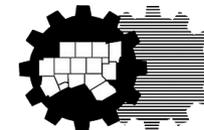


NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS AIR QUALITY PROGRAMS

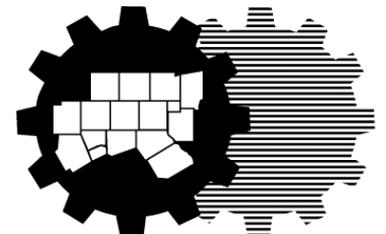
Transportation Policy, Programs, and History

**Jenny Narvaez
Principal Air Quality Planner
North Central Texas Council of Governments
April 13, 2015**



**North Central Texas
Council of Governments**

WHO IS NCTCOG?



WHAT IS THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG)?

A voluntary association of, by, and for local governments.

NCTCOG serves a 16-county region of North Texas, which includes over 230 member governments including counties, numerous cities, school districts, and special districts.

Established to assist local governments in planning for common needs, cooperating for mutual benefit, and coordinating for sound regional development.

NCTCOG's purpose is to help local governments recognize regional opportunities, eliminate unnecessary duplication, and make joint decisions.

METROPOLITAN PLANNING ORGANIZATION

Activities Overseen by Regional Transportation Council (RTC)

Metropolitan Transportation Plan - Mobility 2035

Transportation Improvement Program

Surface Transportation Program-Metropolitan Mobility

Congestion Mitigation and Air Quality Program

Section 5307 (Urbanized Area)

Section 5310 (Elderly and Disabled)

Air Quality Conformity Determinations

Unified Planning Work Program

Metropolitan Transportation Planning Funds:

Federal Transit Administration (Section 5303)

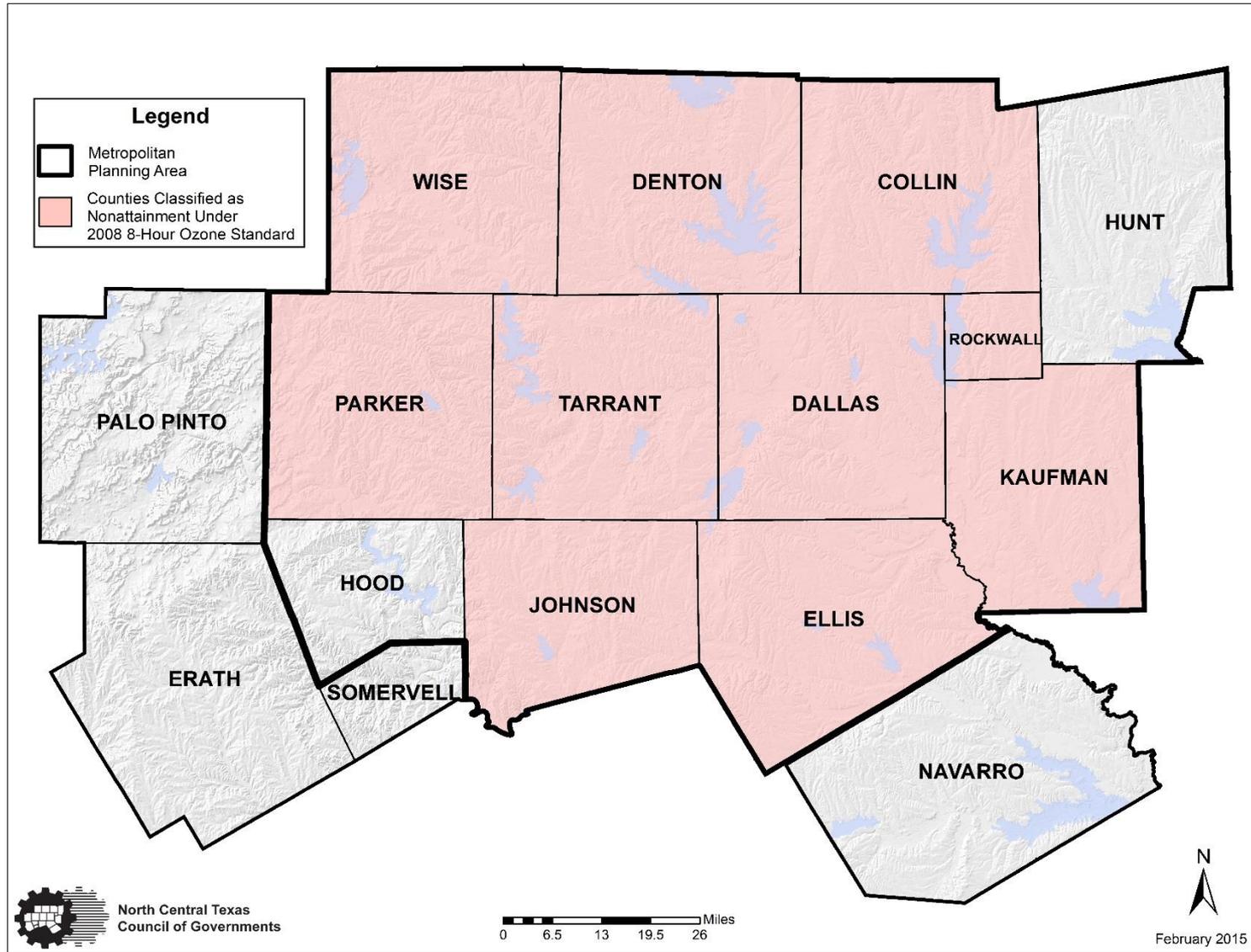
Federal Highway Administration (PL)

Texas Department of Transportation

AIR QUALITY BACKGROUND



2008 8-HOUR OZONE NONATTAINMENT REGION



1990 CLEAN AIR ACT AMENDMENTS

National Ambient Air Quality Standards (NAAQS)

Six Criteria Pollutants

Carbon Monoxide (CO)

Lead (Pb)

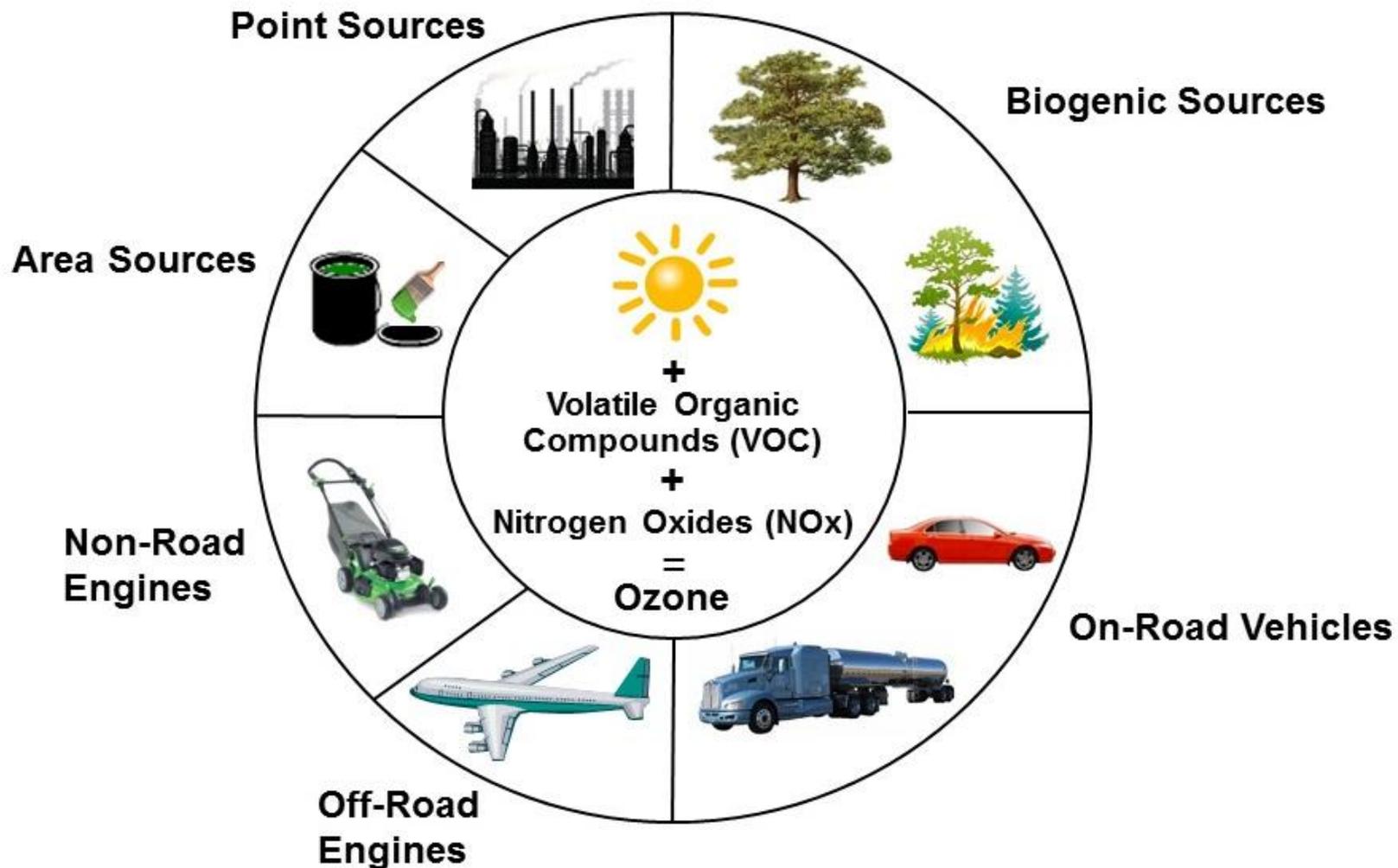
Nitrogen Oxides (NO_x)

Ozone (O₃)

Particulate Matter (PM_{2.5} & PM₁₀)

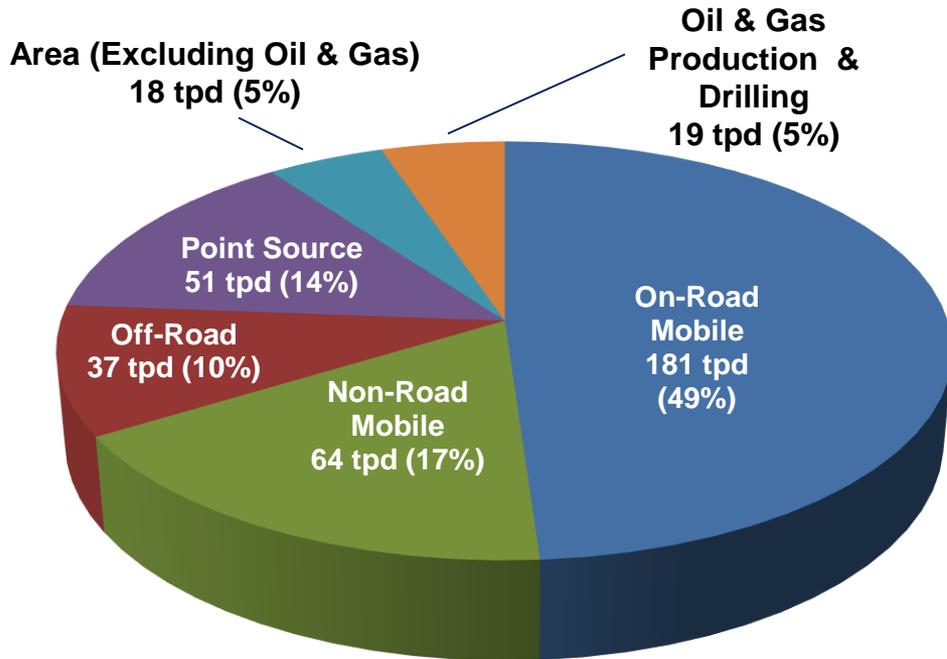
Sulfur Dioxide (SO₂)

OZONE FORMATION

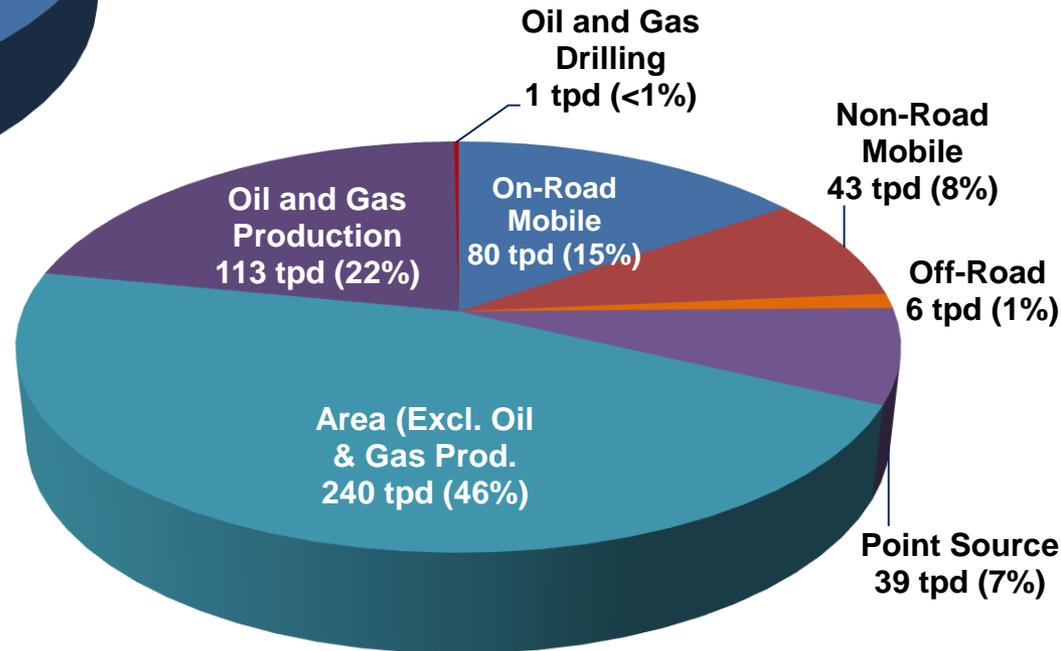


Optimum conditions for the formation of ozone include high temperatures and low winds.

2012 EMISSION INVENTORIES



Total NO_x = 370 tons per day (tpd)

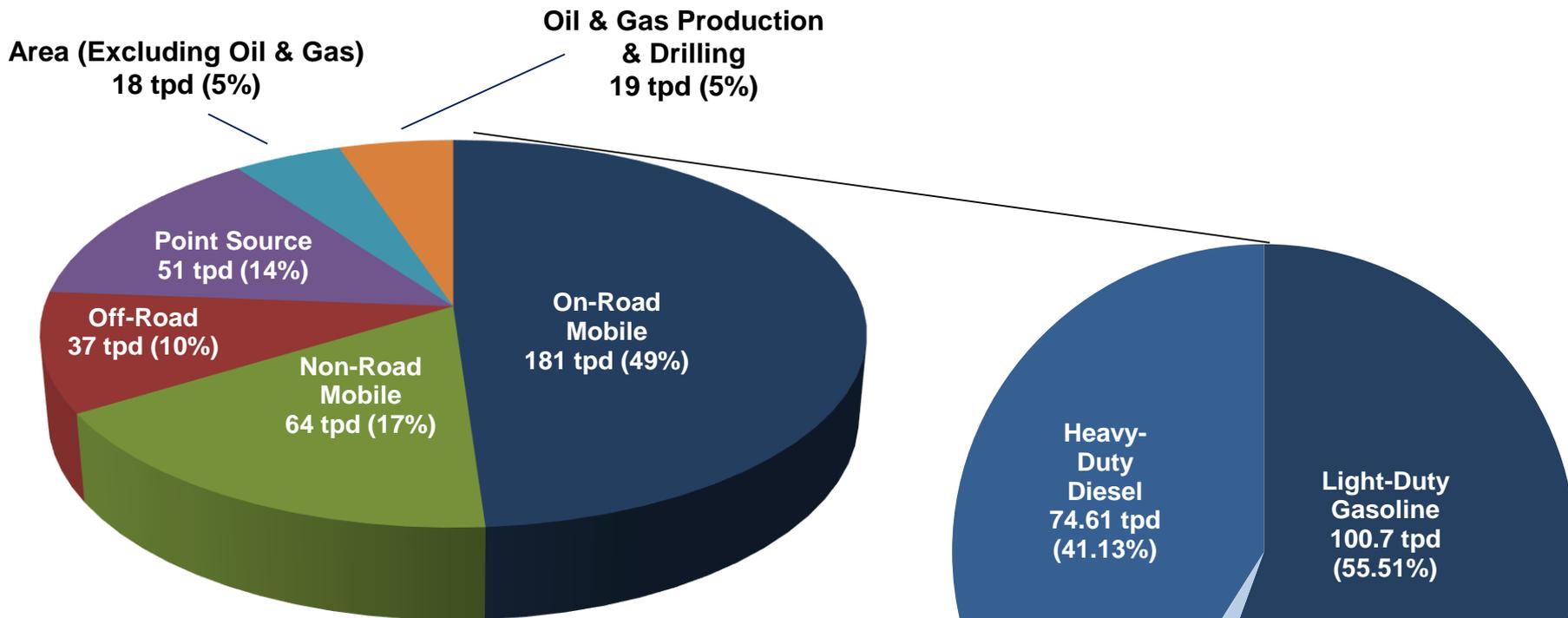


Total VOC = 522 tons per day (tpd)

NO_x = Nitrogen Oxides
 VOC = Volatile Organic Compounds
 tpd = Tons per Day

2012 EMISSION INVENTORIES

Estimated NO_x Emissions by Source



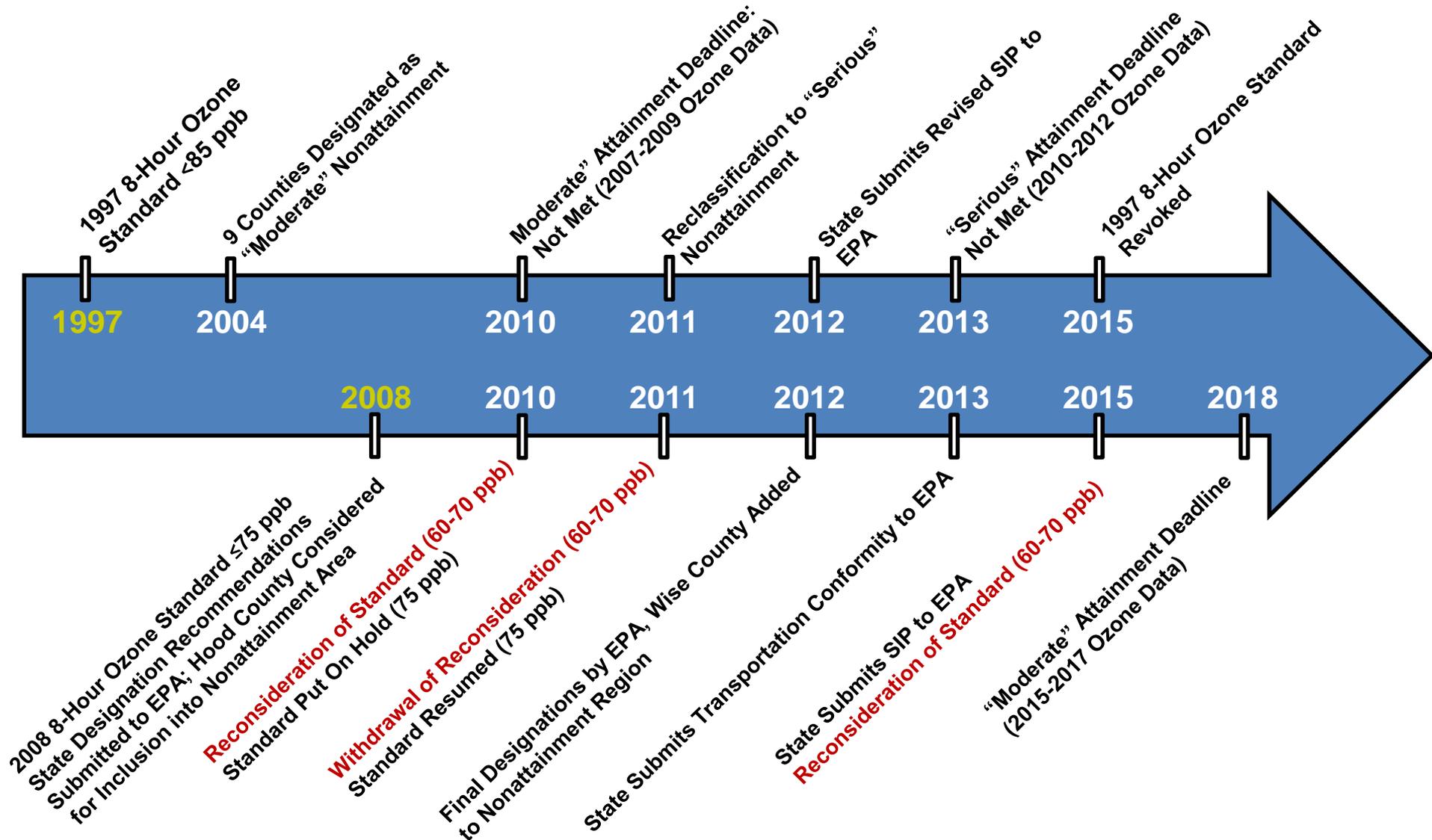
Total NO_x = 370 tons per day (tpd)

NO_x = Nitrogen Oxides
VOC = Volatile Organic Compounds
tpd = Tons per Day

Source: Texas Commission on Environmental Quality

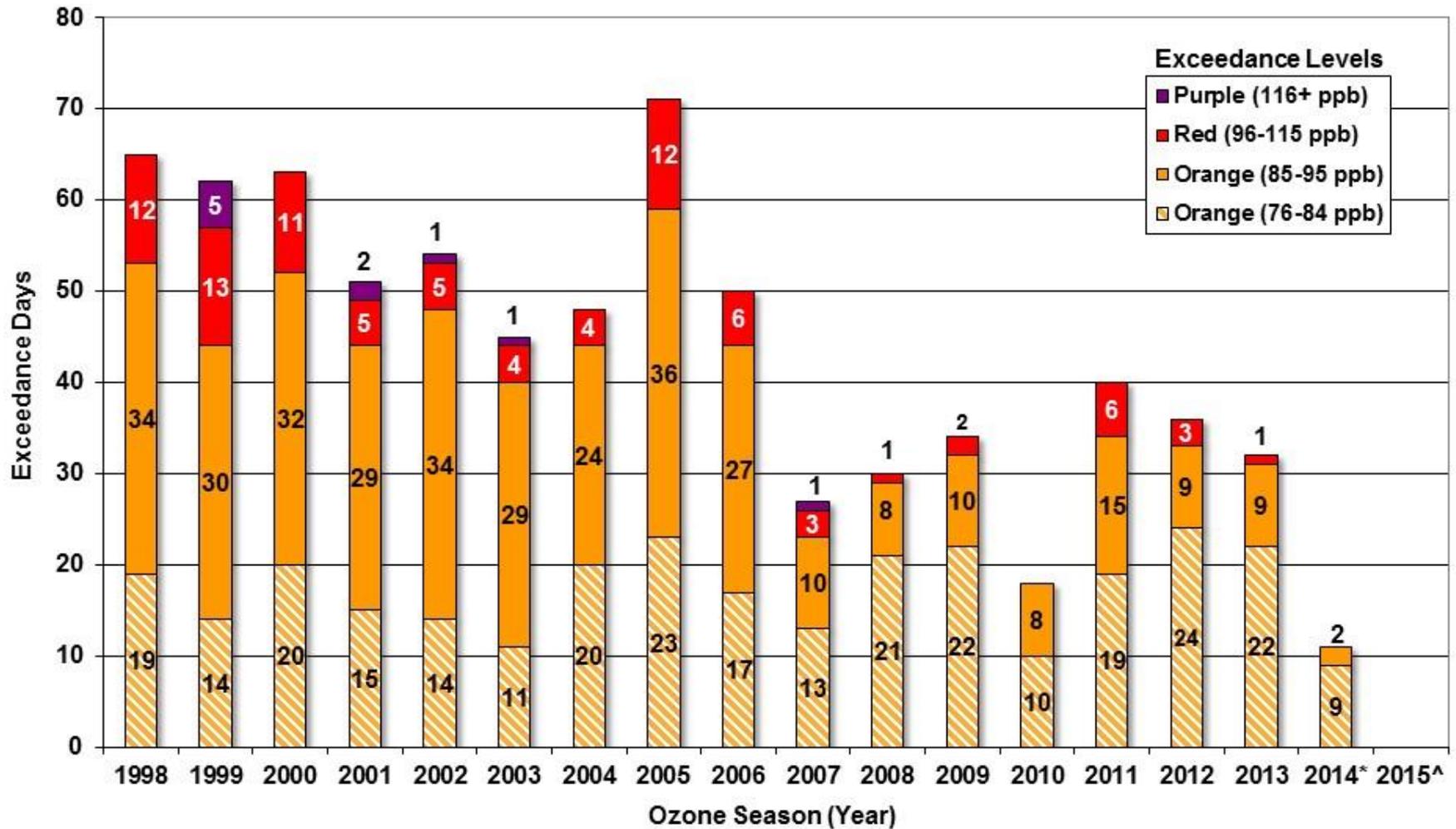
EIGHT-HOUR OZONE STANDARD

Timeline



EIGHT-HOUR OZONE STANDARD

Exceedance Days



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)

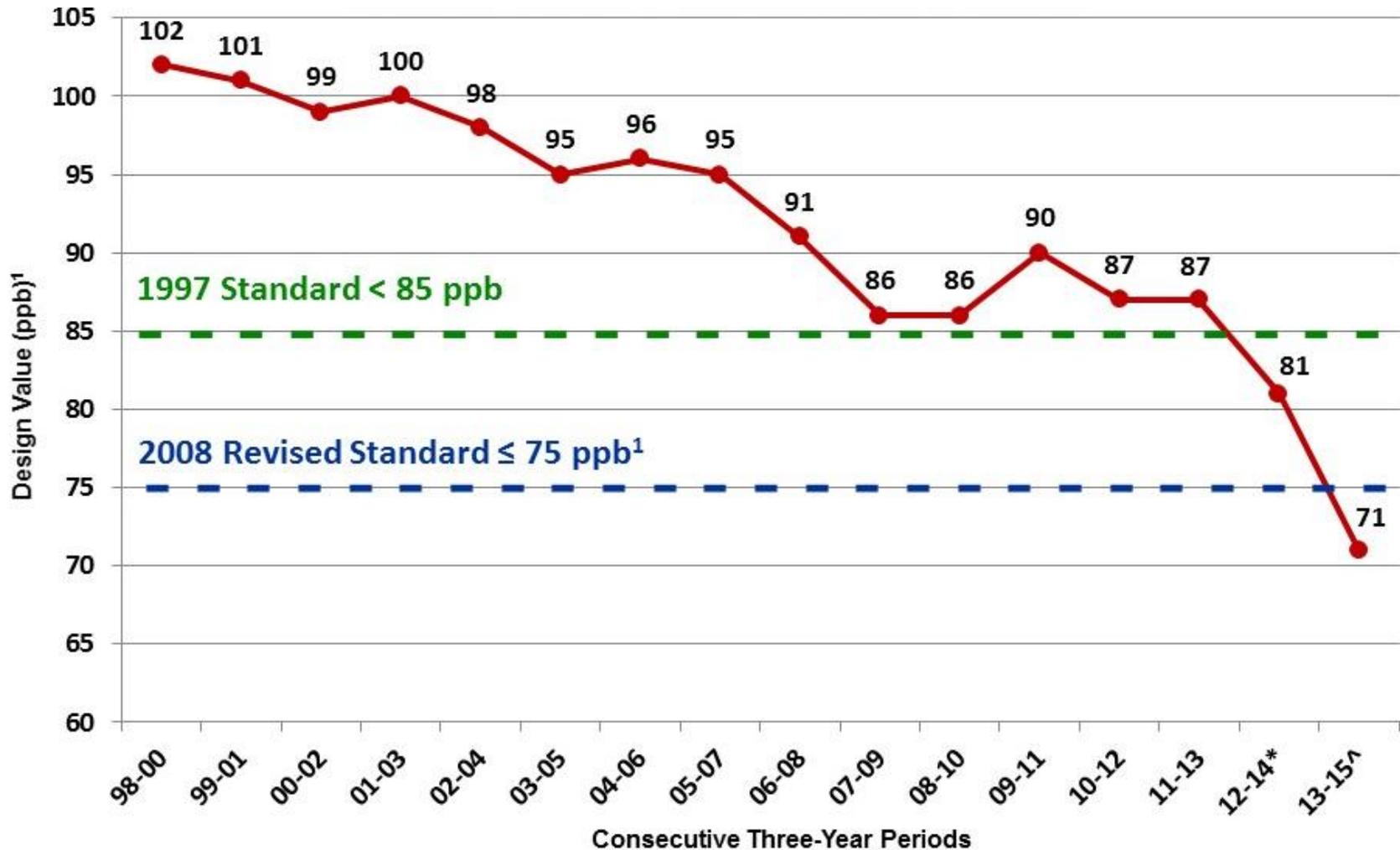
*2014 data not certified by the TCEQ

^Not a full year of data, current as of 4/10/2015

Source: http://www.tceq.state.tx.us/cgi-bin/compliance/monops/8hr_monthly.pl

EIGHT-HOUR OZONE STANDARD

Historical Trends



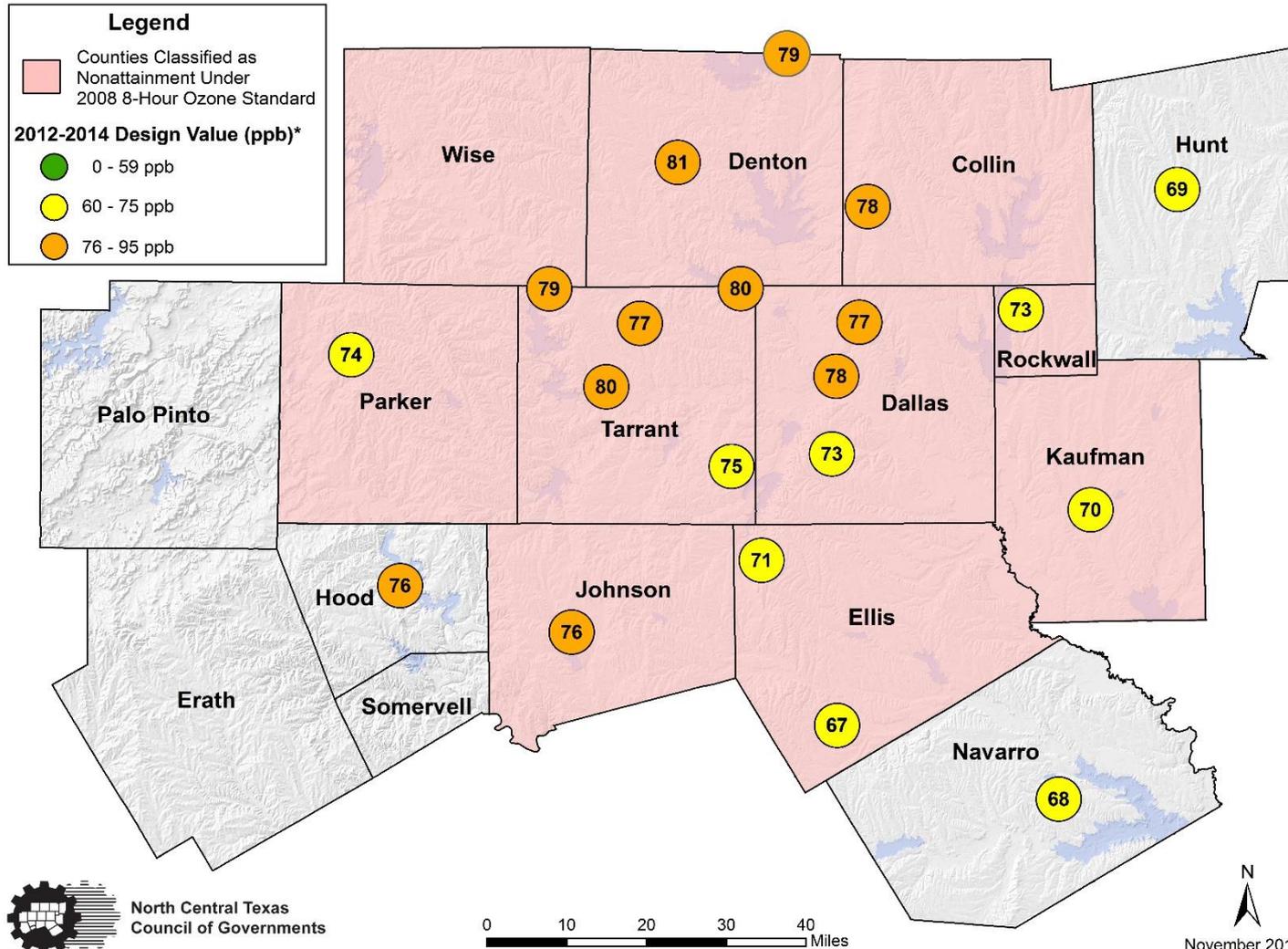
¹Attainment Goal - According to the US EPA National Ambient Air Quality Standards, attainment is reached when, at each monitor, the Design Value (three-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration) is equal to or less than 75 parts per billion (ppb).

*2014 data not certified by the Texas Commission on Environmental Quality

^Not a full year of data, current as of 4/10/2015.

EIGHT-HOUR OZONE STANDARD

2008 8-Hour Ozone Standard Design Values for 2014



*Data not certified by the TCEQ.

Colors represent Air Quality Index breakpoints.

According to the US EPA National Ambient Air Quality Standards, attainment is reached when, at each monitor, the three-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 75 parts per billion (ppb)

AIR QUALITY PROGRAMS



FEDERAL AIR QUALITY FUNDING

Congestion Mitigation and Air Quality Improvement (CMAQ) Program

The CMAQ program was implemented to support surface transportation projects and other related efforts that contribute air quality improvements and provide congestion relief to help meet the requirements of the Clean Air Act.

Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas).

CONGESTION MITIGATION AND AIR QUALITY PROGRAM

Examples of Eligible Activities

Advanced Truck-stop Electrification Systems
Traffic Signalization
High-Occupancy Vehicle Lanes
Intersection Improvements
Transit Projects
Implementation of Intelligent Transportation Systems
Improvements to Incident and Emergency Response

Performance-Based

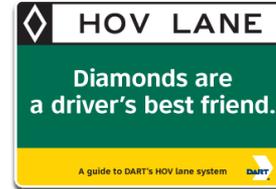
Establish measures for States to use to assess traffic congestion and on-road mobile source emissions. [§1203; 23 USC 150(c)]

Establish targets for these measures within one year of the final rule on national performance measures. [§1203; 23 USC 150(d)]

Develop and update biennially a performance plan to achieve air quality and congestion reduction targets. [§1113; 23 USC 149(l)]

TRANSPORTATION AIR QUALITY PROGRAMS

Examples of Current Efforts



northcentral.texas.clean.school.bus.program



tryparkingit.com



Don't Choke, Call #SMOKE



NCTCOG OZONE ACTIVITY WEBSITE



TCEQ Map of Current Monitor Levels

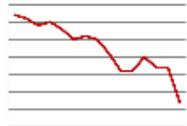
2015



2015 Ozone Season Calendar

Monitor Location	Exceedance Days Per Month (7 ppb)	Exceedance Days Per Month (8 ppb)
Monitor #1	0	0
Monitor #2	0	0
Monitor #3	0	0
Monitor #4	0	0
Monitor #5	0	0

Ozone Monitor Scorecard



Ozone Design Value Trendline

TCEQ Air Quality Forecast

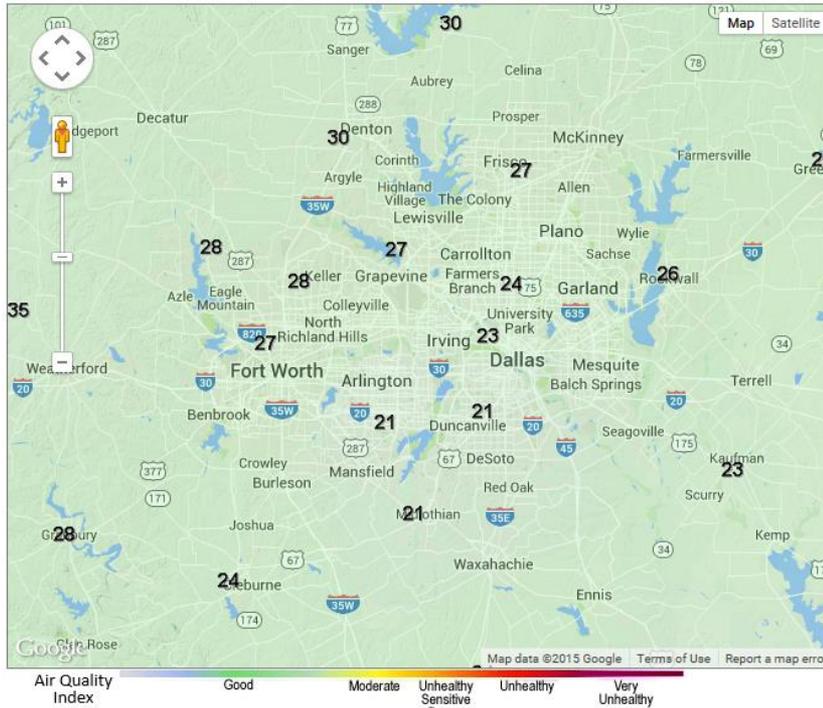
Current Ozone Activity

No Air Pollution Action Day for Saturday, April 11, 2015

Current Design Value is: **71 ppb***

Current Air Quality Index (AQI) for Friday, April 10, 2015 2:00:00 PM

These are not monitor values. These are AQI values. See table below.



- Show Ozone Monitors
 - Show Shaded AQI Estimate
 - Show Current Traffic
- Use Boxes Above to Increase Visibility



Current AQI Animation

Animation Courtesy of AirNow

These are not monitor values. These are AQI values. See table above.

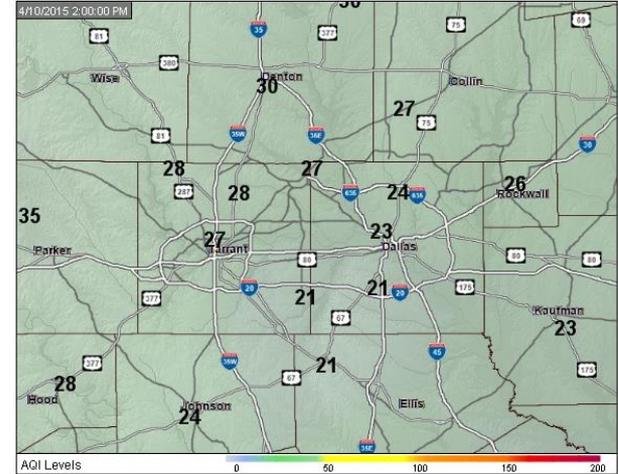


Image Looping: Start Stop
Single Frame: <-->

Note: The AQI values above are updated hourly

Current Outdoor Conditions

Time	Conditions	Temperature	Dew Point	Humidity	Wind	Air Pressure	Current Air Quality
1:53:00 PM	Mostly Cloudy	64.0	44.1	48.0%	East 5.8 mph	30.16 inches	Good

Air Quality Forecast Courtesy of AirNow

Stats	Fri 4/10/2015	Sat 4/11/2015	Sun 4/12/2015	Mon 4/13/2015	Tue 4/14/2015
Category	Good	Good	Good	Good	Good
Primary Pollutant					

Air Quality Index Values and Ozone Concentration

Air Quality Index(AQI) Values	8-Hour Ozone Levels (ppb)	Levels of Health Concern	Colors
0-50	0-59	Good	Green
51-100	60-75	Moderate	Yellow
101-150	76-95	Unhealthy for Sensitive Groups	Orange
151 to 200	96-115	Unhealthy	Red
201 to 300	116-374	Very Unhealthy	Purple
301 to 500	Not Defined	Hazardous	Maroon

<http://www.nctcog.org/trans/air/ozone/current.asp>

NORTH TEXAS AIR QUALITY PROGRAMS

Resources

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