

# **TECHNOLOGIES NEEDED FOR FUTURE COMPLIANCE WITH OZONE STANDARDS**

**House Committee on Environmental Regulation  
Subcommittee on Air Quality and Municipal Landfills**

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# NATIONAL AMBIENT AIR QUALITY STANDARDS

## Current Status of Dallas-Fort Worth Area Under Existing NAAQS

**Nonattainment**  **Ozone**  
**Lead**  
**Carbon Monoxide**  
**Nitrogen Oxides**  
**Particulate Matter**  
**Sulfur Dioxide**

# FUND TEXAS EMISSIONS REDUCTION PLAN (TERP)

## Fully Fund the Program

- Volkswagen Settlement NOT a Replacement for TERP

## Appropriate Previously Collected Revenue

- Projected Balance: \$1.74 Billion
- \$1 Billion  $\approx$  67.25 tons NO<sub>x</sub> Reduced per Day Statewide\*

## Update Program Language

- Prioritize Zero-Emission or Near-Zero Emission Engines

# RESTORE & FUND VEHICLE REPAIR AND REPLACEMENT PROGRAM

## **Fully Fund the Program**

## **Appropriate Previously Collected Revenue**

- Projected Balance: \$303.7 Million

## **Modernize Programs**

## **Improve Funding Split Between Transportation Strategies and Vehicle Repair/Replacement**

## **Minimize Fraud**

# RESTORE & FUND AIR QUALITY FUNDING FOR NEAR-NONATTAINMENT AREAS

## Reinstate Funding for Near-Nonattainment (Rider 7)

### Modernize Program Eligibility and Requirements

- Encourage Technology Projects (e.g. Hood County Propane Equipment and Infrastructure)

# REDUCE REGULATORY BARRIERS

## **Revise Rule Language/Definitions to Accommodate New Technologies**

- **Allow Idle Reduction for Heavy-Duty Trucks at Rest Stops**
- **Allow Electric Vehicle Charging Stations to Charge Based on Fuel Instead of Time**
- **Allow Transmission Utilities to Use Battery Storage**

# CONSEQUENCES

## Lost Revenues to State

- Estimated \$75-100 Million from Light-Duty Vehicle Repair and Replacement Program

## Lost Opportunities for Economic Development

## Higher Costs of Doing Business

## Lost Productivity and Higher Health Care Costs

- Estimated \$5.8-\$21.2 Billion in Monetized Health Benefits Achieved through TERP\*

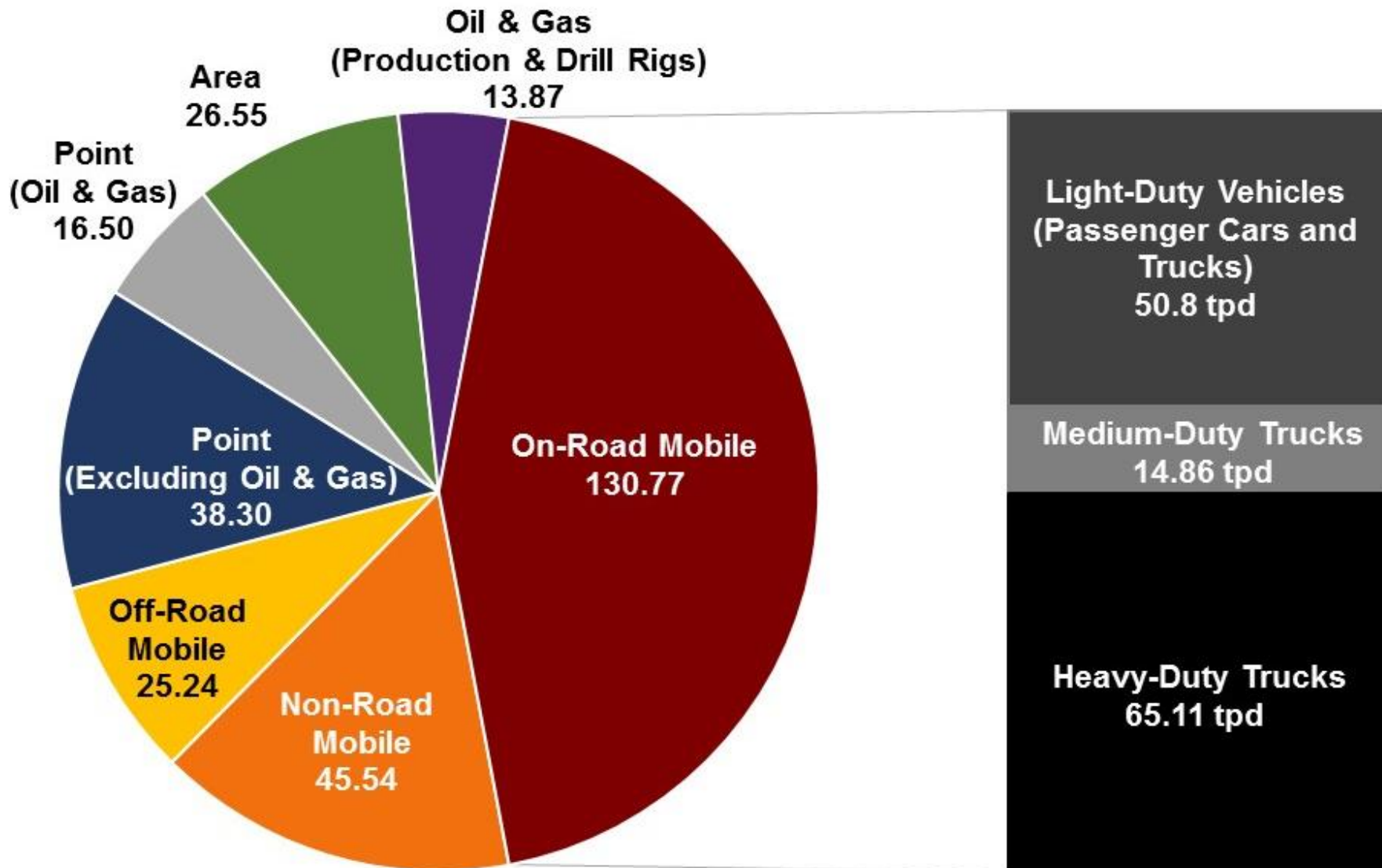
\*Extrapolated from EPA Third Report to Congress: Highlights from the Diesel Emission Reduction Program (<https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=P100OHMK.pdf>), compared to funding awarded under TERP Diesel Emissions Reduction Incentive Program Reported in the TERP Biennial Report 2015-2016 ([https://www.tceq.texas.gov/assets/public/comm\\_exec/pubs/sfr/079-16.pdf](https://www.tceq.texas.gov/assets/public/comm_exec/pubs/sfr/079-16.pdf)).

# SUPPLEMENTAL INFORMATION



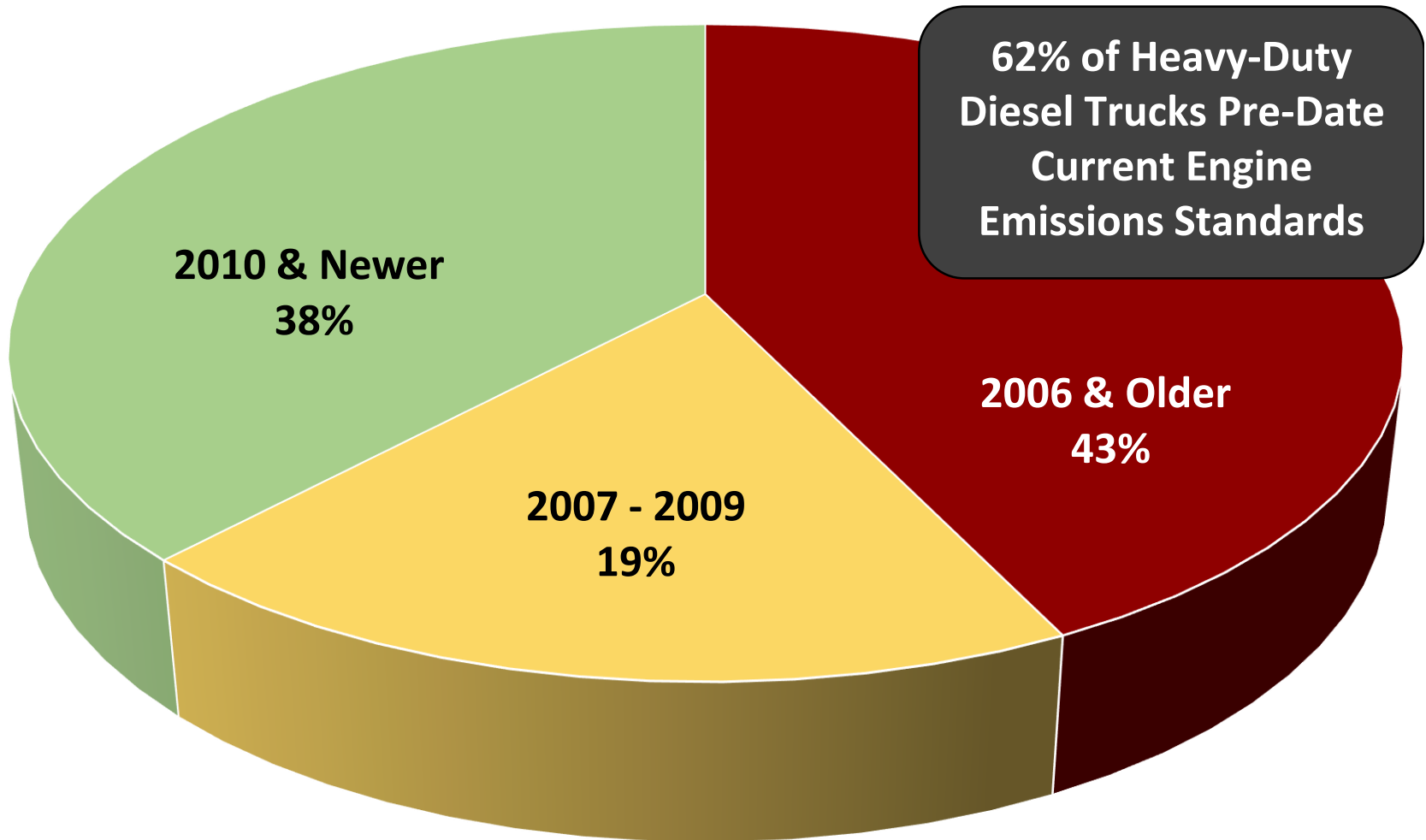
# ESTIMATED 2017 NO<sub>x</sub> ON-ROAD EMISSIONS INVENTORY FOR DFW AREA

Total NO<sub>x</sub> = 296.77 tons per day (tpd)



# NEED FOR VEHICLE FLEET TURNOVER

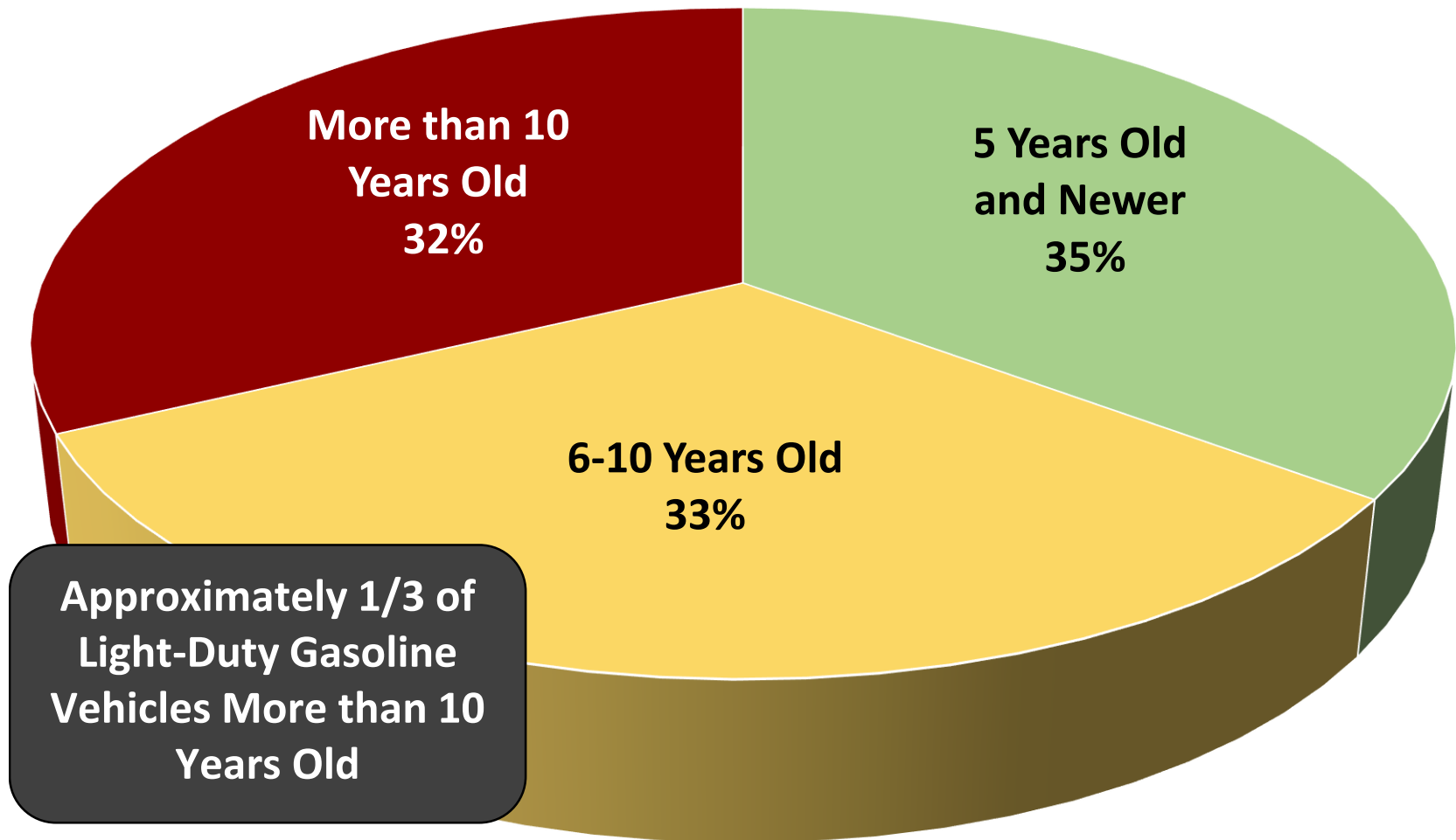
**Age Distribution of Heavy-Duty Diesel Vehicles in 2017 in the Dallas-Fort Worth Ten-County Nonattainment Region<sup>1</sup>**



<sup>1</sup>Only Includes Vehicles Over 26,000 Pounds Gross Vehicle Weight Rating (GVWR); Based on 2014 Texas Department of Motor Vehicles registration data with projected fleet turnover for 2015-2017

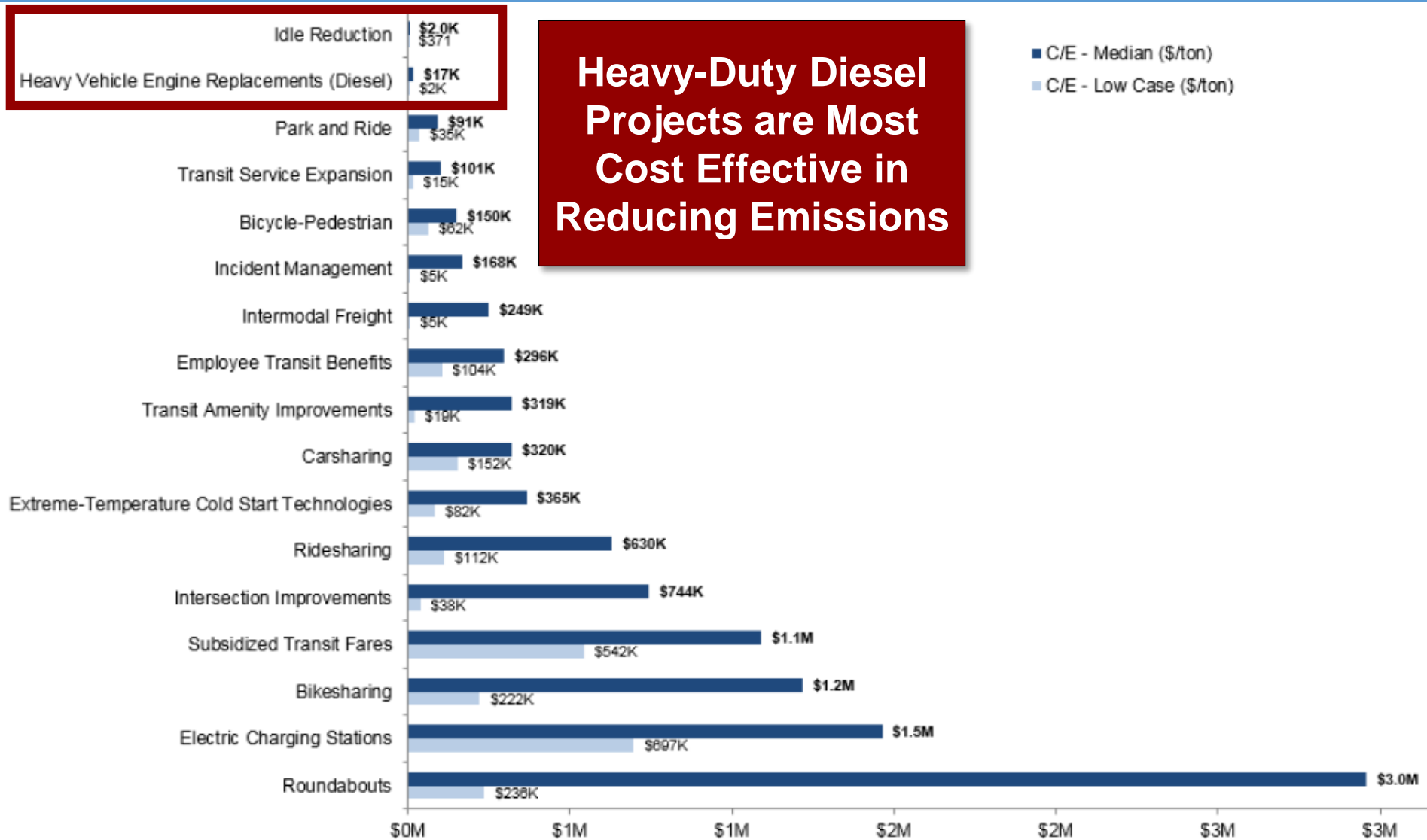
# NEED FOR VEHICLE FLEET TURNOVER

## Age Distribution of Light-Duty Gasoline Vehicles in 2017 in the Dallas-Fort Worth Ten-County Nonattainment Region<sup>1</sup>



# PROGRAM COST EFFECTIVENESS<sup>1</sup>

## COST PER TON NO<sub>x</sub> REDUCED



<sup>1</sup> Source: FHWA-Cost Effectiveness Tables Summary. [http://www.fhwa.dot.gov/environment/air\\_quality/cmaq/reference/cost\\_effectiveness\\_tables/costeffectiveness.pdf](http://www.fhwa.dot.gov/environment/air_quality/cmaq/reference/cost_effectiveness_tables/costeffectiveness.pdf), page 13.

# UPDATE REGULATORY DEFINITIONS AND REQUIREMENTS TO REMOVE UNNECESSARY OR UNINTENDED BARRIERS

<b>Barrier</b>	<b>Impact on Clean Technologies</b>
<b>Commercial Services Prohibited in Interstate Right-of-Way (US Code Title 23 Section 111(a))</b>	<b>Precludes Installation of Electrified Parking/Idle Reduction for Heavy-Duty Diesel Trucks, or of Electric Vehicle Charging</b>
<b>EV Charging Stations Considered Retail Electric Providers by PUCT</b>	<b>Equity Issue for Electric Vehicle Charging Based on Unit of Time Rather than Unit of Fuel</b>
<b>Batteries Classified as “Generators” in Competitive Market by Public Utility Regulatory Act</b>	<b>May Preclude Deregulated Utilities from Incorporating Battery Storage to Optimize Grid Performance</b>