



**AGENDA: 4**

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Bay Area Air Quality Management District  
Mobile Source Committee

# Projects with Proposed Awards Over \$100,000

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January 25, 2018

Yu Zhang Liu  
Staff Specialist



# Overview

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- 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

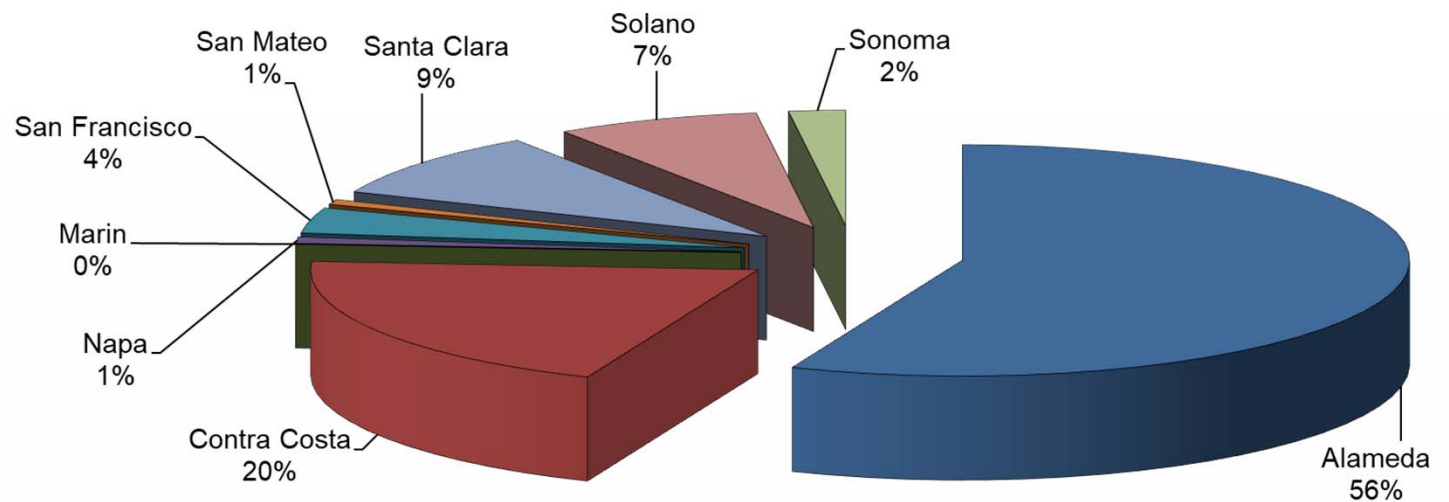
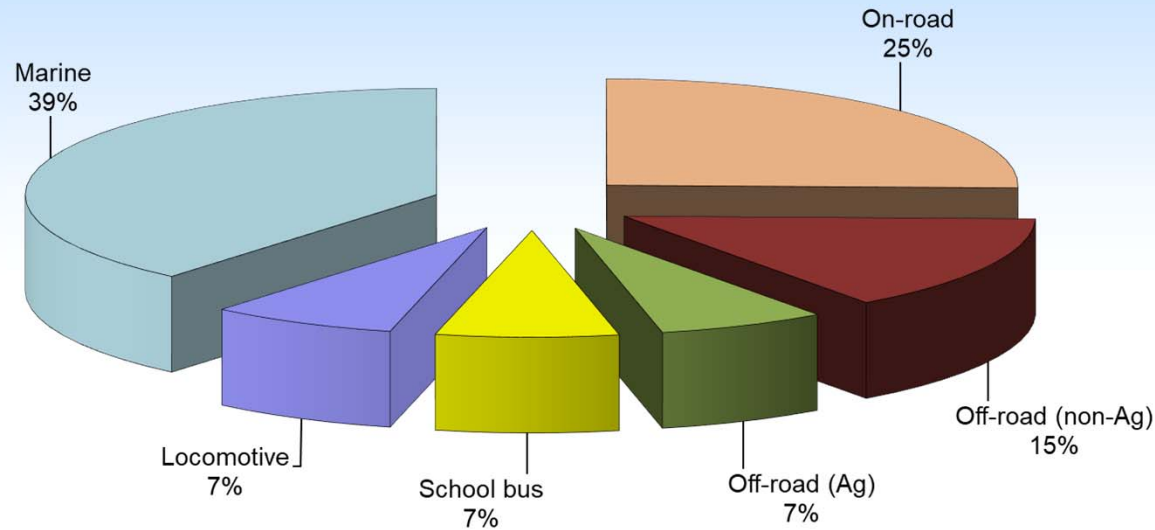
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- **On 3/1/17 District Board of Directors:**
  - Approved participation in CMP Year 19
  - Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000
- **CMP Project Recommendations over \$100k:**
  - 5 Projects to reduce emissions from: 2 off-road tractors, 26 off-road scraper engines, 4 school buses, 2 marine engines
  - \$3,208,760 in total awards
  - Emission reductions: Over 13.5 Tons Per Year (TPY) of criteria pollutants



# CMP and MSIF Funds

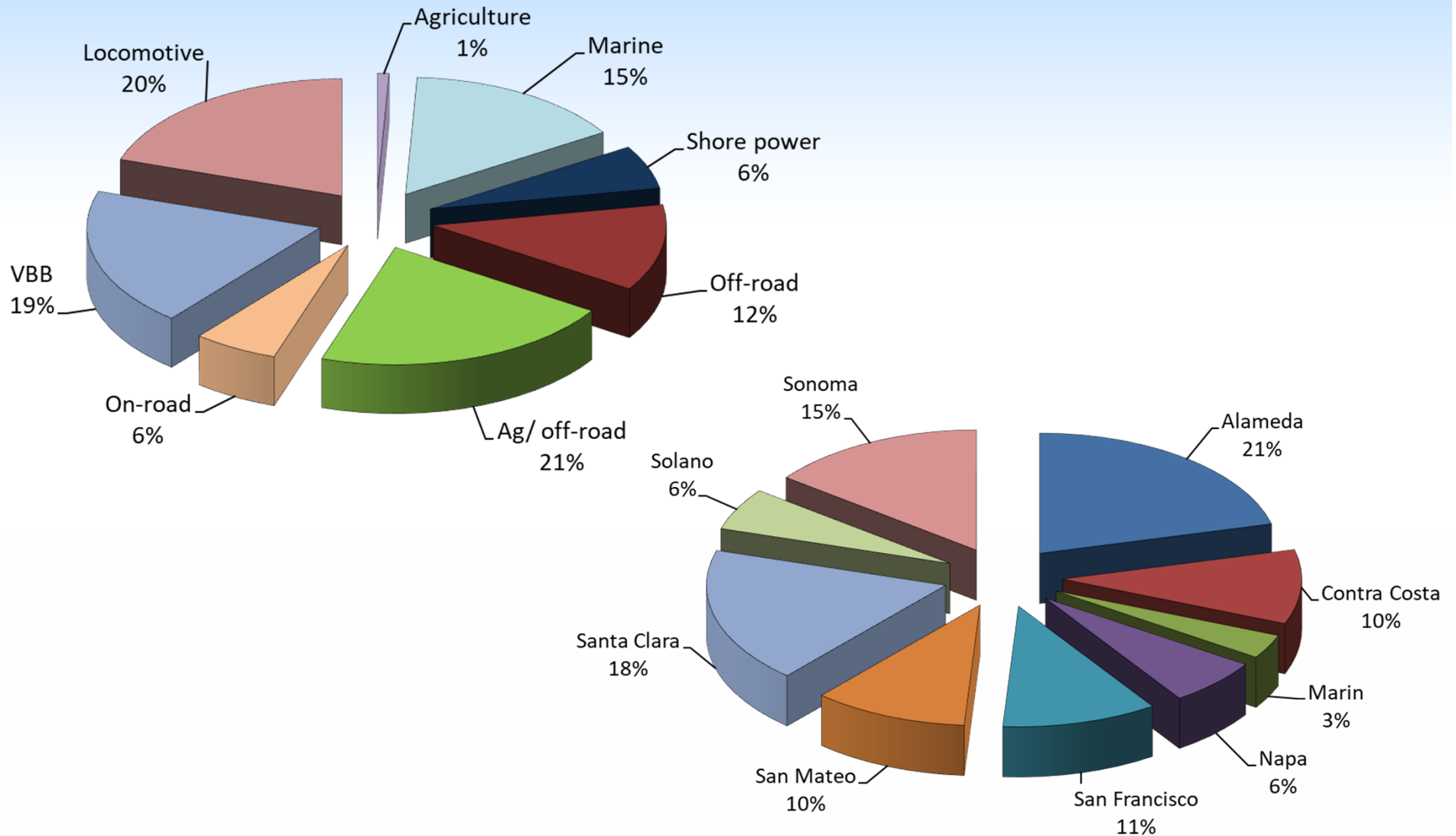
Awarded as of 1/4/18





# CMP and MSIF Funds

Awarded since 2009



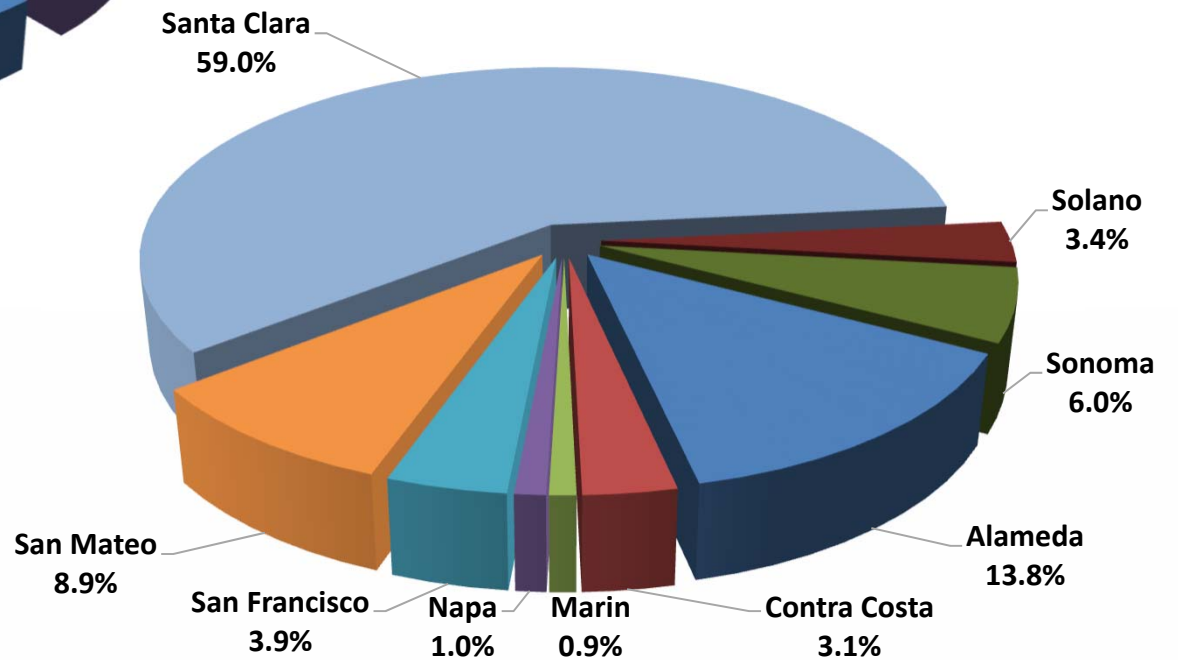
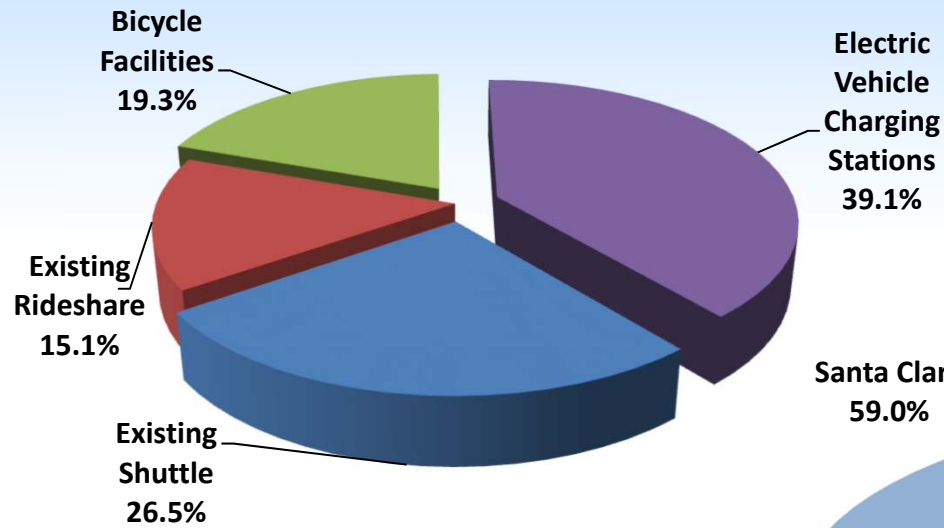


- **Board approval of FYE 2018 TFCA Program**
  - 4/19/17 – Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000 and allocation of \$29.24 million in TFCA funds
  - 8/2/17 - Adopted policies and evaluation criteria
- **TFCA project recommendations over \$100k:**
  - No project with proposed individual grant award over \$100,000
  - Four projects were awarded funding below \$100,000 between 11/17/17 and 1/4/18



# TFCA Funds Awarded by Project Category and by County (For eligible projects evaluated between 7/1/17 and 1/4/18)

**Total = \$7.51 M (out of \$29.24)**







# Recommendations

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## *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

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Bay Area Air Quality Management District  
Mobile Source Committee

# Participation in Year 20 of the Carl Moyer Program and 2018 Caltrain Funding Plan

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January 25, 2018

Anthony Fournier  
Air Quality Program Manager



# Overview

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- Background
- Carl Moyer Program (CMP) Year 20 – Fiscal Year 2017-2018
- 2018 Caltrain electrification project funding plan
- Recommendations



# Funding Sources

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- **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 \$2 motor vehicle registration fee surcharge (12/04)
  - CMP projects eligible for MSIF funding



# CMP Year 20 Funding

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- CA Air Resources Board (ARB) Year 20 funding
  - \$61 million statewide
  - Up to \$11 million for the Bay Area
  - 6.25% allocation for administrative costs
  - Up to \$1.65 million in required match
- ARB 2017 CMP guidelines
- Continued focus on projects benefitting CARE areas
- Proposed \$3 million MSIF allocation for matching funds and additional CMP projects



# 2018 Caltrain Funding Plan

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- **July 29, 2015** – Air District Board (Board):
  - allocated \$20 million in MSIF funds for the Caltrain electrification project;
  - authorized the Executive Officer/APCO to enter into the necessary agreements for the project; and
  - requested a funding plan (between 2016 and 2020) be prepared and brought to the Board annually for approval.
- **January 7, 2016** – Air District executed project agreement
- **March 16, 2016** – Board approved \$13 million initial funding plan
- **March 1, 2017** – Board approved \$3 million in MSIF funds
- **Proposed 2018** – \$3 million in MSIF funds (Total to date - \$19 million)
- Staff will return in future years with updates to the funding plan until the entire allocation has been authorized



# Recommendations

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## *Recommend the Board of Directors:*

1. Adopt a resolution authorizing the Executive Officer/APCO to execute all necessary agreements with the California Air Resources Board (ARB) relating to the Air District's receipt of Carl Moyer Program (CMP) funds for fiscal year 2017-2018 (Program Year 20);
2. Allocate \$3 million in Mobile Source Incentive Funding to provide the required match funding and additional monies for projects eligible for funding under the CMP guidelines; and
3. Approve the proposed 2018 funding plan for the Caltrain Electrification project.



**AGENDA: 6**

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Bay Area Air Quality Management District  
Mobile Source Committee

# Overview of Air District Trip Reduction Programs

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January 25, 2018

Chengfeng Wang  
Acting Manager





# Overview

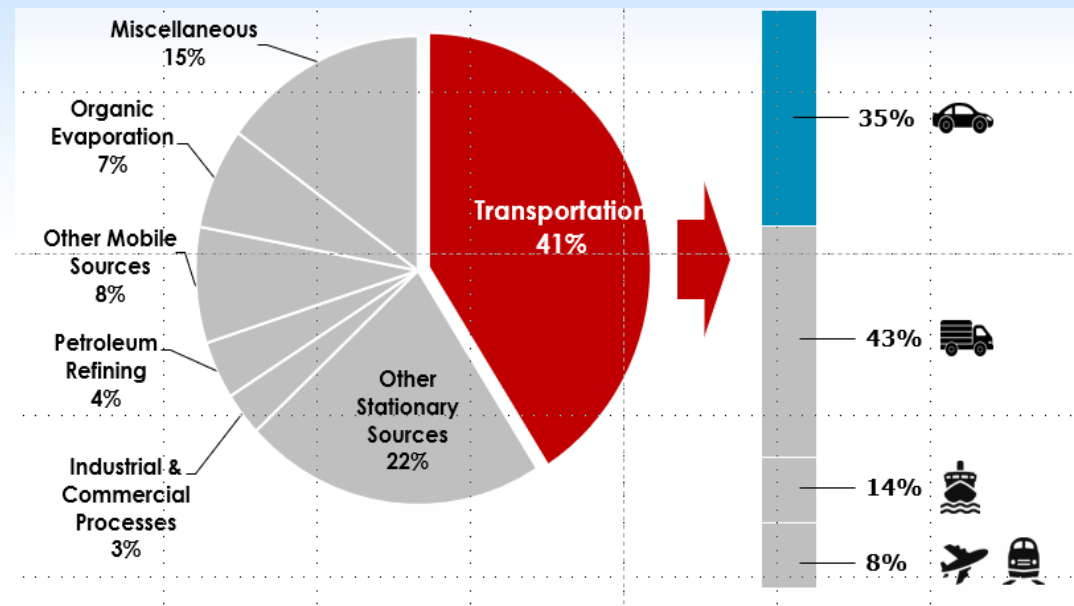
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- Background
- Results of Strategies to Reduce Emissions from Passenger Vehicles 2008-2017
- Air Quality Benefits & Cost-Effectiveness
- Challenges, Opportunities & Options



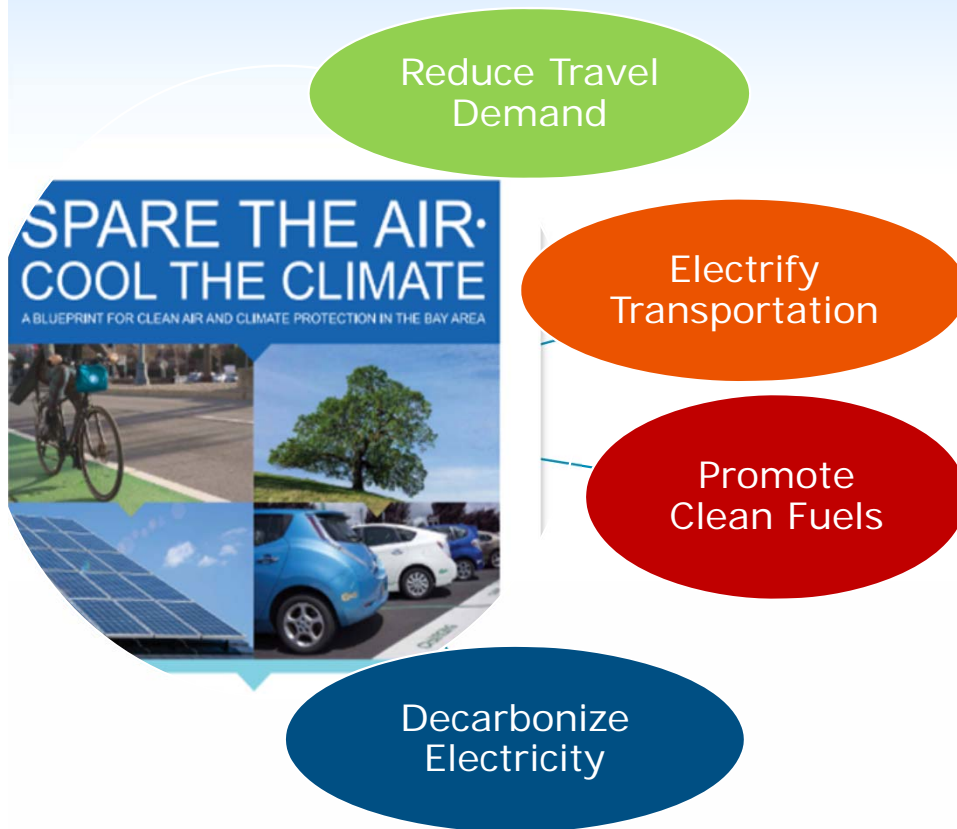
# Background

- ~40% of emissions in Bay Area from transportation
  - Passenger vehicles account for over 35% of emissions
- Trip reduction key strategies to reduce air pollution
- Transportation Fund for Clean Air (TFCA) has provided funding for trip reduction project since 1992
- Air quality benefits of trip reduction projects have declined over time





# Results of Strategies to Reduce Emissions from Passenger Vehicles 2008-2017



- \$60 million awarded to trip reduction projects
  - >9,000 **bicycle parking spaces**
  - ~ 70 **miles of bikeways**
  - > 360 **shuttle routes**
  - Prevented > 900 million **Vehicle Miles Travelled (VMT)**
- Emissions Reductions
  - >1,200 tons criteria emissions
  - >580,000 tons GHG reduced
- Other benefits include congestion mitigation, energy use reduction, & healthy life

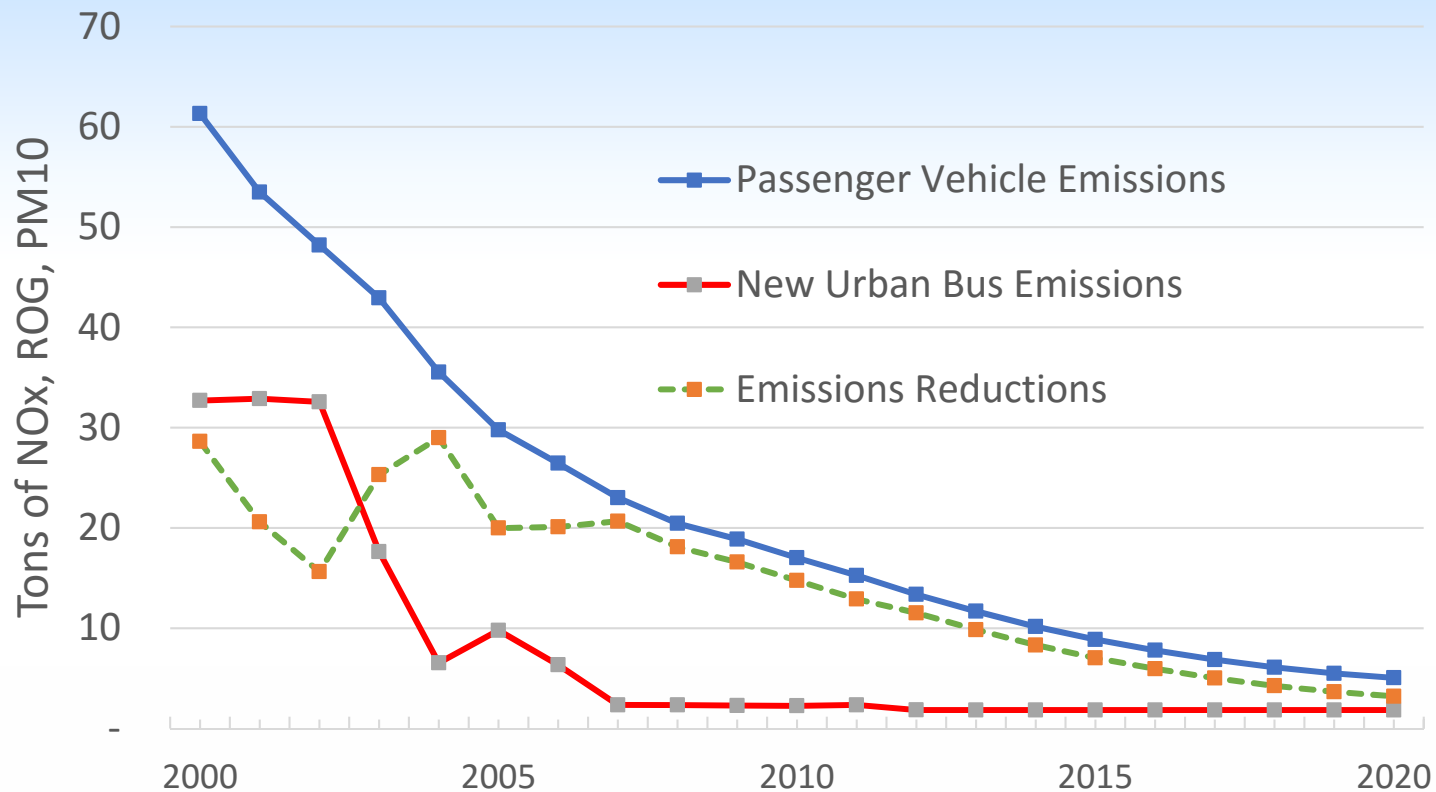


# Air Quality Benefits Decline Over Time





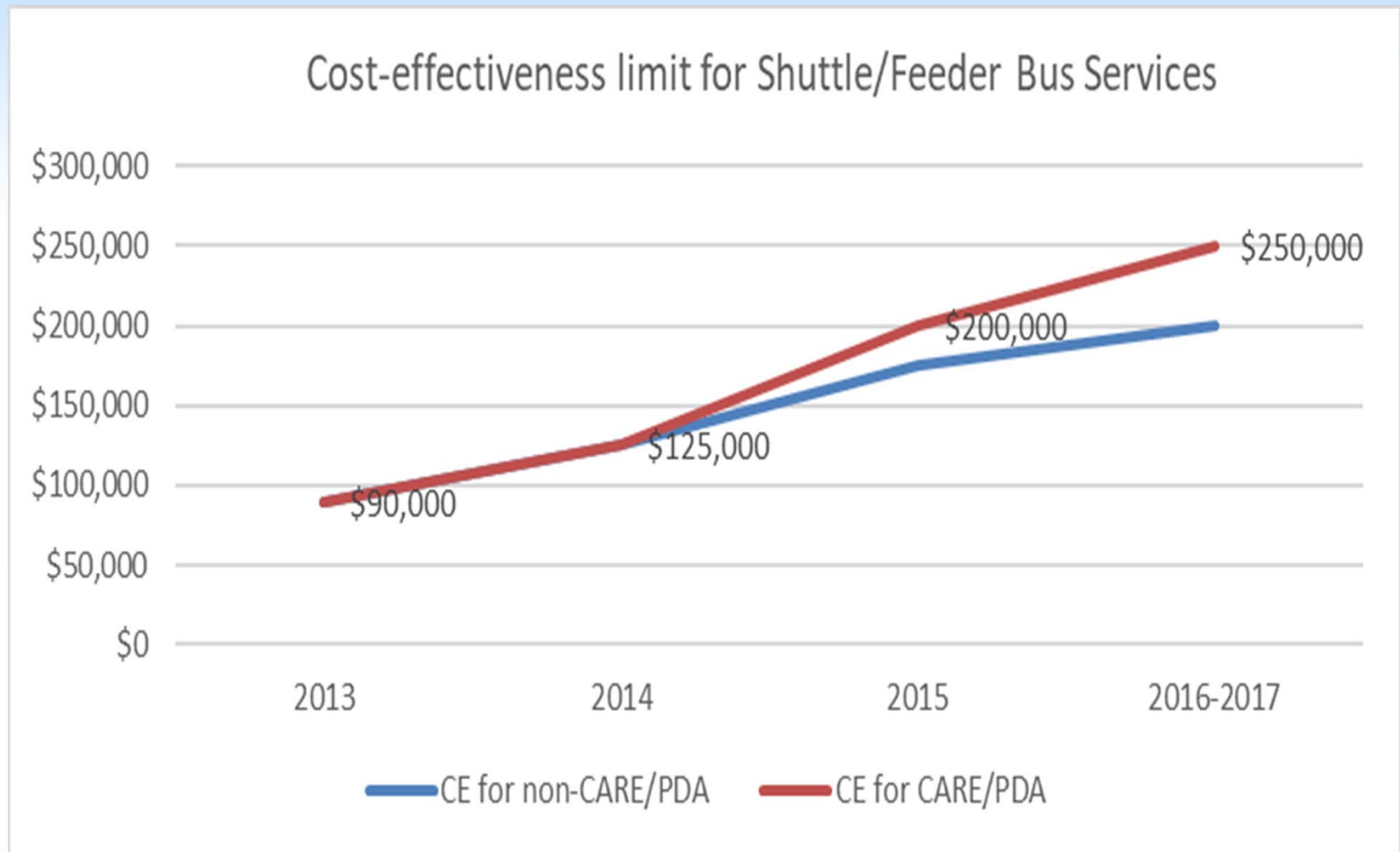
# Passenger Vehicle Emissions Relative to Urban Bus (2000-2020)



1. Assuming 50 million passenger car VMT is replaced with 1 million urban bus VMT
2. Sum of NOx, ROG, PM10 running exhaust emissions
3. Used fleet average emission rates for passenger cars, new vehicle emission rates for urban buses from EMFAC2014



# Cost-Effectiveness Limits





# Challenges, Opportunities & Options

- Air quality benefits from fixed-route shuttle services continue to decline
  - C/E limits increased to maintain historical funding
  - Provided bridge funding through Spare the Air
  - Explored innovative options to more cost-effectively reduce SOV trips
    - Bay Area Bike Share
    - Shared Autonomous Vehicle
    - Pilot Trip Reduction Grant Program
- Next Steps/Options
  - Continue raising cost effectiveness limit
  - Continue phaseout of funding for shuttle projects not meeting cost-effectiveness caps through “bridge funding program”
  - Transition “Fixed Route Service Program” over to expanded Pilot Trip Reduction Program

