

NORTH TEXAS AIR QUALITY UPDATE

**Accelerating Environmental Health in Dallas:
An Opportunities Analysis Work Session
September 21, 2017**



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**North Central Texas
Council of Governments**

CRITERIA POLLUTANTS

Carbon Monoxide

Lead

Nitrogen Dioxide

Particular Matter

Sulfur Dioxide

Ozone

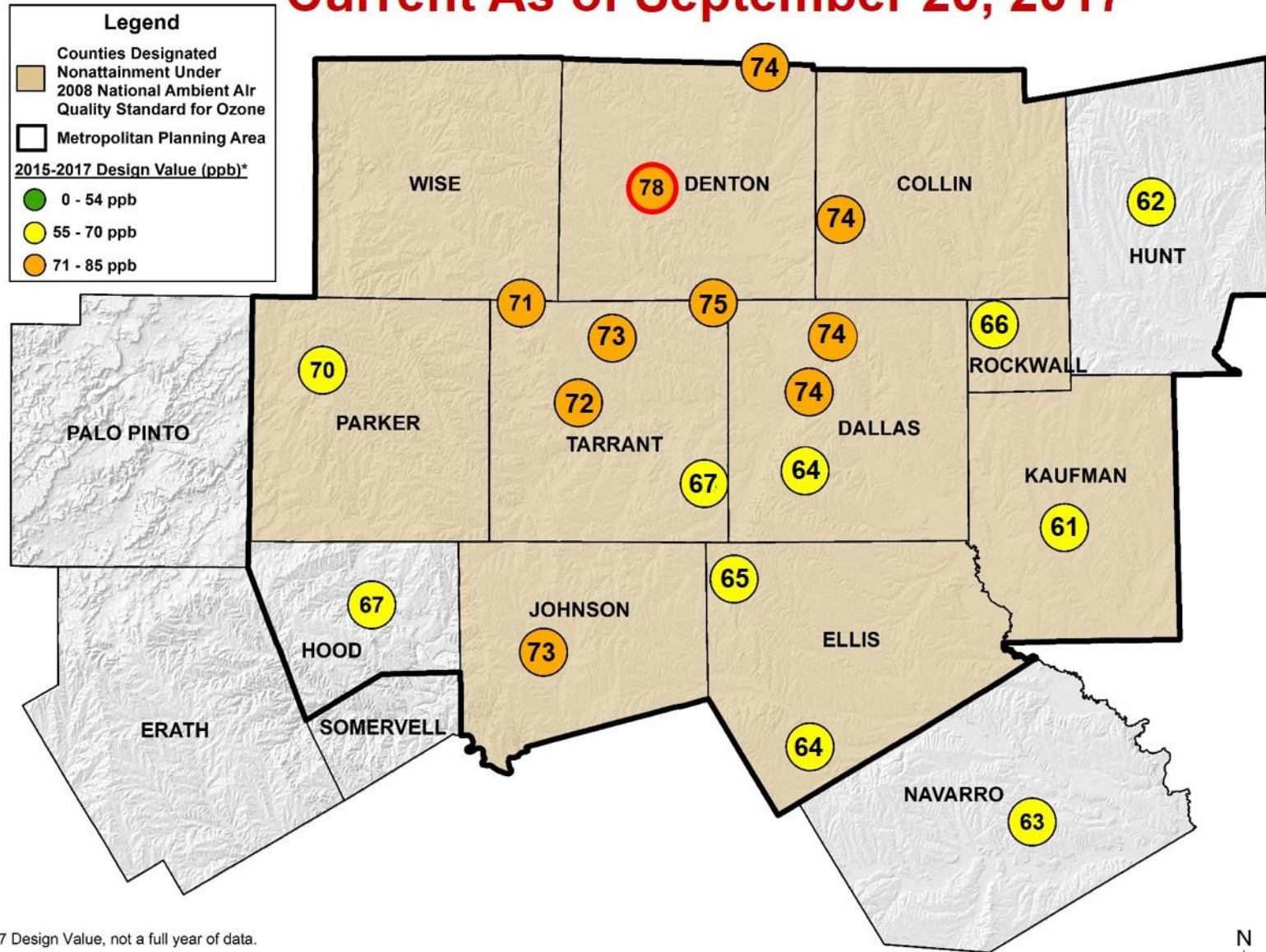
How are we doing?

What is the focus?

What is being done?

OZONE MONITOR DESIGN VALUES

Current As of September 20, 2017



*2017 Design Value, not a full year of data.



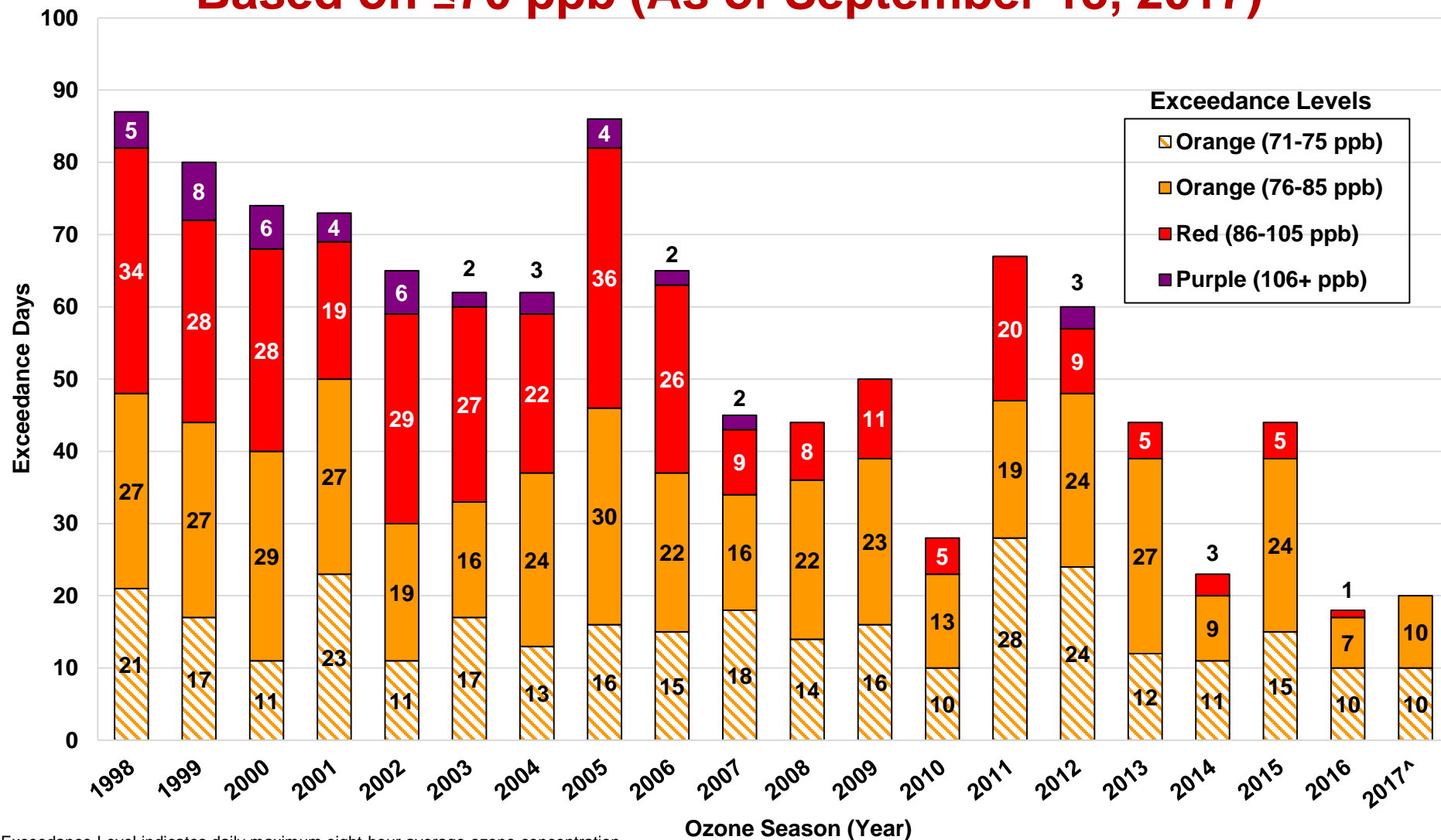
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0 10 20 30 40 Miles




EIGHT-HOUR HISTORICAL TRENDS

Based on ≤ 70 ppb (As of September 13, 2017)



Ozone Season (Year)

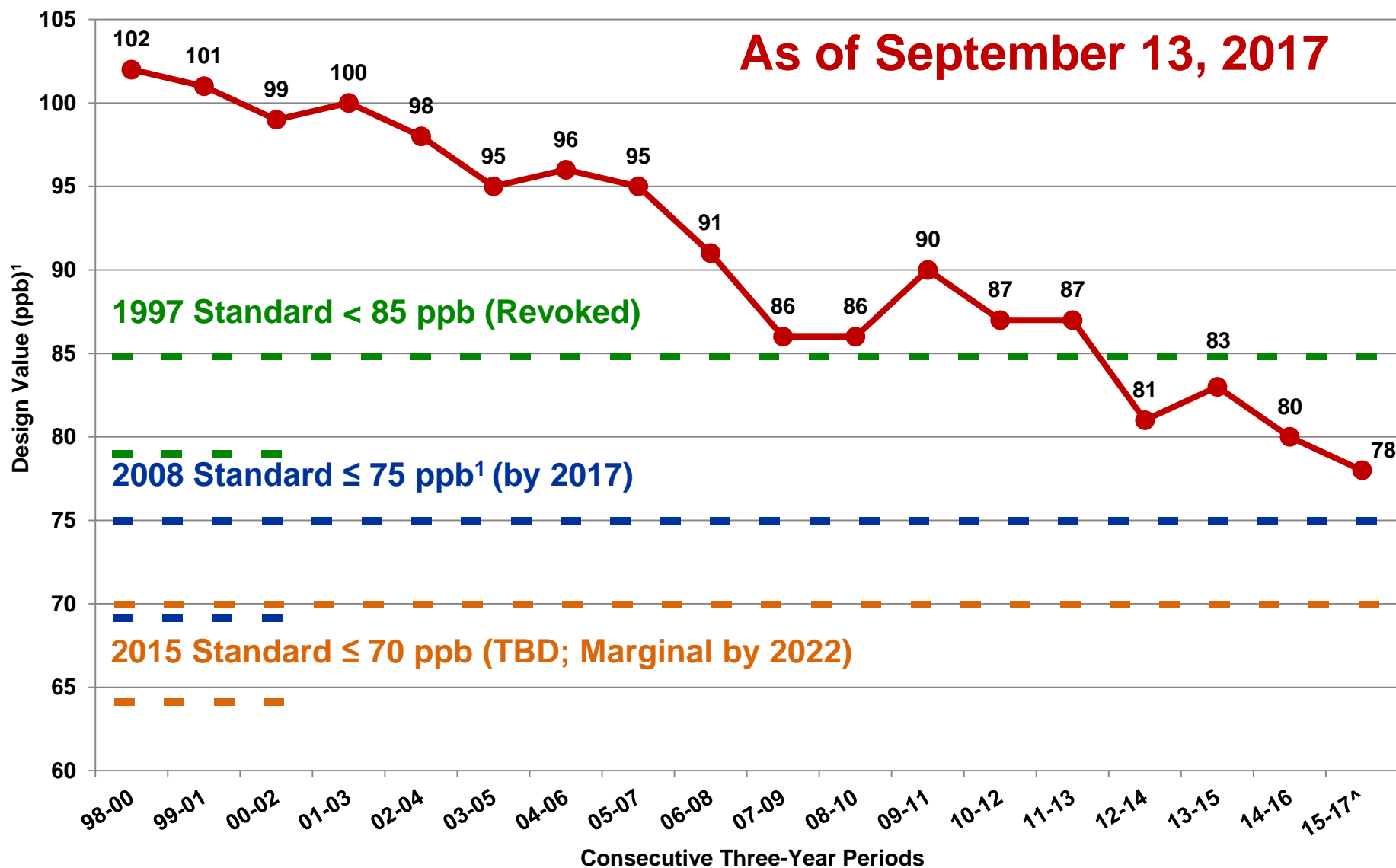
Exceedance Level indicates daily maximum eight-hour average ozone concentration. Exceedance Levels are based on Air Quality Index (AQI) thresholds established by the EPA for the revised ozone standard of 70 ppb.

 = 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)

^Not a full year of data.

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

EIGHT-HOUR HISTORICAL TRENDS

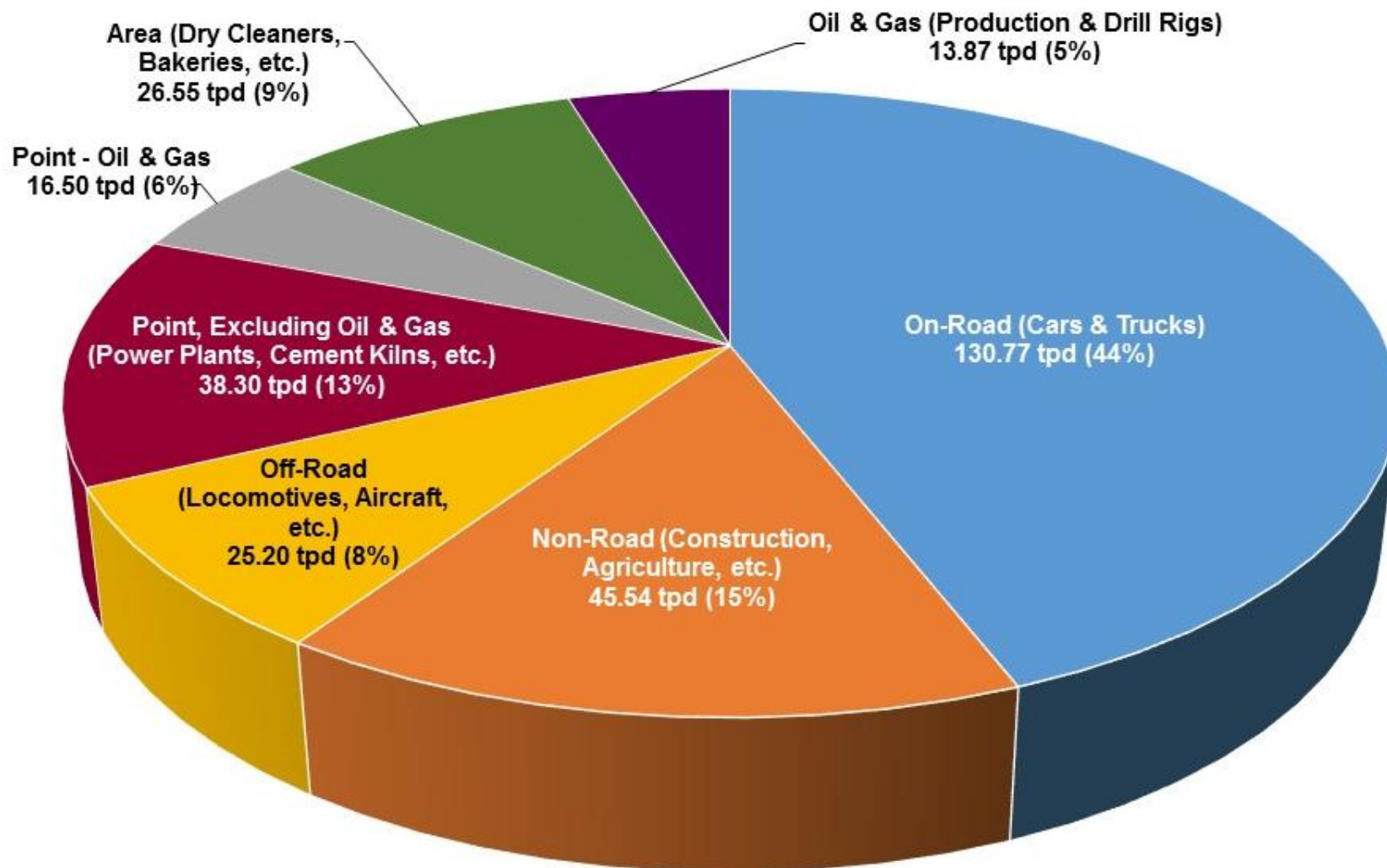


¹Attainment Goal - According to the US EPA National Ambient Air Quality Standards, attainment is reached when, at each monitor, the *Design Value* (three-year average of the annual fourth-highest daily maximum eight-hour average ozone concentration) is equal to or less than 70 parts per billion (ppb).

[^]Not a full year of data.

DFW EMISSIONS SOURCES

Oxides of Nitrogen (NO_x)

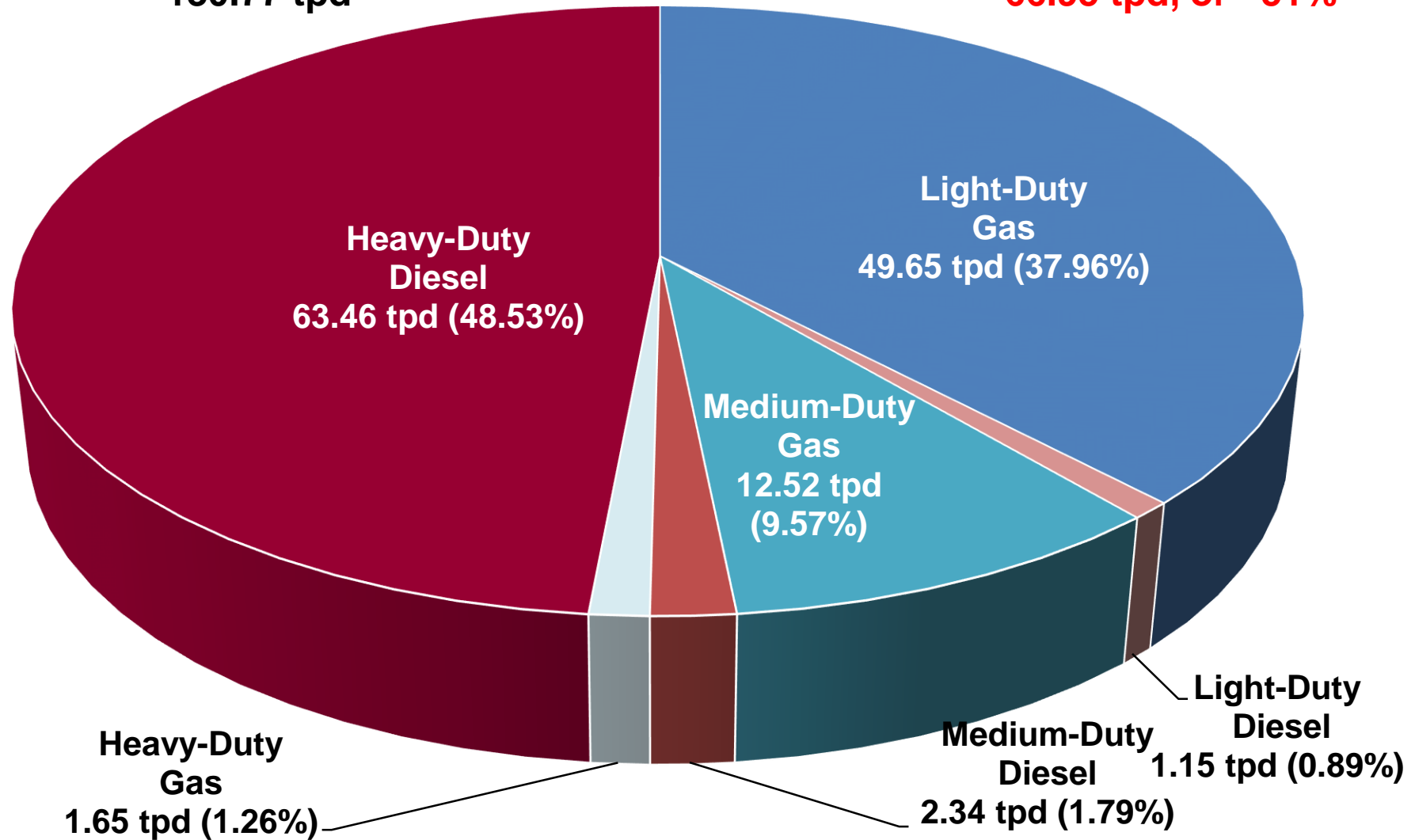


Total NO_x = 296.73 tons per day (tpd)

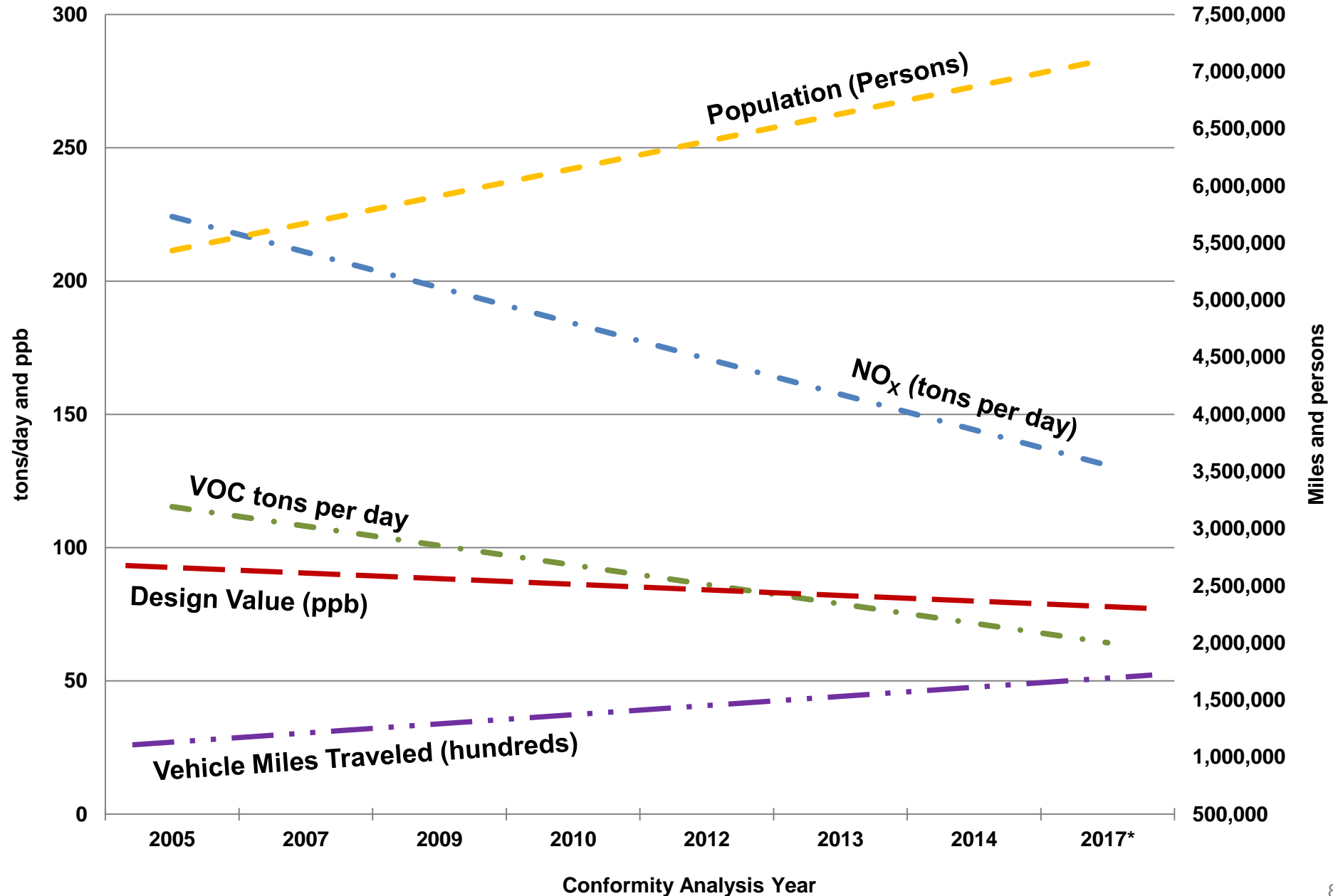
ON-ROAD MOBILE NO_x EMISSIONS SOURCES

**Total On-Road Mobile NO_x =
130.77 tpd**

**Total Diesel Contribution =
66.95 tpd, or ~51%**

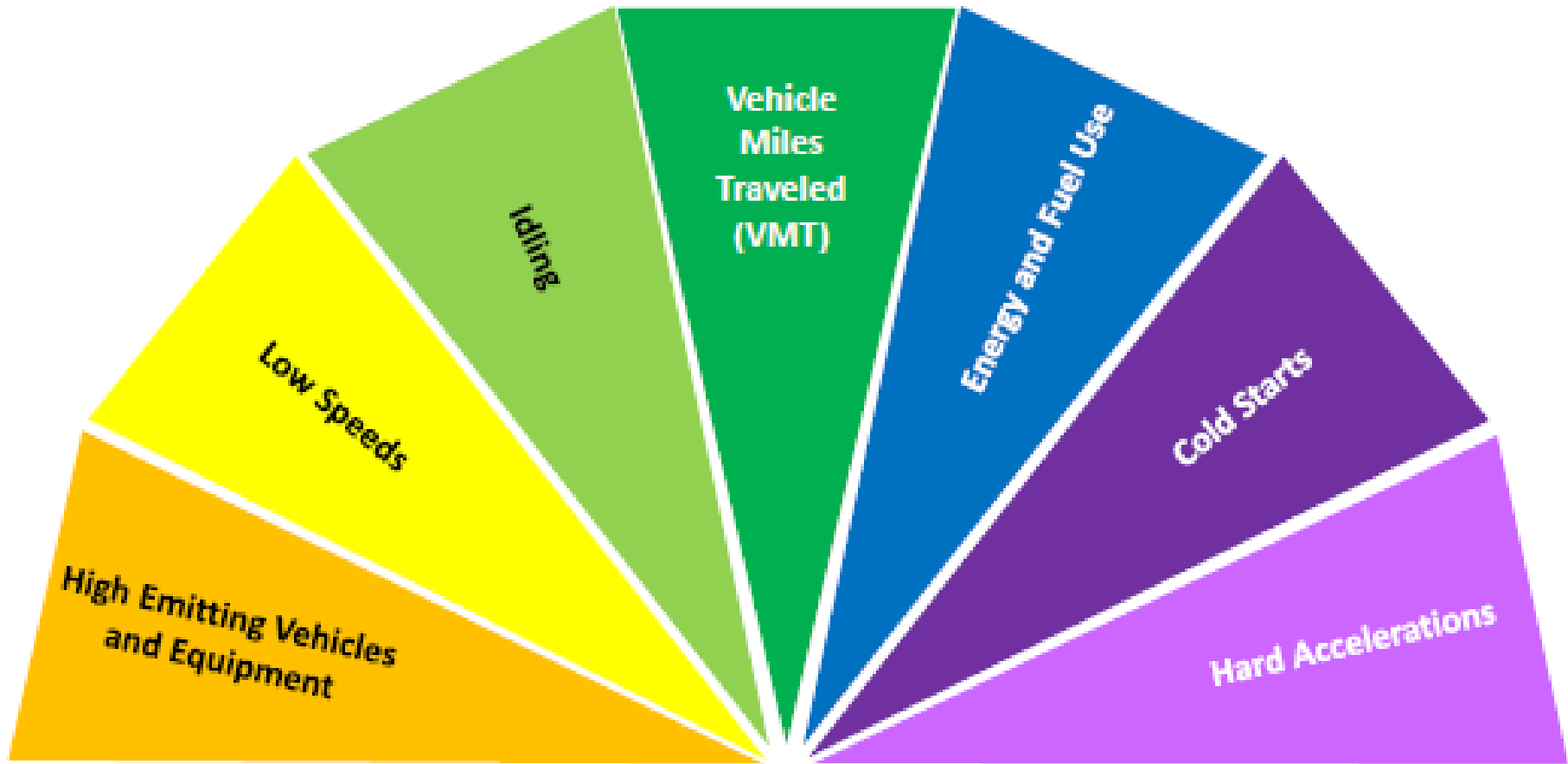


DESIGN VALUE AND DEMOGRAPHIC DATA



SEVEN AIR QUALITY EMPHASIS AREAS

Mobile Sources



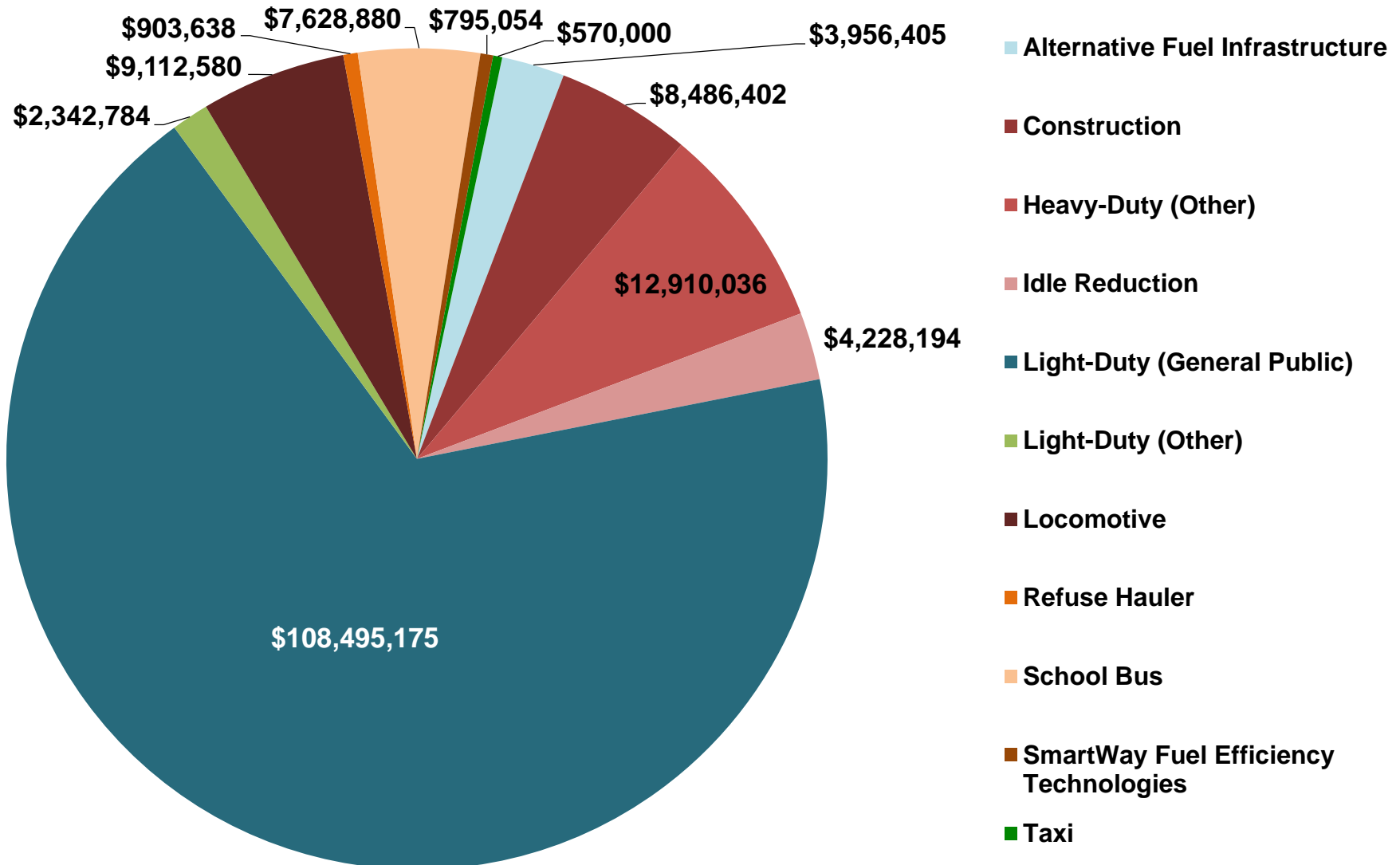
SAMPLE OF AIR QUALITY INITIATIVES



Rideshare. Record. Reward.



NCTCOG CLEAN VEHICLE FUNDING EFFORTS



DOLLARS AWARDED FROM 2006-2016; TOTAL = \$159,429,148

SELECT EXISTING AIR QUALITY INITIATIVES

Technology Improvements

AirCheckTexas Drive a Clean Machine Program

Alternative Fuel Initiatives

- Alternative Fuel Corridor Designations
- Dallas-Fort Worth Clean Cities Program
- Electric Vehicles North Texas

Approximately 4 Tons NO_x Reduced Each Year

- Fleets for the Future Cooperative Procurement

AQ Funding Website and Application Assistance

NCTCOG Clean Vehicle Funding Efforts 2006-2016

Estimated 4,500 Tons NO_x Reduced over Project Lifetimes



SELECT EXISTING AIR QUALITY INITIATIVES

Policies & Processes

- Clean Construction Specification
- Clean Fleet Policy
- Engine Off North Texas
- Go Solar Texas
- Preferential Parking for Alternative Fuel Vehicles

Outreach/Public Engagement

- Air North Texas
- Car Care Clinics
- Regional Emissions Enforcement Program
- Regional Smoking Vehicle Program
- EPA SmartWay Affiliate/Saving Money and Reducing Truck Emissions Program



SELECT EXISTING AIR QUALITY INITIATIVES

Transportation System Management

- Intersection Improvements
- High Occupancy Vehicle/Managed Lanes
- Intelligent Transportation Systems
- Freeway/Arterial Bottleneck Removals
- Traffic Signal Improvements
- Truck Lane Restrictions

Travel Demand Management

- Active Transportation Programs
- Park and Ride Projects
- Rail Transit
- Try Parking It
- Vanpool Programs



GET INVOLVED

Air North Texas

Sign Up for Blog Notices and Alerts
Participate in Activities and Actions
Showcase Efforts during Clean Air Action Day (June)
Promote Efforts Online
www.airnorthtexas.org



AirCheckTexas Drive a Clean Machine

Apply for Financial Assistance
Tell your Friends & Neighbors!
Share Promotional Materials Available Online
www.airchecktexas.org



Electric Vehicles North Texas (EVNT)

Attend EVNT & DFW Clean Cities Meetings
Sign Up to Receive Email Announcements
Attend **National Drive Electric Week** Event
Request Workplace Charging & EV-Ready Construction
www.dfwcleancities.org/evnt



NATIONAL DRIVE ELECTRIC WEEK

Vehicle	Registered
Tesla Model S	71
Chevrolet Volt	28
Nissan LEAF	22
Tesla Model X	13
BMW i3 REX	5
Chevrolet Bolt	5
Cadillac ELR	3
Fiat 500e	3
Ford Focus Electric	3
BMW i3	2
Ford Fusion Energi	2
Toyota Plug-in Prius	2
Chevy Spark EV	1
Fisker Karma	1
Ford C-MAX Energi	1
Hyundai Sonata Plug-In	1
Tesla Roadster	1
Toyota RAV4 EV (2012 and later)	1
Volkswagen e-Golf	1
Zero Motorcycle	1
20 Models	167



LARGEST
GATHERING
OF ELECTRIC
VEHICLES IN
TEXAS

September 9 – Kickoff Event

FREE Webinar Series, Noon – 1 pm Every Day

September 11: EV 101

September 12: Workplace Charging

September 13: Opportunities for Utilities

September 14: Municipalities & EVs

September 15: How to Sell an EV

www.DriveElectricDFW.org

GET INVOLVED

Engine Off North Texas

Request Adoption of Local Ordinances

Report Idling Vehicles

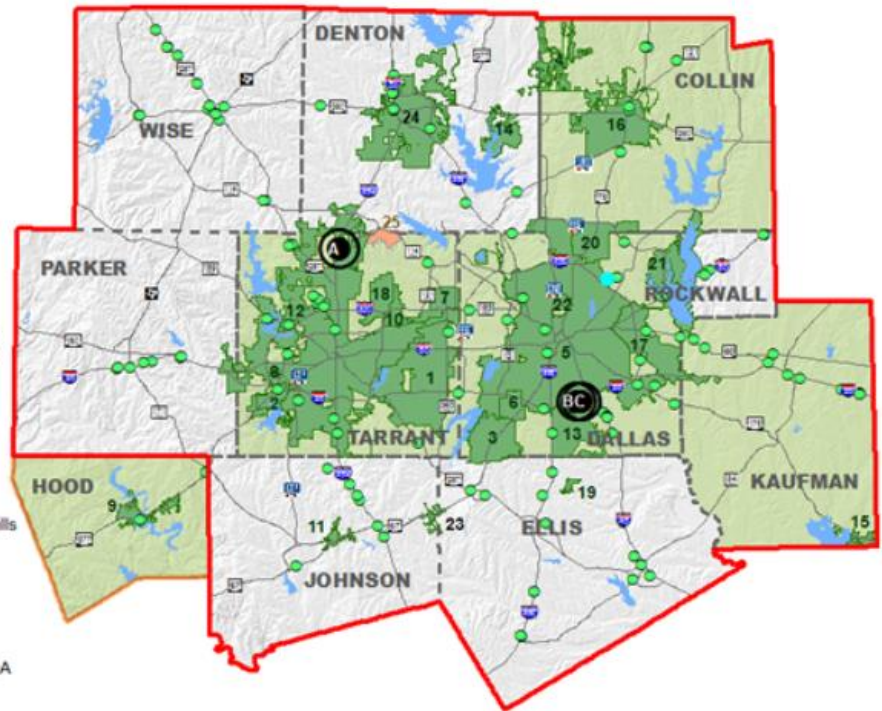
www.EngineOffNorthTexas.org

North Texas Idling Restrictions, Idle Reduction Infrastructure, and Truck Stop Locations



Legend

- Existing TSE Sites
 - A- Pilot Travel Center #434
2400 Alliance Gateway
Ft Worth, TX 76177
I-35 Exit 65
 - B- Exxon / DFW Oil
8181 S Lancaster Road
Dallas, TX 75241
I-20 Exit 470
 - C- Flying J Travel Center #726
7425 Bonnie View Road
Dallas, TX 75241
I-20 Exit 472
- Regional Truck Stops
- Counties with Idling Limitations and Memorandum of Agreement (MOA)
- Cities with Idling Limitations and MOA
 - 1 - Arlington 13 - Lancaster
 - 2 - Benbrook 14 - Little Elm
 - 3 - Cedar Hill 15 - Mabank
 - 4 - Celina 16 - McKinney
 - 5 - Dallas 17 - Mesquite
 - 6 - Duncanville 18 - North Richland Hills
 - 7 - Euless 19 - Pecan Hill
 - 8 - Fort Worth 20 - Richardson
 - 9 - Granbury 21 - Rowlett
 - 10 - Hurst 22 - University Park
 - 11 - Keene 23 - Venus
 - 12 - Lake Worth 24 - Denton
- Cities with Idling Limitations, No MOA
 - 25 - Westlake
- 2008 8-Hour Ozone Standard Nonattainment Area
- Near Nonattainment Counties



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Council of Governments

August 2016

WHAT'S NEXT??

Modernize Legacy Fleet

- 53% of Diesel Fleet >14,000 GVWR is Model Years 1992-2009

Nonprofit Vehicle Donation Partnership

Update Building Codes to Support Electrification and Solar Deployment

Improve/Enhance Effectiveness of Existing Initiatives

- Expand Adoption and Increase Enforcement of Anti-Idling Policies
- Standardize Clean Construction Specification Language
- Increase Electrification

FOR MORE INFORMATION

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www.nctcog.org/airquality