



City of Bowie Memorandum

Thursday, May 19, 2022
Alfred D. Lott, ICMA-CM, CPM,
City Manager

STATUS REPORT

1. Vehicle #7 Replacement

The FY23 Budget allocates funds to purchase a replacement vehicle for car #7. The Public Works Department has identified a Baltimore County Contract, #B-1560, available for piggyback to purchase a 2022 Honda CR-V Hybrid AWD vehicle in the amount of \$39,320. The budget for this vehicle is \$53,000. As provided by Section 62 of the City Charter, this will serve as the required seven (7) day notice of intent to issue a purchase order to Criswell Performance Imports, Criswell Honda in the amount of \$39,320.

2. City Tree Canopy Coverage Update

Since 2011, staff in the Department of Planning and Sustainability have been gathering information on the City's tree canopy and have programs in place to help meet the City Council's Urban Tree Canopy (UTC) goal of 45% set in 2012 (R-56-12). The work has been detailed in the attached staff memorandum. The most recent UTC is from 2018 and was 44.1%. Staff continue to work on meeting the 45% goal and will provide updates to the Council as they are available.



City of Bowie

15901 Fred Robinson Way
Bowie, Maryland 20716

MEMORANDUM

TO: Alfred D. Lott
City Manager

FROM: Joseph M. Meinert, AICP *Joseph M. Meinert*
Director of Planning and Sustainability

SUBJECT: Bowie Urban Tree Canopy Analysis

DATE: May 18, 2022

Urban Tree canopy (UTC) is generally understood to be the layer of leaves, branches, and stems of trees when viewed from above. This UTC may be over grass, water, shrubs, or impervious surfaces. This layer provides benefits to the community as a whole and to residents individually, including better water quality, reduced energy costs, lower local temperatures, enhanced property values, as well as social, educational, and aesthetic benefits. Preserving and expanding this important resource starts with knowing the current level, then setting a goal and plan to meet it.

History

In 2009, the Maryland Department of Natural Resources funded an analysis of the City's UTC by the University of Vermont (UVM) Spatial Analysis Laboratory. Using high-resolution aerial imagery and geospatial analysis, the City's existing UTC was **46%**, using **2007** imagery. In January 2008, BGE began a systematic removal of trees along their rights-of-way called the Bowie Electrical Reliability Action Plan (BERAP). By the time BERAP was completed in December 2009, it had met its goal – the average, all-weather, monthly interruptions of electrical service had dropped from more than 5,600 to around 2,200. That progress came at a cost of countless trees, literally. BGE reported that BERAP crews removed 15,753 trees that were over 8" diameter (7,347 of which were greater than 12" diameter) and did not track trees below that threshold. For trees >8" diameter, BGE offered \$100 vouchers for tree replacements, but just over one-third of the vouchers were claimed (3,354 of 9,358).

BERAP had a significant impact on UTC. When UVM completed a county-wide UTC study was using **2009** imagery, the City's UTC had dropped to **42.6%**. The City tried to mitigate this loss by requesting funds to replace the trees itself through a direct payment, rather than relying on residents. BGE declined to provide the City with the cash equivalent of unclaimed vouchers, and the Public Service Commission did not require it.

Activities

In 2011, the City hired Applied Ecological Services to complete a detailed Urban Greening Strategy. The report identified private residential property as the land use with the most area

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available for new plantings. Anecdotal evidence (number of BERAP vouchers used) suggested that residents may not be interested in trees. Due to the limited planting by the City (75% street tree replacement rate), identifying residential behaviors related to trees was the next step.

The Environmental Advisory Committee looked at tree canopy goals of surrounding communities and recommended to City Council that a 45% goal be adopted for Bowie. R-56-12, a resolution setting the **City's canopy goal at 45%** was passed in July 2012. The work began to increase tree canopy on residential lots. Shortly thereafter, the City applied to the Chesapeake Bay Trust (CBT) for a grant to hire a consultant to conduct a survey. Salter Mitchell was hired to complete a phone survey and hold focus groups to hear from residents about trees – how they feel and think about trees as well as how they handle trees on their property. Their final report was submitted in 2014 and confirmed that residents generally like trees and appreciate the personal and community benefits, but they are concerned about property damage from falling trees and roots.

With this information, the Planning Department began a tree rebate program in 2014. After about two years with very few rebates requested, the City applied to the Chesapeake Bay Trust to complete Community-Based Social Marketing (CBSM) plan. A CBSM plan uses known barriers and benefits for residents to identify marketing tools and messages that can alleviate concerns and encourage private tree planting. In 2016, the City hired Action Research to complete this plan. It identified outreach and marketing techniques and messages to use with residents to increase the rate of tree planting. The work that took place over several years resulted in the development of a turn-key tree planting program called Plant One Tree on Us. Since its inception in FY19, residents have requested 235 trees for their yards.

Findings

Based on the most recent land cover data (imagery collected by US Department of Agriculture in **2018**), the City's **UTC measured 44.1%**. At that point (October), the Prince George's Stadium was in the City limits, having an effective annexation date in July, however South Lake was not (December 2018 annexation). While the goal of 45% has not yet been met, the City's tree canopy cover has increased steadily since the completion of BERAP. This is due partially to new tree plantings but also to growth of younger trees that have been planted in newer subdivisions.

Next Steps

Some of the next steps needed towards meeting the UTC goal include:

- Continue and potentially expand the Plant One Tree on Us program. This includes finding new methods to reach the public like attending HOA meetings and working with the Communications Division to utilize Next Door, which is how several participants learned about the program.
- Assess the possibility to increase street tree replacements.
- Update this memo after each updated UTC percentage is provided. The Chesapeake Conservancy is under contract with the Chesapeake Bay Program to create high-resolution land cover and land use data for the Chesapeake Bay watershed every two years. This is the information used to derive the City's UTC percentage.
- Pursue the potential to have HOA open space afforested or reforested through County grant programs.