

OZONE IN NORTH TEXAS AND THE CLEAN AIR ACT

**North Texas Commission
Topics: North Texas Webinar Series**

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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_x)

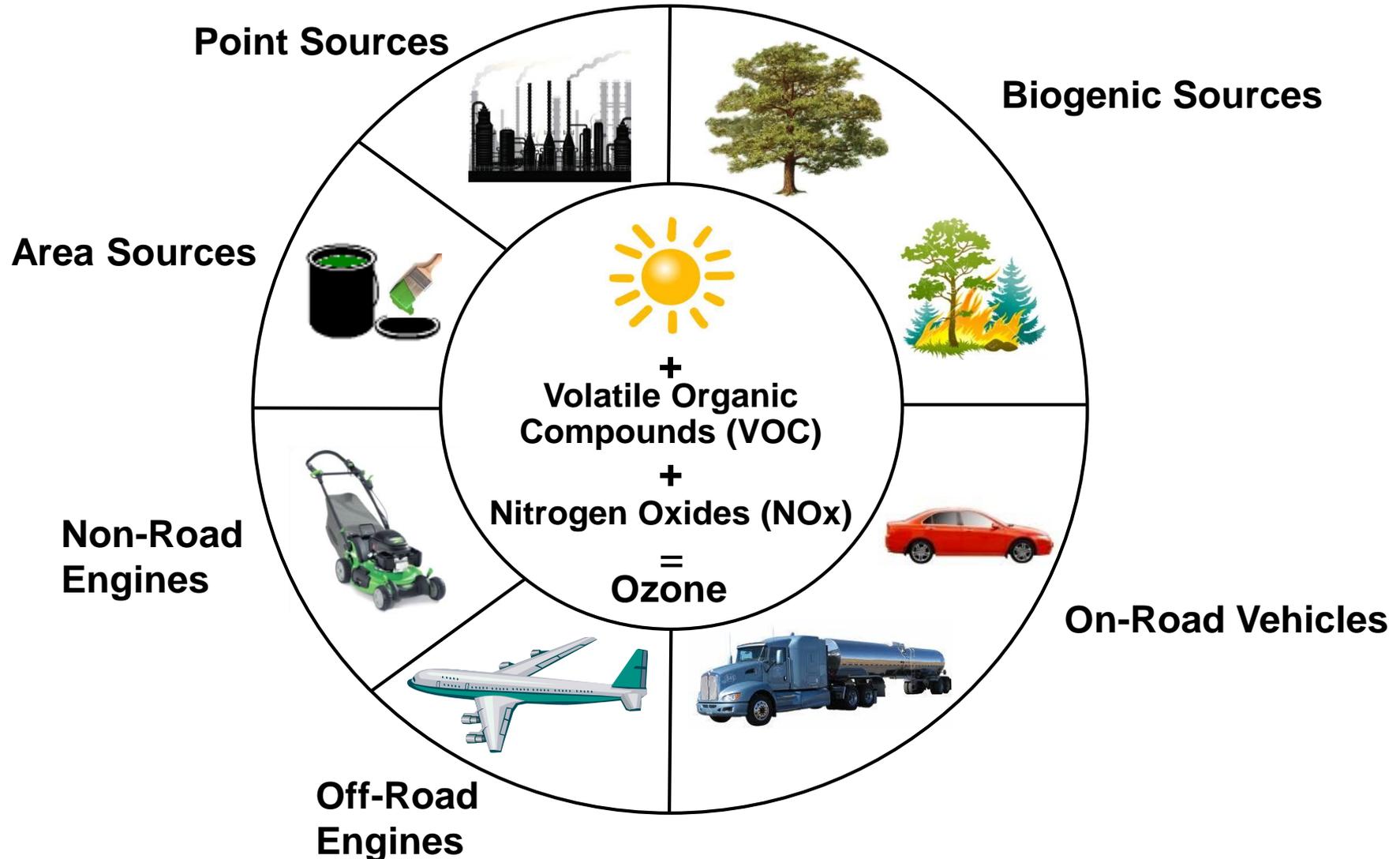
Ozone (O₃)

Particulate Matter (PM)

Sulfur Dioxide (SO₂)

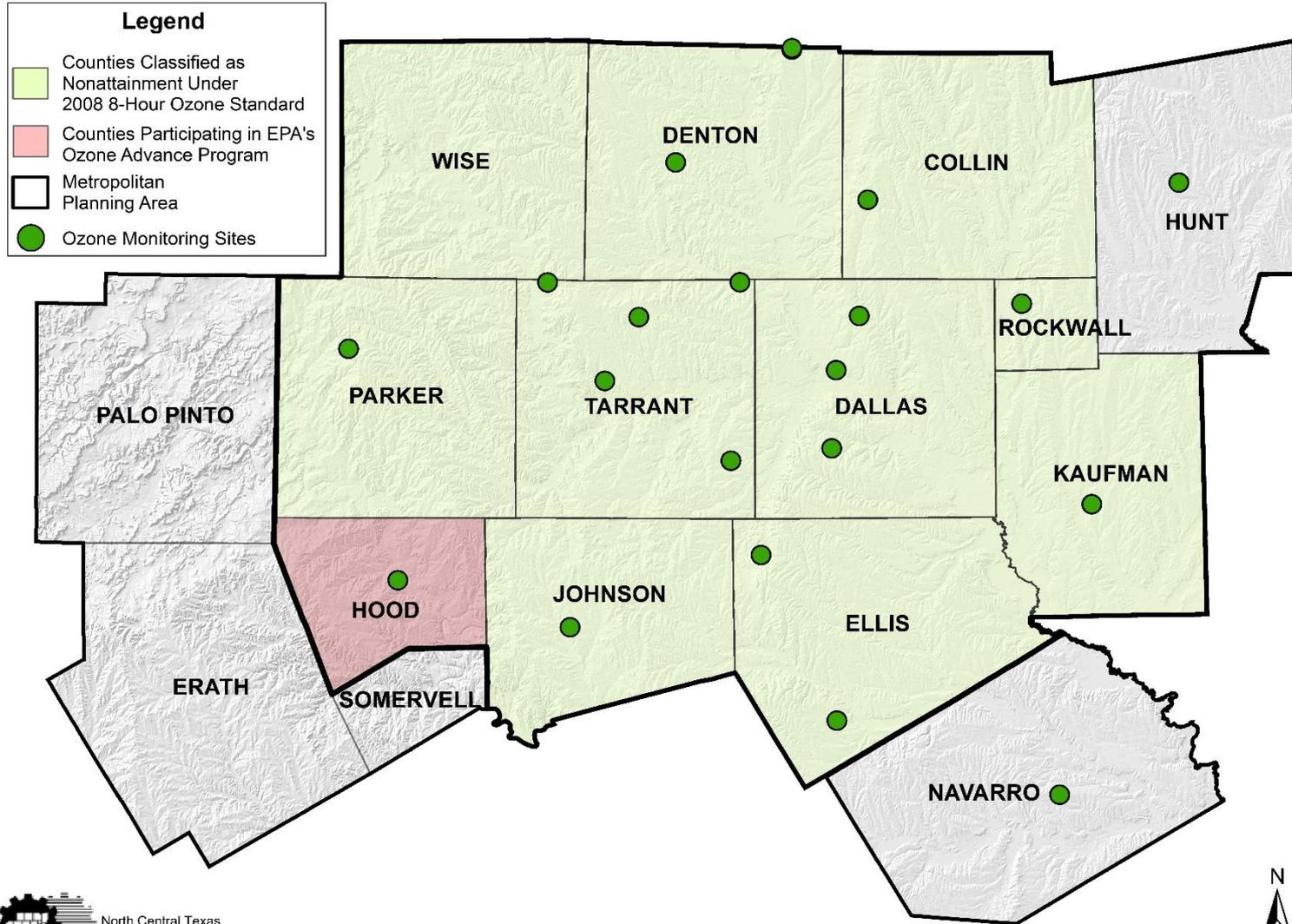
EPA must complete a review of NAAQS every 5 years

OZONE FORMATION



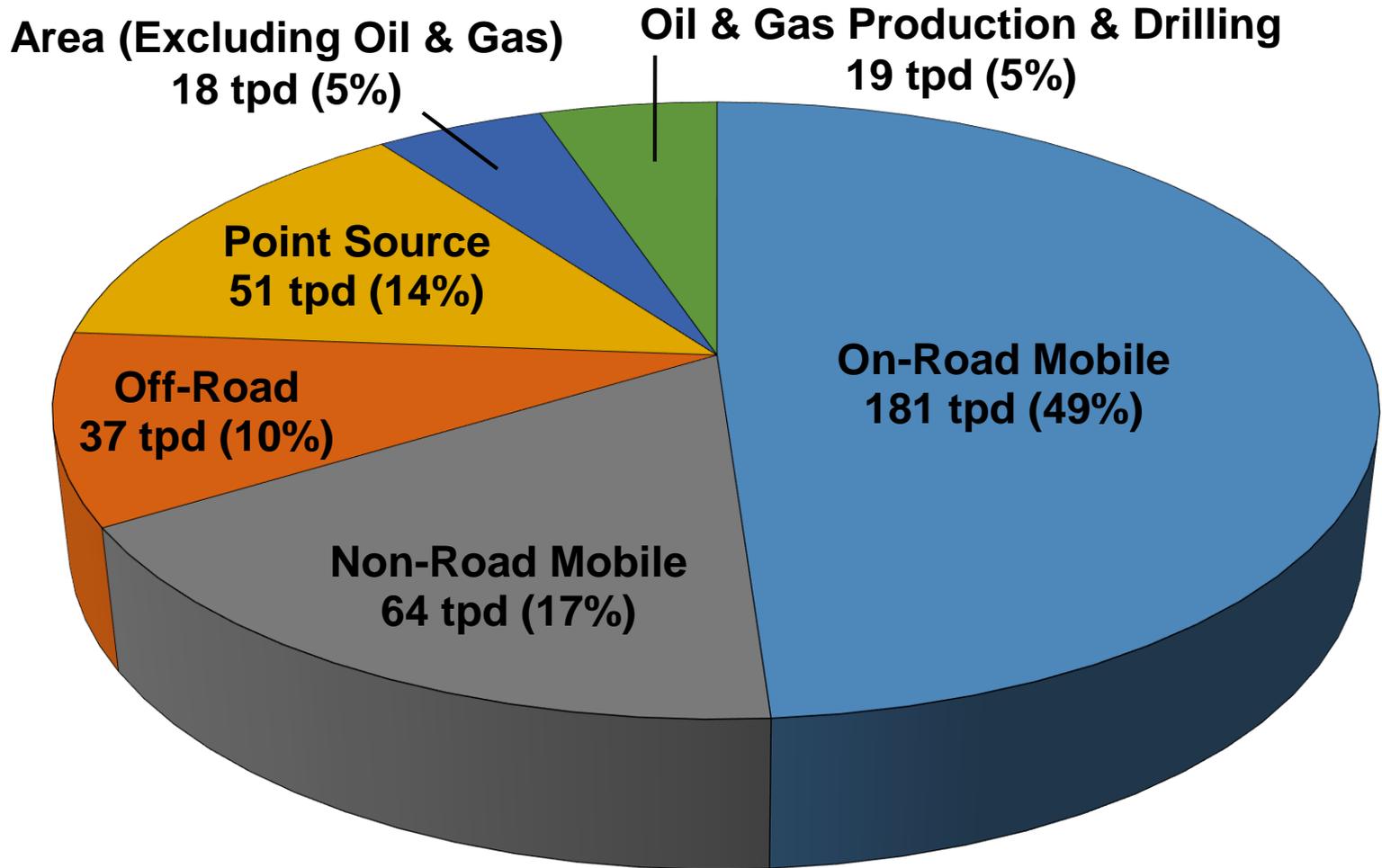
Optimum conditions for the formation of ozone include high temperatures and low winds.

NCTCOG PLANNING AREA



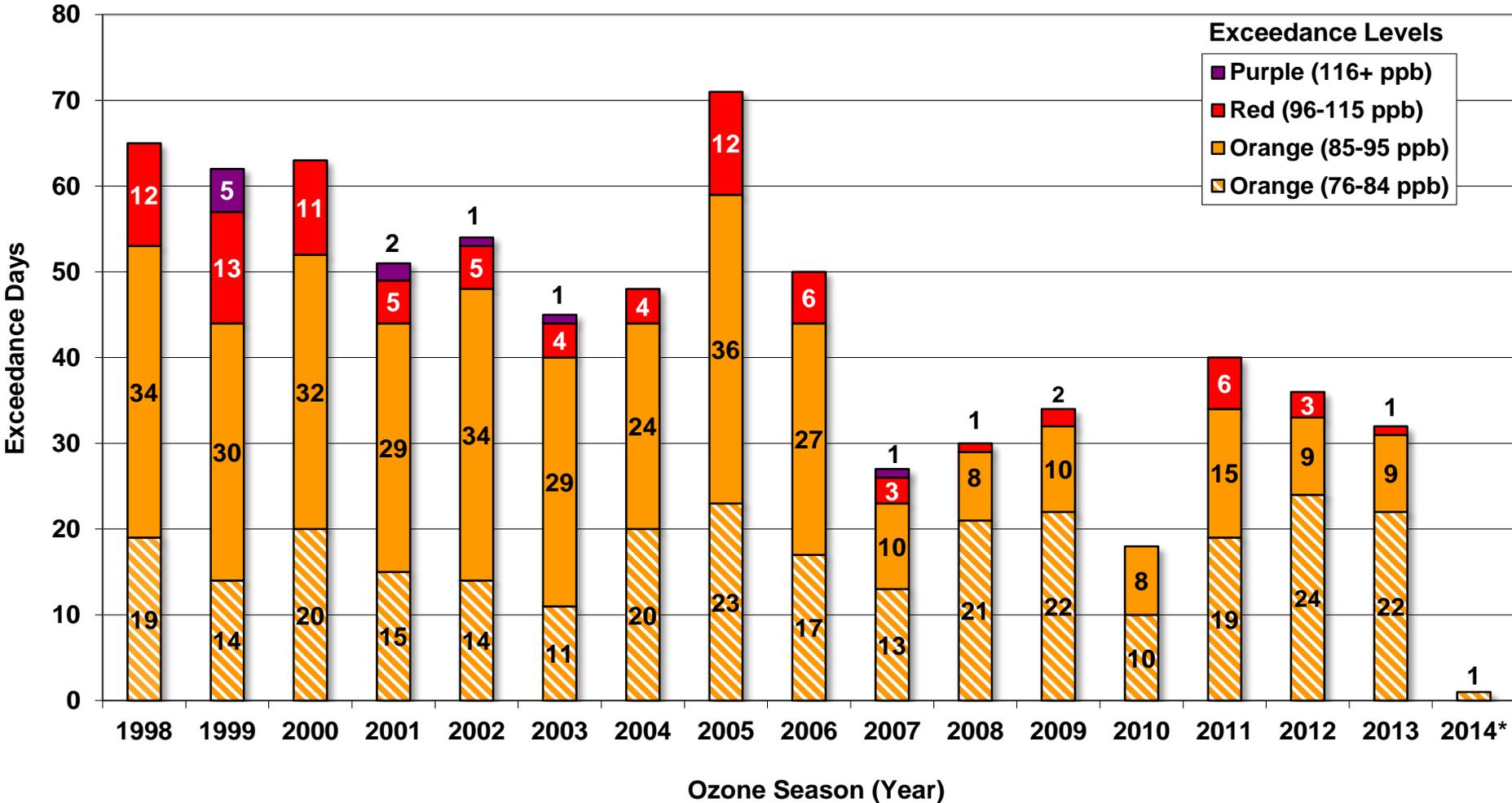
EMISSION SOURCES

Nitrogen Oxides (NO_x)



Total NO_x = 370 tons per day (tpd)

OZONE EXCEEDANCE DAYS



Ozone Season (Year)

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.

*Not a full year of data, current as of 6/19//2014

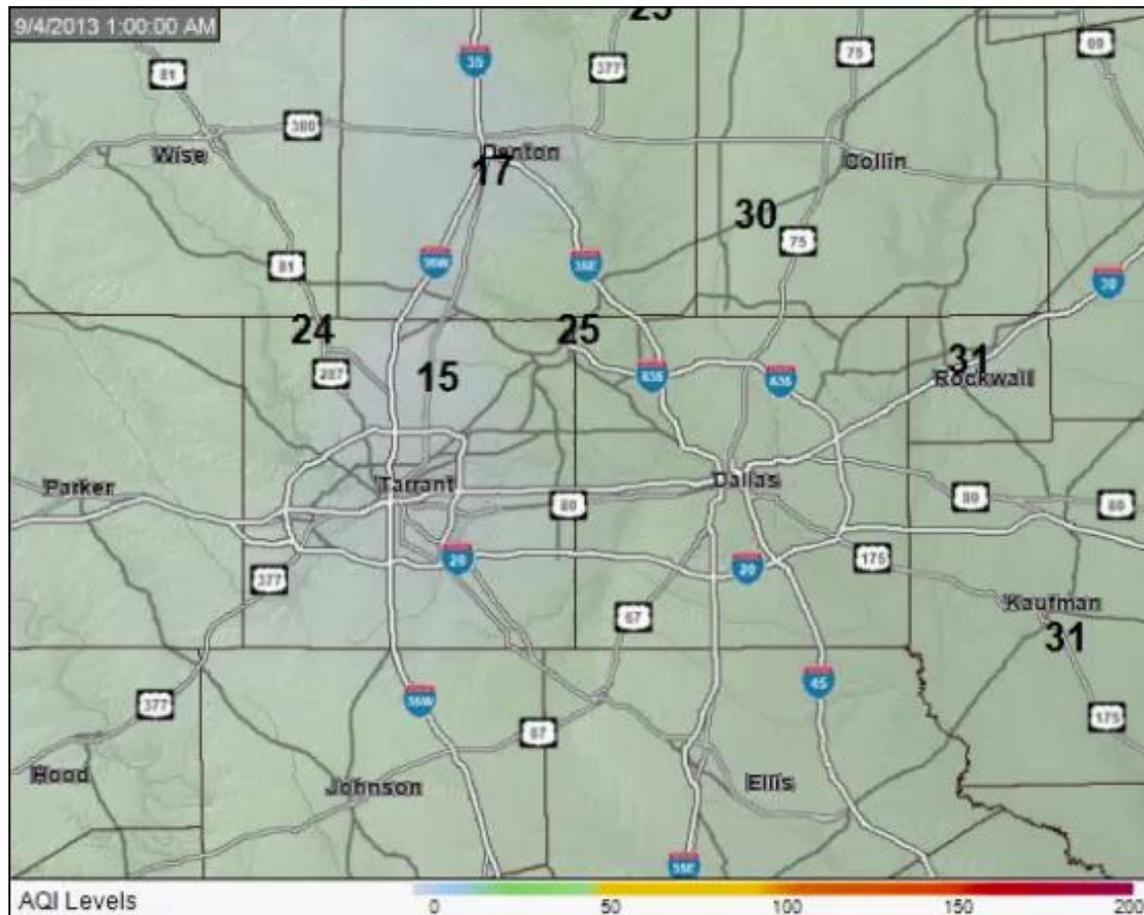
Note: The 2009-2013 data has been certified by TCEQ, and is currently undergoing review by the EPA for concurrence.

 = 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)

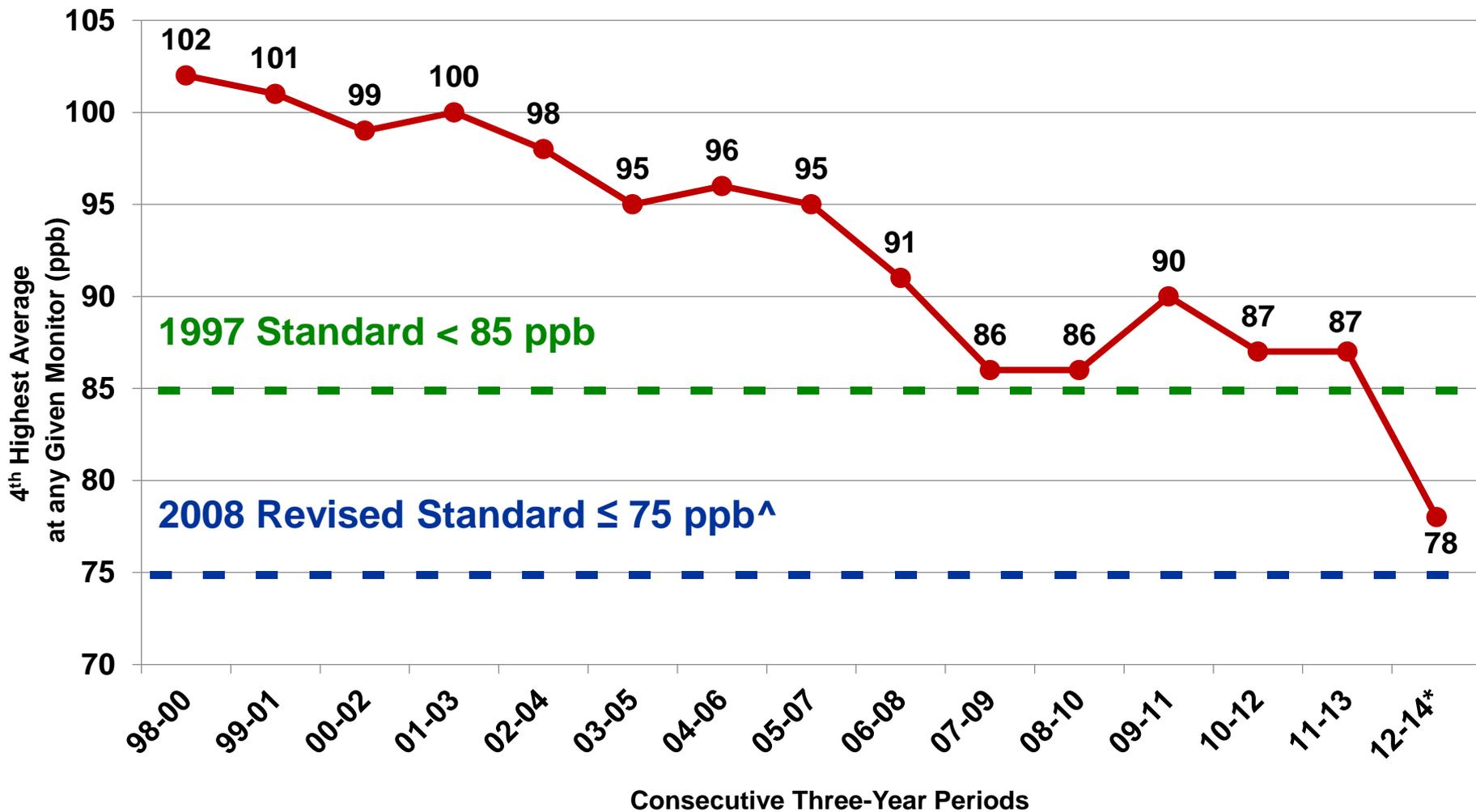
Source: TCEQ, http://www.tceq.state.tx.us/cgi-bin/compliance/monops/8hr_monthly.pl
ppb = parts per billion

2013 HIGHEST EXCEEDANCE DAY

September 4th – 100 ppb at Fort Worth Northwest



HISTORICAL TRENDS IN OZONE



^Attainment Goal - 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 equal to or less than 75 parts per billion (ppb).

*Not a full year of data, current as of 6/19//2014.

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

8-HOUR OZONE STANDARD TIMELINE

2008 = 8-Hour Ozone Standard Revised to 75 ppb

State Designation Recommendations Submitted to EPA; Hood County Considered for Inclusion into Nonattainment Area

**2010 = Reconsideration of Standard (60-70 ppb)
Standard Put On Hold (75 ppb)**

**2011 = Withdrawal of Reconsideration (60-70 ppb)
Standard Resumed (75 ppb)**

2012 = Final Designations by EPA, Wise County Added to Nonattainment Region

2013 = Conformity Determination

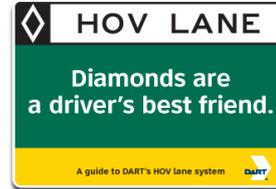
2015 = State Submits SIP to EPA

**2018 = “Moderate” Attainment Deadline
(2016-2018 Ozone Data)**

2015 SIP TIMELINE

- April 20, 2014 = Deadline for Submitting Control Measure Ideas for RACM 8-Hour Ozone Standard Revised to 75 ppb**
- May – August 2014 = TCEQ Technical Work Finalized**
- December 2014 = Public Comment Period Begins**
- January 2015 = Public Hearings**
- June 2015 = TCEQ Commissioners Adopt the SIP**
- July 20, 2015 = Deadline for State to Submit SIP to EPA**
- Various = Quarterly Public Air Quality Technical Committee Meetings Hosted by NCTCOG (Next Meeting – August 2014)**

AIR QUALITY PROGRAMS



tryparkingit.com



Don't Choke, Call #SMOKE

AIR NORTH TEXAS

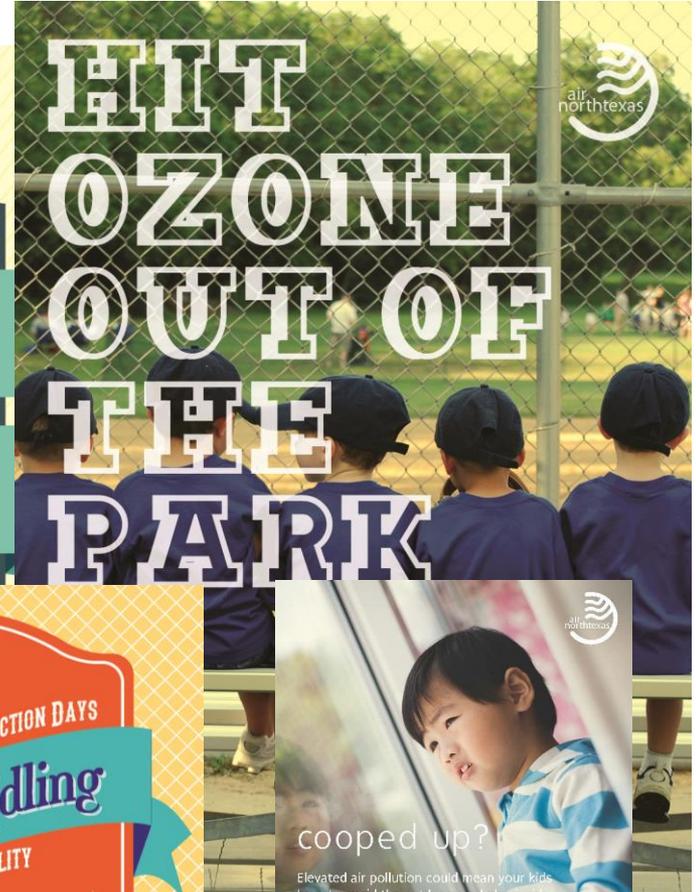
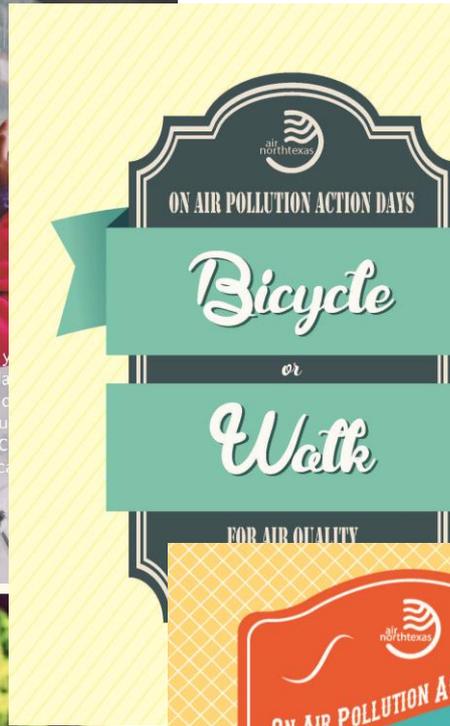


go green. breathe clean.



cooped up?

Elevated air pollution could mean you have to avoid the outdoors and play inside. Help improve air quality for all by doing something to reduce emissions, such as carpooling or using mass transit. Commit to these actions and learn how you can improve our air at www.airnorthtexas.org.



cooped up?

Elevated air pollution could mean your kids have to avoid the outdoors and play inside. Help improve air quality for all by doing something to reduce emissions, such as carpooling or using mass transit. Commit to these actions and learn how you can improve our air at www.airnorthtexas.org.

CLEAN AIR ACTION DAY

First Friday of summer every year

People commit to adopting one clean air strategy for the day

Organizations and businesses promote the day with contests and events for employees

June 27, 2014 | www.airnorthtexas.org



CLEAN AIR ACTION DAY



go green
breathe clean
a campaign for clean air



Espanol

take action

contact us

faq

join us

events

Current Ozone Level
GOOD

- home
- about us
- know your impact
- just for kids
- air facts
- partner resources
- links



- current ozone activity
- biking/walking routes
- commute info
- report smoking vehicles



Clean Air Action Day

It's up to each of us to take responsibility for the air we breathe. Clean Air Action Day 2014 will be on the first Friday of summer, June 27.

On Friday 6.27.14 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.

2013 Results | 2012 Results | 2011 Results | 2010 Results



Take Action -- Choose Clean Air

What clean air choices will you make Friday, June 27?

* indicates required fields

Company
Email Address*
ZIP Code*

[Check all that apply]

- Carpool or vanpool
- Use mass transit
 - > Fares, schedule and route information
- Bike or walk
 - > Recycling and walking routes
- Telecommute
- Take lunch to summer activities or work
- Maintain consistent driving speed by avoiding quick accelerations and hard braking
- Avoid idling
 - > Engine Off North Texas
- Combine trips or drive less
- Report smoking, polluting vehicles (#SMOKE)
 - > Regional Smoking 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 compact fluorescent light bulbs
- Pursue energy efficient home improvement projects
 - > Home, green house
- Choose a clean vehicle option if purchasing a new vehicle (electric, hybrid, natural gas, propane, biofuels, SmartWay)
 - > Newsroom and options
- Use a vehicle-approved biofuel in your car (i.e., E85 and B20)
 - > Newsroom and options
- Call for an alternative fuel 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 6.27.14
- Tell a friend about Air North Texas and options that help improve air quality in the region
- Commit to Be Air Aware the entire ozone season
 - > Be Air Aware

Other [please specify]



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.



Fares
Map
Schedule



Fares
Map
Schedule



Fares
Map
Schedule



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.

ridesourcing is also a clean air commute alternative. Select 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

CLEAN AIR STRATEGIES

Organizations/Businesses/Governments

Move construction activities to evening hours

Postpone mowing to a day with healthy air

Conserve electricity

Limit testing of emergency generators

Coordinate on-site employee lunches

Use audio and video conference call technology

Purchase clean vehicles/DFW Clean Cities



CLEAN AIR STRATEGIES

Individuals

Conserve water to conserve electricity

Bicycle or walk

Use mass transit or rideshare (i.e. carpool, vanpool)

Take lunch to work/carpool to lunch

Conserve electricity

Telecommute

Purchase Clean Vehicles/DFW Clean Cities



8-HOUR OZONE STANDARD

Looking Toward the Future

CAA last revised in 1990

Ozone standards reviewed and/or updated every 5 years

CAA needs to be updated to account for new rules and regulations

EPA is finalizing a 5 year review of the 8-hour ozone standard

Proposed standard must be released by December 1, 2014

New standard must be finalized by October 1, 2015

60 – 70 ppb recommended by the Clean Air Scientific Advisory Committee

Challenges for DFW Region

Population increasing

Vehicle Miles of Travel increasing

Background ozone levels ~45-55 ppb during ozone season

Questions?