

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

**North Texas Commission**  
**Topic: North Texas**

**June 10, 2015**



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**Air Quality Planning & Operations**  
**NCTCOG Transportation Department**

# 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>)**

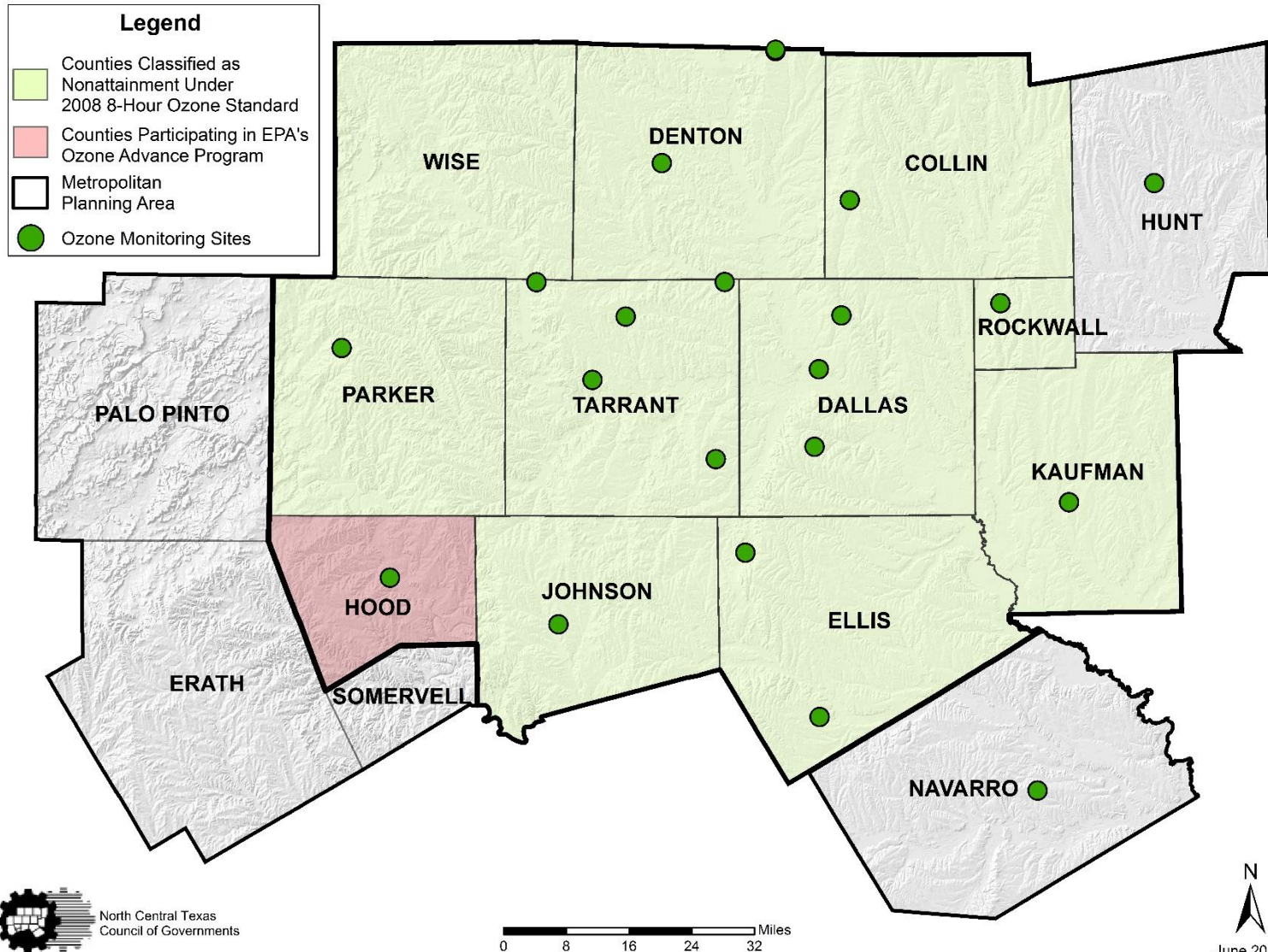
**Ozone (O<sub>3</sub>)**

**Particulate Matter (PM)**

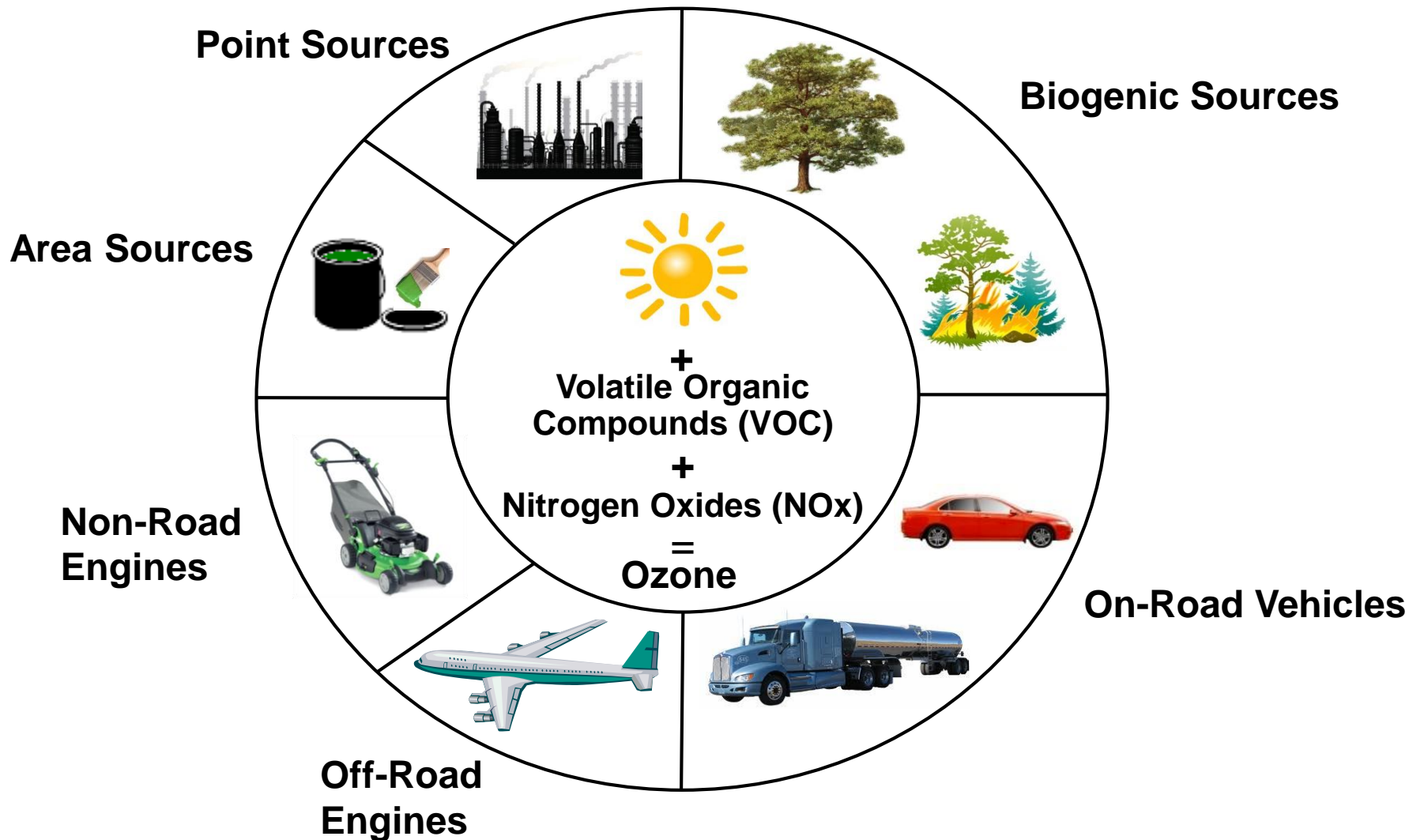
**Sulfur Dioxide (SO<sub>2</sub>)**

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

# NCTCOG PLANNING AREA



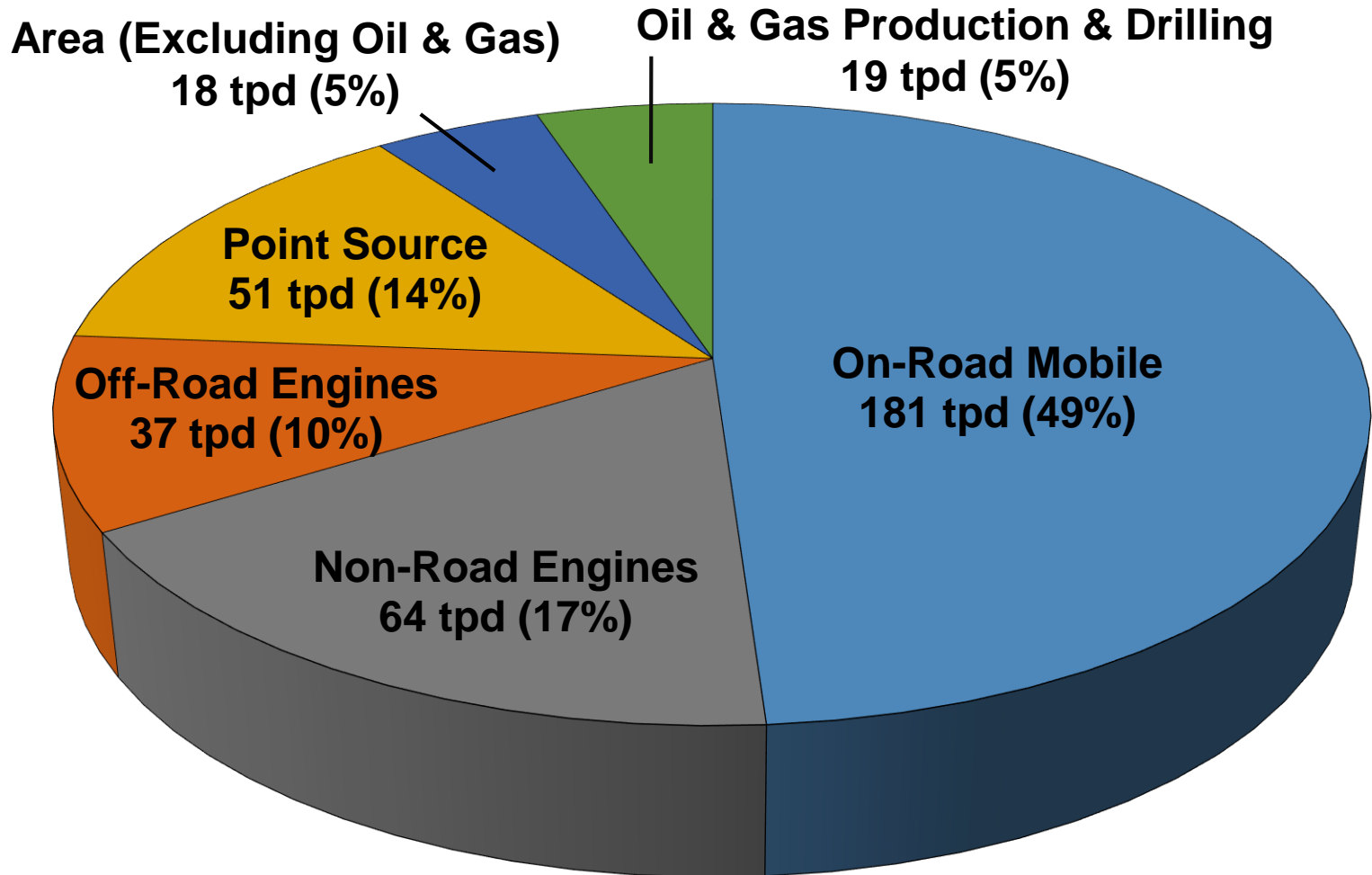
# OZONE FORMATION



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

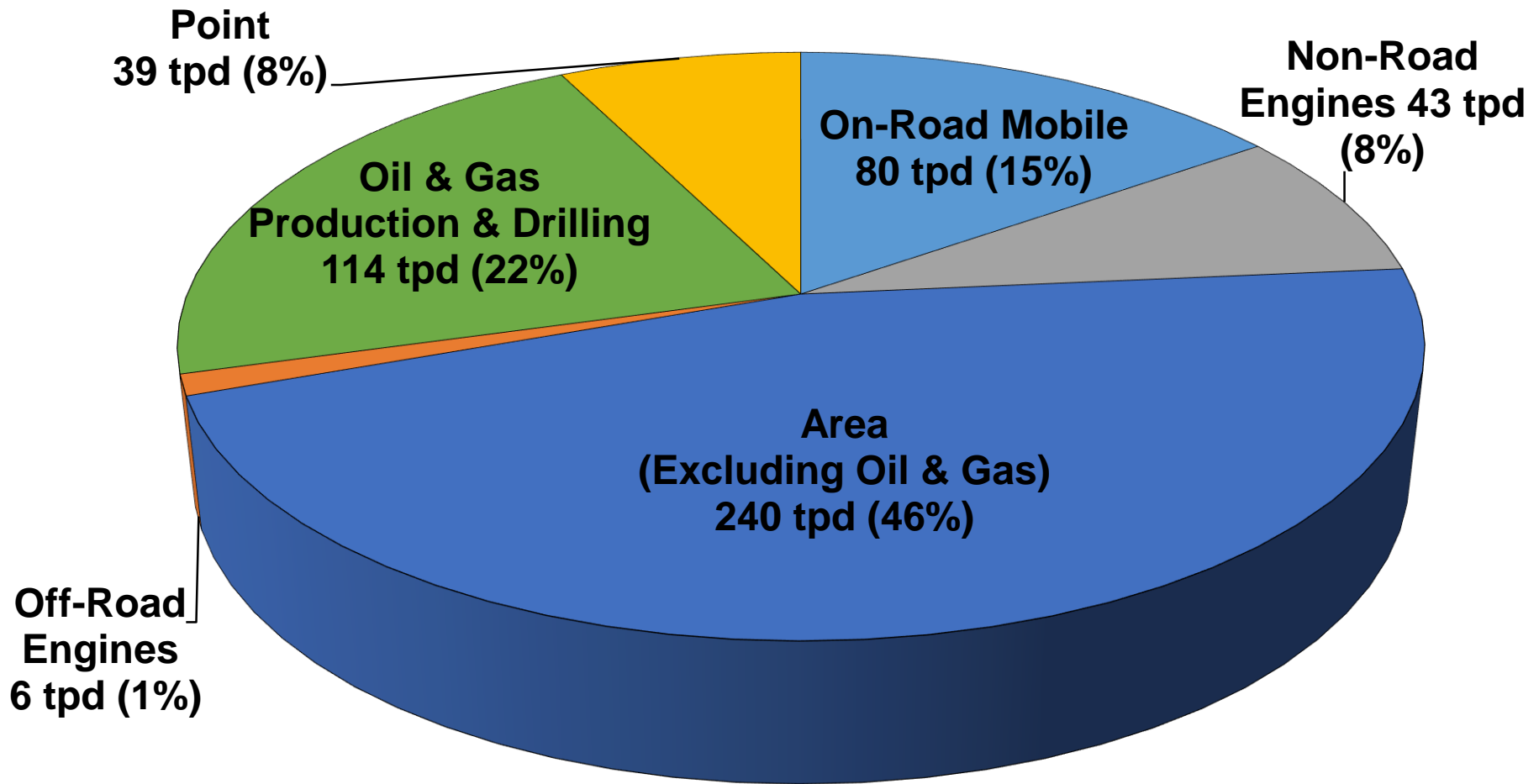
## Oxides of Nitrogen ( $\text{NO}_x$ )



**Total  $\text{NO}_x$  = 370 tons per day (tpd)**

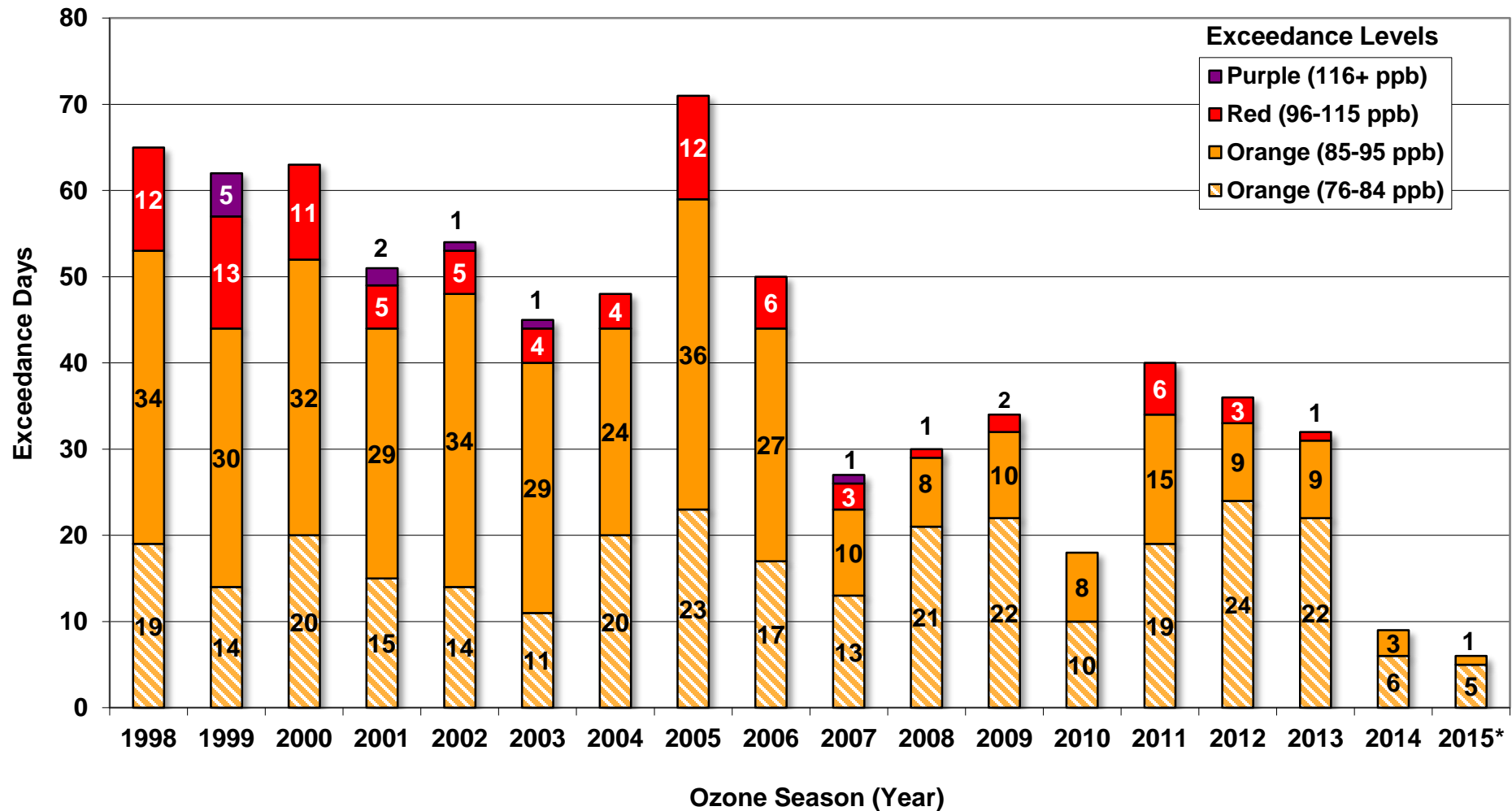
# EMISSION SOURCES

## Volatile Organic Compounds (VOC)



**Total VOCs = 522 tons per day (tpd)**

# OZONE EXCEEDANCE DAYS




\*Not a full year of data, current as of 6/07/2015

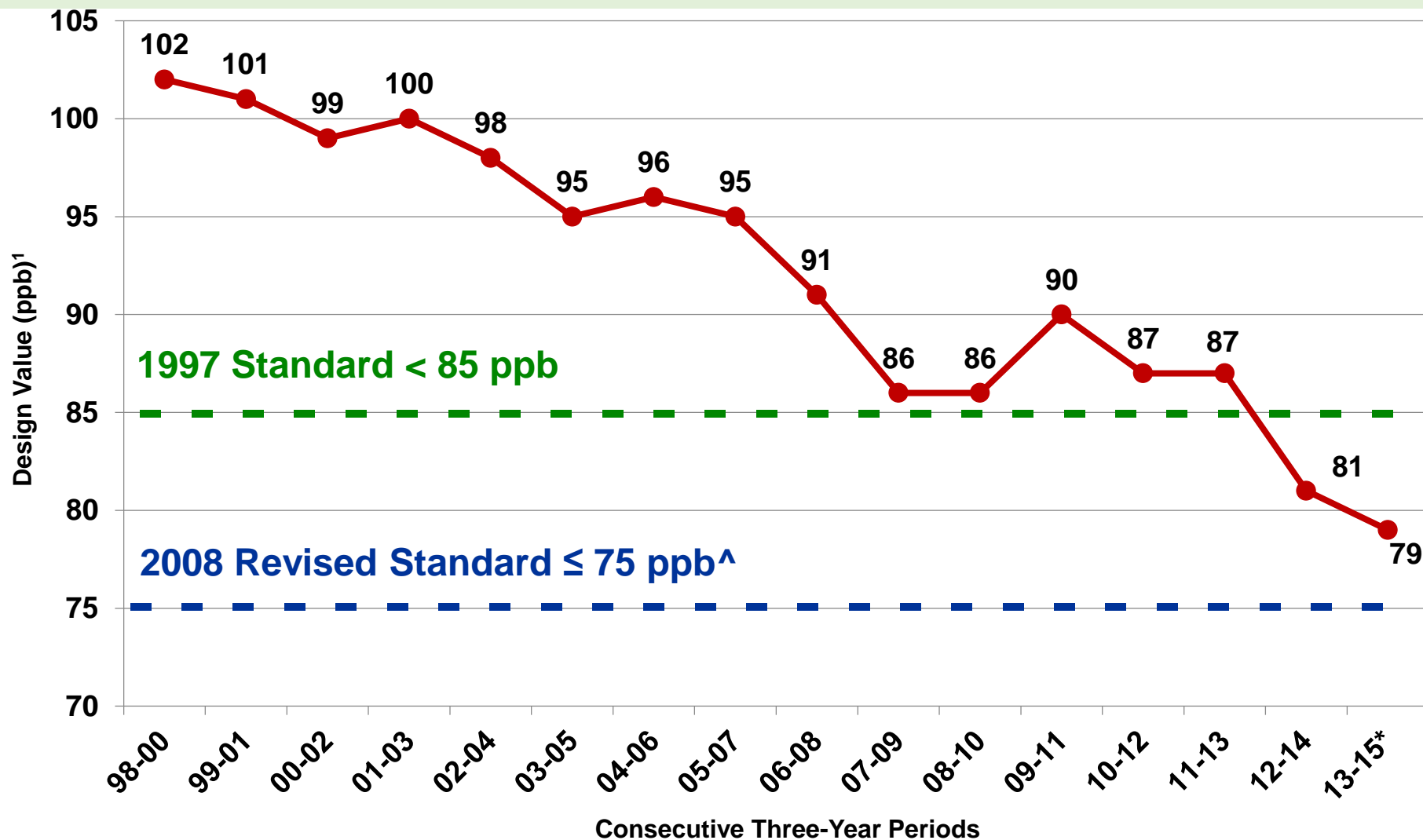
Note: The 2009-2013 data has been certified by TCEQ, and is currently undergoing review by the EPA for concurrence.

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

Exceedance Level indicates daily maximum 8-hour average ozone concentration. Exceedance Levels are based on Air Quality Index (AQI) thresholds established by the EPA for the revised ozone standard of 75 ppb.

 = Additional level orange exceedance days under the revised standard that were not exceedances under the previous 84 ppb standard. (AQI level orange = 76-95 ppb)

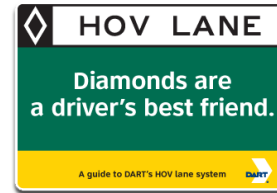
# HISTORICAL TRENDS IN OZONE



<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 8-hour average ozone concentration) is equal to or less than 75 parts per billion (ppb).



# REGIONAL TRANSPORTATION COUNCIL LOCAL AIR QUALITY PROGRAMS



# 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

- Comprehensive Website, Including Current Ozone Conditions

- Monthly Newsletter

- Air Pollution Alerts for Ozone

- Outreach and Advertising Campaign

- Clean Air Action Day, June 26, 2015

## How to Get Involved

- Sign-up to Receive Monthly Newsletters and Alerts

- Provide Messages and Alerts to your Employees

- Participate in Air North Texas Activities

- Promote Your Air Quality Improvements Online

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



be air aware

# 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

- Comprehensive Website
- Vendor Directory
- 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)**

# THE NORTH TEXAS GREEN PARKING PROGRAM

## Program Description

Created by the North Texas Commission, this program helps clean the air, promote clean vehicles, provides an incentive to those driving those vehicles, and allows buildings to earn credits toward LEED certification with free signage to designate parking space for alternative fuel vehicles (AFVs). An smartphone app was created to support this program through the North Texas Apps Challenge in 2014.

## NCTCOG Resources

- Website

- Sign Art Work

- Link to Approved Vehicles

## How to Get Involved

- Place Signs at Your Business

- Promote Program Incentives to Employees and Customers

- Use Smartphone App, Juxt, and Upload Photo and Information



# ELECTRIC VEHICLES NORTH TEXAS (EVNT) & DOE WORKPLACE CHARGING CHALLENGE

## Goal/Description

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



## NCTCOG Resources

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



## How to Get Involved

Attend EVNT & DFW Clean Cities Meetings  
Sign-up to Receive Email Announcements  
Join the Workplace Charging Challenge  
Install On-site Charging

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



# ELECTRIC VEHICLES NORTH TEXAS (EVNT) & DOE WORKPLACE CHARGING CHALLENGE

## Upcoming Event: Texas Triangle Workplace Charging Road Show

### Who should attend

Managers, Planners, & Others Interested in Learning About EVs & Charging Stations for Their Workplace

### Why should You Attend

Get a General Introduction to EVs & Charging Stations

Discover Available Resources

Learn How to Leverage as a Valuable Employee Incentive

Hear Best Practices

Meet Vendors & Test Drive EV Models

### Dates & Locations

Monday, July 27 – Houston

Tuesday, July 28 – San Antonio

Wednesday, July 29 – Austin

Thursday, July 30 – Dallas Fort Worth



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

# NORTH TEXAS GREEN AND GO

## Goal/Description

Reduce Emissions from Tourism and Business  
Travel and Facilitate Behind-the-Wheel  
Experiences with SmartWay Elite Vehicles



## NCTCOG Resources

Information to Identify “Green” Vehicles  
Industry Contacts  
Assistance with Participatory Events

## How to Get Involved

Commit to Going “Green” for Vehicle Rentals, Company Cars  
Host Employee “Ride and Drive,” “Lunch and Learn,” or Similar Events

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

# CLEAN FLEET POLICY

## Goal/Description

Reduce Emissions and Overall Fuel Consumption From Fleet Activities

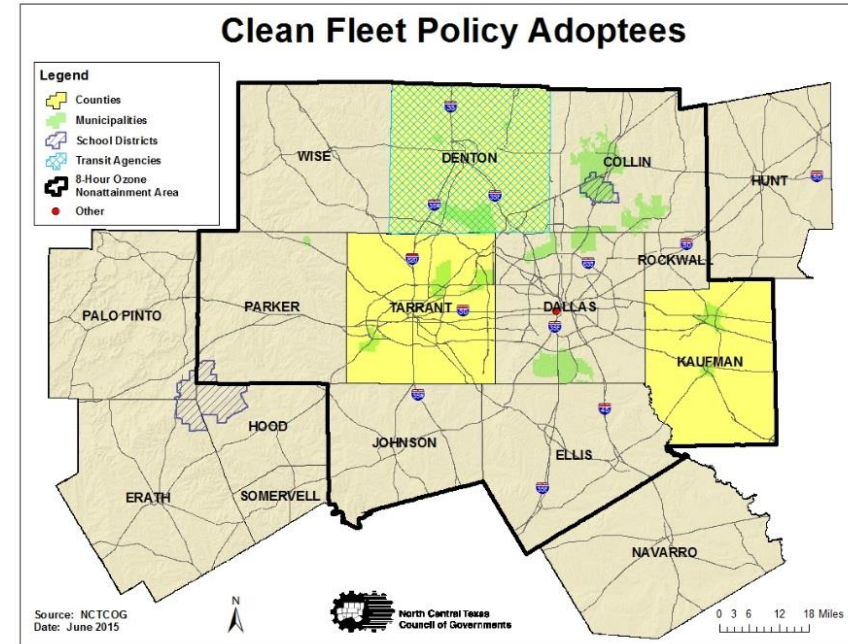
## NCTCOG Resources

Funding Eligibility

Template Policy

Template Idle Reduction (IR) Policy 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 Reports



# 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)

# EPA SMARTWAY TRANSPORT PROGRAM

## Program Goals

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

## NCTCOG Resources

Informational Factsheet  
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



# 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

The logo for SMART (Saving Money and Reducing Truck Emissions) features the word "SMART" in a large, bold, black sans-serif font. Below the text are two horizontal blue bars of increasing length, creating a stylized arrow effect pointing to the right.

**SMART**

Saving Money and Reducing Truck Emissions

## NCTCOG Resources

Informational Brochure  
Driver, Fleet Manager and Vendor Information Folders  
Meetings and Outreach Events  
Individual Technology Assistance  
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/SMART](http://www.nctcog.org/SMART)**

# 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 Business  
Promote Program Assistance



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

# AIR QUALITY FUNDING OPPORTUNITIES

## NCTCOG Assistance Available Funding Help Completing Applications

transportation  
Home > Transportation > Air Quality > Clean Vehicle Funding

Transportation and Air Quality Funding Resources

Funding programs that address air quality, such as clean vehicle projects, are available from a number of Federal, State, local, and non-profit entities. This site provides links to various current and recurring grant opportunities and incentives for clean technology and infrastructure. It provides information that is helpful once you have received grant funding through NCTCOG.

Looking for Grant Funding?

[2015 Clean Diesel Call for Partners](#)

[Vehicle Funding Opportunities](#)

[Other Air Quality Funding Opportunities](#)

[Funding Opportunity Archive](#)

[Sign-Up for Email Updates](#)

Already received Grant Funding from NCTCOG?

[Agreements & Forms](#)

[Usage Reporting](#)

Current Vehicle Grant Funding Opportunities											
	Eligible Focus Areas										
	Heavy-Duty Vehicles						Light-Duty Vehicles				
	Application Deadline	School Buses	Oil and Gas Vehicles/Equipment	Long Haul Trucks	Dump Trucks	Other	Idle-Reduction Technology	Passenger Vehicles	Taxis	Idle-Reduction Technology	Eligible Applicant Type
AirCheckTexas Drive a Clean Machine Program	Open							X			PC
NEW - Clean Diesel Funding Assistance Program	Open until 06/15/15	X	X	X	X	X	X				PB
Drayage Loan Program	FCFS		X			X					PV
Federal and State Incentives and Laws (Including Tax Credits)	Open	X	X	X	X		X	X	X		PV
Light-Duty Motor Vehicle Purchase or Lease Incentive (LDLPI) Program	FCFS until 06/26/15							X	X		PB, PV, PC
NEW - NCTCOG 2015 Clean Diesel Call for Partners	06/05/15		X	X	X	X	X				PB, PV, PC
Propane Vehicle Incentives for Texas	FCFS	X	X		X	X		X	X		PB, PV

FCFS = First-Come, First-Served; PB = Public Sector; PV = Private Sector; PC = Private Citizens; TBD= To Be Determined

# 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 in development

A guide to alternative commuting, employer programs, rewards, and more

## Get Involved

Contact Tori Wilson at (817) 695-9249 or [twilson@nctcog.org](mailto:twilson@nctcog.org) for Details

# Try Parking It Website

## Overview

Regional Commuter Tracking and Ride-Matching System for North Central Texas  
Self-Reporting by Individual Commuters

## Site Features

Carpool and Vanpool Ride-Matching  
Coming Soon – Transit, Walking, and Cycling Buddy Matching  
Daily Trip-Logging Capabilities  
Personal Savings Reports (Environmental and Financial)  
Integrated Savings Calculator – Coming Soon  
Integrated Reward System – Coming Soon  
Regional Points of Interest

walk . bike . carpool . transit . telecommute . flex schedule . vanpool . bike . carpool . transit . telecommute  
flex schedule . vanpool . walk . carpool . transit . telecommute . flex schedule . vanpool . bike . walk . transit  
telecommute . carpool . flex schedule . carpool . walk . bike . transit . telecommute . carpool . flex schedule  
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carpool . flex schedule . walk . transit . vanpool . telecommute . carpool . bike . walk . flex schedule . transit  
bike . telecommute . carpool . walk . flex schedule . vanpool . transit . telecommute . flex schedule . carpool  
transit . walk . vanpool . bike . telecommute . carpool . flex schedule . transit . vanpool . bike . telecommute

**tryparkingit.com**

# Try Parking It Website

## 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 (Environmental and Financial)  
Customizable Employer Portal  
Include Company Logo and Messages for Employees  
Promote Company-Specific Incentives and Rewards

walk . bike . carpool . transit . telecommute . flex schedule . vanpool . bike . carpool . transit . telecommute  
flex schedule . vanpool . walk . carpool . transit . telecommute . flex schedule . vanpool . bike . walk . transit  
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bike . telecommute . carpool . walk . flex schedule . vanpool . transit . telecommute . flex schedule . carpool  
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**tryparkingit.com**



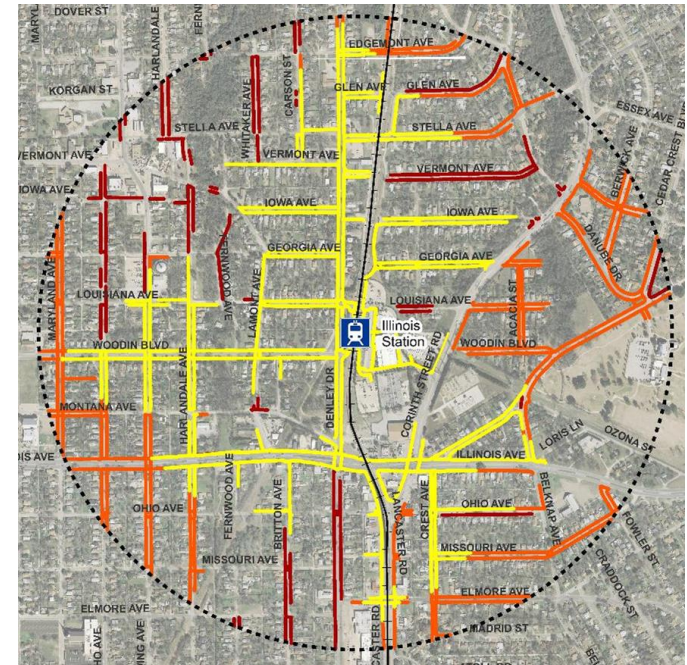
# BIKE / WALK / TRANSIT TRANSPORTATION

## Goal/Description

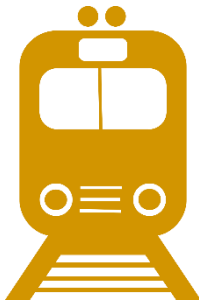
Complete the **first mile / last mile** pedestrian and bicycle connections around transit stations.

## Why Is this Important to Business?

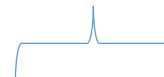
Helps provide transportation options for workers to access places of employment and other destinations.



Rail  
Station



Complete  
Gaps in  
the  
Network



Employment  
Destination



[www.nctcog.org/RoutesToRail](http://www.nctcog.org/RoutesToRail)

# COMPLETE STREETS

## Accommodate All Modes of Transportation

### Goal/Description

Design and operate roadways to enable safe access for all users, including **pedestrians, bicyclists, motorists and transit riders of all ages and abilities.**

### How Do Complete Streets Improve Air Quality and Benefit Business?

Provides options for non-motorized travel to major destinations including employment, education, medical, and transit stations.

Graphic Source: City of Dallas Complete Streets Initiative



# 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**



# CLEAN AIR ACTION DAY

**First Friday of Summer Every Year  
June 26, 2015**

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

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

**Asking Participants to Wear Green and  
Post Photos of Their Commitments on Social Media  
Using #CAAD2015 for a Chance to Win Prizes**





# CLEAN AIR ACTION DAY

The screenshot shows the 'airnorthtexas' website with a 'go green breathe clean' banner. The 'take action' section is highlighted. A blue arrow points from the 'Clean Air Action Day' heading to a text box on the right. Another blue arrow points from the 'What clean air choices will you make Friday, June 26?' heading to a second text box. A third blue arrow points from the list of commitments to a third text box. The website includes a sidebar with navigation links, a 'Current ozone level' indicator, and a 'Share Your Story' section at the bottom.

**airnorthtexas**  
go green breathe clean  
a campaign for clean air

**take action** | contact us | maps | join us | events

**Clean Air Action Day**  
It's up to each of us to take responsibility for the air we breathe. Clean Air Action Day 2015 will be on the first Friday of summer, June 26.  
On Friday 6/26/15 do something extra for clean air. Whether you change how you get to work, adjust Friday night plans or start the weekend early with a trip to the lake, there is something to do to reduce your ozone-causing pollution.  
2014 Results | 2013 Results | 2012 Results | 2011 Results | 2010 Results

**Take Action—Choose Clean Air**  
What clean air choices will you make Friday, June 26?  
\*Indicates required fields.

Company:   
Email Address\*:   
ZIP Code\*:

(Check all that apply)

- ☐ Carpool or vanpool
- ☐ Use mass transit  
→ Fare, schedule and route information
- ☐ Bike or walk  
→ Mapping and walking routes
- ☐ Telecommute
- ☐ Take lunch to summer activities or work
- ☐ Maintain consistent driving speed by avoiding quick accelerations and hard braking
- ☐ Avoid idling  
→ Engines Off Ready to Go
- ☐ Combine trips or drive less
- ☐ Report smoking, polluting vehicles (RSMOR)  
→ Regional Smokey Vehicle Program
- ☐ Confirm you are up-to-date on regular vehicle maintenance and state emissions and safety inspection  
→ Texas Vehicle Inspection Program
- ☐ Consider an electric or other alternative fuel lawn mower  
→ Clean, green lawn
- ☐ Switch to energy-efficient light bulbs
- ☐ Pursue energy-efficient home improvement projects  
→ Home Green Now
- ☐ Choose a clean vehicle option if purchasing a new vehicle (electric, hybrid, natural gas, propane, biofuels, SmartWay)  
→ Newsmakers and options
- ☐ Use a vehicle-approved fuel filter in your car (i.e., F155 and B20)  
→ Denimators and options
- ☐ Call for an alternative-fueled or hybrid vehicle if going to the airport or around town  
→ North Texas Green & Go Partnership
- ☐ Buy local or at places where less driving is required (e.g., farmers markets, walkable communities, etc.)
- ☐ Encourage someone else to make clean air choices on 6/26/15
- ☐ Tell a friend about the North Texas and options that help improve air quality in the region
- ☐ Commit to the Air Aware the entire ozone season  
→ Be Air Aware

Other (please specify):

**Share Your Story**  
Tell and show us more about what you did and why clean air is important. Send comments or upload a photo or video about your commitment or Clean Air Action Day experience.  
Share your story today >>>  
VIDEO: See how North Texans took action >>>

**On Air Pollution Action Days CARPOOL For Air Quality**  
try transit to give your car a break and do something good for air quality. You also won't have to worry about getting stuck in traffic.

**DART** Fares Map Schedule  
**DCTA** Fares Map Schedule  
**Star** Fares Map Schedule  
**TRE** Fares Map Schedule  
**tryparkingit.com**  
tryparkingit.com is another place where you can log an alternative commute, whether riding transit, bicycling, or working from home, and track how you are improving traffic congestion and air quality in North Texas.  
ridesharing is also a clean air commute alternative. So let's carpool matches and vanpool interests through an extensive database of commuters who share similar routes and schedules

Enter company name, email and zip code

Select commitments, share story, upload video and photos

[www.airnorthtexas.org/cleanair.asp](http://www.airnorthtexas.org/cleanair.asp)

**Questions?**