

# **OZONE IN NORTH TEXAS: OPPORTUNITIES FOR IMPROVEMENT**

**Leadership North Texas  
March 31, 2017**

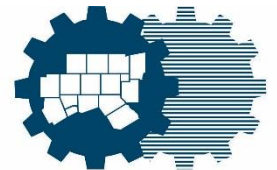
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Air Quality Planning & Operations  
NCTCOG Transportation Department**



**North Central Texas  
Council of Governments**

# **OZONE IN NORTH TEXAS: OPPORTUNITIES FOR IMPROVEMENT**

## **Air Quality 101**



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# CLEAN AIR ACT

**Clean Air Act (CAA) last amended in 1990**

**Requires Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for six criteria pollutants:**

**Carbon Monoxide (CO)**

**Lead (Pb)**

**Nitrogen Oxides (NO<sub>x</sub>)**

**Ozone (O<sub>3</sub>)**

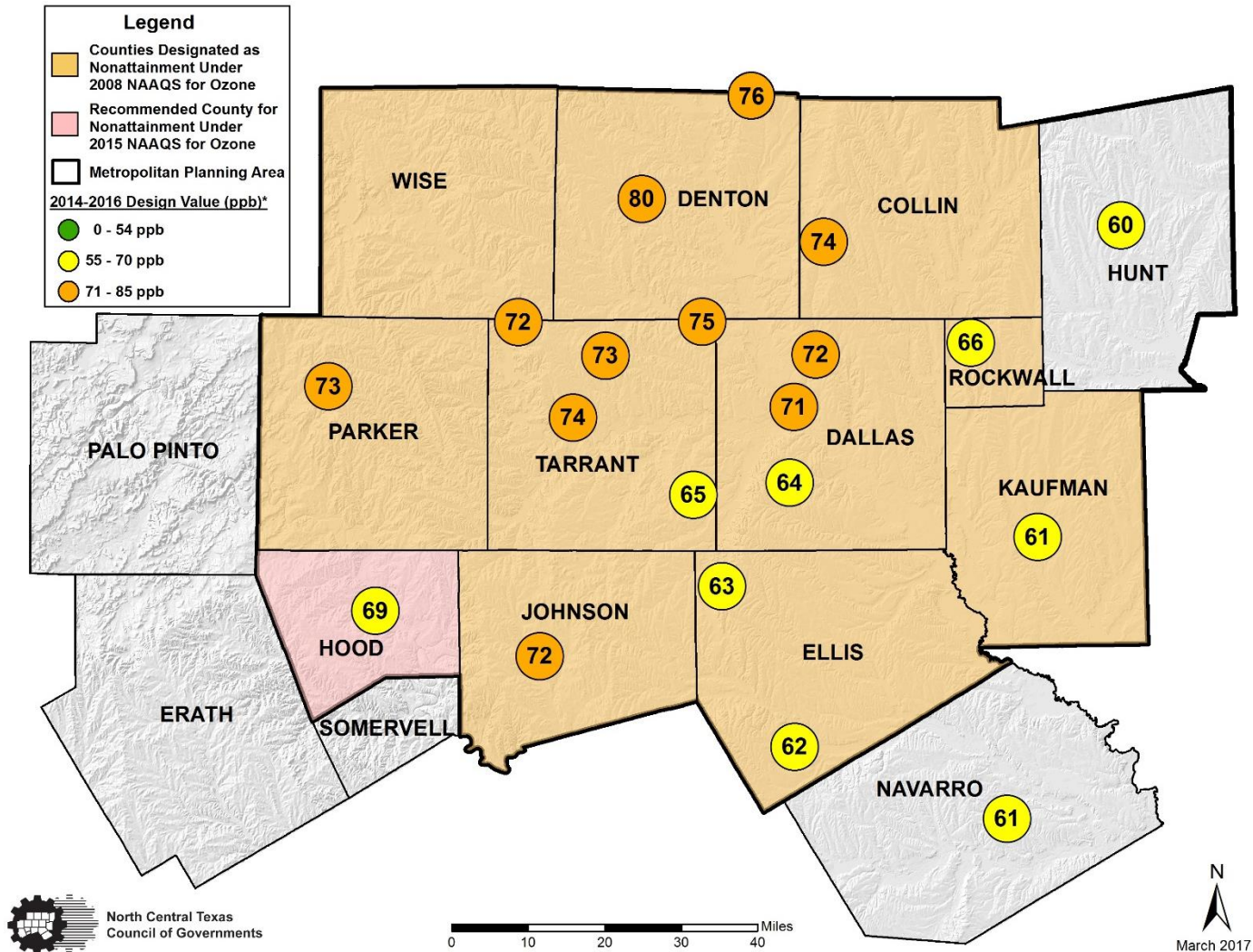
**Particulate Matter (PM)**

**Sulfur Dioxide (SO<sub>2</sub>)**

**EPA must complete a review of NAAQS every five years**

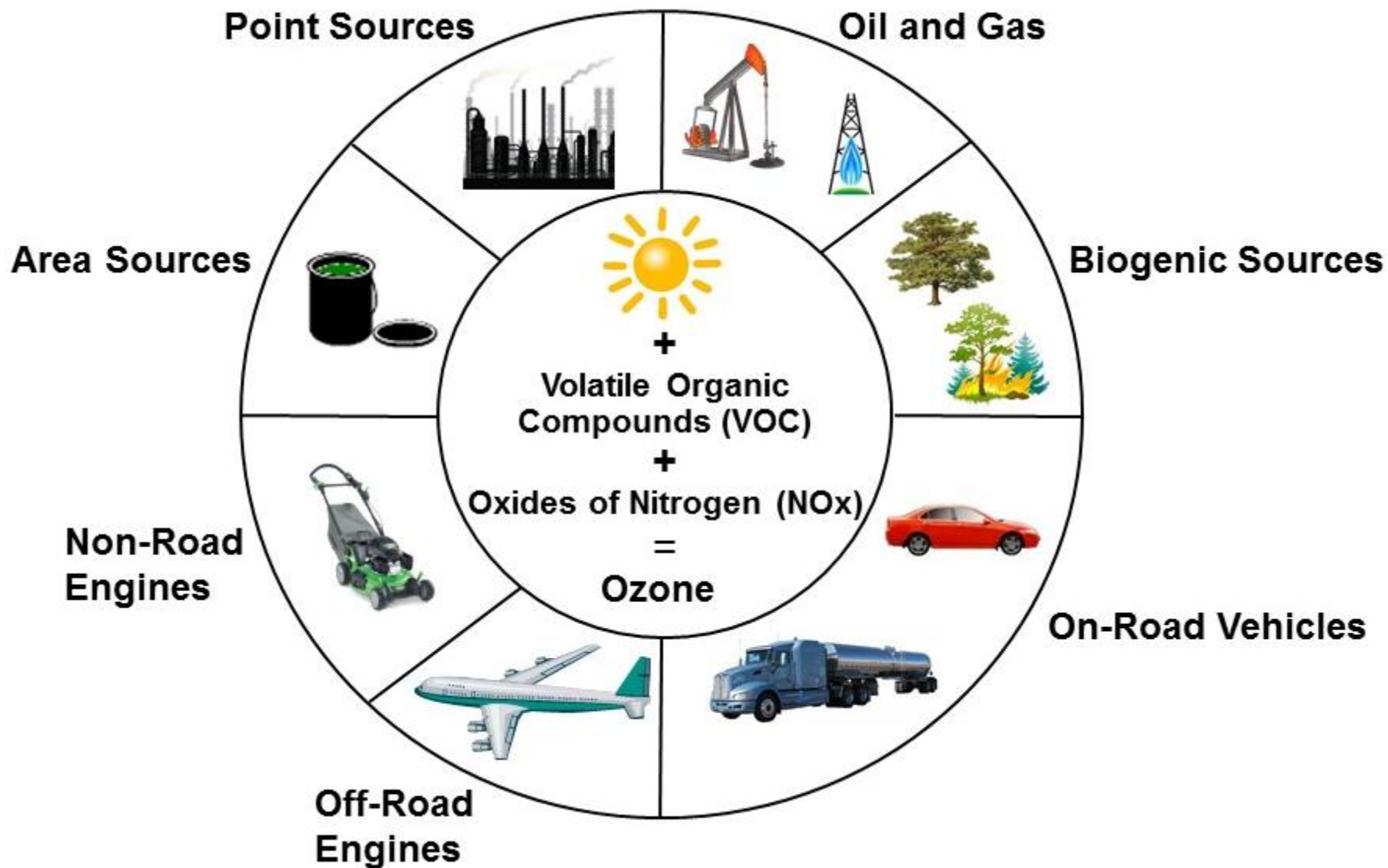
# NCTCOG PLANNING AREA

## North Central Texas Nonattainment Area



\*Air Quality Index based on 2015 NAAQS for Ozone,  $\leq 70$  parts per billion (ppb)  
2016 data not certified by TCEQ.

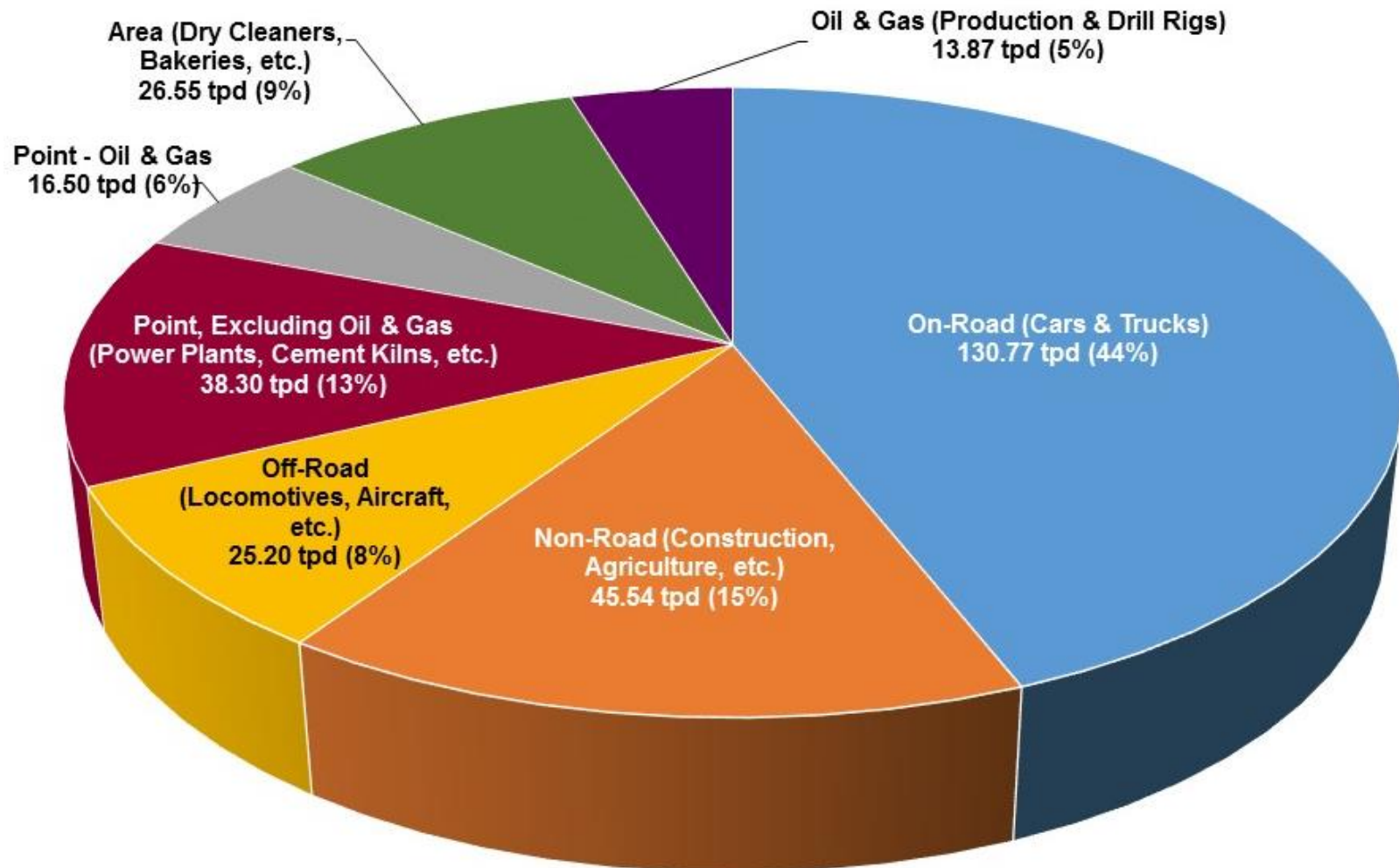
# OZONE FORMATION



Optimum conditions for the formation of ozone include high temperatures and low winds. Sections are not to scale and are for illustrative purposes only.

# EMISSION SOURCES

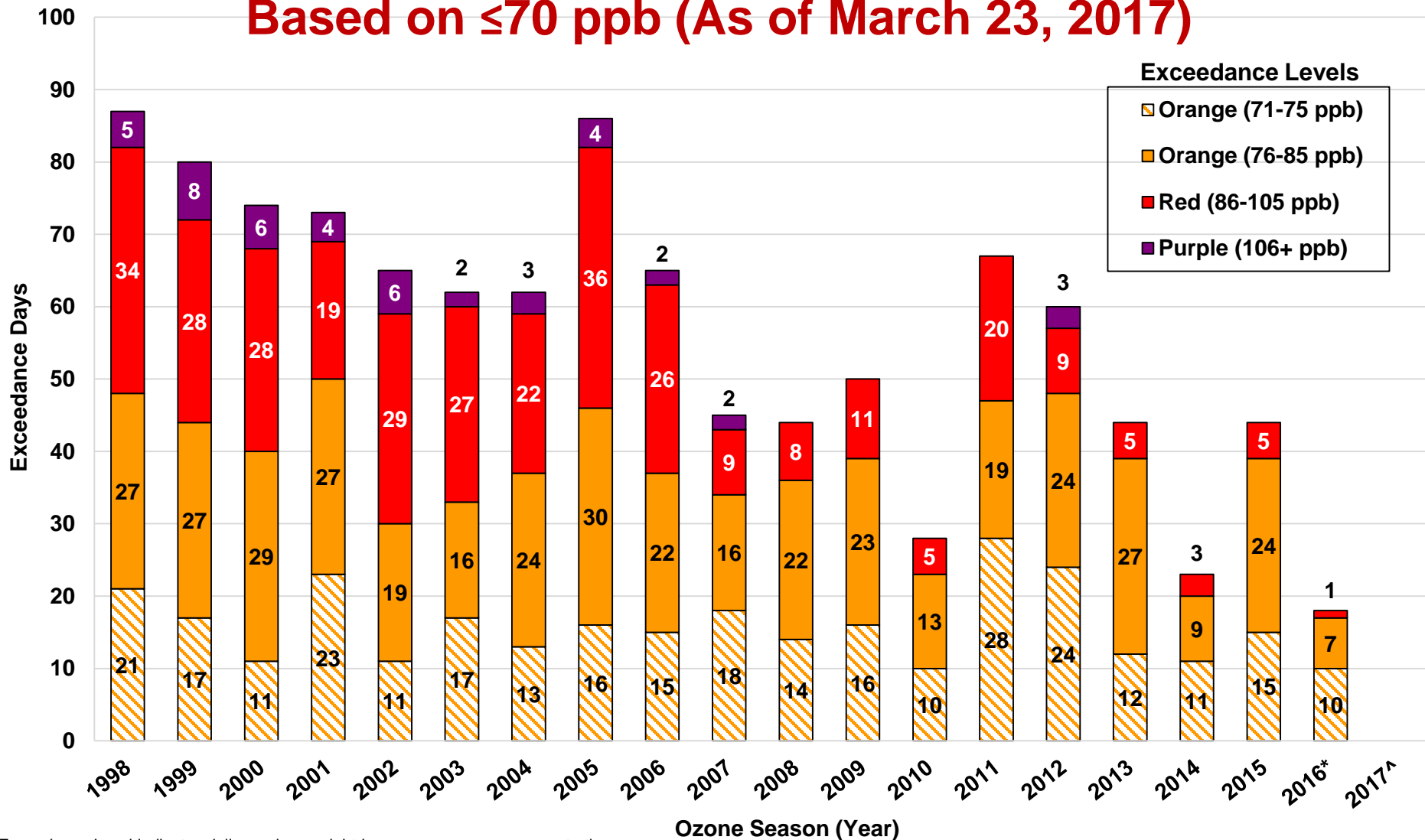
## Oxides of Nitrogen ( $\text{NO}_x$ )




**Total  $\text{NO}_x$  = 296.73 tons per day (tpd)**

# EIGHT-HOUR OZONE TRENDS

Based on  $\leq 70$  ppb (As of March 23, 2017)



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)

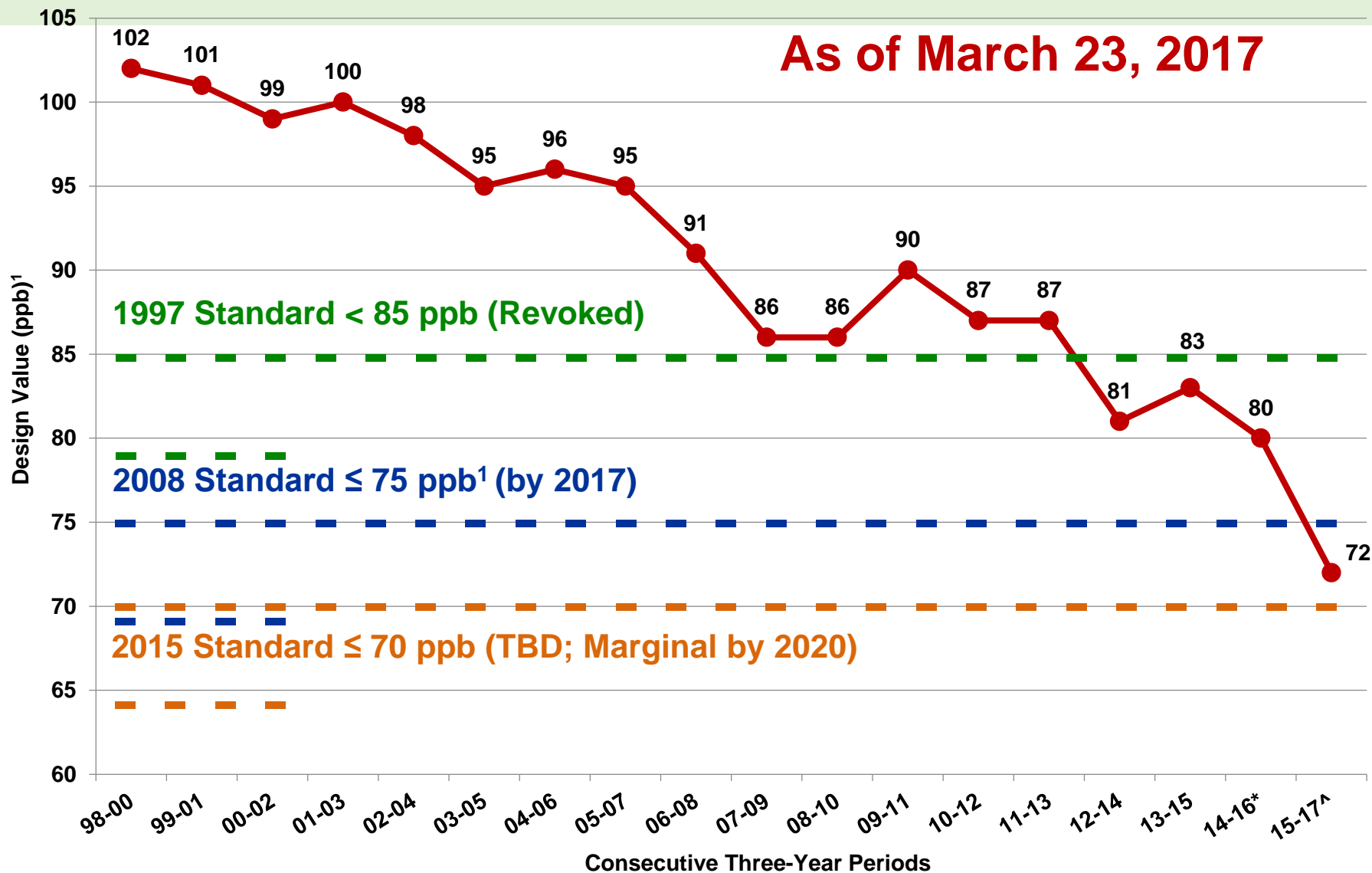
\*Data not certified by TCEQ.

^Not a full year of data.

Source: TCEQ, [http://www.tceq.state.tx.us/cgi-bin/compliance/monops/8hr\\_monthly.pl](http://www.tceq.state.tx.us/cgi-bin/compliance/monops/8hr_monthly.pl)  
ppb = parts per billion



# EIGHT-HOUR OZONE HISTORICAL TRENDS



<sup>1</sup>Attainment 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).

\*Data not certified by the Texas Commission on Environmental Quality.

^Not a full year of data.



# 2015 EIGHT-HOUR OZONE STANDARD ( $\leq 70$ )

## Anticipated Implementation Timeline

2015 Standard Final:	October 26, 2015 <sup>1</sup>
Effective Date:	December 28, 2015
State Nonattainment Designation Recommendations to EPA:	October 2016
EPA Designations Final:	October 2017*
EPA Designations Effective:	December 2017*
Attainment Plans Due (moderate and above):	December 2020*
Attainment Dates (no later than)	
Marginal:	December 2020*
Moderate:	December 2023*
Serious:	December 2026*
Severe:	December 2032*

<sup>1</sup> <https://federalregister.gov/a/2015-26594>

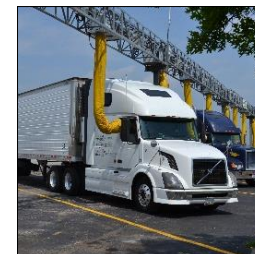
\*Dates are anticipated based on EPA's final designation date.

Source: Environmental Protection Agency (EPA)

# SAMPLE OF AIR QUALITY INITIATIVES



Rideshare. Record. Reward.

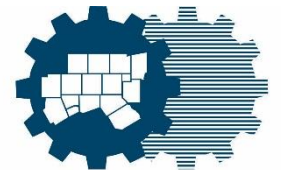


Don't Choke, Call #SMOKE



# **OZONE IN NORTH TEXAS: OPPORTUNITIES FOR IMPROVEMENT**

## **Opportunities for Improvement Programs**



**North Central Texas  
Council of Governments**

# TEXAS EMISSIONS REDUCTION PLAN (TERP)

## Program Goals/Description

Provide Funding Assistance for Projects that Reduce Emissions (NO<sub>x</sub> Focus)

Various Programs Under TERP “Umbrella”

- Mobile Sources

- Refueling Infrastructure

- Point Sources

- Stationary Sources

- Energy Efficiency

**Major Funding  
Available Until  
May 26, 2017**

## NCTCOG Resources

- Assessment of Project Funding Potential

- Free Assistance with Grant Applications

- Comments on Proposed Rulemakings

## Get Involved

- Subscribe to TERP Email Lists

- Subscribe to NCTCOG AQ Funding Emails

- Attend TERP Meetings and Workshops



**[www.terpgrants.org](http://www.terpgrants.org)**

# AIR NORTH TEXAS

## Program Description

A Regional Clean Air Partnership and Campaign to:

- Provide a Comprehensive Air Quality Resource and Regional Message
- Leverage Resources and Collaborate with Regional Partners
- Increase Public Awareness of Specific Opportunities for Residents to Make Clean Air Choices.

## NCTCOG Resources

- New Comprehensive Website, Including Current Ozone Conditions
- Clean Air Corner Blog and Alerts for Ozone Action Days
- Outreach and Advertising Campaign
- Events – Air Quality Awareness Week, May 1-5, 2017 and  
Clean Air Action Day, June 23, 2017

## How To Get Involved

- Sign-up to Receive New Blog Notifications and Alerts
- Provide Messages and Alerts to your Employees
- Become an Air North Texas Partner
- Participate in Air North Texas Activities and Actions
- Promote Your Air Quality Improvements Online

**[www.airnorthtexas.org](http://www.airnorthtexas.org)**



# CLEAN AIR ACTION DAY

## Description:

People Commit to Adopting at Least One Clean Air Strategy for the Day

## When:

First Friday of Summer Every Year  
June 23, 2017

## How to Participate:

Organizations and Businesses Promote the Day  
with Contests and Events for Employees

Asking Participants to Take Steps Toward Improving Air Quality  
and Post Photos of Their Commitments on  
Social Media Using #CAAD2017 for a Chance to  
Win Prizes



**[www.airnorthtexas.org/cleanairactionday](http://www.airnorthtexas.org/cleanairactionday)**





# GO SOLAR NORTH TEXAS

## Goal/Description

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

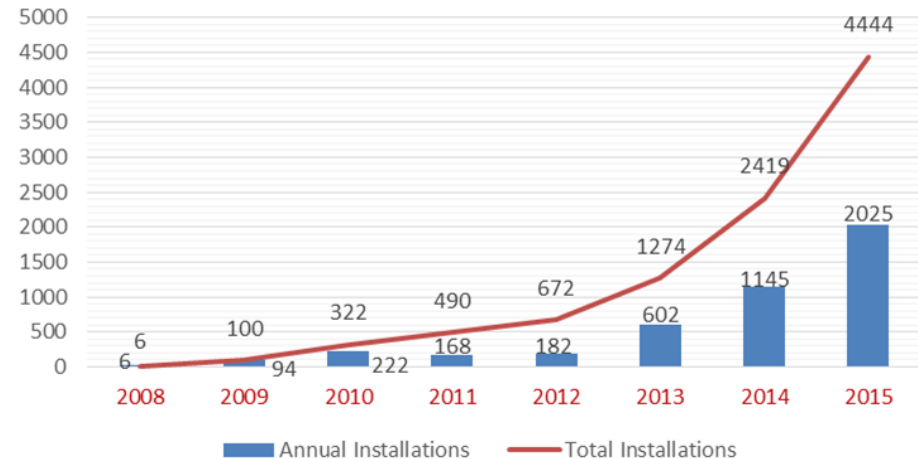
## NCTCOG Resources

- Template Permitting Documents
- Ordinance Guidance
- Website Clearinghouse

## How To Get Involved

- Adopt Suggested Best Practices
- Attend Upcoming Webinars & Trainings

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



Source: NTREG, 2016



[www.gosolarnorthtexas.org](http://www.gosolarnorthtexas.org)



# DALLAS-FORT WORTH CLEAN CITIES COALITION

## Description:

Created by the US Department of Energy, the Coalition provides information and education on alternative fuel and advanced technology vehicles, programs, and policies with a focus on petroleum reduction and air quality benefits.

## NCTCOG Resources

- New Comprehensive Website
- Member Portal
- Meetings/Trainings/Workshops
- Monthly Newsletter
- Video Success Stories
- Annual Report on Alternative Fuel Usage

## How To Get Involved

- Become a Member and Participate in Annual Report
- Participate in One or More Alternative Fuel Subcommittees
- Sponsor the Coalition
- Attend Workshops and Trainings
- Sign-up for Monthly Newsletter and Informative Emails

**[www.dfwcleancities.org](http://www.dfwcleancities.org)**



**Dallas-Fort Worth  
CLEAN CITIES**

# ELECTRIC VEHICLES NORTH TEXAS (EVNT)

## Goal/Description

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

## NCTCOG Resources

EV Fact Sheets  
Guide to Claiming EV Incentives  
Upcoming Workshops & Meetings

## How To Get Involved

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

## National Drive Electric Week



**[www.dfwcleancities.org/evnt](http://www.dfwcleancities.org/evnt)**

# CLEAN FLEET POLICY

## Goal/Description

Reduce Emissions and Overall Fuel Consumption From Fleet Activities

## NCTCOG Resources

Funding Eligibility

Template Policy and Guidance

Template Idle Reduction (IR) Policy and Guidance

DFW Clean Cities Recognition Program

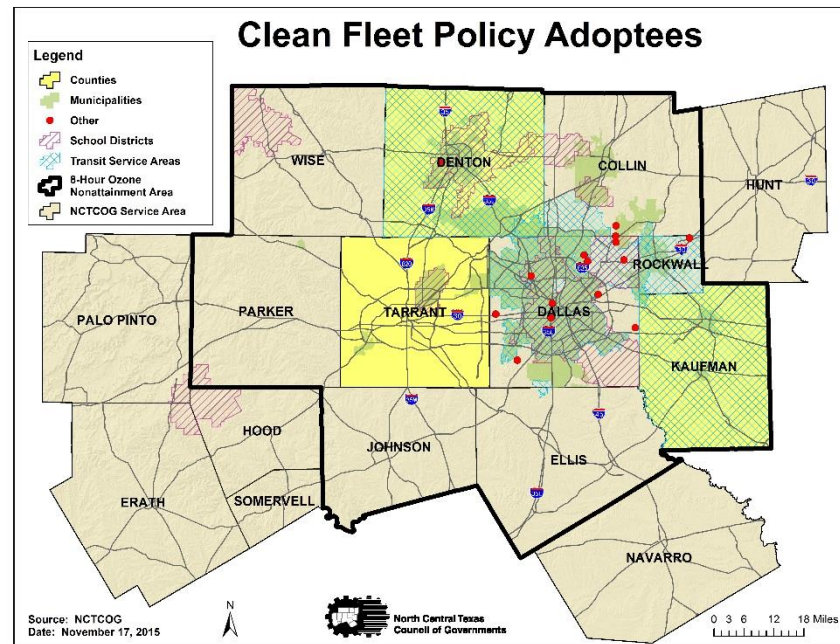
## How To Get Involved

Adopt the Clean Fleet Policy and Submit to NCTCOG

Submit IR Policy/Standard Operating Procedure to NCTCOG

Become a DFW Clean Cities Coalition Stakeholder

Submit Annual Report



# ENGINE OFF NORTH TEXAS

## Program Goals

Encourage Regional Idle Reduction by Promoting Idling Restrictions, Anti-Idling Policies, and Development of Outreach Materials for Idle Reduction Campaigns

## NCTCOG Resources

Idling Complaint Hotline: 877-NTX-IDLE  
Informational Brochures  
Posters and Street Signs

## How To Get Involved

Create No-Idle Zone  
Report Idling Vehicles  
Adopt Anti-Idling Measures for Own Fleet  
Partner with City/County (if in Area with Idling Restrictions)



**[engineoffnorthtexas.org](http://engineoffnorthtexas.org)**

# EPA SMARTWAY TRANSPORT PROGRAM

## Program Goals

Reduce Fleet Emissions, Improve Fuel Economy, and  
Increase Energy Efficiency in the Freight Industry

## NCTCOG Resources

Informational Fact Sheet  
SmartWay Meetings or Webinars  
Assistance with Identifying EPA Tools or  
Joining as a Partner

## How To Get Involved

Become a SmartWay Partner  
Include SmartWay Partnership in Contracts/Purchasing  
Purchase EPA SmartWay Verified Technologies and  
SmartWay Certified Vehicles



**[www.nctcog.org/SmartWay](http://www.nctcog.org/SmartWay)**

# SAVING MONEY AND REDUCING TRUCK EMISSIONS

## Program Goals

Reduce Emissions and Fuel Costs in the Trucking Industry  
by Providing Outreach and Education on Regional  
Initiatives that Improve Efficiency

## NCTCOG Resources

Informational Brochure  
Meetings and Outreach Events  
Individual Technology Assistance  
Driver, Fleet Manager and Vendor Information Folders  
Funding Assistance

## How To Get Involved

Purchase Smartway Verified Technologies  
Institute a Driver Training Program  
Implement Clean Fleet Policy and Join DFW Clean Cities  
Encourage Transportation Providers to Reach Out



**[www.nctcog.org/SMARTe](http://www.nctcog.org/SMARTe)**

# AIRCHECKTEXAS

## DRIVE A CLEAN MACHINE

### Program Goals

Offers Financial Assistance to Low-Moderate Income Vehicle Owners Whose Vehicles Fail Emissions Inspection Test  
Helps Vehicle Owners Comply with Vehicle Emissions Standards to Reduce Ozone-Forming Pollutants Created by On-Road Motor Vehicles  
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.nctcog.org/airchecktexas](http://www.nctcog.org/airchecktexas)**



# EMPLOYER TRIP REDUCTION (ETR) PROGRAM

## Overview

A Voluntary Educational Program that Targets Vehicle Trips of Employees in North Central Texas

Aimed at Reducing the Number of Vehicles on the Road and Improving Air Quality

Promotes Alternatives to Driving Alone on Commute Trips

Alternatives Include Carpooling, Vanpooling, Telecommuting, Flexible Work Hour Programs, Transit Pass Subsidies, Biking and Walking

NCTCOG Staff Available for Employee Information Sessions, Lunch and Learns, Program Development and Setup, Training, and Program Maintenance

## Resources

ETR Employer Manual for North Texas Available

A Guide to Alternative Commuting, Employer Programs, Rewards, and More

## Get Involved

Contact Sonya Landrum at (817) 695-9273 or [slandrum@nctcog.org](mailto:slandrum@nctcog.org) for Details

# TRY PARKING IT

## Overview

Regional Commuter Tracking and Ride-Matching System for North Central Texas

## Site Features

Carpool and Vanpool Ride-Matching

Coming Soon – Transit, Walking, and Cycling Buddy Matching

Daily Trip-Logging Capabilities

Personal Savings Reports

Integrated Reward System and Savings Calculator

Regional Points of Interest

Challenges – I-30 Insider

## Employees

Option to Participate in Trip Logging, Ride-Matching or Both

Registered Users can Specify Rideshare Preferences  
(i.e. commute schedule, co-workers only, non-smokers)



## Registered Employers

Designated Employer Administrator Access

Track Employees' Alternative Commute Activities and Savings

Generate Company-Specific Reports

Customizable Employer Portal



**[www.tryparkingit.com](http://www.tryparkingit.com)**

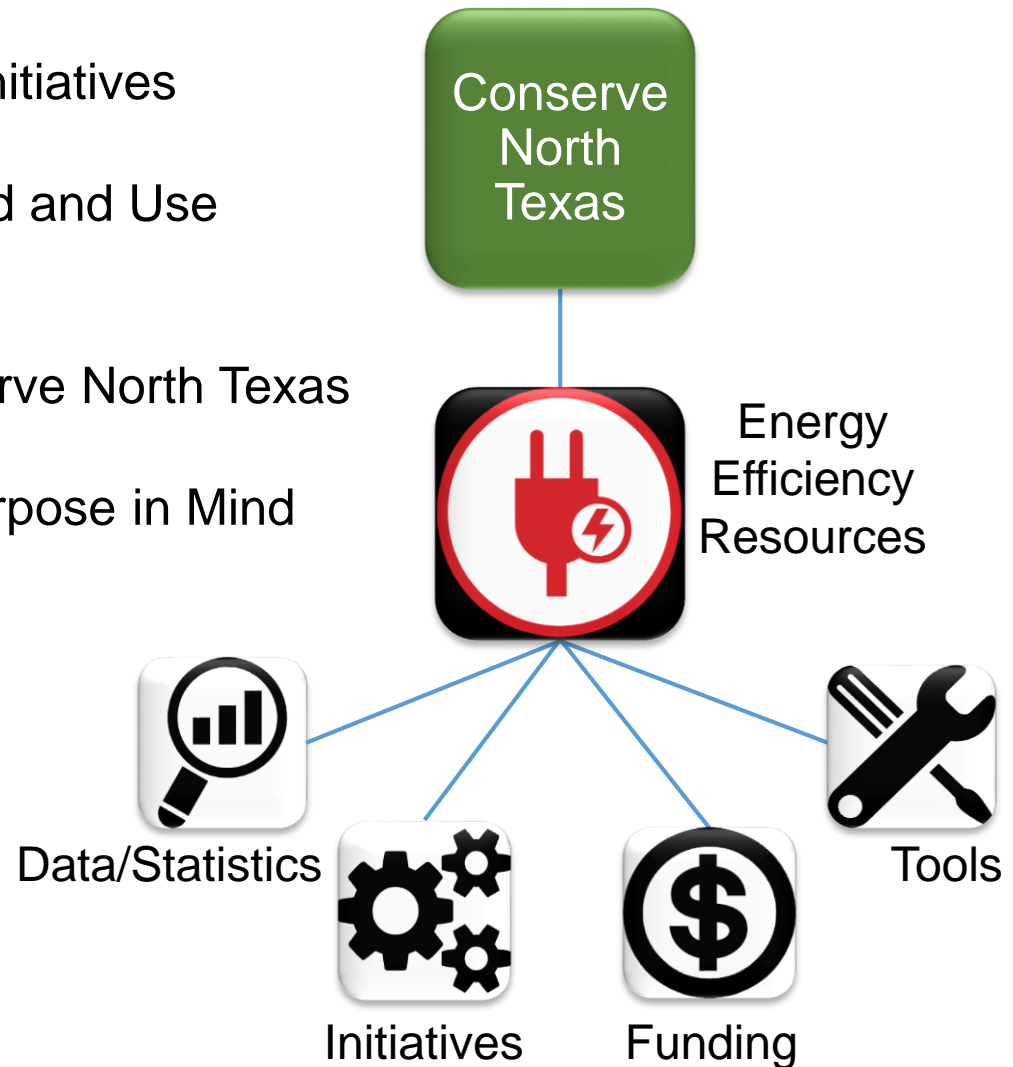
# CONNECTING ENERGY EFFICIENCY RESOURCES

## Issue

Many Energy Resources and Initiatives  
Disaggregated  
Difficult for Stakeholders to Find and Use

## Proposed Solution

Website Clearinghouse: Conserve North Texas  
“One-Stop-Shop”  
Organized with Audience/Purpose in Mind



[www.conservenorthtexas.org](http://www.conservenorthtexas.org)

# OTHER CLEAN AIR STRATEGIES

## Organizations/Businesses/Governments

Move Construction Activities to Evening Hours

Postpone Mowing to a Day with Healthy Air

Conserve Electricity and Retrofit to Efficient Lighting

Limit Testing of Emergency Generators

Coordinate On-site Employee Lunches

Use Audio and Video Conference Call Technology

Reduce Water and Use EPA's WaterSense

Use Solar and Other Renewables for Power Needs When Possible

Use SmartScape Plants

Provide Facilities for Employees that Walk or Ride a Bike to Work



# AIR QUALITY FUNDING OPPORTUNITIES

## NCTCOG Assistance Available Funding Help Completing Applications

Looking for Grant Funding?

Vehicle Funding  
Opportunities

Other Air Quality  
Funding Opportunities

Funding Opportunity  
Archive

Sign-Up for Email  
Updates

Eligible Focus Areas									
Heavy-Duty Vehicles						Light-Duty Vehicles			Eligible Applicant Type
School Buses	Oil and Gas Vehicles/Equipment	Long Haul Trucks	Dump Trucks	Idle-Reduction Technology	Other	Passenger Vehicles	Taxis	Idle-Reduction Technology	
						X			General Public
	X				X				Private Sector
X	X	X	X	X		X	X		Private Sector
X	X		X		X	X	X		Public Sector, Private Sector
X	X	X	X		X				Public Sector, Private Sector, General Public

# FOR FURTHER INFORMATION

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Program Manager

817-608-2346

[mmize@nctcog.org](mailto:mmize@nctcog.org)

Shannon Stevenson

Program Manager

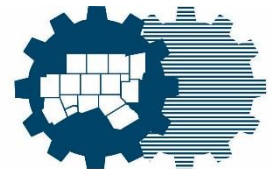
817-608-2304

[sstevenson@nctcog.org](mailto:sstevenson@nctcog.org)

**Find us on social media @nctcogtrans**



[www.nctcog.org/trans/air](http://www.nctcog.org/trans/air)



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