Date: Jan. 10, 2025 Report No. 2025-022

INFORMAL STAFF REPORT TO MAYOR AND CITY COUNCIL

SUBJECT:

Increasing Denton's Tree Canopy

EXECUTIVE SUMMARY:

On October 9, 2024, Council Member McGee submitted a two-minute pitch to increase Denton's tree canopy by 5% by 2040 and use the Tree Mitigation Fund for additional staff. On October 15, 2024, the Council provided consensus to require an Informal Staff Report to address feasibility of the pitch.

DISCUSSION:

The Urban Forest Master Plan adopted in 2020 serves as a guide for managing, enhancing, and growing Denton's tree canopy. The Master Plan currently includes the primary objective to achieve a 40% canopy cover by 2040 which requires 16% additional canopy cover from the most recent tree canopy data collected in 2023. This objective heavily relies on the planting of trees on private property.

Tree canopy cover is the percentage of land covered by tree canopy (leaves branches and stems of trees). Depending on the tree species and growing conditions, a newly planted, large canopy tree will take roughly 20 to 40 years to reach a mature canopy size of 40 feet in diameter. This 40-foot diameter standard is used to calculate potential tree canopy cover for a large canopy tree in the Denton Development Code.

The Tree Mitigation Fund currently supports urban forestry and education programs to increase tree plantings on public and private property, including funding for a staff intern. As of December 20, 2024, this fund has a balance of approximately \$2.1 million For Fiscal Year 2024-25; \$1.0 million is budgeted for city-initiated tree plantings, tree giveaway programs, and prudent land acquisition. The tree giveaway programs are focused on public and private property plantings and aim to increase the City's overall tree canopy by providing approximately 3,000 trees per year, which is estimated to increase the canopy by 0.14%, once mature. All three tree programs are managed by Keep Denton Beautiful (KDB) with oversight provided by Denton Parks and Recreation. Table 1 below lists how many trees will be planted and provided during the 2024-25 fiscal year by all City programs.

Item	Program	Quantity
2-3 in caliper trees	Parks Urban Forestry Tree Planting	350
3-gallon trees	Community Tree Giveaway	700
3-gallon trees	Community Tree Giveaway	700
3-gallon trees	Free Tree Class at the Redbud Festival	150
3-gallon trees	Tree Your Block (Neighborhood Giveaways)	200
Redbud seedlings	Children's Arbor Day	1800
Tree rebates	Tree Rebate Program	150

Date: Jan. 10, 2025 Report No. 2025-022

ANNUAL TOTAL 3,350

Table 1 *This does not include trees planted with new property development.

Since 2021, staff have worked to implement the Urban Forest Master Plan by planting and distributing approximately 6,155 trees in parks, center medians, and KDB giveaway programs. Planting and outreach were impacted during the COVID-19 pandemic. Current plans include the planting and distribution of approximately 50,250 trees over the next 15 years (pending annual funding availability). If planting continues along the current planned trajectory, overall tree canopy will potentially increase by 2.62%, using the 40-ft diameter mature tree standard. Increasing the tree canopy more substantially, to an increase of 5% by 2040 would require the planting of approximately 164,750 additional trees, without factoring tree loss or gain due to development, natural decline, or tree plantings by others.

CONCLUSION:

Increasing the tree canopy 5% by 2040 is lower than established goal in the Urban Forest Master Plan adopted in 2020. Additionally, the request to utilize staff out of the Tree Mitigation Fund is allowable.

Growing the tree canopy by 5% will require a financial investment of at least \$809,000 to \$1.7 million annually for 15 years which will exceed the available and projected resources of the Tree Mitigation Fund. In addition, programs and systems are needed for engaging, encouraging, and monitoring private property owners' participation. Furthermore, staff are exploring alternative metrics to assess progress towards the city's tree canopy cover goals.

Staff recommends providing an update the Urban Forest Master Plan progress to the Committee on the Environment and the Parks and Recreation Board during Q2 of the fiscal year and including a multiyear forecast as part of the budget process to tie how budgeted efforts are impacting the increase the canopy.

STAFF CONTACTS:

Haywood Morgan Urban Forester, Parks and Recreation Haywood.Morgan@cityofdenton.com

Autumn Natalie Parks Program Area Manager, Parks and Recreation <u>Autumn.Natalie@cityofdenton.com</u>

Ziad Kharrat
Assistant Director, Parks and Recreation
Ziad.Kharrat@cityofdenton.com

REQUESTOR:

Council Member Brandon Chase McGee

PARTICIPATING DEPARTMENTS:

Date: Jan. 10, 2025	Report No. 2025-022
Parks and Recreation Department	
STAFF TIME TO COMPLETE REPORT:	
STAFF TIME TO COMPLETE REPORT: Parks and Recreation Department 10 hours	