

# **Bay Area Air Quality Management District Mobile Source Committee**

September 24, 2015

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

**Damian Breen**  
**Deputy Air Pollution Control Officer**

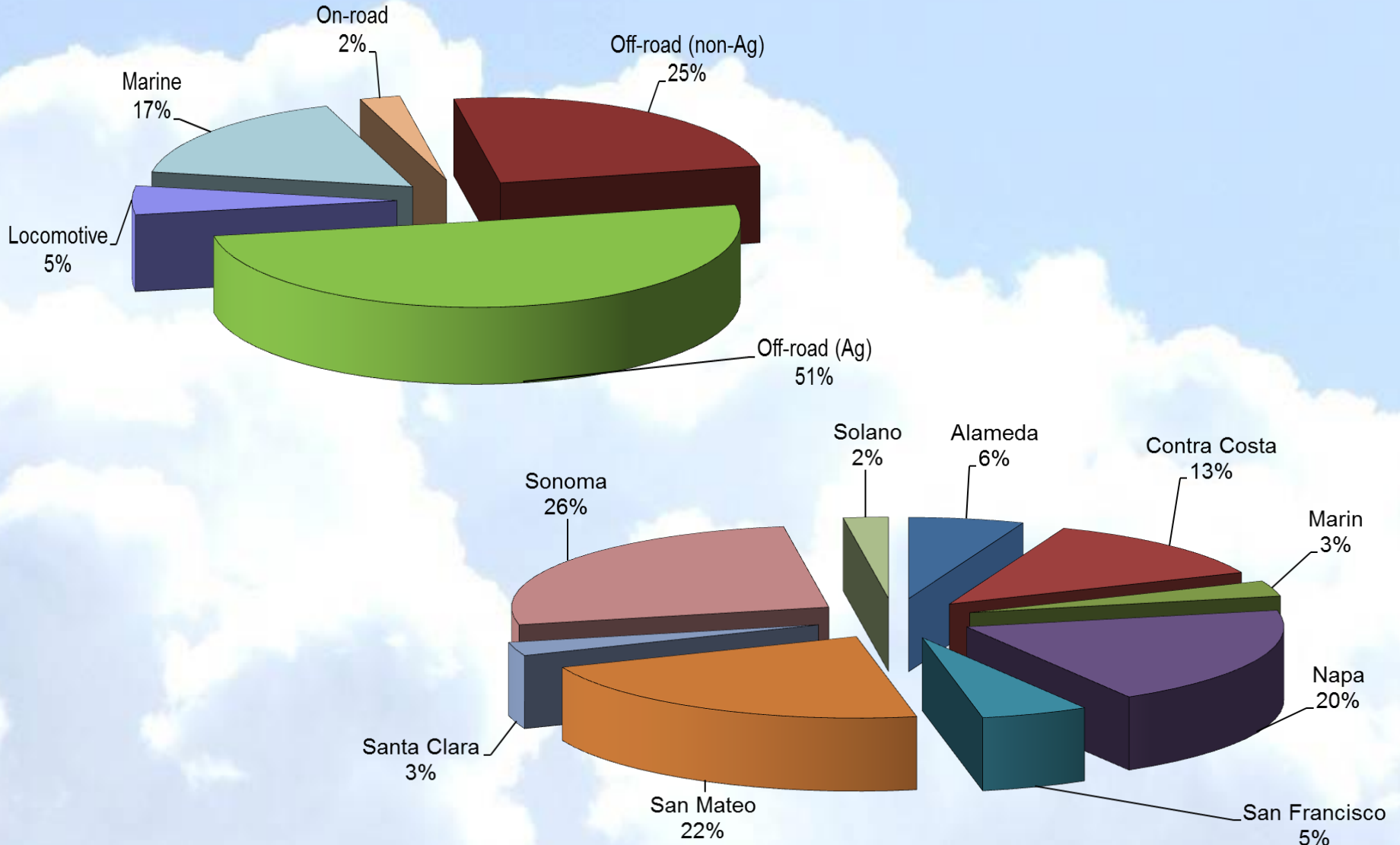
- Background
- Proposed projects with awards over \$100,000
- Recommendations

- **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 LESBP projects eligible for MSIF funding
- **Transportation Fund for Clean Air (TFCA)**
  - Funding provided by a \$4 surcharge on motor vehicles
  - Statutory authority for the TFCA and requirements of the program are set forth in California Health and Safety Code Sections 44241 and 44242

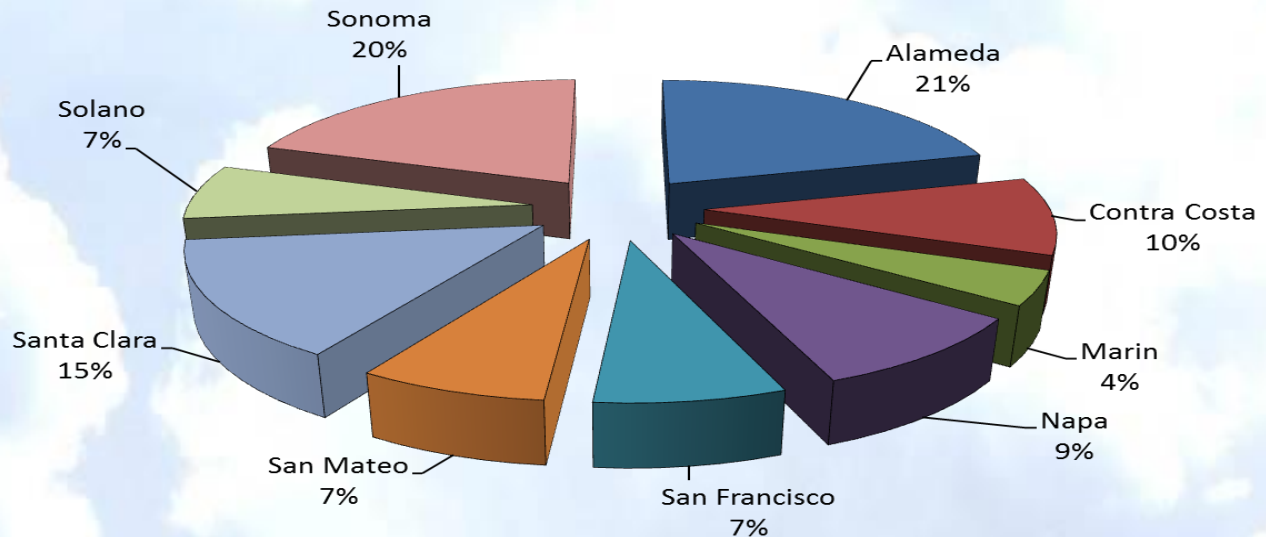
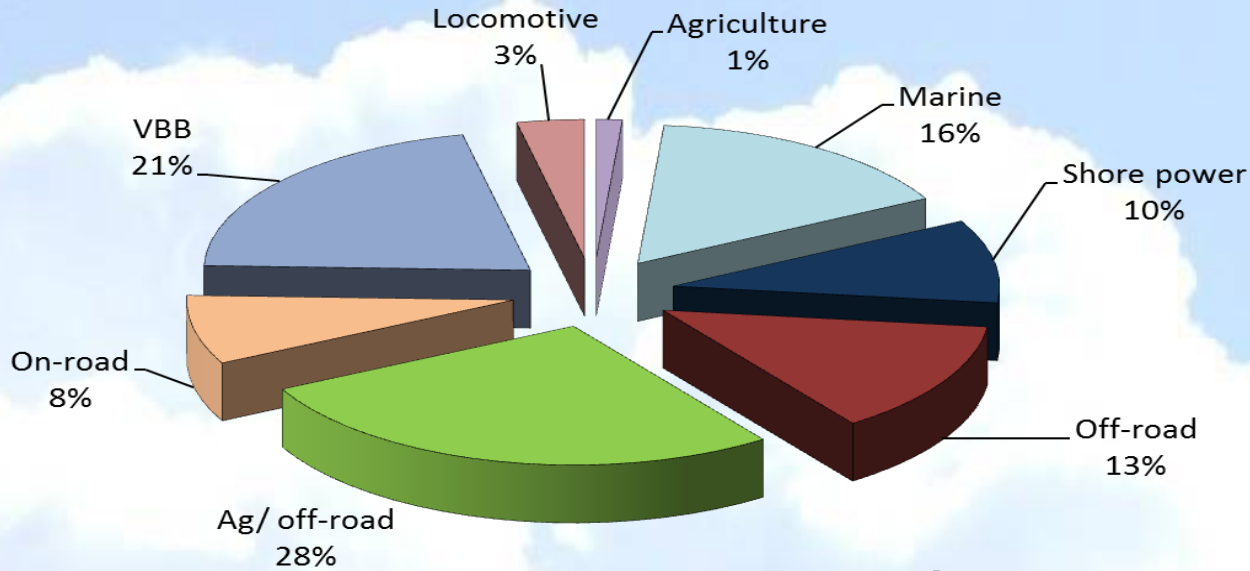
- **On 2/18/15 District Board of Directors:**
  - Approved participation in CMP Year 17
  - Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000
- **CMP Project Recommendations over \$100k:**
  - 7 Projects to reduce emissions from 12 tractors, 1 loader, and 9 marine engines
  - \$1,160,520 in total awards
  - Emission reductions: Over 9.5 TPY of criteria pollutants

# CMP and MSIF Funds

## Awarded as of 9/7/15



# CMP and MSIF Funds Awarded since 2009

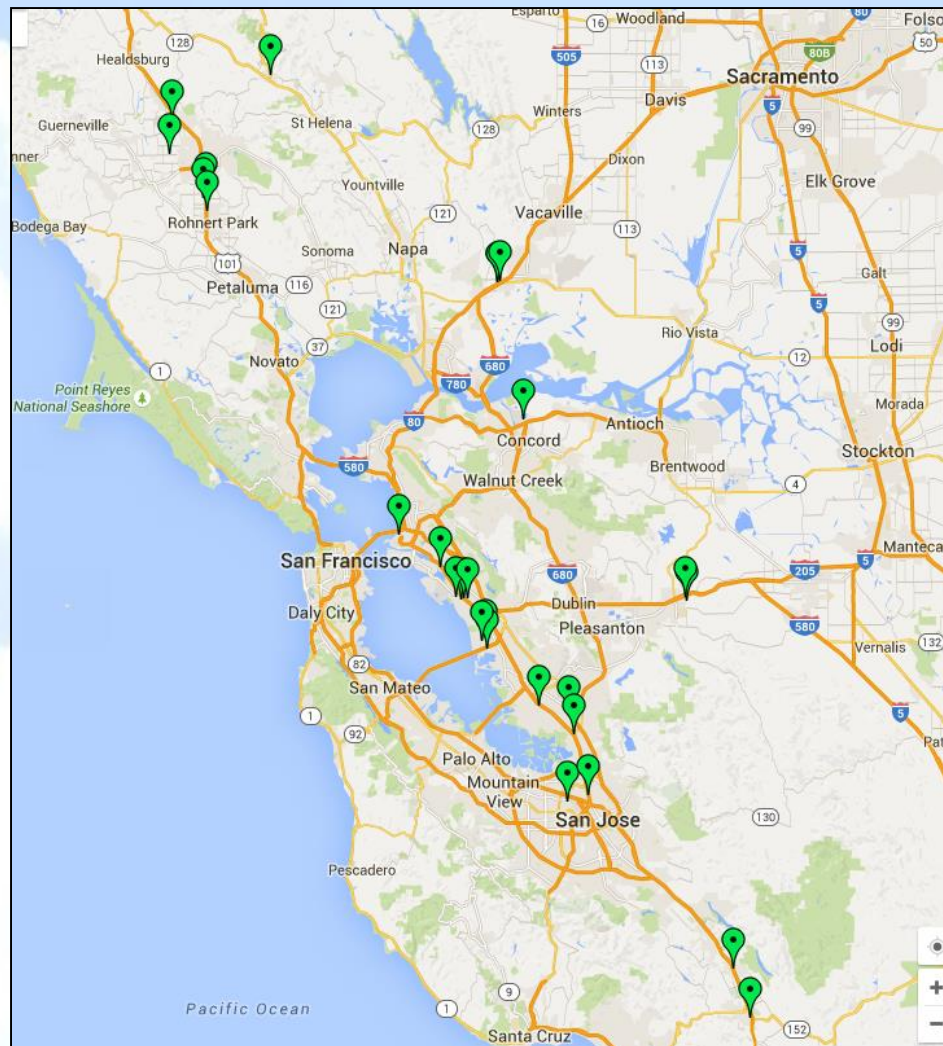


# CMP Outreach Efforts

- Postcard mailing to over 5,700 stakeholders
- Email announcements/updates
- Industry/groups: Airports, farm bureaus, trucking groups, contractors' associations, chambers of commerce, public agencies, vintner's associations, etc.
- Press releases to highlight projects and funding opportunities
- Calls to potential applicants, industry groups
- Information at Air District public events
- Presentations at ARB regulation training sessions
- Program factsheets & flyers
- Website postings/updates
- Quarterly Air District newsletter updates
- Vendor coordinated outreach

# Off-road Equipment Vendors

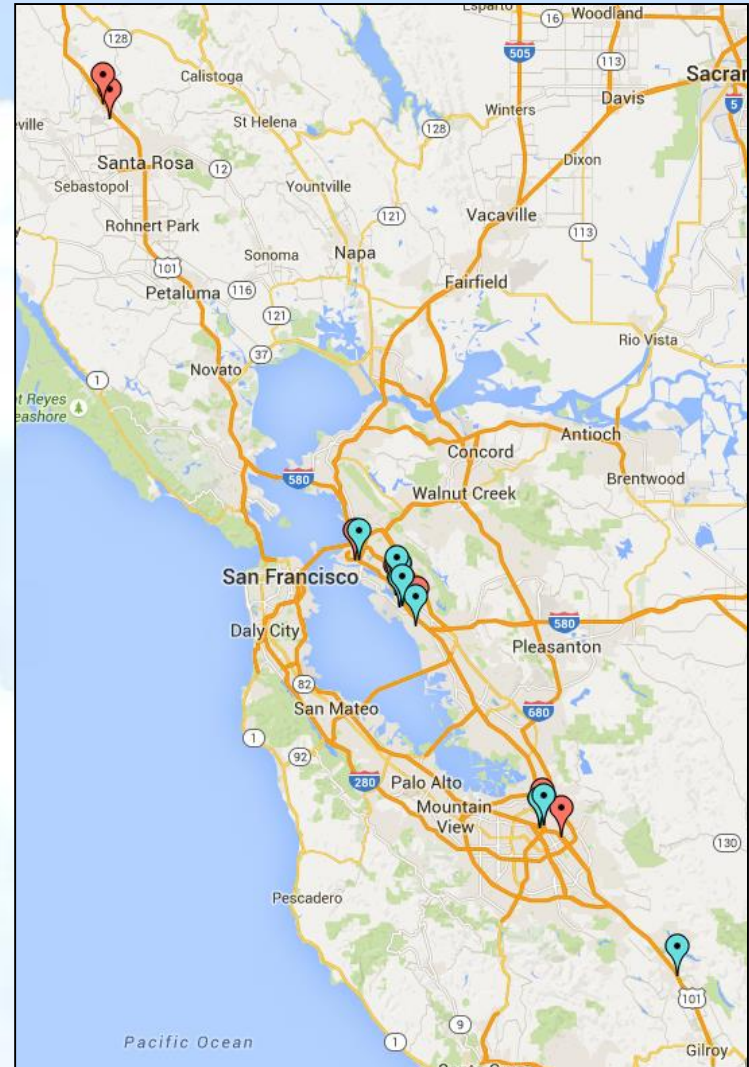
- 30 contracted off-road equipment vendors
- Vendors provide equipment for agriculture, construction, and industrial applications
- Vendors are trained and assist with outreach, application assistance and program implementation
- Any Bay Area off-road equipment vendor can participate
- **Vendor list:**  
[www.baaqmd.gov/ERP](http://www.baaqmd.gov/ERP)





# Truck/Retrofit Vendors

- 26 contracted truck/retrofit vendors
- Vendors are trained and assist with outreach, application assistance and program implementation
- Any Bay Area truck/retrofit vendor can participate
- **Vendor list:**  
[www.baaqmd.gov/VIP](http://www.baaqmd.gov/VIP)



- **Truck owner survey**

- **Purpose:** to collect program participant feedback on Air District grant program processes and outreach methods.
- Conducted in March-April 2015
- 219 respondents

- **Off-road vendor survey**

- **Purpose:** to collect feedback from participating vendors on Air District grant program processes and outreach methods.
- Conducted in July-August 2015
- 38 respondents

- **Approvals by District Board of Directors:**

- Allocated \$24.47 million in TFCA funding for eligible Air District-led and Regional Fund project categories, 5/6/15
- Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000, 5/6/15
- Adopted policies and evaluation criteria for the FYE 2016 TFCA funded projects on 5/6/15 and 7/29/15

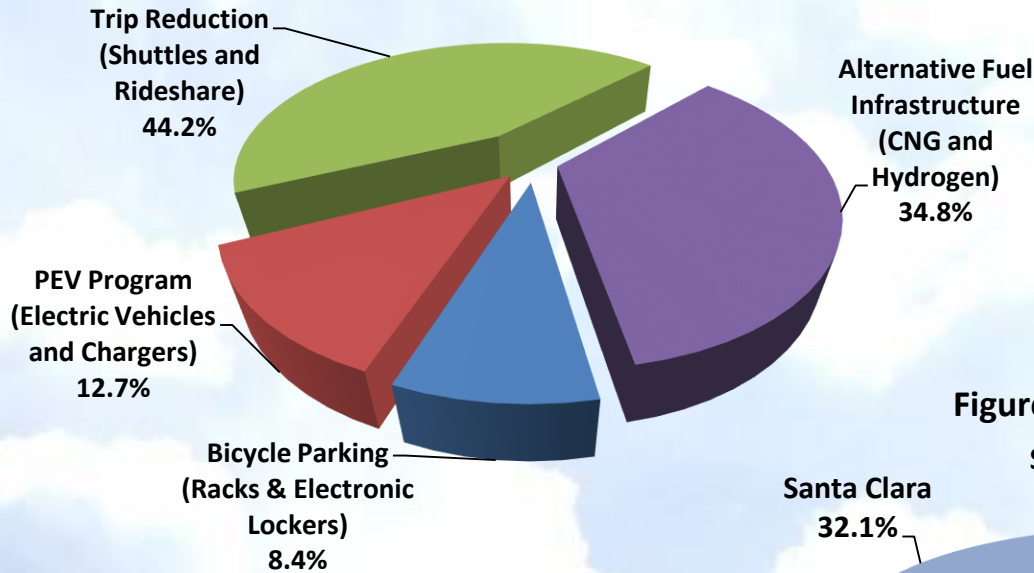
- **TFCA Project Recommendations over \$100k:**

- One Project to install 39 electric vehicle charging stations at 37 multi-family dwelling property locations
- Proposed award of \$234,000
- Emission reductions: Over 0.07 TPY of criteria pollutants

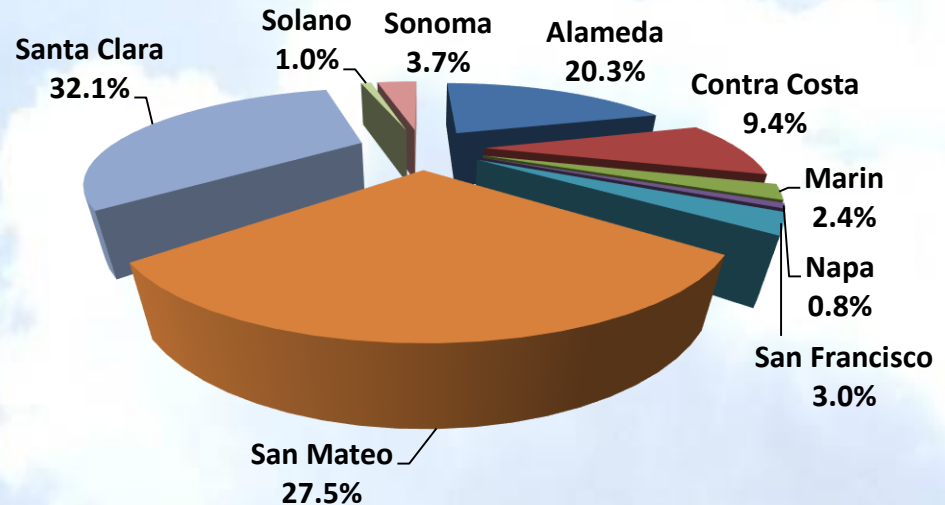
# TFCA Funds

by Project Category and by County  
(Eligible projects evaluated between 7/1/14 and 9/7/15)

**Figure 1: Funding Distributed by Project Category**



**Figure 2: Funding Distributed by County**



# TFCA Outreach Efforts

- Email announcements and website postings & updates
- Industry/groups: transit agencies, congestion management agencies, EV & charging station manufactures & providers, bicycle equipment vendors, cities, counties, special districts, regional & state agencies, advocacy groups
- Webinars: informational and program-specific
- Presentations at CEC, CPUC, Clean Cities, EV Coordinating Council, Regional & County working groups
- Public events, meetings and conferences
- Program factsheets & flyers
- Quarterly Air District newsletter updates
- Vendor coordinated outreach



# Recommendations

## *Recommend the Board of Directors:*

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

# **Bay Area Air Quality Management District Mobile Source Committee**

September 24, 2015

## **Participation in Year 5 of the California Goods Movement Bond Program**

**Damian Breen**  
**Deputy Air Pollution Control Officer**

# Overview

- Background
- Year 5 I-Bond Program
- Recommendations



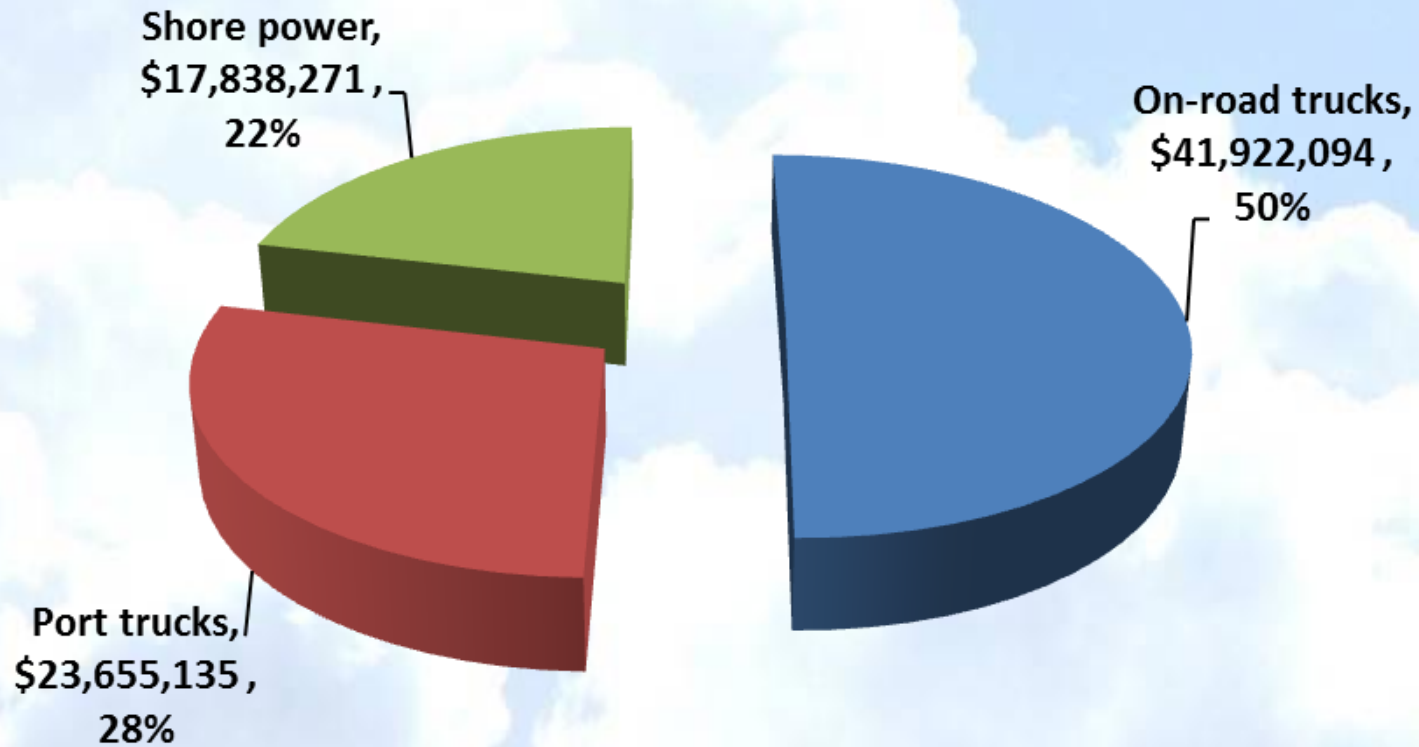
- **Goods Movement Program (I-Bond)**
  - Approved in November 2006
  - \$1 billion to quickly reduce emissions and health risks from freight movement
  - Bay Area trade corridor allocation - \$140 million
  - The Air District has administered GMP funding for the Bay Area trade corridor for the first four years of the program

# Background

- Over \$80 million expended during the first four I-Bond funding cycles for projects to:
  - Retrofit 1,400 port trucks,
  - Replace over 560 port trucks,
  - Retrofit 65 on-road trucks,
  - Replace 850 on-road trucks (*in progress*), and
  - Electrify 12 berths at the Port of Oakland (*shore power*)
- Collectively these projects reduced over 238 tons of PM and 9,347 tons of NO<sub>x</sub>

# Background

## Prior Air District I-Bond expenditures by equipment category



## Eligible Equipment Categories

- Heavy-duty truck projects
- Locomotives
- Transportation refrigeration units
- Shore power & cargo-handling equipment
- Commercial harbor craft

## ARB Priorities for Year 5

1. Zero and near zero-emission truck technologies
2. Small truck fleet opportunities
3. Zero-emission equipment
4. Tier 4 locomotives

# I-Bond Year 5: Application

- **On-road trucks**

- **\$24 million** requested in project & admin funds
- ~507 truck projects
- Emission reductions: 3,577 tons of NO<sub>x</sub>
- Priority for zero and near zero-emission trucks

- **Locomotives**

- **\$15 million** requested in project & admin funds
- ~ 7 locomotive projects
- Emission reductions: 64 tons of PM and 1,062 tons of NO<sub>x</sub>
- Funding prioritizes Tier 4 locomotive technology



# I-Bond Year 5: Application

- **Transportation refrigeration units (TRU)**

- **\$3 million** requested in project & admin funds
- ~66 TRUs
- Emission reductions: 3 tons of PM and 106 tons of NOx
- Zero-emission TRUs



- **Ships at berth & cargo handling equipment**

- **\$5 million** requested in project & admin funds
- ~ 4 pieces of cargo-handling equipment
- Emission reductions: 3 tons of PM and 296 tons of NOx



- **Note:** Funding amounts may be shifted based on interest/demand

# Year 5 Schedule

- **August 4, 2015:** Application submitted to ARB
- **September 14, 2015:** Truck solicitation opened  
*(with existing funds from older grants)*
- **September 24, 2015:** ARB Board considers district allocations for new funds
- **October/November 2015:** ARB sends out Grant Agreements
- **Late 2015/early 2016:** Solicitation periods open for other equipment categories

# Recommendations

## *Request the Committee recommend the Board of Directors:*

1. Adopt a resolution in support of the Air District's application for Year 5 Goods Movement Bond funding;
2. Authorize the Executive Officer/ APCO to enter into agreements with the ARB related to the acceptance of I-Bond funding; and
3. Authorize the Executive Officer/ APCO to appropriate I-Bond funding and to enter into agreements with eligible applicants for projects ranked and approved by the ARB.





# **Bay Area Air Quality Management District Mobile Source Committee**

September 24, 2015

## **Allocation to support Greenhouse Gas Emission Reduction Fund Projects**

**Damian Breen**  
**Deputy Air Pollution Control Officer**

# Overview

- Background
- Project descriptions
- Air District commitment
- Recommendations

# Background

- ARB Low Carbon Transportation Greenhouse Gas Emission Reduction Fund (GGRF)
  - Established in 2012
  - Cap-and-trade funds for long-term, transformative efforts to improve public health and develop a clean energy economy
- SB 535 directs GGRF funds to CalEnviroScreen disadvantaged communities
  - at least 25% of funds to projects that benefit these areas
  - at least 10% of funds to projects located in these areas
- ARB FY2014-15 Air Quality Improvement Program (AQIP) and GGRF Investment Plan
  - \$23,658,500 for zero-emission drayage truck demonstration project
  - \$23,658,500 for multi-source facility demonstration project
  - Deadline for project proposals is September 24, 2015

# Zero-Emission Drayage Truck Demonstration Project

- Local partnerships with truck operators, technology providers, Port of Oakland
- Air district partners (SCAQMD, SJVAPCD, SMMAQMD, and SDAPCD) as part of a larger technology demonstration that includes trucks at the Ports of LA/Long Beach
- SCAQMD is the lead on the joint-application
- Bay Area: Project will demonstrate zero- and near zero-emission trucks serving the Port of Oakland
  - Battery-electric trucks operating on short routes
  - Hybrid-electric trucks operating on longer regional routes to Sacramento or San Joaquin Valley
- \$23,658,500 requested from ARB for joint project

# Multi-Source Facility Demonstration Project

- Demonstration of zero or near-zero technologies at a single freight facility
- Project will demonstrate zero-emission equipment operating at the Port of Oakland
  - Battery electric trucks operating on shorter routes
  - Hydrogen fuel cell rubber-tire gantry cranes
  - Cryogenic Transportation Refrigeration Units (TRUs)
  - Battery electric yard trucks
- Local partnerships with terminal operators, technology providers, Port of Oakland with Air District as lead applicant

# Air District Commitment

- Applications were submitted by September 24, 2015
- 25% required match for each application
  - At least 10% cash match
  - Max 15% in-kind match
- Staff proposes a \$4.65 million TFCA allocation
  - \$3.15 million remaining from 2014 truck allocation (\$5 million)
  - \$1.50 million from FYE 2016 TFCA EV Program allocation
  - Covers the cash match for both applications, but may be used to expand one project if only one proposal is successful
  - If successful, TFCA funds could leverage more than \$40 million
  - No funds will be used if both projects are unsuccessful

# Recommendations

## *Request the Committee recommend the Board of Directors:*

1. Adopt a resolution in support of the Air District's application for California Air Resources Board Low Carbon Transportation Greenhouse Gas Emission Reduction Funds (GGRF);
2. Allocate up to \$4.65 million in TFCA funding as match for GGRF projects using a project cost-effectiveness of \$500,000 per ton of emissions reduced;
3. Authorize the Executive Officer/APCO to enter into agreements with the ARB and partners related to the acceptance of GGRF funds; and
4. Authorize the Executive Officer/APCO to appropriate GGRF funds and to enter into agreements with project participants.