

OZONE IN NORTH TEXAS: OPPORTUNITIES FOR IMPROVEMENT

**Leadership North Texas
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OZONE IN NORTH TEXAS: OPPORTUNITIES FOR IMPROVEMENT

Air Quality 101

Air Quality Funding Opportunities

Opportunities for Improvement Programs



OZONE IN NORTH TEXAS: OPPORTUNITIES FOR IMPROVEMENT

Air Quality 101



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_x)

Ozone (O₃)

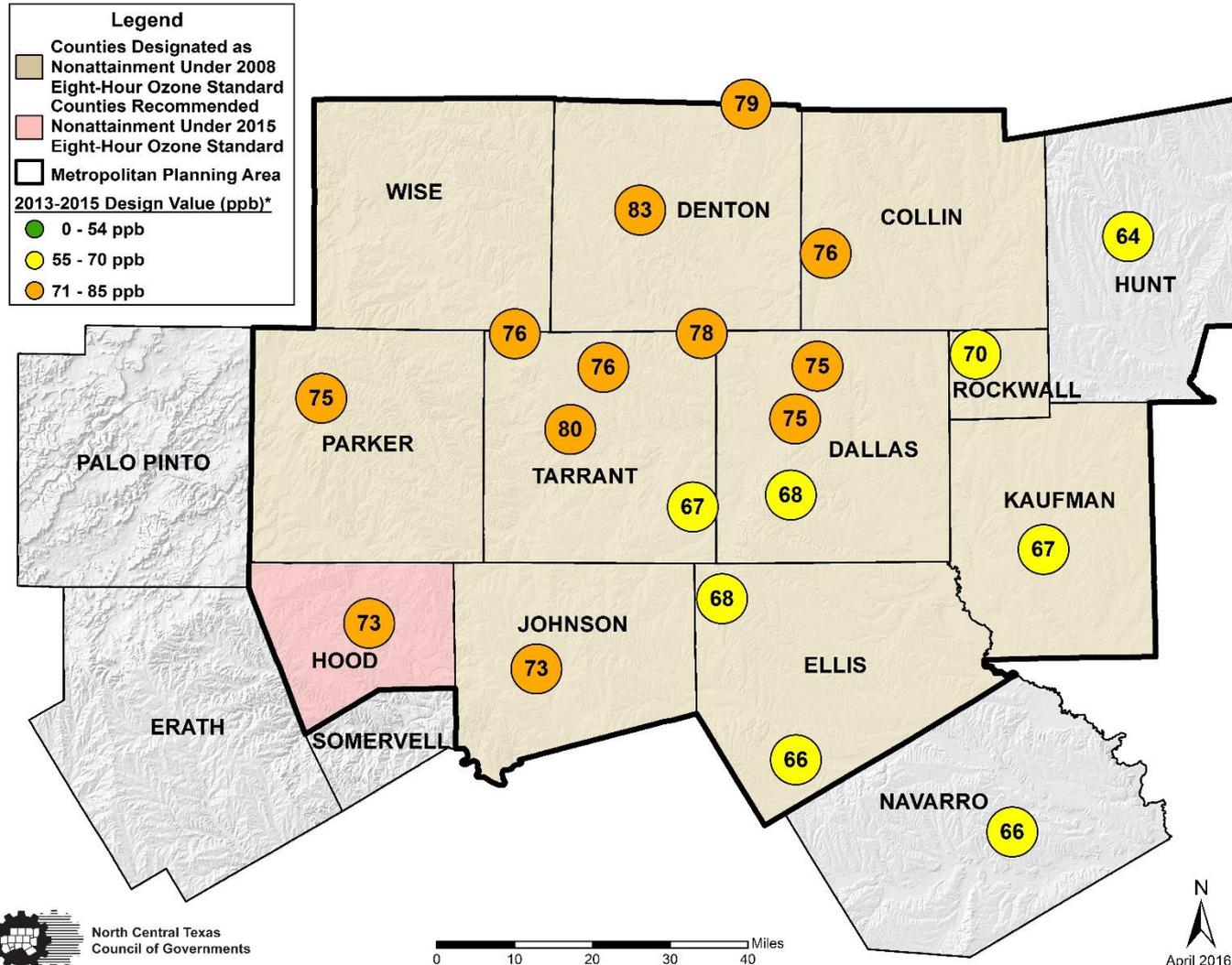
Particulate Matter (PM)

Sulfur Dioxide (SO₂)

EPA must complete a review of NAAQS every five years

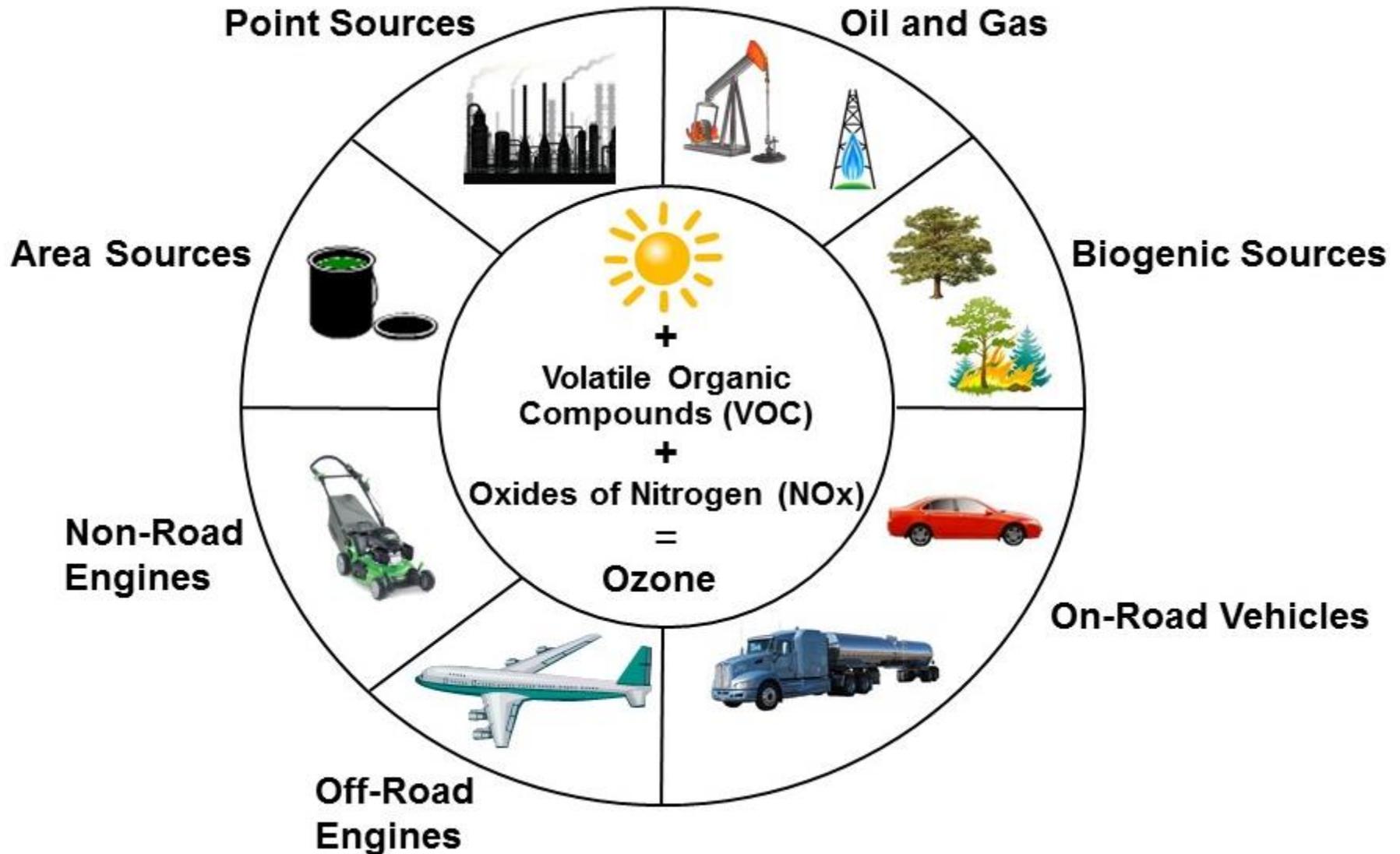
NCTCOG PLANNING AREA

North Central Texas Nonattainment Area



*Air Quality Index based on 2015 Eight-hour Ozone standard, ≤ 70 parts per billion (ppb)

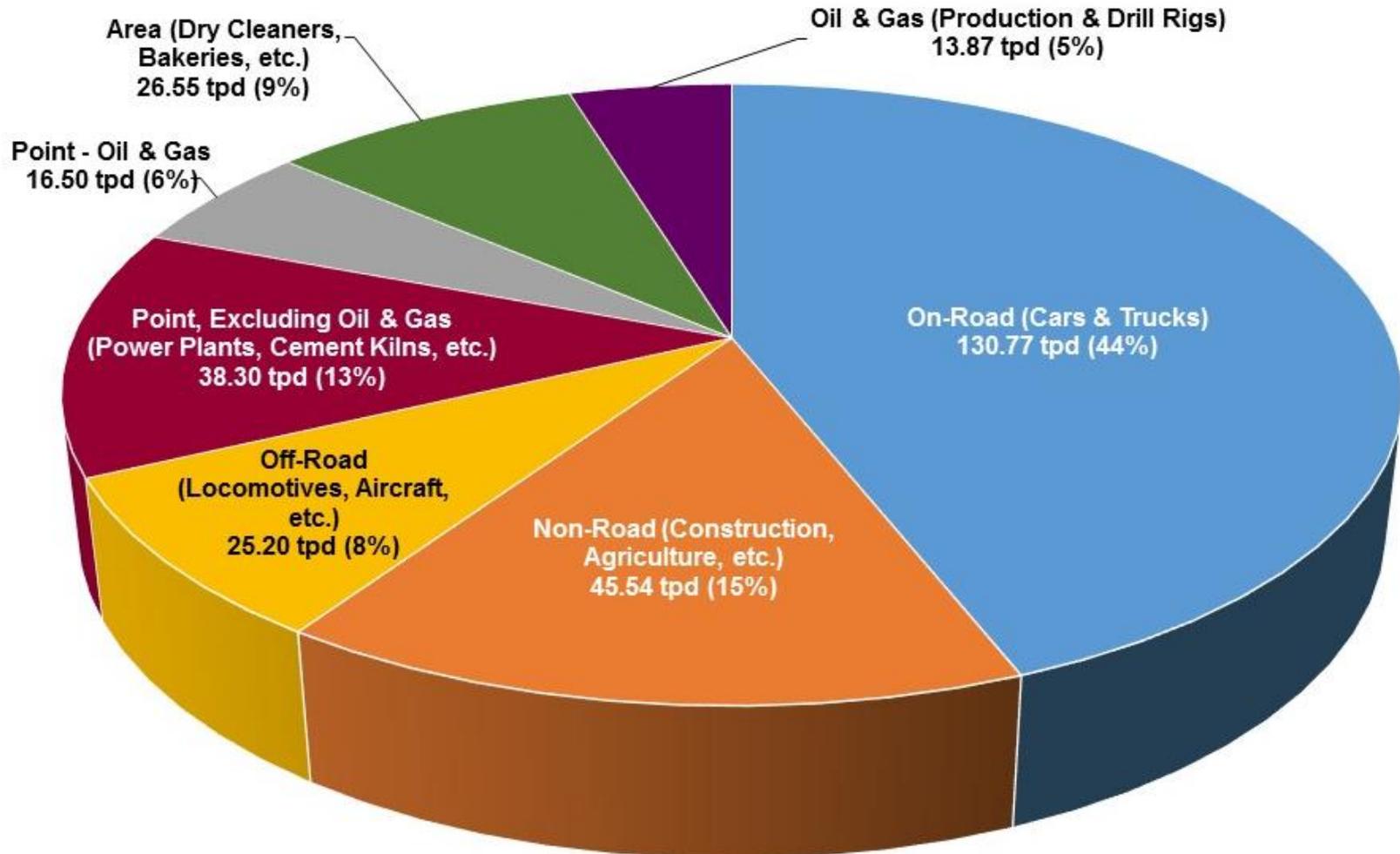
OZONE FORMATION



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

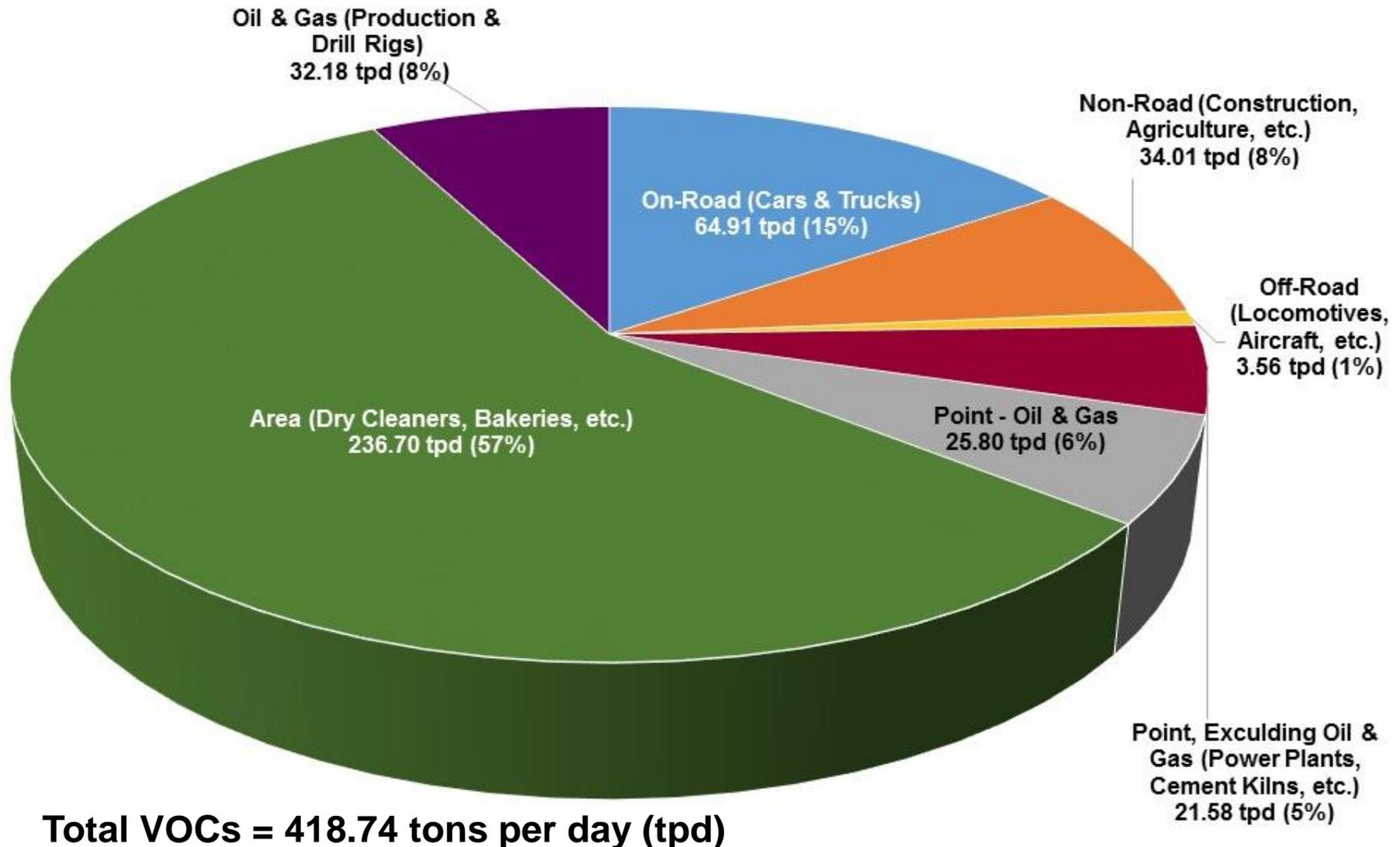
Oxides of Nitrogen (NO_x)



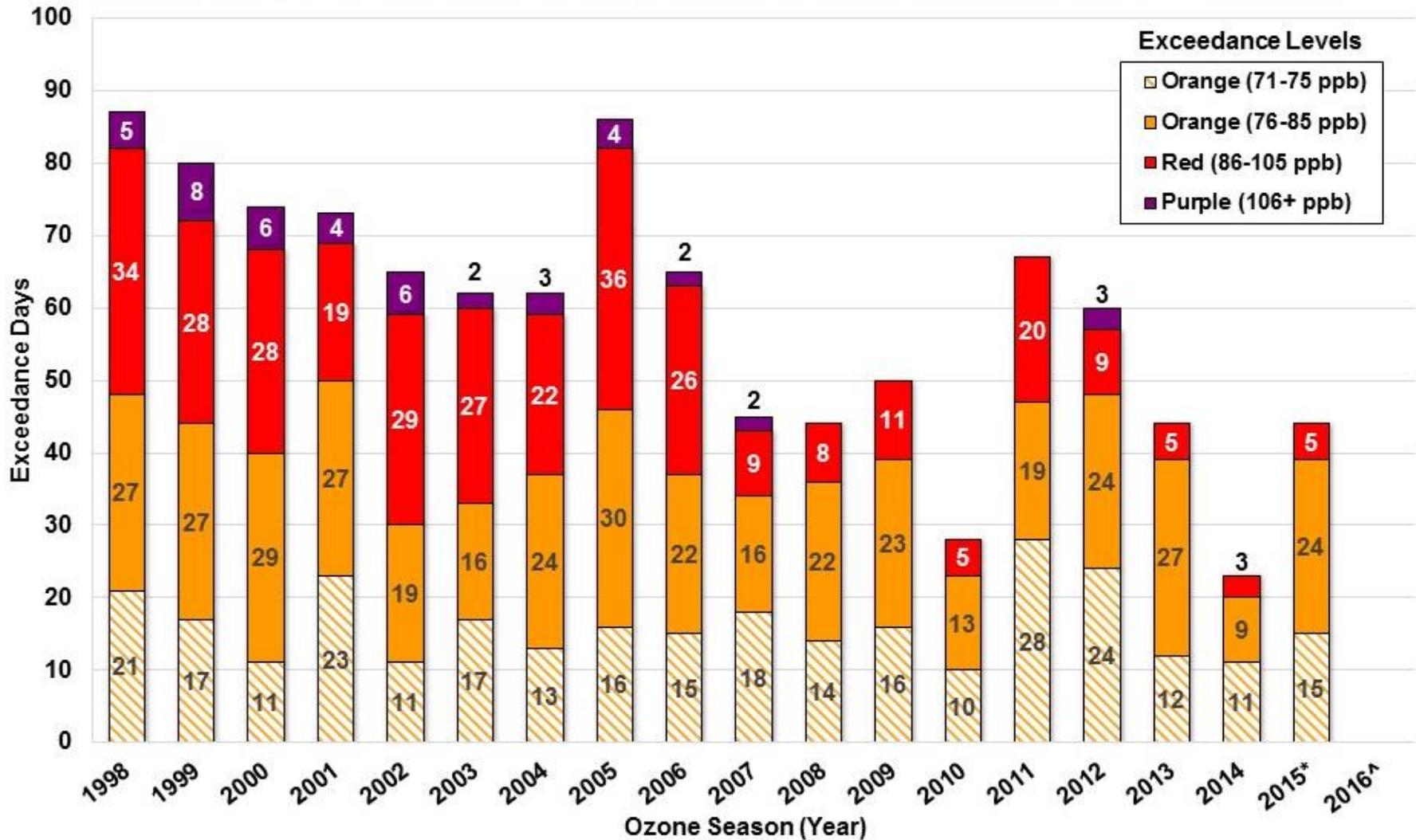
Total NO_x = 296.73 tons per day (tpd)

EMISSION SOURCES

Volatile Organic Compounds (VOC)



OZONE EXCEEDANCE DAYS



Exceedance Levels

- Orange (71-75 ppb)
- Orange (76-85 ppb)
- Red (86-105 ppb)
- Purple (106+ ppb)

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.

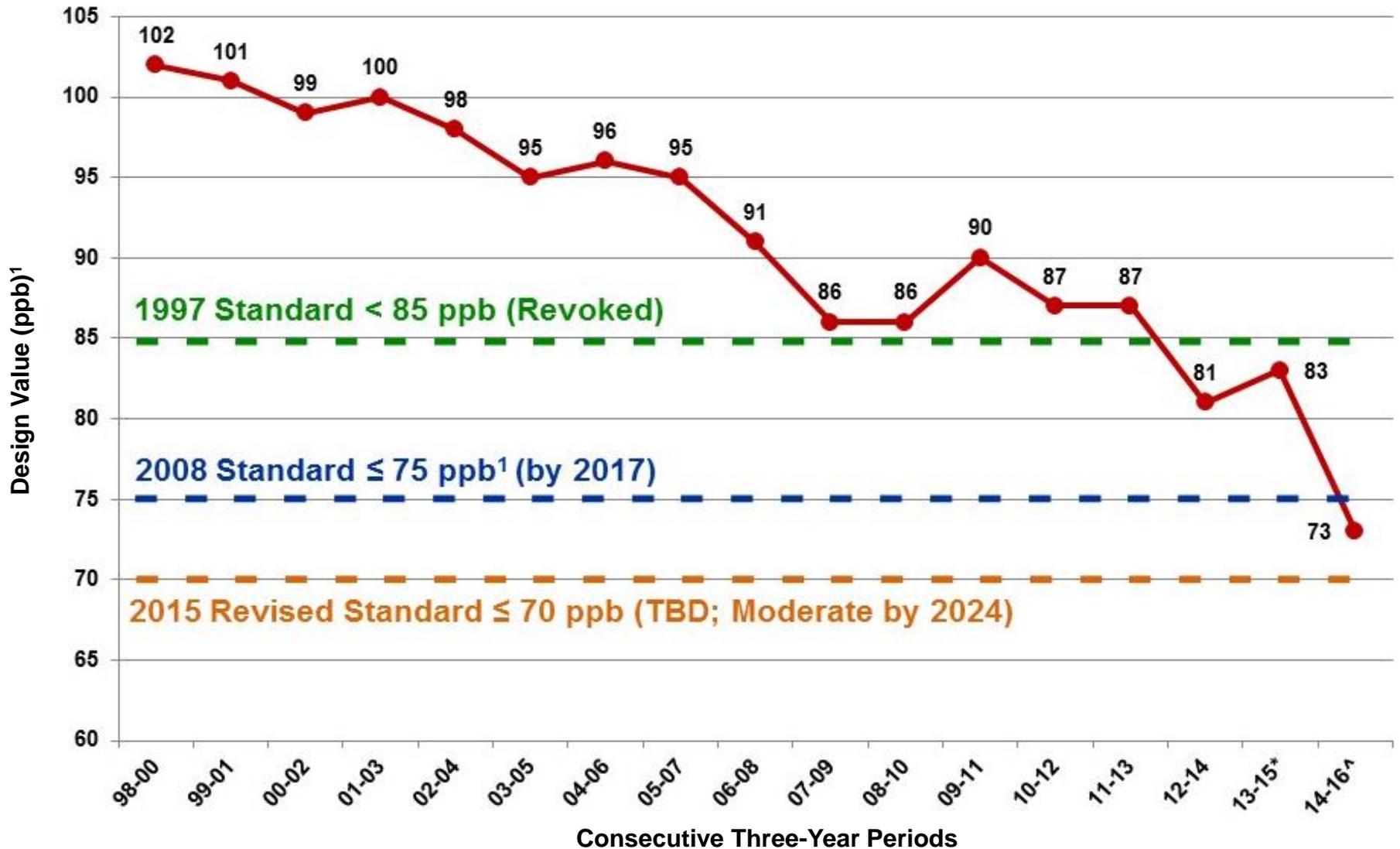
* Data not certified by the TCEQ

^Not a full year of data, current as of 4/24/2016

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

 = 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)

HISTORICAL TRENDS IN OZONE



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).

*Data not certified by the Texas Commission on Environmental Quality

^Not a full year of data, current as of 4/24/2016

REGIONAL TRANSPORTATION COUNCIL LOCAL AIR QUALITY PROGRAMS



Rideshare. Record. Reward.



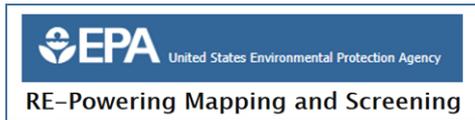
LOOKOUT TEXANS
BIKE WALK DRIVE SAFELY



north.central.texas.clean.school.bus.program



SAMPLE OF NON-ROAD INITIATIVES



TimeToRecycle.com



Green Completions



OZONE IN NORTH TEXAS: OPPORTUNITIES FOR IMPROVEMENT

Air Quality Funding Opportunities



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									Eligible Applicant Type
Heavy-Duty Vehicles					Light-Duty Vehicles				
School Buses	Oil and Gas Vehicles/Equipment	Long Haul Trucks	Dump Trucks	Idle-Reduction Technology	Other	Passenger Vehicles	Taxis		

AirCheckTexas Drive a Clean Machine Program						X			General Public
Drayage Loan Program Deadline: First Come, First Served		X				X			Private Sector
Federal and State Incentives and Laws (Including Tax Credits)	X	X	X	X	X		X	X	Private Sector
Propane Vehicle Incentives for Texas	X	X		X		X	X	X	Public Sector, Private Sector
Texas Natural Gas Vehicle Grant Program (TNGVGP) Deadline: First Come, First Served	X	X	X	X		X			Public Sector, Private Sector, General Public

www.nctcog.org/aqfunding

OZONE IN NORTH TEXAS: OPPORTUNITIES FOR IMPROVEMENT

Opportunities for Improvement Programs



TEXAS EMISSIONS REDUCTION PLAN (TERP)

Program Goals/Description

Provide Funding Assistance for Projects that Reduce Emissions (NO_x Focus)

Various Programs Under TERP “Umbrella”

Mobile Sources

Refueling Infrastructure

Point Sources

Stationary Sources

Energy Efficiency

**Major Funding Round
Coming Fall 2016**

NCTCOG Resources

Assessment of Project Funding Potential

Free Assistance with Grant Applications

Comments on Proposed Rulemakings

Get Involved

Subscribe to TERP E-Mail Lists

Subscribe to NCTCOG AQ Funding E-Mails

Attend TERP Meetings and Workshops



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

Comprehensive Website, Including Current Ozone Conditions

Monthly Newsletter and Alerts for Ozone Action Days

Outreach and Advertising Campaign

Events – Air Quality Awareness Week, May 2-5, 2016 and

Clean Air Action Day, June 24, 2016

How To Get Involved

Sign-up to Receive Monthly Newsletters and Alerts

Provide Messages and Alerts to your Employees

Become an Air North Texas Partner

Participate in Air North Texas Activities

Promote Your Air Quality Improvements Online

www.airnorthtexas.org



GO SOLAR NORTH TEXAS

Goal/Description

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

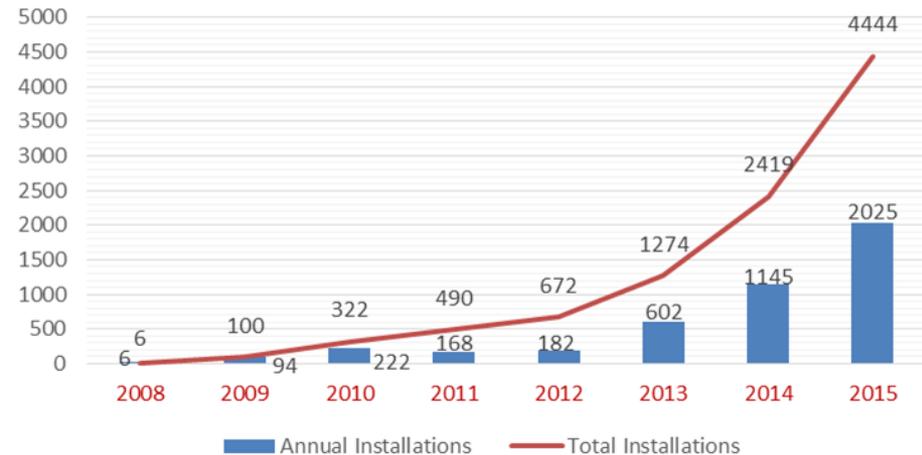
NCTCOG Resources

- 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

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



U. S. Department of Energy



Dallas-Fort Worth
CLEAN CITIES

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).

A smartphone app was created to support this program through the North Texas Apps Challenge in 2014.

NCTCOG Resources

Website

Signs and Sign Artwork

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



www.dfwcleancities.org/greenparking

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



Dallas-Fort Worth
CLEAN CITIES

www.dfwcleancities.org/evnt

NATIONAL DRIVE ELECTRIC WEEK EVENT

Who Should Attend

Anyone Interested in Learning About EVs & Charging Stations
EV Owners

Why Should You Attend

Get a General Introduction to EVs & Charging Stations
Discover Available Resources
Talk to EV Owners
Meet Exhibitors and Participate in “Ride And Drives”

Date, Time & Location

September 17, 2016
10 am – 2 pm
Grapevine Mills Mall



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

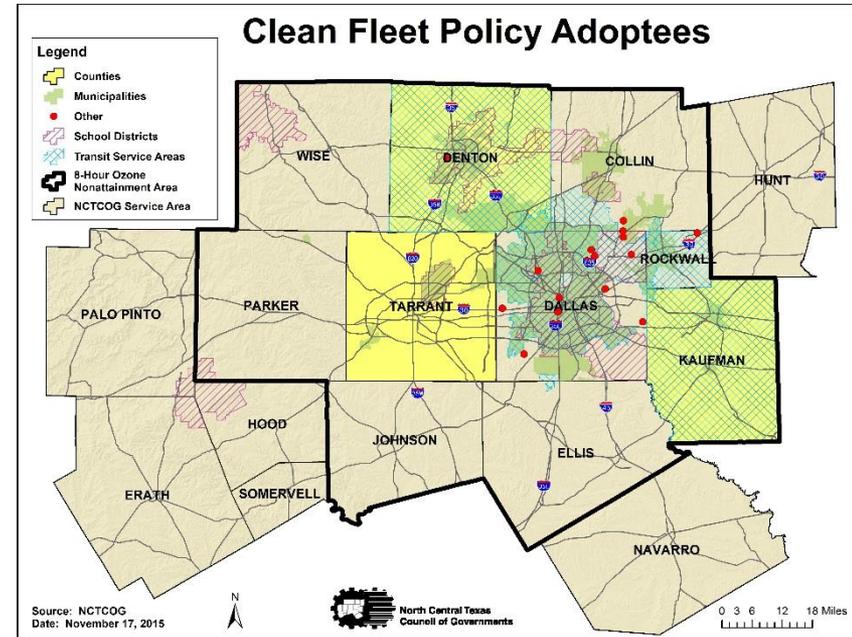
How To Get Involved

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

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



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

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

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 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 (Environmental and Financial)
Integrated Reward System and Savings Calculator
Regional Points of Interest

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



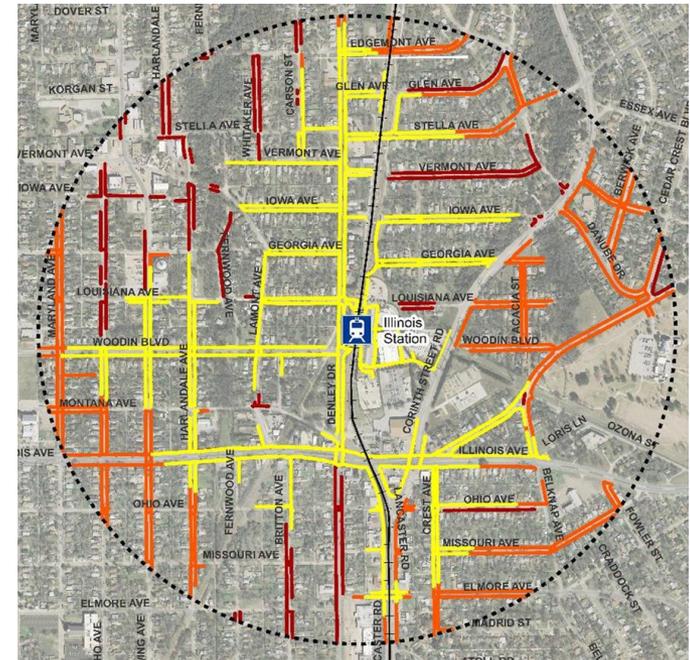
BIKE / WALK / TRANSIT TRANSPORTATION

Goal/Description

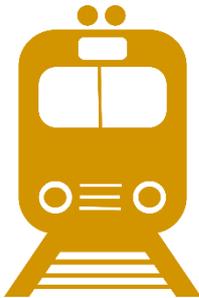
Complete the first mile/last mile pedestrian and bicycle connections around transit stations

Why Is this Important to Business?

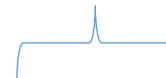
Helps provide transportation options for workers to access places of employment and other destinations



Rail
Station



Complete
Gaps in
the
Network



Employment
Destination



www.nctcog.org/RoutesToRail

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



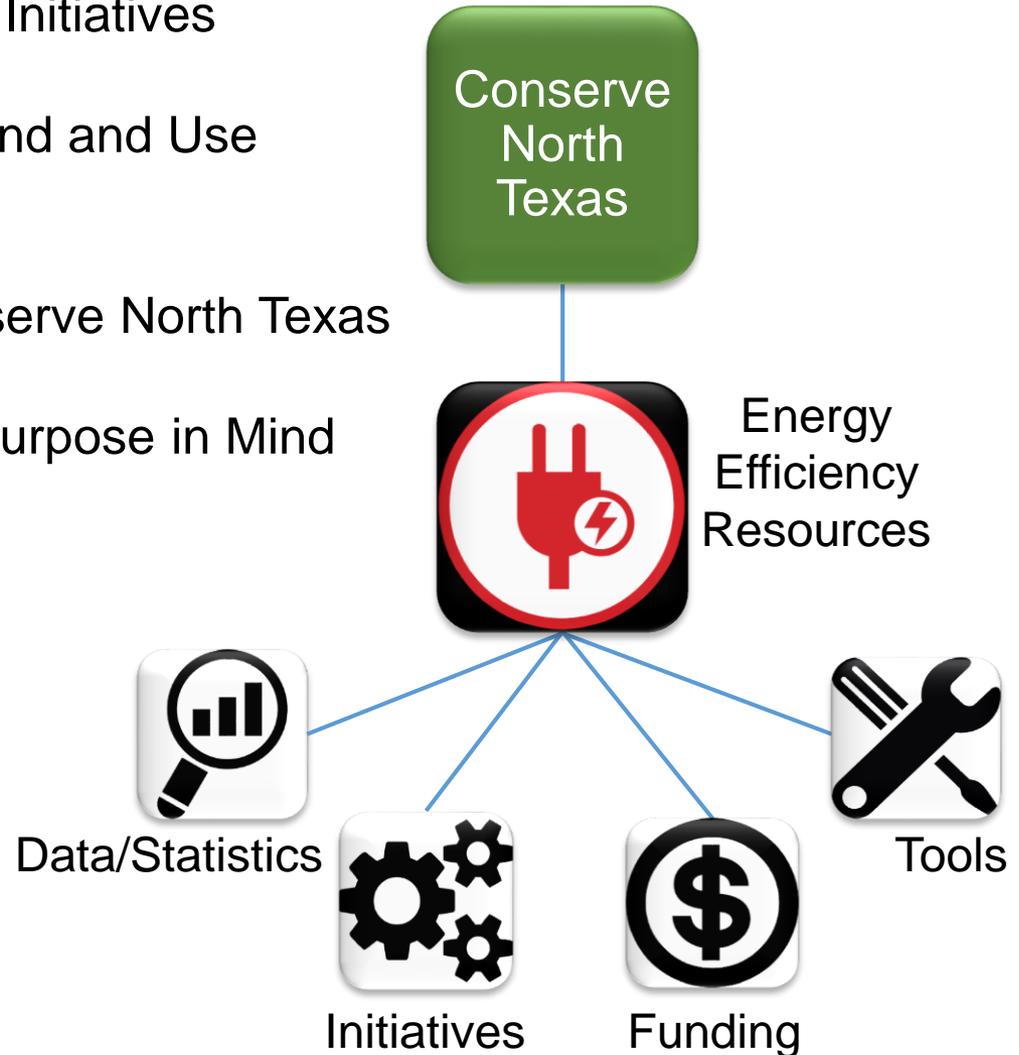
CONNECTING ENERGY EFFICIENCY RESOURCES

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



URL Coming Soon

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



FOR FURTHER INFORMATION

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Find us on social media @nctcogtrans



www.nctcog.org/trans/air

