

# U.S. Environmental Protection Agency's Diesel Emission Reduction Program

Midwest Clean Diesel Initiative

April 25, 2019

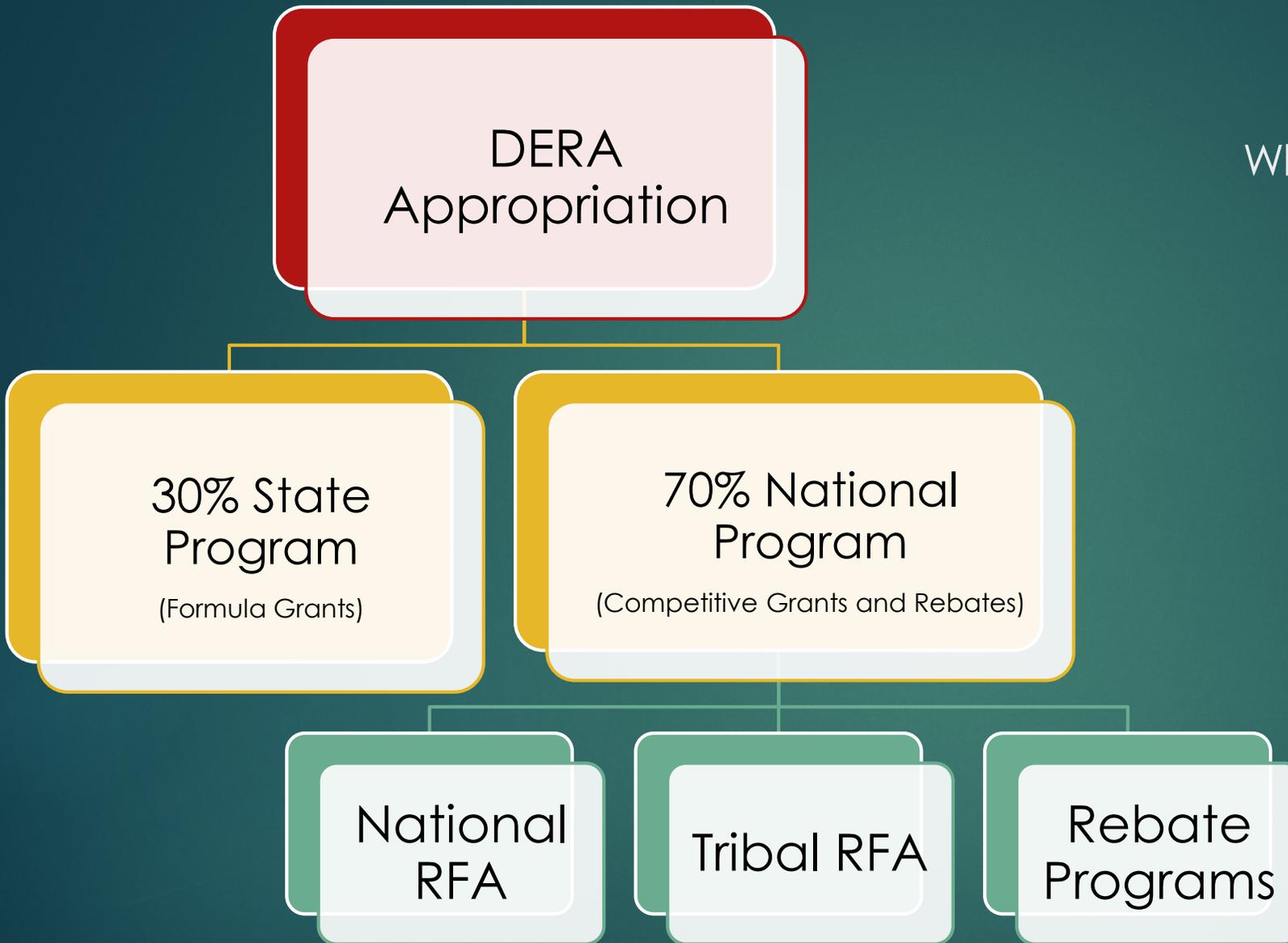
Faye Swift, DERA Grants & Policy Team Leader

[www.epa.gov/cleandiesel](http://www.epa.gov/cleandiesel)

# Diesel Emissions Reduction Act

- Provides funding, on a competitive basis, to eligible entities, to achieve significant reductions in diesel emissions in terms of pollution produced and diesel emissions exposure, particularly from fleets operating in areas designated by the Administrator as poor air quality areas
- Funds projects using an EPA or CARB-certified engine configuration or a verified technology (aka retrofit)





## Who can apply for DERA Grants?

- ▶ Regional, state, local, tribal or port agency with jurisdiction over transportation or air quality; and
- ▶ Nonprofit organization or institution which
  - ▶ Represents or provides pollution reduction or educational services to persons or organizations that operate diesel fleets; or
  - ▶ Has, as its principle purpose, the promotion of transportation or air quality
- ▶ For-profits and individuals can benefit through partnerships with eligible entities

# Eligible Vehicles, Engines & Equipment

- ▶ May include, but are not limited to:
  - ▶ Buses;
  - ▶ Class 5 – Class 8 heavy-duty highway vehicles;
  - ▶ Marine engines;
  - ▶ Locomotives engines; and
  - ▶ Non-road engines, equipment or vehicles used in:
    - ▶ Construction; Handling of cargo (including at a port or airport); Agriculture; Mining; or Energy production (including stationary generators and pumps)

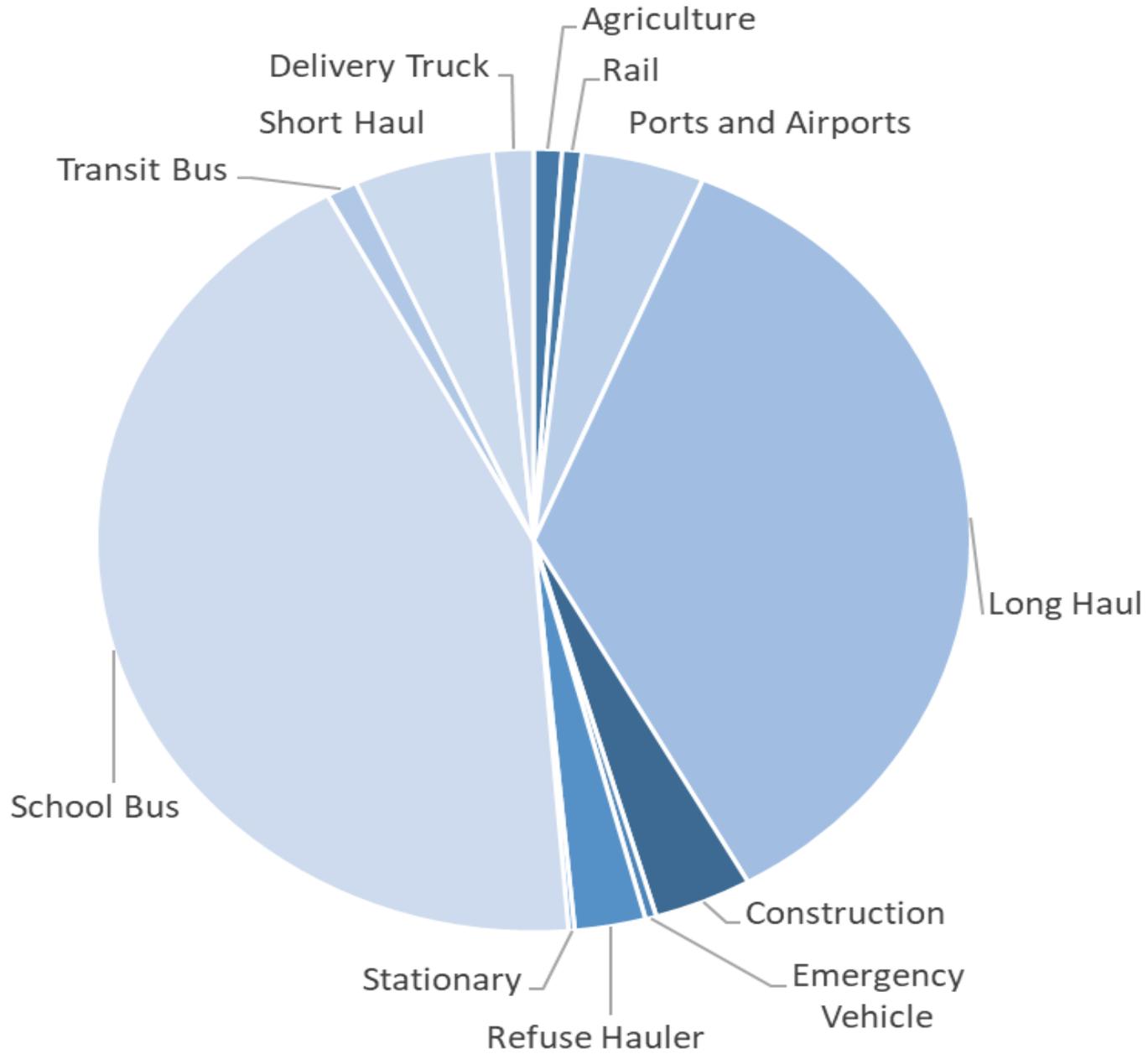
# What will EPA Fund?

- ▶ **Certified Clean Alternative Fuel Conversion:** 40%
- ▶ **Certified Vehicle/Equipment Replacement:**
  - ▶ 25% of a vehicle powered by a diesel or alternative fueled engine (including hybrids) certified to EPA emission standards;
  - ▶ 35% of a vehicle powered by an engine certified to meet CARB's Optional Low-NOx Standards;
  - ▶ 45% of a vehicle powered by a zero tailpipe emission power source.
  - ▶ **Replacement of Drayage Trucks:** 50%
- ▶ **Certified Engine Replacement:**
  - ▶ 40% of a diesel or alternative fueled engine (including hybrids) certified to EPA emission standards
  - ▶ 50% of the cost of an engine certified to meet CARB's Optional Low-NOx Standards
  - ▶ 60% of the cost of a zero tailpipe emission power source
- ▶ **Verified Idle Reduction Technologies:**
  - ▶ **On-Highway Idle Reduction Technologies:** 100% if combined, 25% if stand-alone.
  - ▶ **Locomotive Idle Reduction Technologies:** 40%
  - ▶ **Marine Shore Connection Systems:** 25%
  - ▶ **Electrified Parking Spaces:** 30%

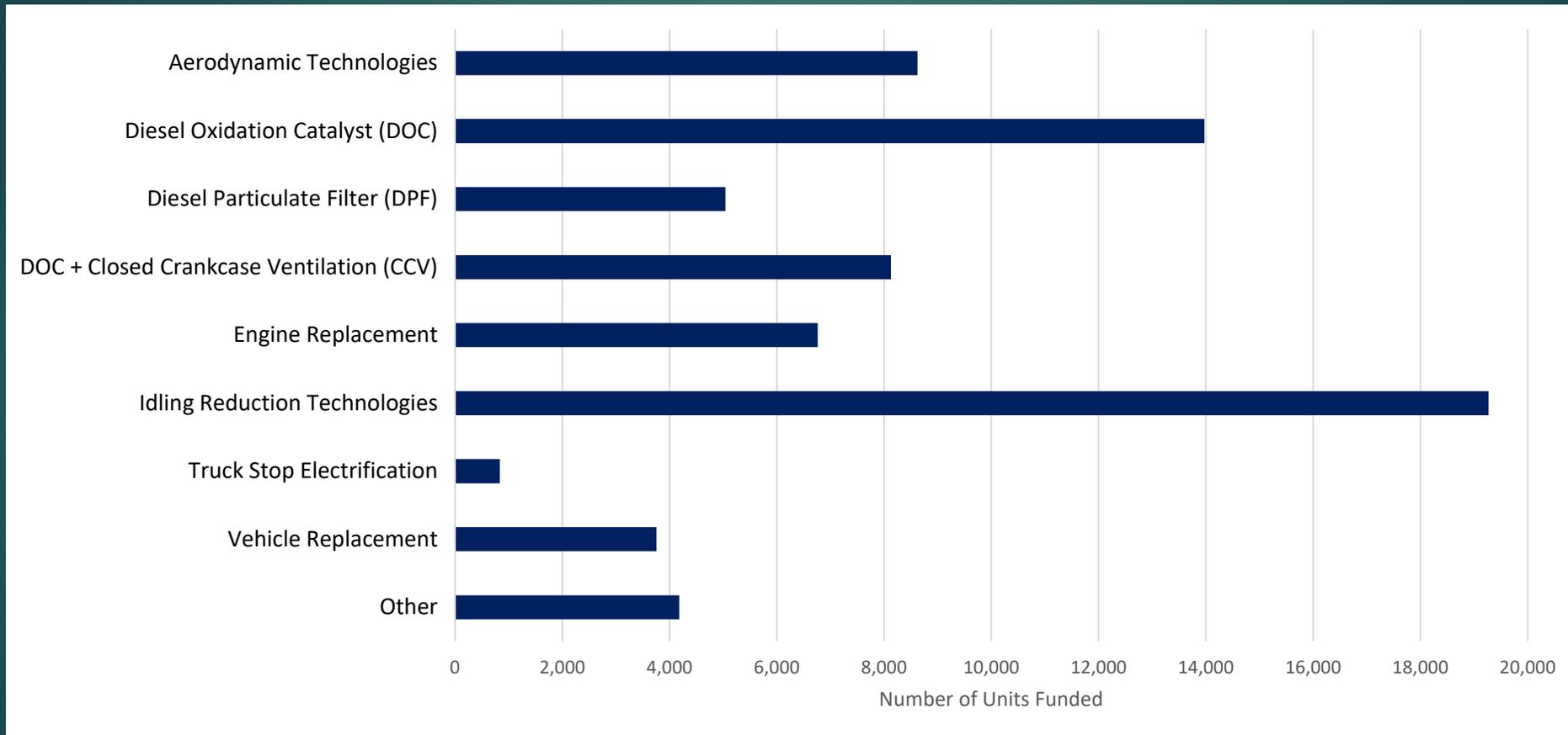
# DERA Program Benefits and Accomplishments (FYs 2008-2016)

| Investment of DERA Program                                    | Emission and Fuel Reductions      |
|---|-----------------------------------|
| \$629 million funds awarded                                   | 472,700 tons of NO <sub>x</sub>   |
| 67,300 engines retrofitted or replaced                        | 15,490 tons of PM                 |
| Up to \$19 billion in monetized health benefits               | 17,700 tons of hydrocarbon        |
| Up to 2,300 fewer premature deaths                            | 61,550 tons of carbon monoxide    |
| 64% of projects targeted to areas with air quality challenges | 5,089,170 tons of carbon dioxide  |
| 3:1 leveraging of funds from non-federal sources              | 454 million gallons of fuel saved |

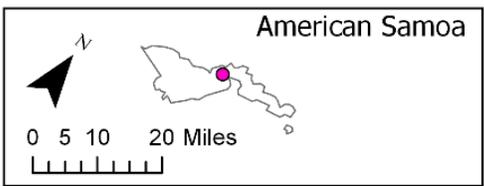
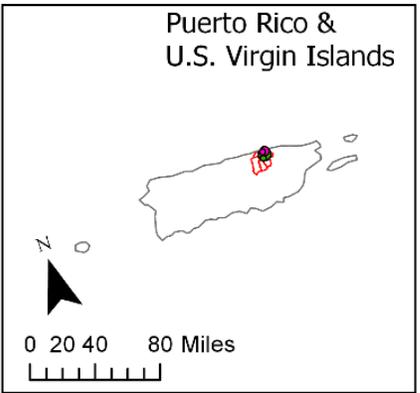
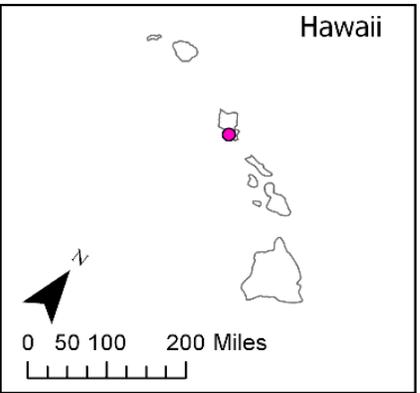
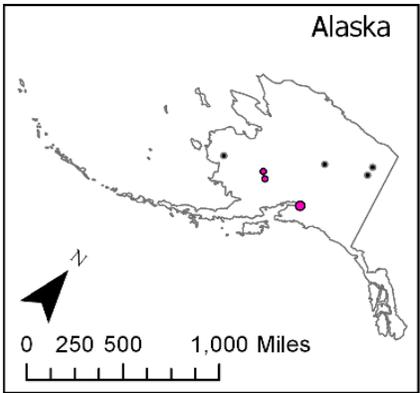
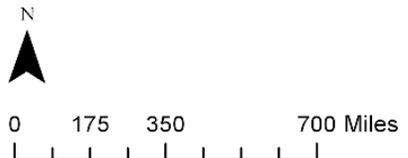
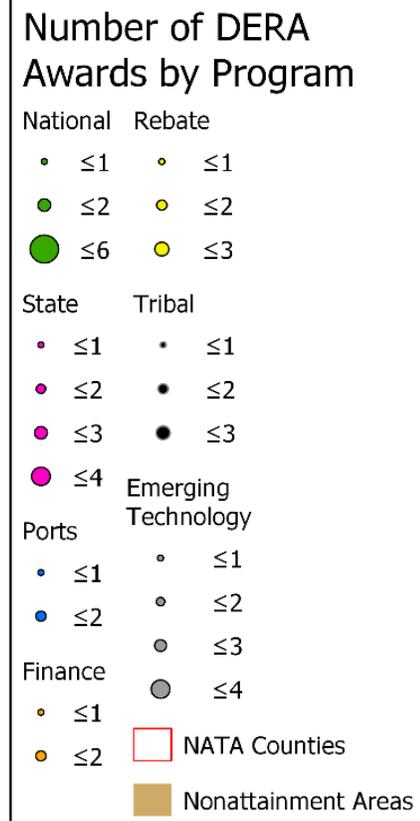
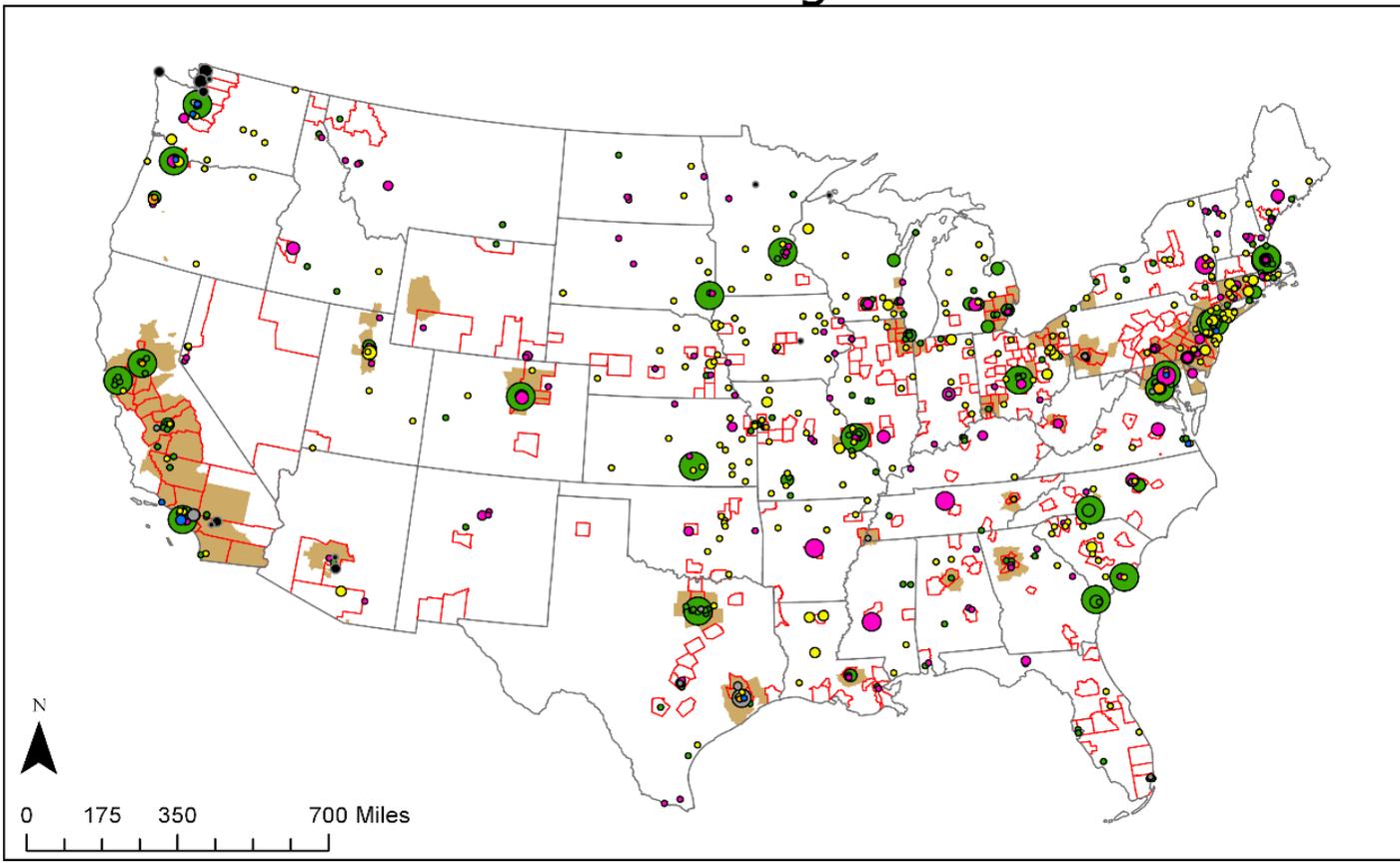
# DERA Funded Sectors 2008-2016



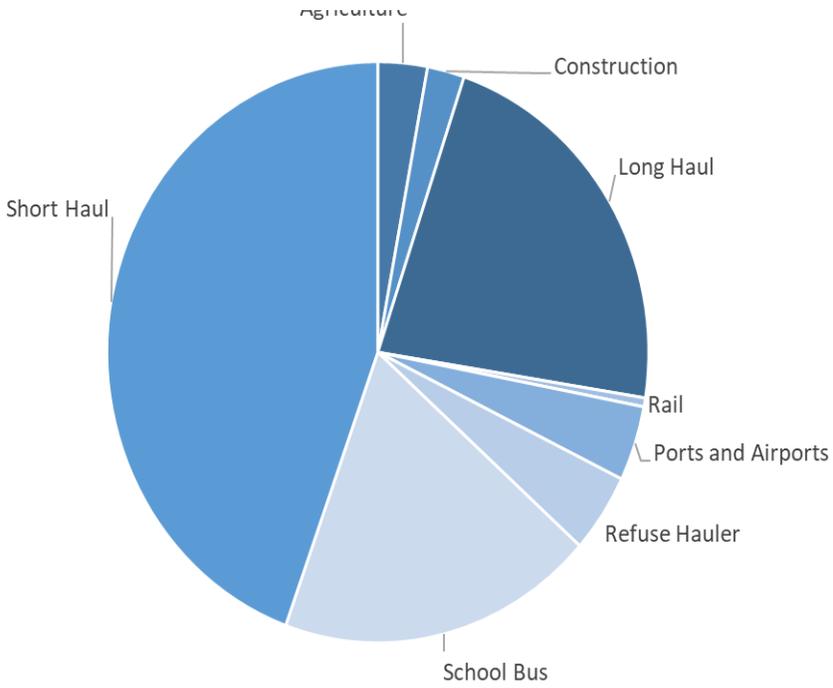
# DERA Funding by Technology Type, 2008-2016



# DERA Program FY 2008-2016



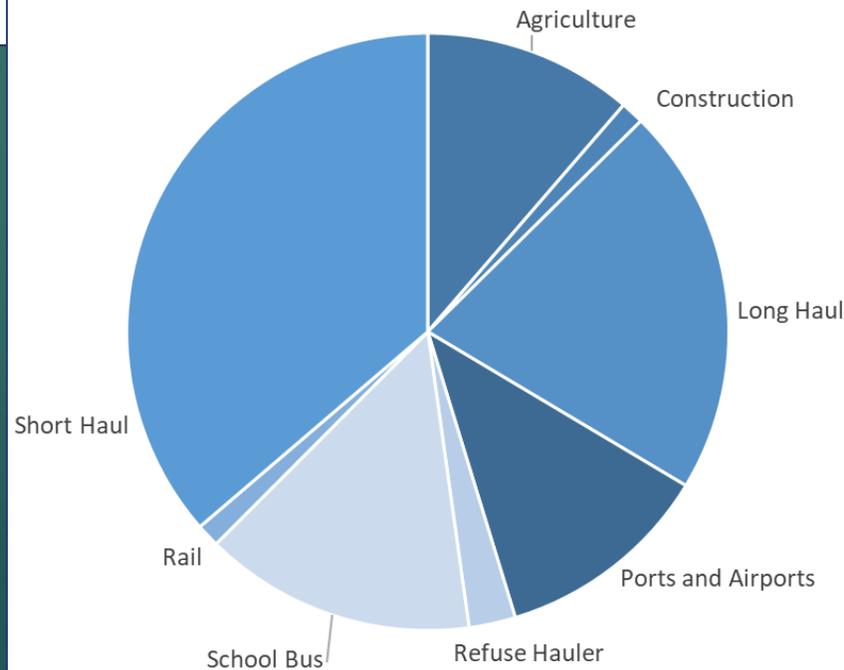
### FY 2014 DERA Funding by Sector



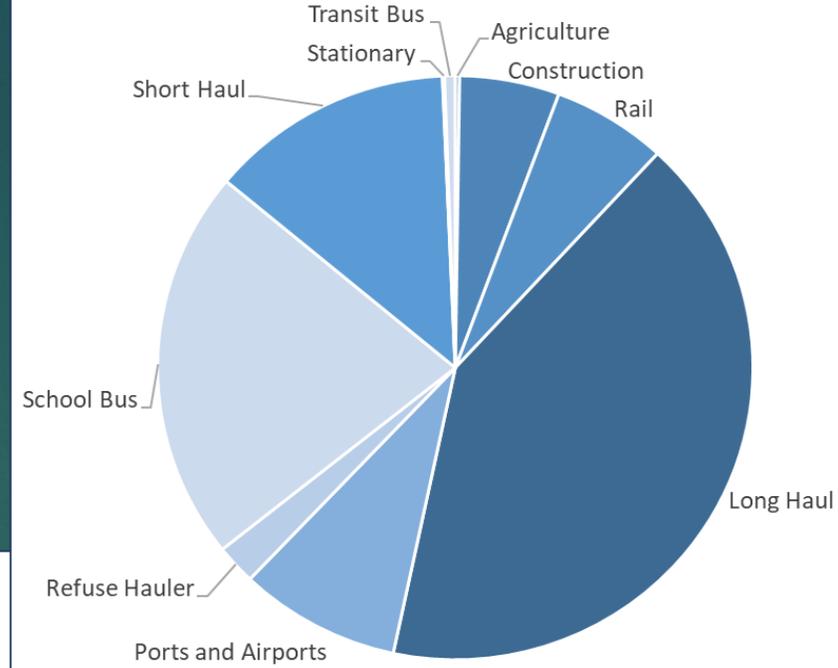
EPA funded 21 national competitive grants in FY 2014 for a total of \$10.6 million. These grants upgraded 400 engines and vehicles.

EPA funded 26 national competitive grants in FY 2015 to reduce emissions from 479 diesel engines or pieces of equipment for a total of \$15.4 million.

### FY 2015 DERA Funding by Sector

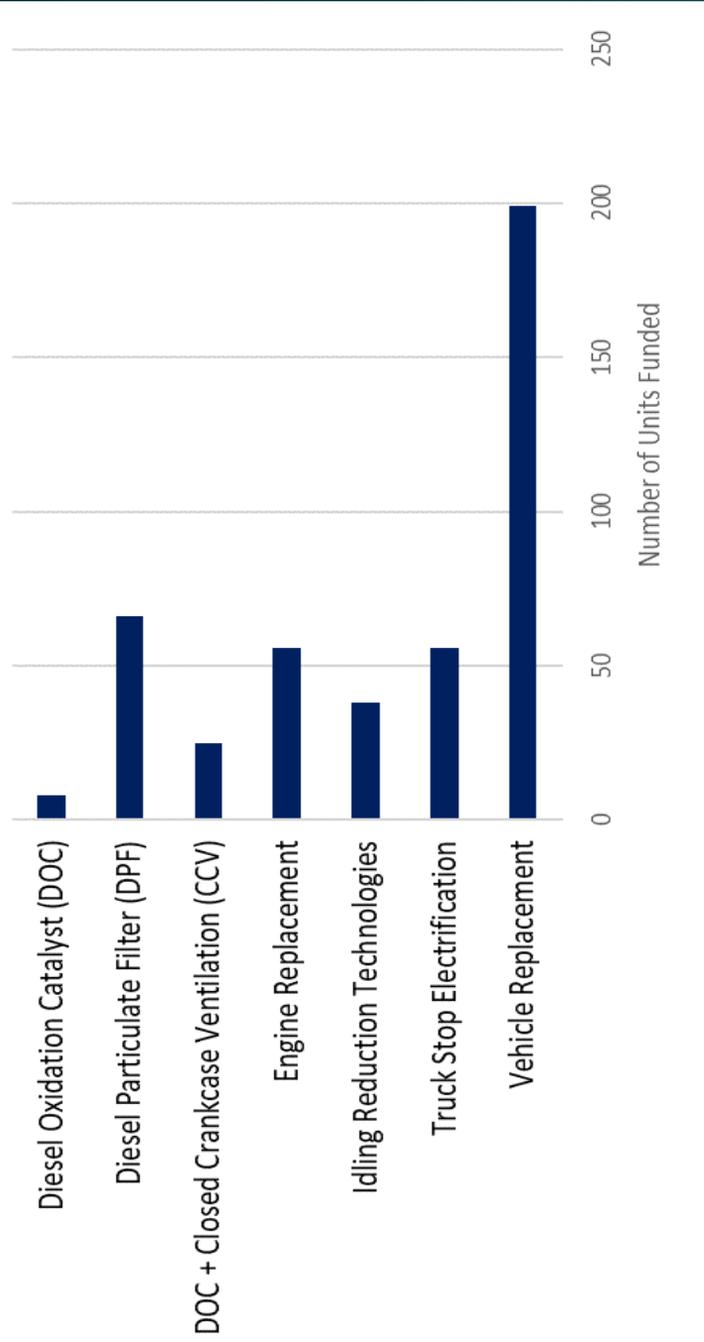


### FY 2016 DERA Funding by Sector

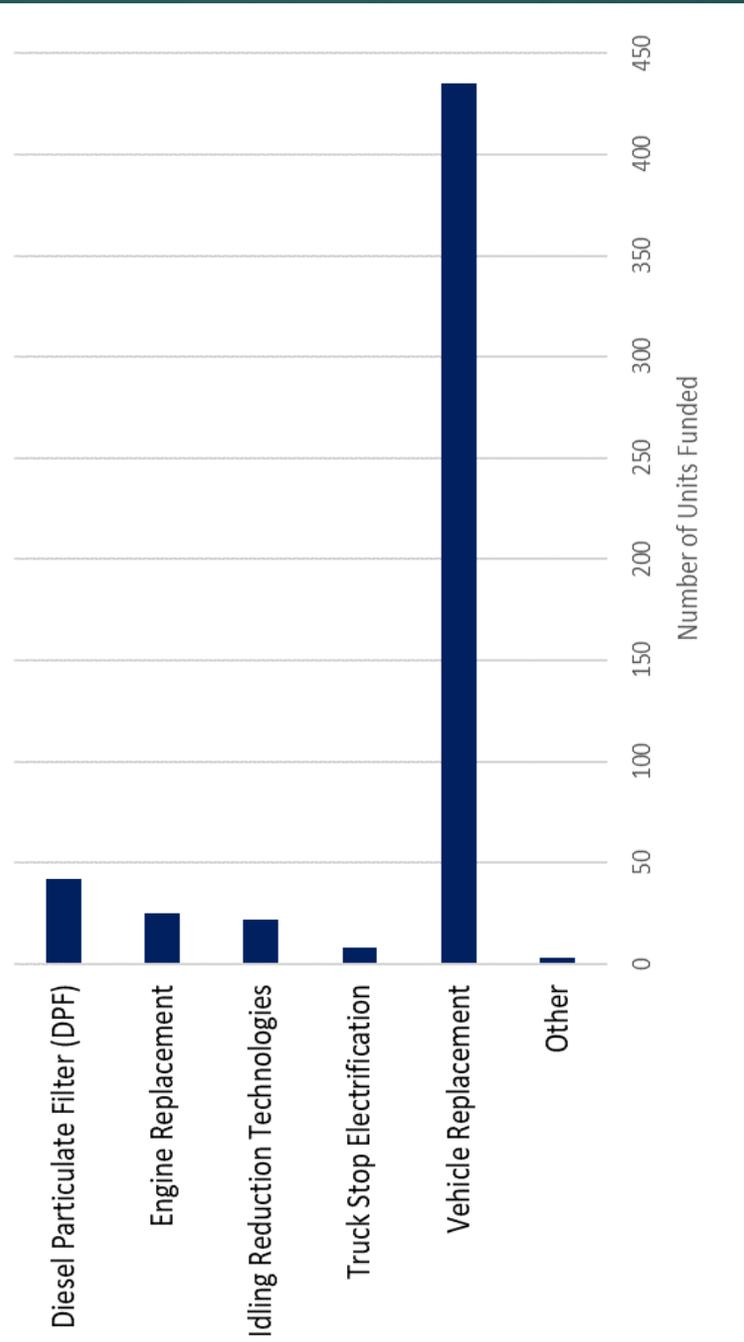


EPA funded 35 national competitive grants in FY 2016 for a total of \$32.9 million. These grants retrofitted or replaced 966 engines or vehicles.

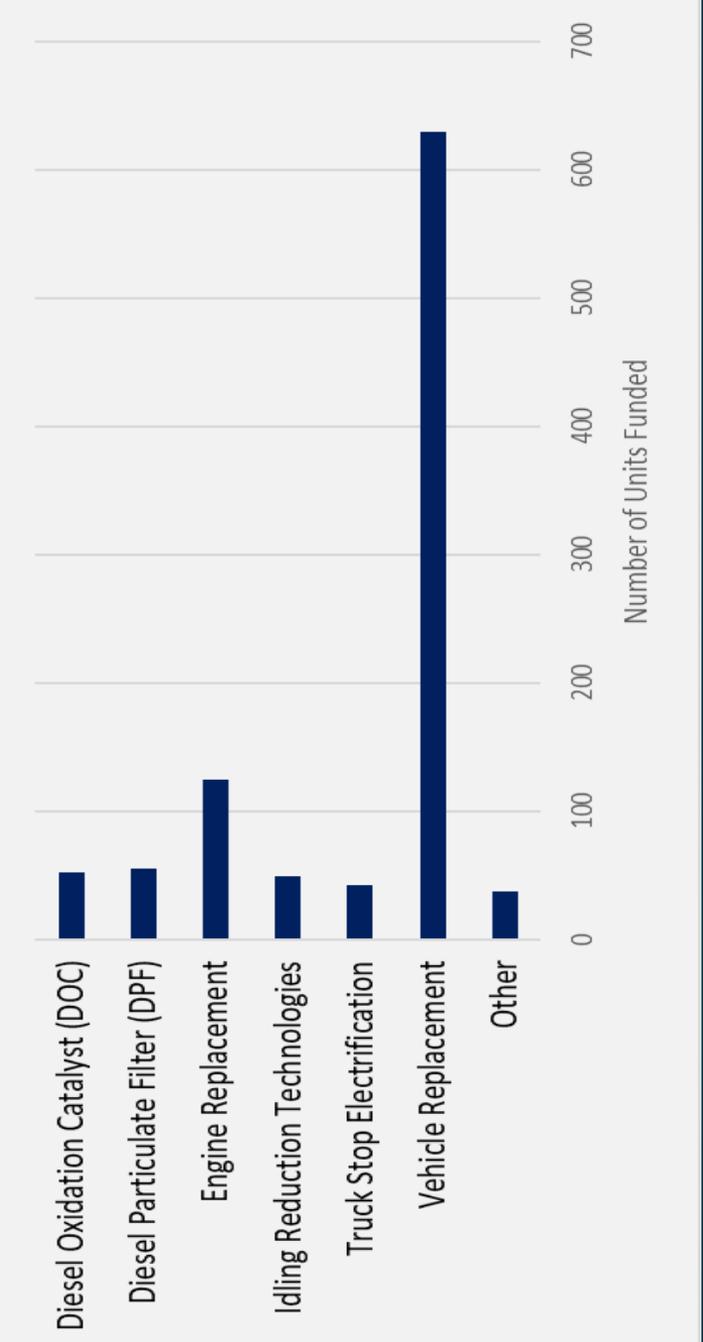
## FY 2014 DERA Technologies



## FY 2015 DERA Technologies

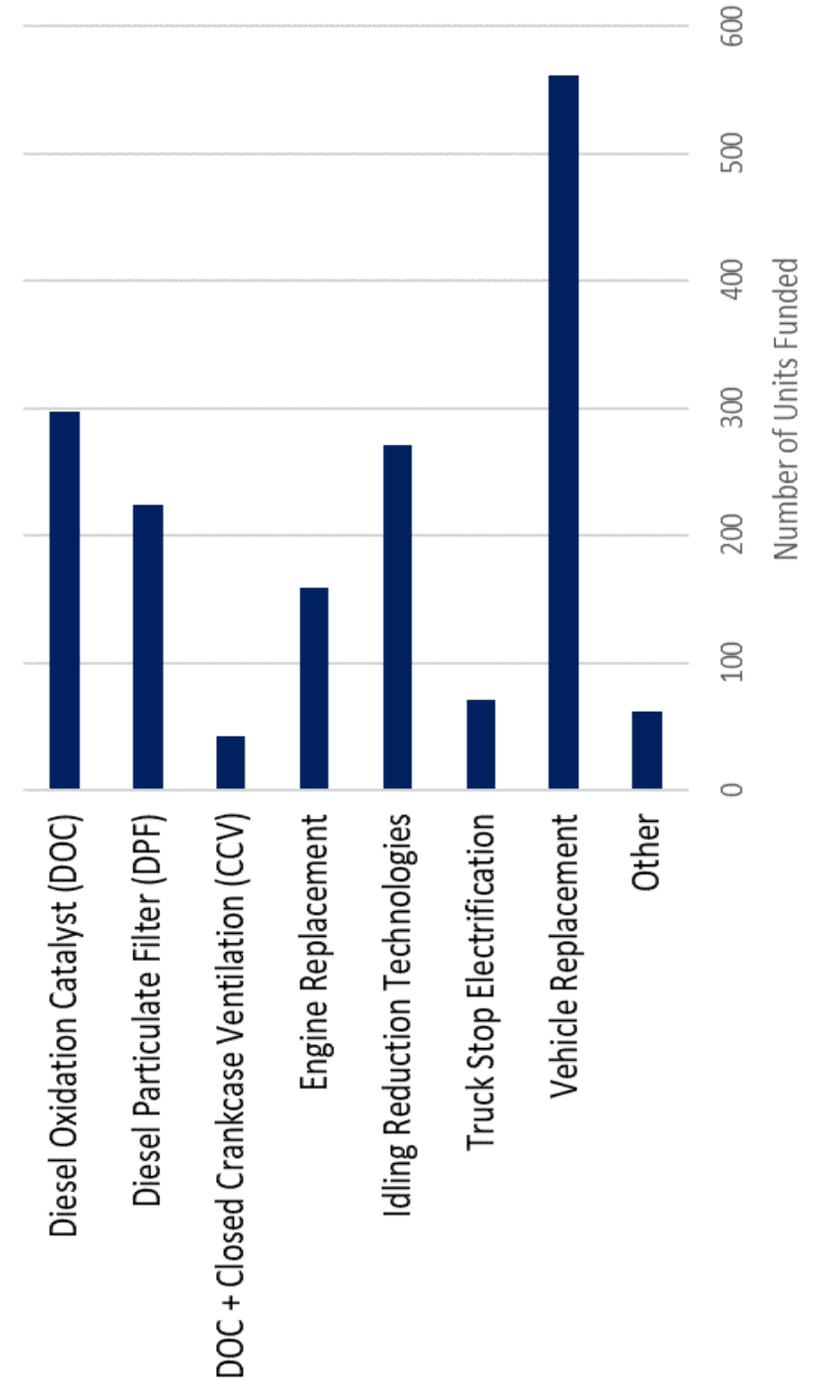
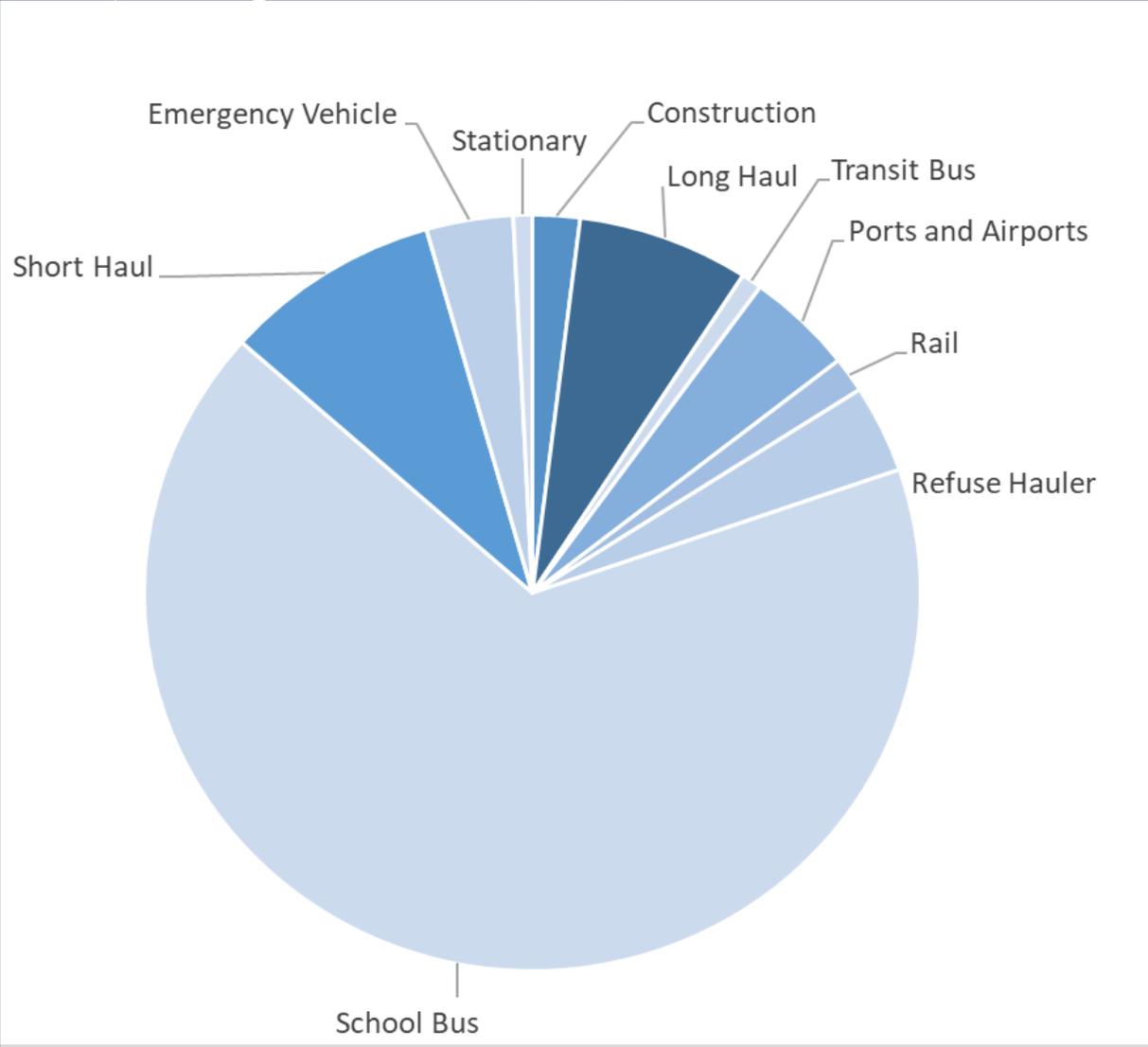


## FY 2016 DERA Technologies

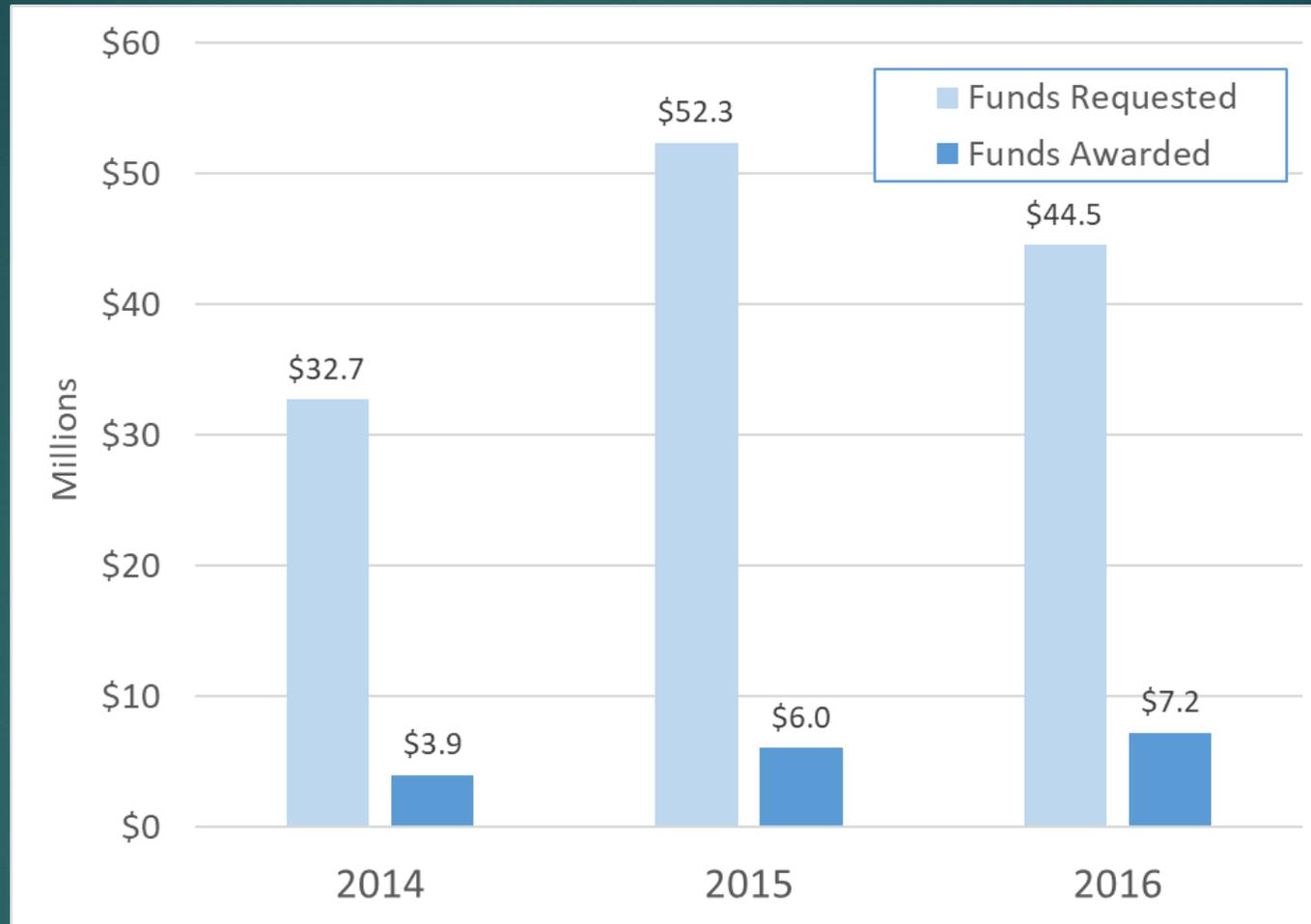


# FY 2014-2016 DERA State Funding

- \$23.2 M
- 48 of 56 eligible states and territories
- 1,520 engines and vehicles



# EPA's DERA School Bus Rebate Program



Over the FY 2014, 2015, and 2016 rebate programs, EPA received nearly 1,600 applications requesting \$130 million dollars in rebate funds. EPA awarded \$17 million in rebates for 224 fleets to replace 858 school buses.

# DERA – Moving Forward

- ▶ FY2019 DERA State Program rolling out now
- ▶ FY2019 School Bus Rebates will open in October 2019
- ▶ FY2020 DERA Competitive RFA opens December 2019
  - ▶ We are currently evaluating the program for opportunities to improve, simplify and streamline the RFA.
  - ▶ Program will continue to prioritize projects related to goods movement and projects in areas of poor air quality
- ▶ FY2020 DERA Tribal RFA will open in Spring 2020