The Cleveland Tree Coalition
2023-2028 **STRATEGIC PLAN**

CLEVELAND
TREE COALITION

Acknowledgements

Executive Summary

Cleveland's urban forest has been at the center of the city's identity and resilience, but there has been a sharp decline in tree canopy over the last several decades. Cleveland historically was nicknamed the "Forest City" for its expansive, lush shade and fruit trees. Now with tree canopy covering only 18%, it's become lower than peer cities of similar size. This strategic plan helps set a focused course of action to collaborate and initiate an immediate increase in investment to achieve a 30% urban tree canopy by 2040.

As further depicted in Figure 1, a healthy and equitable urban tree canopy is critical to the health and well-being of Cleveland's community. When we invest in our urban tree canopy, the benefits include:
◊ Better health for residents, including lower asthma rates and better mental health outcomes,
◊ Better economic outcomes which includes higher property values and better workforce retention,
◊ Improved quality of life, such as through reducing the heat island effect, more walkable communities, and improving the aesthetics of the neighborhood,
◊ Cleaner air and water, and
◊ Enhanced natural lands for wildlife.

When we approach urban tree canopy investments with equity, we ensure all of those who live, work and play in Cleveland are safer, healthier, and more resilient to climate impacts.

Figure 1. Tree Canopy Benefits from a healthy urban canopy
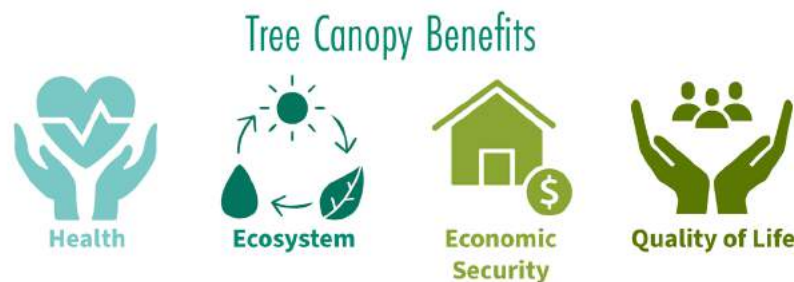
The Cleveland Tree Coalition brings together dozens of partners across the City of Cleveland to catalyze action, plant more trees, maintain existing trees, build capacity and workforce for tree care, develop a set of aligned policies that support urban forestry, and empower and inform communities.

The CTC underwent a collaborative, stakeholder-driven strategic planning process in 2023 which resulted in an updated strategic plan with 5-year goals, prioritized strategies to achieve those goals, performance metrics to monitor progress, and Working Committees to advance and coordinate projects.

Leveraging the new strategic plan as a roadmap, the CTC members can collectively achieve a greater and more equitable investment of trees in Cleveland neighborhoods, emphasizing those where disinvestment is taking place. In partnership with other groups - including Cleveland's Urban Forestry Commission, whose role is to directly advise the Mayor and City Council on policies and regulations that will increase Cleveland's tree canopy - this work will result in a place where decision makers see trees as the solution to pressing societal issues.

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Mission and Vision

The Cleveland Tree Coalition is a collaborative group of public, private, and community stakeholders partnered with the City of Cleveland to rebuild our urban forest.

The coalition is striving to create a healthy, vibrant, sustainable, and equitable urban forest by working collaboratively to implement the Cleveland Tree Plan.

Our Collective Assets and Opportunities

Partners working in the City of Cleveland and surrounding communities are in a good position to advance progress around the 30% urban tree canopy target. In large part, this is because of the numerous and diverse assets. Assets are not only financial, but can take many forms - for example, social, cultural, natural, and built.

The list below shows key themes that emerged from engagement sessions with Cleveland based organizations, businesses, and residents as part of the CTC strategic planning process. These are examples of the categories of assets that can be leveraged to successfully advance the goals of the CTC.

◊ **Natural assets** include Lake Erie, the existing tree canopy, land available to plant more trees, parks, and the numerous organizations and institutions that have initiatives for planting trees/increasing the tree canopy and supporting ecosystem health.

◊ **People and communities** category of assets includes that Cleveland has leaders and residents who already have the expertise and knowledge to make these initiatives happen. Also included here are the 34 unique neighborhoods that Cleveland has. Cleveland's neighborhoods are a mosaic of land use, and infrastructure, and people that can set the stage for a holistic and innovative approach to urban reforestation.

◊ **Organizational and institutional assets** include the many community development corporations, non-governmental organizations, governmental organizations and universities.

◊ **Policy assets** include a current favorable policy environment and leaders who care about investing in the urban environment. City planning considers trees and green space, there is planning for green streets and green trails, and with constant new development in Cleveland, there are constant new opportunities to plant more trees.

◊ **Economic assets** include Greater Cleveland Area businesses, business-support entities such as Chambers, current local and federal funding for trees and greenspace development, and new opportunities for funding for trees and greenspace development.

The Coalition also benefits from certain **key opportunities**, including a municipal administration in Cleveland that is supportive of the urban tree canopy and climate equity; solid private partnerships and a growing corporate interest in sustainability practices; momentum taking place in similar cities across the US, bringing with it an opportunity to share lessons learned around urban forestry; a chance to create synergies with other sectors such as community development and public health, which may have bigger pools of funding than environment alone. Further, opportunities abound to collaborate around green infrastructure for stormwater management efforts; around the shared interest in continuing to improve water quality in Lake Erie; around job creation for jobs caring for and planting trees; and towards the continued investment in parks and recreation across Cleveland.

> One participant in the strategic planning engagement sessions highlighted this additional opportunity: *"I think trees are like the broken window policy. You know, repairing broken windows sends a message to communities that we care. And it's the same with trees. Investing in trees - especially in our low-income neighborhoods - is an indicator that we care about investing in the community. Then maybe that will lead to more investment as well!"*

We cannot reach our goals to plant and maintain trees alone. We need a diversity of partners to get it done and raise enough funding.

Photo 1: Jesse Owens, the first person ever to win four gold medals at one time in Olympic track history, grew up in Cleveland. After the 1936 Olympics in Berlin, the German Olympic Committee gifted gold medalists with oaks, the national tree of Germany. Only a handful of Olympic oaks are known to be planted and alive in the United States; the only confirmed living tree of the four awarded to Owens is at James Ford Rhodes High School, where he practiced track growing up. While Cleveland Metropolitan School District, Holden Forest & Gardens, and Cleveland Neighborhood Progress worked with partners for many years to steward the original tree, the grafted replacement has been years in the making and is ready for planting. A small stem taken from the tree at the high school was grafted onto the rootstock of the same species of European oak, which results in trees genetically identical to the parent. In April 2023, one of the grafted Jesse Owens Olympic white oak trees was planted at League Park on Cleveland's east side in the Hough neighborhood. *Photo credit: Kenyatta Crisp*

The Cost of Inaction
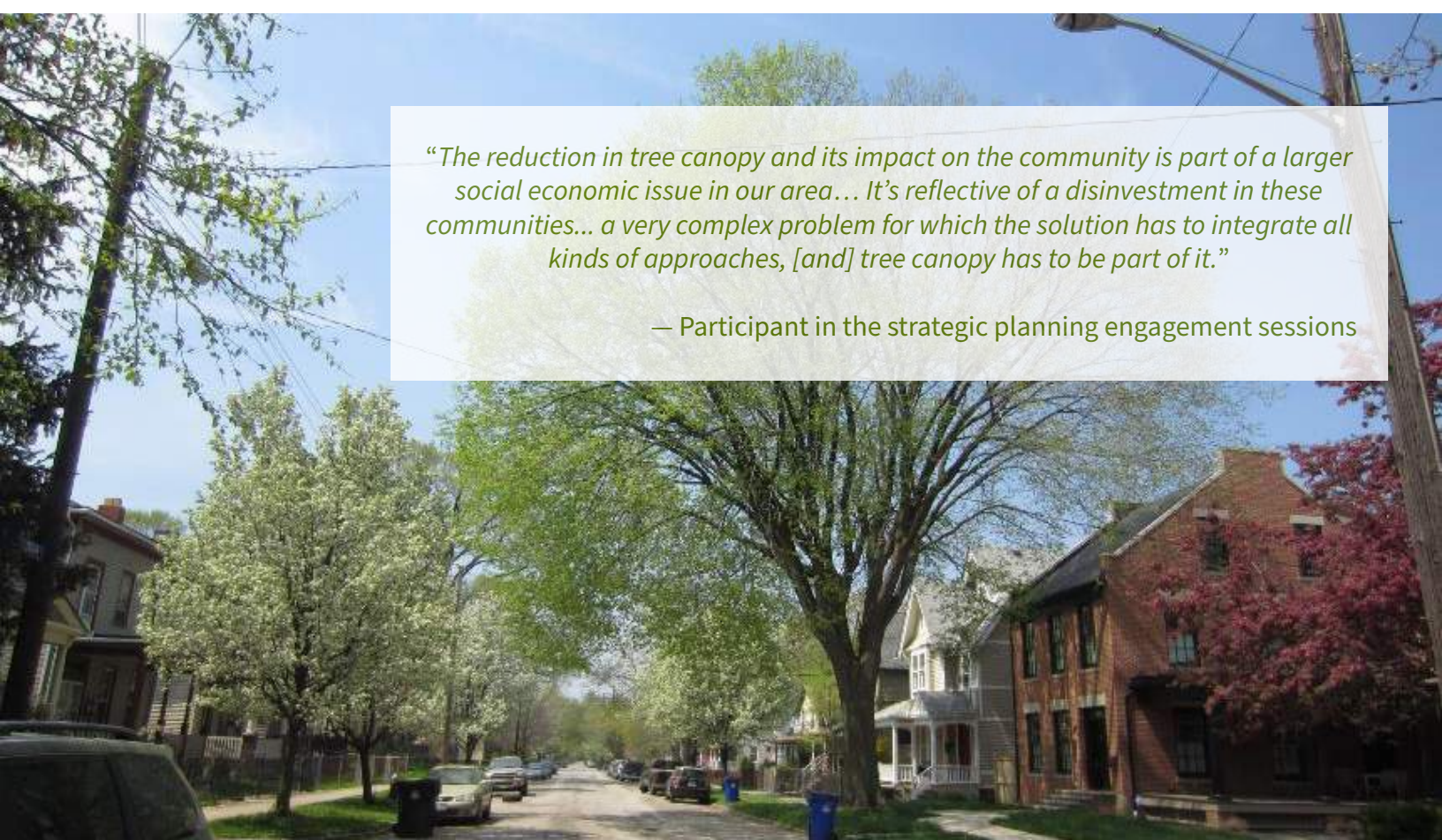
The timing is also right because if we do not act now, Cleveland neighborhoods face a risk of a lower quality of life. Participants in a May 2023 CTC goal setting workshop discussed what will happen if we maintain the status quo and continue to see a decline in the urban tree canopy. Examples are listed below. In contrast, positive outcomes from investing in the urban tree canopy, which are backed up by data and build upon the findings from the original 2015 Cleveland Tree Plan, are illustrated in Figure 2.

◊ **Poor air quality, increased urban heat island effect, and lower health:** Poor air quality negatively impacts health in many ways, with a 2022 study showing the direct link between urban tree canopy and asthma rates in children. The increased urban heat island effect and lack of green space add to the challenges around community mental and physical health, overall poor wellness, exacerbated health disparities, and even increased death rates.
◊ **Worse inequality:** Many neighborhoods already have a history of low investment or disinvestment,

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not only of trees but also into other amenities and infrastructure. Without a deliberate effort to overcome a history of inequality, and dramatically increase the tree canopy in previously divested communities, economic and social inequities will simply get worse over time. In contrast, being deliberate about addressing inequities - as has been successful in Detroit's urban forestry work, which includes workforce development as well - can go a long way in starting to address historic inequities.

◊ **Lack of preparedness and low resilience around flooding and other climate impacts:** Climate change impacts are already affecting communities and the impacts will be more severe in 30 years. More intense flooding impacts are predicted in upcoming years. Places with more trees and wetlands can absorb more stormwater, reducing localized flood damage; those places without trees will not have those same flood resilience benefits. Yet a 2021 report showed that "that Black Americans are systemically flood exposed and experience disproportionate flood impacts" so inaction will mean previously underrepresented groups will continue to be hardest hit.

◊ **Disconnected communities and overall lower quality of life:** With fewer trees, communities feel more disconnected from nature - and each other. The lack of accessibility to green spaces can perpetuate feelings of loneliness and disconnection, as fewer outdoor spaces have shade trees to provide a respite from the summer sun. Ample studies have highlighted the psychological and regenerative benefits to human well-being that come from trees. Excessive heat has also been shown to reduce educational outcomes, which may become a growing issue if unmitigated by a healthy urban tree canopy.

◊ **Disinvestment and loss of economic prosperity:** Particularly in neighborhoods with the lowest tree canopy cover, some emerging research is showing that property values will decrease. There is anticipated be an increase in outward sprawl, less economic mobility, increased energy bills, and there can even be increased crime. Outward migration also results in loss of property taxes, and lack of workforce retention.

◊ **Loss of habitat:** The loss of the tree canopy also results in lower biological diversity among and within plant and animal species in an environment.

"The reduction in tree canopy and its impact on the community is part of a larger social economic issue in our area… It's reflective of a disinvestment in these communities… a very complex problem for which the solution has to integrate all kinds of approaches, [and] tree canopy has to be part of it."

— Participant in the strategic planning engagement sessions

How does Increased Tree Canopy Benefit Cleveland's Residents?

Health Benefits

ER Visits ↓

Central Nervous System Function ↑

Premature Death ↓

Mental Health ↑

Heat Stroke ↓

Healthier People ↑

Quality of Life Benefits

Thriving Communties ↑

Safety ↑

Heat Island Effect ↓

Worker Productivity ↑

Economic Security Benefits

Risk of Flood Damage ↓

Home Values ↑

Direct Ecosystem Benefits

Stormwater Run-off ↓

Ground Ozone ↓

Soil Erosion ↓

Clean Air ↑

Clean Water ↑

Biodiversity ↑

CLEVELAND TREE COALITION

Figure 2. Tree Canopy Benefits from a healthy urban canopy.

History of the CTC

The inspiration for the creation of Cleveland Tree Coalition came out of a Sustainability Summit in Cleveland in 2013. In 2015 the Cleveland Tree Plan was released, which recognized serious tree canopy loss and the important role that trees play in the health of the city. The plan serves as a data-driven approach to rebuilding Cleveland's urban forest through partnership, and it established a unified vision, goals and actions to achieve it. Figure 3 shows how the loss in urban tree canopy has varied across Cleveland neighborhoods and throughout Cuyahoga County.

Formed in 2016 to implement the Cleveland Tree Plan, the Cleveland Tree Coalition is a partnership of organizations, businesses, and branches of local government that strives to create a healthy, vibrant, sustainable, and equitable urban forest by working collaboratively to implement the Cleveland Tree Plan. The Coalition has grown to over 50 organizations and is a nationally recognized model for engaging communities in reforesting the City of Cleveland.

In 2018, the City of Cleveland and the CTC adopted a goal of restoring tree canopy cover to 30% by 2040.

Figure 3. Urban Tree Canopy for Cleveland (average is 18%) and Cuyahoga County (average is 37.6%).

While CTC member organizations have been working tirelessly toward this goal, a 2020 tree canopy progress report indicated a continued loss of tree canopy. The report estimated that to meet the CTC's canopy cover goal would require the planting and successful establishment of 28,400 trees per year. This tree canopy goal envisions a greener city and provides a benchmark against which to measure our region's collective efforts to preserve and expand our urban forest. It also sheds light on the large task before us: planting an additional 284,000 trees in the next decade and significantly shifting our regional culture toward recognizing the value of trees for Cleveland's future social, economic, and environmental prosperity.

In 2019, the CTC undertook a study that led to a decision in 2020 to designate one organization as the fiscal agent and the physical "home" of the Cleveland Tree Coalition. In addition, an Executive Committee (EC) was formed and is now composed of Holden Forests and Gardens, Western Reserve Land Conservancy, Northeast Ohio Regional Sewer District, Cleveland Metroparks, City of Cleveland, Cleveland Neighborhood Progress, Environmental Health Watch, Trust for Public Land, Black Environmental Leaders and Cuyahoga County. This committee voted to designate Western Reserve Land Conservancy as the fiscal agent and Chair of the Coalition's EC. The EC hired the CTC's first full-time director, Samira Malone in May 2022. Since that time, Samira has led fundraising efforts, engaged member organizations and continued to raise public awareness around the urgency of implementing the Cleveland Tree Plan.

The CTC Gains Momentum

The CTC has a strong track record of success. In January 2023, the CTC Director was appointed as Chair of the City of Cleveland's Urban Forestry Commission, further enhancing the ability of the CTC to coordinate with the City. The CTC also manages a successful re-grant program, giving out an average of $300,000 each year to community organizations to support tree planting activities.

Since 2019, the Cleveland Tree Coalition leveraged our relationships and past success to raise over $17M in funding dedicated to reforesting the City of Cleveland. These funds are being spent by member organizations to plant and maintain trees in the city of Cleveland.

Figure 4 is a snapshot of major funding sources from the 2019-2023. And following those values is Figure 5, showing CTC tree planting and distribution, cumulative outcomes since 2015. While these numbers are impressive, this strategic plan offers a roadmap of how the Coalition will need to scale up efforts over the next five years to ensure they are on track to meet their long-term goal of achieving a 30% urban tree canopy by 2040.

Public Funding Amount
City of Cleveland: $10,000,000
Cuyahoga County: $5,000,000
Senator Brown Federal Earmark: $1,500,000
NOPEC Community Grants: $718,043
Ohio Department of Natural Resources: $100,000

Foundation Grants
Cleveland Foundation $150,000
Mt. Sinai Healthcare Foundation $60,000
Janelia Foundation $20,000
Cleveland Votes $8,500
Sears Swetland Family Foundation $5,000
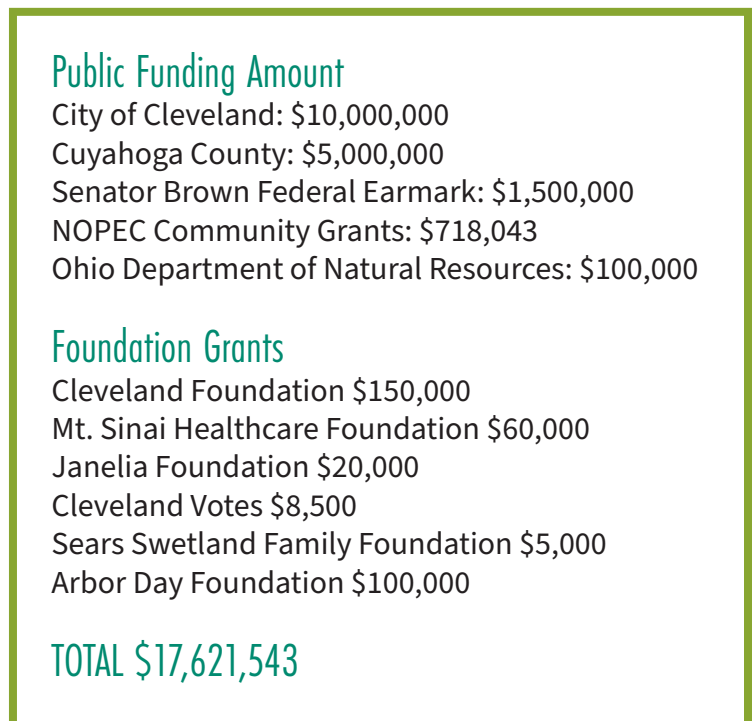Arbor Day Foundation $100,000

TOTAL $17,621,543

Figure 4. Major funding sources for CTC from 2019-2023.

Figure 5. CTC tree planting and distribution, cumulative outcomes since 2015 (Originally developed in the Cleveland Tree Plan 2020 Tree Canopy Progress Report and updated by the CTC team in 2022).

Planning Process

While the 2015 Cleveland Tree Plan is still relevant, documenting the vision for the CTC and showcasing the underlying data supporting the need for enhancing the urban tree canopy in Cleveland, much has changed since 2015. The CTC now has a full-time director, new members have joined the coalition, the funding and political climate has changed, and the world has been through the COVID-19 pandemic. Such dramatic changes have prompted the need for an updated strategic plan with more specific strategies designed to meet today's urgent community and environmental needs.

The strategic planning process was designed to be collaborative, stakeholder driven, evidence-based, systemic and inclusive. Launching in February 2023, outputs from the strategic planning are described in Figure 6.
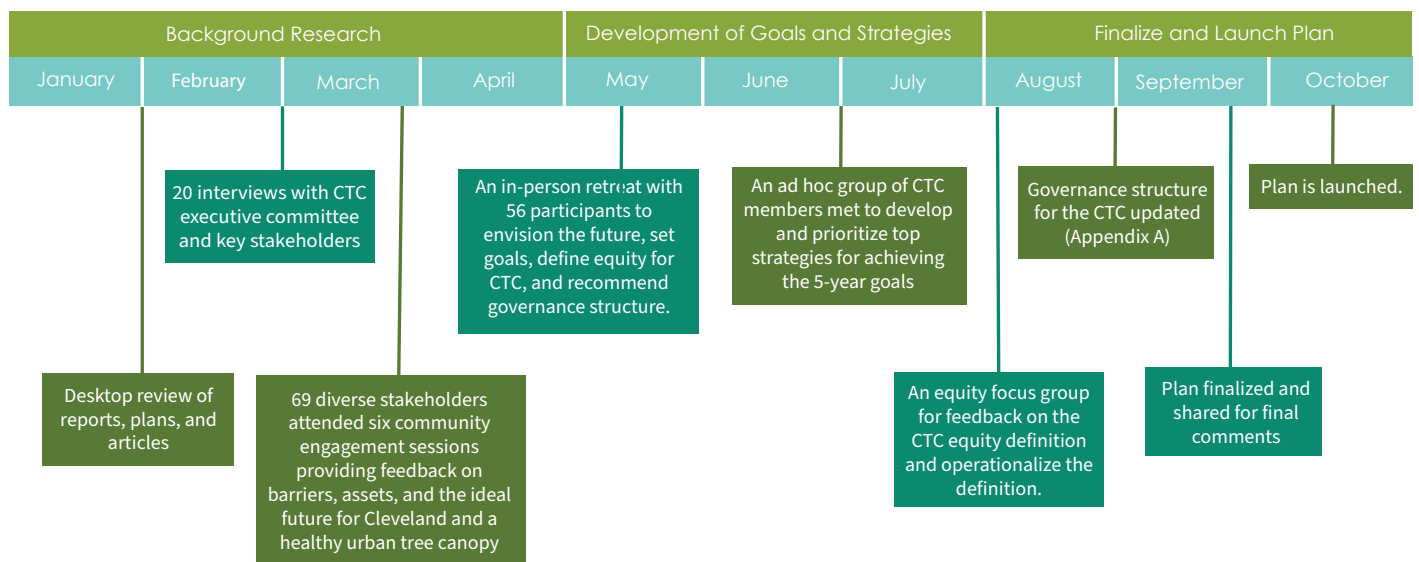

Figure 6. Timeline for the Cleveland Tree Coalition's strategic planning process.

Photo credit: Amber Ford

The plan includes several elements. The **strategic pillars** show the purpose of the existence of the CTC, giving clarity to the main areas of long-term focus for the coalition.

The **goals** in the plan are based upon the strategic pillars, identifying which objectives within those pillars can be accomplished within five years. The goals were designed to be achievable, focused on equity, relevant, scaleable, and adaptable. Further, the Coalition focused on goals where CTC members were willing to commit time and resources.

The **strategies** represent the priority pathways towards achieving those goals. The **performance metrics** in the plan are a mix of indicators to assess outcomes and benchmarks that show our progress towards final outcomes. Note that the performance metrics are to be finalized and implemented by the Working Committees.

Equity Statement

Equity definition:
Target 70% or more of financial and staff resources to sustainably address systemic disparities, as determined by the data and through engaging historically disinvested communities.

Description:
The CTC aspires to be a coalition that supports equity in all stages of work. Success looks like local and diverse residents from the communities being served are involved in projects from the beginning planning stages through the implementation of the projects, encouraging the hiring of local community residents to perform the labor in their neighborhoods.

Success is where resource allocations are based on the needs of each community. Success means that the health of the urban forest is consistent and equitable. Success includes democratic processes as well, where the decision-makers are made up of a diverse group and have equitable representation. The decision makers have considered a community's voice in designing the appearance, location, and extent of its tree canopy.

From the equity definition:
Determined by the data means: The initial analysis for "disinvested communities" comes from the Cleveland Tree Plan 2020 Tree Canopy Progress Report. That report leveraged both I-Tree and ESRI geospatial data, which allowed CTC to look at the overlay between canopy cover and socioeconomic attributes. Further details from the 2020 plan are as follows:

"Historically in Cleveland, areas with lower income and/or higher proportions of Black residents and residents of color have generally had lower tree canopy cover due to disinvestment. This variability leads to an inequitable distribution of tree canopy cover, meaning neighborhoods with lower tree canopy receive fewer benefits. Comparing social equity factors (like income, age, diseases, population density, etc.) and the distribution of tree canopy across the city can help prioritize tree planting and care in neighborhoods with fewer trees that can stand to benefit the most from additional trees and tree care."

In the future, additional data sources can be considered, including peer-reviewed neighborhood-level data, provided that they meet a minimum quality threshold. The Executive Committee (which is expected to change to being structured as a Board of Directors) is responsible for overseeing and interpreting the equity definition. Currently, new data about disadvantaged communities comes from the federal Climate and Economic Justice screening tool (Figure 7).

The CTC can only ensure that the equity definition is being met if the coalition Working Committees and Members together work to track metrics on their progress.

Sample metrics to track CTC progress towards the equity definition may include the following:

◊ Percent of funding going to historically disinvested communities
◊ Number of communities working with CTC member organizations
◊ Number of trees planted in historically disinvested communities
◊ Number of youth educated on urban forestry
◊ Workforce diversity
◊ Number of people engaged in the planting process
◊ Number of sites that can be physically access by a diversity of mobility types
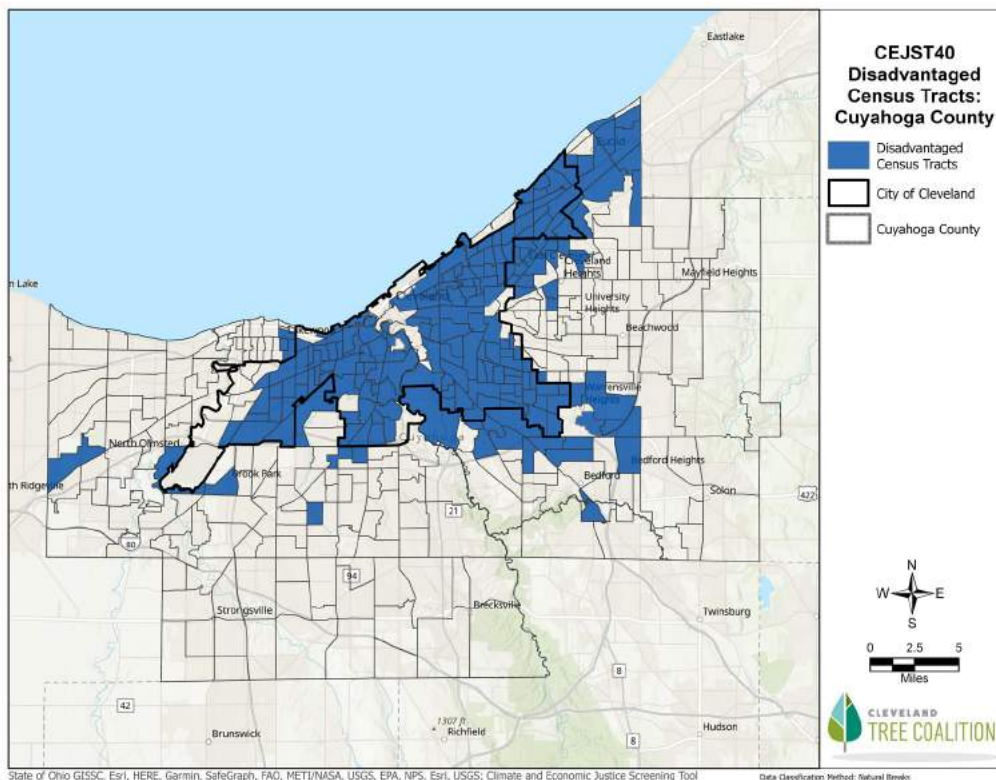◊ Number of community representatives included in project design and planning

Figure 7. Disadvantaged Census tracts in the City of Cleveland.

Achieve a tree canopy cover in Cleveland of 30% by 2040

Engaged and Informed Communities:
Collect and share neighborhood stories to help get more trees in the ground.

Community Capacity:
Partner with employers, education providers, and government entities to create a pipeline for existing and new employees with the skills needed to plant, maintain, and fulfill tree-related activities.

Policy Alignment:
Advocate for new legislation and funding as well as stronger enforcement of policies related to trees at local, county and state levels.

Equitable Neighborhood Investment:
Goal 4a: Increase capacity and funding to plant and establish trees in strategic locations in the city of Cleveland.
Goal 4b: Design and test pilot programs to incentivize and subsidize mature tree maintenance on private property, prioritizing environmental justice areas.
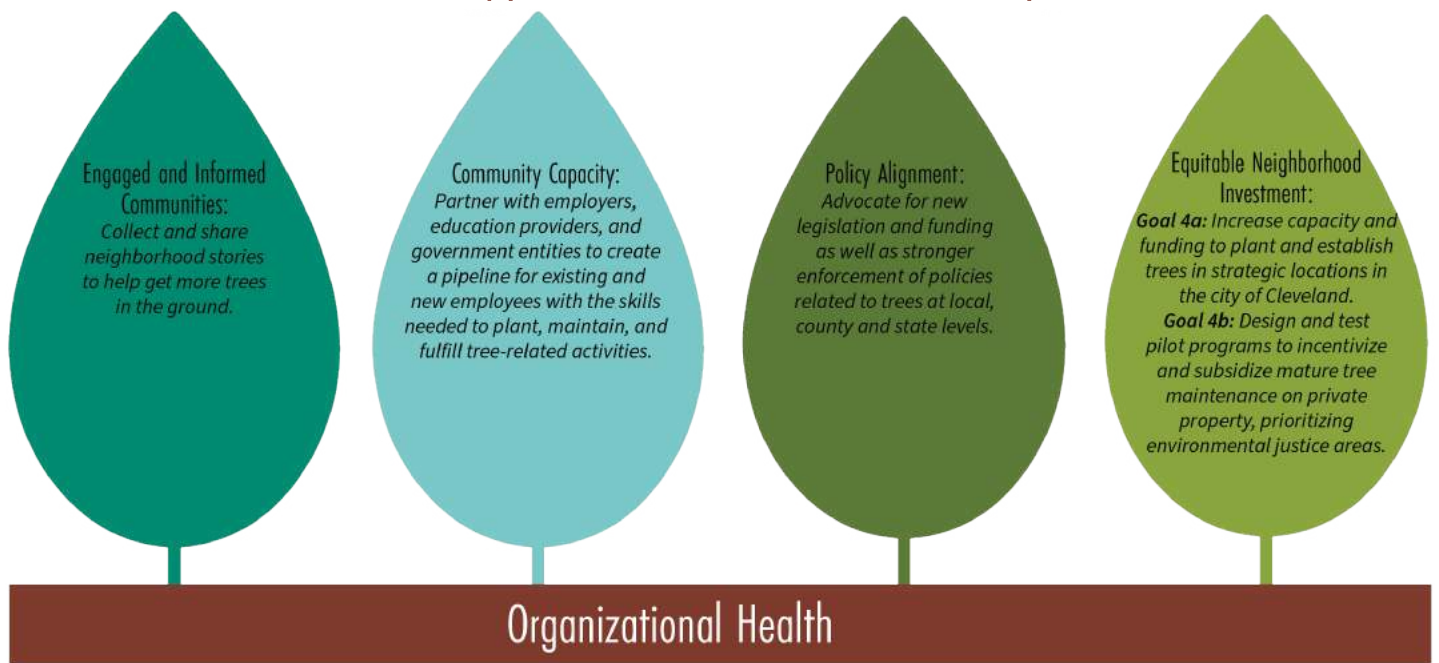
Organizational Health

Figure 8. Summary of the strategic pillars and related five year goals, stressing the importance of organizational health and the long term outcome.

The Plan

The strategic planning process yielded four strategic pillars that both serve as aspirational statements about the future of Cleveland's trees and help to organize future action. Figure 8 shows how the goals fit under the four pillars, with a fifth organizational health pillar serving as the foundation for the organization. The organizational health pillar is described in the last section of this report.

Strategic pillars

1. Engaged and Informed Communities: A healthy tree canopy is recognized as an asset that galvanizes residents, community leaders, neighborhoods, and the commercial sector around public health and quality of life benefits.
2. Community Capacity: We have the people, land, trees, and infrastructure we need to plant and maintain the tree canopy at 30%, which is supported by sustainable funding.
3. Policy Alignment: Policies and systems are aligned to support and enhance funding, planting, and maintaining trees as critical infrastructure.
4. Equitable Neighborhood Investment: The region's low-income communities experience health equity, thriving neighborhoods, and enduring prosperity.

The pillars will be advanced by four **Working Committees**, which have been named Empowering Communities, Workforce & Community Capacity, Policy, and Implementation.

Engaged and Informed Commmunities

Goal 1: Collect and share neighborhood stories to help get more trees in the ground.

Why this matters:

Many misconceptions exist among residents, businesses, elected officials, and other decision makers around the benefits of trees. Shared learning processes are more effective than top-down education as shared learning results in the co-creation of knowledge and solutions that are customized to the needs of the communities. As such, this goal is based upon neighborhood stories to help promote the benefits of trees while supporting engaged and informed communities.

Sample metrics:

◊ Number of news articles and media appearances
◊ Public talks and existing public events attended
◊ Paid promotions, public sentiment campaigns
◊ Number of stories collected and shared
◊ Number of residents engaged in the process
◊ Number of local businesses and contractors hired in the design and implementation of this strategy (e.g., local graphic designer)
◊ Number of marketing outputs (videos and other outreach materials developed)
◊ Percent of neighborhoods out of total neighborhoods highlighted in PR efforts
◊ Number of clicks or views on the stories
◊ Number of additional followers in social media

1. Conduct a broad regional awareness campaign promoting the benefits of a healthy tree canopy with shared messaging among member orgs (i.e. "Replant the Forest City").

◊ Storytelling to showcase benefits and increase civic pride while tailoring to diverse audiences.
◊ Showcase examples of trees as critical infrastructure.
◊ Use a variety of media – PR, digital, social.
◊ Participate in existing events.

2. Create neighborhood-level engagement plans specific to each community that convey how and why to plant trees.

◊ Identify which tree benefits resonate with communities and develop messaging around those relevant benefits.
◊ Participate in events and classes.
◊ Engage in outreach, largely with community ambassadors.
◊ Leverage storytelling and create stories (building on the first strategy).
◊ Identify which tree benefits resonate with communities and develop messaging around those relevant benefits.

3. Engagement to influence public policy and decision makers.

◊ Coordination with other coalitions and organized groups across the city and region.
◊ Promote democratic engagement/voting, through candidate nights, town halls, etc.
◊ Advocate for stable public funding.

Community Capacity

Goal 2: Partner with employers, education providers, and government entities to create a pipeline for existing and new employees with the skills needed to plant, maintain, and fulfill tree-related activities.

Why this matters:
To achieve the 30% canopy by 2040, there are currently not enough people employed in the workforce to meet the planting and maintenance needs. More workforce development is needed to fill the unmet need.

Sample metrics:
◊ Number of program participants
◊ Number of permanent positions secured
◊ Total value of contracted work ($)
◊ Number of new partnerships established around workforce development
◊ Size of arboriculture workforce / number of jobs regionally
◊ Number of new trainings offered & number of individuals trained
◊ Number of new tree related certificates (or credentials) awarded

1. Develop new and explore existing apprenticeships, certifications, and credentials.

◊ Cultivate employer partnerships.
◊ Career ladders for new and seasoned staff.

2. Participate in and co-create industry sector partnerships to develop and grow Northeast Ohio's green workforce.

3. Support pre-workforce development and career exposure for K-12.

◊ Participate in career days and events.
◊ Support paid internships.
◊ Develop and distribute new curricula.
◊ Integrate tree-related curricula and trainings into after-school and summer programs.

4. Grow pool of local, independent contractors who are trained in tree care.

◊ Host training workshops.
◊ Help more independent contractors get tree-related certifications.
◊ Connect small businesses to grants and funding.
◊ Support the scaling up of small, local contracting businesses.

Policy Alignment

Goal 3: Advocate for new legislation and funding as well as stronger enforcement of policies related to trees at local, county and state levels.

Why this matters:
The Coalition will have more impact if there is coordination and unified messaging in advocacy efforts, ultimately leading to more funding, more trees planted, and more support for maintenance of the existing canopy.

Sample metrics:
◊ Ordinance review completed and compiled (including evaluation of best practices)
◊ Number of new ordinances proposed & passed
◊ Number of amended ordinances proposed & passed
◊ Number of appearances before city council
◊ BMP manual completed
◊ Dollars ($) collected in Tree Fund
◊ Number of permits issued and denied

1. Empower the Cleveland Urban Forestry Commission.

◊ Advise and influence a review and update of municipal ordinances.
◊ Advise and influence enforcement of existing ordinances - including use of an 'enforcement arborist', similar to Building and Housing inspectors.
◊ Develop an updated urban forestry management plan.
◊ Set aside 1% funding for trees through utility/road projects, similar to public art 1.5% of budget set-aside for city's capital projects

2. Coordinate Right of Way (ROW) improvement/maintenance stakeholders.

◊ Develop an urban forest management plan that covers utilities, streets, sidewalks, and public works. This is an important mechanism to encourage cross-departmental coordination as well as improved engagement and communication with residents.

3. Advocate for trees through Community Benefit Agreements (CBAs).

◊ Incentivize/require commercial and other property owners to plant and maintain more trees through CBA.

4. Coordinate lobbying efforts of CTC members for local/state/federal policy.

◊ A key role of the CTC director is to facilitate this coordination of lobbying efforts across Coalition members.

Equitable Neighborhood Investment

Goal 4A: Increase capacity and funding to plant and establish trees in strategic locations in the city of Cleveland.

Goal 4B: Design and test pilot programs to incentivize and subsidize mature tree maintenance, prioritizing environmental justice areas, while reducing the loss of mature trees.

Why this matters:
Equitable neighborhood investment is about scaling up strategic new tree plantings. But newly planted trees will not have enough time to grow to be considered part of the canopy or have any measurable impact by 2040. Thus, it's crucial that goals 4A and 4B also emphasize protection of the existing canopy. Further, equity means that where feasible, historically disinvested communities are prioritized. Based upon what we know of the complex needs of communities, planting trees should also be coupled with other infrastructure investments in neighborhoods.

Goal 4A - Sample metrics:
◊   Number of trees planted and maintained
◊   Geographic distribution of new trees
◊   Number of trees given away
◊   Funds raised and invested
◊   Grant applications submitted
◊   Number of trees planted on rental properties

Goal 4B - Sample metrics:
◊   Total number of trees maintained annually through direct program efforts
◊   Funds invested by neighborhood
◊   Number of trees (and benefits) preserved
◊   Number of homeowners engaged
◊   Funding as a proportion of home value (or some other measure of equity)
◊   Number of new programs providing funding for tree maintenance
◊   Number of mature trees with full condition assessment reports complete
◊   Number of existing mature trees managed (prune, fertilize, mulch)
◊   Number of mature trees managed in parks, street trees, public green space and private land

Goal 4A Strategies
1. Increase CTC member collaboration to coordinate resources and reduce redundancies.
2. Expand existing and create community programs/grants for residents to engage in private tree maintenance.
3. Scale up the number of trees that are planted and maintained into existing efforts and real estate developments.
4. Review existing data to prioritize strategic locations for new planting and maintenance, and involve hyper-local stakeholders.

Goal 4B Strategies
1. Prioritize tree maintenance and preservation within environmental justice communities through incentives and training of local residents.
2. Expand existing residential programs and test new pilot programs that incentivize mature tree maintenance.

Organizational Health

Organizational Health Pillar

CTC will build organizational capacity of the coalition, enhance trust with members, and maintain financial sustainability of the CTC.

This is a foundational pillar that is focused internally and supports the other 4 pillars.

Organizational Health 5-year goals:

Goal 1: Build organizational capacity through partnerships and advance the goals and outcomes in the 2023-2028 strategic plan.
Strategies:
1. Coordinate projects that contribute to the strategic plan.
2. Identify and fill strategic gaps while aligning resources with partnerships.
3. Add more staffing to support the plan, the Director's work, and additional fundraising activities that would allow for some amount of sustainable growth.

Goal 2: Ensure a functioning governance and healthy organizational culture across all CTC committees and membership council.
Strategies:
1. Continue to ensure a collective value alignment among coalition members
2. Cultivate, clarify, communicate and ensure systems to support a culture of transparency with a clearly defined governance structure, written agreements, and definitions of roles
3. Support a culture of active, authentic engagement, with a culture of shared ownership and accountability.

Goal 3: Ensure financial sustainability, building and diversifying the base of annual funding for the CTC to continue to exist as a coalition and expanding funding to advance the goals of the strategic plan and support member organizations.
Strategies:
1. Increase individual operating fundraising to maintain the Director's position and the existing re-granting programs (largely through individual, corporate, and foundation grants).
2. Coordinate partners around larger, new, permanent fundraising opportunities and new public funding sources.
3. Oversee administration of existing funding sources (grant reports, stewardship, etc.).

Goal 4: Develop and implement a marketing and engagement strategy for the coalition to ensure unified messaging and consistent and transparent communication.
Strategies:
1. Develop unified messaging about the Coalition and the benefits of the urban tree canopy, and serve as the primary spokesperson for the Coalition.
2. Coordinate, collaborate and align with members' marketing and communications operations.
3. Develop and implement an annual communications and marketing plan for the Coalition brand (including promotion of efforts and initiatives and education).

The Business Plan

The CTC business plan showcases three budget scenarios. These scenarios range from the minimum needed for the Coalition to exist and implement "low-hanging fruit" projects to a very large, high scalability option based upon receiving aspirational new public funding sources. Figure 9 shows these three budget scenarios, which are intended to represent an approximate order of magnitude, not an exact calculation.

All CTC members were surveyed and asked to contribute programs, projects, feasibility studies & pre-planning work, or research & assessments. The members were asked to determine which goal the project contributed to. Members were advised to also include projects that currently do not include trees, but that with additional support, could be adjusted to include trees.

Next, the members had to rank the likelihood of the project happening. The likelihood determined into which budget scenario the project was included. Each project included an estimated budget. Those budgets were included in Figure 9 under **Revenues from Member Organizations.** These estimates are not meant to be a formal commitment, but rather, an estimation of the funding that members may be able to obtain and apply to their own tree-related projects.

Scenario 1. Baseline Budget Scenario.
This is based upon a conservative budget scenario. This includes basic operational needs to keep the lights on for the CTC to continue to be functional, and have some amount of sustainable growth. This additional investment will help the CTC access more funding and steward existing funding. "Very likely or definite" member projects are listed in this scenario.

Scenario 2. Middle Budget Scenario.
This includes all of the Baseline Scenario, plus a slightly more optimistic outlook on funding that moves forward key priorities that were identified in the strategic plan but not yet funded. For members who submitted projects that are in the category named, "It's more of a dream project" those will go here. "Very likely or definite" and "Somewhat likely" member projects are listed in this scenario.

Scenario 3. Aspirational Public Funding Budget Scenario.
This scenario represents the full budget from the Inflation Reduction Act proposal that was submitted by the CTC with 10 Coalition partners in spring 2023, plus the full Middle Scenario including full membership project and program scalability and more member organization staffing needs met. "Very likely or definite;" "Somewhat likely;" and "It's more of a dream project" member projects are listed in this scenario.

	Baseline Scenario Budget (annual)	Middle Scenario Budget (annual)	Aspirational Public Funding Budget (annual)
Revenue			
Donations and grants	$250,000	$312,500	$500,000
Public Funds	$856,000	$856,000	$10,552,997
Funds for Regrants	$349,980	$349,980	$349,980
Other (new funding sources)	$278,441	$1,964,886	$1,537,357
Revenues from Member Organizations	$2,188,435	$3,001,768	$4,458,010
TOTAL REVENUES	$3,922,856	$6,485,134	$17,398,343
Expenses			
Internal - Operations			
Personnel	$130,000	$250,000	$372,258
Office (Rent and utilities)	$6,000	$9,000	$12,000
Supplies	$3,000	$4,500	$6,000
Finance and legal	$20,000	$40,000	$60,000
Technology infrastructure	$2,000	$3,000	$4,000
Professional Development	$2,000	$3,750	$5,000
Travel & other logistical expenses	$14,000	$21,000	$28,000
Consulting	$20,000	$30,000	$60,000
Memberships and Subscriptions	$2,500	$3,750	$5,000
TOTAL OPERATIONS	$200,000	$365,000	$532,258
External - Implementation			
Member Work (External)	$3,384,415	$5,572,849	$15,350,986
Contingency	$338,441	$557,285	$1,535,099
TOTAL EXPENSES	$3,922,856	$6,495,134	$17,418,343
Five-year Cumulative Budget	**$19,614,281**	**$32,475,671**	**$86,091,717**

Figure 9. Estimated budgets for each of the three potential scenarios.

Conclusion

A growing body of research and documentation validates the critical role that a robust urban tree canopy plays in providing an environment that contributes to residents' health and economic well-being as well as helping to meet the many environmental and ecological challenges that impact their daily lives. To meet the canopy cover goal of 30% by 2040 will require new partnerships, more coordination, and greater innovation, all founded on principles of equity. Now is the time to start scaling up so that Cleveland will meet its canopy goal, providing a better place for human and wildlife communities.

Appendix A. Glossary of terms

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Appendix A. Cleveland Tree Coalition Strategic Planning Glossary

Definitions of Common Terms

We want to promote an inclusive environment that invites a diversity of groups, some of whom may have never worked directly with tree planting previously. As such, here is a preliminary list of some terms that may be relevant context for dialogue.

These definitions are evolving, and we will provide flip charts with these terms, so that participants can expand or refine their definitions collaboratively.

"30 percent canopy goal": An evaluation of urban forest in Cleveland, summarized in the 2015 Cleveland Tree Plan, showed that tree canopy cover—the area of the city that is shaded by trees—averages just 19%. Each year, our city loses about 99 acres of its urban forest to development, disease, and old age. To reverse tree loss and reclaim our nickname of "The Forest City," the Cleveland Tree Coalition set a goal of raising city-wide tree canopy from 19% to 30% by 2040.

Alternative Utility/Transportation Infrastructure: Alternative design of utility infrastructure is burying utility lines- or not having water pipes, sewer and utility lines competing with the same area where trees are planted. Alternative transportation is similar- fewer roads because more people are using public transportation and/or riding bikes/walking.

Arborist: Arborists are tree care professionals. Arboriculture services include assessing, planting, pruning, and maintaining trees or shrubs. They also may help in diagnosis, treatment and prevention of tree pests and diseases. There are various trainings, amounts of experience, and certifications for arborists. Some arborists specialize even further by only working with specific shrubs or trees.

Certified arborists have obtained credentials from the International Society of Arboriculture showing that they have expertise in tree care.

Assets: Assets are traditionally thought of as largely financial. However, multiple types of assets exist to support community quality of life: cultural, social, institutional, financial, built, environmental, political.

Best Management Practices: Urban best management practices (BMPs) and low-impact development practices are forms of green infrastructure designed to protect water quality and quantity by reducing stormwater runoff or by storing and treating stormwater before it reaches surface waters.

Biomass: Forest biomass is any plant matter or tree material produced by forest growth that can be converted to an energy source. It includes agricultural materials, tree residue from managed forests and wood waste from urban areas.

Canopy cover: The percentage of an area that is covered by tree canopy, typically calculated from aerial imagery.

Climate resiliency: The capacity to prepare for, respond to, and recover from the impacts of hazardous climatic events while incurring minimal damage to societal wellbeing, the economy and the environment.

Combined Sewer Overflow (CSO): A combined sewer system collects rainwater runoff, domestic sewage,

and industrial wastewater into one pipe. Normally, it can transport all of the wastewater to a treatment plant. Sometimes the amount of runoff exceeds the capacity of the system. When that happens, untreated stormwater and wastewater flows into nearby water bodies.

Disturbance: Natural disturbances can cause significant economic and ecological damage to natural and planted forested and urban areas. Types of natural disturbances include wildfires, wind, flooding, and drought.

Effective Green Policy and Planning: For the context of this process, green policy and planning is government-led efforts that support the planting and maintenance of trees. This is not limited to ordinances or formal planning but much broader.

Environmental Equity: Ensuring that no community faces a disproportionate share of environmental hazards.

Forester: Foresters plan, maintain, and preserve forests and forest resources for public and private use. They may protect wilderness areas, enhance habitats for a variety of species, facilitate public recreation, and manage fires. Many foresters help manage public areas, balancing wilderness protection and recreation in beautiful, inspiring, natural areas with timber needs.

Green infrastructure for stormwater management: Green infrastructure uses plants, soils, and rocks to filter and absorb stormwater where it falls. In 2019, Congress enacted the Water Infrastructure Improvement Act, which defines green infrastructure as "the range of measures that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspirate stormwater and reduce flows to sewer systems or to surface waters."

Girdling versus Felling: Girdling trees is the process where you disrupt the living connection between the roots and the leaves, usually by cutting or chopping away the outer bark and the inner bark or cambium. A girdled tree will die in place and will fall at some undetermined time. Felling involves cutting a standing tree and dropping it in the place you want it.

Healthy maintenance schedule: The City has guidelines, strategies and resources to maintain healthy trees. Pruning is a key element in maintaining healthy trees and preventing trees from rubbing buildings or signs.

Management plan: Forest management plan means a written plan prepared and signed by a qualified forester that prescribes measures to optimize production, utilization, regeneration, maintenance, and harvest of timber.

Natural infrastructure: The term "natural infrastructure" refers to naturally occurring landscape features and/or nature-based solutions that promote, use, restore or emulate natural ecological processes.

Nature-based solutions: Nature-based solutions (NbS) involve working with nature to address societal challenges, providing benefits for both human well-being and biodiversity. Specifically, they are actions that involve the protection, restoration, or management of natural and semi-natural ecosystems; the sustainable management of aquatic systems and working lands such as croplands or timberlands; or the creation of novel ecosystems in and around cities.

Pruning: Trimming or removing branches from trees and shrubs to improve their appearance, health, and/or to reduce conflicts with other types of infrastructure.

Regeneration: Tree regeneration is the process that allows a forest to sustain itself through the growth and survival of seedlings and saplings that replace large forest trees as they die.

Site quality: Site quality is a measure of the ability of a piece of land to provide the resources needed for plant growth i.e., how nutrient rich is the soil, how well does the soil hold water, how deep is the soil, how much sunlight reaches the area.

Tree canopy: The layers of leaves and branches of trees as seen from above. Urban Tree Canopy is the leafy, green, overhead cover from trees that community groups, residents, and local governments maintain in the landscape for beauty, shade, fruit production, wildlife habitat, energy conservation, stormwater mitigation, and a host of public health and educational values.

Shade Tolerance: Tolerance is a term that foresters and ecologists use to indicate a tree's capacity to develop and grow in the shade of, and in competition with, other trees.

Urban ecology: The study of ecosystems that include humans living in cities and urbanizing landscapes. It is an emerging, interdisciplinary field that aims to understand how human and ecological processes can co-exist in human-dominated systems and help societies with their efforts to become more sustainable. Please note that urban biodiversity includes the full mix of habitat types, plants, and animal species – not just trees.
Urban Forests: All of the trees that occupy private properties, parks, public spaces and along streets.
Urban forestry: planting, maintenance, care, and protection of trees in urban settings.

Urban forest master plan: A planning document that provides detailed information, recommendations, and resources needed to effectively and proactively manage and grow a community's tree canopy over a ten- to twenty-year time frame. It is collaboratively developed by urban forestry experts and communities to provide a shared vision for the future of the urban forest and to inspire stakeholders in the care, planting, and protection of trees. Cleveland's urban forest master plan is the Cleveland Tree Plan.

Urban forest management plan: A planning document that focuses specifically on the maintenance needs of a community's trees—typically, for trees that are publicly owned. Using available data about the community's trees, it establishes a three- to five-year work plan to address risk and maintenance needs of the urban forest based on available work assets, resources, and goals. It is typically owned and updated by the municipal or regional department in charge of urban forestry work.

Urban tree canopy (UTC) assessment: A type of analysis that uses high-resolution aerial imagery to map the amount and extent of tree canopy cover in a community. Information from the assessment helps a community identify areas of low canopy cover and prioritize tree planting and care. Urban forestry industry standards recommend updating urban tree canopy assessments every five to ten years.