



## **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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February 23, 2017

Damian Breen  
Deputy Air Pollution Control Officer



# Overview

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



# CMP Year 18

- **On 3/16/16 District Board of Directors:**
  - Approved participation in CMP Year 18
  - Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000
- **CMP Project Recommendations over \$100k:**
  - 3 Projects to reduce emissions from 4 tractors and 2 passenger locomotives
  - \$5,624,910 in total awards
  - Emission reductions: Over 21.1 TPY of criteria pollutants



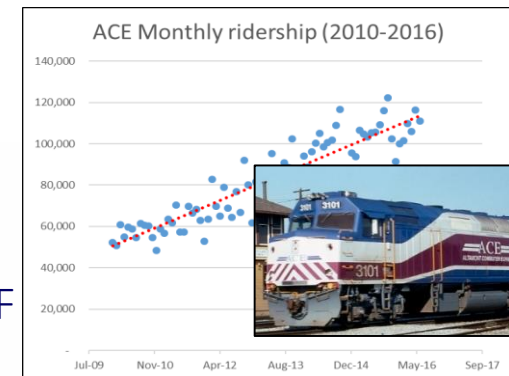
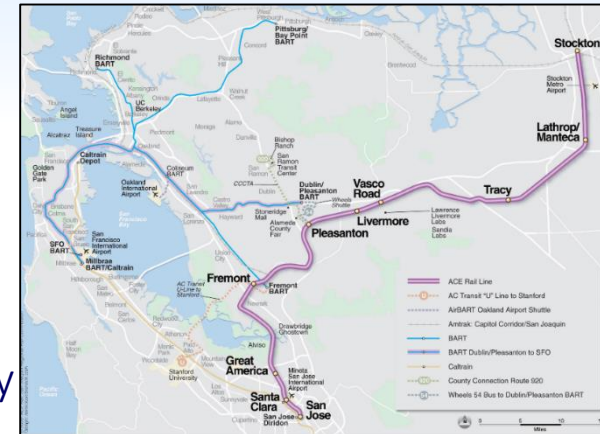
# 18MOY37 – ACE Locomotive replacement project

## Project details

- Replace two 1998, Tier 0+ passenger locomotives with Tier 4 locomotives
- ~86 k gallons/ year per locomotive
- 16 TPY NO<sub>x</sub>, 1.1 TPY ROG, and 0.48 TPY PM
- Significantly cleaner engines and increased passenger capacity

## \$15 million (M) project cost

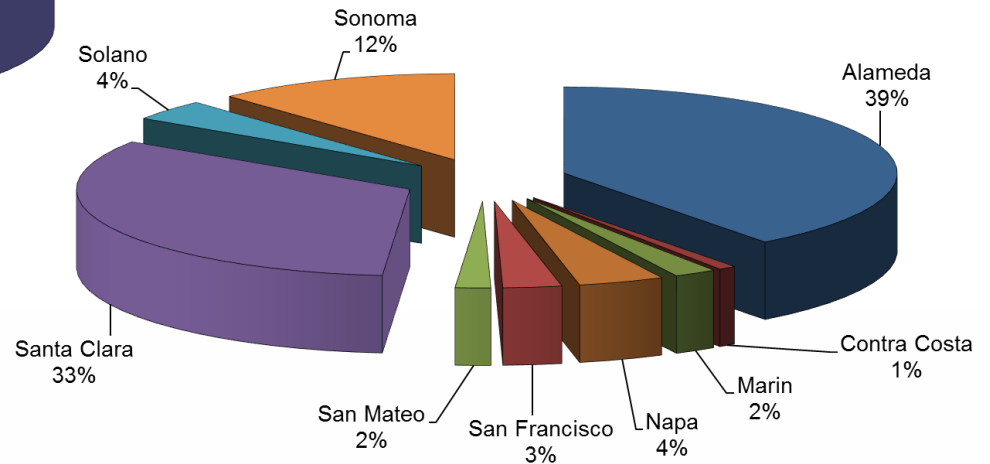
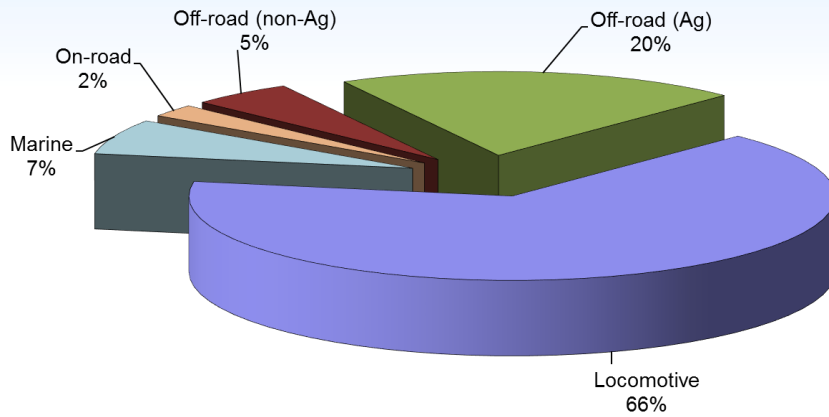
- **ACE:** \$7.5M Cap & Trade funds from CA State Transportation Agency
- **BAAQMD:** \$5M consisting of:
  - ~\$2.5M CMP Yr 17 multi-district funds & ~\$2.5 M - CMP/MSIF
- **SJVAPCD:** ~\$2.5M





# CMP and MSIF Funds

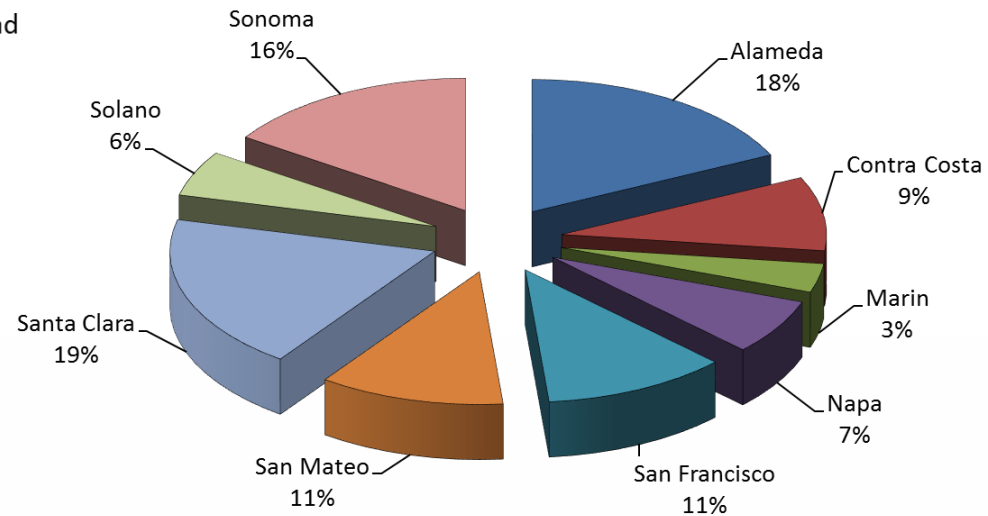
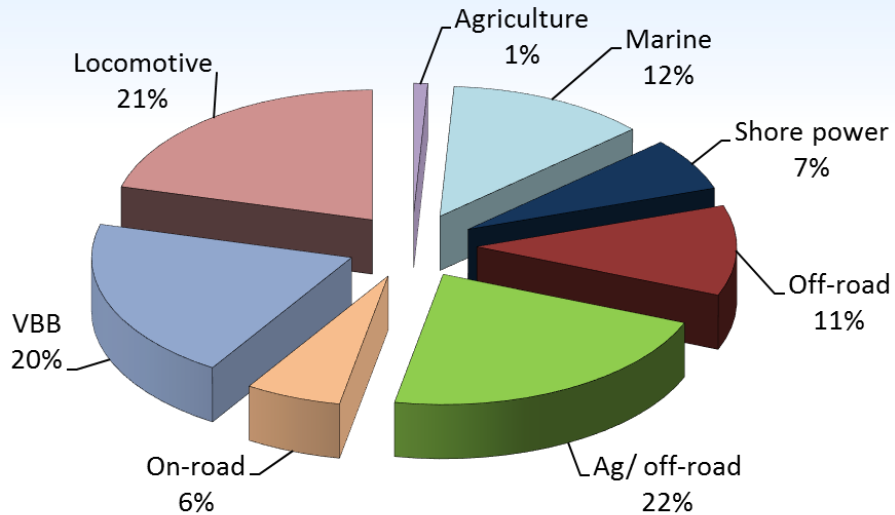
Awarded as of 2/2/17





# CMP and MSIF Funds

Awarded since 2009





## *Recommend the Board of Directors:*

1. Approve Carl Moyer Program (CMP) 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 and partners for the recommended projects.





## **AGENDA: 5**

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Bay Area Air Quality Management District  
Mobile Source Committee

# Air District Grant Programs Overview

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February 23, 2017

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Deputy Air Pollution Control Officer



# Overview

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- Background
- Recap of 2016 allocations & emission results
- 2017 Initiatives
- 2017 Funding projections



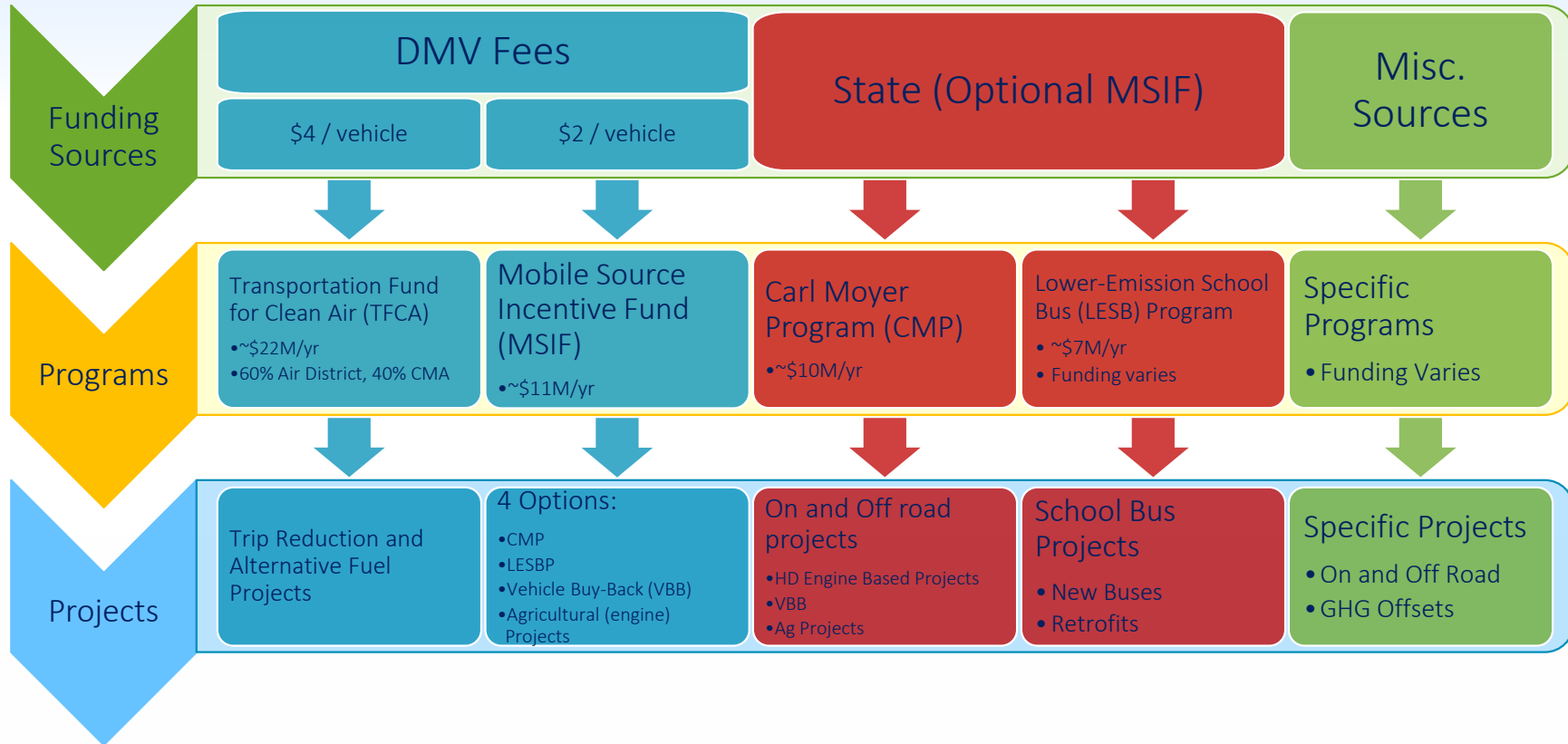
# Background

Calendar Year 2016 - \$70 million allocated to reduce emissions from mobile sources:

- Air District's primary grant programs:
  - Carl Moyer Program (CMP)
  - Mobile Source Incentive Fund (MSIF)
  - Transportation Fund for Clean Air (TFCA)
  - California Goods Movement Bond Program (GMP)
- \$9 million in TFCA funds to County Program Managers
- 63% to CARE areas, based on direct distribution by Air District (\$38M from \$61M total.)

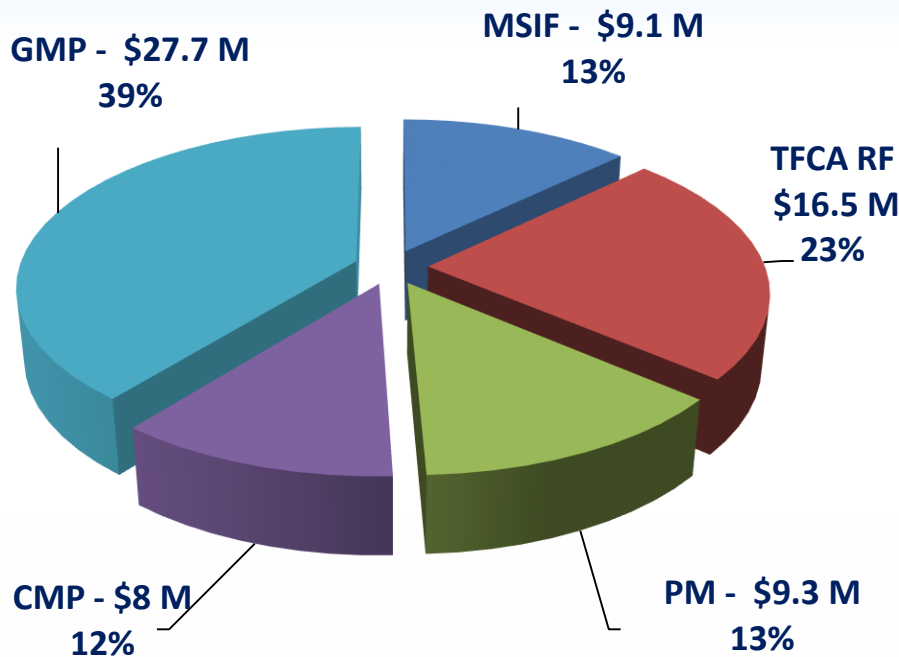


# Grant Programs & Funding Streams





# 2016 Allocations: \$70 M



Mobile Source Incentive Fund (MSIF) - \$2 DMV surcharge: funds projects eligible for CMP, Lower Emission School Bus Program

Transportation Fund for Clean Air TFCF Regional Fund (TFCF RF) - \$4 DMV surcharge: funds on-road motor vehicle emissions reduction projects

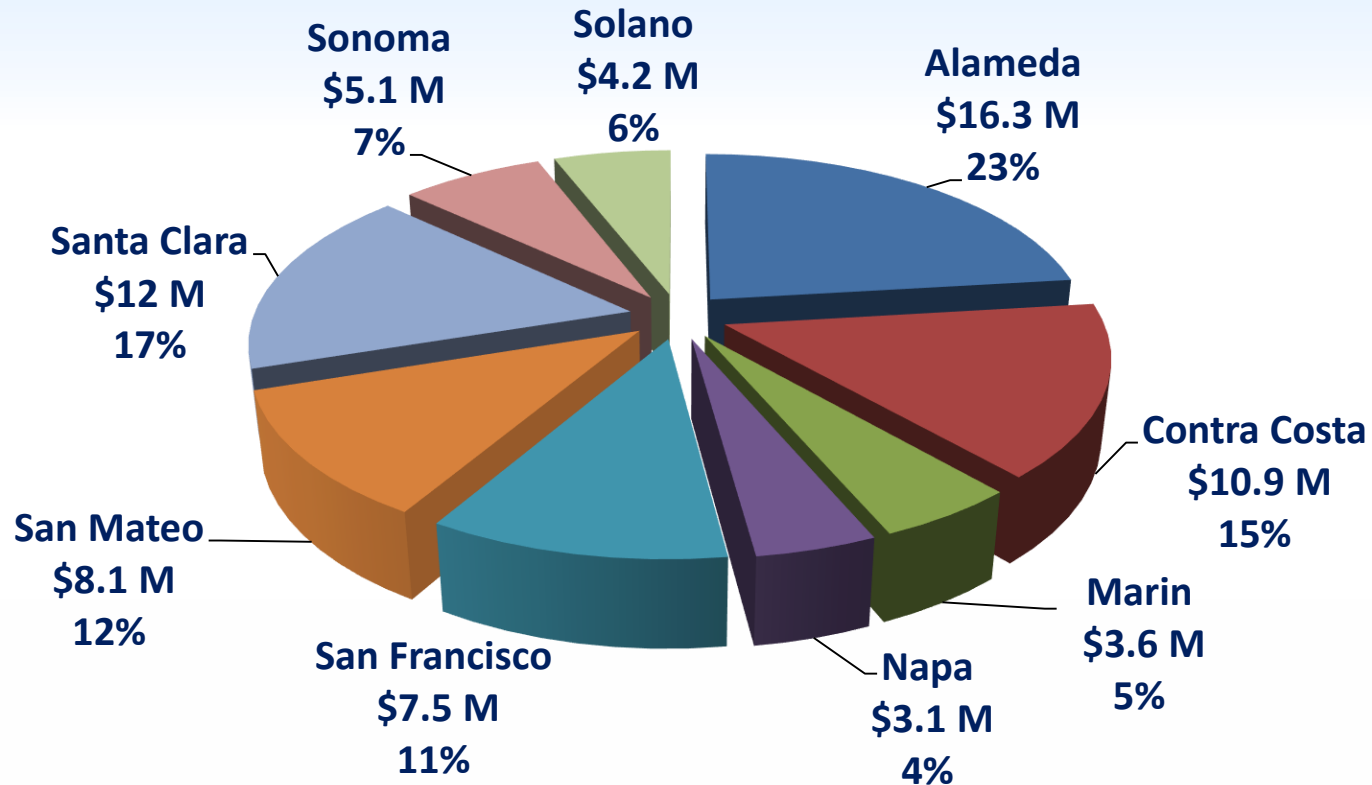
TFCF County Program Manager (TFCF PM) - 40% of TFCF passed-through to each of the 9 counties

Carl Moyer Program (CMP) - state funds for upgrade/replacement of heavy-duty diesel vehicles and equipment (on- and off-road)

Goods Movement Program (GMP) - state funds for upgrade/replacement of diesel freight equipment within California's trade corridors

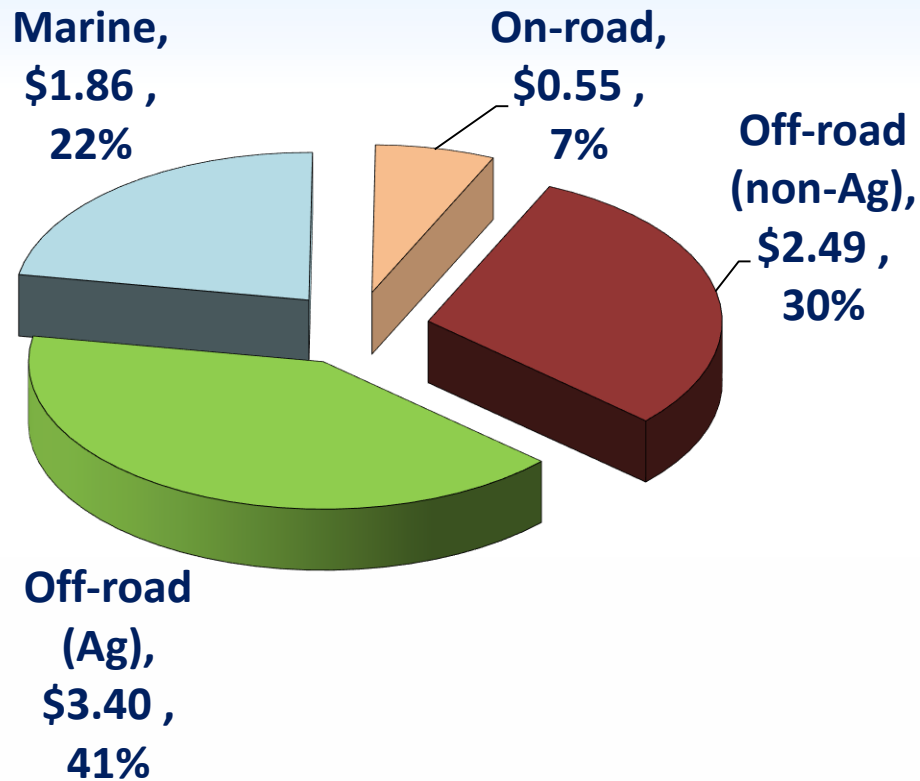


# 2016 Allocations by County





# 2016 CMP Allocations: \$8.3 M





# 2016 MSIF & GMP

## Mobile Source Incentive Fund - \$9.06 M

- Vehicle Buy Back Program: \$5.5 M
- Lower Emission School Bus Program: \$0.56 M
- Caltrain: \$3 M (of \$20 M award)

## Goods Movement Program - \$27.6 M

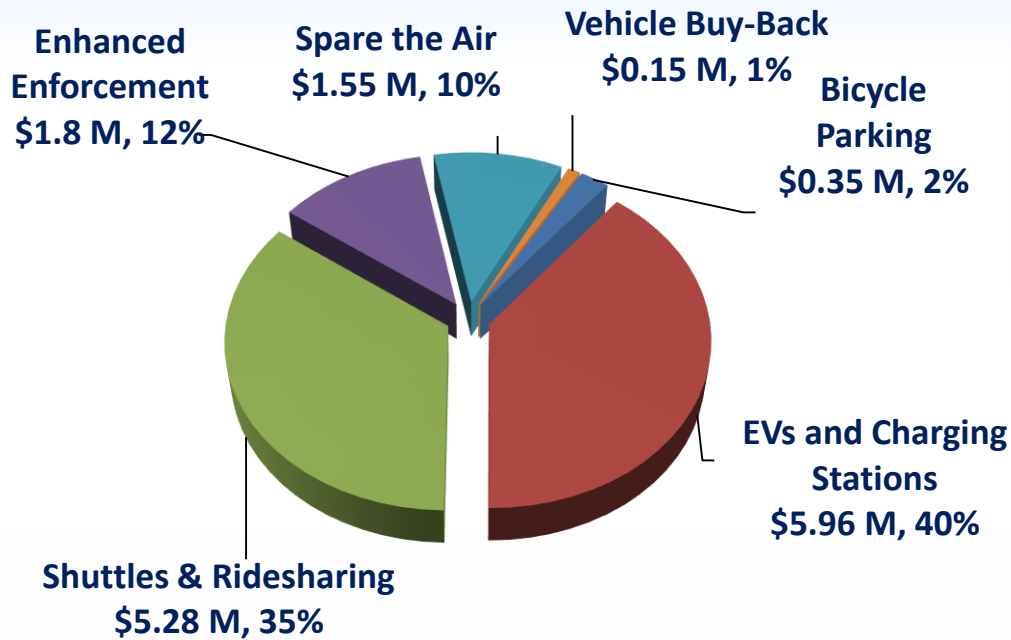
- Trucks: \$16.7 M
- Locomotives: \$10.8 M
- TRUs & CHE: \$84.8 K







# 2016 TFCA RF Allocations: \$16.5 M



\*\$1.4 administrative costs are not included in this chart



# 2016 SID Highlights

- **EVs and Charge Stations:**

- ~ \$6 million awarded to 62 projects for
  - Installation of ~600 Level 2 chargers, 46 DC fast chargers
  - Purchase/lease of 42 light-duty and 61 heavy-duty trucks and buses



- **Shared Autonomous Vehicle (SAV):**

- \$2.05 million awarded to fund two SAV Pilot Projects
- Deploy more than 99 electric SAVs in transit-service in Contra Costa and Alameda



- **Off-road equipment:**

- \$13 million (of the \$20 million allocated) to Caltrain electrification project in 2016 funding plan



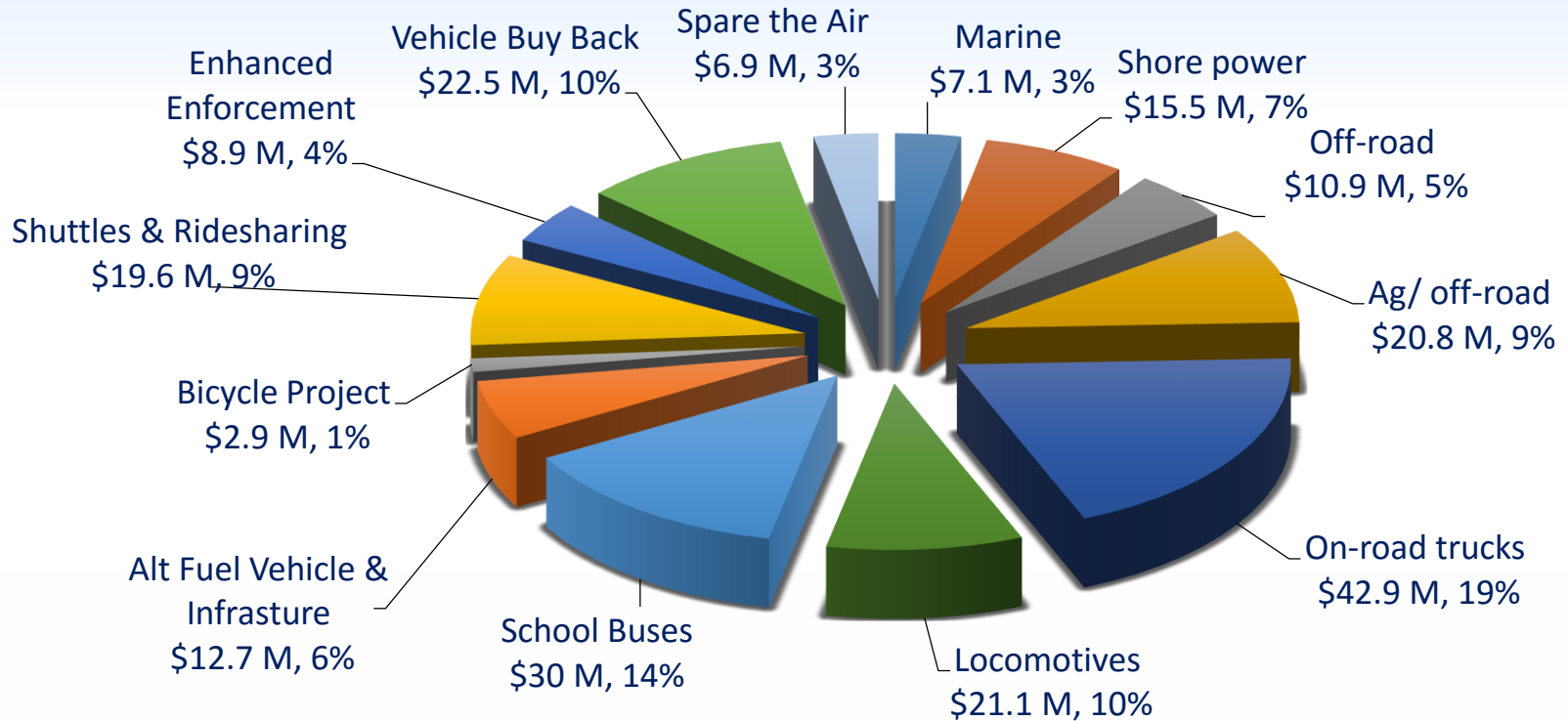


# 2016 Emissions Reductions

- **Emissions reduced by \$61 million:**
    - Particulate Matter (PM) – 39 tons per year
    - Nitrogen Oxides (NO<sub>x</sub>) – 324 tons per year
    - Reactive Organic Gases (ROG) – 146 tons per year
    - Carbon Dioxide (CO<sub>2</sub>)\* – 71,000 tons per year
  - **More than \$38 million to projects in CARE areas**
- \*Not all programs report CO<sub>2</sub> reductions



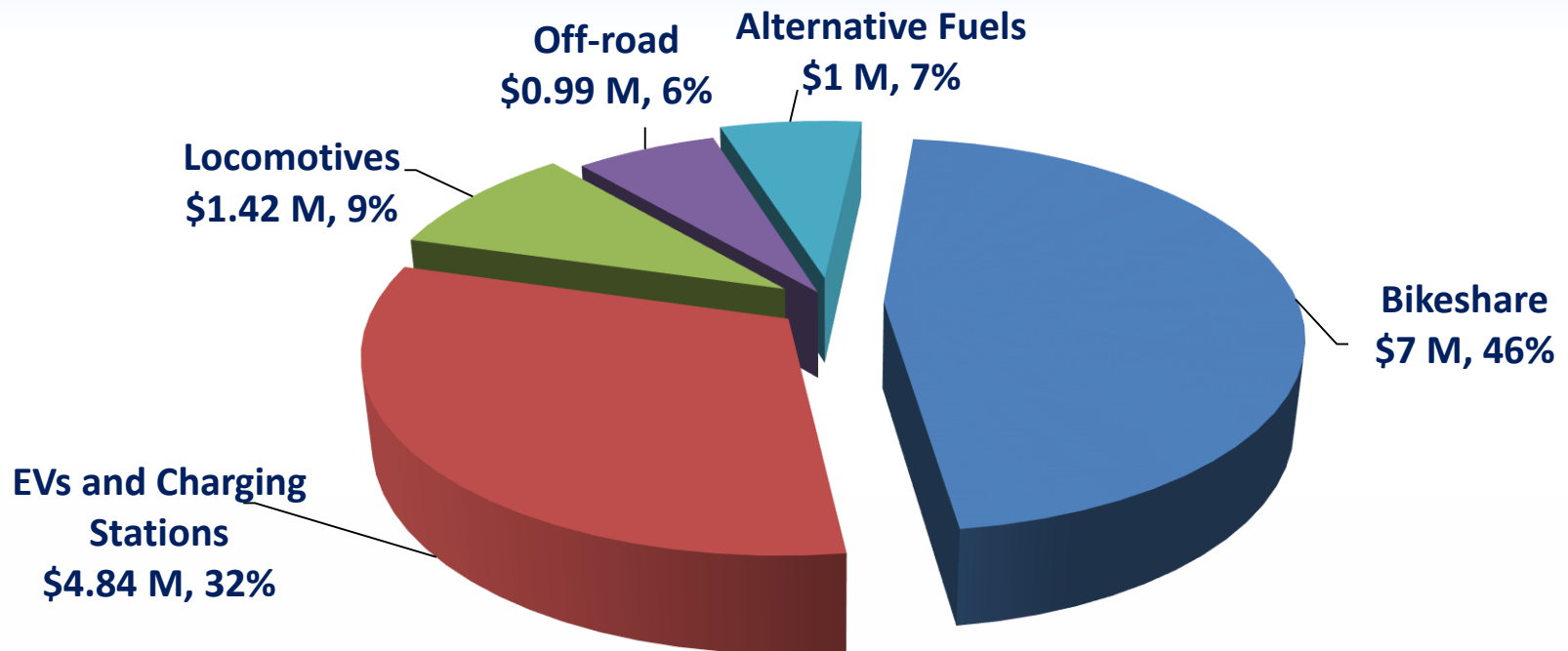
# Allocations 2012-2016: \$228 M



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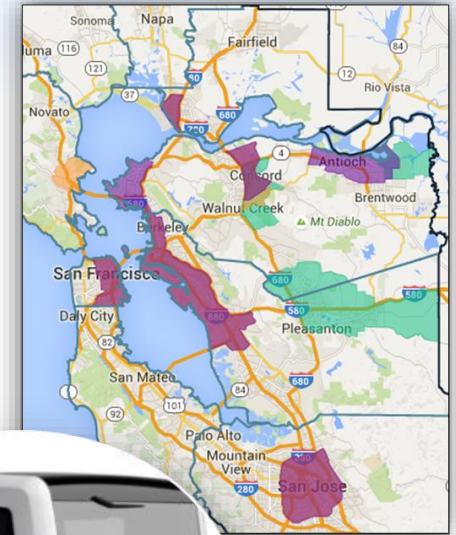
# Other Funding (2012-2016): \$15 M





# 2017 Funding Priorities

- Continued focus on impacted communities and trade corridors
- Investments to reduce diesel emissions
  - Small fleet (1 to 3) on-road trucks
  - Locomotives
  - Marine vessels
  - Agricultural and off-road equipment
- Advanced technologies/ Zero-emissions
  - Plug-in electric & hydrogen vehicles and infrastructure
  - Trip reduction





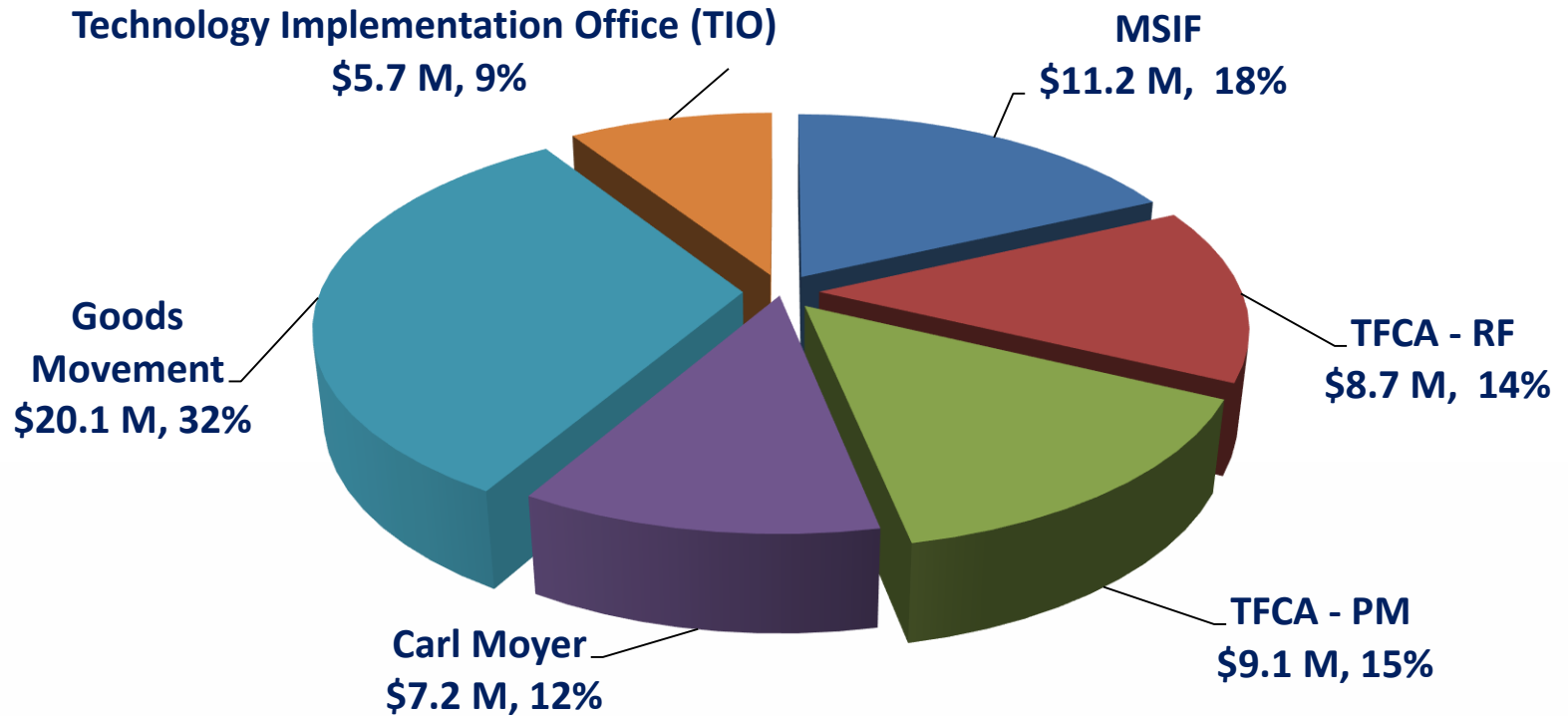
# New Initiatives for 2017

- Establish Technology Implementation Office (TIO):
  - zero emissions vehicles & smart/connected technologies
- Track developing technologies
- Research into new funding sources
- Participation in inter-agency workgroups
  - ARB-Air District Technology Assessment Coordination
- Build a new online grant administration system





# 2017 Funding Projections ~\$62 Million (M)







## **AGENDA: 6**

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Bay Area Air Quality Management District  
Mobile Source Committee

# Participation in Year 19 of the Carl Moyer Program and 2017 Caltrain Funding Plan

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February 23, 2017

Damian Breen  
Deputy Air Pollution Control Officer



## **AGENDA: 5**

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Bay Area Air Quality Management District  
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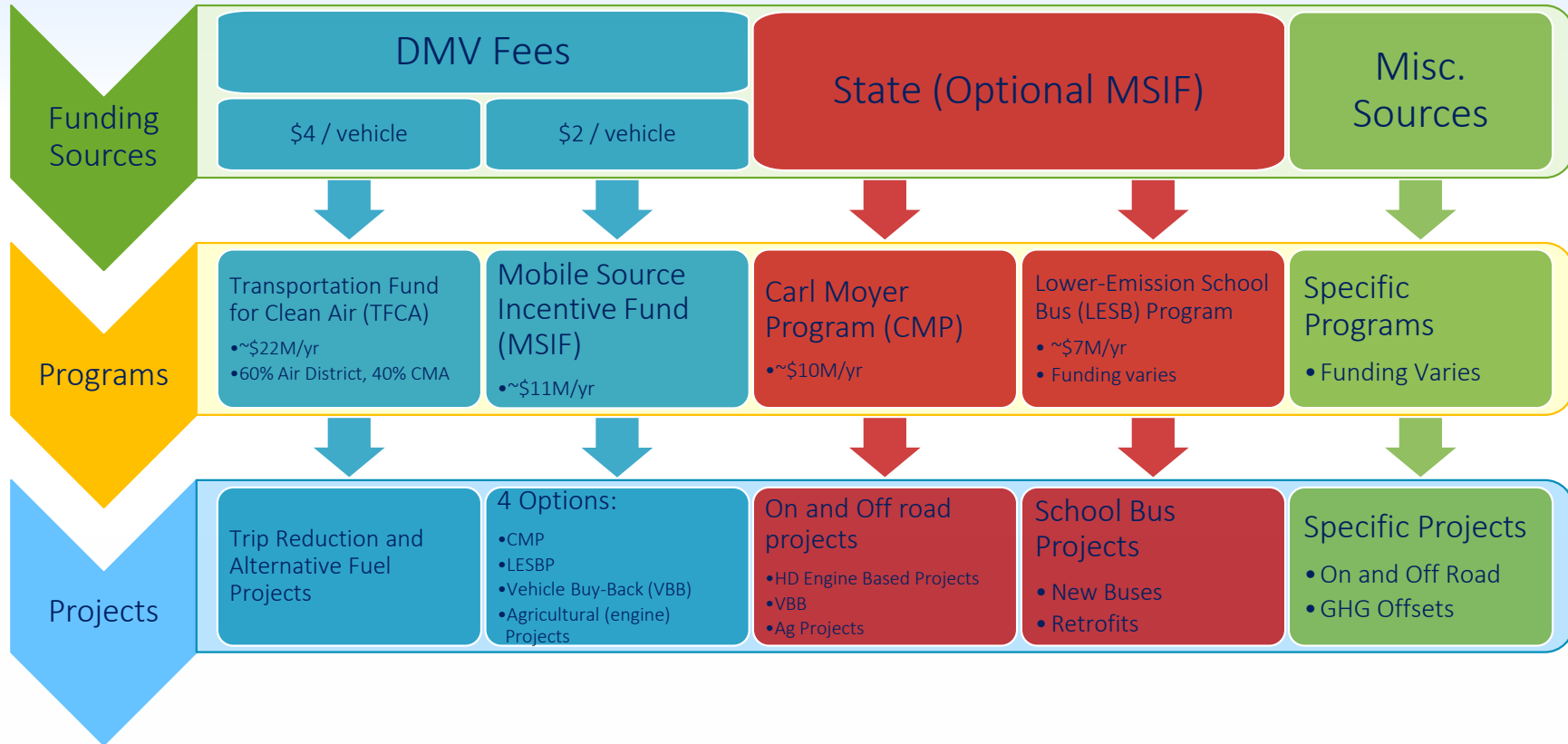
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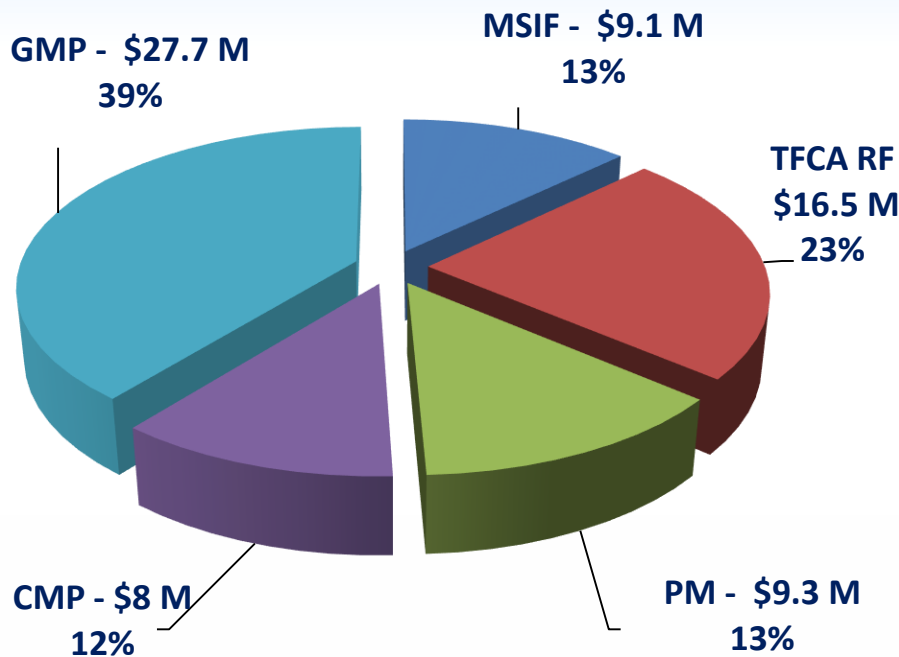


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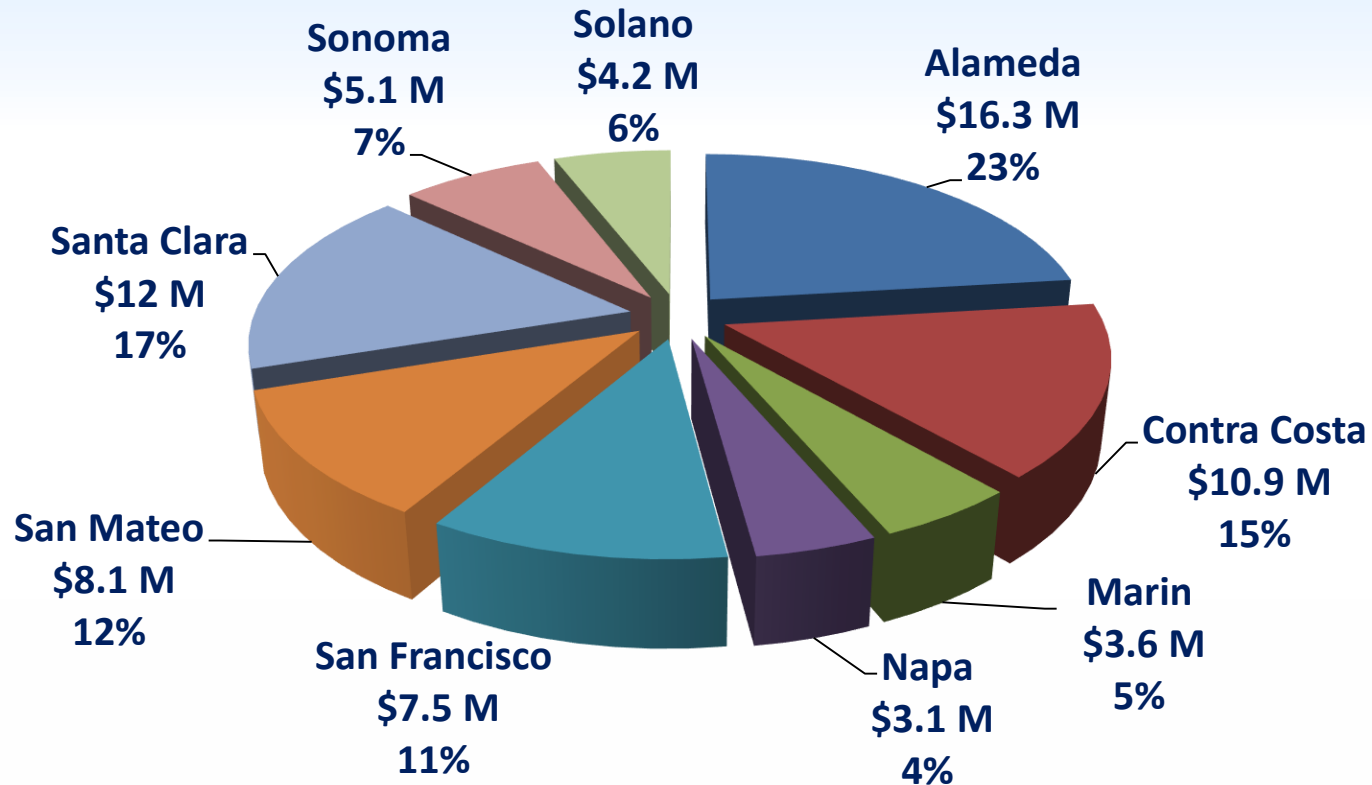
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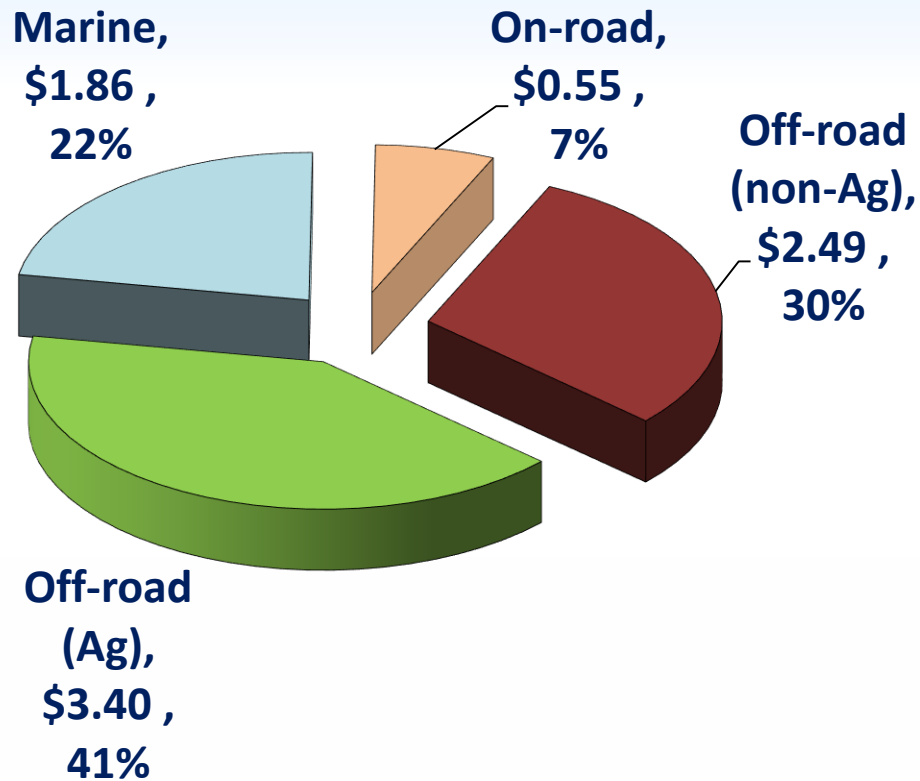


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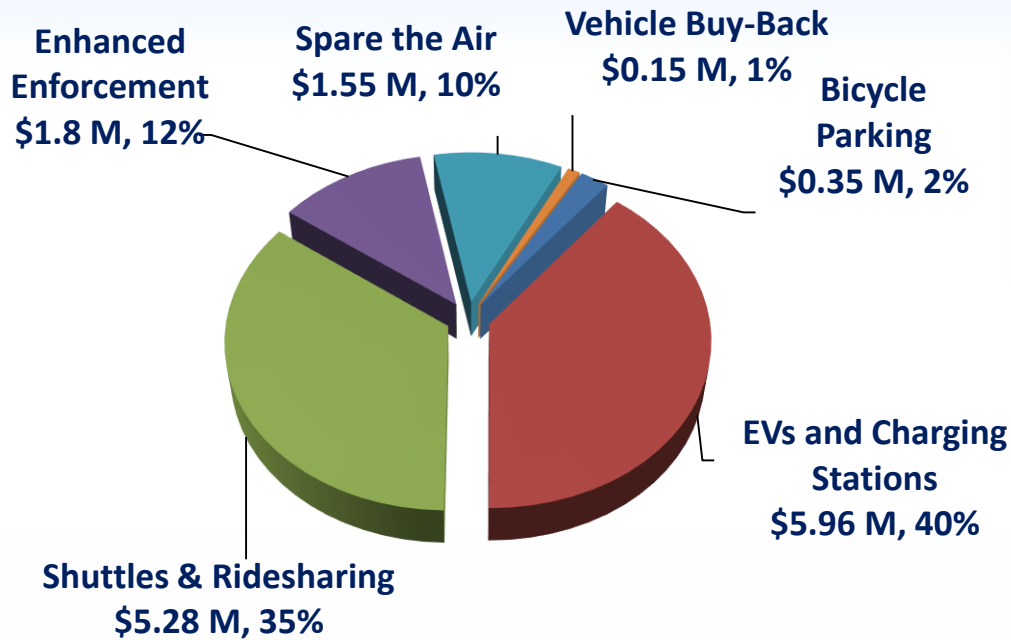
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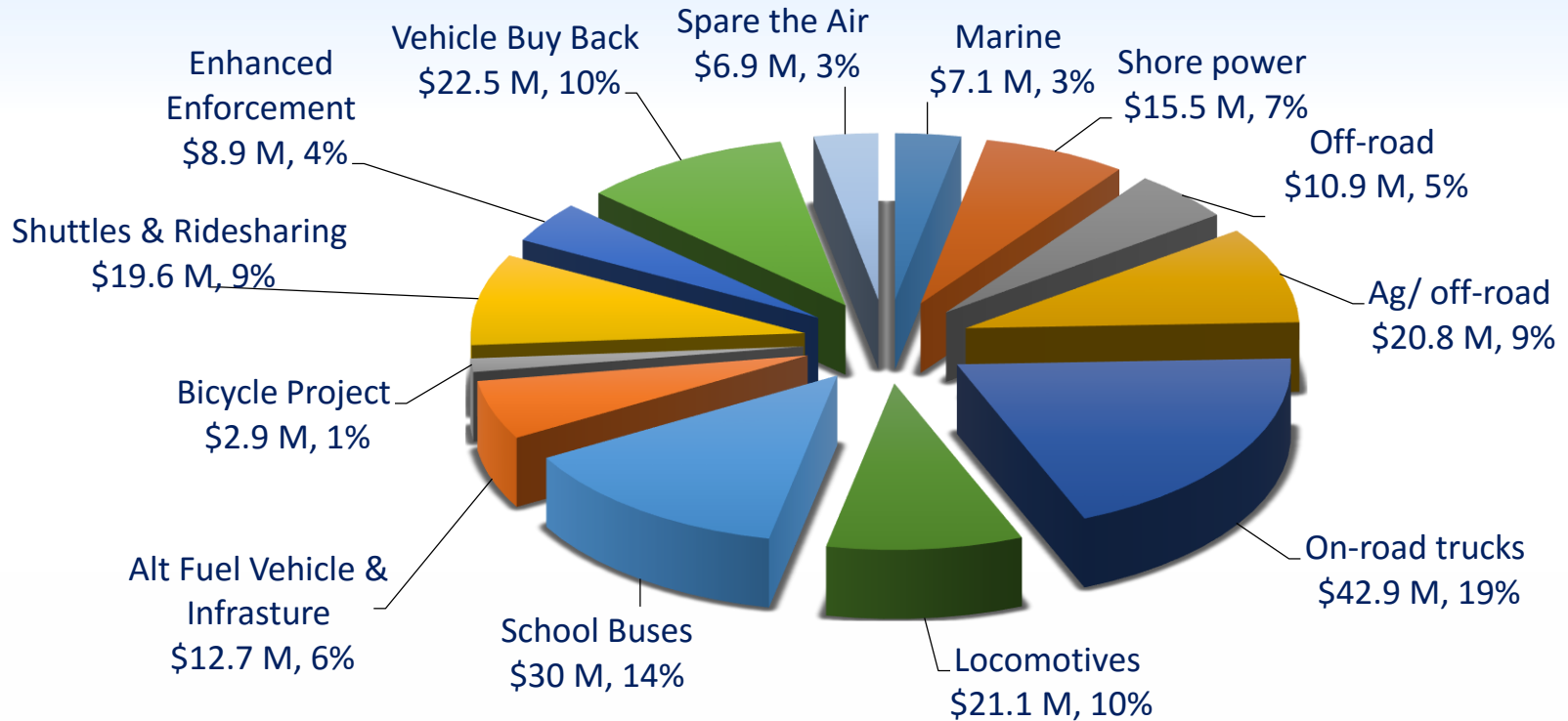


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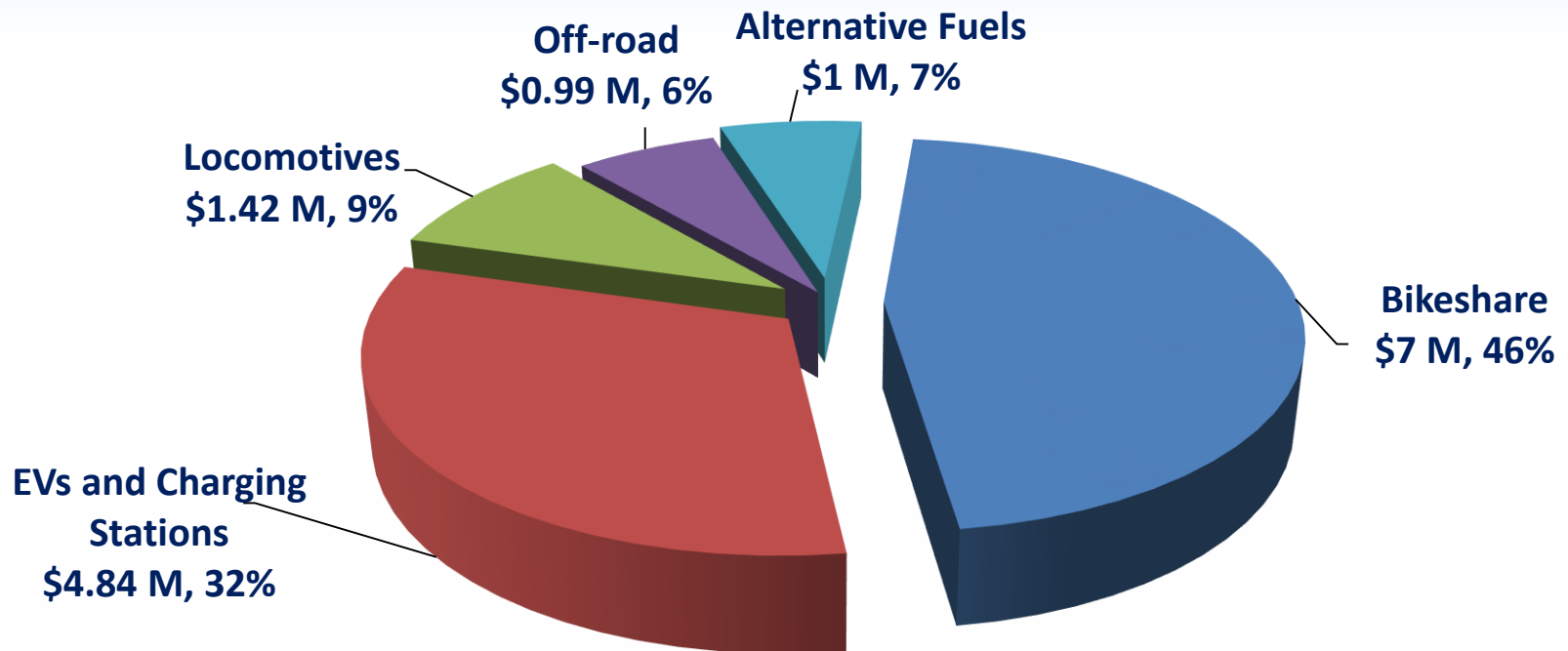
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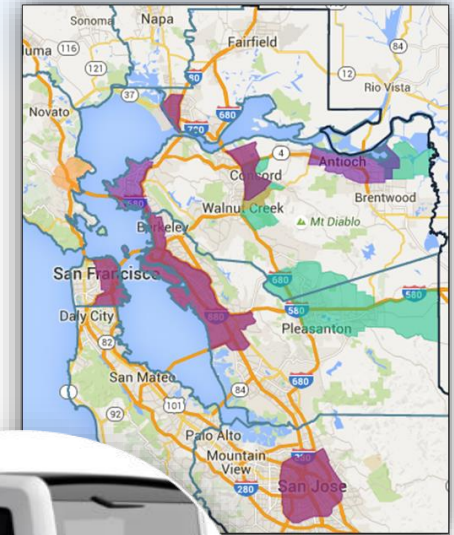
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# New Initiatives for 2017

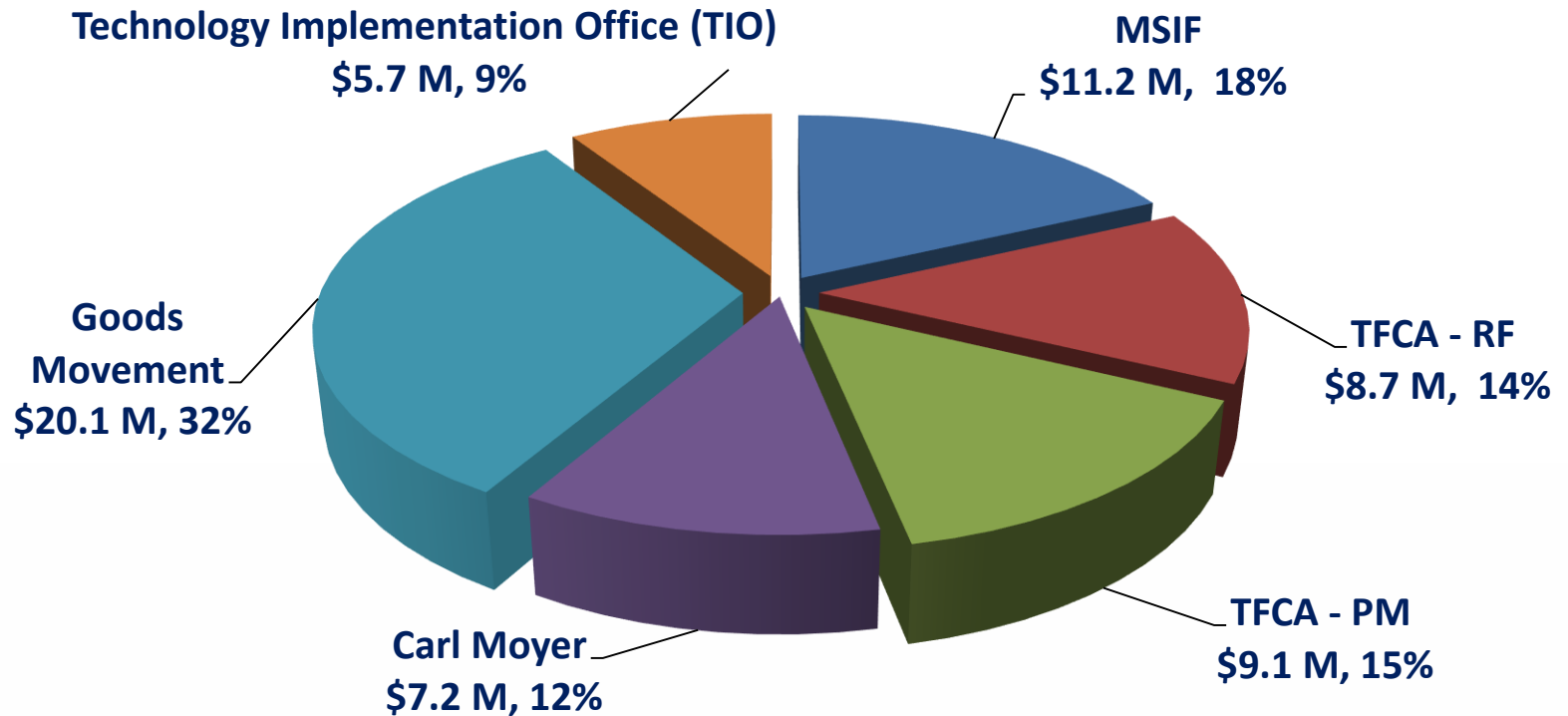
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# 2017 Funding Projections ~\$62 Million (M)





## **AGENDA: 6**

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Bay Area Air Quality Management District  
Mobile Source Committee

# Participation in Year 19 of the Carl Moyer Program and 2017 Caltrain Funding Plan

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February 23, 2017

Damian Breen  
Deputy Air Pollution Control Officer



# Overview

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- Background
- CMP Year 19 (fiscal year 2016-2017)
- 2017 Caltrain electrification project funding plan
- Recommendations



# Funding Sources

- **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 19 Funding

- CA Air Resources Board (ARB) Year 19 funding
  - \$58.9 million statewide
  - Up to \$10.6 million for the Bay Area
  - 6.25% allocation for administrative costs
  - Up to \$1.8 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



# 2017 Caltrain Funding Plan

- **July 29, 2015** – Air District 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** – Air District Board approved \$13 million initial funding plan
- **Proposed 2017** – \$3 million in MSIF funds (Total to date - \$16 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 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 2016-2017 (Program Year 19);
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 2017 funding plan for the Caltrain Electrification project.