

START OF 2020 OZONE SEASON

**NCTCOG Public Meeting
March 2020**



North Central Texas
Council of Governments

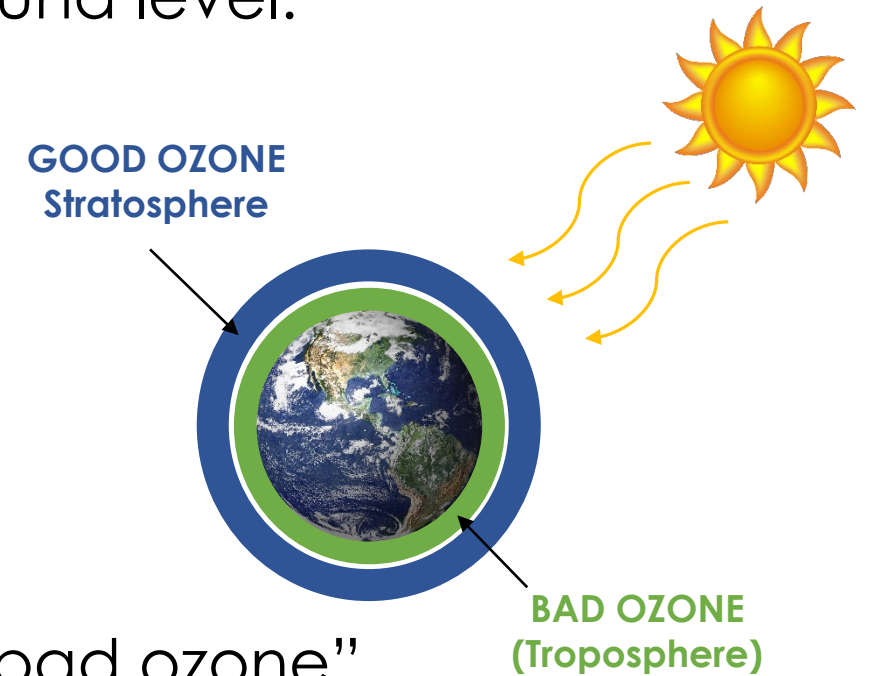


Ozone

Ozone, a gas composed of three atoms of oxygen (O_3), occurs both in the Earth's upper atmosphere and at ground level.

Stratospheric Ozone: forms high in the atmosphere when intense sunlight causes oxygen molecules (O_2) to break up and re-form as ozone molecules. Popularly called “good ozone”, it shields us from the harmful effects of the sun's ultraviolet light.

Ground-Level Ozone: commonly referred to as “bad ozone” forms when emission sources including, but not limited to, transportation, industrial and commercial operations, and vegetation emit oxides of nitrogen (NO_x) and/or volatile organic compounds (VOC) that react in the presence of sunlight.



Health Effects of Ground-Level Ozone

Ozone can:

- Make it more difficult to breathe deeply and vigorously.

- Increase the frequency of asthma attacks.

- Cause shortness of breath and pain.

- Cause coughing and sore or scratchy throat.

- Inflame and damage the airways.

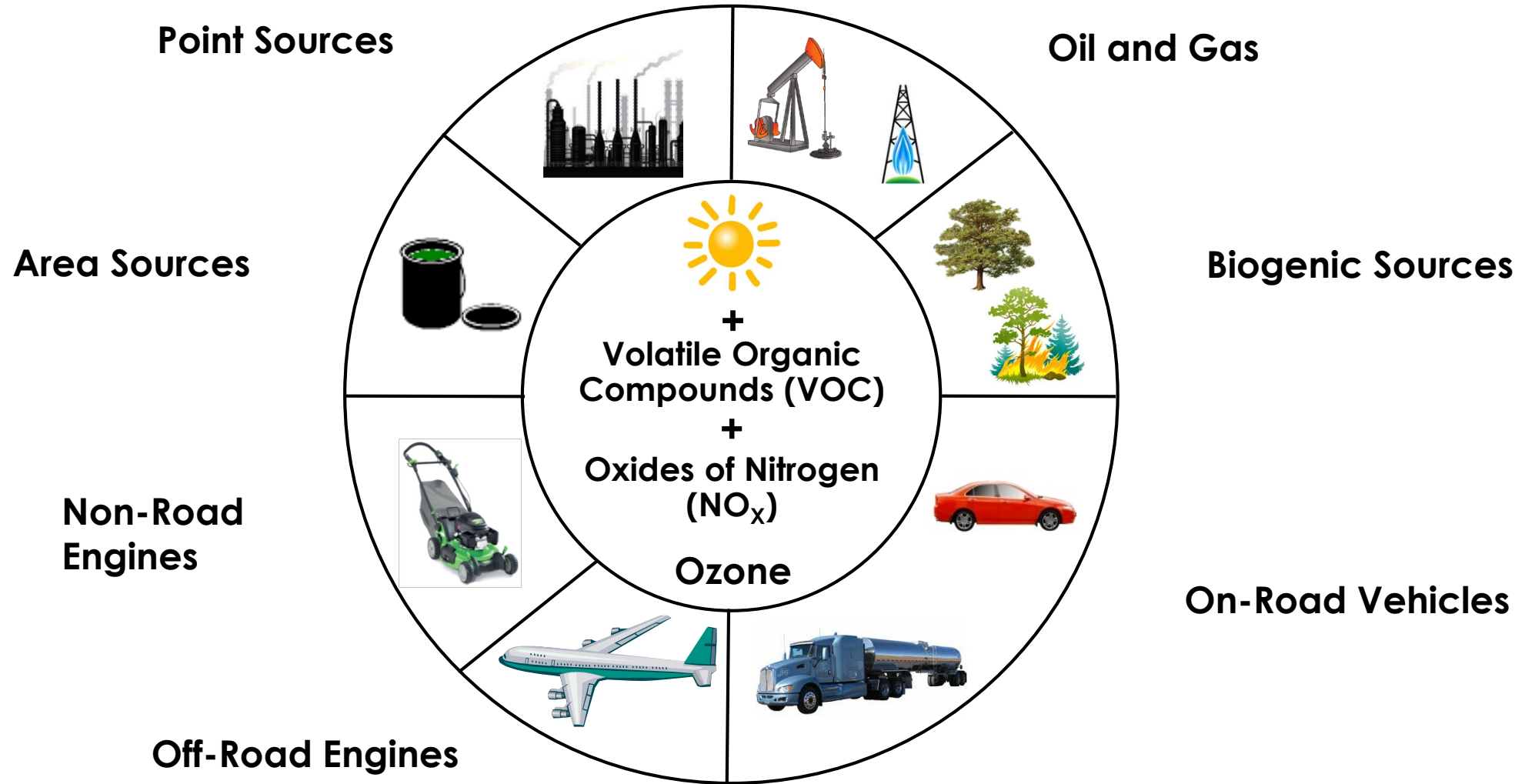
- Aggravate lung diseases such as asthma, emphysema, and chronic bronchitis.

- Cause chronic obstructive pulmonary disease (COPD).

- Make the lungs more susceptible to infection.

- Continue to damage the lungs even when the symptoms have disappeared.

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.

Ozone Standards

2015 8-Hour Ozone NAAQS (70 ppb)

EPA signed final rule classifying 9 counties as Marginal Nonattainment
(Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Tarrant, and Wise)

No SIP required

Attainment deadline: August 3, 2021

2008 8-Hour Ozone NAAQS (75 ppb)

Did not achieve attainment by July 2018 deadline for EPA moderate
designated 10-county region

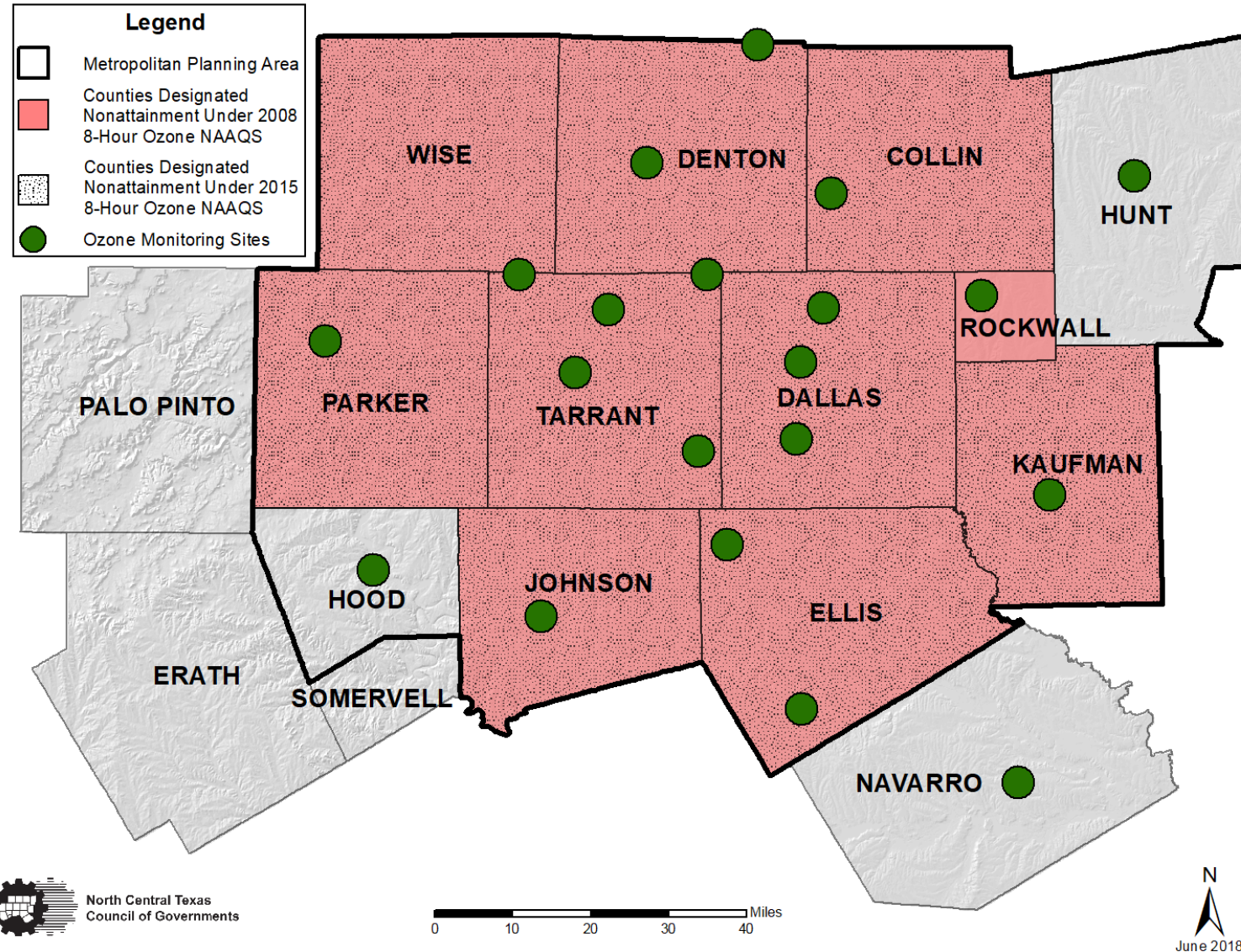
SIP revision 12 months after classification effective date

Proposal to reclassify DFW Area to serious published in Federal Register

Attainment deadline based on effective date of initial designation
(3 more years to attain – July 20, 2021)

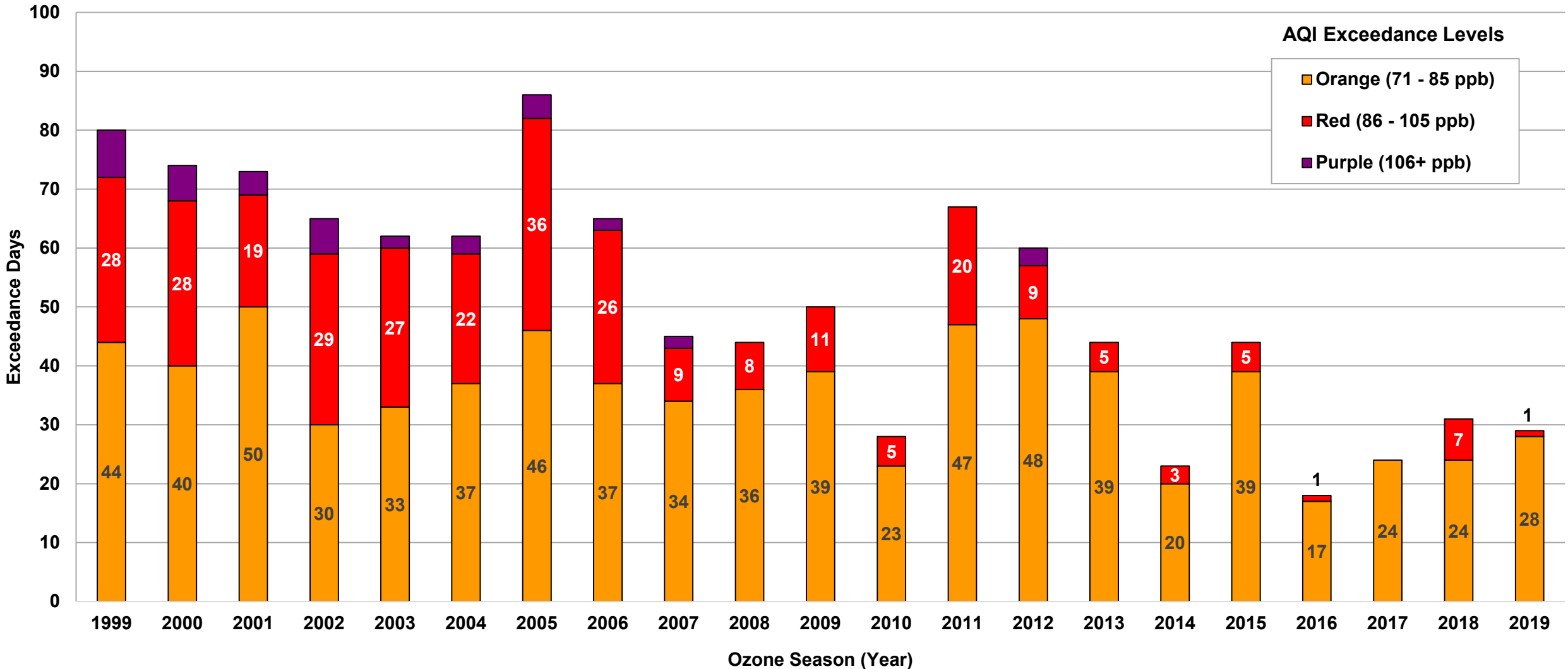
Monitor Locations

2008 and 2015 Ozone NAAQS



Historical Ozone Exceedance Days

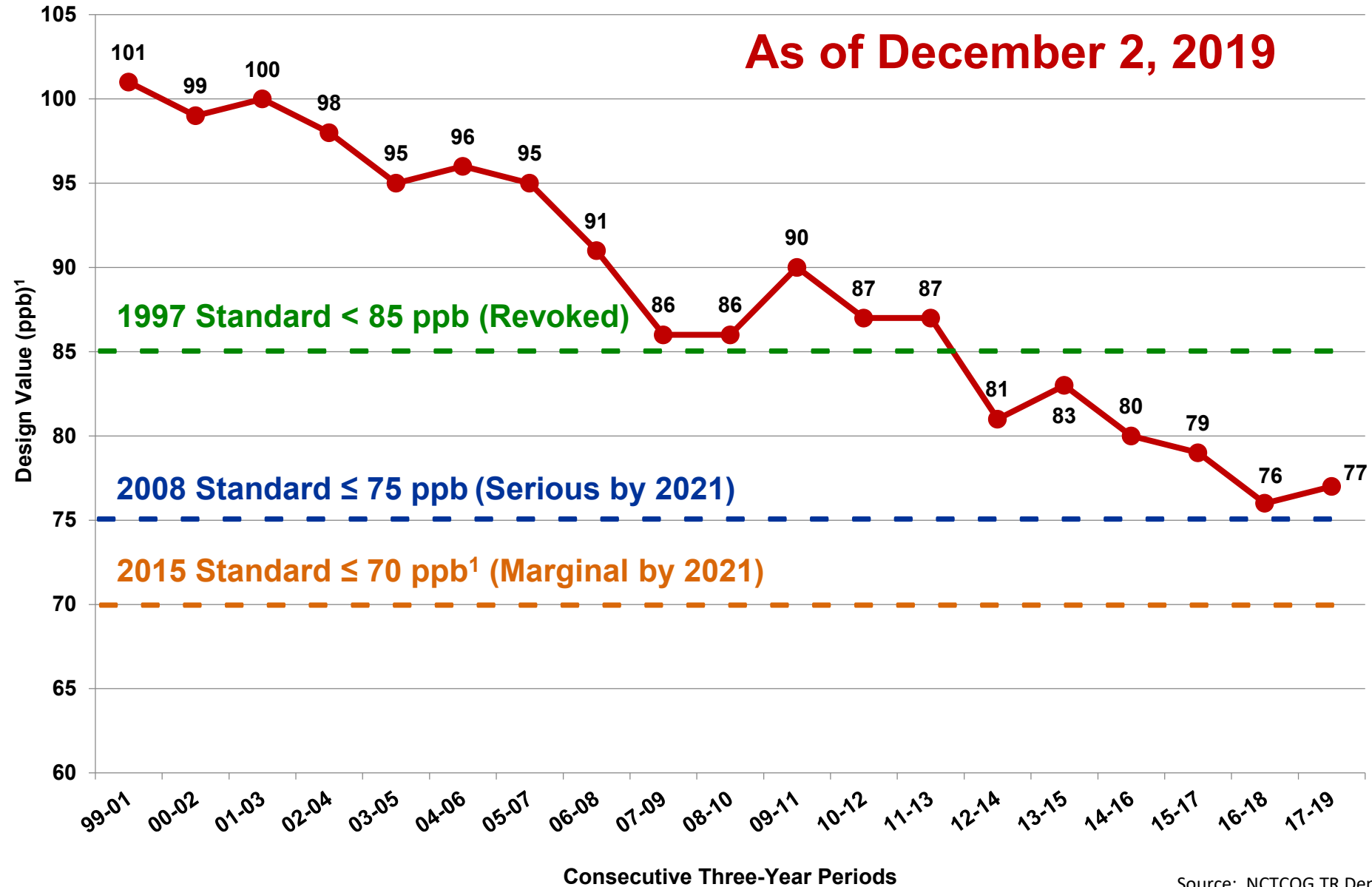
Based on ≤ 70 ppb (As of December 2, 2019)



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.

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

8-Hour Ozone NAAQS Historical Design Value Trend



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).

Air Quality Education

What Can You Do?

Work from home

Carpool

Bring lunch to work or carpool to lunch

Use mass transit

Bicycle or walk

Reduce idling, including during start up

Avoid unnecessary trips

Maintain consistent driving speed

Conserve water to conserve electricity

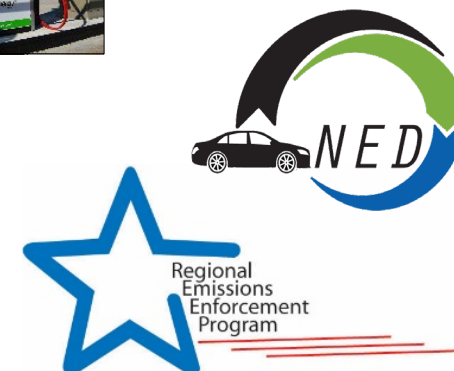
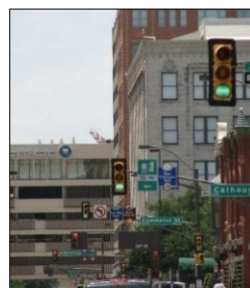
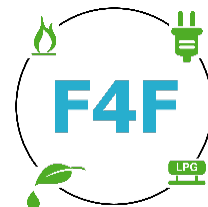
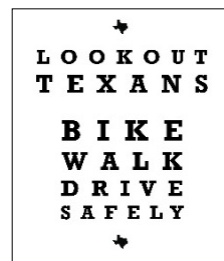
Postpone mowing to a day that is not an Ozone Action Day

Limit use of recreational vehicles

Sample of Air Quality Initiatives



Rideshare. Record. Reward.



Air North Texas 2020 Plans

Campus Clean Air Action Days to take place at participating universities throughout March and April

Staff presence at regional outreach events throughout the spring

Social media campaign for Air Quality Awareness Week, May 4th – May 8th

Clean Air Action Day (June 26)

Air North Texas advertisements and marketing will appear on radio, online, print, etc. (May-October)

Air North Texas Air Pollution Alert emails

www.airnorthtexas.org



Air Quality Education

Air North Texas

Website: www.airnorthtexas.org

Sign up for air pollution alerts

Find air quality and ozone information

Commit to clean air actions for individuals, businesses, governments

Become a partner



CLEAN AIR ACTIONS FOR INDIVIDUALS

Join businesses, local governments and other North Texans in committing to clean air actions.

Review the list below and select the strategies you currently or intend to implement during the critically important Ozone Action Days. High ozone levels can cause serious health problems, and inhaling ground-level ozone is especially dangerous for people who have asthma or respiratory problems.

Better air quality poses fewer health risks to residents and ensures the continued economic success of the region. For more information about how to implement some of these strategies, visit [here](#).

Strategies for individuals:

- ☐ Work from home
- ☐ Carpool
- ☐ Schedule off-site meetings or utilize conference call technology
- ☐ Bring lunch to work or carpool to lunch
- ☐ Use mass transit
- ☐ Bicycle or walk
- ☐ Reduce idling, including during start up
- ☐ Avoid unnecessary trips
- ☐ Drive the most fuel-efficient vehicle when driving is necessary
- ☐ Maintain consistent driving speed
- ☐ Conserve water to conserve electricity
- ☐ Postpone mowing to a day that is not an Ozone Action Day
- ☐ Limit use of recreational vehicles
- ☐ Avoid burning, including grilling and burning trash
- ☐ Conserve electricity

Other (please specify):

*Zip code:

*Email:

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<https://www.nctcog.org/trans/quality/air/ozone>