



## MEMO: TREE ORDINANCE TEXT AMENDMENTS

Date: May 14, 2019  
To: Board of Commissioners  
From: Jason Burdette, Planning Director  
Re: Tree Canopy Study Results

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*The following sections highlight the study's history, alignment with town aims, study uses, and anticipated schedule/potential action.*

### 1. OVERVIEW

#### BACKGROUND

- **Purpose:** The purpose of the Tree Canopy Study (2019) is to understand the historic and current tree canopy extent in Davidson. It covers all land areas in Davidson's jurisdiction and offers a composite picture of data at a high level. It will help to inform current ordinance changes as well as future planning efforts. In these ways, the Tree Canopy Study differs from the Street Tree Inventory (2018) – which assessed individual trees within or adjacent to the public right-of-way with the purpose of informing a management plan.
- **Background:** In November 2018 the Board of Commissioners directed staff to undertake a study of the town's existing tree canopy. The town hired PlanIt Geo, a company based in the Denver, CO region, to execute the study by gathering and analyzing data. The study examines data from 2009, 2017, and 2018; it provides a snapshot of the town's current tree canopy coverage as well as changes since 2009. The study includes all land area within the town limits as well as Extraterritorial Jurisdiction (ETJ).
- **Results:** The study indicates that Davidson's current tree canopy covers 53 percent of its land area. This represents a 4 percent decline over 10 years. The study scope included the division of the study area into five different sub-geographies within the town/ETJ. Those areas are illustrated in the associated presentation; their results are reported below:
  - » **Circles @ 30:** 33% Coverage (1% or 4 Ac. Loss Over 10 Years)
  - » **Downtown:** 23% Coverage (1% or 1 Ac. Loss Over 10 Years)
  - » **Village Infill College:** 55% Coverage (3% or 56 Ac. Loss Over 10 Years)
  - » **Rural:** 61% Coverage (4% or 127 Ac. Loss Over 10 Years)
  - » **East Davidson:** 48% Coverage (4% or 142 Ac. Loss Over 10 Years)
- **Initial Conclusions:** According to practitioners in the field, the losses reported in the Tree Canopy Study are moderate but important. As a comparison, two other university towns for which data is available experienced the following losses:

- » **Fayetteville, AR:** 2% Loss Over 10 Years
- » **Davidson, NC:** 4% Loss Over 9 Years
- » **Charlottesville, VA:** 6% Loss Over 9 Years

It's important to note that the values reported for Davidson are net totals. This means that the actual loss of acres may have been greater but was offset to a certain extent by replanting and/or growth of existing/new canopy cover. The Tree Canopy Study can help stakeholders – elected officials, advisory boards, staff, the college, and volunteer groups such as Trees Davidson – understand where losses are occurring and where future efforts should be directed to help preserve, maintain, and grow a healthy tree canopy.

#### *ATTACHMENTS*

- **Presentation:** Provides an overview of the study's purpose, methods, and results. It also includes important principles to consider while evaluating the results, potential reasons for losses in each sub-area, and how Davidson's results compare to select communities.

## **2. RELATED TOWN GOALS**

#### *STRATEGIC PLAN ALIGNMENT*

- **Land Use Strategy:** The study can help inform revisions to development processes to more effectively guide the approval of landscape plans and tree permits.
- **Partnerships:** The study provides baseline information that can be used to support the efforts of the college and groups such as Trees Davidson to enhance the town's tree canopy.

#### *CORE VALUES*

- **Open Communication:** Advisory board members have and will continue to play an instrumental role in reviewing the study, revising standards, and engaging citizens.
- **Healthy Environment:** The study can help to inform regulations to protect and enhance the town's tree canopy.

#### *COMPREHENSIVE PLAN*

- **Enable Faithful Stewardship, Goal 2 - Preserve Natural Habitats, the Lakeshore, and the Tree Canopy:** This goal recommends a variety of approaches that can be informed by the study, including:
  - » Promote healthy pruning techniques;
  - » Set measurable goals to increase and sustain forest cover;
  - » Consider using only native, drought-tolerant species in town landscaping projects;
  - » Create incentives and/or funds to assist landowners in mitigating tree removal through care practices or replanting;
  - » Create a tree canopy replanting and management plan;
  - » Revise requirements to better preserve existing tree canopy.

#### *CONSTITUENTS SERVED*

- **All Residents:** Residents across town experience the beauty of trees on our streets and in our public spaces and are positively impacted by the improved air quality that trees provide. The study can help community stakeholders understand how/where to address canopy needs.

### 3. OPTIONS/PROS & CONS

#### *OPTIONS*

The Tree Canopy Study represents an important snapshot of the canopy coverage extent in our community. This information can be used in the short-term to inform proposed text amendments to Section 9 of the Davidson Planning Ordinance – particularly 9.3 dealing with canopy coverage, preservation, and permitting requirements. Potential medium- and long-term uses of the study include: Development of a tree canopy management plan; establishing goals for canopy coverage; and, ultimately, benchmarking the town against progress made since this initial study.

### 4. FYI/RECOMMENDED ACTION

The study results are being presented for informational purposes. No action is requested of the board.

### 5. NEXT STEPS

- **May 14, 2019:** Commissioners update and discussion.
- **Late May 2019:** Section 9.3 completed by Planning Board Ordinance Committee.
- **June 2019:** Commissioners review Section 9 proposed text amendments.
- **Summer 2019:** Public hearing, Planning Board recommendation, commissioner consideration of approval.