



Appendix F  
Support Documentation for Health and Equity  
Association Scoring

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## 1 Overview

The California Emissions Estimator Model (CalEEMod) displays environmental and health burdens relevant to the project census tract based on data from CalEnviroScreen® 4.0 (CES) and the Healthy Places Index (HPI). Based on the CES 4.0 indicator scores and the project scale and land use subtypes, CalEEMod can identify measures to address the environmental and health burdens of the project site. CalEEMod also includes a **Health and Equity Evaluation Scorecard** to evaluate how well a project has adopted specific measures and practices to deliver greater health, equity, and other benefits to support the existing community. This appendix provides additional detail on the CES 4.0 and HPI indicators displayed in the **Health & Equity** map screen and presents the methodology and assumptions underpinning measure identification analysis and scorecard.

## 2 Health & Equity Map Screen

The **Health & Equity** map screen displays CES 4.0 and HPI indicator scores relevant to the project census tract. The scores are defined as follows.

- *Overall CES 4.0 Score:* Calculated by CES 4.0 by multiplying the pollution burden percentile and population characteristics percentile for the census tract. The maximum score is 100. An area with a high score is one that experiences a much higher pollution burden than areas with low scores.
- *HPI Composite Score:* Calculated by HPI as the composite score of all HPI indicators. The score range is from 0 to 100 and represents the percentile ranking of the project census tract relative to other census tracts in the state. In contrast to CES, higher scores represent healthier community conditions. For example, a score of 97 indicates that the census tract has healthier community conditions than 97 percent of other California census tracts. Please note that the geographic coverage of the HPI is limited and is not available for the entire state. The score will show as N/A or 0 if data are not available for the project location.

Based on the CES 4.0 indicator scores, the **Health & Equity** map screen identifies the five most relevant emissions reduction, climate risk, and health and equity measures that address the environmental and health burdens of the project site. The next section describes the approach CalEEMod takes to identify these measures.

## 3 Identifying Measures Addressing Health and Equity by Project and Census Tract

CalEEMod contains 287 measures, many of which have co-benefits for climate adaptation, public health, and equity. To help users identify the measures that may have the most benefits for addressing existing environmental and health inequities at the project location, the **Health & Equity** map screen will generate a list of measures that are associated with a project's location and land use subtype(s). These measures are identified based on the following.

- **Is it applicable to the project land use subtype?** The land use subtype(s) applicable to the project are selected by the user in the initial screen. There are 79 land use subtypes in CalEEMod, and not every measure would apply or be appropriate for each land use subtype. If a measure is not applicable for the input land use subtype, it will not be recommended.

- **What are the existing health, environmental, and socioeconomic conditions in the project location?** The map uses CES 4.0 and HPI indicators to represent the existing health, environmental, and socio-economic conditions in each census tract. As only CES is available statewide, CalEEMod uses CES for the measure association scores. Note that only individual indicators are used, such as for ozone, diesel particulate matter (DPM), or unemployment, not the final CES 4.0 score.
- **How effectively do measures applicable to this project type address these existing conditions?** Each measure has been evaluated for its potential to address the health and socioeconomic conditions represented by each of the CES 4.0 indicators. The strength of the association between the measure and the CES indicator is represented in the indicator association score. Each measure was assigned indicator association scores for each of the 21 CES indicators (refer to Table G-48). Note that most indicator association scores are zero, due to the lack of a strong, research-supported relationship between the measure action and the relevant impact or health condition.

To determine the measures that may be the most relevant for a particular project location, CalEEMod takes the following steps:

1. From the user's input project location, CalEEMod identifies the census tract and pulls all available CES 4.0 indicators for that census tract.
2. CalEEMod also pulls all measures that are applicable to the project's land use subtype(s) and scale, as provided by the user.
3. Next, *for each applicable measure*, CalEEMod multiplies its CES indicator association scores by the census tract-specific percentile value for each CES indicator. The resulting indicator products are then combined across each measure, following the methodology and principles outlined in the CES 4.0 report (see Section 3.3, *CalEnviroScreen® 4.0 Measure Association Scoring Methodology*) to deliver that measure's census tract-specific association score (OEHHA 2021).
4. The combined association scores for all measures are then ranked, with the highest-ranking measures reported on the CalEEMod map screen. No actual scores are reported on the screen, as the scoring is not sufficiently refined to allow for measures to be ranked based on numeric values. The scoring is only intended to identify the measures with the strongest associations to the existing health and equity conditions in each census tract.

### 3.1 Land Use Applicability

For each of its 138 emission reduction measures, 99 climate risk reduction measures, and 50 health and equity measures, CalEEMod has identified the land use subtypes and project scale to which they are applicable. Based on user input of their project's specific scale and land use subtype(s) on the **Start a New Project** splash screen, CalEEMod generates a list of all measures that may be reasonably applied to the project.

Land use subtypes are assigned for all measures based on reasonable judgment. For example, a measure to replace residential water heaters with a more sustainable alternative would only be applicable to residential land uses. Similarly, a measure to implement workplace commuting programs would only be relevant to land uses with workers. Some measures, such as establishing onsite renewable energy, have wide applicability and are available to nearly all land use subtypes.

See Appendix G, *Default Data Tables*, Tables G-45 and G-46 for the applicable land use subtypes and project scales by measure, respectively.

## 3.2 Determining Measure-Specific Indicator Association Scores

Each measure was scored for the strength of its association with reductions for each of the conditions represented by CES 4.0 (refer to Table G-48). For example, a measure to expand the bicycle network would have a stronger association with increases in physical activity but likely a smaller association with reductions in air pollution. The scale for scores was set as follows.

- 0 – no association
- 1 – low association
- 2 – medium association
- 3 – high association

Thus, in the example above, the measure to expand the bike network would have an association score of 2 for Active Commuting (an HPI indicator), and a 1 for Ozone and Particulate Matter (CES).

Where feasible, indicator association scores for air quality—ozone, particulate matter (PM), and DPM—are based on a quantifiable outcome, specifically the emissions reduced or trips eliminated by that measure as determined in the California Air Pollution Control Officers Association *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (Handbook). If qualitative methods are used, indicators are scored using best scientific judgment, using both the co-benefits documented for each measure in the Handbook and published scientific research.

The following considerations guided the derivation of other indicator scores from the indicator scores for air quality.

- In general, the score for DPM was one level lower than the score for PM, as DPM emissions are already partly accounted for in PM emissions. If the score for PM is 2, then the DPM score is 1; if the score for PM is 1, then the DPM score is generally 0. However, if the measure primarily focuses on reducing emissions from diesel-fueled vehicles—for example, creating zero-emissions delivery zones—then the DPM score will be scored the same or 1 level higher than the PM.
- Health outcomes associated with air pollution were also scored 1–2 levels lower than the ozone and PM scores. This reflects that health outcomes result from a multiplicity of factors, not only air pollution and, moreover, the sources of air pollution in a community are also diverse. Thus, a small decrease in air pollution will translate into a smaller decrease in incidences of asthma, cardiovascular diseases, and emergency room visits. Ozone, fine PM (PM<sub>2.5</sub>), and heat exposure during pregnancy are also linked with the increased risk of low-birth weights, but similarly due to the complex factors in pregnancy, only measures likely to generate larger reductions in air pollution were associated with the low-birth weight indicator (Bekkar et al. 2020).
- Measures that increase physical activity, such as by supporting bicycling and walking, may also have a higher indicator score for cardiovascular-related health outcomes than for asthma. This is due to the substantial research demonstrating the greater health benefits resulting from increases in physical activity than improvements in air quality (Maizlish 2016; Maizlish et al. 2017).
- Measures that increase transit, increase walking and bicycling infrastructure, or otherwise support active transportation have also been associated with indicators for active commuting,

auto access, park access, and supermarket access—all components of the social determinants of health. These are also associated with small reductions in traffic.

- Measures are associated with housing burden if they increase housing supply, increase affordable housing, or reduce costs (such as unbundling parking). Measures are also considered supportive of housing if they reduce exposure to climate risks at home, such as by installing air filters, increasing the urban tree canopy, stabilizing burned slopes, or expanding access to community resources. While these measures do not directly address the housing cost burden, it can be inferred that those facing high housing costs may have fewer resources to increase the climate resilience of their home and would thus benefit from these measures.
- Measures are associated with education if they are likely to facilitate accessing education (school buses) or build community capacity, such as through community-focused climate change outreach and engagement, enhanced local network support, or increased community resources and spaces for community-based organizations. Measures may also increase local employment and training opportunities. Similarly, measures that have been associated with linguistic isolation also focus on public outreach and education, community planning efforts, and any public-focused climate resilience solutions, such as public alert systems or shuttles to cooling centers. It is critical for these efforts to consider potential language barriers as part of their successful deployment.
- Measures that address poverty and unemployment may either increase employment opportunities, facilitate people accessing employment opportunities (e.g., through expanding mobility choices or transportation networks), or support higher wages and improved working conditions. Measures addressing poverty may also help to decrease cost of living, support healthful food access, reduce climate exposures, or increase climate adaptive capacity.
- Many indicators in CES 4.0 have weak or no associations with the majority of measures in CalEEMod that could be significantly supported by published research to justify their scoring. Thus, the scoring takes a conservative approach to avoid overstating the health and equity benefits of any measure. Examples of indicators with little or no association to CalEEMod measures include drinking water, lead risk housing, pesticides, toxic releases, and hazardous waste facilities. These indicators have scores of 0 for the majority of measures.

See Appendix G, *Default Data Tables*, Table G-48 for the measure indicator scores.

### **3.3 CalEnviroScreen® 4.0 Measure Association Scoring Methodology**

CES 4.0's methodology to calculate the overall CES score is used as a guide to aggregate the individual CES indicator association scores for each measure. CES's 21 indicators are divided across four components: Exposure Indicators, Environmental Effect Indicators, Sensitive Population Indicators, and Socioeconomic Factor Indicators. The first two of these components represent pollution burden, and the latter two population characteristics. Indicators in these four components are first averaged and then combined to determine the overall CES score, with the component score for Environmental Effect Indicators receiving a 0.5 weighting.

To remain consistent with CES, CalEEMod adopts the same methodology and component categories to calculate a final CES measure association score from individual indicator association scores. First, the percentiles for each indicator in a specific census tract are multiplied

by each applicable measure’s indicator association score (on a 0 to 3 scale).<sup>1</sup> The resulting values are then averaged by component to generate component association scores for Exposure, Environmental Effects, Sensitive Population, and Socioeconomic Factor.

Next, the Exposure component association score is averaged with the Environmental Effects component association score, which receives a 0.5 weighting, to produce the *Pollution Burden Association Score*. The Sensitive Population component score is averaged with the Socioeconomic Factor component score at equal weights to obtain the *Population Characteristics Association Score*. Finally, these two scores are multiplied together to determine the final CES measure association score. Table F-1 displays this process.

**Table F-1. CalEEMod Method for Calculating the CalEnviroScreen® 4.0 Measure Association Score**

Pollution Burden		Population Characteristics	
Exposure Indicators	Environmental Effects Indicators <sup>a</sup>	Sensitive Populations Indicators	Socioeconomic Factors Indicators
Ozone percentile <sup>b</sup> × IAS <sub>ozone</sub> <sup>c</sup>	Cleanup Sites × IAS <sub>cleanup</sub>	Asthma × IAS <sub>asthma</sub>	Educational Attainment × IAS <sub>EDU</sub>
PM2.5 × IAS <sub>PM2.5</sub>	Groundwater Threats × IAS <sub>groundwater</sub>	Cardiovascular Disease × IAS <sub>cardiovascular</sub>	Housing Burden × IAS <sub>housing</sub>
Diesel PM × IAS <sub>DPM</sub>	Hazardous Waste Facilities/Generators × IAS <sub>hazwaste</sub>	Low Birth Weight × IAS <sub>LBW</sub>	Linguistic Isolation × IAS <sub>linguistic</sub>
Drinking Water × IAS <sub>drinkwtr</sub>	Impaired Water Bodies × IAS <sub>impwater</sub>		Poverty × IAS <sub>poverty</sub>
Children’s Lead Risk from Housing × IAS <sub>lead</sub>	Solid Waste Sites/Facilities × IAS <sub>waste</sub>		Unemployment × IAS <sub>unemployment</sub>
Pesticide Use × IAS <sub>pesticide</sub>			
Toxic Releases × IAS <sub>toxic</sub>			
Traffic × IAS <sub>traffic</sub>			
Weighted Average Exposure Component Association Score (Max score 300)	Weighted Average Environmental Effects Component Association Score × 0.5 weighting (Max score 150)	Weighted Average Sensitive Populations Component Association Score (Max score 300)	Weighted Average Socioeconomic Factor Component Association Score (Max Score 300)
<i>Pollution Burden Association Score =</i>  (Exposure Component Association Score + Environmental Effects Component Association Score) ÷ 1.5		<i>Population Characteristics Association Score =</i>  (Sensitive Populations Component Association Score + Socioeconomic Factor Component Association Score) ÷ 2	

<sup>1</sup> CES has already transformed each indicator from its raw values (e.g., ozone concentration or asthma rate per 10,000 people) to a percentile score (max value 100).

CES Measure Association Score	=	$\frac{\text{Pollution Burden Association Score}}{\text{Population Characteristics Association Score}} \times$
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<sup>a</sup> Per CES, the Environmental Effects component is given half the weight of the Exposures component.

<sup>b</sup> The ozone percentile, and the percentile from all indicators, will come from the CES 4.0 scores for each census tract. Thus, they will be unique to each census tract.

<sup>c</sup> The IAS is specific to each measure. See Section 3.2, *Determining Measure-Specific Indicator Association Scores*, for scoring.

CES = CalEnviroScreen® 4.0; PM = particulate matter; IAS = indicator association score.

Tables F-2 through F-5 demonstrate calculating scores for Exposure Indicators, Environmental Effect Indicators, Sensitive Population Indicators, and Socioeconomic Factor Indicators for Measure T-2, *Increase Job Density*, for census tract 067001101 in downtown Sacramento.

**Table F-2. Example CalEnviroScreen® 4.0 Measure Association Score Calculation (Exposure)**

Exposure Component Association Score			
CES Indicator (Exposure)	CES Indicator Percentile	Indicator Association Score	CES Indicator Percentile × Indicator Association Score
Ozone	45	3	45 × 3 = 135
PM 2.5	40	3	40 × 3 = 120
DPM	80	2	80 × 2 = 160
Toxic Releases	31	0	31 × 0 = 0
Traffic	12	1	12 × 1 = 12
Pesticides	0	0	0 × 0 = 0
Drinking Water	17	0	17 × 0 = 0
Lead from Housing	48	0	48 × 0 = 0
Average = $\frac{135+120+160+0+12+0+0+0}{8} = 53.375$			

CES = CalEnviroScreen® 4.0; PM = particulate matter; DPM = diesel particulate matter.

**Table F-3. Example CalEnviroScreen® 4.0 Measure Association Score Calculation (Environmental Effects)**

Environmental Effects Component Association Score			
CES Indicator (Environmental Effects)	CES Indicator Percentile	Indicator Association Score	CES Indicator Percentile × Indicator Association Score
Cleanup Sites	93	0	93 × 0 = 0
Groundwater Threats	96	0	96 × 0 = 0
Hazardous Waste	86	0	86 × 0 = 0
Impaired Waters	98	0	98 × 0 = 0
Solid Waste	67	0	67 × 0 = 0
Average with 0.5 weight = $\frac{0+0+0+0+0}{5} \times 0.5 = 0$			

CES = CalEnviroScreen® 4.0.



**Table F-4. Example CalEnviroScreen® 4.0 Measure Association Score Calculation (Sensitive Populations)**

Sensitive Populations Component Association Score			
CES Indicator (Sensitive Populations)	CES Indicator Percentile	Indicator Association Score	CES Indicator Percentile × Indicator Association Score
Asthma	93	2	93 × 2 = 186
Low Birth Weight	73	2	45 × 3 = 146
Cardiovascular Disease	72	1	72 × 1 = 72
Average = $\frac{186+146+72}{3} = 134.66$			

CES = CalEnviroScreen® 4.0.

**Table F-5. Example CES Measure Association Score Calculation (Socioeconomic Factors)**

Socioeconomic Factors Component Association Score			
CES Indicator (Socioeconomic Factors)	CES Indicator Percentile	Indicator Association Score	CES Indicator Percentile × Indicator Association Score
Education	42	0	42 × 0 = 0
Linguistic Isolation	6	0	6 × 0 = 0
Poverty	79	1	79 × 1 = 79
Unemployment	51	1	51 × 1 = 51
Housing Burden	64	0	64 × 0 = 0
Average = $\frac{0+0+79+51+0}{5} = 26$			

CES = CalEnviroScreen® 4.0.

In this example, based on the scores calculated in Tables F-2 through F-5, CalEEMod would calculate the final CES Measure Association Score as follows:

$$\text{Pollution Burden Association Score} = \frac{53.375 + 0}{1.5} = 35.583$$

$$\text{Population Characteristics Association Score} = \frac{134.66 + 26}{2} = 80.33$$

$$\text{CES Measure Association Score: } 35.583 \times 80.33 = 2,858.38$$

CalEEMod would use this method to calculate the association scores for all measures applicable to the example project in census tract 6067001101. The measures with the five highest CES association scores will be presented for the user’s consideration, without scores. Other measures applicable to the project will also be displayed on the **Relevant Measures** splash screen.

### 3.4 Important Considerations

Despite the use of a scoring methodology, this effort is not intended to provide a quantified, prioritized, or ranked selection of measures. Communities have unique histories, experiences, and challenges, all of which are difficult to capture into datasets or quantify into indicators. CES 4.0, though comprehensive, is likely to only represent certain aspects of a community's existing environmental, health, and socioeconomic challenges. There is no replacement for thorough, inclusive community outreach and trust-building.

The purpose of the **Relevant Measures** splash screen is to identify those measures that are applicable to the project and are most closely associated with the existing health, equity, and socioeconomic conditions in the project community as identified by CES 4.0. This information is presented for user consideration to facilitate selection of measures that are more likely to deliver health and equity co-benefits and address the existing challenges in the community. It is recommended users work with community members directly to get their input on preferred measures.

## 4 Health and Equity Evaluation Scorecard

The **Health & Equity Measures** screen presents the 50 available health and equity measures for user consideration and selection. Of these, 40 measures from the categories of Community-Centered Development, Inclusive Engagement, Accountability, Construction Equity, Public Health and Air Quality, Inclusive Economics and Prosperity, and Inclusive Communities are included in the **Health and Equity Evaluation Scorecard**. The **Health and Equity Evaluation Scorecard** provides a simple process to evaluate how well a project has adopted specific measures and practices to deliver greater health, equity, and other benefits to support the existing community. Note that measures from the Affordable Housing and Climate Resilience categories are excluded from the scorecard due to the spectrum of implementation strategies and requirements that defy simple scoring.

### 4.1 Using the Scorecard

The **Health and Equity Evaluation Scorecard** is intended to be used in collaboration with community members, community-based organizations (CBOs), and community project steering committees. The scorecard evaluation is not intended to be conducted by users without direct community collaboration. Ideally, community members direct the scoring evaluation process to assign point values that are accurate and reflective of the community's lived experience with the project. Thus, the **Health and Equity Evaluation Scorecard** can serve as a tool for community members, organizers, and activists to ensure project accountability and to assist in analyzing a project's practice of equity. Developers can use scores to identify strength areas and areas for improvement. Furthermore, the **Health and Equity Evaluation Scorecard** can assist both community members and developers in relationship building and in setting expectations and goals. The **Health and Equity Evaluation Scorecard** can help inform local governments and decision-makers of a project's community engagement approach and the quality of benefits promised by developers. Local governments can refer to project scores to set goals and make informed decisions regarding project development.

Community needs are complex, individual, and ever-changing. Accordingly, the **Health and Equity Evaluation Scorecard** includes a custom function that allows the user to tailor the scorecard to reflect individual community priorities and capture practices otherwise missed in the preexisting measures. Users can develop new measures and point value assignments. Importantly, this custom function is intended to only be used by community groups or by

proponents with explicit consent from a community group, CBOs, or community project steering committee.

## 4.2 Scoring the Measures

Measures are scored up to 5 points each. Each measure has tailored criteria to determine point values. Most measures follow a 1 to 5 scoring range, with higher point values corresponding to increasing levels of action. Some measures adopt a modified scoring scheme within this range (e.g., 1-3-5 or a 3-4-5), again with higher point values corresponding to greater levels of action. Other measures are scored cumulatively, with projects receiving one point for each criterion they meet, up to 5 points.

For the final evaluation score to tabulate properly, users must identify scores for all 40 measures, including those measures that are not applicable to the project. Measures that were preselected on the **Climate** and **Health & Equity** map screens are given a starting score of 0. The user should adjust this score to appropriately reflect measure implementation for the project, if necessary. Measures not applicable to the project based on the user identified land use subtype(s) and project scale are shown in gray with a score of "N/A." If additional measures do not apply to the project, the user should select "N/A," which would subtract the measure's total points possible (5) from the base value for the project. This is different from when a measure is applicable to a project but is either not implemented or not implemented in a manner that satisfies scoring criteria. In this scenario, the user would select "0," and the project would earn zero points for the measure (0/5).

Users may add custom health and equity measures to the scorecard if additional strategies will be implemented by the project. Click the plus sign to the right of the category title to add a custom measure under that category. Users will need to provide a measure title and measure description and identify the entity sponsoring the additional measure. Custom measures can be scored within a range of 0 to 5.

The following sections provide guidance for evaluating the project's performance within each measure category. Table F-6 presents the scoring criteria for each measure. The user should consult this table when completing the scorecard.

### 4.2.1 Process Measures

Underserved and marginalized communities have historically been excluded from project development and planning processes. Measures in this section seek to redefine the role community members play, particularly those from underserved or marginalized backgrounds, in project development. Process measures are designed to ensure community involvement across all phases of project development with an emphasis on promoting equitable community engagement, expanding community decision-making, and ensuring project accountability. Thus, measures evaluate the project's degree of working directly with community members, degree of centering community priorities in project planning, and approach to ensuring project accountability. High scores reflect a high degree of community-centered planning with mechanisms to ensure inclusive processes and strategies to guarantee planned benefits are delivered. Projects that score low for these measures are insufficient in their efforts to work directly with community members to understand their goals and needs, conduct inclusive outreach, and/or fail to implement strong accountability mechanisms.

The measures in this section are organized into three categories: Community-Centered Development, Inclusive Engagement, and Accountability.

#### **4.2.1.1 Community-Centered Development**

Centering community needs and priorities is foundational for equitable development. Community-centered development measures are designed to ensure that community knowledge, priorities, and needs are identified and uplifted. Community members should play central roles when determining community priorities and crafting solutions. Thus, measures in this section are scored based on the degree to which community members are actively engaged in identifying community priorities and project direction during the initial planning phases of project development. A high score reflects a project that meaningfully involves community residents, respects community knowledge and expertise, and directly responds to community-identified priorities. Low scores denote a project that limits the role of community members and excludes their perspectives and priorities in project development.

#### **4.2.1.2 Inclusive Engagement**

During all phases of project development, community members should have authority, confidence, and the necessary tools to participate and succeed in decision-making spaces. Measures in this section are designed to pursue the goal of an inclusive and empowering engagement process that brings underrepresented, underresourced, and underserved members of the community to the project development process. The spectrum of community engagement is used to inform the scoring of these measures; see Figure F-1, adapted from Equity Matters (2015), for detailed descriptions of the different levels along the spectrum of community engagement. High scores in this section reflect a high degree of equitable engagement to uplift people from underserved backgrounds into meaningful decision-making roles. Low scores indicate community members are informed or engaged but have little-to-no decision-making authority and have limited ability to affect real change in project development.

#### **4.2.1.3 Accountability**

Accountability measures are designed to ensure community members have oversight over project development and to ensure agreed-upon benefits are delivered. Measures in this section are scored based on two essential components: the degree to which the project proponent takes active steps ensure responsibility and promote transparency, and the degree to which community members have oversight authority and mechanisms to ensure proponent accountability. A high score reflects a project that is accessible and responsive to community concerns, and that implements strategies to guarantee community members play direct oversight roles in monitoring project development and in developing corrective solutions. Low scores indicate community members have limited access to information during project development and lack channels or effective mechanisms to ensure proponent accountability.

**Figure F-1. The Spectrum of Community Engagement (adapted from Equity Matters)**

	INFORM	CONSULT	DIALOGUE	COLLABORATE	DIRECT
DESCRIPTION	Project proponent or local jurisdiction initiates outreach and uses a variety of channels to inform community on project development.	Project proponent or local jurisdiction gathers information from the community to inform projects; obtains community feedback on analysis, alternatives, and /or decisions.	Project proponent or jurisdiction engages community to shape priorities and plans; directly works with community throughout process to understand and consider community issues and concerns.	Community and project proponent or jurisdiction share in decision-making authority to co-create solutions together. Partner with community in each aspect of planning, including initial development of alternatives and preferred solution.	Community takes leading role in decision-making and determining strategy with participation and technical assistance from project proponent or lead agency. The community or public has final decision-making.
EXAMPLE	Proponent-led presentations, factsheets, and flyers.	Proponent-led interviews, public meetings, surveys, and focus groups.	Proponent- or agency-led interactive workshops and forums.	Ongoing interactions between community and project proponent in a proponent-led format. Establishing a community advisory/steering committee. Consensus-building efforts, participatory decision-making.	Ongoing interactions between community and project proponent in a community-led format, with support from project or lead agency. Participatory budgeting. Decision-making powers delegated to community advisory/steering committee.

## 4.2.2 Outcome Measures

Outcome measures seek to encourage specific project features that can enhance equitable access to resources, promote public health and local economic development, build community capacity, and directly support underserved and marginalized communities. Users should seek to deliver benefits that maximize positive outcomes for low-income, underserved, and marginalized communities. Thus, measures are scored based on three components: the extent to which the project addresses local community needs or concerns; the degree to which the project directs investment toward communities of color and underserved groups; and the degree to which project features enhance public health, community capacity, and accessibility to resources. Projects with high scores in outcome measures implement meaningful project features that maximize inclusive benefits, build community capacity, enhance access to resources, and promote public health and equitable economic development. Projects with features that are likely to continue the status quo, or worse, further gentrification, displacement, and continued inequities receive low scores.

### 4.2.2.1 Construction Equity

Consequential disruptions and health impacts often arise during the construction phase of project development. Measures in this section are designed to mitigate these negative impacts and strengthen community resilience to construction activities. High scores in construction equity measures reflect projects that implement measures to actively monitor impacts, build community capacity to ensure construction impacts are quickly corrected, and are accessible and responsive to public complaints. Low scores in construction equity measures indicate a project that does not take into consideration community preferences is limited in its ability to respond to community complaints and/or limited in its approach to lessening construction-related impacts.

#### 4.2.2.2 Public Health and Air Quality

Users have substantial opportunities to reduce environmental health threats through project development. Public health and air quality measures are designed to accomplish two goals: to encourage project features that actively reduce health-related impacts from air pollution, extreme heat, and other environmental threats; and to improve underserved communities' access to green spaces, food, and other healthful resources. Projects that earn a high score for these measures promote healthful and vibrant communities by implementing best practices in project design to reduce pollution and toxics exposure, while also enhancing access to healthful resources. The project will work with community members to deliver environmental conditions critical to good health. A low score indicates that a project is limited in its efforts to achieve these goals.

#### 4.2.2.3 Inclusive Economics and Prosperity

Systemic racism has exploited communities of color in the name of economic development. At the same time, communities of color have been excluded from economic empowerment, left out of means to accumulate wealth, and experience extremely low levels of economic mobility when compared to white counterparts. Measures in this section are designed to leverage a project's economic impact potential to direct investment and capacity-building efforts specifically toward communities of color and local community members. Measures in the Inclusive Economics and Prosperity section are scored based on the degree to which project proponents dedicate resources toward such efforts. A high score reflects a project that takes substantial direct action to build capacity, directly invest resources toward underserved communities, and provide good wages, safe working conditions, training and education, and/or improved economic opportunities. Projects that overlook or take minimal steps toward these goals receive low scores.

#### 4.2.2.4 Inclusive Communities

Measures in the Inclusive Communities section address how project development and the built environment can both be used to enhance underserved communities' access to resources and create spaces that foster prosperous community growth. Measures are scored based on three criteria: the degree to which community members are engaged when determining resource investment or creation, the degree to which project design features facilitate inclusivity, and the allocation of space or resources to enhance community assets. Projects with high scores enhance access to community resources, create spaces in which people of all abilities and needs can prosper, and deliver substantial opportunities for local community development. Low scores are reflective of a project that takes a narrow approach to investing in community assets and building inclusive and cohesive community spaces.

### 4.3 Developing an Overall Score

Once all measures are scored, CalEEMod will tabulate scores by category and calculate an overall score that will be displayed in the **Health and Equity Evaluated Scorecard** on the **Health and Equity Dashboard** screen and in the detailed and summary reports.

The scorecard presents the number of measures implemented by the project and total points earned by category (Community-Centered Development, Inclusive Engagement, Accountability, Construction Equity, and Inclusive Economics and Prosperity). The maximum points possible is also shown for each category, excluding measures designated as "Not Applicable" to the project. If all measures are applicable, the maximum total points possible is 200 (unless custom measures are added). Category scores are weighted. Users can see the project's total points earned out of the total points possible as well as the weighted category score (see Figure F-2).

**Table F-6. Health and Equity Evaluation Scorecard Measure Criteria**

Measure	Explanation of Scoring Criteria
<b>Community-Centered Development (CCD)</b>	
<b>CCD-1. Consult Pre-existing Community Knowledge/Priorities</b>	
<p>The project will consult existing neighborhood/community plans or studies to understand community priorities, recognize the work that has already been done, avoid engagement fatigue, and address community concerns and needs that have already been identified.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Reviews governing plans (design guidelines, specific plans, general plans, etc.).
	2 - Reviews plans (community-led needs assessments, health needs assessments, asset mapping, etc.) that go beyond baseline requirements.
	3 - Consults with jurisdictional planner on community needs and plans.
	4 - Holds discussions with community groups to determine representativeness of plan(s).
	5 - Community leads discussion on different plans and their details, goals, and vision; project incorporates community priorities based on conversation and community input.
<b>CCD-2. Conduct a Stakeholder Analysis and Develop a Community-Centered Outreach Plan</b>	
<p>The project will conduct a stakeholder analysis to identify stakeholders, recognize the degree of influence of different groups, and prioritize those who have been historically overlooked and excluded when it comes to development projects. The project will also conduct tailored outreach efforts to ensure that perspectives from underrepresented groups are included. Ideally, project proponents should invite community-based organizations (CBO) and community leaders to develop a community outreach plan together.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Identifies stakeholders impacted by project.
	2 - Identifies stakeholders impacted by project and identifies specific barriers to participation for different groups.
	3 - Collaborates with CBOs and community leaders to identify stakeholders impacted by project, barriers to participation for different groups, and takes actionable steps to reduce barriers through an inclusive outreach strategy.
	4 - Collaborates with CBOs and community leaders to identify stakeholders impacted by project, barriers to participation for different groups, and takes actionable steps to reduce barriers through an inclusive outreach strategy. Community members have ample opportunity to direct and co-create an outreach strategy that meets residents where they are, reaches marginalized and underrepresented residents, and is culturally and linguistically appropriate.
5 - Criteria for 4; in addition, the project provides appropriate monetary compensation for community members' involvement in crafting/participating in outreach effort.	

Measure	Explanation of Scoring Criteria
<b>CCD-3. Conduct a Community Needs Assessment</b>	
<p>If existing community knowledge is outdated, lacks relevant detail, or does not represent the perspectives of marginalized groups, the project proponent should conduct a community needs assessment. This assessment asks community members to highlight what they see as the most important needs for their group or community.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Light community engagement to determine needs; documents made publicly accessible.
	2 - Engages in robust community outreach to register community needs and priorities; documents made publicly accessible.
	3 - Collaborates with CBOs, community leaders, property improvement district, local jurisdiction, and/or other community groups to design and lead approach to needs assessment; includes robust community outreach and publicly accessible documents.
	4 - All actions for 3; in addition, project works with community members to analyze the underlying root causes of demonstrated needs and identify appropriate local actions.
5 - All actions for 4; in addition, project provides compensation for community member participation.	
<b>CCD-4. Conduct Community Asset Mapping</b>	
<p>The project will conduct community asset mapping to identify the people, places, institutions, and services in a community that support the resident's quality of life. Creating a community asset map can help reveal the gaps and areas where a project might be able to enhance levels of service, respond to community needs, and complement through project amenities and uses.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Conducts asset mapping without community involvement.
	2 - Conducts asset mapping and identifies additional needs, gaps, and opportunities without community involvement.
	3 - Collaborates with community to map assets and identify needs (amenities and land use).
	4 - All actions for 3; in addition, project design fulfills community needs (amenities).
5 - All actions for 4; in addition, project design fulfills community needs (land use).	



Measure	Explanation of Scoring Criteria
<b>CCD-5. Establish a Community Benefits Agreement</b>	
<p>The project will negotiate a community benefits agreement (CBA) with the community. Community benefits agreements are legal agreements between project proponents and community representatives that explicitly describe the benefits a project will agree to fund or implement in exchange for the support of the local community. These contracts help communicate community priorities and outline how a project will contribute to the community and/or plans to address negative consequences and outcomes of the project.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Project proponent recruits community involvement to draft a CBA in response to community objections to project approval.
	2 - A large and diverse coalition of community members and groups is recruited to draft a CBA during the outset of project development/before approval process.
	3 - All actions for 2; in addition, a clear timeline for specific commitments is established and shared with the public. Roles and responsibilities are detailed with specific commitments to ensure long-term community oversight of the agreement. Reporting and monitoring provisions are included in the CBA. Systems to remedy nonperformance are established.
	4 - All actions for 3; in addition, the project proponent provides funding for long-term community goals. Funding is allocated for community-directed purposes (participatory budgeting).
	5 - All actions for 4; in addition, the project proponent commits to evaluating community satisfaction with CBA through survey questions. Project commits to taking corrective actions in alignment with community response to survey.
<b><i>Inclusive Engagement (IE)</i></b>	
<b>IE-1. Prioritize Outreach to Communities of Color and Underserved Groups</b>	
<p>This measure recommends specific strategies to incorporate when attempting to reach under-served groups. The project will make direct, targeted efforts to reach communities of color and under-resourced groups to increase their opportunities for participation/engagement. Consult with community leaders and a variety of CBOs with relationships in the community to determine effective outreach approaches.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Local jurisdiction or related agency provides educational materials.
	3 - Local jurisdiction or related agency provides educational materials and sets up question and answer (Q&A) process/continuously responds to questions.
	5 - Proponent or local jurisdiction contracts with a responsible third-party community-focused advocacy group with direction to provide education for community members for the duration of project development process.

Measure	Explanation of Scoring Criteria
<b>IE-2. Establish or Join a Community Project Steering Committee</b>	
<p>Community project steering committees help shift decision-making power back to the communities where the project is being developed. This power shift facilitates greater community engagement and enhances equity in decision-making. This measure is scored based on the extent to which a community steering planning committee is invested with decision-making authority.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Informed: The project proponent initiates an effort and uses a variety of channels to inform community on project development.
	2 - Consulted: The proponent gathers information from the community to inform proponent-led projects; obtains community feedback on analysis, alternatives, and/or decisions.
	3 - Dialogued: The project proponent engages community members to shape priorities and plans; works directly with communities throughout the process to ensure that community issues and concerns are understood and considered.
	4 - Collaborated: The community and proponent share in decision-making authority to co-create solutions together; the proponent partners with communities in each aspect of the decision, including the initial development of alternatives and the preferred solution.
	5 - Directs: Community plays leading, decision-making role in determining strategy and action with participation and technical assistance from project proponent, who places final decision-making in the hands of the public or community.
<b>IE-3. Elevate Voices of Underrepresented Groups in Project Direction and Outreach</b>	
<p>The project will ensure that the Community Project Steering Committee is representative of the communities the project impacts. Amplify voices of frontline workers, people of color, women, LGBTQIA+ (lesbian, gay, bisexual, transgender, queer and questioning, intersex, asexual, and other gender identities), people with disabilities, and under resourced communities by empowering them with decision-making authority and incorporating their representation in the steering committee. Leverage community knowledge and available data to identify vulnerable and underrepresented groups in the project impact area and elevate their priorities. Take action on communicated needs and concerns, and report back to the community on how its input have informed the project.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Project recruits steering committee using the project proponent's social media channels and/or through the local jurisdiction.
	2 - Project recruits steering committee members using existing neighborhood associations, posts signs in communal or public spaces in the community.
	3 - Project works with community-based organizations to identify under-represented groups in the community to invite to the steering committee, and identifies and addresses barriers to participation (e.g., transportation, needs accommodation, translation/interpretation, stipend).
	4 - All actions for 3 and works with community-based organization to evaluate the representativeness and the degree of perceived influence individual Community Steering Committee members have on the project.
5 - All actions for 4 and takes corrective actions to ensure members of Community Project Steering Committee feel empowered to participate.	

Measure	Explanation of Scoring Criteria
<b>IE-4. Inclusive Community Meetings</b>	
<p>The project proponent will incorporate the following best practices to ensure that project meetings are accessible and appropriate to the unique needs and characteristics of each community:</p> <ul style="list-style-type: none"> <li>- Hold community meetings in familiar spaces, including both physical spaces and technological platforms, or attend existing community events.</li> <li>- Ensure meetings are accessible via walking and public transit, and accessible to all people.</li> <li>- Hold meetings during times convenient for working members of the community.</li> <li>- Provide refreshments.</li> <li>- Provide childcare to support participation by families, parents, and caregivers.</li> <li>- Conduct outreach in community members' primary language(s), including meeting materials and interpretation.</li> <li>- Use accessible, nontechnical language and provide explanations where appropriate. Ensure all materials and information are readily accessible for disabled persons.</li> <li>- Provide monetary stipends/compensation.</li> </ul>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 – 0–20% of applicable best practices.
	2 – 21–40% of applicable best practices.
	3 – 41–60% of applicable best practices.
	4 – 61–80% of applicable best practices.  5 - 81% or more of applicable best practices.
<b>IE-5. Provide Education on Essential Topics Related to Project</b>	
<p>The project proponent will work with the local jurisdiction or related agency to provide technical assistance, educational materials, relevant information on key issues related to the project to community members. Aspects of a project may require a high degree of specialized knowledge, and certain language may be inaccessible.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Local jurisdiction or related agency provides educational materials.
	3 - Local jurisdiction or related agency provides educational materials and sets up Q&A process/continuously responds to questions.
	5 - Proponent or local jurisdiction contracts with a responsible third-party community-focused advocacy group with direction to provide education for community members for the duration of project development process.

Measure	Explanation of Scoring Criteria
<b>IE-6. Conduct an Equity Assessment with Community Project Steering Committee</b>	
An equity assessment explores how a project addresses and performs across a variety of equity-related indicators. This type of assessment analyzes how a project impacts racial and ethnic groups, how it may enhance or exacerbate equity, and where positive outcomes are likely to be realized during project implementation or other phases.	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Project proponent adopts and undertakes an equity assessment
	2 - Proponent collaborates with CBOs or community group to design and conduct equity assessment
	3 - CBOs and community groups lead in conducting equity assessment
	4 - Action for 3; in addition, proponent agrees to conducting assessments at regular intervals (e.g., annually) long-term and reports back to community
	5 - Action for 4, in addition, proponent commits to taking corrective action if deemed necessary
<b>Accountability (A)</b>	
<b>A-1. Use Participatory Budgeting</b>	
Proponent commits to using participatory budgeting to direct a portion of project funds. Participatory budgeting is a democratic process that allows community members to lead funding allocation for projects by giving community members voting powers when deciding how to spend part of a budget. Point allocation is determined by the funding amount dedicated to participatory budgeting per capita. The Participatory Budgeting Project recommends \$1 million per 100,000 residents or 13-\$22 per resident.	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - 10-\$12 per capita.
	2 - 13-\$15 per capita.
	3 - 16-\$18 per capita.
	4 - 19-\$21 per capita.
	5 - \$22+ per capita.
<b>A-2. Establish Incentive and Penalty Provisions for Community Priorities</b>	
The project will include clawback provision, or a recapture provision, which requires the project to face penalties for failure to deliver on agreed-upon project goals (or, conversely, incentives to deliver goals).	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Incentives/penalties are established.
	3 - Incentives/penalties are established and shared with community members.
	5 - Incentives/penalties are drafted in collaboration with community members.

Measure	Explanation of Scoring Criteria
<b>A-3. Evaluate Project Performance with Community Project Steering Committee/Community-Based Organization</b>	
The project will develop reports in collaboration with the community project steering community or community-based organization to evaluate progress at every stage of project development, centering around agreed-upon focus areas and data metrics.	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Project collaborates with community groups to draft performance metrics and establish a reporting process.
	3 - All actions for 1; in addition, an inclusive, on-going and transparent evaluation process (include funding and staff).
	5 - All actions for 3; in addition a specific process and contingency measures if goals not met. Community steering committee is able to propose and direct solutions to mitigate unintended consequences.
<b>A-4. Establish Clear Points of Contact</b>	
The project will establish accessible channels for the public to reach project proponents. Options include hotlines, websites, social media, email, and physical locations/ mailing addresses. Post clear information detailing channels for communication and ensure that public inquiries are responded to promptly.	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1- Contact information is posted on project proponent's own website.
	3 - Contact information is posted on at least three of the following: project proponent's own website, project site itself, local jurisdiction website, and another location identified by community and/or steering committee.
	5 - All actions for 3; in addition, project proponent guarantees short turnaround timeframe, and meaningful responses and assistance.
<b>A-5. Public Disclosure of Project Commitments</b>	
The project proponent will make publicly available all commitments to improve equity, diversity, health, climate change and resilience, and other benefits.	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Project commitments are posted publicly on local jurisdiction website.
	2 - Project commitments include clear metrics, timelines, goals, and points of contact.
	3 - All actions for 2; in addition are project commitments are posted at an easily accessible location or website (e.g., both digitally and on paper at a community center) in multiple languages.
	4 - All actions for 3; in addition project commitments are conducted in coordination with the project steering committee.
5 - All actions for 4; in addition, contingency measures are implemented if goals are not met.	

Measure	Explanation of Scoring Criteria
<b>Construction Equity (CE)</b>	
<b>CE-1. Create a Construction Plan with Community Input</b>	
<p>The project will create a construction plan that is responsive to community input, reflecting community concerns and priorities. The plan should include construction hours, duration, access closures, detours, noise, dust, parking, deliveries, lighting, emissions, truck routes, and other potential impacts and nuisances that may affect the community. Meaningful choices should be presented to community.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Project develops a construction plan that includes at least five of the following elements: set construction hours, duration, access closures, detours, allowable noise, dust, parking, deliveries, lighting, emissions, truck routes, and other potential impacts and nuisances.
	2 - Project develops a construction plan that includes all of the elements listed above.
	3 - All of the above, plus project proponent posts plan publicly, holds at least one public meeting on the construction plan in an accessible location, and makes revisions to plan based on community input and comments.
	4 - All of the above, undertaken in coordination with project steering committee or a community-based organization, to ensure that community input is reflected throughout the community plan.
5 - The construction plan includes all of the above as well as penalties for violations, including those beyond code.	
<b>CE-2. Ensure Active Modes Access During Construction</b>	
<p>The project will maintain pedestrian and cycling access along street frontage during construction. Any pedestrian detours will not require crossing the street. Bus stop relocations should be no more than two blocks away, with clear signage and a map at the original stop directing passengers.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	<i>Score 1 point for each of the following (up to 5 points):</i>
	- Pedestrian access (protected).
	- Bicycle access (protected).
	- Signage that does not block active mode uses.
	- Transit access (if access available).
- Lighting.	

Measure	Explanation of Scoring Criteria
<b>CE-3. Post a Clear, Visible Enforcement and Complaint Sign</b>	
The project will have conspicuous signs at the fence line listing hotline numbers for potential nuisance complaints and agency responsible for enforcement. The sign should be in clear, plain language.	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	<i>Score 1 point for each of the following (up to 5 points) (signs must be posted on each frontage):</i>
	- Point of contact for project (proponent).
	- Point of contact for project (CBO or other community stakeholder).
	- Responsible enforcement agencies, listed by nuisance.
	- List of requirements (hours/days of construction, visible dust, allowable noise levels, etc.). - Translations into languages widely spoken in the community.
<b>CE-4. Portable Indoor Air Filtration for Nearby Residents During Construction</b>	
The project provides indoor air filtration for the duration of the construction project to potentially impacted residents and businesses. The project may either upgrade or equip heating, ventilation, and air conditioning (HVAC) systems to use MERV-13 or higher air filters capable of at least 0.5 air exchanges per hour or provide California-certified air-cleaning devices.	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	3 - Project proponent identifies sensitive receptors and potentially impacted residents and provides air filters and California Air Resources Board-certified air-cleaning devices. Project proponent provides training and education on their use.
	4 - All of the above, and project proponent provides financial assistance to help offset increased energy costs of operating HVAC/air-cleaning devices as well as replacement filters.
	5 - All of the above, and project proponent works with community-based organization in identifying vulnerable and impacted residents, developing training and education, and providing assistance.
<b>CE-5. Air Quality Monitoring and Response Plan</b>	
The project will commit to fence-line monitoring of air pollution during the construction phase and take action to modify or limit construction activities if levels are exceeded.	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	4 - Project sets up air quality monitors, understands historic or baseline emissions, and develops a response plan with contingency actions.
	5 - Project does all of the above, and in addition air monitors will provide real-time data that residents can easily check. In addition, project will seek community input and review of response plan and contingency measures.

Measure	Explanation of Scoring Criteria
<b>CE-6. Provide Funds to Businesses Impacted by Construction Activities</b>	
The project will provide financial assistance to businesses impacted by construction activities and consequently see a decline in revenue.	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	3 - Project proponent provides financial assistance for a percentage of fixed operating costs only (based on Form 1040 from the Internal Revenue Service).
	4 - Project proponent provides financial assistance to make up all or portion of decline in revenue or sales (based on previous years' income forms).
	5 - Project proponent extends financial assistance to affected businesses that lack extensive records or tax forms and requires that financial assistance includes paycheck protection for employees.
<b>Public Health and Air Quality</b>	
<b>PH-1. Establish Vegetative Barriers to Reduce Pollution Exposure</b>	
For project within 1,000 feet of (1) major roads such as highways, freeways, or arterials; (2) major stationary sources as defined by local air district; or (3) locations with high volume of diesel trucks or other sources of pollution, proponent will commit to designing and establishing vegetative barriers.	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Vegetative barrier meets minimum size requirements according to the U.S. Environmental Protection Agency. <sup>2</sup>
	2 - All of the above, and project will establish a clear maintenance, pruning, and care plan for vegetative barrier.
	3 - All of the above, and project will select vegetation with at least two of the following features: (1) no seasonal leaf shedding or large gaps; (2) small leaves, leaves with complex shapes, and/or rough leaf surfaces; (3) low-allergenic species; (4) low emissions of biogenic volatile organic compounds (VOC); and (5) drought- and heat-tolerant species.
	4 - All actions under 1 and 2, and project will select vegetation with at least four of the following features: (1) no seasonal leaf shedding or large gaps; (2) small leaves, leaves with complex shapes, and/or rough leaf surfaces; (3) low allergenic species; (4) low emissions of biogenic VOCs; (5) drought- and heat-tolerant species; and (6) incorporation of a solid wall or barrier in locations where it does not create barriers to walking and biking.
5 - All actions under Criteria 4, and the project will coordinate and consult with their regional urban forester, local tree foundations, master gardeners, community-based organizations, neighborhood associations and other groups to design the vegetative barrier and select plant species.	

<sup>2</sup> Available: [https://www.epa.gov/sites/production/files/2016-08/documents/recommendations\\_for\\_constructing\\_roadside\\_vegetation\\_barriers\\_to\\_improve\\_near-road\\_air\\_quality.pdf](https://www.epa.gov/sites/production/files/2016-08/documents/recommendations_for_constructing_roadside_vegetation_barriers_to_improve_near-road_air_quality.pdf)



Measure	Explanation of Scoring Criteria
<b>PH-2. Increase Urban Tree Canopy and Green Spaces</b>	
<p>The project will go above and beyond local requirements and standards to enhance urban forestry, tree canopy, and green spaces along streets and public spaces in under-served and low-income communities, which disproportionately lack tree canopy, parks, and green spaces in comparison to wealthier, whiter neighborhoods.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	<i>Score 1 point for each of the following (up to 5 points):</i>
	- Community directs tree/plant species selection and design.
	- Selected tree and plant species are adaptable to future climate conditions (drought-, heat-, and pest-tolerant, longevity, etc.) and enhance diversity of urban forest.
	- Proponent conducts offsite tree planting in communities with low tree canopy. - Proponent establishes 10 percentage points more tree canopy than required by code. - Proponent agrees to enforcement and remediation beyond code if the project fails to plant and maintain trees and vegetation.
<b>PH-3. Highly Rated Air Filtration</b>	
<p>Project proponent will agree to install MERV-13 or higher-rated air filtration systems, and for vulnerable populations such as schools and nursing homes, MERV-14 or higher air filters should be used. This measure also encourages proponent to ensure community members are educated on air filtration best practices.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Proponent installs MERV-13/14 air filtration systems.
	3 - Provides occupants education and training on efficacy and use, hazards, persistent sources of toxic air contaminants, compatible use with windows, etc.
	5 - Proponent installs MERV-16 air filtration systems.
<b>PH-4. Create Healthful, Sustainable Indoor Spaces</b>	
<p>To reduce occupant chemical exposure, the building materials that are nontoxic, low-toxic, and/or low-emitting will be used. Products should be certified by an independent, industry-recognized rating system. Also, ventilation systems will be installed to ensure adequate airflow to prevent the buildup of pollutants in indoor air will also occur.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	<i>Score 1 point for each of the following (up to 5 points):</i>
	- Use of independently certified nontoxic, low-toxic and/or low-emissions materials in flooring.
	- Use of nontoxic, low-toxic and/or low-emissions materials in interior furnishings, including cabinetry, furniture, doors, etc.
	- Use architectural coatings that are 20% below the VOC limits set the by the local air district or use "super-compliant" coatings. - Project is free of polyvinyl chloride (PVC). - Install ventilation systems that exceed airflow and fan efficacy requirements in Title 24 by 10%.

Measure	Explanation of Scoring Criteria
<b>PH-5. Provide Equitable Food Access and Food Justice</b>	
<p>To provide equitable food access, especially for underserved, low-income communities of color, the project will provide space to grow, raise, or sell healthful foods in private or public spaces. The project will also aim to reduce barriers for communities to have greater access to food.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	<i>Scored cumulatively for each condition fulfilled (up to 5 points):</i>
	1 - Project increases food production by providing space for or making improvements to urban agriculture through edible landscaping, community gardens, rooftop gardens, etc.
	1 - Project increases food availability by adding grocery stores, markets, or farm stands; or providing space, funding, and equipment for mobile and standing farmers market, food banks, or market conversions (e.g., adding refrigeration for fresh produce at existing stores).
	1 - Project increases accessibility of existing food sources by expanding transportation access through carshare or bikeshare or improving sidewalk and bike lane connections and network.
	2 - Project consults with the local community or CBOs to understand the community's existing challenges around food access and food insecurity and prioritizes their needs, in conjunction with at least one other measure in PH-5.
<b>Inclusive Economics &amp; Prosperity</b>	
<b>IEP-1. Local Labor and Apprenticeships (Construction)</b>	
<p>To encourage economic development for the local community, the project will commit to hiring locally and provide apprenticeship and training opportunities for local residents during the construction phase of the project.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	<i>Cumulatively score for each condition fulfilled (up to 5 points):</i>
	2 - Project proponent sponsors apprenticeships and training opportunities for people from communities under-represented in the construction trades.
	2 - Project proponent hires 15% or more of construction workers from underrepresented, BIPOC (Black, Indigenous, and People Of Color), marginalized, or LGBTQIA+ communities.
	1 - Project proponent hires 15% or more of construction workers locally. Local is to be defined in consultation with community groups or, if consultation is not possible, as within two census tracts.

Measure	Explanation of Scoring Criteria
<b>IEP-2. Local Labor and Apprenticeships (Operations)</b>	
To encourage economic development for the local community, the project will commit to hiring locally and provide internship and training opportunities for local residents during the operations phase of the project, ideally by partnering with local education providers.	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	<i>Cumulatively score for each condition fulfilled (up to 5 points):</i>
	2 - Project proponent sponsors internships for underrepresented people in industry.
	2 - Project proponent hires 15% or more of employees from underrepresented, BIPOC, marginalized, or LGBTQIA+ communities.
1 - Project proponent hires 15% or more of employees locally. Local is to be defined in consultation with community groups or, if consultation is not possible, as within two census tracts.	
<b>IEP-3. Contract with Diverse Suppliers</b>	
The project proponent will commit to contracting with diverse suppliers, as identified in the scoring criteria, for at least 15% of contracting dollars. Diverse suppliers are defined as disadvantaged business enterprises, women-owned business enterprises, minority-owned business enterprises, disabled veteran-owned businesses, and LGBTQIA+-owned businesses.	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - 15% of contracting dollars.
	2 - 30% of contracting dollars.
	3 - 45% of contracting dollars.
	4 - 60% of contracting dollars. 5 - 75% or more of contracting dollars.
<b>IEP-4. Use of Locally/Regionally Manufactured Products and Materials</b>	
This measure calls for the procurement of locally and/or regionally manufactured products and materials. Different parts of California have different capacity in manufacturing and producing materials, and thus preference is to first source materials from within the commute shed of the project location (offering local employment opportunities), followed by within the region or adjacent counties, followed by sourced within California.	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - 10% of materials costs is dedicated to local/regional manufactured products and materials procurement.
	2 - 20% of materials costs is dedicated to local/regional manufactured products and materials procurement.
	3 - 30% of materials costs is dedicated to local/regional manufactured products and materials procurement.
	4 - 40% of materials costs is dedicated to local/regional manufactured products and materials procurement. 5 - 50%+ of materials costs is dedicated to local/regional manufactured products and materials procurement.

Measure	Explanation of Scoring Criteria
<b>IEP-5. Higher Wage and Working Condition Standards</b>	
<p>This measure calls for fair living-wage standards and safe working conditions, including safety protections from emerging climate risks such as extreme heat and wildfire smoke.</p>	N/A - Not applicable to the project.
	<i>Scored cumulatively for each condition fulfilled (up to 5 points):</i>
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Project adopts policies, provides training to staff, and implements strategies to support safe working conditions on climate hazards, following the latest guidance from the State of California
	1 - Project pays 60% of all its employees the living wage for the project area, as determined by MIT's living wage calculator for 1 adult with 0 children ( <a href="https://livingwage.mit.edu/">https://livingwage.mit.edu/</a> )
	2 - Project pays 90% or greater of all its employees the living wage for the project area, as determined by MIT's living wage calculator for 1 adult with 0 children ( <a href="https://livingwage.mit.edu/">https://livingwage.mit.edu/</a> )
2 - Project provides sick leave at twice the amount required by state law; healthcare; and other benefits	
<b>Inclusive Communities (IC)</b>	
<b>IC-1. Invests in Local Arts and Culture to Affirm Community Identity</b>	
<p>The project, working with local community groups, will invest at least 1% of the total project cost in local arts and culture projects, programs, or other initiatives. This could manifest as murals, heritage walks, arts education and artist in training programs, cultural district designation, youth-led arts, arts programs for people who are incarcerated, a small pavilion for performing arts in an onsite plaza, sponsorship of local artists and groups, or other priorities identified by community members.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Project proponent invests 1% of total project costs in local arts and culture groups, projects, programs, or other initiatives.
	2 - Project proponent invests 2% of total project costs in local arts and culture groups, projects, programs, or other initiatives.
	3 - Local artists and art groups from marginalized backgrounds and communities are prioritized in project art selection/investment.
	4 - Action for 3, and in addition, establishes a selection committee that's representative of the local community and marginalized residents, to determine art/artists for selection and/or support.
5 - Project commits to providing ongoing financial support for local arts groups.	
<b>IC-2. Adopt Design Standards</b>	
<p>This measure requires project proponents to adopt a design standard to help guide and promote sustainable design throughout the project planning, constructions, and operations lifecycle</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Project adopts and implements a recognized design standard.
	3 - Project adopts a Leadership in Energy and Environmental Design (LEED) Silver equivalent or higher.
	5 - Project adopts a design standard that requires public engagement.

Measure	Explanation of Scoring Criteria
<b>IC-3. Promotes Accessibility</b>	
<p>The project will increase ADA access beyond code requirements and also design for people with autism as well as other neurological or sensory processing conditions. The measure encourages project design to be inclusive to all, regardless of their age, size, or ability.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	<i>Cumulatively score for each condition fulfilled (up to 5 points):</i>
	1 - Project design accommodates and supports all levels of manual dexterity, handedness, and age.
	1 - Project design accommodates and supports all levels of physical mobility and other ability needs.
	1 - Project design accommodates and supports those with visual and auditory impairments.
	2 - Project design accommodates and supports those experiencing neurodivergent, neurosensory, and/or mental health conditions.
<b>IC-4. Enhanced Open and Green Spaces</b>	
<p>Under this measure, residential projects will contribute their Quimby requirements and other park impact fees, plus an additional 15% or more in acreage-equivalents, to a Quimby plan area in the bottom quartile of a jurisdiction based on aggregated CES 4.0 score, or on the project if in a disadvantaged community. These additional funds may be given to the local jurisdiction or local open space community-based organization. Commercial and industrial projects would make a similar additional contribution based on equivalent dwelling units.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Additional 15% in acreage-equivalents contributed to a Quimby plan area in the bottom quartile of a jurisdiction based on aggregated score, or on the project if in a disadvantaged community.
	2 - Additional 25% in acreage-equivalents contributed to a Quimby plan area in the bottom quartile of a jurisdiction based on aggregated score, or on the project if in a disadvantaged community.
	3 - Project centers design of open and green spaces and/or related investments around intended community's priorities.
	4 - Investments are provided to local open space CBO and/or community members to direct design of the open space.
	5 - All actions above, plus enhanced open and green spaces are aligned with parks-related anti-displacement strategies.
<b>IC-5. Designated Space for Community-Based Organizations, Disadvantaged Businesses, and Community Assets</b>	
<p>This measure requires project proponent to designate space for CBO, a community asset, or disadvantaged business that can contribute to local economic development, social wellbeing and resilience, education, health, capacity building, and other benefits.</p>	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	3 - Designates space to local assets, CBOs, and/or disadvantaged businesses to satisfy needs outlined in existing community plans.
	5 - Consults existing plans and collaborates with CBOs and community members to determine space allocation and occupant selection.

Measure	Explanation of Scoring Criteria
<b>IC-6. Create Nonstandard Commercial or Retail Spaces</b>	
To help support small and independent businesses this measure requires project proponents to allocate space for nonstandard commercial or retail spaces. Percent of leasable area is used to determine the amount of nonstandard commercial or retail space made available by proponent.	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - 20% of leasable area is designated for no-standard commercial or retail space.
	2 - 40% of leasable area is designated for nonstandard commercial or retail space.
	3 - 60% of leasable area is designated for nonstandard commercial or retail space.
	4 - 80% of leasable area is designated for nonstandard commercial or retail space. 5 - 100% of leasable area is designated for nonstandard commercial or retail space.
<b>IC-7. Equal Access to Building Amenities</b>	
This measure requires mixed-income multi-family developments to provide equal access to all building entrances, amenities, lobbies, and other shared facilities for affordable housing units. Affordable housing units are to be built to the same energy efficiency and other design standards as the baseline market-rate units.	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	5 - Project satisfies equal access requirements set in description.
<b>IC-8. Enhanced Access to Community Resources</b>	
This measure requires proponents to enhance and expand access of marginalized and underserved communities to resources such as additional green spaces, food, recreation areas, and healthcare. The project can also expand transportation access to existing resources, such as by improving access to transit stations, sidewalk and bike lane improvements, or other improvements to the active transportation infrastructure. The project should directly address the identified needs of the community and help support the creation of a healthier, more equitable, and more resilient environment for the people who live and work in the project area.	N/A - Not applicable to the project.
	0 - Applicable to project, but not included or not implemented in a manner that satisfies scoring criteria.
	1 - Project creates a new social and/or economic use that is not available within a half mile.
	3 - Project fulfills an identified community need based on community needs assessment or other community planning document.
	5 - CBOs/community members determine project proponent resource investment and/or creation.

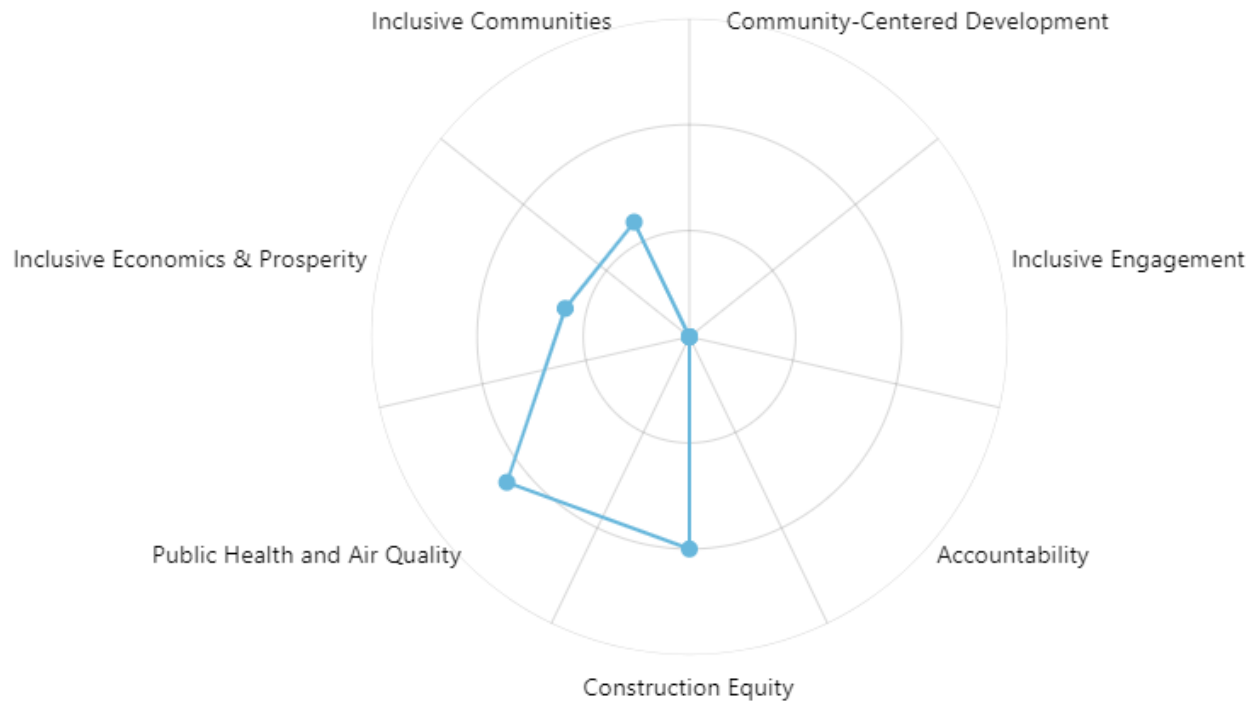
Note: Measures from the Affordable Housing and Climate Resilience categories are excluded from the scorecard.

**Figure F-2. Sample Health and Equity Evaluation Report**

Category	Number of Applicable Measures	Total Points Earned by Applicable Measures	Max Possible Points	Weighted Score
Community-Centered Development	0	0	0	0
Inclusive Engagement	0	0	0	0
Accountability	0	0	0	0
Construction Equity	5	17	25	10
Public Health and Air Quality	4	15	20	11
Inclusive Economics & Prosperity	4	9	20	6
Inclusive Communities	7	14	35	6
<b>Total</b>	20	55	100	33



Weighted categorical scores are also shown in a spider chart to facilitate analysis of a project's strong and weak points (see Figure F-3).

**Figure F-3. Sample Health and Equity Evaluation Report Spider Chart**






CalEEMod uses the weighted category scores and maximum total points (unweighted) to identify the applicable health and equity award tier for the project. Table F-7 shows the different tier levels and their associated weighted total score values.

**Table F-7. Health and Equity Evaluation Tier Levels**

Weighted Score	Tier Level
0–40	
40–50	



Weighted Score	Tier Level
50–60	
60–80	
80+	

#### 4.4 Interpreting the Scorecard Results

Importantly, equity and environmental justice cannot be condensed into a score. While scores are intended to reflect a project’s implementation of equitable development practices, they should not be the only metric used to determine the project’s overall impact on environmental justice and equity. A holistic approach that centers on community members’ lived experiences, priorities, and concerns is essential when evaluating a project’s approach to equity. Measures should serve as starting points, and project proponents and community members are encouraged to make use of the custom functions of the scorecard to capture local community priorities. Thus, scores are to be supportive materials that augment community-level project evaluation.

### 5 References

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