Simply Sustainable Framework

2025

The City of Denton, located in North Texas, is the 20th largest city in Texas and growing at 3.5% annually. Denton is part of the greater Dallas-Fort Worth (DFW) metroplex and has an estimated current population of over 155,000 people. The DFW area is the largest metropolitan statistical area in Texas and the fourth largest in the United States. DFW is home to the DFW International Airport, the 3rd busiest airport in the U.S., offering Denton the ability to be located near a central travel hub.

The City of Denton is known for having a thriving arts, entertainment, and music scene with yearly events like the Arts and Jazz Fest, Denton Blues Fest, Day of the Dead, and the Holiday Lighting festival, which bring in visitors from inside and outside the metroplex for a quick stop in this growing college town. Denton is home to two universities, the University of North Texas and Texas Woman's University, and one satellite campus of North Central Texas College. These academic institutions had a combined enrollment of over 60,000 students as of 2023. Student enrollment is expected to increase by 13% within the next 4 years. Denton was named one of the 10 best College Towns in the nation, and as a college town, it has 52% of renter-occupied units. With the large number of renters being students, the city experiences a higher turnover of residents compared to cities without higher education institutions. Due to the high turnover rate, there is a short period of time to educate and inform many of our residents about conservation and sustainability practices. Denton is also a destination for people who commute to work. The City of Denton employs over 1,000 employees, with 44% living within the city and 55% living outside of the city and commuting in. With over 5,000 other businesses, including top employers such as the University of North Texas, Peterbilt, Texas Health Presbyterian Hospital, and Texas Woman's University, many other employees commute in for work. Outreach to commuters who don't live within City limits is essential, as they also consume resources and contribute to community-wide greenhouse gas emissions. The goal of the Sustainability Framework is to lay a foundation for municipal planning that weaves together the broad community that makes up Denton while ensuring the availability of resources for years to come. To ensure the City of Denton continues to prioritize sustainability and continually evaluates and enhances programs and services necessary to support a growing community, the Simply Sustainable Framework update included future consideration for a thriving community.

The City of Denton's longstanding commitment to sustainability has led to numerous programs and projects focused on improving our environment, providing assistance to the community to become more sustainable, and providing replicable programs that other cities can follow. The LEED for Cities and Communities program defines sustainability as the balance of social, economic, and environmental performance across a city or community, encompassing areas like natural systems, energy, water, waste, transportation, and quality of life. The consumption of natural resources, such as water, energy, land, air, and materials, is required for growth but will have an impact on nature over time. Sustainability can also encompass the resilience of infrastructure to stressors and shocks, such as the impacts of climate change and population growth.

The population of the DFW metroplex is projected to increase by 67% between 2020 and 2050, with employment increasing by 264% in the same period. Housing data has also shown that a previously anticipated growth of 3.19% is now realistically looking like a 4.4% demand to meet housing goals for single-family and multifamily units. This projected growth has led North Texas municipalities to proactively plan for rapid growth. Existing infrastructure will need to be consistently addressed as a growing population continues to add stress. Indicators such as traffic congestion, housing availability, and consumption of resources such as water, energy, and landfill air space will need to be monitored for infrastructure health as the population continues to grow. Additionally, long-range plans will need to be reevaluated more often to ensure City goals are being met and current levels of service are maintained.

Texas ranks highest among states most impacted by natural disasters. North Texas in particular is no stranger to wildfires, droughts, freezes, flooding, and severe storms. Most recently, the COVID-19 pandemic and winter storm URI in 2021 were both unprecedented shocks to the state. While local governments continuously have to critically think about the resiliency of infrastructure and operations, these events have brought the topic to the forefront. Cities and counties must be prepared to take a proactive approach to address the stress a changing climate and increasing population will bring to current and future infrastructure. Resilient communities are adaptable and aim to be stable against a range of external factors. According to the National Resilience Guidance (NRG) a resilient community has the "*ability to prepare for threats and hazards, adapt to changing conditions, and withstand and recover rapidly from adverse conditions and disruptions. Through a clear understanding of ongoing and projected climate stressors, communities can maximize their preparedness and swiftly adapt such that their local environment and residents are protected*."

The City of Denton is unique in that it owns and operates municipal utilities, providing the city more direct control of operations and the ability to adjust efforts to decarbonize operations as we move toward a net-zero goal by 2050. The City controls aspects of solid waste and recycling, water and wastewater, and electric utility services. Having internal utilities allows the City more direct control of operations, including exploring avenues that will decarbonize operations and carry Denton toward its net-zero goal.

Goal 1: Reduce the environmental footprint of municipal operations, assets, and facilities to be in line with Science-Based Targets. Evaluate and improve city facilities to ensure they are resilient to hazards and vulnerabilities and can be a resource to the public.

Goal 2: Provide outreach, incentives, and policies that encourage behavior change and support sustainability for the community. Reduce barriers that prevent the community from reducing their resource dependency on fossil fuels, water, energy, and waste.

Goal 1:

Reduce the environmental footprint of municipal operations, assets, and facilities to be in line with Science-Based Targets. Evaluate and improve city facilities to ensure they are resilient to hazards and vulnerabilities and can be a resource to the public.

Strategies:

- Energy
  - Continue to provide sufficient 100% renewable energy to DME customers.
  - Track and reduce municipal government energy consumption through demand reduction in both new construction and building retrofits.
  - Review Facilities Management policies and best practices to ensure they are in line with resource efficiency goals
  - Enhance energy efficiency standards for new construction
  - Investigate SolarApp+ to expedite the permitting process for code-compliant residential rooftop photovoltaic installations
  - Explore alternative incentives such as property tax exemptions for residents who install renewable energy systems at their primary residence
  - Update and implement the City resource conservation policy
  - Evaluate the inclusion of on-site renewable energy systems for new and appropriate existing facilities
- Water/Wastewater
  - Track and reduce municipal government water consumption through efficient fixtures, smart controls, and best practices
  - Identify new areas to extend reclaimed water lines to provide access to new city users
  - Modify City code to require small and large development projects connect to reclaimed water line where available
  - Investigate Direct Potable Reuse, Indirect Potable Reuse, and Reuse Aquifer Storage Recovery (AS)
  - Maximize use of site-produced Renewable Natural Gas (RNG)
  - Maintain Integrated Stormwater Management (ISWM) Silver Level (Could talk about raising awareness for the process)
  - Update and implement the resource conservation policy
  - Explore rainwater capture and greywater reuse at City facilities
- Materials Management
  - Complete the Landfill Gas to Energy (LFGE), which will allow the Landfill to harness methane to produce Renewable Natural Gas (RNG)
  - Expand food waste and organics collection programs to schools and universities
  - Maximize diversion opportunities at City Facilities

    - Update and implement the resource conservation policy
- Air Quality
    - Replace fossil fuel-powered equipment with electric options where feasible within municipal operations and facilities.
    - Create a dashboard and ensure Denton air quality monitor data is readily available to the public
    - Review City policies and alternative employee work schedules that can reduce the City of Denton's emission levels during ozone season
    - Participate in the North Central Texas Council of Governments Air Quality Programs.
    - Evaluate and enforce air quality policies for City fleet and equipment (anti-idling and ozone action day restrictions)
- Transportation
    - Reduce fossil fuel dependency in municipal fleet and operations, where possible, and opt for alternative fuel vehicles where feasible (Dependent on market availability and vehicle allocation)
    - Update Clean Fleet policy
    - Partner with Economic Development to seek new businesses and work with existing that will install alternative fueling stations
    - Identify and reduce barriers for private businesses to be able to build EV charging stations within the City
- Land Use
    - Encourage redevelopment of infill areas by reducing barriers in the Denton Development Code
    - Explore reductions/exemptions in infill areas on impact fees.
    - Assess barriers to housing in the Downtown core, such as multifamily development and townhome development
    - Complete the Citywide Parking Study to explore opportunities to reduce parking minimums
    - Adopt the most up-to-date building codes and evaluate current rating systems (i.e. EnergyStar, LEED, etc.)
    - Conduct a tree canopy assessment to inform revision of the Urban Forest Master plan to set attainable tree canopy goals
    - Identify with Parks & Rec green space where invasive species can be removed and replaced with native grasses that effectively sequester carbon
    - Continue to pursue Bee City USA, Monarch City USA, Mayor's Monarch Pledge, and Bird City certification Programs provide opportunities to build awareness of benefits of pollinators, encourage native landscaping, and preservation of natural spaces.

City Operations and Facilities

Key Performance Indicators	Targets
Volume of potable water used for City facilities	Decrease the volume of potable water used for City facilities

Percentage of reclaimed water to potable used for irrigation at City facilities	Increase the percentage of reclaimed water to potable used for irrigation at City facilities
Percentage of reclaimed water to potable used at the bulk fill station by City accounts	Increase the percentage of reclaimed water to potable used at the bulk fill station by City accounts
Total municipal government energy consumption	5 percent reduction in total municipal government energy consumption From 2019
GHG Emissions – Municipal Government Operations (Metric Tons of Carbon Dioxide Equivalent)	Net-zero by 2050
GHG Emissions from Municipal Fleet	25 percent reduction by 2025
Annual Municipal Fleet Fuel Consumption	Reduce use of fossil fuels as a percentage of total fuel consumption
Number of Vehicles using Alternative Fuels (Hybrids, etc.) in Municipal Vehicle Fleet	Increase the number of Vehicles using Alternative Fuels within the Municipal Fleet
Number of fossil fuel miles traveled within Municipal Fleet	Reduce the number of fossil fuel miles traveled
Number of electric miles traveled within Municipal Fleet	Increase the number of electric miles traveled
Percentage of new light-duty vehicle purchases to be electric	30 percent by 2030
Report City of Denton Air Quality monitor data monthly	Yes or no
Net tons of material recycled at City Facilities	Increase net tons of material recycled at City Facilities
Acres of protected open space and environmentally sensitive areas (ESAs)	Continue to maximize the protection of open space and protected areas

Goal 2: Provide outreach, incentives, and policies that encourage behavior change and support sustainability for the community and businesses. Reduce barriers that prevent residents from reducing their resource dependency on fossil fuels, water, energy, and waste.

Strategies:

Resources

- Energy
    - Support energy efficiency and building envelope improvement in existing residential structures through rebates, audits, workshops, resources, and other tools such as weatherization kits.
    - Track distribution of rebates, audits, and weatherization kits within the community to be able to quantify energy consumption and reduction

    - Attend community events to provide information to residents on best practices and provide tools to reduce energy consumption through weatherization, unplugging devices, installing Energy Star certified appliances, and local/federal energy efficiency incentives.
- Water
    - Provide water audits, irrigation evaluations, and other water conservation incentives
    - Increase the number of conservation workshops/classes, i.e., rain barrel, DIY irrigation tune-ups, and low water use landscaping.
    - Attend community events to provide information to residents on best practices and provide resources to reduce water consumption through xeriscaping, native planting, and irrigation type and scheduling
- Materials Management
    - Continue recycling audits for Solid Waste and Recycling customers
    - Collaborate with community organizations, Homeowners Associations (HOAs), and other groups to host more Batteries Oil Paints, and Antifreeze (BOPA) events.
    - Partner with nonprofits, vendors, or organizations to accept material considered non-programmatic
    - Create a map as an additional resource for local drop-off locations to divert material
    - Identify and pilot additional diversion opportunities at university move-outs
    - Attend community events to share about programmatic material, contaminants, and other diversion opportunities such as Home Chemical Collection, yard waste program, composting at home, and donating locally.
- Air Quality
    - Intertwine air quality programming into workshops, classes, and events
    - Provide resources for residents to stay informed on the Air Quality Forecast
    - Incentivize residents' use of electric-powered lawn equipment
    - Evaluate opportunities to incentivize commercial electric-powered lawn equipment
    - Provide an interactive air quality dashboard with guidance on utilization
- Transportation
    - Offer alternative transportation education, which familiarizes residents with how to get around Denton using public transit, biking, or walking
    - Track distribution of EV and Ebike rebates within the community
    - Partner with Denton Independent School District (DISD) to support Safe Routes to Schools
    - Provide resources to encourage the safe use of active transportation
    - Track public transit ridership within the City of Denton around events and on off-peak times
- Land Use

- Provide outreach education through workshops, the Emily Fowler Seed Library, and other outlets to be able to inform residents about native wildlife, invasive species, and pollinator gardens
- Establish a program to continue to encourage backyard and community gardening within City limits such as providing tours of community gardens
- Equip residents with best practices for tree care, and look at opportunities to register their trees and new plantings
- Launch a public facing dashboard showing the tree canopy of Denton
- Work toward National Wildlife Federation's Community Wildlife Habitat Certification

City Incentives

Key Performance Indicators	Targets
Percentage of funding depleted for Energy Efficiency rebates	100 percent of funding depleted for Energy Efficiency rebates
Percentage of funding depleted for Water rebates	100 percent of funding depleted for Water rebates
Percentage of funding depleted for EV/E-Bike rebates	100 percent of funding depleted for EV/E-Bike rebates
Percentage of funding depleted for Tree Rebates	100 percent of funding depleted for Tree Rebates

Sustainable Outreach and Education

Key Performance Indicators	Annual Target (FY 23-24 baseline)
Number of Participants in Water Outreach Programs (Audits and Classes)	5 percent increase of the number of participants engaged in water outreach programs
Number of Participants in Energy Outreach Programs (Audits and Classes)	5 percent increase in the number of participants engaged in energy outreach programs
Number of Participants in Materials Management Outreach Programs	5 percent increase in the number of participants engaged in Materials Management programs
Number of Participants in Air Quality Outreach Programs	5 percent increase of the number of participants engaged in Air Quality programs
Number of Participants in Alternative Transportation Outreach Programs	5 percent increase of the number of participants engaged in alternative transportation outreach programs
Number of Participants in Local Food Programs	5 percent increase of the number of participants engaged in local food programs
Number of Schools registered in the Denton Sustainable Schools Program	Increase the number of Schools registered in the Denton Sustainable Schools Program

Community Measures

Key Performance Indicators	Targets
Reduction in system water loss	50 percent reduction in system water loss by 2050
Percentage of reclaimed water to potable used by commercial businesses	Percentage of reclaimed water to potable used by commercial businesses
Volume of reclaimed water used at the bulk fill station by commercial accounts	Increase the volume of reclaimed water used at the bulk fill station by commercial accounts
Track Public Transit Ridership around Downtown events and during off-peak times	Yes or no
GHG Emissions – Community-wide per capita (Metric Tons of Carbon Dioxide Equivalent)	Reduce GHG emissions
Quantity of yard waste collected annually	Increase the quantity of yard waste collected annually
Quantity of Dyno Products purchased annually	Increase the quantity of Dyno Products purchased annually
Total Number of first-time users of Home Chemical Collection (HCC)	Increase the number of first-time users of Home Chemical Collection (HCC)
Total Volume of Household Hazardous Waste collected by Home Chemical Collection (HCC)	Decrease the volume of Household Hazardous Waste collected by Home Chemical Collection from repeat customers
Number of facilitated take-back events for non-programmatic items	Increase the number of facilitated take-back events for non-programmatic items, a minimum of 1 quarterly
Number of certified wildlife habitats	Increase the number of certified wildlife habitats
Track the Number of Trees planted residentially	Yes or no
Track the Number of Trees planted at commercial and industrial development	Yes or no

What can Dentonites do?

Air Quality

- Use electric lawn equipment instead of gas-powered
- Walk, bike, take public transit, or carpool when possible
- Use your most efficient form of transportation

Transportation

- Combine trips
- Use active transportation such as biking and walking when feasible
- Support public transit by using it to attend downtown events
- Take advantage of the EV/Ebike rebates provided by the City of Denton, as well as other incentives

Energy

- Make energy efficient home improvements
- Improve your building envelope through weatherization by insulating and sealing attic spaces; weather-seal doors and windows
- Use Energy Star appliances
- Utilize energy audits DIY or through City
- Set your thermostat to 78°F in summer and 68°F in winter while home
- Consider thermostat settings of when away or sleeping, consider raising it to 80°F - 82°F N
- Consider using a fan in the summer to assist with cooling, visit www.sustainabledenton.com in summer for the annual fan giveaway

Water

- Plant native plants and use xeriscaping when possible
- Water only on designated days
- Water before 10 a.m. or after 6 p.m. to reduce evaporation
- Pick up after your pet, dispose of pet waste properly
- Host a clean-up event near a local water way or adopt-a-spot with your organization
- Dispose of HHW and pharmaceuticals properly

Materials Management

- Recycle only programmatic materials in curbside recycling, visit www.dentonrecycles.com to learn what is accepted
- Repair items or donate versus landfilling
- Buy in bulk to reduce packaging waste

Land use

- Support locally grown produce by purchasing from local

- Plant native and drought tolerant plants
- Create a wildlife habitat at home and certify through the NWF certification and become a Denton Wildlife Steward