

## Quick Take

### Dallas-Fort Worth Nonattainment Area

Many Dallas-Fort Worth area counties do not meet the EPA's regulation for ozone pollution, meaning the region has additional environmental responsibilities when completing transportation improvements. The nonattainment counties are Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant and Wise.

### What is ozone?

Ozone (O<sub>3</sub>) is a gas formed in the atmosphere when three atoms of oxygen combine. Ozone is found both high in the stratosphere and near the ground. Ground-level ozone, which is harmful to our health, forms when nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC) are released in the air and mix in the presence of sunlight. High concentrations of ozone usually occur during the summer.

### Where does it come from?

Ozone emissions come from many sources. In DFW, mobile sources (vehicles, construction equipment, locomotives, aircraft, etc.) account for around 67 percent of NO<sub>x</sub> emissions.

## Air Quality Essential to DFW Transportation

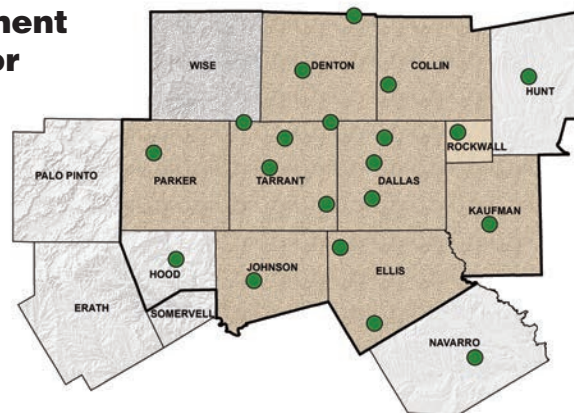
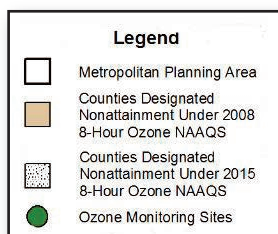
The North Texas transportation system is an expensive asset to maintain. By 2045, the rapidly growing region expects to spend approximately \$136.4 billion in an effort to improve the reliability of its roadways, transit and other transportation elements.

In North Texas, transportation planners have more to think about than how to get people where they are going more efficiently. Ten Dallas-Fort Worth (DFW) area counties are out of compliance with the Environmental Protection Agency's (EPA) 2008 ozone standard of 75 parts per billion (ppb), while nine of those counties (Rockwall County is excluded) are out of compliance with EPA's 2015 ozone standard of 70 ppb. Although there are a number of reasons for this, transportation professionals have to ensure mobility improvements can be made without negatively impacting the air. The region must implement measures to improve its air quality or face future sanctions from the EPA and potentially lose transportation funding. With a rapidly growing population and aging infrastructure, the DFW area needs more funding, not less.

The North Central Texas Council of Governments (NCTCOG) works closely with regional partners to develop and implement strategies, policies and programs to enhance air quality. NCTCOG periodically allows public and private entities to compete for funding intended to reduce the emissions of their fleets and purchase cleaner equipment.

NCTCOG also uses programs that allow the public to participate in the process. Travel Demand Management and Transportation Systems Management strategies also help NCTCOG improve air quality.

### Ozone Nonattainment Areas with Monitor Locations



For real time monitor data, visit [https://www.tceq.texas.gov/cgi-bin/compliance/monops/8hr\\_attainment.pl](https://www.tceq.texas.gov/cgi-bin/compliance/monops/8hr_attainment.pl)

The design value, which determines a county's or region's attainment status, is the three-year average of the fourth-highest value recorded at any given monitor. The 2008 8-hour National Ambient Air Quality Standard (NAAQS) for ozone is exceeded when the Design Value (DV) is more than 75 ppb and the 2015 8-hour NAAQS is exceeded when the DV is more than 70 ppb.

## Categories of Emissions Sources

**AREA** – Bakeries, paint shops, dry cleaners

**NON-ROAD MOBILE** – Construction, agriculture

**OFF-ROAD MOBILE** – Aircrafts, locomotives

**ON-ROAD MOBILE** – Cars, trucks, buses

**POINT** – Cement facilities, power plants

**OIL and GAS** – Production, drill rigs

**BIOGENICS** – Vegetation, wildfires

**BACKGROUND** – Emissions transported into the region

## How is Ozone Harmful?

Ozone in the upper atmosphere, “good ozone,” is beneficial and serves as a protective layer blocking damaging ultraviolet rays from the sun. Ground-level ozone is potentially harmful. Studies indicate elevated levels of this “bad ozone” may make breathing more difficult, increase the frequency of asthma episodes, reduce the body’s ability to resist respiratory infections, and pose a risk to the environment, wildlife, agriculture and manufactured structures in the region.

## History

Ozone is one of six pollutants governed by the National Ambient Air Quality Standards (NAAQS) set by the EPA. The DFW area is subject to two ozone standards, i.e., the serious nonattainment area of 10 counties under the 2008 ozone NAAQS of 75 ppb and marginal nonattainment area of nine counties under the 2015 ozone NAAQS of 70 ppb. NCTCOG is committed to working with regional partners on plans, programs, projects, policies and partnerships to reduce ozone-forming emissions in the DFW region, meet EPA ozone NAAQS and help residents breathe easier.

## Regional Efforts

NCTCOG administers various air quality programs such as removing/repairing high-emitting vehicles/equipment, eliminating unnecessary idling, encouraging fleet modernization and providing financial incentives.







For more information, visit <https://www.nctcog.org/trans/quality/air>

## Air Pollution Alert System

It is important to stay informed of daily air quality information in North Texas. Residents can sign up to receive air pollution alerts when ozone levels are forecast to be high. These alerts indicate that air quality is likely to reach unhealthy levels within 24 hours. These email alerts inform residents, businesses and industries of expected high ozone days so they can make decisions that contribute to cleaner air.

It is recommended people stay indoors or limit their outdoor activity when ozone levels are high. The elderly and children, as well as those with respiratory problems, could suffer severe health problems from prolonged exposure even when the air quality is only moderately unhealthy. Residents can also make behavioral changes year-round, such as carpooling, taking transit, or telecommuting to help reduce emissions levels and decrease the number of bad ozone days.

To sign up for air pollution alert emails, visit <https://www.airnorthtexas.org/signup>

Color	Air Quality	Actions to Protect Your Health
	Good	None necessary
	Moderate	Unusually sensitive people should consider limiting prolonged outdoor exertion
	Unhealthy for Sensitive Groups	Active children and adults and people with respiratory disease, such as asthma, should limit prolonged outdoor exposure
	Unhealthy	Active children and adults and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion
	Very Unhealthy	Active children and adults and people with respiratory disease, such as asthma, should avoid all prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion
	Hazardous	The entire population is more likely to be affected

Source: EPA



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