



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

BOARD OF DIRECTORS  
MOBILE SOURCE COMMITTEE

COMMITTEE MEMBERS

SCOTT HAGGERTY – CHAIR  
MARGARET ABE-KOGA  
CAROLE GROOM  
NATE MILEY  
JIM SPERING

DAVID CANEPA – VICE CHAIR  
PAULINE RUSSO CUTTER  
TYRONE JUE  
KAREN MITCHOFF

THURSDAY  
FEBRUARY 22, 2018  
9:30 A.M.

1<sup>ST</sup> 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 up 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. Closed captioning may contain errors and omissions, and are not certified for their content or form.*

**Staff/Phone (415) 749-**

3. **APPROVAL OF THE MINUTES OF JANUARY 25, 2018**

**Clerk of the Boards/5073**

*The Committee will consider approving the attached draft minutes of the Mobile Source Committee meeting of January 25, 2018.*

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

K. Schkolnick/5070

[kschkolnick@baaqmd.gov](mailto:kschkolnick@baaqmd.gov)

*The Committee will consider recommending Board of Directors approval of Carl Moyer Program (CMP) 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. **UPDATE ON THE AIR DISTRICT'S LIGHT-DUTY ELECTRIC VEHICLE PROGRAM**

K. Schkolnick/5070

[kschkolnick@baaqmd.gov](mailto:kschkolnick@baaqmd.gov)

*Staff will provide an overview of the light-duty electric vehicle (EV) market, a summary of the results of the District's past light-duty EV initiatives, and the Air District's next steps to further support the accelerated adoption of light-duty EVs.*

6. **AIR DISTRICT GRANT PROGRAMS OVERVIEW**

K. Schkolnick/5070

[kschkolnick@baaqmd.gov](mailto:kschkolnick@baaqmd.gov)

*The Committee will receive an informational report on grant funds allocated by the Air District in calendar year 2017, funds awarded over the past five years, and projected funding availability for grant programs in calendar year 2018.*

7. **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)*

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

*Thursday, March 22, 2018, Bay Area Air Quality Management District Office, 375 Beale Street, San Francisco, California 94105 at 9:30 a.m.*

9. **ADJOURNMENT**

*The Committee meeting shall be adjourned by the Committee Chair.*

**CONTACT:**

**ACTING MANAGER, EXECUTIVE OPERATIONS**  
**375 BEALE STREET, SAN FRANCISCO, CA 94105**  
**vjohnson@baaqmd.gov**

**(415) 749-4941**  
**FAX: (415) 928-8560**  
**BAAQMD homepage:**  
**[www.baaqmd.gov](http://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](http://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](mailto: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**

**FEBRUARY 2018**

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
<b>Board of Directors Executive Committee</b> <i>(Meets on the 3<sup>rd</sup> Monday of each Month)</i> - CANCELLED AND RESCHEDULED TO WEDNESDAY, FEBRUARY 7, 2018 AT 10:30 A.M.	Thursday	8	9:30 a.m.	1 <sup>st</sup> Floor Board Room
<b>Board of Directors Executive Committee</b> <i>(Meets on the 3<sup>rd</sup> Monday of each Month)</i> - CANCELLED AND RESCHEDULED TO FEBRUARY 8, 2018	Monday	19	9:30 a.m.	1 <sup>st</sup> Floor Board Room
<b>Board of Directors Stationary Source Committee</b> <i>(Meets on the 3<sup>rd</sup> Monday of every Other Month)</i> - CANCELLED	Monday	19	10:30 a.m.	1 <sup>st</sup> Floor Board Room
<b>Board of Directors Regular Mtg.</b> <i>(Meets on the 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	21	9:45 a.m.	1 <sup>st</sup> Floor Board Room
<b>Board of Directors Mobile Source Committee</b> <i>(Meets on the 4<sup>th</sup> Thursday of each Month)</i>	Thursday	22	9:30 a.m.	1 <sup>st</sup> Floor Board Room
<b>Board of Directors Legislative Committee</b> <i>(At the Call of the Chair)</i>	Thursday	22	10:30 a.m.	1 <sup>st</sup> Floor Board Room
<b>Board of Directors Budget &amp; Finance Committee</b> <i>(Meets on the 4<sup>th</sup> Wednesday of each Month)</i>	Wednesday	28	9:30 a.m.	1st Floor, Yerba Buena Room #109

**MARCH 2018**

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
<b>Board of Directors Regular Meeting</b> <i>(Meets on the 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	7	9:45 a.m.	1 <sup>st</sup> Floor Board Room
<b>Board of Directors Climate Protection Committee</b> <i>(Meets on the 3<sup>rd</sup> Thursday of every other Month)</i>	Thursday	15	9:30 a.m.	1 <sup>st</sup> Floor Board Room
<b>Board of Directors Executive Committee</b> <i>(Meets on the 3<sup>rd</sup> Monday of each Month)</i> - CANCELLED	Monday	19	9:30 a.m.	1 <sup>st</sup> Floor Board Room
<b>Board of Directors Stationary Source Committee</b> <i>(Meets on the 3<sup>rd</sup> Monday of every other Month)</i>	Monday	19	9:30 a.m.	1 <sup>st</sup> Floor Board Room
<b>Board of Directors Regular Mtg.</b> <i>(Meets on the 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	21	9:45 a.m.	1 <sup>st</sup> Floor Board Room

## MARCH 2018

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
<b>Board of Directors Mobile Source Committee</b> <i>(Meets on the 4<sup>th</sup> Thursday of each Month)</i>	Thursday	22	9:30 a.m.	1 <sup>st</sup> Floor Board Room
<b>Board of Directors Legislative Committee</b> <i>(At the Call of the Chair)</i>	Thursday	22	10:30 a.m.	1 <sup>st</sup> Floor Board Room
<b>Board of Directors Executive Committee &amp; Advisory Council Joint Mtg.</b> <i>(EC Meets on the 3<sup>rd</sup> Monday of each Month) and (AC Meets At the Call of the Chair)</i>	Monday	26	9:30 a.m.	1 <sup>st</sup> Floor Board Room
<b>Board of Directors Budget &amp; Finance Committee</b> <i>(Meets on the 4<sup>th</sup> Wednesday of each Month)</i>	Wednesday	28	9:30 a.m.	1st Floor, Yerba Buena Room #109

## APRIL 2018

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
<b>Board of Directors Regular Meeting</b> <i>(Meets on the 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	4	9:45 a.m.	1 <sup>st</sup> Floor Board Room
<b>Board of Directors Executive Committee</b> <i>(Meets on the 3<sup>rd</sup> Monday of each Month)</i>	Monday	16	9:30 a.m.	1 <sup>st</sup> Floor Board Room
<b>Board of Directors Regular Mtg.</b> <i>(Meets on the 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i>	Wednesday	18	9:45 a.m.	1 <sup>st</sup> Floor Board Room
<b>Board of Directors Budget &amp; Finance Committee</b> <i>(Meets on the 4<sup>th</sup> Wednesday of each Month)</i>	Wednesday	25	9:30 a.m.	1st Floor, Yerba Buena Room #109
<b>Board of Directors Mobile Source Committee</b> <i>(Meets on the 4<sup>th</sup> Thursday of each Month)</i>	Thursday	26	9:30 a.m.	1 <sup>st</sup> Floor Board Room

HL – 2/9/18 – 11:05 a.m.

G/Board/Executive Office/Moncal

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT**

Memorandum

To: Chairperson Scott Haggerty and Members  
of the Mobile Source Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: February 8, 2018

Re: Approval of the Minutes of January 25, 2018

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RECOMMENDED ACTION

Approve the attached draft minutes of the Mobile Source Committee (Committee) Meeting of January 25, 2018.

DISCUSSION

Attached for your review and approval are the draft minutes of the Mobile Source Committee Meeting of January 25, 2018.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Marcy Hiratzka  
Reviewed by: Vanessa Johnson

Attachment 3A: Draft Minutes of the Mobile Source Committee Meeting of January 25, 2018

## AGENDA 3A – ATTACHMENT

Draft Minutes – Mobile Source Committee Meeting of January 25, 2018

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, January 25, 2018

#### **1. CALL TO ORDER – ROLL CALL**

Mobile Source Committee (Committee) Chairperson, Karen Mitchoff, called the meeting to order at 9:32 a.m.

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

Absent: Directors Carole Groom and Nate Miley.

Also Present: None.

#### **2. PUBLIC COMMENT ON NON-AGENDA MATTERS**

Public comments were given by Jan Warren, Interfaith Climate Action Network of Contra Costa County.

#### **3. APPROVAL OF THE MINUTES OF DECEMBER 7, 2017**

##### Public Comments:

No requests received.

##### Committee Comments:

None.

##### Committee Action:

Director Canepa made a motion, seconded by Director Hudson, to approve the Minutes of December 7, 2017; and the motion carried by the following vote of the Committee:

AYES: Canepa, Haggerty, Hudson, Jue, Kaplan, Kim, and Mitchoff.

NOES: None.  
ABSTAIN: None.  
ABSENT: Groom, and Miley.

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

Karen Schkolnick, Strategic Incentives Division Director, introduced Yu Zhang Liu, Staff Specialist, who gave the staff presentation *Projects with Proposed Awards Over \$100,000*, including: overview; Carl Moyer Program (CMP), Mobile Source Incentive Fund (MSIF), and Transportation Fund for Clean Air (TFCA); CMP Year 19; CMP and MSIF funds awarded as of January 4, 2018 and since 2009; TFCA funds awarded by project category and county; and recommendations.

##### Public Comments:

No requests received.

##### Committee Comments:

The Committee and staff discussed the equipment functions of funded projects; the request for a chart that shows levels of Particulate Matter (PM)<sub>2.5</sub> and toxic air contaminants (TAC) broken down by county; the request that District staff work with the Metropolitan Transportation Commission to create a map of existing quick-charging electric vehicles (EV) stations along interstates, and then reach out to the areas that lack such infrastructure (and Chambers of Commerce) and explain to them the economic benefits of adding such infrastructure; problems that EV end-users experience with the vehicles themselves and with charging infrastructure. and how to effectively convey that feedback to the appropriate parties and stakeholders; the concern that Alameda County needs more quick-charging EV charging stations, and the Lowes store in Livermore as a potential EV charging site; the request that any apps, webpages, or social media posts about EV charging stations generated by the District be sent to the Board members; the suggestion that staff reaches out to local jurisdictions' Housing Authorities to let them know about District EV charging station grant opportunities; the rapid improvements to EV battery capacity and charging technology, and whether existing infrastructure can support the newer vehicles; the request that staff brings back to the Committee a presentation on current EV technology, how it is anticipated to evolve, and challenges that have been established; and the request for a list of the types of zero-emissions chargers that need to be deployed in the Bay Area.

##### Committee Action:

Vice Chair Haggerty made a motion, seconded by Director Kaplan, to approve of CMP projects requesting grant funding in excess of \$100,000, and authorize the Executive Officer/Air Pollution Control Officer (APCO) to execute grant agreements for the recommended projects; and the motion carried by the following vote of the Committee:

AYES: Canepa, Haggerty, Hudson, Jue, Kaplan, Kim, and Mitchoff.

NOES: None.  
ABSTAIN: None.  
ABSENT: Groom, and Miley.

**5. PARTICIPATION IN YEAR 20 OF THE CARL MOYER PROGRAM AND APPROVAL OF THE 2018 CALTRAIN FUNDING PLAN**

Ms. Schkolnick introduced Anthony Fournier, Air Quality Program Manager, who gave the staff presentation *Participation in Year 20 of the Carl Moyer Program and 2018 Caltrain Funding Plan*, including: overview; funding sources; CMP Year 20 Funding; 2018 Caltrain funding plan; and recommendations.

Public Comments:

No requests received.

Committee Comments:

The Committee and staff discussed the current status of the Caltrain electrification project, after its temporary postponement in February 2017.

Committee Action:

Vice Chair Haggerty made a motion, seconded by Director Kaplan, to approve a resolution authorizing the Air District’s participation in Year 20 of the Carl Moyer Program and allocation of required match funding, and the 2018 funding plan for the Caltrain Project; and the motion carried by the following vote of the Committee:

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

**6. OVERVIEW OF AIR DISTRICT TRIP REDUCTION PROGRAMS**

Ms. Schkolnick introduced Chengfeng Wang, Acting Program Manager, who gave the staff presentation *Overview of Air District Trip Reduction Programs*, including: overview; background; results of strategies to reduce emissions from passenger vehicles from 2008-2017; air quality benefits decline over time; passenger vehicle emissions relative to urban bus emissions from 2000 - 2020; cost-effectiveness limits; and challenges, opportunities, and options.

Public Comments:

No requests received.

Committee Comments:

The Committee and staff discussed the risk of basing emission levels from passenger vehicles on estimated car fleets, and not on the actual number of vehicles in a given area (as staff begins to implement AB 617), as low-income areas may not have an average car fleet, and people may incorrectly assume that vehicles are cleaner than they really are in low income areas, when in fact, those areas may have disproportionate shares of polluting vehicles; the cost- effectiveness cutoff on bike programs and shuttle projects; the request for staff to to promote anti-idling and trip-reduction programs at schools, to protect the susceptible health of children; the request for information on any driving directions apps that may exist, geared toward carpools; the need for the District to address the problem of first/last mile connections, as people continue to drive full round-trips, because they do not have a way to get to their destinations from public transit; the concern that the District will be phasing out the funding of shuttle projects, and the inefficiency of fixed route service programs; the need for a “Cash for Clunkers” program for trucks; effective ways to ensure that people are making their last mile connections; a request for a status update on what the District is planning for the next five years regarding shared autonomous vehicles and related apps for the public; the request for the District’s criteria for identifying shuttle routes, to ensure that whole trips are considered for cost-effectiveness of a shuttle, versus just the last mile of a trip; and the request for a staff presentation that shows how shuttle projects have performed, including trip-data, and project results.

Committee Action:

None; receive and file.

**7. COMMITTEE MEMBER COMMENTS**

Director Hudson expressed his desire to see the District’s Technology Implementation Office identify refueling station locations along Bay Area interstates. He also encouraged the District to reach out to the Contra Costa Transportation Authority, the GoMentum Station Connected Vehicle/Autonomous Vehicles Program in Concord and EV manufacturers to give them feedback regarding issues that end-users experience.

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

Thursday, February 22, 2018, Bay Area Air Quality Management District office, 375 Beale Street, 1<sup>st</sup> floor Board Room, San Francisco, CA 94105, at 9:30 a.m.

**9. ADJOURNMENT**

The meeting adjourned at 10:58 a.m.

Marcy Hiratzka  
Clerk of the Boards

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT**

## Memorandum

To: Chairperson Scott Haggerty and Members  
of the Mobile Source Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: February 9, 2018

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

**RECOMMENDED ACTION**

Recommend Board of Directors:

1. Approve Carl Moyer Program 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 1, 2017, the Board of Directors (Board) authorized Air District participation in Year 19 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 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 Health and Safety Code (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 Air District's Board allocates funding and adopts policies and evaluation criteria that govern the expenditure of TFCA funding.

On April 19, 2017, the Board allocated \$29.24 million in TFCA funding for eligible projects in Fiscal Year Ending (FYE) 2018, authorized cost-effectiveness limits for Air District-sponsored FYE 2018 programs, and authorized the Executive Officer/APCO to execute Grant Agreements and amendments for TFCA-revenue funded projects with individual grant award amounts up to \$100,000. On August 2, 2017, the Board adopted policies and evaluation criteria for the FYE 2018 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 grant applications based upon the respective governing policies and guidelines established by the ARB and the Board. During this review period, there were no eligible TFCA projects over \$100,000 recommended for approval.

## DISCUSSION

### **Carl Moyer Program:**

The Air District started accepting project applications for the CMP Year 19 funding cycle on October 12, 2017. The Air District had more than \$16 million available for CMP school bus projects from a combination of MSIF and CMP funds for the Year 19 cycle. Project applications are accepted and evaluated on a first-come, first-served basis.

As of February 1, 2018, the Air District had received 111 project applications for the CMP Year 19 cycle. Of the applications that have been evaluated between January 4, 2018 and February 1, 2018, two eligible projects have proposed individual grant awards over \$100,000. These projects will replace three school buses, and reduce over 0.3 tons of NOx, ROG and PM per year. Staff recommends the allocation of \$495,000 for these projects from a combination of CMP funds and MSIF revenues. Attachment 1, Table 1, provides additional information on these projects.

Attachment 2, lists all of the eligible Year 19 projects that have been received by the Air District as of February 1, 2018, and summarizes the allocation of funding by equipment category, and county. Approximately 84% 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 and MSIF funding since 2009 (more than \$147 million awarded to 830 projects).

### **Transportation Fund for Clean Air Program:**

The Air District started accepting project applications for the TFCA on July 1, 2017. As of February 1, 2018, the Air District has received 65 project applications for TFCA funding. Of the

applications that were evaluated between November 17, 2017 and February 1, 2018, there were no eligible projects that proposed an individual grant award over \$100,000.

Attachment 4, lists the 46 eligible TFCA projects that were evaluated between July 1, 2017 and February 1, 2018. In total, these projects represent approximately \$7.67 million in funds awarded, and will annually reduce approximately 31.49 tons of NOx, ROG, and PM and 19,454 tons of tailpipe greenhouse gas emissions. Approximately 26% of the TFCA funding awarded to date will directly reduce emissions in highly impacted Bay Area communities.

Attachment 5, summarizes the allocation of TFCA funding for the 46 eligible projects that have been evaluated since July 1, 2017, by project category (Figure 1), and county (Figure 2).

### BUDGET CONSIDERATION / FINANCIAL IMPACT

None. Through the CMP, MSIF and TFCA, 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 Officer/APCO

Prepared by: Anthony Fournier and Chengfeng Wang

Reviewed by: Karen Schkolnick

- Attachment 1: Summary of Carl Moyer Program/Mobile Source Incentive Fund projects with grant awards greater than \$100k (Evaluated between 1/14/18 and 2/1/18)
- Attachment 2: Summary of all Year 19 CMP and MSIF approved and eligible projects (between 10/12/17 and 2/1/18)
- Attachment 3: Summary of program distribution by county and equipment category for CMP and MSIF funding since 2009.
- Attachment 4: Summary of all TFCA approved and eligible projects (evaluated between 7/1/17-2/1/18)
- Attachment 5: Summary of TFCA funds distributed by county and project category (between 7/1/17-2/1/18)

## AGENDA 4 - ATTACHMENT 1

**Table 1** - Summary of Carl Moyer Program/ Mobile Source Incentive Fund projects with grant awards greater than \$100k (Evaluated between 1/4/18 and 2/1/18)

Project #	Applicant name	Equipment category	Project description	Proposed contract award	Total project cost	Emission Reductions (Tons per year)			County
						NOx	ROG	PM	
19SBP8	San Mateo Union High School District	School bus	Replacement of two diesel school buses	\$ 330,000.00	\$ 339,226.00	0.195	0.017	0.000	San Mateo
19SBP86	San Lorenzo Unified School District	School bus	Replacement of one diesel school bus	\$ 165,000.00	\$ 168,483.28	0.082	0.007	0.000	Alameda
<b>2 Projects</b>				<b>\$ 495,000.00</b>		<b>0.277</b>	<b>0.024</b>	<b>0.000</b>	

## AGENDA 4 - ATTACHMENT 2

*Summary of all Yr 19 CMP and MSIF approved/ eligible projects (between 10/12/17 and 2/1/18)*

Project #	Equipment category	Project type	# of engines	Proposed contract award	Applicant name	Emission Reductions (Tons per year)			Board approval date	County
						NOx	ROG	PM		
19MOY13	Ag/ off-road	Equipment replacement	1	\$ 51,224.00	Michael Viratos (Viratos Vineyards)	0.102	0.016	0.011	APCO	Solano
19MOY21	On-road	Equipment replacement	1	\$ 40,000.00	Allied Materials, Inc	0.751	0.109	0.008	APCO	Solano
19MOY16	Ag/ off-road	Equipment replacement	1	\$ 144,055.00	Achadinha Cheese, Inc.	1.189	0.114	0.062	12/20/2017	Sonoma
19MOY38	Locomotive	Equipment replacement	1	\$ 1,080,500.00	Oakland Global Rail Enterprise	1.801	0.108	0.042	12/20/2017	Alameda
19MOY20	Ag/ off-road	Equipment replacement	1	\$ 43,800.00	Bains Farms LLC	0.353	0.054	0.031	APCO	Solano
19MOY25	Ag/ off-road	Equipment replacement	1	\$ 45,200.00	Donald Buhman (Farmer)	0.091	0.015	0.010	APCO	Napa
19MOY24	Off-road	Equipment replacement	1	\$ 66,775.00	Dolan's Lumber of Concord	0.403	0.058	0.033	APCO	Contra Costa
19MOY14	On-road	Equipment replacement	1	\$ 60,000.00	Simon Chuong dba Simon Trucking	1.126	0.170	0.008	APCO	Santa Clara
19MOY2	Marine	Engine replacement	1	\$ 94,000.00	Lovely Martha Sportfishing	0.291	-0.009	0.018	APCO	San Francisco
19MOY10	Marine	Engine replacement	2	\$ 134,800.00	El Dorado Deep Sea Adventure	1.513	-0.022	0.060	12/20/2017	Contra Costa
19MOY15	Marine	Engine replacement	1	\$ 114,000.00	F/V Rose Marie Inc. (Commercial fishing)	0.254	-0.003	0.014	12/20/2017	San Francisco
19MOY1	Marine	Engine replacement	2	\$ 2,590,000.00	Amnav Maritime Corporation (Vessel: Sandra Hugh)	42.718	1.947	1.456	12/20/2017	Alameda
19SBP49	School bus	School bus replacement	4	\$ 496,459.22	San Jose Unified School District	0.480	0.047	0.000	12/20/2017	Santa Clara
19MOY4	Marine	Engine replacement	2	\$ 2,590,000.00	Amnav Maritime Corporation (Vessel: Revolution)	42.718	1.947	1.456	12/20/2017	Alameda
19MOY11	Ag/ off-road	Equipment replacement	1	\$ 41,110.00	Bob Balestra (Vineyard)	0.138	0.021	0.012	APCO	Solano
19MOY6	On-road	Equipment replacement	1	\$ 50,000.00	J&G Transportaion	1.058	0.159	0.055	APCO	Alameda
19MOY35	On-road	Equipment replacement	1	\$ 40,000.00	Manuel Portela Trucking	0.635	0.073	0.028	APCO	Santa Clara

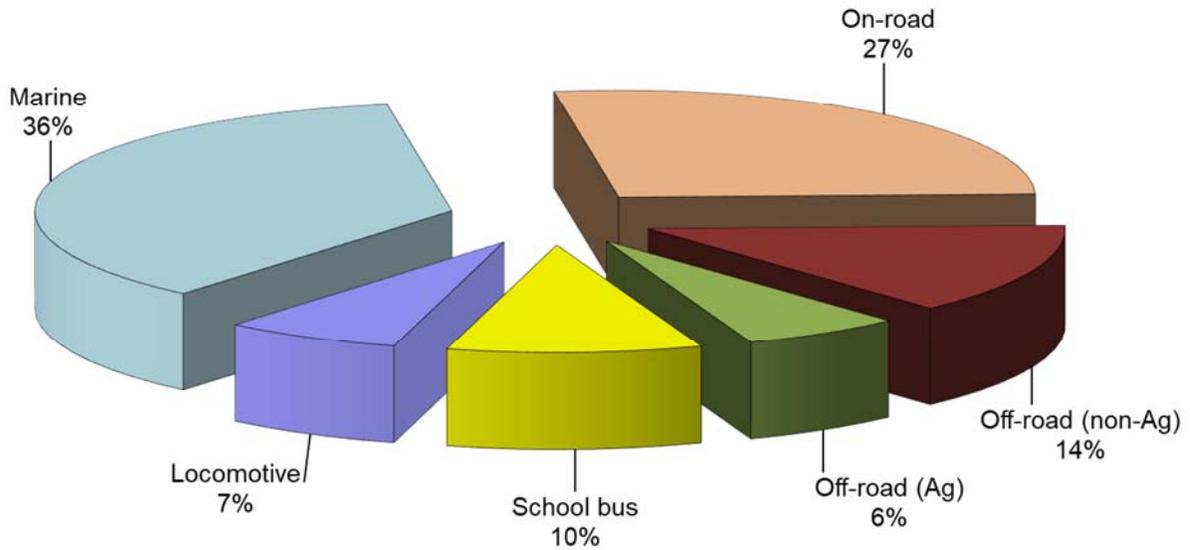
## AGENDA 4 - ATTACHMENT 2

Project #	Equipment category	Project type	# of engines	Proposed contract award	Applicant name	Emission Reductions (Tons per year)			Board approval date	County
						NOx	ROG	PM		
19MOY28	Ag/ off-road	Equipment replacement	1	\$ 27,885.00	Scott T Murphy (Ranch/ farmer)	0.037	0.034	0.009	APCO	Sonoma
19MOY44	Ag/ off-road	Equipment replacement	2	\$ 62,800.00	Willowbrook Stables LLC	0.039	0.034	0.011	APCO	Sonoma
19MOY43	On-road	Equipment replacement	1	\$ 60,000.00	Khaira Trucking, LLC	1.297	0.196	0.000	APCO	Alameda
19MOY22	Marine	Engine replacement	1	\$ 59,000.00	Flash Sport Fishing, DBA, Flash Sport Fishing	0.176	0.001	0.009	APCO	San Francisco
19MOY19	On-road	Equipment replacement	1	\$ 60,000.00	G & C Trucking	1.032	0.138	0.045	APCO	Solano
19MOY39	Ag/ off-road	Equipment replacement	1	\$ 20,270.00	Cabrillo Farms Agriculture, Inc	0.096	0.015	0.008	APCO	San Mateo
19MOY67	On-road	Equipment replacement	1	\$ 60,000.00	Pawar Brothers Trucking	1.455	0.220	0.011	APCO	Santa Clara
19MOY36	On-road	Equipment replacement	1	\$ 20,000.00	Guru Nanak Trucking	1.028	0.155	0.008	APCO	Alameda
19MOY70	On-road	Equipment replacement	1	\$ 60,000.00	E.P.A Trucking LLC	0.894	0.119	0.039	APCO	San Mateo
19MOY48	Ag/ off-road	Equipment replacement	1	\$ 56,100.00	Corona Vineyard Management LLC	0.056	0.010	0.007	APCO	Napa
19MOY42	Ag/ off-road	Equipment replacement	1	\$ 51,700.00	Bains Farms LLC	0.335	0.044	0.025	APCO	Solano
19MOY47	Ag/ off-road	Equipment replacement	1	\$ 247,240.00	William Y. Gil dba Grass Farm	1.535	0.074	0.042	TBD	Santa Clara
19MOY7	Marine	Engine replacement	2	\$ 140,000.00	Warrior Poet Sportfishing	0.679	0.011	0.026	TBD	San Francisco
19MOY72	Off-road	Engine replacement	26	\$ 2,084,200.00	Independent Construction, Co.	9.410	0.499	0.269	TBD	Contra Costa
19SBP53	School bus	School bus replacement	4	\$ 558,120.00	Fairfield-Suisun Unified School District	0.259	0.019	0.000	TBD	Solano
19MOY59	Ag/ off-road	Equipment replacement	1	\$ 179,200.00	Kabeela, Inc.	0.625	0.060	0.033	TBD	Santa Clara
19SBP8	School bus	School bus replacement	2	\$ 330,000.00	San Mateo Union High School District	0.195	0.017	0.000	TBD	San Mateo

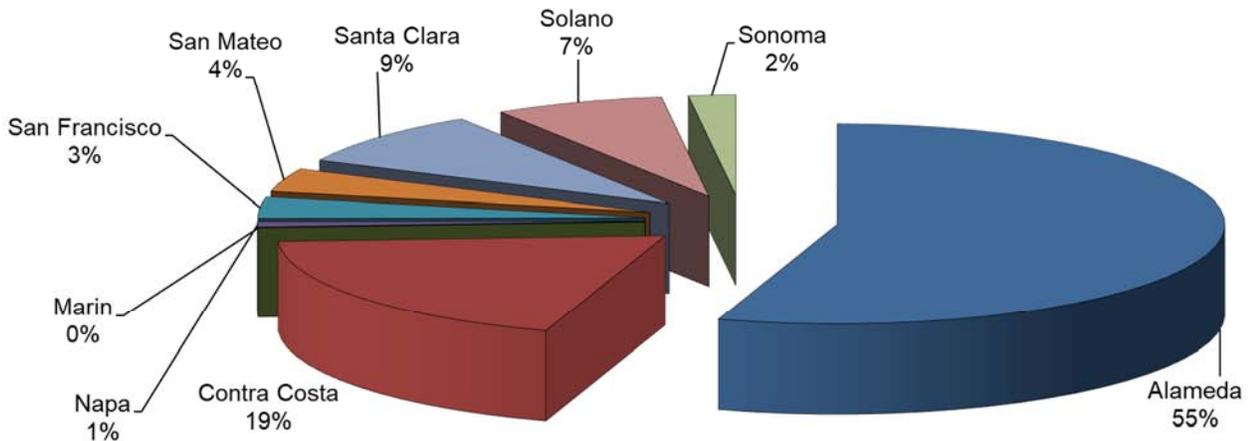
## AGENDA 4 - ATTACHMENT 2

Project #	Equipment category	Project type	# of engines	Proposed contract award	Applicant name	Emission Reductions (Tons per year)			Board approval date	County
						NOx	ROG	PM		
19SBP86	School bus	School bus replacement	1	\$ 165,000.00	San Lorenzo Unified School District	0.082	0.007	0.000	TBD	Alameda
19MOY83	On-road	Equipment replacement	1	\$ 40,000.00	Katakis Trucking	0.769	0.101	0.005	APCO	San Mateo
<b>36 Projects</b>			<b>73</b>	<b>\$ 11,963,438.22</b>		<b>115.618</b>	<b>6.559</b>	<b>3.852</b>		

**Figure 1: CMP and MSIF Funding Distribution by Equipment Category as of 2/1/18**

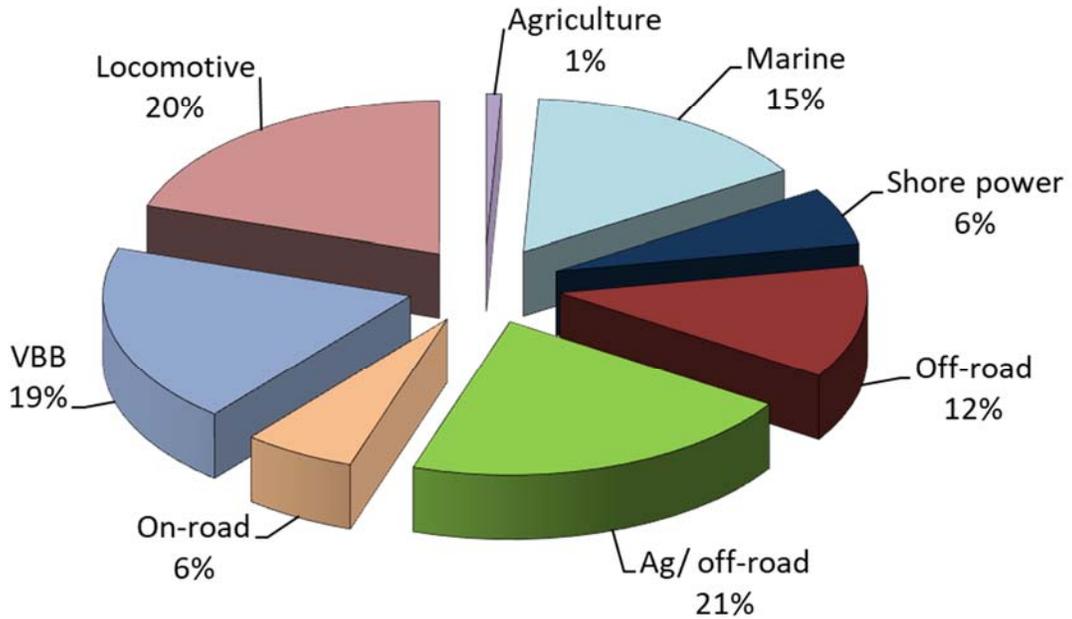


**Figure 2: CMP and MSIF Funding Distribution by County as of 2/1/18**

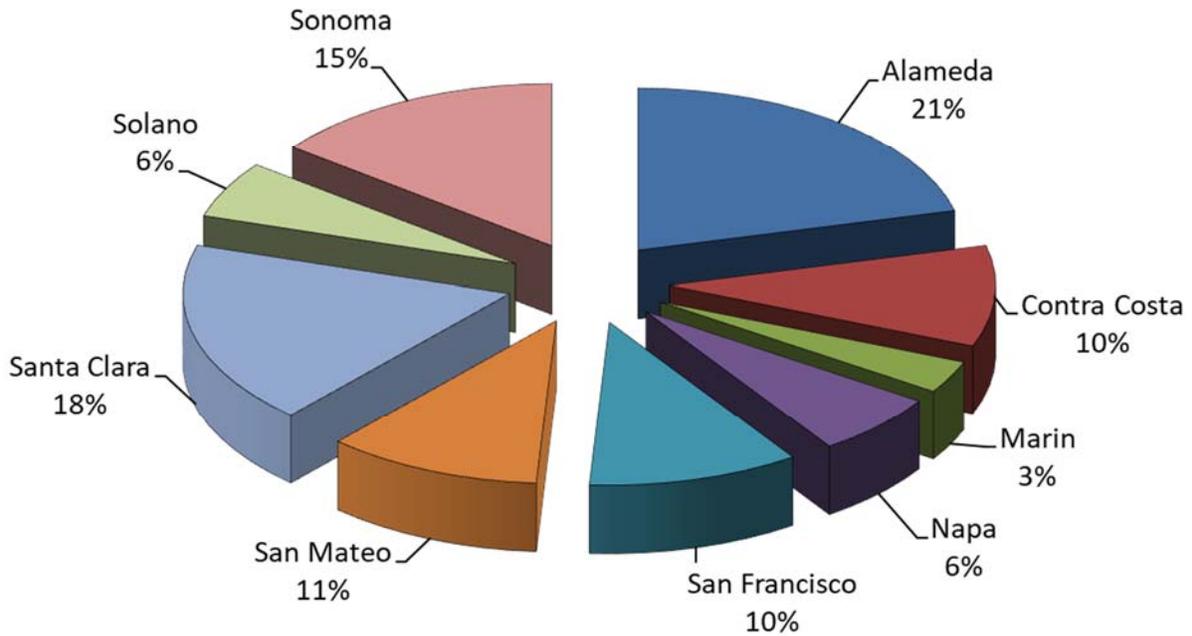


# AGENDA 4 - ATTACHMENT 3

**Figure 3: CMP and MSIF funding since 2009 by equipment category**



**Figure 4: CMP and MSIF funding since 2009 by county**



## AGENDA 4 - ATTACHMENT 4

*Summary of all TFCA approved and eligible projects (evaluated between 7/1/17 and 2/1/18)*

Project #	Project Category	Project Description	Award Amount	Applicant Name	Emission Reductions (Tons per year)			Board Approval Date	CARE Area	County
					NO <sub>x</sub>	ROG	PM			
<b>Projects Pending Board Approval</b>										
None										
<b>Projects Approved</b>										
17EV005	Electric Vehicle (EV) Charging Stations	Install and operate 5 single-port Level 2 (high) charging stations in Daly City, San Carlos, Menlo Park and Mountain View	\$15,000	Concept Hotels	0.008	0.011	0.000	7/11/17	No	Regional
17EV009	EV Charging Stations	Install and operate 4 dual-port Level 2 (low) charging stations in Menlo Park and Cupertino	\$10,000	J Cyril Johnson Investment Corp	0.005	0.007	0.000	7/27/17	No	Regional
17EV010	EV Charging Stations	Install and operate 4 dual-port Level 2 (low) charging stations in Burlingame	\$10,000	City of Burlingame	0.005	0.007	0.000	9/21/17	No	San Mateo
17EV011	EV Charging Stations	Install and operate 3 dual-port Level 2 (high) charging stations in San Francisco	\$10,936	San Francisco Zoological Society	0.006	0.008	0.000	8/3/17	No	San Francisco
17EV013	EV Charging Stations	Install and operate 4 dual-port Level 2 (high) charging stations in San Jose	\$16,000	San Jose Healthcare System, LP	0.009	0.011	0.000	7/20/17	Yes	Santa Clara
17EV015	EV Charging Stations	Install and operate 14 dual-port Level 2 (high) charging stations in Santa Rosa and Petaluma	\$56,000	Sonoma County Junior College District	0.030	0.040	0.001	7/6/17	No	Sonoma
17EV016	EV Charging Stations	Install and operate 6 dual-port Level 2 (low) charging stations in Hayward	\$15,000	California State University, East Bay Foundation Inc.	0.008	0.011	0.000	7/18/17	No	Alameda
17EV018*	EV Charging Stations	Install and operate 182 single-port Level 2 (high) and 8 DC Fast charging stations with solar in Los Altos, Mountain View, and Los Altos Hills	\$1,400,763	Los Altos School District	0.390	0.508	0.008	10/4/17	No	Santa Clara
17EV019	EV Charging Stations	Install and operate 3 dual-port Level 2 (high) chargers in San Jose	\$12,000	Asian Americans for Community Involvement of Santa Clara County, Inc.	0.007	0.009	0.000	8/28/17	Yes	Santa Clara
17EV020	EV Charging Stations	Install and operate 6 single-port Level 2 (high) charging stations in Los Altos Hills	\$29,078	Fremont Hills Country Club	0.018	0.024	0.000	7/20/17	No	Santa Clara
17EV021	EV Charging Stations	Install and operate 52 single-port Level 2 (high) charging stations in San Jose	\$156,000	North First SJ, LP	0.084	0.110	0.002	10/4/17	No	Santa Clara
17EV022	EV Charging Stations	Install and operate 26 single-port Level 2 (high) and 1 DC Fast charging stations in Los Altos	\$96,000	Mountain View Los Altos High School District	0.056	0.073	0.001	10/4/17	No	Santa Clara
17EV023	EV Charging Stations	Install and operate 3 single-port Level 2 (high) charging stations with solar in Richmond	\$18,000	San Francisco Estuary Institute	0.005	0.006	0.000	8/15/17	Yes	Contra Costa
17EV024	EV Charging Stations	Install and operate 20 single-port Level 2 (high) charging stations with solar in Cotati	\$120,000	Old Redwood Commons Association	0.033	0.042	0.001	10/4/17	No	Sonoma
17EV025	EV Charging Stations	Install and operate 3 dual-port Level 2 (high) charging stations in San Mateo	\$12,000	BCSP Crossroads Property LLC	0.007	0.009	0.000	8/17/17	No	San Mateo
17EV027	EV Charging Stations	Install and operate 8 dual-port Level 2 (high) charging station in San Jose	\$32,000	Santa Clara Valley Transportation Authority	0.017	0.023	0.000	10/11/17	Yes	Santa Clara
17EV029	EV Charging Stations	Install and operate 4 single-port Level 2 (high) charging stations in Albany	\$12,000	City of Albany	0.007	0.009	0.000	11/13/17	Yes	Alameda
17EV031	EV Charging Stations	Install and operate 32 Level 2 (high) single port charging stations in Sunnyvale and Cupertino	\$96,000	Fremont Union High School District	0.052	0.068	0.001	11/14/17	No	Santa Clara
17R18	Bicycle Facilities	Install 0.31 miles of Class II and 10.48 miles Class III bikeways in Daly City	\$133,117	City of Daly City	0.071	0.093	0.138	10/4/17	No	San Mateo
17R19	Bicycle Facilities	Install 0.36 miles of Class IV bikeways in Half Moon Bay	\$25,099	City of Half Moon Bay	0.003	0.004	0.006	9/13/17	No	San Mateo
17R20	Bicycle Facilities	Install 1.87 miles of Class II bikeways in Santa Rosa	\$201,907	City of Santa Rosa	0.027	0.039	0.050	10/4/17	No	Sonoma
17R21	Bicycle Facilities	Install 1.7 miles of Class II and 7.95 miles of Class III bikeways in San Leandro	\$139,128	City of San Leandro	0.030	0.040	0.059	10/4/17	Yes	Alameda
17R22	Bicycle Facilities	Install 3.05 miles of Class III bikeways in Redwood City	\$29,206	City of Redwood City	0.004	0.005	0.007	9/13/17	No	San Mateo
17R23	Bicycle Facilities	Install 0.8 miles of Class I bikeway in Albany	\$246,552	East Bay Regional Park District	0.030	0.040	0.059	10/4/17	Yes	Alameda
17R24	Bicycle Facilities	Install 7.76 miles of Class III and .7 miles of Class IV bikeways in Cupertino	\$138,359	City of Cupertino	0.017	0.024	0.031	10/4/17	No	Santa Clara
17R26	Bicycle Facilities	Install 0.28 miles of Class I bikeway in San Carlos	\$120,721	City of San Carlos	0.011	0.014	0.021	10/4/17	No	San Mateo
17R27	Bicycle Facilities	Install 20 electronic bicycle lockers in Richmond	\$40,000	City of Richmond	0.005	0.007	0.009	9/13/17	Yes	Contra Costa
17R28	Bicycle Facilities	Install 104 electronic bicycle lockers in San Jose	\$208,000	City of San Jose	0.026	0.037	0.048	10/4/17	Yes	Santa Clara
17R29	Bicycle Facilities	Install 40 electronic bicycle lockers in San Francisco	\$100,000	San Francisco Municipal Transportation Agency	0.014	0.019	0.028	9/13/17	Yes	San Francisco

## AGENDA 4 - ATTACHMENT 4

*Summary of all TFCA approved and eligible projects (evaluated between 7/1/17 and 2/1/18)*

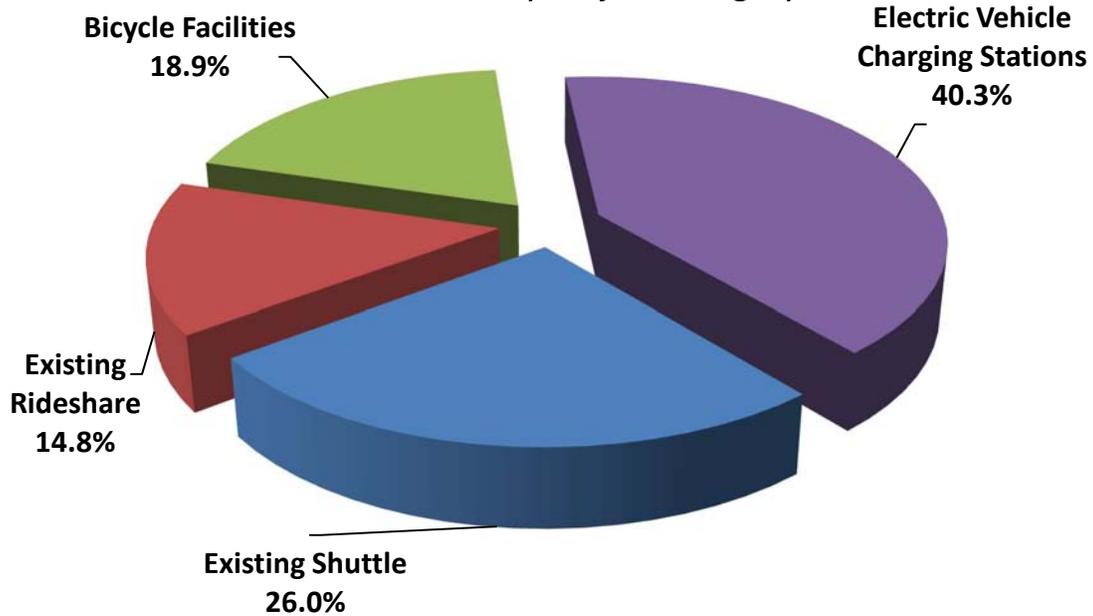
Project #	Project Category	Project Description	Award Amount	Applicant Name	Emission Reductions (Tons per year)			Board Approval Date	CARE Area	County
					NO <sub>x</sub>	ROG	PM			
17R30	Bicycle Facilities	Install 16 electronic bicycle lockers in Oakland	\$36,000	City of Oakland	0.005	0.007	0.009	9/13/17	Yes	Alameda
17R31	Bicycle Facilities	Install 74 bicycle racks and 8 electronic bicycle lockers in Fremont	\$21,550	City of Fremont	0.007	0.010	0.011	9/13/17	No	Alameda
17R32	Bicycle Facilities	Install 171 bicycle racks in Palo Alto	\$12,825	Palo Alto Unified School District	0.012	0.016	0.016	9/13/17	No	Santa Clara
18EV001	EV Charging Stations	Install and operate 244 Level 2 (high) single-port charging stations in San Jose, Campbell, and Saratoga	\$732,000	Campbell Union High School District	0.396	0.516	0.008	12/20/17	No	Santa Clara
18EV005	EV Charging Stations	Install and operate 2 dual-port Level 2 (high) and 1 single-port Level 2 (high) charging stations in Napa	\$11,000	Napa County Superintendent of Schools	0.006	0.008	0.000	1/3/18	No	Napa
18EV006	EV Charging Stations	Install and operate 1 dual-port level 2 (high) and 1 DC Fast charging stations in Emeryville	\$29,000	City of Emeryville	0.016	0.020	0.000	1/10/18	Yes	Alameda
18EV010	EV Charging Stations	Install and operate 5 dual-port level 2 (high) charging stations in Milpitas	\$20,000	Sonicwall Inc	0.011	0.014	0.000	1/17/18	No	Santa Clara
18EV011	EV Charging Stations	Install and operate 24 single-port level 2 (high) charging stations in San Jose	\$72,000	Vocera Communications, Inc.	0.039	0.051	0.001	11/22/17	Yes	Santa Clara
18EV012	EV Charging Stations	Install and operate 4 dual-port Level 2 (high) charging stations in San Jose	\$16,000	Pan Cal Corporation	0.009	0.011	0.000	1/3/18	No	Santa Clara
18EV014	EV Charging Stations	Install and operate 32 single-port level 2 (high) charging stations in San Jose	\$96,000	The Harker School	0.052	0.068	0.001	1/17/18	No	Santa Clara
18R05	Rideshare Services	SJSU Ridesharing & Trip Reduction	\$140,000	Associated Students, San Jose State University	0.808	0.920	1.282	11/1/17	Yes	Regional
18R06	Shuttle Services	ACE Shuttle 53 and 54	\$80,000	San Joaquin Regional Rail Commission	0.331	0.390	0.629	10/3/17	Yes	Alameda
18R07	Shuttle Services	ACE Shuttle Bus Program	\$960,000	Santa Clara Valley Transportation Authority	2.455	2.508	4.222	11/1/17	Yes	Santa Clara
18R09	Shuttle Services	PresidiGo Downtown Shuttle	\$100,000	Presidio Trust	0.213	0.267	0.364	10/3/17	Yes	San Francisco
18R10	Shuttle Services	Caltrain Shuttle Program	\$612,100	Peninsula Corridor Joint Powers Board	1.539	1.832	2.641	11/1/17	No	San Mateo / Santa Clara
18R11	Rideshare Services	511 Regional Vanpool & Carpool Program	\$991,000	Metropolitan Transportation Commission	0.802	1.783	3.507	11/1/17	Yes	Regional
18R12	Shuttle Services	Emery Go-Round Shuttle	\$238,819	City of Emeryville	0.233	0.270	0.415	11/1/17	Yes	Alameda
<b>46 Projects</b>			<b>\$7,667,160</b>		<b>7.917</b>	<b>9.984</b>	<b>13.577</b>			

\*The proposed award for Project #17EV018 includes \$99,900 of funds from the California Energy Commission (CEC), pending CEC's approval. The TFCA award for this project is \$1,300,863.

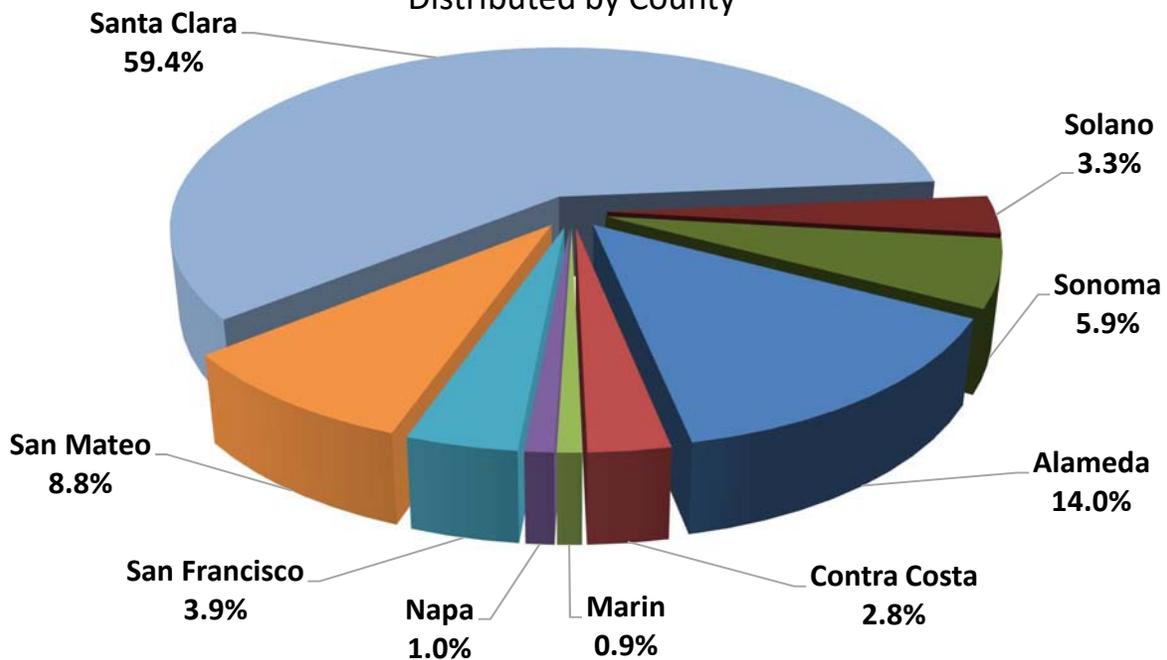
## AGENDA 4 - ATTACHMENT 5

Summary of TFCA funds distributed by county and project category  
(between 7/1/17 and 2/1/18)

**Figure 1: TFCA Projects Awarded  
Distributed by Project Category**



**Figure 2: TFCA Projects Awarded  
Distributed by County**



**BAY AREA AIR QUALITY MANAGEMENT DISTRICT**

## Memorandum

To: Chairperson Scott Haggerty and Members  
of the Mobile Source Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: February 9, 2018

Re: Update on the Air District's Light-Duty Electric Vehicle Program

**RECOMMENDED ACTION**

None; receive and file.

**BACKGROUND**

In the Bay Area, mobile sources account for 53% of certain criteria air pollutants and 41% of the Green-House Gases (GHG) generated<sup>1</sup>. Since on-road vehicles and other mobile source emissions contribute significantly to criteria pollutants and GHGs, emissions reductions from this sector is essential to helping the Bay Area attain State and Federal ambient air quality standards and meet its GHG reduction goals. For this reason, the Bay Area Air Quality Management District (Air District) has invested significant resources to reduce emissions from the light-duty fleet through incentivizes for vehicles, infrastructure, and services that enable mode-switch to alternatives to single-occupancy vehicle use.

With the first introduction of commercially available light-duty plug-in electric vehicles (EV), in 2010, the Air District began focusing on strategies and programs to accelerate the rate of adoption of the cleanest technology available: EVs. The Air District views wide-scale adoption of EVs and electrification of all sectors of transportation as essential to achieving local, State, and Federal emission reduction targets. Additionally, studies have shown that further emissions benefits will be realized over time as the regions' power grid shifts to higher reliance on renewable energy sources<sup>2</sup>.

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<sup>1</sup> BAAQMD 2017 Clean Air Plan, Emissions Inventory for year 2015. Mobile sources include: Passenger Cars, Light-, Medium-, Light-Heavy-, Medium-Heavy-, Heavy-Heavy-Duty Trucks, School/Urban Buses, Motor-Homes, Motorcycles, Lawn & Garden Equipment, Transportation Refrigeration Units, Agricultural Equipment, Construction and Mining Equipment, Industrial Equipment, Light Duty Commercial Equipment, Trains, Off-Road Recreational Vehicles, Ships, Commercial Harborcraft, Recreational Boats, and Airport Ground Support Equipment.

<sup>2</sup> Electric Power Research Institute/National Resources Defense Council, Environmental Assessment of a Full Electric Transportation Portfolio, <http://www.epri.com/abstracts/Pages/ProductAbstract.aspx?ProductId=3002006881>, September 2015

## DISCUSSION

The Air District's EV efforts have included development and implementation of region-wide plans, outreach and awareness campaigns, and direct monetary incentives. These efforts, in combination with other initiatives, have contributed to the region's high per-capita adoption rate (13 registered light duty EVs per 1,000 people—the highest rate in the United States) with more than 100,000 light duty EVs (nearly 40% of the EVs registered in California) being registered to Bay Area residents and businesses<sup>3</sup>. The Air District's efforts in the planning, incentives and outreach area are described in greater detail below:

### **Current and Past Efforts**

#### ***Planning and Financial Incentives***

Beginning in 2010, to prepare the region for the influx of EVs, the Air District partnered with the Metropolitan Transportation Commission (MTC) and other electric vehicle stakeholders to develop the Bay Area Plug-In Electric Vehicle Readiness Plan (PEV Plan). Based on research, analysis, and public input, the final 2013 PEV Plan included:

- Projections for EV ownership and deployment; barriers to EV ownership, deployment, and steps to eliminate barriers in private and public fleets, including recommendations for future incentive programs;
- Key strategic zones/areas for deployment and types of charging stations for regional EV charging infrastructure;
- Best practice recommendations for local government regarding their EV readiness and friendliness with respect to permitting and inspection practices; zoning and parking rules, local ordinances; and building codes;
- Identification of strategies to attract EV manufacturing, production, infrastructure and services to the Bay Area and California; and
- Integration of the Regional PEV Plan into the Bay Area's Sustainable Communities Strategy (SCS) plan (Plan Bay Area 2040).

With the adoption of the PEV Plan, the Air District has focused its incentives to target the key barriers identified in the Plan. Since 2010, the Air District's Board of Directors has allocated over \$11 million for incentive programs and to leverage additional investments. This investment has directly resulted in the deployment of more than 1,500 passenger electric vehicles, 1,050 publicly available Level 2 and DC Fast chargers, and over 1,400 residential chargers. Early incentive programs, such as the Air District's participation in the Department of Energy's EV Project, were designed to demonstrate the viability of EV technology and to "jump-start" the market. More recently, the Air District has targeted its incentives to expand the region's charging network through the *Charge!* Program. *Charge!* has supported approximately 18% of the publicly available

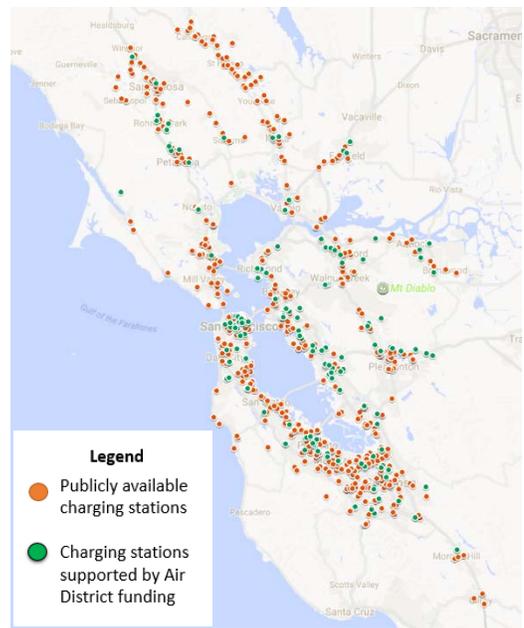
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<sup>3</sup> Estimated using a 76% rebate use rate and data from CARB PEV Rebates Statistics: Center for Sustainable Energy (2015). California Air Resources Board Clean Vehicle Rebate Project, Rebate Statistics. Data last updated January 9, 2018. Accessed January 10, 2018 from <http://energycenter.org/clean-vehicle-rebate-project/rebate-statistics>

charging stations in the Bay Area (Figure 1), making the Bay Area home to one of the most robust charging networks in the nation. Over the past seven years, over 4,400+ publicly available charging stations, including 150+ DC Fast Chargers, have been installed in the Bay Area to support the region's EVs.

### ***Outreach and Partnerships***

Since 2011, the Air District, in partnership with MTC, has also sponsored the EV Coordinating Council, a forum for EV stakeholders including local governments, businesses, research institutions and non-profits to collaborate. The EV Coordinating Council is convened quarterly and serves as a clearing house to cover topics such as: new plug-in vehicles and charging technologies on the market, EV-friendly ordinances adopted by local agencies, and grant opportunities. The Council is an ongoing platform to discuss emerging trends, share best practices, and facilitate innovation to address barriers to EV adoption.



*Figure 1. Publicly available charging stations; stations supported by Air District funding in green*

The Air District also sponsors local events and attends and shares information at regional conferences and meetings with local associations and government agencies (e.g. transportation, environment, public works, school districts, chambers of commerce).

### **Future Efforts**

Over the next decade, the rate of EV adoption will need to increase exponentially to meet the transportation electrification goal of 90%+ by 2050 established in the 2017 Clean Air Plan. The charging network will also need to continue to expand, both in density and geographical reach to accommodate the higher rates of EV adoption and access for drivers in more communities. In addition, the network will need to evolve, to accommodate the new faster-charging longer range EVs that will be available beginning in 2018.

Moving forward, the Air District will be focused on addressing barriers to adoption in communities that have been slower to adopt EV, providing incentives to help build out a fast charging network and fill in gaps in the existing network, and updating the region's EV plans to reflect current technologies and trends. These efforts are described in detail below:

### ***Accelerating adoption in low-income communities***

The California Air Resources Board (ARB) approved an expansion of its light duty EV rebate program for disadvantaged communities to the Bay Area. The Air District is currently working with ARB to accept funding that would provide qualifying low-income residents up to \$9,500 for a new light duty EV. The program, which will provide funding in a range based on the participants income level, will also include options to purchase used EVs and new and used hybrid vehicles, and an option to receive vouchers for transit and car-sharing. This program is scheduled to launch

later in 2018 and will include stakeholder engagement and outreach to disadvantaged communities, case managers to support participants through the application process, and partnerships with dealers, vehicle scrappers, and alternative transportation options (e.g. Clipper card).

***Building out fast charging, and filling in gaps***

Recognizing that the use-case for EVs are shifting due to the availability of new longer range (200+ miles) EV models, the Air District will be expanding its focus to install fast chargers along major highway corridors. These Ultra-fast (150+ kW) Direct Current Fast Chargers will be installed in “plazas” and will operate like gasoline refueling stations. These plazas will also address the needs of potential EV adopters who are looking for EVs to cover daily commuting and long-distance trips, more similar to what consumers are used to with gasoline vehicles.

EV uptake among residents of multi-dwelling units has lagged due to the lack of dedicated parking and the challenge of installing charging infrastructure in shared parking structures. In addition to incentivizing charging installations in multi-dwelling units, the Air District will also continue to target workplace charging. The combination of ultra-fast charging plazas and workplace charging is a viable solution for potential EV consumers who do not have access to home charging.

***Expanding partnerships, outreach, and evaluation activities***

In November 2017, the Air District’s Board and MTC approved a funding partnership whereby MTC will provide \$5 million over the next 5 years to support the Air District’s outreach, and evaluation activities, and to expand the Air District’s light duty EV incentive programs. The Air District will be using these funds to provide additional technical support to local governments to help improve their EV readiness and to expand general outreach and education.

***Leveraging other efforts in the region***

The Air District’s investments and efforts have, and will continue to, play a significant role in catalyzing the Bay Area’s shift towards zero emission transportation. In recent years, other organizations have increased support and incentives for charging infrastructure and vehicles, such as Pacific Gas & Electric’s EV Charge Program, Electrify America (Volkswagen subsidiary), ARB and the California Energy Commission. The California Building Standards Commission recently updated the CalGreen building codes to require new buildings to have a certain percentage of parking spaces be “EV Ready.” To meet the region’s aggressive EV adoption goals, these regulatory and incentive programs are all needed, and the efforts need to be coordinated to have maximum impact on driving adoption.

At the Mobile Source Committee, staff will provide an overview of light duty EV market, a summary of the results of the Air District’s past light duty EV initiatives, and the Air District’s next steps to further support the accelerated adoption of light duty EVs.

**BUDGET CONSIDERATION/FINANCIAL IMPACT**

None.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Ken Mak and Ranyee Chiang  
Reviewed by: Karen Schkolnick and Ranyee Chiang

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT**

## Memorandum

To: Chairperson Scott Haggerty and Members  
of the Mobile Source Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: February 9, 2018

Re: Air District Grant Programs Overview

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**RECOMMENDATION**

None; receive and file.

**BACKGROUND**

In the Bay Area, mobile sources account for 53% of certain criteria air pollutants and 41% of the Green-House Gases (GHG) generated<sup>1</sup>. Since on-road vehicles and other mobile source emissions contribute significantly to criteria pollutants and GHGs, emissions reductions from this sector is essential to helping the Bay Area attain State and Federal ambient air quality standards and meet its GHG reduction goals. As part of its efforts to reduce emissions from mobile sources, the Bay Area Air Quality Management District (Air District) administers grant and incentive programs that offer funding to public agencies, private companies, and Bay Area residents to help offset a portion of the cost to implement eligible emissions reduction projects.

In calendar year 2017, the Air District awarded nearly \$57 million in funding to eligible projects. Approximately \$47.5 million of that funding was directly allocated by the Air District. The remaining \$9.4 million was distributed to the nine congestion management agencies in the Bay Area via the Transportation Fund for Clean Air (TFCA) County Program Manager program. The Air District allocated \$45.6 million from four primary funding sources, including the California Goods Movement Bond, TFCA Regional Fund, Mobile Source Incentive Fund, and the Carl Moyer Program. These programs accumulate annually via fees and bond sales that are distributed to the Air District, and constitute the Air District's primary grant programs.

In addition to these four primary funding sources, staff also seeks out additional funding opportunities (e.g., state and federal sources) to further reduce emissions from both mobile and stationary sources in the Bay Area. The remaining \$1.9 million of the \$47.5 million came from

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<sup>1</sup> BAAQMD 2017 Clean Air Plan, Emissions Inventory for year 2015. Mobile Sources include: Passenger Cars, Light-, Medium-, Light-Heavy-, Medium-Heavy-, Heavy-Heavy-Duty Trucks, School/Urban Buses, Motor-Homes, Motorcycles, Lawn & Garden Equipment, Transportation Refrigeration Units, Agricultural Equipment, Construction and Mining Equipment, Industrial Equipment, Light Duty Commercial Equipment, Trains, Off-Road Recreational Vehicles, Ships, Commercial Harborcraft, Recreational Boats, and Airport Ground Support Equipment.

the U.S. Environmental Protection Agency's National Clean Diesel Program for a locomotive project at the Port of Oakland, the Greenhouse Gas Reduction Grant Program (GGRGP) funded by the ConocoPhillips Carbon Offset Funds and the National Fish and Wildlife Foundation (NF&WF) for the Commercial Lawn and Garden Equipment Replacement Program, and the Air District's general fund for the Wood Smoke Emissions Reduction Incentive Program.

DISCUSSION

Each year the Committee receives an update summarizing prior year grant expenditures. The presentation to the Committee will include a discussion of the total incentive funds allocated in calendar year 2017 by funding source, project/equipment category, and county, and emissions reductions. Staff will also discuss with the Committee the projected funding for each of the Air District's primary grant programs in calendar year 2018 and present historical information showing how Air District funds have been allocated over the past five years.

BUDGET CONSIDERATION / FINANCIAL IMPACT

None.

Respectfully submitted,

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Executive Officer/APCO

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