Health Benefits of the City of Rochester's Urban Reforestation and Tree Expansion

EVIDENCE REVIEW: HEALTH BENEFITS URBAN FORESTS AND TREE CANOPY

Prepared for: City of Rochester, NY

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About this Project
This project has reviewed [1] evidence related to tree canopy impacts and the City of Rochester's Tree Expansion and Beautification Initiative on the environment, communities, and people, and how the impacts support a focus on urban forests and [2] example municipal policies and best practices for creating, and maintaining a healthy urban forest

About this Report
Urban Design 4 Health prepared this report for the City of Rochester, NY.

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About Urban Design 4 Health
Urban Design 4 Health, Inc. (UD4H) prepared this report. UD4H's mission is to support clients with innovative and objective information and tools to achieve health, environmental, economic, and quality of life goals that are intrinsic in efforts to build new communities and to retrofit existing ones. Learn more at www.ud4h.com.

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1 Executive Summary

This report provides an overview of the impacts of urban tree canopy on public health and the environment. The impetus for this report includes the City's Tree Expansion and Beautification Initiative, concurrent updates to the Urban Forest Master Plan, federal funding support, and the need for research-based information to support these efforts.

Public Health Benefits of Trees - Proximity to trees offers many benefits to individuals, including physical, mental, and social advantages. Access to green spaces has been linked to improved physical health, increased physical activity, and reduced exposure to harmful environmental factors like air pollution and noise. Additionally, exposure to nature can reduce stress, improve attention, and foster psychological wellbeing. Urban greenspaces also facilitate social interaction and cohesion within communities. Furthermore, tree canopy has been associated with a subjective sense of safety and reduced crime rates.

Environmental Benefit of Trees - Trees significantly impact the environment by mitigating urban heat islands, managing stormwater, and reducing air and noise pollution. They combat urban heat islands by providing shade and reducing energy consumption. Trees are crucial in stormwater management, slowing its flow and reducing pollution entering surface waters. Increased tree canopy improves air quality by capturing pollutants and dispersing polluted air. However, there is some evidence of pollen exacerbating asthma. Trees also contribute to noise reduction and absorb carbon dioxide, making them valuable in carbon offset initiatives.

Equity/Environmental Justice Equity considerations are important to ensure fair access to and governance of urban vegetation irrespective of socioeconomic status, race, culture, or age. This work has three dimensions: distributional, recognitional, and procedural equity. Promising practices by U.S. cities to promote equity in urban forestry programs include setting goals for equitable tree distribution, acknowledging cultural differences in planning and engagement, and devolving power to communities. Expanding job training opportunities in urban forestry can also help address employment equity.

Achievement of the City of Rochester's goal to create an equitable distribution of resources is measured as an 85% tree stocking percentage across all City quadrants. This goal and metric are

important to ensure a uniform presence of trees throughout the city. Further refining of this 85% stocking metric should be considered since equitable may not always mean equal. For example, historic and current industrial pollution (impacting air and soil quality) may necessitate more trees in specific areas to help reduce the problems.

Analysis & Measurement The report recommends simple and understandable measures for urban forestry programs and avoiding complexity that might overwhelm communities. Key indicators include urban tree diversity, physical and visual access to nature, canopy cover, and available growing space. Functional indicators impacting design choices encompass stormwater management, habitat provision, air quality improvement, and greenhouse gas storage and sequestration. Various software tools, such as i-Tree, the Community Assessment & Goal-Setting Tool, Tree Equity Score (TES), and Impact Scorecard, are available to assess and estimate the impacts of trees, making data-driven decision-making feasible.

Trees benefit people's health and wellbeing in many ways and have positive environmental impacts. Overall equity can be improved through forestry programs. This is done by being thoughtful and deliberate in community engagement approaches that allow people to impact policy and goals, plans, implementation and maintenance schedules, and employment. By implementing best practices and using appropriate measurement tools, cities can foster a healthy urban forest that benefits all residents and contributes to a more sustainable and equitable urban environment.

2 Introduction

This report:

- summarizes available evidence[1] related to the impacts of tree canopy and the City's Tree Expansion and Beautification Initiative on the environment, communities, and people, and how the impacts support (justify) a focus on urban forests and
- provides example municipal policies and best practices for creating and maintaining a healthy urban forest

The impetus to conduct this work includes the:

1. City's Tree Expansion and Beautification Initiative, which began in the Spring 2023 with the planting of 1,000 of a planned 6,000 trees,
2. Concurrent work to update the third edition of the City's Urban Forest Master Plan,
3. Federal funding support, such as the $1.5 billion from the 2022 Inflation Reduction Act for urban and community forestry[2] and
4. Desire for research-based information to support those efforts
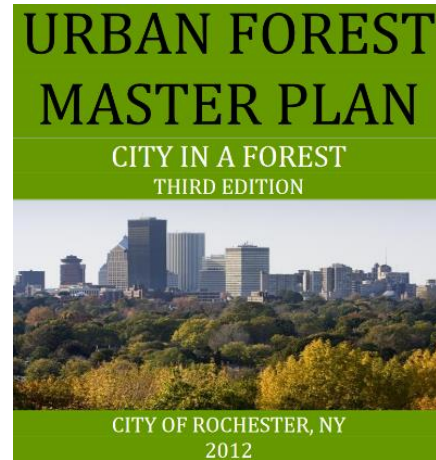
3 Approach

Academic publications reporting peer reviewed studies and reports of current municipal best practices were reviewed to identify:

- Urban forest impacts on the environment, communities, and people (including mental and physical health),
- How these impacts support (justify) a focus on urban forests; and
- Example municipal policies and best practices for creating and maintaining an urban forest to support human and environmental health.

See Appendix A for a list of queried resources and search terms. Reviews of recently published systematic reviews[3] and meta-analyses[4], in addition to highly cited, recently completed individual studies with North American study areas were prioritized.

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[1] A mix of academic publications, including but not limited to research conducted by the Consultant's staff, and best practices

[2] https://www.whitehouse.gov/cleanenergy/inflation-reduction-act-guidebook/

[3] A systematic review refers to a specific method for reviewing existing scholarly literature, which aims collate and summarise all available studies which fall within the scope of a set of defined search terms. See additional description here: https://training.cochrane.org/handbook/current

[4] A meta-analysis refers to a specific type of study which combines data from two or more existing studies to complete statistical analysis on this combined dataset. See additional details available from the Cochrane Statistical Methods Group

4   Benefits of Trees -- People

Several conceptual frameworks have been proposed to understand the pathways between access or exposure to various greenspaces (e.g., parks, gardens, forests, and street trees)(1,2). These pathways, which impact health and wellbeing, include reducing harmful exposures, restoring capacities related, for example, to attention and dealing with stress, and changing people's behaviors (capacities) (Figure 1).
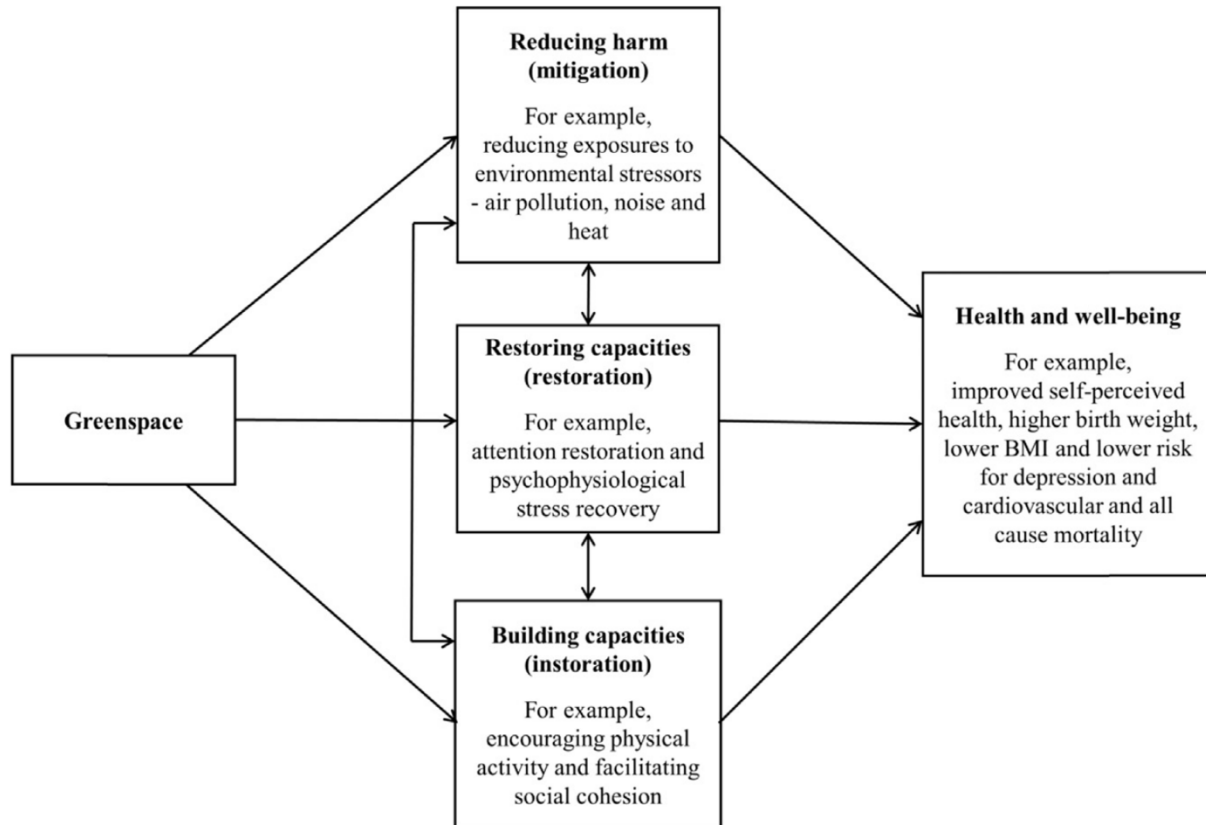
Figure 1: Conceptual framework of proposed pathways between greenspace exposure with health and wellbeing outcomes (1)

Several metrics are used to quantify urban trees' presence, density, and characteristics (e.g., size, species). More recently, studies examining large-scale impacts of urban forestry use remote sensor data or satellite imagery to categorize the type of land cover (e.g., vegetation, built or paved surface). One frequently used metric is Normalized Difference Vegetation Index (NDVI), which measures vegetation density (with higher values more indicative of dense forested areas). Other methods quantify tree canopy density from above (aerial imagery) or street level (via street view imagery). Additionally, some studies will use the location and characteristics of individual trees as a measure of exposure. Where evidence is available, this report highlights new knowledge specific to urban forestry (e.g., tree canopy or other measures specific to exposure to trees) rather than greenspace access or exposure more generally. However, this report did not explicitly exclude studies or reviews that may have included exposure to urban forestry or tree canopy aggregated along with other vegetation or greenspaces. Below is a summary of the evidence for these impacts.

Physical

Access and exposure to greenness, such as urban tree canopy and street trees, has been shown to be associated with a wide range of health outcomes. As described in the section above, there are several mechanisms, or pathways, by which exposure to greenness in general and trees specifically has been proposed to impact human health. These associations include increased physical activity attributed to shade produced by greater tree density or reduced proximity to harmful exposures (e.g., air pollution, noise, heat – more detailed descriptions of these mechanisms are in the following sections). Tree canopy specifically, rather than greenness in general, has been shown to positively impact physical health overall and several specific physical health outcomes.

- Several recent systematic reviews and meta-analyses have been conducted to examine the array of literature examining the role of greenspace (including specific measures such as density of street trees). One systematic review of 19 individual studies found that increased greenspace was associated with a reduced risk of type-2 diabetes and obesity and an increased likelihood of physical activity (3). Another systematic review of 143 studies (with 32 studies specifically examining exposure to trees, either forests or street trees), including nearly 100 individual health outcomes, found between 67%-100% (depending on the specific health outcomes) of the studies reported improved health outcomes associated with increased greenspace exposure (4).

- An additional systematic review of 62 studies examined whether greenspace, including search terms of "street trees" and "urban trees," exposure was similarly associated with improved health outcomes in men and women. These authors found that overall, women tended to experience a stronger association between greenspace and health than men, with this trend seen particularly in North American and European countries. These authors suggested that increasing greenspace, such as through tree planting initiatives, may serve as a strategy to reduce gender-based health disparities(5).

- Living in a neighborhood with more tree cover was associated with greater odds of self reported good general health. In a study of 4,820 adults living in Sacramento, California, a 10% increase in tree canopy cover (measured within a 250m buffer of the participants' home, using high-resolution LiDAR imagery) was associated with 2.9% increase in self-report general health scores (6).

- This same 10% increase in tree canopy in Sacramento, California, was also associated with a 19% reduction of both overweight/obesity and prevalence of type-2 diabetes, 10.4% reduction in the prevalence of asthma, and 7.4% reduction in high blood pressure (Only the result for lower prevalence of being overweight or obese was statistically significant (6).

- Increased residential tree canopy is associated with better birth outcomes. One study found a 10% increase in tree canopy surrounding homes in Portland, Oregon, was associated with a 1.42/1000 reduction in babies being born small for their gestational age (7), which is a leading cause of both infant mortality as well as a risk factors for poor health outcomes later in life. A similar study in Southern California reported that greater residential NDVI was associated with increased birth weight and decreased risk of pre-term births (8), with the greatest protective effect shown for greenness immediately surrounding (50m) participant's homes.

- A study that took advantage of tree loss due to infestation with emerald ash borer to conduct a natural experiment found that the loss of trees across 15 states was associated with increased mortality due to both cardiovascular and lower-respiratory tract illness (9). This quasi-experimental design allows for more certainty about the temporal relation between tree exposure and health outcomes and better supports claims of a causal relationship. These authors found that the health impacts of this loss of ash trees were

greater in neighborhoods with higher median household income but were unable to determine if this was due to greater baseline (prior to the infestation and subsequent tree loss) greenness or due to a difference in the way in which increase tree density impacts residents across the spectrum of neighborhood income levels.

- Despite all the proposed benefits of additional tree canopy and urban forest, there are also some potential risks. Density of tree canopy as a pre-natal exposure was associated with increased asthma and sensitization of pollen during childhood (10). Studies have also shown that increased tree pollen exposure may cause asthma exacerbation and increased emergency room visits due to asthma symptoms (11,12).

Mental Health

Several mechanisms have been suggested to explain how exposure to greenspace may, directly or indirectly, improve mental health. For example, scholars have hypothesized that being exposed to nature may reduce stress (13) and improve attention restoration (14,15) or that the evolutionary connection, termed "biophilia" to the natural world improves psychological wellbeing(16). Indirectly, access and exposure to greenspace may improve mental health due to increased physical activity, opportunities for social interaction, or reduced exposure to noise pollution (17).

- "Forest bathing" refers to spending deliberate time in natural environments, whether walking, or simply viewing these natural amenities. Extensive literature supports the mental health benefits of forest bathing, such as being associated with reduced anxiety and stress (18–23).
- More specifically, it has been suggested that planting oak and maple tree species may have a greater impact on reducing stress (21,23,24).
- In young adults, various measures have been used to quantify the mental health benefits associated with exposure and time spent in urban forests, such as reduced salivary cortisol (25), lower blood pressure (26), increased parasympathetic nervous system, and reduced sympathetic nervous system activation (27), all of which are physiological indicators of reduced stress.
- Much of the existing literature specifically examining the mental health outcomes associated with tree canopy and urban forests specifically (as opposed to greenspace exposure more generally) has been conducted in Japan or European settings. A recent scoping review of all eligible research studies published between 2000 and 2022 reporting on mental health impacts of forest exposure in adults found only one study conducted in the US (28). This study looked specifically at the mental health impacts of physical activity (50 minute walk) in forested compared to urban locations. It was found that moderate-intensity walking in a forested environment was associated with a positive impact on psychological health. However, at least one study has shown the impacts of positive mental health associated with exposure to greenspace (as measured by the proportion of green landcover, not exclusively the density of trees or tree canopy) was shown to vary across the lifespan and follow different patterns in men and women. For men, this protective effect on mental health tended to develop in early adulthood and follow a linear pattern (e.g., more greenspace was associated with improved mental health outcomes). At the same time, a protective effect was shown to occur in women in their mid-forties, with moderate greenness associated with greater mental health benefits (e.g., not the most or least green neighborhoods). These results indicated that the health benefits of increasing neighborhood greenspace may not be experienced across different demographic groups (29).

Social Capital / Cohesion

Urban greenspaces provide a location for neighbors and residents to engage in informal social contact. These neighborhood social ties have been described as one factor contributing to the development of "neighborhoods" as opposed to groups of individual residents who happen to live nearby (30). Greener neighborhoods are also associated with greater social cohesion, which refers to positive social interactions, relations with others, and feelings of belonging and acceptance. Additional tree canopy has also been shown, particularly in a North American context, to be associated with an increased subjective sense of safety and objective measures of crime events.

- One seminal study in this field investigated the neighborhood social ties of residents in 18 identically designed buildings in inner-city Chicago. This study found that residents in buildings with greener neighborhood common spaces (e.g., trees, grass, and other vegetation) were more likely to indicate stronger neighborhood social ties, for example, engaging in more social activities, knowing more of their neighbors, and feeling a stronger sense of belonging (30),
- A recent systematic review of 51 studies found that residents in greener neighborhoods generally tended to report less loneliness. Additionally, residents tended to utilize public spaces with more vegetation and trees, creating more opportunities for social interaction. However, this review highlighted the complexities and inequities in which groups visit these greenspaces and who receives the greatest benefits. Across ages and genders, some individuals have a greater opportunity to spend time in these spaces, and the social benefits also vary by these individual demographic factors (31).
- Increased tree canopy has also been shown to be associated with safer neighborhoods. Studies have found that areas with a greater proportion of tree canopy had less violent and property crime, and this relationship remained after adjusting for local area socioeconomic levels and walkability in Austin, Texas (32). Similarly, in New York City, greater tree canopy cover was associated with reduced overall crime rates and less crime severity (33).

5   Benefits of Trees -- Environmental

Trees impact the environment in many ways, including cooling the air and reducing and treating stormwater, air pollution, and noise (Figure 2). These impacts are described below.

Heat

Urban Heat Island (UHI) effect refers to the increased land surface and air temperature in urban and more densely developed areas. These higher temperatures are attributed to the
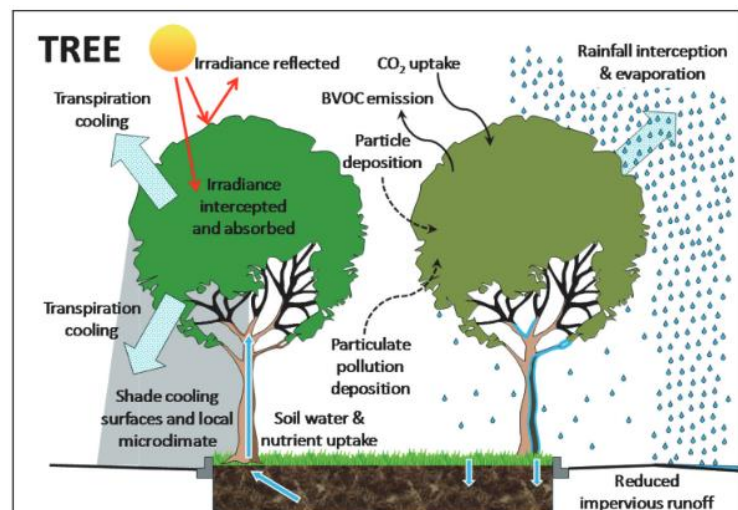
Figure 2: Environmental Benefits of Trees (37)

increased proportion of impervious and developed land uses and
corresponding lack of vegetation (Figure 3).

Figure 3: Heat Island Temperature Profile by Land Use (32)

With increasing extreme heat events (EHE) expected due to ongoing climate change, it will continue
to be necessary to utilize urban forestry strategies to reduce the impact of UHI. Increased urban
vegetation, in particular the proportion of tree canopy, has been suggested as an effective strategy
to reduce the increased energy consumption, reduced outdoor air quality (34), and impacts to
human health (35) associated with UHI.

- There are two main suggested mechanisms by which tree canopy may decrease local
  temperatures: [1] by increasing shade, which has been shown to reduce land surface
  temperatures by as much as 40°C (104°F (when urban areas under dense vegetation canopy
  are compared to paved surfaces with full sun exposure) (36,37), and [2] Increased
  evapotranspiration also results in lower temperatures between 1°C and 8°C in areas shaded
  by tree canopy (38,39).
- A recent meta-analysis found the density of tree canopy was the aspect of urban trees that
  was most influential on temperature, with a nearly linear negative relationship between the
  density of tree canopy coverage and surface temperature. Additionally, trees planted over
  grass rather than paved areas had nearly 10 times higher transpiration rate (40).
- The diversity of tree species and the density of tree canopy coverage increased the
  magnitude of cooling associated with urban trees, suggesting that a greater diversity of tree
  species can increase the cooling potential (41).
- In addition to the density of tree canopy coverage, trees' configuration and vertical
  structure have also been shown to influence the cooling potential. Evidence suggests that
  spreading tree canopy through urban areas tends to have a greater cooling effect (42,43).

Storm Water

Trees contribute to stormwater management by slowing its flow, promoting infiltration, and enhancing the natural processes regulating water within ecosystems (Figure 4). Pollution entering surface waters can be reduced when less stormwater runoff occurs. (44) (45) One study found that 29,299 municipal trees in Santa Monica *"reduced stormwater runoff by 193,168 m³ (1.6% of total precipitation) with an estimated annual value of $110,890."* (46)
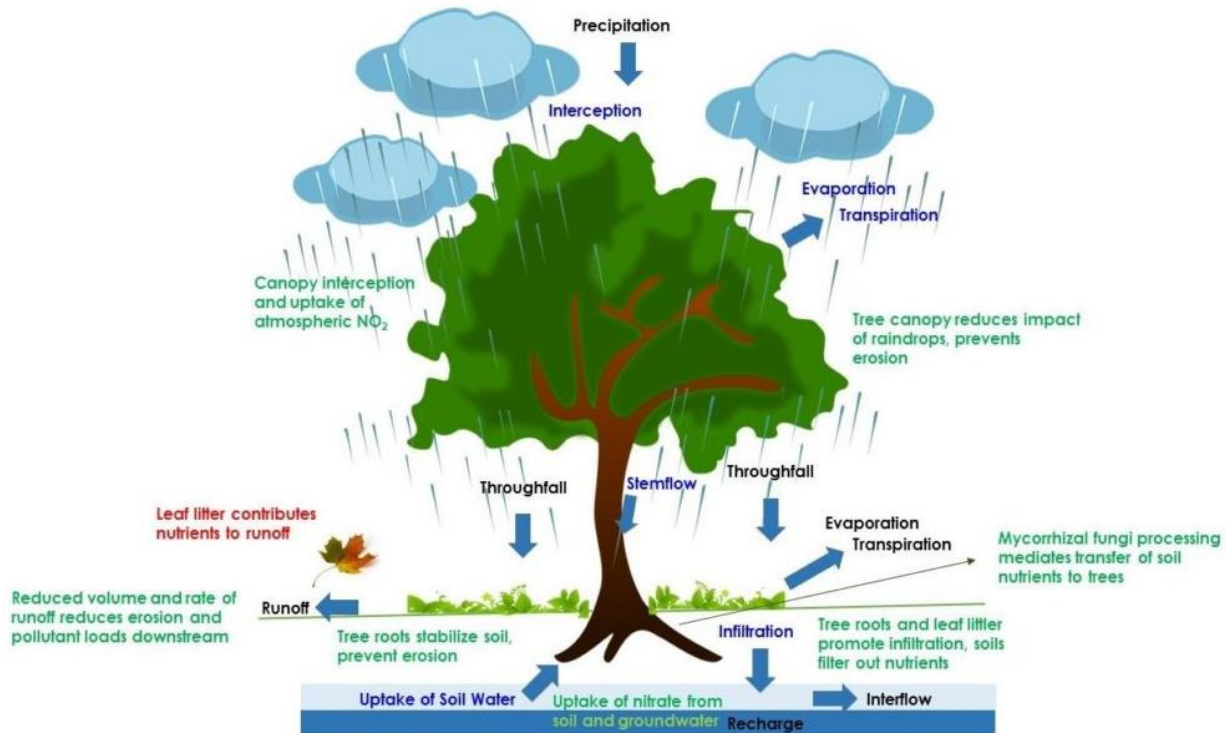
Figure 4. The Influence of Tree Canopy on Runoff and Water Quality (47)

In a review of available literature, the [Center for Watershed Protection](#) identified 49 studies that evaluated the hydrologic benefits of urban trees. Findings included:
- *"Canopy <u>interception</u> of rainfall is an important and significant component of the tree water balance.*
- *When vegetation is small, water is predominately lost by soil evaporation, but once the vegetation is well developed, <u>transpiration</u> becomes the main process.*
- *Studies on the effects of urban trees on <u>soil infiltration</u> are limited. The studies reviewed demonstrate that trees can increase soil infiltration rates, even in highly compacted soils such as those typically found in the urban environment."* (47)

Pollution – Air

Unlike the evidence for reducing urban heat islands and increasing effective stormwater management, the impact of urban tree canopy on air pollution seems to be somewhat inconclusive and potentially more negligible. Although increased urban trees tend to play a positive role in protecting human health by reducing the concentration of airborne particulate matter (48–50)

and ozone (51), trees also release volatile organic compounds (VOCs), pollen, and allergens that are harmful to health (45). Areas with greater overall vegetation tended to have lower concentrations of air pollution. However, at least some of this effect is since higher polluting land uses tended not to be compatible with dense vegetation (e.g., industrial development, large roadways). Despite some inconsistent findings, there remains evidence that increased tree canopy is associated with a reduction in air pollution concentration. Increased tree canopy improves air quality by pollution deposition on urban vegetation and through the dispersion of polluted air (52).

- It is estimated the trees in cities throughout the US remove 215,000 tons of PM_{10} from the air each year (53).
- One study examining the effect of tree canopy on ozone concentration in the Northeastern US, found that increasing urban tree canopy 20% (from 20 to 40%) was associated with a 2.4% reduction in daytime hourly ozone concentrations. This study also found no difference in ozone concentrations based on the species composition of urban trees. (54)
- Other works have found a considerable variation (10 to 20-fold difference) in the pollution particle deposition depending on vegetation species (55). These authors reported that hairy or waxy leaves provided the greatest deposition potential.
- Across multiple US cities, the reduction in ozone due to trees and other vegetation varied considerably, with additional variation across seasons. The greatest reduction in O_3 was from daytime in-leaf season measurements, with a 14.8% average reduction across 14 US cities (56). However, the average air quality improvements, due to reduced O3, attributed to urban trees and vegetation has been reported to be more modest. With an average annual improvement of 2% across various urban environments (56)
- However, other studies have found that tree canopy did not reduce ozone levels near roadways but did reduce NO_2 concentrations. (57)
- The size and location of urban trees also contribute to this vegetation's impact on air quality. For example, a 50% reduction in $PM_{2.5}$ and PM_{10} was achieved by locating tall oak and cedar trees 25m from a roadway. Whereas building a vegetation barrier too far from a roadway or other sources of air pollution did not effectively improve air quality (52) (Figure 5).
- The temperature reduction due to increased tree canopy tends to have a synergistic effect on reducing air pollution.

Pollution – Noise

Urban forestry reduces noise pollution through several mechanisms, including reflection and diffraction of sound waves and absorbing or transforming sound vibrations. In addition to measurable differences in objective noise levels due to vegetation barriers, urban vegetation also tends to positively influence the ways individuals perceive urban noise.

Figure 5. Road Pollutant Dispersion Patterns and Near Road Features (61)

- Installing roadside vegetation creates a buffer that can reduce nearby noise levels. A considerable body of literature supports the efficacy of "tree belts" or vegetation buffers as a mitigation strategy to reduce traffic noise. However, there is considerable debate about the characteristics of these buffers, including how to provide the greatest noise attenuation(58). For example, some studies found high leaf area density or other plan structure elements to improve noise reduction (59,60), whereas others found leaf size not to have a significant effect (61). Others found that increased height and length of the buffer (61,62) were positively associated with noise attenuation; however, there is also evidence that large plant height may increase the perception of noise by directing it back towards residents (63).
- One systematic review of the positive psychological benefits of noise buffering by greenspace found mixed conclusions. The majority of cross-sectional studies provided evidence that increased urban vegetation provided a health benefit due to the association with reduced perceived annoyance due to noise pollution. However, there were less conclusive results when summarizing intervention studies (64).

Carbon Impacts

Carbon offsets are a mechanism aimed at achieving carbon neutrality or net-zero emissions. Offsetting involves calculating the amount of greenhouse gas emissions produced by a particular activity and investing in projects or activities that reduce an equivalent amount of emissions elsewhere (Figure 6). This helps to balance out, or "offset," the emissions produced. Carbon offset projects can take various forms, including planting trees or restoring forests, as trees absorb carbon dioxide during photosynthesis and store carbon.

Figure 6. Carbon Offset Cycle (64)

Nowak et al. write, *"trees act as a sink for carbon dioxide (CO2) by fixing carbon during photosynthesis and storing carbon as biomass. Trees in urban areas (i.e., urban forests) currently store carbon, which can be emitted back to the atmosphere after tree death, and sequester carbon as they grow.* (65) A systematic review summarizes that urban green spaces are also *". . . indirectly reducing urban carbon emissions by regulating microclimates, conserving water resources, and absorbing pollutants . . . , thereby reducing urban carbon emissions . . . ."* (66)

To sell offset credits, the amount of reduced GHG emissions must be calculated. One way to do this for trees is using a suite of free calculators (i-Tree) created by the USDA Forest Service, and the SUNY College of Environmental Science and Forestry in Syracuse, NY, and other private/public partners. Cities in the United States have used the methodologies and tools to analyze carbon storage and sequestration of the trees and forests among various land-use types. A 2016 study used

i-Tree to estimate that street trees in California *"remove 567,748 t*[ons] *CO_2 . . . annually, equivalent to taking 120,000 cars off the road."* (67)

When an offset project is initiated, it generates carbon offset credits. Each credit represents a specific reduction or removal of greenhouse gas emissions. These credits can be bought and sold on carbon markets. Organizations or individuals looking to offset their own emissions can purchase these credits to compensate for their carbon footprint. There are standards[5] and various organizations involved in this marketplace.[6]

Urban Forests and Carbon Offset Credits – In Early Times

New York State is currently developing and an economywide [cap and invest program](#) to address climate change. Stakeholder feedback [sessions](#) began in 2023. The City should monitor the status of this effort and the ability for urban forests to be a source of carbon credits.

"*City and County budgets are just not able to keep up with tree loss. This national sale provides critical funding and a new funding strategy for local governments and nonprofits that are on the front lines of making communities both green and equitable,*" said Brett KenCairn, Executive Director of Nature-based Climate Initiatives." (7)

- *Proceeds from the* [NYS] *Cap-and-Invest auctions will be invested to bolster carbon reductions and help ensure the Program is affordable for all New Yorkers and delivers benefits to disadvantaged communities. Proceeds will support critical investments in climate mitigation, energy efficiency, clean transportation, and other projects, in addition to funding an annual Consumer Climate Action Account that will be distributed to New Yorkers to mitigate any potential consumer costs associated with the Program.* (68)

In 2022, one organization, [City Forest Credits](#), was involved in "*the largest and first-of-its-kind . . .* [purchase of US city forest carbon credits]. *It represents . . .* [31,000 metric tons of] *carbon stored in 13 urban forestry projects across the country. . . for a total purchase price exceeding $1 million. The price per credit was between $34 and $45 per metric ton.*" (69)

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[5] Standards include [Verified Carbon Standard](#), the [American Carbon Registry](#), the [Climate Action Reserve](#), and [Plan Vivo](#).

[6] One such organization, [City Forest Credits](#), "*is a 501(c)(3) nonprofit carbon registry that manages carbon and impact standards for metropolitan areas in the United States. It offers two services for the private sector to contribute to local climate action and enrich our communities. Companies can purchase carbon offsets from urban forest projects, or invest in certified planting projects with health, equity, and environmental impacts.*"

Indianapolis Example

The Indianapolis City-County Council passed a special resolution in December 2022 to support the development of a carbon credit program to protect urban forests and trees in Indianapolis.

- *"The concept raises money by selling carbon credits to companies and other entities that wish to offset their greenhouse gas emissions by investing in carbon-reducing forestry projects or related initiatives. More areas around the country are establishing carbon credit programs, not for massive, at-risk forests abroad, but for their smaller, urban counterparts at home."* (70)
- *". . . The city is exploring the research, development and feasibility of the program. The council recommended that the city provide an update to the council in November 2023 about potential outcomes, among other things."* (71)
- *"The city has a goal of planting 30,000 trees by 2025; the Department of Public Works and its partners have planted more than 23,000 trees since 2018. However, the city can only fund upkeep of the trees for about three years. A carbon credit program is one way to ensure that trees are healthy for years or even decades, said Jeremy Kranowitz, CEO and president of Keep Indianapolis Beautiful."* (72)

6   Equity/Environmental justice

One definition of urban green equity is *". . . fair access to and governance of urban vegetation regardless of differentiating factors such as socioeconomic status, race, culture, or age."* (73) These two elements (Figure 7) can be further described as,

- *". . . (1) the **spatial distribution** of urban vegetation, and*
- *(2) recognition . . .* [and] *acknowledgement of participants' difference, existence and validity in **decision-making processes**, both formal and informal, and the inherent inclusion and power associated with that acknowledgement."* (74)
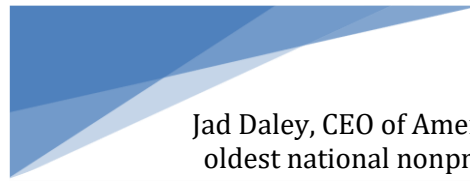
Jad Daley, CEO of American Forests, the oldest national nonprofit conservation organization, said, "*Urban forests stand at the center of carbon removal, social equity, public health, biodiversity, and positive community impacts where millions of people live, work, breathe, and recreate. These credits are a critical step toward financing equitable city forests for everyone.*" (7)
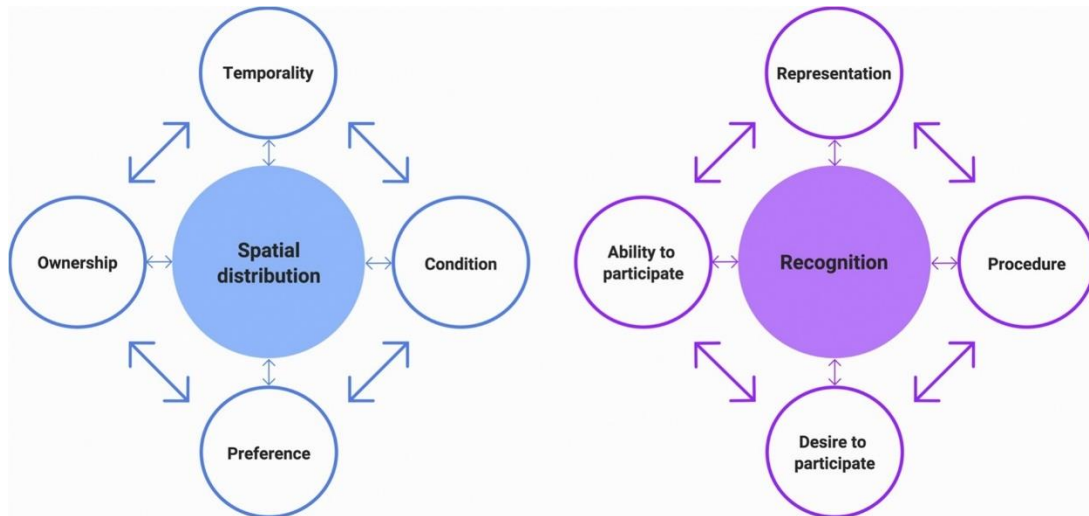
Figure 7. Equity – Access (spatial distribution) and Recognition (Decision Making) (74)

A third dimension, **procedural equity**, can be added based on a framework from urban resilience planning and related to social equity. (75) These three categories of social equity dimensions are additionally described as:

- Distributional Equity – *". . . includes the equitable distribution of environmental goods like tree canopy and ensuring that those most in need have access to the benefits trees provide."*
- Recognitional Equity – *". . . can look like city officials acknowledging the history of redlining that has led to inequitable UTC* [urban tree canopy] *and identifying pathways towards addressing it or ensuring that urban forestry departments have stable funding to develop culturally relevant and multilingual educational resources."*
- Procedural Equity – *". . . an example of this could be the creation of a task force or working group that has member representatives from disproportionately impacted communities, who are given the power to make decisions on the urban forest within their neighborhoods."* (76)

Using these three categories as an organizing structure (Figure 8), promising practices to ensure more equitable urban forestry programs are described below. Unless otherwise noted, the source is The Nature Conservancy's paper, *Assessment of the Urban Forestry Landscape for Promising Equity-Focused Policies and Practices*. (76)
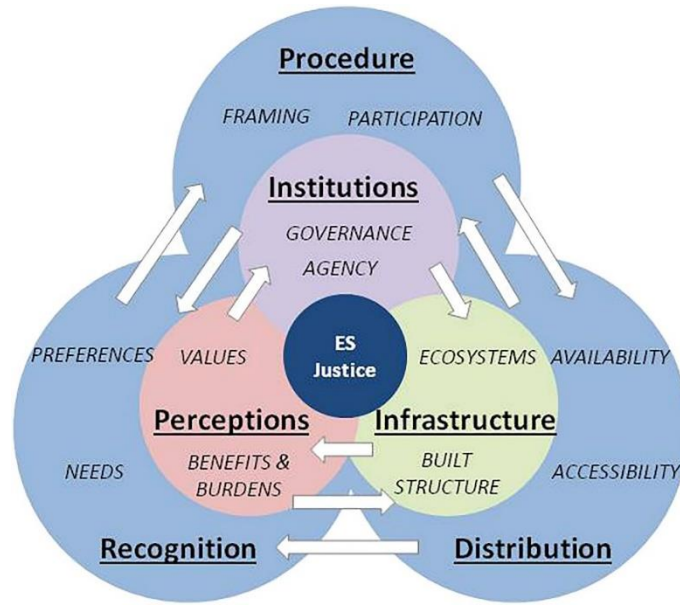
Figure 8. Core elements of the empirical urban ecosystem services justice model: Recognition, procedure, distribution. (77)

Spatial Distribution Equity

The City of Rochester's goal is to create an equitable distribution of resources across demographic groups. The measurement of this is achieving an 85% tree stocking percentage across all City quadrants. This goal and metric are important.

- *"When there are no place-based goals, disparity can actually be exacerbated if tree planting efforts go to areas that already have ample tree canopy or are not facing particular hardships."* (76)

It is important to acknowledge possible obstacles to achieving this goal, including:

- *"difficulties aris*[ing] *not only from the expected policy and funding aspects, but also from ecological ones, including the physical availability of tree planting sites in environmental justice communities.* (78)

Further refining of this 85% stocking goal should be considered since equitable does not always mean equal.

- *"Some areas may be inundated with industrial pollution and have high asthma rates, necessitating increased tree canopy to help combat both the air quality and the soil quality (phytoremediation). Each area is different with their own localized issues and needs.* (76)

- Only using uniform targets *"does not provide a comprehensive assessment of urban forest stewardship in a community and does not account for an area's potential to support a forest canopy."* (79)

- The City of Rochester should consider additional tree canopy distribution factors, such as those used by these cities:

  - The City of Miami measures the equity of tree canopy distribution across several factors, including *"measure equity in tree canopy distribution, such as rental vs. owner-occupied,*

median household income, tree benefits per capita, urban heat island index, and human health indicators." (76)

- The Forest for All NYC Coalition identified needs to consider the following when planning for tree distribution: *"current tree cover needs, local geography, the needs or concerns of the community, and tree survival rates in designated areas"* (76)
- The City of Pittsburgh's Shade Tree Commission established in 2021 the Equitable Street Tree Investment Strategy. The Strategy prioritizes neighborhoods for shade tree investments in several ways, including *"where a history of underinvestment has led to adverse health outcomes, systemic under and unemployment, and increased vulnerability to climate change."* (76)

Recognitional Equity

Addressing recognitional inequities through the City of Rochester's planning and community engagement work involves acknowledging and honoring differences *"with a specific emphasis on the ways and cultures of traditionally disenfranchised populations."* (80)

Processes and projects that explicitly address recognitional equity include *"highlighting how future developments should take inspiration from their history, how leaders should come from the community, and how public and greenspaces should celebrate the mix of cultures that have shaped the community."* (80)

Procedural Equity

The City of Rochester's community engagement work can also advance procedural equity through *"the presence of equitable spaces of engagement that determine who is involved with shaping the social, built and ecological conditions . . . and how that involvement takes place."* (77)

Different ways of doing this include *"devolving power to the community, . . . creating a neighborhood committee to advance specific agendas . . . or schemas for neighborhoods to become collective owners and stewards of . . . greenspace, and through the decentralization of services such as energy production, which would give people more control in how they organize to meet their energy needs."* (80)

Equity Through Employment

Another equity consideration includes providing opportunities for job training.

- *Hiring local talent for tree maintenance and urban forestry work presents an opportunity for cities to involve local community members in the creation of sustainable green jobs related to urban forestry, from tree planting to routine maintenance.* (76)
- A 2011 national call to action by the Vibrant Cities & Urban Forests Task Force found that urban forestry related job training programs *"bolster local and regional economies, improve individual and public health and welfare, and promote lasting stewardship practices"* (81)*.*
- Example programs include:
  - *The Tree Equity Workforce Network (TEWN), convened by American Forests, is a network of stakeholders whose goal is training and supporting individuals who are underrepresented in the tree care industry, particularly Black, Indigenous and people of color.* (82) The Onondaga Earth Corps in Syracuse, NY, is a member.

- The City of Austin's Youth Forest Council *is an immersive, yearlong paid internship connecting young people (ages 16-20) in Austin to careers in natural resources and public service. Youth Forest Council members work with Urban Forest Program professionals to support community activities and develop their own connections to Austin's natural spaces.*

7 Analysis & Measurement

It is recommended that the chosen set of urban forestry program measures should not be too complex. If it is, then it might be "*overwhelming for most communities to measure and communicate with the public.*" (83) One study created a concise set of key indicators for healthy, resilient urban forests by using a Delphi Survey approach[7] with international academics and local practitioners. (83) A basic set of indicators was identified, covering a range of important urban forest values (Table 1).

Table 1. Structural versus Functional Indicators (81)

Structural Indicators		Functional Indicators
Diversity	Urban Tree Diversity	Stormwater Management
Distribution	Physical Access to Nature	Habitat Provision
	Visual Access to Nature	Air Quality Improvement
Density	Canopy Cover	Greenhouse Gas Sequestration and Storage
	Available Growing Space	

Measurements used for the structural indicators include:
- Urban tree diversity – measures within a given location of tree sizes, types, and forms
- Physical access to nature
  - Count of population within an X minute walk or Y distance from a greenspace
  - Note – The "[s]*afety, structure, size, and accessibility of greenspace . . .* [are] *important considerations when using physical access as a measure of urban forest success.*" (83)
- Visual access to nature – defining a metric can be challenging, such as identifying "*the actual content of the view, and what constitutes natural.*" (83)
- Canopy cover – estimates the total leaf area of a tree's canopy
- Available growing space –space at ground level and available soil volume

Measurements used for the functional indicators that impact design choices include:
- *"optimize storm water management (leaf area index, thresholds for impervious surface area),*
- *habitat provision (ideal patch sizes, connectivity corridors),*
- *air quality improvement ([*low volatile organic compound] *VOC species, tree location near pollution sources), and*
- *greenhouse gas storage and sequestration (tree location to cool buildings, tree location to enhance physical activity)." (81)*

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[7] *"The Delphi survey is a group facilitation technique, which is an iterative multistage process, designed to transform opinion into group consensus."* (84)

Several different software tools are available to plan for, assess, and estimate the impacts of trees. These include:

- i-Tree Suit of Tools[8] developed through *a cooperative, public/private partnership between the USDA Forest Service, Davey Tree Expert Company, The Arbor Day Foundation, Society of Municipal Arborists, International Society of Arboriculture, Casey Trees, and SUNY College of Environmental Science and Forestry. Two of these tools are:*
  - i-Tree Canopy - *From your chair, easily estimate land cover and tree canopy plus benefits using random point sampling on aerial imagery.*
  - i-Tree Planting - *Make a case to invest in tree planting by estimating the value those trees will provide in coming years.*
- The Community Assessment & Goal-Setting Tool, created by Vibrant Cities Lab, *". . . isn't an "audit" in the traditional sense; rather, it is a tool that you and your colleagues can use to better understand what constitutes a productive urban forestry program. Along the way, you'll identify areas of opportunity and areas of need. All this can help shape your plans and ensure that the time and money invested will deliver the results to best fit your community. The Community Assessment & Goal-Setting Tool will not just help identify gaps and some of the assets that can help you reach your goals, it will also highlight areas where you're already doing well.* (85)
- *The non-profit* American Forests', Tree Equity Score (TES) *"was created to help address damaging environmental inequities by prioritizing human-centered investment in areas with the greatest need."* (86) Working at the US census tract level (Figure 9) the TES *"measures how well the critical benefits of urban tree canopy are reaching those who need them most. The score establishes an equity-first standard to guide investment in communities living on low incomes, communities of color and all those disproportionately affected by extreme heat, pollution and other environmental hazards (*Figure 10*)."*

The US Department of Agriculture's Forest Service identifies these additional urban forestry tools:

*To ensure the newly-planted trees to reach its maturity, we need to plant and care them well (e.g. with adequate soil volume and water, which most city trees don't have). . . . **the key is not planting 1 million trees but keeping them growing healthily in the long term** (44,45)*

- *The Urban Forest Inventory & Analysis Program (Urban FIA) was developed based on Congressional direction in the 2014 Farm Bill. Urban FIA is a long-term monitoring program that produces a standard dataset across the country to track (and note trends in) the urban forest. The results of Urban FIA monitoring are being made available through city-based reports and My City's Trees.*
- *Urban Tree Canopy Assessments use remotely-sensed high-resolution aerial imagery to precisely quantify and track tree canopy cover change over time.*
- *Field-based urban tree monitoring generates long-term data on urban tree mortality, growth, and health. Consistent guidance on how to develop accurate, long-term tracking systems, and which variables are important to track and monitor, can provide field-based information on not only the quantity but also quality and health attributes of an urban forest.*

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[8] Note – America Forests' CITYgreen software, developed in 1996, was the precursor for the i-Tree, software.

- *Healthy Trees Healthy Cities (HTHC): This newsletter covers this topic in depth beginning on page 3 "Healthy Trees Healthy Cities." In brief, HTHC is a collaborative initiative to promote the long-term health of urban trees by providing free tools and resources such as a smart-phone application ("app"), web-based project management dashboard, and training resources. These resources help communities track stewardship as well as tree health, providing locally as well as nationally-useful data in real-time.* (87)
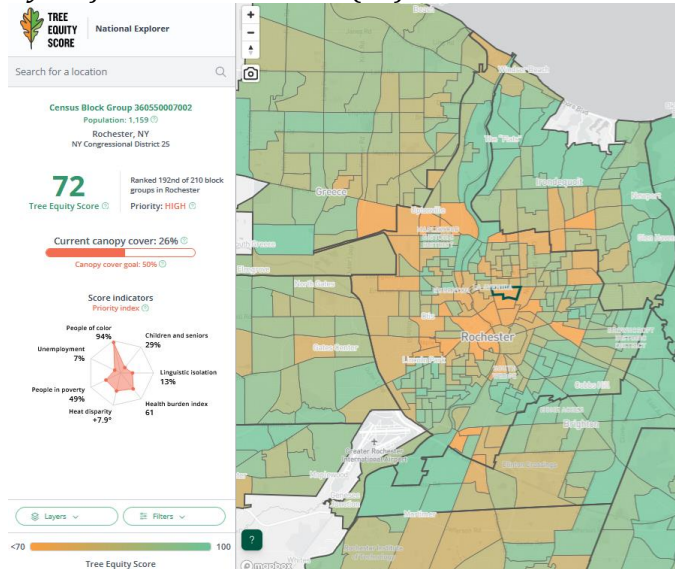
Figure 9. American Forests' Tree Equity Score – census tract level((86)

Figure 10. American Forests' Tree Equity Score – equity urban tree canopy benefits ((86)

- *Impact Scorecard -- City Forest Credits partners with local operators, businesses, local non-profits, and/or government entities to design a project that meets the community's needs. The Impact Scorecard* [example here] *quantifies the potential impact of a designed project by analyzing 5 themes and 90 indicators.* (76)

8 Conclusions

The motivation for this report stems from several factors, including the initiation of the City's Tree Expansion and Beautification Initiative, ongoing updates to the Urban Forest Master Plan, federal funding support, and the need for research-based information to bolster these efforts.

The report explores the benefits of trees for people, encompassing physical, mental, and social aspects. It highlights that access to green spaces, including tree canopies, positively impacts physical health by increasing physical activity and reducing harmful exposures. Additionally,

exposure to nature is linked to stress reduction, attention restoration, and improved psychological wellbeing. Urban greenspaces foster social cohesion and safety within communities.

The environmental benefits of trees include their role in cooling the air, managing stormwater, mitigating air and noise pollution, and sequestering carbon. Increased tree cover is associated with improved air quality through pollution deposition and dispersion. However, there is some evidence of pollen exacerbating asthma.

The report also addresses equity and environmental justice in urban forestry. Urban green equity can be defined as fair access to and governance of urban vegetation, irrespective of socioeconomic status, race, culture, or age. It introduces spatial distribution equity, recognitional equity, and procedural equity as key dimensions of achieving urban green equity. Promising practices to promote equity in urban forestry programs emphasize the importance of involving local communities and addressing historical disparities.

Using a concise set of urban forestry program measures is recommended to avoid overwhelming communities. Structural and functional indicators cover tree diversity, physical and visual access to nature, canopy cover, and available growing space. Various software tools, including i-Tree, the Community Assessment & Goal-Setting Tool, Tree Equity Score, and Impact Scorecard, are highlighted as valuable resources for planning and assessing the impact of trees in urban environments.

Trees are an essential component of livability. Trees positively impact physical and mental health, environmental quality, and social equity.

9   Appendix A – Resource and Search Terms

The resources queried to identify relevant publications included UD4H's existing literature library, PubMed, and Google Scholar. Key search terms included combinations of urban forestry terminology and terms relevant to each section of the report (Table 2).

Table 2. Example of Search Terms

"urban forest(ry)" OR "trees" OR "tree canopy" OR "tree canopy cover"	"health" OR "physical health" OR "wellness" OR "chronic disease"
	"mental health" OR "stress" OR "well-being" OR "wellbeing"
	"social connectivity" OR "social interaction" OR "social cohesion"
	"urban heat island" OR "extreme heat" OR "urban heat"
	"air pollution" OR "outdoor air"
	"noise pollution" OR "noise exposure"

10 Appendix B – Best Practice Resources

Best Practice Resources - Heat

- US Environmental Protection Agency
  - Title: [Reducing Urban Heat Islands: Compendium of Strategies Trees and Vegetation](#) (88)
    - How trees and vegetation reduce temperatures
    - The benefits and costs associated with trees and vegetation
    - Other factors to consider when using trees and vegetation
    - Urban forestry initiatives
    - Tree and vegetation tools and resources

- US Environmental Protection Agency
  - Title: [Reducing Urban Heat Islands: Compendium of Strategies](#) (89)
    - Voluntary efforts, including demonstration projects, incentives, urban forestry programs, weatherization, outreach and education programs, and awards.
    - Policy efforts, including procurement, resolutions, tree and landscape ordinances, comprehensive plans and design guidelines, zoning codes, green building programs and standards, building codes, and air quality requirements.

Best Practice Resources - Stormwater

- US Environmental Protection Agency
  - Title: [Stormwater Trees Technical Memorandum - Reducing Pollution in Surface Water](#)
    - *"This technical memorandum addresses planting and maintaining trees which are adjacent to roadways or sidewalks in urban areas where buildings and impervious surfaces create harsh environments. These street trees can be planted for many reasons including stormwater management or increased shade and green space."* (90)
  - Title [Stormwater Best Management Practice – Municipal Landscaping](#)

    - *"Minimizing turf area by replacing it with alternative ground cover, shrubs and trees increases infiltration and reduces mowing requirements, which subsequently reduces air, water and noise pollution."* (91)
  - *Title* [Stormwater Best Management Practice – Riparian/Forested Buffer](#)
    - *"With proper design, a buffer can provide stormwater management benefits, provide room to mitigate natural flooding, and assist in sustaining the integrity of stream ecosystems and habitats. As conservation areas, buffers are part aquatic ecosystem and part urban forest."* (92)
- Journal of Environmental Quality
  - Title: [The Urban Forest and Ecosystem Services: Impacts on Urban Water, Heat, and Pollution Cycles at the Tree, Street, and City Scale](#).

- o . . . [A] *simple pollution prevention strategy involves establishing urban wood-land or forest areas that border waterways or "higher-risk" areas and that receive inorganic nutrient fertilizers.* (45)
- • Center for Watershed Protection
  - • Title: [Urban Watershed Forestry Manual. Part 3: Urban Tree Planting Guide](#) (2016) (93)
    - o This *"comprehensive guide for community planners and local governments on planting trees to improve water quality within a watershed. Information contained within this guide includes methods for increasing forest cover on public lands and rights-of-way, conserving and planting trees at development sites. Also includes an urban tree planting guide for work crews and volunteers."*
    - o See Chapter 2 for guidance on the major elements to evaluate site conditions to determine what to plant. See Appendix A for a *"Field sheet for the urban reforestation site assessment (URSA)"*

Best Practice Resources – Air

- • US Environmental Protection Agency
  - o Title: [Recommendations for Constructing Roadside Vegetation Barriers to Improve Near-Road Air Quality](#) (94)
    - ▪ *Provides recommendations on the physical characteristics of roadside vegetation that can provide a local air quality benefit*
- • Journal Article
  - o Title: [Landscaping Guidance for Improving Air Quality Near Roadways Plant Species and Best Practices for the Sacramento Region](#) (95)
    - ▪ *The goals of this guidance are to:*
    - ▪ *Provide guidelines for evaluating a potential vegetation barrier site;*
    - ▪ *Offer vegetation planting recommendations appropriate to the Sacramento region to meet vegetation height, thickness and porosity goals;*
    - ▪ *Evaluate appropriate vegetation characteristics in a table format;*
    - ▪ *List best practices for vegetation planting;*
    - ▪ *Offer suggestions for effective long-term maintenance; and*
    - ▪ *Suggest sample language for recommending to local jurisdictions the installation of vegetation barriers as a condition of approval in project development applications.*

Best Practice Resources – Noise

- • Source: US Department of Agriculture, Forest Service
  - o Title: [Conservation Buffers: Design Guidelines for Buffers, Corridors, and Greenways](#) (96)
    - ▪ *Over 80 illustrated design guidelines for conservation buffers are synthesized and developed from a review of over 1,400 research publications. Each guideline describes a specific way that a vegetative buffer can be applied to protect soil, improve air and water quality, enhance fish and wildlife habitat, produce economic products, provide recreation opportunities, or beautify the landscape. These science-based guidelines are presented as easy-to-understand rules-of-thumb for facilitating the planning and designing of conservation buffers in rural and urban*

landscapes. The online version of the guide includes the reference publication list as well as other buffer design resources www.bufferguidelines.net.

- Journal Article
  - o Title: Guidance for noise reduction provided by tree belts
    - Fang and Ling (61) provide guidance on optimal relative height, width, and distance when designing tree belts for noise reduction.

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USDA Plant Hardiness Map

USDA Agricultural Research Service
U.S. DEPARTMENT OF AGRICULTURE

2023 USDA
Plant Hardiness Zone Map
New York

Oregon State University

St Lawrence Massena
Clinton
Raquette Franklin
Saint Lawrence Lake Placid
Oswegatchie Essex
Jefferson Hudson
Watertown Black Lewis Hamilton Warren
Poultney
Oswego Wsh.
Nigr. Orleans Oneida Utica Fulton Saratoga
Genesee Monroe Rochester Wayne Seneca Syracuse Hrkmr. Mohawk Montgmry.
Buffalo Ontario Sn. Onondg. Sch.
Erie Madison Schohr. Albany ALBANY
Wymn. Lvng. Yates Cayug. Chenang. Otsego Hudson Rnsslr.
Genesee CrtInd.
Chautauqua Cattaraugus Allegany Steuben Schylr. Ithaca Tmpkn. Delaware Greene Colmb.
Chmn. Susquehanna Binghamton Ulster Dtchs.
Tioga Broome Sullivan Wallkill Ptn.
Orange Hudson Wst.
Rck. Rck.
New York Q. Nss. Suffolk

Average Annual Extreme
Minimum Temperature 1991-2020

Temp (F)	Zone	Temp (C)	Temp (F)	Zone	Temp (C)
-30 to -25	4a	-34.4 to -31.7	-10 to -5	6a	-23.3 to -20.6
-25 to -20	4b	-31.7 to -28.9	-5 to 0	6b	-20.6 to -17.8
-20 to -15	5a	-28.9 to -26.1	0 to 5	7a	-17.8 to -15
-15 to -10	5b	-26.1 to -23.3	5 to 10	7b	-15 to -12.2

0 15 30 60
Miles

0 25 50 100
Kilometers

Public Meeting Summaries

SUMMARY OF PUBLIC FEEDBACK

Overview of Public Meetings Held in December 2023 and January 2024

Four in-person public meetings (one in each City Quadrant) and one virtual public meeting were held in December 2023 and January 2024 to introduce the Urban Forest Master Plan Update to the public, present the project scope of work and schedule, and gather the community's feedback on current perceptions, future vision, and current issues and opportunities related to the City's urban forest. The locations, date, and times of each public meeting are described below:

1. Northwest Quadrant Public Meeting
   Monday, December 11, 2023, at 6:30 PM
   Water Bureau Conference Room, 10 Felix Street, Rochester, NY

2. Northeast Quadrant Public Meeting
   Tuesday, December 12, 2023, at 6:30 PM
   Ibero-American Action League, 216 Clifford Ave, Rochester, NY

3. Virtual Public Meeting
   Wednesday, December 20, 2023, at 6:00PM

4. Southwest Quadrant Public Meeting Discussion
   Monday, January 8, 2024, at 6:00 PM
   Arnett Branch Library, 310 Arnett Boulevard, Rochester, NY

5. Southeast Quadrant Public Meeting Discussion
   Wednesday, January 10, 2024, at 6:30 PM
   Children's School of Rochester #15, 85 Hillside Avenue, Rochester, NY

A Spanish translator from Ibero American Action League was available at the in-person meetings on December 12, 2023, January 8, 2024, and January 10, 2024. Light refreshments and drinks were provided at all in-person meetings.

Advertisement of the Public Meetings

The five public meetings were initially advertised through a City press release issued on November 21, 2023. Email blasts to a database of stakeholders (including Neighborhood Service Centers, local community groups and non-profits, neighborhood associations, and respondents to the community survey) were sent by Highland Planning in December 2023 and again in January 2024. Several media outlets also covered public meetings and Urban Forest Master Plan Update, including:

- WXXI published an article entitled, "City officials want your input on a plan for Rochester's urban forest," on November 27, 2023. This article specifically referenced the first public meeting on December 11, 2023 and the virtual public meeting on December 20, 2023.
- Rochester First published an article entitled, "Urban Forest Master Plan," on December 20, 2023. This article advertised the community survey, the virtual public meeting, and the in-person meetings in January 2024.
- The Rochester Democrat and Chronicle published an article entitled, "Rochester hiring tree ambassadors for urban forest master plan rewrite," on January 10, 2024. This article also advertised the fifth public meeting held on the evening of January 10, 2024.

Attendance at Public Meetings

The graph below shows the attendance at the five public meetings (Figure 1). Detailed lists of meeting attendees are available in the Appendix. In general, meeting participation increased over time, with the greatest number of participants at the last public meeting on January 10, 2024. This trend may be partially attributed to local media coverage of the project, with an article by Rochester First on December 20, 2023 and an article published in the Rochester Democrat and Chronicle on January 10, 2024.

Based on the trend of meeting participation increasing over time, it is recommended that the public meetings held in May 2024 start in the Southeast and Southwest Quadrants and end in the Northeast and Northwest Quadrants.

Figure 1. Meeting attendance at the five public meetings held in December 2023 and January 2024.
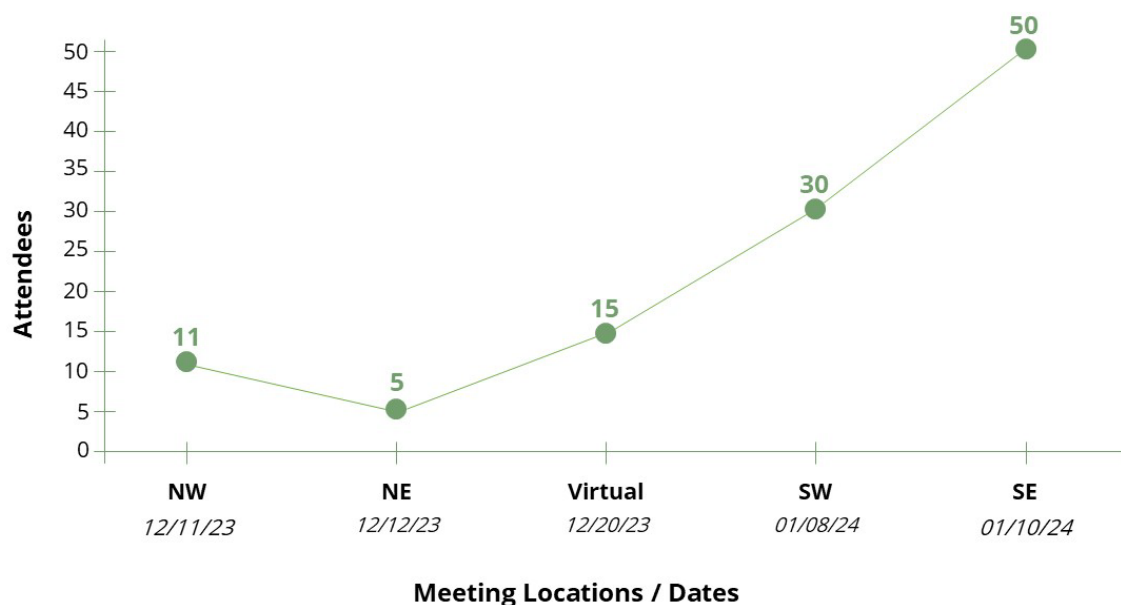
<u>Format of the Public Meetings</u>
Each of the five public meetings followed the same format. Upon arrival, attendees were asked to respond to two warm-up questions:

- *Where should we plant more trees?*
  The first question asked participants to place a sticker on the map of Rochester where they would like to see more trees planted. The same map was presented at each in-person meeting, and attendees were able to see the feedback provided by previous meeting attendees.

- *What kinds of trees should we plant?*
  The second question asked participants to place a sticker under the category of trees they would like to see planted. The options included: flowering trees, trees with edible fruits, trees without fruits/seed pods, trees for pollinators/birds, large shade trees, and native trees. The same board was presented at each in-person meeting, and attendees were able to see the feedback provided by previous meeting attendees.

At the start of each in-person and virtual meeting, Highland Planning welcomed all participants and reviewed the agenda for the meeting. Andrew Place (City of Rochester, City Forester) then gave a presentation about the Urban Forest Master Plan, which included the following components:

Overview of the Urban Forest Master Plan Update:
- The Urban Forest Master Plan was last updated in 2012. The 2012 Urban Forest Master Plan recommends periodic updates (approximately every 10 years), hence the current Plan Update. The Urban Forest Master Plan Update includes an evaluation of existing conditions, recommendations for enhancing the urban forest, and the identification of areas for improvement. The Plan Update will address issues such as tree equity, climate change, tree species diversity (native vs. non-native), and public input.
- Trees and the urban forest provide many benefits. They produce oxygen, promote social ties and cohesion, reduce stress, create shade, reduce heating and cooling costs, and increase property values.

History:
- Past Challenges: Dutch elm disease and an ice storm in 1991 resulted in significant tree loss, leading to the establishment of the Forestry Division, the creation of a tree inventory, and the first Urban Forest Master Plan.
- Subsequent Events: The 1998 Labor Day Windstorm and the emergence of the emerald ash borer in 2010 prompted minimal canopy loss strategies. Most recently, in 2023 the City started a new initiative to plant 6,000 trees over three years with a focus on addressing canopy coverage disparities across the City's Quadrants.

Current Status:
- The city presently has 66,000 trees, with a goal to reach 72,000. Despite challenges, the urban forest is relatively healthy. Currently, across the City's urban forest 12% of trees are in excellent condition, 84% are in fair to good condition, and only 4% are in poor condition. The total proportion of trees in poor condition is used as a key performance indicator, and the goal is to keep the percentage of poor condition trees under 5%.

- Species diversity: The Forestry Division follows the 10-20-30 rule to achieve a diverse urban forest composition, with 10% of a trees from a given species, 20% from a given genus, and 30% from a given family. Currently, the maple family comprises the highest percentage at 36%.
- Challenges: Several challenges confront urban forest management, including issues related to funding, escalating costs, wages, expenses associated with contracting work, and the expanding size of the forest. As the forest grows, the costs of managing it also increase, posing significant challenges for effective management.
- New City of Rochester Forestry Dashboard: The City's urban forest inventory is now online and available for the public to explore. The dashboard is GIS-driven and through a series of interactive maps, the public can learn about which tree species are planted where, annual tree planting initiatives, tree removal and tree pruning, and stump removal.

Timeline for Rochester Urban Forest Master Plan Update:
- Benefits Assessment: Completed in the Fall of 2023
- Existing Conditions Assessment: December 2023 – March 2024
- Development of Recommendations: March - April 2024
- Draft Urban Forest Master Plan Update: End of April / early May 2024
- Final Urban Forest Master Plan Update: June 2024

Highland Planning then provided a brief overview of the project's public engagement strategy and the different opportunities for public input. Overall, the plan involves extensive public engagement and educational initiatives, with several opportunities for the public to help shape recommendations contained in the Plan Update.

- Public Engagement Strategy: The engagement strategy is an ongoing process with suggestions for effective engagement welcome. The engagement team will be utilizing a webpage on the platform Instant Input to facilitate engagement. There is also a webpage on the City's website dedicated to the Urban Forest Master Plan Update.
- Community Survey: A community survey about the urban forest was opened in November 2023 and advertised as part of a City press release about the Urban Forest Master Plan Update. Paper copies of the survey (in Spanish and English) were available at each in-person meeting. The survey will remain open until the end of February 2024. *(The survey has since been extended through March 29, 2024)*
- In-Person and Virtual Meetings: Four in-person meetings (one in each City Quadrant) and one virtual meeting will be held at the onset of the project (Winter 2023/24) and again towards the end of the project once a draft Plan is available for public review and comment.
- Pop-Ups: The Highland Planning Team will also host a series of pop-ups that focus on going to the community to gather feedback.
- Experiential Initiatives: A series of experiential activities, such as walking tours in local parks and neighborhoods and tree plantings, will be held throughout the Spring to gather public input and connect the community to the urban forest.
- Community Tree Ambassadors: Highland Planning will be hiring several paid Community Tree Ambassadors to help broaden public outreach. Community Tree Ambassador forms were available at every in-person meeting. Ambassadors will be active from approximately February 2024 – June 2024.

- Project Team Contact Information: Contact details for Andrew Place (City of Rochester) and Liz Podowski King (Highland Planning) were provided. They are the designated contacts for the project.

Public Feedback

Following the presentation, the public was invited to respond to five questions. At the in-person meetings, these questions were discussed as a group during the December 2023 meetings and at interactive stations during the January 2024 meetings (interactive stations were used due to higher meeting attendance). For the virtual meeting, participants responded to the five questions using interactive polling software followed by a group discussion.

A summary of public responses to the two warm-up questions and the five discussion questions is presented below, followed by key takeaways from all public meetings. The detailed feedback received at each public meeting is included in the Appendix.

Warm-Up Question #1: In which neighborhoods, parks, and/or street corridors would you like to see more trees planted?
- The most recommended location for planting more trees was in the northeast quadrant, followed by the northwest quadrant and downtown (inside the Inner Loop).
- Participants also frequently recommended planting trees along the Genesee River and along commercial corridors and major City thoroughfares with bike lanes, such as Lyell Avenue, Dewey Avenue, Joseph Avenue, Seneca Avenue, N. Clinton Avenue, Clifford Avenue, Lexington Avenue, Lake Avenue, Hudson Avenue, Portland Avenue, Main Street, North Street, Cleveland Street, and State Street.
- International Plaza

Warm-Up Question #2: What types of trees would you like to see planted across the City?
- In the meetings in the northwest, southeast, and southwest quadrants, the most popular preference was native trees. In the northeast quadrant, the most preferred types of trees were flowering and those that produce edible fruits/nuts.
- Table 1 summarizes the number of votes each type of tree received at each public meeting.

Table 1. *Tree Preferences at Public Meetings in Decembre 2023 and January 2024*

	Flowering trees	Trees w/ Edible Fruits	Trees w/o fruits / seed pods	Trees for pollinators / birds	Large shade trees	Native trees
Northwest Quadrant (1/11/23 ; 11 attendees)	2 (18% of attendees)	2 (18% of attendees)	1 (9% of attendees)	4 (36% of attendees)	3 (27% of attendees)	7 (64% of attendees)
Northeast Quadrant (1/12/23; 6 attendees)	5 (100% of attendees)	5 (100% of attendees)	1 (17% of attendees)	3 (50% of attendees)	4 (67% of attendees)	4 (67% of attendees)
Southwest Quadrant (1/8/24; 30 attendees)	11 (36% of attendees)	10 (33% of attendees)	2 (7% of attendees)	15 (50% of attendees)	14 (47% of attendees)	18 (60% of attendees)
Southeast Quadrant (1/10/24; 50 attendees)	15 (30% of attendees)	18 (36% of attendees)	2 (4% of attendees)	34 (68% of attendees)	38 (76% of attendees)	50 (100% of attendees)
Virtual Meeting (12/20/23; 15 attendees)	2 (13% of attendees)	5 (33% of attendees)	0 (0% of attendees)	7 (47% of attendees)	6 (40% of attendees)	7 (47% of attendees)

Discussion Question #1: What is your perception of the City's urban forest today?
While many people have positive perceptions of the City's urban forest, there is a broad awareness of the imbalance in tree canopy cover across the City. Participants at all meetings noted the disparity in the City's tree canopy cover and expressed support for greater investment in the northeast and northwest quadrants to increase canopy cover. Below are some of the common words and phrases used to describe the City's urban forest today.
- Positive, well-maintained
- Parks and cemetery trees in good condition; street trees less healthy
- Good history
- Beautiful Flower City
- Great potential
- Spotty
- Inequitable
- Needs support
- Struggling to blossom in the Olmsted vision
- Need more trees

Discussion Question #2: How would you like to be able to describe the urban forest 10 years from now?

Building on Discussion Question #1, participants at all public meetings envisioned the City's urban forest to be equitably distributed in the future. Other common themes included an expansive, biodiverse, native, healthy, and community-supported urban forest. Below are some of the common words and phrases used to describe the public's future vision for the City's urban forest.
- Diverse (age, structure, species)
- Native
- Equitable
- Expansive – beyond streets and parks
- Lush, vibrant, healthy, flourishing
- Habitat / biodiverse
- A healthy forest ecosystem
- Community-supported; integral to the community
- Well-maintained
- A model for other cities
- Improved public health
- Edible
- Critical infrastructure
- Dense forests on small plots (e.g., Miyawaki Forests)

Discussion Question #3: What current issues or challenges do you experience with the City's urban forest?

The imbalance in tree distribution across the City was discussed at every meeting, as well as urban constraints that negatively impact tree health or limit the available space for new tree plantings. Climate change as also discussed at all meetings as a challenge, but also underscored the need for a robust, expansive urban forest to mitigate the impacts of climate change (e.g., cooling effects of trees). Below are issues that were raised at all of the public meetings:
- Imbalance in tree distribution
- Sidewalks being lifted by tree roots (hazard)
- Other infrastructure limits tree planting space (e.g., overhead and underground utilities, impervious surfaces)
- Compromised tree health due to lack of root space, salt, and impervious surfaces
- Watering of trees, especially early on to get them established
- Climate change – warming climate and increased storm intensity
- Lack of knowledge regarding tree maintenance
- Invasive species and many non-native trees (e.g., Norway Maples)
- Lack of community partnerships
- A need for tree shade in underserved communities
- Imbalance of trees on both sides of the street
- The City should make more effort to engage neighborhoods on a block when they are planning a tree replacement, not just the property owners

Discussion Question #4: What actions would you like to see the City take to resolve these issues?

The need for more community involvement and participation in the urban forest was stressed at most meetings. Comments specifically focused on engaging youth, schools, local community groups, and Indigenous communities in planning, planting, and long-term maintenance/stewardship efforts. Many meeting participants also noted the need to plant beyond the street and consider the removal of pavement, City-owned vacant lots, and partnerships with private property owners to create more space for the urban forest. Other commonly cited actions the public would like to see the City take are described below.

- Increased community involvement with the urban forest through youth, school, and community partnerships, festivals, and plant sales. In general, want to see more celebration of the urban forest.
- Use creative strategies to increase canopy cover and available planting area (e.g., consider vacant city-owned lots, removal of impervious surfaces, curb extensions, mycelium to enhance nutrient uptake)
- Establish partnerships, funding programs, incentives, and/or regulations to increase the urban forest on private property
- Collaboration with schools, non-profits, Indigenous communities, and R-Centers to engage the community with the urban forest and help maintain and monitor the urban forest
- Workforce development (need new urban foresters)
- Diversion of funding from areas with above average canopy cover to fund more planting initiatives in areas with below average canopy cover
- Diversified outreach (e.g., racial diversity, renters)
- Diversify the urban forest in terms of age, structure, and species
- Plant native species
- Take more of an ecosystem-based approach to expanding and caring for the urban forest (one that considers other co-adapted plant species and wildlife).
- Secure more resources for urban forestry initiatives
- City orchards / community gardens
- Invasive species removal
- Provide help to residents who can't water trees
- Coordinate with other related initiatives and City Departments (e.g., create a tripping hazards plan where roots have lifted sidewalks)

Discussion Question #5: What opportunities would you like to see the City pursue to enhance and expand the urban forest?

The importance of partnering with schools, community organizations, and involving local residents in the many elements of urban forestry (e.g., workforce development, tree maintenance and care, volunteer programs, preventing vandalism, etc.). was discussed at all meetings. Other commonly cited opportunities are described below.

- Involve Indigenous communities, youth, schools, R-Centers, and local community groups for tree planting initiatives and tree maintenance/care. Workforce development, green jobs, and building an environmental stewardship ethic is an important part of caring for our urban forest.
- Develop programs with and for immigrant and Indigenous communities who have food- and agricultural-related traditions the City can learn from and celebrate.

- Learn from other places (e.g., Green Heart Project in Louisville, National City Parks Movement in London, other cities addressing inequities in tree canopy cover)
- Create a more comprehensive urban forest inventory by collaborating with other property owners (e.g., County and State partners)
- Bring in state and federal grant funding to increase capacity
- Integrate green infrastructure and rain gardens into the urban forest to mitigate flooding and increase biodiversity
- Create dense mini-forests (e.g., Miyawaki Forests)
- Increase grinding stumps to create more planting spaces
- Continue to train maintenance workers in tree protection
- Explore innovative planting methods for limited spaces (e.g., use of structural soils, curb extensions to increase planting space, removal of impervious surfaces, etc.)
- Label street trees with species tags to build awareness of and connection to the urban forest
- Find ways to include renters in urban forest initiatives too not just property owners. For example, the City should make more effort to engage neighborhoods on a block when they are planning a tree replacement, not just the property owners
- Provide incentives to encourage residents and property owners to maintain and expand the urban forest on private property
- Incentivize or require new developments to contribute to the urban forest (e.g., increase tree planting requirements)

APPENDIX.

Detailed Public Feedback From Public Meetings in December 2023 and January 2024

Northwest Quadrant Public Meeting Discussion
Monday, December 11, 2023, at 6:30 PM
Water Bureau Conference Room, 10 Felix Street, Rochester, NY

12/11/23 Northwest Quadrant Meeting Attendees:
- David Hammond, Resident
- Bill Collins, Maplewood Neighborhood Association
- Katrina Korfmacher, URMC
- Karl Korfmacher, RIT
- Melissa Rivelis, City Resident
- Patrick Clarke, City Resident
- Alexis Drake-Alam, City Resident
- K. Mich, City Resident
- Karen Berger, UR
- Jane Summers, Genesee Valley Audobon
- Danielle Zelazny, Resident

Key Takeaways:
- Plant more wind-resistant, native, less allergenic trees
- Urban Forest Master Plan should strive to create an equitable expansion of tree canopy for heat control, ecological habitats, and flood prevention
- Increase community involvement through programs for kids, ecology festivals, and plant sales
- Spread awareness about the City's Urban Forest GIS dashboard site
- Develop innovative methods for challenging areas include focusing on mycelial soil, planting in vacant lots, and building balconies/roofs.
- The Urban Forest Master Plan should focus consider how Rochester can adapt to climate change

Question and Answer:
- Will the Urban Forest Master Plan include a strategy to water the trees?
  - Yes, the City has a watering program already in place for the first year after trees are planted
- Why are trees represented on Turning Point Park on the map but not other parks?
  - Durand and Genesee are County parks
  - The City has a partial tree inventory in some of these areas

What types of trees would you like to see planted in the city?
- Most participants placed a sticker on Native trees, followed by large shade trees, trees for pollinators/birds, and trees with edible fruits. Flowering trees received one sticker, and trees without fruits/seed pods received zero.
- Might want to consider if there are trees that are more wind-resistance
  - A lot of tree loss comes from storms
  - With climate change, more windstorms
  - Yes, the city does plant wind-resistant trees and studies which ones break

- Some of the tree categories in this question be bundled together – for example, native trees and pollinators, flowering ones that have fruit, or ones that might be edible as well because you might as well choose flowers that are native.
- Consider allergen/asthma-triggering trees.
- Ask whether neighbors aesthetically want a mix of trees or more unity.
    o Does the city have a preference for the mix?
        ▪ Yes, the City have a pallet system developed for each street based on proximity to other trees, underground utilities, and overground utilities. We usually let property owners choose from that approved list per street.
- These trees will be here for 50+ years. Are we also looking at trees that may thrive better in warmer climates?
    o Yes, these are all things we've heard and looked at – you have to choose wisely because although the climate is warming, it isn't warm yet.
- The bird migration patterns have changed a lot.
- Focus more on what kinds of trees would attract birds here and keep the birds we have.

What is your perception of the City's urban forest?
- Park and cemetery trees are healthy, but the street trees need attention.

How would you like to be able to describe the City's Urban Forest 10 years from now?
- Bosco Verticale - incorporating trees with newer buildings, on balconies, green roofing
    o Under control of building owners but could look into zoning codes
    o Maplewood Library and City Hall have green roofs.
- Lush
- Healthy
- Cohesion of natural and built environments
- Diversity of age and species
- Equitable in its coverage – same stocking rate of trees across the whole city, compensation measures for small tree lawns or constraints
- Habitats for small amphibians and a wider range of species
- Planting more shrubs and perennials within these parks mentioned, maybe even planting on the side streets, making it more of a garden rather than only trees, bring in more species
- Getting the community more involved, possibly turning it into an education program, like getting schools involved to do volunteer work
- Urban farms/gardens/forests as gathering spots with benches and trees and shrubs instead of vacant lots
- Beautified neighborhoods
- More miniature natural forests within neighborhoods with fallen trees and mycelium network on forest floor

What current issues or challenges do you experience with the city's urban forest?
- Not enough area for street tree roots
- Q: Does the city test the soil before you plant the tree to see if the PH is correct?
    o A: No, we don't; we have a pallet system to assign trees based on what street you're on – for example, smaller tree lawns get smaller trees, and larger ones get larger. Urban soils are tough on trees, so we have the pallet system; many trees can adapt to most conditions.

- Q: Some municipalities are seeding mycelium-rich spores. Is that something the city has looked into?
    - o A: I think we have been in some locations in the years, but we can look at more moving forward.
- Q: Does the city trim trees for power lines?
    - o A: No, RG&E does that. Try to offset tree planting from wires

What actions would you like the City to take to resolve these issues?
- Opening up impervious areas around the trees, giving a larger recharge area through green infrastructure projects with bioswales and different types of habitats
- Include tripping hazards in the plan because there are many areas where the roots have lifted the sidewalk
    - o A: Currently replacing a lot of the sidewalks in the northwest. The city has a hazardous sidewalk replacement program; they rotate through the quadrants. You can call 311 to create a ticket with the engineering department if you have a known address.

What opportunities would you like to see the City pursue to enhance and expand the urban forest?
- Involving kids in the immediate area, during the pandemic, kids got outside more and were in the parks or just outside more,
    - o There's an outdoor club at Wilson in Franklin that takes kids out – that could be a path for more permanent ambassadors in that program.
    - o Rochester Ecology Partners is another
- Festivals
    - o Holding an annual or biannual festival that focuses on ecology.
        - ▪ Partner with the Cornell Cooperative extension's plant sale on St. Paul
    - o Alternatives to Lilac Festival in other quadrants
        - ▪ Ex: Cherry trees in the Northwest Quadrant that bring people to the neighborhood
- Social media account where the city posts pictures of trees they've planted
- Q: Do you know of any cities that have partnerships with private landowners and cities?
    - o Not aware of any of the municipalities but it could provide a good opportunity.
    - o Blocks in Bloom initiative is partnering with people to make gardens in their front lawns; the incentive is free plants, training with master gardeners, and open to owners or renters with permission from the owner.
- Q: Have you seen any pattern in what trees are thriving and where?
    - o A: Yes, we have a good idea of the mortality rates of different trees and locations that are tougher on trees (ex, trees along arterial roads get hit with salt).
- Q: What trees have you been focusing on planting and where?
    - o A: All types of trees and all over the city, 30-35 species on the list for the initiative
- Increase grinding of stumps to get more trees in
    - o Grind about 800 stumps per year (shown on the GIS map)
    - o Andrew just submitted a grant to create more planting spots
- View tree canopy as an environmental justice issue – this has funding opportunities in our region
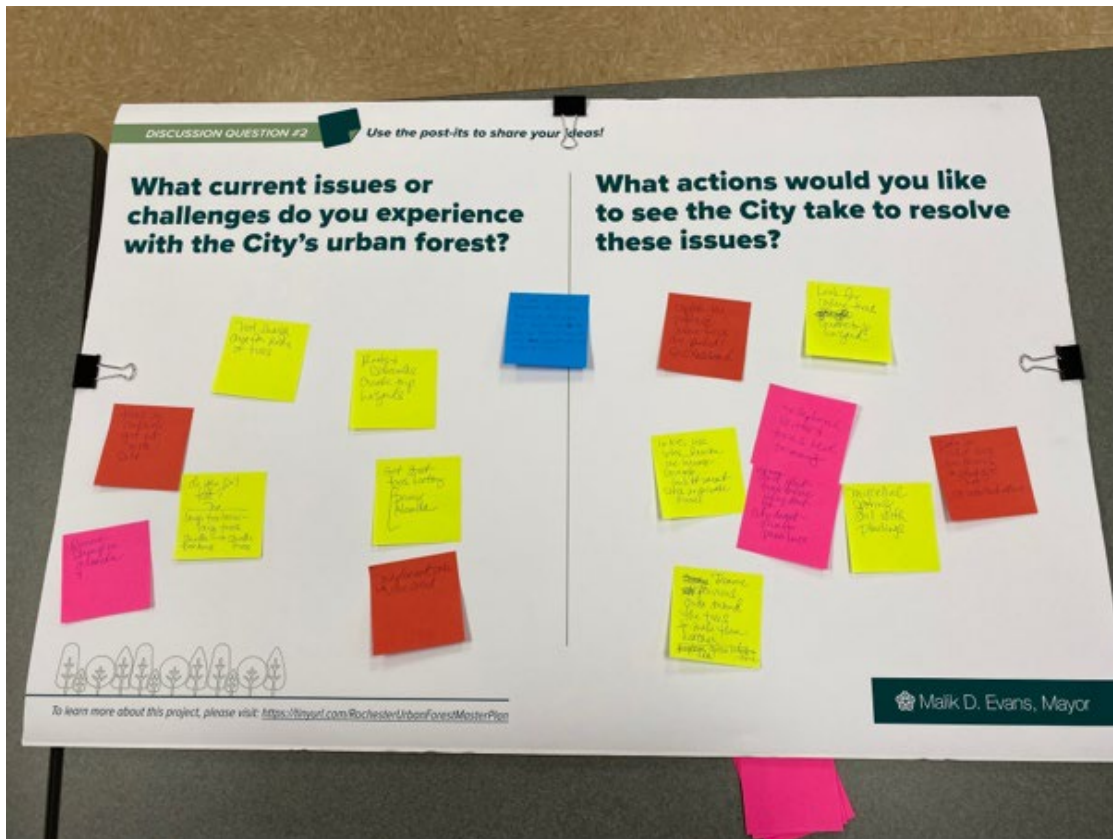
Northeast Quadrant Public Meeting Discussion
Tuesday, December 12, 2023, at 6:30 PM
Ibero-American Action League, 216 Clifford Ave, Rochester, NY

Attendees:
- Luis Bergos – Avenue Blackbox Theater
- Ida Perez – Scrantom St Block Club
- David Hammonds – Wayside Nursery
- David Smiley – Resident
- Elda Lopez Santana - Ibero

Key Takeaways:

- There is an imbalance in tree distribution across the City
- There are limitations in planting locations with underground utilities and impervious surfaces hindering tree planting
- The City should make more effort to engage neighborhoods on a block when they are planning a tree replacement, not just the property owners
- Continue to collaborate with developers to establish green infrastructure
- Continue to train maintenance workers in tree protection
- Explore innovative planting methods for limited spaces
- Secure more resources and staff for urban forestry initiatives

Question and Answers:
- Q: Is anything being done to protect new trees from mowers? They mow too close to the trees and bang against them.
   - A: We're working with a local vendor that put some collars around trees on Cobbs Hill that will expand as the tree grows; we try to mulch new trees. Can do more to educate those who mow.
- Q: What prevents tree planting in some locations
   - A: Underground utilities are a big reason we can't plant trees. Generally, it needs a minimum width of three feet.
- Q: Clinton Avenue was redesigned/reconstructed – major reconstruction 20 years ago, and then they did another one around 2010 – to what extent in the past vs now, do they engage with forestry about these planting issues
   - A: We have conversations with engineering all the time about that, on the back side, when they are going in the design space, forestry is in the whole process in the design space. These conversations include protecting existing trees; we know the difficulty of establishing trees, especially on arterials.
- Q: How do we stand compared to similar-sized cities for tree coverage?
   - A: We are far above others; we are lucky to have had a robust forestry program for decades; other cities have more hazardous trees. We take public safety as our first priority.
- Q: Is there an opportunity to benchmark ourselves in the master plan?
   - Yes, there is an opportunity. We can compare what other cities are willing to share with us.
   - Arbor Day Foundation says to spend $2 per capita on trees; we're above that.

- Q: How do you know which trees are unhealthy?
  - We look at every tree, and we do a more thorough inspection every six years.
  - We got 3 million dollars from USDA to plant trees over the next two years.
    - We just applied for another one to get the stumps removed
  - We treat over 3,000 trees per year – we do the trees every three years

Which neighborhood, parks, or street corners would you like more trees planted?
- Northeast has the fewest trees in the four quadrants.
  - The mayor's initiative started in the northeast.
  - New units were built in the area but lost trees during that development
  - If you walk down Clinton Avenue, there are sections with no trees and, therefore, no shade.
- Clifford, Joseph, and Clinton
  - There are a lot of impervious surfaces on these streets – there are opportunities to do things differently when we get to a street reconstruction project
  - 5x5 plots struggle to survive there
  - Species options also struggle due to bus pollution and salt
  - The Forestry Department works with the engineering department to find opportunities when they are doing that reconstruction
- International Plaza
  - Could we plant trees in big planters that we could strategically place around the plaza that can provide some shade?

What types of trees do people want to be planted?
- Flowering trees, trees for pollinators/birds, native trees, large shade trees, and flowering trees all received three stickers. Trees with edible fruits received two, and trees without fruits/seed pods received one.
- Put more trees that work with the size of the space
- Plant wind-resistant trees

What is your perception of the City's urban forest today?
- Decent, with the exception of the Northeast
- Where we do have trees, the City takes good care of them
- There's a nice garden at Ibero, and someone has been taking good care of it.

How would you like to be able to describe the city's urban forest ten years from now?
- Add more trees with color to add to the property value of older homes and make it look nicer rather than looking like a rundown city.
- Lots of flowers and different plants
- The city's not currently planting trees on city-owned vacant lots, but that has come up recently, and there have been proposals for Miyawaki forests.
  - Miyawaki forests: Dense urban forests on small plots
  - Opportunities for this on city-owned vacant sites
  - Safety considerations with density of trees/brush

What current issues or challenges do you experience with the City's urban forest?
- Imbalance of trees on both sides of the street

What actions would you like the City to take to resolve these issues?
- Encourage developers to use green infrastructure or plant trees in place of the ones they take out for development.
- The city currently sets aside 1% of development project costs to fund public art and could do something similar with green initiatives
- Sourcing large trees for the northeast quadrant to catch them up to the others regarding shade and canopy.
- Train city workers on how to protect trees.
- Consider planting trees in planters for areas with impervious surfaces, like at the International Market.
- Work with the neighborhood block, not just individual property owners, on plantings and replacement; if a property is not owner-occupied and is owned by a landlord, they won't always get involved, whereas the tree loss impacts the whole block. Look for opportunities to engage the community and not just the property owners.
- More staff and development funding for these initiatives
- Increase community engagement in care for and knowledge about the trees.
  - Example: In 2005 or 2006, the city planted a sycamore tree in Genesee Valley Park next to the tennis courts and invited the tennis program to participate in the planting, and they committed every summer at the end of the session to dump the extra water from the cooler on the sycamore tree

What opportunities would you like to see the City pursue to enhance and expand the urban forest?
- Refer to neighborhood plans such as Project Hope's
- Focus on vacant lots
- More green incentives for new developments
- Programming at parks to protect trees.
- Green Visions program could expand and become foresters or people taking care of the trees.
- More native trees and plants people forage from. Example: persimmons, paw paw
- Summer job program for teens
- Account for climate change
- Doing something with the city school district
- Labeling the street trees with species tag

Virtual Public Meeting Discussion
Wednesday, December 20, 2023, at 6:00 PM

Meeting Attendees *(incomplete list, as participants did not have to register. Approximately 15 people attended)*
- Jon Schull , EcoRestoration Alliance
- Jonathan Cloud
- Victoria Zelin
- Holly Rockwell, SSJ Rochester
- Kadin Benjamin
- Graham Murphy
- Lisa Baron
- Steve Cronkite
- Kelvin J. Knight
- Asimi Coleman
- Madison Quinn
- Sarah Abbamontey

Key Takeaways:
- Involve Indigenous communities, youth, and schools. Workforce development and building an environmental stewardship ethic is an important part of caring for our urban forest.
- Participants stressed a desire for native species and recommended taking more of an ecosystem-based approach to expanding and caring for the urban forest (one that considers other co-adapted plant species and wildlife).
- High awareness of tree canopy cover inequities across the city. Participants stressed the need to address this imbalance and to make more space for trees (e.g., remove impervious surfaces), including the diversion of fundings from areas with above average tree canopy cover in order to invest more in below average canopy cover areas.
- The importance of partnering with community organizations and involving local residents was discussed across multiple conversations (e.g., workforce development, tree maintenance and care, volunteer programs, preventing vandalism, etc.).

Questions and Comments from the Chat:
- Add Cooling to Benefits ;-)
- How will pop-up events be advertised to community members?
  - *Answer: On the City's webpage of the Urban Forest Master Plan, on the Instant Input webpage, email blasts, and media press releases.*
- Equity in the area of Urban Forestry is to include workforce development in caring for the trees. Is this going to be addressed?
  - *Answer: Good question. This is being done right now, but will be considered and the City is open to exploring ways to accomplish this.*
- What about career education. The work that's being done for the forests, everywhere.
- Will there be specific outreach to indigenous folks who are trained in environmental practices? Recommend reaching out to the Seneca Nation specifically.
  - *Answer: Great suggestion. Our team will reach out to the Seneca Nation.*

- Wondering about how you're deciding which species to plant and whether there will be more emphasis on native species.
  - *Answer: We try to plant native species every opportunity we can. Unfortunately, not all site conditions are suitable for native species.*
- What about mini-forests?
  - *Answer: Yes, this is something the City is considering in a couple select locations.*
- Mostly just wanting the plan to address tree cover disparity
- This question goes back a little, but I'm wondering what the timeline of funding for Community Tree Ambassadors will be. Is this a position that will be only connected to outreach involving the Forestry Master Plan Update, or will it continue on until after this project?
  - *Answer: The Ambassador Program is currently only funded through June 2024. The City will use the current Ambassador Program as a pilot, and if it's successful, may implement as a more permanent program.*
- The city is something of a food desert. Creating food sources, and helping residents learn to take advantage of wild, fresh, sustainable food.
- Coordinate and connect with related initiatives
- More collaboration with Play ROC. Children don't know how to use trees as outdoor play objects. As home base for Hide and Seek. Racing from tree to tree. Hiding behind or running around during Freeze tag! Due to liability, I won't mention climbing trees…

Where would you like to see more trees planted?
- All along the Riverway, right up to High Falls and beyond
- Main St and other major thoroughfares with bike lanes
- Hudson Ave, North Street, Cleveland St
- The length of the Riverway and along the canal!
- Along State St. Could help with cooling and slow traffic.

What types of trees would you like to see planted in the city?
6. Native trees and those that attract birds and pollinators were the most preferred by participants (7 people voted for each tree type)
7. The next most selected tree type was large shade trees (6 people voted for this tree type)
8. Five people voted for trees with edible fruits/nuts
9. Two people selected flowering trees

What is your perception of the City's urban forest?
- **Unbalanced** (more than one person used this word)
- **Uneven** (more than one person used this word)
- **Inequitable** (more than one person used this word)
- **Sustainable** (more than one person used this word)
- Healthy
- Non-native
- Utilitarian
- Insufficient
- Biodiverse
- Patchy
- Historic

- Impressive
- Beautiful
- Discriminatory
- Lacking
- Connected
- Lush
- Inedible
- Slight
- Equitable
- Expansive

How would you like to be able to describe the City's Urban Forest 10 years from now?
- **Healthy** (more than one person used this word)
- **Lush** (more than one person used this word)
- **Equitable** (more than one person used this word)
- **Diverse** (more than one person used this word)
- Even more beautiful
- Interconnected
- Verdant and visionary
- Tied to local ecology
- Lively
- Resilient
- Maintained
- Sprawling
- Cooling
- Just
- Includes mini-forests
- Verdant
- Biodiverse
- City-side
- Sustainable

What current issues or challenges do you experience with the city's urban forest?
- Need more shade trees. Summers are getting hotter.
- Beautiful flowering trees in some neighborhoods (sadly not others).
- Learning about which trees are planted (i.e., tree ID)
- Some of the issues include care and maintenance, getting residents to see the value of trees and wanting them in their yards.
- Lack of upkeep and care
- New trees sometimes not taken care of or vandalized – could there be more effort to get neighbors involved?
- An ecosystem perspective (co-adapted shrubs, grasses and wildlife as well as native trees) should replace the tree-centric perspective
- Ecosystem focus – bigger effort to find native species that would work in place.
- Should involve kids and schools with urban forestry! To get buy-in, survival, as well as adoption.

- The unequal tree distribution combined with increased impervious cover, which makes planting initiatives in the communities with the lowest canopy cover even harder.
- Remove impervious surfaces and create pocket ecosystems
- Divert funding from planting new trees in areas that already have at least an average urban tree canopy percentage to the communities in most need. Spend funds to increase available space for trees.

What actions would you like to see the City take to resolve these issues?
- Engage and hire locals to plant, maintain, promote and appreciate urban vegetation
- Have you/could you work with neighborhood groups in under-treed area?
- Education, outreach, targeted maintenance
- Create urban foresters, not just urban forests
- Engage youth from local schools or R-Centers with urban forestry
- Combine with use of neighborhood vacant lot proposals/community gardens
- Employ a community organization to hire local people to help with tree planting, maintenance, and education/outreach
- Add more trees to vacant lots and street trees in right-of-way
- Remove impervious surfaces (parking lots) to create microecosystems
- Divert funding from foresting communities that already have average canopy coverage in order to invest in increasing available space for planting in neighborhoods that have low canopy coverage.
- Prioritize tree planting in disadvantaged communities that lack canopy cover.

What opportunities would you like to see the City pursue to enhance and expand the urban forest?
- Bring in grant funding
- Create multi-species accelerated growth (Miyawaki) Forests. I now have some consultants available.
- Federal funding is available for climate mitigation, resiliency, and climate equity. A visionary forestry program could attract funding for all of this.
- Love the training new foresters idea – but then there's the funding. Congrats on receiving the big grant!
- Job training and education. Community partnerships.
- Take advantage of the Urban State Park in High Falls
- Partner with community organizations to implement green jobs/workforce development efforts for tree planting and maintenance.
- Are there ways that volunteers could be useful? I do surveys to assess bat populations for the DEC. Could there be volunteer tree health/tree void surveyors?
- Develop programs with and for immigrant (as well as Indigenous communities) that will have useful agricultural and food-related traditions worth learning from and celebrating.
- Seek partnerships with RGE and utility companies to integrate plans to care for our trees.
- Prioritize the installation of rain gardens to reduce flooding and supplement trees with understory plantings. Geneva's downtown is a beautiful example!
- Bring evangelists to maintenance events at high-density venues (like schools) to win hearts and minds.
- More community tree planting events!
- Mini-orchard in those vacant lots.

- Solidifying a position like the Community Tree Ambassador to connect the City with communities. Perhaps having this job meld into a coordination position that works with other community organization.

Southwest Quadrant Public Meeting Discussion
Monday, January 8, 2024, at 6:00 PM
Arnett Branch Library, 310 Arnett Boulevard, Rochester, NY

1/8/24 Southwest Quadrant Meeting Attendees:
- Bode Nerdaaist, GCCS
- Samantha Jones
- Seth Trimble
- Joseph Gallant
- Judah Gallant, GCCS
- John George
- Kelvin Knight, Northwest NSC
- Traci Terrance, Resident
- Frank Martin, Resident
- Dave MacDasld
- Rebecca Gilbert, GCCS
- April Luehmann, UR
- Jess Nordeast, GCCS
- Kim Ryniec, Resident
- Barbara Helfrick, Resident
- Kate Olson, GCCS
- Daniel Mooney, GCCS
- Saer Mooney, GCCS
- Ben Christian Clarke, GCCS
- Austin, GCCS
- Ben Clarke, GCCS
- Alexis Stubble, GCCS
- Jenna Rossi, GCCS
- Gabe Harlston, GCCS
- Paul Tremblay
- Josh Cuthbert
- Holly Merrill, ROC
- Malcom Gilbertrigg, GCCS
- Zak Deardorff, Resident

Key Takeaways:
- A strong desire for more trees that are healthy and can provide environmental benefits along with shade and safety for residents
- A need for more tree equity when looking to continue to plant trees throughout the city
- A concern for tree roots impacting bike trails and sidewalks
- A strong desire to involve the community in tree related events and education opportunities to build more awareness around the benefits of trees

Question and Answer:
- Why are costs of planting trees increasing
  - o Inflation
- Is there any monitoring of the spotted lantern fly?
  - o Yes, to monitoring and watching to see what preferred host of trees
- Is a canopy shade cover on sidewalk considered
  - o Yes
- Has climate change been considered for what species of trees will thrive best in different climates or changing species for future climates?
- Replacing trees ongoing system?
  - o 600 trees planted, working towards 800. Replant as much as you can. New initiative 2000/year
- What is the plant for tree equity with for Southeast vs Northeast
  - o Looking at quadrants to balance disparities. Both quadrants will be getting more
- Development-tree growth in city row?
  - o Yes. But there is no say on private property?
- How much data drives the decision, specifically with air quality and healthcare data?
  - o Both air quality and healthcare data will be included in the update
- How are other cities moving forward?
  - o GCCS students mentioned visiting New Orleans, Baltimore, Atlanta, and Philly to learn more about city tree planting initiatives later this year
- Franklin have greenhouse
  - o Mention of connecting with them for tree ambassadors

What types of trees would you like to see planted in the city?

Most participants placed a sticker on Native tress, followed by large shade trees, trees for pollinators/birds, and trees with edible fruits. Flowering trees and trees with edible fruits received a modest amount. Trees without fruits/seed pods received 2 stickers.

What is your perception of the City's urban forest?
- Good history, needs support and boosting
- It's incredibly lush in many parts of the city. Reminds me of Portland Oregon
- Equity
- Beautiful Flower City
- Not large, has great potential to be a great forest
- Struggling to blossom into the vision Olmsted had
- Need more trees so we can be safe and have barely any problems with diseases
- South Wedge is gorgeous
- Spotty, disparate
- On par with other cities but could do with expansion
- Need more trees! Oak/big shady trees, pollinator trees
- Need to repair harm in historically red-lined neighborhoods-plant trees, invest!
- Lowering trees each year
- Need way more trees
- Need more trees

- My perception is the "urban" forest is not urban at all. Trees seem to belong to people/places that can afford
- Trees are taken for granted in the reality of climate change. We need to recognize that trees are necessary to our survival
- Lack tree equity and beauty
- Lacks tree equity but sounds like that is being addressed
- In some places, picture perfect. Others: Insufficient and unequitable
- Disparity-overgrowth to under growth. Center areas are tough to grow trees
- Parks and connections good. Street trees are suffering in some places

How would you like to be able to describe the City's Urban Forest 10 years from now?
- Mixture of age and species
- Lush healthy cohesion of natural and built in. Equitable in coverage
- Tire swings. Old trees. Flower trees everywhere. Luscious forest.
- Diverse, flourishing. A model for others
- Value trees. Equitable access to healthy trees. Data that shows that trees are improving health
- No redlining. Lots of trees beautiful colors everywhere
- More of a forest
- More evenly grown. Local species. Attention to tree type by geography.
- Native trees everywhere
- More shade especially in playgrounds and residential areas, more pollinators!
- A lush space
- Lush and healthy
- Lush, vibrant, and vital. Fewer cars, pavements, and concrete
- No more urban forest meetings needed (fixed)
- More tree equity
- Abundant. Calming.
- The lungs and breath of the city-air quality measurably improved across city
- Plausibly tell people that I've seen elves
- An integral part of the community
- Community food gardens located in communities that have low access to nutritious food gardens, not just trees
- Shady canopy covering the city
- Data that shows people are heathier-physically, mentally, and spiritually
- Optimistically and uniform in density across all four quadrants

What current issues or challenges do you experience with the city's urban forest?
- Tree roots that are impacting sidewalks
- A lot of trees in my neighborhood, but not enough on Joseph Avenue
- Planting trees in areas that don't need them
- Tree roots, pushing up asphalt on trails. Creating hazards, especially for bikes
- Tree roots impacting bike trail
- Southeast area of city. Roots, tree health, tree community
- Redlined
- Equitable
- Enough room to create green environments, that will promote healthy trees

- Some areas do not look at all like a forest, pavement, and concrete in excess
- Too hot, need more trees and shade
- Encroachment of the urban forest by wide streets
- Too hot! More trees in poor neighborhoods
- Do you soil test? Larger tree lawns, large trees. Smaller tree lawns→ Smaller trees
- Trees get hot with salt
- I bike the Genesee trail and walk the city. Roots disrupting sidewalks is an issue
- Prioritize tree health and seeing neglect. Litter and … make some areas seem less like a forest
- Include people affected by tree planting
- Leaf raking for elderly-pay attention to this

**What actions would you like the City to take to resolve these issues?**
- Not enough area for roots of trees
- I want the city to be equal with tree planting
- Can we reduce street side to add space around sidewalks/shoulders to plant more trees? This also makes streets slower and safer for pedestrians
- Roots and sidewalks create trip hazards
- Community serves for lead clean up
- I think there is too little collaboration with city planning as a whole. It would be lovely if our treescape were a primary concern in development, repair, and maintenance
- Plant trees in redlined neighborhoods
- I see a lot of planted trees that are not thriving and would like the city to focus on ways to help recently planted trees to thrive
- Leaf services/community services
- Plant more flowering and fruit trees edible
- Make and edible fruit tree map
- Promote awareness of the health benefits- Tree campaign
- Remove pervious area around the trees to make them healthier. Add green infrastructure
- I'd like the forest plan to work with the active transportation plan project to incorporate trees
- More urban canopy equity. Targeted universalism approach
- Community involvement probably lack of feeling they can make a difference. It's hard to plant trees you'll never eat fruit from
- Engage those who have lived in neighborhoods. Stories! Build trust! Let neighborhoods take the lead
- Record/Publish stores and histories about key happenings around trees- ways people were impacted/changed
- Develop city orchard
- Instead of adding trees to highland park etc. add to places in need
- Healthier tree canopy where road diets and placement of trees slow people i.e.) Lake Ave., State St., Goodman, South Ave, Joseph, Hudson.
- Develop tree tours and identify "trees of note"
- Arbor Day Tree planting. Tree giveaway. Build awareness
- Education and marketing to raise awareness
- Educate people about the benefits

What opportunities would you like to see the City pursue to enhance and expand the urban forest?

- Draw people from reservoir
- Fertilized and pollinators for better tree and animal growth
- Help destitute owners deal with out of control/diseased private trees
- Create volunteer or paid programs to allow residents to assist with tree maintenance and planting
- I would like to see forestry work with biking and pedestrian initiatives to make out streets friendlier to non-car travel. Volunteer opportunities to learn about trees and plant trees.
- Build community buy-in and feelings of ownership by including them in health assessments of local trees
- Festivals. Annual festivals of ecology and nature
- Get more stumps out so we can plant more trees
- Community-based planting events. Reaching an equilibrium with empty lots and healthier trees in these areas
- More volunteer opportunities for planting trees
- Teach the community how to care for trees and share benefits
- More tree planting and tree maintenance. Volunteer opportunities for the public
- Partner with others to use $15 million in justice funding for next 2 years. Community-based organizations
- Partner with private owners and tree plantings. Do other cities do this to create partnerships?
- Give free trees to homeowners to plant.
- Fertilizers and pollinators
- Plant trees in places in need and add less concrete
- Finding solutions for putting trees in heathy environments- permeable surfaces away from power lines in park setting that are similar to forests
- Adapt tree initiatives create opportunities to support plant a public tree
- Grow trees in vacant lots
- Tell us what to advocate for! I'm not an arborist but I love trees!
- Plant trees in redlined neighborhoods
- Get with the city planners to require permeably surfaces, parkway (divided) roads, services, burial under roads, etc.
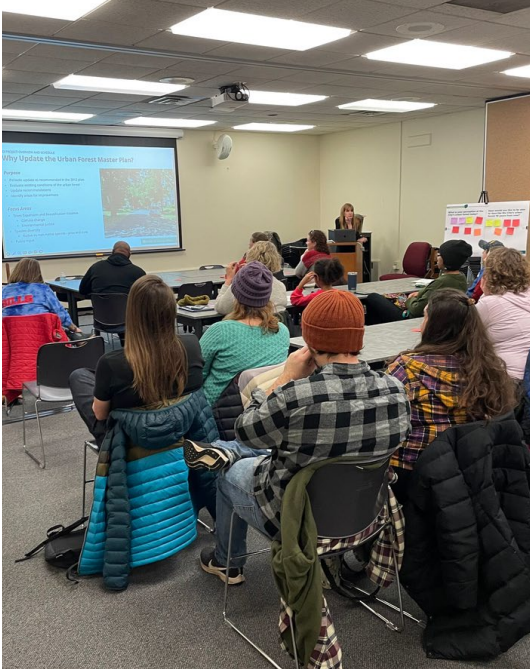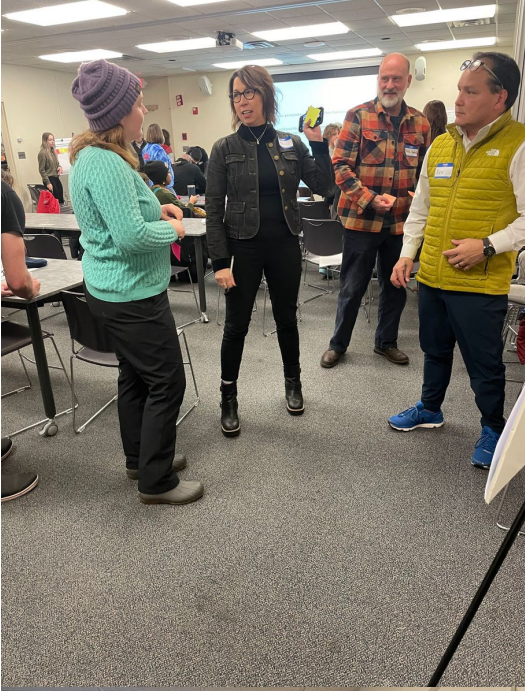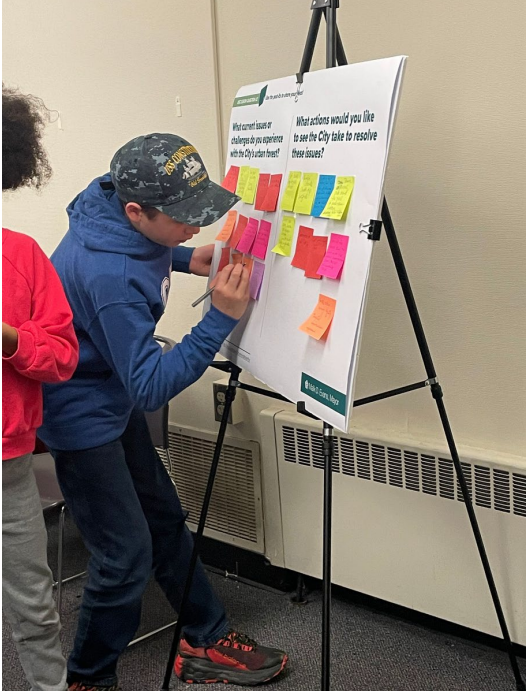
Southeast Quadrant Public Meeting Discussion
Wednesday, January 10, 2024, at 6:30 PM
Children's School of Rochester #15, 85 Hillside Avenue, Rochester, NY

Attendees:
- Jay B. Piper, Rochester City School District
- Allen Blair, Rochester resident
- Melissa Carlson, Rochester Mennonite Fellowship
- Jacob Cole, Community member
- Peter Debes, Friends of the Grove
- Chad Ellis, Citizen
- Abe Ellis, Student
- Ellie Faugh, School 17 Garden Club
- April Foreman, Resident Maplewood
- Matt Gavla, Finger Lakes Prism
- Nate Gibbs, Community Member
- Beata Gomulak-Cavicchio, Resident 19th Ward
- Jason Haremza
- James Hart, City Forestry
- Addie Hillman GCCS
- Shannon Hillman, RMSC/GCCS
- Zach Hillman, Rochester GCCS
- Kathryn Kelly, Community member
- Miranda Klepaez, Neighborhood
- Danielle LaBare, Community Member
- Sue Lawton, Rochester Garden Club
- Judy Lee Hay, Swillburg Neighborhood Association
- Kristy Liddell, Friends of W. Grove
- Cory Lynn Riemer, Community Member
- Rev. Matthew Nickolafo, South Wedge Mission
- Theresa Moraldo, Teacher CSR
- Graham Murphy, Rochester student/research
- Steve Murphy, WashGrove
- Pamela O' Connor Clapman, Rochester Garden Club
- Ed Olinger, Citizen
- Mary Olinger, Citizen
- Judy Peer, Community member
- Sarah Peters, Browncroft Association
- Caitlin Poner, Community member
- Madison Quinn, Rochester Resident and Monroe County DES
- Lisa Reagan, NBNG, SWPC
- Melissa Rivelis, Winton Village Resident
- Kathleen Schoeniger, Cornell Master Gardener,
- Andrew Seager, Rochester Olmsted Parks
- Mike Terrance, Rochester GCCS
- Sara Terrance, Rochester GCCS
- Michael Warren Thomas, Native Habitat

- DJ Weber, Upper Monroe, Cobbs Hill
- Sue Weisler, City Resident
- Molly Wilson, Community member
- Chris Wiomnifer, Roc C
- Tony Wood, Resident Maplewood
- Charlie Zettek, Washington Grove

Key Takeaways:

- A need for an equitable, diverse, and sustainable canopy throughout the city
- A concern for a lack of upkeep on trees (cleaning up leaves, pulling weeds) to ensure they can thrive
- A concern for non-native and invasive tree species being planted
- More collaboration needed between the City, schools, and community organizations to increase involvement in tree planting initiatives
- Consider more points of access to plant trees around the City

Question and Answers:

- What are the funding challenges mentioned in the presentation? What's stopping us from funding the forestry division higher? The community wants to help resolve this issue.
  - o Andrew noted that current limitations include staff, the number of trees the City can buy and plan, and maintenance. The City currently has a grant from U.S. Forest Service and they have applied for a grant opportunity from NYSDEC.
- The City's 66,000 trees are in City right-of-way, parks, and cemeteries, and this is only half the story of our urban forest.
  - o The City only creates an inventory of their trees and what they can control. Andrew acknowledged that this approach creates challenges for the management of the urban forest.
- Written comment: Is there a way to get at least a high-level idea of the number, location and type of trees that are private or other government (i.e. County) property so that the urban forest master plan is a holistic plan, not just a plan for trees on city property? Perhaps the US Forest Agency has the technology use satellite or flyover surveys off all that isn't county in the City inventory of 66,000 trees.
- New companies that ask for tax breaks should adopt a corridor of trees or green infrastructure to maintain. If and when they leave the city, at least we'd have the trees they planted.
- The urban forest master plan update should include getting youth involved in the management of trees and awareness of a forestry career.
- Maintenance contracts should train youth.
- How does the City assess tree health?
  - o The tree inventory includes 36 management units. Every six years, each tree is assessment. Certified arborists assess the trees for diseases, decay, and dead limbs.
- Are you working with certified arborists?
  - o Yes.

- Is the habitat that trees create considered when you take down a tree? How is the City balancing nature versus human need?
  - The primary objective of tree assessment is maintaining safety. We don't take tree removal lightly and we plant as many trees as we can.
- Does the GIS platform show the decision process for the removal of trees?
  - No. It does show trees that will be removed.
- Can you expand the definition of the urban forest to include soil systems, rain gardens, etc.?
  - We need to consider our funding limitations.
- Healthy ecosystems are the only thing that will heal the planet. The urban forest master plan is an opportunity to deal with the topic of climate change more broadly.
- In 20 years, we'll have a different climate. Please plan for that.
- Thank you for doing this plan!
- Green space and trees in this part of the US will become more important in the next few decades. Think big! Be visionary!
- Look at the National City Parks Movement in London.
- The City Forester needs more support for education
- Parks organizations in the city of Rochester can support and advise.
- Need more people to support and advise
  - Thank you. The project also has an advisory committee.
- Look to City codes, like Buffalo's Green Code, to think about developer incentives for trees and permeable infrastructure.
- Some parks, like Seneca Park, are in the city but County operated but part of the urban forest. Please coordinate and manage together!
- Incorporate trees on RCSD property.
  - The City of Rochester advises on RCSD's trees.
- There are too many organizations involved in urban forest management.
- Cobbs Hill has impacted trees.
- The City of Rochester Zoning Alignment Plan (ZAP) will allow people to add housing units to their properties and this may impact trees on private property. There is a 1/17/24 public meeting about this initiative.
- New developments will allow trees to be removed and ZAP doesn't provide provisions or requirements for trees. This will cause heating in our city.
- We need to hear the Mayor talk about what the city is doing about climate change.
- Can we look at the Urban Forest Master Plan more holistically (i.e., not just trees owned by the City)? Look at public and private land. Maybe USDA has the ability to help.

Which neighborhood, parks, or street corners would you like more trees planted?
- A large portion of stickers were placed on Seneca Ave, Lexington Ave, and Lake Ave.

What types of trees do people want to be planted?
- Top 3 choices: Native trees, Large shade trees, and trees for pollinators/birds
- A few were placed under flowering trees, and trees with edible fruits

What is your perception of the City's urban forest today?
- Need more trees in underserved communities – equity
- Need more species, particularly oaks

- Lacks tree equity and beauty
- Lowering trees each year
- They drop nuts for squirrels and other animals
- Wonderful support. Quality of life- why I chose my neighborhoods
- I think we're very fortunate to have. So many green opportunities and spaces. But I also recognize that certain areas of the city have easy access than others.
- Really great in some areas, lacking in others
- Inequitable, but still special
- Need more oaks, maples
- Asset now; could be a much more important building on our own history as the Flower City
- Vast but unequal. Beautiful but broken up.
- Rochester is the top in the state and a model in other states.
- One of the best in the state!
- It is what caused me to move to Rochester

How would you like to be able to describe the city's urban forest ten years from now?
- A forest that along with providing shade, capturing carbon, supports biodiversity. That means more oaks.
- More sycamores
- Equitable
- Fewer Norway maples
- The City in every part is heavily treed in all areas as the city was built
- Equal, diverse, well maintained
- Native, diverse, equitable canopy
- National leader in urban forest investment
- Equitable and sustainable. Ecologically integrated.
- Flourishing in all parts of the city! And supported and accessible to all!
- The canopy will be more equitably spread across the city residential streets and business streets
- Part of a unified ecosystem with multiple interactions with humans, plants, animals
- Continuing its planting initiatives as it has, working with residents and businesses
- Multi-layer ecosystem approach to urban forest – native, diverse, lots of edibles and habitat
- Continuously growing
- Crucial infrastructure: we will build around the forest instead of planting around buildings

What current issues or challenges do you experience with the City's urban forest?
- City contractors damage them
- Residents don't know how to care for them. They let suckers, vines, etc. grow not knowing it will hurt them
- DGEIS as part of the zoning alignment process (ZAP) should include protection of the mature trees we have. Most recent development and rehab projects have allowed trees to be removed.
- Lack of pruning of young trees and pruning for aesthetics.
- Park landscapers don't weed out plantings; trees and shrubs are weakened and smothered
- Invasive trees are commonly planted
- Invasive species (maples, pears)

- The ZAP incentivizes demo of building and building up. There appears to be no consideration of the damage to existing trees and planting requirements are bushes, not trees!
- Leaves from the trees along the road fall into the street create a potential hazard for cyclists. As the active transportation plan gets underway, we need to work with that entity to create a proactive street cleaning plan that supports planting trees and keeping cyclists safe.
- Planting ornamental trees instead of shade trees along the street line
- Trees that get taken out and then aren't replaced because residents don't request it; change to opt out system instead
- Too many non-native maples
- Birchcrest has dumped debris in Cobbs Hill Park at the base of the park
- Behind 111 Hillside, people are dumping waste
- Areas of the city that need more forest are often inundated with obstacles. People who live there rent and can't make decisions for their home. Less concrete areas, etc.
- Lack of racial diversity at input meetings
- Lack of city school and city non-profit partnerships; more collaboration needed
- Trees taken down on a street with no notice or involvement with neighbors
- Our school lost several trees on the city property near Washington Grove; we appreciate the City's help in removing the stumps and replanting the trees
- Poor tree health and seeming neglect
- Litter and vandalism make areas seem little like a forest
- Tree roots that are impacting sidewalks
- SE area of city – roots, tree health and tree crowding
- Invasive species (ailanthus) taking over
- We still treat trees as objects and not subjects

What actions would you like the City to take to resolve these issues?
- Develop a culture of value for trees among City contractors, residents; educate people
- Every developer that gets public funding should be required to plant trees.
- Plant more oaks
- Create culture where removal of healthy trees for more "light" is discouraged
- If contractors damage trees, they should be sanctioned to discourage; word would get around
- Get rid of invasive trees and plants along the river tails that put trees along trails at risk, but also spread into residential neighborhoods
- Educate landscaping crews; hold them accountable
- Plant more sycamores
- More points of access to plant trees
- Consider planting trees besides bus stops for share beauty, etc. for those taking the bus
- Shade trees, not "button" trees
- Incorporate tree/forestry planning into quadrant planning process
- Help for residents who can't water trees
- Work to eliminate invasive trees planted and encourage private developers to only plant natives
- There are places there are a lot of light pollution and trees help reduce that
- Reach out to schools and community organizations!

- As the City works to create protected bike lanes, perhaps an island with trees could do double duty providing shade and safety
- Stop allowing contracts to get away with hurting and killing trees
- Beautifying areas where trees were removed (e.g. stumps of varying heights/angles – looks "savage")

What opportunities would you like to see the City pursue to enhance and expand the urban forest?
- Plant trees in redlined neighborhoods
- Give free trees to homeowners to plant
- Teach the community how to care for the trees and share benefits
- More tree planting and maintenance volunteer opportunities for the public
- Community-based plating events
- Reaching an equilibrium with empty lots and healthier trees in those areas
- Food gardens
- Build community buy-in and feeling of ownership by including them in health assessment of local trees
- Help destitute owners deal with out of control and diseased private trees
- Fertilizer and pollinators for better tree and animal growth
- Create volunteer or paid program to allow residents to assist with tree maintenance and planting.
- Look at the City of Rochester Zoning Alignment Plan right away
- Start a forestry program for youth and create jobs for the future
    - Great idea!
- Create incentives (with tax credits?) for homeowners, businesses, and schools to help with inventory and care for trees on their properties
- Encourage residents to plant more natives to support biodiversity
- Don't let landlords determine tree lawn; too many opt for not having them to not maintaining them
- Utilizing student community service hours to help plant trees and engage a younger group
- Rochester has a lot of trees; this is still a city not a rural area
- More collaboration with owners of the "urban forest" not under control of the city, especially with private owners
- Do more educational programs on the collapse of biodiversity and the important of watering trees
- Find ways to include renters in the conversation! Just because they don't own the home doesn't mean they don't care
- Plant trees and education people about tree equity
- Utilization of environmental auction parcel 5, taking environmental clean-up properties
- More ways for people (especially youth) to get involved!
- Grow city resident pipeline and work on trees by requiring city resident employment and internship quota for any contracts for city tree work
- So important to partner with RCSD youth
- Reach out to city children and ask them what they want to see for trees; they're the future!
- Consider leaving dead trees (or at least their trunks) if they're not a serious danger to support biodiversity and nature

- Partner with RCSD to plant trees on school property with students! Get kids involved to get them invested at an early age
- Prioritizing partnership with community organizations
- More money for trees; less money for police
- Highlighting benefits that address challenges like crime
- The main opportunity that needs to happen is allowing the City's Forestry department to hire tree people to do the work of taking care of the trees we have plus the ones we will be planting. The funding and pay needs to be matched.
- Eliminate invasive species
- Educate and organize community regarding ecology, health benefits, and tree/plant choice and maintenance
- What about partnering between urban forestry department, children's school, and Washington Grove to develop curriculum around biodiversity in old growth forest?

Other comments from poster board with question: What types of trees would you like to see planted across the City?
- Native trees suited to the warmer climate of the future
- All of these in the right places
- Some species may become invasive. Develop a list of native and non-native trees
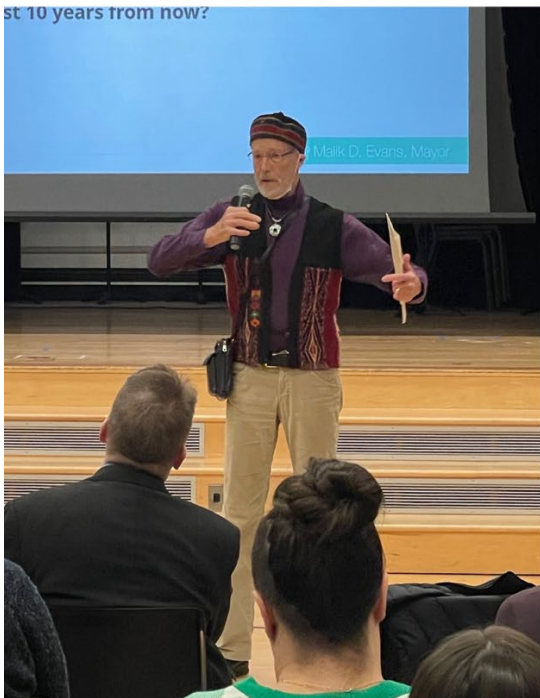
SUMMARY OF PUBLIC FEEDBACK FROM SPRING 2024 PUBLIC MEETINGS

Overview of Public Meetings Held in May 2024

Four in-person public meetings (one in each City Quadrant) and one virtual public meeting were held in May 2024 to present the draft Urban Forest Master Plan Update to the public along with the public outreach completed throughout the project and to gather the community's feedback on the City of Rochester's recommendations for improving and managing the urban forest. The locations, date, and times of each public meeting are described below:

1. **Southwest Quadrant Public Meeting**
   Monday, May 6, 2024, at 6:00 PM
   Arnett Branch Library, 310 Arnett Boulevard, Rochester, NY

2. **Southeast Quadrant Public Meeting**
   Tuesday, May 7, 2024, at 6:30 PM
   The Children's School of Rochester (School #15), 85 Hillside Ave, Rochester NY

3. **Northwest Quadrant Public Meeting**
   Tuesday, May 14, 2024, at 6:30 PM
   Rochester International Academy, 1 Edgerton Park, Rochester, NY

4. **Northeast Quadrant Public Meeting**
   Thursday, May 16, 2024, at 6:30 PM
   Ibero-American Action League, 214 Clifford Avenue, Rochester, NY

5. **Virtual Public Meeting**
   Monday, May 20, 2024, at 6:00PM

A Spanish translator from Ibero American Action League was available at all the in-person meetings on May 6, May 7, May 14, and May 16. Light refreshments, drinks, and wildflower seeds were provided at all in-person meetings.

Advertisement of the Public Meetings

The five public meetings were advertised through email blasts to a database of stakeholders (including Neighborhood Service Centers, local community groups and non-profits, neighborhood associations, respondents to the community survey, and attendees at past urban forest outreach events) sent by Highland Planning in April and May 2024. The Community Tree Ambassadors also helped to promote the meetings through door to door outreach in each quadrant from April 26 through May 18th. Ambassador outreach also included pop-up events at the Public Market, the International Plaza, and compost drop-off sites.

Attendance at Public Meetings

- 11 people attended the Southwest meeting
- 18 people attended the Southeast meeting
- 9 people attended the Northwest meeting
- 0 people attended the Northeast meeting
- 11 people attended the Virtual meeting

Detailed lists of meeting attendees are available in the Appendix.

Format of the Public Meetings

Each of the five public meetings generally followed the same format. Upon arrival at the in-person public meetings, attendees were asked to participate in a Love Letter to a Tree activity. The prompt asked for participants to "Share a story on one of the paper leaves about a tree in Rochester that have meaningfully impacted your life and add it to our community tree.

Overview of the Urban Forest Master Plan Update

At the start of each in-person and virtual meeting, Highland Planning welcomed all participants and reviewed the agenda for the meeting. Andrew Place (City of Rochester, City Forester) than provided a brief introduction to the draft Urban Forest Master Plan Update, including an overview of the Master Plan Update's goals and main sections. The City of Rochester than recapped the project schedule, highlighting the different opportunities for public engagement during the plan development.

Public Engagement Recap and How Feedback Helped Shape Recommendations

Highland Planning (Stephanie Hyde) then provided an overview of the public engagement conducted during the development of the Urban Forest Master Plan draft. She shared key findings from the following public events:

- Winter public meetings in each quadrant

- Community survey

- Pop-up events held throughout the spring

- Outreach led by Community Tree Ambassadors

Community Tree Ambassadors were then invited to share their experiences and feedback received from their door-to-door and other outreach efforts.

Highland Planning (Stephanie Hyde) then described how public input shaped the recommendations contained in the draft Urban Forest Master Plan Update, highlighting key examples of what we heard from the community and how that feedback became a discrete recommendation in the draft Master Plan Update.

Group Discussion of the Urban Forest Master Plan Update Recommendations

Next, the City of Rochester described the draft recommendations in the Urban Forest Master Plan Update. This discussion was organized by the nine (9) categories of challenges and recommendations identified in the Master Plan Update. After the recommended actions were introduced for each category, Highland Planning asked the meeting attendees to use their voting worksheet/smartphone to answer the following question:

> *By a show of hands (or using your smart phone to participate in an interactive poll), please select the ONE recommendation that is most important to you.*

At the in-person meetings, all recommendations under each category were explained and the group was invited to vote on a worksheet and then raise their hand for the recommendation that they found most important. All worksheets were collected at the end of all meetings. For the virtual meeting, participants responded to the question using interactive polling software followed by a group discussion.

Once all of the challenges and draft recommendations had been introduced, Highland Planning facilitated a group discussion centered on the following question:

> *Are there any recommendations that you think are missing?*

Next Steps

Highland Planning closed the meeting with a discussion of next steps, including a recap of any remaining public meetings and the upcoming urban forest walking tours with Forestry Division staff.

Key Themes from Public Feedback

A summary of the public responses from the group discussion of Urban Forest Recommendations, and questions is presented below, followed by key takeaways from all public meetings. The detailed feedback received at each public meeting is included in the Appendix.

	TOTAL
Community Engagement	
1. Continue the newly formed Tree Ambassador Program	9
2. Increase community involvement with urban forest planning	12
3. Partner with community-based organizations	12
4. Host annual quadrant meetings to gather input on tree plantings	1
5. Develop guidebook for public engagement / volunteers	3

Funding	TOTAL
1. Utilize recent grant funding to equitably expand tree canopy and complete the Trees Expansion and Beautification Initiative	8
2. Evaluate costs and benefits of contractual tree maintenance versus in-house operations	6
3. Demonstrate the need and advocate for increased annual Forestry budget allocations	12
4. Continue to seek grant opportunities	3
5. Promote and utilize the Reforest Rochester Fund to supplement tree planting efforts	3

Protection + Health	TOTAL
1. Monitor for hazardous conditions, pests, and disease	4
2. Continue annual rotational tree pruning	0
3. Explore the use of volunteers, seasonal staff, school interns, and youth workers to complete the pruning of young trees	12
4. Implement pest and disease management plans	3
5. Explore educational opportunities pertaining to tree benefits, threats to urban forest health, and the effects of vandalism on young trees	6
6. Promote urban forest health through species diversity, emphasizing the selection of native species	14

Storm Events	TOTAL
1. Continued Forestry response to storm events	5
2. Review and update the Urban Forest Emergency Response Plan to guide response, recovery, and minimize the impact of events	23
3. Document major storm events in a manner to meet federal reimbursement requirements	7

Construction	TOTAL
1. Review plans and enforce current tree protection standards to minimize damage and loss	6
2. Improve communication across City departments to increase enforcement of tree protection standards	18
3. Pursue educational opportunities to increase tree protection awareness, compliance, and enforcement	11

Perpetuation + Expansion	TOTAL
1. Strive for "one-for-one" replacement plantings; continue Tree Expansion and Beautification Initiative	6
2. Partner with community-based organizations	3
3. Implement tree planting requirements for new projects and developments in partnership with City Zoning	12
4. Identify opportunities for vacant lot tree planting	4
5. Identify opportunities for edible fruit tree plantings in parks, community gardens, and other open spaces	7
6. Ascertain tree data on private property to build a more complete tree inventory	7

Tree Equity	TOTAL
1. Continue Tree Expansion and Beautification Initiative to increase tree stocking and address disparities	2
2. Allocate tree plantings with a goal to establish an equitable tree stocking level across City quadrants	9
3. Increase overall tree stocking levels through tree planting initiatives and partnerships with community-based organizations	13
4. Learn from other municipalities' policies and initiatives to address tree equity	7
5. Seek educational opportunities to promote the value and importance of a healthy urban forest	4

Parks + Cemeteries	TOTAL
1. Prioritize public safety	1
2. Replace lost trees and add new plantings	4
3. Develop tree management and planting plans for parks and cemeteries	10
4. Identify grant opportunities to support management plans	4
5. Work with community partners and volunteers to implement management plans and support planting initiatives and educational programs	15

Promotion of the Urban Forest	TOTAL
1. Continue "Tree City USA" designation	1
2. Pursue "Tree City USA" Growth Award	11
3. Expand annual Arbor Day celebration to include festivals, community tree plantings, and/or tours	19

The next section describes key themes from the discussion in response to the question, "Are there any recommendations that you think are missing?"

Key themes from May 6, 2024, Southwest public meeting:

Historic Preservation and Replacement:
- o Replace historic trees in Rapids Cemetery with new plantings.

Shade and Comfort:
- o Plant trees to provide shade at bus stops and walking routes to enhance walkability.

Tree Maintenance and Safety:
- o Trim trees near power lines and other obstructions for safety.
- o Choose appropriate tree species for narrow tree lawns and commercial corridors.

Ecological Considerations:
- o Prioritize planting native trees where applicable.
- o Recognize that forests include a diverse range of plants and provide significant ecological benefits.

Urban Planning:
- o Develop a process for removing pavement and replacing it with trees.
- o Define standards for tree caliper size and species in commercial areas to ensure they can withstand environmental stressors like salt.

Tree Care and Establishment:
- o Implement guidelines for the first year of care for newly planted city trees, including initial watering by the city followed by property owner responsibility.
- o Balance the size of newly planted trees with their establishment period.

Education and Community Involvement:
- o Prioritize educating children and training youth in forestry practices.
- o Clearly communicate to the public what aspects of the urban forest plan are being kept, changed, or newly introduced.

Enhancing Walkability:
- o Consider increasing walkability in the urban forest master plan by prioritizing shade along walking routes identified in the active transportation plan.

Key themes from May 7, 2024, Southeast public meeting:

Funding and Budgeting:
- o Seek grants and request small annual budget increases.
- o Ensure the budget accounts for inflation over a 10-year period.
- o Conduct a cost-benefit analysis of tree planting, including community engagement benefits.

Forest and Trail Management:
- o Address heavy usage in Washington Grove by placing logs on trails to prevent straying and using chainsaws for maintenance.
- o Incorporate tiny forests (Miyawaki forests) into the urban forest master plan.

Playgrounds and Parks:
- o Edge playgrounds with forests and shade trees.
- o Concentrate fruit trees in playgrounds and include specific planting plans for parks.
- o Address the care and status of previously planted trees, such as hazelnut trees by Allison Clark.

Tree Care and Maintenance:
- o Define the city's policy for caring for damaged and repaired trees.
- o Monitor and coordinate with other departments to prevent issues like rubble dumping during road reconstructions.
- o Protect older trees from over-pruning and unnecessary removal.

Community Involvement and Education:
- o Involve high school students in tree planting to reduce vandalism and educate them.
- o Prioritize community engagement and hold fundraisers, plan events, and awards for Arbor Day.

Policy and Communication:
- o Maintain the urban forest master plan advisory committee.
- o Be specific about inter-departmental communication and cost definitions in the plan.

Equity and Success Rates:
- o Monitor and aim to maintain tree equity over time.
- o Track the success rates of tree plantings, especially those under warranty.

Cultural Sensitivity and Historical Design:
  o Correct culturally insensitive names in the plan (e.g., Seneca Trail to Onondaga').
  o Consider historic landscape architecture designs when planting in parks created by Olmsted.

Tree Planting Costs and Soil Recommendations:
  o Address the cost of planting trees, approximately $600 per tree.
  o Include soil recommendations in the urban forest master plan.

Protection Against Contractor Malpractices:
  o Incorporate measures to prevent paying contractors who dump rubble and engage in other harmful practices.

Key themes from May 14, 2024 Southwest Public Meeting

1. **Community Collaboration and Engagement**:
   o Collaboration with community organizations and neighborhood groups is crucial.
   o Enhance communication with the community regarding construction and urban forestry projects.

2. **Tree Recycling and Maintenance**:
   o Implement a tree recycling program.
   o Maintain proactive processes for treating diseases like Emerald ash borer and seek federal grants for early disease detection.
   o Promptly remove stumps to improve aesthetics and safety.

3. **Urban Planning and Safety**:
   o Reduce concrete and car usage; use trees to calm traffic and improve road safety.
   o Engage with the City's Department of Environmental Services and the Genesee Transportation Council on these issues.

4. **Long-Term Planning and Updates**:
   o Ensure the urban forest plan considers a 10-20 year horizon.
   o Update and review the plan more frequently, ideally every one to two years, and keep the advisory committee active.

5. **Education and Tree Health**:
   o Provide education on keeping trees healthy, especially for new plantings.
   o Regularly trim trees every six years to maintain their health.

6. **Pairing Recommendations**:
   o Some recommendations should be paired for better effectiveness, such as combining certain strategies from Recommendation #3 (Protection and Health) and #5 (Construction).

Key themes from May 20, 2024 Public Webinar:

1. **<u>Funding</u>**
   o Look for opportunities to collaborate with / partner with the State in the development of the new High Falls State Park. This is a unique opportunity where a substantial portion of the urban forest will be in the gorge and there will be a lot of State funding connected to this initiative.

2. **<u>Biodiversity</u>**
   o Strongly recommend that the City considers the Biodiversity Index from the Convention of Biological Diversity

3. **<u>Education</u>**
   o Would like to see notices or educational programs to help people understand how to mulch their trees (no more volcano mulch!)

APPENDIX.
Detailed Public Feedback From Public Meetings in May 2024

Southwest Quadrant Public Meeting
Monday, May 6, 2024, at 6:00 PM
Arnett Library, 310 Arnett Boulevard, Rochester, NY

Project Team:
Andrew Place, (City of Rochester, DES)
Brian Liberti, (City of Rochester, DES)
Tanya Zwhalen, (Highland Planning)
Stephanie Hyde, (Highland Planning)

Southwest Quadrant Meeting Attendees:
Eleanor Coleman, Rotary SW
John Curran
Mary D. Cooper, 19WCA
John DeMott, 19th Ward
Jesse Knoth, Healthi Kids
Deb Leary
Elda Lopez, Spanish Interpreter
Frank Martin, Tree Ambassador
Dan Ross
Kanisa West
Deborah Wight, 19th Ward

Love Letter to a Tree Activity Notes:
- Dear tree, I like your beauty, I dislike cleaning up after you
- Need to know which are best trees for which streets
- Love the shade, love the canopies over the street, love the spring flowering trees

Comment Cards:
- Garden at Kirkland/Kenwood (133 Kenwood) could use fruit trees.

Question and Answer: Discussion Question: Are there any recommendations that you think are missing?
- Rapids Cemetery plantings to replace historic trees
- Plant trees to provide shade to bus stop areas
- Trim trees near power lines and obstructions
- Choose the right trees for narrow tree lawns
- Choose native where applicable
- Forests are not just trees; they evolve with other plants and provide ecological benefits
- Develop a process to remove pavement and replace with trees
- Define a minimum caliper tree in commercial corridors in the urban forest master plan

- Choose trees that will survive the salt in commercial corridors
  - Understand that every inch of tree means a year it needs to become established; this is a balance
- Define care in the first year of City tree?
  - Water first season with a bag; then the City asks property owner to water the tree
- Education of children should be a priority of the urban forest master plan
- Was increasing walkability a consideration in the urban forest master plan? Review and prioritize plantings in the walking routes identified in the active transportation plan. Having shade makes it easier to walk.
- Everything is great.
- Prioritize training time with forestry for youth.
- Define what you are keeping, changing and what's new for the public.

Below are the top choices (up to three) participants voted for after reviewing each Draft Recommendation Category:

Category #1: Community Engagement
- Option 1: Continue the newly formed Tree Ambassador Program (3 votes)
- Option 2: Increase community involvement with urban forest planning (3 votes)
- Option 3: Partner with community-based organizations (1 vote)

Category #2: Funding
- Option 1: Utilize recent grant funding to equitably expand tree canopy and complete the Trees Expansion and Beautification Initiative (3 votes)
- Option 2: Evaluate costs and benefits of contractual tree maintenance versus in-house operations (3 votes)

Category #3: Protection and Health
- Option 1: Monitor for hazardous conditions, pests, and disease (2 votes)
- Option 3: Explore the use of volunteers, seasonal staff, school interns, and youth workers to complete the pruning of young trees (2 votes)

Category #4: Storm Events
- Option 2: Review and update the Urban Forest Emergency Response Plan to guide response, recovery, and minimize the impact of events (4 votes)

Category #5: Construction
- Option 2: Improve communication across City departments to increase enforcement of tree protection standards (3 votes)
- Option 3: Pursue educational opportunities to increase tree protection awareness, compliance, and enforcement (2 votes)

Category #6 Perpetuation and Expansion
- Option 3: Implement tree planting requirements for new projects and developments in
- partnership with City Zoning (2 votes)

- Option 5: Identify opportunities for edible fruit tree plantings in parks, community gardens, and other open spaces (2 votes)
- Option 6: Ascertain tree data on private property to build a more complete tree inventory (2 votes)

Category #7: Tree Equity
- Option 2: Allocate tree plantings with a goal to establish an equitable tree stocking level across City quadrants (2 votes)
- Option 3: Increase overall tree stocking levels through tree planting initiatives and partnerships with community-based organizations (2 votes)

Category #8: Parks and Cemeteries
- Option 2: Replace lost trees and add new plantings (2 votes)
- Option 3: Develop tree management and planting plans for parks and cemeteries (2 votes)

Category #9: Promotion of the Urban Forest
- Option 2: Pursue "Tree City USA" Growth Award (2 votes)
- Option 3: Expand annual Arbor Day celebration to include festivals, community tree plantings, and/or tours (3 votes)

Southeast Quadrant Public Meeting
Monday, May 7, 2024, at 6:30 PM
The Children's School of Rochester School No.15
85 Hillside Ave, Rochester, NY 14610

Project Team
Andrew Place, (City of Rochester, DES)
Brian Liberti, (City of Rochester, DES)
Tanya Zwhalen, (Highland Planning)
Stephanie Hyde, (Highland Planning)

Attendees:
William A Brewer
Barbara Anne Zinker, Azalea Neighborhood Association
Susan Boland
Melissa Carlson, Mennonite Church
Rome Celii
Peter Debes, Friends of the Grove
Rachel Edwards, Rochester Garden Club
Judy Hay, Swillburg
Kathryn Kelly, Tree Ambassador
Kristy Liddell, Friends of the Grove
Elda Lopez Santana, Spanish Interpreter
Evan Lowenstein, Tree Ambassador
Frank Martin, Tree Ambassador
High Mitchell. Sierra Club
Cassandra Pelsos
Diane Powell
Wendy Rosen
Andrew Seassez, ROPA

Love Letter Notes:
- Here's a hug
- I love staring up into tree canopy
- I am grateful for all the generous gifts our trees provide us
- Dear trees, your beauty and solace is a magnificent gift. We will support you to stay with appreciation.
- Thank you for blanketing my flower beds with leaves, free mulch, and full of butterflies!

Comment Cards and Worksheet Notes:
- In some neighborhoods, renters are a majority of residents. Often shorter terms of residency and often landlords don't provide basic upkeep equipment-hoses. City could

consider including watering for time that gives chance of taking root. Also a positive city presence.

- How can we control deer population in wooded areas-to promote regeneration of forests?
- Education efforts workshops to teach neighborhoods about how to care for trees and leaving the leaves for habitat
- Design criteria for new development to prioritize native plantings of trees and shrubs
- Advertise Reforest Rochester carbon offset
- For City's tree "nursery" is the location capable of hosting groups etc. and other youth to visit, even pitch in see earliest sapling to readiness for street planting
- Some properties frontage have space for more than 1 tree, plant 2 or 3
- We don't know what is currently done vs what will be done in the future.
- Expanding Arbor Day would be great for publicity and education opportunities

Question and Answer: Discussion Question: Are there any recommendations that you think are missing?
- Tell us more about funding. What's next?
  - Seek grants and requesting a small increase in budget each year
- Heavy use in Washington Grove is impacted the forest; we need logs on the trails to keep people from straying. And a chainsaw.
- Include tiny forests Miyawaki forests in the urban forest master plan
- Playgrounds should be edged with forests and shade trees
- What is the City's policy for caring for damaged, repaired trees?
  - City does do repair
- Priorities and the process tonight separates connections
  - Fundraiser for Arbor Day, tree planning, awards, grant writing – all are needed
  - The return would be large
- Thank you for this meeting and this process
- Keep the urban forest master plan advisory committee
- Be more specific in the plan regarding what you mean about communications between departments
- Regarding cost, how to pay for staff; define this better on page 17
- Put your budget into consistent dollars over 10 years; include inflation
- Do a cost benefit analysis about having trees or not
  - The Plan will have this
  - Include the benefits of staff and community engagement
- Get high school kids involved with planting to educate them; there may be less vandalism if you do
- Look at tree equity over time. Can we maintain this equity in three years?
- What are the success rates of tree plantings?
  - For bald burlap two caliper, we have one-year warranties
  - We will know soon because we planted a lot of trees as part of the Mayor's initiative last year
- Concentrated fruit trees in playgrounds

- o Allison Clark planted hazelnut trees in many parks; what is the status of those trees?
- o Include a planting plan for parks specifically in the urban forest master plan
- How much does it cost to plant a tree?
  - o $600
- Does the plan include soil recommendations?
- Does the plan include soil recommendations?
  - o No
- Contractors put rubble in the ground during road reconstructions. City forestry coordinates with other departments like engineering. It is important to monitor this.
- Incorporate protections to not pay contractors when they practice dumping when working for the City.
- Older trees are over pruned and coming down; can we protect them?
- Note: Seneca trail is no longer called that. It is the Onondaga'. Seneca is an insulting word. Look up the spelling. Correct this on page 4 of the plan.
- Consider historic landscape architecture design when planting in parks created by Olmsted.

Below are the top choices (up to three) participants voted for after reviewing each Draft Recommendation Category:

Category #1: Community Engagement
- Option 2: Increase community involvement with urban forest planning **(6 votes)**
- Option 3: Partner with community-based organizations **(6 votes)**
- Option 1: Continue the newly formed Tree Ambassador Program **(2 votes)**

Category #2: Funding
- Option 3: Demonstrate the need and advocate for increased annual Forestry budget allocations **(9 votes)**
- Option 1: Utilize recent grant funding to equitable expand tree canopy and complete the Trees Expansion and Beautification Initiative **(3 votes)**
- Option 5: Promote and utilize the Reforest Rochester Fund to supplement tree planting efforts **(2 votes)**

Category #3: Protection and Health
- Option 6: Promote urban forest health through species diversity, emphasizing the selection of native species **(5 votes)**
- Option 3: Explore the use of volunteers, seasonal staff, school interns, and youth workers to complete the pruning of young trees **(3 votes)**
- Option 5: Explore educational opportunities pertaining to tree benefits, threats to urban forest health, and the effects of vandalism on young trees. **(3 votes)**

Category #4: Storm Events
- Option 2: Review and update the Urban Forest Emergency Response Plan to guide response, recovery, and minimize the impact of events **(12 votes)**
- Option 1: Continued Forestry response to storm events **(3 votes)**

Category #5: Construction
- Option 3: Pursue educational opportunities to increase tree protection awareness, compliance, and enforcement (6 votes)
- Option 2: Improve communication across City departments to increase enforcement of tree protection standards **(5 votes)**
- Option 1: Review plans and enforce current tree protection standards to minimize damage and loss **(4 votes)**

Category #6 Perpetuation and Expansion
- Option 3: Implement tree planting requirements for new projects and developments in partnership with City Zoning**. (7 votes)**
- Option 1: Strive for " One-for One" replacement plantings; continue Tree Expansion and Beautification Initiative **(4 votes)**
- Option 4: Identify opportunities for vacant lot tree planting **(3 votes)**

Category #7: Tree Equity
- Option 2: Allocate tree plantings with a goal to establish an equitable tree stocking level across City quadrants (5 votes)
- Option 3: (4 votes)
- Option 5: (3 votes)

Category #8: Parks and Cemeteries
- Option 3: Develop tree management and planting plans for parks and cemeteries **(7 votes)**
- Option 5: Seek educational opportunities to promote the value and importance of a healthy urban forest **(6 votes)**
- Option 2: Allocate tree plantings with a goal to establish an equitable tree stocking level across City quadrants **(2 votes)**

Category #9: Promotion of the Urban Forest
- Option 3: Expand Annual Arbor Day Celebration to include festivals, community tree plantings, and/or tours**(10 votes)**
- Option 2: Purse "Tree City USA" Growth Award **(4 votes)**

Rochester Urban Forest Master Plan Update **// Spring Public Meetings Summary**

Northwest Quadrant Public Meeting Discussion
Tuesday, May 14, 2024, at 6:30 PM
Rochester International Academy, 1 Edgerton Park, Rochester, NY 14608

Project Team
Andrew Place, (City of Rochester, DES)
Brian Liberti, (City of Rochester, DES)
Tanya Zwhalen, (Highland Planning)
Stephanie Hyde, (Highland Planning)

Attendees:
Bill Collins
Syd Fererre (Tree Ambassador)
Mikayla Foas
Matthew Lehk
Elda Lopez Santana (Spanish Interpreter)
Frank Martin (Tree Ambassador)
Francis Pellegrio
Paul Trembley (Tree Ambassador)
Michael Warren Thomas (Tree Ambassador)

Question and Answer: Discussion Question: Are there any recommendations that you think are missing?

- What did the Genesee Community Charter School learn in their tours of cities?
    - Collaboration with community organizations
    - Tree recycling program
- Regarding Construction (Recommendation #5), include communication to the community as well. Connect with neighborhood organizations.
- Some recommendations need to be paired. For example, regarding Recommendation #3 (Protection + Health), #3 and #5 (Construction) should be paired.
- What are the challenges with disease? The City should pursue federal grants to identify the early detection of trees with disease.
    - The City established a proactive process to treat trees with Emerald ash borer.
- Can the City work on prompt removal of stumps?
    - Yes. This is being addressed now.
- I'd like less concrete and fewer cars. Use trees to slow roads and improve safety.
    - The City's Department of Environmental Services and the Genesee Transportation Council are looking at this.
- Does this plan think 10-20 years out?
- Update this plan more frequently. Or talk about it more frequently. Every one or two years, it would be good to have an update on your progress. Keep the committee in place.
- Include education about how to keep trees healthy.
    - This is done for new trees. Every six years, the City trims them.

Below are the top choices (up to three) participants voted for after reviewing each Draft Recommendation Category:

Category #1: Community Engagement
- Option 2: Increase community involvement with urban forest planning **(4 votes)**
- Option 3: Partner with community-based organizations **(1 votes)**

Category #2: Funding
- Option 2: Evaluate costs and benefits of contractual tree maintenance versus in- house operations **(2 votes)**
- Option 4: Continue to seek grant opportunities **(2 votes)**

Category #3: Protection and Health
- Option 5: Explore educational opportunities pertaining to tree benefits, threats to urban forest health, and the effects of vandalism on young trees. **(3 votes)**
- Option 6: Promote urban forest health through species diversity, emphasizing the selection of native species **(2 votes)**

Category #4: Storm Events
- Option 3: Document major storm events in a manner to meet federal reimbursement requirements **(4 votes)**
- Option 2: Review and update the Urban Forest Emergency Response Plan to guide response, recovery, and minimize the impact of events **(3 votes)**

Category #5: Construction
- Option 2: Improve communication across City departments to increase enforcement of tree protection standards **(4 votes)**
- Option 3: Pursue educational opportunities to increase tree protection awareness, compliance, and enforcement **(3 votes)**

Category #6 Perpetuation and Expansion
- Option 3: Implement tree planting requirements for new projects and developments in partnership with City Zoning**. (3 votes)**
- Option 5: Identify opportunities for edible fruit tree plantings in parks, community gardens, and other open spaces **(3 votes)**

Category #7: Tree Equity
- Option 4: Learn from other municipalities' policies and initiatives to address tree equity **(3 votes)**
- Option 3: Increase overall tree stocking levels through tree planting initiatives and partnerships with community-based organizations **(3 votes)**

Category #8: Parks and Cemeteries
- Option 5: Seek educational opportunities to promote the value and importance of a healthy urban forest **(4 votes)**

Category #9: Promotion of the Urban Forest
- Option 3: Expand Annual Arbor Day Celebration to include festivals, community tree plantings, and/or tours**(4 votes)**
- Option 2: Purse "Tree City USA" Growth Award **(4 votes)**

Northeast Quadrant Public Meeting Discussion
Thursday, May 16, 2024, at 6:30 PM
Ibero American Action League, 214 Clifford Ave.

No attendees

Rochester Urban Forest Master Plan Update **// Spring Public Meetings Summary**

Virtual Public Meeting Discussion
Monday, May 20th, 2024 at 6:00p.m.

Project Team
Andrew Place, (City of Rochester, DES)
Liz Podowski King (Highland Planning)

Attendees:
- o Evan Lowenstein, Tree Ambassador
- o Kathryn Kelly, Tree Ambassador
- o Charles
- o Ellen
- o Joe McElveney
- o Lisa Baron
- o Orissa
- o Pam Bakst
- o Wanda
- o Ruth Yanoff
- o Edgar

Question and Answers:

- Have there been any plans for the Frederick Law Olmsted Park at Jones Square?
  - o Andrew: No specific plans, right now park is maintained, trees are replaced as they are lost, try to stick to original Olmsted type plantings.
- We are in zone 6B hardiness, has the city considered any trees that will be drought or heat hardy?
  - o Andrew: Yes, we are. Also, we are warming up in a new zone and what trees/species do we plant to keep up with that. No specifics as far as species but they try to stick with natives. Also, an increase in the hardiness zone would influence a native species
- Are there any plans for the old tent city building renovation into veterans housing?
  - o Andrew: That I cannot speak to.
- A question about whether the City's aware of the city Biodiversity Index from the Convention of Biological Diversity and noting that that is a great example.
  - o Andrew- This is something I'm not aware of or familiar with but it's something we can explore and take a look at.
- Participant (Lisa Barron) mentioned the workshop for the High Falls State Park at MCC Campus on May 4th and asked "How can we inform people that there is going to be a State Park down below, how can we soften the concrete, etc.? What are your plans in this new urban forest plan to partner with the State because they're coming and taking over Falls

Terrace Park…What are your thoughts about that? - This is an important partnership to cultivate because it could impact funding.
- o Andrew - I don't have specifics on all of it, but I am aware of the project. Good suggestion. We want to work with the state to come up with a plan to promote and educate the community about the urban forest, and we talk about all of these things in the Master Plan Update.
- Participant mentioned the City Biodiversity Index, why it's a big deal because of the value it can have for nature-based solutions to mitigate climate change, with inequitable shade coverage as it gets hotter, wanted to mention this.
  - o Andrew: We understand the importance and need for biodiversity. The Master Plan Updates discusses about native species, and our first choice is native. But if we can't find a suitable native for the site conditions, we need to find something else. We recognize natives play a major role biodiversity and we strive for that whenever we can.
- Participant "Thank you for all the public outreach, thanks to Evan for being an ambassador, you put out a good effort to engage the community and the plan is reflective of that.
  - o Andrew: We've learned a lot from you, hope you've learned a lot from us, looking forward to finalizing and getting it out the door at the end of June.
- Participant- mentioned meeting Evan (Tree Ambassador) at a compost drop-off and offered to help any way they could.
- Question about removing suckers on the base of the tree?
  - o Andrew: The best way to get ahold of the City is call 311 and a technician will be sent to have a look at it and write up a request to have it addressed
- Participant asked "Can you put out a notice to tell people to not volcano mulch their trees, can you tell them that they're killing their trees?
  - o Andrew: This could be part of the educational outreach recommended in the Urban Forest Master Plan.

Below are the top choices (up to three) participants voted for after reviewing each Draft Recommendation Category:

Category #1: Community Engagement
- Option 1: Continue the newly formed Tree Ambassador Program **(3 votes)**
- Option 2: Partner with community-based organizations **(2 votes)**
- Option 5: Develop guidebook for public engagement / volunteers **(2 votes)**

Category #2: Funding
- Option 3: Demonstrate the need and advocate for increased annual Forestry budget allocations **(3 votes)**

Category #3: Protection and Health
- Option 3: Explore the use of volunteers, seasonal staff, school interns, and youth workers to

complete the pruning of young trees **(4 votes)**
- Option 6: Promote urban forest health through species diversity, emphasizing the selection of native species **(3 votes)**

Category #4: Storm Events
- Option 3: Document major storm events in a manner to meet federal reimbursement requirements **(4 votes)**
- Option 2: Review and update the Urban Forest Emergency Response Plan to guide response, recovery, and minimize the impact of events **(2 votes)**

Category #5: Construction
- Option 2: Improve communication across City departments to increase enforcement of tree protection standards **(6 votes)**

Category #6 Perpetuation and Expansion
- Option 2: Partner with community-based organizations **(3 votes)**

Category #7: Tree Equity
- Option 3: Increase overall tree stocking levels through tree planting initiatives and partnerships with community-based organizations **(5 votes)**

Category #8: Parks and Cemeteries
- Option 6: Work with community partners and volunteers to implement management plans and support planting initiatives and educational programs **(6 votes)**

Category #9: Promotion of the Urban Forest
- Option 3: Expand Annual Arbor Day Celebration to include festivals, community tree plantings, and/or tours **(6 votes)**

Community Survey Summary

Survey Overview

The City of Rochester's Forestry Division initiated an update to the City's Urban Forest Master Plan, last updated in 2012. Respondents were asked to complete a brief survey to help the City better understand the community's perception of trees, current issues with the urban forest, and opportunities for expanding and cultivating a healthy urban forest.

The survey was created and distributed using Instant Input; Instant Input is a web-based platform that includes custom surveys, events announcements, timelines, documents and updates that project owners can post on-demand. The community survey was made available online on the project's Instant Input page (https://www.app.instantinput.com/project/details/98efc893-f105-4885-aecc-90b93a3825cd) as well as in hard copy form. Hard copies of the survey were made available at all in-person public meetings in December 2023 and January 2024. Any meeting participant who chose to fill out a hard copy of the survey received an addressed and stamped envelope so that they could easily return the survey to the Project Team. Both the online and hard copy versions of the survey were available in both English and Spanish. The community survey was launched at the end of November 2023 and remained open through the end of March 2024. It garnered 425 unique responses from the community including four (4) Spanish language response submissions.

Data Limitations

The survey is only one strategy the City has employed for gathering public input on the Urban Forest Master Plan Update. Because the survey responses are self-selecting, they are not statistically valid. The survey alone cannot be used to find the "answer" or "solution", but it can in part help guide the community's long-term vision for the urban forest and identify the tools and actions needed to achieve that vision.

Survey Organization

The survey was divided into two sections: project-based questions and demographic questions. Below is a description of each section.
- The project-based section included questions about the City of Rochester's urban forest and how the community perceives and interacts with the natural environment around them. This section was designed to develop an understanding of the community's desires/needs as they relate to the urban forest. The feedback provided in response to these questions will help inform the project team about challenges the community faces related to Rochester's urban forest and opportunities for improving the urban forest.

- The demographic section of the survey included a set of questions focused on where respondents live, their age, race/ethnicity, and housing tenure. This information helps the project team understand who took the survey and how well survey responses represent the City of Rochester's population. As noted above, this survey is not statistically significant and the feedback presented in the summary below is not representative of the entire City's population.

Summary of Survey Results

Question 1 (Q1) of the survey was a multiple-choice question that asked: **"What is your overall perception of the City's urban forest?"** Out of the 421 respondents to this question, the majority at 51% responses had a "somewhat positive" perception of the urban forest**.** This was followed by 99 responses (24%) indicating a "very positive" positive and 37 responses (9%) as "indifferent". The remaining 16% indicated their perception of the urban forest was either "somewhat negative" or "very negative." Overall, the majority of respondents have a positive perception of Rochester's urban forest.

"What is your overall perception of the City's urban forest?"

- Very Positive
- Somewhat Positive
- Indifferent
- Somewhat Negative
- Very Negative
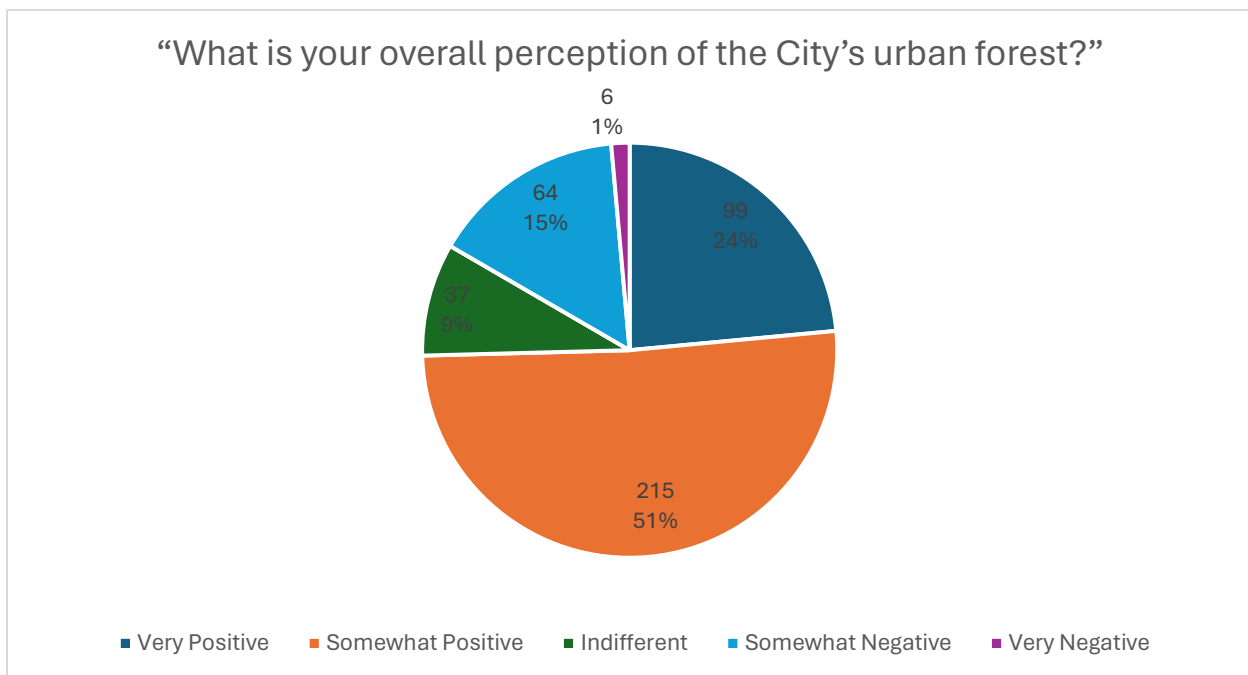
Question 2 (Q2) asks as an open-ended question, "**What actions could the City take to help improve your perception of the urban forest?"** The responses are categorized and summarized below:

- **Improved Maintenance and Management**: There is a call for better maintenance of existing trees, including proactive trimming, especially for older trees. Additionally, there's a desire for more aggressive replanting of trees that are cut down or lost due to various reasons. Calls for better pruning and maintenance of existing trees, timely replacement of downed trees, disease management, and proactive planning for replacing aging trees. Monitoring and controlling the replacement of nuisance trees.

- **Increased Tree Planting**: Suggestions for additional tree plantings in areas lacking greenery, particularly in tree-scarce neighborhoods and along highways. This includes planting trees in vacant lots and infilling throughout the city where trees have died or been absent.
- **Emphasis on Native Species**: The preference is for mostly native trees and plants, with calls for exclusive planting of native species to support regional wildlife and ecosystems. There's also a focus on planting fruiting trees like apples, mulberries, and cherries.
- **Equity and Accessibility**: Efforts to ensure equitable distribution of trees throughout the city, particularly in low-income neighborhoods. Suggestions include using data on poverty levels to prioritize tree planting in areas needing utility assistance and energy cost reduction. Suggestions include increasing tree diversity and including functional, medicinal, and edible species in food desert areas.
- **Community Engagement and Education**: Suggestions for community involvement through neighborhood associations and educational initiatives like guided walks to raise awareness about the importance of trees and their ecological impact. Also, suggestions to involve residents in tree planting decisions and provide information about tree maintenance plans. Suggestions include providing information about the types of trees being planted and allowing homeowners to choose the trees planted in their easements
- **Environmental Considerations**: Concerns about ecological impact and biodiversity, with calls for diversifying tree types, planting more native plants to support pollinators, and creating complete ecosystems in micro-forests and pocket parks.
- **Aesthetic and Recreational Enhancements**: Suggestions for creating more green spaces with amenities for recreational activities and events to draw attention to urban forestry initiatives.
- **Policy and Enforcement**: Calls for stronger enforcement of littering fines to protect trees, as well as policies to prevent unnecessary tree removal and combat invasive species like the Trees of Heaven.
- **Diversity in Tree Types**: Calls for diversifying tree types to improve resilience and aesthetics, including planting more tall varieties for adequate shade. Respondents advocate for increasing diversity in species selection and avoiding non-native ornamental trees.
- **Infrastructure Integration and Development**: Incorporating urban forest considerations into city planning and development projects, such as avoiding unnecessary tree removal and preserving older trees. Suggestions to integrate into urban infrastructure, such as planting more trees along streets and highways and incorporating trees into urban housing developments.
- **Climate Adaptation**: There's a call to adjust plantings to include warmer climate trees in preparation for global warming. This includes planting drought-tolerant and salt-tolerant species. Recommendations for planting trees that are resilient to climate change, as well as improving habitat connectivity for urban wildlife.

Question 3 (Q3) reads, **"In your opinion, what benefits do you and your community experience from the urban forest? Please choose all that apply."** and asks the respondents to choose from a multiple-choice list. The question is designed to better understand what the community identifies as advantages to City's urban forest. The results were evenly split between the responses provided in the survey with **"shade and cooling"** as the most selected response by a narrow margin followed by **"Beauty"**, **"improved mental well-being"**, "**air pollution removal"**, **"carbon storage/climate change mitigation"**. There were only two respondents that indicated, **"I do not believe trees**

provide any benefits". The individuals who selected the "**other**" choice were asked to share further detail – this is summarized in the bulleted list below.
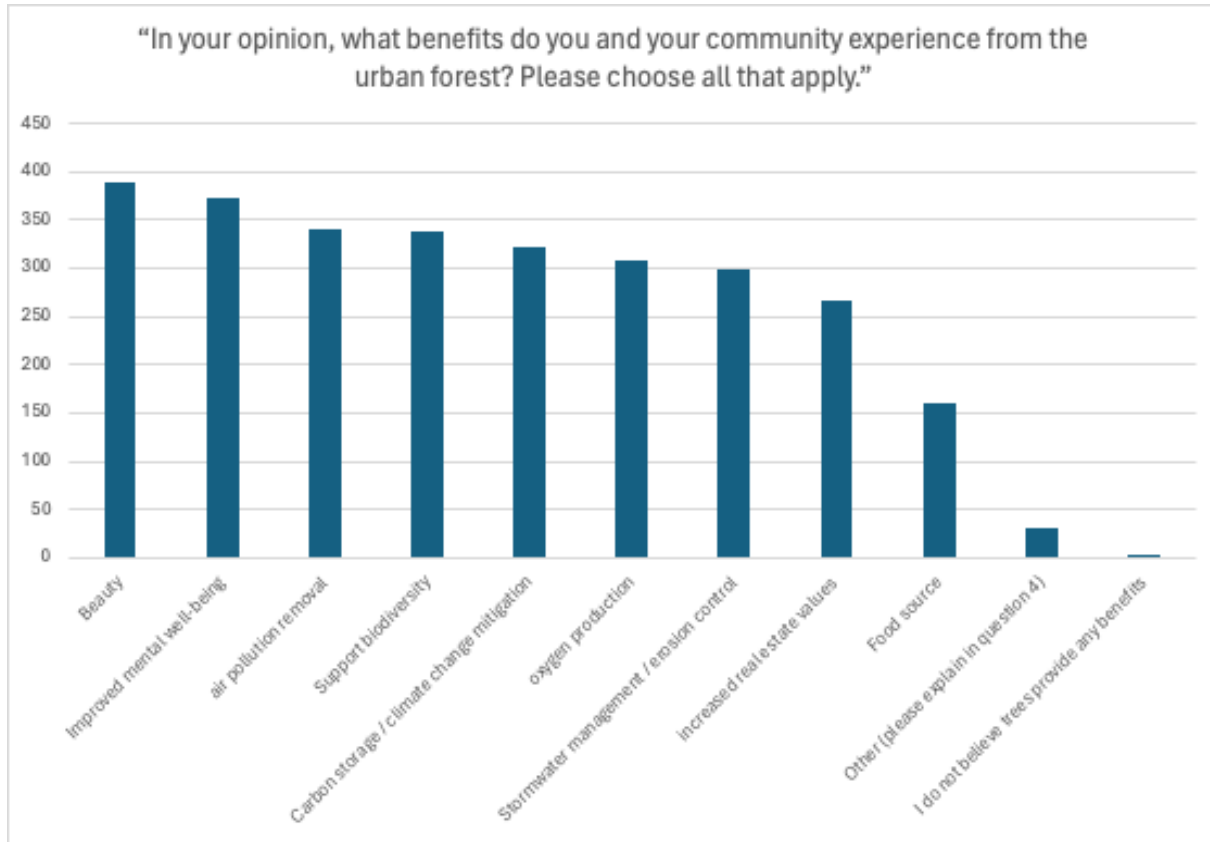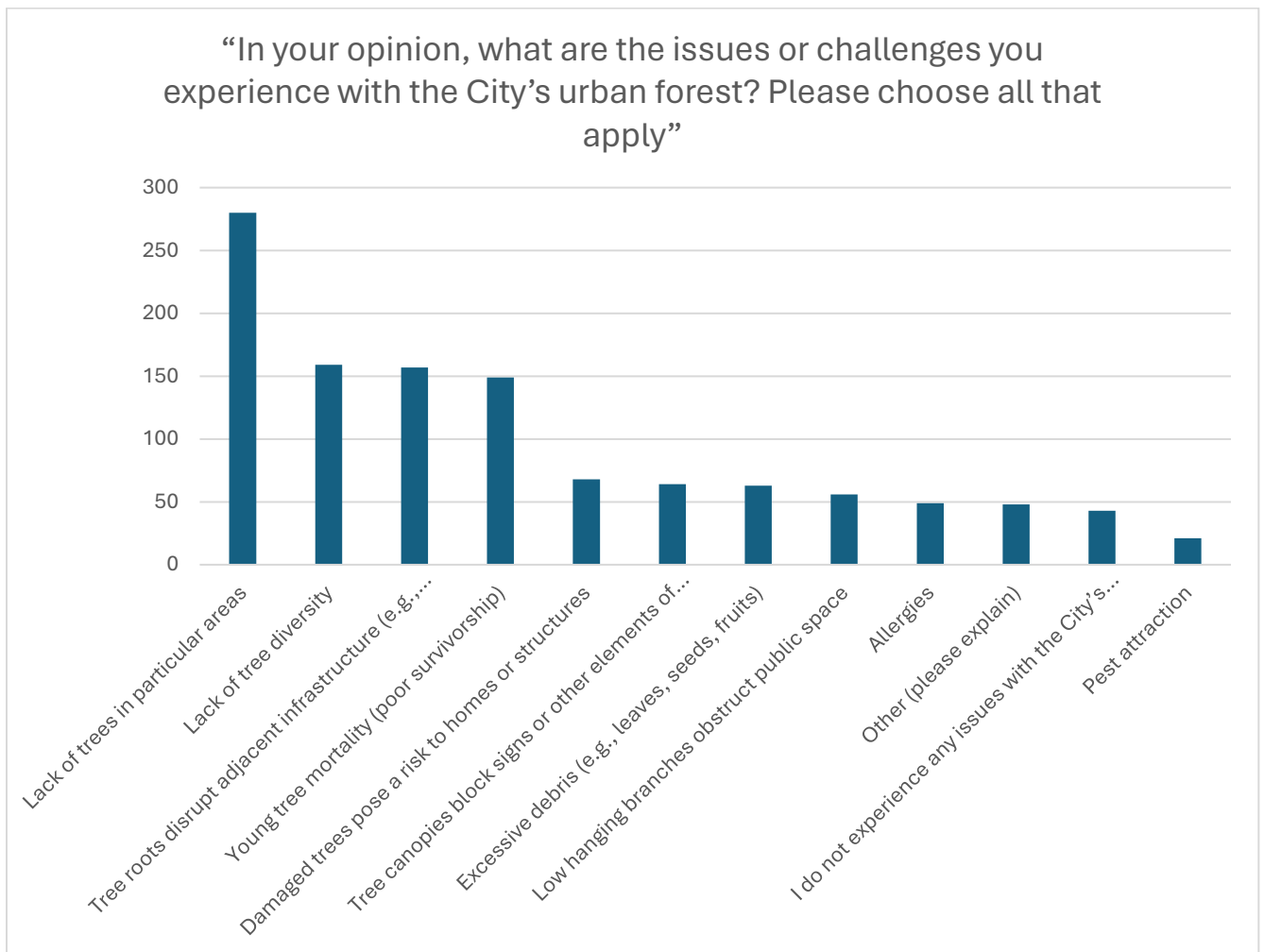

- **Environmental Preservation and Restoration:** Emphasize the importance of maintaining indigenous foliage and trees for biodiversity and ecosystem health. Avoid invasive plant species and prioritize native trees like oaks for their role in supporting local wildlife populations.
- **Community Character and Pride:** Highlight the significance of the urban forest in shaping community character and fostering a sense of pride among residents. Specific locations like Cobbs Hill, Pinnacle Hill, and parks along the Genesee River are mentioned as cherished urban forest areas.
- **Traffic Calming and Pedestrian Safety:** Note the role of mature street trees in traffic calming, making streets feel narrower to drivers and reducing speeding. Trees also provide protection for pedestrians from cars, contributing to safer sidewalks.
- **Economic and Cultural Significance:** Discuss the economic benefits of the urban forest in terms of tourism revenue and the cultural significance it holds for institutions like the Eastman School of Music. Mention the value of urban forests in attracting visitors and enhancing the city's reputation.
- **Community Engagement and Education:** Encourage community involvement in tree planting and care-taking activities, emphasizing the educational opportunities these initiatives provide. Propose the creation of "urban orchards" with fruit-bearing trees in public spaces for residents to enjoy and collect fruit.

4

- **Urban Design and Beautification:** Address the role of trees in urban design, emphasizing their contribution to good urban design principles and the need to avoid monoculture planting. Suggest planting trees in formal rows to enhance urban aesthetics.
- **Health and Well-being Benefits:** Highlight the mental and physical health benefits of trees, including stress reduction and a sense of peace and enjoyment they bring to neighborhoods.

This level of response highlights the significant range of benefits available and the diversity in use/consideration of the natural environment in the City of Rochester.

Question 4 (Q4) was a choose all that apply, multiple-choice question that aimed to better understand some of the concerns that the community experiences when considering the natural forest environment in Rochester. When asked, "**In your opinion, what are the issues or challenges you experience with the City's urban forest? Please choose all that apply**", respondents replied that the largest issue or challenge was "lack of trees in a certain area". The community responded looking for more tree diversity, healthier young trees that are well cared for through maturation, and better infrastructure maintenance around tree rooting. Further details available in the corresponding chart.

Chart: "In your opinion, what are the issues or challenges you experience with the City's urban forest? Please choose all that apply"

Categories (left to right):
- Lack of trees in particular areas: ~280
- Lack of tree diversity: ~160
- Tree roots disrupt adjacent infrastructure (e.g.,...): ~157
- Young tree mortality (poor survivorship): ~149
- Damaged trees pose a risk to homes or structures: ~67
- Tree canopies block signs or other elements of...: ~64
- Excessive debris (e.g., leaves, seeds, fruits): ~62
- Low hanging branches obstruct public space: ~55
- Allergies: ~48
- Other (please explain): ~47
- I do not experience any issues with the City's...: ~42
- Pest attraction: ~20

Individuals who selected the "**other**" choice were asked to share further detail – this is summarized in the bulleted list below.

- **Need for Safe Green Spaces:** There is a strong desire for more safe green spaces within the city to provide residents with natural environments for recreation and relaxation.
- **Emphasis on Native Plants and Trees:** There is a consensus on using only native plants and trees to maintain biodiversity and ecological balance within the urban environment.
- **Shortage of Street Trees:** Many areas lack an adequate number of street trees, leading to calls for increased tree planting initiatives, similar to those observed in other cities like Buffalo.
- **Homeowner Assistance Program:** There is a demand for a city program to assist homeowners with issues caused by trees, such as sewer line damage, emphasizing the need for comprehensive tree management policies.
- **Advocacy for Food Forests:** Suggestions for the creation of food forests to address the lack of edible fruit and nuts within the urban environment.
- **Concerns about Tree Destruction and Pruning:** Issues related to the destruction of trees during development, improper pruning techniques by contractors, and the negative impact on infrastructure caused by tree roots.
- **Community Engagement and Communication:** Residents express a desire for more communication from city officials regarding tree maintenance and management, as well as opportunities for community involvement in tree-related initiatives.
- **Infrastructure Challenges:** Concerns about storm drain blockage, sidewalk heaving due to tree roots, and lack of coordination between tree planting and infrastructure maintenance.
- **Balancing Views and Urban Canopy:** Residents highlight the need to balance the benefits of urban trees with considerations such as blocking views and obstructing infrastructure.

Question 5 (Q5) is an open-ended question that asks, **"What actions would you like to see the City undertake to address the challenges you experience with the urban forest?"** This question was indented to illicit specific and thoughtful responses from the survey participants. The responses are categorized below in a bulleted list for the purposes of the survey summary.

- **Increased Tree Planting:** There's a strong call for planting more trees, especially native species and those that adapt well to urban environments, across all streets and neighborhoods, along canals, and in parks. Specific locations like Parcel 5 and Lakeview Park Mall Boulevard were referenced by respondents.
- **Native Species and Biodiversity:** Many respondents emphasize the importance of planting native species, increasing biodiversity, and focusing on local species that support wildlife, including fruit-bearing trees, while maintaining a balance between male and female trees.
- **Equitable Distribution:** There's a concern for ensuring an equitable distribution of trees, particularly in tree-scarce neighborhoods and low-income areas with the most significant urban heat island effect. Encouraging homeowners and businesses without trees to plant them.

- **Tree Maintenance and Care:** There's a need for aggressive maintenance, including regular trimming, monitoring, and watering of newly planted trees, as well as addressing issues like root damage to sidewalks. Suggestions for using larger caliper trees on commercial corridors to discourage vandalism, more frequent trimming to prevent obstruction of business signage, and better education for city workers on proper tree planting techniques and maintenance.
- **Community Engagement:** Suggestions include collaborating with residents, Master Gardeners, neighborhood groups, corporations and volunteers for education, outreach, and tree planting initiatives, as well as increasing awareness about the benefits of urban forests. as creating volunteer programs or incentives for tree maintenance.
- **Environmental Impact:** Considerations for the environmental impact of tree planting and maintenance practices, including reducing the removal of mature trees and conserving open spaces with trees. Considering water drainage, addressing sidewalk issues caused by tree roots, and removing invasive species while planting natives to support biodiversity. Addressing issues like squirrel infestation and promoting low-maintenance alternatives to grass lawns.
- **Communication and Awareness:** Calls for better communication with residents about tree health reports, maintenance schedules, and the benefits of urban forests, as well as creating easy-to-follow information for caring for trees. Other programs include tree adoption programs, and transparency in tree-related processes and decision-making. Provide avenues to report tree related issues.
- **Safety and Accessibility:** Concerns about trees blocking signage, obstructing pedestrian signals, and creating hazards on sidewalks, with suggestions for wider sidewalks and trimming low-hanging branches.
- **Collaboration and Support:** Suggestions for collaboration with schools, businesses, and property owners to promote tree maintenance and support efforts to protect and preserve existing trees.
- **Financial Support:** Some respondents suggest financial assistance programs for homeowners to remove problematic trees and replant with beneficial species.
- **Long-Term Planning:** Suggestions include long-term planning to double the urban forest, increase canopy cover, and create mini-ecosystems or food forests.
- **Infrastructure Integration:** Considerations for integrating trees with urban infrastructure, such as sidewalks, bike lanes, and street lighting, while ensuring safety and accessibility. Recommendations for considering tree placement in construction projects, preventing damage to sidewalks and roads caused by tree roots, and avoiding planting trees that drop debris or interfere with infrastructure.
- **Public Awareness and Education:** Suggestions for marketing campaigns to promote tree appreciation and awareness, as well as educational initiatives for residents, children, and developers on the benefits of trees and proper tree care.
- **Funding and Resources:** Calls for increased funding and manpower to support tree planting, maintenance, and management, as well as investing in green spaces and urban forestry programs.
- **Gender Diversity in Tree Planting:** Suggestions to plant more female trees to limit pollen production and increase diversity.
- **Expansion of Green Spaces:** Requests for expanding public greenspaces with trees, particularly in areas with limited greenspace, and the need for targeted tree replacements in specific locations, such as Cobbs Hill.

Question 6 (Q6) is an open-ended question where respondents are asked, **"In which neighborhoods, parks, and/or street corridors would you like to see more trees planted?"** This question served as a pathway to better understand geographically where the community desired further forestry efforts. The responses are categorized below in a bulleted list for the purposes of the survey summary.

- **Downtown Rochester:** Including areas like Edgerton, downtown core, and parcels along commercial corridors. Streets mentioned include Village Gate, Joseph Ave, and Main St. East Main, St Paul Street, Clinton Ave, Goodman St, such as St. Paul Blvd, South Wedge, Swillburg, Portland Avenue, Atlantic Avenue, East Avenue, and areas near the Public Market, were highlighted as needing more trees.
- **Specific Neighborhoods:** Beechwood, Upper Monroe Ave, North Marketview Heights, 19th Ward, Lyell Otis Area, North Winton Village, Upper Falls neighborhood, and Charlotte. Other areas include Lake Avenue, Ford Street, Troup Street, and Ridge Road in Irondequoit, Broadway west of Goodman, Genesee St., Norton Village Park, Atlantic Ave., Homestead Heights neighborhood, North Winton Road, Culver Road, Webster Ave, and State Street north of the railway bridge. Examples include Winton Rd between Blossom and the railroad tracks, Union Street, University Ave, Lake Ave, and 104 (West Ridge Road).
- **Parks and Recreational Areas:** Pinnacle Hill, Cobbs Hill Park, Pulaski Park, Farmington Park, and College Town, particularly around basketball courts and tennis courts. Other areas include Genesee Valley Park, Culver Road Park, Brown Square, Seneca Park, Charlotte Beach, Edgerton Park and the Riverwalk areas.
- **Major Roadways:** Such as along 490, Lake Ave, and Plymouth Exchange for noise reduction and beautification.
- **Public Properties:** Schools, malls, and cemeteries, community gardens, and other public spaces to benefit children and families. A desire for more walkable and green streets, with suggestions for bike lanes, medians, and sidewalk trees. Also, suggestions were made to include trees in areas of high foot traffic.
- **Revitalization Areas:** High Falls district, Corn Hill, and sections along the Genesee River.
- **Commercial Developments:** Suggestions for incorporating more trees into commercial developments and requiring a certain number of trees per acre of pavement.
- **Urban Redevelopment Areas:** Focus on locations where trees have been removed due to development and areas with vacant lots and underutilized spaces, in the Lock 66 Neighborhood, the parcel outside the Hungerford and along business corridors.
- **Low-Income and Minority Communities:** Prioritizing tree planting in historically overlooked neighborhoods with low tree coverage like 14621, 14605, North Clinton, 19th Ward, Bay Street, the Crescent, and the Kodak area.
- **Formerly Redlined Areas:** Targeting tree planting efforts in areas identified as formerly redlined, emphasizing equity and community engagement.
- **Fruit Tree Planting:** Requests for planting fruit trees in public spaces, parks, and strips of land between streets, particularly in areas like Ellison Park, Upper Falls, and Brown Square
- Suggestions for diversity in tree species, including avoidance of evergreen trees, and consideration for shade coverage in areas frequented by children and families.

Question 7 (Q7) was another select all that apply multiple-choice question that asked the individuals taking the survey to identify specifically what they would like to see planted through

future efforts. In response to, "**What types of new trees would you like to see planted in the City of Rochester?"** the community shared the following results. The most selected answer was "t**rees native to the region**" closely followed by "**Trees that attract pollinators and birds**" which could indicate that the community is prioritizing the growth and health of the urban forest. Further details are available in the corresponding chart.
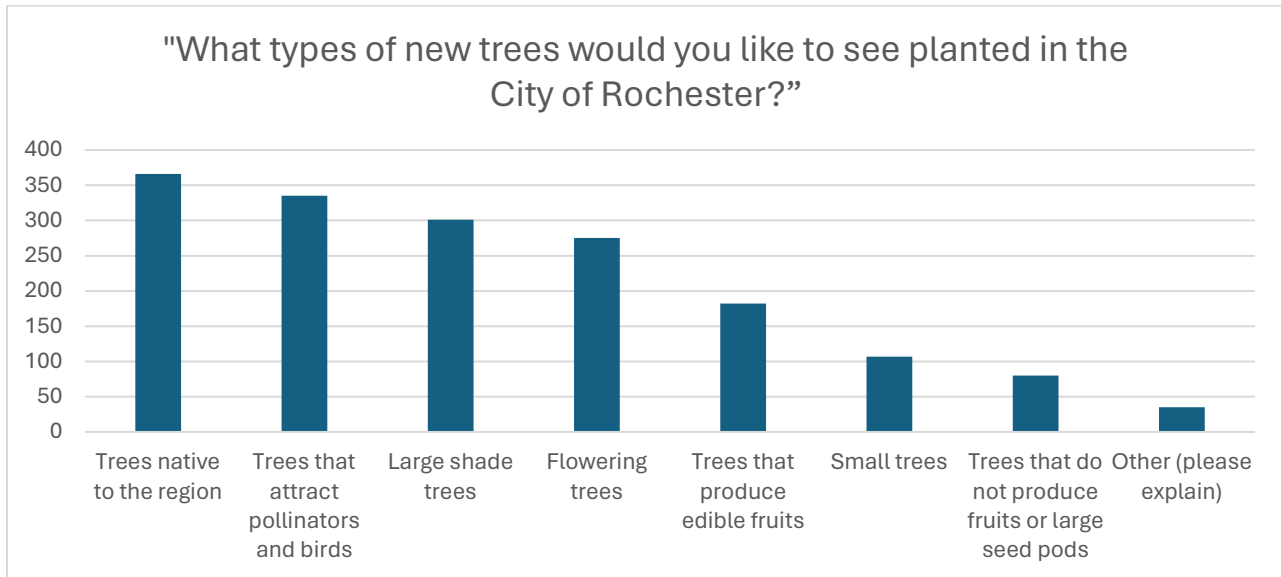
"What types of new trees would you like to see planted in the City of Rochester?"

Individuals who selected the "**other**" choice were asked to share further detail – this is summarized in the bulleted list below for the purposes of this survey summary.

- **Preference for Native Trees:** There is a strong emphasis on planting native trees to the region, ensuring they are disease-resistant and habitat-friendly.
- **Consideration for Urban Context:** Trees planted along city streets should prioritize shade and beauty rather than fruit production. Evergreen trees are suggested to add greenery during winter.
- **Climate Resilience:** Concerns about changing weather patterns lead to requests for trees that will thrive in future decades and continue to do well as the climate warms.
- **Diversity of Tree Species:** While native trees are preferred, there's also a call for diversity, including both native and non-native trees in public areas such as parks, malls, and cemeteries. Suggestions also included planting trees on historic parks like Lakeview Park Mall Boulevard and restoring them with missing tree species.
- **Community Engagement:** Requests for involvement in tree planting decisions, particularly in areas like vacant residential lots, to create "mini food forests" and ensure appropriate tree selection.
- **Sensitivity to Allergies and Nuisance:** Some residents express concerns about allergies, messiness from fruit trees, and the invasive nature of certain tree species like Bradford pears.
- **Aesthetic Considerations:** Preferences for trees that change color with the seasons, add beauty to streetscapes, and create a sense of outdoor rooms along city streets.
- Specific tree species suggestions include Chickasaw plum, red mulberry, serviceberry, pawpaw, and persimmon, tailored to the local climate and ecosystem.

Question 8 (Q8) asked, **"Do you believe that Division of Forestry's tree removal policy meets the needs of your community?"** and offered multiple-choice responses. 67% of respondents to this question answered, "**I am not aware of the Division of Forestry's tree removal policy**" which indicates that there is room for education and outreach as it relates to the City's urban forest and the tree removal process. Further details available in the corresponding chart.

"Do you believe that Division of Forestry's tree removal policy meets the needs of your community?"
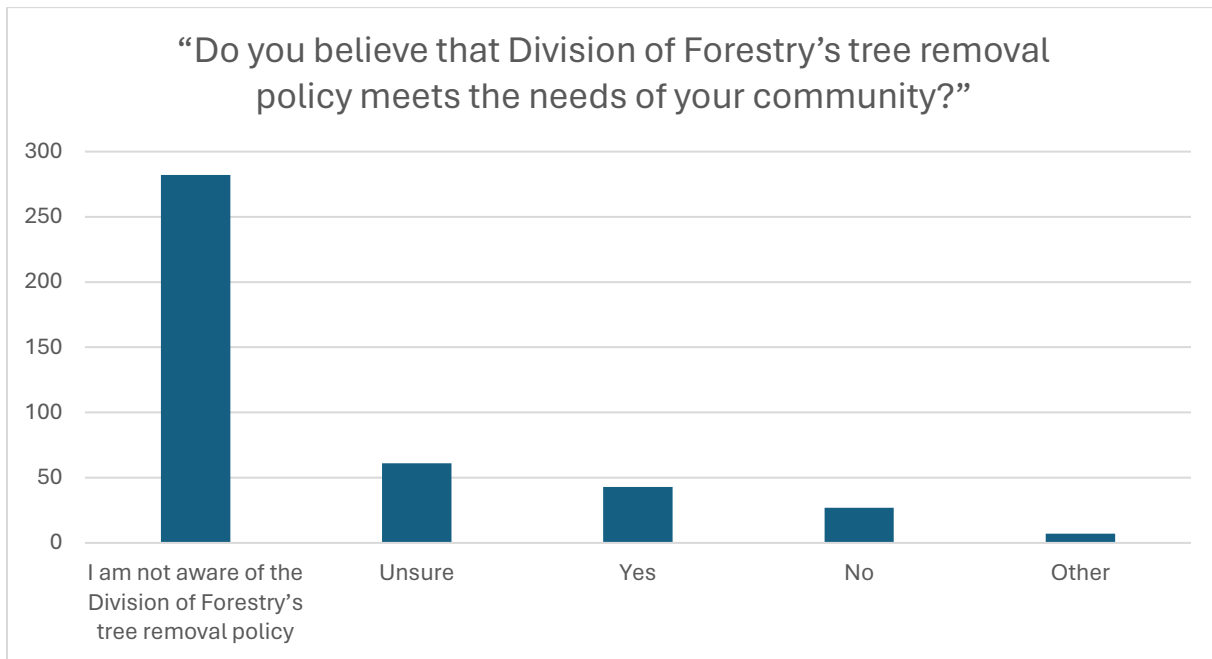
Individuals who selected the "**other**" choice were asked to share additional detail – this is summarized in the bulleted list below for the purposes of this survey summary.

- **Tree Maintenance and Replacement:** Concerns about the removal of trees, especially healthy ones, and the need for prompt replacement of removed trees. Suggestions include a 1-for-1 replacement policy and replanting in the same location or nearby.
- **Public Engagement and Transparency:** Calls for public sessions to discuss tree removal policies and increased communication regarding tree trimming and removal decisions.
- **Safety Considerations:** Emphasis on removing dead or diseased trees for safety reasons, particularly those close to sidewalks, and addressing potential hazards posed by damaged or infected trees.
- **Quality of Tree Replacement:** Requests for improved quality control in tree replacement efforts, ensuring that the species chosen are suitable for the area and meet residents' preferences where possible.
- **Authority and Accountability:** Concerns about the authority of the forestry division and the need for better education and training regarding tree health and maintenance.
- **Health Considerations:** Requests for flexibility in tree removal policies, especially for residents with medical conditions that may be exacerbated by certain tree species.

- **Awareness and Engagement:** Lack of awareness about the city's forestry division and its activities, suggesting a need for increased public engagement and education on forestry-related matters.

Question 9 (Q9) was a demographic based "yes or no" question and asked, "**Are you a resident of the City of Rochester?"** 365 community members answered "**yes**" and 55 answered "**no**". An overwhelming majority (87%) of respondents live in the City.

Question 10 (Q10) followed by asking respondents, "**What is the zip code of your primary residence?"** 35 unique zip codes were collected; the highest number of responses were from Rochester zip codes 14620 (86 respondents with this zip code) and 14607 (63 respondents with this zip code). Most responses were received from New York State residents based on the provided zip codes.

Question 11 (Q11) was a multiple-choice question that asked, **"Do you own your home or rent?"** A total of 416 responses were received. Most of the individuals responding (273) indicated they were homeowners while 129 respondents shared that they were renters. There were 14 responses that indicated "other".

Question 12 (Q12), "Do you operate a business in the City of Rochester?", was a yes or no question. 42 individuals indicated "yes" they were a business owner in the City, and the majority of responses (375) indicated "no". Further targeted outreach may be needed to ensure comprehensive coverage of area business owners.

Questions 13 (Q13) then followed up with a fill in option, **"If you operate a business in the City, what is your business zip code?"** The subsequent zip codes were provided by respondents with the response frequency indicated in the adjacent parentheses.

- 14620   (86)
- 14607   (63)
- 14609   (53)
- 14610   (44)
- 14619   (27)
- 14613   (19)
- 14611   (17)
- 14617   (12)
- 14608   (10)
- 14612   (10)
- 14618   (9)
- 14604   (8)
- 14606   (8)
- 14621   (7)
- 14615   (6)

- 14623   (5)
- 14625   (5)
- 14616   (4)
- 14605   (4)
- 14624   (3)
- 14468   (3)
- 14526   (3)
- 14580   (3)
- 14586   (2)
- 14450   (2)
- 12208   (2)
- 14614   (2)
- 23188   (1)
- 14534   (1)
- 14546   (1)
- 13613   (1)
- 14850   (1)
- 14543   (1)
- 14514   (1)
- 14472   (1)

Question 14 (Q14) asked, **"What is your age?"** The age group with the largest number of respondents was "**31-45 years old**" with 43% of responses. The next most selected age range was "**19-30 year olds**" with 19%. This indicates that the survey was primarily taken by young and middle-aged adults.
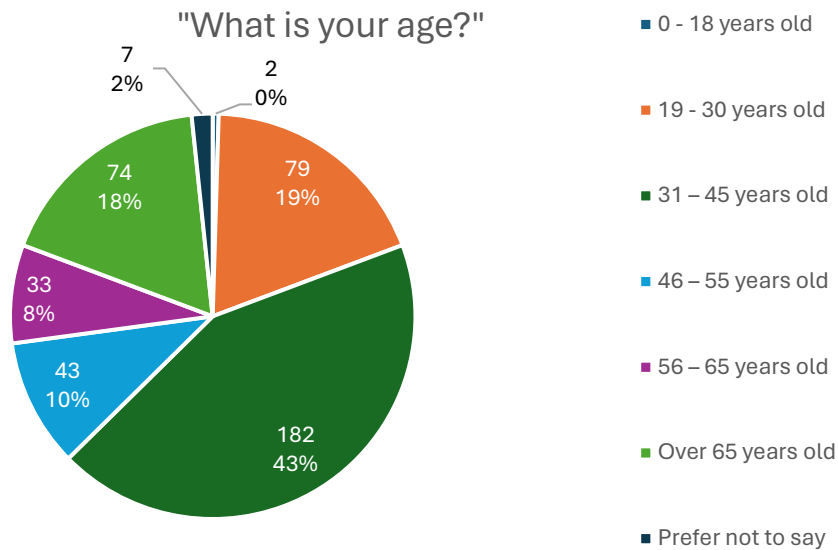
Question 15 (Q15) asked respondents in multiple-choice format to select, "**With which race/ethnicity do you identify (please choose all that apply)?**" The options given to select from are listed below.

- Native American or Alaska Native
- Asian or Asian American
- Black or African American
- Hispanic or Latino/a
- Middle Eastern or North African
- Native Hawai`ian or Pacific Islander
- White or European
- Prefer not to say

A majority of the 415 survey respondents that participated in the question identified themselves as only **"White or European"** (316) followed by 42 respondents indicating that they **"prefer not to say"** only. Of the remaining responses, 19 were **"Black or African American"** only, and 12 as **"Hispanic or Latino/a"** only. **"Native American or Alaska Native"** was selected 3 times and **"Asian or Asian American"** only was selected once (1). The remaining 22 responses indicated multi-ethnic/multi-racial identifying individuals that selected multiple choices that applied to themselves including but not limited to, **Middle Eastern or North African** and **Native Hawai`ian or Pacific Islander**.
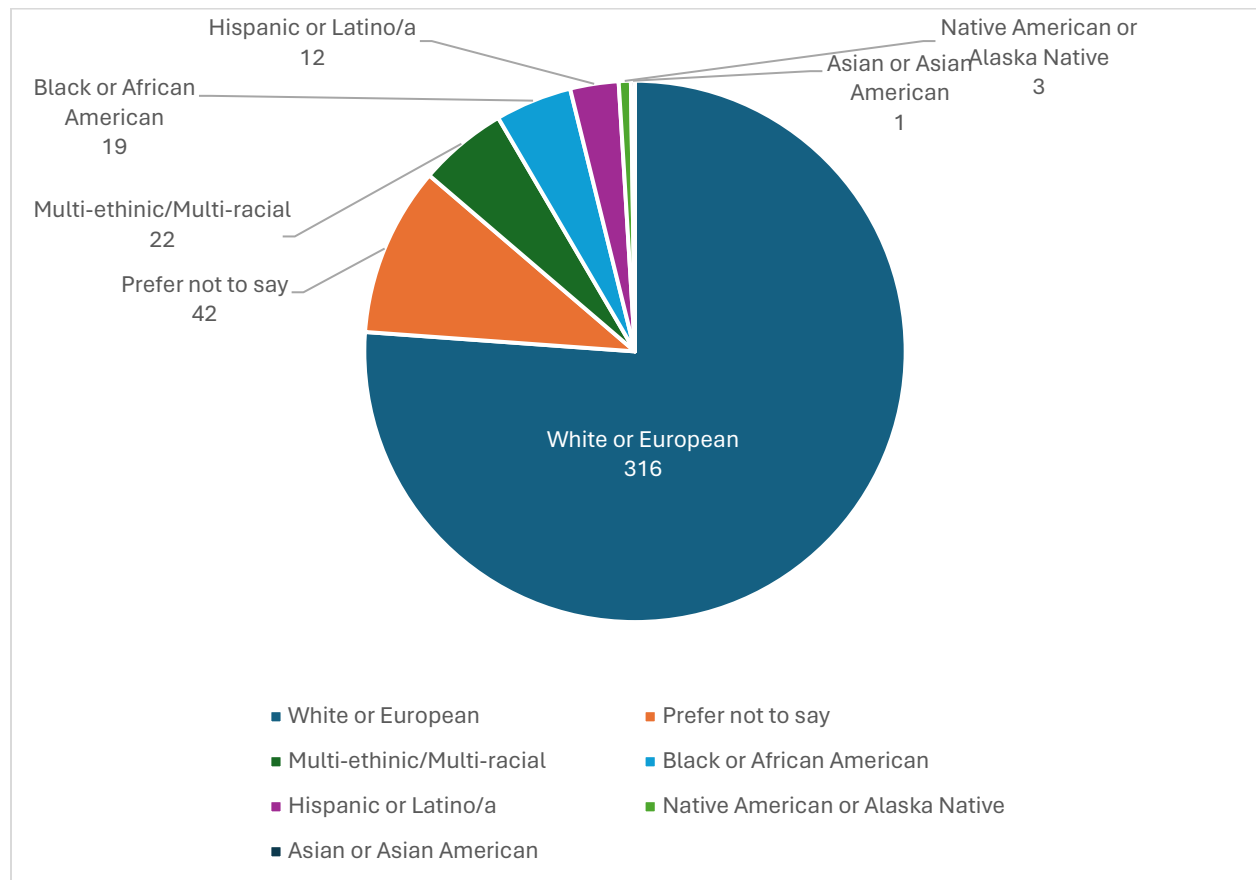
Pop-Up Event Meeting Summary

THE CITY OF ROCHESTER
Forestry Division
& Urban Master Forest Plan

SUMMARY OF PUBLIC FEEDBACK

Overview of Pop-Ups Held in March 2024

Five in-person pop-ups were held in March 2024 to raise awareness about the Urban Forest Master Plan Update, to promote the community survey, and to gather the community's feedback on current perceptions, future vision, and current issues and opportunities related to the City's urban forest. The locations, date, and times of each pop-up are described below:

1. **Central Library**
   115 South Ave., Rochester, NY 14604
   Friday March 8th, 1:00-4:00pm

2. **Sully Branch Library (2 times)**
   530 Webster Ave, Rochester, NY, 14607
   - Tuesday March 12th, 2:00-5:00pm
   - Wednesday March 13th 2:00-5:00pm

3. **Lyell Branch Library**
   956 Lyell Ave, Rochester, NY 14606
   Thursday March 14th, 2:00-5:00pm

4. **Maplewood Library**
   111 Dewey Ave. Rochester, NY 14613
   Tuesday March 19th, 12:00-3:00pm

5. **Seed Swap at Edgerton R-Center**
   41 Backus St, Rochester, NY 14608
   Saturday March 30th, 2:00-4:00pm

Advertisement of the Pop-Up

The five pop-ups were advertised through the City of Rochester's webpage for the Urban Forest Master Plan and through the City's social media account.

Attendance at the Pop-Ups

The team engaged with approximately 110 people total from all the pop-up events.

Format of the Pop-Ups

Each of the five pop-ups followed the same format. At the table, attendees were asked to respond to the questions listed below. They also were encouraged to provide their feedback online through the Urban Forest Master Plan survey.

- *What kinds of trees should we plant?*
  The second question asked participants to place a sticker under the category of trees they would like to see planted. The options included: flowering trees, trees with edible fruits, trees without fruits/seed pods, trees for pollinators/birds, large shade trees, and native trees. The same board was presented at each pop-up, and attendees were able to see the feedback provided by previous pop-up attendees.

- *Where should we plant more trees?*
  The first question asked participants to place a sticker on the map of Rochester where they would like to see more trees planted. The same map was presented at each in-person meeting, and attendees were able to see the feedback provided by previous pop-up attendees.

- *Love Letter to a Tree Activity*
  Participants were encouraged to write a story about a local tree that was meaningful to them or simply a few words about why they love trees. These anecdotes were written on paper leaves that were then hung on the "community tree" and displayed on the table.

- *What current issues or challenges do you experience with the City's urban forest?*
  Participants were asked to provide their responses on sticky notes.

- *What actions would you like to see the City take to resolve these issues?*
  Participants were asked to provide their responses on sticky notes.

Public Feedback

A summary of public responses to the questions asked at pop-ups are presented down below, followed by key takeaways from all pop-ups. The detailed feedback received at each pop-up is included in the Appendix.

Discussion Question #1: What types of trees would you like to see planted across the City?

In addition to placing a sticker on where they wanted to see more trees, one comment that came up was to stop planting tree species that are overpopulated throughout the urban forest.

Table 1. Tree Preferences at Pop-Ups in March 2024

	Flowering trees	Trees w/ Edible Fruits	Trees w/o fruits / seed pods	Trees for pollinators / birds	Large shade trees	Native trees
Central Library Date: 3/8/24 Attendees: ~20	16 (80% of attendees)	24 (100% of attendees)	2 (10% of attendees)	15 (75% of attendees)	13 (65% of attendees)	14 (70% of attendees)
Sully Branch Dates: 3/12/24 and 3/13/24 Attendees: ~30	10 (33% of attendees)	26 (87% of attendees)	2 (1% of attendees)	2 (1% of attendees)	6 (20% of attendees)	8 (27% of attendees)
Lyell Branch Date: 3/14/24 Attendees: 2				1 (50% of attendees)	1 (50% of attendees)	1 (50% of attendees)
Maplewood Branch Date: 3/19/24 Attendees: ~18	2 (11% of attendees)	1 (1% of attendees)	2 (1% of attendees)	2 (1% of attendees)	2 (1% of attendees)	4 (22% of attendees)
Seed Swap Event at Edgerton R-Center Date: 3/30/24 Attendees: 40	19 (48% of attendees)	25 (63% of attendees)	1 (1% of attendees)	24 (60% of attendees)	14 (35% of attendees)	31 (78% of attendees)

Discussion Question #2: In which neighborhoods parks, and/or street corridors would you like to see more trees planted?

The most common themes included:
- **Urban Greening and Beautification**: Suggestions include transforming vacant lots into pocket parks and planting trees in parking lots or around businesses to improve aesthetics and create more green spaces in urban areas.
- **Community Health and Access to Nature**: Concerns about "food apartheid" and suggestions for planting fruit trees or edible and medicinal herbs in underserved neighborhoods like 14621 indicate a desire to promote community health and access to fresh, nutritious food.
- **Tree Maintenance and Health**: Comments about the condition of trees, particularly those around Norton and in vacant lots, highlight concerns about tree health and the need for maintenance, including removing old or dying trees to ensure the vitality of urban forests.
- **Geographic Equity**: References to specific neighborhoods like the northeast and northwest suggest a focus on geographic equity in urban greening initiatives, ensuring that all communities have access to trees and green spaces.

Additional Comments
- Make more vacant lots into pocket parks
- Encourage city businesses with parking lots to plant trees in them or around them
- In areas where we experience food apartheid
- Edible & medicinal herbs
- Trees around Norton aren't full – what's wrong with them?
- Remove old, dying trees
- Northeast and northwest
- Fruit trees in 14621
- Trees in vacant lots

Discussion Question #3: What current issues or challenges do you experience with the City's urban forest?
The most common themes included the need for more trees, improved maintenance practices, biodiversity conservation, and addressing public health and safety concerns in outdoor environments.

Here are the more specific themes discussed:

- **Desire for More Trees:** Multiple comments express a desire for more trees in various contexts, such as on walking trails, around houses, and for providing shade.
- **Maintenance Concerns:** Concerns are raised about the maintenance of existing trees, particularly around old houses, with mentions of branches and bushes blocking sidewalks and trees being messy or not well-maintained.
- **Biodiversity and Native Species:** Suggestions are made for planting more native and keystone species to enhance biodiversity and promote ecosystem health.

- **Public Health and Safety:** There are mentions of concerns about ticks and Lyme disease, indicating a need for measures to address public health risks associated with outdoor spaces.
- **Responsibility and Accountability:** Questions are raised about who is responsible for the upkeep of trees and green spaces, suggesting a desire for clarity and accountability in maintenance efforts.
- **Environmental Quality:** Issues such as trash and the unequal distribution of trees are highlighted, indicating a broader concern for environmental quality and equity in access to green spaces.

Discussion Question #4: What actions would you like to see the City take to resolve these issues?

The most common themes from this question included promoting native biodiversity, ensuring adequate green infrastructure in urban development, and engaging the community, particularly youth, in environmental efforts.
Here are the more specific themes discussed:

- **Mandated Tree Planting**: Suggestions for mandated tree planting requirements for new construction projects, indicating a desire to ensure urban greenery keeps pace with development.
- **Promotion of Native Species**: Calls for planting more native and keystone species to enhance biodiversity and support local ecosystems.
- **Utilization of Programs**: Support for continuing programs like the clean sweep program, indicating a recognition of the importance of ongoing efforts to maintain and improve urban green spaces.
- **Connectivity and Accessibility**: Desire for a more connected tree network and increased walking paths with ample tree shade, highlighting the importance of accessibility and connectivity in urban green infrastructure.
- **Tree Maintenance and Safety**: Requests for assistance in removing old, dangerous trees and dead stumps, emphasizing the importance of tree maintenance and safety.
- **Youth Employment and Community Engagement**: Suggestions to hire local youth to help with tree planting, indicating a desire for community engagement and youth employment opportunities in environmental initiatives.

Love Letter to a Tree Activity comments:
Here are the most frequent themes from the comments received:

- **Environmental Benefits**: Many comments highlight the importance of trees for clean air, oxygen production, and their role in combating CO2 levels.
- **Aesthetic Value**: Several remarks express admiration for the beauty of trees, including their color, foliage, and the way they change throughout the seasons.
- **Functional Advantages**: There's a frequent mention of practical benefits such as shade, cooling effects, and the provision of habitats for wildlife like birds, butterflies, and bees.

- **Emotional Attachment and Gratitude**: Many comments express love, appreciation, and gratitude towards trees for their various contributions to health, well-being, and the environment.
- **Memorial and Tribute**: Some messages honor the memory of individuals or express appreciation for trees in memory of loved ones.
- **Cultural References**: A few comments touch on cultural practices such as syrup production from trees or references to literary works ("O lofty tree, How I love thee!").

Themes from other conversations with community members:

- **Urban Tree Planting and Maintenance**: Suggestions are made to plant trees in various locations throughout the city, including abandoned tree planters, playgrounds, sidewalks, and between buildings. There's also a call for better maintenance of green spaces to ensure the health of existing trees.
- **Community Engagement and Education**: The need for increased communication and engagement with the community, including direct contact with city council, utilizing grassroots organizations, and offering classes on tree care and pruning.
- **Promotion of Biodiversity and Environmental Awareness**: Recommendations include incorporating more fruit trees into public spaces, promoting healthy lifestyles through programs like the 5210 initiative, and aligning with biodiversity conventions to assess and enhance Rochester's biodiversity.
- **Infrastructure and Transportation**: Suggestions for creating tree-lined bike trails and utilizing radio stations to promote urban forest initiatives indicate a desire to integrate tree planting and maintenance into urban planning and transportation projects.
- **Promotion of Public Spaces and Institutions**: Ideas for utilizing public spaces like the Lamberton Conservatory to promote urban forest plans and incorporating tree planting into educational programs at schools demonstrate a desire to enhance community spaces and engage residents of all ages in tree stewardship.

APPENDIX.
Detailed Public Feedback From Public Meetings in March 2024

Central Library Pop-Up
Friday, March 8, 2024 from 1:00-4:00pm (Green Stickers)
115 South Ave., Rochester, NY 14604

<u>**Team**</u>
James Hart (Forestry Division)
Michael Warren Thomas
Stephanie Hyde
Danielle Tinkleman

Love Letter to a Tree activity Comments
- More trees please
- Trimming by City of older large trees
- Clean Air
- They provide excellent shade. Great for bird watching
- List of helpers for doing garden work
- Ahh shade
- Native trees
- Fruit trees
- We need trees. We breathe their co2 and they breathe our breath
- Thank you for calming traffic and our minds with your beautiful foliage
- For the love of all trees. Decolonize cannabis
- Trees, especially native trees are important for the ecosystem. They also improve our quality, provide shade/cooling, and host beneficial insect species
- Smell
- Clean air and privacy
- Shade trees
- Flowering trees (x2)

1. **What types of trees would you like to see planted across the City?**
    Responses to this question are included in the main pop-up summary on page 3.

    Additional Comments
    - Stop planting tree species that are overpopulated

2. **In which neighborhoods parks, and/or street corridors would you like to see more trees planted?** *Responses to this question are included in the main pop-up summary on page 4.*

    Additional Comments
    - Make more vacant lots into pocket parks

3. **What current issues or challenges do you experience with the City's Urban Forest?**
    - I'd like to see more trees on our walking trails!
    - Old trees around old houses are not well-maintained

- There could be more native and keystone species

4. **What actions would you like to see the City take to resolve these issues?**
   - Mandated planting for new construction projects
   - Plant more native and keystone species

Other comments documented from conversations:
- There are less edible trees on Webster Ave. They have been taken down but people could benefit from them coming back
- Plant trees in abandoned tree planters throughout the city
- Cyclists love tree lined, protected bike trails
- Should bring paid worker program that could help with outside urban forest work
- Connect with more grassroots organizations instead of always going to non-profits
- There should be more ways to have direct contact with City Council communications to share concerns
- Should put pollinator trees back between the shelter and Kodak building. Grass around that area is not well-kept
- Urban Forest Update needs to provide a good analysis of where to go

Photos:

Sully Library Pop-Up
Tuesday, March 12, 2024, 2:00-5:00pm (Blue stickers)
Wednesday, March 13, 2024, 2:00-5:00pm
530 Webster Ave, Rochester, NY, 14607

Team

3/12
James Hart (Forestry Division)
Stephanie Hyde
Syd Ferree

3/13
Melissa Rivelis (Forestry Division)
Stephanie Hyde
E Turpin
Kathryn Kelly
Paul Tremblay

Love Letter to a tree activity comments
- Thank you for providing health and wellness
- Love trees
- Thank you for shade
- I love trees
- I love trees
- I like how it's green
- I like the color of the leaves
- Bees
- Flower tree
- Apple trees
- Flower trees
- Butterflies
- Get big enough to hug
- Air
- They provide shade and keep us cool
- I like how its help you with the sun
- The color of the leaves
- Butterflies
- I love trees. I love the smell
- I like the colors of the leaves
- Decorating trees
- Long live your memory Janet Jordan #Thatwhatshesaid (For the daughter of a rec staff member who was killed in the neighborhood)
- I like the smell and the color
- The smell
- Trees help produce oxygen

- I love apple trees
- I like how they help earth
- I like what Syd likes
- Tree help us live and block the sun
- Colored leaves
- I like how they smell
- Bark
- I love apples
- It gives us air
- In Loving Memory of Verel Rose
- Blesses us
- Trees sprouting
- Shade
- Natural formation of the tree bark
- They smell good
- I like that the leaves change color in the fall
- I like trees because they are pretty
- I love trees (x3)

1. **What current issues or challenges do you experience with the City's Urban Forest?**
   - More trees
   - Scared of ticks and Lyme disease
   - Who is responsible for the upkeep?
   - Branches and bushes blocking sidewalks

2. **What actions would you like to see the City take to resolve these issues?**
   - Continue utilizing the clean sweep program

Additional comments:
   - Having more ways for people to connect with trees would help encourage more people to care about trees
   - Utilize radio stations in the area to promote the survey and upcoming events
   - Have more fruit trees at schools and incorporating them with the 5210 program to promote healthy lifestyle. Could also have the students take care of the trees
   - Plant more trees at playgrounds and on sidewalks to provide shade
   - Lamberton Conservatory would be a great way to promote the Urban Forest Master Plan Update

Photos:

Lyell Branch Pop-Up
Thursday, March 14, 2024 2:00-5:00pm (Red stickers)
956 Lyell Ave, Rochester, NY 14606

Team
Dan VanKouwenberg (Forestry Division)
Stephanie Hyde
Paul Tremblay
Lydia Rivera
Syd Ferree

Tree leaf activity:
- No leaves were collected at this pop-up.

Instead, we ended up going to door to door up Lyell Avenue. Here are the businesses and organizations we stopped at:
- o Valero gas station (Left flyers and laminated sign)
- o Burger King (Left flyers and laminated sign)
- o Holy Apostles Church (Left flyers and laminated sign)
- o Cameron Community Ministries Teen Center (Left flyers and sign)
- o Dunkin Donuts (Left flyers and laminated sign)
- o Wu's Discount Inc (Left flyers and laminated sign)

What current issues or challenges do you experience with the City's urban forest?
- Not enough tree shade
- Unequal distribution of trees

What actions would you like to see the City take to resolve these issues?
- A more connected tree network
- More walking paths with ample tree shade

Additional Feedback given:
- Offer classes for how to prune trees-provide more opportunity to learn and long-term residents
- Assess Rochester's biodiversity by using the city biodiversity index made by the convention on biological diversity
- Rochester should align more with the convention on biological diversity

Photos:

Maplewood Library Pop-Up
Tuesday, March 19th 12:00-3:00pm (Yellow stickers)
111 Dewey Ave. Rochester, NY 14613

Team
Stephanie Hyde

Love Letter to a Tree Activity Notes:
- Thanks for the syrup
- O lofty tree, How I love thee!
- A colorful tree all around

Stephanie also spoke with Brian DiNitto, the New Americans Librarian, who is in charge of teaching English classes. After talking to him about the project, he asked if she could explain the Urban Forest Master Plan Update to his students. While I explained the project he recorded it, to play as a presentation for his students later.

Seed Swap Pop-Up
Saturday, March 30, 2024 from 1:00 – 4:00 p.m. (red stickers)
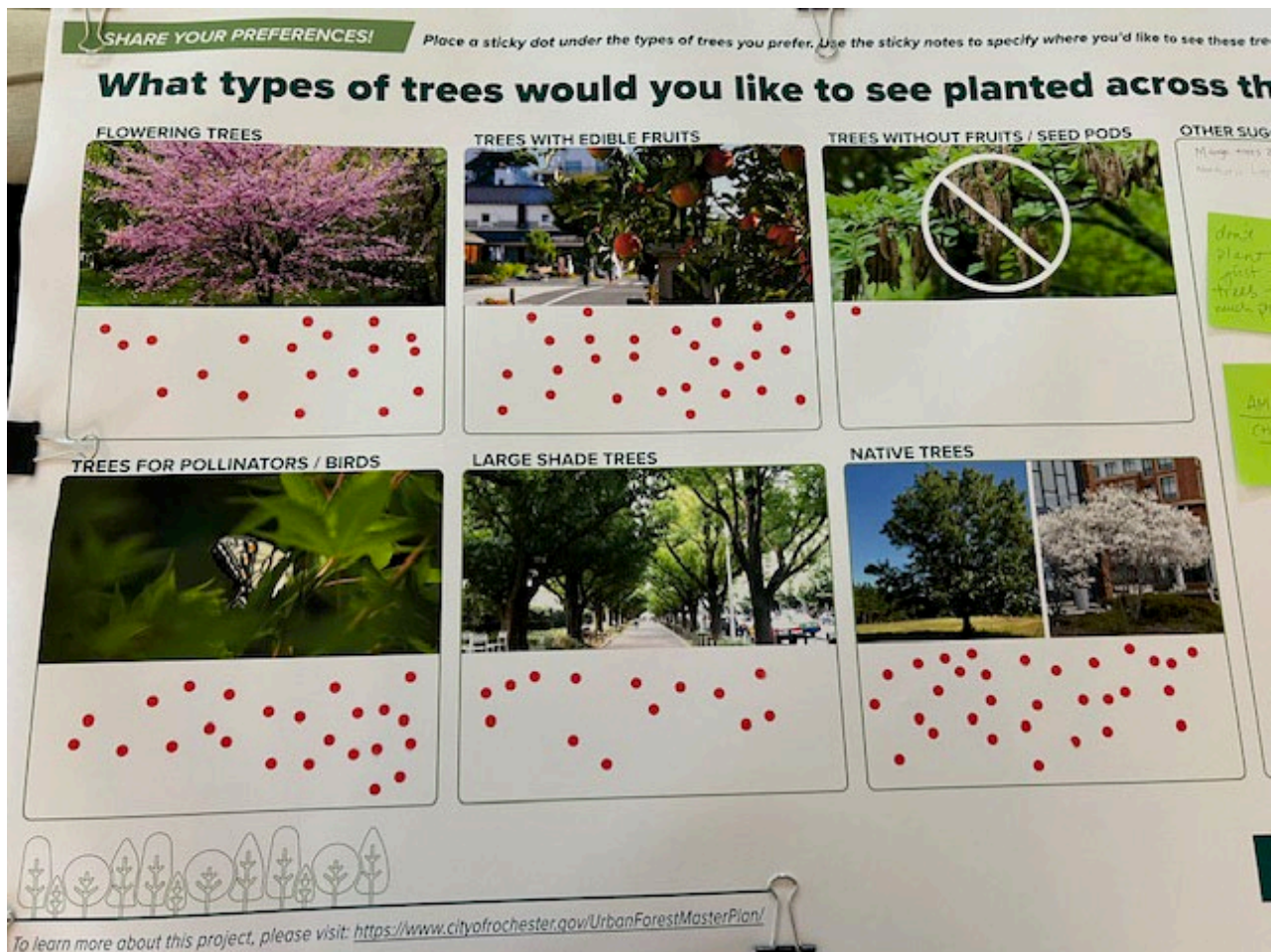**Edgerton R-Center, 41 Backus Street, Rochester**

Team
Nancy Raca

Love Letter to a Tree Activity Comments
- Thank you for air (x2)
- I love Washington Grove
- I used to love the trees at #1 school
- Hug a tree

1. **What types of trees would you like to see planted across the City?**

Additional Comments
- Mango trees
- Northern larch
- American chestnut
- Pawpaw trees

- Don't plant just female trees – too much pollen
- Hear me out..Wolves -> eat deer -> help ecology

2. **In which neighborhoods parks, and/or street corridors would you like to see more trees planted?**

Additional Comments
- Encourage city businesses with parking lots to plant trees in them or around them
- In areas where we experience food apartheid
- Edible & medicinal herbs
- Trees around Norton aren't full – what's wrong with them?
- Remove old, dying trees
- Northeast and northwest
- Fruit trees in 14621
- Trees in vacant lots

3. **What current issues or challenges do you experience with the City's Urban Forest?**
- Trash
- Messy trees

4. What actions would you like to see the City take to resolve these issues?

- Need help removing old, dangerous trees & dead stumps
- Growth of natural/native habitat for native wildlife
- Hire local youth to help plant trees

Photos: