

5th Year Annual Report

October 9, 2024

Submitted to:

California Air Resources Board

Submitted by:

Bay Area Air Quality Management District
West Oakland Environmental Indicators Project
West Oakland Community Action Plan Community Steering Committee











OWNING OUR AIR

5th Year Annual Report

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Introduction

Assembly Bill 617 is a State-mandated program that uses a community-based approach to reduce local air pollution in disproportionately impacted communities. This program aims to improve community health by reducing exposure to local air pollution sources in the most impacted neighborhoods through the development of Community Emission Reduction Plans (CERP). Owning Our Air: The West Oakland Community Action Plan (WOCAP) is the CERP developed to reduce the health effects of air pollution in West Oakland.

West Oakland's early industrial history is reflected in today's land use pattern. The area is a mix of industrial, commercial and residential uses. Freight oriented land uses are also prevalent in the neighborhood. The Port of Oakland, US Post Office and other freight and industrial operations generate substantial truck trips. The neighborhood is bisected by a network of truck routes and is bounded by four interstate highways as well as railyards and rail lines. This intense mix of uses has created a disproportionate air pollution burden for the local community.

The WOCAP is a joint effort between the West Oakland Environmental Indicators Project (WOEIP) and the Bay Area Air Quality Management District (Air District). As "Co-Leads" the Air District and WOEIP have worked with the WOCAP Steering Committee, a group of residents, researchers, academics, public agencies, non-profits, and community institutions to implement WOCAP strategies. The strategies are designed to reduce both air pollution emissions and exposure to air pollution. Reporting on strategy progress is a requirement of the AB617 program.

The California Air Resources Board's (CARB) is responsible for implementing AB 617. CARB released Blueprint 2.0¹ which provides guidance on CERP content and annual reporting for air districts and community partners. The WOCAP is now entering its fifth year of implementation and according to Blueprint 2.0, the Air District and community steering committees are required to assess the progress of strategy implementation and provide a summary of whether the 5-year targets were met. This fifth annual WOCAP report highlights progress made over five years of implementation (2020 – 2024).

The year 2024 marks a significant milestone in WOCAP implementation because that is the final year of the implementation schedule originally envisioned to meet the plan targets. This Fifth Year Annual Report provides a reflection into key areas of WOCAP implementation including community process and enforcement efforts. It includes a summary of the results of five years of emission reduction grant investments. It provides benchmark data related to demographic and public health conditions in West Oakland, as well as an update to the emissions inventory to assess progress

¹ https://ww2.arb.ca.gov/sites/default/files/2024-04/BP2.0 FULL_FINAL_ENG_2024_04_09.pdf

² Table 6-4 Owning Our Air: The West Oakland Community Action Plan Implementation Schedule

towards achieving plan targets. Finally, it evaluates the WOCAP strategies that did not make progress over the last five years and recommends a course of action for each of these strategies.

WOCAP Emissions Reduction Highlight

WOCAP demonstrated an effective reduction of air pollution and health risk in an impacted community under the AB 617 program. Based on the Air District and the community collaborative analysis, Diesel Particulate Matter (DPM) was identified as the biggest air pollution concern in West Oakland, with tugboats noted as a significant source of DPM. During implementation of WOCAP, DPM emissions from local sources declined by 31% and the 2025 DPM exposure targets have largely been realized for most impact areas. DPM reductions were due to a combination of CARB statewide regulations (e.g., limiting emissions from heavy-duty trucks) and targeted deployment of incentives in West Oakland which resulted in upgrades of older, dirtier tugboats to newer and cleaner models.

The components of the fifth year report have been discussed with the CSC throughout the course of the summer and into fall 2024.

- June CSC meeting Air District and Port strategy revisions
- **July** CSC meeting Other agency-led strategy revisions (City of Oakland Planning Dept. Sustainability Dept., Dept. of Transportation, Public Works; Alameda County Public Health Department; Caltrans; OEHHA)
- August CSC meeting review community profile
- **September** CSC meeting review emissions inventory update, investment summary and enforcement summary

Implementation Timeline

The timeline below traces the organic evolution of WOCAP implementation. Community involvement in the WOCAP implementation process was a high priority for the Co-Leads, the Air District and WOEIP. The Co-Leads followed CARB's guidance and used a community steering committee (CSC) model of engagement. The steering committee process provided a platform to track public agency's important strategy implementation work and provided an organizing space for government and community to discuss, brainstorm and advocate for implementation of WOCAP strategies.

The Plan was written from 2018 to 2019. The timeline below covers the implementation years through 2024.

2019

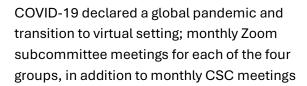
Air District adopted WOCAP in October; California Air Resources Board adopted WOCAP in December



2020

Implementation subcommittees formed grouped by 1) Port & Freight, 2) Land Use, 3) Health and Living Buffers, 4) Bike, Walk, Transit

- Break out groups during monthly CSC meetings to discuss strategy implementation approaches
- Each subcommittee has co-chairs, one agency representative and one community CSC member



"Oakland's Very Own Speaker Series" at monthly CSC meetings: interview and Q&A with of one of West Oakland's activists, historians, or culture bearers – grounds the attendees in the West Oakland experience

Strategy Implementation Highlights

- Air District works with Oakland Unified School District to install 4 high-efficiency air filtration systems in the following schools: KIPP Bridge Academy, Martin Luther King, Jr. Elementary, Prescot, and Hoover Elementary (Strategy #75)
- CARB adopts the Advanced Clean Truck Regulation (Strategy #29)



2021

Subcommittees wind down and re-alignment discussions ensue at monthly CSC meetings to clarify roles and contributions of guests, partners and agencies

Strategy Implementation Highlights

- Urban Greening grants from Metropolitan
 Transportation Commission (MTC) Alameda
 County Transportation Center (ACTC),
 California Air Resources Board (CARB) and
 Port of Oakland totals \$1 million (Strategy #12)
- Air District updates Complaint Policy to improve referral system (Strategy #Enf-AD-4) and outreach materials about backyard burning (Strategy #Enf-AD-2)
- Air District funds incentives to repower tugboats with cleaner diesel engines (Strategy #50)



2022

Out of the realignment phase, a conceptual structure for Implementation Projects and "Ad Hoc" committees introduced that resulted in the Health Equity Advisory Committee (HEAC)

Guidance for guest speakers developed to ensure speakers relate all content to WOCAP and specific to West Oakland, focus on providing enough context for community to understand the issue and ground the content in the principles of environmental justice

Community engagement plan developed to provide an approach to recruitment for new steering committee members and an orientation for new members

Strategy Implementation Highlights

- City of Oakland amends heavy-duty truck parking regulations (Strategy #38)
- Air District awards a \$4.5 million grant to AC Transit to expand capacity of a hydrogen fueling facility to support fueling of hydrogen powered buses (Strategy #52)



2023

Co-Leads create annual CSC meeting calendar and standardize CSC meeting preparation. CSC meeting calendar includes:

- Semi-annual enforcement updates from Air District, CARB, City of Oakland Code Enforcement and Truck Parking Enforcement
- Semi-annual updates on strategy implementation progress
- Project "deep dives" coordinated with important partner agencies deadlines to organize CSC input and comments on relevant agency-led initiatives such as the City of Oakland's Environmental Justice Element
- End of the year celebration Town Hall
- Regular reflections (surveys) to assess internal cohesion and external CSC/public level of understanding and level of satisfaction with the process
- Roll call at monthly CSC meetings to boost accountability of CSC members

Strategy Implementation Highlights

- Caltrans commissions a study of the benefits of roadside vegetation as a method to reduce exposure to air pollution (Strategy #16)
- City of Oakland adopts Environmental Justice General Plan Element (incorporating WOCAP strategies #22 and #83) and truck-intensive business zoning rules requiring more stringent rules within 500 feet of residential and other health-protective industrial zoning updates (Strategy #5)

2024

Continue annual CSC meeting calendar

Transition to holding quarterly virtual public CSC meetings and monthly CSC member-only working sessions to encourage more participation from CSC members

Strategy Implementation Highlights

- WOEIP holds community meetings and works to design mitigation plan for the Prescott Greening project (Strategy #12)
- Air District publishes a Metal Recycling White paper (Strategy #68)



рареі (Зпаседу #00)

 Air District funds two electric infrastructure projects totaling over \$6.5 million that will support truck fleets servicing the Port of Oakland (Strategy #53), and three tugboat projects were awarded over \$9 million to repower the tug engines to Tier 4 engines, the cleanest diesel engine available (Strategy #50)

Emission Reduction Grants - Investment Summary

The Air District uses incentive programs to implement WOCAP strategies, expediating air quality improvement in West Oakland by providing grant funding for clean air projects to businesses, public agencies, and residents. Projects typically involve the replacement and upgrade of old, dirty, heavily polluting mobile equipment and engines with cleaner options. Grant funding is provided only toward projects that go above and beyond regulatory requirements which advances community health by encouraging equipment owners to transition to clean technologies sooner than required by regulation. Programs primarily focus on emissions and exposure reductions of criteria pollutants including nitrogen oxides (NO_x), reactive organic gases (ROG) and particulate matter (PM), and toxic air contaminants such as diesel particulate matter.

Five Years of Incentive Funding in West Oakland At-A-Glance

Over the last five years, the Air District has funded 114 projects reducing air pollution in West Oakland, with over \$51 million invested in these projects. The Air District estimates that over 1,000 tons of NO_x, ROG, and PM emissions will be removed over the course of the projects' lifespans.

Some highlights of West Oakland projects include:

- Cleaner Tugboats: Repowering 13 tugboats with cleaner engines.
- **Hybrid Cranes:** Upgrading 16 rubber-tired gantry (RTG) cranes at the Port from diesel to cleaner diesel-electric hybrids.
- **Zero-Emission Trucks:** Replacing 32 trucks and yard trucks with zero-emission models, and purchasing 30 new hydrogen fuel cell drayage trucks
- **Electric Charging Stations:** Installing over 100 electric charging stations to support the transition of heavy-duty truck fleets to zero emissions, and adding 55 electric vehicle chargers for cars and trucks.
- Vehicle Scrapping: Scrapping 64 older residential vehicles.

Figure 1 below provides a breakdown of the 114 projects by equipment category. Each project may have funded multiple pieces of equipment and engines. Figure 2 below provides a breakdown of the total calculated emissions reductions by criteria air pollutant for projects determined to benefit West Oakland.

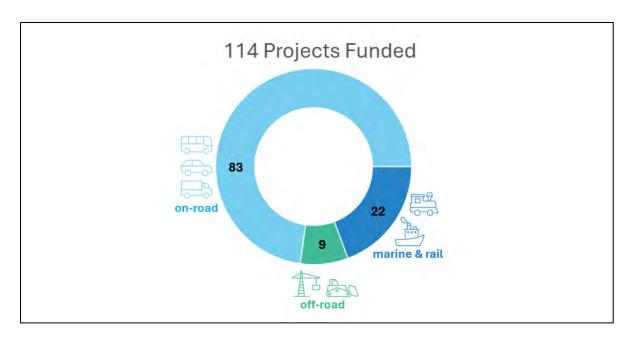


Figure 1 Incentive Projects Overview by Equipment Category

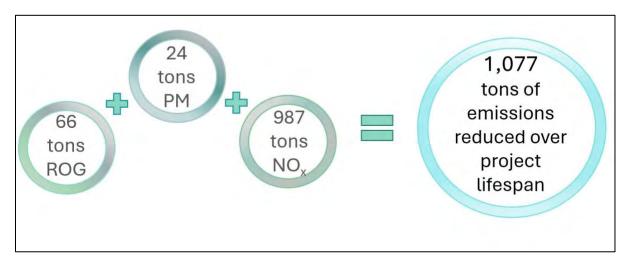


Figure 2 West Oakland Emissions Reductions Resulting from Incentive Investment

Progress on Incentives-Related Strategies

Over the last five years, the Air District grant programs have shifted to better align with the WOCAP strategies that aim to clean up diesel and other air polluting operations in and around West Oakland. The Air District has expanded and directed focus on outreach to West Oakland mobile equipment operators, increased award amounts for residential vehicle projects within West Oakland, and enacted eligibility requirements for certain programs that limit awards only to projects within priority communities such as West Oakland.

Some of the key strategies the Air District has focused incentives programs on include:

- Supporting the purchase of electric vehicles and equipment, including installing charging
 infrastructure at the Port of Oakland and for businesses throughout West Oakland.
 (Strategy #41, #49, #52, #53, #54)
- Upgrading tugboats, barges, and locomotives at the Port of Oakland to cleaner engines.
 (Strategy #50, #51)
- Offering programs for residents to retire their old vehicles or upgrade to cleaner alternatives. (Strategy #48)

The Air District is committed to continuing to support emission reduction strategies through existing grant programs and has also begun preliminary development of future programs to address remaining gaps in strategy implementation. For example, the Air District is working to develop a lawn and garden grant program to scrap and replace lawn and garden equipment with electric options (Strategy #54) and a truck replacement program to support owners of small fleets that want to upgrade to electric (Strategy #41, #53).

Enforcement Progress

The Air District led implementation of six WOCAP enforcement-related strategies. This section reviews the implementation progress, CSC engagement in these strategies and provides a recap of compliance and enforcement data during implementation. Although the Air District achieved many of its enforcement-related strategies such as creating informational flyers on open burning, updating the Air District's Complaint Policy and routinely presenting to the community steering committee (CSC), the work is not done. The conclusion of this section points to the important work of the Air District's Strategic Plan to continue enforcement efforts in West Oakland and other priority communities.

WOCAP Enforcement-Related Strategy Implementation Progress

WOCAP contains six Air District led Compliance and Enforcement strategies. Five of the strategies are complete. The final strategy is an ongoing action in which the Air District and CARB continue to consult with community on where there may be unpermitted sources of emissions. For details, see the strategy tracking table in Appendix 1.

Summary of CSC Input into Enforcement Activities

Enforcement activities in West Oakland are a reoccurring topic at the CSC meetings. Twice per year

the CSC receives updates on the WOCAP enforcement strategies relating to Air District inspections of permitted facilities, complaints and facility violations. Likewise, CARB presents on enforcement of mobile sources such as truck idling and marine enforcement (inspecting cargo handling equipment, ocean going vessel fuel inspections and commercial harbor craft inspections, etc.). Additionally, the City of Oakland reports on heavy-duty truck parking enforcement and unpermitted industrial-related businesses in West Oakland (i.e., "code enforcement"). One objective is for enforcement staff to hear first-hand from the community. Some themes that have emerged from these meetings include:

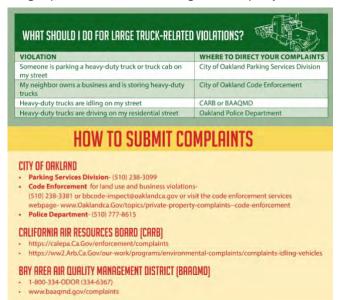


Figure 3 WOCAP Enforcement Flyer

- Request from agencies for community to
 be enforcement's "eyes, nose and ears" and thus to report any perceived violations using
 as much detail as possible (location, pictures, and identifying information such as license
 plates and vehicle numbers). To assist with this, as depicted in Figure 3, the WOCAP CoLeads developed an enforcement flyer to help with resident outreach.
- Community feedback to enforcement agencies has included:
 - o Address after hours enforcement (before 5am, after 5pm and on weekends).
 - o Provide joint enforcement and coordination.
 - Enforcement presentations need to go beyond data snapshot (of complaints, violations and inspections) and to help community understand what the data means. For example, which violations are most harmful and what happens once complaints are made using plain, every day words.

Summary of Compliance and Enforcement Data

Figure 7, located at the end of this section, summarizes compliance and enforcement data for WOCAP from January 2019 through 2024. The data reported reflects the work of the Air District's Compliance and Enforcement Division who is responsible for performing core compliance and enforcement program activities that include:

- Unannounced, compliance inspections of Air District permitted facilities.
- Investigations of community complaints and general air quality concerns.
- Taking enforcement actions when non-compliance is discovered.
- Responding to and investigating major incidents such as fires associated with manufacturing or industrial processes, or other major air emission releases.

Figure 7 reports compliance and enforcement metrics which center around **inspections**, **violations** and **complaints**, each of which are described below.

Understanding Compliance Inspections Presented in Figure 7

Air District inspectors conduct routine, unannounced compliance inspections of stationary sources that have an Air District Permit to Operate. These permitted source inspections occur at

facilities such as metal shredding facilities, chemical plants, sewage treatment plants, coating operations, printing facilities, auto body shops, and Gasoline Dispensing Facilities (GDF). GDF or gas station inspections are conducted at facilities which dispenses gasoline or other fuels directly into the fuel tanks of motor vehicles.

In addition to inspections at permitted facilities, Air District inspectors conduct compliance inspections at various construction sites and demolition projects that involve the demolition of a building/structure or the removal of asbestos-containing materials from a building/structure.³

Category	Sub Category (Meeting)	7			
Enforcement	Gas Station Inspections				
Enforcement	Asbestos Inspections				
Enforcement	Source Inspections Permitted Facilities				
	Inspections Tot	al			
Violations	Gas Station				
Violations	Asbestos				
Violations	Other				
	Violations Tot	al			
Complaints	Odor				
Complaints	Fire out				
Complaints	Train				
Complaints	Woodsmoke				
Complaints	Asbestos Inspections				
Complaints	Dust				
Complaints	Idling Truck				
Complaints	Gas Station				
Complaints	Other				

Figure 4 Excerpt from Figure 7 Compliance & Enforcement Data, highlighting inspections

Why is there a focus on GDFs and Asbestos in reporting?

Figure 4 highlights the inspections data excerpt. Within the Compliance & Enforcement Division, GDFs and Asbestos have dedicated enforcement programs due to the substantial volume of sites/facilities and asbestos job notifications that require consistent oversight. These programs necessitate specialized teams of inspectors to ensure timely and thorough inspections, maintaining compliance with air quality regulations. Hence inspection reporting (and violation reporting) focuses on "Gas Station Inspections", "Asbestos Inspections" and "Source Inspections Permitted Facilities".

Understanding Violations Data Presented in Figure 7

There are three general types of violations that Air District inspectors can issue:

Administrative: Typically associated with recordkeeping or reporting requirements.

³ Air District inspectors routinely conduct unannounced inspections of permitted sources and asbestos project sites. As part of the inspection, Air District inspectors meet with the owner or operator of a facility to ensure sources are operating in compliance with Air District regulations, permit requirements and other State and Federal Air Quality Regulations. Inspectors conduct inspections of equipment, operational processes and review associated records to determine a facility's compliance status.

- Operational: Emissions-related (e.g., emission exceeded regulatory standard or failed source test).
- Permit: Sources operating without an Authority to Construct or Permit to Operate.

When a Gas Station or an Asbestos job site receives a violation notice from the Air District, it could fall under any of the above categories. Violations issued to Gas Stations are typically cited for Reg. 2-1 (permit violations) or Reg. 8-7 (operational or administrative standards). Violations issued to Asbestos job site are cited under Reg. 11-2 (operational or administrative standards). Asbestos job sites are not permitted by the Air District; however, they must comply with air quality standards detailed in Regulation 11, Rule 2 when removing and or disturbing asbestos containing materials.

Figure 5 highlights the violations excerpt.

Notice of Violations are issued to facilities or job sites found to be operating in violation of air quality regulations. In addition to citing the

Category	Ψ.	Sub Category (Meeting)		7	
Enforcement		Gas Station Inspections			
Enforcement		Asbestos Inspections			
Enforcement		Source Inspections Permitted Facilities			
		Inspect	ions Tota	al	
Violations		Gas Station			
Violations		Asbestos			
Violations		Other		L	
		Violat	ions Tota	al	
Complaints	9	Odor			
Complaints		Fire out			
Complaints		Train			
Complaints		Woodsmoke			
Complaints		Asbestos Inspections			
Complaints		Dust			
Complaints		ldling Truck			
Complaints		Gas Station			
Complaints		Other			

Figure 5 Excerpt from Figure 7 Compliance and Enforcement Data highlighting violations

types of sources and regulations violated, these notices document the compliance issue and cause, the extent of harm associated with the violation and how the violation was stopped or corrected. When a Notice of Violation is issued, the facility is required to correct the violation and may have to pay a monetary penalty, including taking steps to prevent it from happening again. Facilities that do not correct violations or take measures to prevent them risk increased penalties for repeat violations.

Understanding Complaints Data Presented in Figure 7

The Air District receives a wide variety of air quality related complaints. Below are brief descriptions of each type of complaint that are reported to the Air District, highlighted in Figure 6:

- Odor: Complaints related to unpleasant or strong smells emanating from a facility or location, which may affect the surrounding community.
- Fire Out: Complaints regarding an outdoor fire or illegal burn, including residual smoke.
- Train: Complaints involving emissions caused by train operations, including idling trains and rail yard activities.
- Woodsmoke: Complaints related to smoke produced by burning wood from residential fireplaces, wood stoves, or outdoor firepits, impacting air quality.
- Asbestos: Complaints about the release or presence of asbestos fibers, typically during demolition, renovation, or improper handling of asbestoscontaining materials.

Category	Sub Category (Meeting	Sub Category (Meeting)		
Enforcement	Gas Station Inspections	Gas Station Inspections		
Enforcement	Asbestos Inspections	Asbestos Inspections		
Enforcement	Source Inspections Per	Source Inspections Permitted Facilities		
		Inspections Total		
Violations	Gas Station			
Violations	Asbestos	Asbestos		
Violations	Other			
		Violations Total		
Complaints	Odor			
Complaints	Fire out			
Complaints	Train			
Complaints	Woodsmoke			
Complaints	Asbestos Inspections	1		
Complaints	Dust			
Complaints	Idling Truck			
Complaints	Gas Station			
Complaints	Other			

Figure 6 Excerpt from Figure 7 Compliance and Enforcement Data highlighting complaints

- Idling Truck: Complaints about commercial vehicles or buses left running while stationary, contributing to air pollution and potential health hazards in the vicinity.
- **Dust/Particulate:** Complaints regarding visible dust or particulate matter in the air, often generated by construction, industrial activities, etc.
- Gas Stations: Complaints concerning emissions or odors from gas station operations, including fuel dispensing and storage.
- Other: Complaints concerning emissions that do not fit into any of the categories above.

The public may report air quality complaints to the Air District 24 hours a day, 7 days a week⁴. Air District staff investigate every complaint to achieve early intervention on potential problems and to allow the Air District to be proactive in protecting public health.

How the Complaint Process Works:

For each complaint, the inspector responds and investigates to determine whether the alleged source is violating an air pollution regulation. As part of the investigation, the inspector conducts a compliance inspection at the facility to ensure there is no ongoing violation of an air quality regulation or permit requirement. The inspector takes appropriate enforcement actions, such as

⁴ https://www.baaqmd.gov/en/online-services/air-pollution-complaints/complaint-policy-and-procedures

issuing a Notice of Violation, when the alleged source is determined to be in violation. This may include working with and referring information to other local enforcement partners when a violation pertains to other jurisdictions and authorities. Each complaint is assigned a complaint reference number, which is provided to the complainant and can be used to obtain the complaint investigation details and final report. As a general overview of our complaint process:

- When a complaint is filed, our dispatch center records the complaint and sends the complaint details to the inspector.
- When the inspector receives the complaint, they will reach out to the complainant by phone and/or meet with the complainant in person as part of the investigation to determine the possible source and cause of emissions.
- During the investigation, if the inspector can identify a potential source of emissions or
 if an alleged source is provided by the complainant, then the inspector will conduct an
 inspection at the alleged site to determine compliance with applicable air quality
 regulations and ensures the site mitigates and resolves any emissions or compliance
 issues. The inspector takes enforcement action if an air quality violation is discovered.
- Upon completion of the investigation, the inspector will determine the complaint status and follow up with the complainant on the investigation findings if requested. A copy of the investigation report may be requested when first reporting the complaint or after the Inspector's investigation through the Air District's Public Records.

Compliance	& Enforcement Metrics	Period 1 JAN 2019 - AUG 2020	Period 2 SEPT 2020 - JUN 2021	Period 3 JUL 2021 - JUN 2022		Period 5 JUL 2023 - JUN 2024	5YR TOTALS
Category -	Sub Category (Meeting)	Amount	Amount	Amount	Amount	Amount	Amount
Enforcement	Gas Station Inspections	12	46	8	2	0	68
Enforcement	Asbestos Inspections	12	5	20	9	1	47
Enforcement	Source Inspections Permitted Facilities	143	53	156	64	2	418
	Inspections Totals	167	104	184	75	3	533
Violations	Gas Station	1	3	1	2	0	7
Violations	Asbestos	8	2	2	1	0	13
Violations	Other	15	5	6	20	6	52
	Violations Totals	24	10	9	23	6	72
Complaints	Odor	60	21	19	7	30	137
Complaints	Fire out	2	1	1	2	2	8
Complaints	Train	1	0	0	0	0	1
Complaints	Woodsmoke	6	7	1	9	0	23
Complaints	Asbestos Inspections	4	1	0	2	2	9
Complaints	Dust	11	3	13	5	12	44
Complaints	Idling Truck	6	8	0	3	0	17
Complaints	Gas Station	1	0	0	0	1	2
Complaints	Other	5	3	9	4	9	30
	Complaints Totals	96	44	43	32	56	271

Figure 7 Compliance & Enforcement data throughout WOCAP implementation

Appendix 2 contains bar charts of the data in the table above that can be used to see patterns within this data.

Key Takeaways from Figure 7 Compliance and Enforcement Data

- **Compliance inspections** waned during the last reporting year (Period 5). This is due in part to the cyclic nature of the inspections program.
 - GDFs have longer inspection frequencies ranging from 2-4 years. GDF inspections are due again in 2024, so the Air District anticipates inspection numbers to go up during the next report.
 - Asbestos inspections do not have set inspection frequencies because they are based on notifications of jobs that involve the removal of asbestos. Asbestos inspections are done based on priority and the nature of the specific job.
 - The majority of the permitted sources in West Oakland were inspected in previous reporting periods. Inspections done during reporting periods 1 & 2 will be due for inspections again later in 2024, so the Air District anticipates inspection activity to pick back up.
- Violations spiked in the 2022-2023 period due to the Radius Recycling (formerly Schnitzer Steel) fire.
- Overall, we are seeing a downward trend of complaints coming from West Oakland and in
 most complaint categories (e.g. Odor, Woodsmoke, Asbestos, Train, Idling Trucks). When
 looking at the top three complaint categories (Odor, Dust, and Other) we see a significant
 downward trend for "Odor" and slight increase trend of "Dust" and "Other."

Future Enforcement Activities

The Air District will continue the work of holding industry accountable, proactively working with community to identify enforcement concerns and creating more transparent and community-friendly reporting through its newly created Strategic Plan. Released for public review and comment in July of 2024, three out of the five goals directly address improvements to and reaffirm commitments to compliance and enforcement activities.

Draft Strategic Plan⁵ Excerpts

Goal 1 "...To achieve impact, we will also strengthen our regulations, permitting and enforcement policies, and improve how we hold industry accountable when our regulations are violated."

- Strategy 1.5 Enhance Violation Investigations: "... We will enhance our procedures for investigating violations of Air District regulations in communities overburdened by air pollution to better protect community health." (page 39)
- Strategy 1.6 New Enforcement Policy: "... We will collaborate with communities to develop an enforcement policy to better prevent violations of air quality regulations." (page 39)

https://www.baaqmd.gov/en/about-the-air-district/mission-statement/draft-strategic-plan

Goal 2 "...We will directly engage with communities about compliance and enforcement activities, including recent incidents or other air pollution violations, our enforcement response, the extent of public harm, and legal actions we may take."

- **Strategy 2.5 Air Quality Complaints: "...** We will improve the complaint process to ensure it is effective and transparent (page 51)
- Strategy 2.6: Talk with Communities: "... Meet regularly with community members on compliance and enforcement activities, recent incidents or other air pollution violations, enforcement response, the extent of public harm, and legal actions we may take." page 53)

Goal 4 "...We will also increase the efficiency and effectiveness of our inspection and investigation resources to improve compliance rates and increase the impact of our enforcement programs."

• Strategy 4.5 Improve Compliance Investigations: "... We will increase the efficiency and effectiveness of inspection and investigation resources to improve compliance and increase the impact of our enforcement program." (page 78)

Community Description Update

This section presents an update to the demographic, socio-economic and health indicators from the original WOCAP. New indicators related to children (including newborns and infants) and adolescents' health were added due to their heightened level of vulnerabilities to air pollution exposure. These additional health indicators include: low birth weight, pre-term birth, and students who are asthmatic within Oakland Unified School District (OUSD).

Community Profile Update Caveats and Limitations

Rather than attribute any causality to health outcomes from WOCAP implementation, this section of the report seeks to update the population and health characteristics for the area. Most changes in health outcomes take a long time to see. Many other factors influence health outcomes beyond the potential emission reductions from WOCAP implementation.

The update has several limitations. First, some health indicators are available at the ZIP code level while others are available at the Census Tract level. With the expansion of ZIP code 94607 and changing Census Tract boundaries, the geographic comparisons within West Oakland are not exact. Second, results were averaged across multiple years to account for delays in data releases and small responses at the Census Tract level. Lastly, the COVID-19 pandemic impacted behavior,

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⁶ National Institute of Environmental Health Sciences. Air Pollution and Your Health. Date last accessed 19 August 2024. https://www.niehs.nih.gov/health/topics/agents/air-pollution

health metrics, and environmental conditions. COVID-19 infections and deaths disproportionately affected African Americans and Latinos.⁷

The information is generally presented in a 'before WOCAP' and 'after WOCAP implementation' format. Depending on the availability and release of data, it either follows:

- 2013-2017 before WOCAP (baseline) and 2018-2022 after WOCAP (benchmark)
- 2016-2018 before WOCAP (baseline) and 2020-2022 after WOCAP (benchmark)

Additional minor variations exist but they align to the 'before WOCAP and 'after WOCAP' approach.

Population Characteristics

Approximately 29,000 people live in West Oakland.⁸ Figure 8 shows the percentage of population by race based on the American Community Survey 5-year estimates (2013-2017 and 2018-2022) for the WOCAP area. Across the entire Bay Area region, the Asian and other/multiethnic populations grew at a faster rate than the rest of the racial or ethnic groups. West Oakland continues to be a community with a much higher proportion of African American/Black residents than the rest of the Bay Area. Approximately 39% of the population in West Oakland is African American compared to 10% in Alameda County and 6% in the Bay Area as a whole.

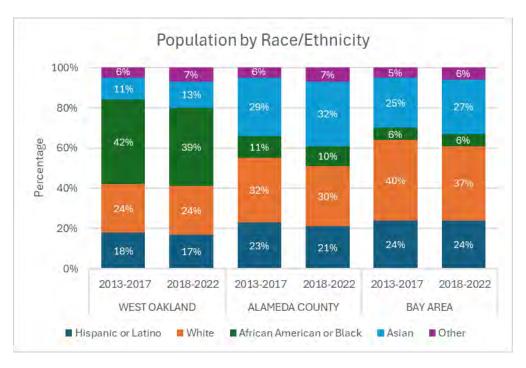


Figure 8 Race Demographics for West Oakland, Alameda County, and the Bay Area. Source: ACS, 2013-2022

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⁷ Reitsma, Marisa B., et. al. Racial/Ethnic Disparities in COVID-19 Exposure Risk, Testing, And Cases At The Subcounty Level in California. https://www.healthaffairs.org/doi/10.1377/hlthaff.2021.00098

⁸ American Community Survey (ACS) 2013-2022 DP05 (Census Tracts: 4014, 4015, 4016, 4017, 4018, 4022, 4024, 4025, 4026, 4027, 9819, 9820)

Approximately 41% of the population in West Oakland lives below the Bay Area poverty level (two times the federal poverty level), compared to 19% in Alameda County, and 18% in the Bay Area as a whole. Across the Bay Area, there has been an overall decrease in poverty rates with an 11% decrease observed in West Oakland. Figure 9 shows income, Figure 10 shows education level, and Figure 11 shows employment status for West Oakland, Alameda County, and the region based on the American Community Survey 5-year estimates (2013-2022). Compared to the baseline years of 2013-2017, West Oakland showed a 2% decrease in educational attainment and 3% decrease in unemployment.

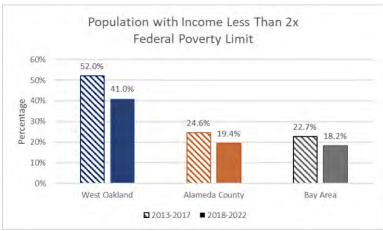


Figure 9 Poverty in West Oakland, Alameda County, and the Bay Area. Source: ACS, 2013-2022

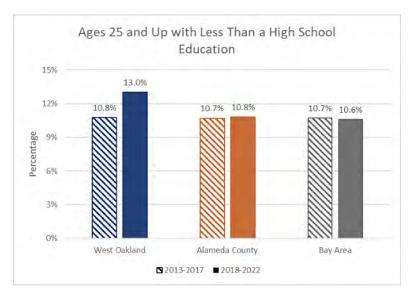


Figure 10 Educational Attainment in West Oakland, Alameda County, and the Bay Area. Source: ACS, 2013-2022

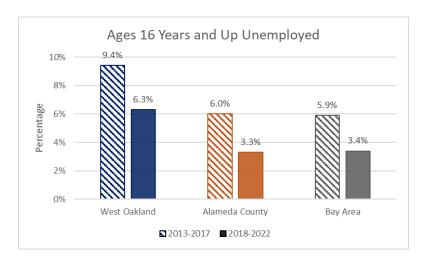


Figure 11 Unemployment rates in West Oakland, Alameda County, and the Bay Area. Source: ACS, 2013-2022

Health Conditions in West Oakland

Life expectancy at birth is a statistic that estimates the average number of years a newborn infant could live if the mortality rates at the time of their birth were to remain the same throughout their life. Figure 12 shows life expectancy in West Oakland compared to Alameda County based on data from the Alameda County Department of Public Health. Across the two time periods and within each location, there was not a difference in life expectancy, however West Oakland has a lower life expectancy compared to Alameda County. Figure 13 shows that African Americans in West Oakland continue to be living approximately 15 years fewer than those with the highest life expectancy. From the period 2020-2022, African Americans in West Oakland have a life expectancy of 73.2 years.

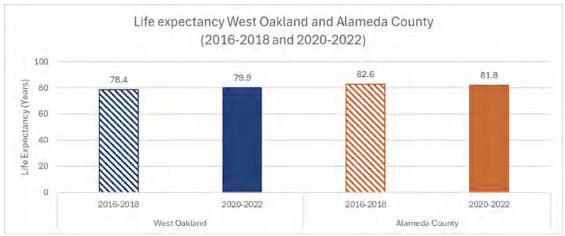


Figure 12 Life Expectancy in West Oakland and Alameda County from 2016-2018 and 2020-2022. Source: ACPHD CAPE, with data from Alameda County vital statistics files 2016-2018 and 2020-2022

 $^{^{9}}$ ACPHD CAPE, with data from Alameda County vital statistics files 2016-2018 and 2020-2022

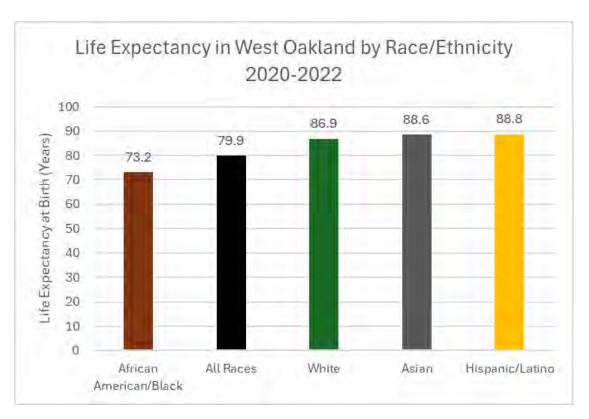


Figure 13 Life Expectancy in West Oakland by Race/ Ethnicity from 2020-2022. Source: ACPHD CAPE, with data from Alameda County vital statistics files 2016-2018 and 2020-2022

Chronic diseases continue to be the leading cause of death and disability in Alameda County. Mortality rates are a measure of frequency of deaths in a specific population over a given time period. Age-adjusted mortality rates takes into account comparisons between groups of people with different age distributions. They are used to control for effects of age differences between different diseases. For example, older people may be more prone to certain diseases than younger ones. Figure 14 shows the mortality rate of stroke, heart disease, and cancer mortality – all of which can be partly influenced by poor air quality. The chart shows deaths per 100,000 people in West Oakland and Alameda County. Although there appears to be a decrease in number of deaths related to heart disease and cancer death for West Oakland, there was no statistically significant difference across the two time periods. Additionally, West Oakland and Alameda County residents experience similar rates of death from cancer, heart disease and strokes in 2020-2022.

Figure 15 shows that although West Oakland residents continued to experience higher rates of asthma emergency visits and hospitalizations, both regions saw approximately a 62% decrease for all ages. ¹⁰ This may be attributed to the overall decrease in the number of emergency department visits for non-COVID-19 related health conditions. As shown in Figure 16, asthma emergency visits and hospitalizations for children in West Oakland also decreased for both the West Oakland and Alameda County geographies, by approximately 38% and 44%, respectively.

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¹⁰ ACPHD CAPE, with data from HCAI 2016-2018 and 2019-2021

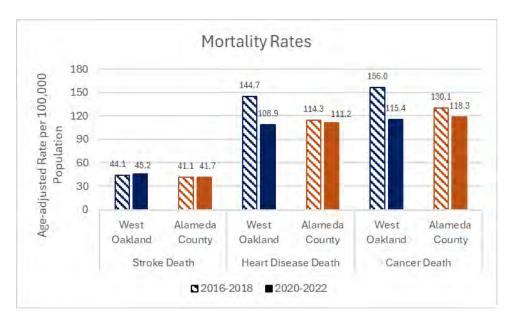


Figure 14 Mortality rates in West Oakland, Alameda County, and the Bay Area. Source: ACPHD CAPE, with data from Alameda County vital statistics files 2016-2018 and 2020-2022

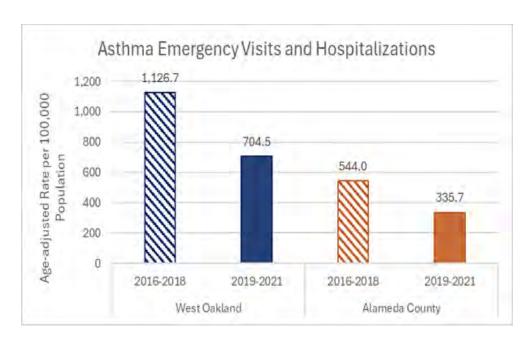


Figure 15 Asthma Emergency Department Visits and Hospitalization in West Oakland and Alameda County from 2016-2018 and 2019-2021. Source: ACPHD CAPE, with data from HCAI 2016-2018 and 2019-2021

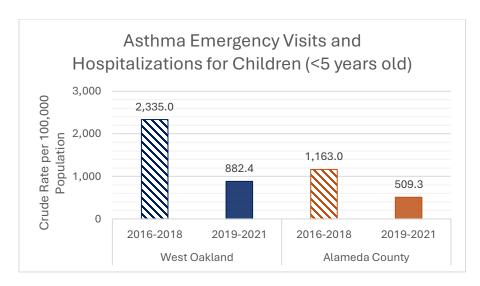


Figure 16 Asthma Emergency Department Visits and Hospitalization for Children (<5 years old) in West Oakland and Alameda County from 2016-2018 and 2019-2021. Source: ACPHD CAPE, with data from HCAI 2016-2018 and 2019-2021

The community description update sought to incorporate potential trends in low birth weight rates and preterm birth rates for West Oakland and Alameda County. Preterm birth, also known as premature birth, is when a baby is born before 37 weeks of pregnancy. Figure 17 reflects a slight increase in the preterm birth rate, but these results were not significant across the two geographies. Low birth weight is when a baby weighs less than 5 pounds 8 ounces (2,500 grams) at birth, regardless of gestational age. Figure 18 shows a significant difference between low birth weight rates in West Oakland compared to Alameda County.

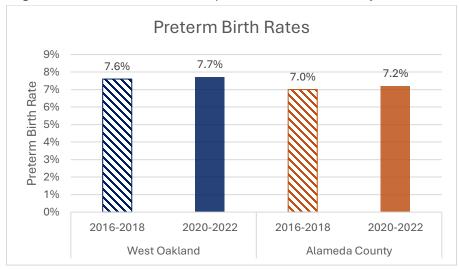


Figure 17 Preterm Birth Rates in West Oakland and Alameda County from 2016-2018 and 2019-2021. Source: ACPHD CAPE, with data from Alameda County vital statistics files 2016-2018 and 2020-2022

¹¹ ACPHD CAPE, with data from Alameda County vital statistics files 2016-2018 and 2020-2022

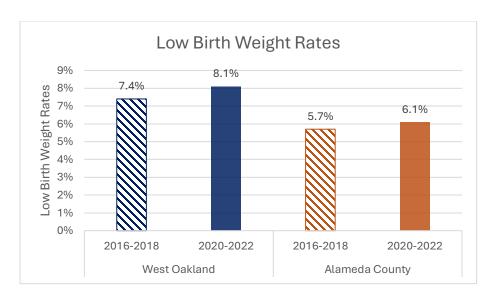


Figure 18 Low Birth Weight Rates in West Oakland and Alameda County from 2016-2018 and 2019-2021. Source: ACPHD CAPE, with data from Alameda County vital statistics files 2016-2018 and 2020-2022

Lastly, the community profile sought to better understand asthma rates among students within Oakland Unified School District (OUSD). Figures 19 - 21 reflect high rates of asthma at West Oakland schools, a higher percentage of days absent among asthmatic students, and a high rate of asthma-related medical incidents in West Oakland school year 2023-2024.¹²

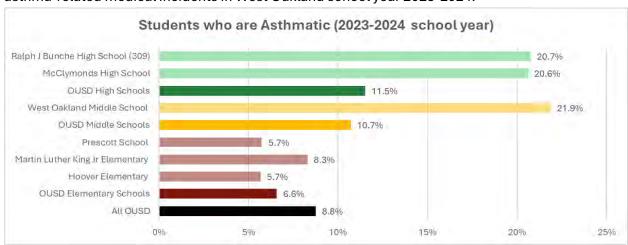


Figure 19 Students who are Asthmatic from within Oakland Unified School District from 2023-2024

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¹² Oakland Unified School District, with data from 2023-2024.

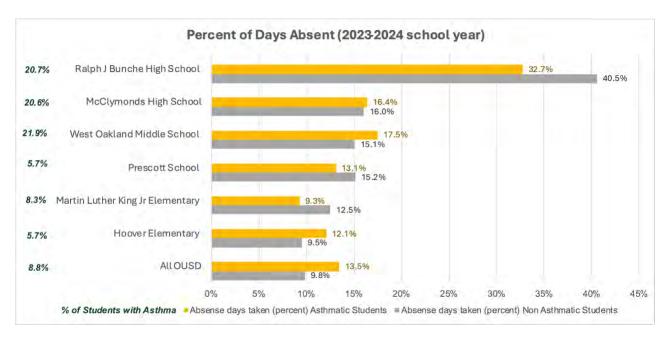


Figure 20 Oakland Unified School District asthmatic and non-asthmatic students from and the percentage of absence days from 2023-2024

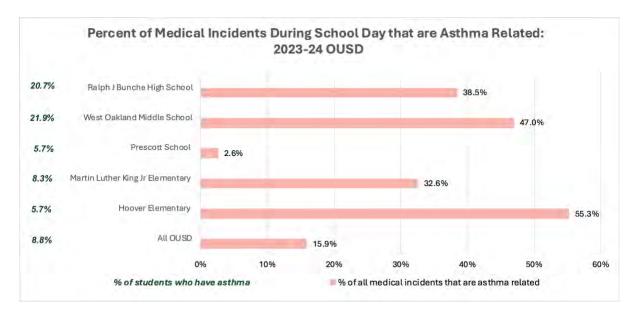


Figure 21 Percent of medical incidents during school days that are asthma related in 2023-2024 from Oakland Unified School District.

Emissions Inventory Update

Background

During development of the WOCAP, the Air District worked with the CSC and CARB to develop a community-scale emissions inventory for local sources in West Oakland. The original emissions inventory was developed for a base year of 2017 and forecast years of 2024 and 2029 (5 and 10 years from the WOCAP adoption year of 2019). Once compiled, the emissions data were combined with meteorological inputs in the AERMOD dispersion model to estimate pollutant concentrations and cancer risk resulting from local sources. This evaluation focused on fine particulate matter ($PM_{2.5}$), diesel particulate matter ($PM_{2.5}$), diesel particulate matter ($PM_{2.5}$) and cancer risk, and human exposures and risks were estimated for seven community-identified impact zones that the CSC selected based on analyses of monitoring data. For each zone and the community as a whole, the contribution of key local sources (e.g., permitted sources, port-related sources, etc.) to air quality impacts was estimated based on modeling results. Findings from this exposure assessment were then used to support strategy development and to establish plan targets.

As part of the development of this fifth-year report, the 2024 emissions inventory was updated to account for activity changes, plan strategies, and regulatory programs that have been implemented since the adoption of the WOCAP. Emissions changes were also used to adjust prior modeling and exposure results, providing an assessment of progress toward plan targets over the past 5 years. In addition, an updated forecast of 2029 emissions from local sources was developed to assess further progress that is anticipated in the years ahead.

Methods

To the extent possible, the methods and datasets used to update the 2024 and 2029 emissions inventories are consistent with those used in the development of the 2017 baseline inventory presented in the WOCAP. This use of "historical methods" provides a measure of changes relative to the original 2017 baseline and facilitates the evaluation of progress toward WOCAP goals and targets. However, emissions inventory methods and datasets improve over time, and some of the tools and datasets used to develop the original WOCAP emissions estimates are no longer current. Therefore, Air District staff developed an alternative "best methods" inventory that estimates progress against an updated 2017 baseline (see Appendix 3). In both inventories, percentage changes against the 2017 baseline are similar.

The main focus of emissions inventory updates was the set of high-priority local sources included in the exposure analyses, which includes on-road mobile sources, port- and rail-related sources, and permitted facilities. However, inventory updates also include other local sources for which sufficient data were unavailable to support modeling (e.g., restaurants, residential sources, and

¹³ For example, since the WOCAP was adopted, CARB has released the EMFAC2021 mobile source model to replace the EMFAC2017 model used for WOCAP emissions estimation for on-road motor vehicles.

construction activities). Table 1 summarizes the information used to develop emissions updates for key sources. Notably, emissions for port-related sources were based on a variety of datasets, including a 2020 port inventory, vessel call data from the Marine Exchange, and data on berthing hours and shore power usage from port staff. In consultation with CARB, port-related emissions were forecast from 2024 to 2029 using projections developed by the San Francisco Bay Conservation and Development Commission (BCDC).

Table 1. Information used to update emissions for key West Oakland sources.

SOURCE	UPDATED INFORMATION					
On-road Vehicles (Highway and Street)						
On-road vehicles, like cars and trucks, including exhaust, fuel evaporation, brake & tire wear, and road dust	Fleet turnover, regulatory impacts, and activity changes from the EMFAC model; impacts of new CARB regulations					
Port						
Ships maneuvering & berthing, harbor craft, dredging, bunkering, Port trucks, cargo handling equipment, and OGRE & BNSF railyards	2020 Port of Oakland Inventory, Marine Exchange data, berth electrification updates, engine upgrades for tugs and gantry cranes, revised growth rates for port activities.					
Rail						
Rail lines (including passenger rail), and UP railyard	Latest activity and fleet data; impacts of new CARB locomotive regulations					
Permitted						
Schnitzer, EBMUD, Dynegy, Pinnacle Ag Services, Sierra Pacific, CASS, California Cereal, CA Waste (10th St), and many others	Latest Air District reporting data					
Other						
Ferries, Schnitzer (ships), Schnitzer trucks and other truck-related businesses	Latest activity and fleet data; impacts of new CARB regulations					

As noted in Table 1, the updated emissions also account for the impact of new CARB regulations that were adopted after the WOCAP was completed, including the heavy-duty inspection and maintenance (HDIM) program, the commercial harbor craft (CHC) regulation, and the in-use locomotive regulation.

Emissions Summary

The combination of plan actions, existing and new statewide regulations, fleet turnover, and other changes resulted in significant emissions reductions in West Oakland between 2017 and 2024. Emissions of DPM and cancer risk-weighted emissions, ¹⁴ of which DPM is the leading component, were estimated to decrease by 31% and 28%, respectively, between those years (Figures 22 and 23). Progress was less significant for PM_{2.5} emissions, which decreased by 10% between 2017 and

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¹⁴ Cancer risk-weighted emissions are estimated by multiplying the emissions of all relevant toxic air contaminants in the inventory by their cancer slope factor (CSF) and a dosage factor, then summing the results. CSFs are used to estimate the risk of cancer associated with exposure to a particular carcinogen.

2024 (Figure 24). For all three classes of pollutants, further emissions reductions between 2024 and 2029 are forecasted to be approximately 7%, largely due to forecasted growth in on-road motor vehicle activity from the EMFAC model and BCDC's annual forecasted growth of 2.3% for activities at the Port of Oakland. These emissions forecasts are highly uncertain, particularly for the port, which has had decreases in vessel calls and container shipments in recent years.

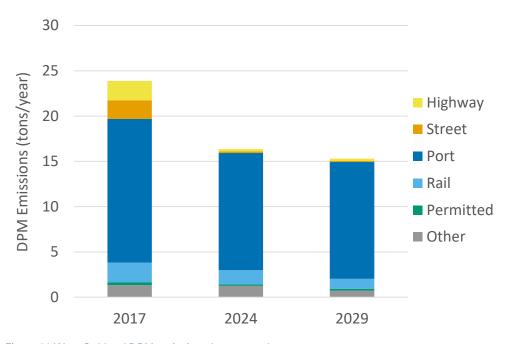


Figure 22 West Oakland DPM emissions by year and source category.

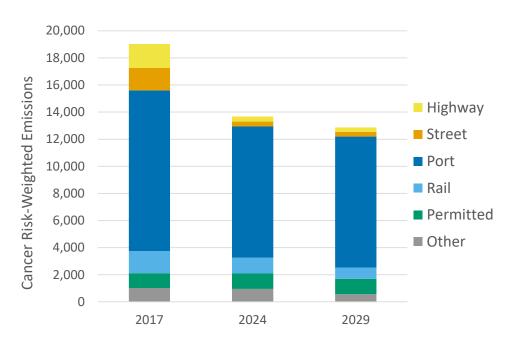


Figure 23 West Oakland cancer risk weighted emissions by year and source category.

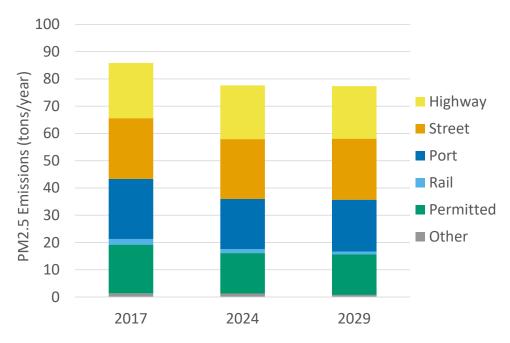


Figure 24 West Oakland PM2.5 emissions by year and source category.

Significant reductions in DPM emissions reflect the impact of local, regional, and statewide efforts to target diesel sources. For example, Figure 22 shows large reductions in DPM emissions from onroad mobile sources (highways and streets), which result from existing statewide regulations like

CARB's Truck and Bus Rule and new regulations like the HDIM program. Large DPM emissions reductions were also achieved for port-related sources like tugboats and other harbor craft, largely through grant-funded engine upgrades. Table 2 shows 2024 emissions reductions for West Oakland resulting from key statewide and local actions.

Table 2. 2024 emissions reductions estimated for key statewide and local actions.

		2024 Reductions (tons)		
Action	Affected Sources	PM2.5	DPM	Cancer Risk- Weighted
Heavy-Duty Inspection and Maintenance (HDIM)	Heavy-duty diesel vehicles	0.15	0.16	115
Expanded Berth Electrification	Ocean-going vessels at the Port of Oakland	1.36	0.23	174
Cargo handling equipment engine upgrades through grant programs ^a	Rubber-tired gantry (RTG) cranes at the Port of Oakland	0.30	0.30	223
Harbor craft engine upgrades through grant programs ^a	Assist tugs, dredgers, bunkering barges	2.02	2.08	1,555
TOTAL		3.83	2.77	2,067

^aNote that the reductions shown were estimated for the single year of 2024, while reductions discussed in the grants investment summary on page 7 are cumulative over multiple years.

Progress in reducing $PM_{2.5}$ emissions is less significant due to the wide variety of sources emitting $PM_{2.5}$, including non-combustion sources such as fugitive dust. Table 2 shows that the key actions listed have reduced $PM_{2.5}$ emissions from heavy-duty trucks, harbor craft, and ocean-going vessels at berth. However, emissions from other $PM_{2.5}$ sources, such as road dust, have remained the same or increased between 2017 and 2024. Tables A4-1 – A4-3 in Appendix 3 provide more details on emissions changes for specific source types to help interpret these overall changes.

Exposure Assessment and Targets

Human exposures to air pollution from a given source are affected not just by the source's emissions levels, but by other factors such as meteorology, the proximity of populated areas to the source, and the source' release characteristics (e.g., elevated stack vs. low-level release). Therefore, Air District staff updated the exposure modeling results presented in the WOCAP to evaluate progress toward reducing exposures and meeting plan targets. ¹⁵ Note that all modeling results and targets focus on impacts from <u>local sources</u>, not total pollutant exposure resulting from air pollution transport and other non-local factors. WOCAP targets can be summarized as follows:

By 2025, all West Oakland neighborhoods will have the same air quality as today's [2017] average West Oakland neighborhood, and by 2030, all West Oakland neighborhoods will have the same air quality of today's [2017] "cleanest" West Oakland neighborhood.

For DPM, this approach resulted in a 2025 target of having all seven impact zones at or below an average residential DPM exposure of $0.25\,\mu\text{g/m}^3$ (attributable to local sources only). Based on modeling results, 4 of the 7 impact zones had residential average DPM concentrations attributable to local sources that exceeded $0.25\,\mu\text{g/m}^3$ in 2017, as shown in Figure 25. When DPM emissions reductions between 2017 and 2024 are accounted for, only one zone (2) is slightly above the 2025 target, and DPM exposure reductions range from 38% (zone 2) to 62% (zone 7). For the community as a whole, average residential DPM exposures attributable to local sources were reduced by 56% between 2017 and 2024. Note that this reduction exceeds the overall DPM emissions reduction of 31% described in the emissions inventory section above. The larger reductions in exposure are primarily due to significant DPM reductions for on-road mobile sources (highways and streets), which operate within residential areas (unlike marine sources). It should also be noted that results for cancer risk levels track DPM results closely, as shown in Figure 26.

¹⁵ This update was done by scaling prior modeling results using the emissions changes outlined above and in Appendix 4. AERMOD treats the modeled pollutants as inert (i.e., no chemical transformations are considered), so resulting concentrations scale linearly with emission levels.

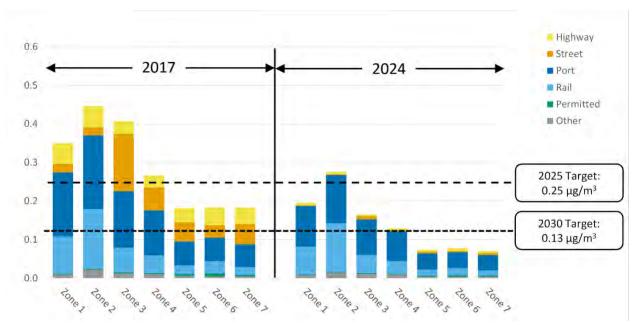


Figure 25 West Oakland DPM concentrations by impact zone and source category (modeled local sources).

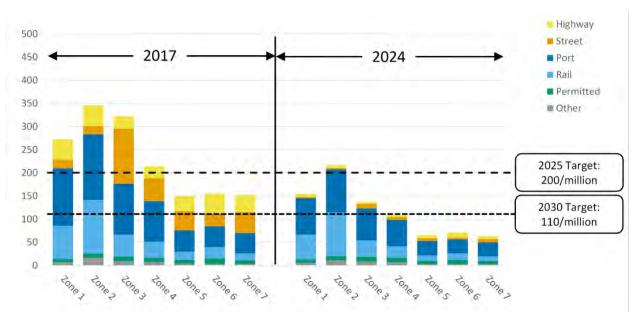


Figure 26 West Oakland cancer risk levels by impact zone and source category (modeled local sources).

For average residential $PM_{2.5}$ exposures, progress between 2017 and 2024 was less pronounced than for DPM and cancer risk, as discussed in the emissions inventory section above. For $PM_{2.5}$, the 2025 target called for all seven impact zones to be at or below an average residential $PM_{2.5}$ exposure of 1.7 μ g/m³ (attributable to local sources only). Based on modeling results, 5 of the 7 impact zones exceed the 2025 target in 2017, as shown in Figure 27. When $PM_{2.5}$ emissions reductions between 2017 and 2024 are accounted for, three zones (3, 5, and 6) remain above the

2025 target. However, PM_{2.5} exposures were reduced across all zones, with reductions ranging from 3% (zone 5) to 20% (zone 1). And for the community as a whole, average residential PM_{2.5} exposures attributable to local sources were reduced by 56% between 2017 and 2024.

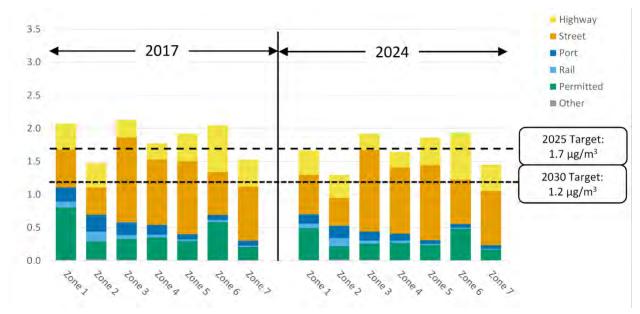


Figure 27 West Oakland PM2.5 concentrations by impact zone and source category (modeled local sources).

Conclusions

The updated emissions inventory and exposure assessment shows that DPM emissions from local sources targeted by the WOCAP were reduced by 31% between 2017 and 2024 due to plan actions, statewide regulations, fleet turnover, and other factors. These emissions reductions lowered average residential DPM exposure attributable to local sources by 56% across West Oakland, with exposure reductions ranging from 38% to 62% across the 7 impact zones identified by the CSC. Reductions were less pronounced for $PM_{2.5}$, as emissions from key local sources decreased by 10% and average residential exposures attributable to local sources were reduced by 8% overall and by 3% to 20% across the 7 impact zones. These findings point to significant progress in reducing impacts from the diesel sources of greatest concern to the CSC and to the need for enhanced local and regional efforts to address $PM_{2.5}$ impacts.

Strategy Evaluation

A key component of the Blueprint 2.0 fifth year annual report is an assessment of each strategy. Blueprint 2.0 calls for a rationale for all strategies that are modified or removed from the plan. ¹⁶ As the Air District, WOEIP and agency partners wrapped up the fifth year of WOCAP implementation, the Air District began the process of assessing strategies. The majority of strategies are complete,

¹⁶ Blueprint 2.0, page 95.

in progress, or ongoing. The assessment contained in this report focused on the remaining strategies for which no progress was reported during five years of WOCAP implementation.

The Air District began the strategy revision process by working with the designated lead agencies to propose a course of action for each strategy such as revise the strategy, continue the strategy or close out the strategy along with a rationale for each recommendation. The Air District and WOEIP then discussed the strategy assessment with the CSC in two parts. In June 2024, they discussed with the CSC Air District and Port-led strategies. In July of 2024, the Air District and WOEIP talked through the other agency-led strategies with the CSC. Once all CSC feedback was received, the Air District and WOEIP Co-Leads further revised the strategy revisions and shared with the CSC for final review over email. Appendix 4 contains the detailed strategy assessment. A summary of the assessment is included in this section.

A total of 29 strategies were assessed.

- 13 strategies recommended to be revised
- 3 strategies recommended to be continued
- 3 strategies identified as complete
- 10 strategies recommended to be closed out

Strategies that are recommended to be revised relate to continuing the work on reducing the impact of transport trucks (Strategy #67) and to call for agencies to work together to advocate for and fund electrification of rail industry (Strategy #64, #65). Strategies related to minimizing emissions exposure from the Port of Oakland and the East Bay Municipal Utility District were also proposed to be revised. Strategies have been revised that call for the Port to study the truck traffic and public health impacts from larger container ships, (Strategy #43), to continue the work of "greening" the shipping industry (Strategy #63) and to continue to make progress on electrifying Port operations (Strategy #21). A strategy was revised to analyze odors from EBMUD (Strategy #FSM-4). A call to study the impacts of toxic air contaminants and cumulative exposure was also included as a strategy revision (Strategy #82). Additional revisions related to studying the effects of street sweeping (Strategy #59), include health in all policies guidance (Strategy #76), create a smoking ban in residential buildings in Oakland (Strategy #77), use participatory budgeting for investments in environmental justice neighborhoods in Oakland (Strategy #79) and finally to increase marketing of West Oakland health clinics and resources (Strategy #85).

Strategies that will be continued include optimizing the Port's appointment system (Strategy #FSM-6), assessing trucks parked in the Caltrans right-of-way (Strategy #7) and implementing truck traffic calming improvements (Strategy #40).

Completed strategies included the City of Oakland studying development impact fees (Strategy #13), the City of Oakland developing policy to limit fugitive dust (Strategy #27) and making Dynegy Power Plant more sustainable (Strategy #74).

Strategies proposed to be closed out relate to Air District Regulation 8-5 to limit emissions of organic compounds from storage tanks that, once studied more in-depth, turned out to not have an appreciable impact on emissions reduction (Strategy #73). Strategies for which alternate initiatives were identified to meet the intent of the strategy included avoiding displacement in West Oakland (Strategy #25), green building approaches to housing construction (Strategy #86), updating conditions of approval for carbon free electricity (Strategy #88) and expanding asthma management (Strategy #84). Some strategies were found to be exceptionally challenging from an implementation perspective and for which other strategies could achieve desired improvements such as limiting the hours that trucks can operate in West Oakland (Strategy #9) and street closures near schools (Strategy #58). Other strategies were duplicative of existing strategies (Strategy #18 and #84). Finally, some strategies became obsolete due to changes in economic conditions such as low uptake of carshare after the pandemic, plus new initiatives replacing car share (Strategy #46) and changes in "last mile delivery", such as Amazon delivery services that take packages to a person's doorstep (Strategy #80).

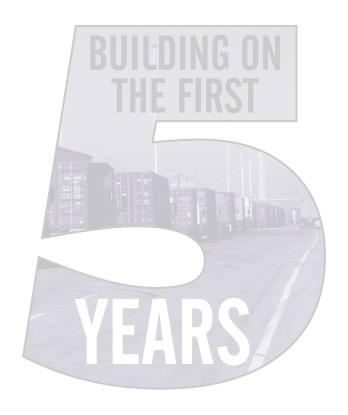
Conclusion

WOCAP strategy implementation progress is due to the interdisciplinary collaboration among government agencies, the proactive approach taken by the West Oakland Environmental Indicators Project to develop innovative projects and due to the advocacy of the WOCAP steering committee. The last five years of implementation resulted in tangible progress as highlighted throughout this report. Significant incentive grant funding has been used to replace old, dirty, heavily polluting mobile equipment and engines with cleaner options. This investment along with the implementation of other strategies has resulted in significant emissions reductions in West Oakland, particularly for DPM and cancer risk-weighted emissions as described in the emissions inventory update section. Enforcement strategies were completed that involved addressing backyard burning, updating complaint procedures and regularly reporting to the WOCAP steering committee. The WOCAP steering committee along with agency partners spent several months reviewing the strategies that did not make progress during the last five years and developed a recommended action and supporting rationale to either revise the strategy, continue the strategy or close out the strategy.

For more information, visit the Air District's WOCAP webpage at https://www.baaqmd.gov/community-health/community-health-protection-program/west-oakland-community-action-plan

See also the West Oakland Environmental Indicators Project webpage at https://woeip.org/featured-work/

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Appendices

Appendix 1	Strategy Status Update
Appendix 2	Compliance & Enforcement data charts
Appendix 3	Emissions Inventory Update Technical Appendix
Appendix 4	Strategy Assessment





Appendix 1

Strategy Status Update



Appendix 1 Status of WOCAP Strategies, 2023-2024

Strate gy #	DISTRICT/PARTNER/CARB STRATEGIES Brief Strategy Description	Qualitative Status Update July 1, 2023 to June 30, 2024	Status	"Lead" Agency
1	The City of Oakland continues working with California Waste Solutions and CASS, Inc. to relocate operations to the former Oakland Army Base and works with the property owners and local residents to redevelop the former sites in West Oakland with new business and light industrial uses that fit into a green economy.	The City and CASS continue to negotiate the terms of a Disposition and Development Agreement (DDA) and anticipate bringing the DDA to City Council for approval in 2024.Oakland Maritime Support Services (OMSS) is currently finalizing its construction air quality plan after it was available for public comment and receiving input from Staff. OMSS is also tracking its permit for new construction through the building permit process. California Waste Solutions (CWS) is currently responding to comment letters received after its air quality plan was available for public comment. CWS and is also tracking its permit for new construction through the building permit process.	In progress	City of Oakland
2	The Air District will continue to engage in environmental review processes for development projects in West Oakland, such as the Oakland A's Ballpark and the MacArthur Maze Vertical Clearance Project, including coordinating with community partners and lead agency staff, providing data and technical assistance, and reviewing and commenting on CEQA documents through 2025.	The Air District reviewed and commented on one project between July 1, 2023 to June 30, 2024 within the West Oakland AB617 Community: Oakland Harbor Turning Basins Widening Project: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa-letters/2023/baaqmd_turning_basins_widening_deir_comment_letter121823-pdf.pdf?rev=e4e35c8c15b7481d87ea20c82279d69d≻_lang=en	Ongoing	Air District
3	The Air District will study the potential air pollution and health outcomes of allowing truck traffic on I-580 and designating a truck lane on I-880. Allowing truck traffic on I-580 would require legislative approval, re-engineering, and re-construction.	Caltrans released the solicitation for the study but received no bid from contractors by the December 2023 deadline. Caltrans modified the scope (reducing the proposed community engagement tasks) and was awarded an additional \$150,000 in March 2024 for this project (bringing the study total to \$600,000). The Air District and the City of Oakland have reviewed the modified work scope and provided comments. Caltrans is in the process of republishing the RFP with a planned timeline of August 2024. If Caltrans receives a successful bid, the Division hopes to kick off the study by Winter 2024 or early 2025.	In progress	Air District
4	Consistent with measures in the West Oakland Specific Plan, the City of Oakland identifies locations outside of West Oakland for heavier industrial businesses currently in West Oakland that contribute to air pollution emissions and negative health outcomes in West Oakland.	No update. May be considered in Phase 2 of the General Plan Update.	In progress	City of Oakland

Strate gy #	DISTRICT/PARTNER/CARB STRATEGIES Brief Strategy Description	Qualitative Status Update July 1, 2023 to June 30, 2024	Status	"Lead" Agency
5	The City of Oakland and Port of Oakland amends existing Ordinances, Resolutions, or Administrative policies to accelerate relocation of truck yards and truck repair, service, and fueling businesses in West Oakland currently located within the freeway boundaries that do not conform with the zoning designations adopted in the West Oakland Specific Plan.	In October 2023, the City adopted Planning Code Amendments as part of Phase 1 of the General Plan Update that amend expiration timelines for Nonconforming Uses and CUP termination timelines for truck-intensive uses. Additional work on this strategy may occur in Phase 2 of the General Plan Update.	In progress	City of Oakland, Port of Oakland
6	The City of Oakland uses incentives and subsidies to relocate businesses away from West Oakland that do not conform with the zoning designations adopted in the West Oakland Specific Plan. The Air District will provide emissions data and technical support to assist the City in these efforts and to ensure that any relocated businesses do not cause exposure issues at the new location.	The Economic Development Action Plan, which is slated to be released by Economic Workforce Division by the end of 2024, will present a set of policy recommendations to spur business movement.	In progress	City of Oakland
7	The City of Oakland revises business licensing procedures to require current and proposed businesses to disclose truck visits per day and works with Caltrans to determine the number of trucks that park in the Caltrans right-of-way near West Oakland. Caltrans works with WOEIP and the Air District to address air quality issues from truck parking leases, such as by modifying leases to allow for collecting surveys and partnering with the Air District and CARB to allow enforcement access.	See Strategy revisions – Proposed to continue strategy: Caltrans determines the number of trucks that park in the Caltrans right-of-way near West Oakland. Caltrans works with WOEIP and the Air District to address air quality issues from truck parking leases, such as by modifying leases to allow for collecting surveys and partnering with the Air District and CARB to allow enforcement access.	Not yet started	Caltrans
8	The City of Oakland amends existing City Ordinances and Administrative policies to list new truck yards and truck service, repair and fueling businesses as prohibited uses within the area of West Oakland that is inside the freeways (excluding the Port, OAB, and 3rd St. corridor of Jack London Square from Brush St. to Union St.).	Completed.	Complete	City of Oakland
9	The City of Oakland develops a plan to limit the hours that trucks can operate in the community.	See Strategy revisions – This strategy is proposed to be closed out.	Close out	City of Oakland

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10	The City of Oakland creates a comprehensive, areawide urban canopy and vegetation plan that identifies locations that trees can be added and maintained, such as parks and along Caltrans' rights-of-way and develops a plan to protect existing trees that reduce exposure to air pollution emissions in West Oakland. This includes partnering with local nonprofit groups, encouraging trees on private property, and working with the community on tree maintenance and (as needed) removal. The development of the Oakland Urban Forest Master Plan will inform this work.	Final draft of the Oakland Urban Forest Master Plan is expected Summer 2024.	In progress	City of Oakland, Air District, WOEIP
11	The City of Oakland works with local groups to train residents to maintain biofilters.	See Strategy 10.	In progress	City of Oakland,
12	The Air District and the West Oakland Environmental Indicators Project intends to implement the green infrastructure project currently under development between Interstate I- 880 and the Prescott neighborhood in West Oakland by 2021.	Prescott Greening has fall 2024 community meetings scheduled. WOEIP is working with Hyphae to determine the best scientifically supported mitigation plan.	In progress	WOEIP
13	The City of Oakland conducts a study regarding development fees for environmental mitigations.	Completed.	Complete	City of Oakland
14	The Air District, in partnership with IBank, provides loans guarantees for local small businesses to install energy storage systems (e.g. batteries, fuel cells) to replace stationary sources of pollution (e.g. back-up generators).	After much input from air districts, CARB approved updates to the Community Air Protection Incentives Guidelines 2024, which included the addition of Emergency Stationary Diesel Generator Replacement Projects as an eligible category, allowing districts to fund replacements of older diesel generators with zero-emission technologies. The Air District will consider developing a program for this category with a focus on local small businesses.	In progress	Air District
15	The City of Oakland continues requiring new developments to provide infrastructure for electrical vehicle charging stations.	Completed.	Complete	City of Oakland
16	The City of Oakland, in partnership with the Steering Committee, CARB and the Air District, studies the exposure reduction benefit of requiring solid or vegetative barriers to be incorporated into	Caltrans is currently conducting field studies to collect data and evaluate a vegetative barrier model. The City of Oakland Dept. of Transportation (OakDOT) will use its West Oakland STEP grant to pilot vegetative buffers in West Oakland and measure air quality	In progress	City of Oakland, CARB, Caltrans,

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	site design between buildings and sources of air pollution (for example, a freeway).	data before and after. Hyphae Labs is the lead on this task. Due to a delay in grant implementation, work on this item began in June 2024. Hyphae is assessing whether this task can still be completed as originally envisioned by December 2025, which is the end of the grant implementation period.		Air District
17	The City of Oakland adopts policies to lessen air quality impacts of residential and office buildings through the reduction or elimination of natural gas systems. The Subcommittee noted that equity outcomes need to be considered and that additional data is needed to understand the City's timeline to ban NG in new construction.	Progress was stalled by the Ninth Circuit Court of Appeals' decision overturning Berkeley's new construction gas ban, which forced Oakland to stop enforcing our own ban from 2020. The City's ECAP Consistency Checklist, adopted 2021, is an important backstop for all but single-family residential construction, as it would require any developer wishing to build with gas to revisit CEQA & conduct an extra GHG reduction strategy. Staff is currently exploring legislative/policy options to replace our 2020 rule (anticipated by Q1 2025). The Ninth Circuit decision also stalled progress on the BE Roadmap for existing buildings, which we now hope to finalize by Q1 2025.	In progress	City of Oakland
18	The Air District advocates for more electrical infrastructure and power storage, including development of (1) fast-charging facilities, (2) truck charging stations and (3) better land use support for electric trucks by 2025.	See Strategy revisions - This strategy is proposed to be closed out.	Close out	Air District, Port of Oakland
19	The Port of Oakland adopts an Electrical Infrastructure Plan for the maritime waterfront areas of Oakland. This Plan seeks to remove barriers to adoption of zero-emission trucks, such as cost, land, and ownership of charging equipment.	Port has received funding, 16 awards, for programs and projects under the Ports ZeroEmissions initiative and Seaport 2020 Beyond Plan, and that align with City ECAP and AB617 WOCAP. These projects and grant applications are coordinated with the Port Community Electrification Committee. Link to Grant Awards: WOCAP, City ECAPhttps://www.portofoakland.com/environment/environmental-stewardship/sustainability-climate-resiliency/ Link to Comprehensive Listing of Port Grants/Applications/Awards/Future Opportunities/ Not Selected: https://www.portofoakland.com/environment/environmental-stewardship/sustainability-climate-resiliency/ Recent application for USEPA Clean Ports Grant: https://www.portofoakland.com/cleanports/	In progress	Port of Oakland

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20	The City of Oakland revises development requirements to require the implementation of as many transportation demand management (TDM) strategies as feasible by developers of new buildings.	City of Oakland Dept. of Transportation (OakDOT) works closely with the Planning Department to tailor Transportation Demand Management (TDM) strategies, site plans, and off-site transportation improvements to private development projects in keeping with the recommendations of OakDOT's Transportation Impact Review Guidelines (TIRG).	Complete	City of Oakland
21	The Air District works with the City and Port of Oakland and other agency and local partners to create a Sustainable Freight Advisory Committee to provide recommendations to each agency's governing board or council. The Committee's scope includes: air quality issues, enhanced/increased enforcement of truck parking and idling, improved referral and follow-up to nuisance and odor complaints related to goods movement, improvements to the Port appointment system, charging infrastructure and rates, developing landuse restrictions in industrial areas, funding, and consideration of video surveillance to enforce truck parking, route, and idling restrictions.	See Strategy revisions – Proposed revision: WOEIP, Air District, Port of Oakland, and other partners continue to actively participate in the Sustainable Port Collaborative and in the Community Electrification Workgroup. The Committee's scope expands beyond its current focus on Port electrification to include: air quality issues, enhanced/increased enforcement of truck parking and idling, improved referral and follow-up to nuisance and odor complaints related to goods movement, improvements to the Port appointment system, charging infrastructure and rates, developing land-use restrictions in industrial areas, funding, and consideration of video surveillance to enforce truck parking, route, and idling restrictions. The Air District continues to offer incentives for eligible zero emissions infrastructure, vehicles, and equipment and these incentives are discussed in the regular Workgroup meetings. The Air District provides feedback and support concerning the Port's other grant-seeking endeavors to electrify and transition to zero-emissions.	In progress	WOEIP, Air District, Port of Oakland
22	The City of Oakland adopts more stringent air quality construction and operations requirements.	The City adopted the EJ Element (September 2023) and related Planning Code Amendments (October 2023). EJ has related policies: 1.8, 1.12 and 1.13. The City updated its Standard Conditions of Approval to address EJ-1.8, EJ-1.12, and 1.13. Underlined changes made can be found in Appendix A of the Final EIR (https://cao-94612.s3.us-west-2.amazonaws.com/documents/Oakland-Phase-I-2045-GPU-FEIR July-2023.pdf, pages 77-82 of the pdf). EJ-1.8 Air Filtration. Consistent with the State's Building Energy Efficiency Standards for air filtration in effect as of January 1, 2023, require newly constructed buildings of four or more habitable floors to include air filtration systems equal to or greater than Minimum Efficiency Reporting Value (MERV) 16 (ASHRAE Standard 52.2) EJ-1.12 Construction Site Impacts. Through standard conditions of project approval, code enforcement, and other regulatory mechanisms, require new	Complete	City of Oakland

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		development to minimize disturbances of natural water bodies and natural drainage systems caused during construction and to implement measures to protect areas from road dust, erosion, and sediment loss.		
		EJ-1.13 Emissions from Construction Activities. Require projects to implement construction air pollution and greenhouse gas emissions controls and applicable mitigation strategies for all construction sites to the maximum extent feasible. Refer to Best Construction Practices and Best Available Retrofit Control Technology (BARCT) recommended by BAAQMD.		
23	The City adds the AB 617 Steering Committee Co- Chairs to the official lists to receive notification of "Applications on File" for discretionary planning projects and "Meeting Agendas" of the Planning Commission and its five Subcommittees, and the Landmarks Preservation Board.	Completed.	Complete	City of Oakland
24	The Air District works with agency and local partners to improve referral and follow-up on nuisance and odor complaints by 2021. This work includes updates to complaint processes, enforcement procedures, and coordination with other public agencies regarding odors, backyard burning, and other complaints.	Completed.	Complete	Air District
25	To address potential changes in local pollution exposure, the City of Oakland works with local community groups to address gentrification and the pricing out of long-term residents caused by gentrification. This effort includes meetings with local community groups and incentives and loans targeted to existing businesses and residents. Funding for this effort is identified as needed.	See Strategy revisions - This strategy is proposed to be closed out.	Close out	City of Oakland

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26	The City and Port of Oakland will work to establish permanent locations for parking and staging of Port related trucks and cargo equipment, i.e. tractors, chassis, and containers. Such facilities will provide long-term leases to parking operators and truck owner-operators at competitive rates. Such facilities will be at the City or Port logistics center or otherwise not adjacent to West Oakland residents.	Port has received funding, 16 awards, for programs and projects under the Ports Zero Emissions initiative and Seaport 2020 Beyond Plan, and that align with City ECAP and AB617 WOCAP. These projects and grant applications are coordinated with the Port Community Electrification Committee. Link to Grant Awards: WOCAP, City ECAPhttps://www.portofoakland.com/environment/environmental-stewardship/sustainability-climate-resiliency/ Link to Comprehensive Listing of Port Grants/Applications/Awards/Future Opportunities/ Not Selected: https://www.portofoakland.com/environment/environmental-stewardship/sustainability-climate-resiliency/ Recent application for USEPA Clean Ports Grant: https://www.portofoakland.com/cleanports/ ZE equipment (CHE, Drayage Trucks) and supporting infrastructure.	In progress	City of Oakland, Port of Oakland, Caltrans
27	The City of Oakland and other appropriate local agencies limit fugitive dust from construction activity through better enforcement of existing regulations and permit requirements	Completed.	Complete	City of Oakland
28	The California Air Resources Board develops improvements to the existing truck and bus inspection and maintenance programs. Potential improvements include increasing warranty requirements, adding a lower in-use emissions performance level, increasing inspections in West Oakland, using aggregated GPS and other telecommunication records to identify locations of idling trucks and buses, and partnering with the Air District to develop a system using on-board diagnostic and remote sensing devices to identify and fix faulty emissions abatement devices on trucks and buses.	See enforcement update for Action "Enf_CARB_1."	Ongoing	CARB

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29	The California Air Resources Board develops the following regulations to increase the number of zero-emission trucks and buses operating in West Oakland: The Advanced Clean Trucks regulation to transition to zero-emission technology those truck fleets that operate in urban centers, have stop-and-go driving cycles, and are centrally maintained and fueled. Amendment to the drayage truck regulation to transition the drayage truck fleet to zero emissions.	The Advanced Clean Fleets regulation was adopted on April 28th, 2023 by CARBs board at the second public hearing.	In progress	CARB
30	The California Air Resources Board, in partnership with the Steering Committee, WOEIP and the Air District, conduct a pilot study to assess local idling impacts from trucks and buses. The Steering Committee, WOEIP and the Air District advocate for "Clean Idle" trucks and buses to idle no more than 5 minutes when in West Oakland.	In 2023, CARB did not observe any illegally idling diesel trucks in West Oakland. CARB began coordinating with WOEIP on an initiative to install "No Idling" signs at public schools and streets within the community and will continue to do so in 2024.	In progress	CARB
31	The California Air Resources Board develops amendments to the transport refrigeration unit (TRU) regulation to transition the TRU fleet to zero-emission operations by requiring both zero-emission technology and supporting infrastructure.	Completed.	Complete	CARB
32	The California Air Resources Board develops amendments to the existing cargo handling equipment regulation, which includes yard trucks, rubber-tired gantry cranes, and top handlers, that may reduce idling and transition the various types of equipment to zero-emission operation.	CARB is beginning the rulemaking process for amendments to the CHE rule. No formal documents or outreach yet. CARB is participating in contracts with CHE experts to begin the rulemaking process. https://ww2.arb.ca.gov/our-work/programs/cargo-handling-equipment	In progress	CARB

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33	The California Air Resources Board develops a handbook that identifies best practices for the siting, design, construction, and operation of freight facilities to minimize community exposure to air pollution.	Currently, staff resources assigned to the development of a standalone Freight Handbook have been reprioritized to work on development of freight regulations. To ensure that the recommendations included in the Concept Paper for the Freight Handbook and public stakeholder input are utilized, CARB staff are working to integrate this information into the Community Air Protection Program Resource Center (https://ww2.arb.ca.gov/ocap_resource_center)	Complete	CARB
34	The California Air Resources Board develops regulations to expand California-specific standards for new light-duty vehicles, impacting 2026 and later model year vehicles, to increase the number of new zero-emission and plug-in hybrid electric vehicles sold in California and increase the stringency of fleet-wide emission standards for greenhouse gases and criteria pollutants.	OAL has approved this rulemaking and filed with the Secretary of State on November 30, 2022. The effective date of the regulation is November 30, 2022.	Complete	CARB
35	The California Air Resources Board develops new standards for small off-road engines (SORE), which are spark-ignition engines rated at or below 19 kilowatts and used primarily for lawn, garden, and other outdoor power equipment.	Completed. Amendments to the SORE regulations will become effective January 1, 2023	Complete	CARB
36	The City of Oakland requires industrial and warehouse facilities to provide electrical connections for electric trucks and transport refrigeration units in support of CARB regulations.	Completed.	Complete	City of Oakland

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37	The Port of Oakland, as part of the 2020 and Beyond Seaport Air Quality Plan, supports the transition to zero-emission drayage truck operations, including setting interim year targets out to 2035, coordinating an extensive zero-emission truck commercialization effort, working with the City of Oakland to amend local ordinances to increase the allowable weight limits for single-axle, zero-emission trucks on local streets located within the Port and the Oakland Army Base/Gateway areas, and developing an investment plan for needed upgrades to the Port's electrical infrastructure. The Port of Oakland also works with the California Public Utilities Commission and the California Energy Commission to study the development of time-of-day electric rate structures favorable to truck operators.	Port has received funding, 16 awards, for programs and projects under the Ports Zero Emissions initiative and Seaport 2020 Beyond Plan, and that align with City ECAP and AB617 WOCAP. These projects and grant applications are coordinated with the Port Community Electrification Committee. Link to Grant Awards: WOCAP, City ECAPhttps://www.portofoakland.com/environment/environmental-stewardship/sustainability-climate-resiliency/ Link to Comprehensive Listing of Port Grants/Applications/Awards/Future Opportunities/ Not Selected: https://www.portofoakland.com/environment/environmental-stewardship/sustainability-climate-resiliency/ Recent application for USEPA Clean Ports Grant: https://www.portofoakland.com/cleanports/ ZE equipment (CHE, Drayage Trucks) and supporting infrastructure.	In progress	Port of Oakland
38	The City of Oakland, consistent with the West Oakland Truck Management Plan: 1) improves training for police officers, community resource officers, and parking control technicians who issue truck and trailer parking tickets; 2) changes the parking regulations so they are easier to enforce; 3) increases truck parking fines; 4) targets enforcement at specific times and locations; and 5) improves signage directing drivers to available truck parking.	In FY 24/25, the West Oakland STEP grant will be purchasing at least one vehicle license plate reader to support truck parking enforcement.	In progress	City of Oakland, Port of Oakland, ACTC
39	The City of Oakland, consistent with the West Oakland Truck Management Plan: 1) improves signage regarding existing truck routes; 2) works with businesses on preferred routes to use when destinations are not located on truck routes; and 3) adds to, or changes, truck routes and prohibited streets.	1) Truck Route Signage: In 2025, City of Oakland Dept. of Transportation (OakDOT) will be refreshing signage for existing truck routes and truck prohibited streets; 2) unknown progress; 3) Proposed changes to the truck route network were not approved by Council when brought by OakDOT staff in 2022. The effort is currently on hold.	In progress	City of Oakland, Port of Oakland

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40	The City of Oakland, consistent with the West Oakland Truck Management Plan, implements, in consultation with West Oakland residents, traffic calming measures to keep truck traffic off residential streets.	See Strategy Revisions – Proposed continue strategy: City of Oakland Dept. of Transportation (OakDOT) was originally going to design truck traffic calming measures, in collaboration with residents, as part of the West Oakland Sustainable Transportation Equity Project grant from the California Air Resources Board. Due to delays in the grant implementation, it is unknown at this time whether that design process will move forward. We will know more in the next few months, as we work with our grant partners to determine feasibility.	In progress	City of Oakland, Port of Oakland
41	The Air District works with CARB to streamline the process for providing financial incentives for fueling infrastructure, and for low and zero-emission equipment. The Air District increases outreach and assistance to individual owner-operators and small companies by providing two workshops and enhanced outreach in West Oakland by 2022.	In the last year, the Air District funded two electric infrastructure projects totaling over \$6.5 million that will support truck fleets servicing the Port of Oakland (24MOY14, 24MOY20). 1. Air District staff have been meeting regularly with CARB and other air districts to provide input and suggested updates to the State's incentives program guidelines to better meet the needs of communities and air districts and increase effectiveness of programs that can incentivize the switch to zero-emission technologies. CAP Incentives updates were approved in March 2024 and will undergo additional updates in the coming year. Updates to the Carl Moyer Program are expected to be approved in October 2024. 2. The Air District continues to provide incentive information to operators in West Oakland and at the Port of Oakland through workshops and meetings. Specifically, the Air District participates in the Community Electrification Committee to discuss incentive opportunities. 3. Air District staff presented at workshops for truck operators who service the Port (one in-person and one online) to share information about current funding opportunities for electrifying their fleets. Staff will also begin attending regular meetings held by the Port for truck operators to support and provide information on transitioning to electric trucks. The meetings are held every two months.	Ongoing	Air District
42	The City and Port of Oakland award long-term leases to vendors that will deliver trucker services (including mini-market and convenience stores, fast food, and fast casual restaurants), and parking to keep trucks off West Oakland streets.	Port has received funding, 16 awards, for programs and projects under the Ports ZeroEmissions initiative and Seaport 2020 Beyond Plan, and that align with City ECAP and AB617 WOCAP. These projects and grant applications are coordinated with the Port Community Electrification Committee.	In progress	City of Oakland, Port of Oakland

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		Link to Grant Awards: WOCAP, City ECAPhttps://www.portofoakland.com/environment/environmental- stewardship/sustainability-climate-resiliency/ Link to Comprehensive Listing of Port Grants/Applications/Awards/Future Opportunities/ Not Selected: https://www.portofoakland.com/environment/environmental- stewardship/sustainability-climate-resiliency/ Recent application for USEPA Clean Ports Grant: https://www.portofoakland.com/cleanports/ ZE equipment (CHE, Drayage Trucks) and supporting infrastructure.		
43	The Port of Oakland studies the effects on truck flow and congestion due to increasing visits from larger container ships, the feasibility of an off-terminal container yard that utilizes zero-emission trucks to move containers to and from the marine terminals, and the potential efficiency gains from increasing the number of trucks hauling loaded containers on each leg of a roundtrip to the Port.	See Strategy Revisions – Proposed revision: The Port of Oakland studies the effects on truck flow, congestion and related potential health impacts due to increasing visits from larger container ships. The study should include: • evaluation of the impact on air quality and truck congestion on container ship "peak offload days" potentially using a health impact assessment framework • feasibility of an off-terminal container yard that utilizes zero-emission trucks to move containers to and from the marine terminals • potential efficiency gains from increasing the number of trucks hauling loaded containers on each leg of a roundtrip to the Port.	Not yet started	Port of Oakland
44	The Alameda County Transportation Commission works with West Oakland residents and businesses to develop mitigations to short- and long-term impacts caused by the construction of the 7th St Grade Separation East Project and the implementation of other elements of the GoPort Initiative.	See Strategy #12.	In progress	Alameda County Transpor tation Commiss ion, Oakland Dept. Transpor tation
45	The City of Oakland collaborates with AC Transit, BART, Emery-Go-Round, and the local community to implement the broad array of transit improvements identified in the West Oakland Specific Plan.	West Oakland Transit Improvements: City of Oakland Dept. of Transportation's (OakDOT's) Traffic Capital Projects team will continue working on 95% design plans for the project, which they expect to complete by September 2024, followed by 100% design, which should be complete by December 2024. We anticipate construction in 2025.	Ongoing	Oakland Dept. Transpor tation, AC

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gy#	Brief Strategy Description	West Oakland Universal Basic Mobility Pilot: Through 2024, staff will continue to recruit program participants and continue the distribution of pre-paid debit cards with a value of up to \$320 each. The City has funding for up to 1,000 participants. The program will end in December 2025.		Agency Transit, BART
46	The City of Oakland collaborates with MTC and ACTC to consider a program for extending car sharing to low-income individuals and groups.	See Strategy revisions - This Strategy is proposed to be closed out.	Close out	Oakland Dept. Transpor tation, ACTC
47	AC Transit implements the Grand Avenue transit improvements identified in its Bus Rapid Transit Plan, as well as mitigations if the improvements cause increases in truck and auto idling on Grand Avenue.	City of Oakland Dept. of Transportation (OakDOT) has completed a Complete Streets repaying effort on West Grand between Mandela Parkway and Market Street that removes one lane of vehicle traffic from Grand Avenue, installs buffered bike lanes, creates protected intersection treatments at high-volume intersections, calms traffic, and improves pedestrian safety on this High Injury Corridor.	Complete	AC Transit, City of Oakland
48	The Air District plans to offer up to \$7 million per year to replace older autos through the Vehicle Buy Back program, and up to \$4 million per year through the Clean Cars for All program to replace older autos and provide an incentive for a hybrid electric, plug-in hybrid electric, battery electric vehicle, or Clipper Card for public transit.	 Vehicle Buy Back program: As written, the strategy is complete, and the Air District continues to enhance this program. In 2024, the Air District Board of Directors approved an increase to the incentive offered from \$1,200 to \$1,500 to scrap 1998 model and older cars. Clean Cars for All received an additional \$3.4M in funding. The program is currently open and accepting applications. 	Ongoing	Air District
49	The Air District offers financial incentives to replace box and yard diesel trucks with zero emission trucks owned by West Oakland businesses every year.	The Air District continues to offer funding annually to replace diesel yard trucks with ZE trucks through our VW Zero-Emission Freight and Marine and Heavy-Duty Vehicle and Equipment Replacement programs. The Heavy-Duty Vehicle and Equipment Replacement program was updated in 2023 to prioritize funding to the Air District's priority areas, including West Oakland. However, no new applications were received this year.	Ongoing	Air District
		The Air District provided a letter of support for the Port's application to the EPA to fund zero emission vehicles and equipment including yard trucks. The Air District also opened an infrastructure solicitation in June 2024 that offers funding for projects that install electric charging stations for equipment such as yard trucks at the Port.		

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50	The Air District offers financial incentives to upgrade tugs and barges operating at the Port of Oakland with cleaner engines every year.	The strategy as written is complete as the Air District continues to provide funding annually through its Heavy-Duty Vehicle and Equipment Replacement Program. In addition, the Air District continues to make successful progress in cleaning up tug boats. Three tug boat projects were awarded over \$9 million in the last year (23MOY145, 23MOY146, 25MOY85) and will repower the tug engines to Tier 4 engines, the cleanest diesel engine available. In the last year, the Air District also approved an award of up to \$5 million for an infrastructure project that will help to bring the first zero-emission tug boat to the SF Bay. The funded project will install shoreside power at the Port of Oakland for Amnav Maritime's proposed zero emissions tug boat and will be co-funded by the California Energy Commission (CEC). The ZE tug itself will cost \$52 million and is being funded in part by CARB's Advanced Technology Demonstration Program.	Ongoing	Air District, Port of Oakland
		The tug and its supporting infrastructure are expected to be in operation in early 2027. The Air District is also obtaining approval for an award for another shorepower project at the Port of Oakland that will install shoreside power to power a new zero-emission bulk cargo vessel (Eagle Rock Aggregates). The project has been evaluated and awarded and is awaiting approval by CARB and the Port Commission. The vessel itself will be funded in part by CARB's Advanced Technology Demonstration Program.		
51	The Air District offers financial incentives to upgrade line-haul, passenger, and switcher (yard) locomotives with cleaner engines every year.	The Air District continues to offer funding annually to upgrade diesel locomotives through our VW Zero-Emission Freight and Marine and Heavy-Duty Vehicle and Equipment Replacement programs. Direct outreach to locomotive owner/operators in CERP communities is ongoing. There were no new project applications received for West Oakland in the last year.	Ongoing	Air District
52	The Air District plans to offer financial incentives to support the development of a hydrogen refueling station and the purchase of trucks and off-road equipment powered by fuel cells every year.	In 2021, the Air District co-funded 30 hydrogen fuel cell trucks that operate out of the Port of Oakland. These trucks now fuel at a hydrogen fueling facility the Port and are operational. This project was co-funded by ACTC, CARB and the CEC. Furthermore, the Air District has funded hydrogen fueling station in Emeryville and associated fuel cell buses for AC Transit's fleet. The facility and fleet are now operational.	Ongoing	Air District

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53	The Air District offers financial incentives to replace long-haul diesel trucks with zero-emission trucks owned by West Oakland businesses every year.	In early 2024, the Air District contracted two new infrastructure projects that will support the transition to electric truck fleets that service the Port of Oakland. A new competitive infrastructure solicitation opened in June 2024 that offers funding for public and private electric charging stations to support heavy-duty diesel equipment, including projects that support trucks servicing the Port. The Air District is developing a program for replacement of heavy-duty trucks to zero-emission that will open in 2025.	Ongoing	Air District
54	The Air District will award up to \$1 million in funding incentives to pay for the cost of purchasing cleaner equipment in West Oakland, potentially including: electric lawn and garden equipment, battery electric Transport Refrigeration Units, and cargo-handling equipment, by 2021.	This strategy as written has been met because the Air District has funded over \$1 million in upgrades to cargo-handling equipment (such as RTGs and forklifts) through its Heavy-Duty Equipment Replacement program. This strategy is ongoing because: 1. Funding continues to be made available annually for TRUs and cargo-handling equipment throught the Heavy-Duty Vehicle and Equipment Replacement program that was update in 2023 to prioritize funding to the Air District's priority areas, including West Oakland. In addition, the Air District has been meeting regularly with CARB and other air districts to provide input and suggested updates to the State's Carl Moyer program guidelines to enhance funding opportunities for all equipment categories. Updated guidelines are expected to be approved in October 2024. 2. Air District staff are developing a lawn and garden equipment program that will launch within the next year.	Ongoing	Air District
55	The Bay Area Rapid Transit District will develop a bike station with controlled access at the West Oakland BART Station.	Mandela Station has their entitlements for the Planned Unit Development and FDP's, but no building permits have been filed to date. Developer is in the process of getting funding for the first phase for the large affordable housing project on the site. Project website: https://www.oaklandca.gov/projects/west-oakland-bart-mandela-station-1	In progress	BART

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56	The City of Oakland implements the broad array of bicycle and pedestrian improvements identified in the West Oakland Specific Plan, the 2019 Oakland Bike Plan, and the 2017 Oakland Walks Pedestrian Plan.	The City of Oakland Bike Plan webpage contains the progress on implementing the Bike Plan (https://www.oaklandca.gov/resources/bicycle-plan). Transportation and street improvements are also part of the City's Capital Improvement Program. The City develops a new CIP Budget every two years. See project webpage: https://www.oaklandca.gov/topics/capital-improvement-program .	Ongoing	Oakland Dept. Transpor tation, ACTC
57	Through the Pilot Trip Reduction Program, the Air District offers incentives for the purchase of electric bicycles for bike share programs.	Completed.	Complete	Air District
58	The Oakland Unified School District and the City of Oakland, as part of the Safe Routes to Schools Program in West Oakland, begin twice a day street closures next to public schools in West Oakland to keep cars and trucks away from arriving and departing students.	See Strategy revisions - This strategy is proposed to be closed out.	Close out	OUSD, City of Oakland, ACTC
59	The City of Oakland increases the frequency of street sweeping to decrease road dust, particularly on streets adjacent to schools, on designated truck routes, and on streets near freeways. The California Department of Transportation increases the frequency of street sweeping along the I-880, I-980, and I-580 freeways. Consideration is given to technology and techniques that avoid re-suspending road dust.	See Strategy revisions – Proposed revision: Study the effectiveness of street sweeping on road dust, and if effective, work with the City of Oakland and Caltrans to increase the frequency of street sweeping on streets adjacent to schools, on designated truck routes, and on streets near freeways and along the I-880, I-980, and I-580 freeways. Consider technology and techniques that avoid re-suspending road dust.	In progress	WOEIP
60	The California Air Resources Board develops amendments to the At-Berth Air Toxics Control Measure to further reduce ship emissions at berth by strengthening the regulation to cover more vessel visits and types of ships.	CARB hosted a public workshop on February 14, 2023, to discuss the findings and key recommendations included in the At Berth Interim Evaluation Report, which was posted to CARB's website on December 1, 2022. Slides from this workshop can be found on CARB's At Berth program webpage. The general public/stakeholders may comment/provide feedback to CARB at any time via shorepower@arb.ca.gov. https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessels-berth-regulation	In progress	CARB

Strate gy #	DISTRICT/PARTNER/CARB STRATEGIES Brief Strategy Description	Qualitative Status Update July 1, 2023 to June 30, 2024	Status	"Lead" Agency
61	The California Air Resources Board develops amendments to the Commercial Harbor Craft Air Toxics Control Measure to achieve additional control of harbor craft emissions. The Steering Committee, WOEIP, and the Air District advocate for early compliance of harbor craft operating near West Oakland.	At the March 24th Board Hearing, the Board approved the Commercial Harbor Craft Amendments, which will take effect on January 1st, 2023. The Board directed staff to release a 15-day package for public comment, and all public comments will be included in the Final Statement of Reasons.	Complete	CARB
62	The California Air Resources Board develops regulations to reduce idling emissions from locomotives at rail yards with an emphasis on reducing emissions from locomotives not preemptied under the federal Clean Air Act. The Steering Committee, WOEIP, and the Air District advocate for early compliance for locomotives operating in West Oakland.	Completed. 15-day changes, posted March 1, 2023 2nd Board Hearing, Regulation Adopted — April 27, 2023 https://ww2.arb.ca.gov/our-work/programs/reducing-rail-emissions-california	Complete	CARB
63	The Port of Oakland implements a Clean Ship Program to increase the frequency of visits by ships with International Maritime Organization Tier 2 and Tier 3 engines.	See Strategy revisions – Proposed revision: Expand the Port of Oakland's existing and highly successful shorepower program by adding mobile shorepower outlets, emissions capture, and control barges, and providing shorepower for bulkers.	In progress	Port of Oakland
64	The Port of Oakland implements a Clean Locomotive Program to increase the number of U.S. EPA Tier 4 compliant locomotives used by the UP, BNSF, and OGRE railways to provide service in and out of the Port of Oakland.	See Strategy Revisions – Proposed revision: CARB, the Port, EPA Region 9 and the Air District collaborate and coordinate to continue to strengthen CARB's Clean Locomotive Rule.	Not yet started	CARB, Port, EPA Region 9 and Air District
65	The Port of Oakland studies the feasibility of using electric switcher locomotives at the two Port railyards.	See Strategy revisions – Proposed revision: Continue to develop a partnership with the two Port of Oakland rail tenants on grant funding for electric switchers.	In progress	Port of Oakland
66	The Air District works with Schnitzer Steel to study the feasibility of installing a shore-power or bonnet system to capture and abate vessel emissions at the West Oakland facility by 2021.	CARB regulation dictate controls and installation dates: https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessels-berth-regulation	Not yet started	Air District

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67	The Air District intends to seek authority in 2021 to reduce emissions and risk from magnet sources, such as the Port of Oakland, freight operations and warehouse distribution centers.	See Strategy revisions – Proposed revision: The Air District intends to pursue future programs to reduce emissions and risk from magnet sources related to the goods movement industry via an Indirect Magnet Source policy package. The policy package could include rule making, model ordinances and technical support to local governments to develop their own policies. Emissions reductions may come from the transport trucks serving the Port of Oakland, warehouse distribution centers and other designated freight locations.	In progress	Air District
68	The Air District proposes amendments to existing regulations to further reduce emissions from metal recycling and foundry operations, such as changes to: 1) Rule 6-4: Metal Recycling and Shredding Operations, which requires metal recycling and shredding facilities to minimize fugitive PM emissions through the development and implementation of facility Emission Minimization Plans; and 2) Rule 12-13: Foundry and Forging Operations, which requires metal foundries and forges to minimize fugitive emissions of PM and odorous substances through the development and implementation of facility Emission Minimization Plans by 2025.	 Work has begun on white paper evaluation of metal recycling and shredding operations and potential control strategies and concepts. Staff presented an update on the white paper at the Stationary Source Committee meeting on February 14, 2024. The White Paper was released for public comments in July 2025. 	In progress	Air District
69	The Air District's Rule 11-18: Reduce Risk from TACS at Existing Facilities requires selected Bay Area facilities to reduce risk or install best available retrofit control technology for toxics on all significant sources of toxic emissions. Based on the results of the facility-specific health risk assessment, the Air District may require Schnitzer Steel and the East Bay Municipal Utility District to adopt a Risk Reduction Plan if the health risk exceeds a risk action level per the requirements of Rule 11-18 implementation. The Air District will keep the CSC appraised of amendments to Rule 11-18.	For Rule 11-18, Implementation Procedures were amended and posted on April 29, 2024. The amendment process for these procedures included a public comment process. The Air District is also working on amendments to Rule 11-18 that are intended to increase the pace at which Health Risk Assessments (HRA) are completed and approved and risk reductions are implemented. We expect to have a workshop on these amendments before the end of the year. Final permit amendments for Schnitzer's shredder controls are in progress. Inventory development for Schnitzer's site-wide Rule 11-18 HRA is in progress.	In progress	Air District

Strate gy #	DISTRICT/PARTNER/CARB STRATEGIES Brief Strategy Description	Qualitative Status Update July 1, 2023 to June 30, 2024	Status	"Lead" Agency
70	The Air District intends to provide incentives to replace existing diesel stationary and standby engines (fire pumps, dryers, conveyor belts, cranes) with Tier 4 diesel or cleaner engines. Priority is given to upgrading Tier 0, 1 & 2 engines located closest to schools, senior citizen centers, childcare facilities, and hospitals.	 After much input by air districts, CARB approved updates to the Community Air Protection Incentives Guidelines 2024, which included the addition of Emergency Stationary Diesel Generator Replacement Projects as an eligible category, allowing districts to fund replacements of older diesel generators with zero emission technologies. The Air District will consider developing a program for this category that will prioritize local small businesses. The Air District continues to make funding available annually for eligible portable and stationary engines (> 25hp) under its Heavy-Duty Vehicle and Equipment Replacement program that was updated in 2023 to prioritize funding to the Air District's priority areas, including West Oakland. No eligible stationary/standby engine project applications were received in the last year. 	In progress	Air District
71	The Air District proposes new regulations to reduce emission sources from autobody and other coating operations, including the use of vanishing oils and rust inhibitors by 2025.	 Priorities for source evaluation and rule development efforts for 2023 include plans to begin additional white paper evaluations (including strategies identified in WOCAP) as capacity allows. Work has not yet begun on white paper evaluation of this source. 	Not yet started	Air District
72	The Air District proposes new regulations to reduce emissions from wastewater treatment plants and anaerobic digestion facilities, such as a regulation to reduce emissions of methane, reactive organic gases, and oxides of nitrogen by 2020.	Work has begun on white paper evaluation of this source and potential control strategies and concepts.	In progress	Air District
73	The Air District proposes amendments to existing Regulation 8-5 to further reduce emissions of reactive organic gases and other toxic compounds from organic liquid storage tanks by 2020. Organic liquid storage tanks are defined in Regulation 8-5.	See Strategy revisions - this strategy is proposed to be closed out.	Close out	Air District

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74	The Air District advocates for a plan that East Bay Clean Energy and PG&E are spearheading to replace the Dynegy Power Plant with a cleaner and more reliable source of energy by 2022. The proposed location for this initiative is the Oakland C, Oakland L, Maritime Port of Oakland, and Schnitzer Steel substation pocket, which is located within PG&E's Oakland distribution planning area. Eligible resource types include: (1) in-front-of-the-meter renewable generation; (2) in-front-of-the-meter energy storage, and (3) behind-the-meter energy storage. EBCE is seeking to procure the energy, resource adequacy (RA), and renewable energy credits (RECs) associated with these local resources, while PG&E will focus on meeting Oakland's transmission reliability needs.	Completed.	Complete	East Bay Commun ity Energy, PG&E
75	The Air District intends to develop and fund a program to reduce exposure to air pollution at schools, day care facilities, senior centers, health facilities, public facilities, apartments and homes in West Oakland by 2021. This Strategy includes policies or grants for building energy efficiency upgrades to reduce infiltration of pollutants and the installation of high-efficiency air filtration systems (rated MERV 14 or higher).	The locations for Clean Air Centers are set through the one-time funding of AB836. No others have been funded within West Oakland. Some locations are running the portable air filters 24 hours a day, seven days per week.	In progress	Air District
76	The City of Oakland works with local and agency partners to implement regional and local adoption of the State Department of Public Health's Health In All Policies program.	See Strategy revisions – Proposed revision: The WOCAP Community Steering Committee will adopt a Health in All Policies framework to better consider the health benefits and impacts of proposed plans, policies, and programs.	Not yet started	WOCAP Steering Committ ee
77	Consistent with the Healthy Development Guidelines, the City of Oakland implements a project-wide smoking ban in Oakland at new developments.	See Strategy revisions – Proposed revision: Consistent with the Healthy Development Guidelines and the Housing Element, the City of Oakland will create an ordinance to prohibit smoking in existing and new multi-unit housing to protect other residents and neighbors from external impacts. The ordinance should consider ways to protect violators from evictions and assist violators in quitting smoking with support from the Alameda County Public Health Department and/or other community health partners.	Not yet started	City of Oakland (Planning), Alameda County Public Health

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				Departm ent
78	Consistent with the State's Building Energy Efficiency Standards for air filtration in effect as of January 1, 2020, the City of Oakland requires newly constructed buildings of four or more habitable floors to include air filtration systems equal to or greater than MERV 13 (ASHRAE Standard 52.2), or a particle size efficiency rating equal to or greater than 50 percent in the 0.3-1.0 μm range and equal to or greater than 85 percent in the 1.0-3.0 μm range (AHRI Standard 680).	Completed.	Complete	City of Oakland
79	The City of Oakland works with agency and community partners to undertake participatory budgeting with West Oakland community members to allocate local health improvement grants that reduce emissions or exposure to emissions.	See Strategy revisions – Proposed revision: In alignment with General Plan EJ-A.34 and EJ-A.36 the WOCAP and other EJ Priority Community Leaders will advocate that the City of Oakland plan the approach to and begin the participatory budgeting process for EJ community investments, especially ones that reduce emissions or exposure to emissions and protect public health. The City should provide WOCAP and other priority EJ communities with a regular progress report on this strategy.	Not yet started	City of Oakland (City Administ rator's Office and Finance Departm ent)
80	The Air District researches actions that are potentially exposure-reducing, such as: 1) an engineering evaluation of exhaust stacks and/or vents to determine if relocation will reduce local exposure; (2) a study to determine if smart air filtration systems can reduce exposure by in-taking air during daily non-peak vehicle travel times, such as between midnight and four a.m.; and (3) a study of the potential air quality benefits of a centralized package delivery site such as personal lockers by 2025.	See Strategy revisions - This strategy is proposed to be closed out.	Close out	Air District

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81	The City of Oakland works with local businesses, partner agencies, and community members to develop a Green Business Strategic Plan to attract, retain, and support innovative green companies in West Oakland. This effort includes coordination with State and local agencies to develop criteria for green business certification for new and existing businesses.	The Economic Development Action Plan (EDAP), which is slated to be released by the City of Oakland Economic and Workforce Division by the end of 2024, will contain a Climate Sector Strategy, including specific actions to attract climate tech businesses. EDAP goals will also be reflected in the Land Use and Transportation Element (LUTE) that is being updated as part of the larger General Plan Update.	In progress	City of Oakland, Alameda County
82	The California Office of Environmental Health Hazard Assessment, in partnership with the Steering Committee, the City of Oakland, CARB, and the Air District, studies setting a limit on West Oakland's cumulative exposure to TACs.	See Strategy revisions – Proposed revision: Advocate for expanded basic research on health impacts of PM2.5 exposure and add basic research on NOx, SOx, and Toxic Air Contaminants (TACs). Notify Air District and the WOCAP CSC when there are open calls for suggesting new research topics and help the CSC with understanding the research concept solicitation process. Provide updates, as requested by the CSC, on future research projects that address cumulative impacts.	Not yet started	CARB, OEHHA
83	The City of Oakland works with community partners to implement the Healthy Development Guidelines for new building projects.	The Environmental Justice Element was adopted in September 2023 and included many health-related policies aligned with Healthy Development Guidelines. There is potential for more strategies to be adopted as part of Phase 2 of the General Plan Update.	In progress	City of Oakland
84	The Alameda County Public Health Department expands its Asthma Management programs.	See Strategy revisions - This strategy is proposed to be closed out.	Close out	Alameda County Public Health Departm ent
85	The City of Oakland works with Alameda County Public Health Department to improve access to medical services within West Oakland. This work expands existing programs such as: (1) Child Health and Disability Prevention Program free health check-ups for infants through teens; (2) Asthma Management at schools; (3) Building Blocks for Health Equity which works to correct inequity in health outcomes for children; (4) Urban Male Health Initiative which is charged with reducing the premature mortality of men and boys in Alameda	See Strategy revisions – Proposed revision: The Alameda County Public Health Department, West Oakland Health Council, and other community health providers in West Oakland increase marketing and education to ensure West Oakland residents know about and utilize existing health programs.	In progress	Alameda County Public Health Departm ent and West Oakland Health Center

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	County; and (5) Alameda County Health Improvement Plan to develop and implement a five- year county plan to improve health and achieve health equity.			
86	The Alameda County Public Health Department works with agency and local partners to investigate the use of green building approaches in housing construction and renovation that will reduce emissions and exposure to air pollution emissions. This work examines weatherization/energy efficiency and renewable energy services. This work draws from the Contra Costa County Health Department's pilot effort in cooperation with the Regional Asthma Management Program.	See Strategy revisions - This strategy is proposed to be closed out.	Close out	Alameda County Public Health Departm ent
87	CARB conducts a technology assessment of commercial cooking rules and control strategies and proposes incentives and/or a Suggested Control Measure for commercial cooking. The Air District offers incentives and/or proposes a regulation to reduce emissions from commercial cooking.	CARB conducted research with the Districts on primary sources and pollutants within the commercial cooking category. We found that the majority of local emissions from commercial cooking come from underfired charbroiling. We are now moving forward with the districts to evaluate existing and emerging control technologies for underfired charbroiling. The results of the technology evaluation will determine our next steps.	In progress	CARB
88	The City of Oakland studies revising standard conditions of approval and/or similar requirements for large projects to require "opt-up" to East Bay Community Energy's Brilliant 100 carbon-free electricity supply.	See Strategy revisions - This strategy is proposed to be closed out.	Close out	City of Oakland

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89	The Alameda CTC and Caltrans will continually engage with the community, at a minimum through participation in quarterly meetings of the WOCAP implementation committee, on early project planning and delivery for projects in West Oakland where Alameda CTC and/or Caltrans is the project sponsor in order to ensure projects do not increase transportation impacts on residents. These projects will undergo appropriate reviews to assess the environmental and health impacts, and potential local benefits, and adopt associated mitigation measures so they do not result in a net increase in air pollution or health inequities for residents most impacted by the county's freight transportation system in West Oakland.	Caltrans representative continues to attend and engage with WOCAP steering committee on projects in West Oakland	In progress	ACTC Caltrans
FSM_1	The Air District will investigate local impacts of backyard wood fires and strategies to minimize these impacts.	See update for FSM 5.	In progress	Air District
FSM_2	The Air District will analyze road dust emission rates for local streets.	Completed.	Complete	Air District
FSM_3	The Air District will investigate potential rulemaking to limit fugitive dust from construction activity.	 Staff have continued to consider comments and input received on the Fugitive Dust White Paper published in 2023. Draft regulatory amendments are being developed and will be shared with the community and stakeholders for feedback. 	In progress	Air District
FSM_4	The Air District will work with CARB, EBMUD, and other agency and community partners to identify strategies and incentives to address community concerns about odors, health-related emissions, and disclosing to the community information about complaints and complaint resolutions from the EBMUD facility in the Owning Our Air plan area.	See Strategy Revisions – Proposed revision: EBMUD identifies strategies and incentives to address community concerns about odors and disclosing to the community information about complaints and complaint resolutions from EBMUD facility.	In progress	EBMUD
FSM_5	The Air District will investigate the feasibility of amending Regulation 5 (Open Burning) and/or Reg. 6-3 (Wood Burning Devices) to prohibit recreational fires	An update on mitigation options for woodsmoke impacts and white paper status was presented to the Stationary Source Committee in May 2024. The white paper on woodburning is currently under development, and is tentatively planned to be released in Q4 of 2024.	In progress	Air District

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FSM_6	The Air District works with the Port of Oakland to optimize the Port appointment system to minimize truck idling.	See Strategy Revision – Proposed continue: The Air District works with the Port of Oakland to optimize the Port appointment system to minimize truck idling. All four public agencies (i.e., Air District, Port, City of Oakland (Mobility Division (truck parking) and Code Enforcement Division) and CARB) provide semi-annual updates on coordination efforts pertaining to enforcement.	Not yet started	Air District, Port of Oakland
Enf_AD _1	Increase Frequency of Compliance Inspections at Stationary Sources: To ensure compliance with air quality standards, rules and regulations, the Air District's Compliance & Enforcement Division will enhance inspection frequencies in the West Oakland area for the next 5 years: • Inspect all the permitted facilities and sources within a 2-year period; • Inspect any unpermitted facilities and sources identified by the Steering Committee; and • Annually track and document the number of inspections conducted, including type, date and location.	First Bullet: Completed per 2021 Annual Report Last 2 Bullets: (Continuous strategy) Enforcement staff continues to conduct unannounced inspections on any unpermitted facilities and sources identified by the Steering Committee. All inspections are documented in a compliance verification (CV) report and enforcement activity is reviewed periodically.	ongoing	Air District
Enf_AD _2	Develop education and outreach material on open burning: To address the community concern of illegal backyard burning in West Oakland, Air District Compliance & Enforcement staff will develop outreach materials to ensure the community understands health and air quality impacts from backyard burning. Informational fliers will help the community understand particulate emissions and air quality regulations that specifically prohibit open burning of garbage, tree pruning and other combustible material in residential fireplaces and open firepits.	Completed.	Complete	Air District

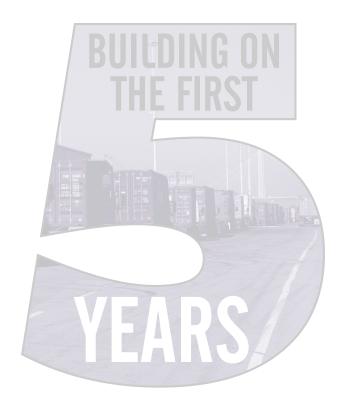
Strate gy #	DISTRICT/PARTNER/CARB STRATEGIES Brief Strategy Description	Qualitative Status Update July 1, 2023 to June 30, 2024	Status	"Lead" Agency
Enf_AD _3	Provide Annual Report on Enforcement Activities of Stationary Sources: The Air District's Compliance & Enforcement Division will provide an annual update to the Steering Committee summarizing the progress of the West Oakland Enforcement Strategy at the end of each calendar year for the next 5 years. The update will include the following information: • Provide an annual inspection summary to the Steering Committee noting inspection results and a general description of violations in the West Oakland area; • Number of complaints received in the West Oakland area, including a description of the types of complaints.	In this reporting period, enforcement staff have conducted a total of 2 inspections which include 2 general source inspections. A total of 6 violations were issued (6 "other" types of violations). A total of 56 complaints were received in this reporting period (30 odor, 2 fire out, 2 asbestos, 12 dust, 1 GDF, and 9 other) The Compliance & Enforcement Division acknowledges the low number of inspections conducted during this reporting period and is providing reassurance to the community that inspections and enforcement work continues and has not stopped. One factor for the low numbers is that many facilities were inspected in recent years and the sources are due for inspection by the end of 2024. We anticipate a significant increase in inspection activity in West Oakland in Q3 and Q4 2024. Additionally, the Air District transitioned to a new database system in late 2023, which caused some unforeseen disruptions in Q4 2023 and Q1 2024 to business processes and inspection schedules. We have actively worked to resolve this issue and reaffirm our commitment to the community that staffing resources will be allocated to ensure inspections are conducted in a timely manner.	Ongoing	Air District
Enf_AD _4	Update Air District Complaint Policy: While the Air District has a robust complaint policy and procedure to promptly respond to air quality complaints and other compliance incidents/episodes, the Air District recognizes the need to review the complaint procedure, including the evaluation of new technologies to streamline complaint receipt, response and investigations. Air District staff plans to conduct a series of community workshops throughout the Air District in the last quarter of 2019 to solicit input from Bay Area residents. Air District staff will work with the West Oakland Steering Committee in this endeavor.	Completed.	Complete	Air District

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Enf_AD _5	Enhanced Enforcement Referral Process: Through the course of Air District work in West Oakland, Air District inspectors may identify compliance concerns that fall within another local enforcement authority or jurisdiction. The Compliance and Enforcement Division will develop an enhanced referral system with the different agencies having jurisdiction in West Oakland. Any issues identified beyond the scope of Air District's authority will be referred to the appropriate agency on the day of the investigation.	Completed.	Complete	Air District
Enf_AD _6	Identify Unpermitted Sources: CARB and District staff will consult the community for areas where there may be potentially unpermitted sources of emissions.	District staff continues to work with community members and other agency staff to identify unpermitted sources.	Ongoing	Air District
Enf_CA RB_1	Increase the frequency of compliance inspections with guidance from the community steering committee: CARB will collaborate with the West Oakland community emissions reduction program Co-leads to work with the Steering Committee to actively enhance enforcement activities. This will be done through a combination of improved complaint reporting, more focused inspections, and reportback meetings to update the community Steering Committee on both the status of inspections and to obtain additional areas of mobile source concern. CARB will work with the Co-leads to meet annually with the community Steering Committee in order to prioritize enforcement measures and identify possible locations where non-compliant vehicles are present. CARB will additionally report to the community the number of inspections performed, mapped locations of the enforcement, and the number of citations and/or Notices of Violations issued.	CARB coordinated a truck enforcement field event on June 28th and 29th of 2023. Prior to the event, staff met with WOEIP to discuss our plan of action and to identify potential locations within the community to conduct roadside inspections and with the California Highway Patrol to identify locations to safely set up inspection sites and pull over diesel trucks. Inspection sites included the intersection of Adeline and 3rd Street and the intersection of Maritime Street and Burma Road. In total, CARB inspected 84 trucks and issued 24 citations across various enforcement programs during this deployment. Once the field event was completed, CARB developed a 2-page summary to share with the community and presented the results at the September 2023 WOCAP CSC meeting. CARB will continue to coordinate with the community to identify truck hot spots for inspections and the deployment of the Portable Emissions Acquisition System, or PEAQS to screen potentially high-emitting trucks. In total, CARB conducted 490 inspections in West Oakland in 2023. This includes the inspections conducted during the June 2023 field event, described above. The breakdown of all 2023 inspections is included below. Overall, CARB continues to see high compliance rates across the various truck enforcement programs in West Oakland. - 9 drayage program inspections with 0 violations - 261 Heavy-Duty Vehicle Inspection Program (HDVIP) inspections with 3 non-emissions related violations and 2 emissions related violations - 1 Public Agency and Utility (PAU) vehicle inspection with 0 violations	Ongoing	CARB

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		 80 Truck & Bus program inspections with 5 emissions related violations 53 On-Board Diagnostic (OBD) inspections with 4 emissions related violations 77 Malfunction Indicator Light (MIL) Status inspections with 10 emissions related violations. 		
Enf_CA RB_2	Coordinate and conduct inspections of Stationary Source with Air District staff: CARB will coordinate with Air District staff and will select, based on Steering Committee input, stationary sources for joint inspections. CARB is also committed to assisting Air District staff with compliance inspections of unpermitted sources identified by the Steering Committee.	See enforcement update for Action Enf_CARB_5.	Ongoing	CARB
Enf_CA RB_3	Achieve Compliance with the Truck and Bus Regulation via Senate Bill 1: In April 2017, the Governor signed Senate Bill 1 (SB 1) into law which included a provision that, beginning in 2020, a vehicle must demonstrate compliance with the State Truck and Bus regulation before it can be registered with the Department of Motor Vehicles (DMV). Beginning in 2020, the DMV, in conjunction with data provided by CARB, will deny vehicle registration to non-compliant heavy-duty vehicles based on the model year of the vehicle.	The Truck and Bus regulation requires nearly all trucks and buses to have 2010 or newer model year engines by January 1, 2023, to reduce particulate matter(PM) and oxides of nitrogen (NOx) emissions. To ensure the continued and proper maintenance of heavy-duty vehicles, CARB has been enforcing the Clean Truck Check - Heavy-Duty Inspection and Maintenance (HD I/M) regulation that began in January 2023. Through the Clean Truck Check, CARB has increased the number of inspections in West Oakland across our various enforcement programs, including HDVIP, OBD, and MIL Status inspections. See the enforcement update for Strategy "Enf_CARB_1" for details. For the Truck and Bus regulation, the California DMV continues to place registration holds on trucks and buses with 2009 or older model year engines and CARB continues to inspect trucks for compliance.	Ongoing	CARB
Enf_CA RB_4	Provide Annual Report of Enforcement Activities: CARB's enforcement division will provide an annual report to the Steering Committee to update and summarize CARB's enforcement activities within the community.	CARB continues to provide regular updates on our enforcement activities through the WOCAP CSC. In 2023, CARB staff provided an update on 2022 enforcement activities at the April 5, 2023 meeting, followed by an update on the June 2023 truck enforcement field event at the September 6, 2023 meeting.	Ongoing	CARB
Enf_CA RB_5	Coordinate with other agencies: CARB will seek opportunities to coordinate with other agencies with enforcement authority in West Oakland like the City and Port of Oakland. One such opportunity could involve CARB staff working with the City of Oakland to provide truck idling signage in areas where community members observe trucks idling.	In 2023, CARB joined and continues to engage in the Rapid Response Taskforce (RRTF) coordinated by US EPA and CalEPA. The RRTF also includes BAAQMD, DTSC, the State and Regional Water Boards, the Port of Oakland, and the San Francisco CUPA, and it aims to bring together the community and the various enforcement agencies to respond to the fire at Radius Recycling that occurred on August 9, 2023. This is part of an ongoing effort for government agencies to be	Ongoing	CARB

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		able to better coordinate and expedite investigations when there is potential non-compliance in overburdened communities like West Oakland.		
Enf_CA RB_6	Enhance CARB's Data Management Practices. CARB is committed to enhancing the quality of enforcement data for the West Oakland community. Moving forward, CARB will maintain the location of enforcement activity and received complaints to provide the Steering Committee with the most accurate data available. CARB has recently completed a visualization tool that makes CARB enforcement data more transparent and available. The tool can be accessed online by visiting https://webmaps.arb.ca.gov/edvs/.	Completed.	Complete	CARB
Enf_CA RB_7	Provide in-person community specific training: CARB will develop and implement a new program that will be offered to the West Oakland community. Information will cover topics like the fundamentals of enforcement, how the enforcement process works, instructions on filing a thorough complaint, and what to expect from the enforcement process after filing a complaint. Through this program, community members will be able to better support CARB or air district enforcement processes. CARB may also develop online trainings in the future.	In 2023, CARB joined and continues to engage in the Rapid Response Taskforce (RRTF) coordinated by US EPA and CalEPA. The RRTF also includes BAAQMD, DTSC, the State and Regional Water Boards, the Port of Oakland, and the San Francisco CUPA, and it aims to bring together the community and the various enforcement agencies to respond to the fire at Radius Recycling that occurred on August 9, 2023. This is part of an ongoing effort for government agencies to be able to better coordinate and expedite investigations when there is potential non-compliance in overburdened communities like West Oakland.	Ongoing	CARB
Enf_CA RB_8	Update enforcement measures as applicable: CARB staff are committed to updating enforcement strategies as requested by the Steering Committee, if said strategies are enforceable by CARB staff or if CARB can reasonably accommodate the request (e.g., additional enforcement training for idling vehicles). As new CARB regulations included in the Plan are adopted, CARB will enforce these measures	No update.	Ongoing	CARB

Strate gy #	DISTRICT/PARTNER/CARB STRATEGIES Brief Strategy Description	Qualitative Status Update July 1, 2023 to June 30, 2024	Status	"Lead" Agency
	and integrate associated activities and data into the West Oakland enforcement measures.			



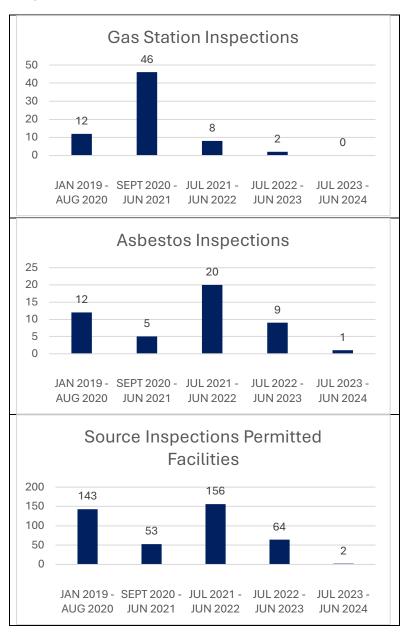
Appendix 2

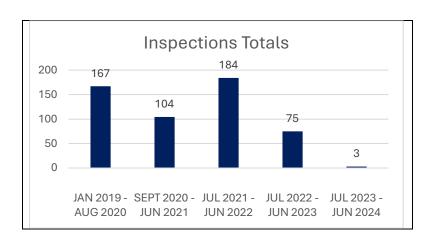
Compliance & Enforcement



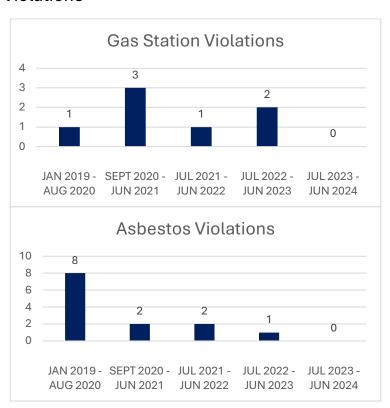
Appendix 2 Compliance and Enforcement Data Charts

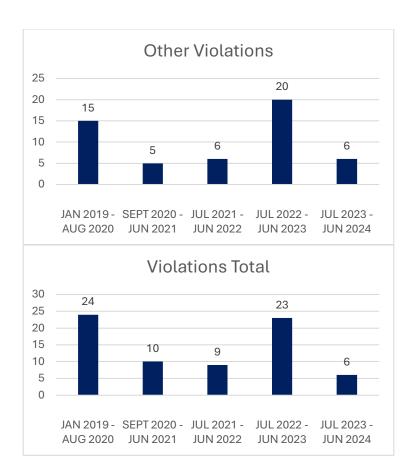
Inspections



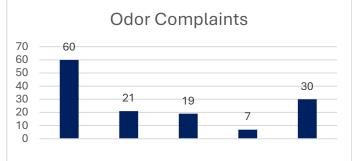


Violations

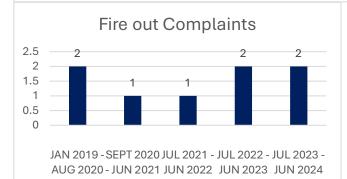




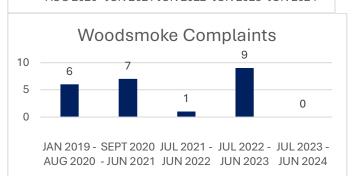
Complaints



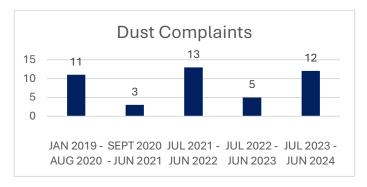
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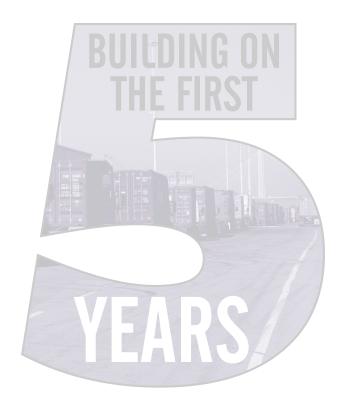






Complaints (Continued)

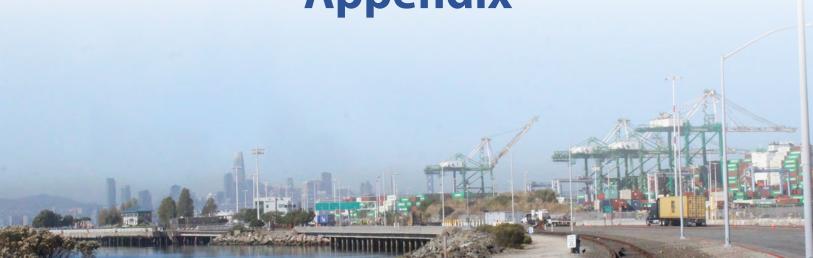




Appendix 3

Emissions Inventory Update Technical





Appendix 3 – Emissions Inventory Details

Historical Methods Inventory

This section provides additional details on the "historical methods" emissions inventory presented in the main body of the report. In this version, methods used to develop the original baseline inventory presented in the WOCAP were preserved so that updated emissions estimates for 2024 and 2029 would be directly comparable to the WOCAP baseline. This approach facilitates trends analyses and provides an assessment of progress toward original plan targets.

Tables A4-1 through A4-3 provide detailed breakdowns of West Oakland emissions for 2017, 2024, and 2029 and estimated changes in emissions between 2024/2029 and the 2017 WOCAP baseline. These tables also include emissions estimates for local sources not included in the model-based exposure analyses described in the main body of this report (see the "Area" and "Nonroad" sections at the bottom of each table). Emissions for these non-modeled sources were derived from gridded inventory data prepared at a 1-km grid resolution for regional photochemical modeling applications. While this resolution is not sufficient for local-scale exposure analyses, the gridded data do provide a more complete inventory for West Oakland.

Table A4-1 shows that DPM reductions from key sources included in the local-scale exposure modeling total 7.5 tons between 2017 and 2024. An additional 2.9 tons of reductions were estimated for the non-modeled Area and Non-road sources, for a total DPM reduction of 10.4 tons. Whether or not these non-modeled sources are considered, DPM emissions were reduced by more than 30% between 2017 and 2024. Changes in cancer risk-weighted emissions (Table A4-2) track the DPM changes closely on a percentage basis, as DPM is the main driver of cancer risk in the inventory.

Similarly, Table A4-3 shows that $PM_{2.5}$ reductions from key sources included in the local-scale exposure modeling total 8.3 tons between 2017 and 2024. An additional 0.6 tons of reductions were estimated for the non-modeled Area and Non-road sources, for a total $PM_{2.5}$ reduction of 8.9 tons. Notably, emissions from road dust (a significant $PM_{2.5}$ source) are estimated to increase by about 7% between 2017 and 2024 due to increased vehicle activity and delays in implementing an expanded street sweeping program in West Oakland.

Table A4-1. Diesel PM Emissions Summaries and Differences, Historical Methods (tons per year)

	D	PM Emissior	Differences		
Source	2017	2024	2029	2017- 2024	2017- 2029
Highway	2.12	0.27	0.22	-1.86	-1.90
Non-truck vehicles	0.18	0.07	0.04	-0.11	-0.14
HD/Medium HD trucks	1.86	0.13	0.12	-1.73	-1.73
Light HD trucks	0.09	0.07	0.06	-0.02	-0.03
Street	2.07	0.17	0.14	-1.91	-1.93
Non-truck vehicles	0.09	0.03	0.02	-0.06	-0.07

	D	PM Emission	Differences		
Source	2017	2024	2029	2017- 2024	2017- 2029
HD/Medium HD trucks	1.88	0.07	0.06	-1.83	-1.83
Light HD trucks	0.09	0.07	0.06	-0.02	-0.03
Port	15.85	12.92	12.89	-2.94	-2.96
OGV maneuvering	3.84	4.39	4.93	+0.55	+1.09
OGV berthing	4.31	4.08	4.58	-0.23	+0.27
Harbor craft	3.94	1.68	0.84	-2.25	-3.10
Dredging	1.16	0.54	0.44	-0.62	-0.72
Bunkering	0.28	0.15	0.10	-0.13	-0.18
Port trucks	0.50	0.12	0.12	-0.38	-0.38
Cargo handling	1.57	1.85	1.79	+0.28	+0.23
OGRE Railyard	0.08	<0.01	<0.01	-0.08	-0.08
BNSF Railyard	0.18	0.10	0.09	-0.08	-0.09
Rail	2.20	1.56	1.12	-0.64	-1.08
Rail lines	1.09	0.45	0.20	-0.64	-0.89
UP Railyard	1.11	1.11	0.92	0.00	-0.19
Permitted	0.30	0.18	0.18	-0.12	-0.12
Schnitzer (stationary)	-	<0.01	<0.01	<0.01	<0.01
EBMUD	0.09	0.04	0.04	-0.05	-0.05
Dynegy	< 0.01	0.00	0.00	>-0.01	>-0.01
Pinnacle Ag Services	-	-	_	-	-
Sierra Pacific	-	-	-	_	-
CASS	-	-	-	-	_
California Cereal	_	_	_	_	_
CA Waste (10th St)	_	_	_	-	_
Other	0.21	0.14	0.14	-0.07	-0.07
Other	1.33	1.25	0.71	-0.08	-0.62
Ferries	0.93	0.89	0.48	-0.04	-0.45
Schnitzer (ships)	0.27	0.33	0.20	+0.06	-0.06
Schnitzer (trucks)	0.01	< 0.01	<0.01	-0.01	-0.01
Truck-related businesses	0.12	0.03	0.03	-0.09	-0.09
Total – modeled sources	23.87	16.34	15.27	-7.54	-8.60
Area	-	-	-	-	-
Commercial cooking	_	_	_	-	_
Food and Agriculture	_	_	-	-	_
Residential fuel combustion	_	_	_	-	_
Commercial/industrial fuel combustion	-	-	-	_	-

	DPM Emissions			Differences	
Source	2017	2024	2029	2017- 2024	2017- 2029
Industrial processes	-	-	_	_	_
Solvent utilization	_	_	_	_	_
Consumer products	_	_	_	_	_
Other area sources	-	_	_	_	-
Non-road	5.36	2.49	1.59	-2.86	-3.77
Construction equipment	3.33	1.42	1.07	-1.91	-2.26
Commercial/industrial equipment	0.51	0.21	0.09	-0.31	-0.43
Lawn & garden equipment	0.02	0.02	0.02	<0.01	<0.01
TRUs	0.26	0.06	0.02	-0.19	-0.24
Other non-road sources	1.24	0.78	0.39	-0.46	-0.85
Total – non-modeled sources	5.36	2.49	1.59	-2.86	-3.77
Grand Total	29.23	18.83	16.86	-10.40	-12.38

Table A4-2. Cancer Risk-Weighted Emissions Summaries and Differences, Historical Methods (unitless)

	Risk-w	eighted Em	issions	Differences	
Source	2017	2024	2029	2017- 2024	2017- 2029
Highway	1,767	309	260	-1,458	-1,508
Non-truck vehicles	328	163	125	-165	-202
HD/Medium HD trucks	1,376	97	93	-1,278	-1,283
Light HD trucks	64	49	42	-15	-22
Street	1,651	191	159	-1,460	-1,492
Non-truck vehicles	182	90	70	-92	-113
HD/Medium HD trucks	1,400	49	45	-1,351	-1,356
Light HD trucks	69	52	45	-17	-24
Port	11,849	9,659	9,648	-2,189	-2,201
OGV maneuvering	2,863	3,274	3,674	+411	+812
OGV berthing	3,255	3,079	3,455	-174	+203
Harbor craft	2,932	1,253	624	-1,679	-2,308
Dredging	860	401	328	-448	-524
Bunkering	209	115	72	-95	-137
Port trucks	368	89	87	-279	-281
Cargo handling	1,168	1,375	1,336	+206	+168
OGRE Railyard	57	1	1	-56	-56
BNSF Railyard	136	74	69	-61	-66

	Risk-v	veighted Emi	ssions	Differences	
Source	2017	2024	2029	2017- 2024	2017- 2029
Rail	1,637	1,163	835	-473	-801
Rail lines	810	337	148	-473	-662
UP Railyard	826	826	687	0	-139
Permitted	1,101	1,142	1,142	+40	+40
Schnitzer (stationary)	823	944	944	121	121
EBMUD	110	69	69	-41	-41
Dynegy	1	2	2	2	2
Pinnacle Ag Services	-	-	_	_	_
Sierra Pacific	-	-	_	_	-
CASS	<1	4	4	4	4
California Cereal	<1	<1	<1	<1	<1
CA Waste (10th St)	_	_	_	_	-
Other	168	122	122	-46	-46
Other	1,017	960	563	-57	-454
Ferries	695	664	359	-31	-336
Schnitzer (ships)	223	275	183	51	-40
Schnitzer (trucks)	8	<1	<1	-8	-8
Truck-related businesses	90	21	20	-69	-70
Total – modeled sources	19,022	13,425	12,606	-5,597	-6,415
Area	132	134	137	3	5
Commercial cooking	13	15	14	2	1
Food and Agriculture	_	_	_	_	_
Residential fuel combustion	41	36	41	-4	0
Commercial/industrial fuel combustion	15	15	16	0	1
Industrial processes	13	14	16	1	3
Solvent utilization	31	33	31	2	0
Consumer products	19	20	19	1	0
Other area sources	<1	<1	<1	<1	<1
Non-road	4,133	1,969	1,271	-2,164	-2,862
Construction equipment	2,497	1,068	807	-1,429	-1,690
Commercial/industrial equipment	409	177	83	-232	-327
Lawn & garden equipment	42	43	35	-1	8
TRUs	192	47	15	-145	-177
Other non-road sources	992	634	332	-358	-660
Total – non-modeled sources	4,264	2,103	1,407	-2,161	-2,857

	Risk-weighted Emissions			Differences	
Source	2017	2024	2029	2017- 2024	2017- 2029
Grand Total	23,286	15,528	14,014	-7,758	-9,272

Table A4-3. $PM_{2.5}$ Emissions Summaries and Differences, Historical Methods (tons per year)

	P	M _{2.5} Emissio	ns	Differ	ences
Source	2017	2024	2029	2017- 2024	2017- 2029
Highway	20.25	19.69	19.26	-0.56	-0.99
Non-truck vehicles	12.20	12.85	12.14	+0.66	-0.06
HD/Medium HD trucks	2.49	0.90	0.91	-1.58	-1.58
Light HD trucks	0.41	0.42	0.42	+0.01	+0.01
Road dust	5.15	5.52	5.79	+0.36	+0.63
Street	22.31	21.92	22.38	-0.39	+0.07
Non-truck vehicles	4.81	5.02	4.70	+0.21	-0.11
HD/Medium HD trucks	2.43	0.75	0.75	-1.68	-1.68
Light HD trucks	0.35	0.35	0.35	0.00	0.00
Road dust	14.72	15.80	16.58	+1.08	+1.86
Port	22.00	18.36	19.01	-3.64	-2.99
OGV maneuvering	3.94	4.25	4.76	+0.30	+0.82
OGV berthing	7.83	6.47	7.26	-1.36	-0.57
Harbor craft	3.82	1.63	0.81	-2.19	-3.01
Dredging	1.12	0.54	0.44	-0.58	-0.68
Bunkering	0.27	0.15	0.09	-0.12	-0.18
Port trucks	0.93	0.69	0.73	-0.24	-0.20
Road dust	2.25	2.70	3.03	+0.45	+0.78
Cargo handling	1.60	1.85	1.79	+0.25	+0.19
OGRE Railyard	0.07	<0.01	<0.01	-0.07	-0.07
BNSF Railyard	0.17	0.09	0.09	-0.08	-0.08
Rail	2.09	1.51	1.09	-0.58	-0.99
Rail lines	0.99	0.42	0.18	-0.58	-0.81
UP Railyard	1.09	1.09	0.91	0.00	-0.18
Permitted	17.84	14.80	14.80	-3.04	-3.04
Schnitzer (stationary)	5.20	4.74	4.74	-0.46	-0.46
EBMUD	3.99	4.12	4.12	+0.13	+0.13
Dynegy	1.96	2.34	2.34	+0.38	+0.38
Pinnacle Ag Services	1.48	1.05	1.05	-0.43	-0.43
Sierra Pacific	0.91	0.70	0.70	-0.21	-0.21

	Pl	M _{2.5} Emission	ıs	Differences	
Source	2017	2024	2029	2017- 2024	2017- 2029
CASS	0.72	0.32	0.32	-0.41	-0.41
California Cereal	0.58	0.45	0.45	-0.13	-0.13
CA Waste (10th St)	0.46	0.22	0.22	-0.24	-0.24
Other	2.54	0.87	0.87	-1.66	-1.66
Other	1.36	1.30	0.78	-0.06	-0.58
Ferries	0.91	0.86	0.47	-0.04	-0.44
Schnitzer (ships)	0.30	0.37	0.25	+0.07	-0.05
Schnitzer (trucks)	0.04	0.04	0.04	>-0.01	>-0.01
Truck-related businesses	0.11	0.03	0.03	-0.09	-0.09
Total – modeled sources	85.85	77.59	77.33	-8.26	-8.53
Area	30.40	31.68	32.57	+1.29	+2.17
Commercial cooking	20.63	21.75	22.59	+1.12	+1.96
Food and Agriculture	-	-	_	_	-
Residential fuel combustion	6.93	6.99	6.98	+0.06	+0.05
Commercial/industrial fuel combustion	2.30	2.39	2.44	+0.09	+0.13
Industrial processes	0.03	0.03	0.04	0.00	+0.01
Solvent utilization	-	-	_	-	_
Consumer products	-	-	_	-	_
Other area sources	0.50	0.52	0.53	+0.01	+0.02
Non-road	14.18	12.25	12.37	-1.93	-1.82
Construction equipment	4.10	2.39	2.18	-1.71	-1.92
Commercial/industrial equipment	1.17	0.97	0.90	-0.20	-0.27
Lawn & garden equipment	0.12	0.13	0.10	+0.01	-0.02
TRUs	0.24	0.06	0.02	-0.18	-0.22
Other non-road sources	1.81	1.00	0.76	-0.80	-1.05
Total – non-modeled sources	44.58	43.93	44.94	-0.65	+0.36
Grand Total	130.43	121.52	122.26	-8.91	-8.17

Best Methods Inventory

This section provides additional details on the "best methods" emissions inventory that makes use of models and datasets not available at the time WOCAP was developed. Updated information used to create this alternative inventory include:

• CARB's EMFAC2021 model for on-road mobile sources – among other changes, PM_{2.5} emission rates for brake wear from light-duty vehicles are about 70% lower in EMFAC2021 than in EMFAC2017 (the version used during WOCAP development).

- Updated data for ocean-going vessels (OGV) for example, new vessel speed profiles were
 developed using data from the Coast Guard's Automatic Identification System (AIS), which
 provides vessel speed and location information via automated radio links.
- Updated data for commercial harbor craft (CHC) in 2021, CARB updated their emissions methodology for CHC, which included updated load factors and emission factors that significantly reduced emissions estimates.
- Updated road type assignments for road dust estimates the CARB methodology for road dust emissions uses silt loading estimates that vary by road type (freeway, major/collector, local). Previously, the Air District classified West Oakland roads based on functional classifications from the Citilabs telematics data used to estimate on-road emissions for the community. Subsequently, the Air District developed a more refined approach that assigned road types based on traffic activity levels on each roadway.

Tables A4-4 through A4-6 provide detailed emissions estimates for the best methods inventory that parallel those listed above for the historical inventory (note that only modeled sources are shown, as the best methods updates did not affect non-modeled sources). The tables show that the best methods updates generally resulted in lower emissions relative to the original WOCAP inventory. For example, DPM emissions in the 2017 best methods inventory total 16.72 tons, which is 30% lower than the corresponding total in the original 2017 inventory (23.87 tons). This difference is largely driven by lower emissions for on-road mobile sources, OGV maneuvering, and harbor craft. Similarly, PM_{2.5} emissions in the 2017 best methods inventory total 58.54 tons, which is 32% lower than the corresponding total of 85.85 tons in the original 2017 inventory. This difference is largely driven by lower emissions for road dust, OGV maneuvering, and harbor craft.

Despite the differences, changes between 2017 and 2024 are fairly consistent between the historical and best methods inventories. Over that period, DPM emissions are reduced by 7.52 tons (31%) in the historical inventory and 6.63 tons (39%) in the best methods inventory. For $PM_{2.5}$, emissions are reduced by 8.26 tons (10%) in the historical inventory and 5.46 tons (9%) in the best method inventory. These findings indicate that similar patterns of emissions reductions are found using either inventory approach.

Table A4-4. Diesel PM Emissions Summaries and Differences, Best Methods (tons per year)

	D	DPM Emissions			Differences	
Source	2017	2024	2029	2017- 2024	2017- 2029	
Highway	2.85	0.44	0.28	-2.41	-2.57	
Non-truck vehicles	0.26	0.08	0.04	-0.19	-0.22	
HD/Medium HD trucks	2.39	0.22	0.13	-2.16	-2.26	
Light HD trucks	0.20	0.14	0.11	-0.06	-0.09	
Street	1.16	0.14	0.09	-1.02	-1.07	
Non-truck vehicles	0.06	0.02	0.01	-0.04	-0.05	
HD/Medium HD trucks	1.01	0.06	0.03	-0.95	-0.98	
Light HD trucks	0.09	0.06	0.05	-0.03	-0.04	

	D	PM Emission	าร	Differences	
Source	2017	2024	2029	2017-	2017-
				2024	2029
Port	8.46	6.05	6.12	-2.41	-2.34
OGV maneuvering	0.50	0.57	0.64	+0.07	+0.14
OGV berthing	4.31	2.64	2.96	-1.67	-1.35
Harbor craft	0.86	0.37	0.18	-0.49	-0.67
Dredging	0.25	0.34	0.28	+0.09	+0.02
Bunkering	0.17	0.03	0.02	-0.14	-0.15
Port trucks	0.53	0.15	0.14	-0.38	-0.40
Cargo handling	1.57	1.85	1.79	+0.28	+0.23
OGRE Railyard	0.08	<0.01	<0.01	-0.08	-0.08
BNSF Railyard	0.18	0.10	0.09	-0.08	-0.09
Rail	2.66	2.02	1.51	-0.64	-1.15
Rail lines	1.09	0.20	0.20	-0.64	-0.89
UP Railyard	1.57	0.92	1.31	0.00	-0.26
Permitted	0.30	0.18	0.18	-0.12	-0.12
Schnitzer (stationary)	_	<0.01	<0.01	<0.01	<0.01
EBMUD	0.09	0.04	0.04	-0.05	-0.05
Dynegy	< 0.01	0.00	0.00	>-0.01	>-0.01
Pinnacle Ag Services	_	_	_	_	_
Sierra Pacific	-	_	-	_	-
CASS	-	-	-	-	-
California Cereal	-	-	_	_	-
CA Waste (10th St)	-	-	_	_	-
Other	0.21	0.14	0.14	-0.07	-0.07
Other	1.30	1.25	0.73	-0.04	-0.56
Ferries	0.93	0.89	0.49	-0.04	-0.44
Schnitzer (ships)	0.24	0.32	0.21	+0.08	-0.03
Schnitzer (trucks)	0.01	< 0.01	<0.01	-0.01	-0.01
Truck-related businesses	0.11	0.04	0.03	-0.07	-0.08
Total – modeled sources	16.72	10.09	8.90	-6.63	-7.83

Table A4-5. Cancer Risk-Weighted Emissions Summaries and Differences, Best Methods (unitless)

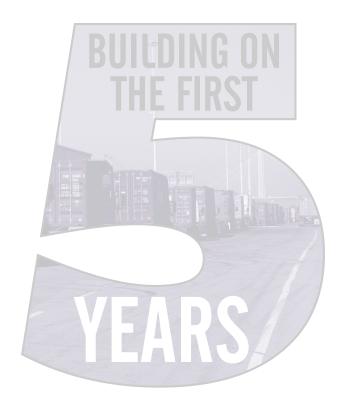
Source	Risk-w	Risk-weighted Emissions			Differences		
	2017	2024	2029	2017-	2017-		
				2024	2029		
Highway	2,385	463	311	-1,923	-2,074		
Non-truck vehicles	420	176	122	-244	-299		
HD/Medium HD trucks	1,804	175	102	-1,629	-1,702		

	Risk-weighted Emissions			Differences	
Source	2017	2024	2029	2017- 2024	2017- 2029
Light HD trucks	161	111	88	-49	-73
Street	945	140	94	-804	-851
Non-truck vehicles	103	43	30	-60	-73
HD/Medium HD trucks	773	51	27	-722	-745
Light HD trucks	69	47	37	-22	-32
Port	6,352	4,534	4,584	-1,819	-1,768
OGV maneuvering	373	426	479	+54	+106
OGV berthing	3,255	1,992	2,236	-1,263	-1,019
Harbor craft	639	276	137	-364	-502
Dredging	187	252	205	+65	+19
Bunkering	128	25	16	-102	-112
Port trucks	410	112	105	-298	-305
Cargo handling	1,168	1,375	1,336	+206	+168
OGRE Railyard	57	1	1	-56	-56
BNSF Railyard	136	74	69	-61	-66
Rail	1,980	1,507	1,121	-473	-859
Rail lines	810	337	148	-473	-662
UP Railyard	1,170	1,170	973	0	-197
Permitted	2,125	1,597	1,597	-528	-528
Schnitzer (stationary)	823	944	944	121	121
EBMUD	110	69	69	-41	-41
Dynegy	1	2	2	2	2
Pinnacle Ag Services	-	_	_	-	-
Sierra Pacific	-	_	_	-	-
CASS	1,024	459	459	-565	-565
California Cereal	<1	<1	<1	<1	<1
CA Waste (10th St)	-	-	_	-	-
Other	168	122	122	-46	-46
Other	988	964	565	-24	-424
Ferries	695	664	368	-31	-327
Schnitzer (ships)	202	267	174	65	-28
Schnitzer (trucks)	7	<1	<1	-6	-6
Truck-related businesses	84	32	22	-52	-62
Total – modeled sources	14,763	9,204	8,272	-5,572	-6,504

Table A4-6. $PM_{2.5}$ Emissions Summaries and Differences, Best Methods (tons per year)

	P	PM _{2.5} Emissions		Differences	
Source	2017	2024	2029	2017- 2024	2017- 2029
Highway	15.43	14.02	14.02	-1.41	-1.41
Non-truck vehicles	5.23	5.18	4.88	-0.04	-0.35
HD/Medium HD trucks	3.14	1.11	1.04	-2.03	-2.10
Light HD trucks	0.58	0.55	0.52	-0.03	-0.05
Road dust	6.49	7.18	7.58	+0.69	+1.09
Street	6.52	5.95	6.09	-0.57	-0.43
Non-truck vehicles	1.13	1.10	1.02	-0.03	-0.10
HD/Medium HD trucks	1.35	0.46	0.44	-0.90	-0.91
Light HD trucks	0.20	0.18	0.17	-0.02	-0.03
Road dust	3.84	4.21	4.46	+0.37	+0.62
Port	14.97	12.48	13.30	-2.49	-1.67
OGV maneuvering	0.66	0.71	0.79	+0.05	+0.14
OGV berthing	7.83	5.56	6.24	-2.27	-1.59
Harbor craft	0.89	0.36	0.18	-0.53	-0.71
Dredging	0.24	0.33	0.27	+0.09	+0.03
Bunkering	0.17	0.03	0.02	-0.14	-0.15
Port trucks	1.10	0.85	0.89	-0.25	-0.21
Road dust	2.25	2.70	3.03	+0.45	+0.78
Cargo handling	1.60	1.85	1.79	+0.25	+0.19
OGRE Railyard	0.07	<0.01	<0.01	-0.07	-0.07
BNSF Railyard	0.17	0.09	0.09	-0.08	-0.08
Rail	2.44	1.86	1.38	-0.58	-1.05
Rail lines	0.99	0.42	0.18	-0.58	-0.81
UP Railyard	1.44	1.44	1.20	0.00	-0.24
Permitted	17.84	17.46	17.46	-0.39	-0.39
Schnitzer (stationary)	5.20	4.74	4.74	-0.46	-0.46
EBMUD	3.99	4.12	4.12	+0.13	+0.13
Dynegy	1.96	2.34	2.34	+0.38	+0.38
Pinnacle Ag Services	1.48	1.05	1.05	-0.43	-0.43
Sierra Pacific	0.91	3.35	3.35	+2.24	+2.24
CASS	0.72	0.32	0.32	-0.41	-0.41
California Cereal	0.58	0.45	0.45	-0.13	-0.13
CA Waste (10th St)	0.46	0.22	0.22	-0.24	-0.24
Other	2.54	0.87	0.87	-1.66	-1.66
Other	1.33	1.31	0.80	-0.02	-0.53
Ferries	0.91	0.86	0.48	-0.04	-0.43

	PI	PM _{2.5} Emissions			Differences	
Source	2017	2024	2029	2017- 2024	2017- 2029	
Schnitzer (ships)	0.28	0.36	0.25	+0.09	-0.03	
Schnitzer (trucks)	0.04	0.04	0.04	>-0.01	>-0.01	
Truck-related businesses	0.11	0.04	0.03	-0.07	-0.08	
Total – modeled sources	58.54	53.08	53.06	-5.46	-5.48	



Appendix 4

Strategy Assessment



Appendix 4 Strategy Assessment

Topic: Stationary Sources - Strategy #73

Original Strategy	DRAFT Revised Strategy
Lead: Air District The Air District proposes amendments to existing Regulation 8-5 to further reduce emissions of reactive organic gases and other toxic compounds from organic liquid storage tanks by 2020. Organic liquid storage tanks are defined in Regulation 8-5.	This strategy is proposed to be closed out.

Proposed Action: Revise Strategy.

Rationale: The purpose of Regulation 8-5 is to limit emissions of organic compounds from storage tanks. Strategy #73 was included in the WOCAP to align it with the Air District's plan for updating rulemaking related to liquid storage tanks. There were a couple smaller fuel/chemical plants in West Oakland that had storage tanks such as Viridis Fuels. As part of the initial rulemaking process the Air District assessed the potential for amendments to Regulation 8-5 to achieve emissions reductions. The Air District found limited potential to effectively achieve substantial volatile organic compound (VOC) emission reductions, thus, amendments to Rule 8-5 are not being proposed at this time and this strategy is proposed to be closed out.

Topic: Mobile Sources - Strategy #67

Original Strategy

DRAFT Revised Strategy

Lead: Air District

The Air District intends to seek authority in 2021 to reduce emissions and risk from magnet sources, such as the Port of Oakland, freight operations and warehouse distribution centers.

Lead: Air District

The Air District intends to pursue future programs to reduce emissions and risk from magnet sources related to the goods movement industry via an Indirect Magnet Source policy package. The policy package could include rule making, model ordinances and technical support to local governments to develop their own policies. Emissions reductions may come from the transport trucks serving the Port of Oakland, warehouse distribution centers and other designated freight locations.

Proposed Action: Revise Strategy.

Rationale: Revisions made to reflect the Air District's strategic approach to addressing Indirect Magnet Sources since recent state-level assembly bill legislative efforts failed in 2021 and 2023¹. Revisions also indicate that some areas are designated freight locations and clarifies that the intent is to facilitate air quality improvements to the goods movement industry.

An update on potential Indirect Magnet Source policies will be presented and discussed at the Stationary Source Committee of the Air District Board on September 11, 2024. An example of the Air District's policy support are the recent zoning code amendments to address truck-attracting businesses developed by the City of Oakland with the support of the Air District:

¹ The Air District introduced a bill through Assemblymember Bauer-Kahan in 2021 that unfortunately did not get too far. In 2023, Assemblymember Reyes (Los Angeles area) introduced a bill related to magnet sources, that made it through one committee before failing. It has been challenging to move these bills toward passage in the legislature. (Source: 2022-2023 WOCAP Annual Report, Strategy #67 update.)

17.103.065 Truck-Intensive Industrial Activities

All industrial businesses that generate truck trips such as manufacturing, warehousing, freight, and recycling businesses, etc. proposed within 500 feet of residential land use will now be subject to new conditional use permit criteria to help decision makers understand the businesses' intent to manage truck-related activities (applicants will provide map of truck routes, truck loading and parking areas, etc.) to minimize impacts to nearby community.

17.114.050 Nonconforming Activity—Discontinuance

Whenever a non-conforming truck activity discontinues operation, the right to continue the nonconforming use shall expire immediately.

17.134.130 Termination of a Conditional Use Permit

If a conditionally permitted truck activity has ceased, or has been suspended, for a consecutive period of six (6) or more months, the conditional use permit is null and void.

Topic: Health Programs - Strategy #80

Original Strategy DRAFT Revised Strategy Lead: Air District This strategy is proposed

The Air District researches actions that are potentially exposure-reducing, such as: 1) an engineering evaluation of exhaust stacks and/or vents to determine if relocation will reduce local exposure; (2) a study to determine if smart air filtration systems can reduce exposure by in-taking air during daily non-peak vehicle travel times, such as between midnight and four a.m.; and (3) a study of the potential air quality benefits of a centralized package delivery site such as personal lockers by 2025.

This strategy is proposed to be closed out.

Proposed Action: Close Out Strategy

Rationale: There are several unrelated actions grouped in this strategy. The first two items are redundant of strategies 69 and 75. The final item is addressed by revised strategy 67.

- 1. "...engineering evaluation of exhaust stacks..."

 Evaluation of exhaust stacks happens as part of permit applications and Rule 11-18 evaluation. Strategy 69 already refers to Rule 11-18.
- 2. "...study to determine if smart air filtration systems can reduce exposure..."

 Strategy 75 already refers to installation of high-efficiency air filtration systems. Bay Area Healthy Homes Initiative and work under AB836 Clean Air Centers is targeted in Strategy 75.
- 3. "...study of the potential air quality benefits of centralized package delivery sites..."
 Revised Strategy #67 addresses "indirect sources" such as package delivery sites.

Topic: Land Use - Strategy #18

Original Strategy	DRAFT Revised Strategy
Lead: Air District The Air District advocates for more electrical infrastructure and power storage, including development of (1) fast-charging facilities, (2) truck charging stations and (3) better land use support for electric trucks by 2025.	This strategy is proposed to be closed out.

Proposed Action: Close Out Strategy

Rationale: See revised Strategy 21 stating that the Air District will continue to actively participate in the Sustainable Port Collaborative and in the Community Electrification Workgroup to collaborate on grant funding opportunities to support the Port of Oakland's transition to electrification and zero emissions and for community environmental benefits.

Topic: Further Study Measure - Strategy #FSM-4

Original Strategy

DRAFT Revised Strategy

Lead: Air District

The Air District will work with CARB, EBMUD, and other agency and community partners to identify strategies and incentives to address community concerns about odors, health-related emissions, and disclosing to the community information about complaints and complaint resolutions from the EBMUD facility in the Owning Our Air plan area.

Lead: EBMUD

EBMUD identifies strategies and incentives to address community concerns about odors and disclosing to the community information about complaints and complaint resolutions from EBMUD facility.

Proposed Action: Revise Strategy.

Rationale: Separate out the two important pieces of this strategy: (1) community concerns about health-related emissions; and, (2) the odor and complaint aspects. The health-related emissions from EBMUD are addressed by existing WOCAP strategy #69 related to Regulation 11-18. Revised Strategy FSM-4 focuses on strategies and incentives to address odors and complaints.

WOCAP Strategy #69 addresses community concerns about health-related emissions. Rule 11-18 was adopted by the Air District in 2017 to address facilities whose emissions of toxic air contaminants result in a significant risk to nearby residents and workers. The purpose of Rule 11-18 is to focus on existing facilities causing the highest health impacts across the Bay Area and require these facilities to reduce those impacts. Rule 11-18 does not directly address nuisance odors.

East Bay Municipal Utility District (EBMUD) falls within the Air District's Major Facility Review Program (Title V). The Title V program requires large industrial facilities to issue a single comprehensive operating permit that shows all federal, state, and local air quality requirements. The program includes requirements to monitor emissions and make regular reports. EBMUD's current Title V facility permit can be found here: https://www.baagmd.gov/~/media/files/engineering/title-v-

permits/a0591/a0591_110719_renew_final_permit_02-pdf.pdf?rev=f4543273a8c5496c9eae191eb4f9e83a. The Title V permit

contains the EBMUD permit conditions that apply to the equipment at EBMUD, some of which pertain to odors and consequences of odors.			

PART 2 – Port-led Strategies

Topic: Mobile Sources - Strategy #43

Original Strategy

DRAFT Revised Strategy

Lead: Port

The Port of Oakland studies the effects on truck flow and congestion due to increasing visits from larger container ships, the feasibility of an off-terminal container yard that utilizes zero-emission trucks to move containers to and from the marine terminals, and the potential efficiency gains from increasing the number of trucks hauling loaded containers on each leg of a roundtrip to the Port.

Lead: Port

The Port of Oakland studies the effects on truck flow, congestion and related potential health impacts due to increasing visits from larger container ships. The study should include:

- evaluation of the impact on air quality and truck congestion on container ship "peak offload days" potentially using a health impact assessment framework;
- feasibility of an off-terminal container yard that utilizes zero-emission trucks to move containers to and from the marine terminals; and,
- potential efficiency gains from increasing the number of trucks hauling loaded containers on each leg of a roundtrip to the Port.

Proposed Action: Revise Strategy.

Rationale: The revised strategies retains the original intent which was to minimize impacts of traffic and congestion in the community, reduce emissions, and gain efficiencies in container truck moves..

Background and Intent of 2019 Strategy #43

- The bigger ships are causing havoc on the transportation community which then has impacts on the residential community.
- When 1000s of containers come off at once it clogs the system (lots of peaks and valleys) don't want cargo sitting on the docks for long
 - o takes 3 days for vessels to unload and those three days are a nightmare for truck operators
 - o flow of impacts: larger vessels → shorter turnaround times → peaks and valleys of work (inefficiencies in pickups and dropoffs and

- extra costs for storage) \rightarrow VERY high peaks of truck congestion on some days.
- The Port needs to understand the "mobile chain" and how waterfront decisions affect inland operations (some ships have 8,000 containers and truck operators have to move containers to / from Fresno in a short time).
- o the Port needs to develop a system to return containers in a shorter amount of time.

Background: Off Port Land Use Study (San Pedro and Wilmington) https://harborcommunitybenefitfound1.app.box.com/s/rswx5kjnjibjhd6li500hoergjxw6r3h

Background: Progress Towards Zero Emissions Trucks, Port Electrification and Port Operations Modernization

This is a two-prong effort: Electrifying trucks; and implementation of the West Oakland Truck Management Plan (WOTMP). The Port focuses on the Zero Emissions program to achieve air quality benefits, providing public drayage truck charging parking lots. The Port, with multiple partners including maritime tenants and community-based organizations, needs to help deploy zero emissions cargo handling equipment (CHE) and drayage trucks under the U.S. EPA Clean Ports grant partnership. On going efforts are needed to Implement the WOTMP that delivers safety and traffic improvements such as Prescott Greening Project, and other measures in the community as identified in the WOTMP. Additionally, the Port Freight Intelligence Transportation System (FITS) will improve operation of roadways and provide truck-specific regional traveler information. Technology improvements include changeable message signs, camera surveillance, fiber and WiFi communications, a joint traffic management center/emergency operations center, traffic signal enhancements, vehicle and queue detection.

Topic: Mobile Sources - Strategy #63

Original Strategy	DRAFT Revised Strategy
Lead: Port	Lead: Port
The Port of Oakland implements a Clean Ship Program to increase the frequency of visits by ships with International Maritime Organization Tier 2 and Tier 3 engines.	Expand the Port of Oakland's existing and highly successful shorepower program by adding mobile shorepower outlets, emissions capture, and control barges, and providing shorepower for bulkers.

Proposed Action: Revise Strategy.

Rationale: The Port of Oakland is the second port of call and ship deployment decisions are made by ocean carriers based on Los Angeles /Long Beach port needs.

Implementing a Clean Ship Program would reward carriers for something they are already doing. It would be spending money for no additional benefit.

Implementation Notes

• leverage coalitions to further advocacy for green corridors (across Community Emissions Reduction Plan (CERP) communities)

Definitions:

Shorepower: A vessel's ability to plug into electrical power while at berth (ship's place at a dock)

"Capture" and "Control" technology: retrofits to vessels or terminals to achieve compliance with CARB's At Berth Regulation (to reduce emissions at berth)

Bulkers: Merchant ship specially designed to transport unpackaged bulk cargo—such as grain, coal, ore, steel coils, and cement

Background Los Angeles and Long Beach "Green Corridor"

Port of Los Angeles, Long Beach and Shanghai created a voluntary partnership to accelerate emissions reductions on one of the world's busiest container shipping routes across the Pacific Ocean in their Green Shipping Corridor Implementation Plan Outline. As

part of the plan, carrier partners will use reduced or zero lifecycle carbon capable ships by 2025 and together, by 2030, confirm feasibility of deploying the world's first zero lifecycle carbon emission container ships. Additional methods will include expanding the use of shore power and supporting the development of clean marine fueling infrastructure. (Source: www.portoflosangeles.org)

Topic: Mobile Sources - Strategy #64

Original Strategy DRAFT Revised Strategy

Lead: Port

The Port of Oakland implements a Clean Locomotive Program to increase the number of U.S. EPA Tier 4 compliant locomotives used by the UP, BNSF, and OGRE railways to provide service in and out of the Port of Oakland.

Lead: CARB, Port, EPA Region 9 and Air District

CARB, the Port, EPA Region 9 and the Air District collaborate and coordinate to continue to strengthen CARB's Clean Locomotive Rule.

Proposed Action: Revise Strategy.

Rationale: The strategy is challenging due to the willingness of railroads to transition their locomotives to cleaner technologies. The community can continue to advocate for continued progress on clean locomotive regulations. See also Strategy 65.

Implementation notes:

- 1. create a roundtable with all parties plus Alameda CTC and community to advocate to railroads. Rail forum for West Oakland (abandoned tracks also)
- 2. follow Oakland policy related to train "quiet zones" including Downtown Oakland Specific Plan Policy M-1.3 Train Quiet Zone Study.

Topic: Mobile Sources - Strategy #65

Original Strategy	DRAFT Revised Strategy	
Lead: Port	Lead: Port	
The Port of Oakland studies the feasibility of using electric switcher locomotives at the two Port railyards.	Continue to develop a partnership with the two Port of Oakland rail tenants on grant funding for electric switchers.	
Proposed Action: Revise Strategy.		
Rationale: The Port continues to try to partner with rail tenants for grant funding.		

Topic: Further Study Measure - Strategy #FSM-6

Original Strategy	DRAFT Revised Strategy
Lead: Air District, Port	Lead: Air District, Port
The Air District works with the Port of Oakland to optimize the Port appointment system to minimize truck idling.	The Air District works with the Port of Oakland to optimize the Port appointment system to minimize truck idling. All four public agencies (i.e., Air District, Port, City of Oakland (Mobility Division (truck parking) and Code Enforcement Division) and CARB) provide semi-annual updates on coordination efforts pertaining to enforcement.

Proposed Action: Continue Strategy.

Rationale: There will always be a need to coordinate to minimize idling.

Implementation Notes

- research appointment systems that are working well and add evaluation of what is working well, what is not working (in coordination with the Port)
- continue semi-annual enforcement report-outs from public agencies and continue to advocate for joint enforcement initiatives

Topic: Land Use - Strategy #21

Original Strategy

DRAFT Revised Strategy

Lead: Air District

The Air District works with the City and Port of Oakland and other agency and local partners to create a Sustainable Freight Advisory Committee to provide recommendations to each agency's governing board or council. The Committee's scope includes: air quality issues, enhanced/increased enforcement of truck parking and idling, improved referral and follow-up to nuisance and odor complaints related to goods movement, improvements to the Port appointment system, charging infrastructure and rates, developing land-use restrictions in industrial areas, funding, and consideration of video surveillance to enforce truck parking, route, and idling restrictions.

Lead: WOEIP, Port, Air District

WOEIP, Air District, Port of Oakland, and other partners continue to actively participate in the Sustainable Port Collaborative and in the Community Electrification Workgroup. The Committee's scope expands beyond its current focus on Port electrification to include: air quality issues, enhanced/increased enforcement of truck parking and idling, improved referral and follow-up to nuisance and odor complaints related to goods movement, improvements to the Port appointment system, charging infrastructure and rates, developing land-use restrictions in industrial areas, funding, and consideration of video surveillance to enforce truck parking, route, and idling restrictions.

The Air District continues to offer incentives for eligible zero emissions infrastructure, vehicles, and equipment and these incentives are discussed in the regular Workgroup meetings. The Air District provides feedback and support concerning the Port's other grant-seeking endeavors to electrify and transition to zero-emissions.

Proposed Action: Revise Strategy.

Rationale: In 2023 the Port of Oakland and the community established the Sustainable Port Collaborative (Collaborative). The Air District is a strategic partner in the Collaborative focused on the Port's electrification and zero emissions transition. The Air District will assist the transition process through grant making for enhancing electric power distribution infrastructure, on-port power

generation and power storage to support electric and zero emissions trucks.

Per the partnership agreement established for the Electrification Workgroup, all attendees have a baseline understanding of the issues and the projects underway related to air quality and resiliency. Members of the public may stay informed via the project webpage.

PART 3 – Other Agency-led Strategies

#7 Topic: Land Use

Original Strategy

DRAFT Revised Strategy

Lead: City of Oakland, Port of Oakland

The City of Oakland revises business licensing procedures to require current and proposed businesses to disclose truck visits per day and works with Caltrans to determine the number of trucks that park in the Caltrans right-of-way near West Oakland. Caltrans works with WOEIP and the Air District to address air quality issues from truck parking leases, such as by modifying leases to allow for collecting surveys and partnering with the Air District and CARB to allow enforcement access.

Lead: Caltrans

Caltrans determines the number of trucks that park in the Caltrans right-of-way near West Oakland. Caltrans works with WOEIP and the Air District to address air quality issues from truck parking leases, such as by modifying leases to allow for collecting surveys and partnering with the Air District and CARB to allow enforcement access.

Proposed Action:

- Close out "revise business licensing procedures..." and
- Continue strategy focused on "work with Caltrans..."

Rationale: Regarding closing out the "revise business licensing procedures..." The City did not revise business licensing procedures in Planning Code Amendments for Phase 1 of the General Plan Update because it had questions about what to do with this information if collected. The City is more focused on understanding the types of businesses that generate lots of truck trips vs trips for every business (through the truck-attracting business conditional use permit requirement adopted in Oct. 2023).

Change lead to Caltrans and Caltrans works with the City to determine the number of trucks that park in the Caltrans right-of-way.

#9 - Topic: Land Use

Original Strategy	DRAFT Revised Strategy
Lead: City of Oakland	This strategy is proposed to be closed out.
The City of Oakland develops a plan to limit the hours that trucks can operate in the community.	

Proposed Action: Close out Strategy.

Rationale: The original strategy was modeled on a Manhattan municipal ordinance that mandates deliveries had to happen between 4-6am. Due to the inability to enforce a limit on truck hours in the community (traffic enforcement is a low priority for Oakland Police Department), and because the original intent of the strategy was to get trucks off of neighborhood streets, the strategy is proposed to be closed out and the CSC is directed to WOCAP Strategy 4 related to relocating heavy industrial businesses outside of West Oakland; WOCAP Strategy 40 traffic calming measures to keep truck traffic off residential streets; and City truck regulations such as 17.103.065 (related to truck intensive industrial activities), 17.114.050 (related to discontinuance of non-conforming truck uses) and 17.134.130 (related to the termination of a truck-related conditional use permit)

Industrial- and Truck-Related Planning Code Amendments. (adopted in 2023)

17.103.065 Truck- Intensive Industrial Activities

All industrial businesses that generate truck trips such as manufacturing, warehousing, freight, and recycling businesses, etc. proposed within 500 feet of residential will now be subject to new conditional use permit criteria to help decision makers understand the businesses' intent to manage truck-related activities (applicants will provide map of truck routes, truck loading and parking areas, etc.) to minimize impacts to nearby community.

17.114.050 Nonconforming Activity—Discontinuance

Whenever a non-conforming truck activity discontinues operation, the right to continue the nonconforming use shall expire immediately.

17.134.130 Termination of a Conditional Use Permit

If a conditionally permitted truck activity has ceased, or has been suspended, for a consecutive period of six (6) or more months, the

conditional use permit is null and void.

State Truck Restriction rules for reference: https://dot.ca.gov/programs/traffic-operations/legal-truck-access/legal-basis-truck-restrictions

<u>Peak-hour Truck Restrictions</u>: California does not currently have any truck restrictions during certain hours. State and federal law forbids highway restrictions to truck access except for "safety and engineering" reasons. There is no mention in the law of time limitations. However, a peak-hour truck restriction would hinder trucks from making deliveries and would probably, therefore, be considered a restriction under the law. In order to enact a time restriction, it would seem necessary to validate a safety issue by traffic study.

Implementation Notes: Closely follow the City's General Plan Land Use and Transportation Element (LUTE) creation and advocate to get truck-attracting businesses moved out of the neighborhood.

Meet with Michael Ford (OakDOT) - managing the West Oakland Truck Management Plan. Coordinate to identify resources for implementation.

#13 Topic: Land Use

Original Strategy	DRAFT Revised Strategy
Lead: City of Oakland The City of Oakland conducts a study regarding development fees for environmental mitigations.	This Strategy is complete.

Proposed Action: Completed.

Rationale: The City recently conducted a <u>feasibility analysis</u> related to impact fees and found that increasing fees is not feasible for development at this time. It will be heard at the City's September 2024 Community and Economic Development Committee meeting.

Original Strategy DRAFT Revised Strategy

Lead: City of Oakland (Planning)

To address potential changes in local pollution exposure, the City of Oakland works with local community groups to address gentrification and the pricing out of long-term residents caused by gentrification. This effort includes meetings with local community groups and incentives and loans targeted to existing businesses and residents. Funding for this effort is identified as needed.

This strategy is proposed to be closed out.

Proposed Action: Close Out Strategy.

Rationale: The City's new **Housing Element's Goal 1** is "Goal 1. Protect Oakland Residents from Displacement and Prevent Homelessness"... is something to watch and advocate for.

There are also some mentions of displacement and gentrification in the EJ Element.

- <u>EJ-7.6 Collaborative Safety Solutions.</u> Collaborate with educational institutions, senior living facilities, community organizations, and other stakeholders, particularly those who reside in EJ Communities, when developing and implementing programs and improvements that increase safety and encourage the use of active transportation modes. Identify and plan for improvements in collaboration with existing neighborhood residents and businesses to <u>address concerns about gentrification and displacement</u>.
- <u>EJ-4.1 Resource Optimization</u>. Coordinate across City departments and with relevant partner agencies including the Oakland Housing Authority, EBMUD, BAAQMD, ABAG, ACPHD, and others, to optimize the use of data, grant monies, incentives, financial resources, staffing, investments, and programs in <u>addressing displacement and tenant protections</u>; sanitary housing and maintenance issues; environmental hazards in homes and neighborhoods; and other concerns related to stable, safe, and sanitary housing.
- <u>EJ-A.38.</u> As part of land use planning efforts, explore the following strategies in partnership with community organizations based in EJ Communities:
 - Corridor revitalization
- Zoning opportunities to facilitate smaller, "microretail" spaces that are more affordable to new or smaller businesses.

 Cultural Districts that showcase, support, and preserve existing cultural identity of retail and commercial services. For example, programs that support restoration of historical Black business districts in West Oakland.
 - o Neighborhood retail and local business conservation strategies to prevent conversion of existing neighborhood-retail

uses in neighborhoods that would otherwise lose easy access to nearby shops and neighborhood services, <u>including</u> <u>through anti-displacement strategies</u>.

Anti-displacement strategies for artists and creative businesses

The City's Economic and Workforce Development Department is pursuing anti-displacement for businesses projects and the Equitable Climate Action Plan (ECAP) is also working on displacement prevention (see <u>Climate Equity Progress Storymap</u> and the <u>ECAP TLU-3</u>).

Implementation Notes: Monitor the implementation of these plans/ policies.

#27 Topic: Land Use

Original Strategy D	DRAFT Revised Strategy
Lead: City of Oakland The City of Oakland and other appropriate local agencies limit fugitive dust from construction activity through better enforcement of existing regulations and permit requirements.	his strategy is complete.

Proposed Action: Completed.

Rationale: The City Council adopted the Environmental Justice Element in September 2023 which included a policy to limit fugitive dust.

"EJ-1.13 Emissions from Construction Activities. Require projects to implement construction air pollution and greenhouse gas emissions controls and applicable mitigation strategies for all construction sites to the maximum extent feasible. Refer to Best Construction Practices and Best Available Retrofit Control Technology (BARCT) recommended by BAAQMD."

The Air District published a Fugitive Dust White Paper in 2023 that contains mitigation measures and best management practices.

#40 Topic: Mobile Sources

Original Strategy	DRAFT Revised Strategy
Lead: City of Oakland The City of Oakland, consistent with the West Oakland Truck Management Plan, implements, in consultation with West Oakland residents, traffic calming measures to keep truck traffic off residential streets.	Lead: City of Oakland (Dept of Transportation) No revisions needed

Proposed Action: Continue Strategy.

Rationale: OakDOT was originally going to design truck traffic calming measures, in collaboration with residents, as part of the West Oakland Sustainable Transportation Equity Project (STEP) grant from the California Air Resources Board, however this grant has been rescoped and will no longer include the West Oakland traffic calming measures. OakDOT will find other ways to accomplish this.

Implementation Notes: Keep aware of housing and truck route conflicts in Land Use and Transportation Element (LUTE) discussions.

#46 Topic: Mobile Sources

Original Strategy	DRAFT Revised Strategy
Lead: MTC, City of Oakland The City of Oakland collaborates with MTC and ACTC to consider a program for extending car sharing to low-income individuals and groups.	This Strategy is proposed to be closed out.

Proposed Action: Close out Strategy.

Rationale: No progress to report so far. The car share industry is doing very poorly post-COVID and recent pilot projects to offer low-income car sharing in Sacramento have failed after large public subsidies were invested. In addition, OakDOT team is down two staff and has very little capacity to take on new projects. Therefore, it doesn't seem like a good time to pursue this strategy.

OakDOT is implementing a pilot program to provide pre-paid debit cards for transit expenses to low-income residents in West Oakland, which you can learn about here and here.

Note: Connect with MTC about their <u>Mobility Hubs in Affordable Housing</u> Program for car sharing in affordable housing if this is something WOCAP wants to pursue in the future.

#58 Topic: Mobile Sources

Original Strategy	DRAFT Revised Strategy
Lead: OUSD, City of Oakland The Oakland Unified School District and the City of Oakland, as part of the Safe Routes	This strategy is proposed to be closed out.
to Schools Program in West Oakland, begin twice a day street closures next to public schools in West Oakland to keep cars and trucks away from arriving and departing students.	

Proposed Action: Close Out Strategy.

Rationale: The intent of this original was to reduce exposure and idling. It is not feasible to close streets twice per day near public schools and WOCAP/OUSD has not actively looked into this strategy. WOEIP is actively working with OUSD and CARB to install "no idling signs" at schools in Spanish and English. OakDOT will be using STEP grant funds to install these signs in the right-of-way.

Additionally, the City has some existing Safe Routes to School Capital Improvement Projects for 2023-2025. Two West Oakland Schools - KIPP Bridge Academy and Yu Ming - are on the list https://www.oaklandca.gov/projects/2023-2025-safe-routes-to-school-capital-projects

Note: Identify Safe Routes improvements needed around other West Oakland schools and suggest them for future Capital Improvement Projects. Ensure signs are installed.

#59 Topic: Mobile Sources

Original Strategy

DRAFT Revised Strategy

Lead: City of Oakland, Caltrans

The City of Oakland increases the frequency of street sweeping to decrease road dust, particularly on streets adjacent to schools, on designated truck routes, and on streets near freeways. The California Department of Transportation increases the frequency of street sweeping along the I-880, I-980, and I-580 freeways. Consideration is given to technology and techniques that avoid re-suspending road dust.

Lead: WOEIP

Study the effectiveness of street sweeping on road dust, and if effective, work with the City of Oakland and Caltrans to increase the frequency of street sweeping on streets adjacent to schools, on designated truck routes, and on streets near freeways and along the I-880, I-980, and I-580 freeways. Consider technology and techniques that avoid re-suspending road dust.

Proposed Action: Revise Strategy.

Rationale: WOEIP is now launching, with Sonoma Technologies, a Road Dust and Street Sweeping study to determine the effectiveness of sweepers before any effort to increase frequency. WOEIP is now the new lead. They will engage OakDOT and Caltrans as needed in the future for this strategy.

Caltrans is working with Sonoma Tech on literature review of street sweeping as well.

#74 Topic: Stationary Sources

Original Strategy DRAFT Revised Strategy

Lead: Ava Community Energy (formally East Bay Community Energy), PG&E

The Air District advocates for a plan that East Bay Clean Energy and PG&E are spearheading to replace the Dynegy Power Plant with a cleaner and more reliable source of energy by 2022. The proposed location for this initiative is the Oakland C, Oakland L, Maritime Port of Oakland, and Schnitzer Steel substation pocket, which is located within PG&E's Oakland distribution planning area. Eligible resource types include: (1) in-front-of-the-meter renewable generation; (2) in-front-of-the-meter energy storage, and (3) behind-the-meter energy storage. EBCE is seeking to procure the energy, resource adequacy (RA), and renewable energy credits (RECs) associated with these local resources, while PG&E will focus on meeting Oakland's transmission reliability needs.

This strategy is complete.

Proposed Action: Completed.

Rationale: Vistra Energy, a subsidiary of Dynergy (who owned the generation plant) has been doing the upgrade to battery storage for several years. WOEIP and the community participated in the effort to get the upgrades completed. According to the website the project is complete. https://vistracorp.com/vistra-zero/

#76 - Topic: Health Programs

Original Strategy	DRAFT Revised Strategy
Lead: City of Oakland	Lead: WOCAP Community Steering Committee
The City of Oakland works with local and agency partners to implement regional and local adoption of the State Department of Public Health's Health in All Policies program.	The WOCAP Community Steering Committee will adopt a Health in All Policies framework to better consider the health benefits and impacts of proposed plans, policies, and programs.

Proposed Action: Revise Strategy.

Rationale: The City has not made any explicit progress on this strategy, so the CSC has decided to revise this strategy and take ownership of it. This is an educational opportunity for the WOCAP CSC. They can learn about Health in All Policies and incorporate the framework into WOCAP guidance documents and principles. All CSC members would be encouraged to apply the "Health in All Policies" framework to their community and/or agency-related work so they can explicitly think about health benefits and impacts of their programs, plans, and policies.

Implementation Notes: WOCAP will meet with representatives from the State Department of Public Health to craft an approach.

#77 - Topic: Health Programs

Original Strategy	DRAFT Revised Strategy
Lead: City of Oakland (Planning) Consistent with the Healthy Development Guidelines, the City of Oakland implements a project-wide smoking ban in Oakland at new developments.	Lead: City of Oakland (Planning), Alameda County Public Health Department Consistent with the Healthy Development Guidelines and the Housing Element, the City of Oakland will create an ordinance to prohibit smoking in existing and new multi-unit housing to protect other residents and neighbors from external impacts. The ordinance should consider ways to protect violators from evictions and assist violators in quitting smoking with support from the Alameda County Public Health Department and/or other community health partners.

Proposed Action: Revise Strategy.

Rationale: The housing element calls for a smoking ban.

Housing Element, Action 5.2.1: Protect against smoke and wildfire. To reduce the impacts of secondhand smoke, the City will explore amendments to the smoking pollution control ordinance to create smoke-free environments within multifamily housing properties.

Alameda County adopted a ban in 2022 https://acphd.org/tobacco-control/smoke-free-multi-unit-housing/

Context: Oakland's <u>current no-smoking policies</u> (Landlords can prohibit smoking in their building, but it is not required by the City to do so)

Implementation Notes: The City and Alameda County Public Health Department will meet to try and craft language and a program that:

- Identifies county or community health partner resources to support smoking cessation
- Identifies appropriate enforcement approaches that ensure that this new ordinance doesn't risk punitive action (e.g., eviction, rent increase, etc.) from the landlord to vulnerable renters
- Ensures landlords and tenants receive proper notification about the new ordinance and smoking cessation programs available

#79 - Topic: Health Programs

Original Strategy

DRAFT Revised Strategy

Lead: City of Oakland

The City of Oakland works with agency and community partners to undertake participatory budgeting with West Oakland community members to allocate local health improvement grants that reduce emissions or exposure to emissions.

Lead: City of Oakland (City Administrator's Office and Finance Department)

In alignment with General Plan EJ-A.34 and EJ-A.36 the WOCAP and other EJ Priority Community Leaders will advocate that the City of Oakland plan the approach to and begin the participatory budgeting process for EJ community investments, especially ones that reduce emissions or exposure to emissions and protect public health. The City should provide WOCAP and other priority EJ communities with a regular progress report on this strategy.

Proposed Action: Revise Strategy.

Rationale: The original strategy refers to "local health improvement grants" however, WOCAP and the City have never pursued the creation of a local health improvement grant program.

The EJ Element does include participatory budgeting policy language

- **EJ-8.3** Innovative Methods and Creative Strategies. Explore innovative strategies for increasing community involvement in civic processes and ownership of outcomes, tailoring strategies to best reach target audiences. Strategies to explore may include <u>participatory budgeting</u>, participatory action research, providing staff assistance to support community-driven planning and policy efforts, or other approaches that emphasize the active participation of community members most affected by the questions at issue.
- **EJ-A.34.** Develop a <u>participatory budgeting process</u> for EJ Community investments and explore expansion into other departments. Related to Housing Element Action 5.2.9. Responsibility: City Administrator's Office, Department of Finance. Timeframe: Long
- **EJ-A.36.** Integrate community-led and community-driven initiatives into City planning processes, such as other General Plan elements, future action and area plans, the Capital Improvement Program (CIP) process, the adopted City budget, bond measures, and other City investments and resource allocations. Responsibility: City Administrator's Office. Timeframe: Ongoing

The revised strategy updates this concept to align with the EJ Element.

Implementation Notes: CSC should follow up with the City to get annual updates on this strategy's implementation in addition to receiving the City's Bi-annual (every two years) progress report on the EJ Element.

#82 - Topic: Health Programs

Original Strategy

DRAFT Revised Strategy

Lead: OEHHA

The California Office of Environmental Health Hazard Assessment, in partnership with the Steering Committee, the City of Oakland, CARB, and the Air District, studies setting a limit on West Oakland's cumulative exposure to TACs.

Lead: CARB, OEHHA

Advocate for expanded basic research on health impacts of PM2.5 exposure and add basic research on NOx, SOx, and Toxic Air Contaminants (TACs). Notify Air District and the WOCAP CSC when there are open calls for suggesting new research topics and help the CSC with understanding the research concept solicitation process. Provide updates, as requested by the CSC, on future research projects that address cumulative impacts.

Proposed Action: Revise Strategy.

Rationale: The revision will shift the lead implementer to CARB and align with the Path to Clean Air Health Action 6.1. OEHHA will still be on as a supporting partner agency. The revised language calls for expanded research on the health impacts of PM2.5, NOx, SOx, and TACs and additional, general research on cumulative impacts.

#84 - Topic: Health Programs

Original Strategy	DRAFT Revised Strategy
Lead: Alameda County Dept of Public Health	This strategy is proposed to be closed out.
The Alameda County Public Health Department expands its Asthma Management programs.	

Proposed Action: Close out Strategy.

Rationale: Reducing and mitigating the health impacts of air pollution is core to the goals of the WOCAP. It is important that these county programs continue and expand, especially in West Oakland neighborhoods. ACPHD's Asthma Start program began expanding to include adults on Medi-Cal as well as serving children under 18. Asthma Start has also added light housing remediation as part of Cal-AIM and is working with the Air District in the Bay Area Healthy Housing Initiative.

Note: Get updates from ACPHD as needed

#85 - Topic: Health Programs

Original Strategy

DRAFT Revised Strategy

Lead: City of Oakland, Alameda County Public Health Department

The City of Oakland works with Alameda County Public Health Department to improve access to medical services within West Oakland. This work expands existing programs such as:

- (1) Child Health and Disability Prevention Program free health check-ups for infants through teens;
- (2) Asthma Management at schools;
- (3) Building Blocks for Health Equity which works to correct inequity in health outcomes for children;
- (4) Urban Male Health Initiative which is charged with reducing the premature mortality of men and boys in Alameda County; and,
- (5) Alameda County Health Improvement Plan to develop and implement a five-year county plan to improve health and achieve health equity.

Lead: Alameda County Public Health Department and **West Oakland Health Center**

The Alameda County Public Health Department, West Oakland Health Council, and other community health providers in West Oakland increase marketing and education to ensure West Oakland residents know about and utilize existing health programs.

Proposed Action: Revise Strategy.

Rationale: The core goal of this strategy is to improve access to health care services in West Oakland. The numbered lists in the original strategy provide examples of health services, however the list is outdated. Our revised strategy will omit the list, since the health programs may change over time. For informational purposes, this is the updated list of improved access to medical and health services in West Oakland:

- ACPHD contracts with West Oakland Health Center to provide vaccination and connect patients to primary care;
- ACPHD partners with Serenity House to hold Wellness Clinics monthly to provide COVID, MPOX and flu vaccines along with

- screening for blood pressure, diabetes and HIV;
- ACPHD Family Health Services Division: perinatal health initiatives to reduce Black infant and maternal mortality; case management, home visiting, and resource linkage to promote child and family health; support program for fathers; and,
- ACPHD Community Health Improvement Plan: developing and implementing a five-year plan to improve community health in three key priority areas (access to health care, economic security & opportunities, and promoting peaceful families & communities).

The Environmental Justice Element calls for additional healthcare facilities. Therefore, #85 can be considered "in progress".

• EJ Element: *EJ-6.3 Healthcare Facilities*. As part of long-range planning efforts, ensure appropriate land use designations and zoning to facilitate additional healthcare facilities in areas without sufficient access, as shown in Figure EJ-21.

Implementation Notes: ACPHD recommends that one or more WOCAP representatives should participate in the CHIP access health care workgroup to lift up Strategy 85 and to lift up the issue of air pollution and environmental justice.

#86 - Topic: Health Programs

Original Strategy	DRAFT Revised Strategy
Lead: Alameda County Dept of Public Health	This strategy is proposed to be closed out.
The Alameda County Public Health Department works with agency and local partners to investigate the use of green building approaches in housing construction and renovation that will reduce emissions and exposure to air pollution emissions. This work examines weatherization/energy efficiency and renewable energy services. This work draws from the Contra Costa County Health Department's pilot effort in cooperation with the Regional Asthma Management Program.	

Proposed Action: Close out Strategy.

Rationale: The City has pursued a number of efforts over the years that will "reduce emissions and exposure to air pollution":

- Environmental Justice Element policy for upgrades to existing properties occupied by low-income individuals:
 - EJ-4.2 Supplemental Funding Sources for Building Rehabilitation. Place a high priority on identifying supplemental funding sources/resources for retrofit, rehabilitation, and upgrade projects that address health and safety in housing occupied by low-income renters and homeowners, including air quality improvements. Supplemental funding sources could include loans and grants available from the California Strategic Growth Council, CalEPA, CARB, and other entities.
- The updated <u>Standard Conditions of Approval</u> includes a variety of health protective measures for developments near busy roadways, freeways, and other stationary pollution sources.
- <u>ECAP Consistency Checklist</u> assesses whether a development project is consistent with the City of Oakland ECAP and the City of Oakland's greenhouse gas (GHG) emissions reduction target. It includes a variety of measures that further the goals in original strategy 86.
- See <u>Planning Commission annual reporting</u>
- Additional reporting on <a href="https://example.com/housing.com
- WOCAP Strategy 75 already addresses air filtration

Note: The Steering Committee should track the implementation of the EJ Element, ECAP, and Standard Conditions of Approval

#88 - Topic: Health Programs

Original Strategy	DRAFT Revised Strategy
Lead: City of Oakland (Sustainability)	This strategy is proposed to be closed out.
The City of Oakland studies revising standard conditions of approval and/or similar requirements for large projects to require "opt-up" to East Bay Community Energy's Brilliant 100 carbonfree electricity supply.	

Proposed Action: Close out Strategy.

Rationale: The City revised the <u>Standard Conditions of Approval</u> shortly after the ECAP was adopted. That was the same time as adopting the related <u>ECAP Consistency Checklist</u>. It is not specified that ALL major projects had to opt up, but all cannabis operations are required to do so.

There's a related item (Informational Report) going before Council later this summer that will enable the Council to discuss compelling more Oakland customers to opt up.

The Brilliant 100 option was eliminated a year or so ago because it wasn't cost-effective, so now there's just Bright Choice and Renewable 100.

Note: The CSC should monitor the ECAP implementation.



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