



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

BOARD OF DIRECTORS
MOBILE SOURCE COMMITTEE

COMMITTEE MEMBERS

KAREN MITCHOFF – CHAIR	SCOTT HAGGERTY – VICE CHAIR
DAVID CANEPA	CAROLE GROOM
DAVID E. HUDSON	TYRONE JUE
REBECCA KAPLAN	DOUG KIM
NATE MILEY	

THURSDAY
MARCH 23, 2017
9:30 A.M.

1ST FLOOR BOARD ROOM
375 BEALE STREET
SAN FRANCISCO, CA 94105

AGENDA

1. **CALL TO ORDER - ROLL CALL – PLEDGE OF ALLEGIANCE**

The Committee Chair shall call the meeting to order and the Clerk of the Boards shall take roll of the Committee members. The Committee Chair shall lead the Pledge of Allegiance.

2. **PUBLIC COMMENT PERIOD**

(Public Comment on Non-Agenda Items Pursuant to Government Code § 54954.3) Members of the public are afforded the opportunity to speak on any agenda item. All agendas for regular meetings are posted at District headquarters, 375 Beale Street, San Francisco, CA, at least 72 hours in advance of a regular meeting. At the beginning of the regular meeting agenda, an opportunity is also provided for the public to speak on any subject within the Committee's subject matter jurisdiction. Speakers will be limited to three (3) minutes each.

This meeting will be webcast. To see the webcast, please visit <http://www.baaqmd.gov/about-the-air-district/board-of-directors/resolutionsagendasminutes> at the time of the meeting.

Staff/Phone (415) 749-

3. **APPROVAL OF THE MINUTES OF FEBRUARY 23, 2017**

Clerk of the Boards/5073

The Committee will consider approving the attached draft minutes of the Mobile Source Committee meeting of February 23, 2017.

4. **PROJECTS AND CONTRACTS WITH PROPOSED GRANT AWARDS OVER \$100,000**

K. Schkolnick/5070

kschkolnick@baaqmd.gov

The Committee will consider recommending Board of Directors' approval of Carl Moyer Program projects requesting grant funding in excess of \$100,000, and authorization for the Executive Officer/APCO to execute grant agreements for the recommended projects.

5. **LOWER EMISSION SCHOOL BUS PROGRAM UPDATE AND FUNDING ALLOCATION**

K. Schkolnick/5070

kschkolnick@baaqmd.gov

The Committee will receive an update on the Lower Emission School Bus Program and consider recommending Board of Directors' approval of a \$5 million allocation of Mobile Source Incentive Funds (MSIF) for new school bus projects.

6. **FISCAL YEAR ENDING (FYE) 2018 TRANSPORTATION FUND FOR CLEAN AIR (TFCA) FUNDING ALLOCATION**

K. Schkolnick/5070

kschkolnick@baaqmd.gov

The Committee will consider recommending Board of Directors' approval of \$13.93 million allocation of TFCA monies for TFCA programs; authorization of the proposed cost-effectiveness limits for sponsored programs; and authorization for the Executive Officer/APCO to execute grant agreements for recommended projects.

7. **UPDATE ON EFFORTS TO FURTHER REDUCE EMISSIONS AT THE PORT OF OAKLAND & FORMER OAKLAND ARMY BASE**

K. Schkolnick/5070

kschkolnick@baaqmd.gov

The Committee will receive an informational update on efforts to reduce emissions at the Port of Oakland and from the current development at the former Oakland Army Base.

8. **COMMITTEE MEMBER COMMENTS**

Any member of the Board, or its staff, on his or her own initiative or in response to questions posed by the public, may: ask a question for clarification, make a brief announcement or report on his or her own activities, provide a reference to staff regarding factual information, request staff to report back at a subsequent meeting concerning any matter or take action to direct staff to place a matter of business on a future agenda. (Gov't Code § 54954.2)

9. **TIME AND PLACE OF NEXT MEETING**

Thursday, April 27, 2017, Bay Area Air Quality Management District Office, 375 Beale Street, San Francisco, California 94105 at 9:30 a.m.

10. **ADJOURNMENT**

The Committee meeting shall be adjourned by the Committee Chair.

CONTACT:
MANAGER, EXECUTIVE OPERATIONS
375 BEALE STREET, SAN FRANCISCO, CA 94105
mmartinez@baaqmd.gov

(415) 749-5016
FAX: (415) 928-8560
BAAQMD homepage:
www.baaqmd.gov

- To submit written comments on an agenda item in advance of the meeting. Please note that all correspondence must be addressed to the “Members of the Mobile Source Committee” and received at least 24 hours prior, excluding weekends and holidays, in order to be presented at that Committee meeting. Any correspondence received after that time will be presented to the Committee at the following meeting.
- To request, in advance of the meeting, to be placed on the list to testify on an agenda item.
- Any writing relating to an open session item on this Agenda that is distributed to all, or a majority of all, members of the body to which this Agenda relates shall be made available at the District’s offices at 375 Beale Street, Suite 600, San Francisco, CA 94105, at the time such writing is made available to all, or a majority of all, members of that body.

Accessibility and Non-Discrimination Policy

The Bay Area Air Quality Management District (Air District) does not discriminate on the basis of race, national origin, ethnic group identification, ancestry, religion, age, sex, sexual orientation, gender identity, gender expression, color, genetic information, medical condition, or mental or physical disability, or any other attribute or belief protected by law.

It is the Air District’s policy to provide fair and equal access to the benefits of a program or activity administered by Air District. The Air District will not tolerate discrimination against any person(s) seeking to participate in, or receive the benefits of, any program or activity offered or conducted by the Air District. Members of the public who believe they or others were unlawfully denied full and equal access to an Air District program or activity may file a discrimination complaint under this policy. This non-discrimination policy also applies to other people or entities affiliated with Air District, including contractors or grantees that the Air District utilizes to provide benefits and services to members of the public.

Auxiliary aids and services including, for example, qualified interpreters and/or listening devices, to individuals who are deaf or hard of hearing, and to other individuals as necessary to ensure effective communication or an equal opportunity to participate fully in the benefits, activities, programs and services will be provided by the Air District in a timely manner and in such a way as to protect the privacy and independence of the individual. Please contact the Non-Discrimination Coordinator identified below at least three days in advance of a meeting so that arrangements can be made accordingly.

If you believe discrimination has occurred with respect to an Air District program or activity, you may contact the Non-Discrimination Coordinator identified below or visit our website at www.baaqmd.gov/accessibility to learn how and where to file a complaint of discrimination.

Questions regarding this Policy should be directed to the Air District’s Non-Discrimination Coordinator, Rex Sanders, at (415) 749-4951 or by email at rsanders@baaqmd.gov

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
375 BEALE STREET, SAN FRANCISCO, CALIFORNIA 94105
FOR QUESTIONS PLEASE CALL (415) 749-5016 or (415) 749-4941

EXECUTIVE OFFICE:
MONTHLY CALENDAR OF AIR DISTRICT MEETINGS

MARCH 2017

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets on the 1st & 3rd Wednesday of each Month)</i>	Wednesday	15	9:45 a.m.	1 st Floor Board Room
Board of Directors Executive Committee <i>(Meets on the 3rd Monday of each Month) - CANCELLED</i>	Monday	20	9:30 a.m.	1 st Floor Board Room
Board of Directors Climate Protection Committee <i>(Meets on the 3rd Thursday of Every Other Month) - CANCELLED AND RESCHEDULED TO WEDNESDAY, MARCH 22, 2017 AT 10:30 A.M.</i>	Monday	20	9:30 a.m.	1 st Floor Board Room
Board of Directors Stationary Source Committee <i>(Meets on the 3rd Monday of each Month)</i>	Monday	20	9:30 a.m.	1 st Floor Board Room
Board of Directors Budget & Finance Committee <i>(Meets on the 4th Wednesday of each Month)</i>	Wednesday	22	9:30 a.m.	1st Floor, Yerba Buena Room #109
Board of Directors Climate Protection Committee <i>(Meets on the 3rd Thursday of Every Other Month)</i>	Wednesday	22	10:30 a.m.	1st Floor, Yerba Buena Room #109
Board of Directors Mobile Source Committee <i>(Meets on the 4th Thursday of each Month)</i>	Thursday	23	9:30 a.m.	1 st Floor Board Room
Board of Directors Personnel Committee <i>(Meets At the Call of the Chair)</i>	Friday	24	9:30 a.m.	1 st Floor Board Room
Board of Directors Legislative Committee <i>(At the Call of the Chair)</i>	Thursday	30	9:30 a.m.	1 st Floor Board Room

APRIL 2017

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Advisory Council Mtg. <i>(Meets on the 1st Monday of Every Other Month)</i>	Monday	3	10:00 a.m.	1 st Floor Board Room
Board of Directors Regular Meeting <i>(Meets on the 1st & 3rd Wednesday of each Month)- CANCELLED</i>	Wednesday	5	9:45 a.m.	1 st Floor Board Room
Board of Directors Executive Committee <i>(Meets on the 3rd Monday of each Month)</i>	Monday	17	9:30 a.m.	1 st Floor Board Room
Board of Directors Stationary Source Committee <i>(Meets on the 3rd Monday of each Month)</i>	Monday	17	10:30 a.m.	1 st Floor Board Room
Board of Directors Regular Meeting <i>(Meets on the 1st & 3rd Wednesday of each Month)</i>	Wednesday	19	9:45 a.m.	1 st Floor Board Room

APRIL 2017

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Budget & Finance Committee <i>(Meets on the 4th Wednesday of each Month)</i>	Wednesday	26	9:30 a.m.	1st Floor, Yerba Buena Room #109
Board of Directors Mobile Source Committee <i>(Meets on the 4th Thursday of each Month)</i>	Thursday	27	9:30 a.m.	1 st Floor Board Room

MAY 2017

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets on the 1st & 3rd Wednesday of each Month)</i>	Wednesday	3	9:45 a.m.	1 st Floor Board Room
Board of Directors Executive Committee <i>(Meets on the 3rd Monday of each Month)</i>	Monday	15	9:30 a.m.	1 st Floor Board Room
Board of Directors Stationary Source Committee <i>(Meets on the 3rd Monday of each Month)</i>	Monday	15	10:30 a.m.	1 st Floor Board Room
Board of Directors Regular Meeting <i>(Meets on the 1st & 3rd Wednesday of each Month)</i>	Wednesday	17	9:45 a.m.	1 st Floor Board Room
Board of Directors Climate Protection Committee <i>(Meets on the 3rd Thursday of every other Month)</i>	Thursday	18	9:30 a.m.	1 st Floor Board Room
Board of Directors Budget & Finance Committee <i>(Meets on the 4th Wednesday of each Month)</i>	Wednesday	24	9:30 a.m.	1st Floor, Yerba Buena Room #109
Board of Directors Mobile Source Committee <i>(Meets on the 4th Thursday of each Month)</i>	Thursday	25	9:30 a.m.	1 st Floor Board Room

HL – 3/9/17 (4:30 p.m.)

G/Board/Executive Office/Moncal

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Karen Mitchoff and Members
of the Mobile Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: March 8, 2017

Re: Approval of the Minutes of February 23, 2017

RECOMMENDED ACTION

Approve the attached draft minutes of the Mobile Source Committee (Committee) Meeting of February 23, 2017.

DISCUSSION

Attached for your review and approval are the draft minutes of the Mobile Source Committee Meeting of February 23, 2017.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Marcy Hiratzka
Reviewed by: Maricela Martinez

Attachment 3A: Draft Minutes of the Mobile Source Committee Meeting of February 23, 2017

AGENDA 3A – ATTACHMENT

Draft Minutes – Mobile Source Committee Meeting of February 23, 2017

Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105
(415) 749-5073

DRAFT MINUTES

Summary of Board of Directors
Mobile Source Committee Meeting
Thursday, February 23, 2017

1. CALL TO ORDER – ROLL CALL

Mobile Source Committee (Committee) Chair Karen Mitchoff called the meeting to order at 9:38 a.m.

Present: Chairperson Karen Mitchoff; Vice Chair Scott Haggerty; and Directors David J. Canepa, David Hudson, Tyrone Jue, Rebecca Kaplan, and Nate Miley.

Absent: Directors Carole Groom and Doug Kim.

Also Present: None.

2. PUBLIC COMMENT PERIOD:

No requests received.

NOTED PRESENT: Vice Chair Haggerty and Director Miley were noted present at 9:41 a.m.

3. AIR DISTRICT GRANT PROGRAMS OVERVIEW (OUT OF ORDER, ITEM 5)

Damian Breen, Deputy Air Pollution Control Officer, introduced Chengfeng Wang, Strategic Incentives Division Supervisor, who gave the staff presentation *Air District Grant Programs Overview*, including: overview; background; grant programs and funding streams; 2016 allocations: \$70M by county; 2016 Carl Moyer Program (CMP) allocations: \$8.3M; 2016 Mobile Source Incentive Fund (MSIF) & Goods Movement Program (GMP); 2016 Transportation Fund for Clean Air Regional Fund (TFCARF) Allocations: \$16.5M; 2016 SID highlights; 2016 emissions reductions; allocations 2012-2016: \$228M; other funding (2012-2016): \$15M; 2017 funding priorities; new initiatives for 2017; and 2017 funding projections: \$62M.

Public Comments:

No requests received.

Committee Comments:

The Committee and staff discussed allocating funds from future TFCA funding cycles towards congestion relief incentive programs; trip-reduction strategies resulting from the District’s partnership with the Metropolitan Transportation Commission; District programs regarding electric vehicle (EV) charging stations at multi-family dwellings; the California Air Resources Board’s (CARB) Enhanced Fleet Modernization Program; PG&E’s “make-ready” infrastructure for up to 7,500 EV charging stations for multi-dwelling units and workplaces, and the fact that this program applies to the entire PG&E service territory, not just the Bay Area; the feasibility of using District grants to fund carbon sequestration mitigation projects; continued focus on impacted communities and trade corridors; emission reductions in community air risk evaluation (CARE) communities in the last several years and updated regional health risk data; highway corridor diesel particulate matter that settles in Bay Area valleys; discrepancies with the map of impacted communities and areas indicating high concentrations of air pollution; the projected timeline of the District’s near-road air monitoring site in Dublin near the intersections of Highways 580 and 680 and when data will be available; suggested improvements to the map from the Committee; and the projected decrease in 2017 funds, due to the close of the Air District’s five-year Proposition 1B Goods Movement Emission Reduction Program.

NOTED PRESENT: Director Jue was noted present at 10:03 a.m.

Committee Action:

None; receive and file.

4. APPROVAL OF THE MINUTES OF JANUARY 26, 2017 (ITEM 3)

Public Comments:

No requests received.

Committee Comments:

None.

Committee Action:

Director Hudson made a motion, seconded by Director Canepa, to approve the Minutes of January 26, 2017; and the motion carried by the following vote of the Committee:

AYES:	Canepa, Haggerty, Hudson, Jue, Kaplan, Miley, and Mitchoff.
NOES:	None.
ABSTAIN:	None.
ABSENT:	Groom and Kim.

5. PROJECTS AND CONTRACTS WITH PROPOSED GRANT AWARDS OVER \$100,000 (ITEM 4)

Karen Schkolnick, Acting Director of the Strategic Incentives Division, introduced Adam Shapiro, Administrative Analyst, who gave the staff presentation *Projects with Proposed Awards Over \$100,000*, including: overview; CMP & MSIF background; CMP Year 18; Altamont Commuter Express (ACE) Locomotive Replacement project; CMP and MSIF funds as of 2/2/17 and since 2009; and recommendations.

ACE Director of Operations, Planning & Programming, Brian Schmidt, was introduced.

Public Comments:

No requests received.

Committee Comments:

The Committee and staff discussed the difference between “Tier 0+” and “Tier 4” passenger locomotives within the ACE locomotive replacement project; upgrades included in the project; how the District imposes state, not local (CARE), criteria onto the CMP; the District’s attempts to fund cleaner locomotives at Port of Oakland; and Alameda County Transit/Orange County Transportation Authority’s deployment of ten hydrogen fueled buses under the Fuel Cell Electric Bus Commercialization Consortium, and the need for hydrogen-fueling infrastructure (for buses AND trucks) in the Bay Area.

Committee Action:

Director Kaplan made a motion, seconded by Director Hudson, to approve the staff recommendations; and the motion carried by the following vote of the Committee:

AYES:	Canepa, Haggerty, Hudson, Jue, Kaplan, Miley, and Mitchoff.
NOES:	None.
ABSTAIN:	None.
ABSENT:	Groom and Kim.

6. PARTICIPATION IN YEAR 19 OF THE CARL MOYER PROGRAM AND APPROVAL OF THE 2017 CALTRAIN FUNDING PLAN

Mr. Breen and Tina McRee, Supervising Staff Specialist, explained that this item is in regards to the District having to apply for and accept new funds from the State for the upcoming funding cycle. Ms. McRee gave the staff presentation *Participation in Year 19 of the Carl Moyer Program and 2017 Caltrain Funding Plan*, including: overview; funding sources; CMP Year 19 funding; 2017 Caltrain funding plan; and recommendations.

Public Comments:

No requests received.

Committee Comments:

The Committee and staff discussed the annual re-honoring of the full commitment that is required from the Committee, and why the Caltrain electrification project is currently on hold; which agency or organization would be the most appropriate to lead advocacy efforts and appeal to the Federal Transit Administration for the restoration of this project; the need to distinguish Caltrain electrification from the California-wide high speed rail project; and the suggestion of reaching out to the Bay Area Council to gain its perspective on how Congressman Kevin McCarthy responded to the Council’s talking points (possibly regarding such projects as the Caltrain project.)

Committee Action:

Director Kaplan made a motion, seconded by Director Hudson, to approve the staff recommendations; and the motion carried by the following vote of the Committee:

AYES: Canepa, Haggerty, Hudson, Jue, Kaplan, Miley, and Mitchoff.
NOES: None.
ABSTAIN: None.
ABSENT: Groom and Kim.

7. COMMITTEE MEMBER COMMENTS

Director Hudson commented on the high volume of diesel trucks that pass through the Stanislaus County portion of the I-5 Corridor, indirectly polluting the Tri-Valley.

Vice Chair Haggerty requested that the District rethink its policy of putting District signage on those engine replacement projects funded by the Carl Moyer Program if the vehicles are dilapidated and unattractive.

8. TIME AND PLACE OF NEXT MEETING

Thursday, March 23, 2017, Bay Area Air Quality Management District office, 375 Beale Street, 1st floor Board Room, San Francisco, CA 94105, at 9:30 a.m.

9. ADJOURNMENT

The meeting adjourned at 11:01 a.m.

Marcy Hiratzka
Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Karen Mitchoff and Members
of the Mobile Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: March 8, 2017

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

RECOMMENDATIONS

Recommend 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 for the recommended projects.

BACKGROUND

The Bay Area Air Quality Management District (Air District) has participated in the Carl Moyer Program (CMP), in cooperation with the California Air Resources Board (ARB), since the program began in fiscal year 1998-1999. The CMP provides grants to public and private entities to reduce emissions of oxides of nitrogen (NOx), reactive organic gases (ROG) and particulate matter (PM) from existing heavy-duty engines by either replacing or retrofitting them. Eligible heavy-duty diesel engine applications include on-road trucks and buses, off-road equipment, marine vessels, locomotives, and stationary agricultural pump engines.

Assembly Bill 923 (AB 923 - Firebaugh), enacted in 2004 (codified as Health and Safety Code Section 44225), authorized local air districts to increase their motor vehicle registration surcharge up to an additional \$2 per vehicle. The revenues from the additional \$2 surcharge are deposited in the Air District's Mobile Source Incentive Fund (MSIF). AB 923 stipulates that air districts may use the revenues generated by the additional \$2 surcharge for projects eligible under the CMP.

On March 16, 2016, the Board of Directors (Board) authorized the Air District participation in Year 18 of the CMP, and authorized the Executive Officer/APCO to execute Grant Agreements and amendments for projects funded with CMP funds or MSIF revenues, with individual grant award amounts up to \$100,000.

In 1991, the California State Legislature authorized the Air District to impose a \$4 surcharge on motor vehicles registered within the nine-county Bay Area to fund projects that reduce on-road motor vehicle emissions within the Air District's jurisdiction. The statutory authority for the Transportation Fund for Clean Air (TFCA) and requirements of the program are set forth in

California HSC Sections 44241 and 44242. Sixty percent of TFCA funds are awarded by the Air District to eligible projects and programs implemented directly by the Air District (e.g., Spare the Air, Plug-in Electric Vehicle Program) and to a program referred to as the TFCA Regional Fund. Each year, the Board allocates funding and adopts policies and evaluation criteria that govern the expenditure of TFCA funding.

On March 16, 2016, the Board allocated \$21.7 million in TFCA funding for eligible projects in Fiscal Year Ending (FYE) 2017, of which \$13.65 million are new TFCA monies, authorized cost-effectiveness limits and evaluation criteria for Air District-sponsored FYE 2017 programs, and authorized the Executive Officer/APCO to execute Grant Agreements and amendments for projects funded with TFCA revenues with individual grant award amounts up to \$100,000. On July 20, 2016, the Board adopted policies and evaluation criteria for the FYE 2017 TFCA Regional Fund program.

CMP and TFCA projects with grant award amounts over \$100,000 are brought to the Mobile Source Committee for consideration at least on a quarterly basis. Staff reviews and evaluates the grant applications based upon the respective governing policies and guidelines established by the ARB and/or the Board.

DISCUSSION

Carl Moyer Program:

The Air District started accepting project applications for the CMP Year 18 funding cycle on July 11, 2016. The Air District had approximately \$11 million available for CMP projects from a combination of MSIF and CMP funds for the Year 18 cycle. Project applications are accepted and evaluated on a first-come, first-served basis.

As of March 3, 2017, the Air District had received 51 project applications for the CMP Year 18 cycle. Of the applications that have been evaluated between February 2, 2017, and March 3, 2017 one eligible project has a proposed individual grant award over \$100,000. This project will replace one diesel off-road loader, and reduce over 0.72 tons of NOx, ROG and PM per year. Staff recommends the allocation of \$154,505 for this project from a combination of CMP funds and MSIF revenues. Attachment 1, Table 1, provides additional information on this project.

Attachment 2, lists all of the eligible Year 18 projects that have been received by the Air District as of March 3, 2017, and summarizes the allocation of funding by equipment category, and county. This list also includes eligible Voucher Incentive Program (VIP) on-road replacement projects. Approximately 76% of the funds have been awarded to projects that reduce emissions in highly impacted Bay Area communities. Attachment 3 summarizes the cumulative allocation of CMP, MSIF, and VBB funding since 2009 (more than \$135 million awarded to 791 projects).

Transportation Fund for Clean Air Program:

For FYE 2017, the Air District has issued solicitations for FYE 2017 existing shuttle and rideshare projects, which closed on September 1, 2016, and the Charge! Program, which opened on February 15, 2017, and provides funding for the deployment of electric vehicle charging stations. To-date, TFCA funding has been awarded to eight eligible projects, including six existing shuttle and regional ridesharing projects totaling more than \$2.8 million and an addition of two shuttle projects through Air District's Spare the Air program totaling \$1.47 million.

Attachment 4 lists the eight eligible FYE 2017 TFCA projects that were evaluated by the Air District as of March 3, 2017 totaling approximately \$4.28 million in funding awards. These projects will reduce approximately 29.76 tons of NO_x, ROG, and PM, and about 13,400 tons of tailpipe greenhouse gas emissions per year. Note that the emissions reduced by the two shuttle projects funded through the Spare the Air Program are not included in this report and will be evaluated as benefits for that program. Attachment 5 summarizes the allocation of funding by project category (Figure 1), and county (Figure 2).

BUDGET CONSIDERATION / FINANCIAL IMPACT

None. Through the CMP and MSIF, the Air District distributes "pass-through" funds to public agencies and private entities on a reimbursement basis. Administrative costs for these programs are provided by each funding source.

Respectfully submitted,

Jack P. Broadbent
Executive Director/APCO

Prepared by: Anthony Fournier and Chengfeng Wang
Reviewed by: Karen Schkolnick

- Attachment 1: Projects with grant awards greater than \$100,000 (evaluated 2/2/17 – 3/3/17)
- Attachment 2: Summary of all Year 18 CMP/ MSIF and VIP approved and eligible projects (evaluated 8/30/16 – 3/3/17)
- Attachment 3: Summary of program distribution by county and equipment category for CMP, MSIF, VBB, and VIP funding since 2009.
- Attachment 4: Summary of all TFCA approved and eligible projects (evaluated 7/1/2016 - 3/3/17)
- Attachment 5: Summary of distribution of TFCA funds by county and project category (evaluated 7/1/16 - 3/3/17).

AGENDA 4 - ATTACHMENT 1

Table 1 - Summary of Carl Moyer Program/ Mobile Source Incentive Fund projects with grant awards greater than \$100k (Evaluated between 2/2/17 to 3/3/17)

Project #	Applicant name	Equipment category	Project description	Proposed contract award	Total project cost	Emission Reductions (Tons per year)			County
						NOx	ROG	PM	
18MOY47	Diamond W Ranch	Ag/ off-road	Replacement of one diesel loader	\$ 154,505.00	\$ 193,132.00	0.612	0.086	0.031	Sonoma
1 Projects				\$ 154,505.00		0.612	0.086	0.031	

AGENDA 4 - ATTACHMENT 2

Summary of all Yr 18 CMP, MSIF and VIP approved/ eligible projects (between 8/30/16 and 3/3/17)

Project #	Equipment category	Project type	# of engines	Proposed contract award	Applicant name	Emission Reductions (Tons per year)			Board approval date	County
						NOx	ROG	PM		
18MOY10	Ag/ off-road	Equipment replacement	3	\$ 116,595.00	Pina Vineyard Management , LLC.	0.361	0.049	0.021	11/16/2016	Napa
18MOY7	Ag/ off-road	Equipment replacement	1	\$ 71,800.00	Walter Hansel Winery & Vineyards LLC	0.174	0.031	0.015	APCO	Sonoma
18MOY5	Ag/ off-road	Equipment replacement	1	\$ 34,550.00	Corey J Coggins (Farmer)	0.103	0.018	0.004	APCO	San Mateo
18MOY9	Off-road	Equipment replacement	1	\$ 20,700.00	Silicon Roadways, Inc.	0.086	0.016	0.007	APCO	Alameda
18MOY15	Off-road	Equipment replacement	1	\$ 85,200.00	Keith J. Gale General Engineering, Inc.	0.545	0.056	0.020	APCO	Solano
18MOY13	Ag/ off-road	Equipment replacement	1	\$ 95,530.00	Robert and Julia Marsh (Farmer)	0.667	0.070	0.024	APCO	San Mateo
18MOY17	Off-road	Equipment replacement	1	\$ 85,000.00	SF Recovery, Inc.	0.823	0.099	0.035	APCO	San Francisco
18MOY14	Marine	Engine replacement	2	\$ 130,000.00	Reel Time Charters, LLC	0.875	0.005	0.032	1/18/2017	San Francisco
18MOY23	Off-road	Equipment replacement	1	\$ 72,800.00	Columbia Electric, Inc.	0.366	0.052	0.023	APCO	Alameda
18MOY25	Off-road	Equipment replacement	1	\$ 64,000.00	Iron House Sanitary District	0.379	0.046	0.016	APCO	Contra Costa
18MOY12	Ag/ off-road	Equipment replacement	1	\$ 35,000.00	Mazzetta Dairy	0.086	0.002	0.006	APCO	Sonoma
18MOY20	Ag/ off-road	Equipment replacement	2	\$ 97,520.00	Wight Vineyard Management, Inc.	0.221	0.046	0.021	APCO	Napa
18MOY26	Ag/ off-road	Equipment replacement	1	\$ 165,230.00	Saturnino Del Castillo (Farmer)	0.799	0.084	0.028	1/18/2017	Solano
18MOY19	Marine	Engine replacement	2	\$ 230,000.00	Sport Fishing Enterprises, LLC	0.681	0.000	0.037	1/18/2017	Alameda
18MOY2	Ag/ off-road	Equipment replacement	1	\$ 35,325.00	Nick Leras Vineyards	0.169	0.029	0.011	APCO	Sonoma
18MOY27	Ag/ off-road	Equipment replacement	2	\$ 89,060.00	Balletto Ranch, Inc.	0.453	0.081	0.039	APCO	Sonoma
18MOY31	Marine	Engine replacement	2	\$ 156,000.00	Sean Marcus Hodges (Charter fishing)	0.437	-0.011	0.027	2/1/2017	Marin
18MOY28	Ag/ off-road	Equipment replacement	1	\$ 34,000.00	Pina Vineyard Management , LLC.	0.075	0.015	0.007	APCO	Napa
18MOY36	Ag/ off-road	Equipment replacement	1	\$ 49,900.00	Donald R Hardin Trust	0.134	0.024	0.009	APCO	Napa
17MOY66	Ag/ off-road	Equipment replacement	1	\$ 39,545.00	Dirt Farmer & Company, A California Corporation	0.105	0.032	0.010	APCO	Sonoma
18MOY35	Ag/ off-road	Equipment replacement	1	\$ 16,200.00	Cortina Vineyard Management	0.022	0.013	0.003	APCO	Napa
18MOY33	Ag/ off-road	Equipment replacement	1	\$ 44,225.00	M. German & Son Partnership	0.154	0.031	0.014	APCO	Solano
18MOY30	Ag/ off-road	Equipment replacement	2	\$ 294,740.00	Mertens Dairy	1.186	0.156	0.055	3/1/2017	Sonoma
18MOY24	Off-road	Equipment replacement	1	\$ 61,600.00	Columbia Electric, Inc.	0.246	0.044	0.021	APCO	Alameda
18MOY42	Ag/ off-road	Equipment replacement	2	\$ 330,170.00	McClelland's Dairy	1.769	0.153	0.052	3/1/2017	Sonoma
18MOY37	Locomotive	Equipment replacement	2	\$ 5,000,000.00	San Joaquin Regional Rail Commission / ACE	16.164	1.112	0.483	3/1/2017	Alameda / Santa Clara
18MOY40	Marine	Engine replacement	1	\$ 97,000.00	Raymond D. Baker (Commercial fishing)	0.468	0.012	0.018	APCO	Sonoma
18MOY34	Off-road	Equipment replacement	1	\$ 85,000.00	R&A Trucking Company	0.542	0.056	0.020	APCO	Alameda

Project #	Equipment category	Project type	# of engines	Proposed contract award	Applicant name	Emission Reductions (Tons per year)			Board approval date	County
						NOx	ROG	PM		
18MOY47	Ag/ off-road	Equipment replacement	1	\$ 154,505.00	Diamond W Ranch	0.612	0.086	0.031	TBD	Sonoma
18MOY48	Ag/ off-road	Equipment replacement	1	\$ 59,000.00	Richard Keenan (Vineyard)	0.195	0.007	0.008	APCO	Sonoma
VIP282	VIP	Truck Replacement	1	\$ 10,000.00	Cornel Roman/ Camelia Roman	0.400	0.000	0.010	APCO	Alameda
VIP283	VIP	Truck Replacement	1	\$ 15,000.00	Javier De La Torre	0.300	0.010	0.000	APCO	Yolo
VIP284	VIP	Truck Replacement	1	\$ 30,000.00	J/W Sanchez Trucking, Inc.	0.600	0.010	0.000	APCO	Alameda
VIP285	VIP	Truck Replacement	1	\$ 40,000.00	Phieu Hung Nguyen	0.870	0.010	0.000	APCO	Alameda
VIP287	VIP	Truck Replacement	1	\$ 45,000.00	Manuel Rivera DBA JJC Trucking	0.900	0.010	0.000	APCO	San Joaquin
VIP288	VIP	Truck Replacement	1	\$ 45,000.00	Thanh Duc Nguyen	0.890	0.010	0.000	APCO	Alameda
36 Projects			46	\$ 8,035,195.00		32.856	2.463	1.108		

Figure 1: CMP/ MSIF Funding Distribution by Equipment Category as of 3/3/17

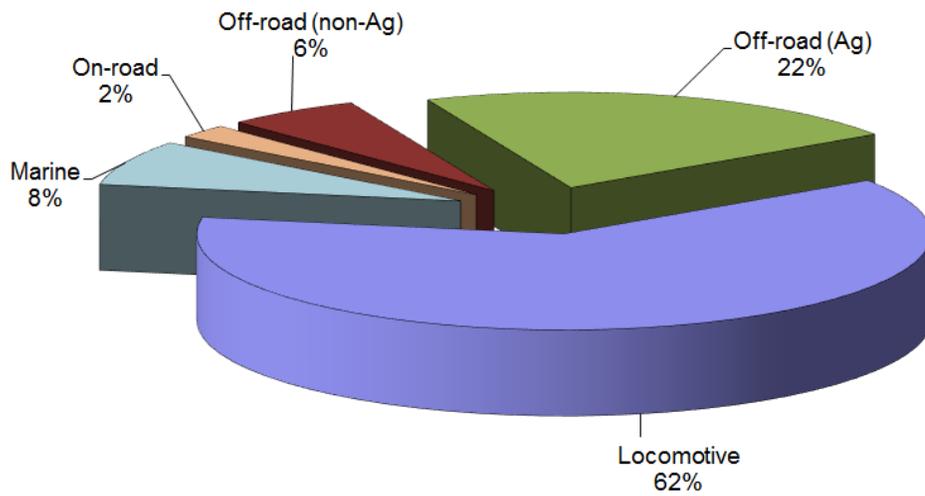
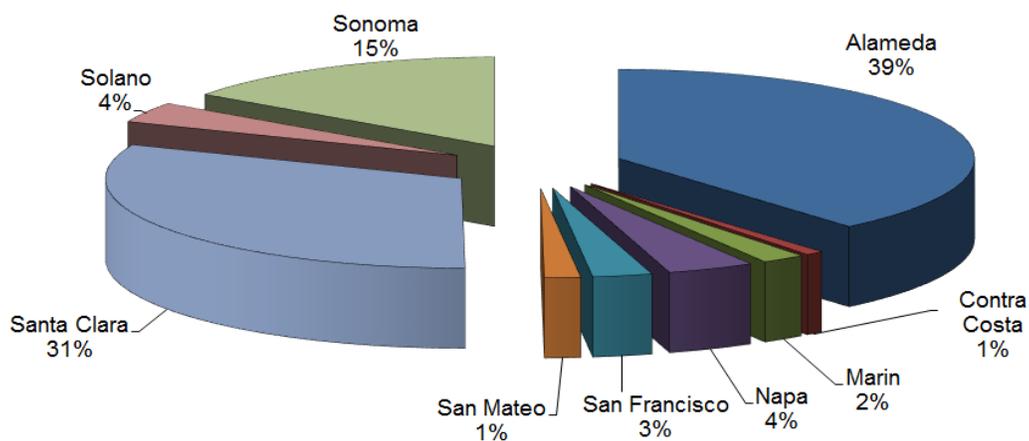


Figure 2: CMP/ MSIF Funding Distribution by County as of 3/3/17



AGENDA 4 - ATTACHMENT 3

Figure 3: CMP, MSIF, VBB and VIP funding since 2009 by equipment category

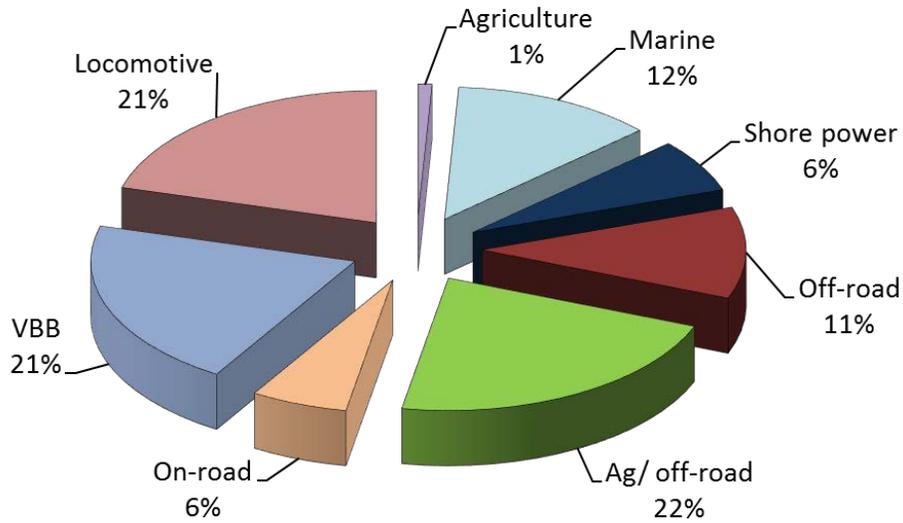
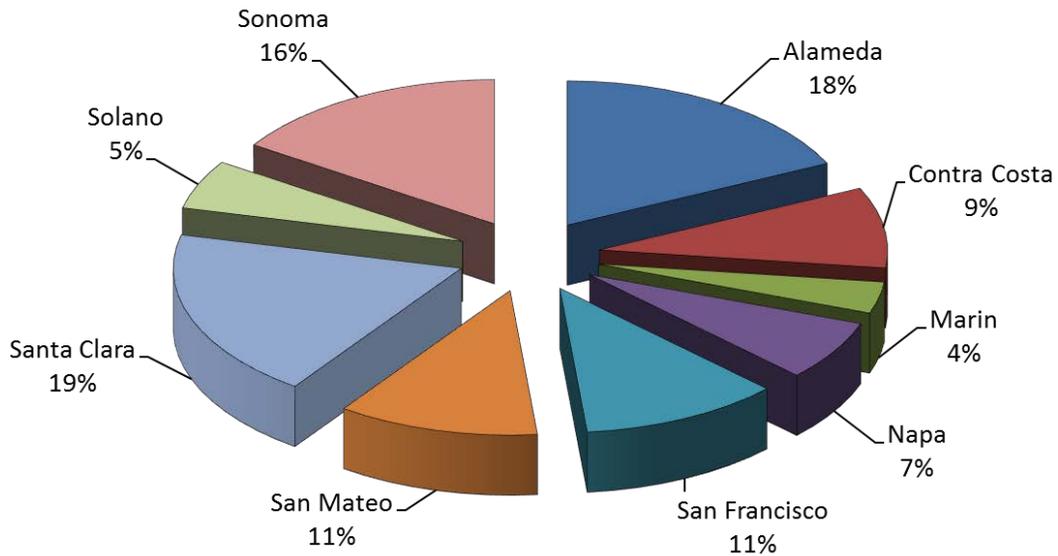


Figure 4: CMP, MSIF, VBB and VIP funding since 2009 by county



AGENDA 4 - ATTACHMENT 4

Summary of all TFCA approved and eligible projects (evaluated between 7/1/2016 and 3/3/2017)

Project #	Project Category	Project Description	Award Amount	Applicant Name	Emission Reductions (Tons per year)			Board Approval Date	CARE Area	County
					NO _x	ROG	PM			
17R05*	Shuttle	City of Oakland Broadway Spare the Air Messaging	\$420,000	City of Oakland	0.000	0.000	0.000	7/18/16	Yes	Alameda
17R06*	Shuttle	LAVTA Spare the Air Messaging	\$1,050,000	Livermore Amador Valley Transit Authority	0.000	0.000	0.000	10/19/16	Yes	Alameda
17R11	Rideshare	511 Regional carpool and Vanpool Program	\$870,000	Metropolitan Transportation Commission	2.563	2.384	3.134	11/16/16	No	Regional
17R12	Rideshare	SJSU Ridesharing & Trip Reduction	\$139,500	Associated Students, San Jose State University	0.231	0.257	0.376	11/16/16	Yes	Regional
17R14	Shuttle	Caltrain Shuttle Program	\$639,900	Peninsula Corridor Joint Powers Board	2.136	2.482	3.718	11/16/16	No	San Mateo
17R15	Shuttle	ACE Shuttle 53 and 54	\$100,000	San Joaquin Regional Rail Commission	0.149	0.432	0.718	11/16/16	Yes	Alameda
17R16	Shuttle	ACE Shuttle Bus Program	\$960,000	Santa Clara Valley Transportation Authority	2.620	2.675	4.553	11/16/16	Yes	Santa Clara
17R17	Shuttle	PresidiGo Shuttle	\$100,000	Presidio Trust	0.344	0.383	0.605	11/16/16	Yes	San Francisco
8 Projects			\$4,279,400		8.04	8.61	13.10			

*Projects funded through Air District's Spare the Air program. Emission reductions are not included and will be evaluated as benefits for the Spare the Air program.

AGENDA 4 - ATTACHMENT 5

Summary of FYE 2017 TFCA funds distributed by county and project category, as of 3/3/17

Figure 1: TFCA Projects Awarded in FYE2016
Distributed by Project Category

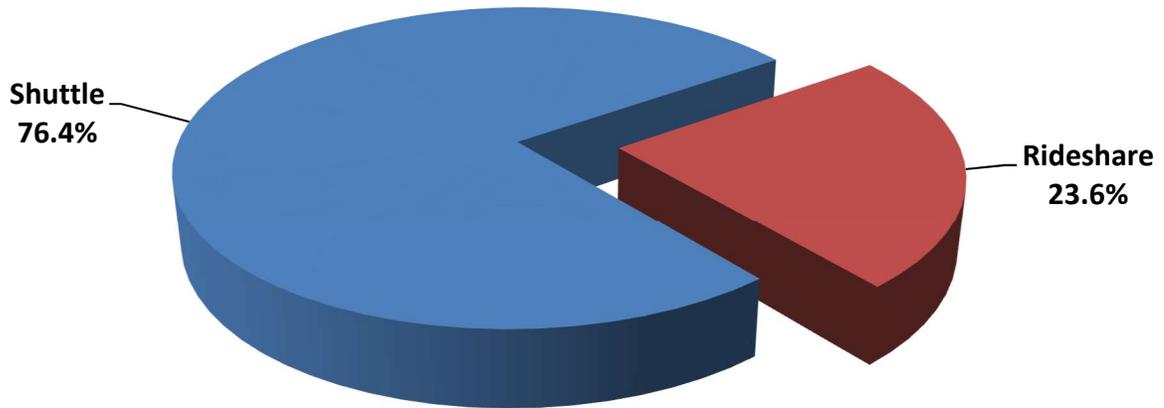
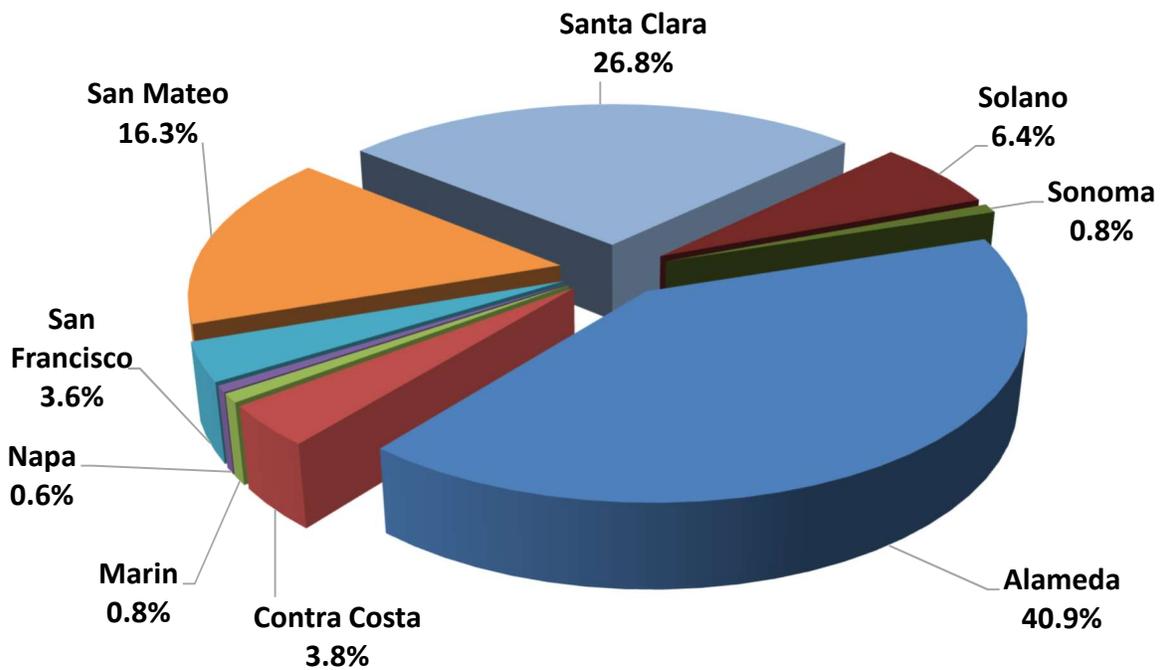


Figure 2: TFCA Projects Awarded in FYE2017
Distributed by County



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Karen Mitchoff and Members
of the Mobile Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: March 8, 2017

Re: Lower Emission School Bus Program Update and Funding Allocation

RECOMMENDED ACTION

Recommend Board of Directors:

1. Allocate \$5,000,000 in Mobile Source Incentive Funds (MSIF) for Lower Emission School Bus Program (LESBP) projects; and
2. Authorize the Executive Officer/APCO to enter into agreements with applicants for LESBP projects.

BACKGROUND

Since 2000, the Air District has provided more than \$75 million to upgrade more than 1,400 school buses in the Bay Area, through the replacement of older school buses, installation of diesel particulate filters (retrofits), and the replacement of compressed natural gas (CNG) tanks. Statewide, the LESBP is administered through local air districts based on guidelines and advisories issued by the California Air Resources Board (CARB). Over the years, the Air District has provided grant funds for school bus projects using funds from various funding sources, including: Proposition 1B Bond Program, CARB, U.S. EPA Diesel Emission Reduction Act (DERA), Transportation Fund for Clean Air (TFCA), and MSIF.

Assembly Bill 923 (AB 923, Firebaugh), enacted in 2004 (codified as Health and Safety Code Section 44225), authorized local air districts to increase their motor vehicle registration surcharge up to an additional \$2 per vehicle. The revenues from the additional surcharge are deposited in the Air District's MSIF account. AB 923 stipulates that air districts may use the revenues generated by the additional \$2 surcharge for projects eligible under the Carl Moyer Program and the LESBP.

DISCUSSION

On June 4, 2014, the Air District's Board of Directors allocated \$6.3 million in MSIF funds for school bus retrofit, replacement and CNG tank replacement projects under the LESBP. Of the funds allocated, \$1.3 million was specifically set aside for CNG tank replacement projects for school buses. On October 19, 2016, due to program demand, the Board of Directors allocated an additional \$1.5 million for CNG tank replacement projects.

Summary of eligible LESBP project types and Air District funding:

- ***School Bus Replacements:*** Grant funding can be used to replace older public school buses with new buses with newer, cleaner (diesel-fueled or alternative-fueled) engines. New engines reduce Particulate Matter (PM) and Oxides of Nitrogen (NOx) emissions by 90-98% compared to the older engines. Under the current CARB guidelines, diesel-powered school buses with model year engines 1993 and older are eligible for LESBP school bus replacement funding. Grants of up to \$165,000 per bus can be awarded to public school districts and Joint Powers Authorities (JPA), and incentive funds typically cover more than 91% of the costs of the new bus. ***Since 2000, the Air District has funded the replacement of 466 school buses.***
- ***Retrofit Filters:*** Public school districts, JPAs and private school bus owners contracting to provide transportation services for public school districts can receive grants of up to \$20,000 per bus to install diesel particulate filters (retrofits) on school buses. This is the only LESBP project category that is open to private entities. Retrofit filters reduce PM emissions by more than 85% and some filters can also reduce NOx emissions. Incentive funds typically cover more than 99% of the eligible costs (i.e., filters, filter installation, spare filter cores, and filter cleaning & maintenance equipment). Under the current CARB guidelines, diesel powered school buses with 1987 and newer engines are eligible for LESBP school bus retrofit funding. ***Since 2000, the Air District has funded 826 school bus retrofit projects.***
- ***CNG Tank Replacements:*** The CNG tank replacement project type was added to the LESBP in 2012 when CARB approved the use of MSIF monies to support these projects in addition to school bus retrofit and replacement projects going forward. The estimated useful life of a school bus in California is 25 years, but the U.S. Department of Transportation requires on-board CNG fuel tanks be replaced prior to the end of the tank manufacturer's recommended service life (15 years). Grants of up to \$20,000 per bus can be awarded to public school districts and JPAs, and this funding typically covers 100% of the cost to purchase and install new CNG tanks. ***Since 2012, the Air District has funded CNG tank replacement projects for more than 139 school buses.***

Additional information about the school bus projects funded by the Air District since 2000 is provided in Attachment 1. Also in Attachment 1 are several charts that summarize the performance of the program since 2000. Figure 1 shows the percent of Air District funding awarded to LESBP projects by project type. The percent of funding allocated by county during this period is shown in Figure 2. Finally, Figure 3 shows the breakdown of the three eligible project types by county.

Recommendation for New Allocation of Funding:

There are more than 2,200 diesel school buses operating in the Bay Area and new technologies and cleaner engines present an opportunity to continue the Air District's focus on reducing school children's exposure to diesel PM. The most recent allocation of Air District funding for school bus retrofit and replacement projects was exhausted in 2016. Also in 2016, CARB revised the LESBP guidelines to support the cleanest technologies (e.g. hybrid-electric buses, electric and alternative-fueled school buses) and include repowers/conversions projects.

Due to the high costs of advanced technologies as well as the continuing demand for CNG tank replacements, school bus replacements and school bus retrofit projects, staff recommends allocating \$5 million in MSIF funding for new school bus projects. Staff also recommends the Board of Directors authorize the Executive Officer/APCO to enter into agreements with applicants for eligible LESBP projects. Staff will continue to monitor the demand for project funding and will request additional funding as needed.

BUDGET CONSIDERATION / FINANCIAL IMPACT

None. The Air District distributes “pass-through” funds to grantees on a reimbursement basis. Administrative costs for the MSIF program are provided by the funding source.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Tina McRee and Lina Patel
Reviewed by: Karen Schkolnick

Attachment 1: Lower Emission School Bus Program projects since 2000

AGENDA 5 – ATTACHMENT 1

Table 1– LESBP School bus replacement projects since 2000

Project Number	Project Category	Number of buses	City	Actual Amount	Grantee Name
00LESBP01	Bus Replacement	5	San Jose	\$ 537,465.00	Evergreen School District
00LESBP02	Bus Replacement	3	Sunnyvale	\$ 350,791.00	Sunnyvale School District
00LESBP03	Bus Replacement	5	San Mateo	\$ 595,819.00	San Mateo Union High School District
00LESBP04	Bus Replacement	4	San Mateo	\$ 501,023.00	San Mateo-Foster City School District
00LESBP05	Bus Replacement	1	Santa Rosa	\$ 108,818.00	Rincon Valley Union School District
00LESBP06	Bus Replacement	2	Berkeley	\$ 234,904.00	Berkeley Unified School District
00LESBP07	Bus Replacement	3	Santa Clara	\$ 331,483.00	Campbell Union School District
00LESBP08	Bus Replacement	5	Union City	\$ 568,970.00	New Haven Unified School District
00LESBP09	Bus Replacement	4	Brentwood	\$ 341,016.00	Liberty Union High School District
00LESBP10	Bus Replacement	5	Solano	\$ 421,803.00	Fairfield- Suisun Unified School District
00LESBP12	Bus Replacement	3	Novato	\$ 258,253.00	Novato Unified School District
00LESBP13	Bus Replacement	2	Tomales	\$ 168,632.00	Shoreline Unified School District
00LESBP14	Bus Replacement	7	Sebastopol	\$ 872,948.00	West County Transportation Agency
00LESBP15	Bus Replacement	5	San Jose	\$ 614,723.00	Oak Grove School District
00LESBP16	Bus Replacement	6	Santa Clara	\$ 495,911.00	Santa Clara Unified School District
00LESBP17	Bus Replacement	6	Gilroy	\$ 475,032.00	Gilroy Unified School District
00LESBP20	Bus Replacement	2	Mountain View	\$ 214,136.00	Mountain View-Los Altos Union High School District
00LESBP21	Bus Replacement	13	San Jose	\$ 1,419,303.00	San Jose Unified School District
00LESBP22	Bus Replacement	4	Fairfield	\$ 337,227.00	Solano County Office of Education
01LESBP01	Bus Replacement	3	San Rafael	\$ 266,428.00	Dixie School District
01LESBP02	Bus Replacement	1	Pittsburg	\$ 93,020.00	Pittsburg Unified School District
01LESBP03	Bus Replacement	2	Milpitas	\$ 173,877.00	Milpitas Unified School District
01LESBP04	Bus Replacement	9	Solano	\$ 1,110,800.00	Vallejo City Unified School District
01LESBP05	Bus Replacement	2	Santa Clara	\$ 182,817.00	East Side Union High School District
01LESBP07	Bus Replacement	4	Sunnyvale	\$ 479,195.00	Sunnyvale School District
01LESBP08	Bus Replacement	1	Pacifica	\$ 123,289.00	Laguna Salada Union School District
01LESBP09	Bus Replacement	6	Santa Clara	\$ 834,277.00	East Side Union High School District
01LESBP10	Bus Replacement	2	Pittsburg	\$ 187,765.00	Pittsburg Unified School District
01LESBP11	Bus Replacement	4	Vallejo	\$ 413,457.00	Vallejo City Unified School District
01LESBP12	Bus Replacement	2	San Jose	\$ 207,738.00	Moreland School District
01LESBP13	Bus Replacement	4	Santa Clara	\$ 397,044.00	East Side Union High School District
02LESBP01	Bus Replacement	2	Sebastopol	\$ 240,414.00	West County Transportation Agency
02LESBP02	Bus Replacement	1	Santa Rosa	\$ 123,384.00	Rincon Valley Union School District
02LESBP03	Bus Replacement	3	San Mateo	\$ 175,566.00	San Mateo Union High School District
02LESBP04	Bus Replacement	2	Mountain View	\$ 278,056.00	Mountain View-Whisman School District
02LESBP05	Bus Replacement	2	Fremont	\$ 241,781.00	Fremont Unified School District
02LESBP06	Bus Replacement	4	Redwood City	\$ 557,399.00	Sequoia Union High School District
02LESBP07	Bus Replacement	1	Petaluma	\$ 121,048.00	Old Adobe Union School District
02LESBP08	Bus Replacement	1	Antioch	\$ 107,114.00	Antioch Unified School District
02LESBP09	Bus Replacement	1	Byron	\$ 108,114.00	Mountain House School District
02LESBP10	Bus Replacement	1	Fairfield	\$ 106,127.00	Travis Unified School District
02LESBP17	Bus Replacement	2	Lafayette	\$ 257,301.00	Acalanes Union High School District
02LESBP18	Bus Replacement	1	Newark	\$ 149,765.00	Newark Unified School District
03LESBP01	Bus Replacement	1	Sebastopol	\$ 117,453.00	West County Transportation Agency
03LESBP02	Bus Replacement	2	Newark	\$ 268,218.00	Newark Unified School District
03LESBP03	Bus Replacement	2	Antioch	\$ 176,236.00	Antioch Unified School District
03LESBP04	Bus Replacement	2	Cupertino	\$ 175,881.00	Cupertino Union School District
03LESBP05	Bus Replacement	4	Sonoma	\$ 348,985.00	Sonoma Valley Unified School District
03LESBP06	Bus Replacement	8	Morgan Hill	\$ 823,166.00	Morgan Hill Unified School District
05LESBP01	Bus Replacement	1	Newark	\$ 134,737.00	Newark Unified School District
05LESBP02	Bus Replacement	9	Morgan Hill	\$ 1,272,146.00	Morgan Hill Unified School District
05LESBP03	Bus Replacement	3	San Jose	\$ 368,234.00	Berryessa Union School District
05LESBP04	Bus Replacement	5	San Mateo	\$ 706,748.00	San Mateo Union High School District
05LESBP05	Bus Replacement	2	Campbell	\$ 273,431.00	Campbell Union High School
08LESBP01	Bus Replacement	1	San Jose	\$ 140,181.95	Campbell Union High School District
08LESBP02	Bus Replacement	4	Daly City	\$ 562,389.07	Jefferson Union High School District
08LESBP04	Bus Replacement	4	Morgan Hill	\$ 572,636.88	Morgan Hill Unified School District

Project Number	Project Category	Number of buses	City	Actual Amount	Grantee Name
08LESBP05	Bus Replacement	2	Morgan Hill	\$ 288,963.20	Morgan Hill Unified School District
08LESBP06	Bus Replacement	3	Fairfield	\$ 442,644.40	Travis Unified School District
08LESBP07	Bus Replacement	3	Fremont	\$ 464,063.07	Fremont Unified School District
08LESBP08	Bus Replacement	1	Sonoma	\$ 147,726.61	Sonoma Valley Unified School District
08LESBP09	Bus Replacement	2	Pope Valley	\$ 255,984.43	Pope Valley Union School District
08LESBP10	Bus Replacement	1	San Lorenzo	\$ 146,987.07	San Lorenzo Unified School District
08LESBP11	Bus Replacement	8	Antioch	\$ 992,718.28	Antioch Unified School District
08LESBP13	Bus Replacement	3	Campbell	\$ 510,000.00	Campbell Union School District
08LESBP14	Bus Replacement	2	Calistoga	\$ 288,315.82	Calistoga Joint Unified School District
08LESBP15	Bus Replacement	2	Union City	\$ 290,285.60	New Haven Unified School District
08LESBP16	Bus Replacement	5	Santa Rosa	\$ 850,000.00	West County Transportation Agency
08LESBP17	Bus Replacement	1	Napa	\$ 140,064.90	Napa Valley Unified School District
08LESBP20	Bus Replacement	1	Hayward	\$ 151,263.69	Hayward Unified School District
08LESBP22	Bus Replacement	4	Hayward	\$ 651,867.37	Hayward Unified School District
08LESBP26	Bus Replacement	3	Danville	\$ 389,505.66	San Ramon Valley Unified School District
08LESBP27	Bus Replacement	1	Hayward	\$ 162,836.44	Hayward Unified School District
08LESBP28	Bus Replacement	1	Fremont	\$ 164,375.67	Fremont Unified School District
08LESBP29	Bus Replacement	1	Petaluma	\$ 163,471.24	Petaluma Joint Union High School District
08LESBP30	Bus Replacement	6	San Jose	\$ 710,542.56	Franklin-McKinley School District
08LESBP33	Bus Replacement	4	Cupertino	\$ 651,671.48	Cupertino Union School District
08LESBP34	Bus Replacement	1	San Mateo	\$ 72,703.52	San Mateo Union High School District
08LESBP35	Bus Replacement	1	Los Gatos	\$ 121,508.46	Loma Prieta Joint Union School District
08LESBP36	Bus Replacement	1	Brentwood	\$ 154,352.27	Liberty Union High School District
08LESBP37	Bus Replacement	2	Windsor	\$ 336,863.88	Windsor Unified School District
08LESBP39	Bus Replacement	1	Sonoma	\$ 163,270.62	Sonoma Valley Unified School District
08LESBP40	Bus Replacement	1	Mountain View	\$ 163,311.04	Mountain View Whisman School District
08LESBP44	Bus Replacement	2	Santa Clara	\$ 325,835.74	Santa Clara Unified School District
08LESBP45	Bus Replacement	7	San Jose	\$ 1,167,678.75	San Jose Unified School District
08LESBP46	Bus Replacement	6	San Jose	\$ 824,237.40	Alum Rock Union School District
08LESBP47	Bus Replacement	7	Napa	\$ 1,014,161.16	Napa Valley Unified School District
08LESBP48	Bus Replacement	10	Concord	\$ 1,684,499.50	Mount Diablo Unified School District
08LESBP49	Bus Replacement	1	Palo Alto	\$ 94,311.70	Palo Alto Unified School District
08LESBP50	Bus Replacement	3	Berkeley	\$ 466,313.59	Berkeley Unified School District
08LESBP51	Bus Replacement	1	Morgan Hill	\$ 135,607.50	Morgan Hill Unified School District
13LESBP01	Bus Replacement	2	Danville	\$ 272,962.28	San Ramon Valley Unified School District
13LESBP02	Bus Replacement	6	Santa Clara	\$ 990,000.00	Santa Clara Unified School District
13LESBP03	Bus Replacement	3	San Lorenzo	\$ 477,729.57	San Lorenzo Unified School District
13LESBP04	Bus Replacement	2	Tomales	\$ 329,720.99	Shoreline Unified School District
13LESBP05	Bus Replacement	2	Fairfield	\$ 328,628.96	Solano County Office of Education
13LESBP06	Bus Replacement	3	Antioch	\$ 419,717.85	Antioch Unified School District
13LESBP07	Bus Replacement	4	Sonoma	\$ 638,449.08	Sonoma Valley Unified School District
13LESBP09	Bus Replacement	3	Brentwood	\$ 451,586.71	Liberty Union High School District
13LESBP10	Bus Replacement	1	Los Gatos	\$ 165,000.00	Loma Prieta Joint Union School District
13LESBP11	Bus Replacement	7	Santa Rosa	\$ 1,189,978.02	West County Transportation Agency
13LESBP12	Bus Replacement	13	Napa	\$ 1,669,113.22	Napa Valley Unified School District
13LESBP13	Bus Replacement	1	Morgan Hill	\$ 142,374.08	Morgan Hill Unified School District
13LESBP14	Bus Replacement	5	Fremont	\$ 824,903.45	Fremont Unified School District
13LESBP15	Bus Replacement	2	Mountain View	\$ 329,205.08	Mountain View Whisman School District
13LESBP16	Bus Replacement	2	San Jose	\$ 329,857.58	Moreland School District
13LESBP17	Bus Replacement	2	Hayward	\$ 329,998.88	Hayward Unified School District
13LESBP18	Bus Replacement	1	Sunnyvale	\$ 169,999.06	Sunnyvale School
13LESBP20	Bus Replacement	2	Concord	\$ 339,999.30	Mt. Diablo Unified School District
13LESBP21	Bus Replacement	1	Bolinas	\$ 164,750.37	Bolinas/Stinson Union School District
13LESBP22	Bus Replacement	2	San Jose	\$ 329,902.34	Campbell Union High School District
13LESBP23	Bus Replacement	5	Fairfield	\$ 746,126.81	Travis Unified School District
13LESBP24	Bus Replacement	1	Santa Rosa	\$ 164,902.35	Rincon Valley Union School District
13LESBP25	Bus Replacement	4	Redwood City	\$ 614,274.44	Sequoia Union High School District
13LESBP28	Bus Replacement	3	San Jose	\$ 493,380.24	East Side Union High School District
13LESBP29	Bus Replacement	2	Menlo Park	\$ 330,000.00	Las Lomas Elementary School District

Project Number	Project Category	Number of buses	City	Actual Amount	Grantee Name
13LESBP30	Bus Replacement	7	Vallejo	\$ 1,027,048.30	Vallejo City Unified School District
13LESBP31	Bus Replacement	11	Fairfield	\$ 1,572,384.43	Fairfield-Suisun Unified School District
13LESBP32	Bus Replacement	4	Castro Valley	\$ 659,923.76	Castro Valley Unified School District
14LESBP01	Bus Replacement	2	Brentwood	\$ 308,115.44	Liberty Union High School District
14LESBP04	Bus Replacement	12	Santa Rosa	\$ 1,980,000.00	West County Transportation Agency
14LESBP05	Bus Replacement	4	Gilroy	\$ 660,000.00	Gilroy Unified School District
14LESBP06	Bus Replacement	3	Mountain View	\$ 413,335.23	Mountain View Whisman School District
14LESBP07	Bus Replacement	2	Petaluma	\$ 327,728.40	Old Adobe Union School District
14LESBP08	Bus Replacement	1	Los Gatos	\$ 164,999.27	Loma Prieta Joint Union School District
14LESBP09	Bus Replacement	12	Santa Rosa	\$ 2,010,000.00	West County Transportation Agency
14LESBP10	Bus Replacement	2	Windsor	\$ 317,845.16	Windsor Unified School District
14LESBP11	Bus Replacement	1	Petaluma	\$ 164,809.90	Petaluma Joint Union High School District
14LESBP12	Bus Replacement	6	San Jose	\$ 739,384.52	Evergreen Elementary School District
14LESBP13	Bus Replacement	7	San Jose	\$ 1,122,079.91	San Jose Unified School District
14LESBP14	Bus Replacement	1	Gilroy	\$ 165,000.00	Gilroy Unified School District
				\$ 60,187,633.50	

Table 2– LESBP CNG tank replacement projects since 2000 (program started in 2012)

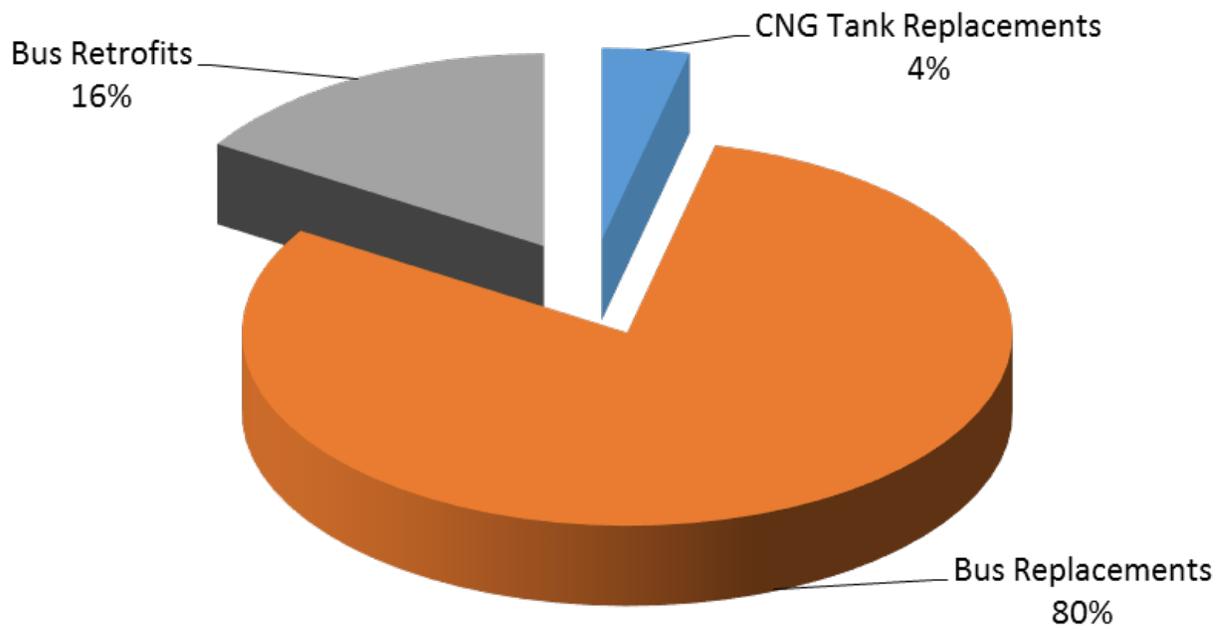
Project Number	Project Category	Number of buses	City	Actual Amount	Grantee Name
12SBTR01	CNG Tank Replacement	16	Napa	\$ 309,880.78	Napa Valley Unified School District
12SBTR02	CNG Tank Replacement	4	Campbell	\$ 79,933.84	Campbell Union School District
12SBTR03	CNG Tank Replacement	17	Santa Rosa	\$ 339,059.05	West County Transportation Agency
12SBTR04	CNG Tank Replacement	1	Hayward	\$ 20,000.00	Hayward Unified School District
12SBTR05	CNG Tank Replacement	1	Petaluma	\$ 19,944.65	Old Adobe Union School District
12SBTR06	CNG Tank Replacement	6	East Palo Alto	\$ 119,900.76	Ravenswood City School District
12SBTR07	CNG Tank Replacement	4	Danville	\$ 79,933.84	San Ramon Valley Unified School District
12SBTR08	CNG Tank Replacement	12	Fremont	\$ 240,000.00	Fremont Unified School District
12SBTR09	CNG Tank Replacement	5	Berkeley	\$ 100,000.00	Berkeley Unified School District
14SBTR01	CNG Tank Replacement	9	Santa Rosa	\$ 179,212.00	West County Transportation Agency
14SBTR02	CNG Tank Replacement	2	Sunol	\$ 39,936.95	Sunol Glen Unified School District
14SBTR03	CNG Tank Replacement	2	Hayward	\$ 39,995.50	Hayward Unified School District
14SBTR05	CNG Tank Replacement	3	Danville	\$ 59,850.00	San Ramon Valley Unified School District
14SBTR06	CNG Tank Replacement	8	Napa	\$ 150,540.89	Napa Valley Unified School District
14SBTR07	CNG Tank Replacement	8	Fremont	\$ 159,968.00	Fremont Unified School District
14SBTR08	CNG Tank Replacement	3	Daly City	\$ 59,850.00	Jefferson Union High School District
14SBTR09	CNG Tank Replacement	3	Redwood City	\$ 59,750.00	Redwood City School District
14SBTR10	CNG Tank Replacement	7	San Jose	\$ 139,636.91	Evergreen Elementary School District
14SBTR11	CNG Tank Replacement	5	Concord	\$ 99,988.75	Mt. Diablo Unified School District
14SBTR13	CNG Tank Replacement	3	San Mateo	\$ 59,850.00	San Mateo Union High School District
14SBTR14	CNG Tank Replacement	3	Sunnyvale	\$ 59,997.00	Sunnyvale School District
15SBTR01	CNG Tank Replacement	3	Campbell	\$ 59,987.49	Campbell Union School District
15SBTR02	CNG Tank Replacement	5	San Mateo	\$ 99,996.70	San Mateo Union High School District
15SBTR03	CNG Tank Replacement	5	San Jose	\$ 99,652.70	Oak Grove School District
15SBTR04	CNG Tank Replacement	4	Foster City	\$ 79,997.36	San Mateo Foster City School District
				\$ 2,756,863.17	

Table 3 – LESBP Retrofit projects since 2000

Project Number	Project Category	Number of buses	City	Actual Amount	Grantee Name
00SBPM01	Retrofit	15	Fairfield	\$ 120,000.00	Fairfield- Suisun Unified School District
00SBPM02	Retrofit	10	Fairfield	\$ 60,000.00	Travis Unified School District
00SBPM03	Retrofit	6	Santa Rosa	\$ 48,000.00	West County Transportation Agency
00SBPM04	Retrofit	3	Fairfield	\$ 24,000.00	Fairfield- Suisun Unified School District
00SBPM05	Retrofit	25	Santa Rosa	\$ 72,414.00	West County Transportation Agency
00SBPM06	Retrofit	1	Santa Rosa	\$ 8,500.00	Rincon Valley Union School District
00SBPM07	Retrofit	4	San Mateo	\$ 23,470.00	San Mateo Union High School District
00SBPM08	Retrofit	3	Mountain View	\$ 16,000.00	Mountain View-Whisman School District
00SBPM09	Retrofit	11	Fremont	\$ 66,954.00	Fremont Unified School District
00SBPM10	Retrofit	13	Redwood City	\$ 42,195.42	Sequoia Union High School District
00SBPM11	Retrofit	1	Petaluma	\$ 8,500.00	Old Adobe Union School District
00SBPM12	Retrofit	15	Antioch	\$ 85,000.00	Antioch Unified School District
00SBPM14	Retrofit	15	Fairfield	\$ 94,523.00	Fairfield-Suisun School District
00SBPM15	Retrofit	1	Fairfield	\$ 8,593.00	Fairfield-Suisun School District
00SBPM16	Retrofit	5	Half Moon Bay	\$ 41,600.00	Cabrillo Unified School District
00SBPM17	Retrofit	3	Menlo Park	\$ 20,000.00	Las Lomas Elementary School District
00SBPM18	Retrofit	1	Santa Rosa	\$ 8,500.00	Rincon Valley School District
03SBPM01	Retrofit	4	Cupertino	\$ 24,872.00	Cupertino Union School District
03SBPM02	Retrofit	16	Santa Rosa	\$ 236,972.55	West County Transportation Agency
03SBPM03	Retrofit	7	Antioch	\$ 59,500.00	Antioch Unified School District
03SBPM04	Retrofit	5	Morgan Hill	\$ 42,381.00	Morgan Hill Unified School District
03SBPM05	Retrofit	8	Sonoma	\$ 118,262.00	Sonoma Valley Unified School District
03SBPM06	Retrofit	7	San Jose	\$ 21,000.00	San Jose Unified School District
03SBPM07	Retrofit	15	San Jose	\$ 90,354.00	Franklin-McKinley School District
03SBPM08	Retrofit	11	San Jose	\$ 66,255.33	Evergreen School District
03SBPM09	Retrofit	15	San Jose	\$ 96,885.00	Oak Grove School District
03SBPM11	Retrofit	4	San Ramon	\$ 14,511.00	San Ramon Valley Unified School District
03SBPM12	Retrofit	3	Pittsburg	\$ 9,000.00	Pittsburg Unified School District
03SBPM13	Retrofit	3	San Mateo	\$ 10,755.52	San Mateo Union High School
03SBPM14	Retrofit	6	Fairfield	\$ 48,000.00	Fairfield- Suisun Unified School District
03SBPM15	Retrofit	2	Morgan Hill	\$ 7,256.00	Morgan Hill Unified School District
03SBPM17	Retrofit	5	Berkeley	\$ 15,000.00	Berkeley Unified School District
03SBPM18	Retrofit	8	Redwood City	\$ 46,884.55	Redwood City School District
03SBPM19	Retrofit	18	Union City	\$ 173,888.36	New Haven Unified School District
03SBPM20	Retrofit	3	Castro Valley	\$ 55,186.90	Castro Valley Unified School District
05SBPM01	Retrofit	10	Petaluma	\$ 152,818.98	Petaluma City Schools
05SBPM02	Retrofit	15	Pittsburg	\$ 238,652.40	Pittsburg Unified School District
05SBPM03	Retrofit	11	San Jose	\$ 173,386.40	San Jose Unified School District
05SBPM04	Retrofit	3	San Mateo	\$ 49,599.00	San Mateo Union High School
05SBPM05	Retrofit	5	Berkeley	\$ 81,984.10	Berkeley Unified School District
05SBPM07	Retrofit	4	Redwood City	\$ 71,910.00	Redwood City School District
05SBPM08	Retrofit	10	Union City	\$ 197,763.00	New Haven Unified School District
05SBPM09	Retrofit	7	Castro Valley	\$ 130,530.42	Castro Valley Unified School District
08SBPM01	Retrofit	14	Novato	\$ 220,685.96	Novato Unified School District
08SBPM02	Retrofit	9	Tomales	\$ 174,852.18	Shoreline Unified School District
08SBPM03	Retrofit	3	San Rafael	\$ 45,256.22	Dixie School District
08SBPM05	Retrofit	8	Petaluma	\$ 159,999.12	Petaluma Joint Union High School District
08SBPM06	Retrofit	8	Fairfield	\$ 152,483.60	Fairfield-Suisun Unified School District
08SBPM07	Retrofit	5	Milpitas	\$ 100,000.00	Milpitas Unified School District
08SBPM08	Retrofit	9	Brentwood	\$ 175,189.41	Liberty Union High School District
08SBPM09	Retrofit	40	Vallejo	\$ 689,710.50	Michaels Transportation
08SBPM10	Retrofit	9	San Lorenzo	\$ 180,000.00	San Lorenzo Unified School District
08SBPM11	Retrofit	8	Antioch	\$ 150,179.12	Antioch Unified School District
08SBPM12	Retrofit	1	Pacifica	\$ 20,000.00	Pacifica School District
08SBPM14	Retrofit	3	Bolinas	\$ 39,343.82	Bolinas/Stinson Union School District
08SBPM15	Retrofit	5	Santa Rosa	\$ 82,508.65	West County Transportation Agency
08SBPM16	Retrofit	8	Berkeley	\$ 160,000.00	Berkeley Unified School District
08SBPM19	Retrofit	1	San Jose	\$ 19,940.06	Campbell Union High School District
08SBPM21	Retrofit	2	Hayward	\$ 40,000.00	Hayward Unified School District

Project Number	Project Category	Number of buses	City	Actual Amount	Grantee Name
08SBPM22	Retrofit	3	Mountain View	\$ 60,000.00	Mountain View Whisman School District
08SBPM23	Retrofit	1	San Jose	\$ 16,777.57	Campbell Union High School District
08SBPM24	Retrofit	66	City of Industry	\$ 1,183,638.00	First Student, Inc.
08SBPM25	Retrofit	17	Gilroy	\$ 336,734.51	Gilroy Unified School District
08SBPM26	Retrofit	7	San Jose	\$ 137,398.95	Moreland School District
08SBPM27	Retrofit	13	Rio Vista	\$ 248,734.28	River Delta Unified School District
08SBPM28	Retrofit	2	Fairfield	\$ 30,791.00	Fairfield-Suisun Unified School District
08SBPM29	Retrofit	7	Windsor	\$ 140,000.00	Windsor Unified School District
08SBPM30	Retrofit	3	Fairfield	\$ 50,350.33	Solano County Office of Education
08SBPM31	Retrofit	7	Santa Rosa	\$ 124,159.91	West County Transportation Agency
08SBPM32	Retrofit	16	San Francisco	\$ 318,039.08	CYO Transportation
08SBPM33	Retrofit	2	Knightsen	\$ 39,810.60	Knightsen Elementary School District
08SBPM34	Retrofit	2	Palo Alto	\$ 35,370.42	Palo Alto Unified School District
08SBPM36	Retrofit	15	Danville	\$ 283,855.81	San Ramon Valley Unified School District
08SBPM38	Retrofit	4	Cupertino	\$ 77,257.99	Cupertino Union School District
08SBPM39	Retrofit	2	San Rafael	\$ 30,474.21	Dixie School District
08SBPM40	Retrofit	10	Santa Clara	\$ 199,987.22	Santa Clara Unified School District
13SBPM01	Retrofit	3	Campbell	\$ 52,446.06	Campbell Union School District
13SBPM02	Retrofit	17	San Jose	\$ 327,398.56	Oak Grove School District
13SBPM03	Retrofit	1	San Bruno	\$ 19,216.04	San Bruno Park School Dist.
13SBPM05	Retrofit	6	Windsor	\$ 119,876.00	Windsor Unified School District
13SBPM06	Retrofit	14	Richmond	\$ 240,000.00	First Student, Inc.
13SBPM06	Retrofit	49	San Francisco	\$ 970,075.78	First Student, Inc.
13SBPM07	Retrofit	4	Goleta	\$ 78,823.04	Student Transportation of America
13SBPM08	Retrofit	5	Half Moon Bay	\$ 94,343.65	Cabrillo Unified School District
13SBPM09	Retrofit	5	Berkeley	\$ 100,000.00	Berkeley Unified School District
13SBPM10	Retrofit	8	Concord	\$ 134,015.34	National Express Corp DBA Durham School Services
13SBPM10	Retrofit	1	San Carlos	\$ 18,206.72	National Express Corp DBA Durham School Services
13SBPM10	Retrofit	6	Campbell	\$ 112,676.44	National Express Corp DBA Durham School Services
13SBPM11	Retrofit	8	Vallejo	\$ 160,000.00	Vallejo City Unified School District
14SBPM01	Retrofit	13	Concord	\$ 258,313.32	Mt. Diablo Unified School District
14SBPM02	Retrofit	2	Concord	\$ 37,033.84	First Student, Inc.
14SBPM02	Retrofit	12	Richmond	\$ 217,938.83	First Student, Inc.
14SBPM02	Retrofit	7	San Jose	\$ 124,129.19	First Student, Inc.
14SBPM02	Retrofit	5	San Mateo	\$ 88,874.35	First Student, Inc.
14SBPM02	Retrofit	13	Santa Rosa	\$ 228,642.54	First Student, Inc.
				\$ 12,087,396.15	

**Figure 1: LESBP funding since 2000
by project type**



**Figure 2: LESBP funding since 2000
by county**

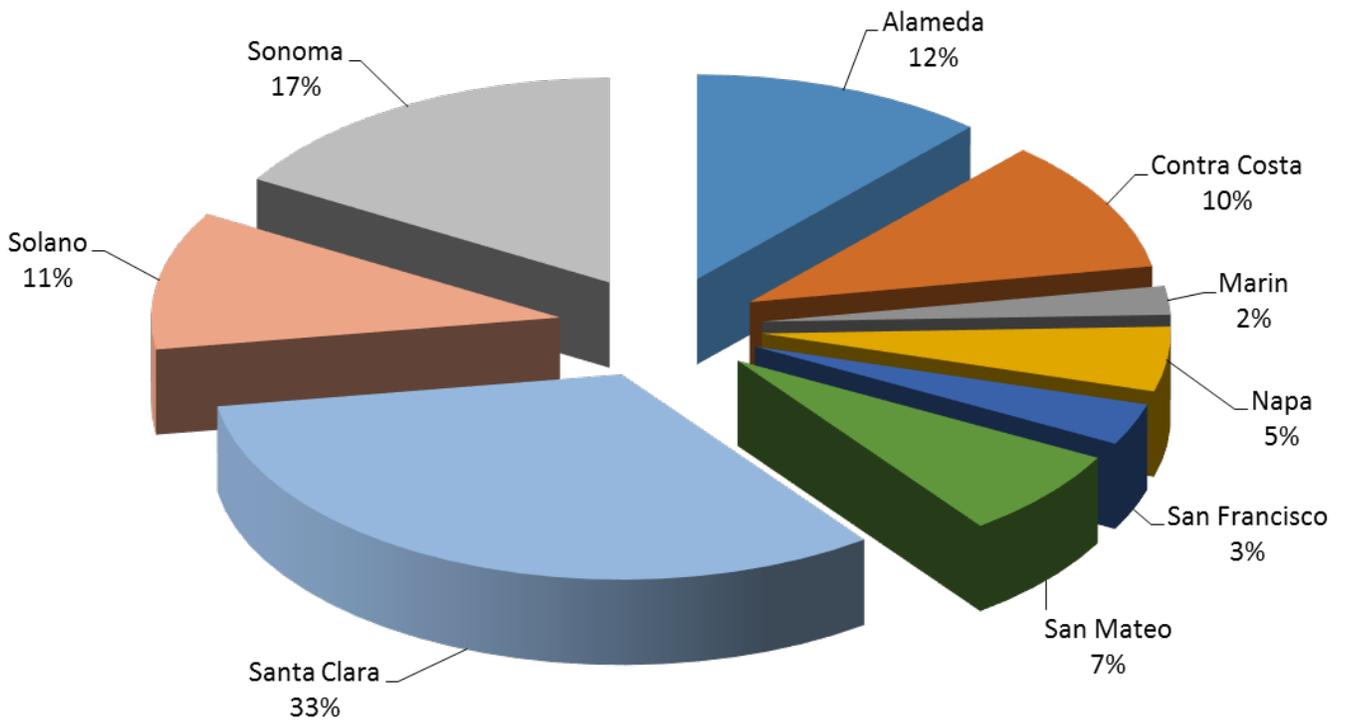
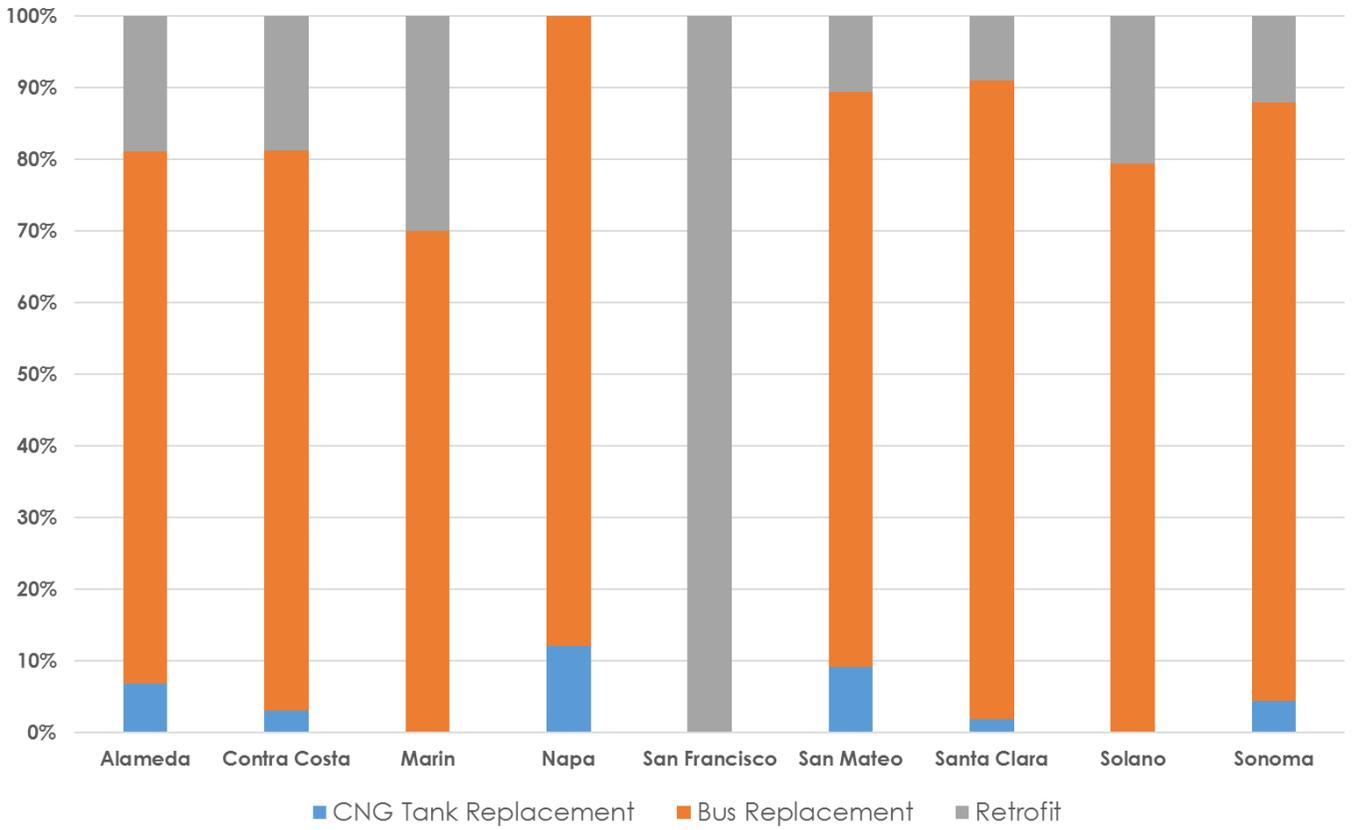


Figure 3: LESBP funding since 2000 by county & project type



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Karen Mitchoff and Members
of the Mobile Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: March 8, 2017

Re: Fiscal Year Ending (FYE) 2018 Transportation Fund for Clean Air (TFCA) Funding
Allocation

RECOMMENDATIONS

Recommend Board of Directors:

1. Allocate \$13.93 million in new Transportation Fund for Clean Air (TFCA) monies 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.

BACKGROUND

With more than 5.5 million on-road motor vehicles in the region, tailpipe emissions account for more than 40% of the criteria air pollutants and about 36% greenhouse gases (GHG) generated in the Bay Area^{1, 2}. For this reason, emission reductions from the on-road transportation sector are essential to attaining State and Federal ambient air quality standards and to meeting the region's GHG reduction commitments.

In 1991, the California State Legislature authorized the Bay Area Air Quality Management District (Air District) to impose a \$4 surcharge on motor vehicles registered within the nine-county Bay Area to fund projects that reduce on-road motor vehicle emissions within the Air District's jurisdiction. The statutory authority for the TFCA and requirements of the program are set forth in California Health and Safety Code Sections 44241 and 44242. Each year, the Air District's Board of Directors (Board) allocates funding and adopts cost-effectiveness criteria that govern expenditure of TFCA funding.

¹ BAAQMD, [Bay Area Emissions Inventory Summary Report: Criteria Air Pollutants Base Year 2011](#), May 2014.

² BAAQMD, [Bay Area Emissions Inventory Summary Report: Greenhouse Gases Base Year 2011](#), January 2015.

Sixty percent of TFCA funds are awarded directly by the Air District to eligible projects and programs implemented directly by the Air District (e.g., Spare the Air, Vehicle Buy Back Program) and to a program referred to as the TFCA Regional Fund. For the past five years, TFCA funds have been primarily focused on eligible project categories that significantly reduce criteria pollutants as well as GHGs, including trip reduction projects (e.g., bicycle parking and shuttles) and alternative fuel vehicle-based projects (e.g., electric vehicles).

Achieving federal and state clean air standards will require a significant shift towards cleaner technology alternatives by both the mobile and stationary source sectors. For this reason, the Air District has created a new Technology Implementation Office, to serve as a catalyst for innovation in the field of GHG emissions reduction by deploying disruptive, low-cost solutions in the areas of zero emissions vehicles; smart/connected technologies; and zero emissions energy generation and efficiency technologies.

DISCUSSION

In developing this recommendation, staff evaluated which incentive programs have been the most successful in helping the region to achieve its emissions reductions targets. Staff analyzed alternative scenarios and determined that a portfolio approach consisting of multiple emissions reduction strategies would be the most effective and most consistent with prior Board direction.

To this end, staff is recommending that \$13.93 million in new TFCA monies (as shown in column A) and \$15.31 million in carryover funds (as shown in column B) be allocated to the programs listed below in Table 1. Carryover is an estimate of remaining TFCA funds from prior-year projects that were recently completed under budget or canceled.

Table 1 - Proposed Programs and TFCA Funding for FYE 2018 (in Millions)

Program Categories	(A) New TFCA Monies	(B) Carryover	(C) Total Funds Available in FYE 2018
Trip Reduction	\$4.00	\$2.00	\$6.00
Bicycle Facilities	\$0.00	\$2.00	\$2.00
Clean Air Vehicles	\$5.22	\$9.44	\$14.66
Spare the Air	\$1.50	\$0.59	\$2.09
Enhanced Mobile Source & Commuter Benefits Enforcement	\$1.50	\$0.78	\$2.28
Vehicle Buy Back	\$0.15	\$0.50	\$0.65
Admin	\$1.56	\$0.00	\$1.56
Total Available Funding:	\$13.93	\$15.31	\$29.24

A narrative description of the recommend programs (listed in Table 1) is provided below:

- ***Trip Reduction***

Eliminating motor vehicle trips is a key strategy to reducing mobile source emissions. For more than 20 years, TFCA has funded shuttle/feeder bus and regional ridesharing services to help reduce emissions from single-occupancy vehicles. However, as the Bay Area's average

auto fleet becomes cleaner, the mobile source emissions reduction benefits from trips eliminated are diminished. Staff has been working to improve the methodology used for evaluating projects' cost-effectiveness to ensure that all of the air quality benefits are properly captured to address this challenge. For FYE2017, approximately \$3.27 million in TFCA funding has been awarded to six shuttle service projects, including the two pilot projects that staff is using to investigate the efficacy of supporting these types of projects through the Air District's Spare the Air program. An additional \$1.01million has been awarded to two rideshare programs.

For FYE 2018, staff is recommending that \$6 million in TFCA funds be allocated to the Trip Reduction category which would be used to provide funding for both eligible existing shuttle/feeder bus and regional ridesharing services, and eligible pilot trip reduction projects. This amount reflects \$4.00 million in new TFCA FYE 2018 funds, and approximately \$2 million in carryover funds from prior years.

- ***Bicycle Facilities***

Bicycling is one of the primary alternative transportation modes for short-distance trips. The Air District has funded bicycle facility improvement projects through the Regional Fund and Air District-sponsored programs for more than 25 years. During this time, the Air District has provided funding for the installation of more than 13,000 new bicycle parking spots (via racks and lockers) as well as the installation of more than 200 miles of new bikeways and bike paths. The Air District is currently preparing a solicitation for new bikeways that would provide up to \$5 million in TFCA funds, and is scheduled to open later in FYE 2017. Funding for this project category was last offered by the Air District in FYE 2010, and it is anticipated that there will be significant demand for this type of funding.

For FYE 2018, staff is recommending that \$2 million in TFCA carryover funds be allocated to the Bicycle Facilities category to supplement the current-year allocation of \$5 million for bikeway projects. If this upcoming solicitation is not oversubscribed, any remaining Bicycle Facility funds from FYE 2017 & 2018 cycles would be allocated to bicycle parking-projects.

- ***Clean Air Vehicles***

The Air District views plug-in electric vehicles (PEVs) as a promising technology for reducing tailpipe emissions, thus helping the region achieve local, state, and federal criteria pollutant and GHG emission reduction targets.

The Air District has established PEV adoption goals of 110,000 PEVs on Bay Area roads by 2020, and 247,000 by 2025. To reach these goals, the Air District developed the Bay Area Plug-in Electric Vehicle Readiness Plan (www.baaqmd.gov/EVready) in partnership with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG). The Plan outlines a series of strategies and best practices that can be taken by regional agencies and others to remove potential barriers and accelerate deployment of PEVs. The Plan also identifies the amount of publicly available charging infrastructure that will be needed to support the PEV targets and opportunities for the Air District to focus

grant funds to meet the PEV adoption targets.

Since 2010, the Air District has awarded nearly \$16 million in TFCA monies to help spur the deployment of PEVs in the region. This funding has helped to deploy more than 1,800 electric cars, trucks, and buses, and nearly 1,100 public available Level 2 and DC fast electric vehicle charging ports, *which represents approximately 24% of the total publicly available electric vehicle chargers in the region.*

As of December 2016, there were more than 91,000 model year 2010 or newer PEVs registered to Bay Area drivers. While this represents nearly 38% of the PEVs registered in California, it is still only 1.5% of the Bay Area's total on-road motor vehicle fleet. The Air District recently opened the third cycle of Charge!, a program that provides incentive funding for the deployment of new electric vehicle charging stations. The Air District is also preparing a solicitation that would provide funding for project sponsors who purchase new electric vehicles, that is scheduled to open later this fiscal year.

For FYE 2018, staff is recommending that \$14.66 million in TFCA funds be allocated to the Clean Air Vehicle category to support the implementation of the PEV Readiness Plan. This amount reflects \$5.22 million in new TFCA monies, and approximately \$9.44 million in carryover funds from prior years. In addition, any funding left over from this current year's FYE 2017 Clean Air Vehicle programs (\$12.50 million), will also be allocated to the FYE 2018 Clean Air Vehicle programs. These programs will be administered by the new Technology Implementation Office.

Staff proposes to use the allocation to provide incentives to support the programs listed below:

- ***PEV Charging Stations:*** Funding will be used to support deployment of publicly available PEV chargers throughout the region. The FYE 2017 Charge! Program recently opened and this program is anticipated to award more than \$5 million in TFCA funding for the purchase and installation of charging stations throughout the region. In FYE 2016, the air district awarded more than \$5 million, including funds from TFCA, Reformulated Gasoline Settlement Fund, and the California Energy Commissions, to sponsors who will deploy 938 public electric vehicle charges (889 level 2 and 49 DC fast) in the region.
- ***PEVs (for Public Agencies):*** Funding will be used to provide incentives to public agencies that purchase or lease new clean air vehicles and operate them in the Air District's jurisdiction. The Air District began offering this streamlined rebate program in 2014, and has to date awarded funding for over 100 vehicles to public agencies.
- ***Zero-emissions Light-Duty Fleets and Heavy-Duty Vehicles (open to all entities):*** Funding will be used to provide incentives to public and private operators for the lease or purchase of three or more light-duty clean air vehicles or one or more heavy-duty trucks and buses that will be operated in the Air District's jurisdiction. The Air District is currently developing a solicitation, which is scheduled to open this fiscal year, that would provide funding for the purchase of zero emission trucks and buses. In FYE 2016, the Air District

awarded more than \$6.4 million in funding to nine project sponsors who will be purchasing 24 trucks and 50 transit buses, and 150 shared autonomous vehicles.

- **PEV Outreach:** Funding from prior years will be used for conducting outreach and training described in the PEV Plan for local government agencies and the public.

Other Air District Sponsored Programs:

- ***Spare the Air:*** The "Spare the Air" program continues to be the Air District's flagship public outreach tool for the summer ozone season. Staff is recommending \$2.09 in TFCA funds, consisting of \$1.50 million in new TFCA monies and \$590,000 in carryover funds from prior years for this outreach program that conducts advertising, media and educational activities to reduce vehicle miles traveled (VMT) and emissions by behavior modification.
- ***Enhanced Mobile Source & Commuter Benefits Program Enforcement:*** Funding under this program helps to enhance Air District patrols for smoking vehicles and offsets the cost of drayage truck regulation enforcement at the Port of Oakland. Additionally, this funding will be used to support Air District staff's enforcement activities associated with the new Commuter Benefits Program including providing compliance assistance and conducting outreach to companies and government agencies. For FYE 2018, staff is recommending \$2.28 in TFCA funds, consisting of \$1.50 million in new TFCA monies and \$780,000 in carryover funds from prior years for these enforcement related programs.
- ***Vehicle Buy Back:*** The Vehicle Buy Back program is a voluntary grant program that pays \$1,000 for an operating and registered model year 1994 or older vehicle. Vehicles meeting the Vehicle Status Requirements are eligible and those accepted into the program are scrapped. This program is primarily funded through the Carl Moyer and MSIF programs, which provides approximately \$7 million annually. For FYE 2018, staff is recommending a \$150,000 allocation in new TFCA monies for this program to support administrative and marketing efforts undertaken by the Air District contractors and \$500,000 in carryover funds from prior years for expansion of the program that would pilot a voluntary buy-back program for motorcycles and on-road trucks from small fleets.

TFCA Cost-Effectiveness

Cost-effectiveness (C/E) is based on the ratio of TFCA funds awarded divided by the sum of surplus emissions reduced of reactive organic gases (ROG), nitrogen oxides (NO_x), and weighted particulate matter (PM₁₀) over a project's useful life. The California Air Resources Board recently released updated emission factors for auto trips. Staff has been reviewing these updates and will be bringing revised recommendations for policies and cost-effectiveness criteria governing programs and projects that are administered through the Regional Fund to the Mobile Source Committee, which is tentatively scheduled for May 2017, and the Board for consideration.

For the programs and projects that will be sponsored directly by the Air District in FYE 2018, staff recommends maintaining the same C/E limits that were approved by the Board in FYE 2017. One change is proposed to the Project-Useful-Life (PUL) of the Air District's Vehicle Buy-Back

program since that program is proposed to accept new vehicle types. The proposed cost-effectiveness limits and PUL for each of the Air District sponsored programs is shown in Table 2:

Table 2 – Proposed cost-effectiveness and PUL 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	No Change
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 & Commuter Benefits Enforcement	\$90,000	1	No Change
Vehicle Buy Back	\$90,000	3	Changed PUL from 1 to 3 years, to account for changes in the program to accept trucks and motorcycles

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

Administration

Per Board of Directors direction on July 20, 2016, it is proposed that the Executive Officer/APCO continue to approve Grant Agreements with individual grant award amounts up to \$100,000. TFCA projects with grant award amounts over \$100,000 will continue to be brought to the Committee for consideration at least on a quarterly basis.

BUDGET CONSIDERATION / FINANCIAL IMPACT

None. The Air District distributes “pass-through” funds to grantees on a reimbursement basis. Administrative costs for the TFCA Regional Fund program are provided by the funding source.

Respectfully submitted,

Jack P. Broadbent
Executive Director/APCO

Prepared by: Chengfeng Wang
Reviewed by: Karen Schkolnick

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Karen Mitchoff and Members
of the Mobile Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: March 8, 2017

Re: Update on Efforts to Further Reduce Emissions at the Port of Oakland and Former
Oakland Army Base

RECOMMENDATIONS

None; receive and file.

BACKGROUND

The Port of Oakland (Port) is the fifth largest container port in the United States and the second largest in the State of California behind the combined ports of Los Angeles and Long Beach. Established in 1927, the Port is home to 18 ship berths, 36 container cranes, two rail yards, approximately 500 pieces of cargo handling equipment and approximately 2,500 trucks. In 2016, the Port moved 2.37 million 20-foot equivalent units (TEU) in to and out of the Bay Area. This flow of containers is associated with over \$600 billion in goods that are linked to approximately 32% of the jobs in the Bay Area.

The Port and former Oakland Army Base redevelopment project (OAB) border the West Oakland and in 2008, the California Air Resources Board (ARB) in partnership with the Bay Area Air Quality Management District (Air District) conducted a health risk assessment (HRA) to determine what emission sources were contributing to poor air quality in that community. That HRA indicated that the health risk from toxic air pollution (primarily diesel particulate matter, or DPM) in West Oakland was three times higher than any other community in the Bay Area. Based on the results of the HRA, the Air District Board of Director's instructed staff to utilize all available options at its disposal to reduce this health risk. The Air District in partnership with ARB, the United States Environmental Protection Agency, the Port, industry, and local community instituted policies and actions which:

- Devised the Marine Air Quality Improvement Plan which targets an 85% reduction in DPM emissions by 2020;
- Instituted and enforced regulations on drayage trucks, harbor craft, off-road equipment, oceangoing vessels and cargo handling equipment;
- Instituted and enforced a noncompliant truck ban under the Port's authority;
- Performed real-time monitoring of emissions in the West Oakland community;
- Invested \$33 million in grant funding to initially retrofit 1,319 trucks and to subsequently replace an additional 627 trucks;

- Invested \$24.5 million to install shore side power at 15 berths at the Port.

These efforts, in combination with implementation of ARB regulations requiring emissions reductions from cargo handling equipment, drayage trucks, refrigerated transportation units, oceangoing vessels, harbor craft and ships at berth, have significantly reduced DPM emissions from marine operations (by possibly as much as 76% according to latest inventory produced by the Port). Additionally, ARB regulations have led to significant emissions reductions from on-road truck traffic using the highways surrounding the West Oakland community.

While this is good news, the science around the health risk posed by DPM has changed significantly since 2008. Recent changes to the guidelines governing the assessment of health risk, developed by the California Office of Environmental Health Hazard Assessment (OEHHA), have increased the health risk from DPM by a factor of approximately 3 to 4 times of those originally used in the 2008 HRA. This means that while DPM emissions have been reduced significantly, remaining emissions have a greater impact on the community's health than previously believed.

DISCUSSION

Recognizing that there is an increased health risk from DPM and that the Air District's Community Air Risk Evaluation (CARE) current regional risk projections show that West Oakland remains the most highly impacted community in the Bay Area relative to exposure to toxic air contaminants, Air District staff initiated an inquiry during summer 2016 to assess how emissions might be further reduced from Port maritime operations.

This effort includes updating the equipment inventories for the Port, trying to understand what may be developed at OAB, reviewing the planning frameworks at the local, state and federal levels to determine how an equipment replacement project integrates with those plans, examining how the authorities of the various regulatory agencies (Port, City of Oakland, ARB, etc.) might be used to reduce emissions, looking at initiatives at other California ports and conducting a comprehensive evaluation of feasible technologies that can be employed to get further emissions reductions. The Air District has also met with representatives from the City of Oakland, Port, ARB, Metropolitan Transportation Commission, Alameda County Transportation Commission, industry, and other stakeholders for their input into this process and to gather information needed to complete its assessment.

While the Air District is completing the efforts described above, the former OAB is being redeveloped. This may lead to increased cargo volumes at the Port and potentially introduce new sources of and more emissions in this area. This new activity triggers California Environmental Quality Act (CEQA) mitigation requirements for the developer, City of Oakland and Port. It is important that these requirements be effectively implemented to adequately address the possible impacts that additional DPM from this project may have on the West Oakland community. As part of this report staff will update the Committee on its efforts to ensure DPM reductions from the current development at the OAB.

BUDGET CONSIDERATION / FINANCIAL IMPACT

None.

Respectfully submitted,

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