

Start of 2022 Ozone Season & Spring 2022 Car Care Awareness

NCTCOG Public Meeting • April 11, 2022

Nick Van Haasen, Air Quality Planner

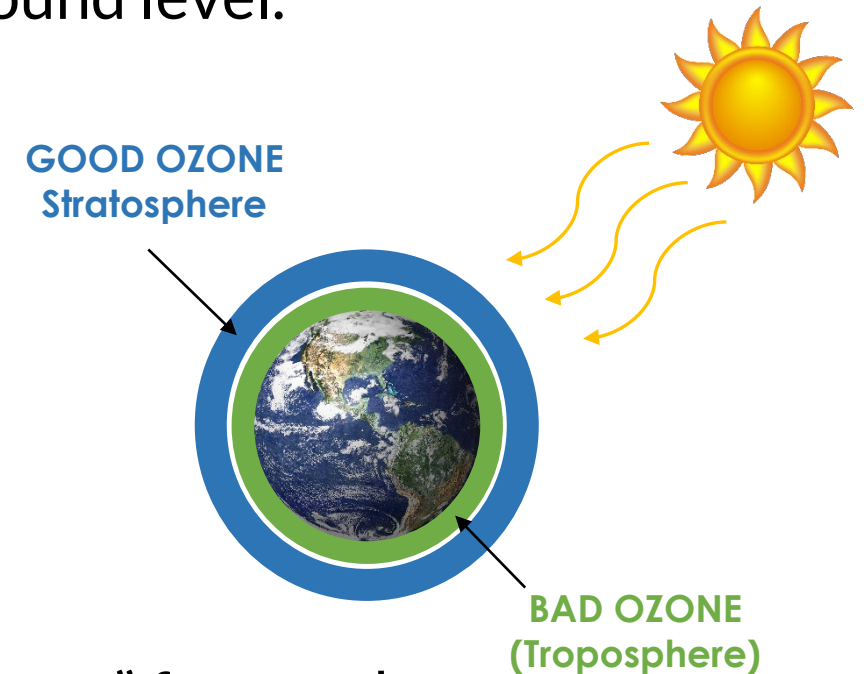
Anthony Moffa, Air Quality Planner

Ozone

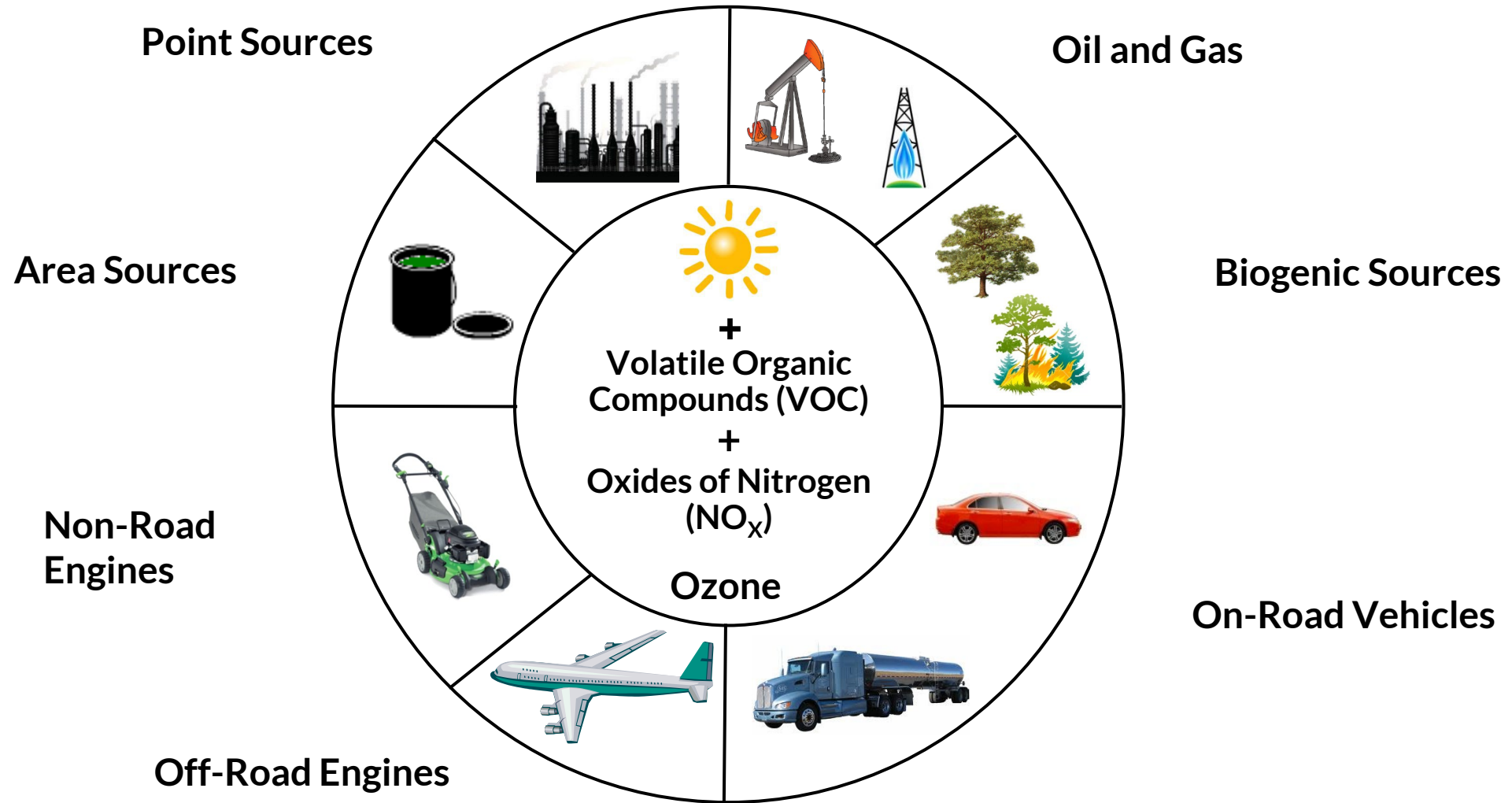
Ozone, a gas composed of three atoms of oxygen (O_3), occurs both in the Earth's upper atmosphere and at ground level.

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.



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.

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.

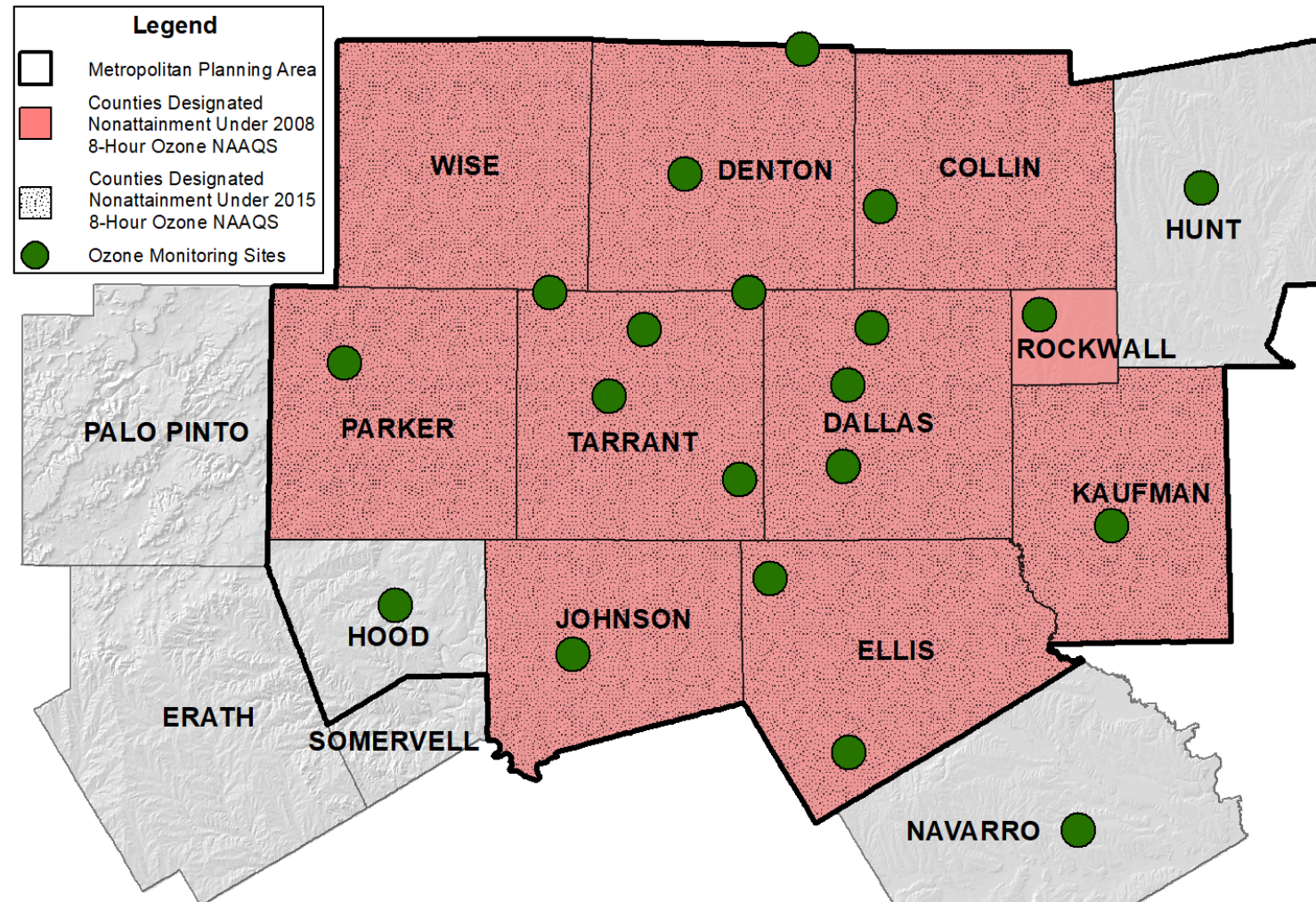
Cause chronic obstructive pulmonary disease (COPD).

Make the lungs more susceptible to infection.

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

Monitor Locations

2008 and 2015 Ozone NAAQS



Timeline and Milestones

2008 Ozone Standard (≤ 75 ppb)

Attainment Date:
No later than **July 20, 2027**

*Attainment will be based on
2024-2026 Ozone Monitor Data*

EPA NAAQS Classifications

Marginal
(3 years to attain)

Moderate
(6 years to attain)

Serious
(9 years to attain)

Severe
(15/17 years to attain)

Extreme
(20 years to attain)

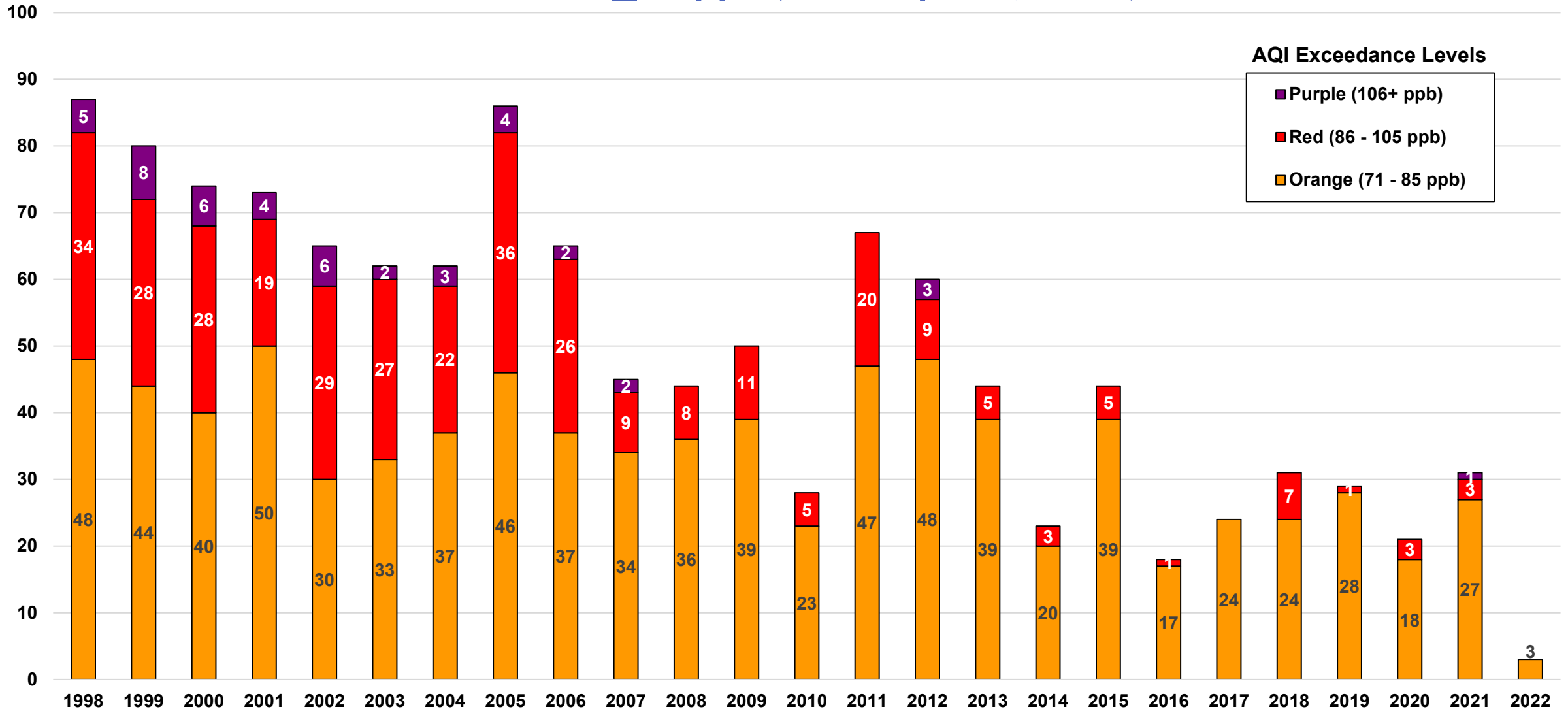
2015 Ozone Standard (≤ 70 ppb)

Attainment Date:
No later than **August 3, 2024**

*Attainment will be based on
2021-2023 Ozone Monitor Data*

8-Hour Ozone NAAQS Exceedance Trends

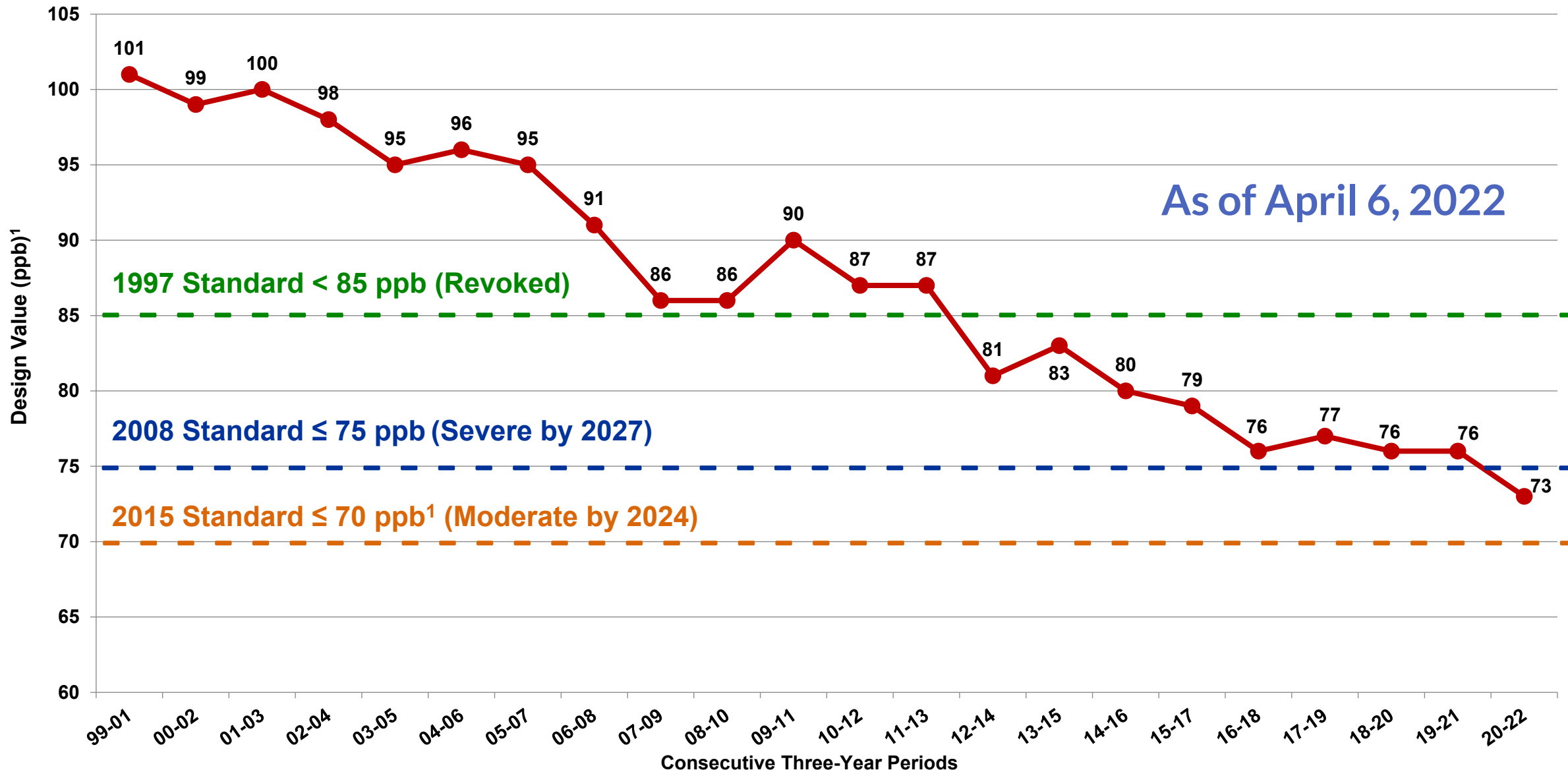
Based on ≤ 70 ppb (As of April 6, 2022)



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

Ozone Design Value 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 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

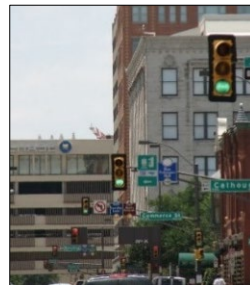
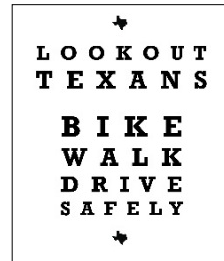
Postpone mowing to a day that is not an Ozone Action Day

Limit use of recreational vehicles

Sample of Air Quality Initiatives



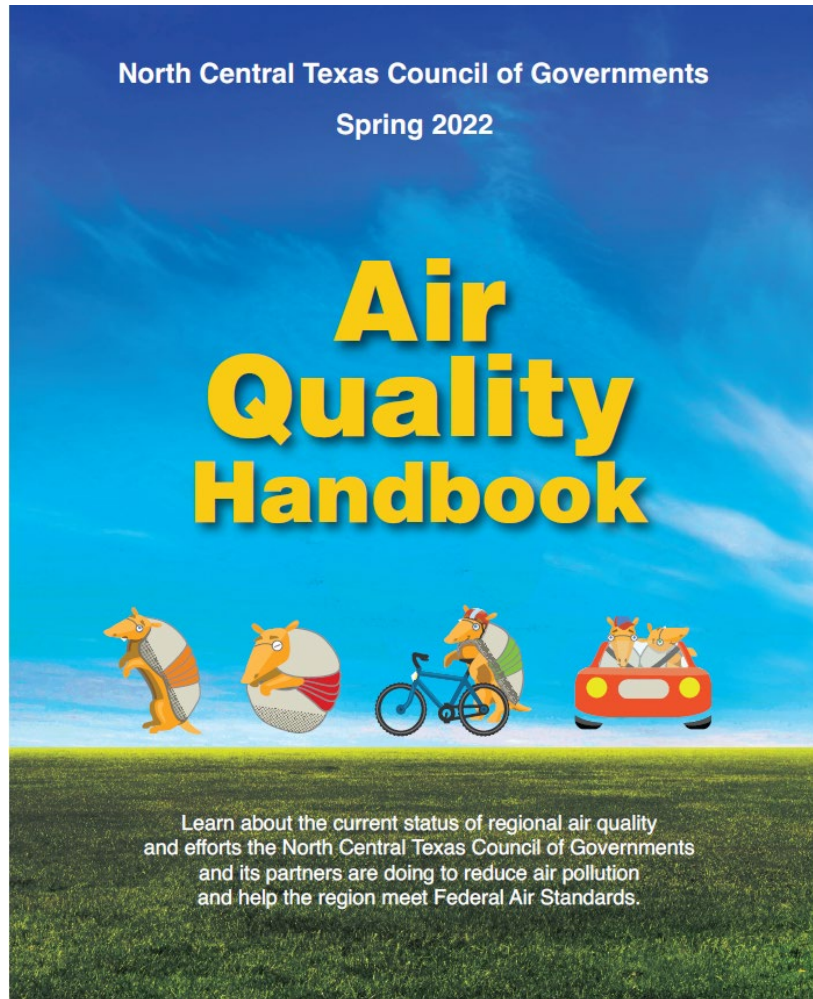
Rideshare. Record. Reward.



Air Quality Handbook

Bilingual

English



https://nctcog.org/nctcg/media/Transportation/DocsMaps/Quality/Air/AQ2022printer_Spring.pdf

Spanish



<https://www.nctcog.org/nctcg/media/Transportation/DocsMaps/Quality/Air/AQ2022SPANISH.pdf>

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

Air North Texas 2022 Plans

Staff presence at regional outreach events throughout the spring, summer, and fall

Social media campaign for Air Quality Awareness Week, May 2-6

Clean Air Action Day, August 3

Air North Texas advertisements and marketing in the July – August timeframe

Air North Texas Air Pollution Alert emails

Social media campaign with regional partners featuring Arlo the Airmadillo

www.airnorthtexas.org

Current Air Quality Index



Highlight of Outreach Events

- April 1** **UNT University Day**
- April 2** **Fix My Ride**
- April 3** **Oak Cliff Earth Day**
- April 21** **UNT Health Science Center Earth Day Fair**
UTDallas Earth Day Fair
- April 23** **City of Lewisville's Colorpalooza**
Grapevine Earth Day
Garland Drive Through Earth Day Celebration
- August 3** **Clean Air Action Day**



www.airnorthtexas.org

For More Information

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



Spring 2022 Car Care Awareness

NCTCOG PUBLIC MEETING

ANTHONY MOFFA

AIR QUALITY PLANNER

April 11, 2022

Car Care Awareness

Campaign Goal

Advance air quality benefits for the region

Inform vehicle owners and general public about proper vehicle maintenance

Educate about check engine light importance and meaning

Build stronger community relations

Aligning nationally with the April and October Car Care Awareness months



Car Care Awareness

Campaign History

Program began as free public clinics, hosted at partnered Recognized Emissions Repair Facilities

Clinics focused on the organization's message of air quality through education

Provided vehicle owners an opportunity to speak with qualified technicians about their check engine light and other vehicle concerns at no cost to them

Focus shifted to electronic outreach in 2020 due to COVID-19 pandemic



Car Care Awareness

Current Efforts

Partnering with nonprofit organizations and vehicle repair shops throughout the region to provide focused outreach

Providing Car Care Awareness digital toolkits and educational material to local governments and organizations upon request

Updating North Texas Car Care Awareness website with vehicle maintenance tips and online education materials for download

North Texas Car Care Awareness



www.ntxcarcare.org

CONTACT US

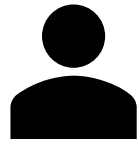
Please contact and let us know if you have a particular organization or automotive repair shop representative for future Car Care Awareness coordination



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