



UFMP Public Input Summary Report

January - June 2023

- I. Introduction
- II. Avenues of Input
- III. Reach of Engagement
- IV. Findings & Recurring Themes

Introduction

As approximately 80% of tree canopy in Knoxville is located on private property, it will take engagement and dedication by a wide range of players in Knoxville. This ranges from all residents, to public agencies like the City of Knoxville, utility companies, large landholders, institutions, the development community, foundations, nonprofit organizations, and engagement at the local level through neighborhood groups and other active entities working with the communities within Knoxville.

For this reason, it is vital to actively include the community in the Knoxville Urban Forestry Master Plan (UFMP) planning process. The goals of the campaign were to bring together the community in dialogue, to learn about the public's priorities related to tree canopy, as well as understand current local challenges and potential solutions.

This document provides an overview of the outreach campaign as well as a summary of findings. The project was facilitated and managed by Trees Knoxville, together with project consultant Urban Canopy Works.



Avenues of Input

The public gave input on the Knoxville UFMP in six different ways:

- 1. Meetings with Community Groups (30 groups, combined 800+ attendees)
- 2. Two Open Houses (89 people/views)
- 3. Online Survey (488 submissions)
- 4. Advisory Group Workshops (98 members, 3 workshops)
- 5. UT Workshop (30 attendees)
- 6. One-on-One Interviews (17 interviews)

Information on each of these avenues follow. Findings from all avenues combined can be found in the next report section *Recurring Themes / Findings*.

Avenue #1: Meetings with Community Groups

- January May 2023
- Combined total of +/- 800 attendees

In an effort to "go where the public already is," the project team put out an offer to meet with a wide range of groups or clubs across Knoxville about this project, and enter into dialogue the importance of trees, providing a forum to collect input. Notes were collected on the dialogue overall, and at the conclusion of each event, attendees were also asked to submit their comments via the online survey at the KnoxvilleTreePlan.org website. Paper copies of the survey were also provided for those uncomfortable with or without access to technology. Over the course of 5 months, Trees Knoxville met with 30 groups (shown below), reaching approximately 800 people directly.

January 2023

- City of Knoxville Neighborhood Advisory Board
- Water Quality Forum
- UT Grounds Management ShortCourse

February 2023

- Dogwood Arts Home and Garden Show
- 4th and Gill Neighborhood (Woolly Bears)
- South Knoxville Open House
- County of Knox Greenways Commission
- Knoxville- Knox County Food Policy Council
- North Hills Garden Club
- American Society of Landscape Architects East TN Chapter
- Green Drinks
- University of Tennessee Urban Forestry Class

March 2023

• Knoxville Area Association of Realtors (KAAR)



- Forest Heights Neighborhood Association
- Colonial Village Neighborhood Association
- Three River Market CO-OP
- Kiwanis Club of Knoxville
- Smoky Mtn Wild Ones Chapter March meeting

April 2023

- Parkridge Neighborhood Meeting
- Knox County Master Gardeners April meeting
- East TN Ornithological Society
- South Knoxville Neighborhoods Meeting
- Sierra Club-Harvey Broom Group
- East Knoxville Community Open House
- Roots in South Knoxville Earth Day Event
- Sequoyah Hills Neighborhood Meeting

May 2023

- Town Hall East's May Meeting
- Waterfest
- Alice Bell Neighborhood Meeting
- West Knoxville Open House

Avenue #2: Two Public Open Houses (one virtual, one in-person)

- Virtual UFMP Open House May 4, 2023 via Zoom
- In-Person UFMP Open House May 11, 2023 at Cansler YMCA
- 40 attendees across both in person and virtual event, plus 49 views of recorded YouTube video of presentation.

Both a virtual and in-person UFMP Open House were held in May 2023 to not only present findings from the Discovery process thus far, but also provide a way for the public to voice what is most important to them. A recording of the virtual open house was also made available for later viewing, and housed on the Trees Knoxville YouTube channel - www.youtube.com/@treesknoxville

Both open houses included a fifteen-minute presentation from consultant Urban Canopy Works on tree canopy, why it is important, and what has been learned so far about Knoxville's urban forest. Following presentations, the virtual open house was opened-up for group discussion and Q&A, while the in-person open house had mini-stations to direct smaller conversations around urban forestry goals, challenges and solutions. Each of 10 stations was set up for community members to visit and provide input, and were staffed by Trees Knoxville volunteers. Stations asked attendees where they lived, where they wanted more trees, ideas on how to encourage tree planting and preservation on private property, what the challenges are (and solutions to) maintaining and improving tree canopy in Knoxville, thoughts on equitable tree canopy, and how they envision participating in this effort and finally an opportunity to Ask the Arborist any tree question they had.













Figure 1. Selection of photos from Knoxville UFMP in-person open house on May 11, 2023



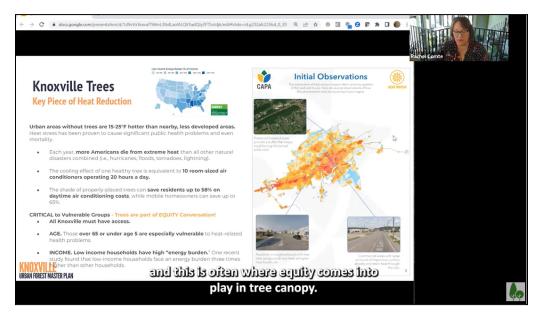


Figure 2. Screen shot of Knoxville virtual UFMP open house on May 4, 2023

Avenue #3: Web-Based Survey and Comment Form

- Online Comment Form live February 1 June 7, 2023 at www.KnoxvilleTreePlan.org
- Total Submissions Received: 488

Throughout the project, extensive information on the UFMP process, Knoxville trees and canopy cover, and more was provided on the UFMP website www.KnoxvilleTreePlan.org. The site also included an online public comment option in which anyone could provide their input and ideas. Questions mirrored the input requested at the open house above, as well as in the workshops, including:

- 1. Top three most important roles of trees.
- 2. Top three biggest challenges with trees.
- 3. What should our goal(s) in Knoxville be regarding trees and tree canopy?
- 4. What are the challenges we are likely to face when working toward those goals?
- 5. What are some solutions to those challenges?
- 6. What else would you like to tell us?



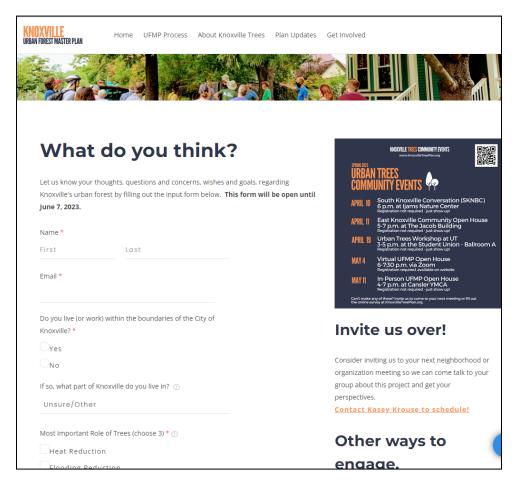


Figure 3. Online survey page on KnoxvilleTreePlan.org

Avenue #4: Advisory Group of Community Organizations

- 98 member advisory group
- 3 sequential workshops over three months

Two stakeholder groups were formed to guide the development of this work: the Steering Committee and the Advisory Group. The Steering Committee was made up of 15 people representing Trees Knoxville leadership and project partners (KUB, Keep Knoxville Beautiful, City of Knoxville and the University of Tennessee). This team worked together at the beginning of the project to develop a 98-member UFMP Advisory Group that would meet multiple times to provide in-depth knowledge and insight into Knoxville's urban forest.

The advisory group was made up of representatives from a wide array of entities within the Knoxville community, including non-profits, city/county staff, utilities, development, architects/engineers, green industry professionals, foundations, schools & campuses, a representative from each neighborhood, and more. Representatives invited to join the group were required to commit to attending three workshops, designed to collectively explore



current conditions in Knoxville, and start identifying community goals, as well as challenges and their solutions. This forum-style workshop format provides an opportunity for the community at-large to self-evaluate the sustainability of Knoxville's urban forest. The full member list for both of these groups can be found at

www.KnoxvilleTreePlan.org/ufmp-process.html







Figure 4. Selection of photos from Knoxville UFMP Advisory Group at the first workshop in February 2023.



Avenue #5: UFMP Workshop at the University of Tennessee

April 20, 2023, 3-5pm. 30 Attendees

A workshop was held at the University of Tennessee on April 20, 2023, open to the public. Similar in format to the advisory group workshops, this event started with a short presentation on the importance of trees and findings to date, and then prompted small groups to brainstorm and discuss what Knoxville's goals are, the big challenges to reaching those goals, and innovative solutions to move forward.



Figure 5. UFMP Workshop at the University of Tennessee Student Union, on Wednesday, April 19, 2023.

Avenue #6: One-on-One Interviews

In addition, 17 one-on-one interviews were conducted to explore specific areas of urban tree canopy in Knoxville. These included interviews with city departments and elected officials as well as representatives from organizations across the community. Interview findings will be used to help develop the plan.



Reach of Public Input Process

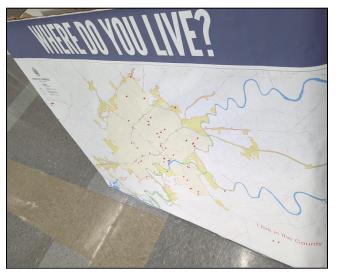
As public input data was collected, location data was requested to ensure comments and outreach included as many communities in Knoxville as possible. Figure 6 only represents the data collected from the online survey, where other neighborhoods were reached through other avenues of input. Most neighborhoods were represented from the online survey, though some more heavily than others.

Comments received online by neighborhood:

Responses	% of Responses	Knoxville Neighborhood	
58	12%	South Knoxville / Old Sevier	
36	7%	Holston Hills	
33	7%	Island Home / South Haven	
25	5%	Fourth & Gill / Old North Knoxville	
24	5%	North Hills	
21	4%	West Knoxville	
20	4%	North Knoxville	
19	4%	Fountain City East	
19	4%	Sequoyah Hills	
17	3%	Bearden	
14	3%	Bearden Village / Westwood / Forest Heights	
14	3%	Downtown / Market Square	
- 11	2%	Parkridge	
- 11	2%	University of Tennessee	
10	2%	Chilhowee Hills	
9	2%	West Hills	
7	1%	Lincoln Park / Oakwood	
6	1%	Alcoa Highway	
6	1%	Fort Sanders	
6	1%	Vestal / South Waterfront	
5	1%	Woodlawn	
4	1%	Colonial Village	
4	1%	Delrose Road	
4	1%	Fountain City West	
4	1%	Whittle Springs / Alice Bell	

Responses	% of Responses	Knoxville Neighborhood		
3	1%	Beaumont / Western Heights / Mechanicsville		
3	1%	Charter Doyle		
3	1%	Deane Hill / Bearden Hill		
3	1%	Timbercrest / Middlebrook Heights		
2	0%	Amherst		
2	0%	Belle Morris		
2	0%	Burlington / Park City		
2	0%	Cumberland Estates		
2	0%	Morningside		
2	0%	Norwood North		
1	0%	Callahan Drive		
1	0%	Chilhowee / Zoo		
1	0%	Civic Coliseum		
1	0%	Five Point / Park City		
1	0%	Inskip		
1	0%	Knoxville Center Mall		
1	0%	Marble City		
1	0%	North Middlebrook		
1	0%	Norwood South		
1	0%	Norwood West		
1	0%	West View		
66	14%	Unsure/Other		
/00	100%			

Figure 6. Summary of neighborhood response quantities of online survey.



Additionally, open house attendees were also asked to put a pin on a map to indicate where they lived, as shown in Figure 7.

Figure 7. In-person Open House attendees pinned a dot on a board to indicate where they lived.



Findings & Recurring Themes

Multiple choice survey questions from the open house and online survey are found below. For ease of consumption, the remaining pages provide a summary of themes heard across all six avenues.

From survey and open house (combined):

Most Important Roles of Trees

According to survey respondents and open house attendees, the most important role of trees in Knoxville centers around **heat reduction**. After that, trees were cited as important <u>wildlife habitat</u>, <u>pollution reduction</u>, <u>aesthetics/beauty</u>, and <u>better</u> human health.

Most Important Role of Trees				
336	Heat Reduction			
286	Wildlife			
258	Pollution Reduction (air & water)			
201	Beauty			
167	Human Health			
145	Buffers (noise, views)			
98	Flooding Reduction			
84	Energy Savings			
47	Soils			
29	Recreation			
50	Economics			
28	Safety			
10	Other			

Overall Responses by Theme

Most questions posed to the public during the outreach phase of this project were in the form of open-ended questions. While making summarizing more challenging, this type of format ensures that we receive a wide range of input, and are able to receive information on topics or aspects of this work that we haven't been predicting. The questions asked most commonly follow:

- What should our goals in Knoxville be regarding trees and tree canopy?
- What are the challenges we are likely to face when working toward these goals?
- "What are some solutions to those challenges?
- What else would you like to tell us?

Every response and input received across all avenues of outreach was cataloged and grouped by theme, as shown in the table below. Each theme is explained in more detail on the subsequent pages.

The most commonly heard theme from survey respondents was related to **concerns for tree loss related to development**. This was followed by the **need for education** of the public, to really connect trees to the services they actually provide Knoxville. The third most prevalent theme was the need for a **higher quality of tree canopy**, largely calling for natives, diversity, resilient species, and wildlife friendly choices. Respondents then called for **more trees** overall, more **preservation and protection** of existing trees, and the need for the **full community to engage**.



Knoxville Community Input on Trees - By Theme -	Online Survey & Open House Number of responses recieved online (488 respondents answering 6 questions) and at open houses (approx. 30).	Small Group Presentations Number of groups that brought up these topics during 30 small group presentations.	Advisory Group Topics brought up by attendees during three workshops.
Education & Engagement	381	10 groups	X
Development / Zoning & Code	345	12 groups	X
Canopy Quality	228	8 groups	X
More Trees	222	1 group	X
Important Role of Trees	217		X
Protect & Preserve (general)	213	10 groups	X
More Resources Needed	188	1 group	X
Better Management (overall)	141		X
Thank You for Doing This	116		X
Trees to Shade Roads/Walkways/Pkg Lots/Concrete	108		X
Partnerships & Collaboration Needed	91	6 groups	X
Equitable and Accessible for All	86	1 group	X
Incentives for Planting or Preservation (overall)	52		X
City Management Improvements	51	2 group	X
Heat Reduction Needed	50		X
Call for Food Forests	42		X
Beauty of Trees	40		X
Need for Financial Assistance for Tree Care	32	6 groups	X
Trees as Nuisance or Fear Factor	29	1 group	X
Utilities	27	1 group	Х
Opportunity for Work Development	13		X
Limited or Low Quality Planting Space	11		X
Interested in Helping	10		X

- 1. Education & engagement is key. The most heard theme during the Discovery process centered on the need to create an awareness and knowledge of the importance of trees. Many cited the belief that the broader public does not connect trees with the important benefits they bring to Knoxville. A better understanding of the role of trees in Knoxville is needed.
 - Advisory Group Input:
 - There is a need to increase awareness regarding the benefits/role of trees in a community. People are not connecting trees to the things they care about health, economic prosperity, resilience to heat, strong communities. Suggestions on incorporating this into a wide range of audiences schools, realtors (home sales), neighborhoods, including signage on trees in parks, and more
 - Additionally, there is a sense of a lack of advocacy or engagement in efforts related to trees in Knoxville, perhaps because of the lack of



knowledge about the value of trees. Challenges in both accessing the right people, getting buy-in from all partners, poverty, unorganized neighborhoods and concerns about gentrification were raised.

- More engagement and better communication/education is needed. Extending and improving outreach on tree initiatives is critical. Tell a better story on the role of trees in a health community. Involve neighborhoods, consider community outreach on a door-to-door level, utilize non profits, get developers/code enforcement/public on the same page with the same goals. Focus the message on the value/importance of trees to the individual/community and proper maintenance of trees.
- The high number of rental properties in Knoxville is a challenge to engagement. There is a belief that landlords would rather remove a tree (or not plant one at all) to save costs and hassles in the long run.
- Heard from Small Groups: During the 30 speaking events to local groups, 10 groups cited need for more outreach and education in this work.
- Survey Respondents: This was the most heard theme from survey and open house attendees. Sample comments within this theme:
 - "Many people don't look at trees as one of our greatest assets. Somehow we must change that mentality."
 - "The general population does not see or appreciate the importance of trees. Education should be a big part of this effort."
 - "Consumer education on the necessity of trees"
 - "General awareness many folks don't realize there are people thinking intentionally and strategically about trees- not even aware this conversation exists, even if they'd likely support it"
 - "Educate homeowners, developers, and realtors about the monetary value of trees. This targeted campaign would preserve many of the irreplaceable and extremely valuable trees that currently grow in our area. Developers specifically need more education on preserving trees around riparian areas that run through or nelt to their properties. The education program should include information about how homeowners should seek a second opinion from an ISA certified arborist if a neighbor or tree care company tells them that a tree is diseased / dying / about to fall."
- 2. Concern for tree loss from development. The second most common theme throughout Discovery related to loss of trees in development. Many expressed concerns for this loss, noting that replanting doesn't replace existing mature tree loss. Most have asked for improvements in tree protections and replanting practices.
 - Advisory Group Input:



- Concern was raised about the quantity of trees removed during development. Many comments cited that current regulations do not preserve/conserve enough canopy, and/or lack effective enforcement. Development should be sustainable for future generations by including parks, greenspace in new suburban areas.
- Variances and ineffective tree protection regulations result in significant lost canopy in development.
- A stronger and more consistent tree protection policy and meaningful efficient regulations are needed.
- Heard from Small Groups: During the 30 speaking events to local groups, 12 groups brought up concerns over loss of trees to development. This was the most commonly heard concern in the small group presentations.
- Survey Respondents: This is the second most heard comment from open house and survey respondents. Sample survey comments within this theme:
 - "Be strategic when planting and minimize clear cutting for new construction. You can't replace the old growth trees."
 - "Require developers to preserve trees already there whenever possible, to add new trees, and to reduce displacement of wildlife. Also, require a tree:concrete ratio for surface parking lots."
 - "So many trees are what has made Knoxville a unique and beautiful city. We should stay ahead of the game and not follow suit of other cities with overdevelopment. Knoxville will lose in the end and will end up like every other city this size. Undesirable. There's a reason everyone is flocking here. By changing our atmosphere we will be changing our city for the worse. "
 - "As Knoxville experiences predicted rapid growth, increasing our trees will become ever more important and more difficult. We have to get ahead of the curve on this, for the sake of health in the city—and that includes mental health and wellbeing. Trees enhance human life."
 - "Hold developers accountable for sustainable construction methods to retain mature trees."
- 3. Higher quality tree canopy was called for, which includes the <u>control/reduction of invasives</u> present today, ensuring <u>trees are maintained</u> and in the best condition possible to ensure long life and thus the highest level of benefits to the community. Additionally, many called for the need for canopy restoration <u>utilizing native species</u>, and increasing of <u>diversity</u> to better weather future stressors like climate change and pests/diseases.
 - Advisory Group Input:



- Beyond tree quantity, participants also mentioned the need for tree quality to ensure longevity of trees. This included proactive care and maintenance, the importance of planting the right trees in places with enough room to grow, and removal of invasives.
- Heard from Small Groups: Out of the 30 small group presentations, 8 groups highlighted the need for a high quality tree canopy, asking for efforts to address invasives, ensure diversity and that species choices are good for the long term, and that the right tree is planting in the right place.
- o Survey Respondents: Sample survey comments within this theme:
 - "Removing all invasives and non native trees like Bradford pears and replace with high volume canopy trees like oaks, hickories, tulip poplars, etc."
 - "City wide effort to combat the kudzu problem."
 - "Preserve the old growth / well established trees as much as possible especially natives and continue to plant as many native trees as possible in a way that supports Knoxville economics. Let Knoxville be known for having a large healthy native tree canopy that helps keep the city cool and attractive so visitors will want to come. After all, Knoxville is known for its urban wilderness let that expand throughout the city. This will also give us a closer regional tie/ continuity to the GSNP."
 - "We should create as much biodiversity as possible and plant trees in as much green space as possible."
 - "Outreach education removing invasives that compromise our trees. Offer a volunteer squad to remove and kill invasive maybe from property if a homeowner is interested. Or clear our parks of invasive species."
- **4.** Recognize **the important role of trees, as critical city infrastructure** (not decoration), vital to climate change resilience, human health, etc. Many responses contained thoughts on the roles trees play, and the need to recognize trees as vital to Knoxville's livability.
 - Advisory Group Input:
 - Trees should be part of a broader strategic effort to improve and utilize natural systems in Knoxville. Ecosystem restoration requires a wide range of efforts. There is a desire for more natives, needing to prioritize invasive species removal and habitat restoration, and using trees to prepare for climate change.
 - o Survey Respondents: Sample survey comments within this theme:
 - "Air pollution is one of Knoxville's biggest challenges because of the concentration of pollution posed by the I-40/I-75 corridors and the way the valley traps pollutants. Increasing the canopy should be a goal to help combat this, aid in heat reduction, and increase the beauty of the community."



- "Tree canopy is vital for buffer zones to protect residents and neighborhoods from all the rampant indiscriminate development we see, smell, and hear these days!!! We need places to breathe, please! TREES PROVIDE OXYGEN."
- "Trees to protect us from heat/climate change"
- "Trees are key to fighting climate change, carbon sequestration, and protecting biodiversity."
- "When planning for new tree canopy, assess planting locations that could both benefit environmental conditions and human health benefits (i.e. do not only focus on environmental)."
- 5. The **need for more trees** across the board came up many times throughout Discovery. Within this theme, there were many ideas on where to focus, like prioritizing based on communities in the most need, where people bike and walk, on school properties, within the urban core, subdivisions, and more.
 - Advisory Group Input:
 - An overarching theme throughout the workshops was the need for more trees. Suggestions included raising canopy and more trees overall, as well as targeting specific areas such as schools, downtown, and subdivisions.
 - o Survey Respondents: Sample survey comments within this theme:
 - "All neighborhoods should have as many trees as possible to reduce heat and pollution, and to provide more beauty"
 - "Plant more, give away more, encourage Knoxvillians to plant more and grow more non-invasive varieties."
 - "I would love to see green spaces with lots of trees in all parts of the city, with an emphasis on areas that currently are deficient."
 - "Increase tree canopy! We're gonna need it in this heat!"
 - "Planting trees strategically to ensure their long term survival and planting MANY trees."
- **6.** The need to **protect and preserve trees overall, especially mature trees** that provide the most to Knoxville. This is not just in slowing losses from development, but to better account for and preserve trees across all of Knoxville.
 - Advisory Group Input:
 - Protection and preservation of trees is needed everywhere. This includes not just in development, but on private property as well.
 - Heard from Small Groups: Out of 30 small group presentations, 10 cited the need to protect and preserve mature trees across Knoxville.



- o Survey Respondents: Sample survey comments within this theme:
 - "The goal should be to preserve and maintain quality tree populations that are healthy and well adapted to the area."
 - "Protect what we have. Especially older growth."
 - "Care for the mature trees we have (through homeowner outreach and more trained, well-paid city workers)"
 - "I see the preservation of existing canopy by addressing climbing invasives on public and private property as a paramount concern for tree health and human safety."
 - "I believe that preservation is often overlooked- but is essential. Obviously proper tree care and maintenance can sustain the current trees and tree canopy. While I definitely think more trees could be planted, especially in currently barren/concrete only places- it would be great to see more frequent maintenance!"
 - "To keep old growth protected from urban expansion."
- 7. Many acknowledged that **more resources are needed** in order to improve the care and management of trees in Knoxville. Tree care on private property can be costly and organizations must be staffed and funded to provide services for public trees and greenspaces.
 - Advisory Group Input:
 - There is an overall lack of resources currently related to the urban forest. This includes lack of funding, time, and staff for planting, care and enforcement of tree protection regulations.
 - We are lacking important data. Access to more data on existing trees in Knoxville (public and private), new planting locations, and areas with the greatest need will help direct efforts.
 - Funding ideas included utilizing stormwater utility fees, allocating some of property taxes to trees, corporate sponsorships, and preparing for the incoming federal funding that will be available.
 - Survey Respondents: Sample survey comments within this theme:
 - "Lack of resources, economic obstacles and an antiquated way of life that is pervasive in this area with no desire for change. Lack of interest will be difficult to overcome."
 - "Funding and maintenance of trees over the long term."
 - "Financial resources to plant new and replace dying trees."
 - "Lack of collaboration with resources outside of the city's current infrastructure."
 - "Maintenance, funding, commercial interests given priority over people."



- 8. Better management overall was cited many times as a challenge community-wide. With the majority of Knoxville's urban forest on private property, homeowners and businesses often don't have the knowledge or understanding of how to properly care for trees over time.
 - Advisory Group Input:
 - More proactive management would happen if the community was more aware of the importance/role of trees. Education is needed on invasives removal, how-tos (tree selection, planting, care), providing developers with scenarios on how to meet existing code with a greener result, and addressing tree misconceptions.
 - Get HOAs engaged in this work.
 - o Survey Respondents: Sample survey comments within this theme:
 - "Add more staff to city urban forest department and Trees Knoxville"
 - "Aging communities and neighborhoods needing tree care, and being solicited by "tree cutters."
 - "Strategic planning and maintenance. Would be better to plant fewer trees over a longer period if that meant the planted trees would be better cared for and established."
 - "Most shopping mall/shopping strip management groups hire landscapers with no understanding or interest in proper maintenance of their parking lot trees -especially mulch "volcanoes!" Educate or "incentivize" those units re: proper maintenance."
 - "Broad education about the importance of trees and tree care is also important. I think a lot of people cut down healthy trees due to fear of falling and / or an unwillingness to deal with leaves."
- 9. Thank you. Many expressed appreciation for this effort.
 - Advisory Group Comments:
 - "It has been great meeting all the people in my group at each workshop. The ideas presented should really provide us with a good starting point towards developing goals."
 - "As a sit-in for a member who was unavailable I was pleasantly surprised at the depth of the discussion and concern of the issues. The small group is productive and informative. It allows multiple agencies, groups and departments to work to a common goal while learning about everyone's individual contributions."
 - "It seems that the common themes were education, addressing underserved communities, and funding. Great workshops!"



- "This has been a great experience and I am impressed with the community engagement of this project. It seems like a lot of the Trees Knoxville Board members are on the same page."
- "Working groups were receptive and a safe place for discussions and seemed productive."
- "Good program. Glad to have been a part of it. Proud that Knoxville is taking this important issue seriously."
- "Super inspired by all of our workshops!"
- o Survey Respondents: Sample survey comments within this theme:
 - "I am looking forward to a greater urban forest that all members of the Knoxville community can enjoy!"x
 - "I don't have much input or knowledge, just want to say I appreciate what you are doing. Knoxville's lush trees are a treasure and it means we have to continue to replace and protect. Thank you for your efforts and expertise!"
 - "Having the citizens of Knox county and city stand together and stress the importance of green spaces. Sounds like this is a great start and thank you for reaching out."
 - "Grateful for what Kasey, Dale and others are doing to educate our city re: the importance of trees!!"
 - "Keep doing what you're doing, but do more and better. Thanks for all your efforts and understanding the need and importance of a healthy urban ecosystem."
 - "Very excited that you are working on this plan. This helps with property values, equity, health, the environment, and so much more. It's not a silver bullet for anything, but it's a step in the right direction."
- 10. More shade and less pavement is needed, especially for pedestrians. Many cited the fact that cooler, shaded areas are key for better health and staying a livable community. Trees are needed around the city, but especially along sidewalks, streets, and parking lots. Trees are essential for walkability.
 - Advisory Group Input:
 - As part of the need for more trees, consider tree planting initiatives that make sure greenspace is within walkable distance for everyone, strategically planting trees to shade areas used by bicycles and pedestrians, and creating edible landscapes.
 - o Survey Respondents: Sample survey comments within this theme:
 - "Improve walkability by combining shade trees with sidewalks. Numerous examples of new roads with sidewalks with no trees (Oak Ridge Hwy area and areas north), or trees with no sidewalk (most of Knoxville)."



- "Trees reduce heat and as a result, through heat reduction and beauty, make it more pleasant to walk. Knoxville is very hot in the summer - the more pleasant it is to walk and bike, the more likely people are to do them over driving."
- "Improve walkability by combining shade trees with sidewalks."
- "A higher ratio of green space to concrete."
- "Walkable neighborhoods ie. shade"
- 11. Success will require partnership and collaboration. The amount of trees and tree canopy on private land will require multiple collaborations and partnership to see real success in coming years. Additionally, multiple calls to do this work at the neighborhood level because every neighborhood is different, so needs will be different.
 - Advisory Group Input:
 - Utilize partnerships. There is a need to leverage partnerships that would extend the reach of this effort. Suggestions included involving HOAs or other stewards that can connect directly with the communities, churches and faith based organizations, healthcare focused groups, schools, universities, among many others.
 - Heard from Small Groups: Out of the 30 small group presentations, 6 groups brought up the need for collaborations and partnerships to make real progress in the future.
 - o Survey Respondents: Sample survey comments within this theme:
 - "Several challenges will be faced, the first being, the challenge of engaging and activating residents to take action. The second challenge would be engaging partnering agencies/organizations and organizing opportunities for collaboration."
 - "Promoting a resilient landscape is a challenge especially in an urban setting.
 Collaboration more with federal, state and local agencies and organizations can be very helpful in accomplishing diverse goals effectively."
 - "Involve local community groups in planting and care of trees."
 - "Collaborate with multiple groups to target areas of most need then launch a plan to fill these areas."
 - "Figure out who the best community partners would be by having conversations with neighbors & local organizations. Create a plan to figure out who will prune and keep up with trees each year."
 - "Education in neighborhoods by their own neighbors. Have an expert arborist offer to attend HOA meetings. Many older neighborhoods do not have hardcore



HOAs but are more of an civic club vs enforcer of rules. Encourage neighborhoods to form groups to help maintain trees for neighbors who can't and remove English ivy and euonymus."

- 12. Focus on equity and environmental justice. Disparity in tree canopy means that not all residents have access to the benefits that trees provide. Lack of investment in many lower-income or renter-dominated neighborhoods have resulted in many not physically or financially able to care for existing trees. Priority work is needed to address environmental justice in Knoxville.
 - Advisory Group Input:
 - It is important to ensure that all in the Knoxville community have access to the benefits trees provide. Specific comments related to equitable tree canopy centered on reducing the effects of heat islands, equitable distribution of tree benefits, and focusing resources on redlined neighborhoods.
 - Work must be done at neighborhood level. Every neighborhood is different, so their needs will be different.
 - Survey Respondents: Sample survey comments within this theme:
 - "More equitable distribution of canopy coverage. Work with groups like The Bottom, KAUL, Centro Hispano to educate, distribute trees and increase buy-in. Advocate for/work with the city to break up concrete/create permeable surfaces in the spaces with less canopy coverage."
 - "Spread the focus/priorities into multiple areas so neighborhoods aren't left behind."
 - "Reverse environmental injustices, decrease urban heat island, prioritize low economic opportunity areas."
 - "I would love to see more native species! Especially in the lower income areas like Western Heights, I feel like there should be more accessibility to parks or nature areas."
 - "Talk to folks in neighborhoods and organize planting if interested."
 - "Talk to leaders of neighborhoods."
- **13. Incentives for planting or preservation (overall).** Respondents repeatedly brought up incentives as a way to make tree preservation, planting, and care a benefit rather than a burden. Survey responses contained a variety of ideas for incentivizing the support of the urban forest.
 - Advisory Group Input:
 - The majority of the tree canopy in Knoxville is on private property.
 Comments were made about the difficulty of influencing what happens



on private property. How to incentivize industrial or commercial landowners, homeowners, contractors, builders, and other private property owners to plant and properly care for and maintain trees.

- o Survey Respondents: Sample survey comments within this theme:
 - "Incentivize or pay owners (or do it for them for free) to remove invasives, especially bradford pear, remove all non-natives over time."
 - "I would like to see more incentives for planting more trees and native species (or non-invasives), composting, having natural yards (not overgrown), and using less chemicals. I don't think it should be a special use to have a natural garden or certified wildlife habitat. I would like to see that be more of the norm."
 - "Quantify the impact of canopy and pocket woodlands in urban and suburban yards (savings in leaf pick-up, mowing and watering costs, heating and cooling, increases in property value, stormwater infrastructure, cost of providing leaf pick-up) and provide incentives for homeowners that make economic sense for the city."
 - "Find an equitable way to compensate landowners for preserving and planting trees perhaps through property tax rebates or supplying saplings at low or no cost."
 - "Ideally incentives or regulations promoting/requiring more pervious surfaces for parking lots and sidewalks, this should benefit trees if run off is minimized."
- **14. Use trees for heat reduction in Knoxville.** Trees play a major role in reducing the urban heat island effect and are one of the most effective ways a city can mitigate some of the effects of climate change. Knoxville residents commented that the shade provided by trees make the city more liveable.
 - Advisory Group Input:
 - How do we best prepare Knoxville for the changing climate? Are we accounting for declining species and adapting plantings for the future? Are we creating space for trees in the hottest areas?
 - o Survey Respondents: Sample survey comments within this theme:
 - "Protection from the heat is such a large concern, yet no one seems to realize how much help trees are for that."
 - "Knoxville needs more trees in the commercial areas where there are urban heat islands. Some of the worst areas are in West Hills like West Town Mall and the other establishments down Kingston Pike."
 - "All neighborhoods should have as many trees as possible to reduce heat and pollution, and to provide more beauty."
 - ""South Knoxville on Sevier Ave is booming but the heat in the summer is intense due to lack of trees and the overabundance of concrete and asphalt.



From reading the detailed plans of the upcoming Sevier Ave streetscape, I'm happy trees and plants are being added overall but I'm concerned about the lack of trees planned."

- "I'm very excited about rebuilding the tree canopy in neighborhoods that are inequitably affected by heat and poverty."
- **15. City management improvements are needed.** Although it is known that much of the city's tree canopy is on private property, the city still plays a role in managing trees on private property through land development regulations and other types of policies and regulations.
 - Advisory Group Input:
 - A stronger and more consistent tree protection policy and meaningful efficient regulations are needed. Enforcement could be improved by adding staff, as well as better interdepartmental communication (at both county and city level).
 - Challenges in governing bodies (city, county), lack of government policies related to trees, and the overall political climate make advocating for trees difficult.
 - We need an invasive removal program. We also need to include park trees in the City's proactive tree care plan.
 - o Survey Respondents: Sample survey comments within this theme:
 - "Funding and maintenance of trees over the long term."
 - "Elected officials need to change their approach to development."
 - "Larger planting areas for street trees (increase soil volume)"
 - "Hire the urban planning and forestry staff. Allow ongoing public input."
 - "Working with the city to change their view of how trees can be used within a landscape."
- **16. Need for financial assistance for tree care.** Tree care can be expensive, especially for those on fixed incomes. Many believe people may want to do the right thing to care for their trees, but simply don't have the resources to do so.
 - Advisory Group Input:
 - Low income homeowners struggle to maintain trees on their property, largely due to the high cost of tree care. Consider funds to aid homeowners in need of assistance in care and protection of existing trees.



- Lack of resources available to low income homeowners is a barrier to tree protection on some private lands. Consider tax breaks, monetary and other incentives, as well as financial aid or assistance in tree care.
- Heard from Small Groups: Out of the 30 small group presentations, 6 groups brought up the need to aid those without resources in tree preservation efforts.
- Survey Respondents: Sample survey comments within this theme:
 - "Tree care is very expensive, especially for older people who live in older homes and often have beautiful trees."
 - "Improve the availability of proper trimming and care of existing trees and make replacement trees affordable."
 - "Provide resources and incentives to empower private tree owners to care and maintain trees in under-resourced neighborhoods."
 - "Can the city find a way to fund some help for people that need to trim dying branches but can't afford it? Or they might need to sweep leaf debris but don't have the means. Community programs to help, either by volunteers or city crews. I feel that way about home repair in low-income areas, also."
 - "Provide economic assistance and/or tax incentives for proper care of established canopy trees to keep neighborhood-scale canopies healthy. Possibly a city partnership with approved private tree care services to provide quality, affordable preventative care and consultation for urban trees on private property (maybe native trees over a certain diameter, or age could be eligible for assistance)"
- **17. Beauty of Trees.** Trees add beauty and create a unique sense of place in Knoxville making it more appealing to residents and visitors alike.
 - Survey Respondents: Sample survey comments within this theme:
 - "Too much construction and expansion due to increased population. We still need to keep our city as beautiful with trees as we can. Please."
 - "All neighborhoods should have as many trees as possible to reduce heat and pollution, and to provide more beauty."
 - "Knoxville's beauty lies in its network of trees and parks. Use the example set by the Kingston Pike-Sequoyah Hills Neighborhood Association to encourage other neighborhoods to develop neighborhood tree plans and help fund such tree projects. Thank you for your valuable work!"
 - "Trees make sense health-wise and they make space so much more beautiful and enjoyable, especially considering the summer seems to be getting hotter -thank you for your efforts!"
 - "Trees make areas pretty."



- **18. Call for Food Forests.** There is an increasing interest in access to trees that produce either fruits or nuts, proposed as tools to solving multiple issues, including food deserts, equity and wildlife habitat challenges.
 - o Survey Respondents: Sample survey comments within this theme:
 - "I am encouraged to see this questionnaire and hope that it will lead to more help for environmental developments. I'd like to see Dogwood Trails with less focus on big lawns and more emphasis on Edible Landscaping and native bees for pollinating and so forth."
 - "Bradford pears are of the devil. Take them all down and plant fruit trees for the community to eat from."
 - "Food security is a major issue in Knoxville, especially in underserved neighborhoods/ communities that had been affected by Knoxville's urban renewal. Planting more fruit trees is not the only solution to this problem but would be a step forward."
 - "Increase the tree canopy with native and edible trees, increasing food and habitat for wildlife as well as providing a food resource for the communities in which they grow."
 - "I would love to see Knoxville implement more trees aimed at food production accessible for the public. I think these trees could offer all the other benefits of trees, while also providing food to our city. If they go uncollected, I'm sure Knoxville could reach out to Second Harvest or volunteers to help harvest, produce and donate it. I think the goal should be to plant more food producing trees in areas where the public can access them and also in areas where heat reduction and pollution reduction is necessary."
 - "We should plant food forests in places where it makes sense."
- **19. Trees as Nuisance or Fear Factor.** Private landowners hesitate to plant trees or may jump at tree removal due to a variety of fears/nuisances. Most often cited were mess-related and infrastructure damage issues, as well as the need for qualified expertise.
 - Advisory Group Input:
 - There is a lack of knowledge on proper care of trees, as well as the value of preserving trees. Who is responsible for educating, and how can we reach everyone? Perceptions of trees being a hassle, fear of trees, planting trees correctly so they will last. These are all topics brought up that need to be addressed in outreach. Without seeing the value of trees, it's hard for people to understand why trees should be a priority.
 - Survey Respondents: Sample survey comments within this theme:



- "Homeowners overly worried about if a tree might fall and getting conflicting opinions from contractors on whether the tree is really a safety hazard (who ultimately makes that call?). "
- "Resistance to tree planting out of fear of storm damage to property"
- "On private land, people cut trees proactively once they have one instance of damage from falling trees or branches. Or they take out trees for lawns."
- "People don't want leaves and fruit lying around. People want open lines of sight on roads even though that makes them less safe."
- "Birds and seeds can make a mess."
- **20. Utilities.** Comments included both suggestions to work with utility companies moving utilities underground or supporting tree planting initiatives, as well as complaints about how trees are pruned near utility lines.
 - o Survey Respondents: Sample survey comments within this theme:
 - "Partner with KUB to get rid of overhead lines for an incremental burying of power."
 - "Work with KUB regarding trimming and removals."
 - "Create a sustainable means to raise money like KUB's Green power program. Give every KUB customer the option to donate a portion of every bill towards canopy."
 - "On the commercial side, make sure any contractors know what they're pruning. I've seen a disconnect between various utilities and communication companies on cutting limbs away from lines also. The utilities have already whacked them and the communication companies come behind and brutalize them further."
- 21. Opportunity for Work Development. Many opportunities exist in Knoxville for better management of tree resources, both on private and public lands. This is an opportunity to get the local workforce utilized while working toward tree goals. Workforce training and youth development programs should be considered as a key piece to future efforts.
 - o Survey Respondents: Sample survey comments within this theme:
 - "I would like to see a Knoxville Urban Forestry work-based training program for Knoxville's at- risk youth. As a late teen, my father was part of a program that took city kids for camping and hunting trips--a Fresh Air type of program. Why not bring the forest to the kids and make them an authentic part of the creation of an urban forest. The benefits for a cadre of young urban foresters abound: Job skills, civic involvement, earnings, working with professional foresters and landscapers, and pride and increased self-confidence. Local partnerships and grants could make this happen."



- "Work with community partners to hire and train diverse crews of residents to work in and need their neighborhoods."
- Low-income communities may not only have an issue with having trees but as much an issue with maintaining trees. City support for invasive removal, creating job opportunities and education, would be incredible"
- "A partnership with Pellissippi State Magnolia Avenue Campus to develop an urban forestry curriculum (certified arborist training) would be helpful to create economic opportunities in East Knoxville as well as address the need for certified arborists."
- **22. Interested in Helping.** Many groups and individuals expressed interest in continuing to be involved in either urban forest master plan execution or other tree and preservation-related projects. This information has been delivered to Trees Knoxville.
- 23. Limited or Low Quality Planting Space. There is limited space available for trees to really thrive, especially when they have to compete with other development and necessary city infrastructure. We will have to be intentional about making space for this equally important piece of city infrastructure.
 - Advisory Group Input:
 - Find creative and alternative spaces to add tree canopy. In urban areas, space for trees can be limited. Explore other alternatives for greenspace rooftop gardens, community gardens, decreasing impervious surfaces and adjusting roads and sidewalk infrastructure make room for trees and other green infrastructure.
 - Also, there are conflicting priorities and space constraints. There is limited space in any community for incorporating trees. Other interests that are also important to communities that can compete with trees include utilities, housing needs, interstate and other street/parking needs, and farmland can make creating space for trees challenging.
 - Creativity is needed to find space for trees. Consider burying overhead utilities, adding green roofs, considering a town center concept (vs. traditional sprawling subdivisions, and more.
 - o Survey Respondents: Sample survey comments within this theme:
 - "Finding the room for trees in some of the more populated areas will be difficult."
 - "Specific code requirements for landscape area footprints for any proposed building or structure in order to provide sufficient space for species appropriate tree and shrub material. For example, a code item might state that 'any building must have at least ten feet of space allocated for landscape between building facade and any hardscape (sidewalk, pathway, etc.) surfacing.' "



- "Create better growing sites. The current sites along Cumberland Ave., Central Ave., and Magnolia Ave. are way too shallow. They are not conducive to long term tree growth."
- "Lack of space related to increased concrete {is a challenge}."
- "Creating better growing sites. The current sites along Cumberland Ave., Central Ave., and Magnolia Ave. are way too shallow. They are not conducive to long term tree growth."
- "Finding the land to plant these trees is definitely going to be difficult. It is hard to connect areas of green space, especially in densely populated areas."