



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

September 22, 2016

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

**Damian Breen
Deputy Air Pollution Control Officer**

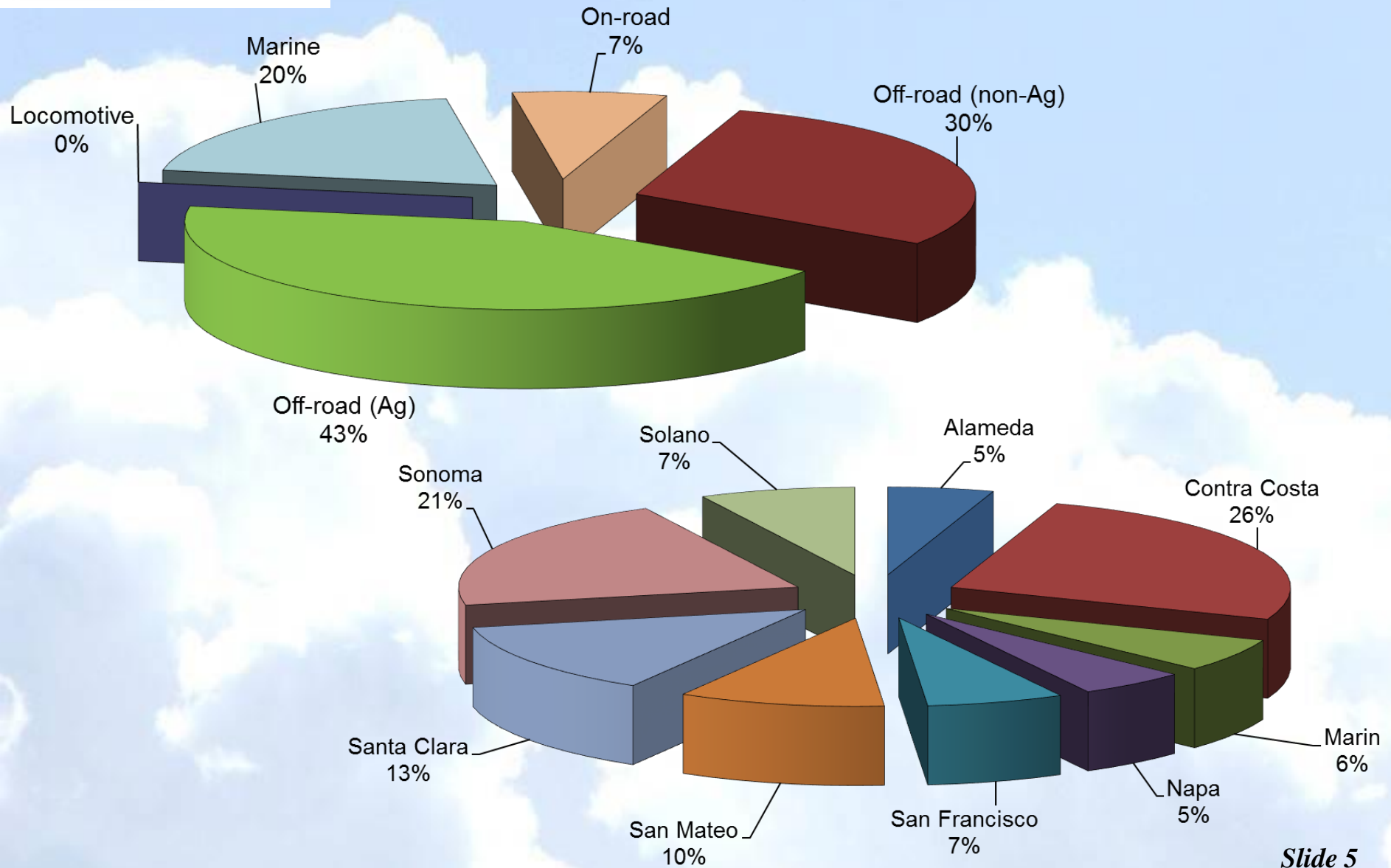
- Background
- Proposed projects with awards over \$100,000
- School bus CNG tank replacement funding
- Recommendations

CMP, MSIF, & TFCA

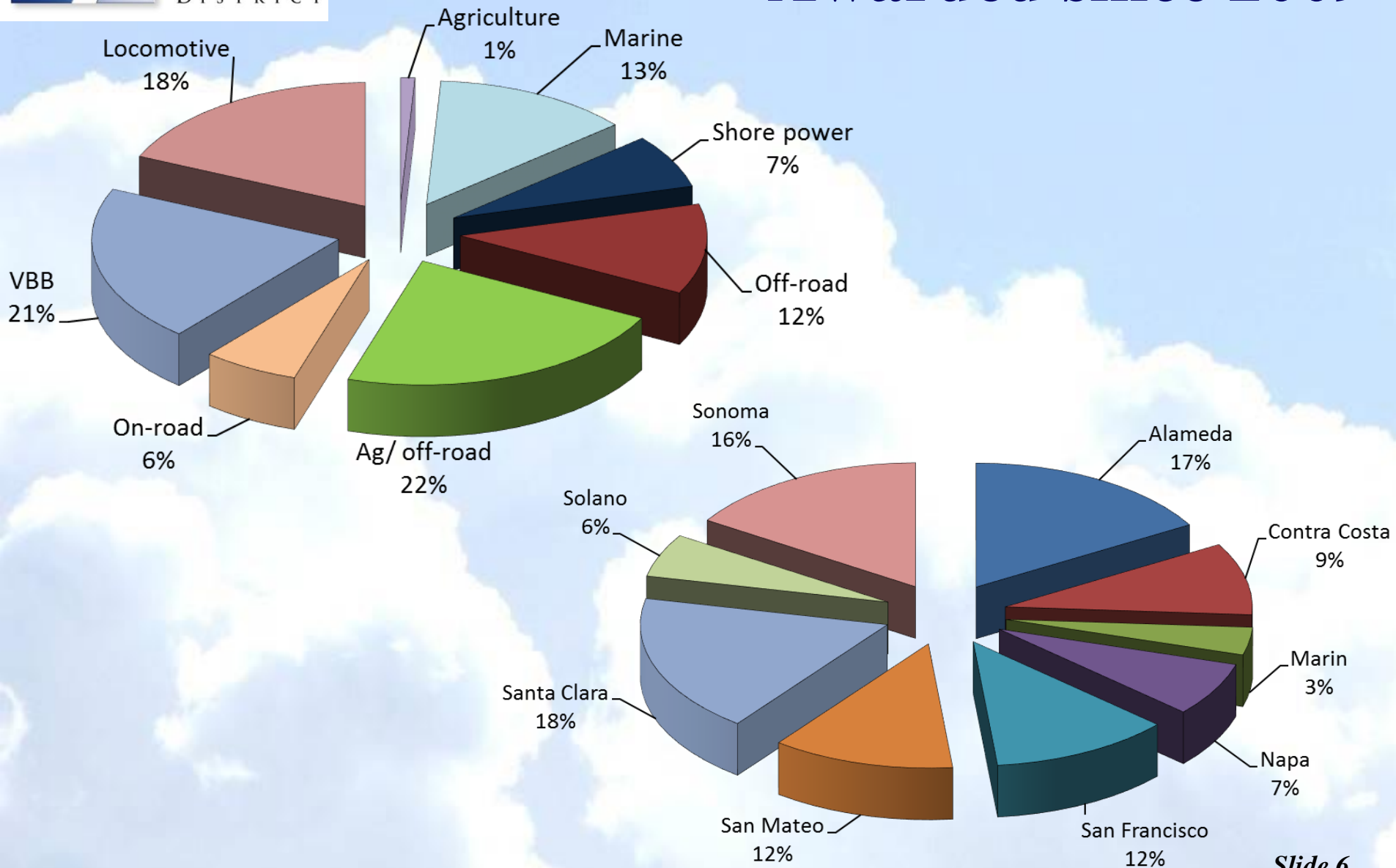
- **Carl Moyer Program (CMP)**
 - Created in 1998 to reduce emissions from heavy-duty engines
 - Voluntary program that funds surplus emission reductions
- **Mobile Source Incentive Fund (MSIF)**
 - AB 923 allowed for additional \$2 motor vehicle registration fee surcharge (12/04)
 - CMP and LESBP projects 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:**
 - 4 Projects to reduce emissions from 5 off-road tractors and 6 marine engines
 - \$580,480 in total awards
 - Emission reductions: Over 2.7 TPY of criteria pollutants

CMP and MSIF Funds Awarded as of 8/30/16



CMP and MSIF Funds Awarded since 2009



- **District Board of Directors:**

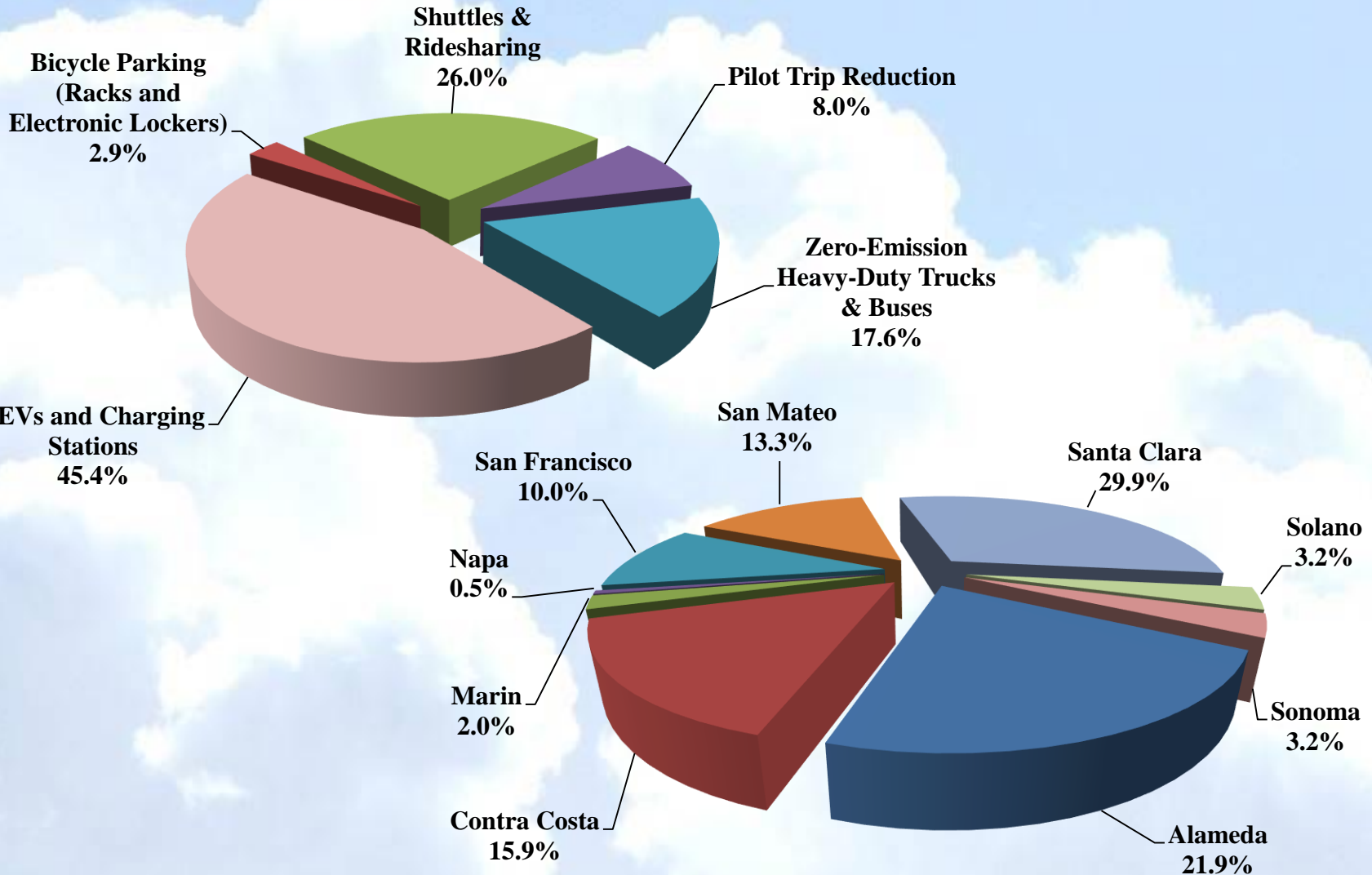
- Allocated \$24.47 million and authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000, 5/6/15
- Adopted policies and evaluation criteria on 5/6/15 and 7/29/15

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

- 1 project to replace 10 Model Year (MY) 2003 buses with new 40' zero-emission battery electric buses
- 1 project to purchase two 35' zero-emission battery electric buses
- Proposed total awards: \$609,012
- Emission reductions: Over 1.65 TPY of criteria pollutants, ~585 TPY of tailpipe greenhouse gas (GHG) emissions

TFCA Funds

by Project Category and by County
(Eligible projects evaluated between 7/1/15 and 8/30/16)



School Bus CNG Tank Replacement Funding

- On 6/4/14 the Board of Directors approved a \$6.3 million MSIF allocation for Lower Emission School Bus Program (LESBP) projects
- Eligible projects: Replacement or retrofit of school buses, and the replacement of CNG school bus tanks
- Current demand exceeds available funds
- Staff proposes the allocation of an additional \$1.5 million in MSIF funding for CNG tank replacement projects
- Staff plans to bring a recommendation for LESBP replacement and retrofit project funding within the next year



Recommendations

Recommend the Board of Directors:

1. Approve Carl Moyer Program (CMP) and Transportation Fund for Clean Air (TFCA) projects with proposed grant awards over \$100,000 as shown in Attachment 1;
2. Allocate \$1,500,000 in Mobile Source Incentive Funds (MSIF) for Compressed Natural Gas (CNG) tank replacements on school buses; and,
3. Authorize the Executive Officer/APCO to enter into agreements with applicants for the recommended CMP and TFCA projects, and Lower Emission School Bus Program projects.



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September 22, 2016

Update on the Shuttle and Rideshare Program

**Damian Breen
Deputy Air Pollution Control Officer**

- Background
- Issues and Challenges
- Outreach Efforts
- Proposed Options and Pilot Projects
- Next Steps and Recommendations

Background

Transportation Fund for Clean Air (TFCA)

- Established in 1991, funding from \$4 surcharge on Bay Area motor vehicles for projects that reduce on-road vehicle emissions
- Statutory authority for the TFCA and requirements of the program are set forth in California Health and Safety Code Sections 44241 and 44242
 - 60% of TFCA funds awarded directly by the Air District
 - Remaining 40% is distributed to the 9-Bay Area Congestion Management Agencies (County Program Manager Fund)
- TFCA is the District's sole funding source that can be used to fund **trip reduction and light-duty alternative fueled vehicle-based** projects

Background

TFCA Shuttle and Rideshare Program

- Developed in the early 1990's to target emissions reductions from light-duty passenger commute vehicles
- Offers grant funding to public agencies that sponsor first- and last-mile shuttle services that connect commuters between mass-transit and employment centers
 - Air District allocates ~ \$4 million (M) annually
 - In past 5 years, the Program has awarded ~ \$3.5 M to between 7 to 10 projects each year based on cost-effectiveness (C/E)
 - most of which have been applying for funds for 10 or more years

Issues and Challenges

- Over time, increasingly challenging to fund projects
 - Due to increasingly stricter engine emission standards
 - Air quality benefits from these projects are lessened
- Program relies heavily on Project-Sponsor-collected survey data
 - Data collected are inconsistent among projects and difficult to verify
 - Some projects struggle to quantify the air quality benefits
- C/E (\$/ton of emissions reduced) limit has been raised
 - From \$90,000 in Fiscal Year Ending (FYE) 2013, to \$200,000 or more in the current FYE 2017
 - With annual adjustments to the C/E limits some, but not all, of the existing projects can remain eligible for funding under this Program

Outreach Efforts

- Oct. 8, 2013 - Feb. 2016, staff held more than 10 public workshop meetings and 30 direct meetings with stakeholders:
 - Project Sponsors
 - Congestion Management Agencies/ County Program Managers
 - Transit agencies
 - Regional agency partners
 - Other interested parties
- Staff has implemented several measures to improve the Program
 - Modified the program's policies, application requirements, and project evaluation methodology.
 - Change in cost effectiveness has helped to allow many shuttle projects to meet the cost-effectiveness requirement and remain eligible for funding
- *Relying on funds for shuttle operators solely through the current Program will continue to be a challenge in the long term*

- 1) Continue to provide Program funding for qualifying projects:
 - Continue increasing C/E limit as ARB updates emissions factors
- 2) Partner with Transit Agencies on Spare the Air program to provide *short-term supplemental funding source*
 - **For existing Program shuttle operators who no longer qualify** for Program funding can receive “bridge” funding from Spare the Air Program (using unspent Trip Reduction funds)
- 3) Implement the Pilot Trip Reduction Program that provides funding for new innovative first and last-mile connection services

Options

TFCA Last Mile Mobility Program
\$4 Million

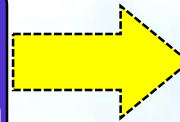


TFCA Shuttle &
Ridesharing Program - \$3.5 Million



Options

TFCA Bridge Funding
Program (2 Years) – \$0.5 Million



Pilot Mobility
Projects



Portion of
Returned
Funds

- Pilot 1 – \$235,000 in Spare the Air bridge funding for City of Oakland Broadway Shuttle:
 - City of Oakland no longer qualified for Program funding; funding is limited to two years
- Pilot 2 – \$1,000,000 in Trip Reduction – Pilot funding for project to test and deploy ~ 150 Shared Autonomous Vehicle (SAV) Shuttles in Bishop Ranch Business Park and Contra Costa County
- *(Proposed)* Pilot 3 – Staff is recommending award of \$406,000 in TFCA – FYE 2017 Regional Funds for Livermore Amador Valley Transit Authority (LAVTA) to pilot SAV project in Dublin:
 - \$322,000 per year for up to three years in advertising revenues
 - \$84,000 (one-time cost) for wrapping 7 LAVTA transit operated shuttle buses with Spare the Air messaging

- Obtain input from the Mobile Source Committee and stakeholders (October – Spring 2017)
- Evaluate results from the pilot projects
- Bring proposed recommendation for expansion of Spare the Air advertising and other options back to Mobile Source Committee for consideration in May 2017

Recommend the Board of Directors:

1. Approve \$406,000 in Transportation Fund for Clean Air – for fiscal year ending (FYE) 2017 Regional Funds to be transferred to the Spare the Air Program FYE 2017 budget for the purposes of:
 - a. Securing an advertising contract with the Livermore Amador Valley Transit Authority (LAVTA) at a cost of \$322,000 for FYE 2017, and
 - b. Paying approximately \$84,000 to cover the cost of wrapping seven LAVTA transit operated shuttle buses with spare the air messaging.
2. Authorize the Executive Officer/APCO to execute all contracts and agreements with LAVTA related to the wrapping and advertising rights; and
3. Authorize the Executive Officer/APCO to extend the advertising service contract with LAVTA at a cost not to exceed \$322,000 annually for up to two additional years, at the Air District's discretion, based on contractor's performance.



Bay Area Air Quality Management District Mobile Source Committee Meeting

September 22, 2016

**Accept, Obligate, and Expend Funding From The
Bay Area Clean Air Foundation (Foundation)**

**Damian Breen
Deputy Air Pollution Control Officer**

- Background
- Project Description
- Tentative Timeline
- Recommendations

Bay Area Clean Air Foundation (Foundation) and RFG

- Air District non-profit foundation
 - Air District Board approved establishment on July 9, 2008
 - Funds air emissions reduction projects, education, and other air quality-related programs
- Reformulated Gasoline Settlement Fund (RFG)
 - Result of a settlement of 14 class action lawsuits against Union Oil Company of California and Unocal Corporation
 - \$7 million for open competitive grants program for projects to achieve vehicle emissions or fuel efficiency benefits for California consumers
 - Most RFG program funding was awarded in 2010

Foundation Projects funded by RFG

- Awarded \$500,000 in May 2015 for Electric Vehicle (EV) Charging Station Deployment Project:
 - Provides grants to public agencies that install publicly available EV charging stations by early 2017
 - Matched with \$692,233 in Air District Transportation Funds for Clean Air (TFCA) funds
- Awarded \$546,097 in 2010 for City Car Share Project to convert 10 Toyota hybrids to PHEVs and placed into car-share service
 - Completed in 2014

Proposed Roadside Monitoring Project

- August 2016, Foundation applied for \$1,301,127 in RFG funding in partnership with Bay Area and Sacramento districts:
 - Construct two new roadside emissions monitoring stations that include monitoring equipment that expands on the EPA's requirements, one in the Bay Area and one in Sacramento
 - Operate monitoring stations for at least five years
 - BAAQMD will monitor for NO₂/NO_x, CO, PM_{2.5}, black carbon (BC), ultrafine particles (UFP), and toxics
 - SMAQMD will monitor for NO₂/NO_x, CO, PM_{2.5}, BC, UFP, and meteorology measurements
- Foundation recently notified that the maximum award being considered is \$1,266,600

Tentative Timeline

Deliverables	Date
Complete Site Selection and Construction	BAAQMD - By end of 2017 SMAQMD – By December 2018
Commence Monitoring	BAAQMD - By January 2018 SMAQMD – By January 2019
Data Collection Period for Project White Paper	Minimum of six months of data

Recommendations

Recommend the Board of Directors:

1. Adopt a Resolution authorizing the Bay Area Air Quality Management District (Air District) to accept, oblige, and expend up to \$1,266,600, plus any interest accrued, from the Bay Area Clean Air Foundation (Foundation) for roadside air pollution monitoring projects; and
2. Authorize the Executive Officer/APCO to enter into all agreements necessary to accept and expend this funding.