Projects and Contracts with Proposed Awards over $100,000

Mobile Source Committee Meeting
February 27, 2020

Hannah Cha
Staff Specialist
Overview

• Background

• Proposed projects with awards over $100,000

• Overview of Fiscal Year Ending (FYE) 2020 funds
  • Status of funding by revenue source
  • Awards by project type and county

• Recommended Actions
• Carl Moyer Program (CMP)
  • Created in 1998 to reduce emissions from heavy-duty engines
  • Voluntary program that funds surplus emission reductions

• Mobile Source Incentive Fund (MSIF)
  • Assembly Bill (AB) 923 (2004) allowed for additional $2 motor vehicle registration fee surcharge
  • CMP and Lower Emission School Bus Program (LESBP) projects eligible for MSIF funding
Community Health Protection Grant Program (CHP)

- Created by AB 134 (2017) appropriation of $50 million (M) from the Greenhouse Gas Reduction Fund (GGRF) to reduce mobile source emissions, including criteria pollutants, toxic air contaminants, and greenhouse gases in Bay Area AB 617 communities.

- Senate Bill (SB) 856 (2018) continued support for these projects awarding $40 M for emission reduction projects under the CMP, Proposition 1B Goods Movement Emission Reduction Program, and select stationary sources.
• On February 6, 2019, Air District Board of Directors
  • Approved participation in CMP Year 21
  • Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to $100,000

• On April 3, 2019, Air District Board of Directors
  • Approved acceptance of SB 856 grant funding for the Community Health Protection Grant Program (CHP)
CMP/MSIF & CHP
Project Recommendations over $100k

• $9,162,993 in CMP/MSIF & CHP funds plus $681,052 in TFCA funds as match for nine (9) projects to replace:
  • Four (4) pieces of off-road agricultural equipment
  • Two (2) pieces of on-road equipment
  • Eight (8) marine engines
  • 20 school buses (TFCA match for six (6) school buses)

• Emissions Reductions
  • Over 43 tons per year (TPY) of criteria pollutants
Reformulated Gasoline (RFG) Settlement Fund

• RFG Open Grants Program
  • Antitrust class action for clean air & fuel efficiency benefits for Californians through competitive grants to non-profits
  • Most of $7 M in funding was awarded in 2010

• On November 11, 2017, Air District Board of Directors
  • Authorized acceptance of up to $2 M from Bay Area Clean Air Foundation and authorized the Executive Officer/APCO to enter into all agreements necessary to accept, obligate, and expend funding

• On December 5, 2017, Bay Area Clean Air Foundation Board
  • Entered into contract for $1.3 M
RFG Settlement Fund (Cont’d)

• Provides funding for projects that will accelerate the adoption of zero- and near-zero-emission equipment and vehicles in and near the Port of Oakland and West Oakland Community

• $276,190 in RFG funds plus $305,980 in TFCA funds as match for two (2) projects to purchase and operate:
  • 15 electric school buses
  • Two (2) electric terminal tractors

• Emission reductions
  • Over 1.02 tons per year (TPY) of criteria pollutants
Transportation Fund for Clean Air (TFCA)

- Statutory authority set forth in California Health and Safety Code Sections 44241 and 44242

- Funding provided by a $4 surcharge on motor vehicles
• On April 3, 2019, Air District Board of Directors
  • Allocated $32.3 M of TFCA funds for FYE 2020 projects
  • Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to $100,000

• On June 5, 2019, Air District Board of Directors
  • Adopted policies and evaluation criteria for the FYE 2020 TFCA Regional Fund program
Project Recommendations over $100k

• $2,236,032 in total TFCA awards including:
  • $1,249,000 for two (2) projects to provide first- & last-mile connection services to mass transit
  • $681,052 as match for two (2) CMP projects
  • $305,980 as match for two (2) RFG projects

• Emission Reductions
  • Over 6.54 TPY of criteria pollutants from the two (2) first- & last-mile connection services projects
  • Over 0.32 TPY of criteria pollutants from the two (2) RFG projects
  • All emission reductions from the two (2) CMP projects are attributed to CMP
## TFCA Match Funds

<table>
<thead>
<tr>
<th></th>
<th>School Bus Projects</th>
<th>Reformulated Gasoline (RFG) Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Number</strong></td>
<td>#21SBP98</td>
<td>#19RFG20</td>
</tr>
<tr>
<td></td>
<td>#21SBP114</td>
<td>#19RFG21</td>
</tr>
<tr>
<td><strong>Number of Vehicles</strong></td>
<td>2 and charging infrastructure*</td>
<td>4 and charging infrastructure*</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total Project Cost</strong></td>
<td>$960,774</td>
<td>$651,710</td>
</tr>
<tr>
<td></td>
<td>$1,840,052</td>
<td>$1,840,052</td>
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<tr>
<td><strong>Proposed CMP and MSIF Award</strong></td>
<td>$323,778</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>$1,672,500</td>
<td>N/A</td>
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<tr>
<td><strong>Proposed RFG Award</strong></td>
<td>N/A</td>
<td>$102,390</td>
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<tr>
<td></td>
<td>N/A</td>
<td>$173,800</td>
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<tr>
<td><strong>Proposed TFCA Award</strong></td>
<td>$513,500</td>
<td>$29,780</td>
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<tr>
<td></td>
<td>$167,552</td>
<td>$276,200</td>
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<tr>
<td><strong>Total Proposed Award</strong></td>
<td>$837,278*</td>
<td>$132,170†</td>
</tr>
<tr>
<td></td>
<td>$1,840,052*</td>
<td>$450,000†</td>
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</tbody>
</table>

*Total proposed awards include CMP, MSIF funds, and TFCA funds as match
† Total proposed awards include RFG funds, and TFCA funds as match

- **TFCA Regional Fund Policy waivers**
- **#2 Cost-Effectiveness**
- **#24 On-Road Heavy-Duty Zero- and Partial-Zero Emissions Truck and Buses**

*Mobile Source Committee Meeting, February 27, 2020  Bay Area Air Quality Management District*
Status of Incentive Funding Awarded
Since July 2019, by Funding Source

$0 $5 $10 $15 $20 $25 $30 $35 $40 $45 $50 $55

- **CMP/MSIF/CHP/FARMER ($52M)**
  - Previously Awarded: $29.49M
  - Recommended: $13.17M
  - Previously Awarded and Recommended: $1.02M
- **TFCA FYE 2020 ($32.3M)**
  - Previously Awarded: $13.17M
  - Recommended: $1.02M

* Includes awards from FYE 2019

Mobile Source Committee Meeting, February 27, 2020
Bay Area Air Quality Management District
Funds Recommended & Awarded by Project Category Since July 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light-duty Cars &amp; Infrastructure</td>
<td>$5.9 M</td>
</tr>
<tr>
<td>On-road Trucks &amp; Buses</td>
<td>$1.6 M</td>
</tr>
<tr>
<td>School Buses</td>
<td>$10.5 M</td>
</tr>
<tr>
<td>Off-road</td>
<td></td>
</tr>
<tr>
<td>Ag</td>
<td>$3.7 M</td>
</tr>
<tr>
<td>Non-Ag</td>
<td>$3.4 M</td>
</tr>
<tr>
<td>Off-road Marine &amp; Locomotive</td>
<td>$11.9 M</td>
</tr>
<tr>
<td>Trip Reduction</td>
<td>$6.7 M</td>
</tr>
</tbody>
</table>

Total = ~$44 M*  

*Includes awards from CMP/MSIF/CHP/FARMER, TFCA Regional Fund, and RFG

List of projects is shown in Attachments 2 and 3

Mobile Source Committee Meeting, February 27, 2020
Funds Recommended & Awarded by County Since July 2019

Total = $~44 M*

- San Francisco: $5.9M, 13.6%
- Alameda: $11M, 25.4%
- Contra Costa: $9.7M, 22.3%
- Marin: $573k, 1.3%
- Napa: $1M, 2.3%
- Solano: $839k, 1.9%
- San Mateo: $1.6M, 3.6%
- Santa Clara: $7.5M, 17.4%
- Sonoma: $5.3M, 12.2%

* Includes awards from CMP/MSIF/CHP/FARMER, TFCA Regional Fund, and RFG

List of projects is shown in Attachments 2 and 3
# Status of Solicitations

<table>
<thead>
<tr>
<th>Program Name, Description, and Website</th>
<th>Status</th>
<th>Revenue Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carl Moyer Funding to replace heavy-duty on- &amp; off-road vehicles and equipment, marine engines, and locomotives <a href="http://www.baaqmd.gov/moyer">www.baaqmd.gov/moyer</a></td>
<td>Open</td>
<td>CMP, MSIF, CHP, FARMER</td>
</tr>
<tr>
<td>Community Health Protection Grant Program Funding to replace old, high-polluting vehicles and equipment <a href="http://www.baaqmd.gov/ab617grants">www.baaqmd.gov/ab617grants</a></td>
<td>Open</td>
<td>California Climate Investments</td>
</tr>
<tr>
<td>Lower-Emission School Bus Program Funding for bus replacements, engine repowers or electric conversions, natural gas tank replacements, and electric charging &amp; alternative fueling infrastructure projects <a href="http://www.baaqmd.gov/lesbp">www.baaqmd.gov/lesbp</a></td>
<td>Open</td>
<td>CMP, MSIF, CHP</td>
</tr>
<tr>
<td>Vehicle Buy Back Program Funding to scrap 1996 and older vehicles and equipment <a href="http://www.baaqmd.gov/vbb">www.baaqmd.gov/vbb</a></td>
<td>Open</td>
<td>MSIF</td>
</tr>
<tr>
<td>Clean Cars for All Funding for low-income owners to retire and replace their vehicles with a cleaner option <a href="http://www.baaqmd.gov/cleancarsforall">www.baaqmd.gov/cleancarsforall</a></td>
<td>Open</td>
<td>California Climate Investments</td>
</tr>
<tr>
<td>Vehicle Trip Reduction (Bicycle Facilities) Funding for bicycle facility projects to reduce single-occupancy vehicle trips <a href="http://www.baaqmd.gov/tripreduction">www.baaqmd.gov/tripreduction</a></td>
<td>Open</td>
<td>TFCA</td>
</tr>
<tr>
<td>Climate Tech Finance Program Subsidized financing to help Bay Area facilities adopt emerging technologies that reduce greenhouse gas emissions <a href="http://www.baaqmd.gov/ctf">www.baaqmd.gov/ctf</a></td>
<td>Open</td>
<td>IBank</td>
</tr>
</tbody>
</table>
Recommended Actions

Recommend the Board of Directors:

1. Approve recommended projects with proposed grant awards over $100,000 as shown in Attachment 1, including necessary policy waivers to allow TFCA funds to be used as match to fund recommended school bus projects; and

2. Authorize the Executive Officer/APCO to enter into all necessary agreements with applicants for the recommended projects.
Participation in Year 22 of the Carl Moyer Program

Mobile Source Committee Meeting
February 27, 2020

Adam Shapiro
Supervising Staff Specialist
Overview

• Background

• Carl Moyer Program Year 22 (fiscal year 2019-2020)

• Recommended Actions
Carl Moyer Program & Mobile Source Incentive Fund

• Carl Moyer Program (CMP)
  ➢ Created in 1998 to reduce emissions from heavy-duty engines
  ➢ Voluntary program that funds surplus emission reductions

• Mobile Source Incentive Fund (MSIF)
  ➢ Assembly Bill (AB) 923 allowed $2 motor vehicle registration fee surcharge (12/04)
  ➢ CMP projects eligible for MSIF funding
  ➢ Bus Program (LESBP) projects eligible for MSIF funding
CMP Year 22 Funding

- California Air Resources Board (CARB) Year 22
  - $84.2 million statewide
    - Up to $13 million for Bay Area
    - 6.25% allocation for administrative costs
    - Up to $2 million in required match

- CARB 2017 CMP guidelines

- Continued focus on projects benefiting Community Air Risk Evaluation (CARE) areas and AB 617 communities

- Proposed $3 million MSIF in match for additional CMP projects
Recommended Actions

Recommend the Board of Directors:

1. Adopt a resolution authorizing the Executive Officer/APCO to execute all necessary agreements with CARB relating to the Air District’s receipt of CMP funds for fiscal year 2019-2020 (Program Year 22);

2. Allocate $3 million in MSIF to provide the required match funding and additional monies for projects eligible for funding under the CMP guidelines; and

3. Authorize the Executive Officer/APCO to execute Grant Agreements and amendments for projects funded with Carl Moyer Program and Mobile Source Incentive Funds, with individual grant award amounts up to $100,000
Clean Cars for All Program

Mobile Source Committee Meeting
February 27, 2020

Deanna Yee
Acting Staff Specialist
Presentation Overview

Background

Application trends

Program status update

New funding

Recommended Actions
Background: Project Milestones

March 28, 2018
• California Air Resources Board (CARB) awarded $5 million (M) in Fiscal Year (FY) 2016-2017 Low Carbon Transportation Funds to start the Bay Area Clean Cars For All Program, with a focus on disadvantaged communities

March 2019
• Program was launched

June 2019
• Executed contract with CARB for $5 M in Volkswagen (VW) funds

October 30, 2019
• Expanded the program to include entire Bay Area with VW funds
Low-income residents* in communities disproportionately burdened by pollution** who turn in older vehicle

**CalEnviroScreen 3.0, Expanded to all Bay Area zip codes in October 2019

http://www.baaqmd.gov/cleancarsforall

* ≤400% Federal Poverty Level
**CalEnviroScreen 3.0, Expanded to all Bay Area zip codes in October 2019
# Background: Incentive Amounts

<table>
<thead>
<tr>
<th>Clean Transportation Options</th>
<th>Incentive Amount Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Transportation Card</td>
<td>$7,500</td>
</tr>
<tr>
<td>Battery Electric</td>
<td>$5,500 - $9,500</td>
</tr>
<tr>
<td></td>
<td>Plus $2,000 rebate for charger</td>
</tr>
<tr>
<td>Plug-In Hybrid</td>
<td>$5,500 - $9,500</td>
</tr>
<tr>
<td></td>
<td>Plus $2,000 rebate for charger</td>
</tr>
<tr>
<td>Hybrid</td>
<td>$5,000 - $7,000</td>
</tr>
</tbody>
</table>
Background: Outreach

Three (3) Clean Cars for All Electric Vehicle (EV) Showcases

19 community events

26 press and social media mentions

Several months of Facebook, Google, and Instagram advertisements
Application Trends (cont.)
as of February 13, 2020

• Applications received: 643
• Applications in progress: 282
• Applications awarded: 353 grantees, $2.96M
  ➢ California Climate Investments (CCI): 246, $2.02M
  ➢ VW: 107, $0.94M
• Funds available: $4.1 M
Geographic Distribution

- 246 California Climate Investments (CCI) awards
  - Four (4) home charging stations
- 107 VW awards
- 36 participating dealerships
• Grantee Average Income: $29,995
• Grantee Median Income: $25,290
• Average Grantee Income percent of the Federal Poverty Level (FPL): 150%
Remaining funds from the 2016 Clean Cars For All Program allocation were reallocated to CARB for the Clean Cars For All Program in FY 2018-2019.

December 2019, CARB staff notified the Air District that they will award up to $5 M of the reallocated funds to the Air District to continue funding the Clean Cars For All Program.

Funds must be expended by February 28, 2022.
Recommended Actions

Recommend the Board of Directors:

1. Adopt a resolution authorizing the Executive Officer/APCO to accept, obligate, and expend up to $5 M from the California Air Resources Board to expand the Bay Area Clean Cars for All Program; and

2. Authorize the Executive Officer/APCO to enter into all agreements necessary to accept, obligate, and expend this funding.
Thank you!
Air District Grant Programs Overview

Mobile Source Committee Meeting
February 27, 2020

Karen Schkolnick
Director of Strategic Incentives Division
Overview

• Background

• 2019 Grant Awards & Results
  - By project category
  - By county
  - Emissions reduced

• Historical Trends & Results
  - Funds awarded
  - Diesel Free by ‘33 progress

• 2020 Grant Revenue Projection & Priorities
Air Pollution & Grant Revenue Sources

Bay Area total emissions of NOx, ROG, PM10: 667 tons/day*

- Passenger Cars: 12%
- On-road Trucks: 17%
- Off-road vehicles: 16%
- Other Mobile Sources: 8%

*Air District Emissions Inventory for calendar year 2015

Incentives

Carl Moyer (CMP)

Mobile Source Incentive Fund (MSIF)

Transportation Fund for Clean Air (TFCA)

Other
- Community Health Protection (CHP)
- Low Carbon Fuel Standard (LCFS)
- Reformulated Gasoline Settlement (RFG)
- Enhanced Fleet Modernization Program (EFMP)
- Supplemental Environmental Project (SEP)
- Funding Agricultural Replacement Measures for Emission Reductions (FARMER)
Funds Awarded in 2019 by Project Type

>$78 million (M) Awarded in 2019

~63% Benefits Community Air Risk Evaluation (CARE) and low-income communities

- Off-road Vehicles & Equipment: $32.4M
- On-Road Vehicles: $24.7M
- Trip Reduction: $9.7M
- Climate Protection: $1.0M
- Community Capacity Building: $10.3M

Mobile Source Committee Meeting, February 27, 2020
2019 Projects Awarded
Off-Road

98 Projects Awarded

$32.4M

Locomotives ($10.0M)
Marine ($9.7M)

Agricultural ($5.4M)

Non-Agricultural Off-Road ($7.2M)

Lawn & Garden ($88,000)

Mobile Source Committee Meeting, February 27, 2020
4,100 Projects Awarded

**2019 Projects Awarded**

**On-Road**

- **School Buses** ($10.0M), **Transit Buses & Trucks** ($3.0M)

- **Electric Vehicle (EV) Charging** ($5.5M), **Clean Cars For All** ($1.9M)

- **Vehicle Buy-Back** ($4.2M)

$24.7M
2019 Projects Awarded
Trip Reduction

16 Projects Awarded

- Shuttles and Ridesharing ($3.1M)
- Bike Parking & Lanes ($1.4M)
- Spare the Air ($5.2M)
- Commuter Benefits ($80,000)

$9.7M

Mobile Source Committee Meeting, February 27, 2020
Bay Area Air Quality Management District
2019 Projects Awarded

- **Other**
- **Climate Protection** ($158,000)
- **Wood Smoke Reduction** ($173,000)
- **Community Capacity** ($653,000)

128 Projects Awarded

44 Projects Funded

Over $10M of TFCA funds pass-through to County Transportation Agencies

Mobile Source Committee Meeting, February 27, 2020
Over $78M Awarded

~$592,000 (1%) awarded outside the Air District
2019 Projects Awarded
Estimated Emissions Reductions

- >328 tons per year (TPY)\(^{\dagger}\) of criteria pollutant emissions reduced
  \(^{\dagger}\) Not all programs reporting emission reductions

- Ozone precursors reductions = removing >84,000 vehicles from Bay Area fleet

- 19,135 TPY\(^*\) of carbon dioxide (CO\(_2\)) emissions reduced
  \(^*\) Not all programs reporting CO\(_2\) reductions

Nitrogen oxides (NO\(_X\))

- 222 TPY NO\(_X\)

Reactive organic gases (ROG)

- 89 TPY ROG

Particulate matter (PM)

- 17 TPY PM
Historical Trends
Grant Funds Awarded 2011-2019

Average ~$70M
## Historical Trends
### Funding Awarded 2015-2019

Over $338.8M awarded

<table>
<thead>
<tr>
<th>Light Duty Vehicles &amp; Infrastructure</th>
<th>Trip Reduction</th>
<th>On-Road Trucks and Buses</th>
<th>Off-Road Equipment</th>
<th>Other</th>
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<tbody>
<tr>
<td>Light Duty EVs</td>
<td>Shuttles &amp; Ridesharing</td>
<td>Heavy Duty Trucks</td>
<td>Locomotives</td>
<td>Planning &amp; Outreach</td>
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<tr>
<td>EV Charging</td>
<td>Bicycle Facilities</td>
<td>Transit Buses</td>
<td>Agriculture</td>
<td>Woodsmoke</td>
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<tr>
<td>Alternative Fueling Infrastructure</td>
<td>Spare the Air</td>
<td>School Buses</td>
<td>Equipment</td>
<td>Pass Through</td>
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<tr>
<td>Vehicle Buy Back</td>
<td>Commuter Benefits</td>
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<td>Marine</td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>Light Duty EVs</th>
<th>EV Charging</th>
<th>Alternative Fueling Infrastructure</th>
<th>Vehicle Buy Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>$47.3M</td>
<td>$41.5M</td>
<td>$75.7M</td>
<td>$118.3M</td>
</tr>
<tr>
<td>$56.0M</td>
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</tr>
</tbody>
</table>

Mobile Source Committee Meeting, February 27, 2020
Path to Diesel Free by ‘33

2005  2010  2015  2020  2025  2030  2033

Commercially Available
Pre-Commercial
R&D
### Results 2011-2019

<table>
<thead>
<tr>
<th>Light-Duty Cars &amp; Fueling Stations</th>
<th>Shared &amp; Connected Vehicles</th>
<th>On-Road Trucks and Buses</th>
<th>Off-Road &amp; Rail</th>
<th>Shore Power</th>
<th>Wood Smoke</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;1,600 cars</td>
<td>Bike Sharing</td>
<td>&gt;300 Medium &amp; Heavy-Duty Vehicles</td>
<td>~160 cargo handling &amp; airport ground support equipment&lt;br&gt;Caltrain&lt;br&gt;~250 Lawn &amp; Garden</td>
<td>14 Berths at Port of Oakland</td>
<td>&gt;50 residential electric heat pumps</td>
</tr>
<tr>
<td>&gt;5,000 charging stations</td>
<td>Car Sharing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shared autonomous vehicles</td>
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<td></td>
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</tr>
</tbody>
</table>

*Mobile Source Committee Meeting, February 27, 2020*
## Projected Grant Revenues for Calendar Year 2020 (in Millions)

<table>
<thead>
<tr>
<th>Fund/Program</th>
<th>Amount (in Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation Fund for Clean Air</td>
<td>$25.6</td>
</tr>
<tr>
<td>Enhanced Fleet Modernization Program</td>
<td>$4</td>
</tr>
<tr>
<td>Mobile Source Incentive Fund</td>
<td>$12.8</td>
</tr>
<tr>
<td>Carl Moyer †</td>
<td>$22.2</td>
</tr>
<tr>
<td>Assembly Bill (AB) 617 / Community Health Protection</td>
<td>$40</td>
</tr>
<tr>
<td>Volkswagen NOx Mitigation*</td>
<td>$30</td>
</tr>
</tbody>
</table>

### Total

$134.6

†Carl Moyer category includes revenue from: Carl Moyer, Carl Moyer Statewide Funds, Funding Agricultural Replacement Measures for Emission Reductions (FARMER), and Low Carbon Fuel Standard.

*Total Volkswagen funding is $423M statewide, which will be dispersed over ~5 year period. Staff projects that as much as 33% of funding could go to projects located in the Bay Area.
2020 Grant Program Priorities

- AB 617 & impacted communities to reduce disproportionate exposure
- Equity Programs, e.g. Vehicle Incentive Program, Clean Cars for All
- Funding for projects that benefit communities adjacent to ports, roadways, and stationary facilities that drive increased health risk
- Diesel Free by ‘33
- Trip reduction to reduce Vehicle Miles Traveled (VMT)