Charlotte's Urban Arboretum Trail (UAT)

Preservation, Partnerships, & Placemaking

Trail Forum

Tim Porter & Laura Bandara – City of Charlotte

December 5, 2023

2 Missions are greater than 1

- **Community Tree Canopy Preservation – Tim Porter**
  - leads the development, management, and implementation of tree canopy policy and community programs.

- **Urban Design Center – Laura Bandara**
  - advances the quality of Charlotte's built environment and brings public awareness to the importance of urban design.
  - reveals how design influences quality of life and economic resilience.
  - advocates for great public places in a livable city.

Outline

- Policy foundation
- Program history & policy
- Importance of partnerships
- UAT accomplishments
- What's Next
- Discussion & questions

Charlotte Future 2040 Plan

1. 10-MINUTE NEIGHBORHOODS

2. NEIGHBORHOOD DIVERSITY AND INCLUSION

3. HOUSING ACCESS FOR ALL

4. TRANSIT- AND TRAIL-ORIENTED DEVELOPMENT

5. SAFE AND EQUITABLE MOBILITY

6. HEALTHY, SAFE, AND ACTIVE COMMUNITIES

7. INTEGRATED NATURAL AND BUILT ENVIRONMENTS

8. DIVERSE AND RESILIENT ECONOMIC OPPORTUNITY

9. RETAIN OUR IDENTITY AND CHARM

10. FISCALLY RESPONSIBLE

CHARLOTTE
URBAN FOREST MASTER PLAN
2017

HOME ACTION STEPS PARTNERS GET INVOLVED FULL REPORT ABOUT

City of Charlotte

Preserving and Enhancing Our "City of Trees" Through Establishment of a Tree Canopy Goal
Goal "50% in 2050" Adopted by City Council June 28, 2011

A long-term strategic plan to preserve and care for Charlotte's tree canopy.

Charlotte, North Carolina is proud to be known and valued for its vibrant urban tree canopy. When viewed from above, tree canopy covers 47% of the city, which makes Charlotte one of the highest canopy cities in the U.S. On top of the aesthetic benefits Charlotte's trees provide, the city receives over $335 million in real benefits and services from these trees every year.

Despite these valuable benefits, the city's tree canopy is at risk. The two most pressing

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- 21 policy items

GOAL 7: INTEGRATED NATURAL AND BUILT ENVIRONMENTS

Charlotte will protect and enhance its surface water quality, tree canopy, and natural areas with a variety of trees, plantings, green infrastructure, green building practices, and open space at different scales throughout the entire community as a component of sustainable city infrastructure that addresses the threat of climate change.

OBJECTIVES

7a) Increase the number of small parks and plazas within or near neighborhoods and neighborhood centers that contain community amenities such as recreation facilities, tree canopy, retrofit stormwater facilities, and water quality/natural resource education.

7b) Increase the acreage of protected (including public and private) natural lands (such as forests and natural areas) within the City.

7c) Improve surface water quality such that all City streams meet surface water quality standards.

7d) Increase the acreage of amenitized open space and forested or tree-shaded open space within private developments that are open to the public.

Charlotte Future 2040 Plan

7.13 Continue to preserve and protect tree canopy on City-owned properties and consider a tree planting program on City-owned properties available for public use, such as the Urban Arboretum Trail and Program.

7.14 Purchase high priority natural lands that serve important City interests such as stormwater management, recreation, and water quality.

7.53 Increase awareness and quantity of the urba tree canopy with neighborhood serving public space through the Urban Arboretum Program.

Strategic Partnerships

7.19 Establish new partnerships and expand existing partnerships with Mecklenburg County and other stakeholders that may include other non-governmental organizations (NGOs), community organizations, and nonprofits to secure private funding and support to develop new and existing parks, tree canopy and shared-use paths, and the protection of open spaces as neighborhoods grow.

Tree Canopy Preservation Program (TCPP)

- **Established in 2011 through revisions to tree ordinance**
  - Payment in lieu option for developers to meet tree save requirement
  - Authorized City to administer funds
    - Spend the $ to acquire & protect land for forest conservation

- **Current Program - Two-phase process:**
  - Collect fees during land development permitting
  - Administer funding through TCPP & UAT

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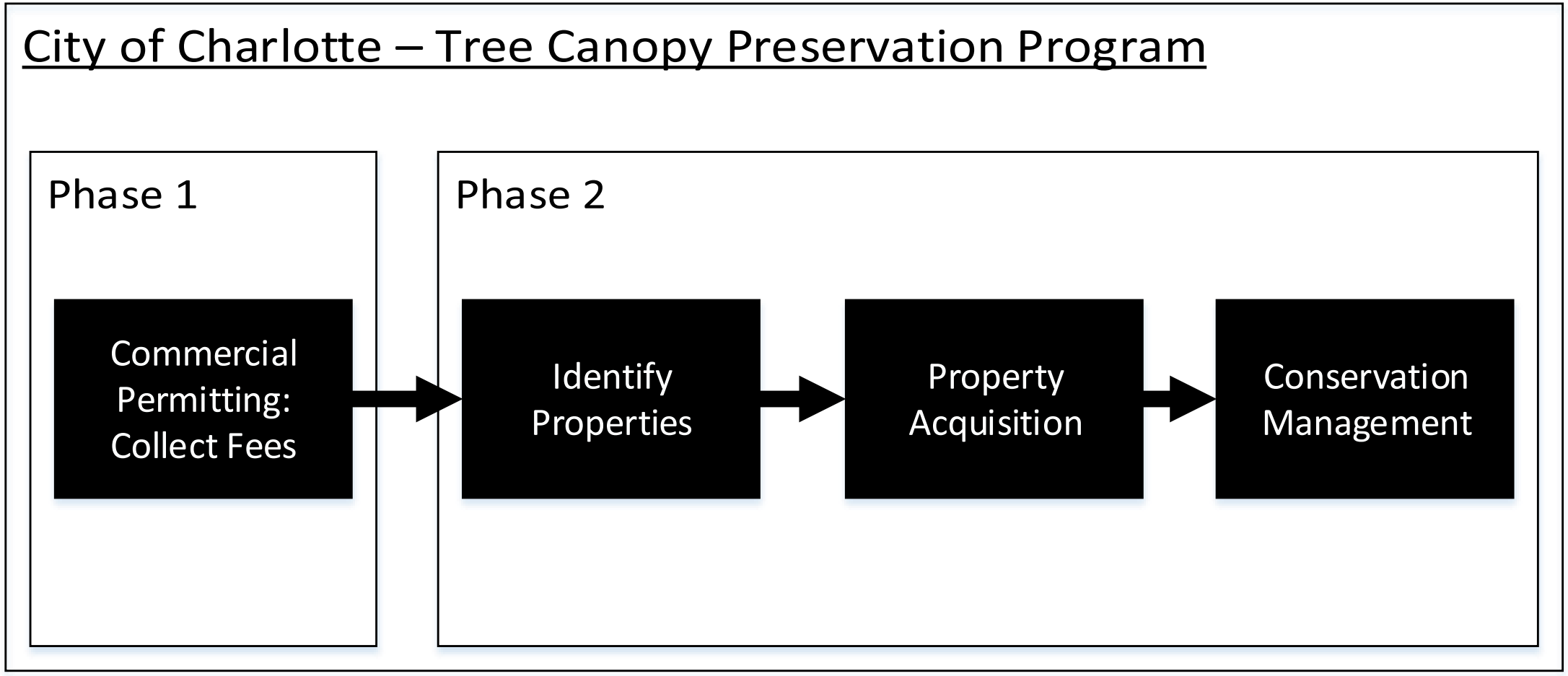
  - Administer funding through TCPP & UAT
    - Acquire land and protect via CE, conserve tree canopy in perpetuity

Tree Canopy Preservation Program (TCPP)



Tree Canopy Preservation Program (TCPP)

- McPherson CE - approximately 15 acres, adjacent to greenway
- Gum Branch CE - approximately 60 acres, adjacent to greenway
- Doe Creek CE - approximately 94 acres, adjacent to greenway
- Smawley CE - approximately 24 acres, adjacent to nature preserve
- UNCC - approximately 22 acres, adjacent to greenway

CITY OF TREES
URBAN
ARBORETUM
TRAIL

- 2005-2011 Tree Ordinance Revisions Stakeholder Process
- 2011 Tree ordinance revisions implemented
- 2014 1st acquisition (15 acre site in South Charlotte)
- 2014 TCPP conservation framework developed
- 2014 Partnership with Landscape Management
- 2015 Partnership with Catawba Lands Conservancy
- 2015 Program growth – acquired 5 sites / 46 acres
- 2017 Sustain Charlotte award
- 2018 UAT development & i2 Lab
- 2019 Partnership with UDC
- 2019 Arbor Day Foundation award
- 2016-2020 Acquired 42 properties / 270 acres
- 2020-2023 1st UAT alignment established, sites developed
- 2020 TreesCharlotte planting contract
- 2021 2040 Comprehensive Plan
- 2022 UAT/TCPP management shifts to Planning Department
- 2023 Grant partnership with CLC/CTT
- 2023 Updating UAT strategy

- $13 million collected & $7 million spent, since 2011
- 321 acres conserved
- 2x more land preserved than developers required
- 201,250 trees protected
- 45 properties protected
- $4.7 million of annual tree benefits
- 26 million tons of carbon sequestered annually
- 1.5 million gallons storm water intercepted annually
- 135,000 pounds of air pollution mitigated annually
- 7 national presentations given by staff

*Benefit data obtained using U.S. Forest Service's iTree assessment tool.

TOTAL ANNUAL BENEFITS

Charlotte's trees annually provide **$52,131,770** in ecosystem benefits.

MENTAL HEALTH

People without views of nature from their desks claimed 23% more sick days than workers with views of nature.

WILDLIFE HABITAT

Planting and protecting trees provides habitat for Mecklenburg's +270 bird species.

CLEANER AIR

$16,605,517

Each year, Charlotte's roadside trees remove 3,493 tons of greenhouse gases.

ENERGY SAVINGS

Residents and businesses can save up to 50% on hot-day energy bills.

STORMWATER MANAGEMENT

$11,887,761

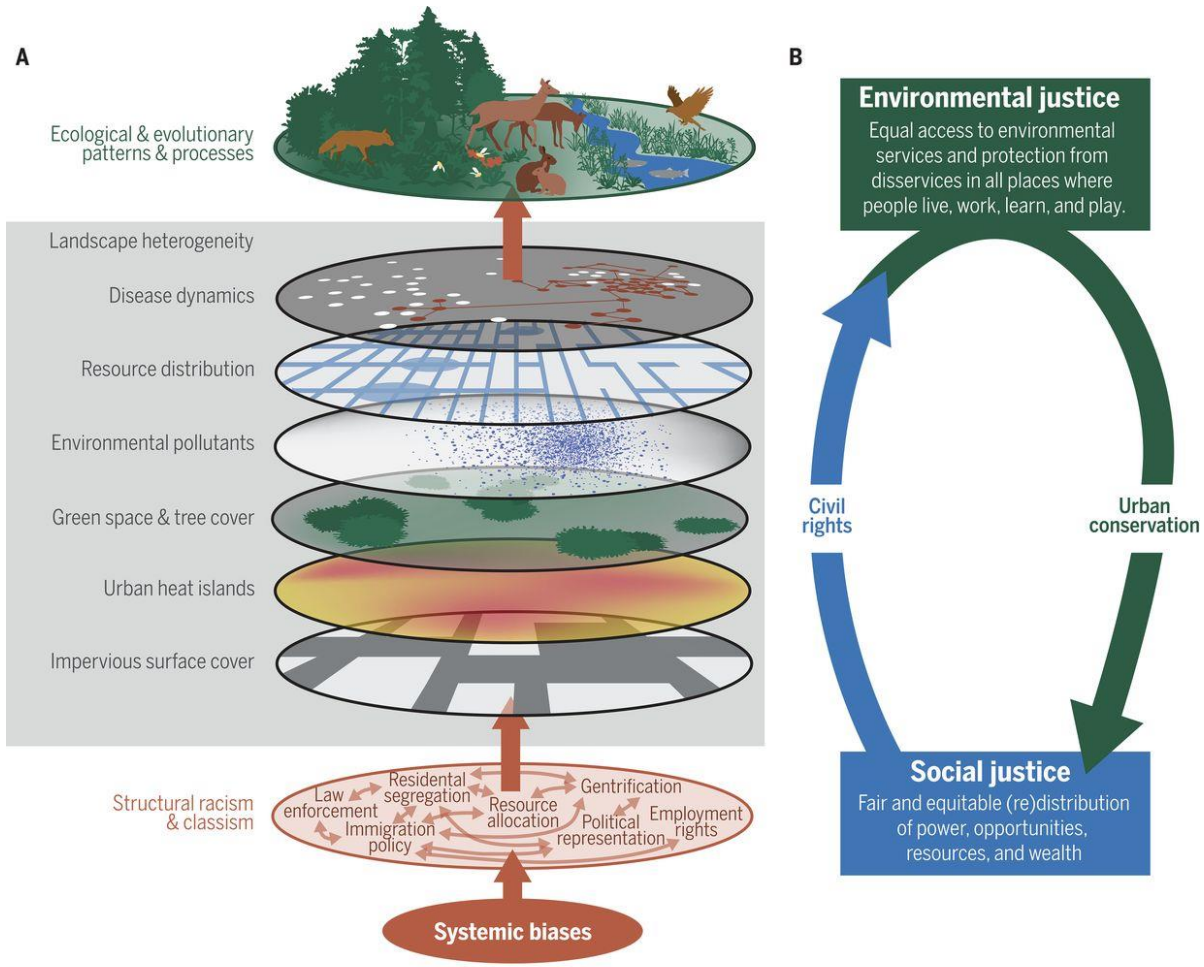
The City's tree intercepts 1,330 million gallons of runoff annually.

CARBON SERVICES

$23,638,491

In one year, Charlotte's mature trees absorb 138,600 tons of CO2.

I-Tree,
Arbor Day Foundation,
EPA



C Definitions

Inequality: Unequal distribution of wealth and resources across social groups.

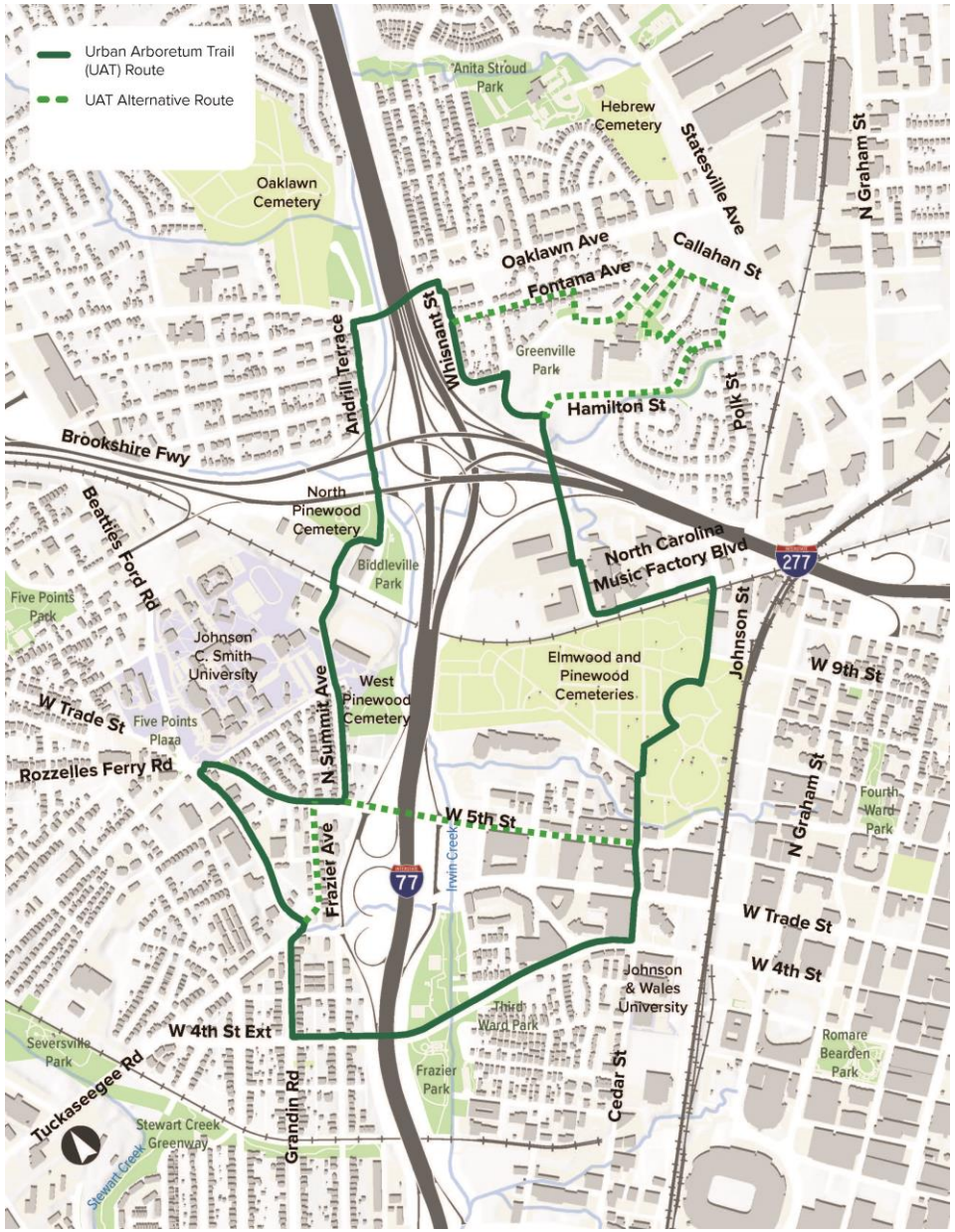
Inequity: Unjust allocation of resources driven by power dynamics discrimination, stereotypes, and systemic biases.

Racism: Stereotypical norms that disadvantage communities of color (typically Black, Asian, Latinx, and Indigenous groups), including the interdependent forces of "prejudice plus power" that dictate how racial inequalities persist even after elimination of racist actors or policies.

Classism: Discriminatory actions based on wealth, income, or social class, usually directed at barring people from working class backgrounds from accessing benefits and social spaces dominated by middle or upper classes.

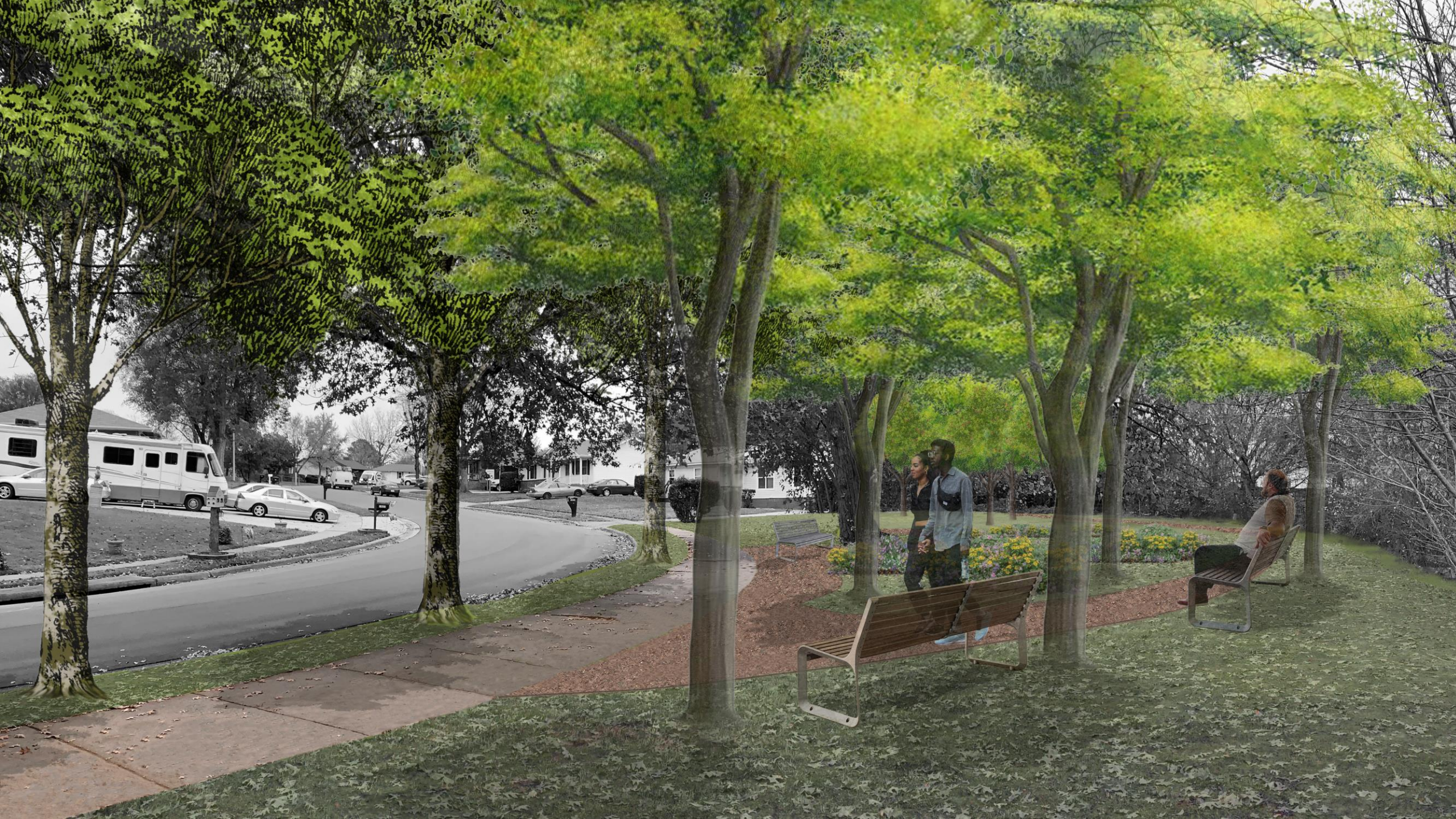
Intersectionality: The intersection, interaction, and compounding of marginalized identities, causing individuals and communities at such intersections to experience greater social inequities.

Schell et al., "The ecological and evolutionary consequences of systemic racism in urban environments" *Science*
18 Sep 2020, Vol 369, Issue 6510


Urban Arboretum Trail (UAT) Route
UAT Alternative Route
Anita Stroud Park
Hebrew Cemetery
Statesville Ave
N Graham St
Oaklawn Cemetery
Oaklawn Ave
Callahan St
Fontana Ave
Whisnant St
Andrill Terrace
Greenville Park
Hamilton St
Polk St
Brookshire Fwy
North Pinewood Cemetery
Beatties Ford Rd
Biddleville Park
North Carolina Music Factory Blvd
277
Five Points Park
Johnson C. Smith University
Elmwood and Pinewood Cemeteries
Johnson St
W 9th St
W Trade St
Five Points Plaza
West Pinewood Cemetery
N Summit Ave
Rozzelles Ferry Rd
W 5th St
Fraizer Ave
77
Irwin Creek
N Graham St
Fourth Ward Park
W Trade St
W 4th St
Johnson & Wales University
Third Ward Park
W 4th St Ext
Seversville Park
Tuckaseegee Rd
Frazier Park
Cedar St
Romare Bearden Park
Grandin Rd
Stewart Creek Greenway
Stewart Creek

BIKE ROUTE
URBAN ARBORETUM TRAIL

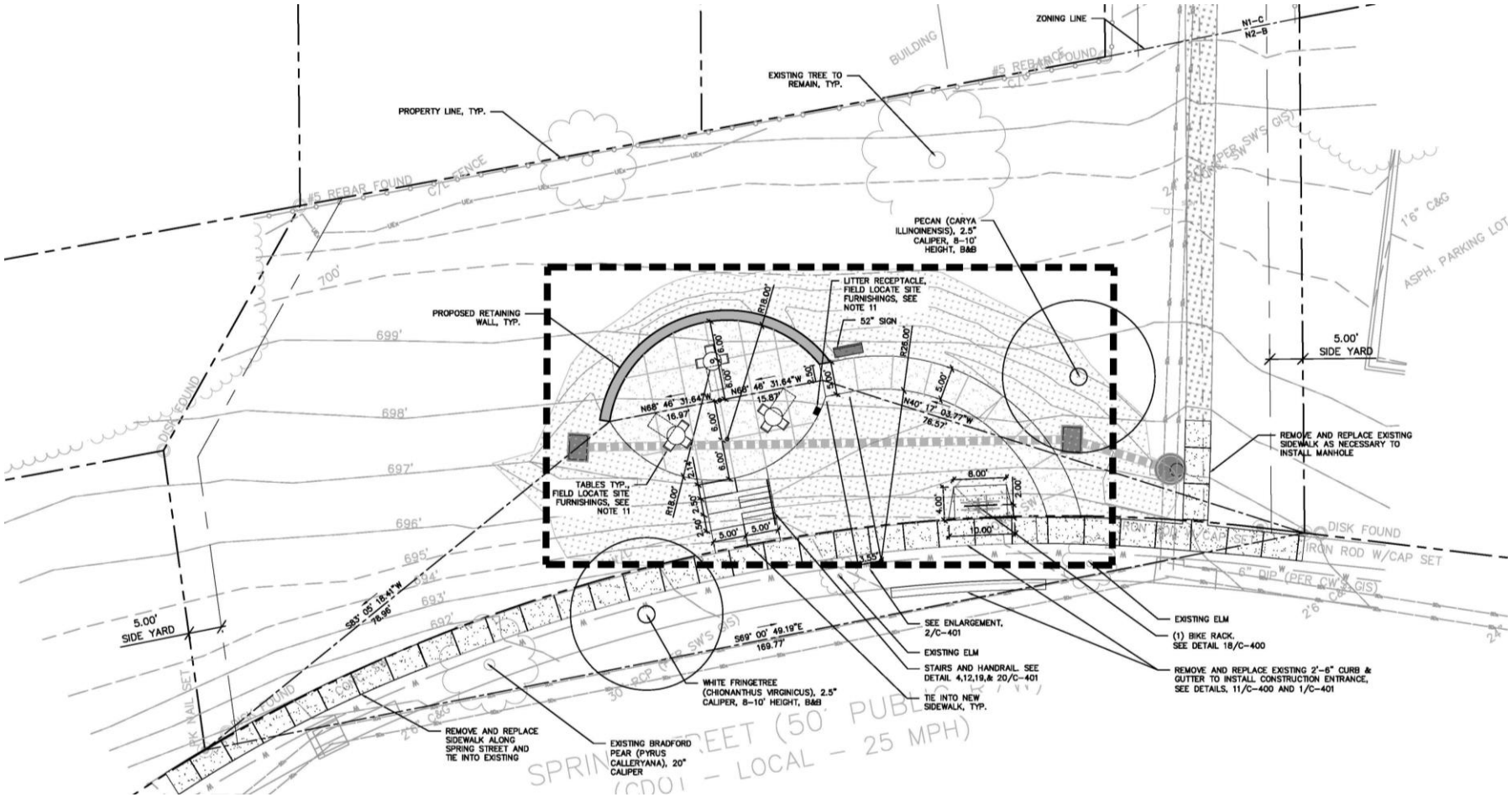
Greenville Grove Design Concept



Polk/Hamilton Edible Landscape

Red Vest Day – Lowe's volunteers

Spring Street Plaza Design Concept



Key West

What's Next for UAT

Update UAT program management and acquisition strategy

- Corridors of Opportunity
- Increased focused on urban ecology, wildlife habitat
- More strategic and intentional
- Increase effectiveness and efficiency

Develop new UAT hubs and alignments

- Consider developing overlay and long-range program area targets
- Finalize land donation model and UDO option for developers

Questions and Discussion

- Thanks for listening!

- City of Charlotte; Planning, Design & Development Department

- Tim Porter, Chief Urban Forester Community Tree Canopy Preservation
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- Laura Bandara, Program Manager and Urban Designer Urban Design Center
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