



DAVIDSON,  
NORTH CAROLINA



8,747 Land Acres  
15,246 Residents

### URBAN TREE CANOPY



2022: 5,230 Acres or  
60% of Land Area

### UTC DISTRIBUTION



38% of UTC  
is within the  
Rural Planning Zone



For an interactive canopy tool and  
additional analytics visit [Davidsonland.org](https://Davidsonland.org).

## AN ASSESSMENT OF PAST AND PRESENT URBAN TREE CANOPY

Davidson is a cozy suburban town situated just north of the Charlotte metropolitan expanse and nestled along the shores of Lake Norman. This North Carolina town has a growing urban forest with over 5,000 acres of canopy. In Davidson, the urban forest isn't just about scenic views and shaded spaces; it actively contributes to the environment and economy while fostering a tight-knit community spirit among residents and visitors. The town's parkland, green spaces, and canopied greenways are a testament to the town's commitment to its essential urban forest. Through strategic planning efforts, educational outreach programs, and continued community collaboration with organizations like the Davidson College Arboretum, Davidson can use the data from this assessment to help plan the creation of new urban green spaces within walking distance of every household.

This assessment examined the distribution of canopy both past (2018) and present (2022) across Davidson's municipal town boundary, watersheds, and planning zones. The results, based on the most recently available source aerial imagery from the USDA's National Agriculture Imagery Program (NAIP) collected in June of 2022, will help Davidson revise existing, and develop new strategies to protect and expand the tree canopy. As the town continues its expansion, it becomes crucial to prioritize the Circles at 30 and Downtown planning zones for canopy preservation.

### UTC RESULTS

60%

2022 Tree Canopy Cover

53%

\*2018 Tree Canopy Cover

57%

\*2009 Tree Canopy Cover

\*Data from previous TCA assessment in 2019.

#### Tree Canopy Change (2018-2022)

- Canopy Loss
- No Change in Canopy
- Canopy Gain

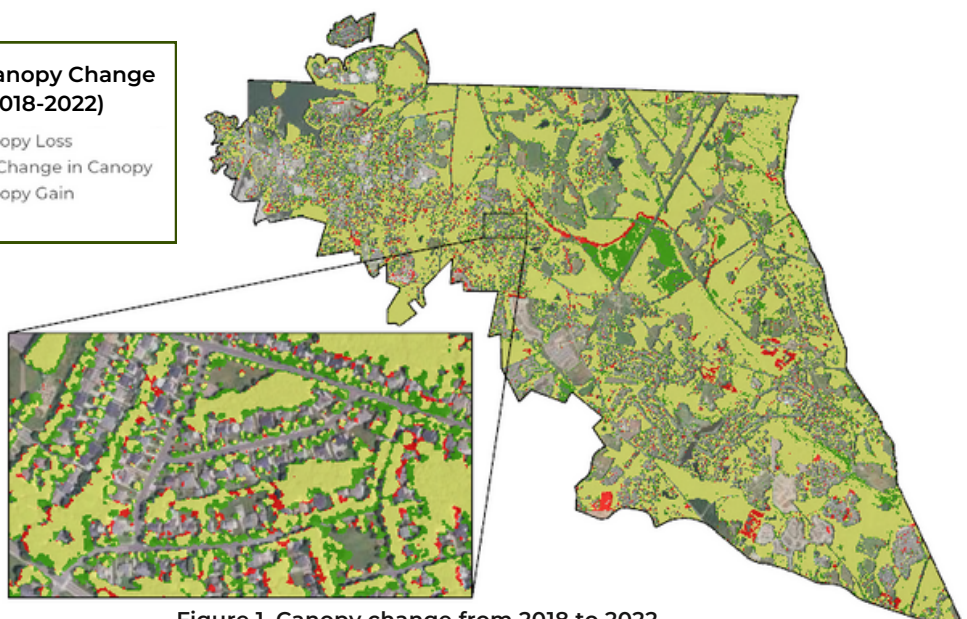


Figure 1. Canopy change from 2018 to 2022

## Tree Canopy by Watersheds

Urban tree canopy (UTC) was evaluated for Davidson's three watersheds: Clarke Creek, Headwaters Rocky River, and Reeds Creek-Lake Norman. Trees near floodplains stabilize the town's clay soils and aid in mitigating stormwater runoff that may otherwise carry unhealthy pollutants (such as nitrogen, phosphorous, and suspended sediment) into surface water bodies. Plus, these trees provide shade to water bodies and in turn, reduce water temperatures to protect the aquatic ecosystem of endangered fish and reptile species.

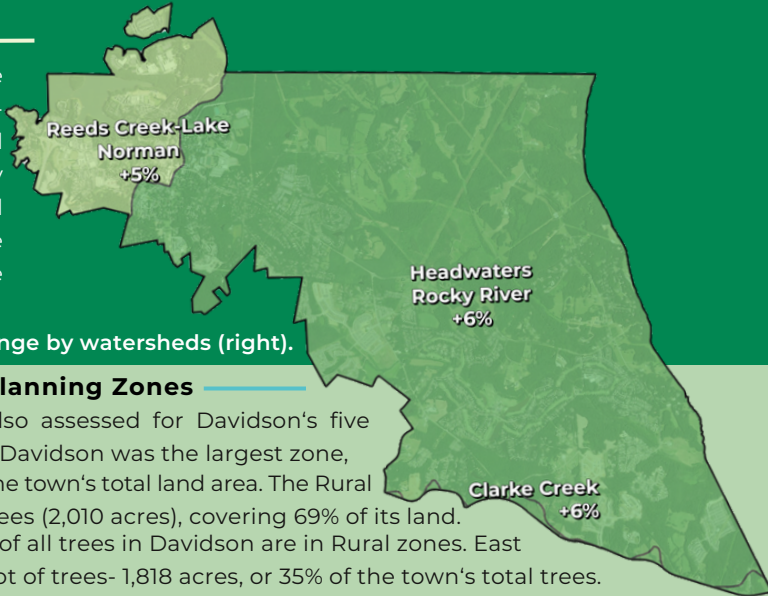


Figure 2. Canopy change by watersheds (right).

## DAVIDSON AND NEARBY COMMUNITIES

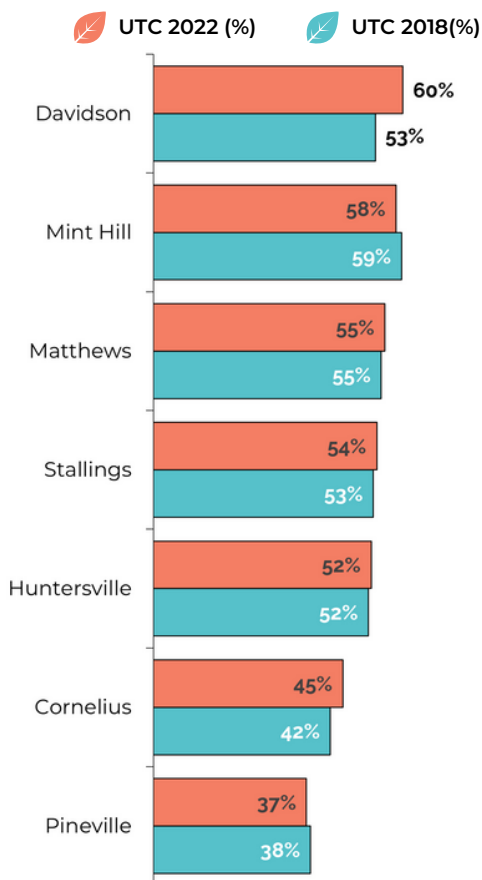


Figure 3. Urban tree canopy percentages of nearby communities with recent urban tree canopy assessments.

In 2022, Davidson had more trees in its town area (60% canopy cover) compared to neighboring jurisdictions. Based on another recent study in the area, many of the nearby communities fell within the 45-55% canopy range.

Over the span of four years, Davidson also saw the most significant increase in canopy cover, with 7% growth. Other jurisdictions averaged a 1% growth while Pineville and Mint Hill experienced canopy loss from 2018 to 2022.

## Tree Canopy by Planning Zones

UTC metrics were also assessed for Davidson's five planning zones. East Davidson was the largest zone, representing 39% of the town's total land area. The Rural zone had the most trees (2,010 acres), covering 69% of its land. This means that 38% of all trees in Davidson are in Rural zones. East Davidson also has a lot of trees- 1,818 acres, or 35% of the town's total trees. The Downtown planning zone had the fewest trees, containing just 1% of the town's total canopy cover.

During the study period, all planning zones saw an increase in canopy, ranging between 5-8%. The largest increase (246 acres) occurred in the Rural planning zone. This increase could be attributed to the growth of an existing tree farm. Downtown and Circles at 30 planning zones saw more modest growth, gaining just 6 and 16 acres respectively.

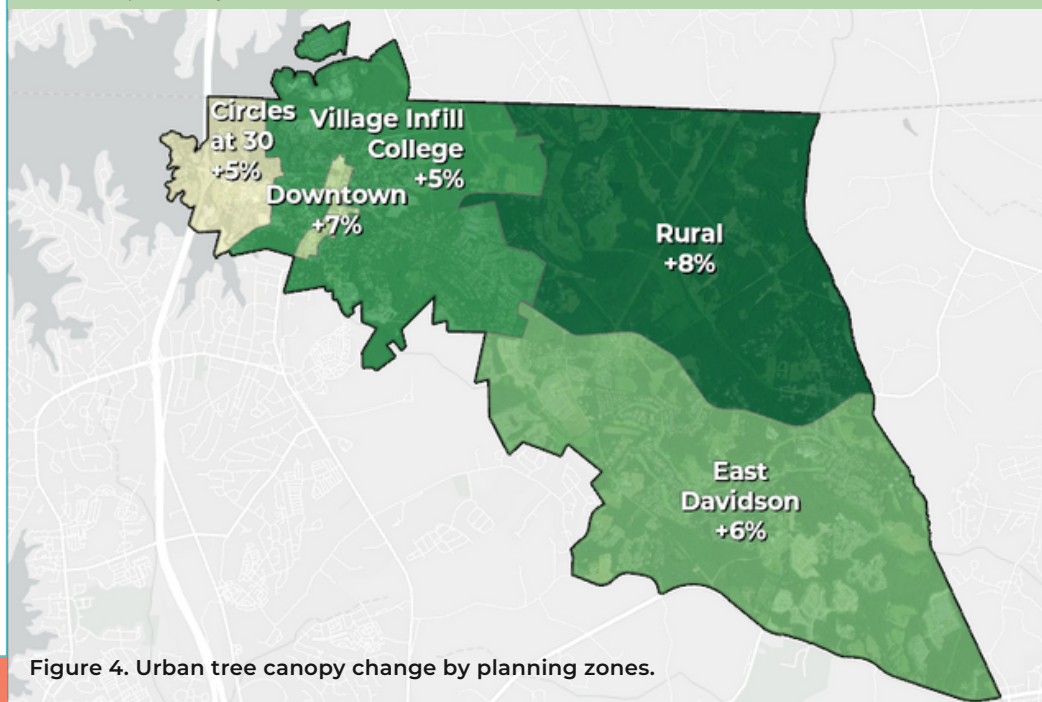


Figure 4. Urban tree canopy change by planning zones.

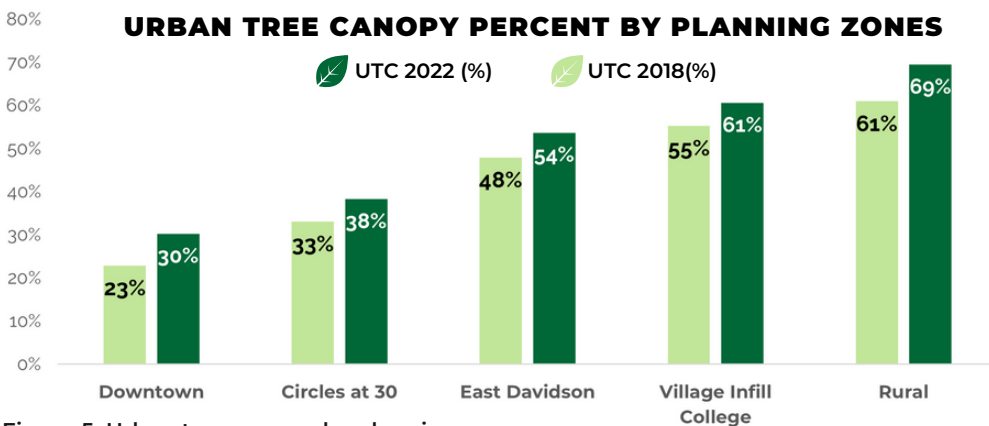


Figure 5. Urban tree canopy by planning zones.