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Bay Area Air Quality Management District  
Mobile Source Committee

# Projects and Contracts with Proposed Grant Awards Over \$100,000

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September 27, 2018

Ken Mak  
Acting Supervising Staff Specialist



# Overview

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- Background
- Proposed projects with awards over \$100,000
- Summary of funds awarded & recommended in Fiscal Year Ending (FYE) 2019
- Update on funding availability
- Recommendations



## ❖ 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



# Community Health Protection Grant Program (CHP)

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- ❖ AB 134 appropriated \$250 million from the Greenhouse Gas Reduction Fund (GGRF) to reduce mobile source emissions including criteria pollutants, toxic air contaminants, and greenhouse gases in AB 617 communities
- ❖ Bay Area allocated \$50 million of these funds for emission reduction projects under the CMP, and optionally under the Proposition 1B Goods Movement Emission Reduction Program



# Transportation Fund for Clean Air (TFCA)

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- ❖ 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 (*Regional Fund & Air District Sponsored*)
  - Remaining 40% is distributed to the 9-Bay Area Congestion Management Agencies (*County Program Manger Fund*)



# Reformulated Gasoline (RFG) Settlement Fund

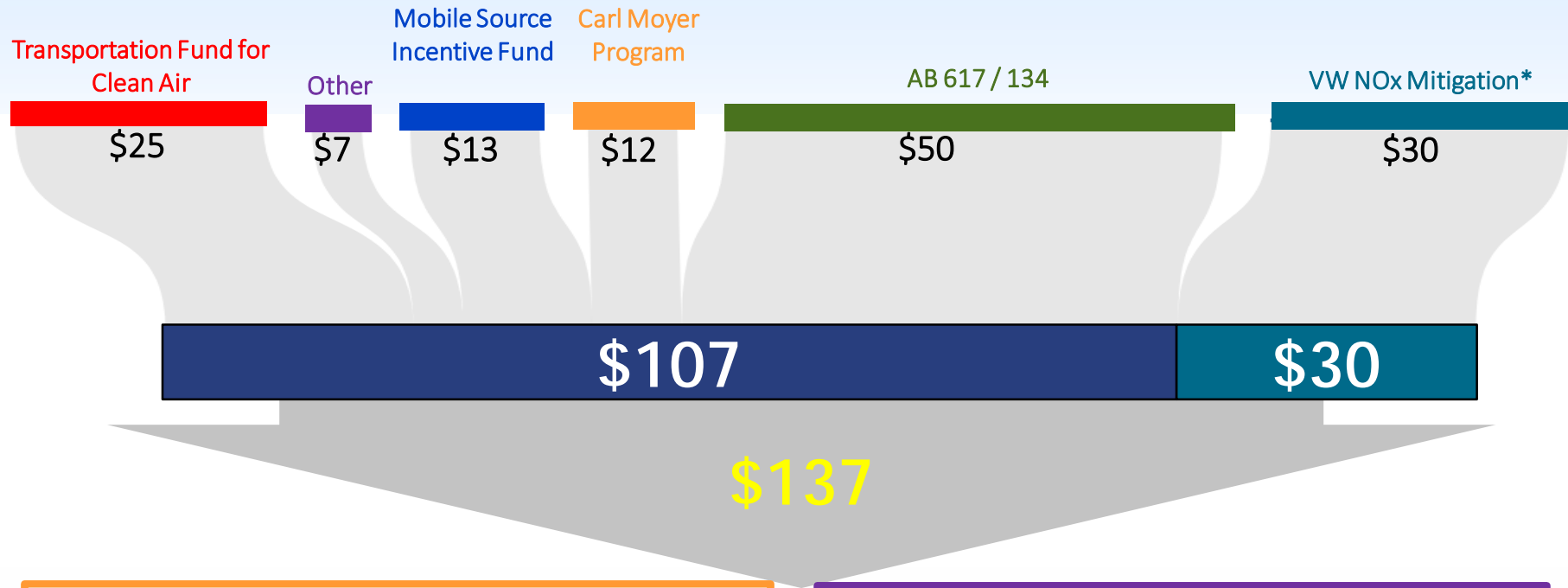
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- ❖ Settlement agreement created \$7 million grants program; Most funding awarded by RFG in 2010
  - Purpose to reduce petroleum consumption
  
- ❖ On 11/1/17 Air District Board of Directors authorized acceptance of up to \$2 M in RFG funds from the Bay Area Clean Air Foundation and authorized Executive Officer/APCO to enter into all agreements necessary to accept, obligate, and expend this funding
  - For project to deploy zero-emission technologies
  - Currently \$1.2 million in project funds available



# Projected Grant Revenues for FYE 2019

## \$137 (in Millions)



**Carl Moyer Category Includes Funding From:**

- CMP Year 20
- CMP Statewide Funds
- Farmers (agriculture only)
- LCFS - Low Carbon Fuel Standard

**Other Funding Sources:**

- EFMP – Enhanced Fleet Modernization Program
- RFG – Reformulated Gasoline Settlement Fund
- DERA – Diesel Emissions Reduction Act
- Zero-Emission Hydrogen Ferry Demonstration Project

\*Total Volkswagen funding is \$423M statewide, which will be dispersed over ~5 year period. Staff projects that as much as 33% of funding could go to projects located in the Bay Area.



# CMP/MSIF, & CHP

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- ❖ **On 2/21/18 Air District Board of Directors:**
  - Approved participation in CMP Year 20
  - Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000
  
- ❖ **On 12/20/17 Air District Board of Directors:**
  - Approved acceptance of \$50 M in AB 134 funding for the Community Health Protection Grant Program (CHP)





# CMP/MSIF, CHP Project Recommendations Over \$100k

- ❖ Eight projects to reduce emissions from 6 pieces of agricultural equipment, 32 school buses, 2 pieces of off-road equipment, and 1 marine engine
  - \$8,477,366 in total awards
  - Emission reductions: over 6.7 Tons Per Year (TPY) of criteria pollutants





## ❖ On 5/2/18 Air District Board of Directors:

- Allocated \$20.44 million of TFCA funds for FYE 2019 projects
- Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000

## ❖ On 6/6/18 Air District Board of Directors:

- Adopted policies and evaluation criteria for the FYE 2019 TFCA Regional Fund program



# TFCA & RFG Project Recommendations Over \$100k









- ❖ Three projects to deploy/install:
  - 1 electric heavy duty truck
  - 5 electric forklifts
  - 1 electric bulk material conveyor (vacuum)
  - 48 light duty electric vehicles in carsharing service
  - 45 level 2 EV chargers at school locations
- ❖ \$939,000 in Total funds (\$308,000 from TFCA and \$631,000 from RFG)
- ❖ Emission reductions: 0.182 tons per year (tpy) of criteria pollutants



# Funds Awarded & Recommended by Project Category Since July 2018

Total = \$13.4M

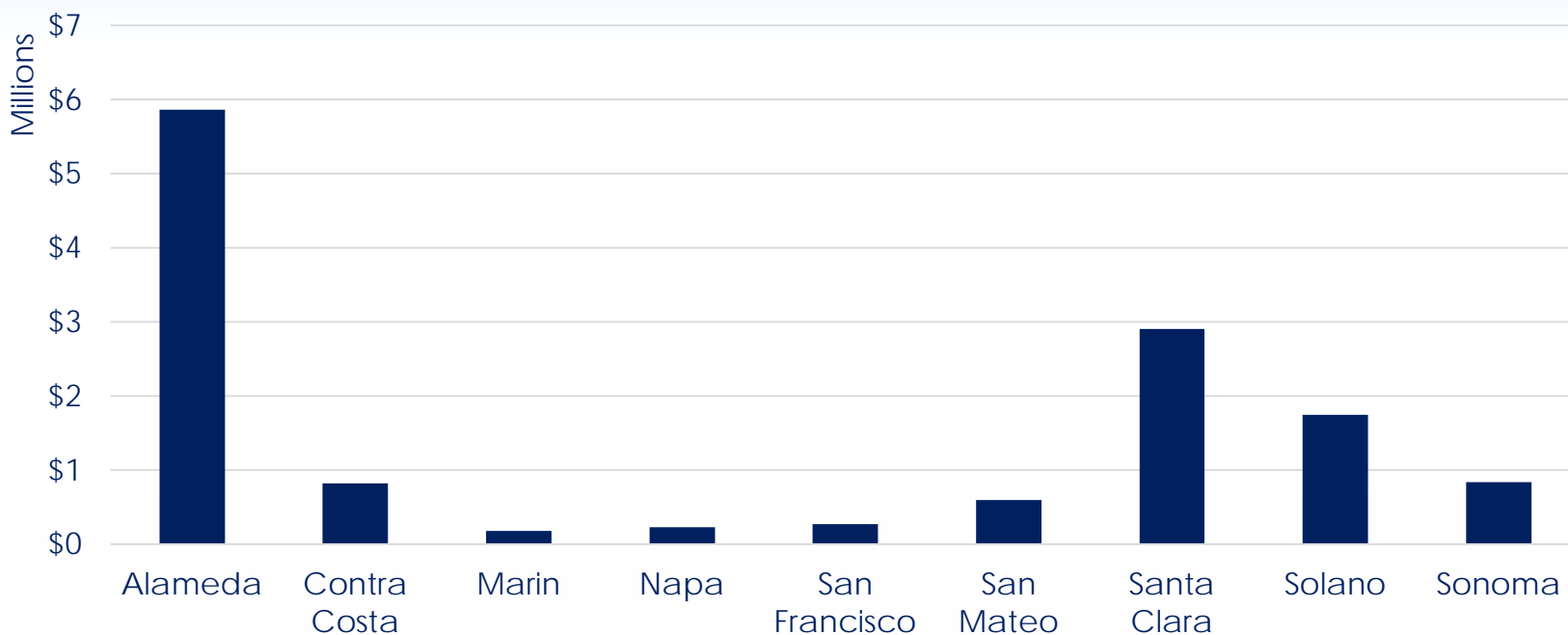
					
<b>Light-duty Cars &amp; Infrastructure</b>	<b>On-road Trucks &amp; Buses</b>	<b>School Buses</b>	<b>Off-road</b>	<b>Marine</b>	<b>Trip Reduction &amp; Bike Facilities</b>
\$940,000	\$290,000	\$7,515,232	Ag: \$749,566 Non-Ag: \$413,958	\$180,000	\$3,317,269

List of projects available in Attachments 2 and 3



# Funds Awarded & Recommended by County Since July 2018

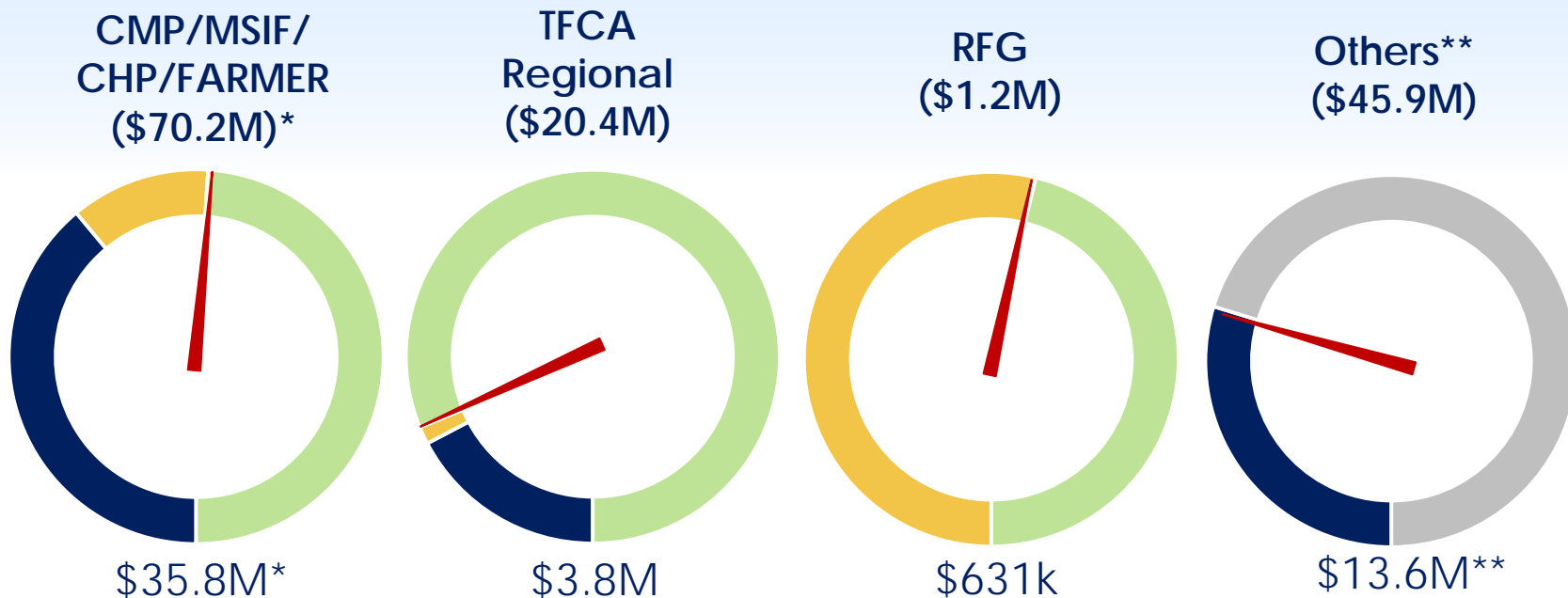
Total = \$13.4M



List of projects available in Attachments 2 and 3



# Status of FYE 2019 Incentive Funding by Source



\*Includes awards from FYE 2018

\*\*Other includes pass-through funding from TFCA County Program Manager, ARB-funded Hydrogen Ferry Demo, EPA-funded DERA, and MTC for EV Outreach, as well as funding that is not yet available from the Volkswagen NOx Mitigation, and ARB-funded EFMP.





# Recommendations

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## *Recommend the Board of Directors:*

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





AGENDA: 5

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Bay Area Air Quality Management District  
Mobile Source Committee

# Update on Status of Heavy-Duty Zero-Emission Mobile Source Technologies

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September 27, 2018

Chengfeng Wang  
Manager, Strategic Incentives Division





# Overview

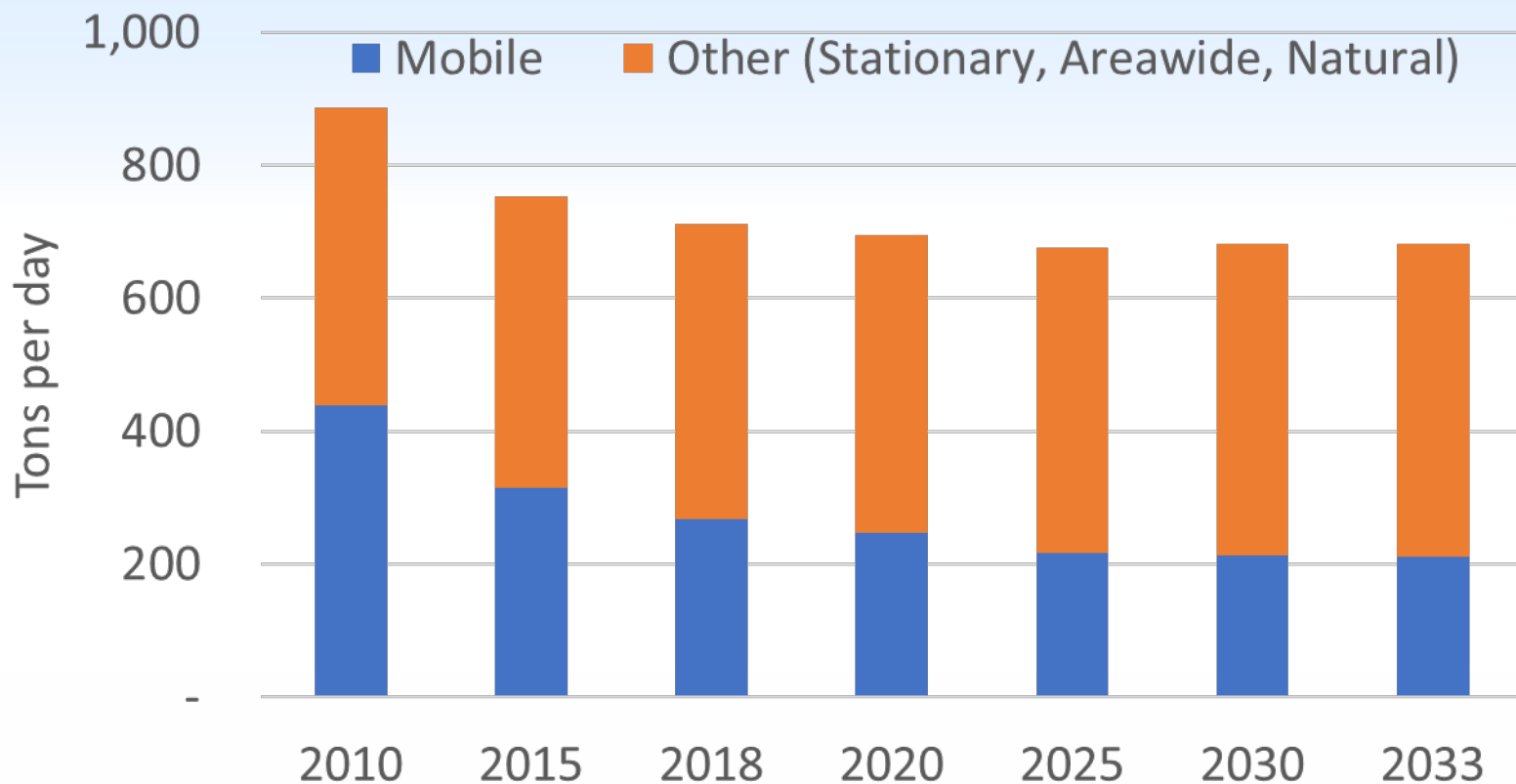
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- ❖ Background
- ❖ Technology Assessment
- ❖ Roadmap to Diesel Free by '33
- ❖ Next Steps



# Bay Area Criteria Emissions

\*Assuming "business-as-usual" scenario (2010-2033)



\*Projected change in criteria emissions inventory over time based on adopted control measures

Criteria emissions include NO<sub>x</sub>, PM<sub>10</sub>, and ROG

Data Source: California Air Resources Board, CEPAM: 2016 SIP - Standard Emission Tool



# Air District Awarded >\$100M for Zero-Emissions

Since 2011



Light-Duty  
Cars &  
Fueling  
Stations

Shared &  
Connected  
Vehicles

On-Road  
Trucks and  
Buses

Off-Road &  
Rail

Shore  
Power

>1,600 cars  
>3,900  
charging  
stations

Bike Sharing  
Car Sharing  
SAVs

>200 Medium &  
Heavy Duty

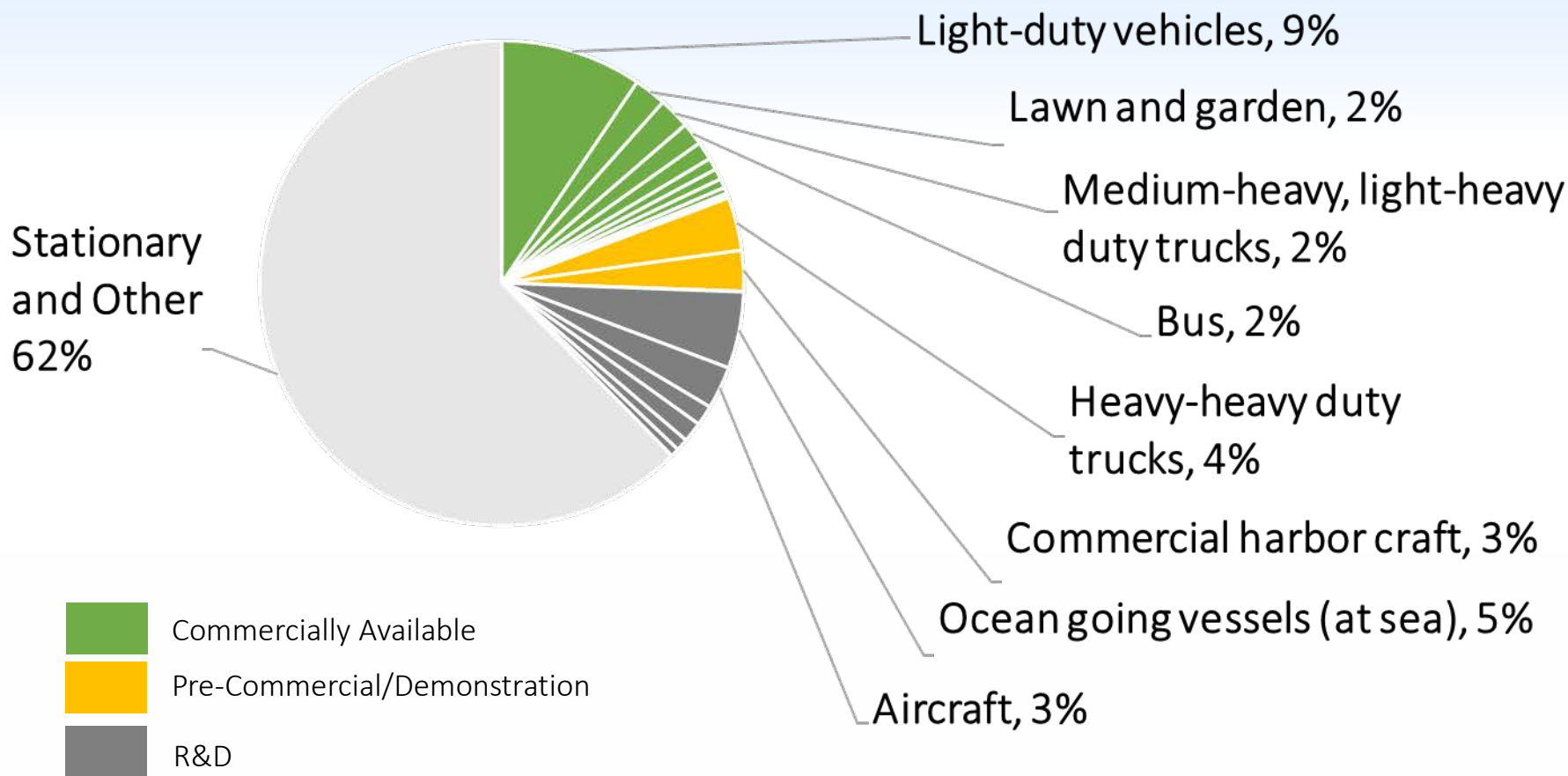
~100 CHE and  
Airport GSE  
Caltrain

14 Berths at the  
Port of Oakland



# Roadmap for Achieving Diesel Free by '33

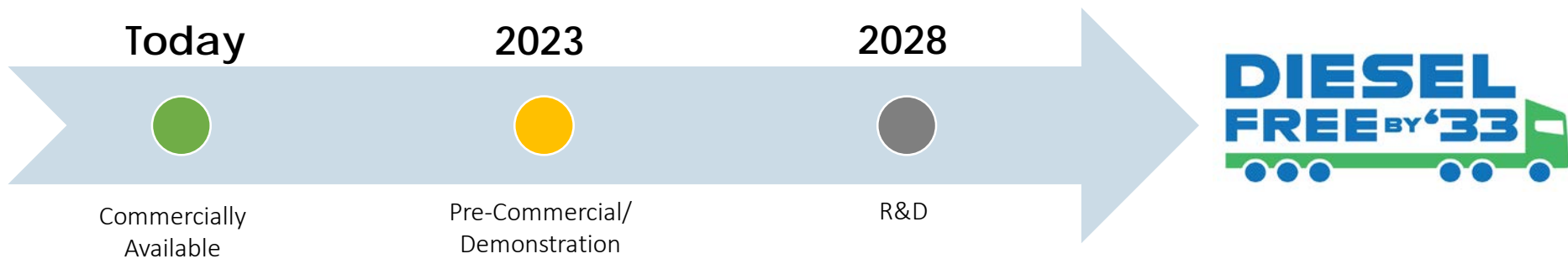
Based on Technology Readiness Level of Replacement Vehicles and Equipment (as of 2018)



Data Source: California Air Resources Board, CEPAM: 2016 SIP - Standard Emission Tool



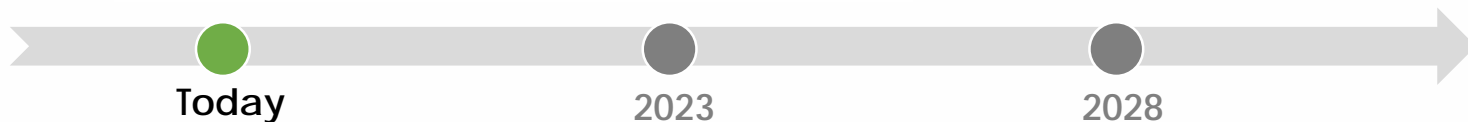
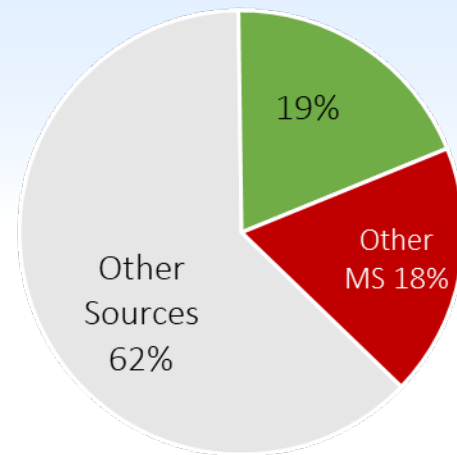
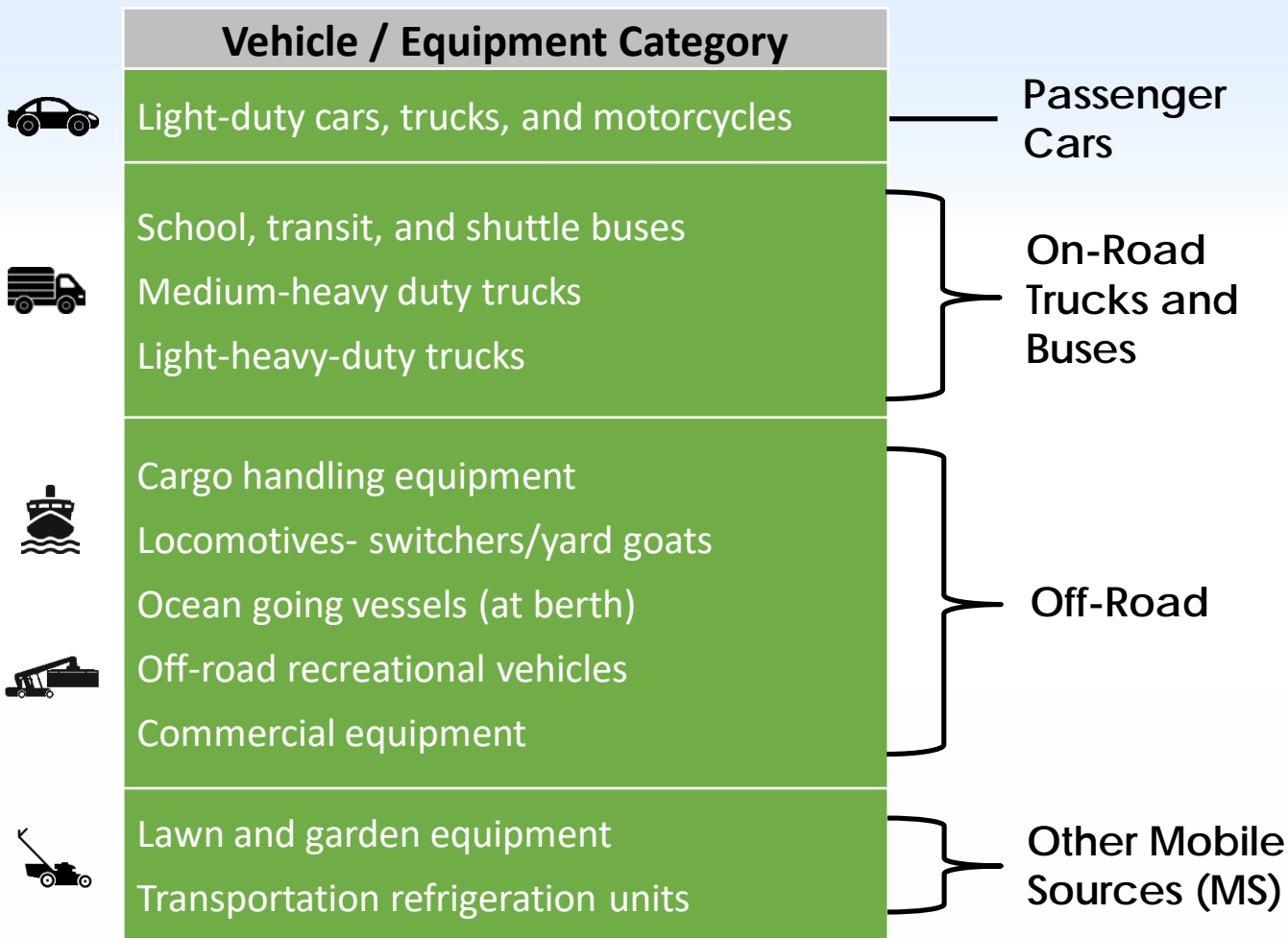
# Roadmap to Zero-Emissions by 2033





# Roadmap to Zero Emissions: Years 1-5

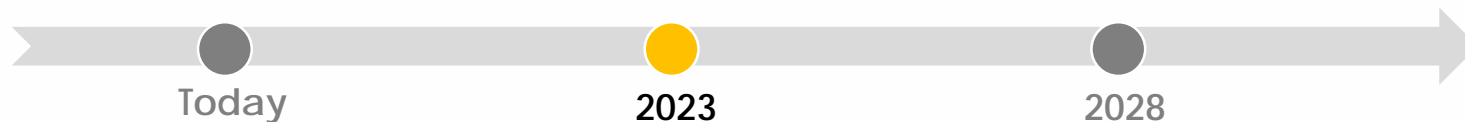
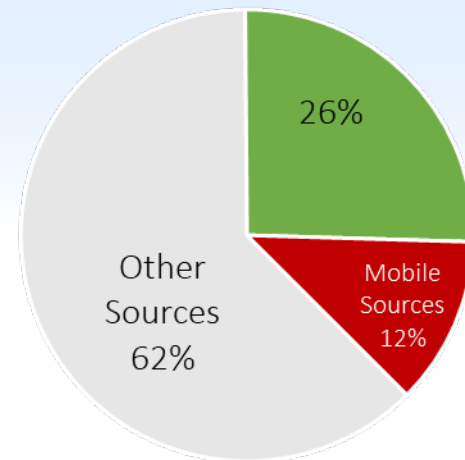
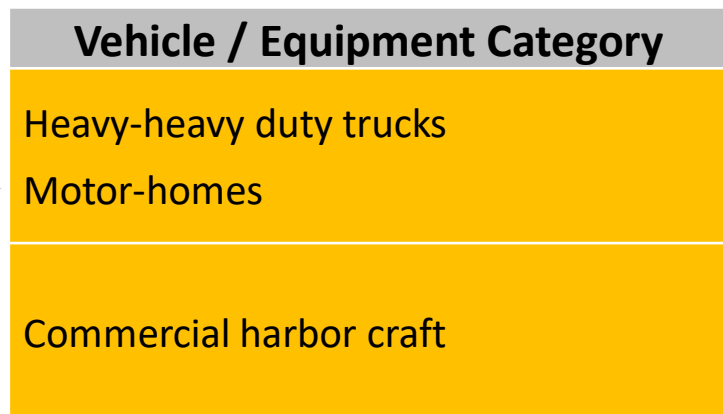
to reduce up to 19% of all emissions





# Roadmap to Zero Emissions: Years 6-10

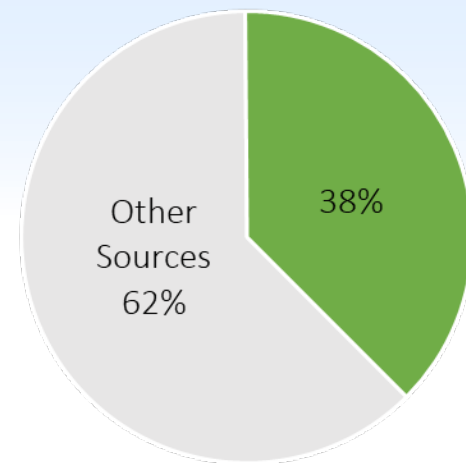
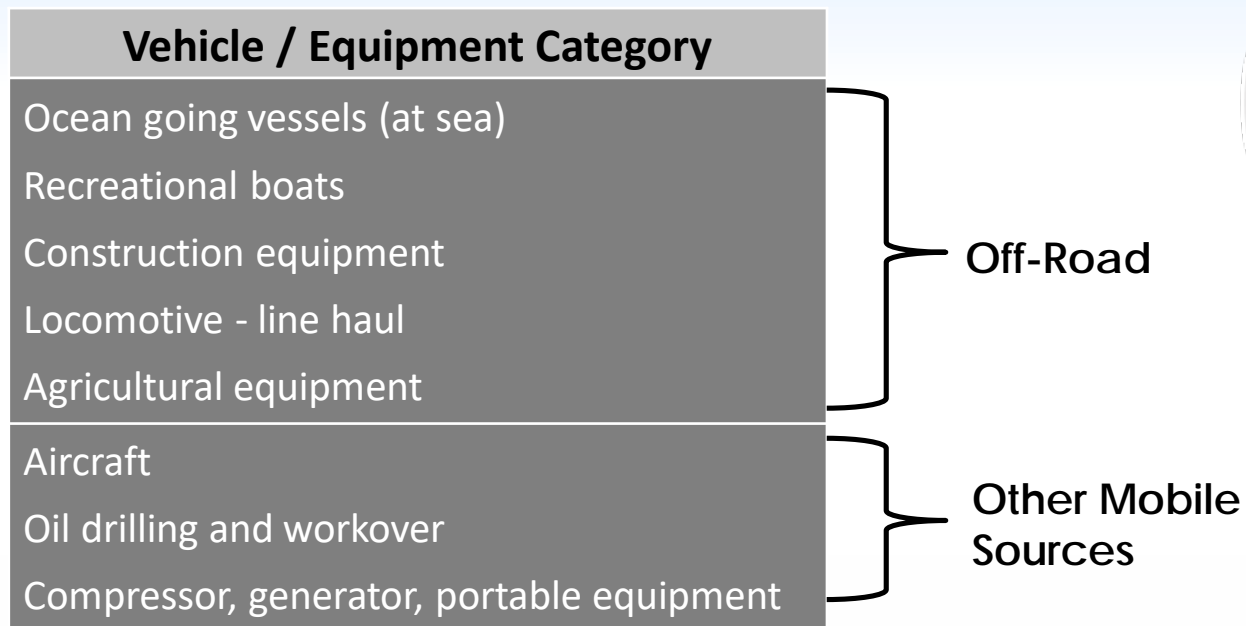
to reduce up to 26% of all emissions





# Roadmap to Zero Emissions: Years 11-15

to reduce up to 38% of all emissions







# Next Steps

- Continue to work to achieve local and state goals and policies
  - Clean Air Plan
  - Diesel Free by '33
  - SB 100
- Implement Diesel Free by '33 roadmap
  - Annually reassess technology status
  - Prioritize funding for commercially available zero-emissions technologies with focus on impacted communities
  - Participate in demonstrations to support accelerated advance in technologies





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Bay Area Air Quality Management District  
Mobile Source Committee

# Update on Air District Grant Program Funding for Fiscal Year Ending (FYE) 2019

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September 27, 2018

Karen Schkolnick  
Director, Strategic Incentives Division

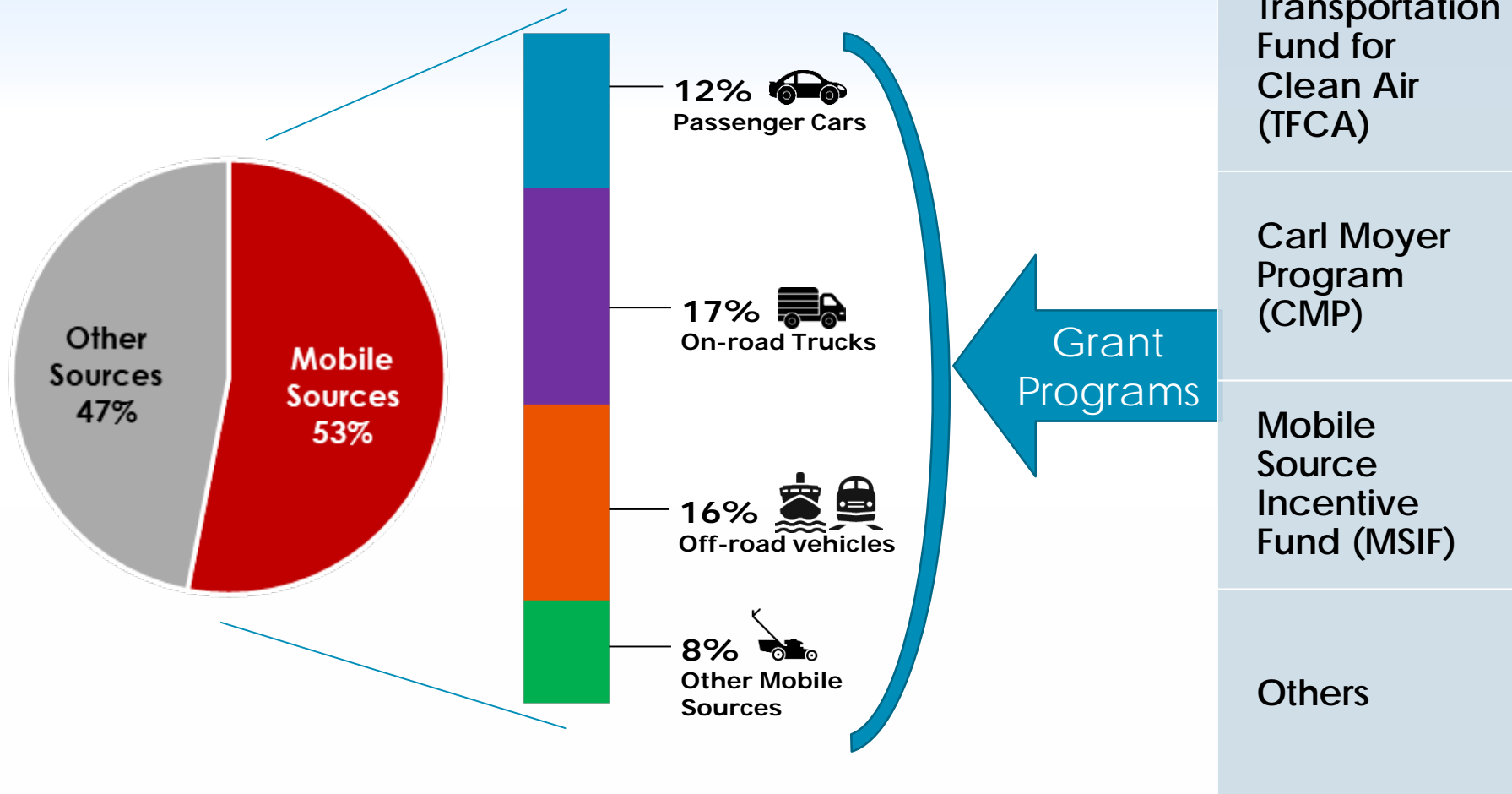


- Background
  - Bay Area Emissions Inventory & Grant Revenue
- Funding Awards and Results
  - 2017 Results
  - Five Year Summary (2013-2017)
- Fiscal Year (FYE) 2019 Projections and Next Steps



# Sources of Criteria Pollution & Grant Funding

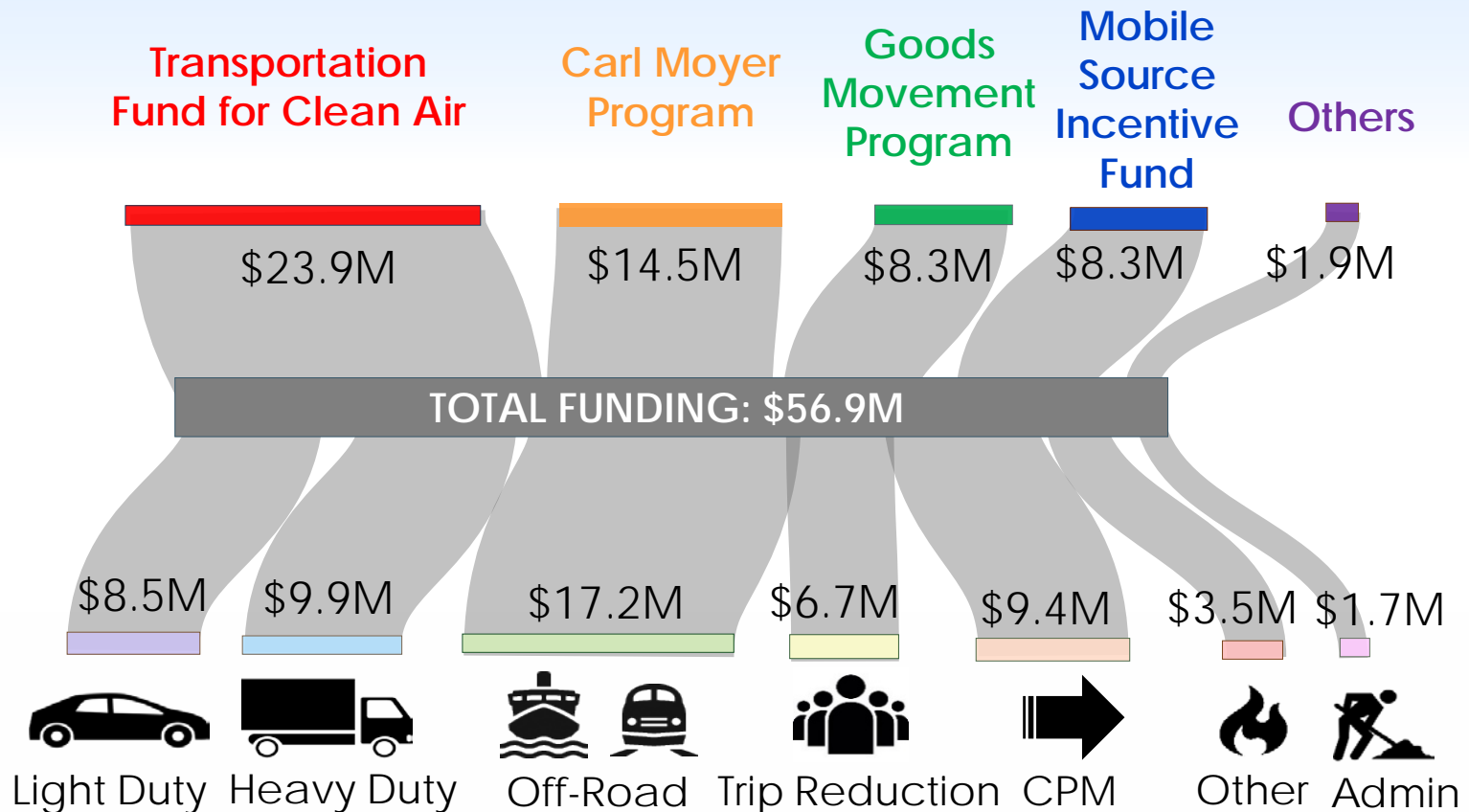
Bay Area 2015 Total: 667 tons/day





# \$56.9M Awarded in 2017

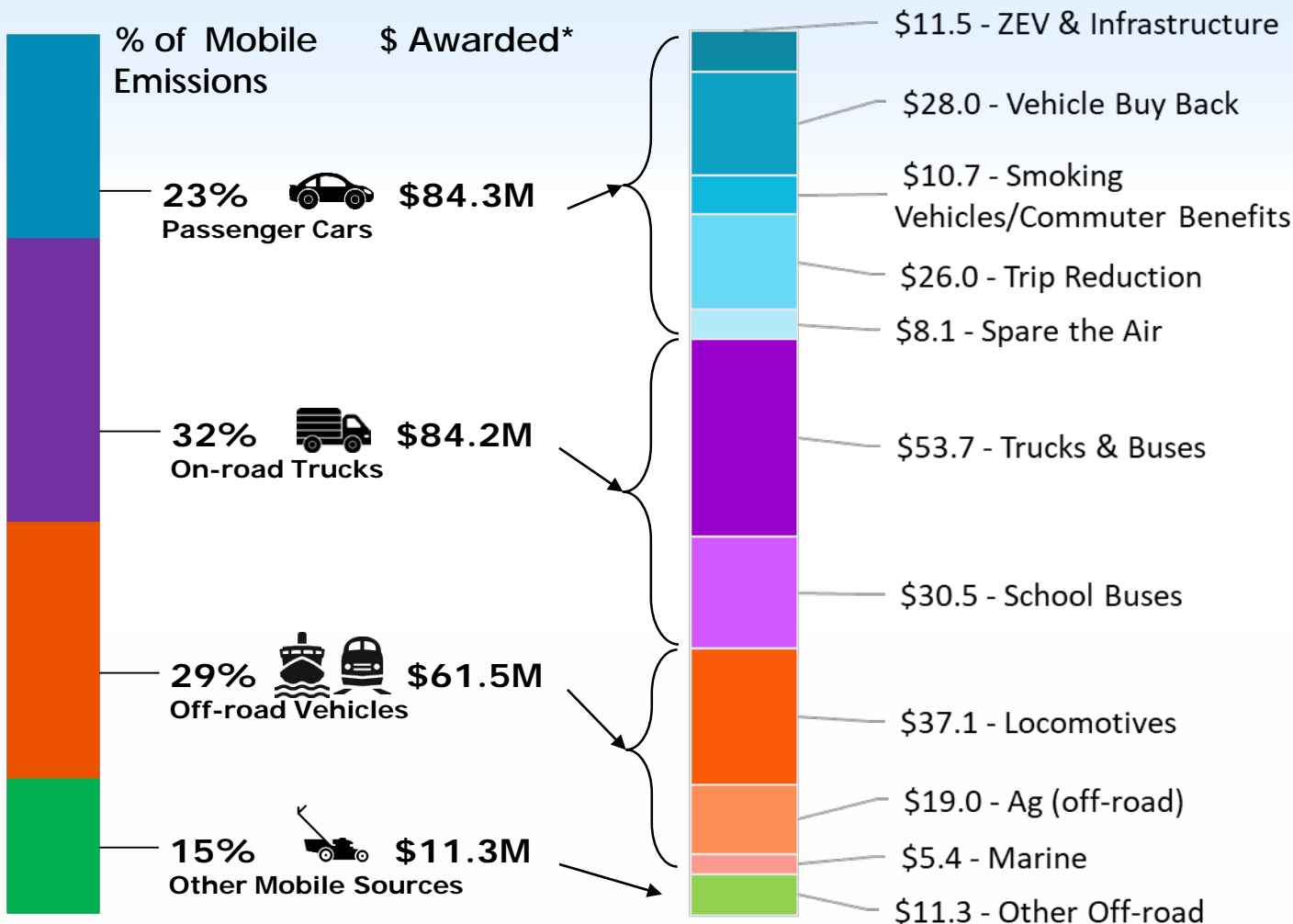
by Funding Source & Project Type



\* Other funding sources include U.S. EPA's DERA, ConocoPhillips Carbon Offset Funds, National Fish and Wildlife Foundation & Air District's general fund



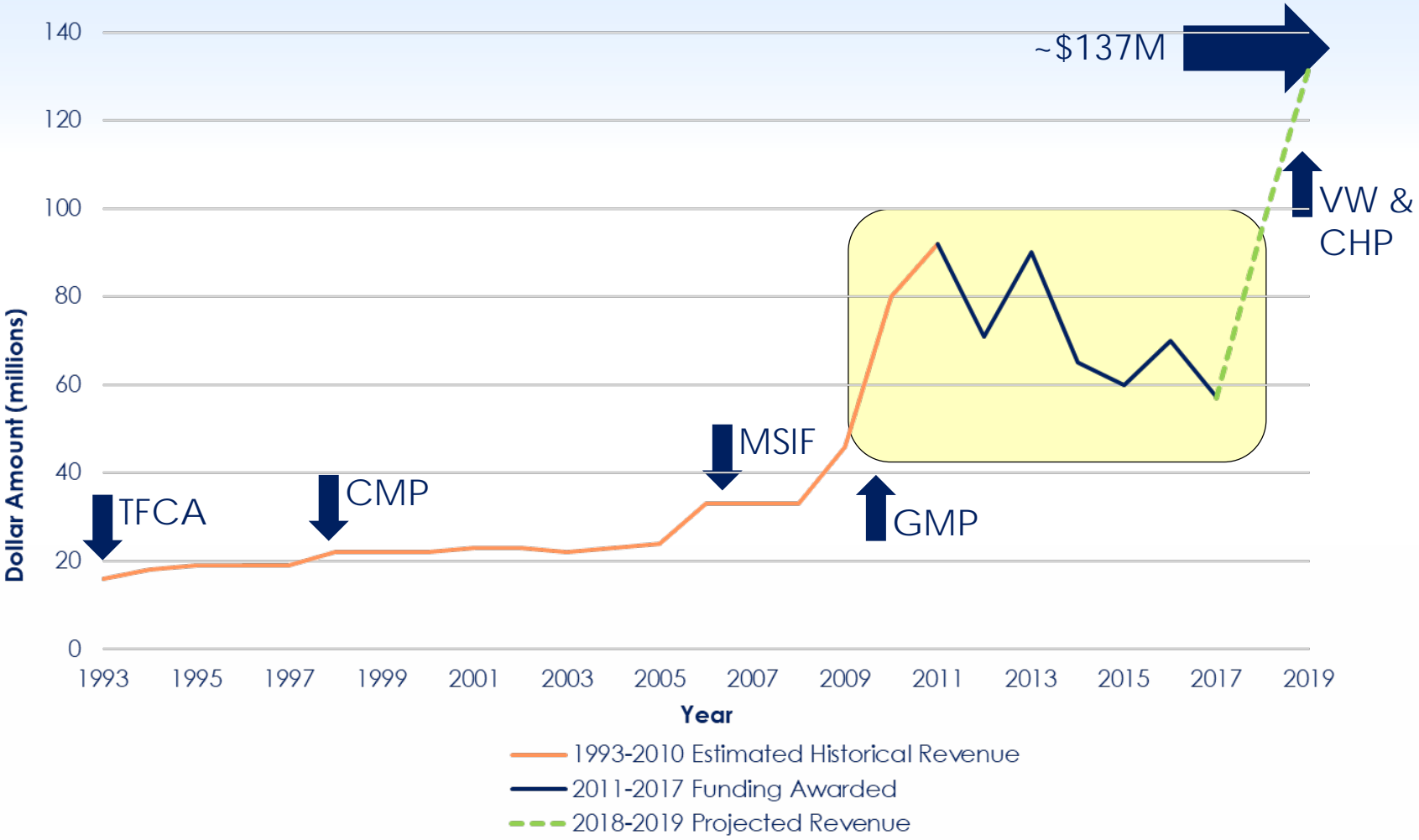
# Funds Awarded (\$250M) and Inventory of Mobile Source Emissions by Equipment Category: 2013-2017



\*Remaining amounts to planning & outreach (\$6.4M) and woodsmoke (\$2.2M)



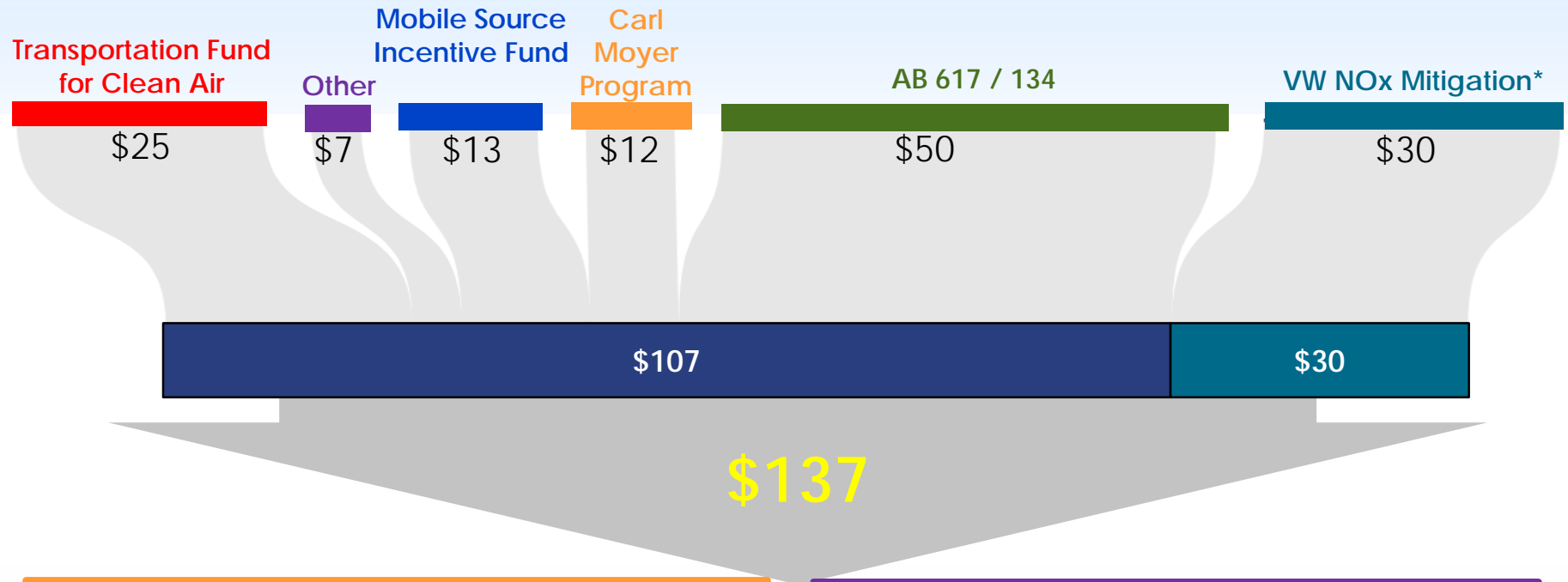
# Estimated Revenue & Funds Awarded 1993-2019





# Projected Grant Revenues for FYE 2019

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\*Total Volkswagen funding is \$423M statewide, which will be dispersed over ~5 year period. Staff projects that as much as 33% of funding could go to projects located in the Bay Area.





# Next Steps

## FYE 2019 Grant Program Priorities

- Focus on projects to get immediate emission reductions in the communities most affected by air pollution
- Prioritize funding for commercially available zero-emissions technologies
- Implement the roadmap to zero-emissions

