

FY23 State of the Forest

Charlottesville Tree Commission

MaKshya Tolbert and Tyler Miller

State of the Forest: Purpose

Purpose of this report:

To bring to the attention of the Charlottesville City Council
and our community the current state of our urban tree canopy (UTC)
and the compelling need for strategic interventions.

State of the Forest: Precarious

Imperiled. Decline Expected to Continue:

- Significant infiltration of invasive species in the urban canopy.
- Disparities in tree canopy coverage among neighborhoods, some as low as 14.5%
- increasing frequency of climate change related weather events, such as hurricanes, droughts, extreme heat, and severe storms.
- The spread of tree pests and diseases like emerald ash borer, sudden oak death, and bacterial leaf scorch continue to jeopardize the vitality of Charlottesville's tree canopy

Current Canopy Coverage Estimated around 38% by PlanIT Geo.

- This study could not account for invasive infiltration & non-tree foliage.
- On Ground observations put the canopy coverage closer to 25%.

Expect losses to continue for the foreseeable future reducing the canopy by another ~15% by 2050.

Urban Tree Canopy (UTC) across Charlottesville

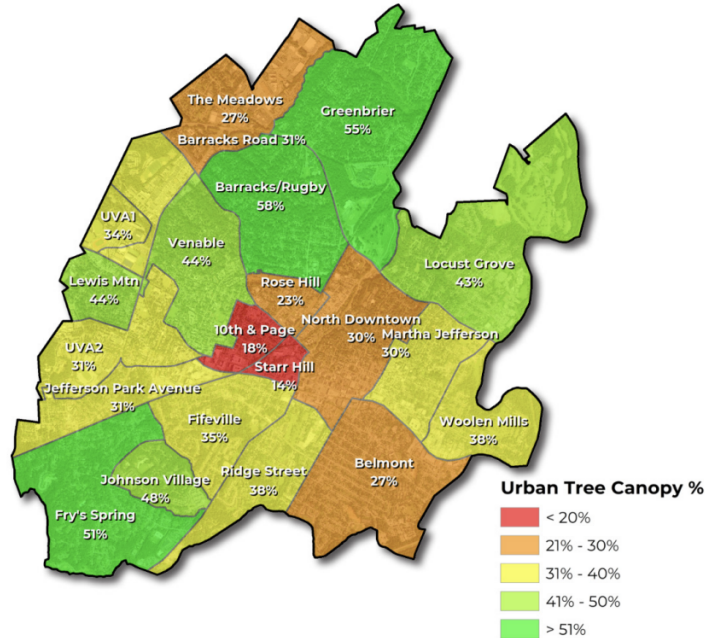


Figure 1: Map of Charlottesville Neighborhoods and Canopy Coverage.⁴

Changing data

Shade disparities

Need for intensive
planting and
preservation of
large shade trees

City of Charlottesville vs. scenarios: daunting yet exciting

The following table (see Figure 4) shows tree plantings conducted by the City from 2018 to through 2024 and provides a useful reference for where the City stands in regards to the scenarios outlined above.

	2018	2019	2020	2021	2022	2023	2024 (projected)
Tree (2" caliper)	161	134	151	23	139	162	181
Seedling/ Sapling	0	0	0	0	0	32	850-1000

Figure 4: Tree Plantings funded through CIP Fiscal Years 2018-2024¹²

Scenarios for Canopy Loss Reversal (T)

The 2023 PlanIT Geo Tree Canopy Assessment analyzed the composition of the City's canopy infrastructure and outlined four possible scenarios and accompanying projected changes in canopy coverage from 2023 to 2050. These four scenarios were called (1) Business as Usual, (2) Maintain Existing Canopy Coverage, (3) Attainable Growth, and (4) Aggressive Growth. The details of these four scenarios are presented in the table below (see Figure 3).

Scenario	Goal	Estimated Citywide UTC % in 2023	Planting Required		Net Tree Canopy Change		Citywide UTC % in 2050	
			Total	Annual	Acres	%	Acres	%
Business as Usual Planting Trends	Calculate the citywide canopy % in 2050 if the City continues to plant approx. 500 trees a year for the next 27 years.	38%	13,492	500	-889	-13%	1,761	25%
Maintain Existing UTC %	Calculate the number of tree plantings required to maintain 38% canopy cover over the next 27 years.	38%	69,431	2,572	5	0%	2,655	38%
Attainable Growth	Calculate the number of tree plantings needed to grow the citywide canopy to 45% by 2050.	38%	99,806	3,697	491	7%	3,141	45%
Aggressive Growth	Calculate the number of tree plantings needed to grow the citywide canopy to 50% by 2050.	38%	121,504	4,500	837	12%	3,487	50%

Shifting arboreal momentum and capacity

- FY24 projections: we're somewhere between "Business-as-usual" and "Maintaining Canopy"
- The daunting news: We could lose significantly more canopy over the next two decades, at this pace
- The good news: Relief is possible, and ahead of us
- Setting the groundwork that reaches the breadth of our community's need

Supporting Steve's (our Forester) groundwork

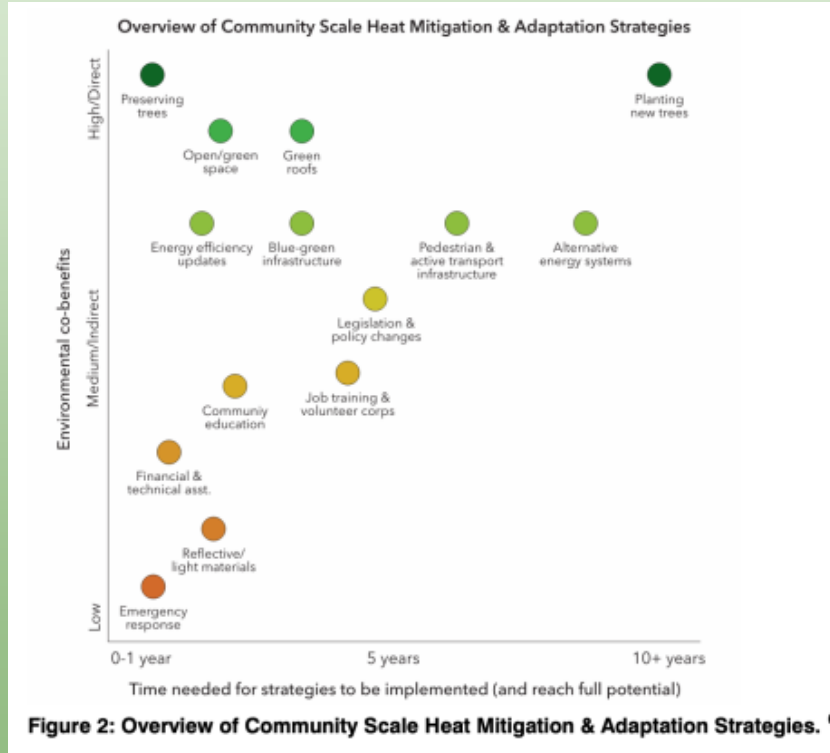
- Inflation Reduction Act / US Forest Service: Forest Management Plan
- Downtown Mall: long-overdue maintenance and care
- Distilling the City's parks, trails, and Rights of Way (ROWs): new trees in newly-liberated areas newly
- Removed and maintained hazardous and diseased trees (ash trees)
- Walk-and-talks, tree plantings, opportunities to learn

On the Tree Commission: Furthering shared groundwork

Commitment to supporting the Forester's capacity, and at the pace of critical citywide and community priorities and projects, including:

- **Cville Plans Together:** Active participation, feedback, review, and insight towards Cville Plans Together and Zoning Ordinance rewrite processes
- **Review and share-out of key documents:** Urban Forestry Management Plan, State of the Forest, Comprehensive Tree list
- **Comprehensive Tree List:** essential site plan and zoning tool
- **Getting outside:** Public practice, education, advocacy (Arbor Day celebrations, tabling, social practice projects)
- **Partners in Practice:** Ongoing planting and preservation-driven collaboration

Reactivity to creativity: adaptation strategies exist



- Mitigation and adaptation to change and precarity is possible: across a range of co-benefits and strategies
- Charlottesville's 2023 **Heat Mitigation and Adaptation Guidebook** details what we as a community **can do, are doing, or could do**
- An opportunity to align intention and practice

A right and responsibility to the (arboreal) city

Charlottesville's Tree Commission is as useful as the resources and capacity the City invests in its trees and its people who care for trees. Building capacity that aligns with the needs and insights of community members in our neighborhoods provides the Commission with the opportunity to at least operate somewhere between business-as-usual and maintaining UTC in the year ahead. The Commission recommends the city:

1. **Fully fund** the Urban Forester's upcoming 2024 CIP request.
1. **Budget and staff key positions** to implement an ongoing program of tree planting and maintenance, invasive species control, enforcement of zoning ordinances, and beyond.
1. **Develop incentives for tree planting and preservation on private property**, where the vast majority of our city's trees stand.

Goodnight!

*(and any questions
we can sleep on?)*