



AGENDA: 4

Bay Area Air Quality Management District
Mobile Source Committee

Projects with proposed awards over \$100,000

December 7, 2017

Adam Shapiro
Staff Specialist



Overview

- Background
- Proposed projects with awards over \$100,000
- Recommendations



CMP, MSIF, & TFCA

- **Carl Moyer Program (CMP)**
 - Created in 1998 to reduce emissions from heavy-duty engines
 - Voluntary program that funds surplus emission reductions
- **Mobile Source Incentive Fund (MSIF)**
 - AB 923 allowed for additional \$2 motor vehicle registration fee surcharge (12/04)
 - CMP and Lower Emission School Bus Program (LESBP) projects eligible for MSIF funding
- **Transportation Fund for Clean Air (TFCA)**
 - Statutory authority set forth in California Health and Safety Code Sections 44241 and 44242
 - Funding provided by a \$4 surcharge on motor vehicles
 - 60% of TFCA funds awarded directly by the Air District
 - Remaining 40% is distributed to the 9-Bay Area Congestion Management Agencies



CMP Year 19

- **On 3/1/17 District Board of Directors:**

- Approved participation in CMP Year 19
- Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000

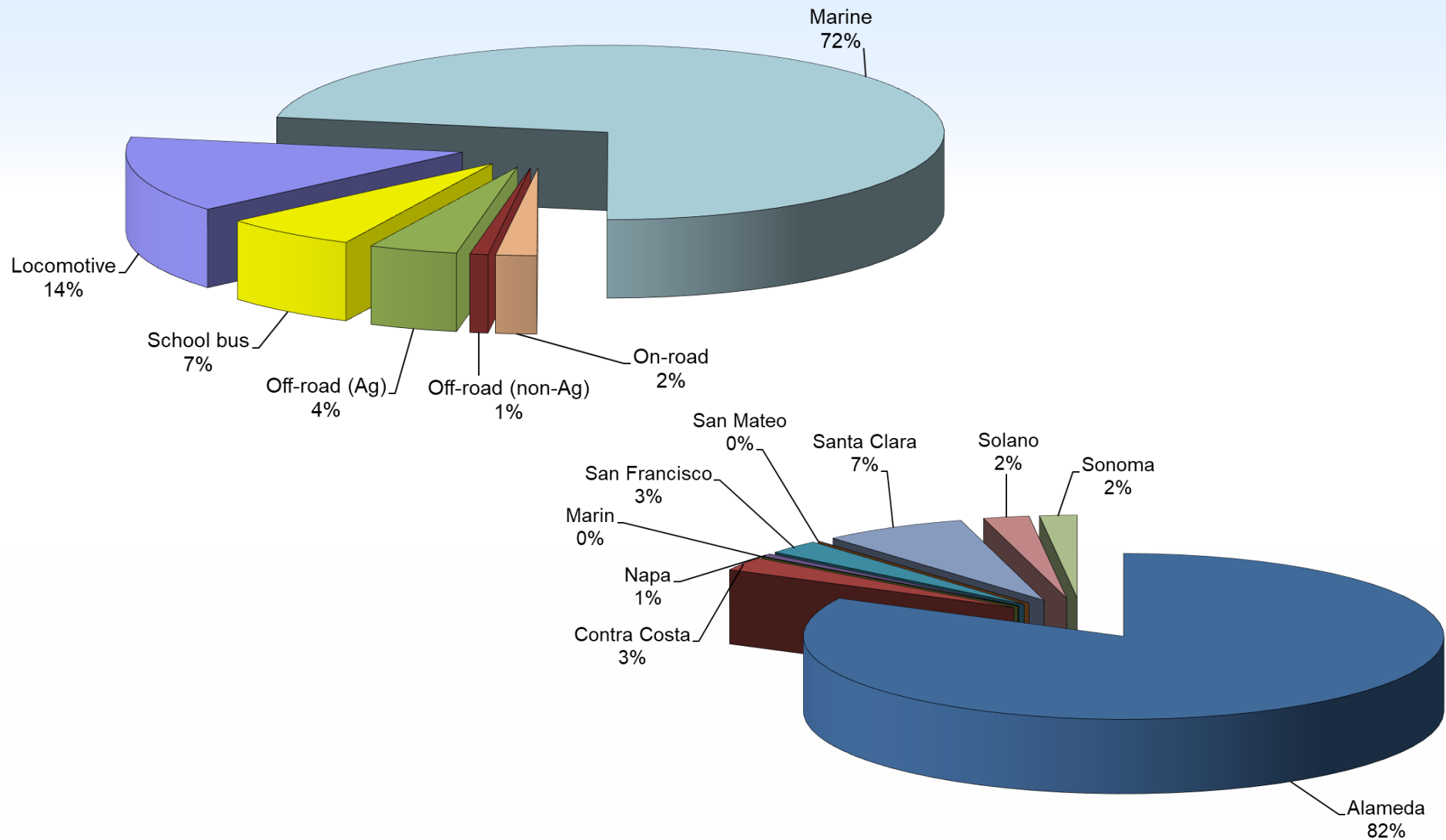
- **CMP Project Recommendations over \$100k:**

- 7 Projects to reduce emissions from: 1 off-road loader, 1 locomotive, 4 school buses, and 7 marine engines
- \$7,149,814.22 in total awards
- Emission reductions: Over 97 Tons Per Year (TPY) of criteria pollutants



CMP and MSIF Funds

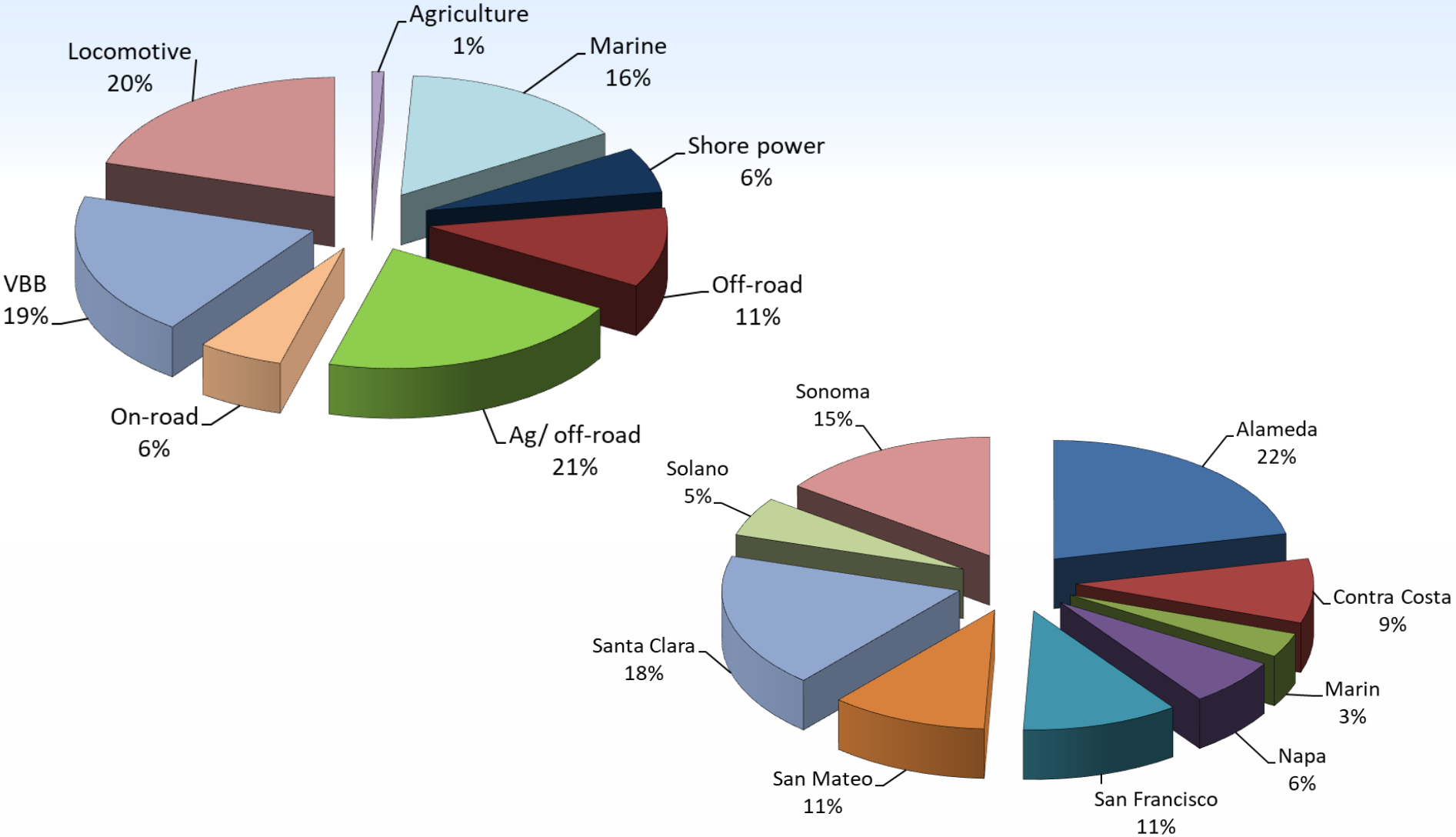
Awarded as of 11/17/17





CMP and MSIF Funds

Awarded since 2009





- **Board approval of FYE 2018 TFCA Program**
 - 4/19/17 – Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000 and allocation of \$29.24 million in TFCA funds
 - 8/2/17 - Adopted policies and evaluation criteria
- **TFCA project recommendations over \$100k:**
 - One project to install 244 Level 2 (High) electric vehicle (EV) charging stations at 9 high schools in Santa Clara County
 - Proposed award: \$732,000
 - Emission reductions: ~0.92 TPY of criteria pollutants

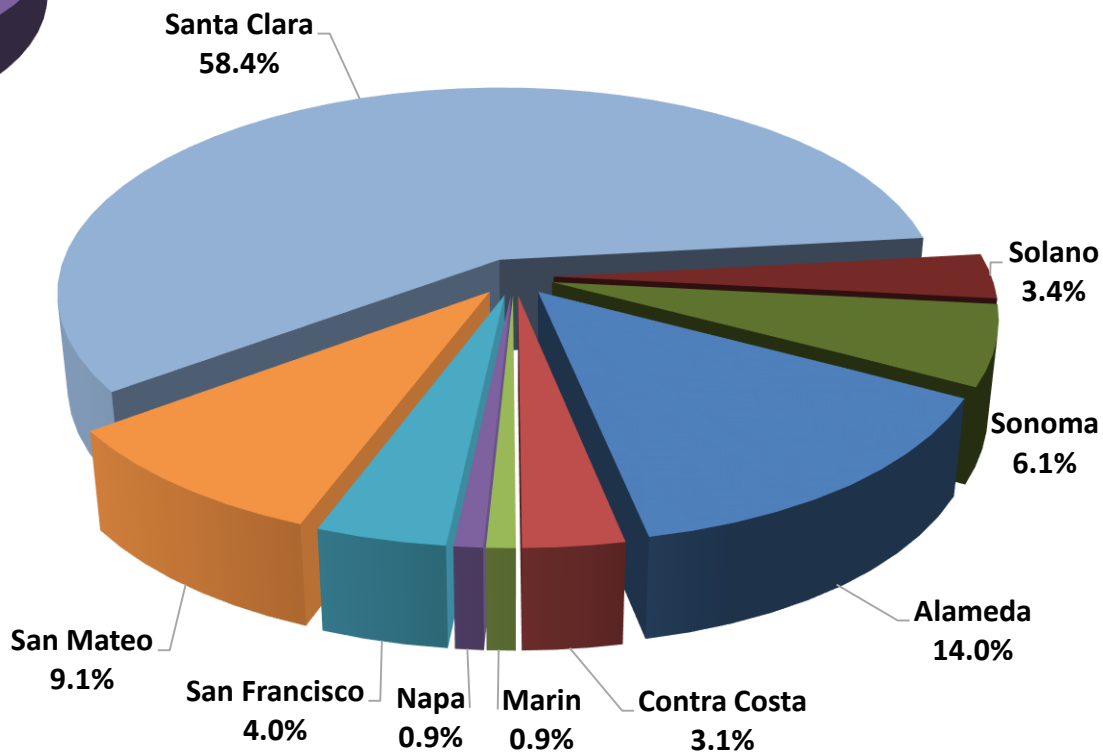
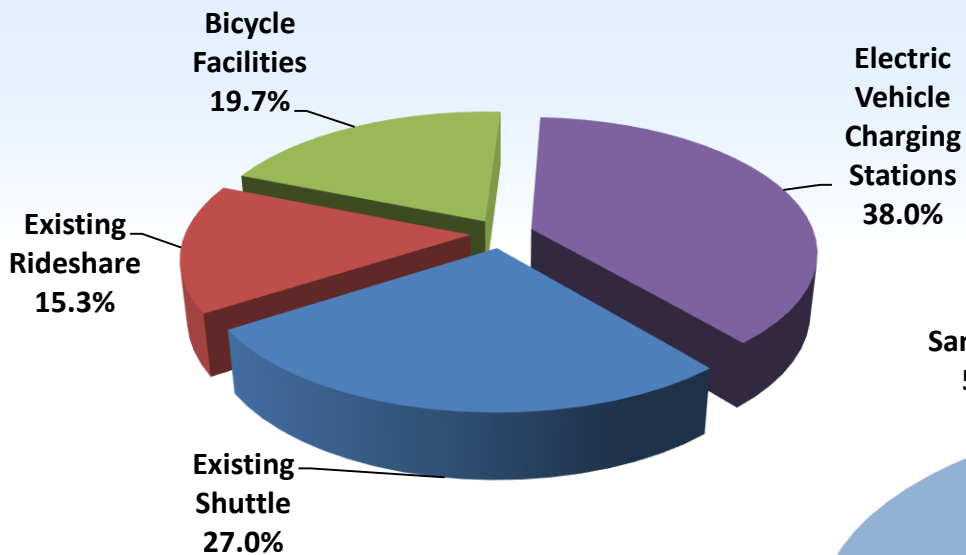


TFCA Funds Awarded

by Project Category and by County

(For eligible projects evaluated between 7/1/17 and 11/17/17)

Total = \$7.38 M (out of \$29.24)





Recommendations

Recommend the Board of Directors:

- Approve proposed grant awards over \$100,000 as shown in Attachment 1; and
- Authorize the Executive Officer/APCO to enter into all necessary agreements with applicants for the recommended projects.



AGENDA: 5

Bay Area Air Quality Management District
Mobile Source Committee

Fiscal Year Ending (FYE) 2016
Transportation Fund for Clean Air (TFCA)
Audit Report Results
and
FYE 2017 Report on TFCA Regional Fund
Expenditures and Effectiveness

December 7, 2017

Chengfeng Wang
Acting Manager



Overview

- **TFCA Background**
- **Audit #18:**
 - Process
 - Findings and Air District Responses
 - Trends
- **FYE 2017 Expenditures and Cost-Effectiveness:**
 - Expenditures
 - Emissions Reductions
 - Cost-Effectiveness



Background

- **Transportation Fund for Clean Air (TFCA)**
 - Statutory authority set forth in California Health and Safety Code Sections 44241 and 44242
 - *Section 44242*: requires a fiscal audit of all projects and programs funded with TFCA monies (at least every two years)
 - *Section 44241*: requires annual public hearing to review TFCA expenditures to determine effectiveness in improving air quality
 - Funding provided by a \$4 surcharge on motor vehicles
 - 60% of TFCA funds awarded directly by the Air District
 - Remaining 40% is distributed to the 9-Bay Area Congestion Management Agencies



Audit #18 Process

- **February 18, 2015:**

- Board approved award of contract to Gilbert Associates, Inc. (Gilbert) for independent audit services

- **Audit #18 Scope:**

- Reviewed financial and compliance objectives for Regional Fund and Air District sponsored projects that were closed out by 6/30/2016
- Covered 36 TFCA projects (27 projects sponsors) and over \$11M in TFCA funds expended



Audit #18 Process (cont'd)

- **Financial audits** performed in accordance with generally accepted auditing standards in the U.S. and applicable standards contained in *Government Auditing Standards*
- **Compliance audits** performed in accordance with the requirements outlined in the Health and Safety code, funding agreements, and *Government Auditing Standards*
 - Focus to ensure TFCA expenditures were paid in accordance with program's objectives
 - Not designed to provide assurance on overall project compliance



Audit #18 Findings

- **Sponsor Findings:**

- No sponsor findings noted as of and for the project period ending June 30, 2016

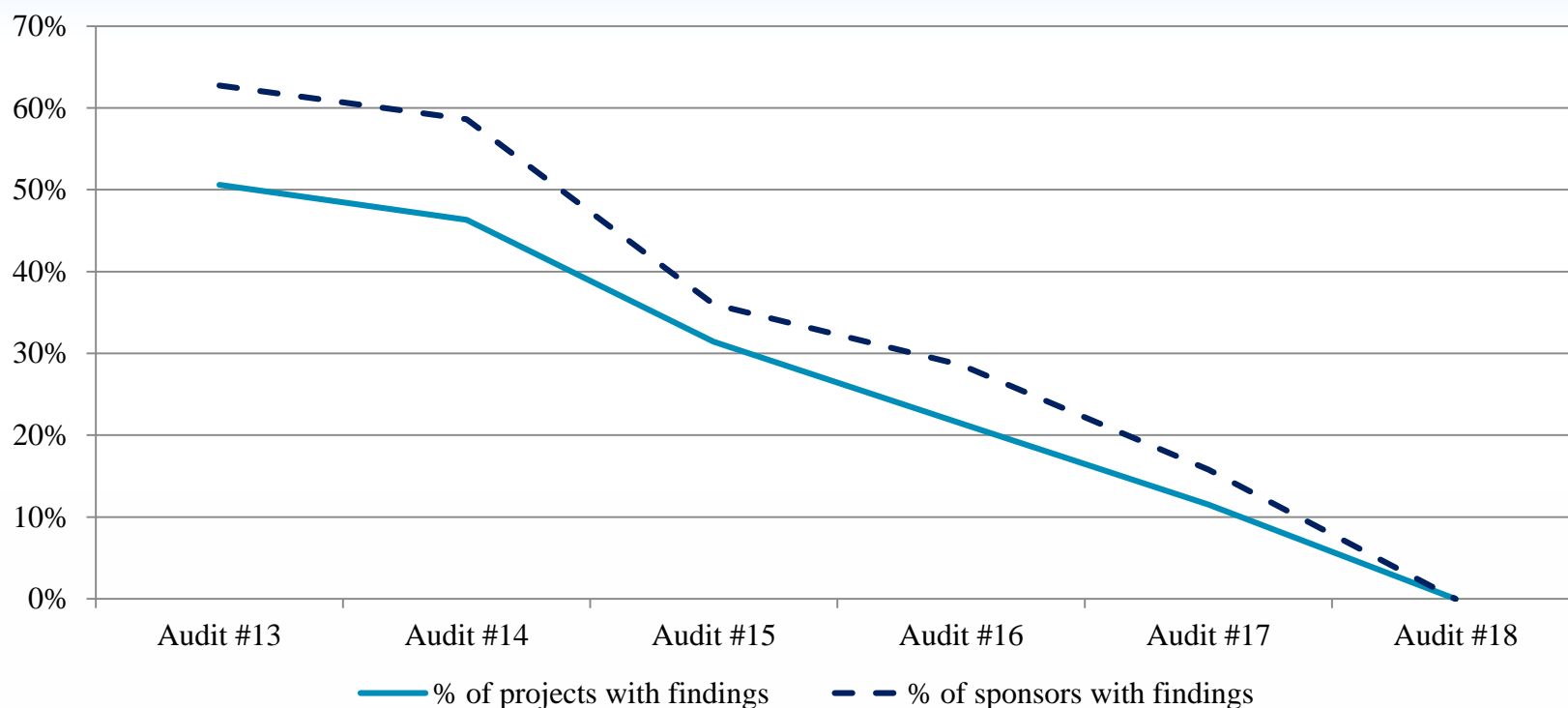
- **Air District Findings:**

- No oversight findings noted as of and for the project period ending June 30, 2016



TFCA Audit Performance Trend

Performance Trend for TFCA Audits #13 - #18



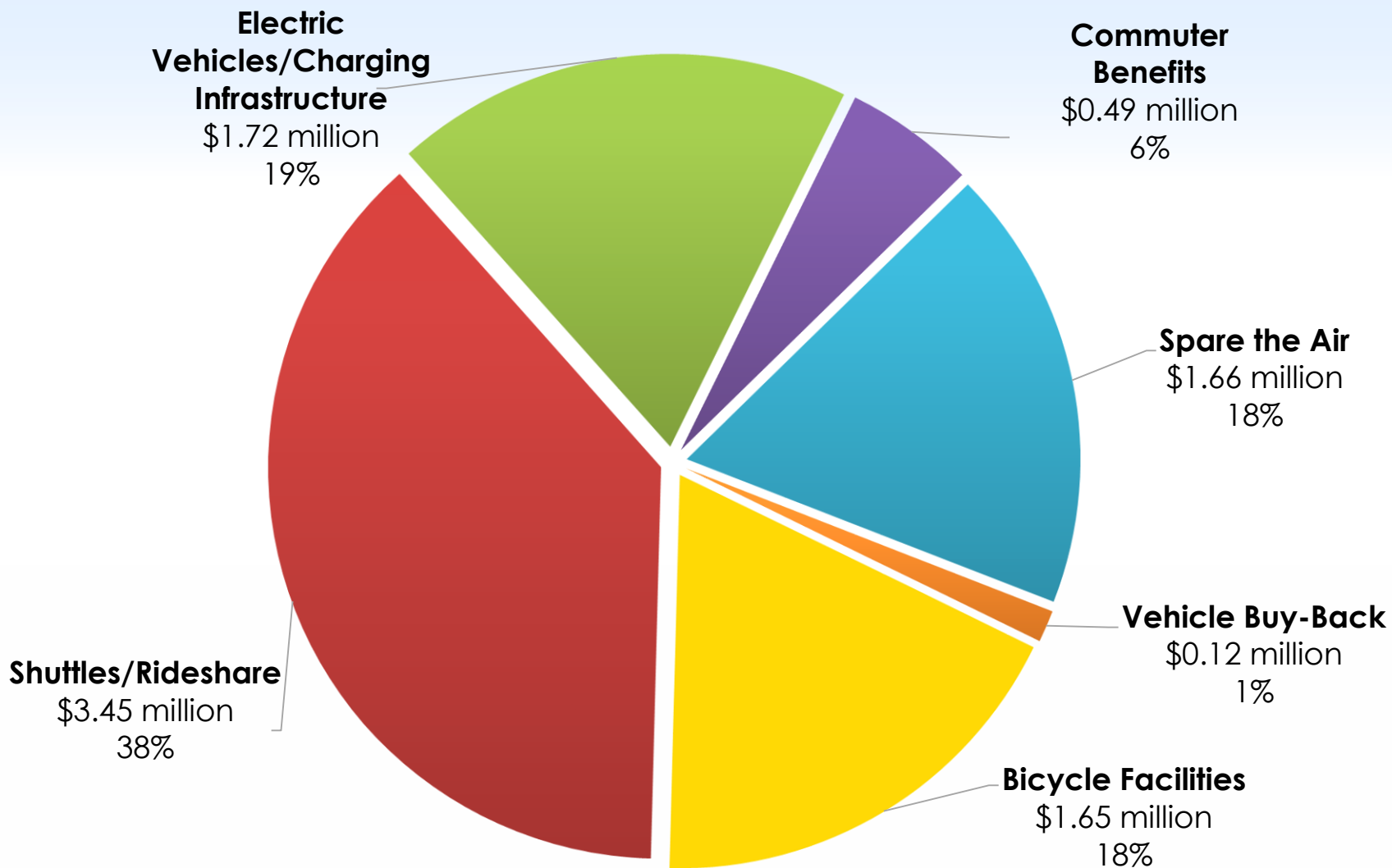


Summary of FYE 2017 Expenditures and Effectiveness Report Results

- Report covers 17 TFCA Regional Fund and 3 Air District-sponsored programs that concluded in FYE 2017
- **Expenditures: \$9.87 million (M)**
 - \$2.27 M for Air District programs
 - \$6.43 M for Regional Fund grants
 - \$0.40 M in County Program Manager funds
 - \$780,229 in administrative and audit costs
- **Lifetime criteria pollutants reduced: 165.04 tons**
 - 53.56 tons of reactive organic gases
 - 44.83 tons of nitrogen oxides
 - 66.65 tons of particulate matter
- **Lifetime greenhouse gas emissions reduced: 94,000 tons**



Expenditures by Project Category





Summary of Expenditures and Effectiveness

Category	# of Projects	TFCA \$ Expended	% of TFCA \$ Expended	Emissions Reduced (tons) ^a	% of Emissions Reduced	C/E - Weighted (\$/ton) ^b
Bicycle Facilities	5	\$1,654,469	18.19%	3.53	2.14%	\$484,812 ^c
Shuttles/Rideshare	9	\$3,453,903	37.98%	40.32	24.43%	\$87,746 ^d
Electric Vehicle/Charging Infrastructure	3	\$1,718,331	18.90%	4.79	2.90%	\$146,423
Commuter Benefits	1	\$488,124	5.37%	2.19	1.33%	\$206,478
Spare the Air Program	1	\$1,658,955	18.24%	114.20	69.20%	\$12,972
Vehicle Buy-Back Program	1	\$119,761 ^e	1.32%	-	-	-
Total for Projects and Programs^f	20	\$9,093,543	100%	165.04	100%	\$48,571
Administration		\$780,229				

(a) Combined emission reductions of ROG, NO_x, and PM₁₀ over project operational period.

(b) Consistent with the current California Air Resources Board methodology to calculate cost-effectiveness for the Carl Moyer Program (CMP), PM emissions were weighted by a factor of 20 to account for their harmful impacts on human health.

(c) Emissions reduced from the bicycle facility projects were determined using the default cost-effectiveness value of \$90,000 per ton of emissions reduced.

(d) Seven of nine projects were cost-effective.

(e) Total FYE 2017 program cost was \$4,738,657.26, which includes funds from CMP, Mobile Source Incentive Fund (MSIF), and TFCA.

(f) Total may vary due to rounding.



Key Expenditures and Effectiveness Report Findings

- **Overall cost-effectiveness: \$48,571/ton criteria pollutant emissions reduced:**
 - Five out of 20 projects and programs achieved less-than-originally-estimated emissions reductions
 - Two shuttle, one bicycle, and one electric vehicle project did not meet the cost effectiveness cap
- **TFCA funds were allocated to eligible projects and programs, consistent with the authorizing legislation**
- **Other public health benefits:**
 - Conserve energy and help to reduce greenhouse gases
 - Reduce traffic congestion
 - Expanding public's access to services that provide first and last-mile connections to rail, ferry, and mass transit
 - Improve physical fitness and public safety by facilitating pedestrian and other car-free modes of travel
 - Contribute to accelerate the adoption of zero-emissions vehicles



AGENDA: 6

Bay Area Air Quality Management District
Mobile Source Committee

New Grant Program Revenue and Staffing for the Technology Implementation Office and Strategic Incentives Division

December 7, 2017

Karen M. Schkolnick
Director, Strategic Incentives



Overview

- Overview of New Grant Program Revenue
 - Assembly Bill (AB) 134 Funding for Carl Moyer Program and Goods Movement Bond Program
 - Other Funding
- Staffing Needs
- Recommendations



Projected Funding 2018

Funding Source	Funding Amount
Carl Moyer Program (Yr. 19)	\$8 Million (M)
Mobile Source Incentive Fund	\$11 M
Transportation Fund for Clean Air	\$22 M
AB134	\$50 M
Other Funding*	\$17 M
Total	> \$108 M

*Other funding includes other federal, state, and settlement funds



Assembly Bill 134

- Signed into law on September 9, 2017
- Amends the 2017 State Budget Act and allocates \$50 million (M) to the Air District
- Funds to be encumbered by June 30, 2019, and fully liquidated by June 30, 2021

Carl Moyer Program



Goods Movement Bond Program





\$17 million in new Funding

\$3.7 admin

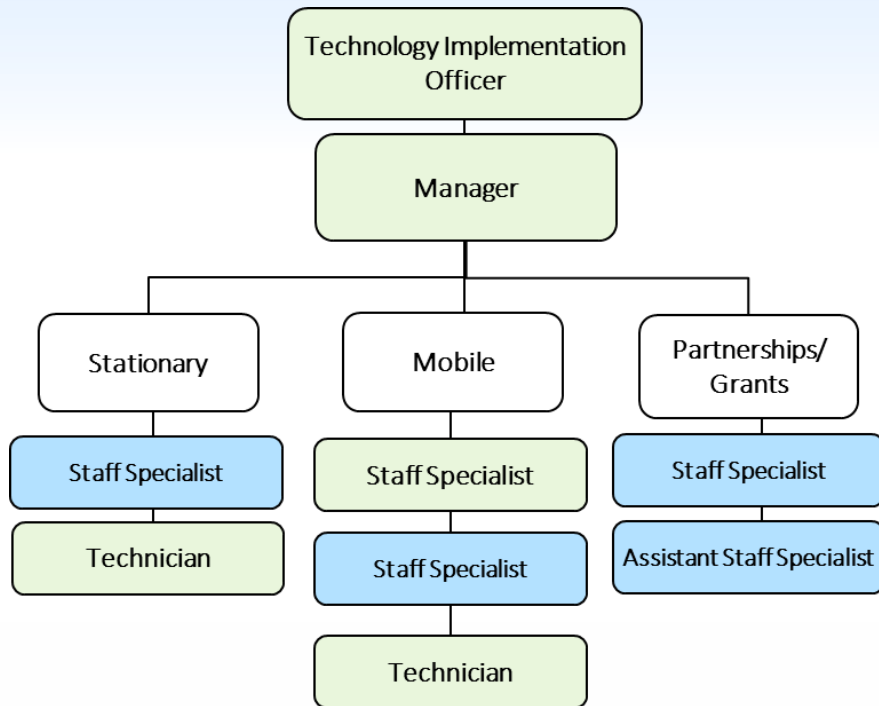
Funding Agency	Project Title
Air Resources Board	<ul style="list-style-type: none"> Enhanced Fleet Modernization Plus-up Program Goodwill Industries Electric Vehicle
Caltrans/MTC	<ul style="list-style-type: none"> Public Education and Signage EV Program Spare the Air
RFG Settlement Fund	<ul style="list-style-type: none"> EV Charging Demo Zero Emission Vehicle/Equipment for Port of Oakland
California Energy Commission	<ul style="list-style-type: none"> Bay Area Corridor Charging Expansion
National Fish and Wildlife Foundation	<ul style="list-style-type: none"> Commercial Lawn & Garden Equipment
US EPA	<ul style="list-style-type: none"> Locomotive Replacement (2 projects)





Full Time Employee (FTE)s -- Strategic Incentives Division and Technology Implementation Office

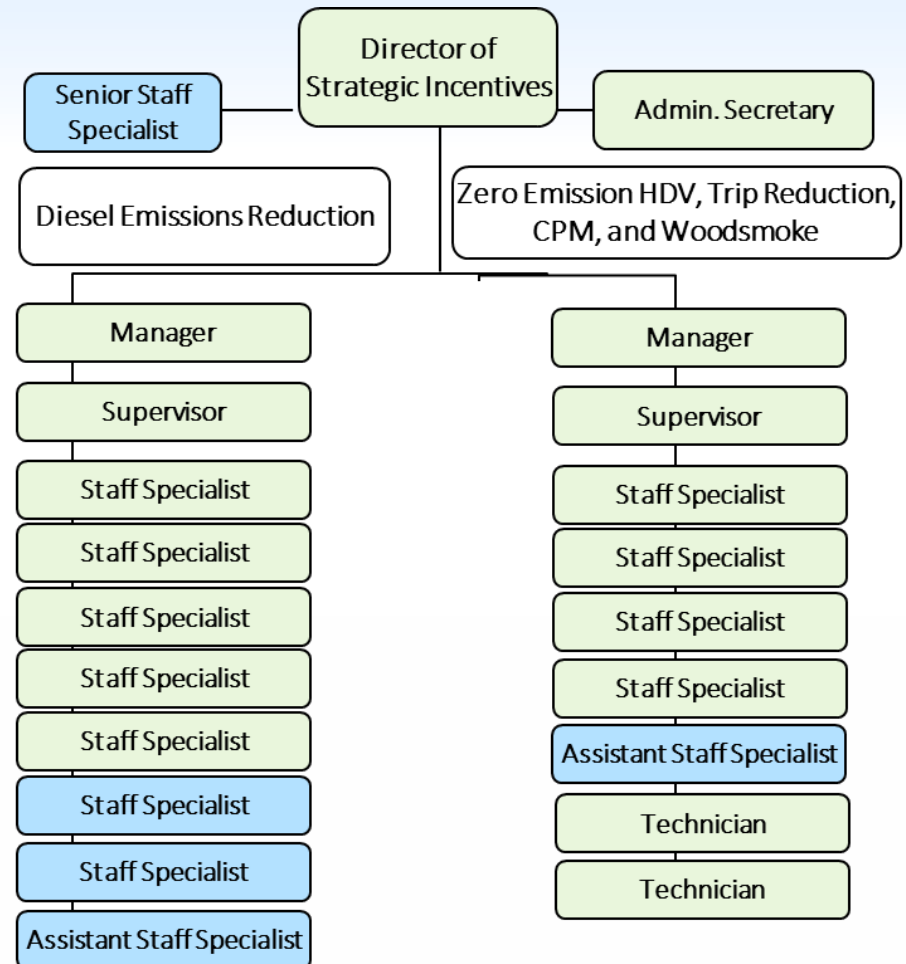
Technology Implementation Office



Legend

- Existing FTE
- Proposed FTE
- Programs

Strategic Incentives Division





Recommendations

Recommend the Board of Directors:

1. Amend the Fiscal Year Ending 2018 budget for the Carl Moyer Program, authorize the Bay Area Air Quality Management District to accept, obligate, and expend \$50 million in funding from the California Air Resources Board resulting from Assembly Bill 134, and adopt a resolution authorizing this award
2. Authorize the Executive Officer/APCO to enter into all agreements necessary to accept, obligate, and expend this funding; and
3. Refer staffing request to Budget and Finance and Executive Committees



AGENDA: 7

Bay Area Air Quality Management District
Mobile Source Committee

Update on Efforts to Further Reduce Emissions at the Port of Oakland and Former Oakland Army Base

December 7, 2017

Damian Breen
Deputy Air Pollution Control Officer



Overview

- **New Legislative Mandates**
 - AB 617
 - AB 134
- **A Blueprint for Reducing Emissions in Communities of Concern**
 - **Background on the West Oakland Community, Port of Oakland, and Oakland Army Base Redevelopment**
 - **Early actions and results**
 - **West Oakland**
 - Results of Technology Review
 - CEQA and Community issues
 - Actions by Partners
- **Next Steps**



AB 617 (2017)

Requires CARB to:

- Select areas to deploy community air monitoring systems and to implement community emission reduction programs.
- Provide grants to support community participation in developing community emissions reduction programs

Requires local air districts to:

- Deploy community air monitoring systems
- Submit community air monitoring data to ARB to publish and emission reduction program to ARB for approval
- ***Implement a community emissions reduction program***



AB 134 (2017)

Amends the 2017 budget act (AB 97) to include 2017 Greenhouse Gas Revenue Expenditure Plan

Investments include (statewide):

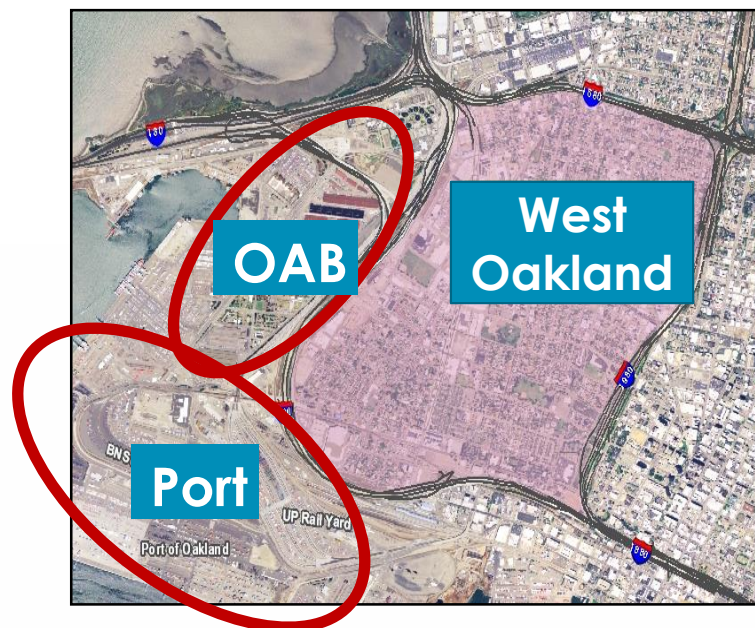
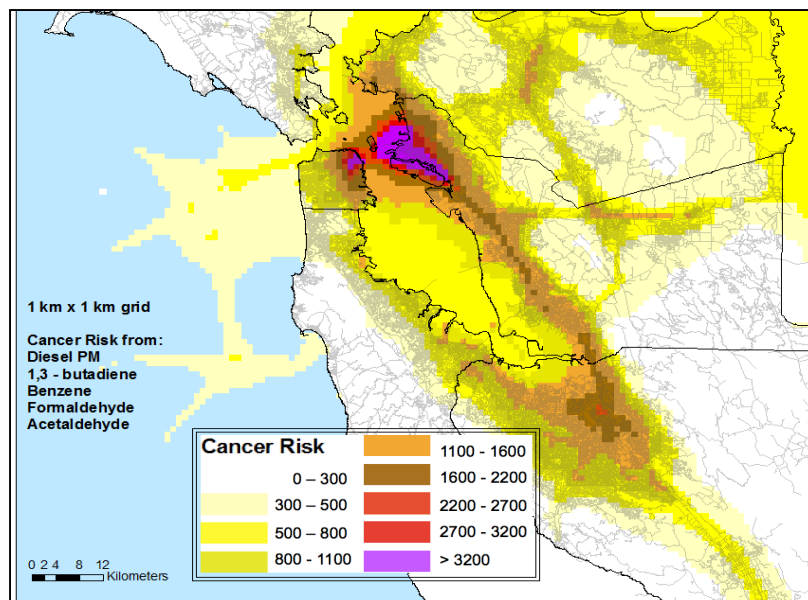
- **\$250 million** to air districts (**\$50 M to BAAQMD**) expand Carl Moyer Program
- **\$5 million** in grants to communities for AB 617 implementation activities
- **\$140 million** in funds to improve port equipment
- **\$180 million** for HVIP (clean trucks and buses)



A Blueprint for Reducing Emissions in Communities of Concern

West Oakland Overview

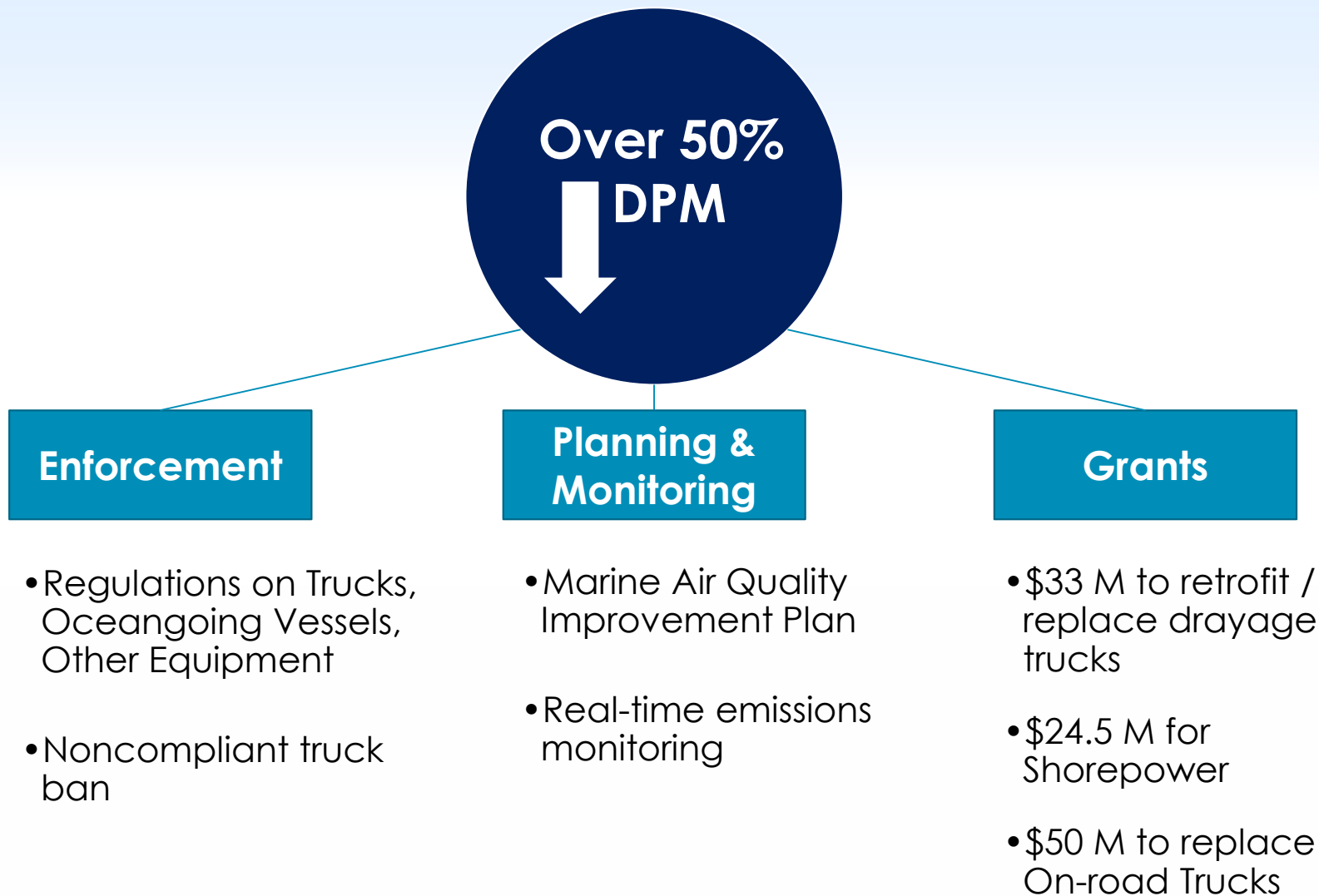
- Port of Oakland 5th largest in US; 2nd in California
 - 18 ship berths, 36 cargo cranes, 2 Rail Yards, 500 cargo handling equipment, 2,500 trucks
- 2008 HRA: cancer risk is ~3x higher than Bay Area average; primarily from Diesel Particulate Matter (DPM)
- 2009 BAAQMD CARE Report shows Port responsible for 29% of West Oakland Health Risk





A Blueprint for Reducing Emissions in Communities of Concern

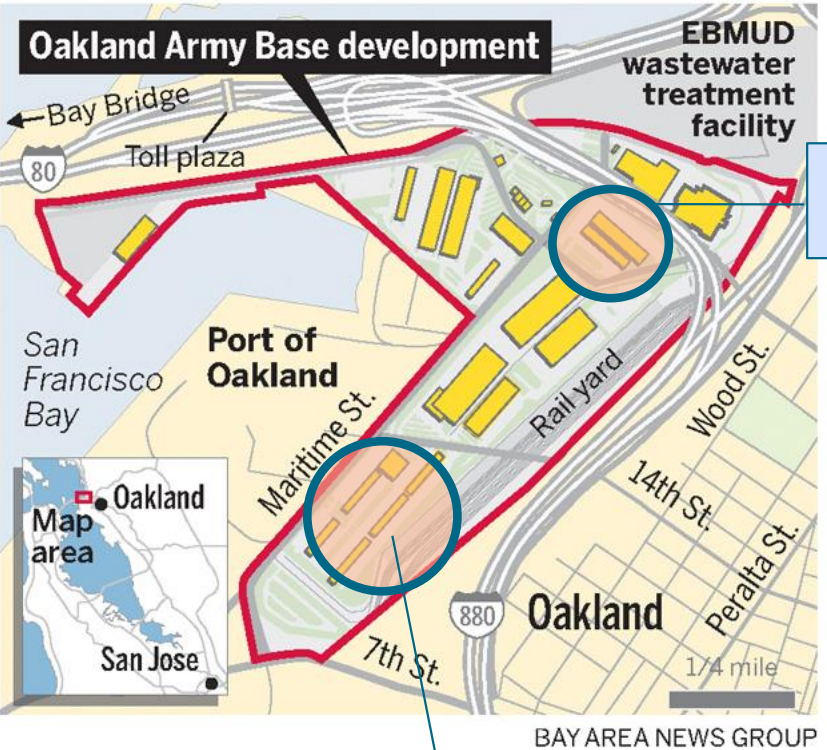
Early Actions at Port of Oakland: 2008-2017





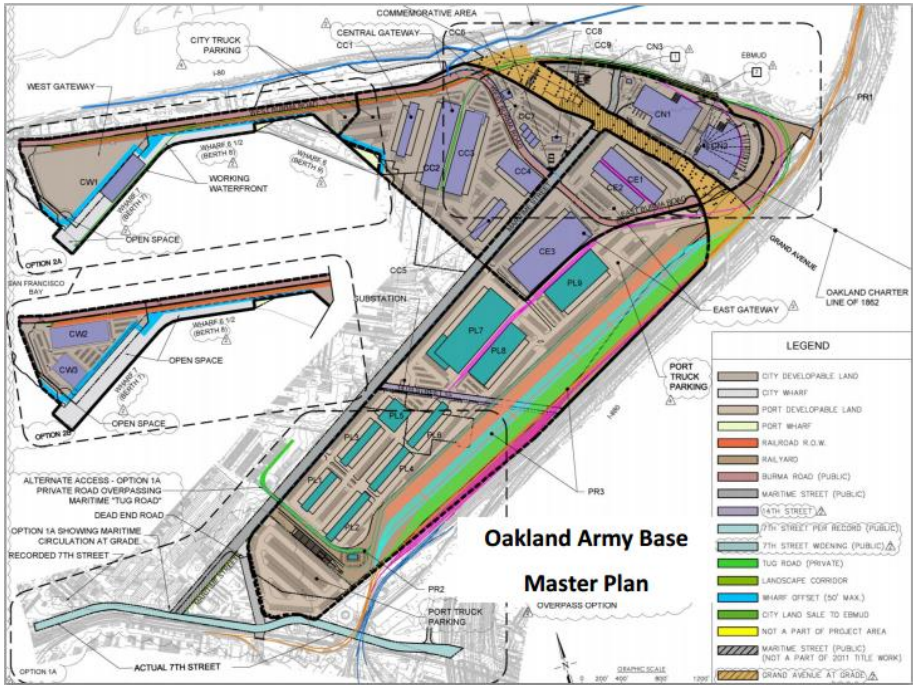
A Blueprint for Reducing Emissions in Communities of Concern

Former Oakland Army Base Development (OAB)



Prologis

Centerpoint





A Blueprint for Reducing Emissions in Communities of Concern

West Oakland Overview

- Update equipment inventories from Port and other operators
- Understand OAB redevelopment efforts
- Review planning frameworks
- Examine potential actions by regulatory agencies (Port of Oakland (Port), City of Oakland (City), California Air Resources Board (ARB), etc.)
- Evaluate feasible technologies that can be deployed



A Blueprint for Reducing Emissions in Communities of Concern

Results of Technology Review

Partners: City, Port, Metropolitan Transportation Commission (MTC), Alameda County Transportation Commission (ACTC), Alameda County Public Health Department (ACPHD), ARB, United States Environmental Protection Agency (USEPA)

Purpose: Determine available technologies to rapidly reduce DPM

1. At the Port
2. At OAB as it is redeveloped

Results: 6 TPY DPM Reduction possible from current operations for \$220 million

- Yard Trucks
- Tug Boats
- Top Pick Cranes
- Drayage Trucks

Guidance Document on available technologies provided to Port and City



Oakland Army Base Development CEQA and Community Issues

CEQA requires OAB redevelopment not to increase risk burden due to DPM from its operations

Port and City are committed to Actions provide they are “feasible” and that technologies are “available:”

- **Mitigation 4.4-3a:** Port to develop and implement program to reduce emissions from maritime and rail operations.
- **Mitigation 4.4-3b:** The City to administer a West Gateway Rail and Maritime Emissions Reduction Program.
- **Mitigation 4.4-4:** The City and Port to jointly create, maintain, and fund, a truck diesel emission reduction program.
- **Mitigation 4.4-5:** City and Port to work with major developers to fund BAAQMD Transportation Control Measures.
- **Mitigation 4.4-6:** City and Port shall implement sustainable development policies for new development
- **Mitigation Measure 5.4-1:** City and Port to encourage, lobby, and potentially participate in emission reduction demonstration projects that promote technological advances in improving air quality.
- **SCA AIR-3:** Exposure to Air Pollution (Toxic Air Contaminants: Particulate Matter) incorporate health-protective measures into project design to reduce the potential health risk due to exposure to diesel particulate matter (PM) both inside buildings and out-of-doors.
- **SCA GCC-1:** Greenhouse Gas (GHG) Reduction Plan: The Goal of this Plan shall be to increase energy efficiency and reduce GHG emissions by at least 20 percent with a goal of 36 percent below the project's “adjusted” baseline GHG emissions.

Community has files Title 6 Complaint with Federal agencies USEPA, USDOT, etc.



Actions by Partners (Local)

- **Port of Oakland:**
 - Commitment to Honor CEQA mitigations via 11/8/2017 letter on CenterPoint Lease
 - Seek Air District, Industry and Community input on feasible technologies to prevent emissions increases from new development
 - West Oakland Truck Management Plan

- **City of Oakland:**
 - Work with Air District on operations plan for Prologis site and future developments
 - Work with Air District on mitigation fund to offset future development
 - West Oakland Truck Management Plan

- **ACTC:**
 - \$4 Million - Intelligent Transportation Systems
 - Freight Planning
 - \$6 million in Measure BB Funding available for:
 - Ocean-going vessel emission control technologies – Bonnet & Shore power
 - Locomotives: advance newest technology rail switchers
 - Cargo handling equipment: includes investments such as rubber tired gantry cranes at the Port of Oakland
 - Trucks: expand deployment of zero and near zero emission vehicles with a focus on trucks that operate in Alameda County

- **ACPHD:**
 - Assist Air District in Identifying and Quantifying costs for a receptor mitigation program



Actions by Partners (Regional, State and National)

- **MTC:**
 - Regional Freight Movement and Investment Strategy
 - \$10 Million for Zero Emissions Busses
- **ARB:**
 - Freight Emissions Reductions Strategy
 - Funding – Cap and Trade & VW Settlement Funds
 - Regulations – Shore Power, Class 5/6 Trucks, Cargo Handling Equipment, etc.
- **USEPA:**
 - Assist with community side outreach & Title 6 complaint review
 - DERA funding – \$0.6 Million for Locomotive Changeout



A Blueprint for Reducing Emissions in Communities of Concern

Next Steps

West Oakland Initiative:

Continue to engage stakeholders:

- January 2018: Community/Industry Meetings

Continue investments at the Port and West Oakland Community:

- Early 2018 – Port Electrification Solicitation (Reformulated Gasoline Settlement)
- February 2018 - Expenditure Plan Mobile Source Committee

617 Initiative: Expand to other communities of concern

- January 2018 – Board of Director Retreat
- Early 2018 – 2020: Develop and begin implementing initiatives for all other Bay Area communities of concern