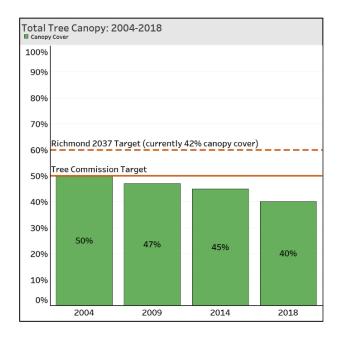
STATE OF THE URBAN FOREST - FY2022 Report of the Charlottesville Tree Commission

The Tree Commission works with the Parks & Recreation Department to protect and improve the urban forest so that the City can reach its goals for public health, energy conservation, climate sustainability, stormwater management, water and air quality, and environmental justice and equity.

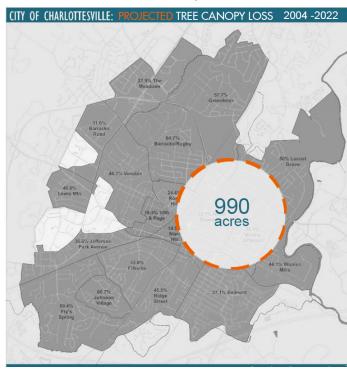
2022 was another year of challenges in achieving these aims. The Park's department was without an Urban Forester for almost five months of that time and reductions in staff resources affected the ability of Parks & Recreation to meet green infrastructure goals. This report reflects these realities while offering some hope for the years ahead.

Decline of the Urban Tree Canopy — Rather than robust and flourishing, Charlottesville's overall tree canopy continues to decline at an accelerating rate.



The last expert analysis of satellite imagery from 2018 shows a 10% reduction in tree canopy between 2004 and 2018, from 50% coverage to 40%. What is worse, the rate of loss is increasing over time.

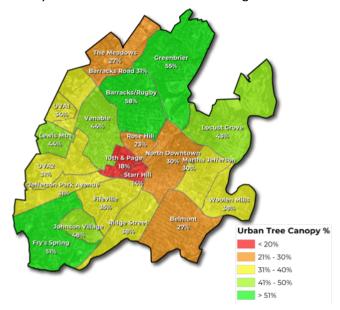
Today, five years later, the total canopy loss may be closer to 35%, equal to a loss of 990 acres in less than two decades as seen on the map below.



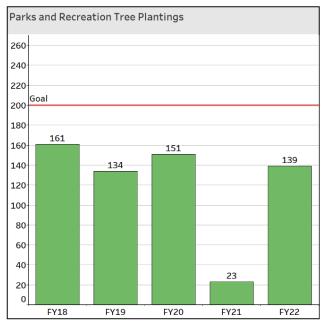
It is not impossible to increase tree canopy even in a developing city. Richmond continues to reach its goal of 60% canopy from its current coverage of 42%, and Washington DC also continues to increase its canopy coverage.

Heat Islands, Public Health, & Justice — The canopy decline across all neighborhoods is most acute in low-income neighborhoods. Fourteen of the city's 19 neighborhoods are now below 40% canopy cover, and two of these are extremely low-canopy, below 20%. These neighborhoods face higher surface temperatures, greater utility costs, and their residents suffer the greatest physical stress, accounting for the majority of heat-related illnesses in any community.

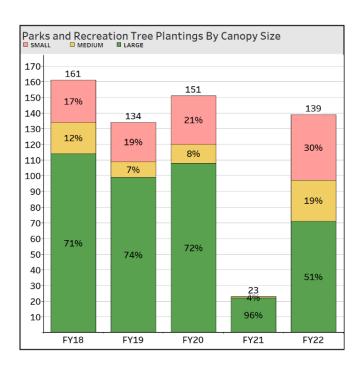
By these measures, Starr Hill and 10th & Page (below 20% canopy) and Belmont, Rose Hill, and The Meadows (below 30%) fare worse in the City. The map below shows that the City's low-canopy neighborhoods primarily correlate with lower-income neighborhoods.



Critical Need to Plant Trees—The City's goal is to plant 200 trees every year. It has not met this goal in any of the past five fiscal years, especially FY21 when the fiscal impact of Covid resulted in only 23 trees planted.



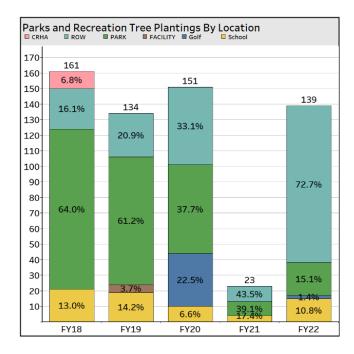
Compounding this shortfall, the City has removed more trees than it has replaced. With devastating storms and diseases, especially the emerald ash borer, the City lost approximately 165 trees in FY22.



Planting Large Canopy Trees — A Tree Commission goal is to primarily plant shade trees. This accords with the goals of fostering healthier neighborhoods, providing greater shade for pedestrians, reducing energy costs, and mitigating pollution. As the graph above indicates, Parks & Recreation continues to include a high percentage of large canopy trees among those it plants each year.

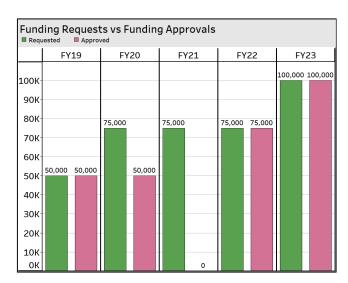
Location of Trees Planted on Public Property —

The graph below shows that plantings were primarily in the public right-of-way (ROW) in FY22. While these trees contribute to the overall tree canopy and provide shade for walkers, they do not provide sufficient shade to cool pedestrians where they play and gather. Thus, for the next couple of years, the Tree Commission will also prioritize planting on school grounds and parks. In order to improve tree canopy cover in low-canopy neighborhoods where there is little public property, the Tree Commission initiated ReLeaf Cville to plant on private property where the City cannot.



Financial Investment in the Urban Forest —

The financial uncertainty of the pandemic led to the elimination of the FY21 CIP budget for tree planting. Fortunately, the City's financial resources rebounded resulting in an increase for tree planting to 75K in FY22 and 100K in FY23.



It is crucial that the City continue to plant trees, which requires full funding of future CIP requests.

Further delay in investing in the urban forest will only exacerbate negative health, environmental, and social consequences and reduce the likelihood of closing a years-long gap in planting.

The inexorable spread of the emerald ash borer is a present dire threat to over 300 ash trees throughout Charlottesville's urban forest as well as to the safety of citizens on the City's streets and in its

parks. To counter these threats, the City approved a FY23 request for \$50,000 for removals.

As for the preservation of trees, the Commission appreciates that Council recognizes this important need and for several years has provided funding in Parks & Recreation's operating budget. The department uses these funds to prune, repair, and protect existing large and valuable trees in the community, especially specimen and historic trees protected under City ordinance.

Zoning Ordinance Revision – Both the recent Comprehensive Plan and the Climate Action Plan include excellent aspirations for a more sustainable built environment and healthier natural environment. Despite these lofty goals, the urban forest is suffering further fragmentation and degradation primarily as a

result of the development of private land.

Development often fails to protect and preserve existing trees, and also fails to incorporate appropriate number of new canopy trees.

One of the most important suggestions in the Climate Action Plan refers to protecting and restoring natural ecosystems by using already **degraded** land for development, as opposed to denuding wild lands. Unfortunately, the City's current regulations and policies often fail to follow this recommendation and are inadequate to protect and enhance the urban forest. Thus, the zoning ordinance must be revised to address these deficiencies.

Activities of the Charlottesville Tree

Commission — The Tree Commission has continued to meet virtually. Despite this constraint, members worked individually and in small groups to promote the goals of the Tree Commission. What follows are the primary projects undertaken by the committees throughout 2022 into early 2023.

Education & Advocacy

- Worked with City staff to improve the Urban Forestry web site.
- Successfully advocated for full funding for tree planting and ash tree removal in the CIP.

- Worked with the Urban Forester to prepare The Downtown Mall Tree Management Plan RFP to better preserve the existing trees and to plan replacements.
- Collaborated with ReLeaf Cville and City of Promise to begin planting trees in the 10th and Page neighborhood which resulted in 39 trees planted this past fall.



 As seen in the photo below, participated in ReLeaf's Environmental Career Fair at CHS to educate teenagers about jobs in the Green Industries.



 Began developing a handout to educate the community about the purpose and work of the Tree Commission.

Arbor

 Held two events on Arbor Day - with CATS, recognized a notable Elm at Sojourners Church and with ReLeaf Cville, planted an Oak at Clark School with a group of third graders.

- Worked with the Urban Forester to revise priorities for locations of new trees and developed the list of tree species and locations for approximately 160 new trees for this spring.
- Advised the Department of Utilities on tree species for their Arbor Day tree-give-away program which resulted in over 200 tree requests by City residents.
- Began a conversation with PHA about working to save the Oak trees along Garret and 2nd Streets as PHA prepares their development plans for Friendship Court.

Codes & Ordinances

- Continued to participate in virtual meetings of the C'ville Plans Together Steering Committee.
- Prepared for a thorough review of city zoning code and comments on proposed changes affecting trees.
- Prepared comments on the city's Climate Action Plan.
- Consulted with neighborhood associations on the protection of trees when threatened by development.
- Submitted comments on proposals, including the Azalea Springs development and 5th Street safety improvements.
- Prepared comments concerning the critical slope ordinance, which has been consistently waived in the last two years and which is one of the few code provisions meant to protect sensitive environmental areas.

Looking Forward: How the City Can Protect and Enhance Trees and the Natural Environment

The City should take budgetary and organizational action to support the city's tree canopy, and live up to this vision as stated in the recently adopted Comprehensive Plan:

"Charlottesville will be an environmental leader, with healthy air, water and ecosystems, as well as ample, high-quality, and accessible open space, natural areas, and a preserved and enhanced tree canopy."

Such environmental systems, including forests, are neither a luxury nor an amenity the city can choose to invest in or not; they are a critical element of the municipal infrastructure and essential to the well-being of all. Following are some steps the City can take to

support this vision.

- **1. Fund the current CIP requests** for 100K for tree planting, 100K for the removal of hazardous ash trees, 100K for the ongoing preservation and replacement of the Downtown Mall trees, and 75K to reduce invasive plants that are rapidly outcompeting native vegetation on City-owned properties.
- 2. Create a zoning ordinance that treats trees and the natural environment as vital City assets. As stated in the Comprehensive Plan, "Require that zoning changes preserve and enhance natural resources and sensitive environmental areas, designated flood plain areas, steep slopes, rivers, and streams.
 - Strengthen the critical slope and other environmental ordinances in the current rewrite of the zoning ordinance instead of waiting for a second phase.
 - Enhance requirements, enforcement, and add penalties for tree protection during construction.
 - Increase number of trees required in new development, stressing large canopy trees.
 - Provide incentives to save trees in development, whether private or public trees.
 - Require meaningful compensation from developers for damages or removal of public trees.
 - Eliminate "no setback" waivers that prohibit opportunities to plant street trees.
 - Encourage large developments to be located on already degraded land that do not destroy trees, forests, streams, and critical slopes.

3. Improve the City's organization to better manage urban forest and all natural resources

- Encourage greater coordination and integration between Parks & Recreation, NDS, and Public Works
- Support creation of Natural Resources Manager position.

4. Enhance charge of the Tree Commission to better advocate for the urban forest and all natural resources

- Support the Commission's review of particular site plans, particularly for large-scale development, development that will have negative impact on trees and other natural systems.
- Encourage departments to work together on common goals, and require that a member of the

- Environmental Sustainability division attend Tree Commission meetings along with Parks & Recreation and NDS representatives.
- Explore the creation of a Natural Recourse Commission or expand the Tree Commission's charge to include enhancement and protection of all natural resources.

Conclusion

The Tree Commission appreciates the support that City officials and staff, especially in Parks & Recreation, has given us in recent years as we struggled through the pandemic.

We take our charge seriously to advise and advocate for a healthy natural environment with an emphasis on trees. Furthermore, we truly believe we need more affordable housing, but to be a livable city, we need both more housing and a healthy environment. It does not have to be one or the other.

Many of our citizens may not be able to visit our state parks and other special natural areas. Therefore, Charlottesville must provide places where they can experience nature. More and more scientific research has found that people living near trees, forests and green space have better health. This sign, posted by some residents of Crescent Hall expressing their love for their trees, makes the case for a healthy, natural environment within our City for all of its citizens.

