October 7, 2020

OTAQ

AAPCA Virtual Fall Meeting

Overview of Current and Upcoming OTAQ Priorities

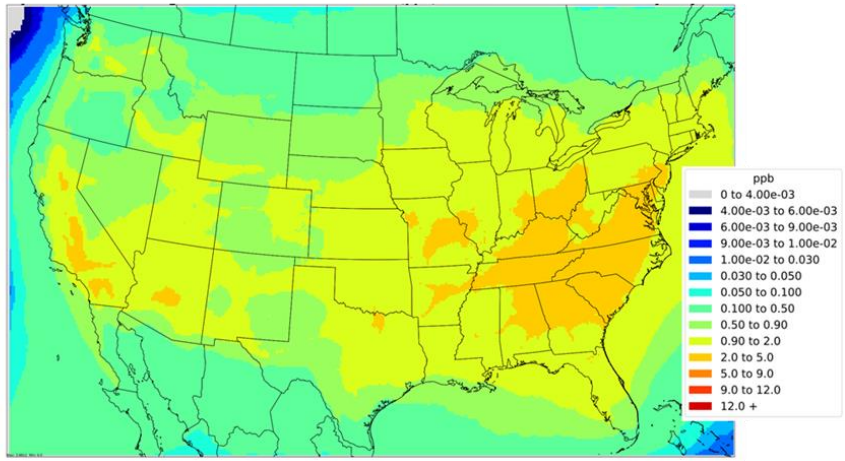
Overview:

- OTAQ Regulatory Updates
- MOVES
- State CAA programs
- OTAQ Partnership Programs
  - DERA
  - EPA Ports Initiative
  - TEAM Case Studies

Cleaner Trucks Initiative: Need for Action

- Heavy-duty emissions contribute to ozone, $PM_{2.5}$, and ecosystem effects
- Heavy-duty engines will continue to be one of the largest contributors to mobile source NOx emissions nationwide in the future

Projected Seasonal Ozone Concentrations from Onroad Heavy-duty Diesel in 2025*



*8-hr maximum average; Zawacki et al, 2018. Mobile source contributions to ambient ozone and particulate matter in 2025. Atmospheric Environment, Vol 188, pg 129-141. Available online: https://doi.org/10.1016/j.atmosenv.2018.04.057.

Cleaner Trucks Initiative: ANPR

- Advance Notice of Proposed Rulemaking on January 21, 2020
- We've heard from state & local agencies that while ambient concentrations are improving, more needs to be done to reduce exposure and risk
  - NOx reductions from heavy-duty vehicles are a critical part of strategies to attain and maintain the NAAQS
  - Environmental justice and other public health concerns
  - Regional haze
  - Water bodies and terrestrial ecosystems

Cleaner Trucks Initiative: Program Areas

- Current emissions standards have lowered overall NOx emissions, but have not resulted in effective control under all operating conditions

- Major program areas under consideration:
  - Standards and test cycles
  - Emission control technologies
  - In-use emission standards
  - Extending the regulatory useful life
  - Ensuring long-term in-use emissions performance
  - Certification and compliance streamlining

Cleaner Trucks Initiative: Status

- We are actively moving forward with this important rulemaking
  - Engaging in a robust and open dialogue with stakeholders
  - Furthering our own research and test programs which have been disrupted by the pandemic

- Planning to issue proposal in first quarter of 2021

Other Regulatory Priorities

- Aircraft GHG Standard
  - Proposed in August
  - Would adopt standards set internationally in 2016
  - Industry strongly requesting final rule by the end of 2020

- Fuel Streamlining
  - Streamlining fuels regulatory program to increase efficiency and reduce costs
  - Proposed in April and working to finalize this fall

- Heavy-duty/light-duty/nonroad Technical Amendments
  - Proposed in May
  - Plan to finalize by the end of 2020

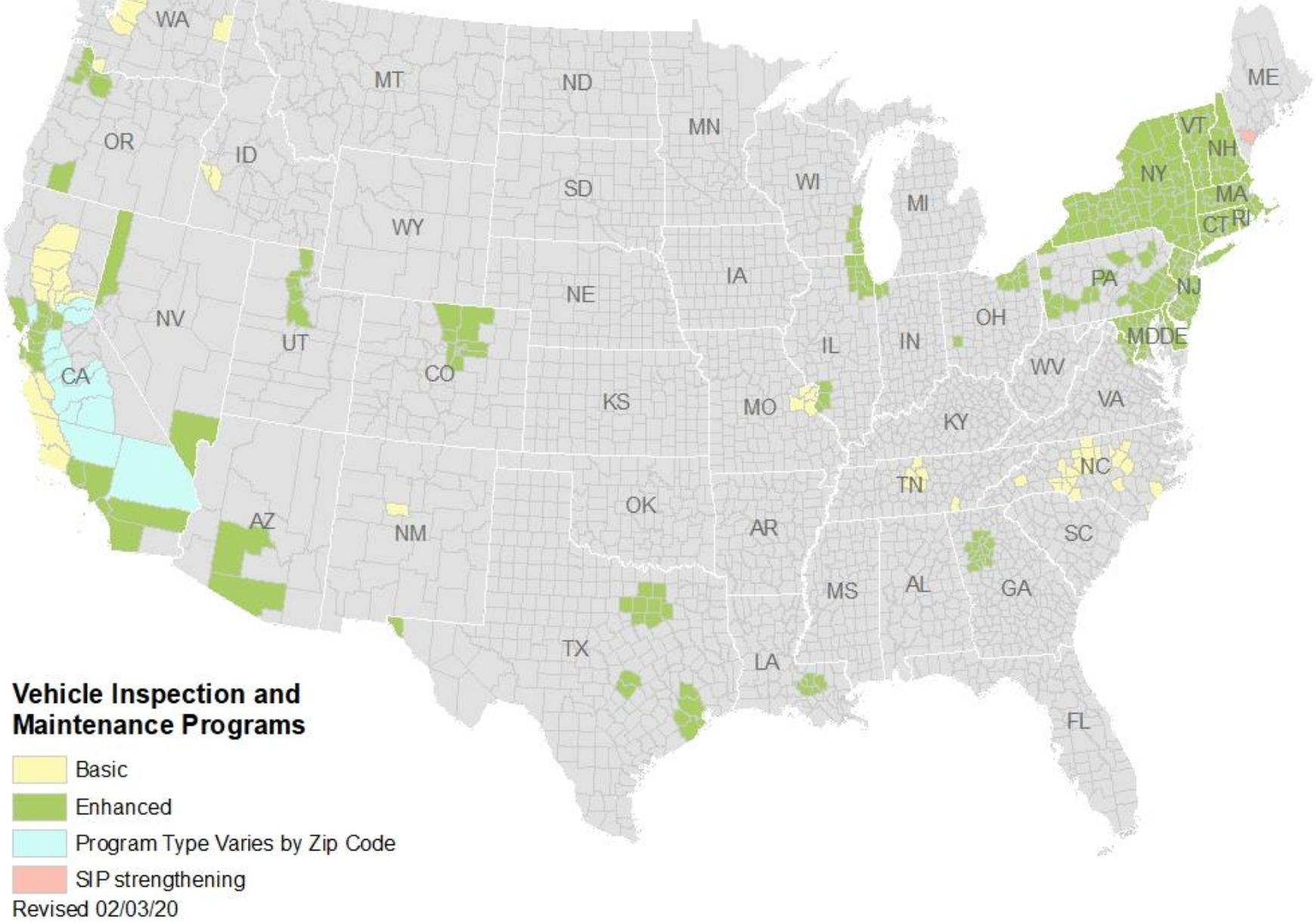
MOVES Emissions Model

- We are developing a major new revision to MOVES, EPA's emission model for mobile sources
- MOVES3 will replace MOVES2014b
  - Incorporates rules not in prior MOVES version
  - New data on heavy-duty and light-duty emissions
  - Improved user features
- We are working toward release by end of 2020
- Updated guidance will discuss when and how MOVES3 should be used for regulatory purposes
- Public webinar after release, ongoing technical support and training

Vehicle Emission Inspection and Maintenance (I/M) Programs

- Goal: To identify light-duty gasoline vehicles with excess emissions and effect needed repairs.
  - About 68 million vehicles tested annually in 30 states + D.C.
- OTAQ's I/M team –
  - Hosts bimonthly I/M stakeholder calls for workgroup of 150+ members from all state and local I/M agencies;
  - Sponsors National OBD Clearinghouse: www.obdclearinghouse.com.
- In 2020 –
  - Released 3 new I/M guidance documents to provide clarity to state/local agencies: www.epa.gov/state-and-local-transportation/vehicle-emissions-inspection-and-maintenance-im-policy-guidance-and
  - Worked with EPA Regions and states managing I/M programs during COVID-19 pandemic.

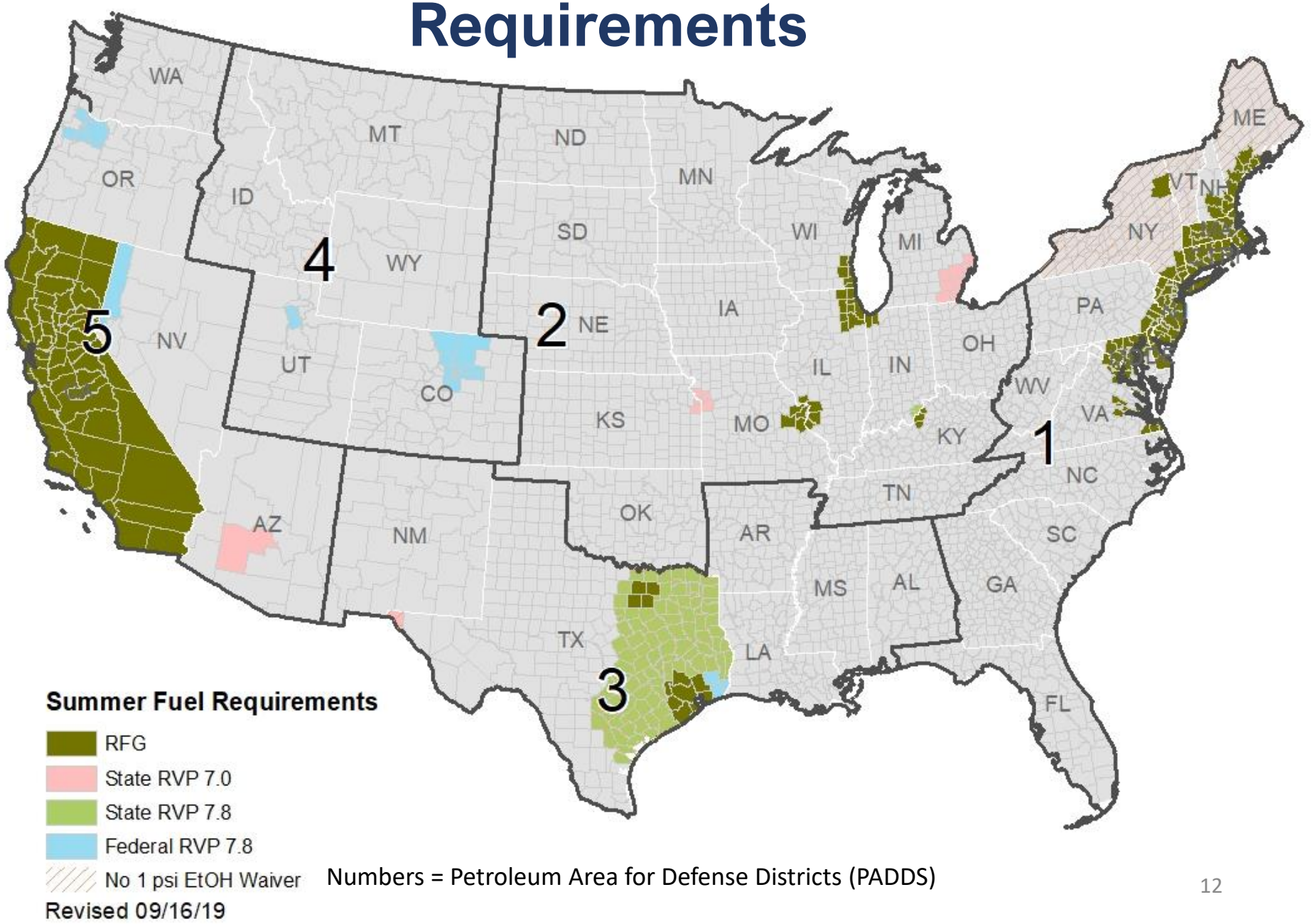
Current I/M Programs



State Fuel Program Overview

- State fuel programs include:
  - Federal reformulated gasoline (RFG)
    - Currently sold in 17 states and the District of Columbia
  - California RFG—applies statewide
  - Federal 7.8 psi summertime Reid Vapor Pressure (RVP) limit
    - There are 6 areas in 5 states required to sell gasoline that complies with this limit
  - State fuel regulations—primarily those focused on summertime RVP control
    - There are 7 areas in 6 states where summertime RVP regulations currently apply

2019-Summertime RVP Control Requirements



Numbers = Petroleum Area for Defense Districts (PADDS)

State Fuel Program Plans for Next 2 Years

- Current information indicates that:
  - One state is pursuing an RFG opt-out
  - Two states are pursuing removing state fuel rules
- If other states considering fuel changes, we're available to help
- Opportunities in OTAQ Fuel Streamlining Rule:
  - Updating the RFG opt-out process regulations
  - Creating a streamlined process for relaxing the federal 7.8 psi RVP limit—based on the RFG opt-out process
  - Providing a pathway for mandatory RFG areas to remove the RFG requirement with certain safeguards
    - Must be designated attainment for the most stringent applicable ozone NAAQS
  - Clarifying regulations, removing outdated provisions, etc.

Promoting clean air best practices at ports

EPA PORTS INITIATIVE

Through EPA tools and assistance in the five program areas, we aim to accelerate adoption of:

- **Cleaner technologies and other strategies**
- **Clean air planning practices** (emissions inventories, clean air plans, community engagement) that inform strategic clean air investments

Highlighted resources for port stakeholders

EPA PORTS INITIATIVE

Recently Released

- Port Emissions Inventory Guidance
  www.epa.gov/ports-initiative/port-and-goods-movement-emission-inventories

- Community-port collaboration toolkit, training materials, and case studies from pilot projects in Savannah, New Orleans, and Seattle
  www.epa.gov/community-port-collaboration

Coming Soon

- Case study on San Pedro Bay Ports' Clean Air Action Plan
- Factsheets on operational strategies such as gate management
- Updated best practices web area
- Assessment of fuel cell applications at ports

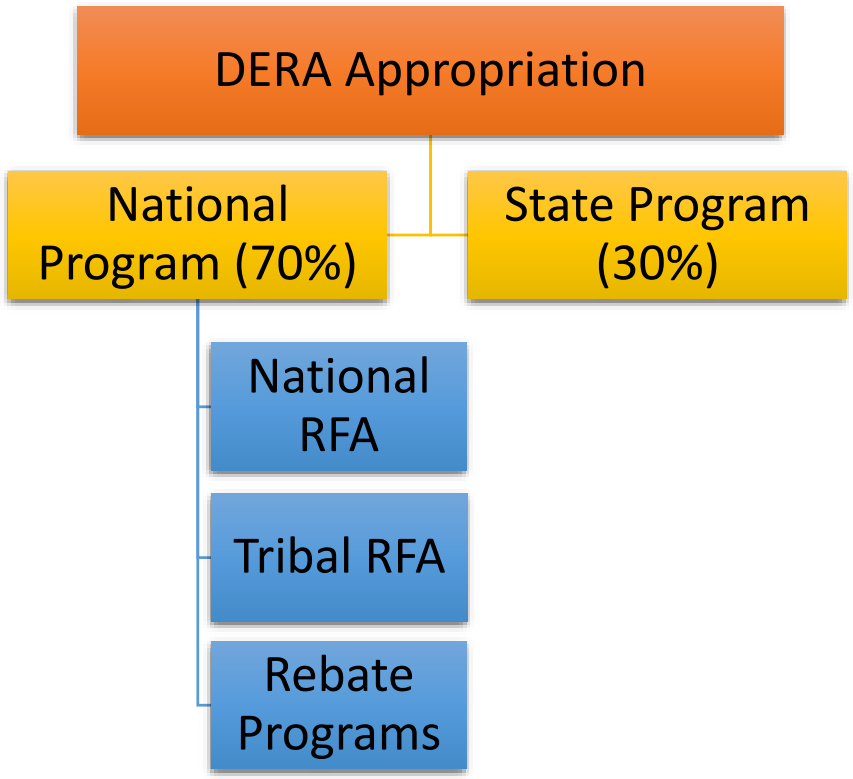
What is DERA?

Diesel Emissions Reduction Act (DERA): provides funding to achieve reductions in diesel emissions and exposure from the nation's legacy diesel fleet, particularly in areas of poor air quality.

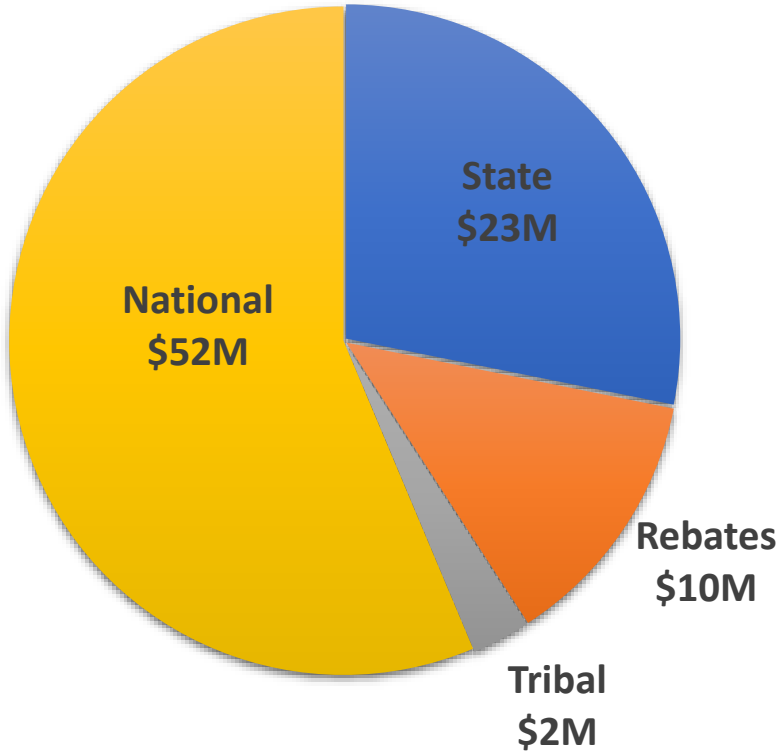
How? By incentivizing fleet owners to purchase new, cleaner vehicles and engines and removing the old, polluting engines from service.

DERA's Funding Allocation

Funding Allocation



2020 Funding by Program ($87M appropriation)



TEAM

- Travel Efficiency Assessment Method (TEAM) is EPA's analytical approach that uses local travel activity information, sketch-planning travel activity analysis, and MOVES emissions modeling to estimate potential future emission reductions from combinations of travel efficiency strategies (e.g. travel demand management, enhancements to public transit, transportation pricing, land use changes, etc.).

- TEAM can be a cost-effective alternative to more resource-intensive travel demand forecasting models to compare possible scenarios and aid in decision-making.

- OTAQ to host public webinar in near future on TEAM – we will let AAPCA know!

Case Studies with State and Local Partners

2014
Tucson
Kansas City
Boston

2016
St. Louis
Atlanta
Orlando

2018
Lake Charles
Seattle
Champaign
Connecticut

2020
Austin
Pittsburgh

For more information on TEAM and to access the case studies, please visit: www.epa.gov/state-and-local-transportation/estimating-emission-reductions-travel-efficiency-strategies