

Bay Area Air Quality Management District Mobile Source Committee

February 25, 2016

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

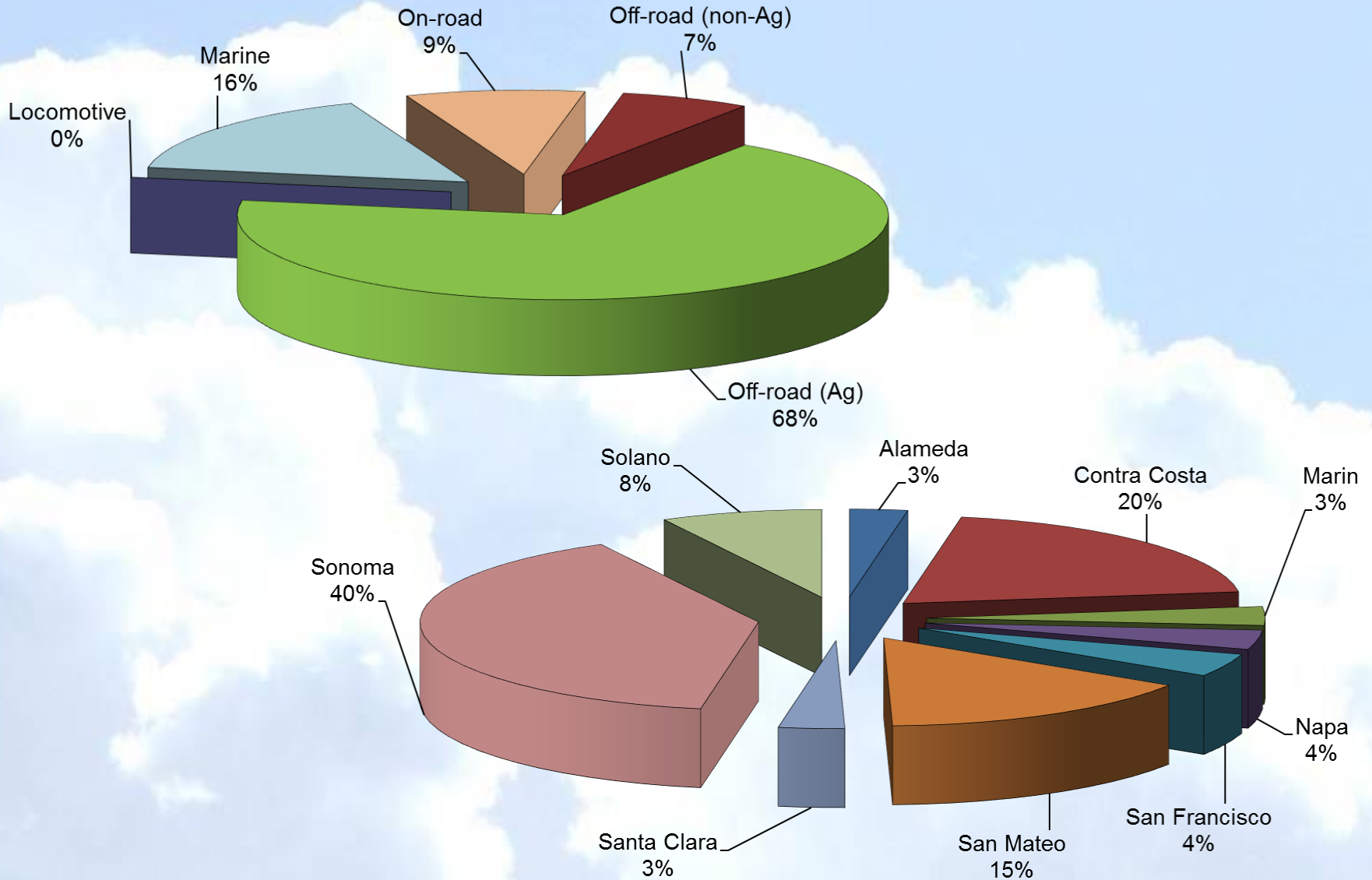
Damian Breen
Deputy Air Pollution Control Officer

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

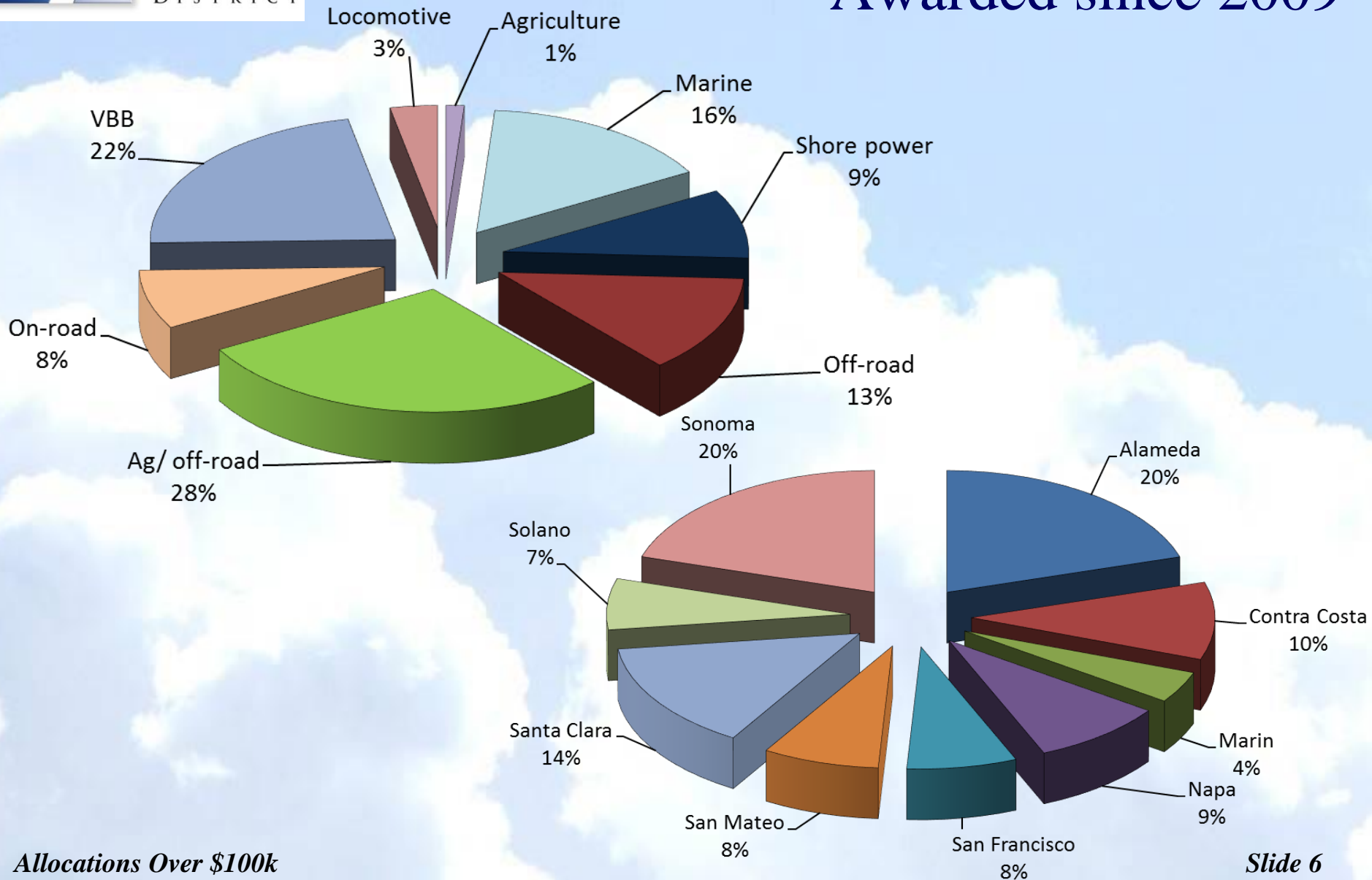
- **Carl Moyer Program (CMP)**
 - Created in 1998 to reduce emissions from heavy-duty engines
 - Voluntary program that funds surplus emission reductions
- **Mobile Source Incentive Fund (MSIF)**
 - AB 923 allowed for additional \$2 motor vehicle registration fee surcharge (12/04)
 - CMP and LESBP projects 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:**
 - 5 Projects to reduce emissions from
 - 4 tractors,
 - 2 loaders, and
 - 1 marine engine
 - \$866,490 in total awards
 - Emission reductions: Over 3.7 TPY of criteria pollutants

CMP and MSIF Funds Awarded as of 2/3/16



CMP and MSIF Funds Awarded since 2009



- **District Board of Directors:**

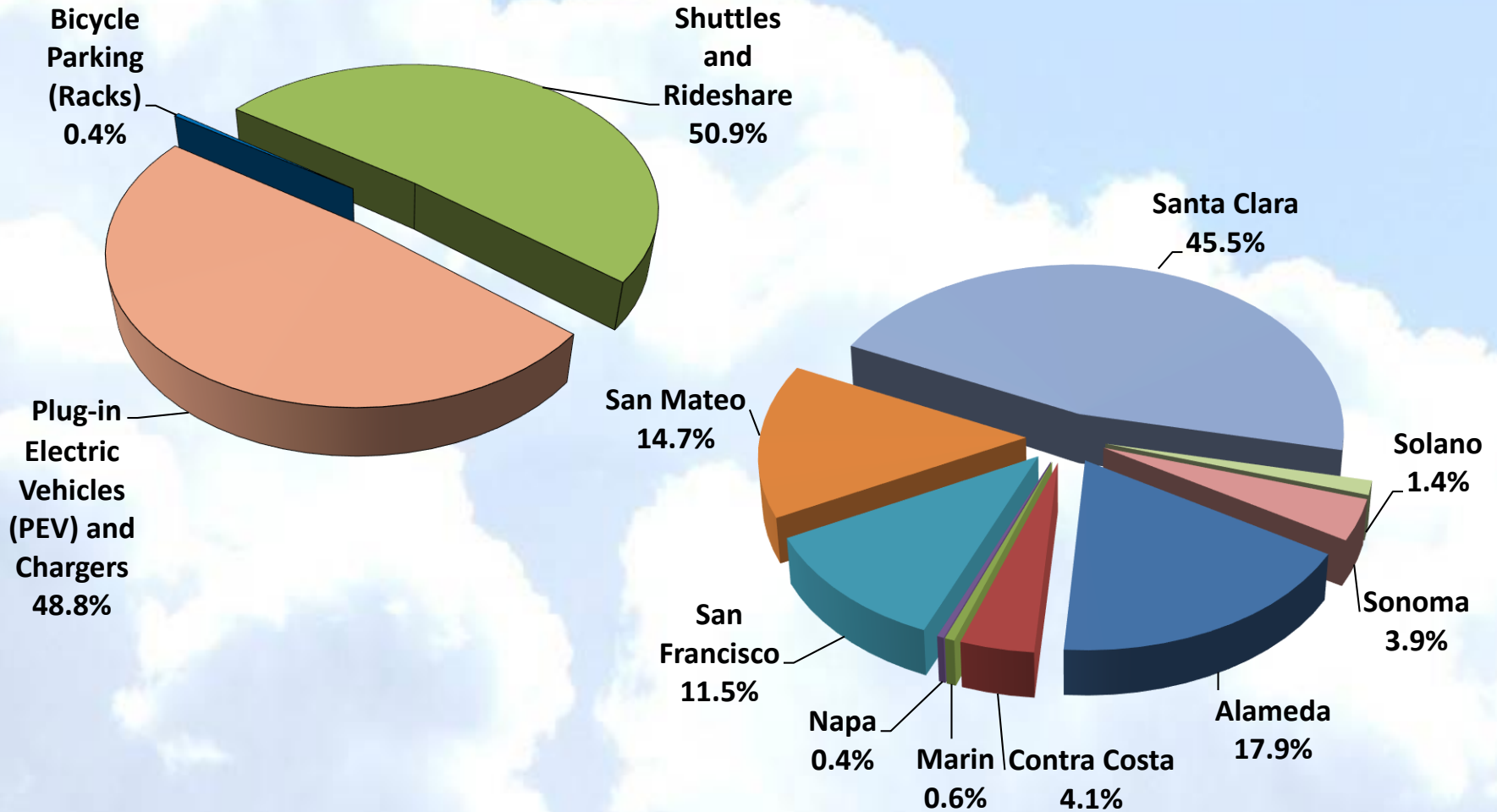
- Allocated \$24.47 million for eligible project categories in FYE 2016, 5/6/15
- Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000, 5/6/15
- Adopted policies and evaluation criteria for FYE 2016 projects on 5/6/15 and 7/29/15

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

- 3 projects to install electric vehicle (EV) charging stations including:
 - 21 dual-port Level 2 charging stations (with solar) at a shopping center
 - 350 Level 2 charging stations at a workplace
 - 32 dual-port Level 2 and 5 DC Fast charging stations at a workplace
- Proposed total awards \$768,959
- Emission reductions: Over 0.41 TPY of criteria pollutants

TFCA Funds

by Project Category and by County
(Eligible projects evaluated between 7/1/15 and 2/3/16)



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

February 25, 2016

Air District Grant Programs Overview

Damian Breen

Deputy Air Pollution Control Officer

Overview

- Background
- Recap of 2015 allocations & emission results
- 2016 Funding projections
- 2016 Initiatives

Background

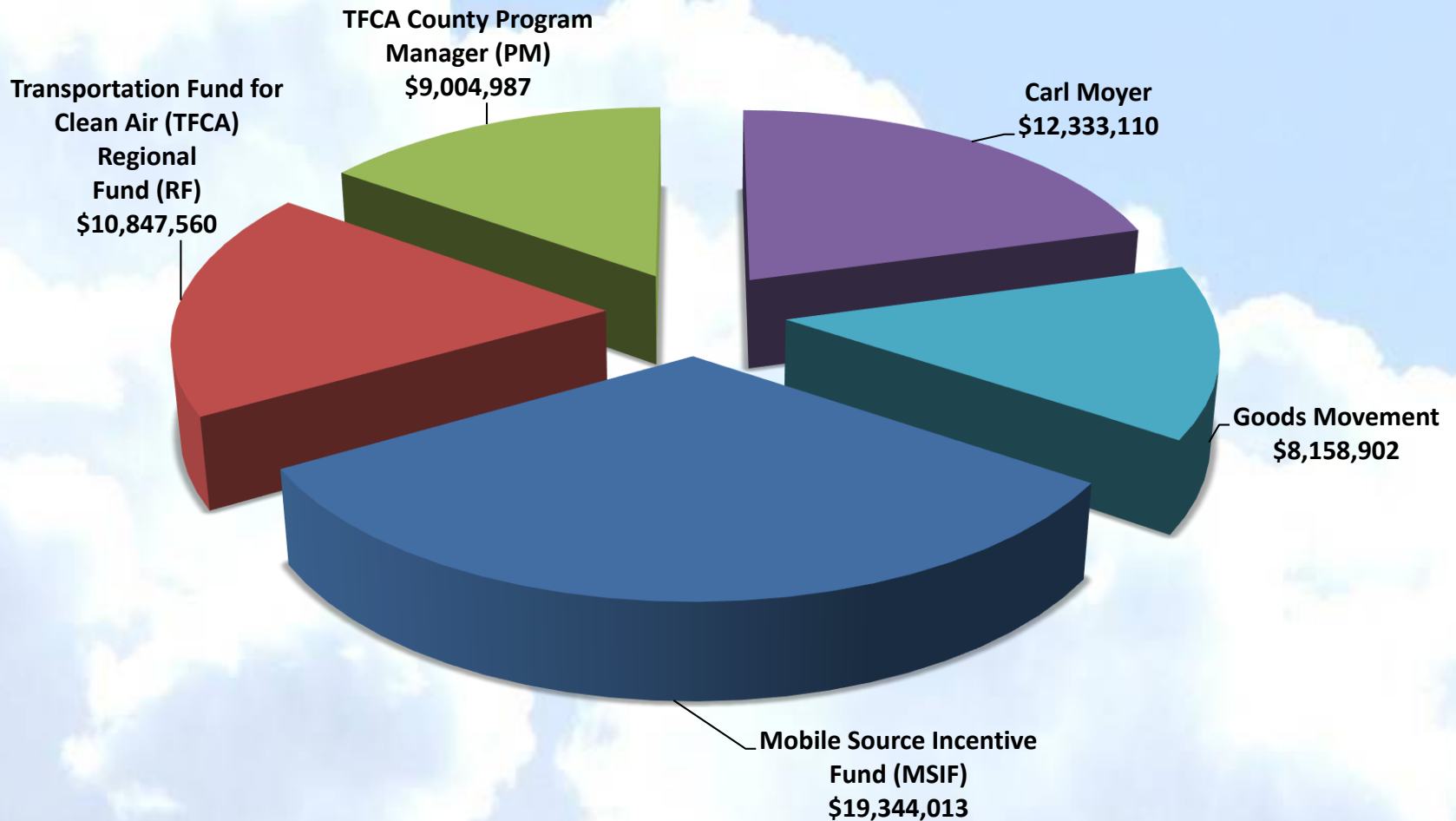
Calendar Year 2015 - \$60 million allocated to reduce emissions from mobile sources:

- 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
- 34% to CARE areas

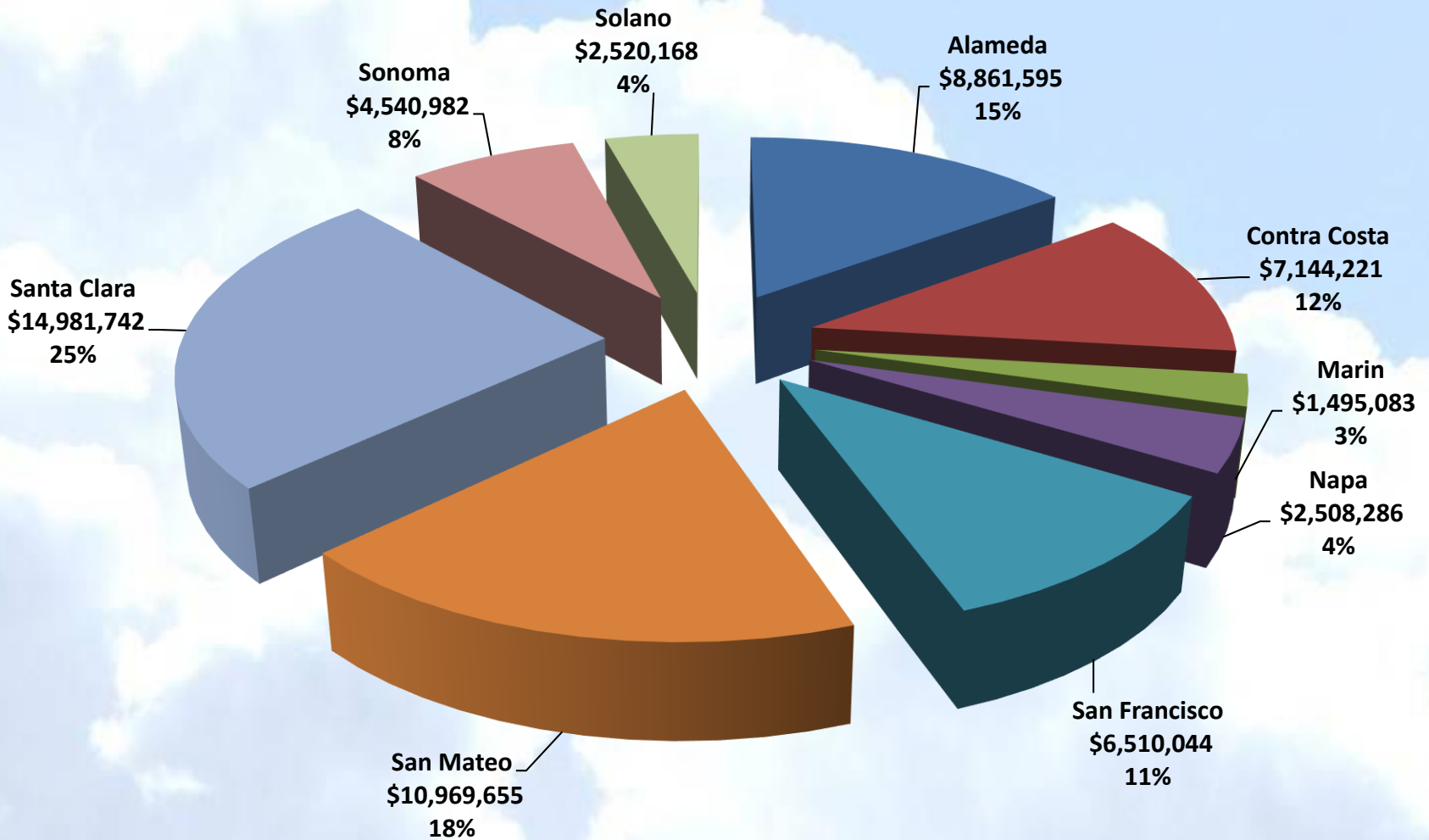
2015 Strategic Incentive Division (SID) Highlights

- Successful completion of ARB and DOF Audit of over \$145 million and over 10,000 engines (FYE 2008-2014)
- Off-road equipment:
 - \$20 million to support electrification of the Caltrain system by 2020
 - \$2.5 million awarded to United Airlines to electrify 81 pieces of ground support equipment at SFO
- Alternative fuels:
 - \$2.2 million awarded to construct 12 hydrogen stations
 - \$760,000 awarded to install 160 new EV charging stations
- Trip reduction:
 - > 2,400 new bicycle rack spaces and electronic lockers
 - Bay Area Bike Share: > 750,000 rides taken since 8/27/13
- Lawn & garden equipment: Over 121 engines exchanged

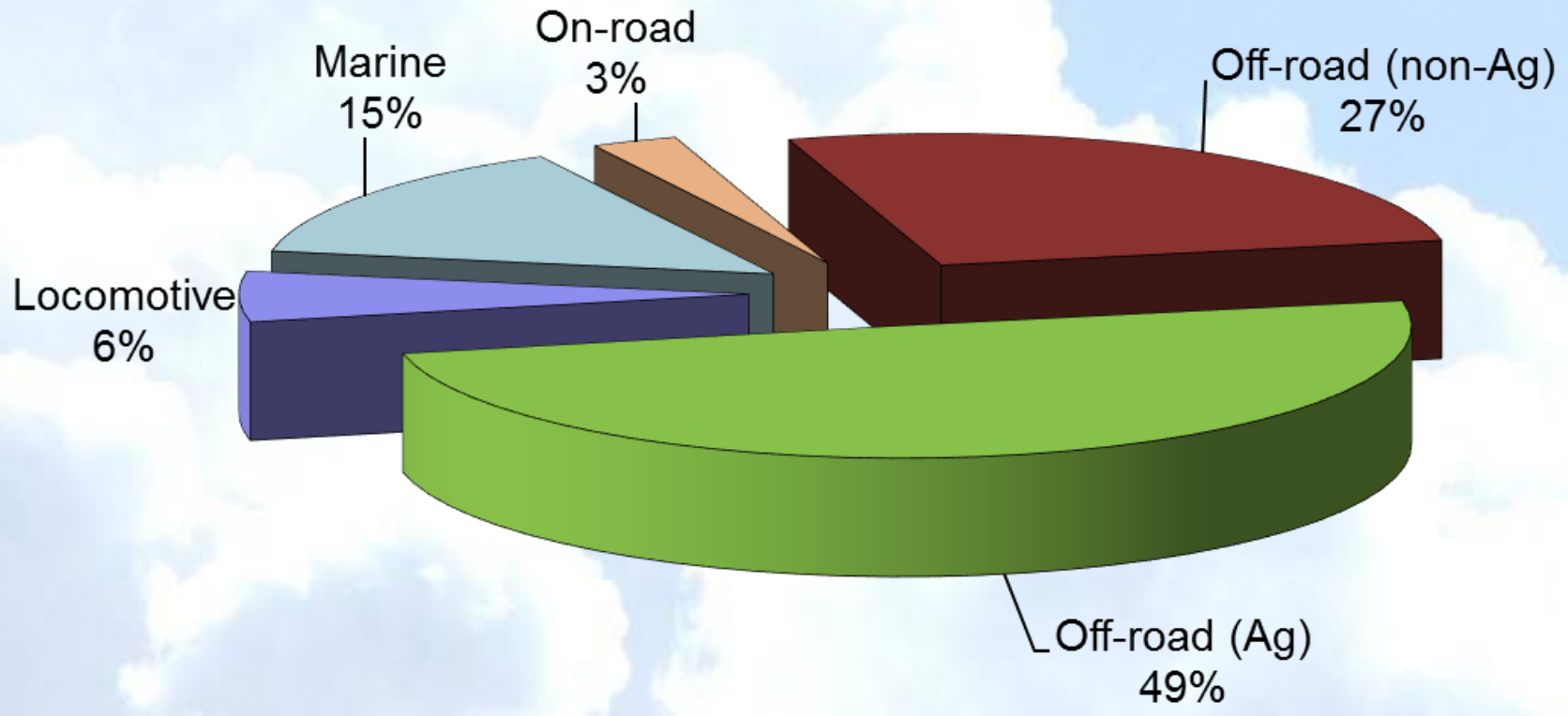
2015 Allocations: \$60 Million



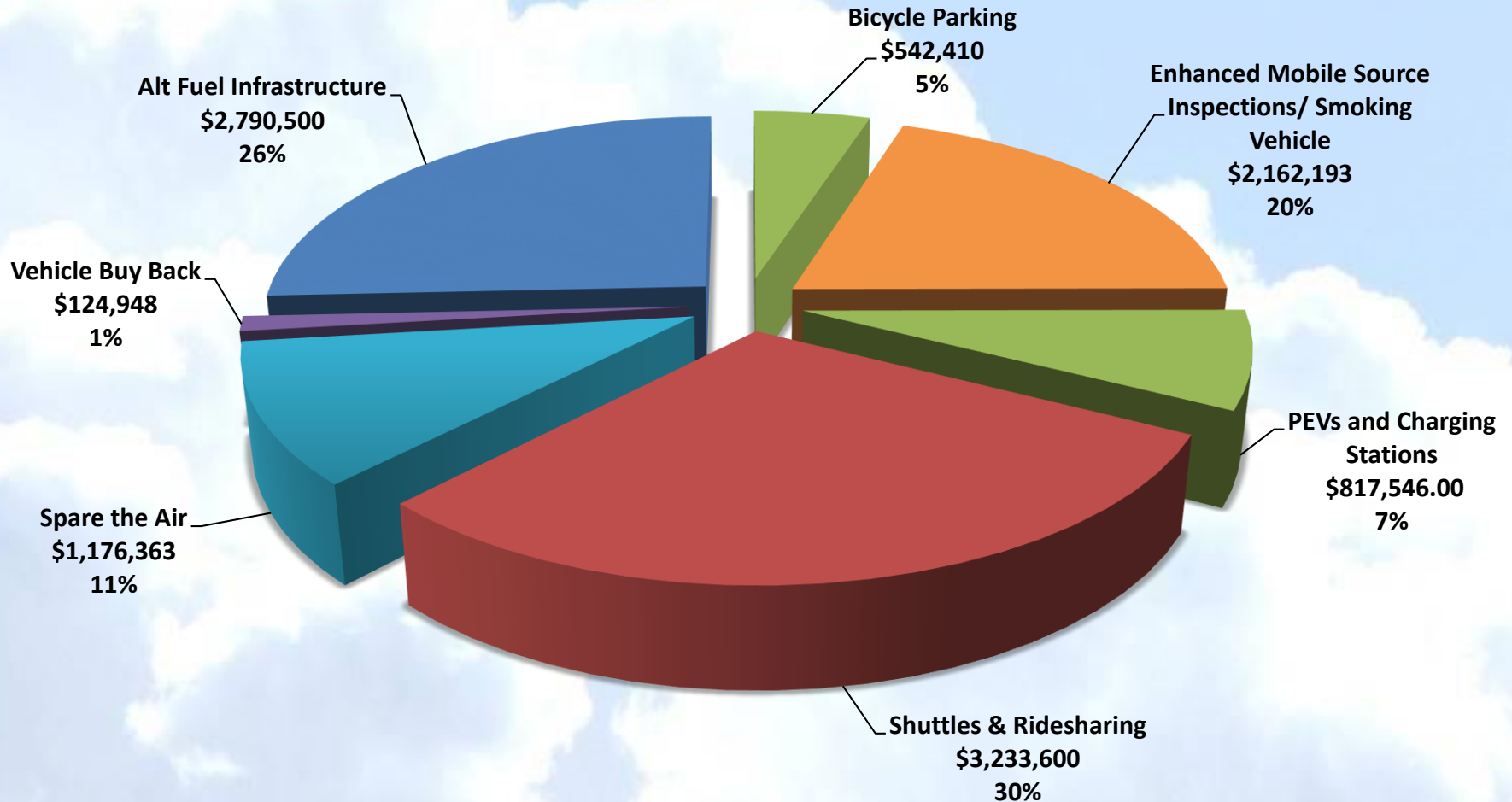
2015 Allocations by County



2015 CMP Allocations: \$12 Million



2015 TFCA Regional Fund (RF) Allocations: \$11 Million



2015 MSIF & GMP

- **Mobile Source Incentive Fund (\$19.3 M)**
 - Vehicle Buy Back Program: \$6.5 M
 - Lower Emission School Bus Program: \$2.7 M
 - Caltrain: \$10 M (of \$20 M award)
- **Goods Movement Program (\$8.1 M)**
 - On-road trucks: \$8.1 M (includes TFCA funds)

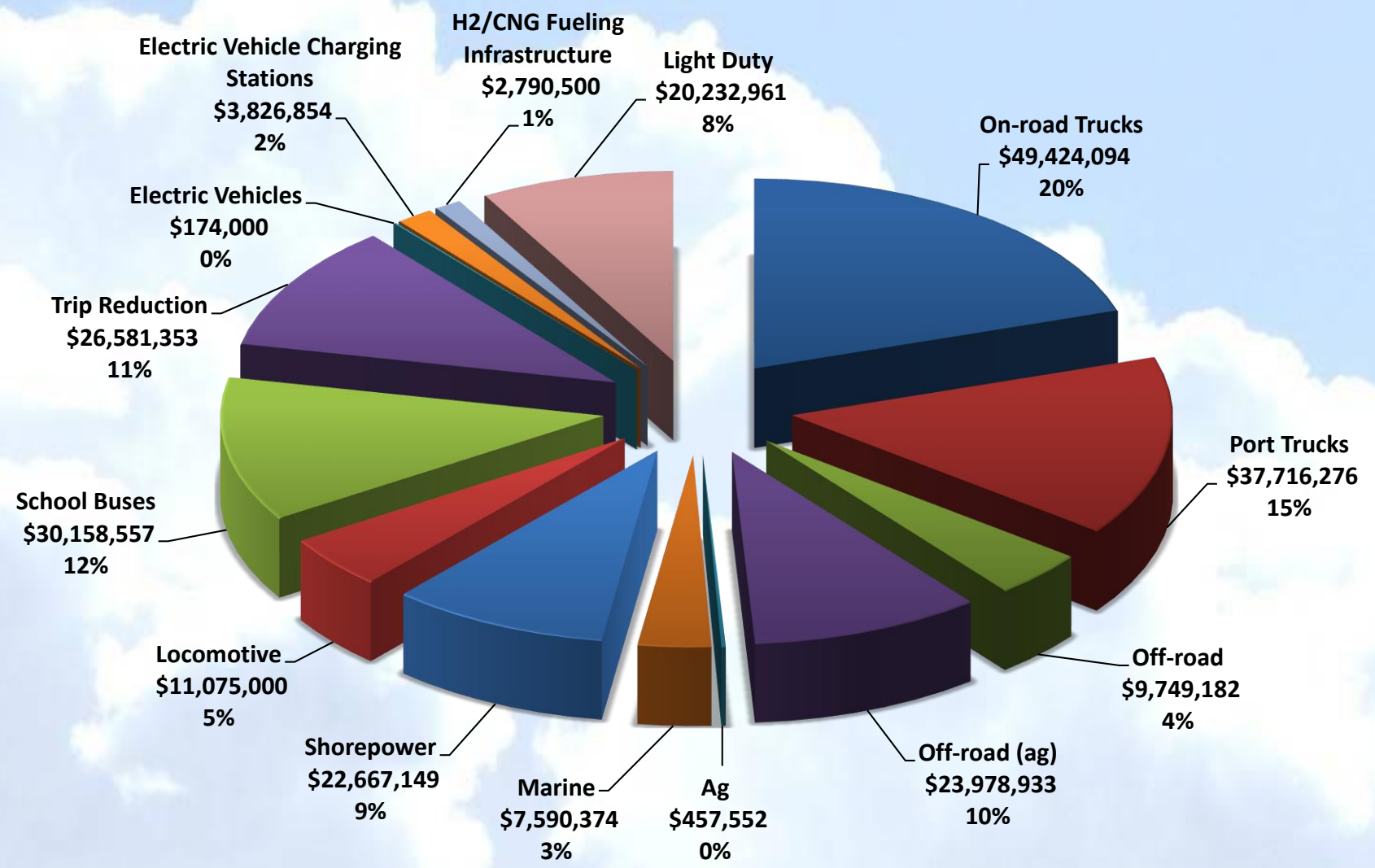
2015 Emissions Reductions

- **Emissions reduced by \$51 million:**
 - Particulate Matter (PM) – 46 tons per year
 - Nitrogen Oxides (NO_x) – 324 tons per year
 - Reactive Organic Gases (ROG) – 151 tons per year
 - Carbon Dioxide (CO₂)* – 75,000 tons per year
- **More than \$20 million to projects in CARE areas**

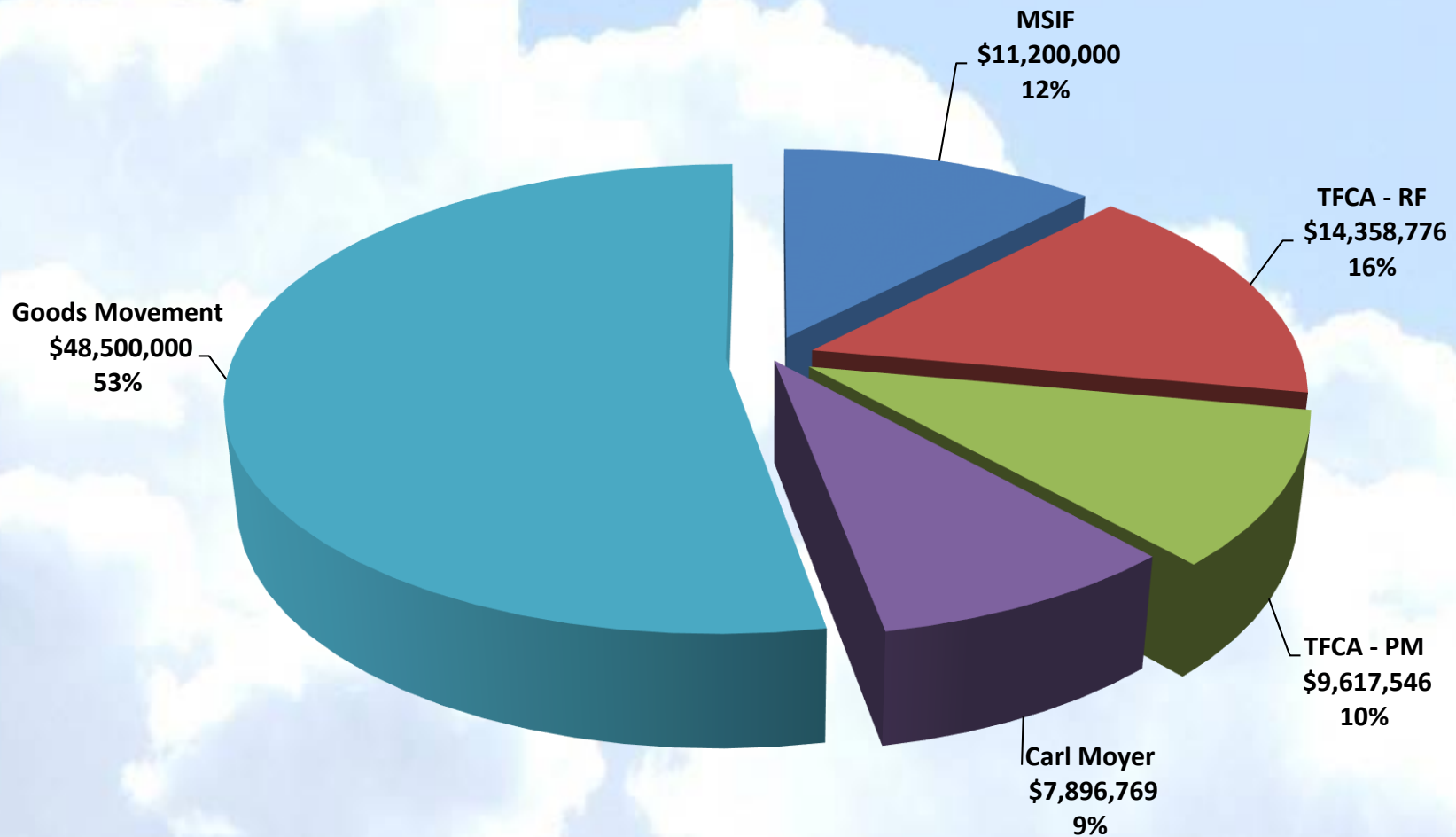
*Not all programs report CO₂ reductions

Allocations Since 2011

\$246 Million



2016 Funding Projections



New Initiatives for 2016

- Work with partners to develop streamlined and multi-year programs under Cap and Trade program
- Coordinate with ARB and other air districts to incorporate SB 513 changes into Carl Moyer/AB 923 guidelines
- Expand funding for zero-emissions transportation:
 - Light-Duty private and fleet vehicles
 - Medium- and Heavy-Duty on- and off-road trucks and buses
 - Cargo-handling equipment
 - Transport refrigeration units

Questions

Bay Area Air Quality Management District Mobile Source Committee

February 25, 2016

**Participation in Year 18 of the Carl Moyer Program and
2016 Caltrain Funding Plan**

**Damian Breen
Deputy Air Pollution Control Officer**

Overview

- Background
- CMP Year 18 (fiscal year 2015-2016)
- 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
- **Recent Legislation**
 - AB 8 (2013) reauthorized CMP & MSIF funding to 2024
 - SB 513 (2015) made changes to the CMP and MSIF statute

CMP Year 18 Funding

- ARB allocation
 - \$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
- Proposed \$5 million MSIF allocation for matching funds and additional CMP projects

CMP Year 18 Implementation

- 2011 ARB CMP Guidelines
- Impacted Communities
 - Priority given to projects reducing emissions in highly impacted communities
 - At least 50% of funds for projects in most impacted areas
- Projects over \$100k brought to the Board for approval
- Schedule
 - April 2016 ARB award
 - Call for project applications spring/summer 2016
 - First-come, first-served process
 - Funds must be obligated by June 2017, and invoices paid by June 2018

Caltrain Funding Plan

- **July 29, 2015** the 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** the Air District executed project agreement
- Proposed 2016 funding plan includes:
 - \$10 million in unexpended MSIF funds from prior years
 - \$3 million in 2016 MSIF funds
- Staff will return in future years with updates to the funding plan until the entire allocation has been authorized

Recommendations

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 2015-2016 (Program Year 18).
2. Allocate \$5 million in Mobile Source Incentive Funding to provide the required match funding and additional monies for projects eligible for funding under the CMP guidelines.
3. Approve the proposed 2016 funding plan for the Caltrain Electrification project.

Bay Area Air Quality Management District Mobile Source Committee

February 25, 2016

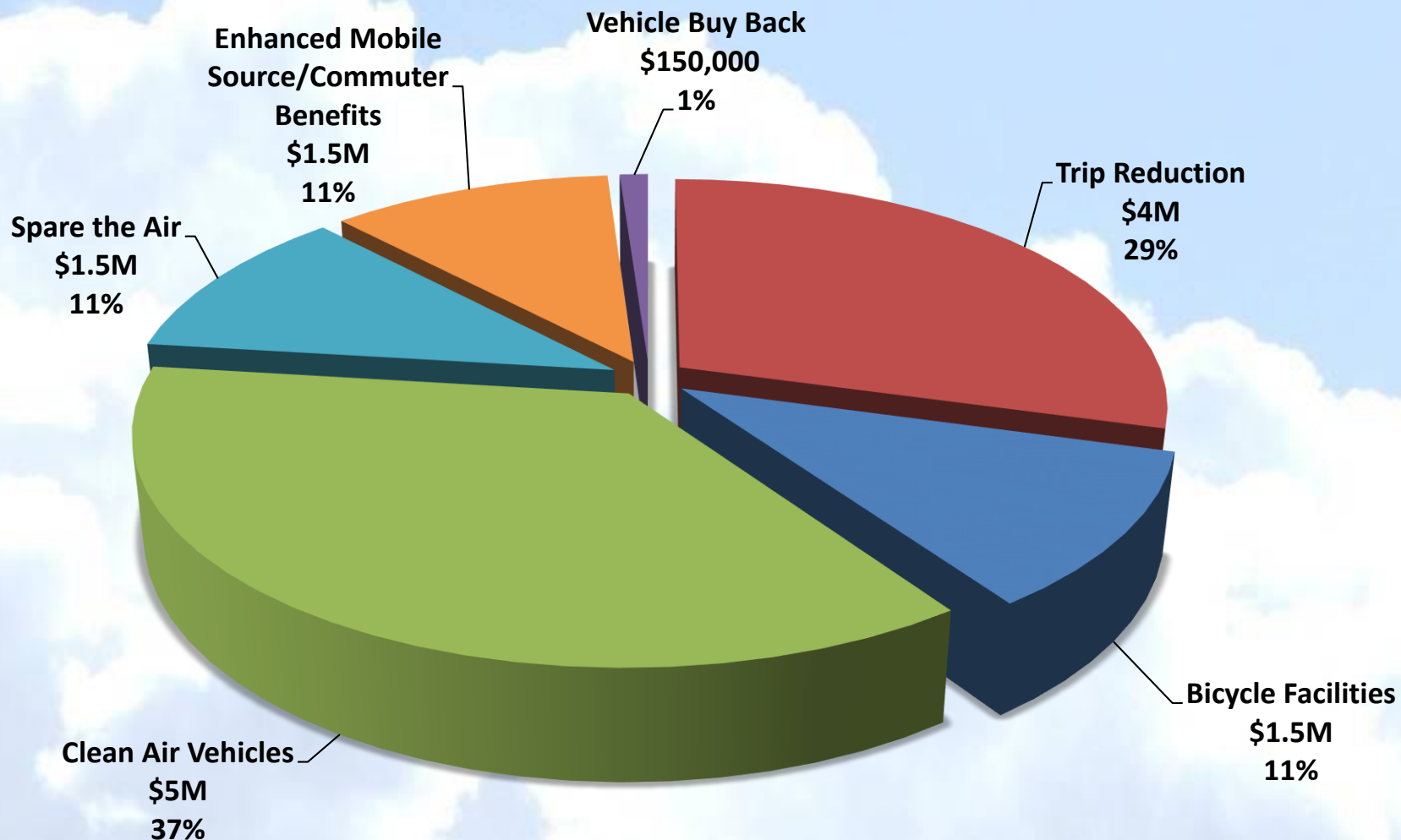
Fiscal Year Ending (FYE) 2017 Transportation Fund for Clean Air (TFCA) Funding Allocations

**Damian Breen
Deputy Air Pollution Control Officer**

- FYE 2017 TFCA expenditure plan
- Regional Fund and Air District programs
- Cost-effectiveness limits
- Recommendations



Proposed Allocation of New TFCA Revenue in FYE 2017



Proposed FYE 2017 TFCA Expenditure Plan (in millions)

Program Categories	Administered by	New TFCA Monies	Carryover*	Total \$ Available
Trip Reduction	RF	\$4.00	\$0.05	\$4.05
Bicycle Facilities	RF & AD**	\$1.50	\$0.50	\$2.00
Clean Air Vehicles	RF & AD**	\$5.00	\$7.5	\$12.50
Spare the Air	AD	\$1.50	\$0	\$1.50
Enhanced Mobile Source Enforcement/Commuter Benefits	AD	\$1.50	\$0	\$1.50
Vehicle Buy Back	AD	\$0.15	\$0	\$0.15
Total Available Funding:		\$13.65	\$8.05	\$21.70

*Carryover is an estimate of the remaining TFCA funds from prior years and may be lower than what is indicated in the table since that funding is currently available to projects in the FYE 2016 cycle.

**The Bikeways, Electronic Bicycle Lockers, and Heavy-Duty Zero Emission Vehicles programs are administered through the Regional Fund. The Bike Rack Voucher Program, PEVs for Public Agencies, and Charge! are Air-District sponsored programs.

Trip Reduction (for public agencies)

\$4 million in new funds/\$4.05 million total

- Existing shuttles and feeder bus services
 - Last-mile service to connect commuters from mass transit to employment and commercial locations
- Existing rideshare services
 - Carpool, vanpool, and rideshare services to riders from at least five Bay Area counties, with no one county accounting for more than 80% of all riders
- Pilot trip reduction
 - New option to provide funding to other innovative cost-effective trip-reduction projects
 - Funding limited to projects in a Highly Impacted Communities or Episodic CARE Areas, or in Priority Development Areas (PDAs)



Bicycle Facilities (for public agencies)

\$1.5 million in new funds/\$2 million total

- **Bicycle racks and electronic bicycle lockers**
 - Expand public access to secure parking equipment serving a major activity center
 - Bicycle racks and electronic lockers
- **Bikeways**
 - Air District TFCA funds have helped to construct approx. 200 miles of Bay Area bikeways
 - Last funding allocation in FYE 2010; based on the availability funding and stakeholders' feedback, staff is proposing to re-introduce funding for:
 - New Class-1 bicycle paths
 - New Class-2 bicycle lanes
 - New Class-3 bicycle routes
 - New Class-4 cycle tracks or separated bikeways



Clean Air Vehicles (PEV)

\$5 million in new funds/\$12.5 million total

- PEV rebates (for public agencies)
 - For purchase/lease of new light-duty PEVs, motorcycles
- PEV grants (open to all entities)
 - Light-duty fleets and heavy-duty vehicles and buses
 - Stricter (lower) cost-effectiveness threshold
- PEV charging stations (open to all entities)
 - Workplaces, multifamily unit dwellings, key destinations
- PEV outreach
 - Training for local government agencies & public, outreach and education to support PEV deployment targets, and signage for PEV charging stations



Enhanced Mobile Source Enforcement/Commuter Benefits

\$1.5 million in new funds

- Enhance patrols for smoking vehicles
- Offset the cost of drayage truck regulation enforcement at the Port of Oakland
- Support enforcement activities associated with the new Commuter Benefits Program



Enhanced Mobile Source Enforcement/ Commuter Benefits (FYE2015)

- **Program statistics for FYE 2015**
 - **Enhanced Mobile Source Enforcement:**
 - 171 port trucks inspected; zero violations
 - 320 idling inspections; 4 violations
 - 3,136 smoking vehicle complaints; 82 reported repairs
 - FYE 2014 = 4,134 complaints; 88 repairs
 - FYE 2013 = 5,257 complaints; 211 repairs
 - **Commuter Benefits:**
 - 18,000 daily trips reduced; 85M annual VMT
- **Results:**
 - Emission Reductions: Over 22 tons ROG, 25 tons NOx, 18 tons PM10
 - Overall Cost-Effectiveness: \$30,878/ton

Other Air District-led Programs

- **Spare the Air (\$1.5 million)**
 - Air District's flagship public outreach tool for summer ozone season
- **Vehicle Buy Back (\$0.15 Million)**
 - Voluntary grant program that pays \$1,000 for an operating and registered model year 1994 or older vehicle
 - TFCA funds are used for outreach costs, and Carl Moyer and MSIF funds (approx. \$7 million/ Year) are used for the vehicle retirement costs.



Cost-Effectiveness Limits for Air District Sponsored Programs

Program Categories	Max. C/E	PUL	Notes
	(per ton of emissions reduced)	(in Years)	
Bicycle Racks (BRVP)	\$250,000	3	<i>C/E increased to align with other bicycle facility programs; no change to PUL</i>
PEVs for Public Agencies	\$450,000	3	No Change
PEV Outreach	\$250,000	3	No Change
PEV Charging Stations	\$250,000	4	No Change
	\$500,000*		No Change
Spare the Air	\$90,000	1	No Change
Enhanced Mobile Source Enforcement	\$90,000	1	No Change
Vehicle Buy Back	\$90,000	1	No Change

**This higher C/E limit is for projects that incorporate renewable power (i.e., solar or wind).*

Recommend the Board of Directors:

1. Allocate \$13.65 million in Transportation Fund for Clean Air (TFCA) revenue to the programs listed in Table 1;
2. Authorize the proposed cost-effectiveness limits for the Air District sponsored programs listed in Table 2; and
3. Authorize the Executive Officer/APCO to enter into funding agreements and contracts up to \$100,000 for projects and programs listed in Table 1.