



City of Denton

City Hall
215 E. McKinney St.
Denton, Texas 76201
www.cityofdenton.com

Meeting Agenda

Sustainability Framework Advisory Committee

Friday, October 24, 2025

1:00 PM

City Council Work Session Room

After determining that a quorum is present, the Sustainability Framework Advisory Committee of the City of Denton, Texas will convene in a Regular Meeting on Friday, October 24, 2025, at 1:00 p.m. in the Council Work Session Room at City Hall, 215 E. McKinney Street, Denton, Texas at which the following items will be considered:

1. ITEMS FOR INDIVIDUAL CONSIDERATION

- A. [SFAC25-036](#) Consider approval of the September 26, 2025 minutes.

Attachments: [SFAC Minutes September 26, 2025](#)

- B. [SFAC25-030](#) Receive a report, hold a discussion, and give staff direction regarding City Council request to review two-minute pitch for rooftop solar and rooftop garden/wall garden retrofits for existing City facilities.

Attachments: [Exhibit 1. Agenda Information Sheet](#)
[Exhibit 2. Two-Minute Pitch Presentation](#)
[Exhibit 3. Informal Staff Report No. 2025-023](#)
[Exhibit 4. Presentation](#)

- C. [SFAC25-037](#) Receive a report and consider a recommendation to City Council for adoption on the final draft of the Simply Sustainable Framework.

Attachments: [Exhibit 1. Agenda Information Sheet](#)
[Exhibit 2. Final Draft of Simply Sustainable Framework](#)
[Exhibit 3. Presentation](#)

- D. [SFAC25-038](#) Staff Reports
1. Moseley Road Landfill Memo Solid Waste & Recycling
2. Matrix

Attachments: [Moseley Road Landfill Memo Solid Waste & Recycling](#)
[Matrix](#)

2. CONCLUDING ITEMS

A. Under Section 551.042 of the Texas Open Meetings Act, respond to inquiries from the Sustainability Framework Advisory Committee or the public with specific factual information or recitation of policy, or accept a proposal to place the matter on the agenda for an upcoming meeting AND Under Section 551.0415 of the Texas Open Meetings Act, provide reports about items of community interest regarding which no action will be taken, to include: expressions of thanks, congratulations, or condolence; information regarding holiday schedules; an honorary or salutary recognition of a public official, public employee, or other citizen; a reminder about an upcoming event organized or sponsored by the governing body; information regarding a social, ceremonial, or community event organized or sponsored by an entity other than the governing body that was attended or is scheduled to be attended by a member of the governing body or an official or employee of the municipality; or an announcement involving an imminent threat to the public health and safety of people in the municipality that has arisen after the posting of the agenda.

CERTIFICATE

I certify that the above notice of meeting was posted on the official website (<https://tx-denton.civicplus.com/242/Public-Meetings-Agendas>) and bulletin board at City Hall, 215 E. McKinney Street, Denton, Texas, on October 20, 2025, in advance of the three (3) business day posting deadline, as applicable, and in accordance with Chapter 551 of the Texas Government Code.

OFFICE OF THE CITY SECRETARY

NOTE: THE CITY OF DENTON'S DESIGNATED PUBLIC MEETING FACILITIES ARE ACCESSIBLE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT. THE CITY WILL PROVIDE ACCOMMODATION, SUCH AS SIGN LANGUAGE INTERPRETERS FOR THE HEARING IMPAIRED, IF REQUESTED AT LEAST 48 HOURS IN ADVANCE OF THE SCHEDULED MEETING. PLEASE CALL THE CITY SECRETARY'S OFFICE AT 940-349-8309 OR USE TELECOMMUNICATIONS DEVICES FOR THE DEAF (TDD) BY CALLING 1-800-RELAY-TX SO THAT REASONABLE ACCOMMODATION CAN BE ARRANGED.

**CITY OF DENTON SUSTAINABILITY
FRAMEWORK ADVISORY COMMITTEE MINUTES
September 26, 2025**

After determining that a quorum was present, the Sustainability Framework Advisory Committee of the City of Denton, Texas convened in a Regular Meeting on Friday, September 26, 2025, at 1:00 p.m. in the City Council Work Session Room at 215 E. McKinney St, Denton, Texas.

PRESENT: Chair Edward Soph, Vice Chair Brand Richter, Member Dave Helms, Member Adam Briggie, and Member Camelia Maier.

LEGAL REPRESENTATION: Christopher Mullins

ABSENT: None

REGULAR MEETING

1. ITEMS FOR INDIVIDUAL CONSIDERATION

A. SFAC25-029 Consider approval of the August 22, 2025, minutes.

Chair Soph requested consideration of the previous meeting minutes for August 22, 2025. Member Helms moved to approve the minutes. Vice Chair Richter seconded. Motion carried.

AYES (5): Chair Soph, Vice Chair Richter, Member Helms, Member Briggie, and Member Maier

NAYS (0): None

B. SFAC25-031 Receive a report and hold a discussion regarding Water Conservation Incentives.

The item was presented by Haley Salazar with the Denton Water Utilities Department. Haley discussed the Lawn and Landscape Ordinance, Water Conservation & Drought Contingency Plan, as well as irrigation compliance for the City of Denton. She also discussed the collaboration with the Environmental Services & Sustainability Department to create water rebates and water incentive programs. Incentive programs are irrigation-focused and include controller rebates, irrigation evaluations, sprinkler tune-ups, and turf buy-back. She further discussed the next steps for the increased violation communication with AMI (Automated Metering Infrastructure) and AMR (Automated Mobile Robots) technology, yard sign program, commercial and institutional turf buy-back program, and future development engagement.

Members asked questions and held a discussion.

C. SFAC25-033 Receive a report, hold a discussion, and consider approval of the Fiscal Year 2025-2026 Sustainability Framework Fund Workplan.

The item was presented by Katherine Barnett with the Environmental Services & Sustainability Department. Katherine discussed the City of Denton's Fiscal Year 2025-2026 Sustainability Framework Fund Workplan as well as the 2025-2026 Programs.

Members asked questions and held a discussion.

Chair Soph requested consideration of the adoption of the City of Denton's Fiscal Year 2025-2026 Sustainability Framework Fund Workplan. Vice Chair Richter moved for adoption. Member Maier seconded. Motion carried.

AYES (5): Chair Soph, Vice Chair Richter, Member Helms, Member Briggles, and Member Maier

NAYS (0): None

D. SFAC25-025 Staff Reports

1. Styrofoam Memo
 2. 2025 Fan Giveaway Staff Report
 3. Matrix
- Member Maier requested an update from Tony Puente, Jr. with the Denton Municipal Electric Department regarding what the pollution costs would be if an acquisition of dispatchable generation occurs, particularly in reference to gas. She also requested that Tony provide details on Texas legislation regarding the acquisition of dispatchable generation and his recommendations for it.
 - Member Maier also requested an update on the Wildlife Corridor Survey in reference to how the survey relates to ecosystem protection.
 - Vice Chair Richter requested that Tony Puente, Jr. provide further updates on the development process for the Renewable Energy Policy and Integrated Resource Plan in a manner that SFAC members may provide DME direct feedback on the policy, plan, and development process.
 - Chair Soph requested that the Renewable Gas Landfill Plant presentation, which was presented at the City Council meeting, be presented at an SFAC meeting.

2. CONCLUDING ITEMS

With no further business, Chair Soph requested a motion to adjourn. Vice Chair Richter moved to adjourn. Member Helms seconded. Chair Soph closed the meeting at 2:09 p.m.

AYES (5): Chair Soph, Vice Chair Richter, Member Helms, Member Briggie, and Member Maier

NAYS (0): None

Edward Soph
Chair
City of Denton, Texas

Meredith Owens
Administrative Assistant III
City of Denton, Texas



City of Denton

Facilities Management
869 S. Woodrow Ln
Denton, Texas
www.cityofdenton.com

AGENDA INFORMATION SHEET

DEPARTMENT: Facilities Management

ACM: Frank Dixon, Assistant City Manager

DATE: October 24, 2025

SUBJECT

Receive a report, hold a discussion, and give staff direction regarding City Council request to review two-minute pitch for rooftop solar and rooftop garden/wall garden retrofits for existing City facilities.

BACKGROUND

On November 25, 2024, Council Member Beck submitted a two-minute pitch to explore the installation of rooftop and wall gardens and solar panels with batteries on City buildings. On December 3, 2024, the Council provided consensus to require an Informal Staff Report to address the feasibility of the pitch. On January 24, 2025, an Informal Staff Report number 25-023 was provided to the City Council in the Friday Report. On August 7, 2025, the City Council Agenda Committee provided direction to forward the rooftop solar and wall garden pitch to the Sustainability Framework Advisory Committee to review and consider retrofitting of existing buildings. It was noted by the Agenda Committee that any retrofits would require consideration through the budget process, and it was not likely at this time.

City of Denton Facilities

Facilities Management oversees 206 City buildings, with 74 or more of those having staff and or public usage. A Facilities Condition Assessment conducted in 2022 found that many assets have been in a deferred maintenance status. To address the deferred maintenance needs, the City implemented a Facilities Condition Assets Capital Maintenance Plan and has funded approximately \$25 million from FY 22-23 to FY 25-26.

Many of the City's facilities have exceeded their originally intended service life. These aging structures require ongoing maintenance to remain safe, functional, and to extend their operational longevity. Funding has been strategically directed toward preserving existing assets for their intended use, with a strong emphasis on maintaining them to high standards that support extended service life.

Importantly, many of these facilities were not originally designed to meet modern demands—such as increased rooftop loads for solar installations, adequate storage for equipment, or expanded electrical infrastructure. These limitations highlight the need for continued investment in maintenance, while also reinforcing the importance of incorporating dedicated design solutions into new vertical construction projects.

Currently, a significant number of City buildings continue to operate beyond their expected lifespan. Through the Capital Improvement Plan, targeted upgrades and replacements are underway, alongside

sustained maintenance of existing structures. These efforts prioritize facilities with high occupancy and operational significance either by extending their life expectancy through strategic investment or by constructing new assets to meet evolving service and growth needs.

New buildings

Incorporating rooftop and/or wall gardens and solar panels with batteries can be evaluated for consideration during the design and development of probable cost studies. When considering new construction, the addition of rooftop or wall gardens adds an estimated \$143 to \$250 per square foot.

Retrofitting Existing Buildings

Rooftop and Wall Gardens:

Installation of any roof and/or facade improvements would require a feasibility study and scope development prior to any necessary engineering survey. Currently, 28 of the City's 206 facilities have roof structures potentially suitable for roof gardens. These facilities would require engineering surveys to identify structural modifications required to support the additional weight and systems. The estimated cost per building is between \$50,000 to \$200,000 to perform necessary assessments.

Solar/Battery Installation:

The installation of solar panels would require a feasibility study and scope development prior to any necessary engineering survey. Currently, 28 of the City's 206 facilities have roof structures potentially suitable for solar panels. These facilities would require engineering surveys to identify structural modifications required to support the additional weight and systems, and additional electrical system evaluation and upgrades.

Most City buildings lack the necessary electrical infrastructure to support renewable energy and would require upgrades to distribution systems, panels, wiring, circuit breakers, dedicated space for battery storage, ventilation, and fire safety measures. The cost of these improvements is estimated to be between \$100,000 and \$1,800,000, depending on facility size and energy use. The estimated annual energy cost savings from solar panels are variable, but estimates range from \$2,500 to \$25,000 for each facility based on energy consumption. The City would expect to see a return on investment from energy cost savings in approximately 20 to 30+ years, depending on the facility size and required infrastructure investment.

Before any infrastructure upgrades can be considered, each facility must undergo a formal engineering assessment to evaluate its structural integrity and electrical systems. These evaluations are essential to determine whether existing assets can support modernization efforts. Investing in engineering and design not only informs decisions about current facilities but also lays the groundwork for future assets. Constructing new facilities with renewable energy goals in mind from the outset is both appropriate and forward-thinking. In many cases, this approach yields a faster return on investment by aligning asset design with long-term operational efficiency and sustainability.

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

On November 25, 2024, Council Member Beck submitted a two-minute pitch to explore implementing rooftop and wall gardens as well as solar/battery installations on existing and future City buildings.

On December 3, 2024, the Council provided consensus for staff to publish an Informal Staff Report (ISR) addressing the feasibility of the pitch.

On January 24, 2025, an ISR was published in the Friday Report.

On August 7, 2025, the Agenda Review Committee recommended sending the pitch to the Sustainability Framework Advisory Committee.

RECOMMENDATION

Current projects do not have sufficient funding to consider rooftop and wall gardens as well as solar/battery installations on existing City buildings. Staff will consider these options in the design and planning of new construction projects, where such features can be integrated more cost-effectively and efficiently from the outset.

EXHIBITS

Exhibit 1. Agenda Information Sheet

Exhibit 2. Two-Minute Pitch Presentation

Exhibit 3. Informal Staff Report No. 2025-023

Exhibit 4. Presentation



AGENDA INFORMATION SHEET

DEPARTMENT: City Manager's Office

CM: Sara Hensley

DATE: December 3, 2024

SUBJECT

Receive a report, hold a discussion, and give staff direction on pending City Council requests for:

- 1) Installation of rooftop and wall gardens and solar panels with batteries on City buildings.
[Estimated Presentation/Discussion Time: 30 minutes]

BACKGROUND

During the work session discussion on August 20, 2024, Council directed staff to draft an ordinance for consideration that would reflect a revised process to improve the current two-minute pitch process (as outlined in Section 2-30 of the Code of Ordinances) with better information, increased engagement of the community through the elevation of involvement of boards and commissions, and budget alignment. The attached ordinance reflects this change in Section 2-30(c) (**Exhibit 2**).

Staff will review one outstanding request for information per elected official during each work session. The work session process will include staff introducing the requested topic followed by the requesting elected official having up to two minutes to describe and justify their request. The remaining elected officials will then have up to one minute to provide feedback and indicate their support for the use of staff time to respond to the request. Staff will respond to all requests where a consensus of at least four elected officials is established with an Informal Staff Report (ISR) or Legal Staff Report (LSR) outlining estimated cost to implement, estimated timeline for implementation of, and determination of strategic alignment of the request.

If the requesting elected official's request is satisfied with the report, the request will be concluded with no further action. If the request is not satisfied, the request may be submitted to the Agenda Committee to enter the Council Committee Process as defined in Section 2-30(c)(5). If there is a consensus of six (6) Council Members, a resolution or ordinance may be placed on a future City Council agenda without going through the Council Committee Process.

The Agenda Committee will use the ISR or LSR to determine if there are any existing committees, boards, or commissions whose defined scope includes the request. If any such committee, board, or commission exists, the Agenda Committee will direct the staff liaison(s) for any appropriate committees, boards, or commissions to find the soonest feasible date and add the request to their agenda for consideration. After review by committees, boards, or commissions, if funding is available to implement the request, as determined by the City Manager, the request will proceed to a City Council work session. A request without available funding will be scheduled for discussion by the City Manager at the next City Council Budget Workshop or Strategic Retreat. The request will either be included in the proposed budget for the next fiscal

year or concluded with no further action. Staff time will not be allowed to work on any request that is concluded with no further action unless the request is resubmitted in accordance with Section 2-30(c).

The following items will be discussed during this work session:

1.) Installation of rooftop and wall gardens and solar panels with batteries on City buildings.

a. **Requestor:** Council Member Beck

b. **Council Member Request:** “As we continue building a more sustainable and operating-cost-efficient Denton, I propose we explore implementing greenroofs (rooftop and wall gardens), as well as rooftop solar/battery installations, for all new city government buildings and existing ones where structurally feasible. This initiative will not only benefit our environment but will also save taxpayer dollars through operational savings in the long run. It will also pilot feasibility for other institutions within Denton to similarly adopt such strategies.

The National League of Cities has had extensive workshops by the DOE and the EPA describing how rooftop gardens reduce building energy costs by insulating against heat in the summer and retaining warmth in the winter, lowering utility bills. They also absorb rainwater, reducing stormwater runoff and alleviating pressure on city infrastructure, which helps taxpayers avoid costly upgrades to our sewer systems as well as mitigating street and sidewalk runoff. Plus, by improving air quality, enhancing urban biodiversity, and providing habitat for pollinator insect species, these gardens contribute to a healthier community—both reducing public health costs and enhancing wildlife.

Rooftop solar with battery storage delivers immediate and ongoing savings by generating clean energy onsite - significantly reducing energy bills for public buildings - energy that can be accessed in peak load hours or during emergencies, improving resiliency and reducing taxpayer costs. Together, rooftop gardens and solar panels work synergistically—plants cool solar panels, increasing their efficiency by 10-25% thus driving even more savings.

This dual strategy represents a cost-effective, forward-thinking investment. By reducing operating expenses for city buildings, taxpayers will see real, tangible savings year after year. Furthermore, the combination of green roofs and solar panels can extend the lifespan of roofing materials, cutting down on costly repairs and replacements. Strategies similar to this have already been implemented at the Embassy Suites Complex.

To advance this idea, I request an informal staff report (ISR) to analyze feasibility, projected savings, and cost-benefit impacts for taxpayers. Following that, we can discuss the findings in a council work session and chart the best path forward. This initiative is about saving money while creating a healthier, more sustainable Denton for generations to come.”

c. **Date Requested:** November 25, 2024

d. **Format for Response:** ISR

EXHIBITS

Exhibit 1 – Agenda Information Sheet

Exhibit 2 – Ordinance No. 24-1725

Exhibit 3 – Presentation

Respectfully Submitted:

Jesse Kent

Assistant to the City Manager

INFORMAL STAFF REPORT TO MAYOR AND CITY COUNCIL

SUBJECT:

On October 25, 2024, Council Member Beck submitted a two-minute pitch to explore implementing rooftop and wall gardens as well as solar/battery installations on existing and future City buildings. increase Denton's tree canopy by 5% by 2040 and use the Tree Mitigation Fund for additional staff. On December 3, 2024, the Council provided consensus to require an Informal Staff Report to address feasibility of the pitch.

DISCUSSION:

Rooftop and Wall Gardens

Installation of roof or façade improvements require engineering work, feasibility studies, and retrofitting. Currently, 28 of the City's 206 facilities have roof structures potentially suitable for roof gardens. These facilities would require structural modifications and engineering surveys to support the additional weight and systems, with an estimated cost between \$50,000 to \$200,000 to assess each building. When considering new construction, the addition of rooftop or wall gardens adds an estimated \$143 to \$250 per square foot.

Solar/Battery Installation

In addition to the structural requirements, solar panels with battery storage require additional considerations. Most facilities lack the necessary electrical infrastructure to support renewable energy, which requires upgrades to distribution systems, panels, wiring, circuit breakers, dedicated space for battery storage, ventilation, and fire safety measures. The cost of these improvements is estimated to be between \$100,000 and \$1,800,000 depending on facility size and energy use.

The estimated annual energy cost savings from solar panels is variable, but estimates range from \$2,500 to \$25,000 for each facility based on energy consumption. The City would expect to see a return on investment from energy cost savings in approximately 20 to 30+ years.

CONCLUSION:

Staff recommends that the existing facilities are not the best option for prioritizing the addition of roof or wall gardens along with solar panels due to the significant structural and electrical modifications required. However, these options will be considered for inclusion in the design and planning of new construction projects, where such features can be integrated more cost-effectively and efficiently from the outset. With this recommendation, the pitch does not require additional board vetting or a work session at this time.

If the Council would like to proceed with exploring retrofitting existing facilities, the request can be considered as part of the FY 2025-26 Budget process.

STAFF CONTACT:

Tom Gramer
Director of Facilities and Fleet

Tom.Gramer@cityofdenton.com
(940) 349-7200

REQUESTOR:

Council Member Beck

STAFF TIME TO COMPLETE REPORT:

Total of 31 hours between four departments. A breakdown is listed below.

PARTICIPATING DEPARTMENTS:

Facilities Management – 22hrs.

Environmental Services – 1hr.

Capital Projects – 4hrs.

Denton Municipal Electric – 4hrs.



Review Two-Minute Pitch: Rooftop Solar and Gardens

Background

- On November 25, 2024, Council Member Beck submitted a two-minute pitch to explore the installation of rooftop and wall gardens and solar panels with batteries on City Buildings. On December 3, 2024, the Council provided consensus for staff to publish an Informal Staff Report (ISR) addressing the feasibility of the pitch.
- On January 24, 2025, an ISR was published in the Friday Report.
- On August 7, 2025, the Agenda Review Committee recommended sending the pitch to the Sustainability Framework Advisory Committee.

City of Denton Facilities

- 206 Buildings
- Facilities Condition Assessment (FCA)
- Funding for maintenance and repair
 - Focus of FCA funding
- Delay of projects due to current budget

Considerations for New Buildings

Rooftop and Wall Gardens

- When considering new construction, the addition of rooftop or wall gardens adds an estimated \$143 to \$250 per square foot.

Solar/Battery Installation

- New building installation cost to be considered.

Considerations for Existing Buildings

Rooftop and Wall Gardens

- 28 of the City's 206 facilities have roof structures potentially suitable for roof gardens. Facilities would require structural modifications and engineering surveys with an estimated cost between \$50,000 to \$200,000 to assess each building.

Solar/Battery Installation

- The cost of these improvements is estimated to be between \$100,000 and \$1,800,000 depending on facility size and energy use.
- The estimated annual energy cost savings from solar panels are variable, but estimates range from \$2,500 to \$25,000 for each facility based on energy consumption.

Next Steps

- Sustainability Framework Advisory Committee to consider:
 - Option 1: Identify and evaluate existing buildings for Rooftop Gardens and recommend to City Council for inclusion in Fiscal Year 2026-2027 City Budget.
 - Option 2: Identify and evaluate existing buildings for Solar Panels with or without battery storage and recommend to City Council for inclusion in Fiscal Year 2026-2027 City Budget.
 - Option 3: Consider inclusion of rooftop and/or wall gardens on new construction
 - Option 4: Consider inclusion solar panels with or without battery storage on new construction
 - Option 5: Do not move forward with the pitch

Staff Recommendation

- Current projects do not have sufficient funding to consider rooftop and wall gardens as well as solar/battery installations on existing City buildings.
- Staff will consider these options in the design and planning of new construction projects, where such features can be integrated more cost-effectively and efficiently from the outset.



City of Denton

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215 E. McKinney Street
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AGENDA INFORMATION SHEET

DEPARTMENT: Environmental Services & Sustainability

ACM: Frank Dixon, Assistant City Manager

DATE: October 24, 2025

SUBJECT

Receive a report and consider a recommendation to City Council for adoption on the final draft of the Simply Sustainable Framework.

BACKGROUND

The City of Denton adopted “Simply Sustainable: *A Strategic Plan for Denton’s Future*” by Council resolution in February 2012. The Plan outlined goals, strategies, and actions across eight focus areas. The Plan was revised in 2017, and “Simply Sustainable: *A Framework for Denton’s Future*” was adopted by the Denton City Council in 2020. This update is intended to build on the foundation of the previously adopted sustainability plans and continue to set aspirational goals for the future. The Simply Sustainable Framework is updated every 4 – 5 years to ensure this document remains relevant to the community's needs.

Staff received feedback from the Sustainability Framework Advisory Committee and the Committee on the Environment, which has been incorporated into the final draft of the Simply Sustainable Framework. The Simply Sustainable Framework will act as a living document, considering the previously adopted plans, such as the Climate Action Plan, and other emerging data, such as the upcoming greenhouse gas inventory. The Simply Sustainable Framework will continually be revised as new policies and plans are undertaken or adopted throughout the City.

EXHIBITS

1. Agenda Information Sheet
2. Final Draft of Simply Sustainable Framework
3. Presentation

Submitted By:
Julissa Amador
Senior Program Coordinator



CITY OF
DENTON

OCTOBER 2025 71

SIMPLY SUSTAINABLE FRAMEWORK

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City of Denton

155,000

Estimated Population

5,000+

Businesses

2,300

Full-Time/Part-Time
Employees

204

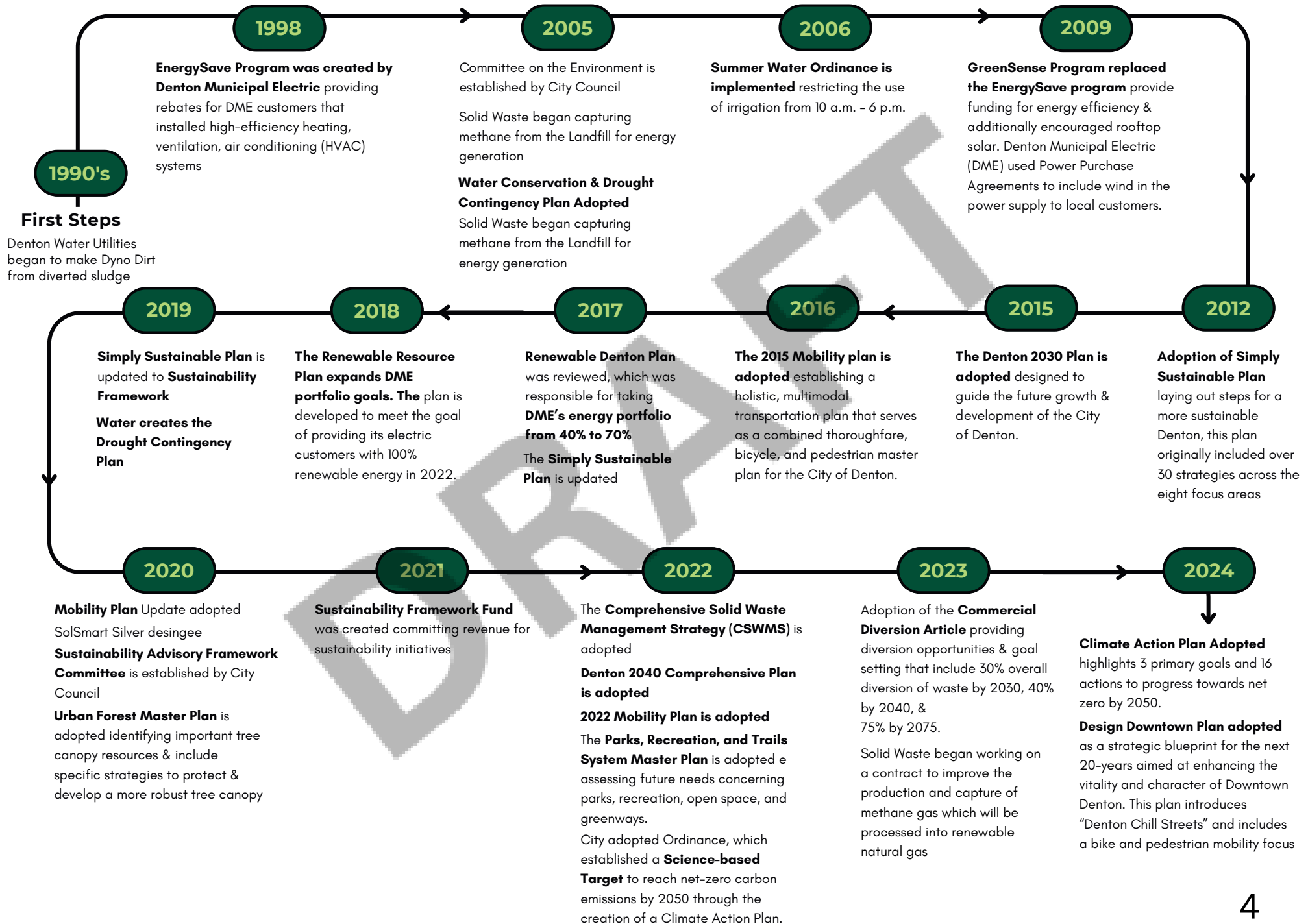
City Buildings

3

Academic institutions



City of Denton Sustainability highlights



Introduction

Overview of Denton and the DFW Metroplex

The City of Denton, located in North Texas, is the 20th largest city in the state and is experiencing annual growth of 3.5%. Denton is part of the greater Dallas-Fort Worth (DFW) metroplex, the largest metropolitan statistical area in Texas and the fourth-largest in the United States. The DFW area is home to the DFW International Airport, the third busiest airport in the U.S., offering Denton proximity to a major travel hub. Denton's current estimated population exceeds 155,000.

The population of the DFW metroplex is projected to increase by 67% between 2020 and 2050, with employment expected to grow by 264% during the same period. Housing demand has also shifted upward, with a previously anticipated growth of 3.19% now realistically trending toward 4.4% to meet goals for single-family and multifamily units. This projected growth has prompted North Texas municipalities to plan for rapid expansion proactively. Existing infrastructure will need to be consistently addressed as population growth adds stress, with indicators such as traffic congestion, housing availability, and resource consumption (e.g., water, energy, landfill space) requiring close monitoring.

Denton as a College Town and Cultural Hub

Denton is known for its thriving arts, entertainment, and music scene, hosting annual community events and, more recently, establishing itself as the Halloween Capital of Texas. These events attract visitors from across and beyond the metroplex.

The city is home to two major universities—the University of North Texas and Texas Woman's University—as well as a satellite campus of North Central Texas College. These institutions had a combined enrollment of over 60,000 students as of 2023, with enrollment expected to increase by 13% over the next four years.

Denton was named one of the 10 best college towns in the nation and has a high percentage (52%) of renter-occupied units, largely due to its student population. This results in a higher turnover rate of residents, creating a narrow window to perform outreach and inform new residents about conservation and sustainability practices.

Employment and Commuter Information

The City of Denton employs over 2,300 full-time/part-time staff and is home to more than 5,000 businesses, including major employers such as the University of North Texas, Peterbilt, Texas Health Presbyterian Hospital, and Texas Woman's University. Denton also serves as a destination for commuters who work in the city but live elsewhere. Outreach to these commuters is essential, as they contribute to resource consumption and community-wide greenhouse gas emissions, even though they reside outside city limits.

Sustainability and Resiliency

Texas ranks highest among states most impacted by natural disasters. North Texas frequently experiences droughts, freezes, flooding, and severe storms. Recent events like the COVID-19 pandemic and Winter Storm Uri in 2021 have highlighted the need for resilient infrastructure and proactive planning. According to the National Resilience Guidance (NRG), a resilient community can prepare for threats, adapt to changing conditions, and recover rapidly from disruptions. Denton is working to ensure its infrastructure and operations are prepared for the stressors of a changing climate and growing population.

The LEED for Cities and Communities program defines sustainability as the balance of social, economic, and environmental performance across areas such as natural systems, energy, water, waste, transportation, and quality of life. Sustainability also includes infrastructure resilience to stressors like climate change and population growth.

The City of Denton has a longstanding commitment to sustainability, demonstrated through numerous programs and initiatives aimed at environmental improvement, community support, and the development of replicable programs for other cities. The Simply Sustainable Plan, created in 2012, outlined strategies to balance environmental protection with city growth while using resources in fiscally and socially responsible ways.

Building on this foundation, the Sustainability Framework was developed to continue guiding municipal planning, ensuring that Denton prioritizes sustainability while adapting to new challenges and opportunities. This living document works in conjunction with other adopted plans, including the:

- Urban Forest Master Plan (2020)
- Denton 2040 Plan (2022)
- Mobility Plan (2022)
- Parks and Trails Master Plan (2022)
- Comprehensive Solid Waste Management Strategy (2022)
- Water Conservation and Drought Contingency Plan (2024)
- Climate Action Plan (2024)

With the recent adoption of the Climate Action Plan (CAP) in 2024, the CAP formalizes the City of Denton's net-zero goal to achieve net-zero greenhouse gas emissions by 2050. The CAP is led by three primary goals and sixteen actions to progress towards those goals. Municipal utilities owned and operated by the City, such as solid waste and recycling, water and wastewater, and electric utility services, provide the city with more direct control of operations and the ability to adjust efforts to meet this net-zero goal. One way that the city is headed to this goal is through leveraging its power purchase agreements to provide 100% renewable energy to Denton Municipal Electric (DME) customers. In 2018, the city adopted the Renewable Resources Plan to achieve 100% renewable energy. DME met this goal by 2021, ensuring that all annual energy consumption is offset by renewable sources, backed entirely by wind and solar energy. Denton Water Utilities (DWU) recently implemented its Water Conservation & Drought Contingency Plan, reducing water loss and increasing water conservation, and reducing its energy consumption.

Solid Waste & Recycling has begun working on contracts to capture the methane from the Landfill to turn it into renewable natural gas. The City of Denton will continue to evaluate and identify opportunities to be able to achieve the overarching net-zero goal set. The City of Denton will also continue to engage the community—including residents, businesses, institutions, and employees—in sustainable practices and behavior change. Future planning will integrate both existing and new strategies to support a growing, resilient, and sustainable city.

This Sustainability Framework update will have two main goals that guide the document, as seen in the following page with strategies broken out by goal.





Goal 1

Reduce the environmental footprint of municipal operations, assets, and facilities. 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. Evaluate and improve City facilities to ensure they are resilient to hazards and vulnerabilities and can be a resource to the public.



Goal 1

Reduce the environmental footprint of municipal operations, assets, and facilities. Evaluate and improve City facilities to ensure they are resilient to hazards and vulnerabilities and can be a resource to the public.

FOCUS AREA

ENERGY

- o Continue to provide sufficient 100% renewable energy to DME customers.
- o Track and reduce municipal government energy consumption through demand reduction in both new construction and building retrofits.
- o Review Facilities Management policies and best practices to ensure they are in line with resource efficiency goals
- o Enhance energy efficiency standards for new construction
- o Investigate SolarApp+ to expedite the permitting process for code-compliant residential rooftop photovoltaic installations
- o Explore alternative incentives such as property tax exemptions for residents who install renewable energy systems and battery storage at their primary residence
- o Update and implement the City resource conservation policy
- o Evaluate the inclusion of on-site renewable energy systems for new and appropriate existing facilities

WATER/WASTE WATER

- o Track and reduce municipal government water consumption through efficient fixtures, smart controls, and best practices
- o Identify new areas to extend reclaimed water lines to provide access to new city users
- o Modify City code to require small and large development projects to connect to the reclaimed water line where available
- o Investigate Direct Potable Reuse, Indirect Potable Reuse, and Reuse Aquifer Storage Recovery (AS)
- o Maximize use of site-produced Renewable Natural Gas (RNG)
- o Maintain Integrated Stormwater Management (ISWM) Silver Level
- o Update and implement the resource conservation policy
- o Explore rainwater capture and greywater reuse at City facilities

MATERIALS MANAGEMENT

- o Complete the Landfill Gas to Energy (LFGE), which will allow the Landfill to harness methane to produce Renewable Natural Gas (RNG)
- o Expand food waste and organics collection programs to schools and universities
- o Maximize diversion opportunities at City Facilities
- o Update and implement the resource conservation policy

Goal 1

Reduce the environmental footprint of municipal operations, assets, and facilities. Evaluate and improve City facilities to ensure they are resilient to hazards and vulnerabilities and can be a resource to the public.

FOCUS AREA

AIR QUALITY

- o Replace fossil fuel-powered equipment with electric options where feasible within municipal operations and facilities.
- o Create a dashboard and ensure Denton air quality monitor data is readily available to the public
- o Review City policies and alternative employee work schedules that can reduce the City of Denton's emission levels during ozone season
- o Participate in the North Central Texas Council of Governments Air Quality Programs
- o Evaluate and enforce air quality policies for City fleet and equipment (anti-idling and ozone action day restrictions)

TRANSPORTATION

- o 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)
- o Update Clean Fleet policy
- o Partner with Economic Development to seek new businesses and work with existing that will install alternative fueling stations
- o Identify and reduce barriers for private businesses to be able to build EV charging stations within the City

LAND USE

- o Encourage redevelopment of infill areas by reducing barriers in the Denton Development Code
- o Explore reductions/exemptions on impact fees.
- o Assess barriers to housing in the Downtown core, such as multifamily and townhome development
- o Complete the Citywide Parking Study to explore opportunities to reduce parking minimums
- o Adopt the most up-to-date building codes and evaluate current rating systems (i.e. EnergyStar, LEED, etc.)
- o Conduct a tree canopy assessment to inform revision of the Urban Forest Master plan to set attainable tree canopy goals or identify with Parks & Rec green space where invasive species can be removed and replaced with native grasses that effectively sequester carbon
- o Continue to pursue Bee City USA, Monarch City USA, Mayor's Monarch Pledge, and Bird City Certification Programs provide opportunities to build awareness of the benefits of pollinators, encourage native landscaping, and preservation of natural spaces.

Key performance indicators

Key Performance Indicators	Targets
Reduction system water loss	50 percent reduction in system water loss by 2050
Quantity of potable water used for City facilities	Decrease the quantity of potable water used for City facilities
Quantity of reclaimed water to potable used for irrigation at City facilities	Increase the quantity of reclaimed water to potable used for irrigation at City facilities
Quantity of reclaimed water to potable used at the bulk fill station by City accounts	Increase the quantity 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
GHG Emissions – Municipal Government Operations (Metric Tons of Carbon Dioxide Equivalent)	Net-zero by 2050
GHG Emissions from Municipal Fleet	25 percent reduction by 2050
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

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 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.

FOCUS AREA

ENERGY

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

- o Provide water audits, irrigation evaluations, and other water conservation incentives
- o Increase the number of conservation workshops/classes, i.e., rain barrel, DIY irrigation tune-ups, and low water use landscaping.
- o Attend community events to provide information to residents on best practices and provide resources to reduce water consumption through native planting, xeriscaping and irrigation type and scheduling

MATERIALS MANAGEMENT

- o Provide recycling audits for Solid Waste and Recycling customers to encourage proper disposal
- o Host more Batteries, Oil, Paints, and Antifreeze (BOPA) events in collaboration with community organizations, Homeowners Associations (HOAs)
- o Partner with nonprofits, vendors, or organizations to accept material considered non-programmatic
- o Create a map as an additional resource for local drop-off locations to divert material
- o Identify and pilot additional diversion opportunities at university move-outs
- o Attend community events to share information about programmatic material, contaminants, and other diversion opportunities such as Home Chemical Collection, yard waste program, composting at home, and donating locally.

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.

FOCUS AREA	
AIR QUALITY	- o Intertwine air quality programming into workshops, classes, and events - o Provide resources for residents to stay informed on the Air Quality Forecast - o Incentivize residents' use of electric-powered lawn equipment - o Evaluate opportunities to incentivize commercial electric-powered lawn equipment - o Provide an interactive air quality dashboard with guidance on utilization
TRANSPORTATION	- o Offer alternative transportation education, and familiarize residents understanding of how to get around Denton using public transit, biking, or walking - o Track distribution of EV and Ebike rebates within the community - o Partner with Denton Independent School District (DISD) to support Safe Routes to Schools - o Provide resources to encourage the safe use of active transportation - o Track public transit ridership within the City of Denton around events and on off-peak times
LAND USE	- o 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 - o Establish a program to continue to encourage backyard and community gardening within City limits such as providing tours of community gardens - o Equip residents with best practices for tree care, and look at opportunities to register their trees and new plantings - o Launch a public facing dashboard showing the tree canopy of Denton - o Work toward National Wildlife Federation's Community Wildlife Habitat Certification

INCENTIVES

Key performance indicators

Key Performance Indicators	Annual 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

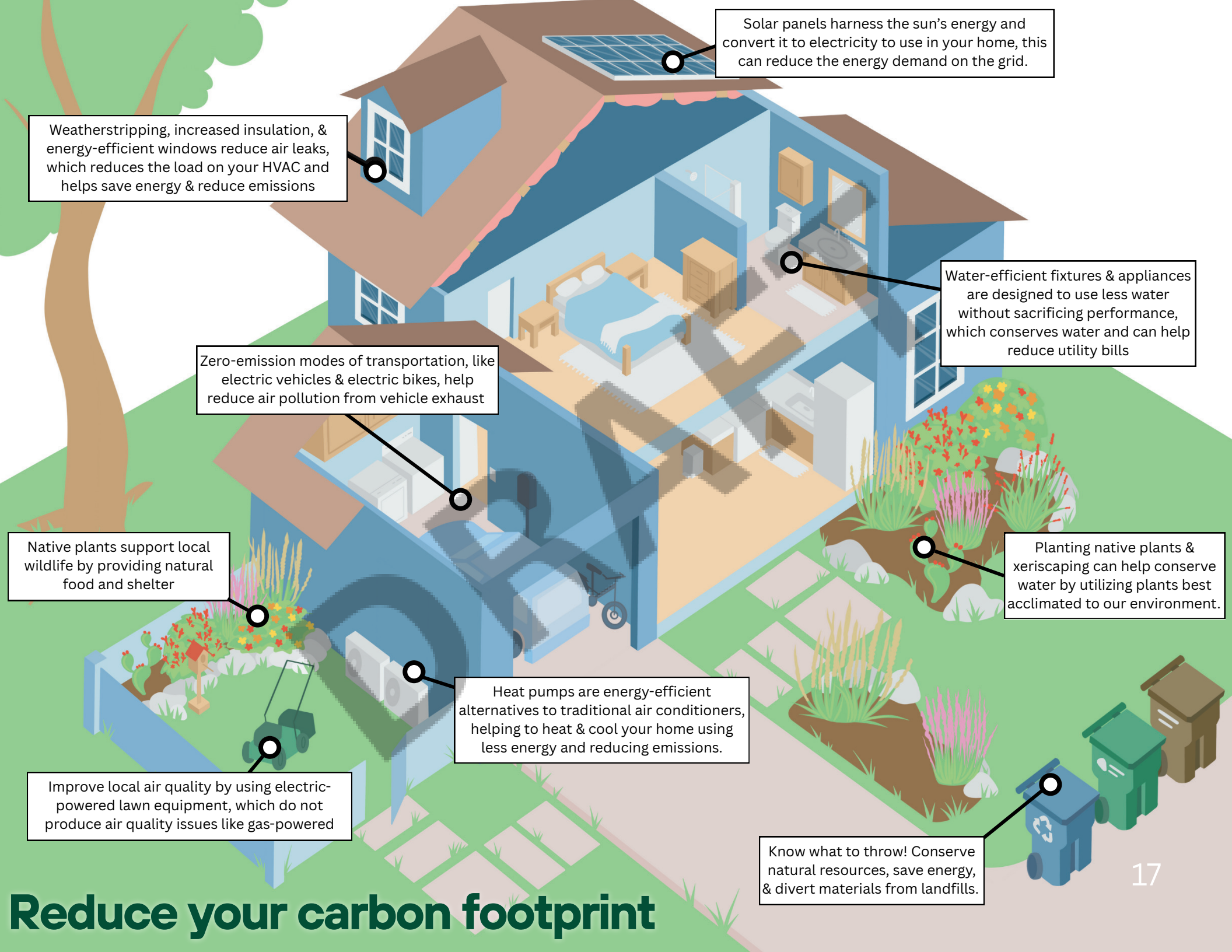
OUTREACH & EDUCATION

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

Key performance indicators

ADDITIONAL COMMUNITY MEASURES

Key Performance Indicators	Targets
Reduction in summer water usage	Decrease water usage June 1 - September 30 (FY 23-24 baseline)
Percentage of reclaimed water to potable used by commercial businesses	Percentage of reclaimed water to potable used by commercial businesses
Quantity of reclaimed water used at the bulk fill station by commercial accounts	Increase the quantity 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 pounds of Household Hazardous Waste collected by Home Chemical Collection (HCC)	Decrease the pounds 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



Solar panels harness the sun's energy and convert it to electricity to use in your home, this can reduce the energy demand on the grid.

Weatherstripping, increased insulation, & energy-efficient windows reduce air leaks, which reduces the load on your HVAC and helps save energy & reduce emissions

Water-efficient fixtures & appliances are designed to use less water without sacrificing performance, which conserves water and can help reduce utility bills

Zero-emission modes of transportation, like electric vehicles & electric bikes, help reduce air pollution from vehicle exhaust

Native plants support local wildlife by providing natural food and shelter

Planting native plants & xeriscaping can help conserve water by utilizing plants best acclimated to our environment.

Heat pumps are energy-efficient alternatives to traditional air conditioners, helping to heat & cool your home using less energy and reducing emissions.

Improve local air quality by using electric-powered lawn equipment, which do not produce air quality issues like gas-powered

Know what to throw! Conserve natural resources, save energy, & divert materials from landfills.

Reduce your carbon footprint

THANK YOU



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Simply Sustainable Framework Final Draft

Julissa Amador

Senior Program Coordinator

Environmental Services &
Sustainability

Today's Focus

- Review Simply Sustainable Framework Update Draft
- Receive Feedback
- Next Steps

Background

- Simply Sustainable: *A Strategic Plan for Denton's Future* adopted in 2012
- Simply Sustainable: *A Framework for Denton's Future* adopted in 2020
- Sustainability Framework Advisory Committee (SFAC) created in 2020
- Revision of the Simply Sustainable Framework every 4-5 years

Background

- Plans adopted following 2020 Simply Sustainable Framework:
 - Urban Forest Master Plan (2020)
 - Denton 2040 Plan (2022)
 - Mobility Plan (2022)
 - Parks and Trails Master Plan (2022)
 - Comprehensive Solid Waste Management Strategy (2022)
 - Water Conservation and Drought Contingency Plan (2024)
 - Climate Action Plan (2024)

Feedback Received from SFAC and COE

- Provide a vision, guiding principles, and a summary
- Creation of a hazards and vulnerability risk assessment
- Greenhouse gas inventory
- Define 100% renewable generation
- Explore incentives for battery storage

Next Steps

- 1. Request additional changes
- 2. Consider recommending the adoption of the Simply Sustainable Framework to City Council



Questions

Julissa Amador
Senior Program Coordinator
Environmental Services & Sustainability





MEMORANDUM

DATE: October 24, 2025
TO: Sustainability Framework Advisory Committee
FROM: Solid Waste and Recycling
SUBJECT: Moseley Road Landfill Redevelopment

In May 2024, the City of Denton's Solid Waste and Recycling (SWR) Department presented to the Public Utilities Board (PUB) to seek guidance on the future of the Moseley Road Landfill property. This discussion was prompted by a formal request from the City of Cross Roads, which expressed interest in entering into a long-term lease agreement for the development of a public park on the site.

SWR outlined three potential options for the property:

- Retain City ownership and maintain the site as-is
- Sell the property
- Lease or rent the property to an external entity

During the May meeting, PUB members expressed opposition to selling the property but were open to exploring a lease agreement with Cross Roads. SWR committed to continuing discussions with Cross Roads representatives. Although the item was originally scheduled for City Council consideration in June 2024, it has since been postponed indefinitely.

The Moseley Road site is a pre-Subtitle D landfill that was officially closed in 1984. It is located in unincorporated Denton County and lies outside the extraterritorial jurisdiction (ETJ) of the City of Cross Roads. Regardless of future use, the City of Denton remains permanently responsible for the site, including all post-closure monitoring and maintenance obligations.

In terms of site maintenance, SWR recently completed a project to address differential settlement issues along the west edge of the facility. A contractor was hired to regrade the area to eliminate water ponding and to install a down chute structure on the west slope to manage stormwater runoff from the top of the site.

OUR CORE VALUES

Inclusion • Collaboration • Quality Service • Strategic Focus • Fiscal Responsibility

Future Items Matrix: Sustainability Framework Advisory Committee

No.	REQUESTOR	DATE REQUESTED	ITEM	PRIORITY	DEPARTMENTS INVOLVED
24-01	Richter	6/7/2024	Consider greenspace enhancements	Medium Term -2	ESS, Parks
24-02	Soph	8/23/2024	Update on adopted climate action plan, presentation on priorities and timeline for adoption of those priorities, timeline for ordinances that might be adopted	Long Term - 3	ESS
24-03	Soph	8/23/2024	Consider solar, especially low-income households	Medium Term -2	ESS
24-05	Soph	12/13/2024	Update on carbon reduction estimates for Framework Fund items	Medium Term -2	ESS
25-01	Soph	1/24/2025	Consider an Environmental Impact Study for Hunter/Cole Ranch developments, similar to Fiscal Impact Study and City's goal for Net Zero.	Long Term - 3	ESS
25-04	Soph	2/13/2025	Consider the creation of a community awareness campaign to help the city reach its CAP/Net Zero goal.	Medium Term -2	ESS, MarCom
25-09	Richter	7/25/2025	Update on Denton's Flood Risk Planning	Medium Term -2	Risk, Engineering
25-12	Soph	7/25/2025	Consider solar rebates	Short Term - 1	ESS
25-13	Soph	7/25/2025	Consider new rebates for battery storage and type 2 car chargers	Short Term - 1	ESS
25-14	Soph	7/25/2025	Consider incentives for white roofs, permeable sidewalks/driveways, and reflective concrete	Short Term - 1	Dev Services, Streets
25-15	Soph	7/25/2025	Consider Climate Risk Assessment of City's Infrastructure	Long Term - 3	Risk
25-16	Soph	8/22/2025	Requested reinstatement of solar incentive program and introduction of a battery incentive program.	Medium Term -2	ESS
25-18	Richter	8/22/2025	Requested DME provide further updates on development process for the Renewable Energy Policy and Integrated Resource Plan in a manner that SFAC may provide DME direct feedback on the policy, plan, and development process.	Long Term - 3	DME
25-19	Richter	8/22/2025	Requested annual and semi-annual analysis of the air quality data that the City captures, specifically the data that is captured but not seen on the dashboard for public viewing.	Medium Term -2	ESS
25-20	Soph	8/22/2025	Update on the plan for the landfill that is being closed (Record ID 239 / Facility ID 13).	Short Term - 1	SWR
25-21	Maier	9/26/2025	Update from Tony Puente, Jr. with the Denton Municipal Electric Department regarding what the pollution costs would be if an acquisition of dispatchable generation occurs, particularly in reference to gas. She also requested that Tony provide details on Texas legislation regarding the acquisition of dispatchable generation and his recommendations for it.	Long Term - 3	DME
25-22	Maier	9/26/2025	Update on the Wildlife Corridor Survey in reference to how the survey relates to ecosystem protection.	Medium Term -2	ESS
25-23	Soph	9/26/2025	Renewable Gas Landfill Plant presentation, which was presented at the City Council meeting, be presented at an SFAC meeting.	Short Term - 1	SWR

*Short Term = 6 months

*Medium Term = 1 year

*Long Term = 1+ years