

DFW AIR QUALITY ROUNDUP

**Air and Waste Management Association
June 24, 2014**



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Air Quality Planning & Operations
NCTCOG Transportation Department**

CLEAN AIR ACT

Clean Air Act was 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)

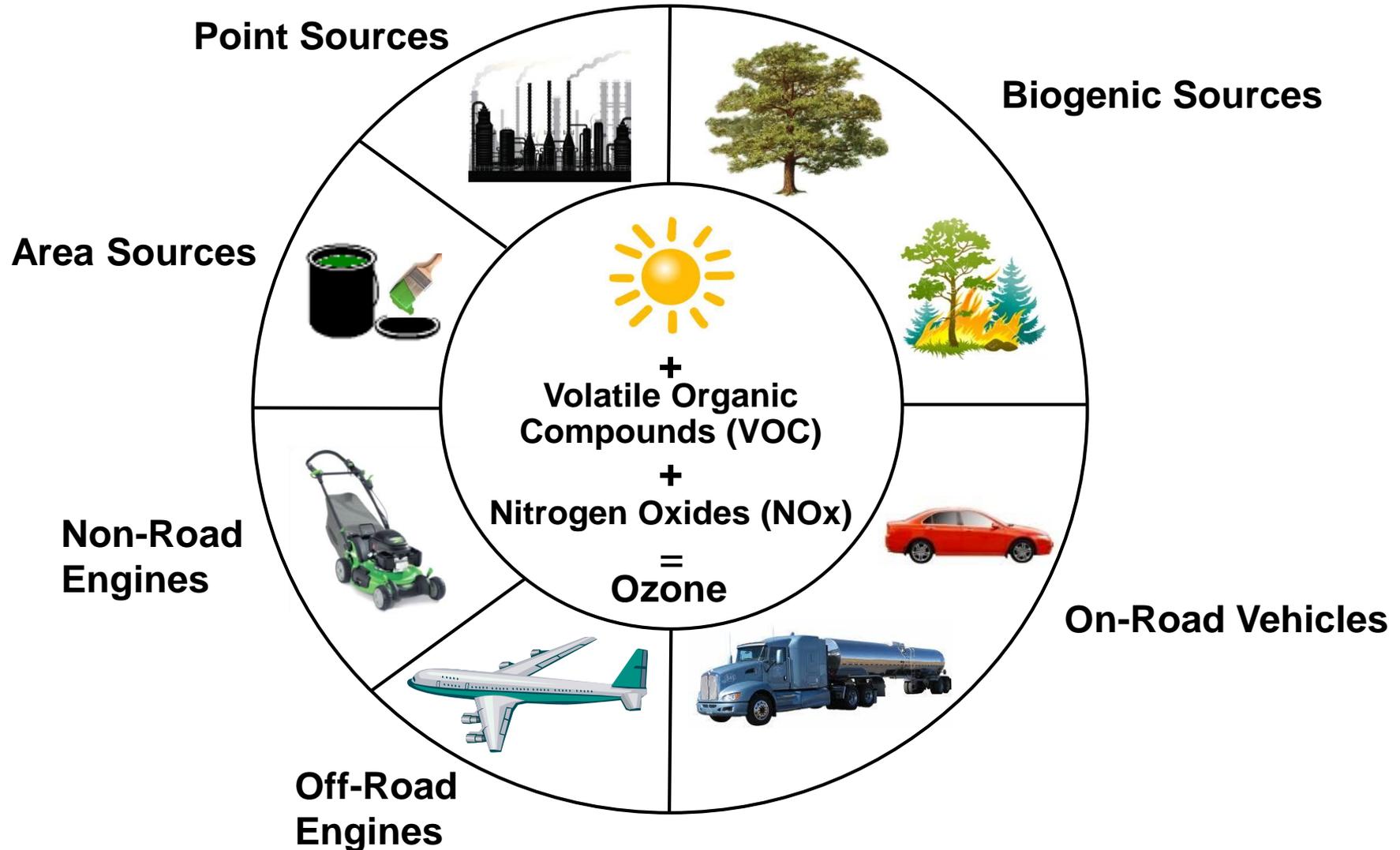
Nitrogen Oxides (NO_x)

Ozone (O₃)

Particulate Matter (PM)

Sulfur Dioxide (SO₂)

OZONE FORMATION

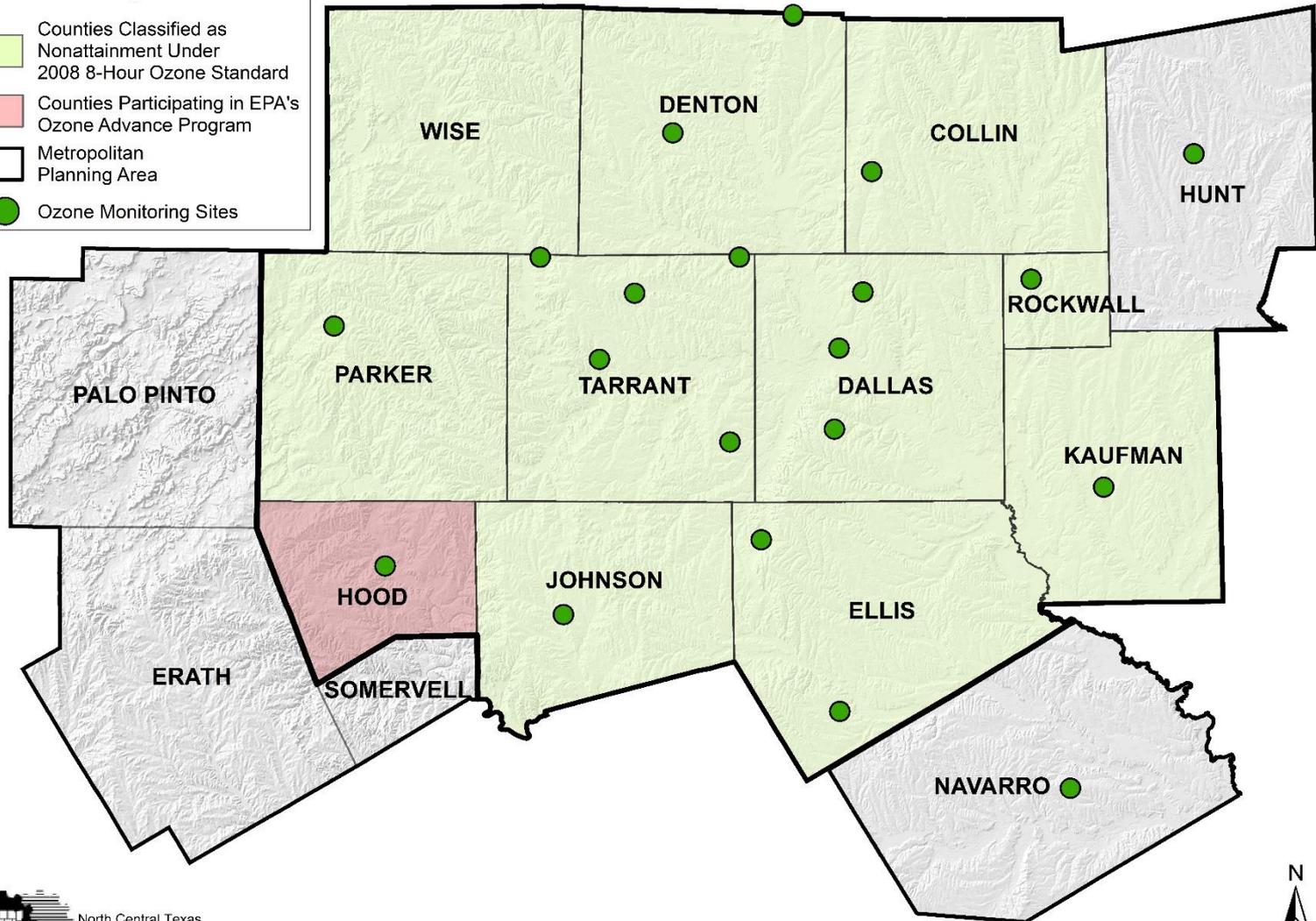


Optimum conditions for the formation of ozone include high temperatures and low winds.

NCTCOG PLANNING AREA

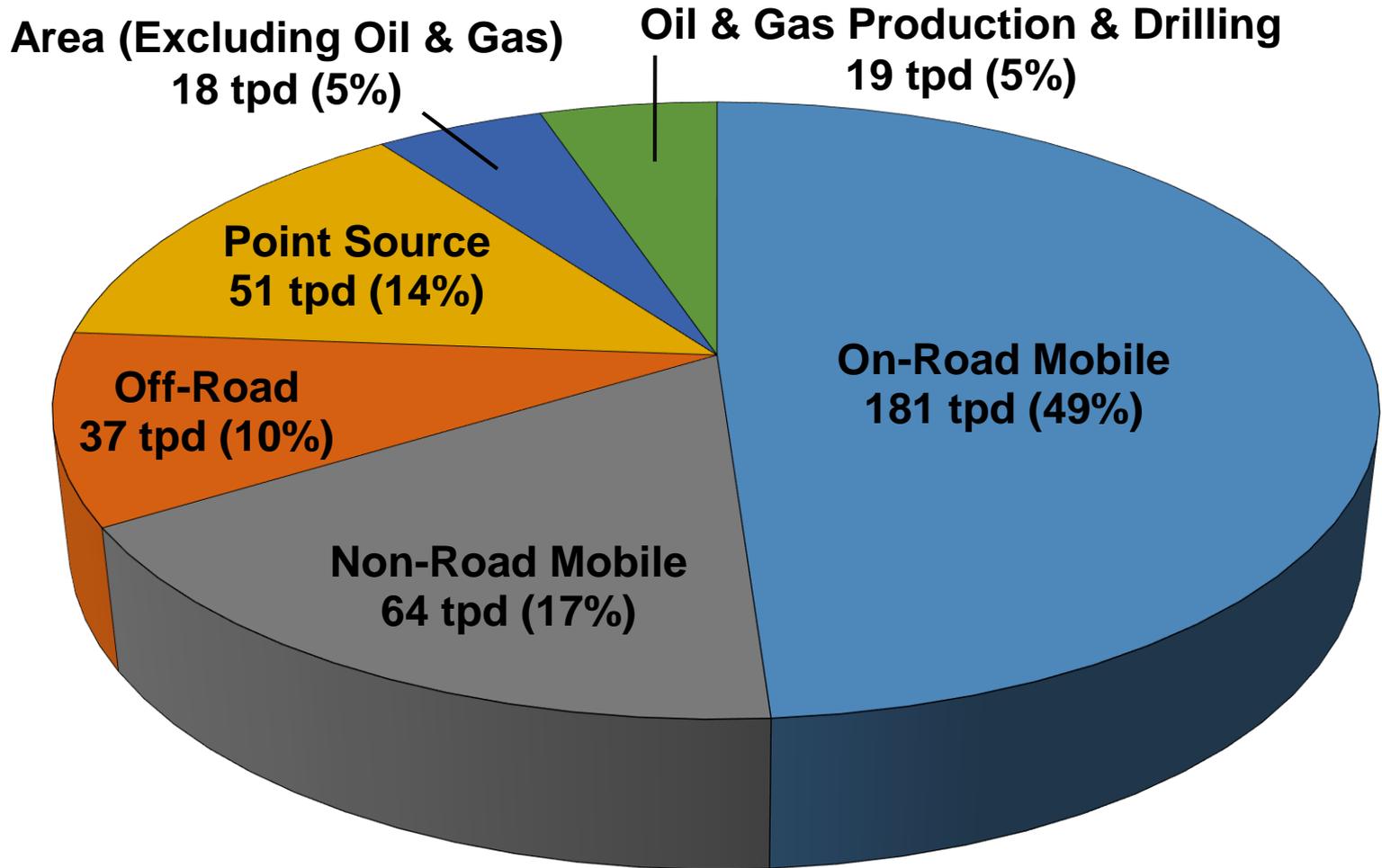
Legend

- Counties Classified as Nonattainment Under 2008 8-Hour Ozone Standard
- Counties Participating in EPA's Ozone Advance Program
- Metropolitan Planning Area
- Ozone Monitoring Sites



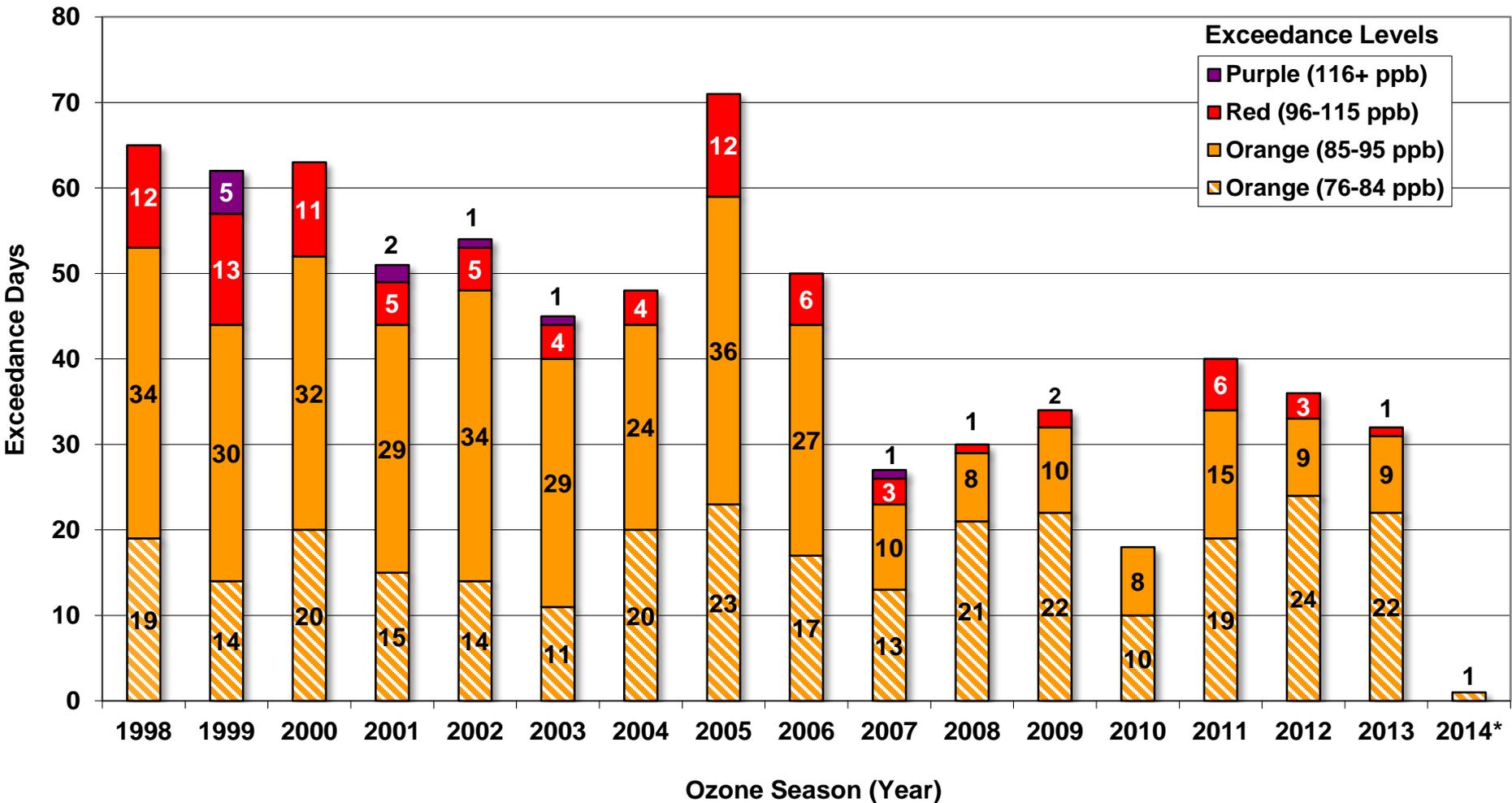
EMISSION SOURCES

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)

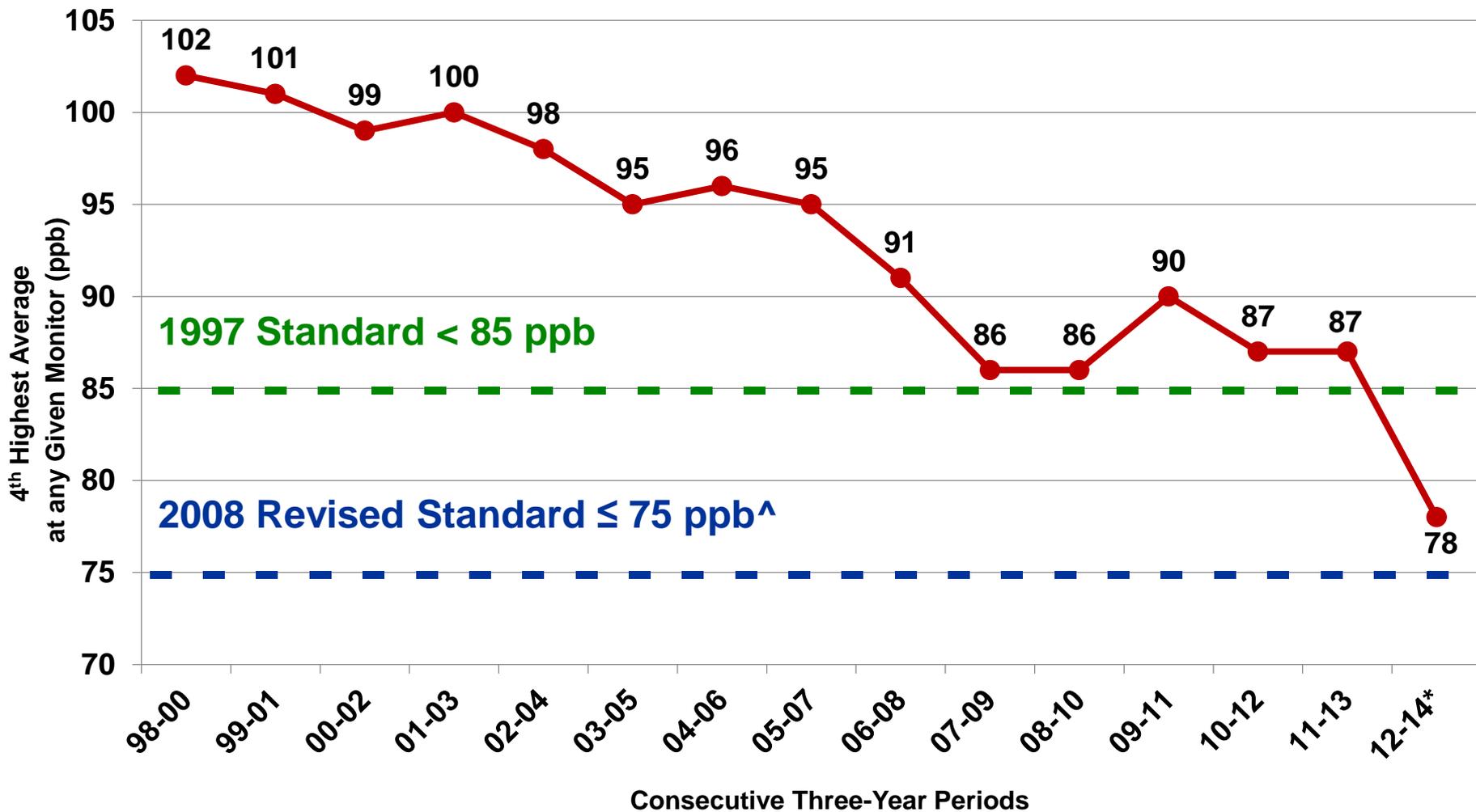
Source: TCEQ, http://www.tceq.state.tx.us/cgi-bin/compliance/monops/8hr_monthly.pl
ppb = parts per billion

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).

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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

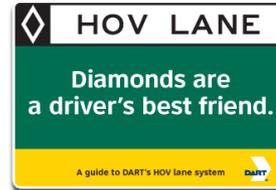
2015 = State Submits State Implementation Plan (SIP) to EPA

**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



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AIR NORTH TEXAS



go green. breathe clean.



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.



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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 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

NO₂ MONITOR SITING

Background

February 2010

**Promulgation of Hourly NO₂ Standard
Hourly Standard = <100 ppb**

March 2013

**Environmental Protection Agency (EPA)
Revised Deadline for Near-Road NO₂
Monitoring Network in Phases Between
January 1, 2014, and January 1, 2017**

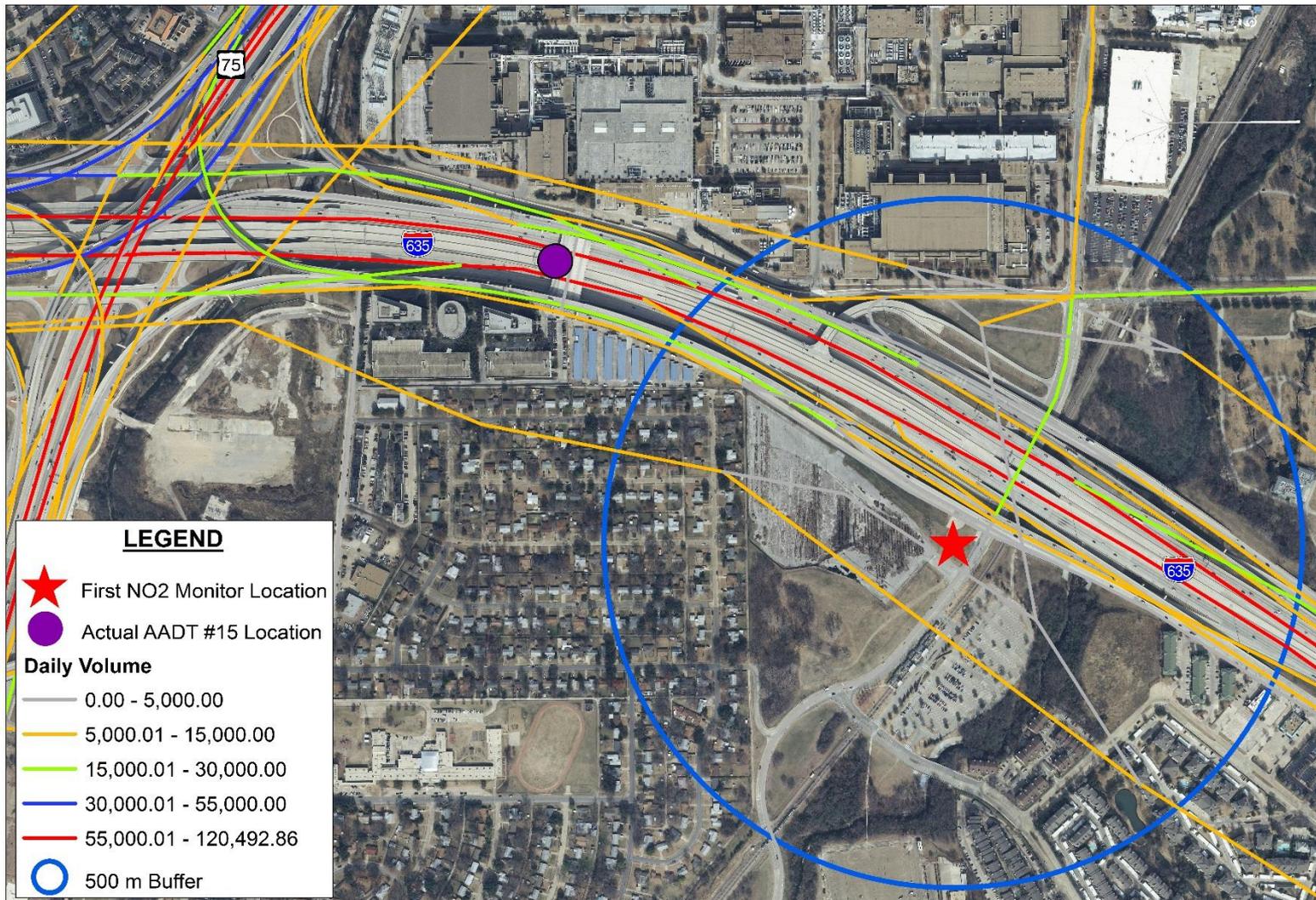
April 2014

**First Near-Road NO₂ Monitor in Dallas-Fort
Worth (DFW) Operational**

**DFW is required to have two near-road monitors operational by
January 2015.**

NO₂ MONITOR SITING

First Monitor Site Location



NO₂ MONITOR SITING

Second Monitor Site Location



Questions?