Attachment D
2030 Equitable Climate Action Plan

Racial Equity Impact Assessment & Implementation Guide

This Assessment and Guide is the work of the Equity Facilitator team, led by Environmental / Justice Solutions,[1] and provides a comprehensive set of recommendations and best practices to help City of Oakland staff maximize equity throughout the 2030 Equitable Climate Action Plan's 10-year implementation period.

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Executive Summary

The **2030 Equitable Climate Action Plan** (**2030 ECAP**), Oakland's roadmap for climate mitigation and adaptation, affirms that reducing disparities is a cornerstone of this City's climate goals. Oakland seeks to "transition away from fossil fuel dependence," in a manner that ensures all of its "communities are resilient to the foreseeable impacts of climate change."[2] The City's commitment to achieving equity and fairness means that no identity—including race, ethnicity, gender, age, ability, sexual orientation or expression— should have a detrimental effect on the distribution of resources, opportunities, and outcomes within the City.[3] **Right now, the communities in Oakland with the greatest socio-economic burdens are located in natural and built environments that face high climate risks**. The 2030 ECAP Equity Facilitator Team, Oakland Climate Action Coalition, Environmental / Justice Solutions, and Blue Star Integrated Studio (**Equity Facilitator**), was charged with leading an equitable community engagement process and ensuring that the final plan is an equitable strategy that is likely to help reduce disparities in Oakland.

The practice of developing equitable climate policies is grounded in data, science, and meaningful community participation. The Equity Facilitator reviewed all draft 2030 ECAP language through a "preliminary equity screen" and developed this Racial Equity Impact Assessment and Implementation Guide (**REIA**) based on the guidance provided by the City's **Department of Race and Equity** (**DRE**). DRE has published the ***Oakland Equity Indicators Report***[4] (2018, *see Appendix B*, gives the City a failing grade on equity) and a racial equity worksheet to help City departments take a structured and analytical approach to implementing changes that improve outcomes for the City's most burdened populations. For this REIA, the Equity Facilitator gathered Oakland-specific data to develop recommendations and methodologies for identifying frontline communities in Oakland.

The purpose of this REIA is to provide City staff with clear guidelines for **maximizing equitable outcomes** as they implement each of the 2030 ECAP's 40 Actions.

- **Primary target audience**. City staff (in multiple departments) with responsibility for implementing 2030 ECAP Actions – developing programs, crafting policies, designing projects, writing plans (as specified). The ECAP includes an Implementation Timeline that concisely lists the lead and supporting departments.
- **How the REIA will be used**. Staff will consult this REIA to aid in developing equitable procedures, programs, and policies during ECAP implementation, particularly for guidance in understanding how to:
    - Identify frontline communities (the Oakland geographies and demographics that are particularly vulnerable to climate change impacts) and compile data to illuminate baseline conditions (*Appendices B and C contain detailed data tables identifying key Oakland's frontline communities by: race/ethnicity, census tract, and district*);
    - Avoid policy blind spots by partnering with community and applying equitable considerations while crafting policies and developing programs;
    - Mitigate or reverse key equity gaps that limit access to resources; and
    - Monitor and evaluate equity outcomes for reporting back to frontline communities.

Two ECAP Actions provide a foundation for ECAP implementation and, in connection with the analysis and guidance provided by this REIA, should drive nearly all aspects of ECAP implementation.

- *A-3* Fund and Implement Citywide Vulnerability Assessment and Comprehensive Adaptation Plan and
- *CL-5* Establish the Oakland Climate Action Network to Support Inclusive Community Engagement on ECAP Implementation

[2] 2030 ECAP
[3] Department of Race and Equity, Racial Equity Implementation Worksheet
[4] Department of Race and Equity, Oakland Equity Indicators Report

Key Recommendations

Based on the Equity Facilitator's community engagement process, equity principles, and our findings after review of existing data and literature, we offer key insights and recommendations for how the City of Oakland can ensure equitable implementation of the 2030 ECAP.

1. **Identify frontline communities.** Each ECAP implementing department should develop a tailor-made approach to identifying the frontline communities that are most relevant to each Action issue area, using Oakland-specific indicators of focus and thresholds of significance.

    a. Compile and assess existing **quantitative and qualitative data** to illuminate the systemic root causes of disparate climate vulnerabilities and outcomes. Identify the most current baseline conditions for frontline communities, noting any data gaps and aspirational data needs, and tracking changes over time.

    b. Acknowledge blind spots. **Groundtruth any/all assertions with frontline communities**, especially through establishment of a robust Oakland Climate Action Network.

    c. Ensure that new equitable considerations are reflected in changes to standard operating practices as needed.

2. **Utilize GIS mapping to increase data visualization and accessibility**, with separate layers for frontline community equity indicators. In connection with the Oakland Equity Baseline Indicators Report, such a map would become an indispensable resource to both City staff and Oakland residents, and can be updated as new data is generated or becomes available.

    a. Include data generated by frontline community members, such as locations of sensitive sites and other local knowledge.
    b. **Collaborate with regional and state agencies**, including those that comply with federal guidelines for civil rights and environmental justice, **to compile data**. (East Bay Community Energy has extensive data relating to energy-cost burdens. Metropolitan Transportation Commission has "demographic maps that overlay the percent minority and non-minority populations as identified by Census or ACS data" along with "charts that analyze the impacts of the distribution of State and Federal funds in the aggregate for public transportation purposes."[5] The Alameda County Public Health Department has additional useful public health data.)

3. **Maximize equitable outcomes**. Co-design equitable ECAP implementing policies and programs with frontline communities in order to maximize co-benefits that meet priority community needs, reduce disparities, and increase the flow of information and resources to previously neglected populations. Adopt recommendations from Section III. ***Best Practices for Frontline Community Engagement*** to increase City-community partnership throughout the 10-year implementation period.

4. Set aside resources to **monitor and evaluate outcomes**. As relevant, track project locations and the locations where project benefits accrue, along with the demographics of beneficiaries. Track benefits that flow to the 25 most burdened census tracts in Oakland as compared to the City as a whole.

5. **Increase and streamline communication** between City departments working on equitable ECAP implementation.

[5] MTC, Plan Bay Area 2040: Final Equity Analysis Report, p. 1-2

I. Introduction

With respect to extreme heat events, frontline communities in the Oakland flatlands face dire threats. The confluence of dark building materials (concrete, asphalt), little tree cover, and ozone pollution, intensifies the sun's rays and traps heat in urban heat islands. Frontline communities may experience higher local temperatures than other areas in Oakland. Higher temperatures also increase the ambient ozone, particulate matter, and smog concentrations in urban areas. Extreme heat is deadly on its own; ozone and PM2.5 are two of the primary causes of adverse health impacts from air pollution. A number of additional factors will compound the threat residents face. Those living in older homes without proper insulation or air conditioning may experience much higher temperatures indoors. As higher temperatures worsen the air quality, people with respiratory or cardiovascular diseases, children, the elderly, outdoor workers, low-income earners, African Americans and Latinxs, will be extremely vulnerable.

As this example illustrates, responding to the threats posed by climate change (*adaptation*) requires us to confront the disparities within our built environment that determine our life outcomes. Alongside many other aims, the City's actions in the coming years have the capacity to "mitigate the effects of extreme heat and reduce resulting disabilities and deaths."[6] To increase **community resilience**, the City must help improve Oaklanders' ability to withstand disasters and strengthen future community response and recovery efforts.[7] The City of Oakland has affirmed that achieving an equitable future for all Oaklanders is a cornerstone of its short-term and long-term goals and is adopting an equitable approach to climate action. The **2030 Equitable Climate Action Plan** (**2030 ECAP**) is Oakland's roadmap for addressing the climate crisis through climate policies that improve outcomes in **frontline communities** and are shared by all Oaklanders.

Each City department that implements 2030 ECAP Actions will incorporate equitable considerations into its relevant policies and practices. (While this may initially sound like a heavy lift, it will become readily apparent that equitable considerations cut across daily City operations in clear and helpful ways that illuminate previously unnoticed blind spots.) ECAP implementation will **channel resources in ways that reduce disparities** in public health, open space, and the built environment, and increase frontline community resilience.

A. Equity Principles

Equitable climate action has **both global and local benefits**, with a focus on the generation of local benefits. The primary greenhouse gas, carbon dioxide (**CO_2**), has no known local toxic effects, but its **co-pollutants** and other indirect impacts are harmful to human health and the local environment. For this reason, it's materially important to consider the both the **location and demographics** that receive the local benefits of CO_2 reduction projects. For example, the residents and neighborhoods closest to transportation related greenhouse gas (GHG) emissions with toxic co-pollutants such as diesel particulate matter (**diesel PM**), receive the most local benefits when those transportation related emissions are reduced. Other local benefits tied to a project's location include: jobs created, increased access to open space, increased tree cover, transit improvements (neighborhood air quality, transit accessibility), building retrofits, EV charging infrastructure, access to rooftop solar, energy efficient appliances (reducing energy cost burden), energy storage, and renewable back-up power. **The intent of equitable climate action is to reduce greenhouse gas emissions in ways that improve the local environment and make the local economy more sustainable.**

The following equity principles shape the Equity Facilitator's recommendations and can serve as guideposts on the pathway toward 2030.

1. **Equitable Governance** (*procedural and structural equity*). Frontline communities participate in directly shaping 2030 ECAP strategy design and implementation through democratic and participatory spaces and processes. Frontline community leaders increase their civic capacity through sustained partnership with City

[6] CalEPA, Preparing California for Extreme Heat: Guidance and Recommendations
[7] APEN, Mapping Resilience, p. 21

staff, community members, community-based organizations. Community empowerment, including delegating decision making authority, increases City accountability to frontline communities.

2. **Equitable Investments** (*substantive and distributional equity*). Where applicable, the lion's share of the local benefits generated by the 2030 ECAP are targeted to maximize benefits to frontline communities by meeting priority community needs, building on community assets and values, increasing community resilience and improving outcomes for existing residents. Using the principle of "*targeted universalism*," City staff will craft strategies that are responsive to the ways that "different groups are situated within structures, culture, and across geographies."[8] ECAP **prioritizes** investments and programs that benefit communities with high climate risk and high social vulnerability; where possible, frontline communities should receive the local benefits generated by climate action strategies first and should receive *more* than their per-capita share.

   Not all benefits created by ECAP implementation are immediately tangible, monetary, or spatial in nature. For example, Action A-5 *Identify & Reduce Financial Risks* calls for the City Administrator's Office to "evaluate existing and potential financial risks posed by climate change to both City and community" and "recommend strategies to mitigate these risks as available and appropriate, including options for insurance products, green infrastructure bonds, real estate strategy and other appropriate mechanisms." In the near term, this Action is about ensuring that the City doesn't lose money during climate disasters. As this Action ostensibly contemplates strategies to mitigate financial risks "to both City and community," staff should include a robust analysis discussing the potential for frontline communities to have ample access to or receive benefits from financial risk reduction strategies.

3. **Community Resilience**. Foster collaboration within and across Oakland's communities, neighborhoods and sectors to decrease community isolation or neglect and increase access to resources.

Climate actions that benefit frontline communities will:

- ❏ Reflect the **knowledge, priorities, and needs** of frontline communities and build on local cultural assets and values;
- ❏ Reduce existing disparities and avoid increasing harms;
- ❏ Build community capacity and resilience;
- ❏ Increase civic collaboration, participation and mutual accountability;
- ❏ Promote additional co-benefits, such as workforce development, quality jobs, business development; and
- ❏ Improve air quality and public health outcomes.

Without careful attention to equity, well-intended climate action can nevertheless result in, fail to ameliorate, or exacerbate:

- ❏ Physical and cultural displacement;
- ❏ Income and wealth inequality;
- ❏ Concentrated neighborhood disinvestment and neglect;
- ❏ Political disenfranchisement;
- ❏ Poor public health and high mortality rates; and
- ❏ Regressive taxes or fees.

"Even well-intended policy interventions may inadvertently exacerbate inequality, but the absence of viable methods and workable policy frameworks ensures the perpetuation of 'in-groups' and 'out-groups.'"[9]

[8] john a. powell, et al., Targeted Universalism: Policy and Practice, p. 5
[9] ibid.

B. Preliminary Equity Screen and Racial Equity Impact Assessment

The Equity Facilitator developed an analytical framework of questions for City staff and community members to consider during the 2030 ECAP design and community engagement phase. The Preliminary Equity Screen assessed whether the Draft Actions maximized equitable outcomes and provided meaningful guidance to City staff in the implementing departments. Though all of the questions did not apply to each Action (and some Actions raise additional equity considerations), the Equity Facilitator determined that the 40 final 2030 ECAP Actions generate primarily affirmative answers to the Preliminary Equity Screen. This preliminary equity screen may also be useful to City staff as a way to evaluate proposed internal policies and procedures prior to community engagement.

Preliminary Equity Screen
Does the draft Action:

1. Prioritize frontline communities and maximize the benefits of climate investments for frontline communities?
    a. Does it address priority community needs?
    b. Does it distribute climate benefits geographically, and/or by income, and/or by race, etc., responsive to the needs of each community?
    c. Does it preserve and strengthen local assets and cultural values?
    d. Does it reduce disparities by remedying/mitigating existing harms and avoiding additional harms?
2. Require or incentivize large businesses/developers/industries to do their fair share to improve the environment and restore our communities?
3. Foster local green job creation, entrepreneurship, and cooperative ownership opportunities for members of frontline communities?

The purpose of this **Racial Equity Impact Assessment** (**REIA**) is to provide in-depth guidance for City staff in each 2030 ECAP implementing department in order to maximize equitable outcomes, including robust frontline community participation in ECAP implementation. The REIA's structure is based on the Department of Race and Equity's racial equity implementation guidance. The REIA's conclusions and assertions are based on the Equity Facilitator's assessment of community engagement feedback, existing data, and climate equity frameworks.

To the greatest extent possible, City staff should follow the recommendations and best practices in this REIA throughout 2030 ECAP implementation. A careful and systematic approach to climate equity ensures ECAP Actions have the best potential to reduce disparities and increase equity and fairness for all Oaklanders.

II. Identifying Frontline Communities

A primary purpose of an equity analysis is to estimate the distribution of *benefits to* and *burdens on* frontline communities generated by proposed policies or projects and "assess whether these benefits and burdens are shared equitably across all population groups."[10] A climate equity analysis also looks at climate vulnerability factors to assess whether climate adaptation efforts will increase community resilience in the communities currently facing both "heightened risk and increased sensitivity" to climate change impacts.

Frontline communities face heightened climate vulnerability due to the cumulative impact of environmental harms and socio-economic inequality, which limits their capacity to **adapt to, resist, or recover** from climate impacts. Furthermore, existing disparities mean that unless the City equitably directs resources to frontline communities, they are less likely to share the benefits of climate action. As an equity strategy, the 2030 ECAP must distribute benefits and decrease burdens in ways that alleviate disparities in Oakland.

For each ECAP Action, City staff will need to determine the:

1. Potential direct benefits and co-benefits —quantitative and qualitative analysis of potential benefits, in light of equity goals;
2. Communities and populations that will receive the benefits —quantitative analysis of the share of potential benefits;
3. Potential adverse impacts and communities that will bear these burdens —quantitative and qualitative analysis of potential burdens to ensure no group is disproportionately burdened unfairly;
4. Existing disparities, or equity gaps, that will need to be addressed to increase frontline communities' access to resources and ensure resilient communities —quantitative and qualitative analysis of existing disparities.

A. Understand the Systemic and Root Causes of Disparate Outcomes

Climate change is a critical and complex challenge, a "threat multiplier" that increases the likelihood of exposure to extreme weather (flooding, sea level rise, wildfires, extreme heat) and exacerbates existing vulnerabilities. The multiplier effect particularly harms individuals experiencing the '**cumulative impact**' of multiple vulnerability factors, many of which have stark racial and economic lines.[11] In Oakland (and across our state and nation), **race** is a key indicator of both climate risk and social vulnerability. For instance, studies show that African Americans can be as vulnerable to extreme heat events as infants and the elderly.[12] Oakland's Department of Race and Equity maintains that the only way to decrease racial disparity is by maintaining focus on its **root causes and symptoms**.

To the greatest extent possible, ECAP implementation should maximize equitable outcomes by carefully generating co-benefits that begin improving the underlying conditions that cause disparate racial outcomes.

> "Not everything that is faced can be changed, but nothing can be changed until it is faced."
> James Baldwin
> *Oakland Equity Indicators Report*

For example, Council District 7 (majority Latinx) received the lowest score (D+) for the ***Park Quality*** Baseline Equity Indicator. This underlying inequity is a highly relevant consideration for the City staff who implement **CR-2 *Expand and Protect Tree Canopy Coverage*** and similar provisions in the West Oakland Community Action Plan *Owning Our Air* and the East Oakland Neighborhoods Initiative Community Plan *Better Neighborhoods, Same Neighbors*.[13] Urban

[10] MTC, Plan Bay Area 2040: Final Equity Analysis Report, p. 2-1
[11] California Department of Public Health, Office of Health Equity, Racism Increases Vulnerability to Health Impacts of Climate Change
[12] Pastor, et. al, The Climate Gap
[13] WOCAP, Owning Our Air; EONI, Better Neighborhoods, Same Neighbors

parks are a significant community asset where additional trees can be planted, and the quality of and access to those parks should not be neglected. Engaging community residents in tree planting, and ongoing tree and park maintenance can support the creation of green jobs and improve the quality of parks in places that have disparate access to tree canopy and green space. Efforts to increase tree canopy coverage should also increase the quality of open space that residents can enjoy in the communities that currently face the greatest disparities.

The issue of displacement provides another example of the need to understand and address the underlying root causes of disparate outcomes. We commonly assume that displacement impacts low-income families across the board, regardless of race. But this assumption is not supported by the data. The UC Berkeley Urban Displacement Project has found that;

> "Between 2000 and 2015, as housing prices rose, historically Black cities and neighborhoods across the region lost thousands of low-income Black households. These areas include the Bayview in San Francisco, flatland neighborhoods in Oakland and Berkeley, and the cities of East Palo Alto, Richmond, and Vallejo. Increases in low-income Black households during the same period concentrated along the region's outer edges, namely cities and neighborhoods in Solano County, eastern Contra Costa County, and southern Alameda County that have relatively lower housing prices and fewer resources. [...] Low-income households of color were much more vulnerable than low-income White households to the impact of rapid increases in housing prices. In the Bay Area, a 30% tract-level increase in median rent paid between 2000 and 2015 was associated with a 28% decrease in low-income households of color. There was no significant relationship between rent increases and losses of low-income White households."[14]

By controlling for race among low-income households, this study highlights a root cause of disportionate displacement impacts on non-white low-income communities. In addition to income inequality (median white household vs median black household) displacement is related to **wealth inequality**. White families are more likely to receive inheritances, have family-owned property, or access a social safety net. Often, family-owned property means that low-income whites do not have to pay rent. To the extent that the Actions in the Transportation and Land Use section increase the availability of deeply affordable housing located near frequent, efficient, and cost-friendly public transportation, this can reduce the vehicle miles traveled by Oaklanders (GHG emissions) and prevent displacement of low-income communities of color. Similarly, Actions in the Buildings section can reduce energy cost burdens that contribute to housing cost burdens. Overall, in addition to incentivizing quality green jobs that pay living wages, encouraging the development of cooperative businesses and providing assistance to disadvantaged business enterprises can build community wealth and resilience.

B. Compile Data on Existing Disparities

According to the Fourth Climate Change Assessment's *Climate Justice Report* "identifying and mapping communities in relation to current and anticipated climate risks (e.g., high social vulnerability or high exposure to climate impacts) is an essential part of the scientific foundation for understanding the state's changing conditions related to climate change."[15] There are numerous helpful data sets and mapping tools, but no single tool comprehensively combines "projected climate change, environmental health risks, socioeconomic data, and adaptive capacity"[16] or can account for project-level benefits and burdens. In fact, the abundance of data can be overwhelming, leading to a lack of focus on the right issues. For this reason, it is important for the City to develop its own comprehensive methodology and datasets. **Municipalities are uniquely situated in their ability to apply the climate equity lens to achieve real world results due to their control of land use planning and infrastructure development.**

For clarity, researchers at Asian Pacific Environmental Network (APEN) divided climate vulnerability indicators into three categories: (1) **exposure to climate risk**; (2) **population sensitivity**; and (3) **adaptive capacity**.[17] Frontline

[14] Urban Displacement Project, Rising Housing Costs and Re-Segregation in the San Francisco Bay Area, p. 3
[15] APEN, Mapping Resilience, p. 20.
[16] ibid.
[17] ibid., p. 57

communities face the greatest exposure risks, the greatest population sensitivity, and the least adaptive capacity. This multiplicity of threat factors can be called a **cumulative burden**. Likewise, the **cumulative benefit** a frontline community gains from an action accrues from its starting deficit; the disparity in tree cover between the hills and flatland neighborhoods means that the City could plant hundreds of trees in the flatlands and there would still be fewer trees than in the more affluent areas; nevertheless, the action works to reduce disparities. Identifying the areas and demographics facing the greatest cumulative burdens is an essential first step in the implementation process and will determine priority issues, policies, funding opportunities, and community engagement.

APEN's framework characterizes socio-economic burdens, such as the cost of energy, as population sensitivity factors (Table 1):

	HEAT	WILDFIRE THREAT	FLOOD RISK	AIR QUALITY	DROUGHT
SENSITIVITY	Race/ethnicity	Race/ethnicity	Race/ethnicity	Race/ethnicity	Race/ethnicity
	Poverty	Poverty	Poverty	Poverty	Poverty
	Linguistic isolation	Linguistic isolation	Linguistic isolation	Linguistic isolation	Agricultural workers
	Asthma	Unemployment	Asthma	Asthma	Diabetes
	Children	Children	Children	Children	Food insecurity
	Elderly	Elderly	Elderly	Elderly	Social safety net programs
	Educational attainment	Educational attainment	Educational attainment	Educational attainment	
	Disability	Disability	Disability	Unemployment	
	Employment	Industrial/hazardous sites	Industrial/hazardous sites	Industry/hazardous sites	
	Outdoor workers	Outdoor workers	Housing quality	Outdoor workers	
	Elderly living alone	Elderly living alone	Housing affordability	Cardiovascular disease	
	Cardiovascular disease	Energy costs	Housing tenure	Obesity	
	Energy costs		Social safety net programs	Diabetes	
	Food insecurity		Food insecurity		
	Obesity		Unoccupied housing		
	Diabetes				
	Urban heat island				
	Housing quality				
	Housing tenure				

Adaptive capacity indicators include (Table 2):

	HEAT	WILDFIRE THREAT	FLOOD RISK	AIR QUALITY	DROUGHT
ADAPTIVE CAPACITY	Emergency services/ responders	Emergency services/ responders	Emergency services/ responders	Tree canopy/green space	Emergency services/ responders
	Vehicle access	Vehicle access	Vehicle access		
	Tree canopy/green space		Transit access		
	Impervious surface cover		Medical facilities		
	Air conditioning		Number of roadways		
			Flood insurance		
			Telecommunications access		

A-3 *Fund and Implement Citywide Vulnerability Assessment and Comprehensive Adaptation Plan* calls for the City to develop and update its emergency plans, the Local Hazard Mitigation Plan, and climate risk assessment. Done correctly, this should provide the City with "granular and comprehensive" data pertaining to all three categories named above (*exposure to climate risk, population sensitivity, and adaptive capacity*). In developing an equitable vulnerability assessment, it's important for the City to co-develop and ground-truth indicators and metrics with

frontline communities. Previous assessments may not have consulted community members or taken current existing conditions into account, leading to equity gaps and blind spots. For instance, a recent investigation discovered that nearly double the number of properties may be susceptible to flood damage than FEMA's federal flood maps have identified, "and minority communities often face a bigger share of **hidden risk**."[18]

Not all climate equity indicators are disaster related. For instance, decreasing the energy cost burden increases the viability of electricity-based solutions over the long-term. Likewise, locating affordable housing near affordable, accessible, and abundant public transit reduces vehicle miles traveled and offers co-benefits that may play a role in reducing climate hazards, such as enabling transit-dependent residents to leave dangerous areas.

The City will undoubtedly need to compile data from numerous sources to gain a full understanding of frontline communities in Oakland**.** This work will most likely require the **combined efforts of the City, County, and regional agencies** such as the Bay Area Air Quality Management District (BAAQMD) due to the overlapping purview of data collection and compilation. **Staff in each City department will need to determine the equity indicators and frontline communities that are most relevant to the ECAP Action they will implement and address their department's current practices and constraints**. Once this understanding is gained, it will become an extremely useful tool for City staff, help streamline future efforts to evaluate equitable outcomes, and remain relevant for the long-term as the baseline from which to measure changes.

In developing this REIA, the Equity Facilitator **generated an Oakland-specific database** of CalEnviroScreen 3.0 census tract data that demonstrates how Oakland's census tracts compare to one another (**Appendix C**). Using CalEnviroSreen's raw data from OEHHA's website, the Equity Facilitator isolated the census tracts located in Oakland and sorted them by district, degree of cumulative impact (disadvantaged communities discussion below), and poverty level. The census tracts were then ranked based on their scores on several individual indicators (Asthma, Diesel PM, Poverty, Housing Burden, Unemployment, and Traffic), and the number of highly burdened census tracts in each Oakland city district was assessed to determine the most impacted districts and their frontline communities by indicator. (The threshold selected for highly burdened census tracts varies by indicator.) For example, the City of Oakland has 77 census tracts above the 75th percentile for Asthma statewide; districts seven, six, and three have the most asthma-burdened census tracts.

This data is combined with qualitative data from the community engagement process and additional quantitative data from the Department of Race and Equity, to highlight important baseline indicators specific to Oakland, and to serve as a resource for identifying Oakland's frontline communities. The discussion that follows should provide some insight into the process of identifying frontline communities, equity gaps, and existing disparities. A brief description of additional tools that provide easily accessible data is also included.

Recommendations

1. Use multiple tools to identify indicators and metrics that define disparities and existing harms, utilizing both quantitative and qualitative data.

ECAP implementation should not exacerbate the existing disparities in Oakland. Where ECAP Actions generate benefits that, over time, can work to mitigate or eliminate the root causes driving the disparities, the benefits should be targeted to the census tracts and demographic communities experiencing the greatest disparities.

The Department of Race and Equity ("DRE") has begun the work of gathering and assessing both public and internal City data to measure the equity impacts of 72 indicators. The City's **Equity Indicators Report** includes a "baseline quantitative framework" that enables Oakland to measure disparities and track changes over time.[19] The equity indicators, organized under six themes, receive a score between 1-100, where 1 denotes the lowest levels of

[18] New York Times, New Data Reveals Hidden Flood Risk (June 29, 2020)
[19] DRE, Equity Indicators Report, p. 8

disparity and 100 the highest. As of 2018, the citywide score is **33.5**. Two of the Oakland baseline Equity Indicators that received the lowest possible score of **1** are especially relevant to the ECAP:

a. **Public Health: Childhood Asthma Emergency Department Visits; and**
b. **Neighborhood and Civic Life: Pedestrian Safety.**

A table of the most relevant Equity Baseline Indicators and a comparison of their outcomes by race is included in **Appendix B**.

CalEnviroScreen 3.0, developed by the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment, is one of the state's primary tools for assessing cumulative impact. It measures **20** indicators of pollution burden and socio-economic burden and assigns a ranking to every census tract in the state.[20] The data is provided in an easily accessible and color-coded interactive map, and the raw data spreadsheets are available to download.[21]

> "CalEnviroScreen, one of the most widely applied screening tools in California environmental policy, is an exemplary model of an indicator set, assessment framework, and visualization tool to communicate complex information for planning and decision making to address the cumulative impacts from poverty and pollution. Complementing CalEnviroScreen with information derived from a climate vulnerability assessment framework offers enormous promise to help local and state agencies make broader climate policy decisions based on comprehensive data."[22]

To arrive at a score that identifies the cumulative burdens in each of California's census tracts, CalEnviroScreen uses indicators that fall into two broad categories: **Pollution Burden and Population Characteristics.** There are two groups of indicators within each category. Each indicator is scored separately as well and census tracts can be ranked on the levels of specific indicators, relative to census tracts in the state and within the City (Appendix C). Under pollution burden, **exposure** indicators "measure the different types of pollution that people may come into contact with" and **environmental effects** indicators are "based on the locations of toxic chemicals in or near communities." Under population characteristics, **sensitive population** indicators measure the "number of people in a community who may be more severely affected by pollution because of their age or health" and **socioeconomic factors** are "conditions that may increase people's stress or make healthy living difficult and cause them to be more sensitive to pollution's effects." The highest scores (most burdened) fall into the 95-100% percentile range. The lowest scores (least burdened) are in the 1-5% percentile range.

The Equity Facilitator identified roughly 106 census tracts in Oakland. Two or three census tracts are shared with neighboring cities; as they fall only partially within City limits, they have not been included in this analysis. **25** of Oakland's census tracts are designated as "disadvantaged communities" (DACs), by the California Environmental Protection Agency meaning that they have a high degree of cumulative burden and rank in the top 25th percentile when compared to all census tracts state-wide. When we ranked the Oakland census tracts based on their scores on individual indicators, such as asthma or diesel PM, however, the number of highly burdened tracts jumped dramatically, highlighting additional frontline communities. (Tables with this data are in Appendix C.) For example, 77 of Oakland's 106 census tracts rank above the 75th (or "top 25th") percentile for the Asthma indicator, which means that a significant number of the Asthma burdened census tracts are not considered DACs.

CalEnviroScreen displays the demographic information of each census tract using data from the American Community Survey, but race is not one of the indicators used to calculate the score. The Equity Facilitator developed Table 3, which shows the 25 Oakland census tracts with the highest cumulative burden, alongside a breakdown of their racial/ethnic demographics. As the cumulative burden grows, the percentage of Whites decreases

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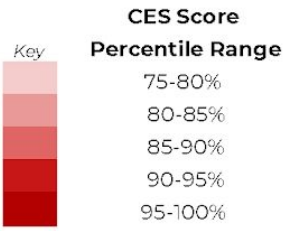
[20] For an in-depth discussion of how to use CalEnviroScreen, *see* California Environmental Justice Alliance, CalEnviroScreen: A Critical Tool for Achieving Environmental Justice in California
[21] Office of Environmental Health Hazard Assessment, CalEnviroScreen 3.0 Report
[22] APEN, Mapping Resilience, p. 7

dramatically. Conversely, the data also shows that as the degree of cumulative burden decreases, the percentages of African Americans and Latinx declines dramatically. These trends are reflected across the Bay Area.

Appendix C provides a District by District snapshot of Oakland, using CalEnviroScreen census tract data and highlighting key community priorities gathered during the community engagement process.

Table 3: Oakland Census Tracts with Highest Cumulative Burden + Racial Demographics

	District	Census Tract	Score	Percentile	White	Black	Asian	Latinx	PI	Native	Other
1	D2	6001405401	39.68	75.56	19%	19%	**34%**	23%	0%	1%	4%
2	D3	6001401600	41.35	77.84	25%	**45%**	9%	13%	2%	0%	6%
3	D3	6001402400	42.77	79.87	21%	**51%**	11%	12%	0%	1%	4%
4	D3	6001402700	40.23	76.39	26%	**40%**	11%	18%	0%	1%	4%
5	D5	6001406201	39.64	75.48	7%	16%	23%	**44%**	3%	0%	7%
6	D4, D5, D6	6001407400	40.62	76.93	4%	17%	11%	**65%**	1%	0%	2%
7	D5, D4	6001407200	41.76	78.46	7%	8%	15%	**68%**	0%	0%	2%
8	D2	6001403000	46.63	84.99	5%	5%	**83%**	2%	2%	1%	2%
9	D3	6001401700	46.23	84.56	**33%**	26%	9%	29%	0%	0%	3%
10	D3	6001402500	43.96	81.55	8%	**64%**	10%	13%	0%	0%	5%
11	D3	6001410500	43.75	81.17	7%	**65%**	15%	7%	1%	0%	5%
12	D7	6001409300	44.83	82.6	5%	30%	2%	**61%**	0%	0%	2%
13	D3, D2	6001403300	44.37	82.13	22%	7%	**55%**	11%	0%	1%	5%
14	D2	6001406000	50.28	89.13	21%	14%	**43%**	16%	0%	1%	5%
15	D3	6001401800	47.54	86.25	27%	**42%**	4%	19%	0%	0%	8%
16	D3	6001402200	49.46	88.32	27%	**31%**	14%	25%	0%	1%	3%
17	D5	6001406100	47.31	85.81	14%	10%	13%	**59%**	1%	0%	2%
18	D7	6001408900	47.97	86.68	3%	29%	5%	**59%**	1%	1%	3%
19	D7	6001409400	49.22	88.02	5%	26%	10%	**59%**	0%	0%	0%
20	D7	6001409200	55.29	93.48	4%	36%	5%	**52%**	0%	0%	2%
21	D7	6001409500	51.44	90.3	8%	24%	1%	**63%**	0%	0%	4%
22	D5, D6	6001407300	52.54	91.16	15%	8%	16%	**56%**	1%	0%	4%
23	D7	6001409000	61.56	**96.91**	2%	34%	3%	**51%**	3%	0%	7%
34	D7	6001409100	59.87	**96.38**	2%	33%	6%	**52%**	0%	0%	7%
25	D6, D7	6001408800	59.65	**96.22**	4%	36%	5%	**50%**	4%	0%	0%



Source: CalEnviroScreen 3.0

Source: American Community Survey 2013-2017 5 year estimate

Several other tools and frameworks include:

- ➔ Public Health Alliance of Southern California's **California Healthy Places Index** (HPI);
- ➔ California Building Resilience Against Climate Effects **Climate Change and Health Vulnerability Indicators** (CalBRACE CCHVI);
- ➔ California Energy Commission's (CEC) Social Vulnerability to Climate Change & Energy Equity Indicators. The **Energy Equity Indicators** are available on an interactive map that includes a layer for CES results. Target areas with low access to clean energy technologies and programs to (a) increase clean energy investment in those communities; and (b) improve community resilience to grid outages and extreme events.[23]

[23] CEC, Energy Equity Indicators

- ➔ **Climate Change Vulnerability Screening Index**
- ➔ Metropolitan Transportation Commission's **Communities of Concern.** MTC has chosen eight indicators of disadvantage to define their Communities of Concern. To analyze the benefits and burdens on disadvantaged communities, MTC and ABAG adopted six quantitative equity performance targets, and provide further context by measuring regional trends;
- ➔ Four Twenty Seven's **California Heat Assessment Tool** (CHAT); and
- ➔ Climate Central's **Surging Seas Risk Zone Map**

2. Create Oakland-specific thresholds or cut-off points. Identify any data gaps or equity gaps. As possible, organize data by council district.

As mentioned above, there is much available data, but it is not organized with Oakland-specific objectives or issues in mind. We propose an Oakland-centric approach for identifying highly-burdened communities in order to hone in on the unique set of factors that drive disparities in this city.

We recommend identifying frontline communities by comparisons between Oakland's council districts, census tracts, zip codes, neighborhoods, and block-by-block to ensure that no community is overlooked or neglected. While statewide rankings are relevant to the big picture, for the City, climate equity means alleviating the disparities between Oakland communities. ECAP solutions should be closely tailored to meet community needs, including differentiating the type of aid provided. Where a District as a whole is relatively affluent, it might be relevant to uncover the frontline issues within that District. Recent studies have shown that "air pollution can be as much as eight times higher at one of end of a city block than another."[24] For example, within a census tract, it should be possible to pinpoint the blocks/neighborhoods most in need of tree canopy (could be achieved by referencing a composite GIS map that includes a layer that maps tree cover).

Frontline Community Thresholds

Cumulative Impact/Highest Burden. The state-wide threshold for DACs includes all census tracts in California that rank above the 75th percentile for cumulative burden.[25] While census tracts below this threshold will come into focus when looking at individual indicators, we recommend that Oakland retain this as a threshold for highlighting the most cumulatively burdened census tracts. Put another way, the census tracts (or neighborhoods in partial census tracts) that qualify as **DACs should be considered Oakland's most burdened frontline communities** (Table 3).

Poverty/Low-Income. After a review of federal and state metrics, the Equity Facilitator determined a localized threshold for low-income frontline communities in Oakland to focus attention on the most-income burdened areas. The metrics the Equity Facilitator reviewed include:

- ➔ The CalEnviroScreen 3.0 **Poverty Indicator**, which measures the percentage of households at or below 200% of the Federal Poverty Level in 2015[26] in each census tract. This metric equates to a household of four earning $**48,072 in 2015**, which is comparable to the Very Low Income threshold set by the State Income Limits, which identify Area Median Income (AMI) by county and set income thresholds for "*Extremely Low-, Very Low-, Low-, and Moderate-income* households." An Oakland household earning $**46,750 in 2015** qualified as Very Low Income, earning 50% of AMI.
    - For the purpose of state funding, the state has identified "Low Income Census Tracts" as "either at or below 80 percent of the statewide median income, or at or below the threshold designated as low-income" by the 2016 State Income Limits.[27]

[24] Environmental Defense Fund, Hyperlocal maps show dramatic variations in Oakland's air pollution
[25] California Environmental Protection Agency, Designation of Disadvantaged Communities Pursuant to SB 535 (de León)
[26] OEHHA, CalEnviroScreen 3.0 Report
[27] Air Resources Board, Priority Population Investments; HCD, State Income Limits 2016

➔ The Equity Facilitator's recommended **local poverty threshold for Oakland** identifies frontline communities as the census tracts above the 70th percentile on the CalEnviroScreen Poverty Indicator, where **over 46% of the population is Very Low Income**. This geographic threshold augments DRE's *Oakland Baseline Equity Indicator* for Poverty, which measures the percentage of the population that is **Extremely Low Income** or less by **race** rather than by census tract. [Appendix C lists these highly income-burdened census tracts (above 70th percentile for Poverty) and identifies the additional census tracts that qualify as Low Income Census Tracts.]

Hyperlocal Data. Census tracts may be the smallest unit with data consistently available. However, neither census tract nor district boundaries define Oakland's neighborhoods. Some census tract boundaries divide communities that are equally impacted, but yield different scores. Several recent studies in West and East Oakland have produced data on pollution levels block-by-block. It may often be necessary to drill down to this level in order to identify disparities.

3. Generate an interactive map overlaying districts, census tracts, and neighborhoods with selected baseline indicators, that detail existing pollution levels, socio-economic stressors, and climate risks.

We strongly recommend that the City translate the frontline community data gathered by each department, into visual layers on a shared GIS map.[28] (There are multiple ways that Oakland's data is organized spatially: by census tract, zip code, etc. To the extent that this data can be harmonized or overlayed, it will help to alleviate confusion.) The *Climate Gap* report recommends identifying frontline communities "by overlaying vulnerability models and socioeconomic, racial/ethnicity, and cultural group distributions."[29] **GIS mapping makes the data more accessible for City policymakers and community members alike** and enables detection of hot spots, a confluence of factors that might otherwise be overlooked.

To the extent possible, we recommend that the City generate its own Oakland-specific map as described above. Otherwise, we recommend that staff perform a review of existing tools and frameworks to select the ones best suited to serve Oakland's needs and supplement the tool(s) with additional data as is needed, available, or desirable.

Key Climate Equity Frontline Communities

- ✓ Communities near major GHG and co-pollutant emissions
- ✓ Sites of sensitive land uses such as schools, day care facilities, and senior centers
- ✓ Areas with high exposure to climate risks
- ✓ Communities of color and Indigenous communities (majority non-white areas)
- ✓ Communities with low wealth and very low income
- ✓ Unemployed individuals
- ✓ Unhoused or curbside communities
- ✓ People with low educational attainment
- ✓ Low income renters
- ✓ Residents of older buildings
- ✓ Areas without adequate tree cover or open space
- ✓ Youth
- ✓ Currently or previously incarcerated individuals
- ✓ People with Limited English Proficiency/linguistic isolation
- ✓ Transit dependent individuals
- ✓ Areas without adequate affordable and accessible public transit options
- ✓ Outdoor workers and day laborers
- ✓ Undocumented immigrants and refugees
- ✓ Seniors (Elderly)
- ✓ Single-parent families
- ✓ People with pre-existing health conditions
- ✓ People with mental health issues
- ✓ People with disabilities or limited mobility

[28] Pacific Institute, Community-Based Climate Adaptation Planning: Case Study of Oakland, California (2012), p. 15.
[29] APEN, Mapping Resilience, p. 20.

C. Monitor and Evaluate Outcomes: Key Performance Indicators (KPIs) & Biennial Reporting

As the first step toward maintaining accountability throughout ECAP implementation, City staff should create and periodically update (on a quarterly basis) a clear timeline for Action implementation. City staff should disseminate this timeline broadly, engaging community groups and the newly established Oakland Climate Action Network, in addition to posting it on the City's central website.

The next step is to ensure adequate funding for data tracking and community engagement. ECAP implementation will be a cycle of community engagement, investment, evaluation, and adjustment. Through consistent monitoring and evaluation, the City will be able to refine its approaches to achieve better results for the geographic areas and demographic groups that face heightened community vulnerability.

a. Key Performance Indicators

This section includes Key Performance Indicators (KPIs) that can serve as equity guideposts to monitor the process and outcomes of ECAP implementation. The KPIs listed below both *directly and indirectly* track the City's progress toward achieving its climate equity goals (broadly expressed in the Equity Principles, *Equitable Governance, Equitable Investments, and Community Resilience*). The list should not be considered exhaustive or relevant to every action. We've included objectives for the selected KPIs below as context for why we believe these particular indicators are important and in acknowledgement that there may be additional (or preferable) ways to measure success. The equity principles and objectives can help guide City staff in selecting KPIs relevant to each action.

There is existing data for most of the KPIs named below, either already in the City's possession or in an easily accessible public database or mapping tool. (The database used is designated in parentheses. The baseline equity indicators already in use by DRE are designated with the initials "**DRE**." CalEnviroScreen indicators are marked "**CES**.") We anticipate others will be developed through several ECAP Actions (such as A-3 *Fund and Implement Citywide Vulnerability Assessment and Comprehensive Adaptation Plan* and CR-2 *Expand and Protect Tree Canopy Coverage*).

We also acknowledge that progress on a number of the KPIs may be subject to factors outside of the City's sphere of control. We nevertheless believe it is important to gather and track data on the baseline conditions that are relevant to the City's climate equity work to ensure robust assessment of progress in reducing disparities and increasing climate equity. **We recommend that City staff implementing ECAP Actions consult this list and select as many KPIs as are applicable and feasible to track**, either with internal City resources or in partnership with regional and state agencies. For the KPIs deemed infeasible but aspirational, we recommend the City pursue, where appropriate, partnerships and resources to obtain relevant data.

In many cases, impacted communities can be involved in shaping the outcome objectives for an Action as well as the indicators and metrics used to monitor implementation and evaluate success. Additionally, where indicators are difficult to quantitatively measure, community feedback is an important qualitative measure to gather and track over time. To generate data, the City can also utilize community participatory research, including community air monitoring or mapping of sensitive sites like home-based day-care centers that might not show up on other maps.

Equitable Governance

Increase Civic Participation, City Accountability & Community Partnerships

Research demonstrates that community participation in environmental decision making processes is itself a key factor in reducing disparate impacts.[30] Rather than viewing ECAP implementation as a series of one-off

[30] Freudenberg, N,. Pastor, M., and Israel, B., 'Community Participation in Environmental Decision-Making Process: Can it Reduce Disproportionate Impact?' (2010)

projects, ECAP initiatives should be viewed as long-term, ongoing efforts - whose core human, social, and economic resources are actively nurtured and continuously renewed as community assets. The City of Oakland can increase accountability, civic capacity and participation by enabling participatory democracy that authentically empowers frontline residents to shape the implementation process and outcome (see Section III) and will establish the Oakland Climate Action Network to advance these objectives. Specific objectives include:

- Community ownership of ECAP implementation through ongoing community implementation and oversight bodies that reflect the knowledge, priorities, and needs of frontline communities.
- Sustained collaboration with community based organizations, neighborhood-specific outreach, engagement and organizing efforts.
- Establishing the Oakland Climate Action Network in each District, building on existing organizing efforts (e.g., East Oakland Neighborhoods Initiative, West Oakland Community Action Plan Steering Committee, Neighborhood Crime Prevention Councils, Resilient Fruitvale, Chinatown Coalition.)
- Increasing community safety by enhancing civic collaboration and increasing access to community spaces.

Recommended Key Performance Indicators

➔ Total attendance + Total number of frontline residents who participate in community-based ECAP engagement activities and events (by district/each year).
➔ Number of frontline residents who report feeling that 2030 ECAP implementation reflects their priorities.
➔ Number of new partnership agreements with community-based organizations and other frontline residents. (**Prime Contracts Awarding, DRE**)
➔ Number of new prime contracts with Disadvantaged Business Enterprises (DBEs) by race/district. (**Prime Contracts Awarding, DRE**)
➔ Average amount of prime contract awards for construction and professional services by race/district. (**Prime Contracts Awarding, DRE**)

Equitable Investments

Maximize Equitable Outcomes

Priority community needs are **key determinants of a community's physical, social and economic well-being** and adaptive capacity. This includes things like cost-savings and improving public health (e.g., public transit, walking and biking infrastructure). Benefits targeted to frontline communities should be tailored to meet priority community needs, or else they may not confer a tangible benefit (e.g. walking and biking infrastructure that goes unused because public safety and/or user-centered design was not considered). Investments should also work to undo, rather than perpetuate or ignore, (a) existing disparities and (b) increasing potential negative impacts. For example, climate-positive interventions such as composting facilities, urban recycling centers, and carbon farming may cause local odor issues or increase the amount of heavy diesel traffic. Specific objectives include:

- Decreasing community vulnerability by improving disaster preparedness and increasing access to vital community and city resources, and mitigating future impacts, such as extreme heat and sea level rise.
- Reducing heat-related illnesses, mitigate urban heat-islands, increase thermal comfort through weatherization, white roofs, solar energy, or urban forestry, and other adaptation measures.
- Reducing disparities in:
    - Air Pollution (CHVI)
    - Pollution Burden (CES)

    - Energy Cost Burden (DRE)
    - Housing Burden (CES/DRE)
    - Traffic (CES)
    - Travel Cost Burden (AC Transit)
    - Average Bus Frequency (DRE)
    - Tree Cover (Urban Forestry Master Plan)
    - Public Health (ACPHD)
    - Public Transit and Active Transportation Infrastructure (Public Works/AC Transit)
    - Open Space/Parks (Parks)
    - Quality of Life (Qualitative Survey)
- Ensuring local benefits in frontline communities.
- Increasing frontline community wealth and income: Foster local family-sustaining green job creation, entrepreneurship, and cooperative ownership opportunities for members of frontline communities. Increase opportunities for workforce development, employment in quality jobs in green / regenerative economy businesses and access to capital to finance the growth of new and expanding green businesses for frontline community members, youth, formerly incarcerated people, undocumented people and others with barriers to employment.

Recommended Key Performance Indicators

Metric Ton Carbon Dioxide Equivalent (MTCO2E) reductions (Oakland GHG Inventory Reports) + Amount of co-benefits

Air Pollution Reductions (**CES**) (ACPHD & BAAQMD)

➔ Concentration and/or Load Reductions of PM2.5, diesel PM, nitrogen oxides (NOx), and indoor air contaminants by census tracts, race, and income.

Energy Cost Savings (DRE)

➔ Amount of energy cost savings (% of energy saved and cost and/or % total income)
➔ Renewable Energy Produced by Low Income Households (LIHH) or in Majority POC Census Tracts

Housing Burden[31] (**CES -** Indicator tracks severe housing cost burden, Low Income Households paying >50% on rent or mortgage)

➔ Percentage of households that pay 30% or more of income on housing
➔ Percentage of households that pay 50% or more of income on housing
➔ Number of new affordable units in transit-oriented development (within ¼, ½ and 1 mile of transit), Priority Development Areas, Transit Priority Areas, and High Opportunity Areas (MTC)
➔ *Housing Opportunity Index*. Number of new and existing homes which are affordable to families earning 80%, 50% and 30% or less of the area median income, divided by the total number of homes using income and sales prices.
➔ Amount of direct displacement caused by retrofits or other housing improvements.
➔ Share of Low Income Households at increased risk of displacement
➔ Percentage of income spent on housing and transportation costs

Traffic Density (**CES**)

➔ Amount of traffic reductions (by VMT or volume) in census tracts, overlaid by race and income data.

Public Transit and Active Mobility Infrastructure

➔ Bus and BART Ridership within Oakland by majority race census tract
➔ Walkability Index. Number of people who report engaging in Active Mobility

[31] Housing Burden is an example of a KPI that may be able to indirectly track ECAP progress, but is also subject to factors outside of the City's control.

- ➔ Pedestrian Safety (**DRE**). Reductions in pedestrian accidents by census tract. Number of high risk intersections improved.
- ➔ Miles of new bike lanes by census tract.
- ➔ Percentage of household in close proximity to a bus line that runs every 15 minutes.
- ➔ Number of curbs modernized "cut" (**DRE**) especially prioritizing census tracts with senior centers or high risk intersections.

Improve Public Health (**DRE**)

- ➔ Childhood Asthma Emergency Department Visits
- ➔ Road Safety
- ➔ Walk Score
- ➔ Proximity to safe park with amenities/open space

Open Space/Parks

- ➔ Acres of new/preserved green spaces (in frontline communities)

Electric Vehicles (EVs)

- ➔ Degree of program penetration, i.e., number of new/used EVs or hybrid purchased through state subsidized EV purchase programs
- ➔ Expansion of rideshare
- ➔ Proximity to a public EV charging station

Sea-Level Rise

- ➔ Acres of low-lying land protected from sea-level rise though floodplain restoration, seawall, voluntary retreat, raising homes on stilts, converting to houseboat or other viable measures.

Wildfire Risk

- ➔ Number and location of wildfire risk mitigation projects completed in high risk areas
- ➔ Estimated amount of acreage protected

Extreme Heat Measures (climate-appropriate tree planting, cooling centers, insulation programs) by district/census tract

- ➔ Number of trees planted (in the flatlands/near elderly populations and schools)
- ➔ Number of homes re-insulated.
- ➔ Number of community centers/resilience hubs providing resources for extreme heat events

Job Creation[32] (directly/indirectly from ECAP implementation)

- ➔ Living Wage (**DRE**) (Number of new green jobs created, Participation by race/ethnicity)
- ➔ Labor Force Participation (**DRE**) (% by race, previously unemployed, age)
- ➔ Participation in City Workforce Development Programs (**DRE**) (% by race, previously unemployed, age)
- ➔ Number of City green job trainings and Just Transition employment programs
- ➔ Local Employment for ECAP-related projects (esp. in high unemployment census tracts (**CES**) and majority non-white census tracts)
- ➔ Number of new green businesses and cooperatives established by race/district.

[32] Data that specifically tracks green jobs in Oakland is currently unavailable. We encourage the City to pursue feasible ways to obtain this data to augment the City's existing employment and labor force data.

Community Resilience
Strengthen Local Assets & Adaptive Capacity

Strengthen Local Assets. Terms like *vulnerable* and *disadvantaged* can cause us to overlook the many assets frontline communities possess, not the least of which includes, "organized groups of neighborhood leaders actively engaged in local planning efforts, policy campaigns, and other efforts to make their communities healthier, safer, and more sustainable."[33] Amidst the focus on vulnerability factors, must be an equal focus on harnessing and expanding **existing community assets and capabilities**, including residents' income/skills, local businesses, home-based enterprises, citizens associations, business associations, community banks, cultural organizations, community-based media organizations, and religious organizations.[34]

> "Facets of a community that can be integrated toward the goal of enhancing disaster resilience include, infrastructure, governance structures, [local] economy, natural resources . . . demographic character, and social interactions."[35]

Researchers say that "significant community development only takes place when local community [members] are committed to investing themselves and their resources in the effort. . . you can't develop communities from the top down, or from the outside in. You can, however, provide valuable outside assistance to communities that are actively developing their own assets."[36]

Recommended Key Performance Indicators

- ➔ Number of new or expanded community-owned institutions (green business cooperatives, public or nonprofit banks or local credit unions, community land trusts, community gardens, housing cooperatives).
- ➔ Number of new local businesses or neighborhood business expansions.
- ➔ Amount of small business start-up grants received by local entrepreneurs.
- ➔ Number of ECAP projects spearheaded by local organizations.
- ➔ Number of capacity-building activities or trainings provided to local nonprofit and community-based organizations, and local businesses.
- ➔ Number of City contracts / partnership agreements with community-based organizations and local businesses.

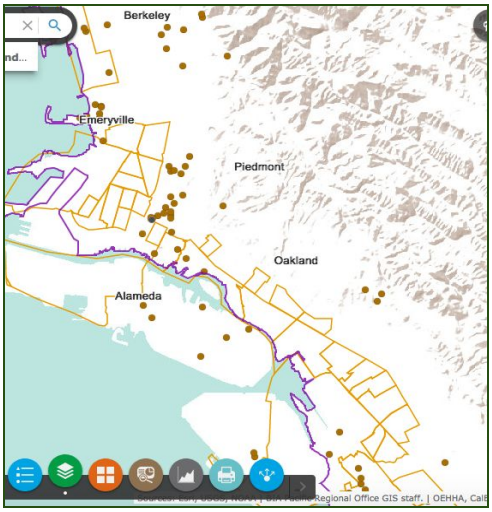
b. Biennial Evaluation & Reporting

The Department of Race and Equity's Racial Equity Implementation Worksheet advises City departments to identify the steps and resources needed for implementation with an eye toward equity and "**propose plans to address gaps in resources or other barriers to implementation**." Monitoring implementation requires data tracking throughout Plan implementation to enable evaluation and course-correction. There are several methods for reporting on whether Action implementation has been equitable.

- ➔ Actions tied to a location (neighborhood or household) can be mapped as they occur and progress. Some benefits accrue to the location where the projects take place. These include: storm shelters, cooling centers, green infrastructure to reduce avoiding local flooding, sequestration that improves surroundings (trees, parks building soil), distribution of resources to residents (emergency kits, smoke masks, tree seedlings, etc.), educational efforts, levees for sea level rise, wildfire avoidance techniques and more. There are, however, variances from place-based benefits, such as avoiding flooding downstream by building in catchments and bioswales upstream. The benefits of these projects should be tagged to the location where the benefits accrue.

[33] APEN, Mapping Resilience, p.15
[34] "Secondary building blocks" include other public and private institutions that can partner with communities, such as educational institutions and libraries.
[35] APEN, Mapping Resilience, p. 21
[36] McKnight, J. and Kretzman, J., Northwestern School of Educational and Social Policy, 'Sustaining Community-Based Initiatives: Mapping Community Capacity'

- ➔ Other Action benefits go directly to individuals and households (building retrofits, transit passes, EV incentives, tree planting etc.). To the greatest extent possible, capture the demographic information of beneficiaries, including income, race, age, language capacity. As data on other relevant factors, such as ability level becomes available, track that demographic data as well.
- ➔ **Track benefits that flow to the 25 most burdened census tracts in Oakland as compared to the City as a whole.** Compare the percentage of benefits that accrue to frontline census tracts with the citywide percentages. Did frontline communities see benefits proportional to their share of population? Keep in mind that actions outside of DACs can benefit DACs (e.g., upstream riparian restoration benefitting downstream neighborhoods) and not all actions located in DACs provide direct benefits (meet priority community needs). (In addition, not all Actions generate benefits that can be tracked in this way.) For example, one major City initiative is to increase EV use and EV charging stations in these frontline communities (see TLU-5 *Create a Zero Emission Vehicle (ZEV) Action Plan*). The difficulties of achieving this, e.g., of generating funding streams in areas that lack ZEV ownership, should not dissuade the City from addressing this equity gap else it risks perpetuating existing disparities. ***Example*.** Project tracking of installations of Publicly-Accessible EV Infrastructure:
    1. Map out installs on a map that shows DACs. Identify the percentage of installs in DACs, e.g., 3 out of 28 = **11%**.
    2. Calculate the percentage of the population that resides in DACs and divide by the total population.
        i. 25 Census Tracts = 83,969 people
        ii. 83,969 / 365,072 Oakland total population (in census tracts fully within city limits, 2010 census) = **23%**
    3. **Conclusion: Installs were 11%; should have been 23%**
    4. Adjust for Relative Poverty in DACs
        i. Number of people below twice the federal poverty level in DACs ~= **65%**
        ii. Number of people below twice the federal poverty level in Oakland ~=**41%**
    5. **Conclusion: Installs were 11%; should have been 36%** (23% x 65%/41%)



When derived from the latest population numbers, population and poverty adjustment can be used as a benefits benchmark for all ECAP actions to hit. (As 2020 census data will be available soon, the City of Oakland should base all population counts on the most recent numbers.) One useful tool to support this evaluation is the CEC's Energy Equity tool that will identify existing solar and EV installation locations at minimum. The City can work with CEC to include Oakland-generated data into the statewide system. (Image: CEC, EV installations and location of DACs)

Where distribution has been inequitable in one year, adjust investments and/or implementation plan to make the following year's distribution more equitable, helping ensure greater KPI benefit accrues in frontline tracts, races and lower income brackets. To the extent that the biennial evaluation process is aligned with the City's budgeting process, this may enable funding to become flexible and responsive to evolving ECAP priorities. Finally, "**design a reporting mechanism that will keep internal and external stakeholders informed of progress, lessons learned, and emerging best practices**."[37] As the Oakland Climate Action Network is established, it will provide an important mechanism for keeping frontline residents informed.

[37] Department of Race and Equity, Racial Equity Implementation Worksheet, p. 2

III. Best Practices for Frontline Community Engagement

This section offers best practices for CL-5 *Establish the Oakland Climate Action Network to Support Inclusive Community Engagement on ECAP Implementation* (Public Works, Department of Race and Equity) to generate meaningful participation from frontline communities. Equitable community engagement reaches beyond brief consultations or transfers of information, to embrace community ownership of the implementation process. According to the Movement Strategy Center, "the key to closing equity gaps and resolving climate vulnerability is direct participation by impacted communities in the development and implementation of solutions and policy decisions that directly impact them."[38]

The International Association for Public Participation's (IAP2) ***Spectrum of Public Participation*** names community **empowerment** as the final goal of public participation, which entails placing final decision-making power in the hands of the public and making a promise to implement what the public decides.[39] Movement Strategy Center developed a companion guide, ***The Spectrum of Community Engagement to Ownership*** with additional guidance and model staff actions for each stage on IAP2's spectrum. The goal is to move from marginalization (denying residents access to decision-making processes) and placation (providing the community with relevant information) up the spectrum towards **delegated power** (ensuring community capacity to play a leadership role in implementation of decisions). Community ownership, which fosters democratic participation and equity through community-driven planning and decision making, is the final stage. Enabling deep participatory democracy will require "capacity investments across multiple sectors,"[40] such as community-based organizations, local governments, philanthropic partners, and facilitative leaders trusted by communities.

A. Increase and Streamline Inter-Departmental Communication and Collaboration on ECAP Implementation

As most ECAP Actions span across the purview of several departments, there is a critical need for improved inter-departmental communication and collaboration on climate action implementation.

CL-5, which calls for creation of the **Oakland Climate Action Network (OCAN)**, illustrates the need to increase internal City capacity to work collaboratively across departments and the Port of Oakland (an independent City department). The OCAN city wide network must include not only community organizations and engaged residents but also key partners within City departments. In support of OCAN, each implementing City department should designate a knowledgeable staffer to be the community engagement partner and interdepartmental liaison. These City staff would collaborate and comprise the main line of communication between City departments implementing ECAP actions. This type of organized role would streamline communication and help alleviate the bureaucratic complexities of working across departments. Furthermore, the regular presence of knowledgeable staffers at OCAN meetings builds trust and puts community organizations in a better position to cooperate and collaborate with the City through OCAN —a direct line of communication with all relevant key City partners.

Lowering institutional barriers to community engagement and creating an efficient system of inter-departmental communication will directly translate to improved and empowered City-community partnership and co-ownership on ECAP implementation.

[38] Movement Strategy Center, The Spectrum of Community Engagement to Ownership, p. 3
[39] International Association for Public Participation (IAP2), Spectrum of Public Participation, p. 1
[40] Movement Strategy Center, The Spectrum of Community Engagement to Ownership, p. 4

B. Delegate Power

A focus on community empowerment means that City staff will collaborate with community-based organizations to ensure that frontline communities cultivate the "capacity to participate in and **lead decision-making processes**"[41] for ECAP implementation. This means building community trust and authentic, non-transactional relationships with frontline community members and organizations, prioritizing "relationships in/with under-represented communities, trusted community members and respected community leaders."[42] It additionally means co-developing planning models to guarantee community priorities will be implemented in accordance with community members' visions.[43] Possible City staff activities to achieve the IAP2 Spectrum's stated goal of community empowerment— referred to as "collaborative & community-driven governance" in the MSC tool— include:

- "Co-fundraising with community-based organizations;
- Attendance at and sometimes co-planning of community-based events and activities;
- Capacity-building workshops to support community-driven policy development;
- Translation of community priorities into policy."[44]

While the 2030 ECAP community engagement process —made possible through the work of the Equity Facilitator team in partnership with City staff, the cohort of Neighborhood Leaders, the Ad Hoc Community Advisory Committee and the activities of the District Community Workshops and Town Halls— effectively gathered community input to ensure priority community needs and local assets were integrated into the planning process, it fell short of giving the community full control over the Plan's outcomes. Two concurrent community-based planning processes, the East Oakland Neighborhoods Initiative (EONI) and the AB 617 West Oakland Community Action Plan (WOCAP), did entail full community ownership over plan design and implementation.[45] Both plans were developed by community members in collaboration with the City and other local and regional government agencies. The community reached consensus through regular standing meetings at locations within the impacted communities.

Because Oakland's 2030 ECAP will go to the City Council for a vote as a flexible plan that needs additional interpretation and definition, it must be accompanied by an ongoing meaningful, transparent, and accountable community engagement process that generates equitable collaboration between City and community organizations. The WOCAP Steering Committee has moved into the implementation phase of its plan and may be able to partner with the City on the implementation of ECAP Actions that intersect and overlap with their existing aims. Because the City and Port of Oakland are members of the WOCAP Steering Committee, this can be accomplished through initial outreach (e.g., presentations to the WOCAP Steering Committee) and sustained participation in relevant WOCAP subcommittee meetings.

C. Establish Local, Issue-Based Implementation Committees

To ensure robust implementation of CL-5, the Oakland Climate Action Network (OCAN) should include establishment of decentralized, neighborhood-based governance bodies, envisioned as regularly occurring decision-making forums, held in neutral, community-oriented, and accessible public spaces where people already gather (such as libraries, schools, and recreation or community centers). OCAN committees would focus on implementing the ECAP Actions most relevant to the challenges faced by residents in those neighborhoods.

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[41] Movement Strategy Center, The Spectrum of Community Engagement to Ownership, p. 3
[42] City of Oakland, Racial Equity Implementation Guide Worksheet, p. 2
[43] National Association for the Advancement of Colored People (NAACP) Environmental and Climate Justice Program (EJCP), Our Communities, Our Power: Advancing Resistance and Resilience in Climate Change Adaptation Action Toolkit, p.
[44] Movement Strategy Center, The Spectrum of Community Engagement to Governance, p. 10
[45] Meeting on a monthly basis for over a year, the WOCAP Steering Committee designed 89 strategies for reducing disparities in air pollution emissions and exposures within West Oakland. Steering Committee members, which include staff of the local and regional agencies that have jurisdiction over West Oakland, renewed their commitment for the implementation phase, committing to monthly Steering Committee and subcommittee meetings. The WOCAP Steering Committee was made possible through a sustained partnership between the Bay Area Air Quality Management District, the West Oakland Environmental Indicators Project, and skilled neutral facilitators known to the community.

The Oakland Climate Action Network can integrate existing bodies and forums such as Neighborhood Crime Prevention Councils (NCPCs), neighborhood associations and resident action councils (e.g., Santa Fe Community Association and Neighbors, Sobrante Park Resident Action Council, EBALDC's Healthy Havenscourt Collaborative), community and recreation centers (e.g., Bushrod, Rainbow and Tassafaronga Rec Centers), engaged congregations and faith groups (e.g., Allen Temple Baptist Church, Kehilla Synagogue), existing place-based community organizations (e.g., Unity Council in the Fruitvale, Black Cultural Zone in East Oakland) and membership-driven, base building organizations (e.g., Communities for a Better Environment in East Oakland, Asian Pacific Environmental Network in Chinatown).

Neighborhood residents are the most equipped to state their lived experience and observations of the actual conditions that they live on a day-to-day basis, and should be consulted to 'ground truth' public data sets. Qualitative observation of neighborhood residents' lived experience, combined with consistent data monitoring, can be combined effectively to determine the actual conditions on a block-by-block basis, of Key Performance Indicators. In East Oakland, Communities for a Better Environment worked with their members and a team of summer interns from UC Berkeley to ground truth publicly available datasets, such as CalEnviroScreen, and found additional toxic hazards plaguing community health that were not published in any database, ranging from auto body shops and nail salons to abandoned gas stations. In West Oakland, West Oakland Environmental Indicators Project worked in partnership with the Environmental Defense Fund on air monitoring to develop a hyper-local and data-driven map highlighting vast disparities in air quality from one block to the next.[46] Neighborhood residents' efforts to collect block-by-block air quality data were a critical factor that enabled policy makers to make critical interventions in the WOCAP Implementation Plan, such as residential truck rerouting and no-idling enforcement, to address these disparities.

With the helpful guidance of community-based organizations referenced above, residents can come together to co-define, vision, plan, and organize around equitable climate action implementation, defining the problems to solve and the specific implementation methods.

1. **Schedule standing meetings** on a monthly or bi-monthly basis, convened and organized by residents and organizations rooted in that community. Meetings should take place on evenings or weekends, at a time when most working families would be available to attend. ECAP meetings within the community on a monthly or bi-monthly basis in each District would build on existing community assets and enable residents of each District to regularly educate themselves, get updated about the progress of climate action efforts in their neighborhoods, and plan community-driven solutions. Regular, standing community meetings have a large co-benefit of strengthening neighborhood social cohesion, resilience, and community capacity in the event of climate disasters. A key factor for climate resilience is the extent to which people know and have relationships with their neighbors. While some residents will not be able to attend all of the meetings, they can benefit from a known schedule allowing them to plug into whenever they can. Meetings should provide culturally relevant food, free childcare, simultaneous interpretation, and materials in the languages commonly spoken in the neighborhood.

2. **Activate the Network throughout Plan implementation**. Engaging residents early on and maintaining residents' active participation over time makes the City's sustained commitment evident and reaches more people. This is especially important for gaining the trust of residents who may be frustrated by the City's past decisions; ongoing policy conversations generate more opportunities for their voices to matter and make a difference. It's also important for attracting newcomers as word spreads within the community. Meetings of local, issue-based implementation committees of OCAN would also help the City gain mutual accountability through collaboration on ECAP implementation at the neighborhood level that generates concrete results. They could create a space for City staff (and elected officials) to build relationships with engaged residents in each District and provide opportunities for regular, in-person or virtual updates. Not

[46] Environmental Defense Fund, How pollution impacts health in West Oakland

only does this increase the community's capacity for civic participation, it also increases the City's capacity and skills in community partnership. Another benefit of sustained engagement is the ability to course correct over time. If certain demographics consistently aren't present, the City can revise and adjust messaging, outreach, and partnerships with community-based organizations over time.

3. **Provide dedicated implementation staffing.** The City must demonstrate institutional support for the OCAN by making resources available. At the very least, City staff responsible for overseeing ECAP implementation would attend one meeting with each neighborhood-based OCAN group per year. At a minimum, each District should have an annual opportunity to hear updates on both overall citywide ECAP and neighborhood-specific ECAP implementation enabling residents to stay informed and provide input and feedback, without leaving their neighborhoods. Staff could also reserve time for attending an additional annual meeting, a citywide assembly that brings the neighborhood-based committees or bodies of the Oakland Climate Action Network together.

D. Develop Equitable Partnership Agreements

While standing meetings will improve community ownership of ECAP implementation, frontline community members will need to receive meaningful compensation, commensurate with their efforts and expertise, which includes lived experience, to ensure robust participation. **We propose that the City enter into partnership agreements with both community-based organizations and individual engaged residents**. CBOs and engaged residents can: (1) conduct outreach, especially in their own neighborhoods and communities; (2) lead OCAN meetings; and (3) spearhead ECAP implementation projects.

This approach lifts up voices that need to be heard, but which are typically marginalized by public processes. For the City of Baltimore's Sustainability Plan, the City hired over 100 residents, particularly from its most impacted neighborhoods, to conduct outreach, surveys, and creatively engage fellow residents. Baltimore envisions paying this group of residents to stay actively engaged through the implementation phase.

Partnership agreements and prime contract awards are a key equity issue for the City to address. The Oakland Equity Indicators Report gave the City a score of 31/100 with respect to "**prime contracts awarding**, the percentage by race/ethnicity of prime contracts under $100,000 awarded by the City of Oakland for construction and professional services. African American Oaklanders are 3.42 times more likely to receive small contracts under 100K (66.7%) than Whites (19.5%). Moreover, the average White contract award (average of 41 contracts) is $1,059,209 or **11.87** times greater than the average African American contract award ($89,191; 6 contracts).[47] The City of Oakland can work with groups like the West Oakland Environmental Indicators Project and the Rose Foundation for Communities and the Environment to develop best practices for partnership agreements to define collaboration in accordance with community engagement best practices.[48]

E. Scaling Up

Given the current COVID-19 global pandemic, the need for social distancing, impending budget cuts and other constraints, the City may not have the resources or capacity to fully implement the practices outlined in this REIA, particularly in this section, at the outset of ECAP implementation. City staff may also need to utilize online-only community engagement strategies for the near-term future. Nevertheless, the City should not abandon progress toward embodying the equity principles outlined in this REIA. For example, OCAN could begin with quarterly citywide meetings to provide updates and receive feedback (inform and consult stages of community engagement) before evolving to become more robust and reach the final stages of the community engagement spectrum.

[47] Department of Race and Equity, Oakland Equity Indicators Report, p. 24
[48] California Office of Planning & Research, Resiliency Guidebook Equity Checklist, p. 2

V. Specific Guidance for Maximizing Equitable Outcomes

The following matrix provides a preliminary identification of frontline communities that are relevant to each Action as illustrated by existing disparity data and equity gaps. This is followed by suggestions for maximizing equitable outcomes and a brief description of improved future conditions. **Staff should consult this matrix as a way to jumpstart the process of determining the frontline communities and corresponding equity gaps each department will prioritize**. It should not be considered an exhaustive list. Guidelines for the process that each department will follow to identify frontline communities are outlined above in Section II.

Transportation & Land Use

TLU-1 Align All Planning Policies & Regulations with ECAP Goals & Priorities

In the course of scheduled revisions, amend or update the General Plan, Specific Plans, Zoning Ordinance, Subdivision Regulations, Parks Master Plan, and appropriate planning policies or regulations to be consistent with the GHG reduction, adaptation, resilience, and equity goals in this ECAP. Specifically, appropriate planning policies should study the following strategies and should incorporate such policies that are found not to have adverse environmental or equity impacts:

- Remove parking minimums and establish parking maximums where feasible, ensuring public safety and accessibility.
- Require transit passes bundled with all new major developments.
- Revise zoning such that the majority of residents are within 1/2-mile of the most essential destinations of everyday life.
- Provide density bonuses and other incentives for developments near transit that provide less than half of the maximum allowable parking.
- Update the Transit Oriented Development (TOD) Guidelines to further prioritize development of housing near transit, including housing for low, very low, and extremely low-income levels.
- Require structured parking be designed for future adaptation to other uses.
- Institute graduated density zoning.
- Remove barriers to and incentivize development of affordable housing near transit.
- Incorporate policies addressing sea level rise, heat mitigation, and other climate risks into zoning standards and all long-range planning documents. Revise these policies every five years based on current science and risk projections.
- Identify and remove barriers to strategies that support carbon reduction, adaptation, resilience, and equity goals, including community solar and energy storage.

Lead Dept. Planning and Building Department
Supporting Dept. Public Works-Sustainability, Department of Transportation

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
Pollution Burden By District/Census Tract ✓ Cumulative burden above the 70-75 Percentile in CalEnviroScreen 3.0 ✓ High Asthma burden ✓ High Traffic burden ✓ High Diesel PM ✓ Majority Asian, Latinx and African American CTs	✓ Existing **Air Pollution Burden** disproportionately impacts low-income communities of color in Oakland. ✓ African American children were 10.05 times more likely than White children to be admitted to the emergency department for asthma-related conditions. ✓ Majority Asian census tracts have the highest average Pollution Burden. ✓ The 6 CTs with greatest cumulative burden are majority Latinx.	✓ **Utilize innovative market practices**— such as Transfer of Development Rights (TDR) a market-based technique that encourages the voluntary transfer of growth from places where the community would like to see less development to places that are appropriate for extra development (near jobs, shopping, schools, transportation or other services) ✓ Create **buffer zones** between residential communities and industrial zones. ✓ Remove barriers to and **provide funding for**	✓ Updated plans and ordinances prevent the siting of new industrial or toxic facilities in frontline communities or toxic hot spots and reduce the number of grandfathered-in toxic and locally unwanted land uses. ✓ Reduce the disparity in pollution burden and harmful air emissions in frontline communities. ✓ General Plan includes a robust Environmental Justice Element along with environmental justice policies supporting the LUT Element.

	✓ Lack of access to financial benefits/business opportunities for solar energy in frontline communities.	community-owned solar.	✓ All Land use plans for frontline communities preserve and increase open space, highlight historic and cultural landmarks. ✓ Frontline communities benefit financially from community ownership of local solar development. cooperatives/companies.
Housing Burden + Transportation Access + Transportation Cost ✓ Households paying over 50% of income on rent ✓ Low-, very low-, and extremely low-income households & Low-Income Census tracts ✓ Fixed Income ✓ Low-Income Renters in Multi-Family Housing ✓ Transit Dependent ✓ Disabled (Curb Ramps) ✓ Elderly (Curb Ramps) ✓ Majority African American CTs + HHs (Households) ✓ High Displacement Risk ✓ In-commuters (who need parking)	✓ Lack of housing near transit affordable to very low and extremely low income households ✓ 'Affordable' housing targets low-income households and is not always affordable to very low and extremely low-income households. ✓ African American median household income is $37,500 or ELI (Extremely Low-Income), compared to White median household income, which is $110,000. **White households have 2.93 times the median income of African American households.** ✓ African Americans face a disproportionately higher **Housing Burden** than other races in Oakland. ✓ **Displacement** disproportionately impacts Oakland's African American community.	✓ Promote "right of first refusal" for existing renters to purchase their home, if for sale, in partnership with Community Land Trusts ✓ Preserve existing affordable housing stock ✓ Incentivize creation of new affordable units near transit stations or in high-opportunity (jobs rich) areas. ✓ All mixed-income housing development should include at least 30% of the units affordable to families below 60% area median income (AMI), including very-low and extremely-low income families. ✓ All infill development "should protect the needs and rights of existing residents in that community . . . especially as it concerns **housing affordability, tenant rights, livability standards, and health**."[49]	✓ Percentage of African Americans living in high opportunity areas (e.g., in transit oriented development, near jobs-centers) stops decreasing and begins to increase. ✓ Streets are safer for active mobility and public transportation access. ✓ Quality housing near transit is affordable to LI, VLI, and ELI households. ✓ People with limited mobility or without car access can easily walk to nearby transit stations ✓ Frontline communities participate fully in all planning processes.
Areas with High Exposure to Climate Threats	✓ Discussion in A-5		
Vehicle Miles Traveled ✓ Communities over			✓ New Low Income Multi-Family Housing units

[49] Physicians for Social Responsibility - Los Angeles, Assessing Infill Development and Transit Oriented Development Through an Equity Lens

one mile away from nearest transit stop, or jobs-rich area ✓ Transit-Dependent (Lack access to a car)			are constructed at best, within ¼ mile, maximum ½ mile away from the nearest transit stop.

TLU-2 Align Permit and Project Approvals with ECAP Priorities

Amend Standard Conditions of Approval (SCAs), as well as mitigation measures and other permit conditions, to align with the City's GHG reduction priorities stated in this ECAP. Explore, through the Planning Commission, adoption of a threshold of significance for GHG impacts to align with this ECAP. In applying conditions on permits and project approvals, ensure that all cost-effective strategies to reduce GHG emissions from buildings and transportation are required or otherwise included in project designs, including infrastructure improvements like bicycle corridor enhancements, wider sidewalks, crossing improvements, public transit improvements, street trees and urban greening, and green stormwater infrastructure. Where onsite project GHG reductions are not cost-effective, prioritize local projects benefiting frontline communities.

Lead Dept. Planning and Building Department
Supporting Dept. Public Works-Sustainability

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Communities within 1-mile radius of facilities where on-site GHG reductions are not cost-effective and would have an adverse local impact, or where GHG reductions do not reduce air quality impacts.	✓ Neighborhoods in the proximity of facilities with high adverse local impacts that are not mitigated by GHG reduction measures.	✓ **Maximize GHG reduction measures that can also reduce emissions of local air contaminants** or reduce adverse local health impacts. ✓ Consider including a GHG life cycle analysis of projects for the GHG inventory. ✓ Include frontline communities in the process of determining local projects that benefit them.	✓ Reduce air pollution and tree cover disparities. ✓ Neither, zip code, census tract, nor demographic identity determine air the quality of the air Oaklaners breathe.

TLU-3 Take Action to Reduce and Prevent Displacement of Residents and Businesses

Leverage City resources and partnerships to prevent residential and business displacement, and preserve and expand existing affordable housing. Specifically:

- Expand support of Community Land Trusts, Community Development Corporations, and limited equity cooperatives to prevent displacement of residents and businesses, prioritizing tenants at highest risk for displacement.
- Leverage new State funding, as well as identify ways to generate additional local funds, to provide ongoing capital financing for housing acquisitions and rehabilitation to preserve existing affordable housing and convert market-rate housing to affordable housing.
- Ensure that all programs funding housing preservation align with climate goals, such as electrifying and weatherizing buildings.
- Develop business anti-displacement programs that align with climate goals, such as increasing neighborhood-serving retail and electrifying and weatherizing buildings.
- Develop resources and incentives to support local entrepreneurs whose businesses are helping Oakland meet its climate goals, with an emphasis on entrepreneurs from frontline communities.
- Prioritize City support for community wealth building projects in Opportunity Zones, particularly where those projects align with ECAP goals.

- Prioritize workforce training dollars and business support for businesses that help meet ECAP goals, especially locally-owned and minority-owned businesses, and businesses primarily employing or creating wealth for frontline community members.

Lead Dept. Economic and Workforce Development Department, Housing and Community Development Department

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ **Severely Housing Burdened** % of Households / Census Tracts that earn ≤ 80% of the AMI and pay ≥ 50% of their income on housing costs. ✓ LI, VLI and ELI Households by race ✓ Small Businesses in frontline communities ✓ **Energy Cost Burden** (% income spent on energy)	✓ Citywide, 51% of Oakland residents are low-income; almost half of households are rent-burdened. ✓ 58.4% of African Americans spend more than 30% of their annual income on rent, versus only 34.9% of Whites. Latinxs were a close second with 53.7% rent-burdened. (DRE) ✓ African American median energy cost burden —2.4%. White—1%. Latinx—1.9% ✓ African Americans are disproportionately displaced. ✓ Small businesses are often displaced by rising rents/energy costs or after natural disasters.	✓ Work with CLTs to remove homes from the speculative market for permanent affordability and/or offer renters the right of first refusal. ✓ Work with entrepreneurs to establish businesses in frontline communities that exemplify and help meet ECAP goals.	✓ ECAP Actions reduce housing and energy costs for members of frontline communities. ✓ ECAP Actions build wealth and assets for frontline communities, through employment and ownership opportunities in the green economy, thereby decreasing housing burden. ✓ City supports small business growth in frontline communities/Opportunity Zones. ✓ City of Oakland celebrates small businesses (disadvantaged business enterprises) and entrepreneurs of color and in frontline communities as climate champions. ✓ Oakland reverses the regional displacement trend reducing the percentage of African American families that are displaced by rising housing and energy costs.
✓ **Asian Americans**	✓ In Oakland, Asian community faces high unemployment, but very low participation in City Workforce Development Programs.	✓ Perform culturally-sensitive, targeted outreach to Asian community for workforce development programs.	✓ .
✓ High Displacement Risk households ✓ Unhoused curbside communities	✓ **African Americans were 41.76 times more likely than Asians, and 6.69 times more likely than Whites, to be homeless.**	✓ Prioritize development of housing that is affordable to Very Low- and Extremely Low-income households	✓ Oakland has abundant, affordable housing options that prevent strucupport quality, clean and safe housing for

	✓ **Number of unhoused is growing, and there are more curbside communities** ✓ **Public support for ecologically sustainable tiny house villages is unmet**	✓ Provide bathrooms, showers, hand washing stations, soap, drinking water, laundry vouchers, dumpsters, vermin abatement, and cleaning supplies.[50] to increase quality of life for curbside communities and nearby residents ✓ Partner with houseless-led organizations to design and develop ecologically sustainable tiny house villages on unutilized or under-utilized public land.	unhoused, curbside communities. ✓ Formerly unhoused communities have places to live that are not curbside and adequate services, including ecologically sustainable tiny house villages on unutilized or under-utilized public land.
✓ Formerly incarcerated individuals and individuals with barriers to employment.	✓ **African Americans were 24.82 times more likely to be incarcerated in prisons than Asians/Other and 20.16 times more likely than Whites.**	✓ Prioritize formerly incarcerated individuals and individuals with barriers to employment for green workforce development programs.	✓ Publicly funded green jobs and workforce development programs go first to formerly incarcerated African American and Latinx individuals.
✓ Native American communities, including Chochenyo Ohlone people, the original inhabitants of this area.	✓ Native Americans are significantly **underrepresented** in the general population (0.8% [51]) despite once being the majority population ✓ Oakland's Equity Indicators Report and other datasets have little to no data on Native Americans in Oakland. ✓ Nationally, 26.6% of single-race American Indians and Alaska Natives were in poverty in 2015, the highest rate of any race group.	✓ Collect and bolster data equity data for Native Americans in subsequent reports. ✓ Consider paying the voluntary Shuumi Land Tax to Sogorea Te Land Trust and support other Ohlone community-based organizations. ✓ The City can return public land to Chochenyo Ohlone stewardship via Sogorea Te Land Trust.	✓ Poverty, unemployment, and other socioeconomic indicators of Native communities are equivalent to white communities.

TLU-4 Abundant, Affordable, and Accessible Public Transit

The City will work with its public transit agencies to replace autos with public transit as a primary transportation mode for trips beyond walking distance, ensuring convenient, safe, and affordable public transit access within Oakland and to neighboring cities for all Oaklanders. Specifically:

- By 2023, the City shall work with public transit agencies to develop short- and long-term strategies to increase public transit ridership by at least 3% per year each year through 2050. Strategies will be based on modifying existing routes and creating new routes for increased reliability, frequency, speed, and efficiency; improving safety at bus stops, prioritizing Deep East and West Oakland; reducing travel times; and ensuring robust, quality service on routes that serve Deep East Oakland and West Oakland.
- To facilitate route efficiency, the City shall work with AC Transit to evaluate the need for new or changed routes in Oakland on an ongoing basis. AC Transit and the City will work as partners, with the City committing to improving travel time and passenger experience along major public transit corridors, and to implementing national and international best practices for prioritizing public transit on Oakland streets while accommodating other modes. The City shall work with public transit

[50] https://justiceteams.org/the-black-new-deal
[51] 2010 United States Census

providers to ensure that economic disruptions of any roadway reconfigurations are minimized.

- The City shall work with public transit agencies, community organizations, and community institutions to ensure that all Oakland residents, regardless of location and disability status, can access the public transit network. To ensure accessibility and adequate service in hard to reach areas, the City and public transit agencies will consider supplementing the central transit network with zero-emission, short-distance, neighborhood-level transportation services such as shuttles, prioritizing areas with high percentages of zero-car or low-car households, persons with disabilities, low-income households, and senior citizens.

Lead Dept. Department of Transportation
Supporting Dept. Public Works

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Low-, very-low, and extremely low-income households & Low Income Census Tracts	✓ Need **low or free fares** in order for low-income individuals to increase bus ridership.	✓ Prioritize fare reductions for low-income households, students/youth, elderly, and transit dependent residents. ✓ Consider an income-based fares program.	✓ Improve African American bus ridership to eliminate disparities. ✓ **Reduce disparity in Average Bus Frequency**. African American and Latinx CTs match bus frequency of "mixed" census tracts (from 11 → 16.7 buses/hr) including augmented service from Zero emission shuttles.
✓ Majority African American Census Tracts + Households ✓ Maj. Latinx CTs + HHs ✓ Low-income Census Tracts w/ low average bus frequency ✓ Transit-Dependent HHs (by race) ✓ Disabled ✓ Elderly ✓ Fixed Income	✓ African Americans are the only racial group in Oakland to report cost to be the biggest barrier to taking transit. ✓ Majority African American + Majority Latinx CT's (Census Tracts) have the **lowest average bus frequency**: 11 buses per hour, compared to majority White CT's at 13.8 buses per hour and majority Asian CT's at 20.5 buses per hour. ✓ Majority African American + Majority Latinx CT's (Census Tracts) have the **lowest average bus frequency**: 11 buses per hour, compared to majority White CT's at 13.8 buses per hour and majority Asian CT's at 20.5 buses per hour. ✓ Transit-dependent (Individuals w/o access to a car) **need local bus service more** than fixed rail (BART) ✓ **African Americans are over 3x more likely than**	✓ Consider programs that will deliver transit cost benefits to low income transit riders of color, such as discounted bus passes. ✓ Collaborate with AC Transit to ensure improved bus frequency and more efficient routes in deep East Oakland and West Oakland. ✓ Collaborate with AC Transit to ensure improved bus frequency and more efficient routes in deep East Oakland and West Oakland.	✓ **Bus frequency, reliability and accessibility are improved.** Residents are more likely to rely on a bus that comes ~ every 15 minutes. ✓ **Reduce disparity in Average Bus Frequency**. African American and Latinx CTs match bus frequency of "mixed" census tracts (from 11 → 16.7 buses/hr) including augmented service from Zero emission shuttles.

	Whites to be transit-dependent (18.7% for African Americans, 6.1% for Whites). Percentage of transit-dependent individuals by race: Asian— 10% Latinx—7.6% Whites—6.1% African Americans—18.7% Citywide average—10.2% ✓ High percentage of curb ramps that are not modernized can hinder access to transit.		
✓ Displaced (former) Oakland residents who in-commute for work or to maintain community ties	✓ Insufficient bus service connecting BART and fixed rail transit lines to destinations in local neighborhoods	✓ Prioritize connectivity between transit modes and local destinations.	✓ In-commuters/all Oaklandlers have ample options for getting to local destinations on public transit.
✓ Students/Youth	✓ Lack of income means they may forego trips to important destinations	✓ Collaborate with AC Transit to expand pilot free bus fare program for youth to a permanent program, as has taken place in San Francisco's MUNI.	

TLU-5 Create a Zero Emission Vehicle (ZEV) Action Plan

By 2021, develop a ZEV Action Plan to increase adoption of electric vehicles and e-mobility while addressing equity concerns and prioritizing investment in frontline communities. The plan must set ambitious targets for ZEV infrastructure and must be coordinated with other land use and mobility options so that ZEV ownership is not necessary for access to ZEV trips, and ZEVs increase as a percentage of all vehicles while overall vehicle miles traveled decreases. The plan must address the following sectors: medium and heavy-duty vehicle electrification, including trucks and delivery vehicles; personal vehicle charging infrastructure in multifamily buildings, including affordable buildings; curbside charging; school and transit buses; and coordination with private and public fleet operators.

Leading Dept. Department of Transportation
Supporting Dept. Public Works-Sustainability

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Low-income truck owner-operators	✓ Burden of transition to EV on small independent truck owner-operators, who are LI	✓ Create a funding mechanism (e.g., revolving loan fund, grants, public bank finance, etc.) to enable low-income truck owner-operators to upgrade to EVs, without undue debt burden.	✓ Low-income truck owner-operators have access to capital to upgrade to EVs, without undue debt burden.
✓ Low- and fixed-income households	✓ May lack funds to purchase EVs or pay for car-sharing or ride-sharing services, apps, or smartphones etc. ✓ Nearly one in five African American Oaklanders did	✓ Ensure EV ownership is not necessary to access EVs, through free car-sharing and ride-sharing programs. ✓ Promote programs like Clean Cars for All and the large and growing market	✓ Low-income households have equitable access to EVs, whether by ownership or carsharing. ✓ Low-income households have equal opportunity to use alternative mobility

	not have access to a car (18.7%), compared to only 6.1% of White Oaklanders. ✓ Oakland's African American median household income was $37,500 compared to $110,000 for Whites (DRE)	of used EVs. ✓ Increase accessibility to alternative mobility options such as e-scooters and e-bikes, through creative payment options, including accepting cash deposits for access.	options.
✓ Residents of apartment buildings (renters) ✓ Owners or renters of older housing stock	✓ Many lack a reliable place to charge because they disproportionately live in substandard or rented housing where they can't install a charger.	✓ Use strategies to get chargers into affordable apartment buildings. ✓ Install more public chargers in areas where there are more apartment buildings and more low-income housing.	✓ Oakland's vehicle electrification programs prioritize the infrastructure in LI areas and older/multifamily housing stock.

TLU-6 Establish Temporary and Permanent Car-Free Areas

Establish temporary open and car-free street areas to assess feasibility of creating permanent car-free areas citywide. Use car-free areas for active transportation, parks and parklets and green infrastructure, pop-up community and commercial activity, and other uses that address community needs. Develop and plan car-free areas together with community members to ensure that community needs and equity impacts are adequately addressed.

Lead Dept. Planning and Building Department
Supporting Dept. Department of Transportation, Economic and Workforce Development Department

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ People with medical or other access needs who may need to cross car-free areas in a vehicle	✓ Children of color have much higher rates of asthma necessitating Emergency Room visits. ✓ Non-white communities have a disproportionate number of Acute Preventable Hospitalizations and Chronic Disease Preventable Hospitalizations (DRE).	✓ Map out sensitive populations. ✓ Be responsive to community needs.	✓ Community members have convenient ingress and egress routes despite car-free areas.
✓ High **Traffic Density** + DAC or VLI census tracts	✓ Air pollution and public health burdens ✓ Proximity to "High Injury Corridors" with high numbers of traffic accidents ✓ Limited access to open space	✓ Strategic use of temporary car-free areas to reduce significant traffic areas during key times and increase local community assets. ✓ Consider continuing the *Slow Streets* program to immediately expand access to space, and add more Slow Streets in deep East Oakland.	✓ Car-free areas positively impact areas in high traffic census tracts, with improved air quality, lower pedestrian and cyclist fatalities and fewer motorized accidents. ✓ Car-free areas become spaces for frontline communities to celebrate their culture and identity (e.g., Black Joy Parade, 510 Day, Hiero Day, etc.).

TLU-7 Rethink Curb Space

Prioritize use of curb space throughout the city by function. In order of priority, allocate curb space for mobility needs for public transit and active transportation, such as walking and biking; access for people and commerce (loading zones and short-term parking); activation; and storage for long-term parking. Prioritize curb space based on surrounding land use and mobility needs, per the City's adopted Bike and Pedestrian Plans. Where on-street parking is provided, revise pricing, availability, and location of parking to encourage active transportation, public transit, and clean vehicles without increasing cost-burden to low-income residents and other sensitive populations such as seniors. Use parking revenues to fund public transit and active transportation improvements in frontline communities. Specifically:

- Update parking pricing strategies for publicly accessible on- and off-street parking to adequately address demand and encourage mode shift.
- Require parking costs to be unbundled from residential and commercial leases.
- Enforce business compliance with parking cash-out requirements.
- Eliminate time limits, expand hours of meter operation, and implement demand-based pricing for on-street parking.
- Improve parking monitoring and enforcement.
- Establish Parking Benefit Districts with revenues to improve multi-modal access, public transit, and walkability of the commercial district.
- Discourage new off-street, City-owned parking.
- Adopt an equitable fee structure in residential parking permit zones.

Lead Dept. Department of Transportation
Supporting Dept. Planning and Building Department

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Low-, very-low, and extremely low-income households & LICTs ✓ In-commuters, especially displaced Oaklanders	✓ Low-income communities and communities of color are disproportionately impacted by regressive parking fee structures, both in terms of % of income, and in terms of inability to pay parking fines, contributing to cycles of debt, poverty and criminalization. ✓ Former long-time Oakland residents who were displaced from Oakland often still work and/or maintain community ties in Oakland. The lack of public transit service in the new locations means they often need to drive into and park in Oakland.	✓ Implement progressive parking fee structure, to charge low-income individuals less than wealthy individuals, with debt-forgiveness programs or decriminalization programs. ✓ Ensure adequate affordable parking options for in-commuters	✓ People of color are not disproportionately impacted by parking fees. ✓ Ensure formerly unhoused communities have places to live that are not curbside and adequate services, including establishing ecologically sustainable tiny house villages on unutilized or under-utilized public land.
✓ Unhoused curbside communities	✓ Unhoused, curbside communities are criminalized for and displaced from residing on the sidewalk or in public right-of-ways.	✓ Designate safe parking lots for unhoused individuals and households to sleep and live. ✓ Identify demographics of unhoused curbside communities.	✓ Rethinking curb space leads to the creation of safe and sanitary living areas for unhoused communities.
✓ Small, locally-owned businesses, particularly DBEs (Diverse or Disadvantaged	✓ Small, locally-owned DBEs are disproportionately impacted by losing parking access (e.g., BRT construction on E. 14th	✓ Preserve some free parking spaces adjacent to locally-owned DBEs. ✓ Prioritize curb	✓ Revised parking structure allows local small businesses to thrive.

Business Enterprises) ✓ Seniors, people with mobility challenges, and people with disabilities	corridor). ✓ East Oakland and other flatland neighborhoods are less likely to have ADA accessible sidewalks and curb cuts. ✓ People with limited mobility need to get as close as possible to their destinations.	modernization and active mobility infrastructure in underserved areas.	

TLU-8 Expand and Strengthen Transportation Demand Management (TDM) Requirements

Increase TDM performance requirements for new developments where feasible to support the mode shifts necessary to achieve a low carbon transportation system. Expand the TDM program to include requirements for existing employers. Fund ongoing monitoring and enforcement of TDM requirements.

Lead Dept. Planning and Building Department
Supporting Dept. Department of Transportation

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Low-income Households ✓ People without access to EVs	✓ Regressive Impacts	✓ Ensure there are no regressive impacts on low-income households and people without access to EVs.	✓ More African Americans and Latinx report use of TDM programs; lower costs.
✓ Small, local DBEs (Diverse Business Enterprise) / employers		✓ Ensure there are no regressive impacts on small, local DBE employers.	

TLU-9 Ensure Equitable and Clean New Mobility

Ensure that new mobility platforms and technologies equitably support City carbon reduction goals, including integrated planning for vehicles, public transit, and active transportation networks and amenities. Specifically:

- Demonstrate that new mobility programs, including ride share programs, align with and support GHG reduction and equity goals in this ECAP.
- Apply Greenlining Institute's Mobility Equity Framework and the Racial Equity Impact tool developed by Oakland's Department of Race and Equity to policies and programs related to new mobility.
- Increase use of Intelligent Transportation Systems to give priority to transit and clean vehicles.
- Provide incentives for walking, biking, carpooling, and ride sharing, and disincentives for fossil fuel-based on demand delivery.
- Require carbon emission reduction plans for charging and rebalancing of micromobility fleets.
- Facilitate the establishment of Transportation Management Associations to enable distribution of public transit passes and invest in increased public transit and other mobility strategies, such as walking, biking and micromobility that can reduce vehicle miles travelled.
- Explore potential for a "mobility wallet" to pay residents to take carbon- and space-efficient travel modes.

Leading Dept. Department of Transportation

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Census tracts lacking safe active mobility infrastructure, e.g.,	✓ Areas without adequate and safe active mobility infrastructure also have low average bus	✓ Prioritize adding new active mobility infrastructure and modernizing curb ramps, in majority people of color	✓ Significantly increase active mobility infrastructure without increasing displacement

sidewalks, dedicated bike lanes ✓ CTs with Low Average Bus Frequency ✓ Seniors and people with disabilities or limited mobility	frequency and are majority people of color.	CTs and near assisted-living facilities, senior centers ✓ Prioritize active mobility incentives for frontline community members.	risk for existing low-income households. ✓ More African Americans and Latinx report increased physical activity and use of active mobility leading to improved public health indicators for African American and Latinx households.
✓ Ride sharing drivers for Lyft, Uber, etc	✓ Ride sharing drivers in the gig economy may have limited to no economic safety net -- may be cost-prohibitive to transition to an EV.	✓ Funding mechanism to support ridesharing drivers in moving from fossil fueled cars to EVs (e.g., require Lyft / Uber pay for upgrade, etc.)	✓ Low-income Oaklanders of color economically benefit from a "mobility wallet" that provides financial incentives.

TLU-10 Expand Neighborhood Car Sharing

Expand the Neighborhood Car Sharing program, ensuring that all shared vehicles are electric vehicles by 2030 and that shared vehicle services address the needs of families, people with disabilities, and frontline communities. Coordinate program expansion with New Mobility programs, EV infrastructure planning, and with revised parking policies. Where feasible, work with partners including developers and property managers to provide dedicated EV car sharing services in multifamily affordable housing buildings to increase access and reduce the car cost burden to lower-income families.

Lead Dept. Department of Transportation

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Residents of multi-family affordable housing ✓ Undocumented immigrants ✓ People with disabilities ✓ Individuals without drivers licenses ✓ People without car access	✓ **Absolute barrier**: many frontline community members are unable to acquire a driver's license.	✓ Community engagement and outreach program. ✓ Hire local residents to inform, educate, and inspire frontline neighborhoods to take advantage of neighborhood car sharing programs. ✓ Carpooling services may be able to link people without drivers licenses to car-sharing efforts.	✓ Costs remain affordable to low-income households and alternative solutions reduce the need for personal vehicle ownership. ✓ Car-sharing stations are equally distributed within majority non-white census tracts.

Buildings

B-1 Eliminate Natural Gas in New Buildings

By 2023, prohibit new buildings and major renovations from connecting to natural gas infrastructure.

Lead Dept. Planning and Building Department
Supporting Dept. Public Works-Sustainability

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Low-income residents	✓ **Long-term Business Vacancy**. May increase the cost of major	✓ Address energy resilience in housing and other buildings that serve	✓ New buildings serve or house low-income residents

✓ Small restaurant owners ✓ Restaurant staff	renovations, for small business owners. ✓ Low percentage of new buildings serve or house low-income people. ✓ Switching from natural gas may impact the cooking process.	frontline communities. ✓ Provide financial assistance to small businesses. ✓ Consider funding a general education campaign offering best practices for effectively making the switch without harming the cooking process.	✓ Oakland restaurateurs and staff welcome the shift away from natural gas.

B-2 Plan for All Existing Buildings to be Efficient and All-Electric by 2040

By 2022, develop a policy roadmap to achieve decarbonization of the existing building stock by 2040, without additional cost burden or displacement risk to frontline communities. The roadmap must address:

- Equitable process and outcomes, including avoiding bill increases, ensuring benefits flow to renters, and local green jobs;
- Incentives and requirements;
- Regulatory obstacles;
- Phasing of implementation;
- Financial assistance for low-income residents and businesses, including on-bill financing;
- Opportunities for integration of distributed renewable energy generation and energy storage; and
- Opportunities and needs for energy efficiency and building envelope upgrades, taking into account local, state, and regional energy efficiency incentive programs and focusing particularly on renters, low-income populations, and populations with a disproportionate risk of housing and business displacement

Lead Dept. Public Works-Sustainability
Supporting Dept. Planning and Building Department

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Residents of soft story buildings ✓ Occupants of older buildings / housing stock	✓ The percent of residential parcels that are soft story in majority non-White census tracts was 1.37 times the percent in White census tracts. ✓ Housing units in predominantly non-White zip codes were 2.03 times more likely to report housing **habitability complaints** than housing units in predominantly White zip codes. ✓ Owners of older buildings may be reluctant to retrofit due to the additional costs required to bring the buildings up to code.	✓ Consider bundling City-funded earthquake safety retrofits and building envelope upgrades in majority non-White census tracts. ✓ Prioritize City-funded energy retrofits and building envelope upgrades in predominantly non-White zip codes, with the highest number of habitability complaints.	✓ Soft story issues are addressed through decarbonization issues, improving housing safety. ✓ Older buildings are retrofitted despite the additional costs, e.g., by providing incentives to the homeowners. ✓ Habitability complaints are significantly reduced due to extensive renovations in non-White zip codes.
✓ Individuals medically dependent on electricity	✓ Lack of financial support or access to alternative sources of energy for individuals medically dependent on electricity during power shutoffs.	✓ Work with EBCE's Local Development Business Plan Implementation program staff to **prioritize medical baseline customers in solar + storage retrofits** to ensure lifesaving electric service during power outages.	✓ Disparities between those who are medically dependent on electricity and those who are not are alleviated, through solar + storage access or other forms of assistance.

✓ Energy Cost Burdened households ✓ African Americans, Latinx	✓ Electrification has the potential to increase energy cost burden, which already disproportionately impacts African American and Latinx households. ✓ Low program utilization in majority people of color census tracts. ✓ Majority African American and Latinx census tracts are more likely to experience higher rates of utility shut offs and debts / arrearages from lack of payment. ✓ African American households disproportionately lack **complete kitchen facilities**.	✓ Prioritize high energy cost burdened households to receive program benefits first, e.g., through energy efficiency and solar + storage programs. ✓ Financial assistance for Low Income DBEs. ✓ Create local jobs through energy efficiency audits and home installations. (Jobs in Energy Efficiency, on average, support more local jobs per dollar than the oil and gas sector.) ✓ Work with EBCE to consider debt forgiveness programs for arrearages on utility bills.	✓ Electrifying Oakland's existing buildings does not result in cost increases to low-income households. ✓ High program utilization by African American + Latinx households reduces the disparity in access to complete kitchen facilities. ✓ Increased energy cost savings decrease energy cost burden for POC households. ✓ Significantly increase POC employment in Living Wage green jobs retrofitting existing buildings.
✓ Renters (esp. low-income renters) ✓ Indoor Air Quality	✓ Over half of White householders are homeowners (only 43.6% are not). Conversely, 69.0% of Latinx householders did not own their homes, and **74.1% of African American householders did not own their homes.** ✓ Use of natural gas creates harmful indoor air quality, and is often coupled with poor ventilation ✓ Potential for direct displacement of renters from homes undergoing retrofits. ✓ Potential for rent increases after renovations are made.	✓ Mitigate displacement risk by strengthening tenant protections, including "**relocation assistance**' and '**right of return**' for tenants temporarily displaced by housing retrofits. ✓ Consider methods such as the 'green lease' to address the 'split incentive' issue, and to prevent tenants paying for property improvements. ✓ Advocate to expand PG&E's OBF (On Bill Financing) program to include residential customers in addition to businesses.	✓ Low-income renters enjoy the benefits of electrification, especially improvements to indoor air quality, without rent increases due to pass-through costs from landlords paying upfront for electrification retrofits. ✓ Low income renters, especially non-white households are not displaced when owners retrofit the buildings they own.

B-3 Prevent Refrigerant Pollution

By 2023, develop a refrigerant management program that:

- Establishes a phaseout timeline for high-GWP refrigerants in existing buildings;
- Integrates with existing local and regional energy efficiency and building electrification programs as appropriate;
- Ensures enforcement of performance measures;
- Identifies financial assistance for low-income residents and businesses; and
- Aligns with refrigerant management strategies adopted by the State of California.

Lead Dept. Public Works-Sustainability
Supporting Dept. Public Works-Facilities

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Low income (LI) households and businesses ✓ Linguistic Isolation/Limited English Proficiency	✓ LI/DBE (Disadvantaged Business Enterprise) businesses may need additional assistance to update refrigerant management strategies. ✓ Difficult reach communities may be unaware of the phase out. ✓ **Abandoned Trash**. Latinx communities experience higher rates.	✓ Establish equitable, progressive funding mechanisms to support financial assistance for low-income residents and small, local DBEs. ✓ Outreach to residential customers in addition to businesses to ensure proper disposal. ✓ Ensure adequate pickup and disposal of retired refrigerants.	✓ Refrigerants are removed from low income and non white communities at equal rates to more affluent and white communities. ✓ Low-income households of color disproportionately benefit from investments in refrigerant pollution management programs. ✓ Amount of abandoned trash decreases.
✓ African Americans, Latinx	✓ Low program utilization in majority people of color census tracts	✓ Prioritize refrigerant pollution management investment programs to Black and Latinx- owned businesses	✓ Increase program use in majority POC census tracts.
✓ Renters (esp. low-income renters)		✓ Prioritize refrigerant pollution management outreach and programs for low-income renters, especially residents of multi-family housing.	

B-4 Reduce Lifecycle Emissions from Building Materials

By 2023, adopt a concrete code for new construction that limits embodied carbon emissions. In subsequent building code updates, implement improved embodied carbon performance standards including additional materials and material-efficient building practices, with exemptions for cost barriers as needed to prevent these changes from directly increasing housing or rent costs. Ensure requirements are at least as stringent as the State of California procurement standards in effect at the time of the building code adoption. Explore ways of supporting local market development for low-lifecycle-emission and carbon-storing biogenic building materials.

Lead Dept. Planning and Building Department
Supporting Dept. Public Works-Sustainability

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ African American & Latinx Households & Majority non-white Census Tracts	✓ Better-paying union building trades construction jobs are not representative of Oakland's diversity. ✓ Procurement supply chains for building materials are not representative of Oakland's diversity.	✓ Procurement standards for supporting supply chains that include a significant number of local DBEs (Diverse Business Enterprises) for low-carbon and carbon-storing green / biogenic building materials. ✓ Local / targeted hiring of African American and Latinx residents to green workforce development / training programs, with pathways to good, family-sustaining union jobs and/or cooperative	✓ Proportionate percentage of workers hired in building construction trades, reflective of demographics of Oakland.

		ownership opportunities. ✓ Financial Support (e.g., grants, revolving loan fund) for Local / DBE green construction materials businesses.	
✓ Renters (esp. low-income renters)	✓ Use of green building materials may increase housing construction prices and thus rent costs.	✓ As needed, offer incentives to building owners to encourage, to prevent pass through of higher costs.	✓ Rents are not increased by virtue of using green building materials in new construction, or energy efficiency / conservation retrofit projects.
✓ Formerly incarcerated individuals	✓ Companies making low-carbon and carbon-storing green / biogenic building materials may not have "banned the box" guaranteeing the ability for formerly incarcerated individuals to apply for work.	✓ Develop hiring and procurement standards regarding formerly incarcerated individuals. ✓ Enforce a 'ban the box' requirement providing equal / non-discriminatory hiring opportunities for formerly incarcerated individuals in contracted green building materials (non-local supply chain or local businesses).	✓ Percentage of formerly incarcerated individuals working in green building materials sectors increases.
✓ Unemployed individuals with barriers to employment	✓ Companies making low-carbon and carbon-storing green / biogenic building materials may not have enforced local / targeted hiring workforce requirements. ✓ African Americans were 1.27 times more likely than Whites to not be in the labor force and 2.12 times more likely than Whites to be unemployed.	✓ Targeted / local hiring standards to prioritize hiring of unemployed individuals with barriers to employment.	✓ Racial disparities between African Americans and Whites in the labor force and unemployment statistics in the local green building materials sector are closed.

B-5 Require All Major Retrofits of City Facilities to be All-Electric

Effective immediately, retrofits of City-owned or controlled buildings shall not install any new natural gas infrastructure or equipment. All major retrofit projects shall eliminate gas infrastructure from the building and integrate energy storage wherever technically feasible and appropriate.

Lead Dept. Public Works
Supporting Dept. Public Works-Sustainability

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Latinx ✓ African Americans ✓ Living Wage	✓ High percentage of workers making less than living wage $14.85/hr and Low percentage of workers in high wage	✓ Green Workforce Development/Training targeted to African American, Latinx, Native, and low-income residents	✓ Percentage of workers hired for building retrofits and earning a living wage is reflective of demographics of Oakland

✓ Employment in High Wage Industries ✓ Labor Force Participation	industries. ✓ Nearly 47% Latinx Oaklanders make less than a living wage. ✓ Nearly 38% of African Americans make less than living wage.	of Oakland, including with guaranteed good jobs pathways	(by race, gender).
✓ Formerly incarcerated individuals ✓ Unemployed individuals with barriers to employment	✓ **African Americans were 1.27 times more likely than Whites to not be in the labor force.** ✓ **African Americans were 2.12 times more likely than Whites to be unemployed.**	✓ Hiring and Procurement standards, esp targeting formerly incarcerated individuals, e.g., ban the box ✓ Targeted / local hiring standards to prioritize hiring of unemployed individuals with barriers to employment.	

Material Consumption & Waste

MCW-1 Eliminate Disposal of Compostable Organic Materials to Landfills

Fully fund and implement the requirements of California SB1383 (Short-Lived Climate Pollutants: Organic Waste Methane Emissions Reduction), reduce surplus food waste, and eliminate disposal of compostable organic materials to landfills. Ensure robust engagement with businesses and institutions, including schools, and continued residential outreach to reduce wasted food and effectively keep compostable material out of the landfill-bound waste stream. Work closely with franchise hauler to ensure that the compostable material stream is uncontaminated so that compost created is high-quality.

Lead Dept. Public Works-Zero Waste Program

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Formerly incarcerated individuals ✓ Unemployed individuals with barriers to employment ✓ Buildings without compost bins	✓ Better-paying union jobs with waste haulers and compost facilities are not always representative of Oakland's diversity. ✓ Many Oakland schools and multi-family apartment buildings, particularly in flatlands neighborhoods, do not yet have compost bins.	✓ Provide more concerted, comprehensive education around material consumption and waste for residents, businesses, institutions that happen regularly and are accessible in all buildings and ensure that it is consistent messaging. ✓ **Prioritize a circular local economy**, with local **manufacturing, and material recovery.** ✓ Targeted / local hiring standards to prioritize hiring of unemployed individuals with barriers to employment. ✓ Update hiring and procurement standards, to enable formerly incarcerated individuals to secure work.	✓ New living wage jobs (e.g., waste haulers or compost facilities) are representative of Oakland's diversity. ✓ All Oakland schools have functioning composting systems, starting with flatlands neighborhood schools. ✓ Multi-family apartment buildings have accessible compost bins that are well-utilized.

MCW-2 Strengthen Infrastructure and Partnerships for Edible Food Recovery

Support existing capacity, and develop new capacity, to recover edible food that is otherwise wasted, and distribute that food for human consumption. Engage with stakeholders including local food donation, recovery, and collection organizations to build robust collection and food storage capacity, and reliable distribution systems to the neediest populations. Engage with food generators such as supermarkets, wholesale distributors, large hotels, and institutions, to donate surplus edible food that food recovery partners want or will accept, and to ensure food generators comply with the Edible Food Recovery requirements of SB 1 3. Inform edible surplus food generators about strategies and best practices for preventing wasting surplus food.

Lead Dept. Public Works-Zero Waste Program
Supporting Dept. Human Services Department; Oakland Parks, Recreation, and Youth Development Department

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Unhoused or curbside communities ✓ Low-income people who would otherwise be eligible for SNAP / food stamps ✓ Low-income elders ✓ Low-income single mothers ✓ People with disabilities / people with limited mobility	✓ Community groups who provide food to people experiencing hunger or malnutrition are underfunded and under resourced ✓ Lack of organizational network to redirect surplus edible food to the organizations who can effectively and equitably distribute it.	✓ Partner with existing community groups who deliver quality food to unhoused or curbside community encampments, or have regular delivery routes to households or community institutions, such as churches. ✓ Prioritize SNAP / food stamp eligible individuals, low-income elders, low-income single mothers, people with disabilities and people with limited mobility for mobile food redistribution systems. ✓ Outreach and engagement programs to inform residents about food redistribution opportunities and locations for picking up food.	✓ Community groups and other local institutions that serve low income populations of color have sufficient quality edible food to distribute. ✓ High program reach in communities of color and low income communities; people know where to go to access food.

MCW-3 Eliminate Single-Use Plastics and Prioritize Reuse in Food Preparation, Distribution, and Sale

By 2023, work with StopWaste and regional partners to pass an ordinance to reduce the prevalence of single-use plastic in Oakland and to ensure that reusable food service ware is the default in dining. Specifically:

- Require reusable food service ware for all dine-in establishments.
- Mandate that any single-use food service ware (plates, bowls, cups) and accessories (straws, utensils, condiment cups) are BPI certified compostable fiber, except where certain materials may be deemed medically necessary or necessary to ensure equal access for persons with disabilities.
- Require that any single-use accessories (straws, utensils, condiment cups) are only available on demand.

By 2025, in coordination with StopWaste and regional partners, the City shall expand on its ban of expanded polystyrene food containers to other categories of single-use plastic and disposable food service ware as needed to meet the City's Zero Waste goals, and to ensure that all materials going to compost facilities within Alameda County are truly compostable.

Lead Dept. Public Works-Zero Waste Program

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Small businesses ✓ Disadvantaged and Diverse Businesses owned by	✓ May be **cost prohibitive** to make the switch to compostable or reusable (especially due to the economic downturn	✓ Use incentives, training, and financial aid rather than fines. ✓ Consider a buy-back	✓ Small, local and DBE businesses are able to make a just transition to reusable and compostable food ware

non-English speakers	caused by the globay COVID-19 pandemic) ✓ Small, local, and DBE's, particularly owned by non-English speakers, may not be aware of the ban ✓ May be difficult to find compostable / reusable food ware	program for unusable plastic and styrofoam food ware. ✓ Encourage Disadvantaged Business Enterprises and other local business development to support this initiative in manufacturing. distribution, or servicing (e.g., picking up and dropping as Mandela Foods Co-op does with produce delivery to corner and liquor stores).	✓ Small, local and DBE businesses are supported with manufacturing, distribution, or servicing reusable and compostable food ware.
✓ People with disabilities, or with allergies to alternative materials	✓ **Need for Plastic Straws**. Paper, biodegradable plastics and even reusable straws made from metal or silicone can be **difficult, impossible, or dangerous** to use. ✓ Stigma from not having easy access to what you need	✓ Ensure widespread awareness of the exemption allowing restaurants to give disposable, flexible plastic straws to customers who need them for physical or medical reasons ✓ Consider methods for making plastic straws relatively accessible	✓ People with disabilities enjoy easy access to the foodware they need in Oakland restaurants.

MCW-4 Support the Reuse, Repair, Recovery, and Refurbishment Economy

By 2025, create a community reuse and repair program to increase waste diversion, reduce material consumption, and create green jobs. Specifically:

- Explore creating or designating live/work or other spaces dedicated to material repair and upcycling, and selling of repaired and upcycled goods.
- Remove land use and other barriers to developing businesses that reuse or repair consumer goods, where doing so will not adversely impact the surrounding residential neighborhood.
- Develop resources to support direct donation to charitable organizations.
- Increase public awareness of and access to opportunities for reuse, product rentals, repair, and donation.
- Support, regulate, and expand citywide reuse infrastructure.
- Establish a methodology to assess benefits of reuse and repair programs to goals for waste diversion, GHG emissions, and economic development.
- Partner with local vocational programs and/or OUSD to launch at least one high school or community college-level Repair Arts Academy.
- Develop a grant, recognition, or incentive program to celebrate and encourage local repair businesses or leaders.

Lead Dept. Public Works-Sustainability
Supporting Dept. Economic and Workforce Development Department

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ African Americans ✓ Unhoused or curbside communities	✓ High rents make it difficult to establish new community small businesses, cottage industries, or cooperatives.	✓ Robust outreach and engagement ✓ Workforce development training that leads to certification or employment ✓ Incentivize local Disadvantaged Business Enterprise development, in particular Black-owned	✓ POC enroll in local vocational programs and establish cooperative businesses proportionate to % of the population.

		businesses and cooperative businesses	
✓ Formerly incarcerated individuals and people with barriers to employment	✓ African Americans and Latinx experience much higher levels of incarceration than Whites ✓ African Americans and Latinx have much higher levels of unemployment than Whites	✓ Targeted / local hiring standards to prioritize hiring of unemployed individuals with barriers to employment, including formerly incarcerated individuals, e.g., 'ban the box'.	✓ Formerly incarcerated individuals and people with barriers to employment are employed at rates proportionate to % of population.

MCW-5 Expand Community Repair Resources

Expand the City's existing tool lending library services to at least 5 other Oakland Public Library branches, recreation facilities, community centers, or other community sites by 2030, prioritizing East and West Oakland and low-income neighborhoods. Ensure tool lending facilities support repairable household items and active mobility modes, including bicycles. Explore potential for onsite community partnership programming to teach repair skills and promote local repair businesses.

Lead Dept. Oakland Public Library
Supporting Dept. Economic and Workforce Development Department

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Majority non-White census tracts ✓ Limited English Proficiency / Linguistically isolated communities	✓ Some communities might not be aware of the services of tool lending libraries	✓ Outreach and education on lending library services	✓ Limited English Proficient and communities of color utilize the community repair and tool lending library services at demographically representative rates as white residents.

MCW-6 Establish a Deconstruction Requirement

Establish a deconstruction requirement to reduce demolition waste from construction and renovation and facilitate material reuse. Regulate hauling and processing of construction and demolition debris to ensure that salvageable materials are identified and removed for reuse instead of being recycled or disposed to landfill.

Lead Dept. Planning and Building Department
Supporting Dept. Public Works-Zero Waste Program

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Latinx and African American household community	✓ Over 46% of Latinx households do not earn a living wage (DRE), compared to 37.6% of African Americans and only 12.3% of Whites.	✓ Targeted local hiring and job training in high-unemployment and majority POC census tracts. ✓ Supporting pathway to employment in high wage industries for POC, formerly incarcerated individuals, and unemployed individuals with barriers to employment.	✓ Increase in the number of local residents in Jobs paying Living Wage and high wage industries (such as building trades construction and renovation jobs doing deconstruction and salvage of materials) is representative of Oakland's diversity.
✓ Formerly incarcerated individuals ✓ Unemployed / not participating in labor force	✓ Living wage jobs are not representative of Oakland's diversity.		

✓ People living adjacent to demolition sites	✓ Frontline community members (especially adjacent to / impacted by demolition sites) may not have access to the salvageable materials removed for reuse.	✓ Partner with community organizations to ensure that salvageable materials for reuse go to frontline communities and small, local DBEs.	✓ Communities of color are also benefiting from the deconstruction requirement, via jobs, economic benefits, and access to salvageable materials for reuse.

Adaptation

A-1 Fund Creation and Operation of Resilience Hubs

Increase community resilience by (1) supporting community engagement and community-led disaster preparedness training, prioritizing frontline communities first; and (2) developing protocols and enhancing building systems to enable trusted community-serving facilities – including libraries, recreation and community centers, and parks – to reliably serve their communities as places of refuge during smoke days, extreme heat, and power outages. By 2022, identify and prioritize specific resilience needs and gaps in frontline communities, and assess feasibility of establishing Resilience Hubs at both municipal and community facilities in areas with prioritized gaps. By 2025, partner with established community resilience groups to co-develop and pilot three Resilience Hubs: community-serving facilities that support residents year-round and support resource distribution and onsite services before, during, or after a natural hazard event. Identify ways that the City can support decentralized community facilities to serve residents who are unable to travel to centralized resilience hubs during disasters and emergencies.

Lead Dept. Office of Resilience
Supporting Dept. Public Works-Sustainability

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ African Americans and Latinx living in the most polluted CTs ✓ Low-income and low-wealth individuals	✓ African Americans experience higher mortality rates during extreme heat events (same vulnerability levels and children and elders)[52]	✓ Prioritize establishing resilience hubs, providing resilience resources, and partnerships with community groups in majority POC neighborhoods/census tracts first. ✓ Restore and expand the CORE program, specifically targeting African American and non-English speaking communities. ✓ Remove barriers to community-owned solar+storage.	✓ Majority POC communities have an equal or greater amount of Resilience Hubs and access to resilience resources as majority white communities. ✓ Low income POC are not disproportionately left behind or placed in danger during natural / climate disasters
✓ Unhoused or curbside communities	✓ Unhoused or curbside communities are more vulnerable than housed populations during climate emergencies, such as floods and wildfires because they live outside and have no reprieve from breathing wildfire smoke. ✓ African Americans are far more likely to be unhoused than White	✓ Improve public facilities and resource distribution in unhoused communities / encampments, including sanitation / handwashing stations, bathrooms, waste pickup / hauling infrastructure, etc	Unhoused communities can access resilience hubs and resources at equal rates as other communities

[52] The Climate Gap at pg. 7

	communities.		
✓ People whose jobs require they work outside (construction, park maintenance, etc)	✓ People whose jobs require they work outside are also disproportionately exposed to wildfire smoke, and extreme heat	✓ Distribute resources, such as N95 masks, inexpensive box fan filters, or water, to frontline community workers, especially during emergencies. ✓ Establish additional protections for low-income individuals who work outside (such as no work on bad air days, etc)	People who work outside have adequate access to resilience resources to decrease or mitigate their exposure impacts
✓ Low-income elders ✓ People with disabilities or mobility challenges ✓ People who are medically dependent on electricity (people with disabilities, chronic illnesses, etc.)	✓ Low-income elders, people with mobility challenges, medically dependent people with disabilities and people with chronic illness who rely on power are more likely to die during a wildfire and/or utility power shutoff. ✓ Low income residents have less access to solar+storage for resilience during power outages and for financial benefits for community-owned solar.	✓ Partner with community organizations like Disability Justice Culture Club who have established rapid response mutual aid networks, utilizing databases and decentralized text / phone trees, to ensure that vulnerable communities have their life-saving needs met during disasters. ✓ Partner with local solar cooperatives and enterprises that enable community ownership of solar and storage facilities.	✓ Reverse disparities in deaths during extreme weather events. ✓ All Oaklanders have ample and equal access to resilience hubs or resources.
✓ Transit-dependent individuals	✓ In the event that public transit cannot run, transit-dependent individuals may be unable to travel to a resilience hub.	✓ Utilize City's ZEV fleet or partnerships with rideshare companies to supplement public transit in inaccessible areas to support emergency transportation in disaster situations.	
✓ Non-English speakers / Limited English Proficient communities	✓ Non-English speakers / Limited English Proficient communities may not have linguistic access to emergency updates and information.	✓ Partner with organizations led by and serving Non-English speakers / Limited English Proficient communities to provide linguistic access to emergency updates and information in their native languages via social media, radio / TV broadcast, text message, etc.	

A-2 Enhance Community Energy Resilience

Work with EBCE to develop a program and timeline for increasing resilience to power losses, including Public Safety Power Shutoffs (PSPS), and climate-driven extreme weather events for low-income, medically dependent, and elderly populations through

installation of renewable energy and onsite energy storage with islanding capabilities, following appropriate project-level environmental review. Include energy efficiency building upgrades in any program, leveraging local and regional incentives. This program may include grants, incentives, rebates, and/or integration with other energy programs.

Lead Dept. Public Works-Sustainability
Supporting Dept. Office of Resilience

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Individuals who are medically dependent on electricity ✓ People with disabilities, elderly people, and people with mobility challenges, particularly electric wheelchair users	✓ Individuals who are medically dependent on electricity are most likely to suffer health risks and die during power shutoffs.	✓ In partnership with EBCE, prioritize lowest-income individuals (CARE customers) who are medically dependent on electricity for free, subsidized building energy efficiency upgrades and islandable solar PV / battery backup systems.	✓ Medically dependent, disabled and elderly African Americans are no more likely than Whites to experience hardship, health risks, or death, in the event of a power shut off than medically dependent, disabled and elderly Whites.
✓ Low-income households with high energy cost burden ✓ Individuals living in all-electric homes, without islandable solar PV / battery backup systems	✓ Low-income households with high energy cost burdens are unable to afford the upfront cost of building energy efficiency upgrades and islandable solar PV / battery backup systems.	✓ Implement a funding mechanism in partnership with EBCE, such as a prioritization loading order for free, subsidized building energy efficiency upgrades and islandable solar PV / battery backup systems.	✓ **Energy Equity** Renters and low-income communities of color access solar energy, including through community-owned solar and energy storage, at equal rates to homeowners and wealthier white communities.

A-3 Fund and Implement Citywide Vulnerability Assessment and Comprehensive Adaptation Plan

Complete and/or update emergency plans, including the Local Hazard Mitigation Plan (LHMP), matching Federal requirements, including hazard identification and climate risk assessment. In conjunction with the update or adoption of the LHMP, complete a citywide vulnerability assessment and comprehensive adaptation plan, addressing climate risks using forward-looking projections and including community stakeholder engagement. Use results of these plans to identify existing and trusted community-serving facilities, including recreation and community centers and parks, as well as locally-trusted private facilities, to serve as shelter, evacuation, and/or clean air centers for future climate emergency events, prioritizing resources in frontline communities. Implement key recommendations of these plans by 2025 to address major climate risks in frontline communities first. Update these documents every 5 years with evolving climate and risk projections and adaptation best practices.

Lead Dept. Planning and Building Department; Office of Resilience
Supporting Dept. Public Works-Sustainability

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Undocumented residents ✓ Unhoused residents	✓ Undocumented and unhoused residents are less likely to engage the City, or feel safe cooperating with the City	✓ Comprehensive Adaptation Plan must include community-driven strategies that protect unhoused and undocumented residents	✓ Undocumented and unhoused residents, particularly African American residents, are treated with the same dignity and respect as housed White residents

✓ Low-income renters ✓ Low-income homeowners	✓ SLR predominantly impacts communities that may not have flood insurance. ✓ SLR may cause toxic groundwater intrusion in low-lying areas and mobilization of contaminants from wastewater and legacy soil pollution. ✓ Flooding from SLR predominantly impacts low-income communities of color in Oakland's flatlands neighborhoods.	✓ Address sea level rise with an eye to understanding the impacts of legacy groundwater threats. ✓ Address SLR with an eye to understanding the disproportionate impacts on flatlands residents near the shoreline.	✓ Sea level rise and groundwater intrusion does not disproportionately impact low-income communities of color.

A-4 Wildfire Risk Reduction

Fully implement a Vegetation Management Plan for high-fire risk areas. Require building owners in high-risk areas to maintain defensible space and implement low-cost fire prevention measures. Increase wildfire safety requirements for new construction or major renovations in high fire risk areas.

Lead Dept. Department of Finance
Supporting Dept. Office of Resilience, Oakland Fire Department

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Residents of urban-wildland interface in Oakland hill neighborhoods (D1, D4, D6, D7) ✓ Homeowners in Oakland hills without fire insurance ✓ Renters in Oakland hills ✓ Elderly, people with disabilities, and people with mobility challenges in Oakland hills ✓ Transit dependent people in Oakland hills	✓ Oakland hills neighborhoods are at greatest direct risk of wildfires. ✓ Low-income homeowners and renters may not be able to pay to maintain defensible space and implement even low-cost fire prevention measures. ✓ Elderly people, people with disabilities, people with mobility challenges, and transit-dependent people are less likely to be able to escape in time in the event of a wildfire.	✓ Prioritize Oakland hill neighborhoods for fire-prevention measures, starting with low-income homeowners, homeowners without fire insurance and renters. ✓ Implement progressive public funding measures to pay for wildfire prevention measures, so as not to burden low-income homeowners and renters. ✓ Implement community-driven wildfire disaster preparedness plans at the neighborhood level, including buddy systems to check on and support transit-dependent people and people with mobility challenges in the event of an emergency evacuation.	✓ People of color, particularly African Americans, are as likely as whites to access and participate in creating and benefiting from fire-prevention measures and wildfire disaster preparedness plans.
✓ People with asthma and other respiratory illnesses	✓ Communities in flatland neighborhoods already bear the brunt of disproportionately toxic	✓ Prepare small-scale Resilience Hubs with N95 masks, low-cost DIY air filtration systems, and	✓ Residents in flatlands neighborhoods are as prepared to deal with the impacts of wildfires as

✓ Residents of flatland communities already disproportionately impacted by air pollution	air quality, which is exacerbated by wildfires.	multilingual climate disaster warning systems in flatlands neighborhoods. ✓ Partner with OUSD to install the latest air filtration technology in flatlands neighborhoods schools.	residents in the hills. ✓ People with asthma and other respiratory illnesses are equipped with N95 masks and low-cost DIY air filtration systems.

A-5 Identify and Reduce Financial Risks from Climate Change

By 2024, evaluate existing and potential financial risks posed by climate change to both City and community. Recommend strategies to mitigate these risks as available and appropriate, including options for insurance products, green infrastructure bonds, real estate strategy and other appropriate mechanisms.

Lead Dept. Public Works
Supporting Dept. Office of Resilience

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Uninsured homeowners and uninsured renters	✓ Mitigating financial risks to frontline communities ✓ Lack of Access to Healthy Financial Institutions in majority non white zip codes.	✓ Offer financial assistance to pay for flood and fire insurance for low-income renters/homeowners	✓ African Americans and people of color are as likely as whites to be insured against floods and fires.

A-6 Expand and Protect Green Infrastructure & Biodiversity

Fund and implement a green infrastructure program for the installation and maintenance of projects and existing civic resources such as the parks system and public spaces, to improve stormwater management, support biodiversity, reduce air pollution exposure, and increase access to natural spaces, including trees. Prioritize investment in frontline communities, and particularly in residential neighborhoods dominated by concrete and asphalt with limited green space and elevated air pollution, in Priority Conservation Areas, and in areas where green infrastructure, including trees and other types of vegetated buffers, can effectively address stormwater management issues and reduce air pollution exposure among sensitive populations. By 2023, identify funding to expand green stormwater infrastructure citywide.

Lead Dept. Public Works-Watershed and Stormwater Management Division
Supporting Dept. Office of Emergency Services, Office of Resilience

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Residents of flatland communities already disproportionately impacted by air pollution. ✓ Renters in Oakland flatland neighborhoods adjacent to creeks with potential for flooding, without flood insurance ✓ Residents in census tracts with the lowest tree canopy cover, who are most impacted by the	✓ Disparity of tree canopy coverage, urban heat island effect, and exposure to air pollution is stark between hill and flatland neighborhoods. ✓ Communities in flatland neighborhoods adjacent to toxic groundwater sites have no way to protect themselves from groundwater intrusion mixing, and accompanying undetectable air and water pollution. ✓ Renters in Priority Conservation Areas being	✓ Prioritize tree planting in neighborhoods with lowest tree canopy coverage with local, good green jobs creation, cooperative ownership and wealth building opportunities, for concrete cuts, tree planting, and maintenance. ✓ Implement the Equity Checklist from the Priority Conservation Areas Resolution (2015) to prioritize public investments in forestry and urban greening to prevent gentrification and displacement.	✓ Reduce frontline community proximity to and exposure to emissions from toxic stationary source facilities. ✓ Eliminate disparity in tree canopy coverage and increase access to open space, especially near creeks. ✓ African Americans are as likely as whites to live adjacent to a toxic site vulnerable to groundwater intrusion. ✓ African Americans are not disproportionately

urban heat island effect.	prioritized for tree planting and urban greening are vulnerable to gentrification and displacement with rising real estate expenses.	✓ Strengthen renter protections and anti-displacement measures in tandem with urban greening efforts.	impacted by displacement due to increased real estate values resulting from urban greening and forestry.
✓ Homeowners and renters near Oakland shoreline, vulnerable to sea level rise. ✓ People adjacent to underground sites of toxic groundwater pollution, vulnerable to air and water pollution from groundwater intrusion due to sea level rise.	✓ Low-income homeowners and renters lacking flood insurance have no way to recoup or pay for damages from flooding of creeks or sea Level Rise. ✓ People living near underground sites of toxic groundwater pollution suffer health impacts resulting from exposure to air and water pollution.	✓ Partner with outside agencies and community-based environmental justice and health organizations to monitor, test, and remediate toxic sites vulnerable to groundwater intrusion due to sea level rise. ✓ Consider strategies for increasing access to flood insurance.	✓ Sea level rise and flooding does not lead to a rise in exposures to toxic contaminants.
✓ People who live in food deserts/food swamps	✓ Lack of access to fresh and affordable fruits and vegetables.	✓ Support local food production in Priority Conservation Areas (PCAs). ✓ Support local entrepreneurship in local sustainable food systems, e.g., DBE-owned urban agriculture businesses.	✓ Over 5% of the food Oaklanders consume is locally and organically grown, decreasing the number of food deserts/swamps and providing sources of revenue for frontline communities.

Carbon Removal

CR-1 Develop Local Carbon Investment Program

By 2023, Establish a program for both voluntary and compliance GHG mitigation fees to be invested locally. Prioritize projects in frontline communities, such as tree planting and urban greening, including in parks; building electrification; creek restoration; and neighborhood EV car share. Partner with Oakland businesses to establish a "Carbon Neutral Oakland Business" designation, with any offset or "Polluter Pays" fees invested locally, with priority benefit to frontline communities.

Lead Dept. Public Works-Sustainability
Supporting Dept. Economic and Workforce Development Department; Planning and Building Department

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ High cumulative impact (DACs) ✓ High Air Pollution census tracts ✓ Undocumented communities ✓ African Americans	✓ Communities of color may not be aware of Local Carbon Investment Program and CEQA processes - more outreach and engagement is needed at the neighborhood level. ✓ Potential economic or social barriers to certification as a "Carbon Neutral Oakland	✓ Ensure that investments in frontline communities meet priority community needs, e.g., decision making on what to invest with Polluter Pays fees are made by community members, not the investor. ✓ Collaborate with local non-profit organizations serving undocumented communities to distribute	✓ Reduce tree cover disparity in majority African American census tracts. ✓ Ensure that African American-owned businesses benefit first from the "Carbon Neutral Oakland Business" designation.

	Business"	any cash dividends/rebates or other direct benefits from generated by the Local Carbon Investment Program to undocumented individuals. ✓ Work with small DBEs (Disadvantaged and Diverse Business Enterprise) to achieve "Carbon Neutral Oakland Business" designation, along the lines of DRE's Cannabis Equity Program.[53]	
✓ Communities adjacent to new facilities	✓ New facilities or projects may increase the risk of displacement in frontline communities.	✓ Support anti-displacement programs and policies	✓ New facilities or projects do not increase the risk of displacement in frontline communities.

CR-2 Expand and Protect Tree Canopy Coverage

By 2022, create a fifty-year Urban Forest Master Plan that:

- Prioritizes strategies to address disparities among neighborhoods in tree canopy coverage;
- Ensures that carbon sequestration is a major factor in tree planting targets, selection of tree species, and tree management practices;
- Establishes a clear and sustainable funding mechanism for ongoing tree maintenance; and
- Establishes a protocol and goals for community partnerships for tree planting and maintenance.

Lead Dept. Public Works-Parks and Tree Services Division

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Residents in census tracts with the lowest tree canopy cover, who are most impacted by air pollution and the urban heat island effect ✓ African Americans ✓ Flatlands residents ✓ Low-income renters in low-tree canopy coverage neighborhoods prioritized for tree planting	✓ African Americans are most vulnerable to extreme heat ✓ Prioritize people of color owned tree planting and maintenance organizations and businesses for contracts to plant and care for urban forest ✓ Renters in Priority Conservation Areas being prioritized for tree planting and urban greening are vulnerable to gentrification and displacement with rising real estate expenses.	✓ Prioritize tree planting in neighborhoods with lowest tree canopy coverage ✓ Create or promote opportunities for local green jobs paying living wages, cooperative ownership and wealth building opportunities, for concrete cuts, tree planting, and maintenance. ✓ Implement the Equity Checklist from the Priority Conservation Areas Resolution (2015) to prioritize public investments in forestry and urban greening to prevent gentrification and displacement. ✓ Strengthen renter protections and anti-displacement	✓ African Americans are as likely as whites to live in neighborhoods with healthy levels of tree canopy coverage. ✓ Majority POC census tracts are not disproportionately impacted by displacement due to increased real estate values resulting from urban greening and forestry.

[53] https://www.oaklandca.gov/projects/cannabis-equity-program

		measures in tandem with urban greening efforts. ✓ Ensure that community-owned groups participate in and benefit from tree-planting work, including grants, and partnering agreements.	

CR-3 Rehabilitate Riparian Areas and Open Space

Secure funding to continue and expand programs to restore creeks and provide ecosystem services in coordination with stormwater management planning, prioritizing investment that reduces climate risks in frontline communities. Include funding for ongoing maintenance and public access.

Lead Dept. Public Works-Watershed and Stormwater Management Division
Supporting Dept. Office of Resilience

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Residents of District 7; Deep East Oakland ✓ Homeowners in Oakland flatland neighborhoods adjacent to creeks with potential for flooding, without flood insurance ✓ Renters in Oakland flatland neighborhoods adjacent to creeks with potential for flooding who have no flood insurance	✓ Creeks in underserved communities receive less maintenance and less active mobility infrastructure ✓ High rates of abandoned trash in African American and Latinx communities. ✓ Lack of public safety along riparian corridors and creeksides ✓ Low-income homeowners and renters are less likely to have flood insurance	✓ Prioritize frontline communities for creek restoration, clean up and open / green space access. ✓ Education/outreach on City's bulky trash program especially targeted to community groups representing and serving POC. ✓ Prioritize POC owned businesses and workers (including education and workforce development) for employment in creek restoration, maintenance, and public safety of riparian areas and open spaces.	✓ Majority POC CTs have as much access to riparian areas and open spaces as other areas. ✓ Majority POC census tracts are as likely as Whites to have access to legal, sustainable waste disposal.

CR-4 Explore Carbon Farming

Explore potential for carbon farming on vacant public or private land, throughout the City's parks and open space system, and in coordination with other public landowners in Oakland. Explore creation of requirements and incentives and prioritize investments in frontline communities where feasible. By 2025, establish a pilot carbon farming project to evaluate carbon removal opportunities.

Lead Dept. Public Works-Sustainability
Supporting Dept. Planning and Building Department

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Residents of 'food deserts / food swamps' in flatlands neighborhoods without grocery stores	✓ If vacant land is being used for things other than growing food and medicine, that limits the available land for local food production	✓ Partner with community organizations and individual Indigenous stewards of Traditional Ecological Knowledge and permaculture practitioners	✓ Carbon farming increases local food production in low-income areas, increasing access to healthy food

✓ Renters without access to a yard for rowing food or medicine at home. ✓ Immigrant and indigenous communities that already grow food/want to increase local food production ✓ Low-income households who can save money by growing food	✓ Barriers to investments in frontline communities ✓ African Americans and Latinx are more likely to live in food deserts / swamps without grocery stores.	to improve soil health for both growing food and medicine, as well as for storing carbon. ✓ Remove any potential barriers to prioritizing investments to *directly benefit* frontline communities (e.g., technical assistance, economic subsidies, job training and workforce development partnerships, support for local food justice and urban agriculture nonprofit organizations, support for small, local DBEs (Disadvantaged Business Enterprise) in the urban agriculture sector). ✓ Improve food access by supporting efforts to make vacant public and private land accessible to 'food desert / food swamp' areas - low-income communities in flatland neighborhoods. ✓ Support local community-based groups that are already practicing urban farming to begin carbon farming as well.	✓ Investments in carbon farming benefit traditional, immigrant and Indigenous communities ✓ Majority POC census tracts establish farming cooperatives or other local businesses to capitalize on the need for carbon farming.

CR-5 Assess Feasibility for Sequestration Incubator

By 2025, evaluate the potential for a Carbon Sequestration Incubator in Oakland to incubate and develop green jobs in urban agriculture, urban forestry, aquatic and riparian restoration, engineering technology, and/or other forms of carbon removal. Assess market opportunities, policy drivers, potential locations, and existing businesses and nonprofits that may benefit from collaborating in such a space.

Lead Dept. Economic and Workforce Development Department
Supporting Dept. Public Works-Sustainability

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Asian Americans ✓ African Americans	✓ Asian Americans were least likely to access City workforce development programs (*DRE*), but have relatively high unemployment levels (5.6%). ✓ African Americans have the highest unemployment rate (8.9%) of any other racial group -- they are twice as likely to be unemployed as whites (4.2%) and	✓ Implement culturally-relevant, community-driven community outreach and engagement in equitable partnership with people of color-led community-based organizations representing and serving frontline communities.	✓ People of color are the majority of the beneficiaries of a potential carbon sequestration incubator.

	Latinx (4.5%).		
✓ Small, local and DBEs (Disadvantaged / Diverse Business Enterprise) ✓ Individuals with low educational attainment ✓ Unemployed youth ✓ Formerly incarcerated people ✓ People with other barriers to employment	✓ Small, local and DBEs may not have the resources to access a 'Carbon Sequestration Incubator'.	✓ Support existing small, local, and DBE's and nonprofits ✓ Connect local community groups to resources from tech companies.	✓ Small, local and DBEs, individuals with low educational attainment, unemployed youth, formerly incarcerated people and people with barriers to employment are all disproportionately employed or benefited financially from Sequestration Incubator efforts.

CR-6 Explore Regional Aquatic Sequestration Opportunities

Coordinate with other Bay Area municipalities, non-profits, and agencies to develop a regional approach to aquatic sequestration in San Francisco Bay by 2030.

Lead Dept. Public Works-Sustainability
Supporting Dept. Economic and Workforce Development Department; Public Works-Watershed and Stormwater Management Division

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ African Americans ✓ Small, local DBEs (Disadvantaged Business Enterprise)	✓ Education and outreach on aquatic sequestration in frontline communities	✓ Jobs and contracts in aquatic sequestration are prioritized for African Americans, low-income Oaklanders and small, local, DBEs.	✓ African Americans and other people of color are as likely as whites to benefit economically from business opportunities in aquatic carbon sequestration.

City Leadership

CL-1 Evaluate and Reduce Climate Impacts of City Expenditures and Operation

By 2022, develop a GHG Impact Analysis for incorporation into budget, capital, and work plans at the departmental level. By 2023, adopt the Good Food Purchasing Policy or similar climate-friendly food policy for all food purchased by the City for City business/events, as part of City contracts for events and activities, and at food service establishments operating on land under the jurisdiction of the City, to ensure that all such food has minimal carbon impacts and maximum health, equity, and local economic benefits. By 2024, track annual embodied GHG emissions related to City expenditures for construction, building maintenance, travel, and food. By 2025, establish maximum GHG performance thresholds for these and other appropriate City purchases.

Lead Dept. City Administrator's Office
Supporting Dept. Department of Finance, Public Works-Sustainability

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes

✓ Lowest-paid City staff (unionized SEIU 1021 employees and non-union contractors) ✓ African American City staff (SEIU 1021 employees and non-union contractors)		✓ Set baseline, track and set goals for improving diversity (racial, ethnic, socioeconomic, ability status, age, etc) of City staff across departments, contractors, and suppliers. ✓ Prioritize hiring of African American, Latinx, and Native Americans for positions at all levels of City government, especially higher-paid staff positions. ✓ Prioritize the hiring of Oakland natives and long-term Oakland residents.	✓ City of Oakland staff (particularly for higher-paid positions) statistically reflects the diversity of Oakland's residents.
✓ Small, local, Diverse Business Enterprises who are not contracting with or supplying the City with services (but could be)	✓ The lack of diversity in the supply chain might increase the disparity in Prime Contract Awarding. ✓ Small local and Diverse Business Enterprises who may not be able to prove or pay for certifying low GHG impact / organic / Fair Trade.	✓ Support small, local, Diverse Business Enterprises with low-GHG or GHG-neutral, organic, Fair Trade certification to become eligible as contractors or suppliers for the City.	✓ City of Oakland contractors and suppliers statistically reflect the diversity of Oakland's residents.

CL-2 Phase Out Fossil Fuel Dependency in All City Agreements and Contracts

Explore ways to eliminate fossil fuel reliance in all agreements and contracts entered into by the City of Oakland, including utility and contractor franchise agreements, facility and infrastructure design and construction contracts, and other agreements in which fossil fuels will be directly or indirectly utilized to conduct the City's business.

Lead Dept. City Administrator's Office
Supporting Dept. Public Works-Sustainability

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Small local Disadvantaged Businesses ✓ Local Jobs dependent on fossil fuel industry	✓ Low possibility that new contracts benefit local frontline communities. ✓ Possibility of local jobs lost from the transition	✓ Maximize possible co-benefits for frontline communities	

CL-3 Accelerate City Fleet Vehicle Replacement

By 2030, ensure that over 50% of the City's fleet uses alternative fuels, with 100% of all non-emergency response sedan purchases being zero emission vehicles. By 2030, triple the number of electric vehicle chargers dedicated to fleet vehicles compared to 2020. By 2025, develop a feasibility study to identify zero emission and alternative fuel solutions for all City heavy-duty and emergency response vehicles and equipment.

Lead Dept. Public Works-Fleet

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Neighborhoods where City Fleet operates, especially	✓ Adverse public health impacts of existing City fleet vehicles.	✓ Develop a plan to prioritize fleet replacements that maximize frontline community benefits, e.g., replacing the heaviest polluting vehicles on the most frequently used routes.	

heavy duty diesel trucks		✓ Where possible, make the City's EV chargers available for public use for free or low costs.	

CL-4 Explore Creation of Public or Green Bank

Explore, with other East Bay cities and regional partners, creation of a regional Public Bank or Green Bank for the purposes of fossil fuel divestment in City investments and local equitable and climate-friendly reinvestment. Identify options and potential for using this mechanism or others to fund climate action activities.

Lead Dept. Department of Finance
Supporting Dept. Economic and Workforce Development Department

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Maj non-white census tracts/zip codes ✓ Small, local Disadvantaged and Diverse Businesses, entrepreneurs, and cooperatives ✓ Cottage Industries	✓ African Americans are particularly impacted by displacement, driven by market speculation in the housing industry, funded by the corporate financial industry. ✓ Certain populations and businesses in historically redlined flatlands neighborhoods find it difficult to receive loans/investments for their businesses and enterprises.	✓ Leverage a Public or Green Bank to finance the preservation of existing affordable housing, provide significant financial support for Community Land Trusts, funding for construction of housing that is affordable to Extremely Low-Income, Very Low Income, and Low Income communities, and implementation of the 2030 ECAP.	✓ The Public/Green Bank promotes construction of affordable housing and provides loans and investments in majority people of color communities helping to preserve and enhance local assets and quality of life.

CL-5 Establish the Oakland Climate Action Network to Support Inclusive Community Engagement on ECAP Implementation

Launch a long-term, inclusive community engagement structure for ECAP implementation. Partner with local community organizations for ongoing collaboration, communication, and mutual accountability in alignment with the City's climate and resilience goals. Specifically:

- Enhance internal City processes and build grassroots organizational capacity for collaboratively leading and executing equitable climate action, responsive to the evolving needs of frontline communities.
- Ensure that the most impacted frontline communities are appropriately identified and resources for climate action and resilience are equitably distributed based on data and through a continuous climate equity analysis.
- Develop and implement strategies for broad, inclusive engagement on climate and resilience action, ensuring that frontline community members are engaged through outreach methods and partnerships that are accessible, multi-lingual, appropriate for multiple ages and abilities, and geographically dispersed.
- Partner with local grassroots organizations to develop leadership within their communities on climate and resilience issues.

Lead Dept. Public Works-Sustainability
Supporting Dept. Department of Race and Equity

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Communities of color (African American, Latinx, Asian American,	✓ Communities of color and linguistically isolated communities are often overlooked in	✓ Increase access and co-ownership of ECAP implementation through localized,	✓ A robust OCAN generates ongoing community ownership of ECAP implementation through

etc.) ✓ Linguistically isolated communities	City-community collaboration on decision-making. ✓ Institutional barriers and systemic racism prevent non-conventional, localized community engagement strategies and practices.	culturally-appropriate strategies. ✓ Lower institutional barriers ✓ Ensure sufficient resources for meaningful community engagement ✓ Continued education about and unlearning of systemic racism	established participatory committees in each city district.

Port of Oakland

P-1 Reduce Emissions from Port Vehicles and Equipment

The City of Oakland recommends that the Port Board of Commissioners reduce emissions from Port vehicles and equipment in the following ways:

- By 2022, develop a long-term plan for full electrification of drayage trucks.
- By 2024, develop a zero-emissions transportation master plan for all airport operations.
- Develop and install sufficient electric charging infrastructure for yard trucks and cargo handling equipment.
- Plan electric charging infrastructure as part of a comprehensive backup power and climate resilience effort to insulate the Port of Oakland from the impacts of changing electric power reliability.
- Study the feasibility of renewable diesel in Port sources of GHG emissions as an interim strategy on the pathway to all-electric vehicles.
- Study the effect of the extra weight of battery electric trucks on the City's overweight corridor.
- Work with State and private businesses to develop and host a renewable hydrogen production, storage, and fueling infrastructure pilot project, to the extent no adverse environmental impacts are identified during project-level review.
- Analyze the potential for establishing entry fees for GHG-producing vehicles as a funding source for PEV infrastructure.

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ West Oakland/D3: 15 census tracts in top 16 for Diesel PM	✓ High impacts on local public health	✓ Prioritize electrification on trucks that operate truck routes that run through highly-burdened census tracts (e.g., truck yards or other known entities)	✓ Residents of West Oakland are not disproportionately impacted by diesel PM ✓ Ensure that WOCAP implementation is complete and consistent with the principles and targets of the ECAP.
✓ Most of the DACs in D3 have a majority African American population	✓ If carbon-free / renewably sourced electricity increases the costs of doing business for small businesses	✓ Provide rebates or vouchers	✓ D3 benefits from cleaner air, without increased energy costs.
✓ Independent truck owner-operators	✓ Independent truck owner-operators may find it cost prohibitive to update their capital investments	✓ Provide rebates or vouchers	✓ African Americans and people of color receive substantial financial assistance through subsidies, rebates or vouchers to retrofit trucks.

P-2 Reduce Emissions from Electricity

The City of Oakland recommends that the Port Board of Commissioners reduce emissions from electricity in the following way:

- By 2023, Port of Oakland should procure 100% carbon-free and nuclear-free electricity for Port operations and all electricity supplied to tenants or other end users.

Frontline Communities	Equity Gaps	Address Equity Gaps	Desired Equity Outcomes
✓ Low-income Port tenants	✓ Possible cost burden of procurement change	✓ Maintain the same or lower billing costs for Port tenants and users, particularly for the low-income	✓ All Port operations are powered by 100% carbon-free and nuclear-free electricity without added cost burdens to low-income users

APPENDIX A

Key Stakeholder Organizations by District

For each Action, identify possible community partners that can enable effective and equitable outreach or implementation. Design a process to collaborate with vulnerable populations that shares as much decision-making power as feasible.

District 1	District 2	District 3	District 4	District 5	District 6	District 7
○ Phat Beets ○ North Oakland Restorative Justice Counsel ○ Restorative Justice for Oakland Youth ○ PLACE for Sustainable Living ○ EcoBlock ○ Friends of the Adeline Corridor ○ Satellite Affordable Housing ○ Movement Generation Justice & Ecology Project ○ Golden Gate Neighborhood Association ○ Bushrod Neighborhood Association ○ Arizmendi Coop ○ Playground Cooperative ○ Mariposa Grove Cooperative ○ Legal Services for Prisoners with Children ○ Driver Plaza Self-Help Hunger Program	○ Laney College BEST Center ○ Highland Hospital ○ Oakland Museum of CA ○ Chinatown Coalition ○ Asian Pacific Environmental Network ○ Eastlake Neighbors United for Justice ○ InterTribal Friendship House (IFH) ○ Mujeres Unidas y Activas ○ 23rd Ave Co-op ○ Cycles of Change / The Bikery ○ Oakland SOL (Sustaining Ourselves Locally) ○ Eastside Arts Alliance ○ MetWest High School	○ West Oakland Environmental Indicators Project ○ Western Service Workers Association ○ Prescott Neighborhood Association ○ LGBTQ Community Center ○ Rose Foundation / New Voices Are Rising ○ The Crucible ○ The Warehouse Workers (ILWU Local 10) ○ Unitarian Universalist (possible meeting venue) ○ Mandela Grocery Co-Op ○ Mandela Partners ○ AYPAL ○ Youth Radio ○ Impact Hub ○ Emerald Cities Collaborative ○ Oakland Food Policy ○ Planting Justice (office) ○ Hope Collaborative (office) ○ Transgender Law Center ○ The Village ○ Homeless Action Center ○ Black Arts Movement Business District (BAMBD) ○ West Oakland Senior Center	○ Nafsi Ya Jaami ○ Friends of Sausal Creek ○ Redwood Heights Neighborhood Association ○ Laurel Cyclery ○ Movement Inc. ○ Anti-Police Terror Project ○ Laurel District Association ○ Laurel Access to Mills, Maxwell Park & Seminary (LAMMPS) ○ PICO ○ Oakland Community Organizations	○ Mujeres Unidas y Activas ○ Alliance of Californians for Community Empowerment (ACCE) ○ The Unity Council ○ Resilient Fruitvale ○ 23rd Street Co-op ○ SOL - Sustaining Ourselves Locally ○ La Raza Centro Legal ○ Conscious Voices (Black Health & Wellness org) ○ American Indian Child Health & Resource Center	○ Mills College ○ Coliseum College Prep Academy ○ Roots International School ○ Eastmont Town Center ○ PLAN - Parent Leadership Action Network ○ The East Oakland Collective ○ Communities for a Better Environment ○ MLK Library ○ Scraper Bike Team ○ Repaired Nations (Black Cooperative Economic Development) ○ Arroyo Viejo Rec Center ○ Madison Park High School ○ Rainbow Recreation Center	○ Black Cultural Zone Community Development Corporation ○ East Oakland Youth Development Corporation ○ East Oakland Boxing Association ○ Acta Non Verba: Youth Urban Farm Project ○ Tassafaronga Rec Center ○ Communities for a Better Environment ○ Castlemont High School ○ Butterfly Movement ○ Youth Uprising ○ Higher Ground Neighborhood Development Corporation ○ Madison Park HS ○ East Oakland Building Healthy Communities ○ ROOTS Community Clinic ○ Lighthouse Community Charter School ○ Planting Justice ○ Sogorea Te Land Trust

Citywide

- Oakland Tenants Union
- East Bay Housing Organization
- Democratic Socialists of America
- Oakland Education Association
- The Greenlining Institute
- Urban Habitat
- Transform
- New Voices are Rising
- EBALDC (multiple districts)
- ACCE - Alliance of Californians for Community Empowerment (Districts 3, 2, 5, 6, 7)
- Causa Justa (District 5 -2)
- East Bay Bike Coalition
- GRID Alternatives
- Sierra Club
- Genesis
- ChangeLab Solutions
- Green For All
- Center on Race, Poverty & the Environment
- Center for Biological Diversity
- Local Clean Energy Alliance
- Lead to Life
- East Bay Permanent Real Estate Cooperative
- Sustainable Economies Law Center
- Growing Together
- California Nurses Association

Key Stakeholder Organizations by ECAP Topic

Transportation	❏ Amalgamated Transit Union 192 ❏ Cycles of Change ❏ Red Bike and Green ❏ ACCE Riders for Transit Justice ❏ The East Oakland Collective ❏ Scraper Bike Team	❏ Transport Workers Union of America ❏ Walk Oakland Bike Oakland ❏ East Bay Bike Coalition ❏ Urban Habitat ❏ Transform ❏ World Institute on Disability
Land Use	❏ Causa Justa::Just Cause ❏ UC Berkeley Urban Displacement Project ❏ Sustainable Economies Law Center ❏ East Bay Permanent Real Estate Cooperative (EB PREC) ❏ Oakland Community Land Trust ❏ Northern California Community Land Trust ❏ Oakland Citywide Anti-Displacement Network ❏ Oakland Tenants Union	❏ Asian Pacific Environmental Network ❏ Sogorea Te Community Land Trust ❏ The Village ❏ Greenbelt Alliance ❏ East Bay Housing Organizations ❏ Alliance of Californians for Community Empowerment ❏ Communities for a Better Environment
Waste	❏ Global Alliance for Incinerator Alternatives ❏ O2AA ❏ PLACE for Sustainable Living ❏ ILWU Local 6 - Sustainable Recycling Union	
Carbon Removal	❏ Urban ReLeaf ❏ Planting Justice ❏ Lead to Life ❏ Mycelium Youth Network	❏ Trees for Oakland ❏ All Power Labs / Local Carbon Network ❏ Higher Ground Neighborhood

		Development Corporation
Adaptation	❏ NorCal Resilience Network ❏ HOPE Collaborative ❏ Movement Generation Justice & Ecology Project ❏ Mycelium Youth Network	❏ West Oakland Environmental Indicators Project ❏ Communities for a Better Environment ❏ People Power Solar Cooperative ❏ Disability Justice Culture Collective - Power to Live Campaign
Buildings	❏ People Power Solar Cooperative ❏ PSE Healthy Energy ❏ The Greenlining Institute ❏ West Oakland Environmental Indicators Project ❏ Communities for a Better Environment ❏ Revalue	❏ Asian Pacific Environmental Network ❏ The Workforce Collaborative ❏ Local Clean Energy Alliance ❏ Western Service Workers Association ❏ GRID Alternatives ❏ Rising Sun Center for Opportunity
Port	❏ ILWU Local 10 ❏ West Oakland Environmental Indicators Project ❏ Teamsters Local 70	
City Leadership	❏ Friends of the Public Bank of the East Bay ❏ Sogorea Te Land Trust ❏ HEAL Food Alliance	
Green Jobs / Just Transition	❏ Alameda County Labor Council ❏ Alameda County Building Trades Council ❏ Jobs with Justice ❏ Labor Network for Sustainability ❏ Movement Generation Justice & Ecology Project	❏ Cypress Mandela Training Center ❏ Sustainable Economies Law Center ❏ Rising Sun Center for Opportunity ❏ CiviCorps

APPENDIX B

Selected Baseline Oakland Equity Indicators

The 2018 Oakland Equity Indicators report by the Department of Race and Equity (DRE) in collaboration with the Resilient Oakland Office and the City University of New York's Institute for State and Local Governance, measures the extent of selected disparities within Oakland by race. The Report compiles and synthesizes both "publicly available and internal City administrative data" (Report, p. 18) on **72** equity indicators, grouped into six themes. "Indicators are the specific quantifiable metrics that are used to measure equity." (Report, p. 9) The scores are placed on a scale of 1 to 100, with 1 representing the most disparity and 100 representing the most parity between Oakland's racial/ethnic groups and typically reflect the "ratio between the outcomes for the least and most advantaged racial/ethnic groups." (Report, p. 16). In this context, some higher scores may indicate that the burdens are spread more equitably, not that there is less overall burden.

Each Indicator receives a score, which is averaged to result in a score for each theme and an overall citywide score.

Citywide Score: **33.5**

Scores By Theme	
1. Economy **41.8** 2. Education **29** 3. Housing **36.8**	4. Public Safety **17.3** 5. Public Health **25.8** 6. Neighborhood & Civic Life **50.6**

The chart below provides a detailed comparison of the results for 36 (of 72) baseline Equity Indicators that we determined ECAP implementation has the most potential to positively impact. We have also bolded the indicators that we believe are within the City's direct sphere of control. We chose not to include the report's Public Safety indicators in this table. While the overarching issue of public safety is highly relevant to ECAP implementation, e.g., addressing public safety concerns at bus stops, and on public thoroughfares and bike routes to encourage frequent use, the individual indicators/metrics DRE used are less relevant in this context.

			Outcomes by Race							
Theme	Topic Score	Equity Indicator Score	White	African American	Latinx	Asian	Other	Oakland	Frontline Community (Disparity Ratio)	Notes on Equity Gaps within the City's Direct Sphere of Control
Economy - 41.8	**Business Development - 33.7**	Business Ownership 36	3.9%	1.4%	2.4%	2.3%	0.5%	2.6%	Whites are 2.7% more likely to own their own business than **African Americans. Also, "Other" racial/ethnic groups**.	
		Prime Contracts Awards 31	19.5%	66.7%	44.4%	20.0%	35.7%	n/a	**African Americans** are 3.42 times more likely to receive small contract awards than Whites. —Average Contract Award: *Whites* (of 41): $1,059,209; *African Americans* (of 6): $89,191; *Asian* (of 5): $362,643; *Latinx* (of 18): $923,891; *Other* (of 14): $299,175—	Increase number of Partnership Agreements + Professional Contract awards to community groups and POC. Increase amount of awards to African American professionals.
		Long-term Business Vacancy 34	1.6%	3.9%	2.4%	4.8%	2.9%	2.7%	**Majority Asian census tracts** were 2.96 times more likely to have long-term business vacancies than majority White census tracts.	
	Employment - 49.0	**Disconnected Youth 35**	8.8%	14.8%	13.2%	5.3%	2.6%	10.3%	**African American youth** were 2.80 times more likely to be disconnected from both work and school than Asian youth.	City of Oakland can fund/sponsor/highlight youth employment and engagement programs.
		Labor Force Participation 72	28.9%	36.7%	30.9%	36.0%	33.0%	32.6%	**African Americans** were 1.27 times more likely than Whites to not be in the labor force.	
		Unemployment 40	4.2%	8.9%	4.5%	5.8%	3.7%	5.4%	**African Americans** were 2.12 times more likely than Whites to be unemployed.	City of Oakland needs to increase diversity in hiring + incentivize contractors/developers to hire African Americans and Asian Pacific Islanders.
	Financial Health - 34	**Access to Healthy Financial Institutions 31**	.13	.42				.38	Majority Non-White (Whites =<40%). **Majority non-White zip codes** had a bad-to-good financial institutions ratio 3.23 times higher than majority White zip codes.	Zoning: Prevent new bad financial institutions from locating in majority non-white census tracts.
		Median Household Income 34	$110,000.00	$37,500.00	$65,000.00	$76,000.00	$67,000.00	$73,200.00	**African Americans**. The median income for White households was 2.93 times the median income of African American households. Asian, Latinx and Other all near the citywide median, though Latinx furthest away.	
		Poverty 33	8.4%	26.1%	21.9%	15.0%	19.0%	17.0%	**African Americans** were 3.09 times more likely than Whites to be living at or below the federal poverty level.	
	Job Quality - 51.7	**Employment in High Wage Industries 54**	50.4%	82.0%	83.2%	67.5%	59.8%	67.1%	**Latinx** workers were 1.65 times more likely to not be employed in a high-wage industry than White workers.	City can increase the local minimum wage.
		Living Wage 29	12.3%	37.6%	46.5%	36.4%	36.0%	30.9%	**Latinx** workers were 3.79 times more likely than White workers to make less than the living wage.	
		Participation in Workforce Development Programs 72	91.4%	73.2%	86.1%	92.9%	n/a	n/a	**Asians** experience high unemployment rates, but are the least likely to participate in City Workforce Development programs.	City can do more targeted outreach to the Asian community.
Education - 29	**Enrollment - 22.3**	Chronic Absenteeism 25	5.6%	22.2%	12.6%	5.2%	n/a	n/a	**African American** students were 4.3 times more likely and Latinx students 2.4 times more likely than Asian students to be chronically absent from school. Conversely, high attendance by Asians does not correlate to high employment rates.	*Note*. The Childhood Asthma Emergency Visits Indicator impacts attendance; both are lagging indicators.
Public Health - 25.8	**Access to Preventive Care - 28.7**	Acute Preventable Hospitalizations 39	165.3	360.3			256.9	297.3	The average rate in non-White zip codes was 2.18 times higher than the rate in White zip codes.	
		Chronic Disease Preventable Hospitalizations 26	274.8	1132.9			728.9	884.3	The average rate in non-White zip codes was 4.12 times higher than in White zip codes.	
	Child Health - 27.7	**Childhood Asthma Emergency Department Visits 1**	407.4	4093.3	1134	408	n/a	1658	**African American** children were 10.05 times more likely than White children to be admitted to the emergency department for asthma-related conditions.	Improving indoor/outdoor air quality (environment and housing) should improve chronic and acute asthma rates and emergency room visits.
		Physical Fitness 63	58.8%	82.6%	85.0%	65.2%	68.5%	78.1%	**Latinx** students were 1.45 times more likely than White students to not be in the Healthy Fitness Zone in all six areas (abdominal strength, aerobic capacity, body composition, flexibility, trunk extensor strength, and upper body strength) captured by the OUSD-administered Physical Fitness Test.	
	Mortality - 42	Infant Mortality 16	1.9	11.7	4.7	3.1	11.2	5.1	The **African American** infant mortality rate was 6.16 higher than the rate for Whites.	
		Life Expectancy 77	81.6	73	83.3	85.9	n/a	80	The life expectancy for Asians was 1.18 times higher than the life expectancy for **African Americans**.	
		Premature Death 33	12592.9	26889.6	11940.9	8527.9	n/a	15479.7	The **African American** Years of Lives Lost (YLL) rate was 3.15 times greater than that of Asians.	
Housing - 36.8	**Affordability - 49**	Homeownership 53	43.6%	74.1%	69.0%	48.1%	70.1%	56.4%	Almost one in four **African American** householders did not own their homes. African American householders were 1.70 times more likely to not own their homes than White householders.	
		Loan Denial 40	12.1%	25.7%	19.6%	14.3%	21.6%	14.7%	The home loan denial rates for **African Americans** were 2.13 times higher than the rates for Whites.	
		Rent Burden 54	34.9%	58.4%	52.7%	49.2%	48.7%	48.0%	African American households were 1.67 times more likely to be rent burdened than White households.	
	Displacement - 29	Homelessness 1	268.6	1,797.0	329.3	43.0	n/a	n/a	African Americans were 41.76 times more likely than Asians to be homeless, and **6.69 times more likely than Whites to be homeless.**	
	Essential Services - 36	**Energy Cost Burden 38**	1.0%	2.4%	1.9%	1.3%	1.4%	1.4%	The median energy cost burden for African American households was 2.4%, compared to 1.0% for White households. **The median energy cost burden for African American households was 2.34 times higher than the cost burden for White households.**	Electrification should not add to this burden.

			Outcomes by Race							
Theme	Topic Score	Equity Indicator Score	White	African American	Latinx	Asian	Other	Oakland	Frontline Community (Disparity Ratio)	Notes on Equity Gaps within the City's Direct Sphere of Control
	Housing Quality - 33	**Housing Habitability Complaints 40**	0.67%	1.36%			0.8%	1.13%	Housing units in predominantly non-White zip codes were 2.03 times more likely to report housing habitability complains than housing units in predominantly White zip codes.	
		Complete Kitchen Facilities 37	0.97%	2.03%	0.79%	1.05%	0.69%	1.13%	African American individuals were the most likely to not have a stove/range, refrigerator, or sink in their homes. **African Americans were 2.55 times more likely than Latinos to not have a stove/range, refrigerator, or sink in their homes.**	
Neighborhood & Civic Life - 50.6	**Built Environment - 33.3**	**Pedestrian Safety 1**	2.3%	5.6%	11.4%	30.0%	6.5%	6.1%	Asians experience disproportionate rates of serious injuries and fatalities in pedestrian accidents, at 30%, compared to the next highest, 11.4%. **The percent of streets with pedestrian safety concerns in majority Asian census tracts was 13.16 times the percent in majority White census tracts.**	
		Soft Story Buildings 67	0.62%	0.22%	0.27%	0.0%	0.85%	0.66%	The percent of residential parcels that are soft story in majority non-White/mixed census tracts was 1.37 times the percent in White census tracts.	
		Long-term Residential Vacancy 32	0.39%	0.88%	0.27%	0.66%	0.52%	0.47%	Long-term residential vacancy was highest in majority African American census tracts (0.88%), followed by majority Asian census tracts (0.66%). **The percent of vacant addresses in majority African American census tracts was 3.21 times the percent in majority Latino census tracts.**	
	Environmental Health - 46.7	**Park Quality 57**	n/a						Council District 1 received the highest score of 2.9 (C+), while Council **District 7** received the lowest score of 1.8 (D+). The average overall park rating in Council District 1 was 1.59 times the rating in Council District 7.	
		Abandoned Trash 28	26.1	82.6	102.8	82.0	69.4	66.9	Rates of illegal dumping requests per 1,000 population were highest in majority Latino census tracts (102.8) and lowest in majority White census tracts (26.1). **The rate of illegal dumping service requests in majority Latino census tracts was almost four (3.94) times higher than the rate in majority White census tracts.**	
		Pollution Burden 55	31.8%	37.4%	40.6%	51.6%	37.9%	36.9%	Pollution burden is a CES score that is an aggregate of several indicators of potential exposures to pollutants and environmental conditions.**The pollution burden score in majority Asian census tracts was 1.63 times higher than the score in majority White census tracts.**	*Note.* Pollution burden is only half of the CES cumulative impact score, where Population Characteristics, have a multiplier effect on the impacts of pollution burdens. **Oakland's nine most cumulatively burdened census tracts are majority Latinx census tracts.**
	Transportation and Infrastructure - 47.3	Access to a Car 33	6.1%	18.7%	7.6%	10.0%	14.2%	10.2%	Nearly one in five African American Oaklanders did not have access to a car (18.7%), compared to 6.1% of White Oaklanders. The percent of African Americans who did not have access to a car was three (3.08) times higher than the percent of Whites without car access.	
		Bus Frequency 60	13.8	11	11	20.5	16.7	13.3	Ratio between the average numbers of buses per hour in majority non-White/mixed and majority African American census tracts: 1.52.	
		Curb Ramps 49	n/a						51% of Oakland's curbs are not ADA accessible with appropriate curb ramps (Report based on a citywide survey of the state of Oakland's curb ramps)	In future, the City should disaggregate curb ramp data by majority people of color census tract, zip code, or by District to more effectively represent the disparities of accessible curbs in Oakland.

[1] % of employed individuals who are self-employed in their own incorporated business, professional practice, or farm.

[2] % of Prime contracts under $100,000 awarded by the City of Oakland for construction and professional services.

[3] % of business addresses that have been vacant 2 years or more by majority race/ethnicity of census tracts.

[4] % of youth who are NOT working or in school by race.

[5] % by race of individuals over 16 who are NOT in the labor force.

[6] % of individuals in the labor force who are unemployed by race.

[7] Ratio of bad to good financial institutions by majority non-white vs majority white zip codes.

[8] % of the population living at or below the federal poverty level, as defined by the U.S. Department of Health and Human Services.

[9] % of workers who are NOT employed in high wage industries.

[10] % of workers making less than a living wage ($14.86/hr).

[11] % of unemployed individuals NOT participating in the City of Oakland's Workforce Development Program by race.

[12] % of students who missed over 10% of school days in a school year by race.

[13] Acute preventable hospitalization rates (per 100,000) by race/ethnicity of zip codes. (Compares zip codes where more than 60% of the population is non-White zip codes that are more than 60% White. The third category of zip codes are racially and ethnically mixed.)

[14] Chronic disease preventable hospitalization rates (per 100,000) by race/ethnicity of zip codes. (Compares zip codes where more than 60% of the population is non-White zip codes that are more than 60% White. The third category of zip codes are racially and ethnically mixed.)

[15] Rate of visits per 100,000 children under 5 years by race.

[16] % of students who are NOT in the Healthy Fitness Zone in all six areas.

[17] Infant mortality rate per 1,000 live births.

[18] Number of years an individual is expected to live.

[19] Rate of Years of Lives Lost (YLL) per 100,000 people per year.

[20] % of householders who do NOT own their homes.

[21] % of loan applications denied by financial institutions.

[22] % of renter households paying more than 30% of income on rent.

[23] Number per 100,000 people.

[24] Median % of household income spent on energy costs.

[25] % of housing units with habitability complaints by race/ethnicity of zip codes.

[26] % of individuals living in housing units without complete kitchen facilities (stove or range, refrigerator, and a sink with a faucet).

[27] % of streets in the High Injury Network.

[28] % of residential parcels that are soft story by majority race/ethnicity of census tracts.

[29] % of residential addresses that have been vacant 2 years or more by majority race/ethnicity of census tracts.

[30] Average overall park rating.

[31] Rate of illegal dumping requests per 1,000 population.

[32] Average pollution burden by majority race/ethnicity of census tracts.

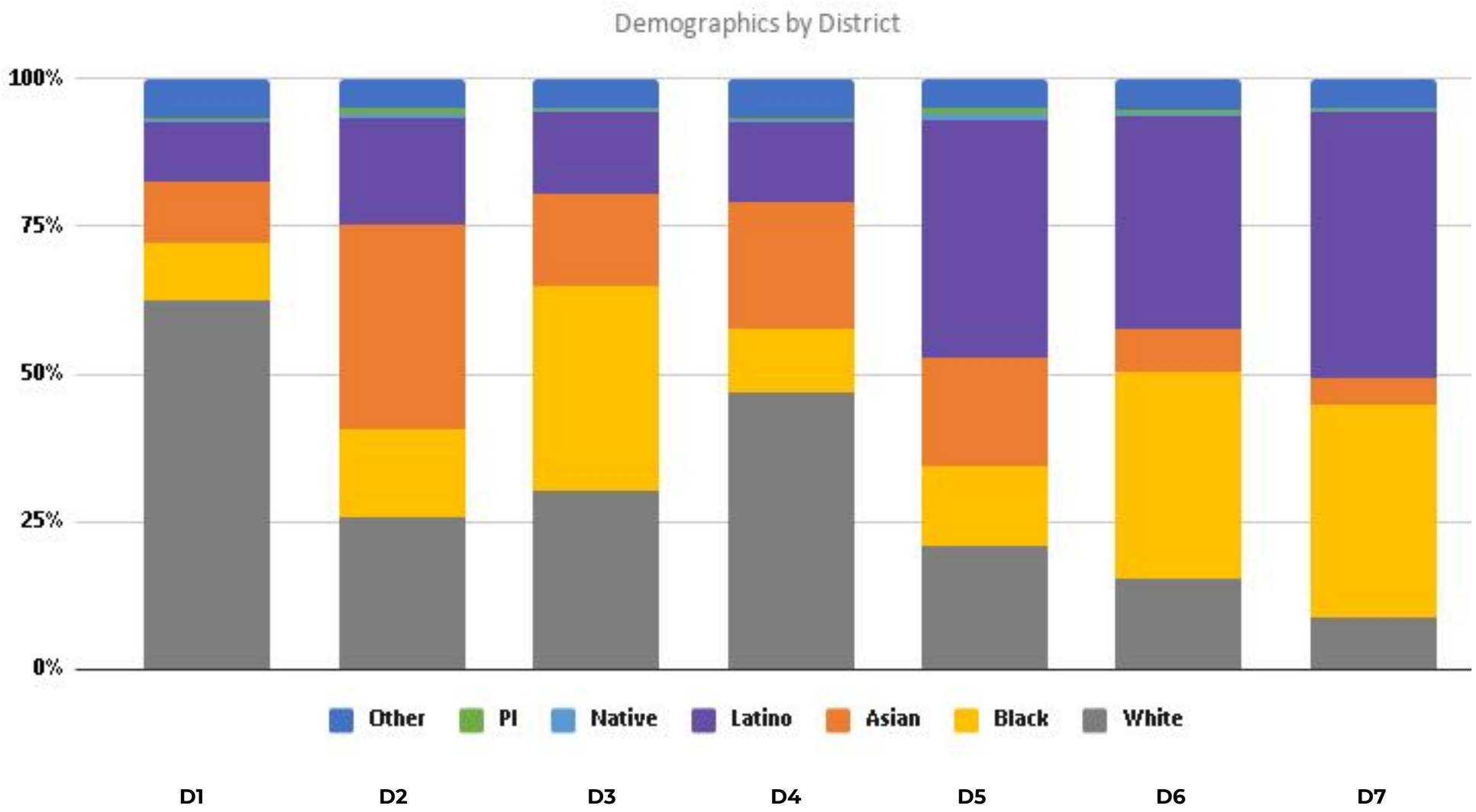
[33] % of individuals who do NOT have access to a car by race.

[34] Average number of buses per hour by majority race/ethnicity of census tracts.

[35] % of ramps that are not ADA accessible.

APPENDIX C

CalEnviroScreen + Community Engagement Data: District x District Snapshot

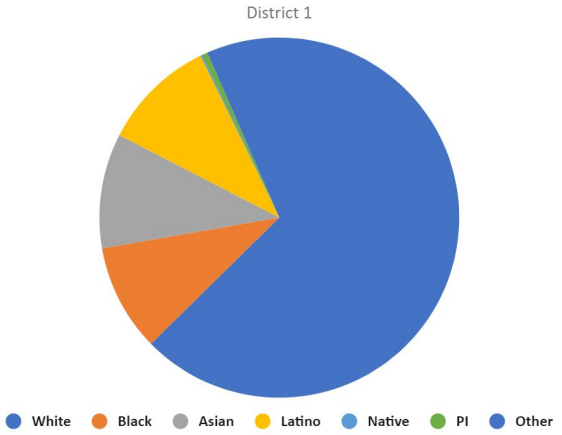


District 1

Total Population: **32,778** Zip Codes: 94618, 94611, 94609

	Census Tract No.	CES Score	Percentile	Percentile Range	DAC	Pov
1	6001400200	1.81	0.25	1-5%	No	No
2	6001404300	4.61	2.61	1-5%	No	No
3	6001404200	5.66	4.02	1-5%	No	No
4	6001404000	7.75	7.82	5-10%	No	No
5	6001404101	8.12	8.71	5-10%	No	No
6	6001400400	10.91	15.02	15-20%	No	No
7	6001404102	11.72	16.79	15-20%	No	No
8	6001400300	12.04	17.63	15-20%	No	No
9	6001401200	18.03	33.27	30-35%	No	No
10	6001400600	18.28	33.95	30-35%	No	No
11	6001400500	18.55	34.58	30-35%	No	No

It's worth noting that District 1 not only has no DACs, its most cumulatively burdened community is in the 30-35% percentile range— not even approaching high burdens. District 1 is also predominantly white.



D1 Community Priorities

- Fund *Citizens of Oakland Respond to Emergencies* (CORE)
- Neighborhood disaster preparedness, including buddy systems
- Adapt buildings to climate events, including mandatory retrofits on resale for large commercial and industrial buildings
- Maintain Oakland's cultural diversity
- Build integrated and "complete" neighborhoods e.g., through mixed income housing and transit-oriented development
- Update Building Code; also address Lead Paint
- Increase Tree Cover and Green Space and increase access; reclaiming common spaces; restoring wetlands
- Keep Elders safe on public transit

District 2

Total Population: **51,971** Zip Codes: 94606, 94610

3.5 DACs (6001403300 - shared ½ with D3)

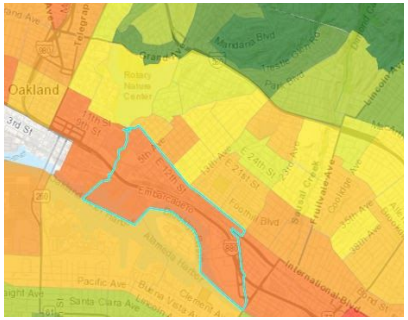
	Census Tract No.	CES Score	Percentile	Percentile Range	DAC	VLI
1	6001405100	6.34	5.33	5-10%	No	No
2	6001403800	11.72	16.77	15-20%	No	No
3	6001403900	17.13	30.66	30-35%	No	No
4	6001405200	21.82	42.70	40-45%	No	No
5	6001405301	23.80	47.17	45-50%	No	No
6	6001405800	24.20	48.14	45-50%	No	Yes
7	6001405600	25.43	50.66	50-55%	No	No
8	6001405500	27.34	54.51	50-55%	No	No
9	6001405402	30.09	59.65	55-60%	No	Yes
10	6001405700	30.46	60.42	60-65%	No	Yes
11	6001405302	33.44	65.78	65-70%	No	Yes
12	6001405902	34.49	67.46	65-70%	No	Yes
13	6001405901	34.89	68.28	65-70%	No	Yes
14	6001405401	39.68	75.56	75-80%	Yes	Yes
15	6001403300	44.37	82.13	80-85%	Yes	No
16	6001403000	46.63	84.99	80-85%	Yes	Yes
17	6001406000	50.28	89.13	85-90%	Yes	Yes

D2 Community Priorities

- ➔ API community & seniors need better living conditions, increased safety (walk a lot, so targets for mugging)
- ➔ Community strengths include folks who hold knowledge of local plants and species and how to live in right relationship
- ➔ Address the homeless epidemic
- ➔ Reduce exposure to pollutants, especially diesel
- ➔ Moving to zero-waste, including local reuse centers, and taps for free water
- ➔ Greener city
- ➔ Invest in community for initiatives to work
- ➔ Deal with displacement, e..g, create tax base to help at-risk households
- ➔ Increase and ensure affordable housing near transit
- ➔ Support Community Land Trusts

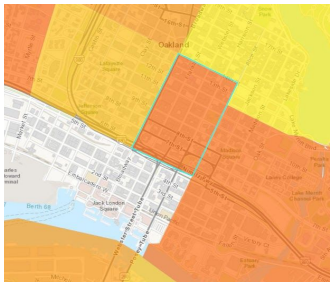
The following charts provide the indicator score details of the DAC tracts that contribute to exceptionally heavy burden.

6001406000



Pollution Burden Percentile: 78	**Population Characteristics Percentile**: 87
➔ Ozone: 8 ➔ PM 2.5: 31 ➔ **Diesel**: 95 ➔ Pesticides: 0 ➔ Toxic Releases: 43 ➔ **Traffic**: 87 ➔ Drinking Water: 4 ➔ **Cleanups**: 98 ➔ **Groundwater Threats**: 99 ➔ **Hazardous Waste**: 95 ➔ **Impaired Water**: 98 ➔ Solid Waste: 12	➔ **Asthma**: 91 ➔ **Low Birth Weight**: 75 ➔ Cardiovascular Disease: 37 ➔ **Education**: 79 ➔ **Linguistic Isolation**: 99 ➔ **Poverty**: 86 ➔ Unemployment: 62 ➔ **Housing Burden**: 89
Race/Ethnicity Af-Am: 12% White: 17%	Hispanic: 21% **As-Am: 47%** Other: 3%

6001403000



Pollution Burden Percentile: 74	**Population Characteristics Percentile**: 83
Ozone: 8 PM 2.5: 31 **Diesel**: 97 Pesticides: 0 Toxic Releases: 44 Traffic: 76 Drinking Water: 4 **Cleanups**: 92 **Groundwater Threats**: 97 **Hazardous Waste**: 78 Impaired Water: 90 Solid Waste: 33	Asthma: 98 Low Birth Weight: 64 Cardiovascular Disease: 15 Education: 89 Linguistic Isolation: 100 Poverty: 90 Unemployment: 74 Housing Burden: 74
Race/Ethnicity Af-Am 4% White 4% Hispanic 1% **As-Am 88%** Other 2%	

6001405401	
Pollution Burden Percentile: 44	**Population Characteristics Percentile**: 91
Ozone: 8 PM 2.5: 31 Diesel: 96 Pesticides: 0 Toxic Releases: 44 Traffic: 12 Drinking Water: 4 Cleanups: 66 Groundwater Threats: 78 Hazardous Waste: 79 Impaired Water: 96 Solid Waste: 0	Asthma: 92 Low Birth Weight: 88 Cardiovascular Disease: 40 Education: 80 Linguistic Isolation: 87 Poverty: 83 Unemployment: 76 Housing Burden: 89
Race/Ethnicity Af-Am 4% White 4% Hispanic 1% **As-Am 88%** Other 2%	

District 3

Total Population: 44,318

	Census Tract No.	CES Score	Percentile	Range	DAC	VLI
1	6001403701	8.89	10.62	10-15%	No	No
2	6001403702	12.67	19.28	15-20%	No	No
3	6001403502	15.76	27.17	25-30%	No	No
4	6001403600	19.15	36.21	35-40%	No	No
5	6001403501	24.96	49.80	45-50%	No	Yes
6	6001402900	26.65	53.25	50-55%	No	Yes
7	6001403100	34.09	66.89	65-70%	No	No
8	6001402600	35.00	68.50	65-70%	No	Yes
9	6001401300	36.69	71.28	70-75%	No	Yes
10	6001402800	38.17	73.45	70-75%	No	Yes
11	6001402700	40.23	76.39	75-80%	Yes	Yes
12	6001401600	41.35	77.84	75-80%	Yes	Yes
13	6001402400	42.77	79.87	75-80%	Yes	Yes
14	6001410500	43.75	81.17	80-85%	Yes	Yes
15	6001402500	43.96	81.55	80-85%	Yes	Yes
16	6001401700	46.23	84.56	80-85%	Yes	No
17	6001401800	47.54	86.25	85-90%	Yes	Yes
18	6001402200	49.46	88.32	85-90%	Yes	Yes
19	6001983200	NA	NA	NA	No	NA
20	6001981900	NA	NA	NA	No	NA
21	6001982000	NA	NA	NA	No	NA

D3 Community Priorities

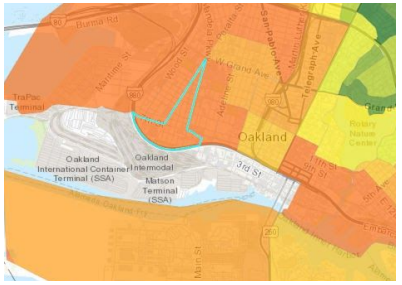
- ➔ Ending house flipping/predatory investment (preserve affordable housing)
- ➔ Moving truck routes away, especially off 880
- ➔ Love proximity to BART; need all-hours service
- ➔ Lack of access to healthy food
- ➔ Homelessness
- ➔ AC Transit reliability
- ➔ Potable Water emergency plan
- ➔ More Trees
- ➔ Fund incentives that are accessible to frontline communities; increase access to information
- ➔ Increase accessibility to the Bay
- ➔ Safer bike/walk trails to parks

6001401800

Pollution Burden Percentile: 70	**Population Characteristics Percentile**: 88
Ozone: 8 PM 2.5: 31 **Diesel**: 99 Pesticides: 0 Toxic Releases: 44 Traffic: 5 Drinking Water: 4 **Cleanups**: 99 **Groundwater Threats**: 95 **Hazardous Waste**: 94 **Impaired Water**: 86 **Solid Waste**: 90	**Asthma**: 99 **Low Birth Weight**: 98 Cardiovascular Disease: 30 Education: 58 Linguistic Isolation: 45 **Poverty**: 86 **Unemployment**: 95 **Housing Burden**: 98

Race/Ethnicity
Af-Am 57%
White 15%
Hispanic 19%
As-Am 3%
Other 5%

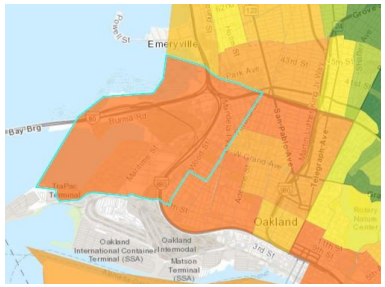
6001402200



Pollution Burden Percentile: 82	**Population Characteristics Percentile**: 82
Ozone: 8 PM 2.5: 31 **Diesel**: 99 Pesticides: 0 Toxic Releases: 43 Traffic: 53 Drinking Water: 4 **Cleanups**: 100 Groundwater Threats: 99 Hazardous Waste: 94 Impaired Water: 86 Solid Waste: 92	Asthma: 99 Low Birth Weight: 91 Cardiovascular Disease: 30 Education: 60 Linguistic Isolation: 56 Poverty: 81 Unemployment: 79 Housing Burden: 87

Race/Ethnicity
Af-Am 36%
White 16%
Hispanic 30%
As-Am 11%
Other 5%

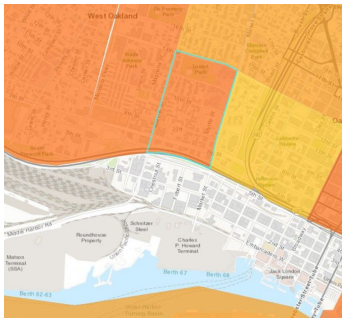
6001401700



Pollution Burden **Percentile**: 89	**Population Characteristics** **Percentile**: 68
Ozone: 8 PM 2.5: 31 **Diesel**: 99 Pesticides: 0 Toxic Releases: 44 **Traffic**: 92 Drinking Water: 4 **Cleanups**: 100 **Groundwater Threats**: 100 **Hazardous Waste**: 97 **Impaired Water**: 86 **Solid Waste**: 95	**Asthma**: 99 **Low Birth Weight**: 81 Cardiovascular Disease: 36 Education: 54 Linguistic Isolation: 44 Poverty: 57 Unemployment: 26 **Housing Burden**: 87

Race/Ethnicity
Af-Am 33%
White 26%
Hispanic 26%
As-Am 10%
Other 5%

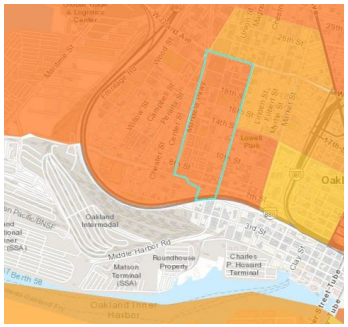
6001402500



Pollution Burden **Percentile**: 61	**Population Characteristics** **Percentile**: 87
Ozone: 8 PM 2.5: 31 **Diesel**: 99 Pesticides: 0 Toxic Releases: 44 Traffic: 34 Drinking Water: 4 **Cleanups**: 97 **Groundwater Threats**: 97 Hazardous Waste: 72 **Impaired Water**: 86 Solid Waste: 20	**Asthma**: 99 **Low Birth Weight**: 93 Cardiovascular Disease: 30 Education: 59 Linguistic Isolation: 67 **Poverty**: 97 **Unemployment**: 99 Housing Burden: 61

Race/Ethnicity
Af-Am 67%
White 8%
Hispanic 5%
As-Am 17%
Other 4%

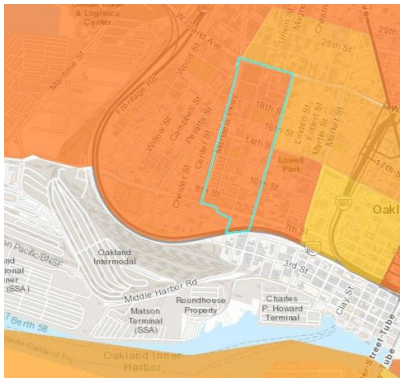
6001410500



Pollution Burden **Percentile**: 70	**Population Characteristics** **Percentile**: 80
Ozone: 8 PM 2.5: 31 **Diesel**: 99 Pesticides: 0 Toxic Releases: 44 Traffic: 15 Drinking Water: 4 **Cleanups**: 100 **Groundwater Threats**: 99 **Hazardous Waste**: 90 **Impaired Water**: 86 Solid Waste: 74	**Asthma**: 99 **Low Birth Weight**: 83 Cardiovascular Disease: 30 Education: 56 Linguistic Isolation: 39 **Poverty**: 89 **Unemployment**: 98 Housing Burden: 64

Race/Ethnicity
Af-Am 62%
White 7%
Hispanic 9%
As-Am 17%
Other 5%

6001401600



Pollution Burden **Percentile**: 70	**Population Characteristics** **Percentile**: 80
Ozone: 8 PM 2.5: 31 **Diesel**: 99 Pesticides: 0 Toxic Releases: 44 Traffic: 15 Drinking Water: 4 **Cleanups**: 100 **Groundwater Threats**: 99 **Hazardous Waste**: 90 **Impaired Water**: 86 Solid Waste: 74	**Asthma**: 99 **Low Birth Weight**: 83 Cardiovascular Disease: 30 Education: 56 Linguistic Isolation: 39 **Poverty**: 89 **Unemployment**: 98 Housing Burden: 64

Race/Ethnicity
Af-Am 62%
White 7%
Hispanic 9%
As-Am 17%
Other 5%

District 4

	Census Tract No.	CES Score	Percentile	Percentile Range	DAC	VLI
1	6001404600	2.05	0.35	1-5%	No	No
2	6001404502	4.32	2.35	1-5%	No	No
3	6001404501	4.49	2.43	1-5%	No	No
4	6001408000	5.94	4.58	1-5%	No	No
5	6001404700	8.22	9.07	5-10%	No	No
6	6001406800	12.77	19.55	15-20%	No	No
7	6001406700	15.24	25.69	25-30%	No	No
8	6001406900	16.05	27.85	25-30%	No	No
9	6001404800	17.06	30.52	30-35%	No	No
10	6001407000	27.21	54.27	50-55%	No	Yes

D4 & D5 also include several census tracts that overlap two or more districts.

D4 Community Priorities

- ➔ Strengths include plenty of green space; need more urban forestry in the flatlands.
- ➔ Need better and safer bike lanes
- ➔ More carpooling
- ➔ Waste diversion, ending single use products
- ➔ Improve and increase public transit
- ➔ Green Infrastructure
- ➔ Stormwater and sewer infrastructure improvements
- ➔ Support a public bank

District 5

Total Population:

CalEnviroScreen 3.0

	Census Tract No.	CES Score	Percentile	Percentile Range	DAC	VLI
1	6001404900	17.66	32.29	30-35%	No	No
2	6001406300	27.59	54.99	50-55%	No	Yes
3	6001406400	30.26	59.96	55-60%	No	No
4	6001406202	36.57	70.98	70-75%	No	Yes
5	6001406201	39.64	75.48	75-80%	Yes	Yes
6	6001406100	47.31	85.81	85-90%	Yes	Yes

D5 Community Priorities

- ➔ Safe Active Mobility
- ➔ Decrease idling on Fruitvale Ave
- ➔ Provide indoor air filtering along 880 corridor, reroute trucks, buffer zones
- ➔ Turn Bay Channel along estuary into parkland and protect buildings from flooding and sea level rise
- ➔ More outreach and education on opportunities, such as energy efficiency/EV programs
- ➔ Honoring the people's power/info/wisdom; train
- ➔ Resilient community areas, especially urban gardens
- ➔ Community-owned solar
- ➔ Pipeline for youth; green jobs/climate equity training
- ➔ Increase City and climate organization's capacity to work with this community and increase community capacity to engage.

District 6

Total Population:

	Census Tract No.	CES Score	Percentile	Percentile Range	DAC	VLI
1	6001408100	12.19	18.06	15-20%	No	No
2	6001407800	15.17	25.53	25-30%	No	No
3	6001408200	16.42	28.78	25-30%	No	No
4	6001408400	20.97	40.69	40-45%	No	Yes
5	6001408300	24.52	48.91	45-50%	No	No
6	6001408500	25.89	51.57	50-55%	No	Yes
7	6001408600	26.98	53.89	50-55%	No	Yes
8	6001408700	30.69	60.84	60-65%	No	Yes

D6 & D7 also include several census tracts that overlap with other districts.

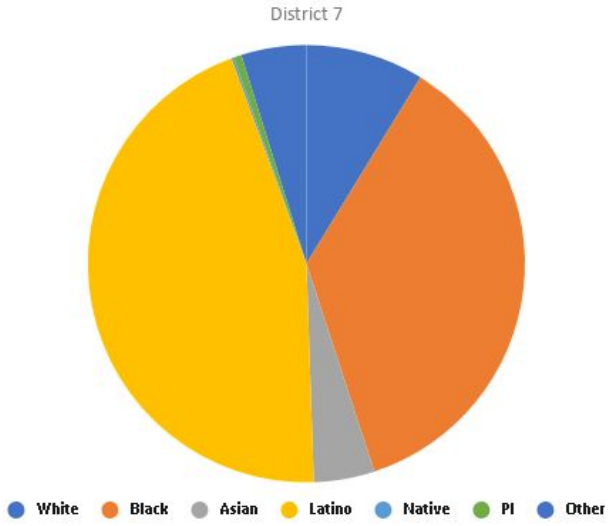
D6 Community Priorities

- ➔ Trees, trees, trees. Adopt-a-spot for trees, maintained by volunteers, more oak trees
- ➔ More open creeks with trails
- ➔ Make streets and bike lanes safer, increase bike lanes
- ➔ Improve and green public transportation
- ➔ Preserve local culture, more public murals
- ➔ Outdoor pop-up community activities
- ➔ More local free activities for youth and green jobs training
- ➔ More outreach and education on climate change and opportunities, such as energy efficiency/EV programs
- ➔ More businesses in vacant buildings
- ➔ Diverting quality unused food for people in need
- ➔ Complete neighborhoods

District 7

Total Population:

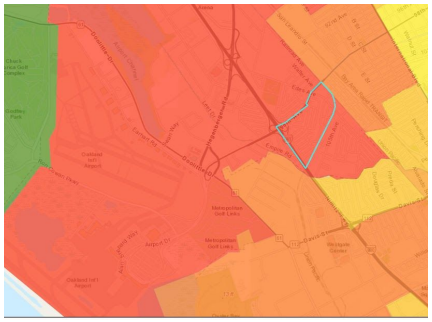
	Census Tract No.	CES Score	Percentile	Percentile Range	DAC	VLI
1	6001410000	23.39	46.11	45-50%	No	No
2	6001409900	23.99	47.64	45-50%	No	No
3	6001410400	26.25	52.40	50-55%	No	No
4	6001410200	26.66	53.29	50-55%	No	No
5	6001409800	27.38	54.61	50-55%	No	No
6	6001410300	29.28	58.19	55-60%	No	Yes
7	6001410100	33.38	65.57	65-70%	No	Yes
8	6001409300	44.83	82.60	80-85%	Yes	Yes
9	6001408900	47.97	86.68	85-90%	Yes	Yes
10	6001409400	49.22	88.02	85-90%	Yes	Yes
11	6001409500	51.44	90.30	90-95%	Yes	Yes
12	6001409200	55.29	93.48	90-95%	Yes	No
13	6001409100	59.87	96.38	95-100%	Yes	Yes
14	6001409000	61.56	96.91	95-100%	Yes	Yes



D7 Community Priorities

- ➔ Climate Justice curriculum
- ➔ Complete neighborhoods
- ➔ Creek restoration
- ➔ Low cost or free bus fare
- ➔ Improve BART station
- ➔ More attention to and concern for East Oakland
- ➔ Highlight Oakland's history "Old Oakland"
- ➔ Better, safer bike lanes, and education on bike awareness/safety
- ➔ Updating commercial and residential zoning / mindfulness of zoning in residential areas (cannabis near schools)
- ➔ Traffic
- ➔ Accessible grocery stores, markets, healthy food options
- ➔ More youth activities
- ➔ Dealing with Asbestos and Lead
- ➔ More public trash cans and recycling programs

6001409100



Pollution Burden Percentile: 82	**Population Characteristics Percentile**: 98
Ozone: 8 PM 2.5: 31 **Diesel**: 92 Pesticides: 0 Toxic Releases: 54 **Traffic**: 92 Drinking Water: 4 **Cleanups**: 95 **Groundwater Threats**: 77 Hazardous Waste: 71 **Impaired Water**: 90 **Solid Waste**: 79	**Asthma**: 100 **Low Birth Weight**: 97 **Cardiovascular Disease**: 97 **Education**: 87 Linguistic Isolation: 50 **Poverty**: 80 Unemployment: 74 **Housing Burden**: 87

Race/Ethnicity
Af-Am 41%
White 2%
Hispanic 52%
As-Am 4%
Other 2%

Overlapping Districts

	Census Tract No.	CES Score	Percentile	Percentile Range	DAC	VLI	District	Notes
1	6001404400	5.62	3.96	1-5%	No	No	1, 3	Mostly D1
2	6001405000	9.62	12.37	10-15%	No	No	1, 4	hills
3	6001407900	12.89	19.76	15-20%	No	No	2, 5	50/50
4	6001407700	13.11	20.41	20-25%	No	No	2, 5	
5	6001409700	20.87	40.42	40-45%	No	Yes	3, 2	50/50
6	6001406602	24.52	48.95	45-50%	No	Yes	3, 2	~5 blks in D2
7	6001406601	25.88	51.54	50-55%	No	Yes	4, 5, 6	
8	6001407101	27.18	54.22	50-55%	No	Yes	4, 5, 6	
9	6001401100	29.50	58.52	55-60%	No	No	5, 4	2 blks in D4
10	6001403400	29.99	59.47	55-60%	No	No	5, 4	~5 blks in D4
11	6001407600	30.39	60.23	60-65%	No	Yes	5, 4	~5 blks in D4
12	6001405700	30.46	60.42	60-65%	No	Yes	5, 4	50/50
13	6001409600	32.46	63.88	60-65%	No	Yes	5, 4	
14	6001407102	32.93	64.79	60-65%	No	No	5, 4	
15	6001406500	34.76	67.92	65-70%	No	Yes	5, 6	
16	6001407500	37.59	72.62	70-75%	No	Yes	6, 4	~2 blks in D4
17	6001407400	40.62	76.93	75-80%	Yes	Yes	6, 4	
18	6001407200	41.76	78.46	75-80%	Yes	Yes	6, 4	Mostly D4
19	6001403300	44.37	82.13	80-85%	Yes	No	6, 7	
20	6001407300	52.54	91.16	90-95%	Yes	Yes	6, 7	Mostly D7
21	6001408800	59.65	96.22	95-100%	Yes	Yes	6, 7	Mostly D7

Ranking by Indicator

City and other climate action must not exacerbate the disparities identified by these indicators. Specific actions will generate benefits that can work to mitigate or eliminate the root causes driving the disparities in these indicators. Those benefits should be targeted to the frontline communities identified by these indicators.

In addition, while race and age are not part of CalEnviroScreen scores, the tool includes that demographic data for each census tract.

Asthma

Frontline Communities - 77 Census Tracts in top 25th percentile. Districts 7, 6, 3

Rank	Score	State %	Census Tract	District	DAC	VLI
1	189.95	99.71	6001409100	7	Yes	Yes
2	189.95	99.71	6001410300	7	Yes	Yes
3	185.65	99.69	6001410400	7	No	No
4	172.25	99.46	6001410200	7	No	No
5	170.91	99.43	6001409800	6	No	Yes
6	170.91	99.43	6001408300	6	No	No
7	170.91	99.43	6001408400	6	No	No
8	170.91	99.43	6001408200	7	No	No
9	166.1	99.29	6001409300	7	Yes	Yes
10	165.52	99.26	6001402200	3	No	N A
11	165.52	99.26	6001401800	3	No	N A
12	165.52	99.26	6001402500	3	No	N A
13	165.52	99.26	6001410500	3	Yes	Yes
14	165.52	99.26	6001402400	3	Yes	Yes
15	165.52	99.26	6001983200	3	Yes	Yes
16	165.52	99.26	6001981900	3	Yes	Yes
17	165.52	99.26	6001982000	3	Yes	Yes
18	165.44	99.16	6001403100	3	No	No
19	162.39	99.08	6001403300	3 & 2	Yes	No
20	161.73	99.06	6001408800	7	Yes	Yes
21	161.73	99.06	6001409500	7	Yes	Yes
22	161.73	99.06	6001408900	6 & 7	Yes	Yes
23	160.69	99.02	6001409400	7	Yes	Yes
24	160.42	99.00	6001409600	6 & 7	No	Yes
25	159.24	98.99	6001401700	3	Yes	No
26	153.91	98.88	6001409900	7	No	No
27	149.26	98.62	6001410100	7	No	Yes
28	147.98	98.55	6001401600	3	Yes	Yes
29	147.84	98.54	6001409000	7	Yes	Yes
30	137.45	98.04	6001408700	6	No	Yes
31	137.04	98.02	6001409700	6 & 7	No	Yes
32	135.08	97.79	6001410000	7	No	No
33	133.35	97.76	6001403000	2	Yes	Yes
34	132.77	97.72	6001408500	6	No	Yes
35	131.31	97.66	6001408600	6	No	Yes
36	124.1	96.97	6001402900	3	No	Yes
37	123.88	96.95	6001402800	3	No	Yes
38	122.34	96.85	6001400600	1	No	No
39	122.26	96.81	6001401100	1 & 3	No	No
40	122.15	96.76	6001403400	3 & 2	No	No

41	117.49	96.10	6001402600	3	No	Yes
42	114.55	95.50	6001401200	1	No	No
43	110.47	94.74	6001407200	5	Yes	Yes
44	110.47	94.74	6001407400	5	Yes	Yes
45	110.47	94.74	6001406201	5	No	Yes
46	110.47	94.74	6001406202	4, 5 & 6	Yes	Yes
47	110.47	94.74	6001406300	5 & 4	No	Yes
48	110.47	94.74	6001407101	5 & 4	No	Yes
49	110.37	94.65	6001400500	1	No	No
50	107.51	94.17	6001407102	5 & 4	No	No
51	106.59	93.90	6001409200	7	Yes	No
52	105.75	93.72	6001406100	5	Yes	Yes
53	103.08	93.32	6001407500	6 & 4	No	Yes
54	102.28	93.17	6001402700	3	Yes	Yes
55	101.64	93.03	6001401300	3	No	Yes
56	99.49	92.69	6001407300	5 & 6	Yes	Yes
57	97.97	92.21	6001407600	4, 5 & 6	No	Yes
58	97	92.01	6001405401	2	No	Yes
59	97	92.01	6001405902	2	No	Yes
60	97	92.01	6001405402	2	Yes	Yes
61	97	92.01	6001405500	2	No	No
62	97	92.01	6001405301	2	No	No
63	95.23	91.20	6001405901	2	No	Yes
64	93.8	90.84	6001406000	2	Yes	Yes
65	88.63	88.93	6001406500	5 & 4	No	Yes
66	86.89	88.08	6001405800	2	No	Yes
67	84.37	87.17	6001406900	4	No	No
68	82.49	86.26	6001407900	6 & 4	No	No
69	82.1	86.19	6001408100	6	No	No
70	80.31	85.36	6001406602	4	No	No
71	80.31	85.36	6001404800	4	No	No
72	80.31	85.36	6001406700	5 & 4	No	Yes
73	77.14	83.17	6001407700	6 & 4	No	No
74	74.94	81.89	6001404900	5	No	No
75	73.61	81.00	6001405302	2	No	Yes
76	72.72	80.45	6001406800	4	No	No
77	66.48	75.43	6001406601	5 & 4	No	Yes

Diesel PM

Frontline Communities - District 3 (contains the top 14 most impacted census tracts)

93 Census Tracts in the top 25th percentile statewide. Levels of diesel exhaust chemicals within 1 - 3 mile radius of the source can be more than 10x higher than elsewhere.

Rank	Score	State %	Census Tract	District	DAC	VLI
1	76.110	98.92	6001402200	3	No	NA
2	76.110	98.92	6001401800	3	Yes	Yes
3	76.110	98.92	6001402500	3	Yes	Yes
4	76.110	98.92	6001410500	3	Yes	Yes
5	76.110	98.92	6001402400	3	Yes	Yes
6	76.110	98.92	6001402600	3	Yes	Yes
7	76.110	98.92	6001981900	3	No	Yes
8	75.686	98.79	6001401700	3	Yes	No
9	73.417	98.67	6001401600	3	Yes	Yes
10	72.771	98.64	6001982000	3	No	NA
11	68.355	98.54	6001402700	3	Yes	Yes
12	65.291	98.05	6001403100	3	No	No
13	57.300	97.03	6001983200	3	No	NA
14	54.344	96.73	6001402800	3	No	Yes
15	54.340	96.71	6001403000	2	Yes	Yes

16	54.340	96.71	6001401300	3	No	Yes
17	54.340	96.71	6001403400	3 & 2	No	No
18	54.340	96.71	6001402900	3	No	Yes
19	54.340	96.71	6001403501	2	No	No
20	54.340	96.71	6001405301	2	No	No
21	54.340	96.71	6001405200	3	No	No
22	54.340	96.71	6001403600	2	No	No
23	54.340	96.71	6001403900	3	No	No
24	54.340	96.71	6001403502	3	No	No
25	54.340	96.71	6001403702	3	No	Yes
26	54.340	96.71	6001404102	2	No	No
27	54.340	96.71	6001403800	1	No	No
28	54.340	96.71	6001404000	1	No	No
29	54.340	96.71	6001426200	3	No	No
30	54.334	96.52	6001405600	2	No	Yes
31	54.140	96.47	6001405302	2	No	No
32	53.941	96.40	6001404101	1	No	No
33	52.053	96.27	6001405500	2	No	No
34	50.640	96.03	6001401200	1	No	No
35	50.622	96.00	6001401100	1 & 3	Yes	Yes
36	49.326	95.81	6001405401	2	Yes	No
37	48.070	95.48	6001403300	3 & 2	No	Yes
38	44.792	94.97	6001405800	2	Yes	Yes
39	44.580	94.93	6001406000	2	No	No
40	44.403	94.91	6001405100	2	No	Yes
41	44.308	94.87	6001405402	2	No	Yes
42	44.270	94.86	6001405901	2	No	Yes
43	44.270	94.86	6001405902	2	Yes	Yes
44	43.222	94.65	6001406201	5	No	No
45	42.190	94.40	6001400500	1	No	No
46	42.190	94.40	6001400600	1	No	No
47	42.190	94.40	6001400300	1	No	No
48	42.190	94.40	6001400400	1	No	No
49	42.190	94.40	6001400200	1	Yes	Yes
50	41.028	93.74	6001406100	5	No	Yes
51	40.532	93.52	6001405700	2 & 5	No	No
52	40.352	93.44	6001404300	1	No	Yes
53	39.466	92.73	6001406202	5	No	Yes
54	38.782	92.37	6001406300	5	Yes	Yes
55	38.370	92.10	6001407200	4, 5 & 6	Yes	Yes
56	38.370	92.10	6001407400	5 & 4	No	Yes
57	38.370	92.10	6001407500	5 & 4	No	No
58	38.370	92.10	6001406500	5 & 4	No	Yes
59	38.370	92.10	6001407102	6 & 4	No	Yes
60	38.370	92.10	6001407600	4, 5 & 6	No	Yes
61	38.370	92.10	6001407000	5 & 4	No	No
62	38.370	92.10	6001407101	6 & 4	No	Yes
63	38.370	92.10	6001407700	4	Yes	Yes
64	38.354	91.94	6001407300	5 & 6	Yes	Yes
65	38.315	91.92	6001408800	6 & 7	Yes	Yes
66	38.280	91.90	6001409000	7	Yes	Yes
67	38.045	91.77	6001408900	7	No	Yes
68	37.957	91.76	6001408700	6	No	No
69	37.695	91.69	6001404200	1	Yes	Yes
70	37.550	91.52	6001409100	7	No	Yes
71	37.272	91.34	6001406601	5 & 4	No	No
72	36.569	90.79	6001406900	4	Yes	Yes
73	35.085	89.73	6001409500	7	No	No
74	34.770	89.55	6001406400	5	No	No
75	33.960	89.23	6001405000	2 & 5	No	No
76	33.877	89.17	6001407800	6	No	No
77	33.448	88.85	6001407900	6 & 4	No	Yes

78	31.999	87.70	6001406602	5 & 4	Yes	Yes
79	31.210	86.88	6001409400	7	No	No
80	31.079	86.71	6001409200	7	No	Yes
81	29.929	85.49	6001406800	4	No	Yes
82	29.603	84.70	6001408600	6	No	No
83	29.220	83.78	6001409300	7	No	No
84	29.220	83.78	6001410100	7	Yes	Yes
85	29.220	83.78	6001409600	7	No	Yes
86	29.220	83.78	6001410300	7	No	Yes
87	29.220	83.78	6001410200	6 & 7	No	Yes
88	29.220	83.78	6001410400	7	No	Yes
89	28.633	82.85	6001409700	6 & 7	No	No
90	27.639	81.24	6001408500	6	No	No
91	25.066	76.50	6001409800	7	No	No
92	23.838	72.84	6001404400	1 & 4	No	No
93	23.128	70.74	6001404502	4	No	No

Poverty

Indicator: Very Low Income Households (200% of 2015 federal poverty level).

Frontline Communities - Census tracts with 46% or more of households with Very Low Income. Districts 2, 3, 5, 6, 7.

Rank	Score	State %	Census Tract	District	DAC
1	75.5	96.52	6001402500	3	Yes
2	73.5	95.31	6001408900	7	Yes
3	70.8	93.55	6001406202	5	No
4	70.2	93.12	6001409600	6 & 7	No
5	69.4	92.61	6001408600	6	No
6	68.4	91.93	6001407500	6 & 4	No
7	67.6	91.33	6001405402	2	No
8	67.5	91.19	6001405901	2	No
9	66.8	90.63	6001407200	5 & 4	Yes
10	66.5	90.33	6001402600	3	No
11	66.5	90.33	6001408800	6 & 7	Yes
12	65.7	89.69	6001403000	2	Yes
13	65.7	89.69	6001409400	7	Yes
14	64.4	88.59	6001410500	3	Yes
15	64.2	88.41	6001409500	7	Yes
16	64.1	88.27	6001407101	5 & 4	No
17	64	88.17	6001408400	6	No
18	61.9	86.12	6001406000	2	Yes
19	61.7	85.91	6001401800	3	Yes
20	60.6	84.86	6001409300	7	Yes
21	60.4	84.70	6001402800	3	No
22	59.5	83.86	6001406201	5	Yes
23	59	83.38	6001405902	2	No
24	59	83.38	6001408700	6	No
25	58.6	82.94	6001405401	2	Yes
26	56.8	81.09	6001402200	3	Yes
27	56.3	80.50	6001407300	5 & 6	Yes
28	56.2	80.41	6001401300	3	No
29	56.1	80.28	6001407000	4	No
30	55.8	79.92	6001409100	7	Yes
31	55.1	79.11	6001407400	4 & 5 & 6	Yes
32	54.8	78.78	6001406602	5 & 4	No
33	54.7	78.74	6001409700	6 & 7	No
34	54.3	78.30	6001406500	5 & 4	No
35	53.7	77.59	6001408500	6	No
36	53.2	77.10	6001406300	5	No
37	52.5	76.22	6001409000	7	Yes

38	52.1	75.70	6001410300	7	No
39	51.6	75.21	6001405700	2 & 5	No
40	51	74.32	6001402700	3	Yes
41	50.2	73.41	6001403501	3	No
42	50.1	73.27	6001406100	5	Yes
43	49.7	72.82	6001402400	3	Yes
44	49	72.02	6001402900	3	No
45	48.8	71.88	6001405800	2	No
46	48.2	71.16	6001401600	3	Yes
47	47.4	70.06	6001405302	2	No
48	47.3	69.93	6001406601	5 & 4	No
49	47.2	69.75	6001407600	4 & 5 & 6	No
50	46.8	69.35	6001410100	7	No

Oakland census tracts that do not meet the EF's designated income threshold for poverty, but do meet the State of California's designation of low-income are listed below:

Oakland VLI	Census Tract	State LICT
No	6001410200	Yes
No	6001409200	Yes
No	6001406400	Yes
No	6001405500	Yes
No	6001403100	Yes
No	6001403300	Yes
No	6001405600	Yes
No	6001408200	Yes
No	6001407102	Yes
No	6001403400	Yes
No	6001410400	Yes
No	6001401100	Yes
No	6001404800	Yes
No	6001409800	Yes
No	6001406900	Yes
No	6001405301	Yes

Housing Burden

Indicator: **Severely Housing Burdened Low Income Households**. Percent of households in a census tract that are both low income (making less than 80% of the HUD Area Median Family Income) and severely burdened by housing costs (paying greater than 50% of their income to housing costs). (5-year estimates, 2009-2013).

Frontline Communities: D7 - 13 CTs, D6 - 9 CTs, D5 - 9 CTs, D3 - 7CTs.

41 Census Tracts in the top 25th percentile statewide for this indicator. Oakland threshold is CTs w/ >25% households housing burdened, which matches statewide DAC threshold.

Although 19 of the 25 Oakland DACs show up on this list, the tracts with the highest housing burden aren't necessarily DACs.

Rank	Score	State %	Census Tract	District	DAC	VLI
1	43	98.81	6001410300	7	No	Yes
2	42.3	98.67	6001409600	6 & 7	No	Yes
3	41.6	98.43	6001408900	7	Yes	Yes
4	41.6	98.43	6001408500	6	No	Yes
5	41.1	98.26	6001401600	3	Yes	Yes
6	39.9	97.78	6001401800	3	Yes	Yes
7	39.4	97.50	6001408400	6	No	Yes
8	37.6	96.53	6001410100	7	No	Yes
9	36.2	95.52	6001408600	6	No	Yes
10	35.9	95.18	6001409400	7	Yes	Yes
11	35.5	94.88	6001406201	5	Yes	Yes
12	35.2	94.71	6001408800	6 & 7	Yes	Yes

13	34.1	93.75	6001407102	5 & 4	No	No
14	32.5	91.84	6001409000	7	Yes	Yes
15	32.4	91.70	6001405901	2	No	Yes
16	32.3	91.50	6001402700	3	Yes	Yes
17	32.2	91.36	6001406400	5	No	No
18	32.1	91.18	6001409700	6 & 7	No	Yes
19	31	89.40	6001407500	6 & 4	No	Yes
20	31	89.40	6001406000	2	Yes	Yes
21	30.7	88.79	6001405401	2	Yes	Yes
22	30.6	88.58	6001408700	6	No	Yes
23	30.5	88.46	6001402400	3	Yes	Yes
24	29.6	87.07	6001406202	5	No	Yes
25	29.5	86.89	6001409100	7	Yes	Yes
26	29.3	86.52	6001402200	3	Yes	Yes
27	29	85.82	6001407000	4	No	Yes
28	28.8	85.42	6001407400	4 & 5 & 6	Yes	Yes
29	28.6	84.96	6001405700	2 & 5	No	Yes
30	27.6	83.12	6001409500	7	Yes	Yes
31	27.5	82.93	6001410200	7	No	No
32	27.4	82.67	6001409200	7	Yes	No
33	27.2	82.18	6001401700	3	Yes	No
34	26.6	80.81	6001405302	2	No	Yes
35	26.5	80.59	6001406500	5 & 4	No	Yes
36	26.1	79.70	6001405402	2	No	Yes
37	26.1	79.70	6001405800	2	No	Yes
38	26	79.40	6001407200	5 & 4	Yes	Yes
39	25.9	79.06	6001406300	5	No	Yes
40	25.4	77.60	6001409300	7	Yes	Yes
41	25.3	77.35	6001402800	3	No	Yes

Unemployment

Indicator: Percentage of population that is unemployed.

Frontline Communities: Census Tracts with ≥ 9% unemployment; in the top 50% statewide; 59 Total

Rank	Rate	State %	Census Tract	District	DAC	VLI
1	25.5	99.06	6001402500	3	Yes	Yes
2	23.5	98.27	6001410500	3	Yes	Yes
3	20.1	95.58	6001408800	6 & 7	Yes	Yes
4	20	95.49	6001401800	3	Yes	Yes
5	18.7	93.78	6001406201	5	Yes	Yes
6	18.4	93.22	6001410300	7	No	Yes
7	17.9	92.45	6001405901	2	No	Yes
8	17.7	91.95	6001408900	7	Yes	Yes
9	17.7	91.95	6001405700	2 & 5	No	Yes
10	17.3	91.10	6001409500	7	Yes	Yes
11	17.3	91.10	6001405402	2	No	Yes
12	17.2	90.84	6001410200	7	No	No
13	16.9	90.20	6001407500	6 & 4	No	Yes
14	16.8	89.91	6001408400	6	No	Yes
15	16.7	89.57	6001407400	4 & 5 & 6	Yes	Yes
16	16.7	89.57	6001402600	3	No	Yes
17	16.3	88.46	6001410100	7	No	Yes
18	16.2	88.22	6001402400	3	Yes	Yes
19	16.1	87.98	6001409300	7	Yes	Yes
20	15.9	87.38	6001410400	7	No	No
21	15.5	86.24	6001401300	3	No	Yes
22	15.4	85.89	6001406601	5 & 4	No	Yes
23	15.2	85.16	6001408700	6	No	Yes
24	15.1	84.73	6001409400	7	Yes	Yes

25	14.9	84.10	6001402800	3	No	Yes
26	14.9	84.10	6001400600	1	No	No
27	14.6	82.80	6001409600	6 & 7	No	Yes
28	14.6	82.80	6001409700	6 & 7	No	Yes
29	14.2	81.11	6001408600	6	No	Yes
30	14.2	81.11	6001406202	5	No	Yes
31	13.8	79.45	6001402200	3	Yes	Yes
32	13.7	79.15	6001406500	5 & 4	No	Yes
33	13.4	77.88	6001409200	7	Yes	No
34	13.4	77.88	6001405902	2	No	Yes
35	13.3	77.40	6001409000	7	Yes	Yes
36	12.9	75.52	6001405401	2	Yes	Yes
37	12.9	75.52	6001405302	2	No	Yes
38	12.8	74.93	6001401100	1 & 3	No	No
39	12.7	74.37	6001407700	6 & 4	No	No
40	12.6	73.59	6001407102	5 & 4	No	No
41	12.6	73.59	6001409100	7	Yes	Yes
42	12.6	73.59	6001403000	2	Yes	Yes
43	11.8	68.79	6001401200	1	No	No
44	11.4	66.13	6001408300	6	No	No
45	11.3	65.55	6001407000	4	No	Yes
46	10.8	61.91	6001406000	2	Yes	Yes
47	10.8	61.91	6001407200	5 & 4	Yes	Yes
48	10.6	60.55	6001407101	5 & 4	No	Yes
49	10.5	59.88	6001404800	4	No	No
50	10.3	58.46	6001406400	5	No	No
51	10.1	56.83	6001405600	2	No	No
52	10.1	56.83	6001406100	5	Yes	Yes
53	9.8	54.39	6001408200	6	No	No
54	9.6	52.82	6001407800	6	No	No
55	9.6	52.82	6001407300	5 & 6	Yes	Yes
56	9.6	52.82	6001406700	4	No	No
57	9.6	52.82	6001409900	7	No	No
58	9.4	51.17	6001403502	3	No	No
59	9.3	50.27	6001406800	4	No	No

Traffic Density

Indicator: The amount of traffic on major, and some local, roads and the length of the roads in or near each census tract.

Frontline Communities: Census tracts with high traffic score, plus designated DAC, VLI or DAC + VLI.

Rank	Score	State %	Census Tract	District	DAC	VLI
1	4291.67	99.72	6001409200	7	Yes	No
2	2935.47	97.13	6001403502	3	No	No
3	2584.77	95.60	6001408300	6	No	No
4	2232.32	92.98	6001409800	7	No	No
5	2145.76	92.27	6001409100	7	Yes	Yes
6	2143.41	92.23	6001407800	6	No	No
7	2123.53	92.05	6001403600	3	No	No
8	2080.53	91.75	6001401700	3	Yes	No
9	1896.48	89.71	6001403900	2	No	No
10	1789.36	88.28	6001406400	5	No	No
11	1762.85	87.84	6001406602	5 & 4	No	Yes
12	1743.09	87.50	6001400600	1	No	No
13	1732.58	87.30	6001406000	2	Yes	Yes
14	1650.74	85.91	6001407900	6 & 4	No	No
15	1600.1	84.90	6001403300	3 & 2	Yes	No
16	1576.47	84.45	6001410000	7	No	No
17	1573.2	84.43	6001406100	5	Yes	Yes
18	1537.88	83.72	6001983200	3	No	No
19	1537.35	83.68	6001401100	1 & 3	No	No

20	1500.07	82.92	6001410100	7	No	Yes
21	1476.8	82.43	6001406601	5 & 4	No	Yes
22	1419.88	81.20	6001409000	7	Yes	Yes
23	1418.49	81.14	6001403702	3	No	No
24	1406.6	80.84	6001407300	5 & 6	Yes	Yes
25	1393.73	80.60	6001407000	4	No	Yes
26	1392.34	80.57	6001400200	1	No	No
27	1364.82	79.85	6001405200	2	No	No
28	1341.83	79.35	6001401300	3	No	Yes
29	1329.47	78.98	6001405000	2 & 5	No	No
30	1306.63	78.36	6001404900	5	No	No
31	1284.52	77.83	6001405700	2 & 5	No	Yes
32	1273.83	77.42	6001404400	1 & 4	No	No
33	1228.36	76.10	6001405100	2	No	No
34	1220.7	75.85	6001403000	2	Yes	Yes
35	1207.3	75.41	6001400300	1	No	No
36	1153.54	73.68	6001400400	1	No	No
37	1142.45	73.32	6001403501	3	No	Yes
38	1104.41	71.90	6001404000	1	No	No
39	1089.96	71.32	6001404300	1	No	No
40	1089.35	71.29	6001409900	7	No	No
41	1052.4	69.90	6001403100	3	No	No
42	997.19	67.51	6001405600	2	No	No
43	945.68	64.90	6001403800	2	No	No
44	906.35	62.92	6001981900	3	No	No
45	811.54	57.59	6001982000	3	No	No
46	783.57	55.72	6001408100	6	No	No
47	769.38	54.93	6001402200	3	Yes	Yes
48	765.85	54.73	6001402600	3	No	Yes
49	758.13	54.19	6001401200	1	No	No
50	723.5	51.95	6001404501	4	No	No
51	704.15	50.46	6001406900	4	No	No
52	668.28	47.55	6001400500	1	No	No
53	611.54	42.77	6001404700	4	No	No
54	609.13	42.51	6001402700	3	Yes	Yes
55	598.83	41.43	6001406500	5 & 4	No	Yes
56	586.44	39.95	6001404502	4	No	No
57	564.71	37.81	6001406700	4	No	No
58	548.79	36.13	6001406800	4	No	No
59	547.4	35.91	6001404200	1	No	No
60	537.97	34.74	6001403701	3	No	No
61	531.54	33.96	6001402500	3	Yes	Yes
62	469.47	27.80	6001408900	7	Yes	Yes
63	468.88	27.72	6001406300	5	No	Yes
64	464.4	27.16	6001404101	1	No	No
65	459.86	26.70	6001402800	3	No	Yes
66	441.53	24.94	6001407102	5 & 4	No	No
67	430.14	23.80	6001403400	3 & 2	No	No
68	423.6	23.20	6001404600	4	No	No
69	421.88	23.07	6001404102	1	No	No
70	411.44	22.25	6001408800	6 & 7	Yes	Yes
71	410.99	22.16	6001406202	5	No	Yes
72	404.09	21.33	6001405301	2	No	No
73	399.03	20.85	6001408500	6	No	Yes
74	394.52	20.57	6001404800	4	No	No
75	392.75	20.42	6001407101	5 & 4	No	Yes
76	388.04	19.89	6001407200	5 & 4	Yes	Yes
77	387.92	19.86	6001408000	4	No	No
78	385.52	19.65	6001401600	3	Yes	Yes
79	362.81	17.60	6001408200	6	No	No
80	348.72	16.33	6001408600	6	No	Yes
81	348.57	16.31	6001409600	6 & 7	No	Yes
82	346.51	16.07	6001409500	7	Yes	Yes

83	345.52	16.02	6001407600	4 & 5 & 6	No	Yes
84	331.9	14.76	6001410500	3	Yes	Yes
85	329.65	14.58	6001409300	7	Yes	Yes
86	326.99	14.34	6001405302	2	No	Yes
87	325.1	14.19	6001407700	6 & 4	No	No
88	318.86	13.81	6001409400	7	Yes	Yes
89	295.33	11.83	6001405401	2	Yes	Yes
90	294.2	11.69	6001402900	3	No	Yes
91	280.89	10.57	6001405402	2	No	Yes
92	276.41	10.26	6001405902	2	No	Yes
93	268.99	9.79	6001408400	6	No	Yes
94	267.33	9.71	6001408700	6	No	Yes
95	264.6	9.54	6001405500	2	No	No
96	256.1	8.95	6001407400	4 & 5 & 6	Yes	Yes
97	242.09	7.91	6001410200	7	No	No
98	236.09	7.52	6001406201	5	Yes	Yes
99	235.29	7.43	6001405901	2	No	Yes
100	226.27	6.99	6001410300	7	No	Yes
101	212.59	6.19	6001410400	7	No	No
102	208.82	5.97	6001407500	6 & 4	No	Yes
103	207.52	5.88	6001405800	2	No	Yes
104	200.83	5.45	6001409700	6 & 7	No	Yes
105	186.3	4.93	6001402400	3	Yes	Yes
106	180.13	4.62	6001401800	3	Yes	Yes