliency, Adaptation and EJ Considerations

Climate change will have negative effects on health and may cause displacement from increased frequency or severity of hazards like flooding, drought, wildfire, extreme heat, and other impacts. Climate change will increase the severity of existing hazards and risks to communities as well as to human health. The **safety element** is required to analyze existing hazards, as well as the impacts of climate change on the community related to existing and future hazards. The California Department of Public Health provides recommendations and publications dealing with health and climate change (See Section VIII). Climate change will likely be one of the biggest threats to public health for decades to come; land use planning and the general plan can help communities prepare, adapt, and reduce GHGs that cause climate change. It is also known that climate change can disproportionately impact the most vulnerable communities, which are often already



“Vulnerable communities experience heightened risk and increased sensitivity to climate change and have less capacity and fewer resources to cope with, adapt to, or recover from climate impacts. These disproportionate effects are caused by physical (built and environmental), social, political, and/or economic factor(s), which are exacerbated by climate impacts. These factors include, but are not limited to, race, class, sexual orientation and identification, national origin, and income inequality.”

Source: [Defining Vulnerable Communities in the Context of Climate Adaptation](#), OPR, July 2019.



suffering from other disproportionate environmental burdens and health risks. Explicit consideration of health and EJ issues provides an opportunity to improve resilience of local communities, especially vulnerable populations.

There are many definitions of vulnerable populations and disadvantaged communities. The Integrated Climate Adaptation and Resiliency Program (ICARP), established at OPR, is charged with developing a cohesive and holistic response to the impacts of climate change by coordinating state and local adaptation efforts to advance implementation. Through the enabling legislation, ICARP is centrally focused on efforts that advance climate equity and support integrated climate strategies, or those strategies that benefit both greenhouse gas reductions and adaptation. The ICARP Technical Advisory Council adopted a definition for vulnerable communities. Although the definition for vulnerable communities is different from the statutory definition of disadvantaged communities in Government Code section 65302(h), it provides insight into the factors that contribute to vulnerability in an adaptation context, including disproportionate environmental burdens and health risks. The table below demonstrates different data that can be used to inform planning for adaptation and resilience.

Some health effects of climate change are already occurring because of increasing temperatures and

related effects. Temperature records continue to be broken with increasing temperatures year after year in California.<sup>xxxvi</sup> Increased exposure to extreme heat puts children, older adults, people with pre-existing health conditions, and those who work in high-exposure jobs like construction, agriculture, and landscaping at more serious risk to suffer from heat stroke and heat-related complications. Studies show increased mortality during times of high heat.<sup>xxxvii</sup> In fact, according to the Center for Disease Control, between 1979 and 2003, more people prematurely died from extreme heat-related illness than the total combined deaths from other natural disasters including tornadoes, floods, earthquakes, hurricanes, and lightning.<sup>xxxviii</sup> Policies can be integrated into the general plan to address heat islands, provide cooling centers for vulnerable communities, and address the risk of heat exposure due to employment (e.g., farmworkers) or housing situation (homelessness, lack of air conditioning).

Targeted investments in green infrastructure as well as urban forestry and greening in disadvantaged communities can help to reduce the adverse impacts associated with climate change. Increased urban greening and use of cool surfaces like cool or green roofs – which have a high-albedo effect, reflecting higher portions of radiation back into space – can decrease temperatures and lessen the effects of extreme heat. These investments



can also result in additional benefits. For instance, green roofs can improve air quality and healthy tree canopies can provide shade and help with carbon capture.<sup>xxxix</sup>

Energy efficiency and conservation programs also have multiple co-benefits. When new housing developments are planned to use less energy, they can improve comfort and health during extreme heat events and reduce energy bills, allowing families to put their savings toward other expenses. Existing housing can also be weatherized or retrofitted to improve efficiency. These measures can be particularly impactful for low-income communities, which are more likely to be energy burdened and experience thermal-related illnesses<sup>xl</sup>. Additionally, energy efficiency measures or other green building measures, in conjunction with smoke-free multi-unit

housing policies, can improve indoor air quality in both new and existing housing, which can reduce respiratory illness such as asthma.<sup>xli</sup>

As temperatures rise, land use policies to promote the efficient circulation, conservation, and recapture of water are also needed for drought mitigation. While creating these policies and programs, it is important to control for pools of stagnant water to minimize risk for mosquito reproduction. The mosquitos themselves are a health hazard: scientists predict that insect-borne diseases, such as dengue and yellow fever, will increase in the future as a result of climate change. In 2013, the particular mosquito that carries dengue was found in California. Land use policies to conserve water and prevent large-scale stagnant pools will be key in managing such health risks and increasing resilience.

**Table 1: Adaptation and Resilience Data Indicators**

FACTOR	INDICATOR	CES (weighted index + map)	CCHVI (not an index)	HPI (weighted index + map)	ROI (weighted index)	SB 1000
Existing inequities, institutionalized racism, or exclusion: People facing disadvantage or discrimination often have lower socioeconomic status, which result in fewer resources for preparing, coping and recovering from climate impacts.	Educational attainment	■	■	■	■	■
	Employment	■	■	■	■	■
	Housing burdened low income households	■	■	■	■	■
	Income	■	■	■	■	■
	Linguistic isolation	■	■	■	■	■
	Poverty	■	■	■	■	■
	Race and Ethnicity	■	■	■	■	■
	Two parent household	■	■	■	■	■
	U.S. Citizenship	■	■	■	■	■
	Violent Crime Rate	■	■	■	■	■
	Voting	■	■	■	■	■
Physical states or conditions that increase vulnerability: Older adults, young children, pregnant women, and people with chronic health conditions or mental illness are more susceptible to harm from effects of climate change.	Asthma emergency department visits	■	■	■	■	■
	Children	■	■	■	■	■
	Cardiovascular disease	■	■	■	■	■
	Elderly	■	■	■	■	■

FACTOR	INDICATOR	CES (weighted index + map)	CCHVI (not an index)	HPI (weighted index + map)	ROI (weighted index)	SB 1000
<b>Poor environmental conditions, access to services, or living conditions:</b> Populations at higher risk under a changing climate include those who are uninsured or underinsured or lack access to health care or child care, lack access to transportation, live in areas with poor air quality, live on upper floors of tall buildings, live in areas with lots of impervious surfaces and little tree cover, and lack life-supporting resources such as adequate housing, ways to cool living space, are food insecure or lack adequate medications, or are tenants or renters. Populations at higher risk also include those living in "land islands" that have limited access to resources and services due to conditions of geographic isolation.	Alcohol outlets					■
	Air conditioning					■
	Active commuting					■
	Diesel PM					■
	Groundwater threats					■
	Housing habitability					■
	Hazardous waste facilities and generators					■
	Healthcare availability					■
	Housing crowding					■
	Impaired water bodies					■
	Impervious surfaces					■
	Ozone concentrations					■
	PM 2.5 concentrations					■
	Park Access					■
	Solid waste sites/facilities					■
	Public transit access					■
	Toxic cleanup sites					■
	Toxic releases from facilities					■
	Traffic density					■
	Tree canopy					■
	Retail Density					■
	Supermarket Access					■
Use of high-hazard, high-volatility pesticides					■	
Water Contaminants					■	
<b>Lack of investment and opportunities:</b> The disinvestment and resource deprivation historically experienced by communities facing inequities or isolation leads to degraded living conditions and lack of power over decisions that affect their lives	Homeownership					■
	Health Insurance					■
	Vehicle Ownership/ Access					■

## DATA TO CONSIDER DURING THIS ANALYSIS

The following analyses can help inform the development of policies and programs that promote the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins. For more specific data tools and resources please see Section VIII of this EJ guidance.

Intent of Analysis	Data for Consideration
Understanding areas at risk for increased temperatures and extreme heat can help inform policy decisions to impact community resilience.	Temperature and extreme heat data
Understanding changes in precipitation and snowpack, including both increased risk of drought conditions as well as extreme precipitation events and flooding risk increase, can help inform policy decisions that address water availability, flood protection, and emergency response	Precipitation changes, snowpack loss, extreme precipitation events, extended drought scenarios
Increasing tree canopy can help with carbon capture, provide shade from high heat, and improve the physical appearance of the community.	Tree canopy
Understanding projected sea level rise can help inform policies for future building within communities at risk.	Sea Level Rise
Understanding areas at risk from increasing wildfire hazards can help to inform policies for future building within communities at risk.	Wildfire threat, fire hazard severity zones (FHSZ)

## Promoting Civic Engagement in the Public Decision-Making Process

### Requirement Description

The general plan must identify objectives and policies to promote civic engagement in the public decision-making process. (Gov. Code, § 65302(h)(1)(B).)

The National Academy of Sciences **Communities in Action: Pathways to Health Equity** specifically recognizes community engagement as a key lever to improving health equity, particularly as it relates to land use planning, housing, and transportation.

### General EJ and Civic Engagement Considerations

Community engagement is a fundamental part of any general plan update to inform the community vision. It is particularly important with respect to EJ because it allows communities that have often not been included in

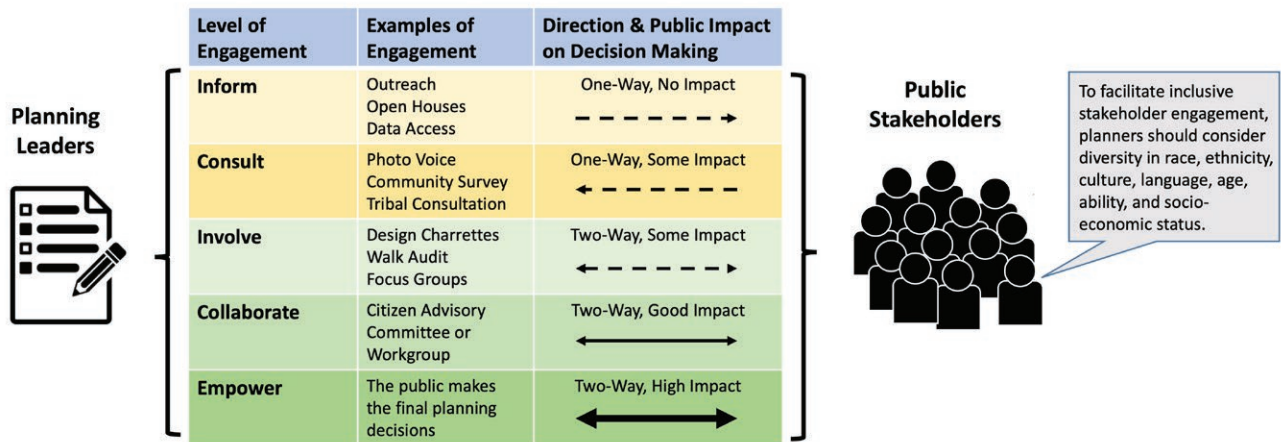
the planning process to be engaged in the decisions that impact their health and wellbeing.

As jurisdictions engage with disadvantaged communities, it is important to acknowledge that prior planning and policy decisions contributed to disproportionate burdens being placed on the community, putting their health at risk. As a result, attention should be devoted to understanding local history. Relationships and trust may need to be rebuilt with residents to better facilitate meaningful civic engagement.

Partnering with community-based organizations, advocacy groups, and trusted leaders that work within the identified disadvantaged communities can help jurisdictions develop appropriate engagement strategies and increase community participation. Collaborating with these groups as well as residents can help the jurisdiction identify how and when the community would prefer to engage in public decision-making processes.

While developing avenues for engagement, jurisdictions should consider diversity in race, ethnicity, culture, language, age, ability, and socioeconomic status. Moreover, jurisdictions should identify potential external barriers for

**Figure 3: Community Engagement Strategies**



participation such as time conflicts, or access to transportation and childcare, as well as internal barriers such as use of jargon, meeting format, power dynamics, and level of prior knowledge regarding the planning process. All civic engagement opportunities should be conducted in a way that is accessible, transparent, and inclusive to meet the unique needs of people living within the identified disadvantaged areas. For more information please refer to the [Community Engagement and Outreach Chapter](#).

Civic engagement should be viewed as an ongoing process that lasts throughout and beyond a general plan update. Within the general plan itself, objectives and policies must be identified to promote civic engagement in disadvantaged communities per Gov. Code, § 65302(h)(1)(B). The plan should facilitate and promote the ongoing engagement of disadvantaged communities in planning and implementation processes so that they can participate in the improvement of their own community at both the general plan level and as more specific decisions are made at the project and program levels. Metrics should also be included in the plan to help jurisdictions assess the effectiveness of their engagement efforts and evaluate progress.

Close communication with the community is key to maintaining trust and positive relationships. Throughout the duration of the engagement process, jurisdictions should be cognizant of the promises they are making to community members and transparent about how the

community's input is influencing the planning process. Following adoption of the general plan update, jurisdictions should continue to involve and engage disadvantaged communities in general plan implementation activities. For example, civic engagement should be included in proposed changes in zoning or other implementing codes or standards, local neighborhood-level specific plan or revitalization efforts, review of new development projects and associated entitlements, capital improvement plans or facility master planning, development of new community-facing programs related to improving public health, or other applicable implementation programs.

## DATA TO CONSIDER DURING THE ANALYSIS OF THIS REQUIREMENT

For more specific data tools and resources please see Section VIII of this EJ guidance.

Intent of Analysis	Data for Consideration
Population characteristics can inform the jurisdiction as it plans inclusive avenues for civic engagement and assesses the effectiveness of its efforts.	Population Characteristics (race, ethnicity, culture, language, age, ability, socioeconomic status, etc.)
Historical context can inform civic engagement, help reestablish trust between local governments and disadvantaged communities, and uncover the needs of disadvantaged communities.	Historical context with respect to EJ and the identified disadvantaged communities.

### Prioritizing Improvements and Programs that Address the Needs of Disadvantaged Communities

#### Requirement Description

The general plan must identify objectives and policies to prioritize improvements and programs that address the needs of disadvantaged communities. (Gov. Code, § 65302, subd. (h)(1)(A).)

#### General Considerations for Prioritizing Improvements and Programs

Many disadvantaged areas have not had sufficient maintenance of or improvements to the built environment and/or supportive programs in their communities. Establishing policies and implementation programs in the general plan that address the specific needs of disadvantaged communities is a strategy to improve access to opportunities, improve health, and increase well-being. The general plan's EJ objectives, policies and implementation programs should focus on areas identified by the local community for improvement. As a result, jurisdictions should include community improvements and programs that are identified and supported by disadvantaged communities and address the priority needs of disadvantaged communities.

The general plan should also identify mechanisms for monitoring EJ policies and implementation programs. Performance indicators and metrics may serve as a useful tool to help track implementation outcomes in EJ communities as general plan policies and programs are implemented over time (see, for example, the discussion of health data and indicators in [Chapter 6: Healthy Communities](#)). The general plan can also incorporate communication and reporting strategies to convey implementation status and outcomes to EJ stakeholder communities, either as part of the mandatory general plan annual progress reporting program or other implementing mechanisms to improve transparency (see also [Chapter 9: Implementation](#)). Ongoing civic engagement and involvement of disadvantaged communities during general plan implementation and monitoring can also be included as a strategy to ensure that the needs of disadvantaged communities are prioritized.

## VII. Additional Data Resources for Equity and EJ

The following section provides a list of tools that may help jurisdictions during their analysis of EJ element requirements.

Data Source	Description	Identifying DACs	Pollution Exposure	Public Facilities	Food Access	Safe and Sanitary Homes	Physical Activity	Civic Engagement	Unique Health Risks
<a href="#">Cal-Adapt</a>	UC Berkeley developed this tool for the State of California with oversight by the California Energy Commission and others to create a resource library of reliable scientifically supported data to inform climate planning.								
<a href="#">CalEnviroScreen</a>	The Office of Environmental Health Hazard Assessment (OEHHA) in the California Environmental Protection Agency created this online mapping tool to identify communities that are burdened by environmental factors.								
<a href="#">CalEPA Regulated Site Portal</a>	This portal provides data on environmentally regulated activities across California that pertain to hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials.								
<a href="#">California Environmental Health Tracking Program</a>	The California Department of Public Health created this online mapping tool. It is a tool that helps identify environmental risks associated with health outcomes such as poor air quality and asthma.								
<a href="#">California Power Map</a>	Physicians, Scientists, and Engineers for Healthy Energy created this mapping tool that compares fossil fuel and bioenergy power plants that are 10 megawatts or larger.								
<a href="#">California's Fourth Climate Change Assessment</a>	California's Fourth Climate Change Assessment provides relevant information regarding climate science, impacts, and adaptation solutions across the state and within regions.								

Data Source	Description	Identifying DACs	Pollution Exposure	Public Facilities	Food Access	Safe and Sanitary Homes	Physical Activity	Civic Engagement	Unique Health Risks
<b>CARB Air Monitoring</b>	The California Air Resources Board collects air quality data from over 40 locations throughout the state and disseminates information about ambient-level pollutant trends, air modeling and forecasting.								
<b>CARB Low-income and Disadvantaged Communities</b>	This map, developed by the California Air Resources Board, helps jurisdictions identify low-income and disadvantaged communities as defined by SB 535 and AB 1550.								
<b>CARB Pollution Mapping Tool</b>	This tool provides a map of large industrial facilities across California as well as numerical data on GHG emissions, criteria pollutants and toxic air contaminants of each facility.								
<b>Census Data</b>	The United States Census collects data on a range of factors. The American Community Survey is conducted annually.								
<b>CHAT Tool</b>	The California Heat Assessment Tool was created as part of California's Fourth Climate Change Assessment in order help local communities identify changes to heat health events and identify areas of vulnerability.								
<b>City Health Dashboard</b>	Sponsored by the Robert Wood Johnson Foundation and NYU Langone Health, this dashboard provides data for 500 of the largest cities in the United States, many of which are in California.								
<b>Climate Change and Health Vulnerability Indicators for California</b>	The California Department of Public health maintains these indicators to assess exposures, social vulnerability, and adaptive capacity for areas across California.								

Data Source	Description	Identifying DACs	Pollution Exposure	Public Facilities	Food Access	Safe and Sanitary Homes	Physical Activity	Civic Engagement	Unique Health Risks
<b>Envirostor</b>	The Department of Toxic Substances Control hosts this program. It is a database that provides data in a GIS form to identify contaminated sites as well as facilities that deal with hazardous waste.								
<b>Environmental Justice Screening Method (EJSM)</b>	Originally created for the California Air Resources Board, this tool identifies communities overburdened by environmental and social stressors.								
<b>Healthy City</b>	This tool, maintained by Advancement Project California, allows users to access localized data to create maps. This platform also allows users to upload their own data.								
<b>Healthy Places Index</b>	This index was created and is maintained by the Southern California Health Alliance. OPR worked with the team to align data sources with SB 1000 requirements. It provides GIS mapping capability and combines 25 community characteristics into one value. Additionally, data layers can be separated out for additional analysis.								
<b>Healthy Stores for a Healthy Community</b>	This resource provides county level data regarding tobacco and alcohol prevalence and use, access to fresh fruits and vegetables, and the associated health and economic impacts.								
<b>Human Right to Water Data Tool and Report</b>	OEHHA tool provides an assessment of the state's community water systems in terms of water quality, accessibility and affordability. Indicators can be examined individually or in groups to allow for a nuanced understanding of key domestic water issues.								



Data Source	Description	Identifying DACs	Pollution Exposure	Public Facilities	Food Access	Safe and Sanitary Homes	Physical Activity	Civic Engagement	Unique Health Risks
<a href="#">Human Right to Water Portal</a>	SWRCB website that includes data, maps, funding programs, and other information that can be used in understanding existing challenges and address water quality, access, and affordability issues in disadvantaged communities.								
Local and Regional Data	Information from local and regional entities, such as MPOs								
<a href="#">Longitudinal Employer-Household Dynamics Data</a>	The United States Census Bureau published this data to help jurisdictions “characterize workforce dynamics”.								
<a href="#">Map the Meal Gap</a>	Feeding America created this map to help counties quantify food insecurity in their jurisdiction.								
<a href="#">PolicyMap</a>	This mapping tool provides access to over 37,000 data indicators that have been standardized across the nation.								
<a href="#">Racial Equity Tools</a>	This webpage outlines the linkages between EJ and environmental racism by highlighting key research. Moreover, it provides numerous tools to help jurisdictions put racial equity into practice.								
<a href="#">Regional Opportunity Index, UC Davis Tool<sup>xxv</sup></a>	This tool provides an index based on social, economic, and environmental indicators for review and analysis by local residents, program managers, and policy makers to inform investment decisions.								
<a href="#">SB 1000 Implementation Tool Kit by CEJA</a>	This toolkit, produced by the California Environmental Justice Alliance, provides additional guidance to help jurisdictions implement SB 1000.								

Data Source	Description	Identifying DACs	Pollution Exposure	Public Facilities	Food Access	Safe and Sanitary Homes	Physical Activity	Civic Engagement	Unique Health Risks
The Opportunity Atlas	Based out of Harvard University, this non-profit provides data centered on economic opportunity and upward mobility.								
Urban Footprint	This tool allows jurisdictions to access hundreds of data sets, create maps, and analyze alternative land use scenarios.								
Urban Heat Island Index	The California Environmental Protection Agency maintains this data source to reflect heat islands.								
US EPA's EJSCREEN	This mapping and screening tool contains a nationally standardized dataset with 11 environmental indicators, 6 demographic indicators, and 11 EJ indexes.								
500 Cities-Local Data for Better Health	The Centers for Disease Control maintains health data for the 500 biggest cities across the US, many located in California.								

## VIII. Example Policies

---

National City and Jurupa Valley were the first cities to adopt EJ elements in California. Their plans are linked in the table below along with other jurisdictions who have adopted EJ elements following the passage of SB 1000 in 2016<sup>8</sup>. A list of policy examples can also be found in the accompanying Example EJ Policies for General Plans document. Jurisdictions may modify existing language and tailor it to match their vision for **equity and environmental justice**.

Jurisdiction	Year	General Plan
City of National City	2011	<a href="#">National City Health and Environmental Justice Element</a>
City of Jurupa Valley	2014	<a href="#">Jurupa Valley General Plan</a>
City of Woodland	2017	<a href="#">Woodland General Plan</a>
City of Ceres	2018	<a href="#">Ceres General Plan 2035</a>
County of Sacramento	2018	<a href="#">Sacramento County Environmental Justice Element</a>
City of Stockton	2018	<a href="#">Envision Stockton 2040 General Plan</a>
City of Elk Grove	2019	<a href="#">Elk Grove General Plan</a>
Town of Yountville	2019	<a href="#">Yountville General Plan</a>
City of Inglewood	2020	<a href="#">City of Inglewood Environmental Justice Element</a>

---

8 Most of these jurisdictions were identified using data from OPR's 2019 Annual Planning Survey.

# Bibliography

---

- i. Library of Congress. (n.d.). The Missions. Retrieved from <https://www.loc.gov/collections/california-first-person-narratives/articles-and-essays/early-california-history/missions/>
- ii. Lake F. (2018). *Fire as Medicine: Fire Dependent Cultures and Re-Empowering American Indian Tribes*. Fire Adapted Communities Learning Network. Retrieved from <https://fireadaptednetwork.org/fire-as-medicine-fire-dependent-cultures/>
- iii. California Legislative Information. (2018). AB-771 *Burning of forest lands: forest landowners*. Retrieved from [https://leginfo.legislature.ca.gov/faces/billCompareClient.xhtml?bill\\_id=201720180AB771&showamends=false](https://leginfo.legislature.ca.gov/faces/billCompareClient.xhtml?bill_id=201720180AB771&showamends=false)
- iv. Chou C. (2014). *Land Use and the Chinatown Problem*. *Asian Pacific American Law Journal*, 19(1) Retrieved from <https://escholarship.org/content/qt8g7550h8/qt8g7550h8.pdf?t=ne4gyw>
- v. Kilvans L., Green M. (May 2019). *Asthma Rates Higher in California's Historically Redlined Communities, New Study Finds*. KQED. Retrieved from <https://www.kqed.org/news/11749299/asthma-rates-higher-in-californias-historically-redlined-communities-new-study-finds>
- vi. Nardone A., Casey J., Morello-Forsch R., Mujahid M., Balmes J., Thakur N. (January 2020). *Associations Between Historical Residential Redlining and Current Age-Adjusted Rates of Emergency Department Visits Due to Asthma Across Eight Cities in California: An Ecological Study*. *Lancet Public Health*, 4(1), e24-e31. Doi: [10.1016/S2542-5196\(19\)30241-4](https://doi.org/10.1016/S2542-5196(19)30241-4) Retrieved from <https://pubmed.ncbi.nlm.nih.gov/31999951/>
- vii. Romasanta, G. (July 2019). *Why It Is Important to Know the Story of Filipino-American Larry Itliong*. *Smithsonian Magazine*. Retrieved from <https://www.smithsonianmag.com/smithsonian-institution/why-it-is-important-know-story-filipino-american-larry-itliong-180972696/>
- viii. Hoffman P. (August 1988). *UFW fights harvest of poison*. *The Witness*. Retrieved from <https://libraries.ucsd.edu/farmworkermovement/essays/essays/eleven/09%20-%20UFW%20FIGHTS%20HARVEST%20OF%20POISON.pdf>
- ix. Office of Legacy Management. (n.d.). *Environmental Justice History*. Retrieved from <https://www.energy.gov/lm/services/environmental-justice/environmental-justice-history>
- x. Cal Recycle. (October 2018). *Brief History of the Movement in the United States*. Retrieved from <https://www.cal-recycle.ca.gov/envjustice/history#:~:text=In%20California%20a%20major%20milestone,%2C%20low%2Dincome%20farmworker%20community.&text=One%20recommendation%20included%20creating%20the,which%20was%20established%20in%201992.>

- xi. PBS Learning Media. (n.d.). *Environmental Justice: Opposing a Toxic Waste Incinerator*. Retrieved from <https://ca.pbslearningmedia.org/resource/envh10.sci.life.eco.enhdiscrim/environmental-justice-opposing-a-toxic-waste-incinerator/>
- xii. Cole L., Foster S. (2001). *From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement*. Retrieved from [https://jasonwmoore.com/wp-content/uploads/2018/07/Cole-and-Foster-From-the-Ground-Up\\_Environmental-Racism-and-the-Rise-of-the-Environmental-Justice-Movement-2001-NYU-Press.pdf](https://jasonwmoore.com/wp-content/uploads/2018/07/Cole-and-Foster-From-the-Ground-Up_Environmental-Racism-and-the-Rise-of-the-Environmental-Justice-Movement-2001-NYU-Press.pdf)
- xiii. California Environmental Justice Alliance. (2018). *SB 1000 Implementation Tool Kit*. Retrieved from <https://caleja.org/sb-1000-toolkit/>
- xiv. Bell J, Mora G, Hagan E, Rubin V, Karpyn A. *Access to Healthy Food and Why it Matters: A Review of the Research*. 2013; Oakland, CA: Policy Link and Philadelphia, PA: The Food Trust. [http://thefoodtrust.org/uploads/media\\_items/access-to-healthy-food.original.pdf](http://thefoodtrust.org/uploads/media_items/access-to-healthy-food.original.pdf)
- xv. Gregg, E., Zhuo, X., Cheng, Y., Albright, A., Narayan, K., Thompson, T. (2014). *Trends in lifetime risk and years of life lost due to diabetes in the USA, 1985–2011: a modelling study*. *The Lancet Diabetes & Endocrinology*, 2(11), 867-874. doi: 10.1016/S2213-8587(14)70161-5
- xvi. Office of Disease Prevention and Health Promotion. (2020). *Access to Foods that Support Healthy Eating Patterns*. Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/access-to-foods-that>
- xvii. Chaparro, M., et al. (June 2012). *Nearly four million Californians are food insecure*. Retrieved from UCLA Center for Health Policy website: <http://healthpolicy.ucla.edu/publications/Documents/PDF/FoodPBrevised7-11-12.pdf>
- xviii. Pothukuchi, K., Joseph, H., Burton, H., & Fisher, A. (2002). *What's cooking in your food system? A guide to community food security assessment*. Retrieved from The Community Food Security Coalition website: [https://nesfp.org/sites/default/files/uploads/a\\_guide\\_to\\_community\\_food\\_assessment\\_2002.pdf](https://nesfp.org/sites/default/files/uploads/a_guide_to_community_food_assessment_2002.pdf)
- xix. Institute for Agriculture and Trade Policy. *Growing a Community Food System*. Retrieved from <https://www.iatp.org/documents/growing-a-community-food-system>
- xx. Health Affairs. *Housing and Health: An Overview of the Literature*. Retrieved from <https://www.healthaffairs.org/doi/10.1377/hpb20180313.396577/full/>
- xxi. Charleswell C. *The Built Environment: The Source of Inequities in Health, Wellbeing, and Feminist Activism in Communities of Color*. The Hampton Institute website: <http://www.hamptoninstitution.org/built-environment.html#XbrGRFxKiUk.2014>
- xxii. California Environmental Justice Alliance. (2018). *SB 1000 Implementation Tool Kit*. Retrieved from <https://caleja.org/sb-1000-toolkit/>

- xxiii. The Strategic Growth Council. *Guidelines for the Transformative Climate Communities Program*. Retrieved from <http://sgc.ca.gov/programs/tcc/resources/application.html>
- xxiv. California Department of Public Health. (2015). *Economic burden of chronic disease in California*. Retrieved from: [https://www.cdph.ca.gov/Programs/CCDC/DCDC/DCDCB/CDPH%20Document%20Library/CAEconomic-BurdenCD2015\\_ADA.pdf](https://www.cdph.ca.gov/Programs/CCDC/DCDC/DCDCB/CDPH%20Document%20Library/CAEconomic-BurdenCD2015_ADA.pdf)
- xxv. Danaei G., Ding E., Mozaffarian D., Taylor B., Rehm J., Murray C., et al. (2009). *The preventable causes of death in the United States: Comparative risk assessment of dietary, lifestyle, and metabolic risk factors*. PLoS Med., 6(4), doi:10.1371/journal.pmed.1000058
- xxvi. National Survey of Children's Health. (2012). *Data query from the Child and Adolescent Health Measurement Initiative*. Retrieved from Data Resource Center for Child and Adolescent Health website: [www.childhealthdata.org](http://www.childhealthdata.org)
- xxvii. California Department of Public Health and Nutrition Policy Institute. (2016). *Obesity in California: The Weight of the State, 2000-2014*. Retrieved from [https://www.cdph.ca.gov/Programs/CCDC/DCDC/NEOPB/CDPH%20Document%20Library/RES\\_CAObesityReport\\_Website.pdf](https://www.cdph.ca.gov/Programs/CCDC/DCDC/NEOPB/CDPH%20Document%20Library/RES_CAObesityReport_Website.pdf)
- xxviii. Centers for Disease Control and Prevention. (2003). *Behavioral risk factor surveillance system, physical activity prevalence data: California*. Retrieved from <https://chronicdata.cdc.gov/Behavioral-Risk-Factors/Behavioral-Risk-Factor-Surveillance-System-BRFSS-H/iuq5-y9ct/data>
- xxix. Humpel N., Owen N., & Leslie E. (2002). *Environmental factors associated with adults' participation in physical activity: A review*. American Journal of Preventive Medicine, 22(3), 188-199. doi:10.1016/S0749-3797(01)00426-3
- xxx. Gordon-Larsen P., Nelson MC., Page P., Popkin BM. *Inequality in the Built Environment underlies key health disparities in physical activity and obesity*. Pediatrics. 2006; 117 (2): 417-424.
- xxxi. Duncan DT, Kawachi I, White K, Williams Dr. *The geography of recreational open space: Influence of neighborhood racial composition and neighborhood poverty*. Urban Health. 2013; 90 (4): 618-631.
- xxxii. ChangeLab Solutions. (2014). *Model joint use agreement resources: Increasing physical activity by opening up school grounds*. Retrieved from <http://www.changelabsolutions.org/publications/model-JUAs-national>
- xxxiii. U.S. Department of Transportation, Federal Highway Administration. (2017). *Popular Vehicle Trips Statistics*. Retrieved from <https://nhts.ornl.gov/vehicle-trips>
- xxxiv. Safe Routes to School National Partnership and National Center for Safe Routes to School. (2014). *Integrating safe walking and bicycling to school into comprehensive planning*. Retrieved from <http://www.saferoutespartnership.org/resources/fact-sheet-case-study/integrating-safe-walking-bicycling-planning>
- xxxv. ChangeLab Solutions. (2014). *Model general plan language supporting safe routes to schools*. Retrieved from [http://www.changelabsolutions.org/publications/SRTS\\_general-plans](http://www.changelabsolutions.org/publications/SRTS_general-plans)

- xxxvi. National Oceanic and Atmospheric Administration (2015). *Global Climate Report - Annual 2015*. Retrieved from <https://www.ncdc.noaa.gov/sotc/global/201513>
- xxxvii. California Environmental Protection Agency, Heat Adaptation Workgroup. (2013). *Preparing California for extreme heat*. Retrieved from [https://healthyplacesindex.org/wp-content/uploads/2018/02/2013\\_cph\\_preparing\\_california\\_for\\_extreme\\_eat.pdf](https://healthyplacesindex.org/wp-content/uploads/2018/02/2013_cph_preparing_california_for_extreme_eat.pdf)
- xxxviii. Centers for Disease Control and Prevention. (2012). *Emergency preparedness and response for extreme heat: A prevention guide to promote your personal health and safety*. Retrieved from [https://www.cdc.gov/disasters/extremeheat/heat\\_guide.html](https://www.cdc.gov/disasters/extremeheat/heat_guide.html)
- xxxix. California Environmental Protection Agency, Heat Adaptation Workgroup. (2013). *Preparing California for extreme heat*. Retrieved from [https://healthyplacesindex.org/wp-content/uploads/2018/02/2013\\_cph\\_preparing\\_california\\_for\\_extreme\\_eat.pdf](https://healthyplacesindex.org/wp-content/uploads/2018/02/2013_cph_preparing_california_for_extreme_eat.pdf)
- xl. Jessel S., Sawyer S., Hernández D. (2019). *Energy, Poverty, and Health in Climate Change: A Comprehensive Review of an Emerging Literature*. Retrieved from <https://www.frontiersin.org/articles/10.3389/fpubh.2019.00357/full#B61>
- xli. The Green and Healthy Home Initiative: <http://www.greenandhealthyhomes.org>