

# 2014 EPA Port Stakeholders Summit

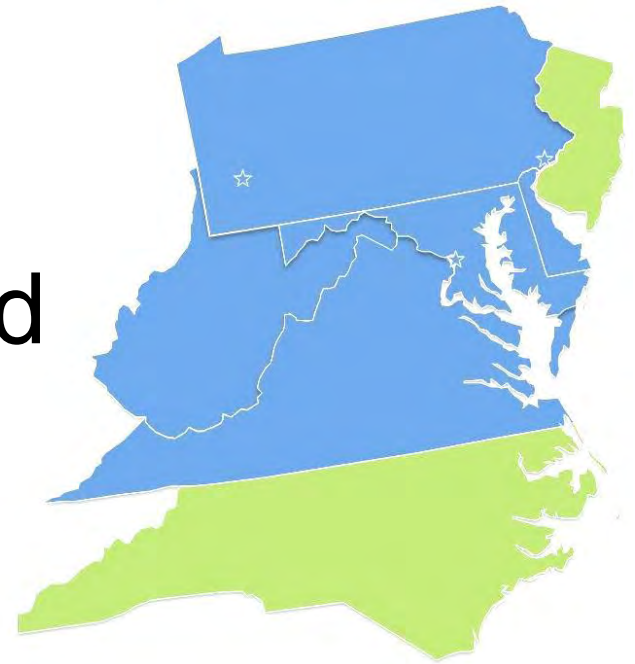


## Lessons from the Mid-Atlantic Voluntary Dray Truck Replacement Program

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# Mid-Atlantic Diesel Collaborative

- Leverage resources and expertise
- Promote collaboration and coordination
- Raise awareness: how and why to reduce diesel emissions



# Presentation Overview

- Motivation – Why Dray Trucks
- Program Description
- Results
- Lessons Learned

# Motivation

- Areas not meeting air quality standards
- Older vehicles with high emission rates
- Growth in container business anticipated

# 2007 and 2010 Engines

- New technology meets stricter emissions standards
- Replacing old trucks reduces adverse impacts on surrounding communities

# Program Description

- Goal: Replace about 110 dray trucks with 2008 or newer vehicles
- Hampton Roads
- Baltimore
- Philadelphia
- Wilmington, DE



# Program Staffing

- University of Maryland Environmental Finance Center (EFC)
- Mid-Atlantic Regional Air Management Association (MARAMA)

# Key Requirements

- Old engine MY '03 & older
- Own truck for at least a year
- Active port service
- Street legal
- New engine MY '07 & newer
- Scrap old truck



# Timeline

**2009-2010**

Obtain grant  
& build staff  
team

**2011**

Stakeholder  
outreach &  
begin  
replacing  
trucks

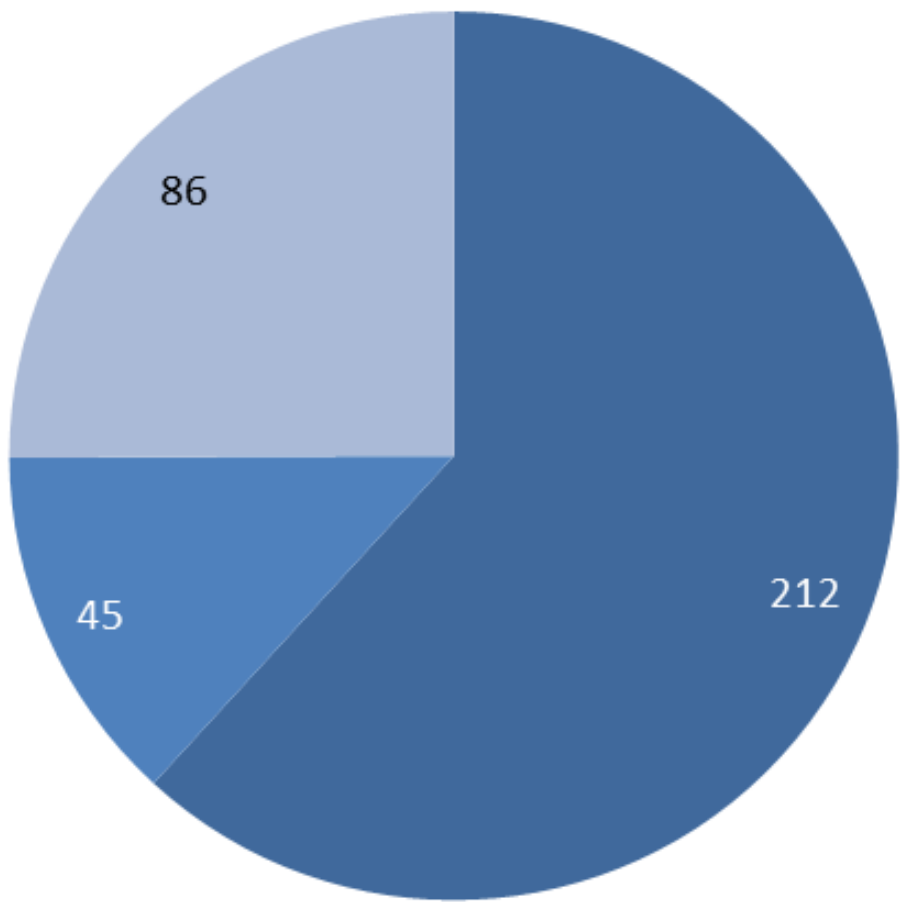
**2012 -14**

Partners,  
sponsors on  
board.  
Replace  
trucks

# Program Structure

- Stakeholder outreach
- Recognition for leveraged support
  - California Cartage
  - Champion Truck Lines
- Screened & recommended
  - Lenders
  - Truck vendors
  - Scrap yards/recyclers

# Results



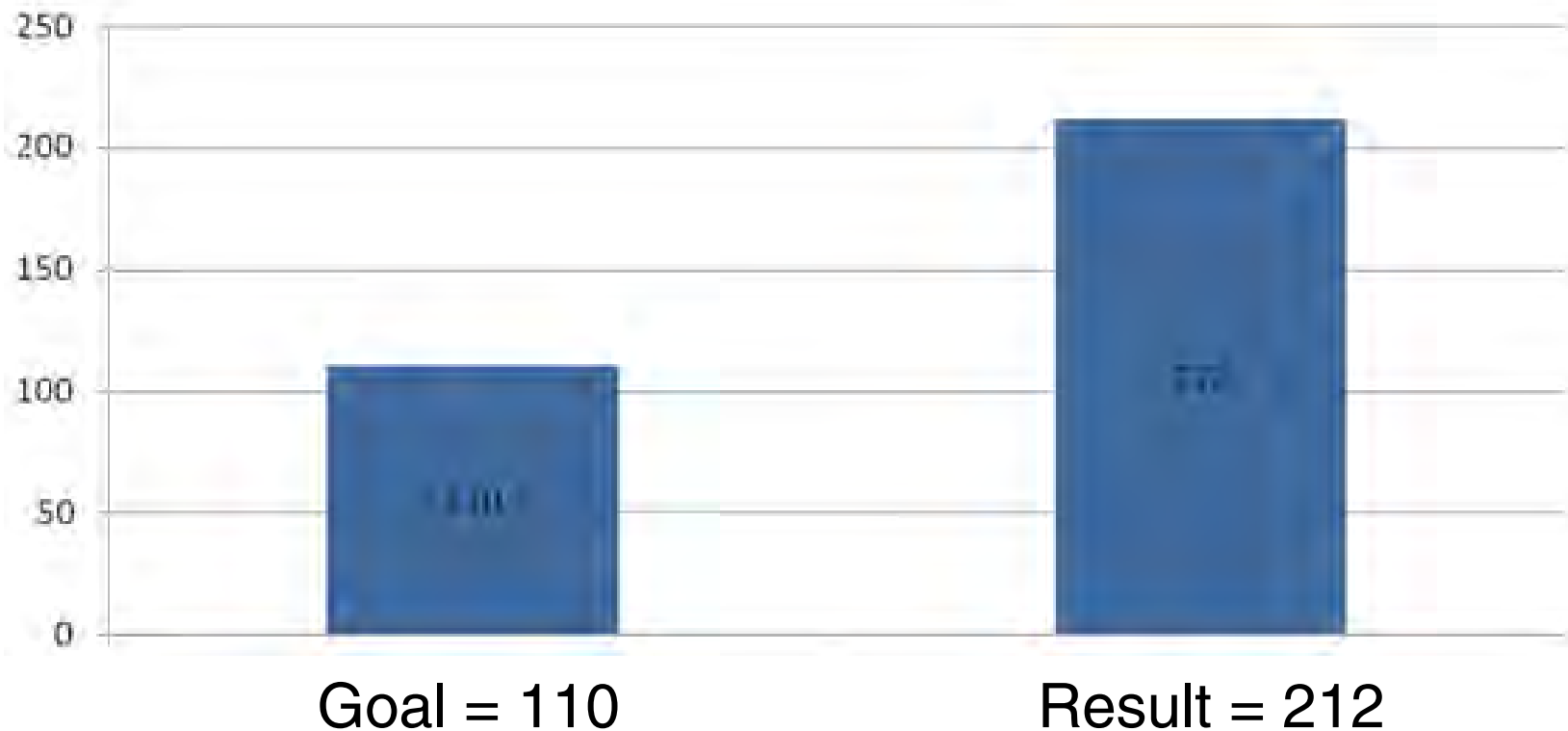
**343 Applied**

**About 3/4  
Approved**

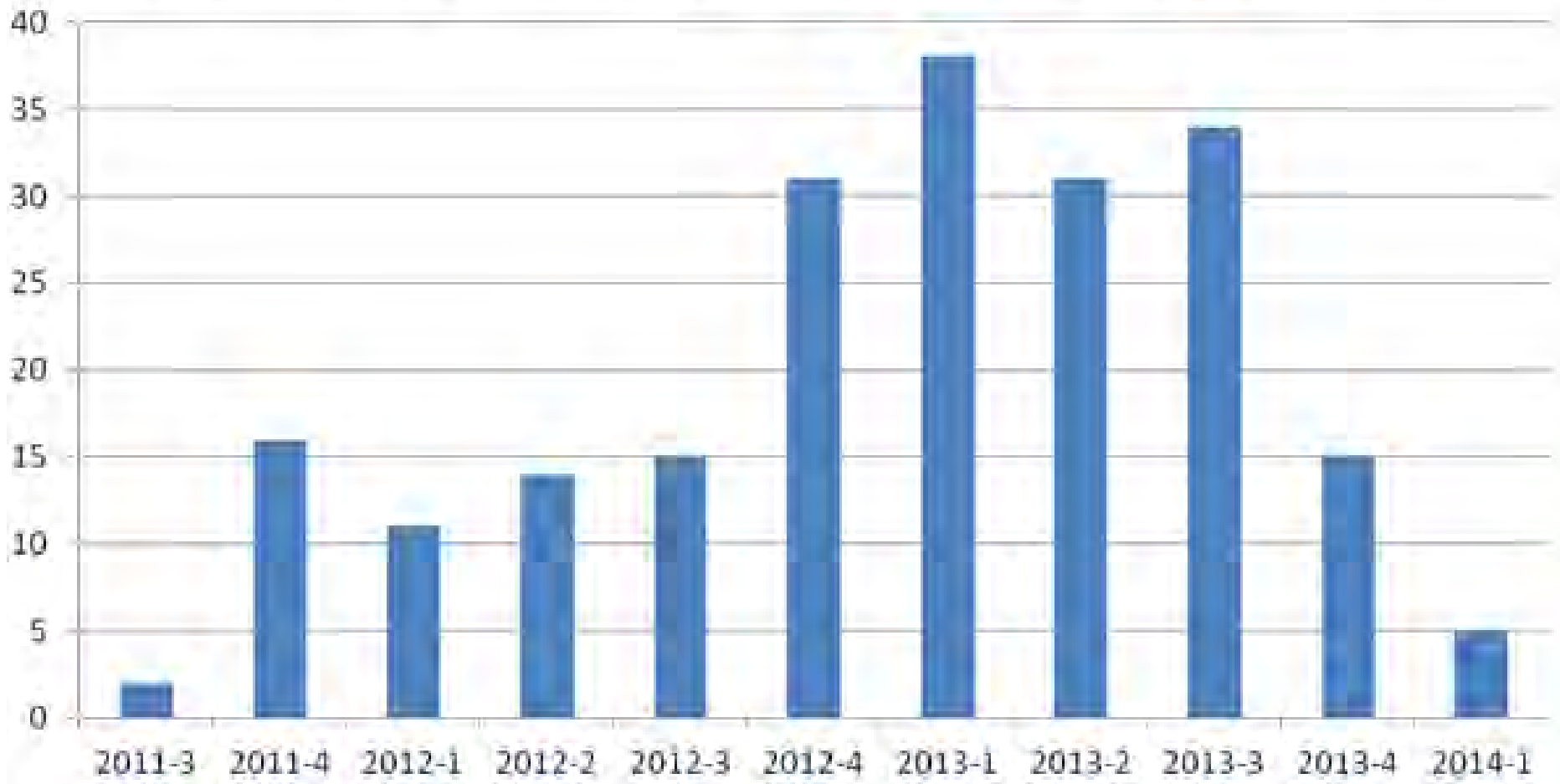
**45 Withdrew**

**212 Trucks  
Replaced**

# Results Exceeded Goals



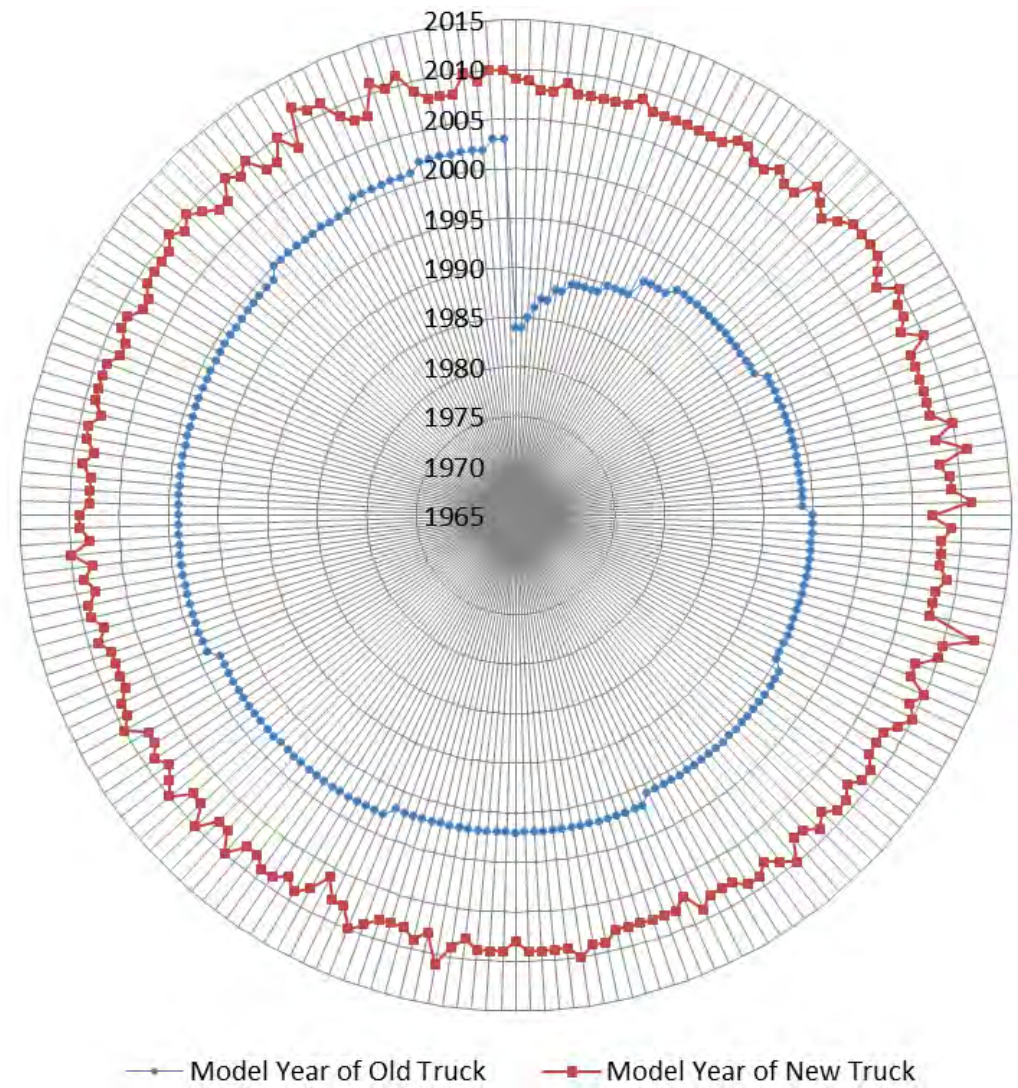
# Number of Trucks Replaced by Calendar Quarter



# Early Replacement Achieved

- Scrapped trucks  
Average MY 1994 ('84 - '03)
- Replacement trucks  
Average MY 2009 ('06 - '13)  
33 were 2010 or later

Replacement trucks were about 10 to 15 years newer than scrapped trucks

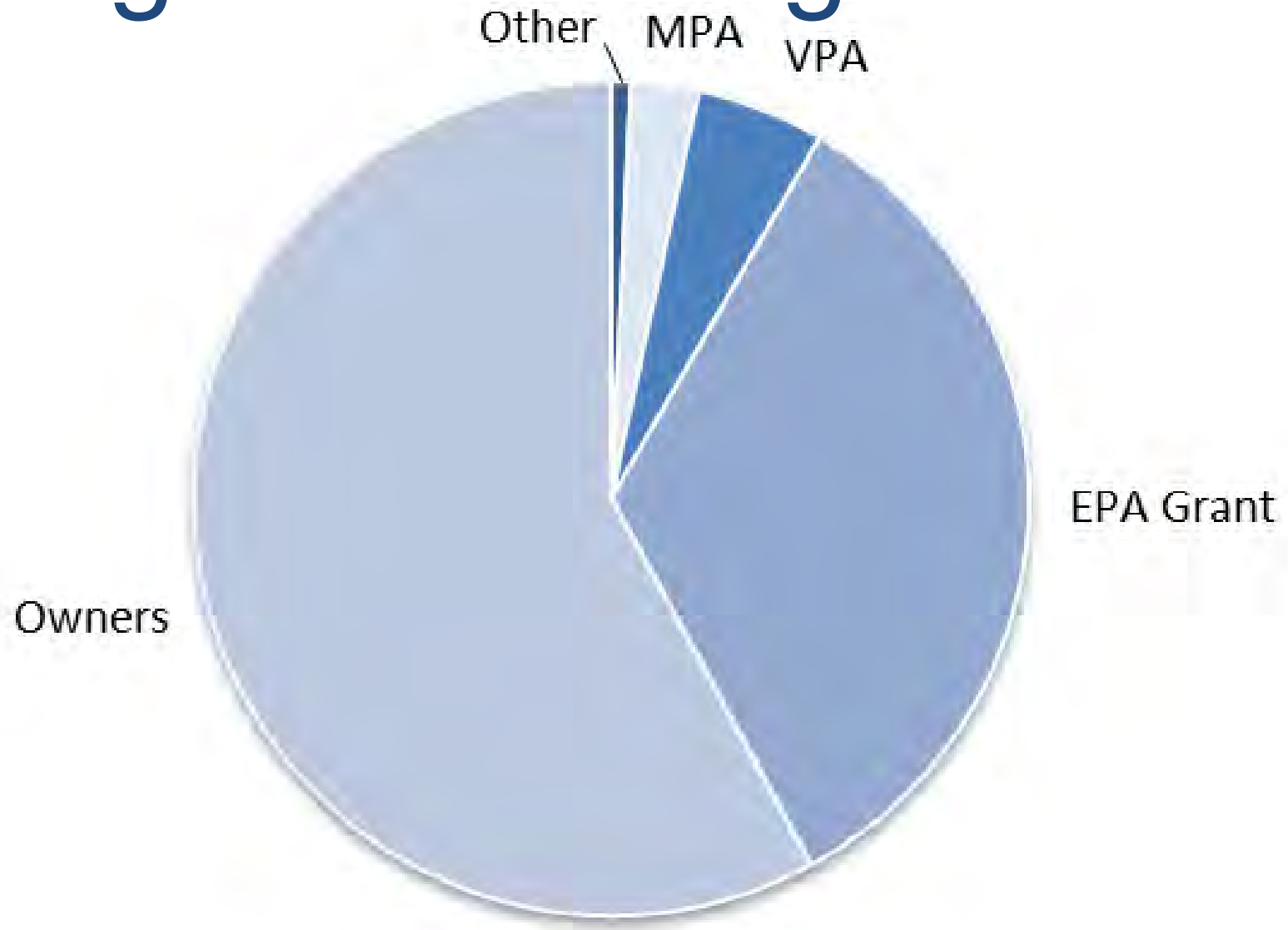


# Cost of trucks

- Average truck price – \$52K
- Program incentive – up to \$20K per vehicle (not over half the cost)
- Owners invested \$6.7 million



# Program Funding



# Emissions Reductions Achieved

- 30% reduction in NOx emissions over the lifetime of the trucks replaced (Over 3000 tons)
- 20% reduction in lifetime PM2.5 emissions (About 150 tons)

# Lessons Learned

- Sufficient grant support will leverage early replacement

“I would never have been able to purchase a new truck if not for this program.”

# Lessons Learned

- Port Support is essential--  
Financial &  
Programmatic



# Lessons Learned

- Build on prior success
- Work with a team of stakeholders to design a program that works for your area

# Lessons Learned

- Outreach takes thought, time, and effort
- Ongoing education is needed
- Word of mouth is important



# Lessons Learned

## Key players

- Truck vendors
- Lending institutions
- Scrap yards & recyclers
- Carriers & associations
- Other grant recipients

# Lessons Learned

- Have applicants determine their financial readiness
- Minimize time between scrapping and providing down payment



# Lessons Learned

- Adapt when things don't work as planned
- Stay in touch with applicants during process
- Is it time for MY 2010?

For more information:

<http://www.efc.umd.edu/cleandiesel>

