



City of Denton

City Hall
215 E. McKinney Street
Denton, Texas
www.cityofdenton.com

AGENDA INFORMATION SHEET

DEPARTMENT: Environmental Services & Sustainability

ACM: Frank Dixon, Assistant City Manager

DATE: September 16, 2025

SUBJECT

Receive a report, hold a discussion, and give staff direction on the new public-facing City of Denton Air Quality Dashboard.

BACKGROUND

The Texas Commission on Environmental Quality (TCEQ) regulatory air quality monitors are located throughout the state, including one in northwest Denton. The TCEQ monitors assess regional air quality compliance with National Ambient Air Quality Standards (NAAQS) established by the Clean Air Act, and do not allow for neighborhood-level assessment of local air quality. In 2023, the City of Denton staff began the process to procure 12 non-regulatory air quality sensors that were installed in 2024 and provide neighborhood-level data. Site locations were chosen based on several criteria, including sufficient spatial distribution throughout the city, DC power availability, minimal tree canopy cover, and distance from roadway.

The City of Denton sensors record ambient temperature, humidity, ground-level ozone (O₃), carbon monoxide (CO), total volatile organic compounds (TVOC), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and particulate matter (PM_{2.5} and PM₁₀). Additionally, four of the 12 sensors measure wind speed and wind direction.

Currently, the City of Denton website educates residents on regional air quality and ongoing efforts to reduce greenhouse gas emissions and improve local air quality. Staff have built a public-facing dashboard on the website, which displays the previous week's averages of O₃, PM_{2.5}, PM₁₀, and ambient weather. Within the dashboard, there are links to the Denton Airport South TCEQ site and educational material on ground-level ozone and particulate matter. Staff are working on a live dashboard to be launched late 2025 that will report 24-hour rolling averages of the air quality parameters. This dashboard is only for informational purposes to educate residents about local air quality at the neighborhood-level.

EXHIBITS

1. Agenda Information Sheet
2. Presentation

Prepared By:
Kaitlynn Davis
Conservation Programs Coordinator