



**AGENDA: 4**

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

December 18, 2014

## **Acceptance of Funds from the National Fish and Wildlife Foundation (NFWF) for a Commercial Lawn and Garden Equipment Replacement Program**

**Damian Breen  
Deputy Air Pollution Control Officer**

# Overview

- Background
- Project Description
- Recommendations

# Background

- Alameda and Contra Costa County Health Department staff approached Air District in February 2014 requesting assistance administering a commercial lawn & garden equipment exchange program
- Funding from National Fish & Wildlife Foundation (NFWF)
  - Shoreline LLC's Selby terminal plea bargain with US Attorney General
  - Plea bargain set aside funding for "the improvement of air quality in the Bay Area, and in particular, Contra Costa and Alameda Counties."
- Air District staff worked with Health Department staff and NFWF program administrators to develop the program description

# Background

- Lawn & garden equipment replacement programs reduce emissions by replacing existing gasoline equipment with zero/low-emission equipment
- Equipment replacements are not required by regulation, so all emissions reduced by zero/low-emission equipment “change outs” are voluntary
- Alameda and Contra Costa Counties:
  - One million pieces of lawn & garden equipment
  - Daily Emissions (tons) – 2.1 ROG, 0.7 NO<sub>x</sub>, 0.15 PM & 116 CO<sub>2</sub>
- Air District submitted the proposal to NFWF on October 3, 2014
- NFWF presented Air District with contract on October 29, 2014

# Project Description

- Project will replace conventional commercial lawn & garden equipment with zero/low emission equipment

- Equipment targeted:



Lawn mowers	Chainsaws
Leaf blowers	Line trimmers
Sweepers	Hedge trimmers

- Equipment to be replaced will be scrapped through a contracted metal recycler
- Project will run from February to October 2015
- Air District will receive assistance from Alameda and Contra Costa County Health Department staff

# Project Description

## Funding priority:

- Schools - no funding cap
- Municipalities - \$10,000 cap
- Commercial enterprises – \$10,000 cap

## Funding:

- \$470,000 award from NFWF
- \$423,000 split between Alameda & Contra Costa County to purchase equipment - \$211,500/each
- \$47,000 to Air District for administration (10%)

## Expected outcome:

- Replace 450 pieces of equipment
- Reduce yearly emissions (tons): 0.21 ROG, 0.64 NO<sub>x</sub>, 0.13 PM & 103 CO<sub>2</sub>



# Recommendations

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

1. Accept \$470,000, in funds from the NFWF to implement a commercial lawn and garden equipment replacement program in Alameda and Contra Costa Counties.
2. Authorize the Executive Officer/APCO to enter into all necessary agreements to implement the program and expend the \$470,000, in funds from the NFWF for the commercial lawn and garden equipment replacement program.



**AGENDA: 5**

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

**December 18, 2014**

## **Consideration of Amendments to the Fiscal Year Ending (FYE) 2015 Transportation Fund for Clean Air (TFCA) Regional Fund Policies**

**Damian Breen  
Deputy Air Pollution Control Officer**

- Background
- TFCA Regional Fund
- Public input process
- Proposed revisions
- Recommendations

# Background

## Transportation Fund for Clean Air (TFCA)

- Since 1991, \$4 surcharge on Bay Area motor vehicles for projects that reduce on-road vehicle emissions
- 60% of TFCA funds awarded directly by the Air District:
  - Air District led projects and programs (Spare the Air, Enhanced Mobile Source Enforcement & Commuter Benefits Project); and
  - TFCA Regional Fund Program
- 40% distributed to the 9-Bay Area Congestion Management Agencies (County Program Manager Fund)
- Board adopts policies and evaluation criteria annually
- TFCA can be used to fund trip reduction and light-duty alternative fuel vehicle-based projects

# Approval and Public Comment Process FYE 2015 TFCA Regional Fund

- **District Board Actions:**

- **June 5, 2013:** FYE 2014 Alternative Fuel Program and Electric Vehicle project funding allocation;
  - **May 21, 2014:** FYE 2015 Plug-in Electric Vehicle (PEV) and Infrastructure Program and authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000;
  - **June 4, 2014:** FYE 2015 Regional Fund Policies and Evaluation Criteria.
- **October 16 - November 10, 2014:** Open for public comment
  - **October 29, 2014:** Public workshop held at BAAQMD and online webinar
  - Open call for projects in early 2016 - *Pending approval*

# Proposed Update Policy #22 - Light Duty ZEV & PZEV for Fleets

- Funding available for projects that:
  - Purchase/lease **three** or more new (2014 or newer) light-duty vehicles to a single owner
  - Vehicles must be maintained for **three years** and meet minimum vehicle **mileage requirements**
- Maximum funding amounts:

		<u>Average Annual Mileage/Vehicle</u>			
GVWR	Vehicle Type	15,000 – 24,999 miles per year	25,000 – 34,999 miles per year	35,000 – 44,999 miles per year	45,000 or more miles per year
8,500 or lighter	SULEV	\$1,250	\$2,500	\$3,500	\$4,500
	ZEV	\$4,000	\$6,500	\$8,500	\$10,500
8,501 – 14,000	SULEV	\$6,000	\$8,000	\$10,000	\$12,000
	ZEV	\$10,000	\$12,000	\$14,000	\$16,000

## Proposed Update Policy #23 - Heavy-Duty ZEVs

- Funding available for projects that:
  - Purchase/lease 2014 or newer heavy-duty vehicles
  - Vehicles must be maintained for **three years** and meet minimum **vehicle mileage requirements**
- Maximum funding amounts:

GVWR/Intended Service Class	<u>Average Annual Mileage/Vehicle</u>		
	15,000 – 29,999 miles per year	30,000 – 44,999 miles per year	45,000 or more miles per year
14,001 – 33,000	\$12,500	\$25,000	\$40,000
33,000+	\$20,000	\$40,000	\$60,000
URBAN BUS	\$15,000	\$30,000	\$45,000

## Proposed Update Policy #24 - Alternative Fuel Infrastructure

- CNG and Hydrogen station requirements:
  - Open to the public
  - Operate for three years & adhere to existing standards
  - Funding for new dispensing facilities and upgrade & improvements that expand existing sites
  - State or Federal Agency has funded or given passing score (*For Hydrogen projects only*)
- Award limited to **\$300,000, or 35%** of total project cost
- **\$1.25 million** max. grant amount per non-public entity (increased from \$500k, Policy #7)

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

1. Approve changes to the FYE 2015, Transportation Fund for Clean Air (TFCA) Regional Fund Policies to include light-duty zero and partial zero emissions vehicles for fleets, heavy-duty zero emissions vehicles, and alternative fuel infrastructure (hydrogen and CNG) projects as eligible project types.
2. Authorize the Executive Officer/APCO to enter into contracts for eligible projects.



**AGENDA: 6**

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

December 18, 2014

## **Transportation Fund for Clean Air (TFCA) Cost-Effectiveness Report**

**Damian Breen  
Deputy Air Pollution Control Officer**

# Overview

- TFCA background
- Key highlights
  - Expenditures
  - Emissions reductions
  - Cost-effectiveness
- Recommendation

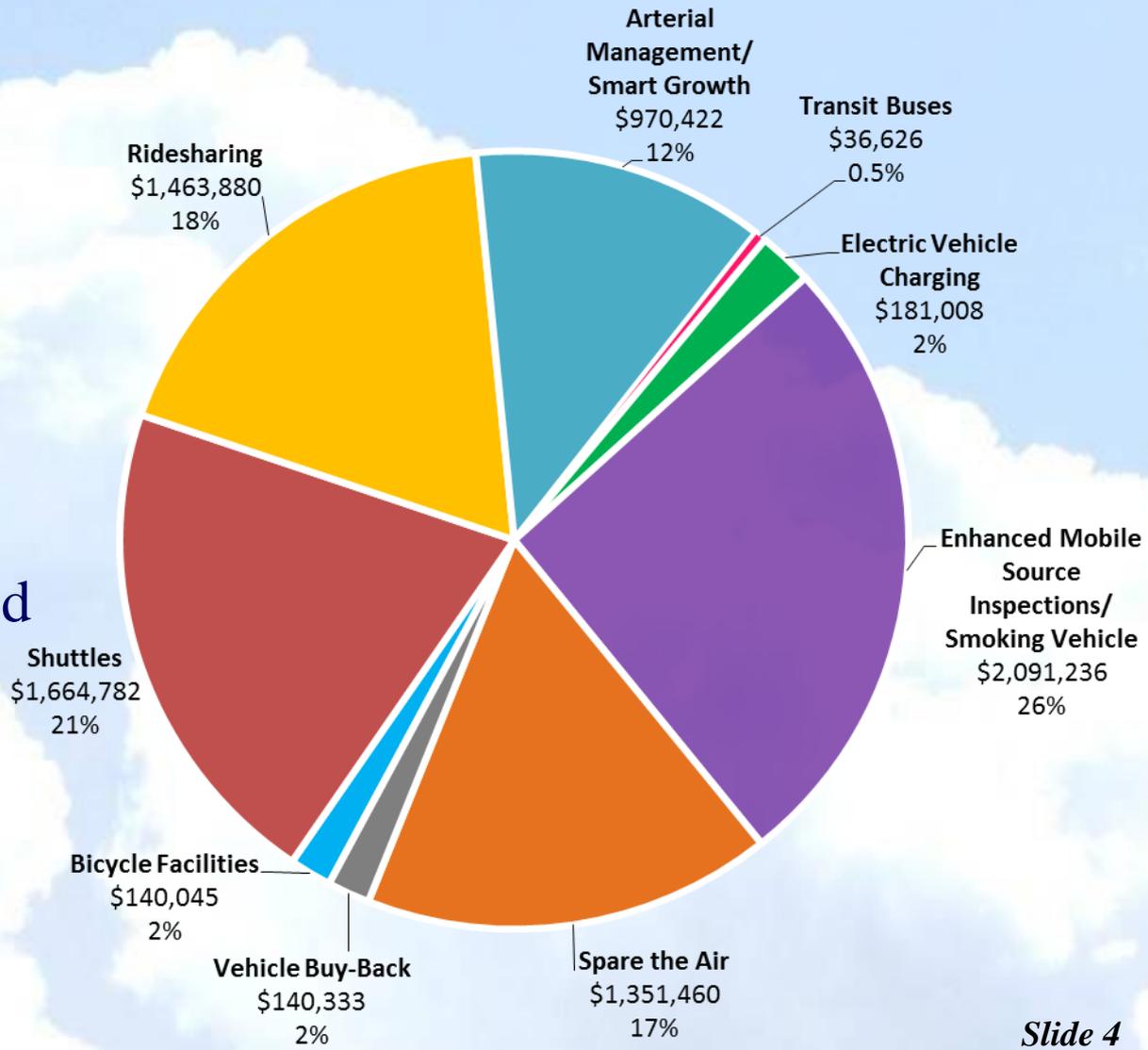
# Background

- **Transportation Fund for Clean Air (TFCA)**
  - Funded by \$4 motor vehicle registration fee surcharge
  - 60% to Regional Fund projects and Air District Programs
  - 40% to County Program Manager Fund
  
- **Health and Safety Code (HSC) Requirements**
  - Section 44241: *requires annual public hearing to review TFCA expenditures to determine effectiveness in improving air quality*

# Expenditures of Programs and Projects Closing in FYE 2014

## Total expenditures for 25 Projects \$8.84 million:

- \$4.46 million for 22 Regional Fund projects
- \$3.58 million for 3 Air District-sponsored programs
- \$803,192 in administrative and indirect costs



# Emissions Reductions of Programs and Projects Closing in FYE 2014

## Lifetime Emission Reductions:

- **Criteria pollutant emissions: 229.57 tons**
  - ❖ 72.83 tons of reactive organic gases
  - ❖ 92.30 tons of nitrogen oxides
  - ❖ 64.45 tons of particulate matter
- **Greenhouse gas emissions: 116,327 tons**

# Cost-Effectiveness of Programs and Projects Closing in FYE 2014

Attachment 1 - Table 1

Category	# of Projects	TFCA \$ Expended	% of TFCA \$ Expended	Emissions Reduced (tons) <sup>a</sup>	% of Emissions Reduced	C/E - Weighted (\$/tons) <sup>b</sup>
Bicycle Facilities	3	\$140,045	1.74%	1.75 <sup>c</sup>	0.76%	\$90,000
Shuttles	7	\$1,664,782	20.71%	15.70	6.84%	\$80,104 <sup>d</sup>
Ridesharing	3	\$1,463,880	18.21%	59.91	26.10%	\$19,100
Arterial Management/Smart Growth	5	\$970,422	12.07%	16.24	7.07%	\$26,721 <sup>e</sup>
Transit Buses	1	\$36,626	0.46%	0.44	0.19%	\$78,220
Electric Vehicle Charging	3	\$181,008	2.25%	0.54	0.23%	\$78,312
Enhanced Mobile Source Inspections/ Smoking Vehicle Program	1	\$2,091,236	26.01%	4.89	2.13%	\$277,346 <sup>f</sup>
Spare the Air Program	1	\$1,351,460	16.81%	122.72	53.46%	\$37,813 <sup>g</sup>
Vehicle Buy-Back Program	1	\$140,333 <sup>h</sup>	1.75%	7.38 <sup>i</sup>	3.22%	\$6,089
<b>Total for Projects and Programs<sup>j</sup></b>	<b>25</b>	<b>\$8,039,794</b>	<b>100%</b>	<b>229.57</b>	<b>100%</b>	<b>\$39,332</b>
Administration		\$803,192				

# Cost-Effectiveness of Programs and Projects Closing in FYE 2014

- TFCA funds were allocated to eligible recipients for eligible projects and programs, consistent with the legislation that authorizes the TFCA.
- Average cost-effectiveness was \$39,332/ton of emissions reduced.
- Staff is exploring options for streamlining survey process and for updating pre- and post-project evaluation methodology to ensure all emissions reductions are captured.

# Recommendation

*Request the Committee recommend the Board of Directors:*

Receive and file the TFCA Report on Expenditures and Effectiveness of Regional Fund and Air District-Sponsored Programs and Projects Closing in Fiscal Year Ending (FYE) 2014 (Attachment 1).