

STATE OF YOUR CANOPY

McCrorey Heights, Charlotte, NC

Table Of Content

As of September 2023



09

Welcome Message Introduction to TreesCLT & Treesilience	03
Treesilience Programs Learn about our free Treesilience programs	04
State of the Canopy What is a "State of the Canopy" and why?	05
Tree Mapping Assessment What we found from tree mapping	06
Ecosystem Benefits Total tree value & savings	08
McCrorev Heights Treesilience Stats	



About TreesCharlotte

Mission

TreesCharlotte is a public/private nonprofit collaboration to grow, diversify and steward the city's iconic urban forest. Trained volunteers and science-based programs teach residents about the value of trees and how to plant and care for them.

Treesilience

Treesilience is a holistic tree care initiative aimed to protect and enhance Charlotte's under-canopied and underserved neighborhoods while building community through trees. Through the generosity of corporate sponsors, McCrorey Heights residents can participate in Treesilience at no cost. TreesCharlotte defines "under-canopied" neighborhoods as neighborhoods with a tree canopy that is less than 40%. The City of Charlotte currently holds a tree canopy of around 47%. According to our last tree canopy survey from 2018, McCrorey Heights's tree canopy is at 35%. Neighborhoods with a lower tree canopy have a higher exposure to air pollution, which can have a detrimental effect on health and disproportionately affects people living in socioeconomically disadvantaged areas. Our goal is to lessen exposure to air pollution from highways and industrial complexes through trees.

Our **Free** Treesilience Programs

Tree Engagement

Treesilience community activities are designed to engage the community that we are serving. Each season involves at least one community event, free for the residents of our Treesilience neighborhoods. Through these educational efforts, we will review the importance of trees and how to care for them.

Front Yard Planting

Participants receive guidance to aid with selecting their tree(s) using the concept of "right tree for the right place." They can choose from a variety of native and naturalized tree species that will provide shade and mitigate storm water runoff. We provide a comprehensive plan, trees, mulch, and tools, and plant the new trees.

Tree Stewardship

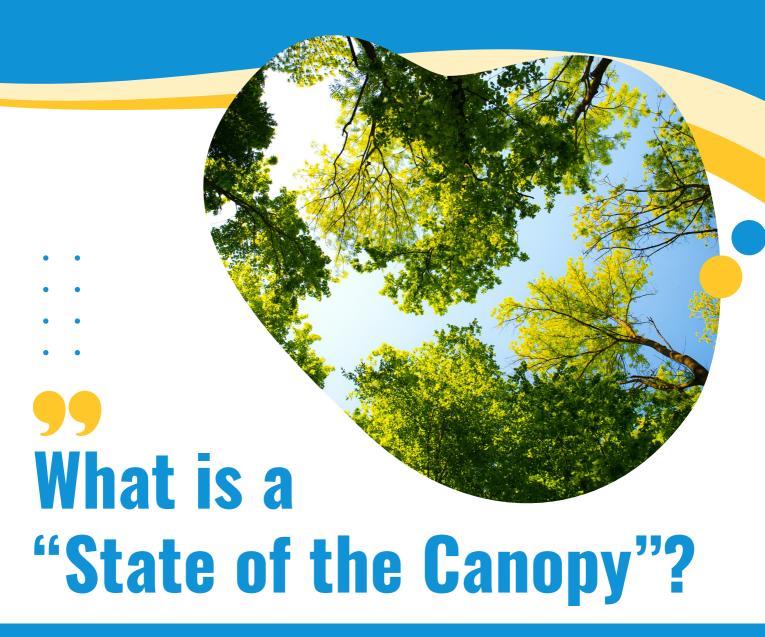
We involve groups of volunteers to provide mulch, prune young small trees, and manage invasive plants as needed. Participants will receive training during subsequent years. These measures ensure that small trees have the best chance of surviving and thriving. Qualifying residents, with hazardous mature trees, may receive additional support if funding is available.

Tree Adoptions

We host free giveaways, where residents can take home trees (with mulch) to plant in their back yards. Participants are asked to sign a pledge to care for the trees they receive and attend an educational tree planting and care clinic.

Ready to apply?

Visit our website below, or scan the QR code on the back of this booklet!



A "State of the Canopy" is an analysis of a community or city's tree canopy based on quantitative data that was gathered through the tree mapping process. We are able to pull interesting and informative facts about a community's tree canopy by examining the types of trees that exist, the ages of the trees, the size, and the species.

This information is important because it allows each community that we serve to understand their own individual tree canopy, with information ranging from what types of trees exist, the size of the trees, and the eco-benefits that those trees are giving back to their communities. Our hope is that with these data points, community members can make thoughtful and informed decisions about how to care, preserve, and grow their own tree canopies.





Tree Mapping Assessment

Who, When and Where

With a group of trained volunteers, TreesCharlotte mapped the front yard trees in the McCrorey Heights neighborhood on July 28, 2023 and September 14, 2023.

What

Through the City's Tree by Tree program, 846 trees have been mapped in McCrorey Heights! The most common mapped trees in McCrorey Heights were Crape Myrtles, Willow Oaks, and Bradford Pears.

How

We identified trees by using the <u>Picture This</u> app. Then, we measured the "DBH" (diameter at breast height) of each tree using forestry tape measures. Finally, the ecobenefits data in this analysis was calculated using the Tree by Tree map managed by the City of Charlotte. For more information visit https://charlottenc.gov/trees.







Why?

By identifying the tree species, DBH (or size of each tree), and general health of the front yard trees in McCrorey Heights, we're able to draw conclusions regarding the "State of the Canopy" in McCrorey Heights, such as what eco-benefits are derived from the trees that already exist in this community.

What We Found

We were able to locate 84 potential heritage trees in McCrorey Heights. Heritage trees are "any tree native to North Carolina per the US Department of Agriculture Natural Resource Conservation Service Plants Database with a DBH of 30 inches or greater." - <u>Charlotte Tree Ordinance, 2023</u>

We found that the most common tree in McCrorey Heights is the Crape Myrtle (Lagerstroemia indica) tree. We mapped 313 Crape Myrtle trees, which equates to 37% of the trees that are currently mapped. "Common crape myrtle is a deciduous, erect, multi-trunked, tree or shrub. It is native to the Philippines, Japan and central Himalayas to southern China and Indochina. It requires full sun and moist, well-drained soil, though it will tolerate occasionally wet or dry soil once established." - NC Extension Gardner Toolkit

The third most common tree in McCrorey Heights is the Bradford Pear (Pyrus calleryana or "Callery Pear"). Bradford Pears are considered invasive trees in North Carolina and are recommended to be removed and replaced with a native or naturalized tree. Bradford pears can spread easily into natural forests and replace native trees while creating "food deserts" for birds and other wildlife. They also break easily during storms and can outcompete native trees. TreesCharlotte only sources and plants native and naturalized trees for this reason and we can source a better alternative for your Bradford Pear if you're interested in replacing one on your property. (Source: NC State Extension Forestry)

Some of the more notable eco-benefits of the existing tree canopy in McCrorey Heights include:

- 135,000 gallons of stormwater runoff avoided each year
- 520+ pounds of air pollutants removed each year
- 80,800+ of CO₂ sequestered* each year

*"A natural or artificial process by which carbon <u>dioxide</u> is removed from the atmosphere and held in solid or liquid form." - Oxford Languages Dictionary

"Carbon dioxide in the atmosphere warms the planet, causing climate change." - NASA







McCrorey Heights

Ecosystem Benefits as of September 2023



Total Tree Value and Savings

Total Annual Monetary Benefit: \$4,150.90

Benefits are only calculated for trees with defined species, DBH, condition, and crown light exposure based on i-Tree research.

TreesCharlotte Addendum: Monetary benefit for 50-year lifetime of mapped trees - \$207,500

CARBON (LIFETIME)



Carbon Storage 974,073.06 (lbs) 🕜

CO₂ Storage **3,571,600.00 (lbs) ?** CO₂ Storage Monetary Benefit \$83,065.26 **②**

CARBON (ANNUAL)



Carbon Monetary Benefit \$1,879.24 ? CO₂ Sequestered **80,802.90 (lbs) ?**

AIR QUALITY (ANNUAL)



Air Quality Monetary Benefit \$1,067.91

Pollutants Removed 521.06 (lbs)

STORMWATER (ANNUAL)



Stormwater Monetary Benefit \$1,203.74 ?

Runoff Avoided 18,007.86 (ft³) ?

Interception 103,119.36 (ft³) ?

i-Tree

This eco-benefits data in this analysis was calculated using the Tree by Tree map managed by the City of Charlotte.

For more information visit https://charlottenc.gov/trees

08 www.treescharlotte.org/treesilience-application/

Treesilience

Statistics as of September 2023



McCrorey Heights





MCC TREES WORK COMPLETED



HOUSES CANVASSED



APPLICATIONS RECEIVED



TREES MAPPED





VOLUNTEERS ENGAGED



EVENTS

Maria da a Maria da da da Maria da Anton da Maria da da Maria da da da Maria da d



TREES TO CARE



TREES
PENDING
ADOPTION



TREES TO



FESTIVAL



CORPORATE PARTNERS



Visit www.treescharlotte.org/treesilienceapplication/ to apply for our free Treesilience program, or scan the QR code below





Contact us



(+1 980-477-0170



joi@treescharlotte.org



701 Tuckaseegee Rd., Charlotte, NC, 28208