

REGIONAL ENVIRONMENTAL UPDATE

**Energy Efficiency Summit & Fair
July 7, 2018**

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North Central Texas
Council of Governments

CRITERIA POLLUTANTS

Carbon Monoxide

Lead

Nitrogen Dioxide

Particular Matter

Sulfur Dioxide

Ozone

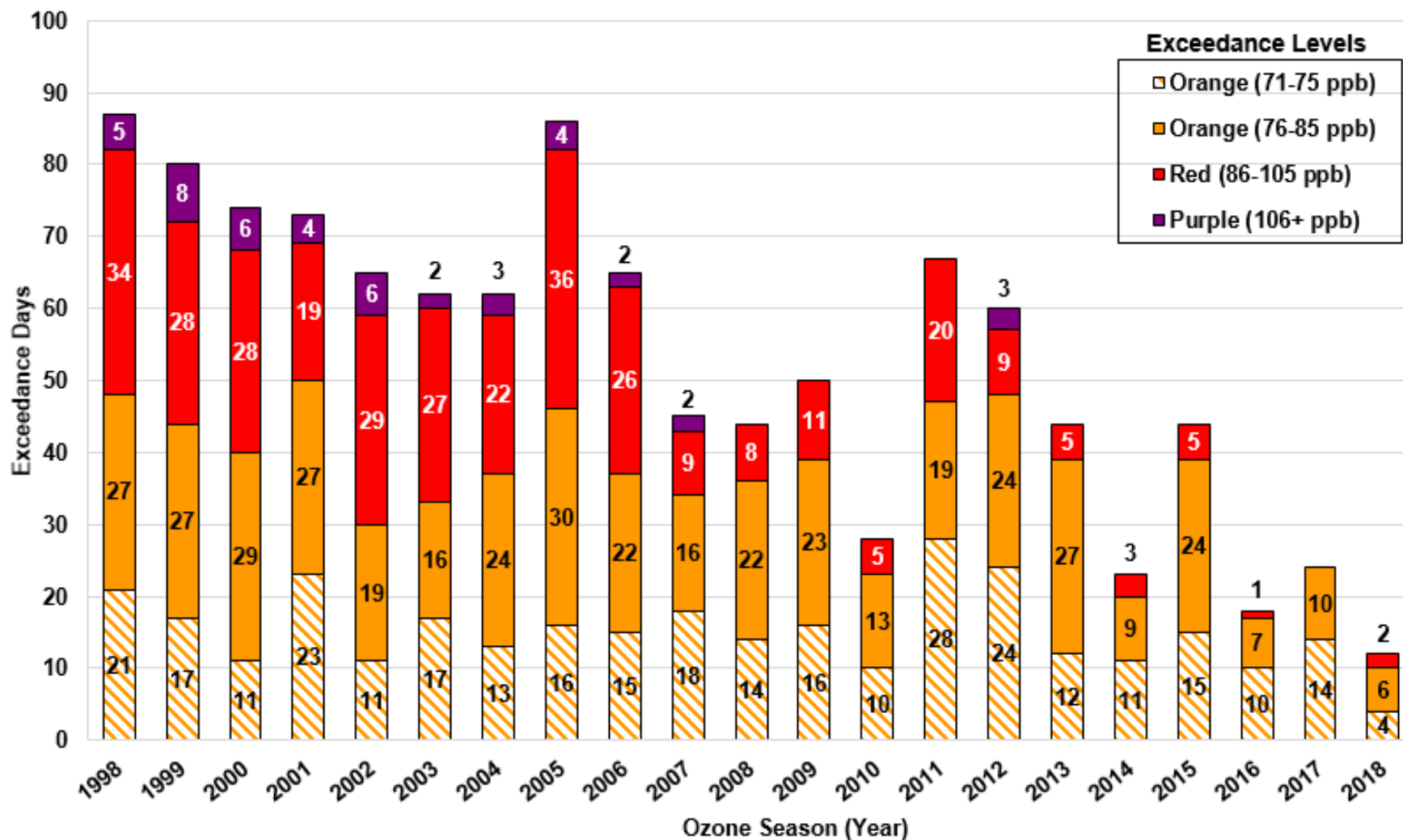
How are we doing?

What is the focus?

What is being done?

EIGHT-HOUR OZONE TRENDS

Eight-Hour Ozone Exceedance Days Based on ≤ 70 ppb



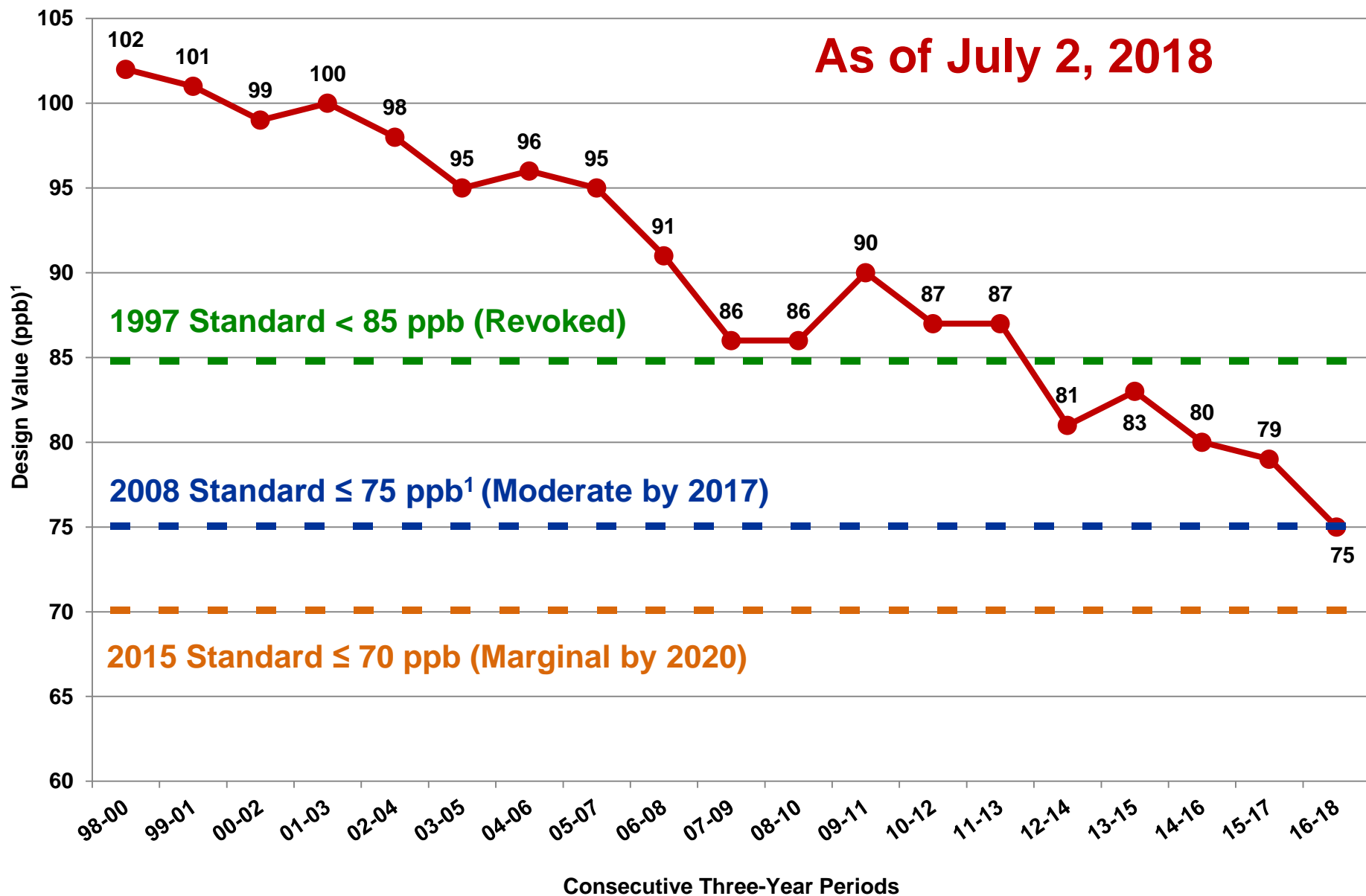
Exceedance Levels are based on Air Quality Index (AQI) thresholds established by the EPA for the revised ozone standard of 70 ppb.

Orange = Additional level orange exceedance days under the revised standard that were not exceedances under the previous 75 ppb standard. (AQI level orange = 71-75 ppb)

Source: TCEQ, http://www.tceq.state.tx.us/cgi-bin/compliance/monops/8hr_monthly.pl
ppb = parts per billion

EIGHT-HOUR OZONE TRENDS

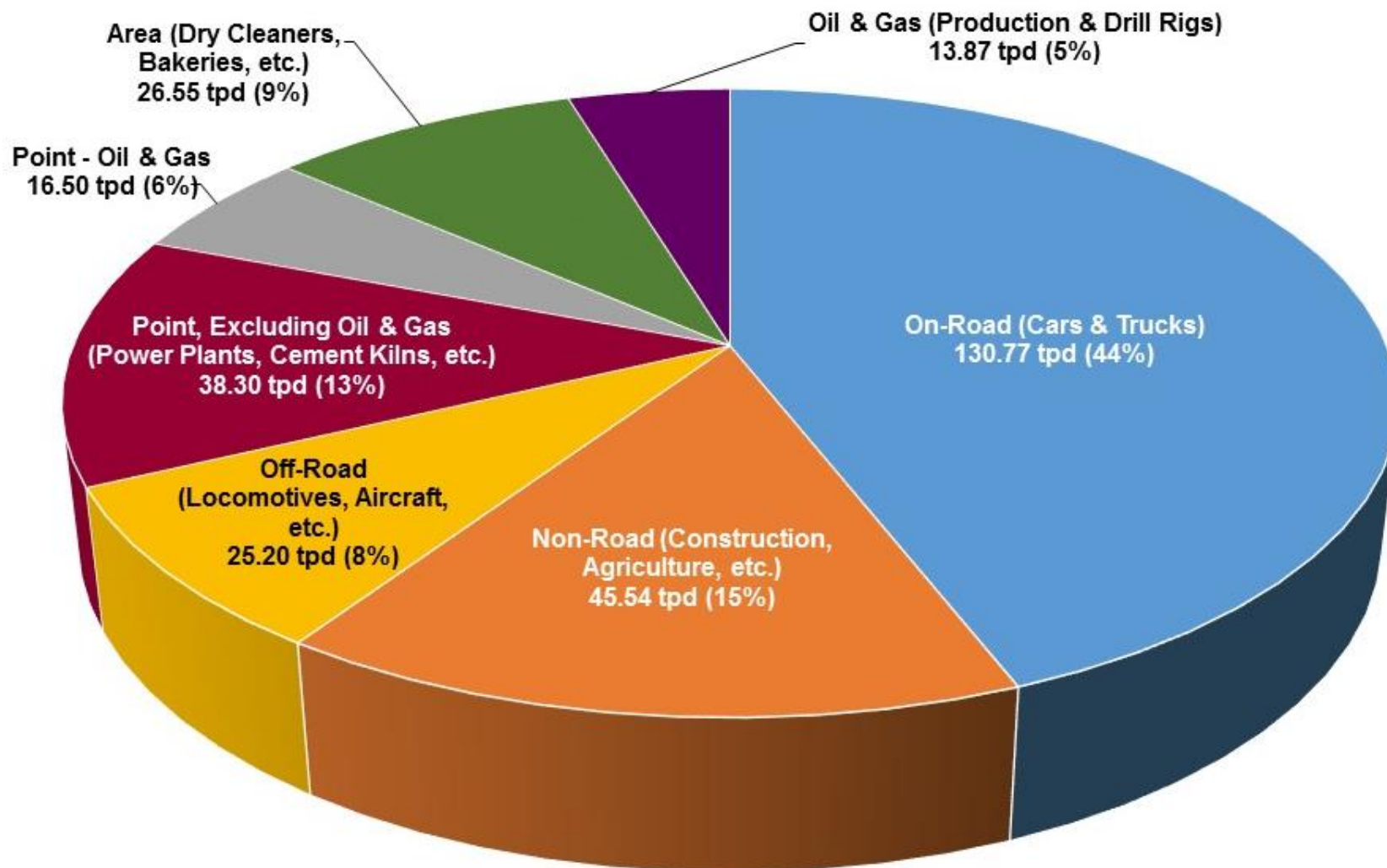
As of July 2, 2018



¹Attainment Goal - According to the US EPA National Ambient Air Quality Standards, attainment is reached when, at each monitor, the *Design Value* (three-year average of the annual fourth-highest daily maximum eight-hour average ozone concentration) is equal to or less than 75 parts per billion (ppb).

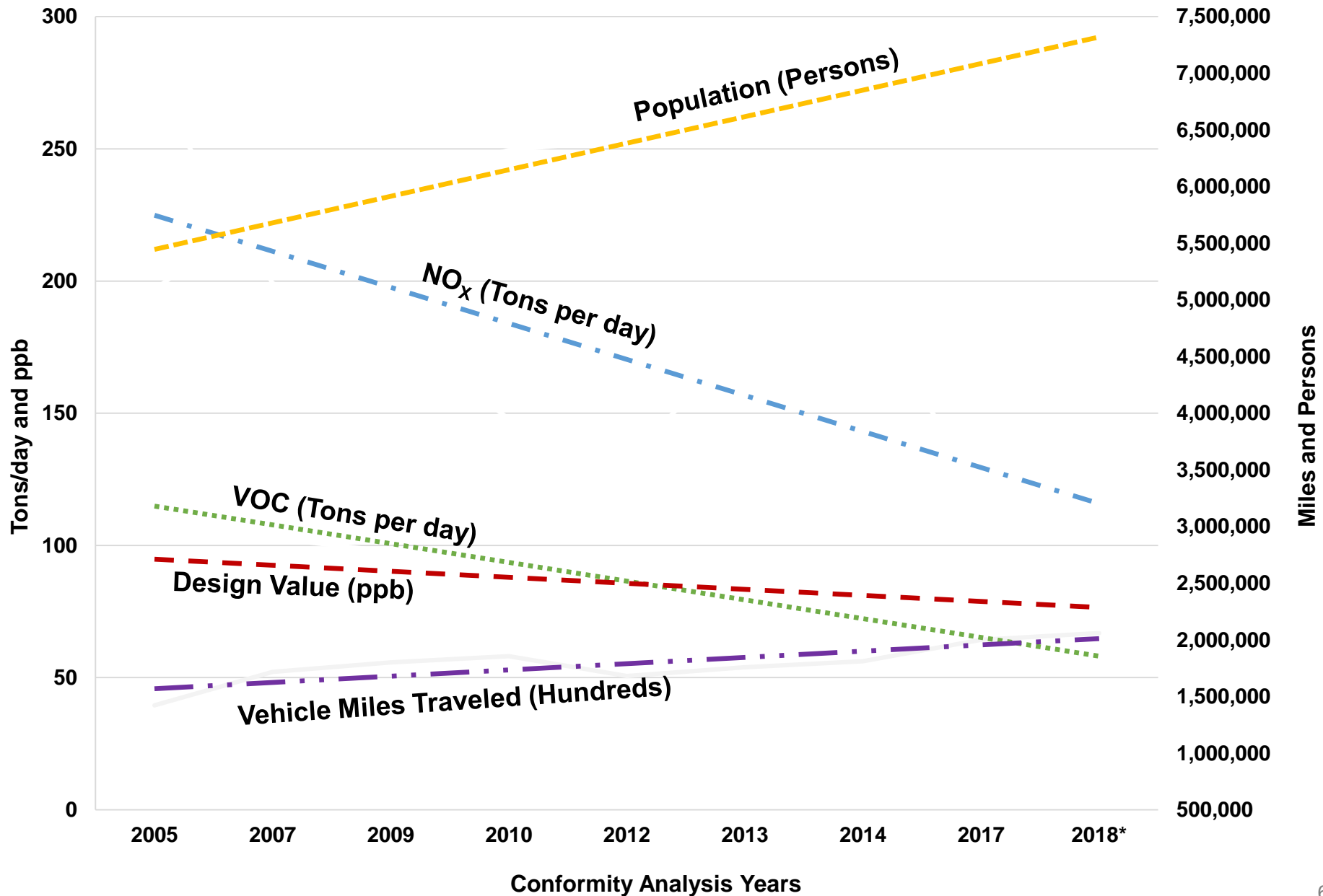
DFW EMISSIONS SOURCES

2017 Oxides of Nitrogen (NO_x)



Total NO_x = 296.73 tons per day (tpd)

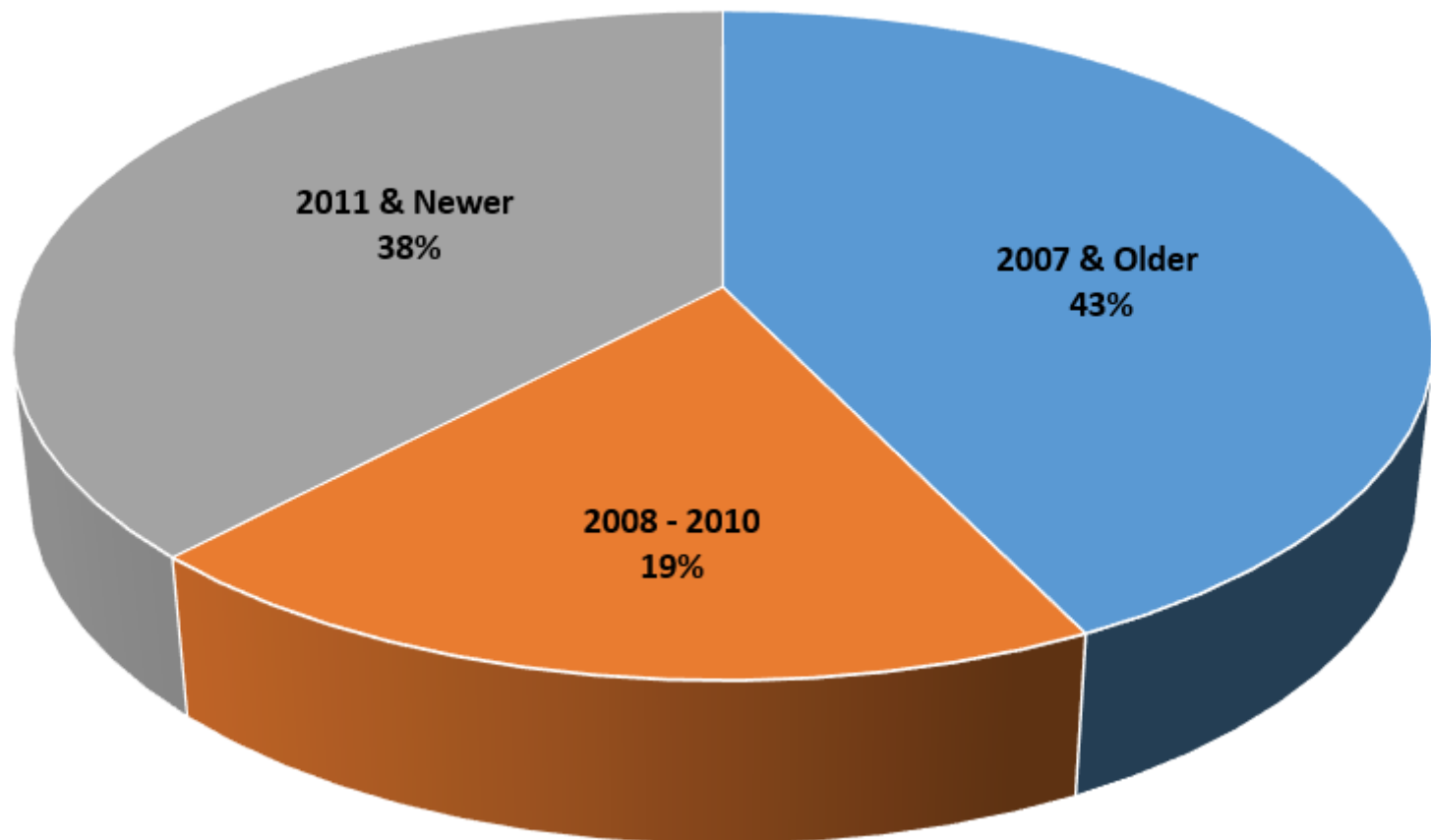
DESIGN VALUE AND DEMOGRAPHIC DATA



*2018 design value data current as of 07/1/2018

HEAVY-DUTY DIESEL VEHICLE¹ AGE DISTRIBUTION

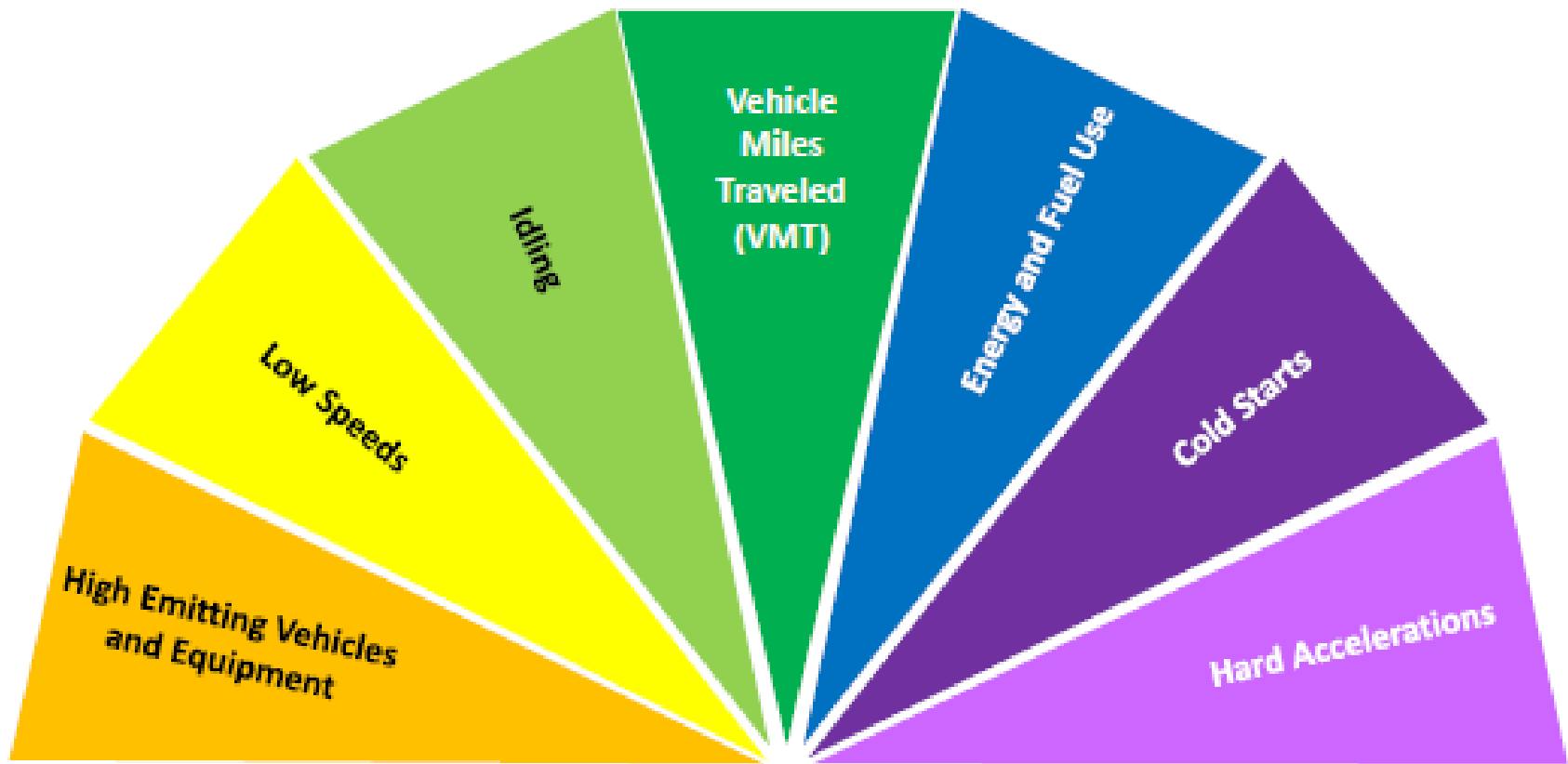
**DFW 10-County Nonattainment Region
(Greater than 26,000 Gross Vehicle Weight Rating)**



¹Based on 2014 Texas Department of Motor Vehicles registration data

SEVEN AIR QUALITY EMPHASIS AREAS

Mobile Sources



SAMPLE OF AIR QUALITY INITIATIVES



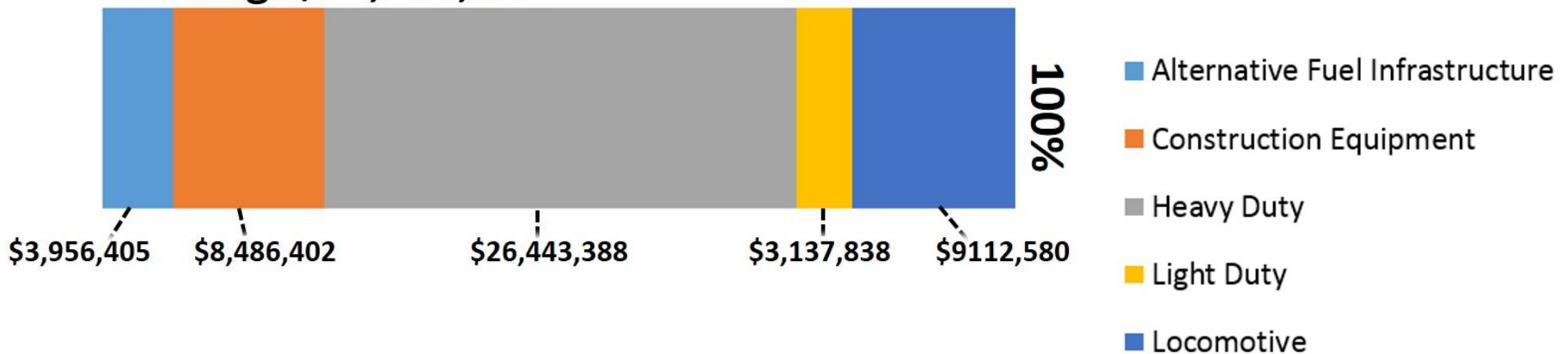
Rideshare. Record. Reward.



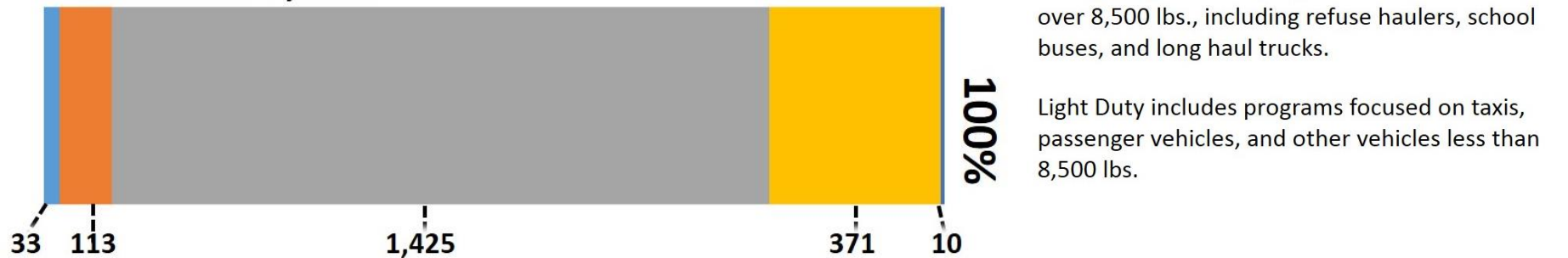
NCTCOG CLEAN VEHICLE FUNDING EFFORTS

Total Vehicle/ Equipment/ Technology Grant Funding Awarded and Activities Administered by Activity Type (2006 – 2017)

Funding: \$51,136,613



Activities: 1,952



GO SOLAR TEXAS

Program Goals

- Streamline Regulatory Processes
- Provide Resources for Cities
- Increase Awareness

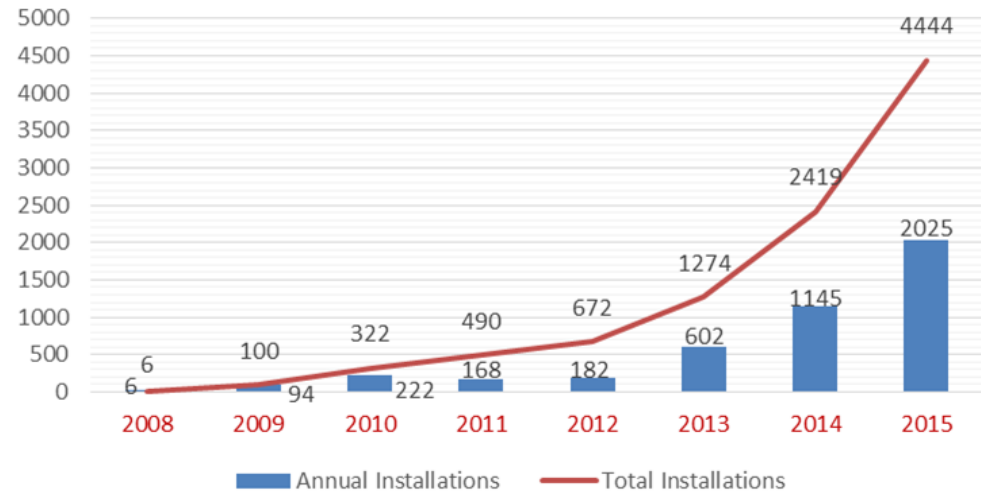
NCTCOG Resources

- Template Permitting Documents
- Ordinance Guidance
- Website Clearinghouse

How To Get Involved

- Adopt/Encourage Suggested Best Practices
- Download/Watch Webinars & Trainings

**Annual and Total DFW Area
Solar Installations (2008 to 2015)**



Source: NTREG, 2016



www.GoSolarTexas.org

SOLSMART

Program Goals

- Reduce Solar Soft Costs
- Adopt Solar-Friendly Processes and Policies
- Designate Communities

6 of 10 SolSmart-Designated Communities are in North Texas!!!

NCTCOG Role

- Hosted Trainings
- Shared Regional Best Practices
- Conducted Technical Review of Community Documents and Policies

How To Get Involved

- Encourage Cities to Pursue SolSmart Designation

Texas' SolSmart-Designated Communities		
<u>BRONZE</u>	<u>SILVER</u>	<u>GOLD</u>
Denton	Brownsville	Austin
Lewisville	Corinth	Cedar Hill
Plano	Kennedale	El Paso
	San Antonio	

www.solsmart.org

ELECTRIC VEHICLES NORTH TEXAS

Program Goals

- Promote Adoption & Use of Electric Vehicles (EVs)
- Encourage On-site Charging at Workplaces

NCTCOG Resources

- EV Fact Sheets & Regional Data
- EV Incentive Information
- Presentations at Community Meetings

How To Get Involved

- Attend EVNT & DFW Clean Cities Meetings
- Sign Up to Receive Email Announcements
- Attend **National Drive Electric Week** Event
- Install Workplace Charging



www.dfwcleancities.org/evnt

NATIONAL DRIVE ELECTRIC WEEK

September 8 @ Grapevine Mills Mall from 10 am – 1 pm

Second Largest National Drive Electric Week in the Country (right behind San Diego) with Over 150 Electric Vehicles in Attendance!

Unbiased, No-Pressure Opportunity to Ask Questions & Explore EVs



#beatcalifornia #roadto200 #texasEV

REGISTER HERE: www.DriveElectricDFW.org

AIRCHECKTEXAS DRIVE A CLEAN MACHINE

Program Goals

Offers Financial Assistance to Low-Moderate Income
Vehicle Owners

Vehicles Fail Emissions Inspection Test, up to \$600

Vehicles 10 years old or older, up to \$3,500

Targets the Highest Polluting Vehicles and Provides an
Incentive for Citizens to Contribute to the Regional
Air Quality Solution

NCTCOG Resources

Program Applications, Informational Brochure, Banners

How To Get Involved

Place Applications at Businesses

Promote Program Assistance



www.airchecktexas.org

LIGHT-DUTY VEHICLE INCENTIVE PROGRAM

Program Goals

Offer Financial Assistance for all Texas Residents Following Purchase or Lease of a New Vehicle

Up to \$2,500 for Electric or Hydrogen (maximum 2,000 vehicles)

**Up to \$5,000 for Compressed Natural Gas or Propane
(maximum 1,000 vehicles)**

Reduce Ozone-Forming Pollutants Created by On-Road Motor Vehicles

State Resources

Application Instructions

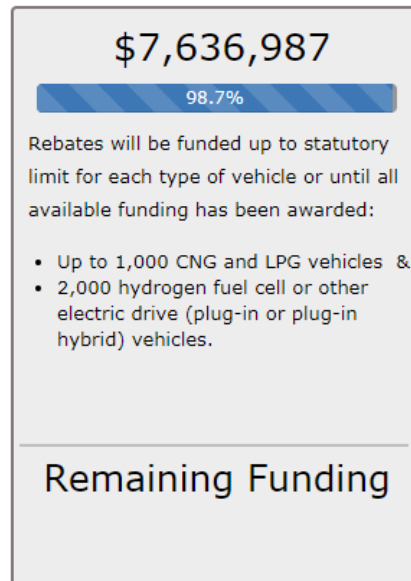
List of Eligible Vehicles

How To Get Involved

Complete Your Application

Encourage Vehicle

Manufacturers to Get on
Vehicle Eligibility Lists



Fuel Type	Approved
LPG	0
CNG	0
Hydrogen Fuel Cell	0
Electric (Plug-in)	20
Electric (Plug-in Hybrid)	20

Grants Approved

<https://www.tceq.texas.gov/airquality/terp/ld.html>

CURRENT ELECTRIC VEHICLE INCENTIVES

Vehicle Incentives	Amount	Agency
<u>Plug-In Electric Drive Motor Vehicle Credit</u>	Up to \$7,500	Federal
<u>Light-Duty Motor Vehicle Purchase or Lease Incentive Program (LDLIP)</u>	Up to \$2,500	State of Texas
<u>AirCheckTexas Drive a Clean Machine Program</u>	Up to \$3,500	Participating Counties
Total Possible Savings Per Vehicle:	Up to \$13,500	

CAR CARE CLINICS

Program Goals

- Inform Vehicle Owners About Repair and Replacement Assistance
- Allows Vehicle Owners to Take Active Role in Vehicle Maintenance
- Helps to Inform Vehicle Owners about Check Engine Lights

NCTCOG Resources

- Promotional Items and Information Handed out by Staff
- Brochures with Check Engine Light Information
- Onsite AirCheckTexas Application Processing

How To Get Involved

- Promote Website
- Mention Clinics and Assistance at Meetings



REGIONAL SMOKING VEHICLE PROGRAM

Program Goals

Offers Vehicle Owners Advice of Possible Emission Problems

Allows Local Citizen Identification Efforts Anonymously

Helps Reduce Smoking Vehicles From Roadways

NCTCOG Resources

Smoking Vehicle Fact Sheet

Newly Designed Website

Informative Brochures to Hand Out at Meetings



How To Get Involved

Promote Reporting of Smoking Vehicles on Roadway

Report Smoking Vehicles Through Website or Calling Hotline

REGIONAL EMISSIONS ENFORCEMENT PROGRAM

Program Goals

- Conduct Covert Operations and Prosecute Those Performing Improper Emissions Inspections
- Target Unlawful Temporary Tags via On-Road Enforcement

NCTCOG Resources

- NCTCOG Emissions Database of Vehicle Inspection and Registration Records for Law Enforcement
- Mobile Emissions Enforcement Working Group

How To Get Involved

- Keep Vehicle Inspection Current
- Fix Vehicle Promptly When Check Engine Light Appears



1 in 6

Vehicles on the road with questionable temporary tags in a recent survey by the Tarrant County Sheriff's Department in Southeast Tarrant County

\$25 million

Potential loss of registration funding in 2016 in Dallas, Tarrant, Harris, and Travis Counties

<https://www.nctcog.org/trans/quality/air/for-everyone/hevp/reep>

PROPERTY ASSESSED CLEAN ENERGY

Program Goals

Incentivize Water and Energy Conservation Upgrades through New Financing Mechanism

Lower Operating Costs - Eligibility Includes Water Conservation, Energy Efficiency, Resiliency, and Distributed Generation Projects

Resources / How to Get Involved

Apply for Financing

Encourage Local Governments to Establish PACE District

Eligible Properties



Commercial Property



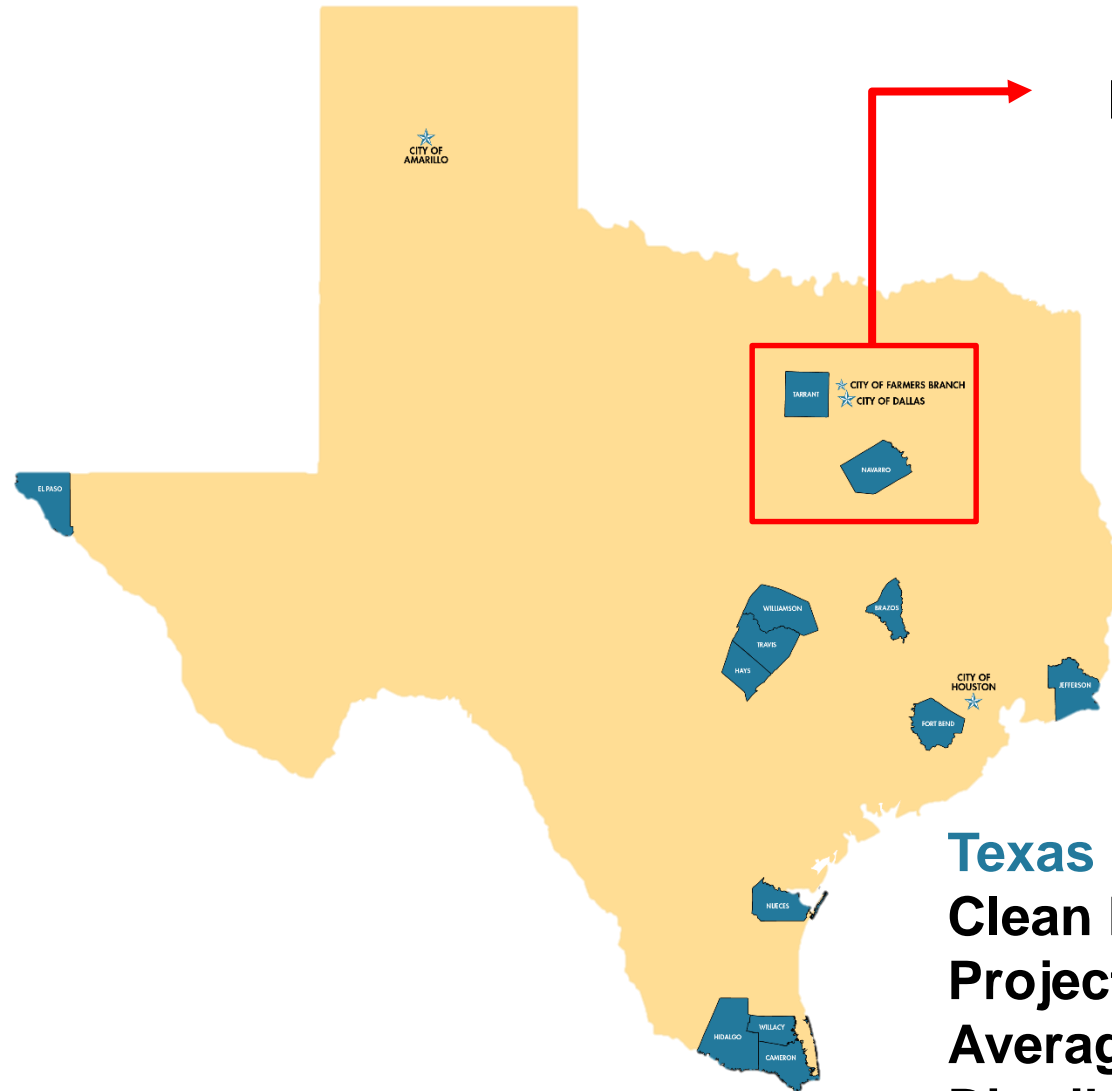
Industrial Property



Multifamily Residential Property

<http://pace.harcresearch.org/>

PROPERTY ASSESSED CLEAN ENERGY



North Texas PACE Districts

Tarrant County

Navarro County

City of Dallas

City of Farmers Branch

Texas PACE Impacts 2016-2018

Clean Energy Investment: \$32.159 M

Projects: 10

Average Payback: 10.11

Distributed Generation: 56749 kw

NOx Reduction: 19,952.87 lbs

Energy Reduction: 99,006.88 MMBtu

CONSERVE NORTH TEXAS




Goals



Regional Clearinghouse of Energy Efficiency, Water Conservation, and Transportation Resources.

Resources / How to Get Involved

“One-stop-shop” For a Comprehensive Inventory of Programs, Tools, Case Studies, Funding, and Other Resources

Topic		
		
Water	Energy	Fuel
Find resources to reduce water use and increase water conservation within the public and private sector.	Search resources that help reduce energy consumption and increase energy efficiency across all sectors.	Explore resources to reduce energy and fuel intensity within the transportation sector.

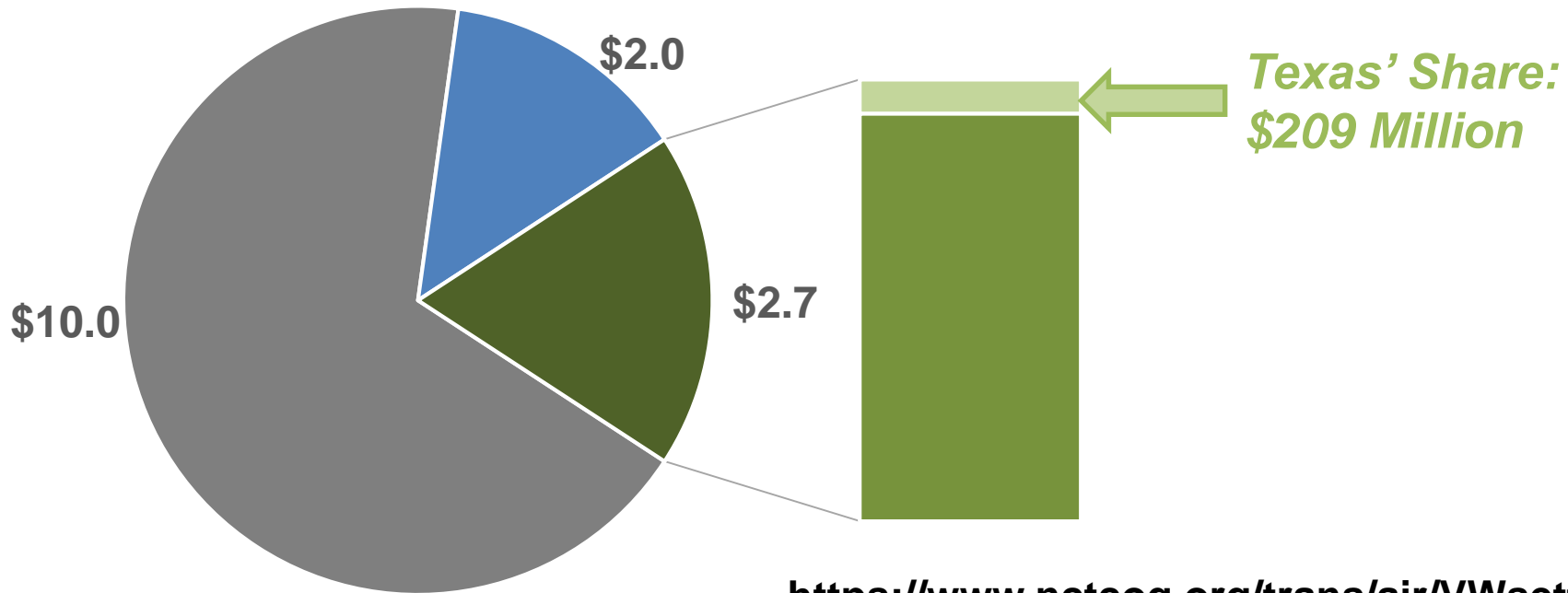
VOLKSWAGEN SETTLEMENT

Total Settlement to Date: \$14.7 Billion

Zero Emission Vehicle (ZEV) Investment - Managed by Electrify America

Environmental Mitigation Trust (EMT) - Distributed to States

Settlement Breakdown (\$ in Billions)



- Vehicle Buyback and Modification
- ZEV Investment
- Environmental Mitigation Trust

<https://www.nctcog.org/trans/air/VWsettlement/>

<https://www.tceq.texas.gov/agency/trust>

ELIGIBLE NO_x MITIGATION ACTIONS

Eligible Mitigation Actions 1-9

- 1. Replace/Repower Freight and Port Drayage Trucks (Class 8)**
Includes Dump Trucks, Waste Haulers, Concrete Mixers
- 2. Replace/Repower School, Shuttle, & Transit Buses (Class 4-8)**
- 3. Replace/Repower Freight Switchers**
- 4. Replace/Repower Ferries/Tugs**
- 5. Install Ocean Going Vessels Shorepower**
- 6. Replace/Repower Freight Trucks (Class 4-7)**
Includes Dump Trucks, Waste Haulers, Concrete Mixers
- 7. Replace/Repower Airport Ground Support Equipment**
- 8. Replace/Repower Forklifts and Port Cargo Handling Equipment**
- 9. Deploy Light-Duty ZEV Supply Equipment**

Eligible Mitigation Action 10

- 10. Diesel Emission Reduction Act (DERA) Option for State Clean Diesel Program**
Texas' State Clean Diesel Program Currently for School Buses

AIR QUALITY HANDBOOK

North Central Texas Council of Governments

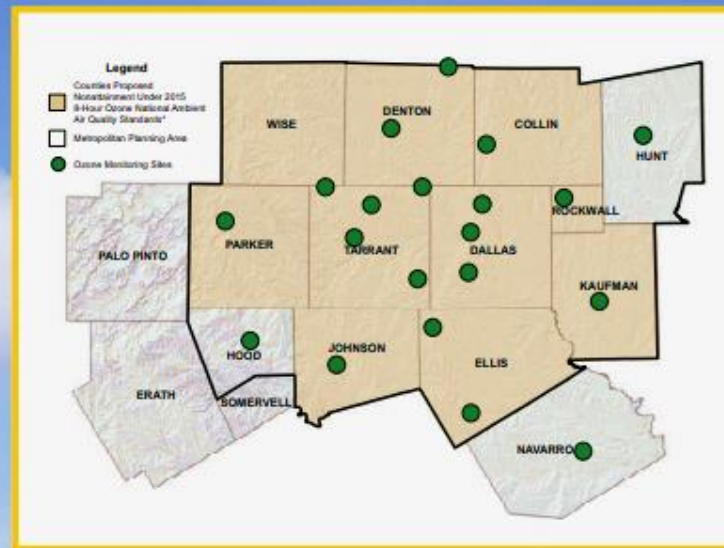
Air Quality

Handbook

Spring 2018

This Air Quality Handbook presents the current status of regional air quality and a summary of the work undertaken by the North Central Texas Council of Governments as the metropolitan planning organization and its partners to reduce air pollution and help the region meet federal air quality standards.

Exhibit 1: North Central Texas Nonattainment* Area and Ozone Monitoring Sites



FOR MORE INFORMATION

Visit the NCTCOG Table to Pick Up Details on:

AirCheckTexas Drive a Clean Machine
Dallas-Fort Worth Clean Cities
Electric Vehicles North Texas
Environmental Programs
Go Solar Texas
National Drive Electric Week
Regional Smoking Vehicle Program
Transportation Planning Information
Additional Air Quality and Clean Vehicle Programs

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www.nctcog.org/airquality