



## URBAN FORESTRY TREE COMMISSION MEETING

Wednesday January 17, 2024 – 6:00 P.M.

Parks, Recreation & Cemetery Administrative Office

Meeting Room A

50 Officer Manny Familia Way Worcester, MA 01605

Or

**If you choose to use the Microsoft Teams platform:**

- 1) Go to [www.teams.com](http://www.teams.com)
- 2) Enter Meeting ID# 251 040 578 709
- 3) Enter password: rtUHTL

**If you choose to attend via phone:**

- 1) Call 1-469-998-7682
- 2) Enter Meeting ID#: 416 674 65#

*If technological problems interrupt the virtual meeting component, the meeting will continue in-person.*

### AGENDA

1. Call to Order
2. Attendance (Roll Call)
3. Acceptance of Minutes for the (Roll Call) – November 1, 2023
4. To request a reasonable accommodation or interpretation or submit written comments or questions in advance of the meeting, please contact the Parks, Recreation & Cemetery Division by email at [Worcestertrees@worcesterma.gov](mailto:Worcestertrees@worcesterma.gov). Please note that interpretation requests must be received no later than 48 hours in advance of the meeting. Para solicitar una interpretacion razonable, o enviar comentarios o preguntas por escrito por favor comuniquese con la oficina de la Division de Parques, Recreo & Cementerio por correo electronico a [Worcestertrees@worcesterma.gov](mailto:Worcestertrees@worcesterma.gov). Por favor note que las solicitudes de interpretacion deberan ser enviadas 48 horas antes de la reunion.
5. Public Participation – Pursuant to Chapter 20 of the Acts of 2021 and in order to ensure active, public engagement, the City of Worcester currently allows for both in person and remote participation at the Urban Forestry Tree Commission meetings. To partake in the “Public Participation” section of this meeting, you may join us directly within the 50 Officer Manny Familia Way Meeting Room A, follow the information above to join via the Teams application or dial the direct line as indicated. If you would like to raise your hand when in the meeting as a call-in user, you may dial \*5.

6. Assistant Commissioners Report (See Report Topics Below)

7. Old Business

- Request of Commissioner Winbourne for the Commission to set goals for the Commission

8. New Business

Agenda items must be submitted (3) three business days before each Commission Meeting with subject line "Agenda Item" to [worcestertrees@worcesterma.gov](mailto:worcestertrees@worcesterma.gov).

- The second draft of the Urban Forestry Master Plan which can be found here: [Trees in the City - Right Tree, Right Place | City of Worcester, MA \(worcesterma.gov\)](https://www.worcesterma.gov/urban-forestry)
- Request to discuss lessons learned <https://www.boston.gov/departments/parks-and-recreation/urban-forest-plan>
- Request of Commissioner Winbourne to discuss Green School Yard Program
- Request of Commissioner Winbourne to discuss Audubon Report on Solar
- Request of Commissioner Karoway-Waterhouse for Forestry to report monthly data on removals & plantings including district, genus/species, reason for removal, or (if planting) was it by resident request.
- Request of Commissioner Karoway-Waterhouse on the reason why Worcester does not have a fall planting and what would it take to start.
- Request of Commissioner Wobble to advise if there is an effort to maintain our current canopy by removing invasives like oriental bittersweet

9. Date of Next Meeting:

- February 28, 2024
- March 20, 2024
- April 3, 2024
- May 1, 2024
- June 5, 2024

8. Meeting Adjourned (Roll Call)

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## URBAN FORESTRY TREE COMMISSION MEETING MINUTES

Wednesday November 1, 2023 – 5:15 P.M.

Parks, Recreation & Cemetery Administrative Office

Meeting Room A

50 Officer Manny Familia Way Worcester, MA 01605

Or

**If you choose to use the Microsoft Teams platform:**

- 1) Go to [www.teams.com](http://www.teams.com)
- 2) Enter Meeting ID# 214 315 946 310
- 3) Enter password: p7GtXB

**If you choose to attend via phone:**

- 1) Call 1-469-998-7682
- 2) Enter Meeting ID#: 485 742 788#

### AGENDA

1. Call to Order – Meeting was called to order at 6:03 PM
2. Attendance (Roll Call) –
  - **Commissioners Present:**
    - Alexander Elton
    - Robin Karoway-Waterhouse
    - Joseph Mogel - Virtual
    - Joy Winbourne
    - Kristin Wobbe - Virtual
  - **Administration Present:**
    - Robert C. Antonelli, Jr. Assistant Commissioner
    - Brian Breveleri, Urban Forester and Supervisor of Forestry
    - Milagros Pacheco, Staff Assistant III
    - Denis Tucker – Working Foreman - Virtual
3. Acceptance of Minutes for September 27, 2023. Commissioner Elton made a motion to approve the minutes. Second by Commissioner Wobbe. All were in favor, Minutes were approved. 3 – 0.

4. To request a reasonable accommodation or interpretation or submit written comments or questions in advance of the meeting, please contact the Parks, Recreation & Cemetery Division by email at [Worcestertrees@worcesterma.gov](mailto:Worcestertrees@worcesterma.gov). Please note that interpretation requests must be received no later than 48 hours in advance of the meeting. Para solicitar una interpretacion razonable, o enviar comentarios o preguntas por escrito por favor comuniquese con la oficina de la Division de Parques, Recreo & Cementerio por correo electronico a [Worcestertrees@worcesterma.gov](mailto:Worcestertrees@worcesterma.gov). Por favor note que las solicitudes de interpretacion deberan ser enviadas 48 horas antes de la reunion.
5. **Public Participation** – Pursuant to Chapter 20 of the Acts of 2021 and in order to ensure active, public engagement, the City of Worcester currently allows for both in person and remote participation at the Urban Forestry Tree Commission meetings. To partake in the “Public Participation” section of this meeting, you may join us directly within the 50 Officer Manny Familia Way Meeting Room A, follow the information above to join via the WebEx application or dial the direct line as indicated. If you would like to raise your hand when in the meeting as a call-in user, you may dial \*3.
6. **Assistant Commissioners Report (See Report Topics Below)**
7. **Old Business**
  - Solar Access (Ted Conna) - File
  - Planning and Regulatory Services
    - Question regarding Tree Canopy Cover in New Construction
    - Question regarding tree planting in Parking Lots
  - Request of Commissioner Elton to review all existing tree zoning ordinances for the city
  - Request of Commissioner Karoway-Waterhouse on where the final version of the Urban Forestry Master Plan can be found.
  - Request of Commissioner Elton regarding Ash Trees treatment options:
    - Commissioner Elton spoke on being optimistic on finding funds to treat Ash Trees.
8. **New Business**
  - Submission of Commissioner Winbourne on Ash Trees
    - Commissioner Winbourne discussed tree information she received on 395 Street Ash Trees in Worcester.
  - Request of Commissioner Elton for an update on existing zoning and planning regulations for trees in the City?
  - Request of Commissioner Elton for an update on tree planting or canopy requirements for development in the city?
  - Request of Commissioner Elton are development plans brought before Planning & Regulatory Services reviewed by anyone from City Forestry?
  - Request of Commissioner Winbourne for an update on the partnership with New England Botanic Garden

- Grace Elton from New England Botanic Garden spoke regarding the contract the Garden has with the City of Worcester to water trees, as well as other projects, and the change in future services due to monetary restrictions due to delayed payments.
- Assistant Commissioner Antonelli said there were challenges on both ends. He understood the NE Botanic Gardens position and that he would look to see what can work to continue the partnership on the areas that they are comfortable with as well as the city. There was further discussion on funding, City of Worcester contracts with outside contractors.
- Request of Commissioner Wobbe for an update on the Miyawaki Forest proposal
- Request of Commissioner Wobbe on how trees are requested & cared for
  - Assistant Commissioner Antonelli said that if an individual requests a tree to be planted through the 311 system, they give an address of the location, if it's in front of that property, either within the right of way, or they can request a setback planting within the 1st 20 feet from the back of sidewalk. Either one of those two requests are fine. The City will maintain the trees in the right of way, but within the setback area that 20 feet, the city will do some initial work, but after three years the tree becomes the responsibility of the of the property owner.
- Request of Commissioner Winbourne for an update on the US Forest Service IRA Grant
- Request of Commissioner Winbourne for access to the City's US Forest Service grant Proposal
- Request of Commissioner Winbourne for an update on Urban Forestry Master Plan
- Request of Commissioner Winbourne for comments submitted on the Urban Forest Master Plan
- Request of Commissioner Winbourne for the Commission to set goals for the Commission
- Michelle Smith from Economic Development Department addressed a few questions as one piece. She said that the zoning regulations are not great with regards to tree preservation, she explained that anyone can cut a tree and unless it's near wetlands, it's not a violation of any of the regulations unless it's a public shade tree, in which case the DPW & Parks – Forestry Division would be the specialist and would know what the regulations and Mass laws are. The terms of the zoning ordinance are in the new constructions, parking lots - Interior Landscaping Parking lots with more than sixteen (16) parking spaces shall have landscaping in the interior of the parking lot in addition to landscaping along the edges of the lot. No interior landscaping is required, however, for parking lots where all spaces abut a landscaped setback area as described in Note 5, above, and the parking lot follows Article V, Section-5(C) of this Ordinance. At least one (1) tree shall be planted within the parking lot (interior for every ten (10) proposed and existing spaces. Such interior trees shall be in addition to trees required along the edges

of the lot. Interior trees shall be planted in planting beds no smaller than five feet by five feet (5' x 5'). Parking spaces abutting a landscaped setback area (as described in Note 5, above) and in compliance with Article V, Section-5(C) of this Ordinance, however, shall not be counted in the calculation when determining the number of interior trees required. Trees shall be in such a manner as to provide shade over the greatest number of parking spaces practicable. Notwithstanding any of the foregoing to the contrary, the Planning Board may waive or modify these interior landscaping requirements upon a specific finding, in writing, that a substantial hardship would result or would otherwise cause the parking area to be in noncompliance with this Ordinance.

- There were additional questions from the commission regarding the position responsible with compliance, conformance, permits, ordinance regulations, tree planting suggestions, the DCR Grant, collection of data, bidding out future research work, baseline data collection and what is involved, timeline. Ms. Smith gave detailed information in answer to all the questions. She also spoke about the DCR Challenge Grant through Conservation and Planning. Ms. Smith said they have a low budget for 850 Acres of Land, they do snow clearing, vegetation on sidewalk or hazard trees. Last year they applied for the grant, and they were notified they awarded the grant.
- Mr. John O'Dell from Sustainability and Resilience Division spoke about the US Forestry Grant, he said: that the US forestry grant was not granted to the City of Worcester. He wondered if there might have been deficiencies in the grant or any other feedback that might have been helpful. He said they had reached out to a couple local communities about their own specific grants that were successful, and they only heard back from Boston. Boston for reference received a grant for \$11 million. He pointed out that the maximum grant amount allowed was \$50 million. The City of Worcester grant application was for less than half, it was for 23.5. No, grant he had seen online was higher than 17 million, and event for most of the larger communities like Boston or larger, we're in the low teens, at \$10 to \$14 million range. Communities the size of Worcester, for example Springfield, was successful they got a \$6 million. Boston's grant was a good grant, he said he had a chance to read it, and he said it was a thoughtful they focused most of their funds on hiring staff to do work. They had very much smaller allotment toward tree planting, but a lot more to tree management and the staff needed to do that. They asked for \$11 million. They got \$11 million. He said that based on his other observations of some of the other grants received, that our grant may have been robust and holistic more than others, but that may have been a further reach from where they wanted to go. They wanted to spread the money out to as many communities as possible and therefore kept the overall price allotment down for grants they approved. That was his supposition on that. He added that the feedback received from others as well as our own review,

subsequently the report and application were put together very quickly, but that he was still pleased. He didn't think there were any major misses and that it was a very good and strong effort and it touched on a lot of different things that work well together, and he believed it will serve them well for future grant opportunities. If as expected it opens again next year, the City of Worcester will probably lower the number of interconnected pieces they put together and apply.

- There was further discussion, comments, questions regarding the funds, where to allocate fund, and grant opportunities. The fact that some individuals don't want trees planted in front of their homes. Educating the public on the benefit of trees, different methods of education to include educating children, which can drive adult behavior. Ideas on how to address the issue of resources. Green School Yards of America Program. Collaboration with educational institutions. The awarded grant to fund 2 Miyawaki Forest and the process of finding the best locations to put them in, the first two will be on municipal land. The forests will need to be designed and installed by the end of Fiscal Year 24 (June 30, 2024). Community outreach and feedback in reference to placement/location of forests. Balancing of tree species. Solar Access. A new Audubon study on solar. Urban Heat Island Study based on current state and what the potential future could be. Tree canopy. Parking lot constructions related to solar panels. Ecosystem study that can quantify what is better, shade canopy or solar panel production.
- Mr. Conna was in attendance via phone, and he spoke about his proposal, he said he was happy that it generated some interest. He said it's common sense that everyone does their best proactively to minimize the conflict between trees and solar collectors. So, there isn't trees in front of solar collectors or solar collectors installed in front of trees. He said he wasn't sure there's a need for a new ordinance to figure out what to do if you have a conflict, he said the thing is to avoid the conflict. He added that Solar collectors benefit more than just the homeowner and the electric company because, mitigating the impacts of climate change is to everyone's benefit. He asked that this be written into the Urban Forest Master Plan. He also said he didn't see the need to keep carrying forward this item on the agenda.
- Commissioner Elton made a motion to file the Solar Access item. Second by Commissioner Karoway-Waterhouse. All were in favor. Motion was approved 5 – 0.
- Commissioner Elton made a motion to file all old business and new business except for the goals and objectives. Second by Commissioner Karoway-Waterhouse. All were in favor. Motion was approved 5 – 0.

9. Date of Next Meeting:

- December 6, 2023
- January 17, 2024

- February 28, 2024
- March 20, 2024
- April 3, 2024
- May 1, 2024
- June 5, 2024

## 10. Meeting Adjourned (Roll Call)

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### ASSISTANT COMMISSIONER'S REPORT:

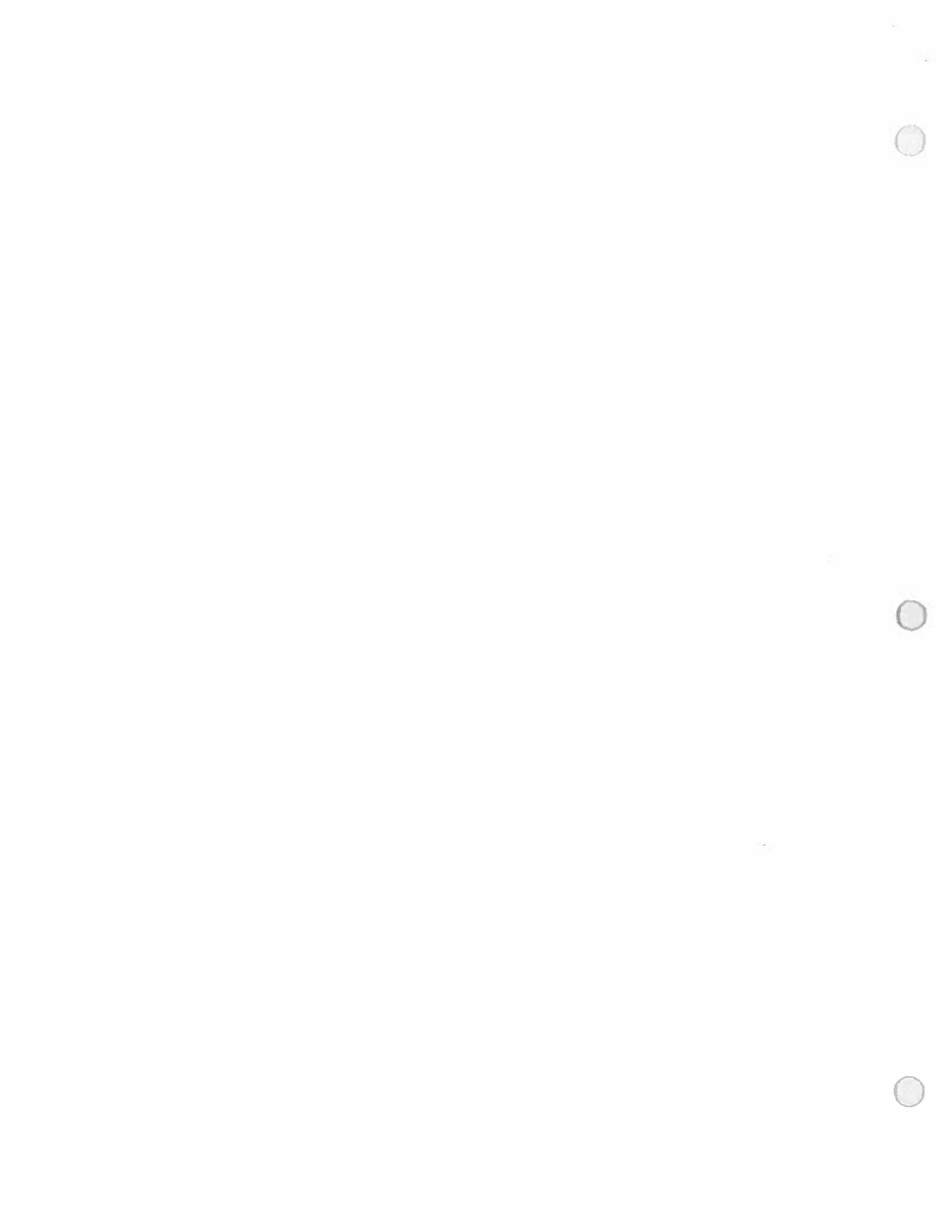
#### 1. General:

- Urban Forestry Master Plan Review
  - The second draft of the Urban Forestry Master Plan which can be found here: [Trees in the City - Right Tree, Right Place | City of Worcester, MA \(worcesterma.gov\)](https://www.worcesterma.gov/urban-forestry)
  - The Urban and Community Forestry (UCF) Inflation Reduction Act Notice of Funding Opportunity which can be found here: City of Worcester application attached [Urban Forests | US Forest Service \(usda.gov\)](https://www.usda.gov/urban-forests)
- DCR Informational Flyers – Update
- USDA Tree Owners' Manual – Update
- DCR Urban & Community Forestry Grant Application - Update
- Door Hanger - NA
- Tree Commission attending neighborhood meetings – Update
  - [Neighborhood Response Team | City of Worcester, MA \(worcesterma.gov\)](https://www.worcesterma.gov/neighborhood-response-team)
- Tree replacement policy - NA
  - Request Only
  - Mandated replacement
- Neighborhood Based Urban Heat Risk Assessment - NA
- Worcester Now | Next online survey - NA
- Green Worcester Advisory Committee -NA
- Planting –
  - Spring 2024 Planting - NA
- Customer Service Update
  - Customer Service Contact Information 508-929-1300 &/or 311
- Street Resurfacing Opportunities & Challenges – NA
- Zoning Ordinance Discussion - NA
- Worcester Ordinance Relative to the Protection of Public Trees - NA
- Partnerships –
  - New England Botanical Garden @ Tower Hill - NA
- Grant Applications –
  - Commonwealth of Massachusetts Grant
- Economic Development Initiatives –
  - NA
- Forestry Vandalism & Graffiti –
  - NA



- Donations –
  - NA
- Pests –
  - ALB (Asian Longhorned Beetle) - NA
  - EAB (Emerald Ash Borer) - NA
  - Spotted Lanternfly - NA
  - Elm Zigzag Sawfly – NA
- Forestry Operations –
  - Tree City USA – NA
  - Arbor Day –
    - April 26, 2024
    - April 27, 2024 – Festival
- Budget – Operational & Capital – NA
  - Parks, Recreation & Cemetery Division – NA
  - Capital Improvement Program – NA
  - City Five Point Financial Plan – NA
- Misc. – N/A
- Commissioner Elton made a motion to adjourn. Second by Commissioner Karoway-Waterhouse. All were in favor. Motion was approved 5 – 0. Meeting was adjourned at 7:31 PM.

**A copy of this full meeting will be available to view and listen to at:  
[www.worcesterma.gov/city-clerk/public-meetings/agendas-minutes](http://www.worcesterma.gov/city-clerk/public-meetings/agendas-minutes)**



**ASSISTANT COMMISSIONER'S REPORT:**1. General:

- Urban Forestry Master Plan Review
  - The second draft of the Urban Forestry Master Plan which can be found here:  
[Trees in the City - Right Tree, Right Place | City of Worcester, MA \(worcesterma.gov\)](#)
  - Worcester Regional Research Bureau Brief 23-14 "Worcester's Urban Forest Master Plan"
- Door Hanger - NA
- Tree Commission attending neighborhood meetings – Update
  - [Neighborhood Response Team | City of Worcester, MA \(worcesterma.gov\)](#)
- Tree replacement policy – Update
  - Commission to recommend a policy on Tree Planting & Replacement:
    - Option 1:

The City of Worcester will plant trees within the right of way that meets the Arbor Day Foundation "Right Tree – Right Place" protocols, Commonwealth of Massachusetts Urban & Community Forestry planting guidelines, ISA Planting standards, and ANSI A300 Part 6 tree planting and transplanting standards in all available locations without a request or agreement of the adjacent property owner.
    - Option 2:

The City of Worcester will plant trees within the right of way that meets the Arbor Day Foundation "Right Tree – Right Place" protocols Commonwealth of Massachusetts Urban & Community Forestry planting guidelines, ISA Planting standards, and ANSI A300 Part 6 tree planting and transplanting standards upon request or agreement of the adjacent property owner only.
- Neighborhood Based Urban Heat Risk Assessment - NA
- Worcester Now | Next online survey - NA
- Green Worcester Advisory Committee -NA
- Planting –
  - Spring 2024 Planting - NA
- Customer Service Update
  - Customer Service Contact Information 508-929-1300 &/or 311
- Street Resurfacing Opportunities & Challenges – NA
- Zoning Ordinance Discussion - NA
- Worcester Ordinance Relative to the Protection of Public Trees - NA
- Partnerships –
  - New England Botanical Garden @ Tower Hill - NA
- Grant Applications –
  - DCR Grant Program - NA
- Economic Development Initiatives –
  - NA
- Forestry Vandalism & Graffiti –
  - NA
- Donations –
  - NA
- Pests –

- ALB (Asian Longhorned Beetle) - NA
  - EAB (Emerald Ash Borer) - NA
  - Spotted Lanternfly - NA
  - Elm Zigzag Sawfly – NA
- Forestry Operations –
  - Tree City USA – NA
  - Arbor Day –
    - April 26, 2024
    - April 27, 2024 – Festival
- Budget – Operational & Capital – NA
  - Parks, Recreation & Cemetery Division – NA
  - Capital Improvement Program – NA
  - City Five Point Financial Plan – NA
- Misc.



The City of  
**WORCESTER**

Department of Public Works & Parks  
Parks, Recreation & Cemetery Division  
Forestry Operations

50 Officer Manny Familia Way, Worcester, MA 01605  
P | 508-799-1190 F | 508-799-1293  
Worcestertrees@worcesterma.gov

## **URBAN FORESTRY TREE COMMISSION MEETING**

Wednesday January 17, 2024 – 6:00 P.M.

Parks, Recreation & Cemetery Administrative Office

Meeting Room A

50 Officer Manny Familia Way Worcester, MA 01605

Or

Virtual with Teams

## **ASSISTANT COMMISSIONER'S REPORT**

**GENERAL**





The City of  
**WORCESTER**  
Department of Public Works & Parks

Department of Public Works & Parks  
Forestry Operations

50 Officer Manny Familia Way, Worcester, MA 01605

P | 508-799-1190 F | 508-799-1293

Worcestertrees@worcesterma.gov

# Urban Forest Master Plan

## First Draft Comments

### June 2023







**To:** Robert C. Antonelli Jr., Assistant Commissioner, DPW&P, Parks, Recreation & Cemetery  
Division and Urban Forestry Tree Commission

**CC:** Eric Batista, Worcester City Manager; Kerry Gray, Davey Resource Group, Inc.; Stephen Rolle,  
DTM; Peter Dunn, EOOED, Michelle Smith, DPRS

**From:** John Odell, Chief, Department of Sustainability & Resilience

**Date:** May 16, 2023

**Re:** **Comments from the Department of Sustainability & Resilience on the Draft Urban Forestry  
Master Plan**

The Green Worcester Plan (GWP) calls for the Urban Forestry Master Plan (UFMP) to be a cornerstone in creating connected green and blue spaces. The GWP states that “*planting trees to expand the city’s tree canopy is among the most effective sustainability and climate change adaptation actions that a city can take.*” The Department of Sustainability and Resilience (DSR) supports the UFMP’s dedication to conducting a comprehensive street tree survey across Worcester. However, we feel that the UFMP can be further strengthened if considered the following recommendations:

**1) Propose Statement of a Vision That Inspires**

- A vision is what inspires action and progress, even when at a present moment, the path to it may not be clear<sup>i</sup>. We feel that UFMP needs such a vision. One example is based on the vision proposed by Evelyn Herwitz, Green Worcester Advisory Committee member:

*By 2040, Worcester will be home to a healthy urban forest for all, with an equitable distribution of climate-resilient trees, a growing canopy shading heat islands, and cooling corridors that connect our neighborhoods. We will foster public investment, public-private partnerships, and robust community involvement to maximize tree plantings and best-practice stewardship of our urban forest, to ensure a sustainable and resilient environment for generations to come.*

**2) Increase Specificity of Action Steps, including:**

- Increase the total tree canopy of Worcester so that on average 50% of the city is shaded by planting 40,000<sup>ii</sup> new trees by 2050. This canopy expansion would build on the draft Plan’s existing equity-based efforts to plant new trees in environmental justice areas first.

**3) Provide Robust Resources for Stewardship, Transparency and Accountability**

- The goals and actions in the draft UFMP are numerous and significant. Adding to the existing tree canopy will expand these goals and actions. We believe it is imperative to discuss in depth the level of internal and external resources needed to allow for this implementation including community engagement, cross-departmental teamwork, tree data management, pursuit of external funding sources, stakeholder collaboration, and more. We recommend a new section is created in the plan to showcase the vision and to explore the needed city structures and resources to support work that protects and promotes the city’s Urban Forest.

<sup>i</sup> Similar to the ambitious Green Worcester Plan goal for Worcester to become the greenest mid-sized city in America by 2050.



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<sup>ii</sup> A recommendation of the 2022 Heat Risk Assessment Study. Increasing from 35,000 (per Heat Risk Vulnerability Assessment) to 40,000 in order to account for inevitable tree loss of new plantings.



May 16, 2023

Rob Antonelli  
Worcester Parks & Recreation  
50 Officer Manny Familia Way  
Worcester, MA 01605

Via email: [antonellir@worcesterma.gov](mailto:antonellir@worcesterma.gov)

Re: Worcester Draft Urban Forestry Master Plan Public Comment

Dear Mr. Antonelli and the Worcester Urban Forestry Master Planning Team,

Thank you for the opportunity to submit, on behalf of Mass Audubon, the following comments on the draft Worcester Urban Forestry Master Plan (UFMP) for your consideration. These comments were compiled by Erica Holm, Urban Ecologist, and reviewed by Heidi Ricci, Director of Policy and Advocacy, Deb Cary, Community Advocacy and Engagement Manager, and Jenn Madson, Central Regional Director.

As you know, Mass Audubon is the largest nature-based conservation organization in New England. Founded in 1896 by two women, Harriet Hemenway and Minna Hall, who fought for the protection of birds, Mass Audubon carries on their legacy by focusing on the greatest challenges facing the environment today: the loss of biodiversity, inequitable access to nature, and climate change.

Forests and trees play important roles in addressing all three of these priority challenges. As recognized in the draft Plan, Worcester's urban forest provides many important benefits, including carbon storage and sequestration, cooling and shade, absorption and filtration of stormwater, access to nature, more attractive and livable communities, and public health and social benefits.

In addition to the specific comments on the Plan below, we recommend:

- 1) That the UFMP explicitly address the role of development and redevelopment projects and the regulations and permitting requirements for those projects. We recommend that the City make a commitment to adopting rules that require maximum retention of existing trees on development sites; strengthen requirements for planting **and maintenance** of new trees within development plans; and payments into a tree fund to help offset the unavoidable losses of tree cover due to development. Other communities have adopted such regulations<sup>1</sup>.
- 2) That the City of Worcester consider adopting a policy regarding parcels of land with significant tree cover (greater than 40%) which evaluates their climate resiliency attributes prior to development. The balance of conservation and development within these parcels is critical to reducing the impacts of climate change.

We applaud the City of Worcester for undertaking this planning process.

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<sup>1</sup> <https://www.mapc.org/resource-library/tree-regulations/>



## 1) Strengths of the Plan

- Describes direct benefits of trees and urban forestry concepts throughout
- Provides details on historic and current operating information and degree to which other plans intersect with urban forestry
- States the needs for a comprehensive tree canopy assessment, additional planting, proactive tree maintenance, and increased staffing
- Recognizes major problems with suggestions for potential solutions

## 2) Areas for Improvement

- **Prioritize the Recommendations, reduce overlap/redundancy wherever possible, and expedite action via an Implementation Plan.**
  - i. Do not wait for the urban tree canopy (UTC) assessment to be completed to begin work on the ground. Doing an UTC assessment will make comparisons of urban forestry efforts over time comparable to other cities, and is necessary, but should not prevent action on other Action Steps or Recommendations. It should also not supersede the lived experience of residents in Worcester's environmental justice communities – who often already know where trees and care are needed.
  - ii. Create fewer new strategic plans in favor of expediting action in urban forestry. Do not split into multiple lengthy documents – have one visioning UFMP, paired with one urban forestry implementation plan that covers planting, risk management, roles, includes BMPs, etc. (p. 52).
  - iii. Does this plan cover a specific number of years or other timeframe? The City of Boston's 2022 Urban Forest Plan covers 20 years.
  - iv. Consider using the SMART goals framework and creating checklists within an annual implementation plan.
  - v. A 2022 [article](#) on Portland, Oregon's urban forest showed a 1% decrease in tree canopy for the first time in 50 years. Portland has had [multiple urban forest management plans](#), released in 1995 and 2004. An Urban Forest Action Plan followed in 2007 which has Implementation Updates released almost every year since. Even communities that have a long history of urban tree planning and implementation struggle to attain a net gain in canopy. It is critical to set clear goals and track progress through this plan..
- **Use consistent, accurate, well-defined terms and improve formatting in specific places.**
  - i. Provide a glossary defining tree, urban forest, types of pruning, and other jargon or words that have variable meaning and possible interpretations.
  - ii. When talking about street trees only, do not interchange the word “publicly-managed trees” or just “trees” alone (p. 27).
  - iii. Remove “formerly known as Gypsy moth” – the name was changed for a social justice reason, so there is no need to include the former name, especially when the Latin binomial is provided (p. 33).
  - iv. Update how Mass Audubon is referred to in the plan for correctness and consistency throughout (p. 59, 61 incorrect).
  - v. Charts starting on p. 42 are too difficult to interpret – use the same shade to fill in boxes, have the boxes have a check mark or borders showing, or provide a legend. There are some text formatting issues on p. 45.

- **Focus on recommendation number four, to strengthen the regulations that would ensure tree protection.**
  - i. If Worcester has a tree protection ordinance created in 1761, why does it say that there are no protection regulations outside of Ch. 87 (p. 44)? Boston is working on a tree ordinance right now, and there are countless examples across the country that could be models for Worcester.
  - ii. Increase awareness of statewide and regional urban forestry legislation efforts (e.g. [Municipal Reforestation bill](#), and the successes of the [Greening the Gateway Cities Program](#)).
- **Address inequity and environmental justice more thoroughly.**
- **Focus on both tree planting and maintenance. Mature tree preservation provides greater climate resilience benefits now than tree planting initiatives.**
  - i. Engage residents in mature tree preservation
  - ii. Focus on early tree care with an equitable workforce development component. Consider partnering with nonprofit organizations, e.g. Mass Audubon's Broad Meadow Brook residential intern program, Tower Hill's summer program, and Worcester Green Corps.
- **Address urban forestry technical issues more thoroughly – most importantly -respond more comprehensively to opportunities outside of street trees.**
  - i. Natural areas, private land, parks and conservation land, and campuses (schoolyards, cemeteries, hospitals, etc.) contribute significantly to the urban forest – often to a much greater extent than street trees. Increase emphasis on the importance of understanding these pieces of the urban forest and actions that can be taken in partnership to steward them.
  - ii. Consider expediting development of a plan to treat or manage the 405 ash trees for emerald ash borer.
  - iii. Increase attention given to invasive and problematic tree species like Callery pear and Norway maple, which quickly invade natural areas and outcompete native species guilds.
  - iv. Add additional urban & community forester positions to the staff, rather than a single arborist. Urban foresters can evaluate and work on UFMP implementation planning, partnering with other urban foresters, and engaging the community where arborists do more of the technical tree care work and advisership.
- **Partner to request Inflation Reduction Act funds in the present and consider financial and workforce sustainability and feasibility far into the future.**

### 3) Working together - opportunities for collaboration with Mass Audubon

- Education and workforce development
- Support and collaboration on funding requests
- Interdisciplinary implementation of conservation science and education – tying urban forestry to wildlife, regional resilience, and public health

Mass Audubon's priorities include urban greening. We look forward to continuing to build our partnerships with, and within, the City of Worcester to improve access to nature and climate resiliency. The following summarizes some of our key priorities and resources that we offer in this shared endeavor:





- Mass Audubon has released an ambitious [Action Agenda](#) for 2021 – 2026 which includes significant investment in creation of new urban green spaces, facilitation of partnerships, and participation in equitable expansion of access and education in urban greenspace.
- Mass Audubon's Broad Meadow Brook Wildlife Sanctuary, located in the heart of Worcester, has offered over 30 years of land stewardship, nature-based education, climate advocacy, and urban tree canopy benefits to a diverse community of constituents in surrounding Environmental Justice communities. Supporting more than 435 acres of land and 5 miles of trails, our team engages 17,000 community members, including more than 2,000 Worcester Public School youth each year. We hope to adopt implementation of this plan, and be included in Worcester's urban forestry considerations as a landowner, source of expertise, educator, and partner.
- Mass Audubon's Conservation Science department employs 15 senior-level ecologists, one solely focused on urban ecology, to advance natural resources education, practitionership, and ecological function of land across the state. Members of this team could be ideal to participate in and potentially build a citywide and regional practitioner group for urban forestry.

**Thank you for your time and consideration. We look forward to the culmination of these efforts and are grateful for the opportunity to contribute.**

Sincerely,

A handwritten signature in black ink that reads "Jenfe. M. Madson".

Jennifer M. Madson  
Regional Director, Central

A handwritten signature in black ink that reads "Erica Holm".

Erica Holm  
Urban Ecologist

A handwritten signature in blue ink that reads "Deborah D. Cary".

Deborah D. Cary,  
Community Advocacy and  
Engagement Manager

Cc: City Manager Eric Batista [CityManager@worcesterma.gov](mailto:CityManager@worcesterma.gov)





The City of  
**WORCESTER**

To: Robert C. Antonelli Jr., Assistant Commissioner, DPW&P, Parks, Recreation & Cemetery Division and Urban Forestry Tree Commission

CC: Eric Batista, Worcester City Manager; Kerry Gray, Davey Resource Group, Inc.; Department of Sustainability & Resilience

From: Green Worcester Advisory Committee

Date: May 15, 2023

Re: **Comments from the Green Worcester Advisory Committee on the Draft Urban Forestry Master Plan**

Given the relevance of the Urban Forestry Master Plan (UFMP) to the Green Worcester Plan's goals, and as comments on the first publicly presented draft UFMP are due on May 16, 2023, the Green Worcester Advisory Committee's May 15, 2023 meeting agenda included the item "*Discussion on Draft Urban Forestry Master Plan.*"

In general, Green Worcester Advisory Committee members thought the draft Plan did a thorough job of assessing existing street trees. However, they also thought that the plan should go further with more specific and actionable goals, and should include a vision statement, in order to enable action without needing to wait for additional studies, as recommended in the draft Plan.

To that, the committee voted to endorse **Member Evelyn Herwitz's written statement (Attachment A)** which was previously presented during public comment period at the Urban Forestry Tree Commission meeting on May 3, 2023.

Additionally, the committee voted to submit the following recommendation for your consideration as the draft UFMP is further refined:

1. To recommend that the Urban Forest Master Plan (UFMP) include better defined tree planting goals, consistent with the Green Worcester Plan (GWP) and the Heat Risk Assessment Study (Attachment B), with the goal to have a rapid, sustained increase in tree canopy cover. Ideally, the target should be a net gain of 2,000 trees per year to be consistent with the GWP and the Heat Risk Assessment Study.
2. To recommend that the UFMP give additional attention to the entire urban forest, beyond just street trees, or if that's not feasible for this plan, that the UFMP at least identify when and how the city will develop policies to preserve, protect, and grow the entire urban forest.
3. To recommend that the city/UFMP establish a goal of no-net-loss of trees for all street, sidewalk, and public and private development projects and begin to determine how to achieve it.
4. To recommend that the UFMP define the goal that new and existing street, sidewalk, and public development work should always include preserving and planting trees wherever feasible.
5. To recommend the UFMP define as city policy that the city will not plant future shade trees in front of solar collectors and will not grant permits for solar collectors that would be significantly shaded by existing or planned shade trees—just as we would not plant trees that conflict with other utilities or street lighting.

Sincerely,

Mary Knittle, Chair of the Green Worcester Advisory Committee





## Feedback on Worcester's Draft Urban Forest Master Plan Worcester Urban Forestry Tree Commission, May 3, 2023

I'm Evelyn Herwitz, and I live in District 1. Thank you for the opportunity to share my thoughts about the draft Urban Forestry Master Plan. The Plan is a huge accomplishment, a key step in realizing the Urban Forestry goals of the Green Worcester Plan. I commend Mr. Antonelli and his team along with Davey Resource Group for giving us a very clear picture of the status of our City's urban forest, as well as some foundational goals and recommendations for growing our canopy and better caring for our trees. I also appreciated that you cited my book, *Trees at Risk*, as end-note #1. As I was reviewing the historical timeline, I thought, that looks familiar!

The plan confirms, with data and other research, what we all know to be true: our City's trees need help. I enthusiastically support the recommendations to shift from a reactive to proactive approach to managing and protecting our urban forest, as well as the importance of doing so with a priority on equity, sustainability, and climate resilience. We now have a huge opportunity to significantly improve our efforts with the US Forestry Service Urban & Community Forestry IRA grant program. Time is of the essence, as the deadline for grant applications is June 1.

Here's what I think will help to strengthen the Plan, which should form the basis for the grant application, and improve our chances of getting much-needed resources for its implementation:

### **Vision: What We Want**

While the plan is based on adaptive management principles and does a good job of explaining what we have and how we're currently doing, it needs more clarity, imagination, and specificity regarding what we want and how to get there. In particular, the plan needs a vision that guides the goals and action steps. I offer the following:

*In ten years, Worcester will be home to a healthy urban forest for all, with an equitable distribution of climate-resilient trees, a growing canopy shading heat islands, and cooling corridors that connect our neighborhoods. We will foster public investment, public-private partnerships, and robust community involvement to maximize tree plantings and best-practice stewardship of our urban forest, to ensure a sustainable and resilient environment for generations to come.*

### **Action Plan: How to Get There**

Current language in the plan includes goals and recommendations. I think we need a greater emphasis on action, sooner than later. A few observations:

- While the Plan recommends a comprehensive urban tree canopy assessment, to pick up where the Plan leaves off, **waiting another two years for the results before defining planting priorities is too long.** We already have ample data from Clark University and WPI studies, the recent heat island study by Urban Climate Consulting, American Forests Tree Equity Score data and other readily available resources to set priorities. We all know that **Green Island and the City's other core neighborhoods need more trees to mitigate heat and help control flooding.** Now is the time to find viable planting locations and work with the neighborhoods to build support for planting and maintenance. The comprehensive tree canopy assessment can inform plantings as we move forward, but we have no more time waste, given the

increase in severe weather events. I also believe that **we have the data and expertise in this community to help us identify viable planting sites and neighborhood canopy cover goals** without waiting for the tree canopy assessment. This should be a Year One priority.

- **Trees and their care need to be priorities in all economic development**, from site planning through construction and after the buildings are completed and occupied. This should be made explicit in the Plan and linked to zoning ordinance reviews, the site permitting process, and any updates to the City's tree ordinance.
- **We need to plant more trees than we remove.** A 1:1 planting replacement goal will continue to result in a net loss of tree canopy, given the many stresses on young trees in an urban setting. I urge you to consider at least 2:1, and even 3:1, as a goal. If we are able to secure federal funding, we can be much more visionary and aggressive with planting diverse species in the right places, while also thinking more creatively about incentives for private land owners to plant trees on their property and ways to overcome resistance to planting and caring for trees.
- **We need to think boldly about what kind of urban forestry department our City needs** to meet the demands of climate change and pressures on our urban forest. The plan makes a modest proposal for additional staffing, and I'm aware of current budgetary constraints on the City. But the USFS grant provides an opportunity to rethink the size and organizational structure of Forestry, so that we have the people and funding support in place to become truly proactive.
- As you address these points and other feedback, it is essential that a **subcommittee of the Urban Forestry Tree Commission work directly with consultants and City staff on any revisions of the Plan.** We have some real expertise on the Commission that will be of benefit to all involved, and your active involvement in shaping the Master Plan is needed.

Edward Winslow Lincoln, who was the 19th century mastermind behind our many green streets, Elm Park, and our municipal parks system, had a vision of shaded streets and ample green spaces where citizens could find respite from a rapidly industrializing city and enjoy the public health benefits that trees provide. As I read through 150 years of Tree Commission reports for my book, I found his words and relentless championing of trees to be an inspiration. We would not have the urban forest that we have today without his visionary efforts.

We are at a crucial point in our City's history, now, as temperatures rise and pressures on our urban environment intensify. We need an inspiring vision and aggressive action plan to meet that challenge. We are blessed with dedicated public servants, as well as expertise and enthusiasm among members of our community who want to help to ensure we have a sustainable, resilient urban forest for the 21st century. Let's go.

Evelyn Herwitz  
21 Chippewa Road  
evelynherwitz@gmail.com

## Antonelli, Robert C. Jr., Parks Asst. Comm.

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**From:** Ted D. Conna [REDACTED]  
**ent:** Tuesday, May 16, 2023 5:00 PM  
**To:** WorcesterTrees; Antonelli, Robert C. Jr., Parks Asst. Comm.  
**Cc:** Odell, John W.; Zhaurova, Luba  
**Subject:** Urban Forest Master Plan comments (1-7) and page-by-page suggested edits (8)

**Caution:** This email came from outside the City of Worcester. Do not click on links or open attachments unless you are sure you recognize the sender and you know the contents are safe.

Thank you for the opportunity to participate in this planning process for Worcester's urban forest. The draft UFMP is a good, fine-grained treatment of where we are with regard to street trees, and what is needed to improve upon the status quo. I agree that Forestry needs more funding, staff, and resources to do the job we ask of them, and I would support giving them more than the draft plan asks for. But this plan needs a much bolder vision for Worcester's trees.

### 1) Need more aggressive tree planting goals

The Green Worcester Plan calls for an increase in tree cover to mitigate climate change, and the recent Heat Island Risk Assessment Study suggested a need for a net gain of 30-35,000 trees citywide, which is about the same scale as the ALB reforestation program.

On p. 53, we see that in the past four years, we removed just a few more trees than we planted, for a tiny net loss. What we need is a big, sustained net gain. I agree that a no-net-loss policy should apply to private development projects and to city street and sidewalk work. But there should also be a bold plan to have a target net gain of about 2,000 trees per year citywide, which would get us to 35,000 new trees in 15-20 years.

### 2) Need to expand focus beyond just street trees

We need an expanded focus, because as the plan makes clear, we'd be lucky if even 20% of those new trees can be planted on city rights-of-way. I understand that street trees are what we know the most about, and that the city has less control over trees on private land. But here are some things that could be expanded upon:

The draft plan mentions the need to strengthen tree protection measures, which is good. It would be a stronger plan if it went into some more detail about that. The city of Providence's Significant Tree Ordinance is one example. Members of the Urban Forestry Tree Commission could be a resource for other possible policies and ordinances to protect trees.

The draft plan also mentions the need to develop tree planting standards and requirements for developers, including for parking lots--also good. There are many ways to accomplish this, and again, it would be good to flesh it out a bit more.

The draft plan could also consider how the city could encourage natural reforestation in certain places--there may be mowed fields or lawns on park, school, or private land that could be allowed to grow in with trees--and trees do plant themselves, for free! Some of these sites could also be planted as small orchards, providing a new local food source as well as tree cover.

Community partnerships will be important here. For example, many school sites have trees, and getting students involved in learning about and caring for the trees would be a win-win-win for students-schools-community.

### 3) Common sense measures should be expedited

The plan calls for 5 or 6 additional plans and studies, which is fine, but there is common sense progress we could make right now, with this plan, without waiting for further study.

A canopy study may be helpful, but the lack of it is not the limiting factor in the challenging urban neighborhoods that need trees the most. We should begin planting trees on treeless streets asap, and the draft plan should address how we can overcome the obstacles to that.

I've advocated for preserving solar access, and I'm pleased to see it is on the city's radar, but we don't need to wait two years to consider that. The draft plan should define a zero-cost policy that we don't plant large shade trees in front of solar collectors, just as we shouldn't plant them where they block streetlights, on top of utilities, etc. And we should avoid siting utilities and solar collectors that might conflict with existing or planned trees.

#### **4) No net loss of trees for street, sidewalk, public and private development projects**

The draft plan should define a goal of no-net-loss of trees for all street, sidewalk, and public and private development projects, and begin to determine how to achieve it--since that may not always be possible onsite and may require offsets elsewhere.

#### **5) Net gain for public development projects should be a priority**

The draft plan should define the goal that new and existing street, sidewalk, and public development work should always include preserving and planting trees wherever feasible.

#### **6) Quantify more of the financial benefits of planting trees**

The draft plan attempts this, but many of us think the argument could be strengthened. In January, the Green Worcester Advisory Committee was told of a NYC study showing \$5-6 in benefits for every \$1 spent on trees.

#### **7) Role of Urban Forestry Tree Commission**

The UFTC is a valuable resource, and the plan would benefit if it better defined the UFTC's role and how the city can take better advantage of the expertise there.

#### **8) Suggested edits**

p.7, 22, and 70

To recommendation #5, please add clarification that this includes maintaining adequately sized tree boxes at all times.

p.19

Worcester's street trees alone sequester 182 tons each year and store an equivalent of \$3,008,412

of carbon.

I find this statement confusing in a few ways. To my knowledge, a healthy mature tree removes about 48 lb/year of carbon from the air, and if they were all healthy-mature, that would calculate to 555 tons per year for all the street trees. I understand that number needs to be downgraded because young/sick/old trees don't remove as much carbon, but downgrading by 2/3 seems excessive. And going from 182 tons stored/year to \$3M stored/cumulative-to-date is changing too many variables at once. Including the intermediate step of tons stored/cumulative-to-date would be clarifying. Finally, it would also be nice to have even a crude guesstimate of the tonnage and value of carbon removal by ALL of Worcester's trees--so as not to understate the value of the urban forest.

p.23

Consider moving this plan organization page so that it precedes p.10

p.27-28

8,494 planting sites were inventoried, but the plan really should explain how "planting site" is defined. Does it include only existing, empty tree boxes? Does it include any other potential sites without existing tree boxes? Are any such sites excluded due to obvious constraints like interference with utilities, street lighting, etc.?

p.28

Hard to believe we've gone from 15,500 trees in 2005 to 23,100 trees in 2022, with the ALB infestation in the middle of that. Is it possible the 2022 inventory was more complete?

p.30

maple (29%) exceeds industry guidelines that a single genus should not make up more than 20% of the tree population (Table 3).

But table 3 shows maple genus at 38%, which I assume is the correct number.

p.35

#### Street Tree Maintenance Needs

Each site assessed was assigned a maintenance need, indicating the type of tree work needed to improve tree health, mitigate defects, or grow the public urban forest (Figure 9). The most common primary maintenance need of inventoried sites is pruning, with 53% of established street trees needing routine pruning, 21% of young trees in need of training pruning, and 11% of trees in need of higher-priority (risk-based) pruning. Tree maintenance activities are prioritized based on risk and available resources with tree removals and high priority pruning addressed first before routine pruning, stump removal, and other activities

I would suggest rewording this for clarity and accuracy. As currently worded, it is incorrect. Here is my suggestion:

Each site assessed was assigned a maintenance need, indicating the type of tree work needed to improve tree health, mitigate defects, or grow the public urban

forest. It is assumed that every tree should be on some type of pruning cycle (Figure 9). The most common primary maintenance need of inventoried sites is pruning, with 53% of established all street trees (generally, the established trees) needing routine pruning, 21% of young-all trees (all the younger trees) in need of training pruning, and 11%-15% of all trees (generally, the older trees) in need of higher-priority (risk-based) pruning. Tree maintenance activities are prioritized based on risk and available resources with tree removals and high priority pruning addressed first before routine pruning, stump removal, and other activities

p.45

The first and fifth bullet points are redundant, and could probably be reworded and/or combined.

p. 46-47

I find this analysis odd, and potentially unhelpful. I think beyond a certain level, the dollars-spent-per-tree metric becomes vulnerable to the perception that a larger number represents inefficiency and waste, and a smaller number is better. Dollars-spent-per-capita, or dollars-spent-per-street-mile, might be a better metric to use. I'd rather see more dollars spent on planting more new trees, but the dollars-spent-per-tree does not measure that. How about a comparison of net-tree-gain targets of Worcester vs. other cities?

p.54

For Worcester's public street and park trees the City should, at a minimum, strive to plant as many trees as it removes each year.

This really does not move the needle from the current status quo. Whether it's a more aggressive replacement ratio, or a target number for net gain of new trees, we need to aim higher here.

p.58

Chapter 12 - Streets and Sidewalks &  
Section 28 - Protection of Public Trees

I suggest removing the "&" and clarifying that Ch.12, Sect. 28 is a city ordinance enacted in 2009.

p.67

Interdepartmental Coordination. Good working relationships exist between DPW & Parks, Forestry Operations, and other City departments; however, communication typically occurs late in construction and design projects or when there is a conflict between trees and a City construction/infrastructure project. Improved communication and collaboration processes need to be established to ensure trees are considered early on during City projects.

Excellent to see this need highlighted. I think the plan would be stronger if this were fleshed out a bit more (which departments?, what types of projects?, what changes of protocol or jurisdiction would accomplish this goal?, etc.). I also think the need for better interdepartmental coordination should be elevated to the list of plan recommendations on page 7.

p.100

The Plan goals, recommendations, and actions were shared in Section 5. They focus on improving Worcester's urban forest through proactive planning, management, and engagement. And this section, Section 5, outlined ways...

The second "Section 5" is a typo. Should be Section 6.

p.107

Requires tree planting around and within parking lots X Chapter 12, Section 28 (i);

Requires tree plantings around new developments (see also trees in parking lots) X Chapter 12, Section 28 (i);

I think the reference to Sect. 28 (i) here might be wrong, unless it defines the tree warden's authority in relation to other regulations.

respectfully submitted,  
Ted Conna  
Green Worcester Advisory committee, District 4

[Redacted signature]

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Pain is what you feel.  
Suffering is what you think.  
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sent from my desktop, not my dumbphone

## DPRS comments on the Draft Urban Forestry Master Plan:

### General Comments:

We understand that the focus of this master plan was on street trees and parks, but it would be great if we could acknowledge the need to better manage our canopy on passive open space areas, trees on other city properties (e.g. schools) and canopy on private properties, as a need that while not included in the scope of this plan certainly warrants further investigation and planning for as an action item in the plan (feel free to co-assign it to Planning & Regulatory Services for action! These strategies are so important to further this effort to grow, protect, and maintain canopy health and we feel need to be more explicitly acknowledged as being an absent (i.e. out of scope) if they're not incorporated as strategies themselves – although I'd love for them to be explicit to-dos coming out of the plan (beyond the citywide UTC assessment).

Generally, the responsibility and action matrix should be discussed further for implementation reasonability before this is finalized – there are lots of things our office would like to, and likely should be, involved in implementing/supporting and I'm sure this is the case for others. This matrix really says "Forestry Operations" for everything with other departments referenced in a few places - but this is not something Forestry needs to do alone. This work can't occur in a silo to have the impact it needs to have and this implementation should not be Forestry's sole responsibility – that's way too much to carry alone! Many of these efforts need to be intertwined with the other departments work - who help enforce/implement and should also assist in development of those policies/changes – to be most effective. By collaborating on implementation, I think we end up with a product that hopefully helps promote our collective community goals as effectively as possible! Overall, I think we should revise this to reflect all relevant departmental partners needed to support each of these important efforts. While we're happy to offer specific suggestions (and we added explicit call outs where I felt it was absolutely necessary as a minimum), we think there's a lot more overlap and that we should discuss together. We did not look at priority due to time limits in our review but think this needs more collaboration and would love to collaborate on it! We would love to partner to think through implementation and our roles in supporting this important work!

### Specific Comments:

1. Pg. 3, Executive Summary: "Worcester's urban forest — made up of a mosaic of trees growing along the city's streets and in parks and private landscapes"
  - a. Could we also include "open space" or "conservation land" in here as well given how many acres of forest these areas contain?
2. Page 4 – in the last sentence "the plan focuses primarily on Worcester's public trees", adding on: "on Parkland and within Public Rights-of-Ways" or "Public Shade Trees as defined by MGL" could clarify the scope of this study.
3. Page 11 – p1 in right margin "in includes trees growing along city streets, in city parks", and in yards and around businesses". It would be great to add "conservation lands", or "city property" so we're not excluding those?
4. Page 14 – There is a double period at the end of paragraph 1.

5. Page 19 – Middle column, last bolded sentence add “public” to “Worcester’s street trees...”
6. Page 21 – Left column, third to last sentence has a comma before it.
7. Page 22 – Recommendation 2 – add “maintenance” and “on all city owned properties” or is this trying to extend this elsewhere?

Recommendation 4 – add “including making changes to zoning and providing recommended species for select scenarios”.

Recommendation 7 – add “resilience”.

Can there be something about invasives more explicitly (pests and plants – like bittersweet, etc.) maybe revised 10 to add including pests, extreme weather, and invasive vegetation – unless this is intended to mean something else?

Add something about trees as green infrastructure?

8. Page 27 – include population under communities for context in graph?

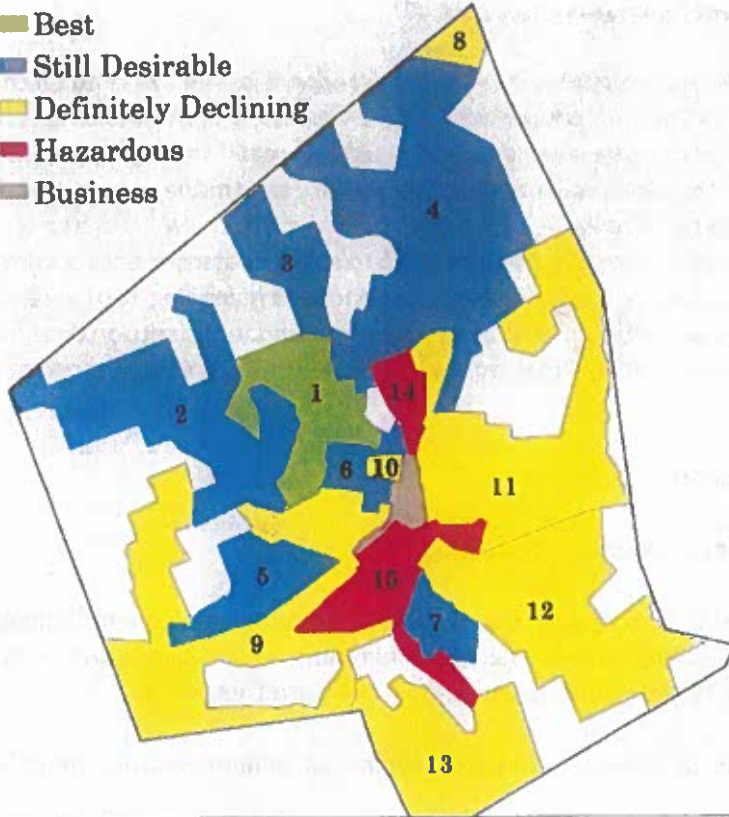
Last paragraph - Is there a per mile density we should be aiming for to compare where we are to?

9. Page 28 – Can we call attention to what’s going on in District 4? It’s EJ characteristics (minority, low-income, LEP) and the area’s history of redlining are compounding issues that make investment to correct inequities a part of the work coming out of this plan. That goes hand in hand with taking about impervious surfaces in relationship to the districts to help explain challenges for planting (especially in D4) as to why this tree planting ratio is comparatively so low and – calling attention to this type of inequity should be an important function of this plan.

Here’s the map from this [Research Bureau report](#):



- Best
- Still Desirable
- Definitely Declining
- Hazardous
- Business



10. Page 30 – gold text – add % change?
11. Page 32 - Can you suggest the need for us to maintain a planting list to provide owners/developers with?
12. Page 33 – delete “council districts” at the end of the Oak wilt paragraph
13. Page 36/37 – Can you talk about capture vs. store and the benefits of young trees for capture and old for storing? Maybe add the number associated with an average tree for the costs shown in graph form to help folks understand the value of planting 1 tree?
14. Page 37 – will you also be recommending that the city better understand/inventory as appropriate non-park city properties (e.g. schools, conservation land, etc.)?
15. Page 41 – is this for the street trees, or what management and players are being referred to?
16. Page 42 – Can you add schools and other city facilities as needing inventories?
17. Page 43 – on coordination – I think one issue touched on is that information is not easily shared/available which compounds problems (e.g. we can't see where shade trees are, or view their conditions – this should be in GIS so all of Worcester (city and not) can see the tree data). If we could improve ease of information sharing and create pathways to assure collaboration that would be great. We could use support in development of a planting list (what tree where!) for private property.

## Why is funder engagement moderate – city council?

18. Pg. 44, Planning & Regulatory Services is mentioned as responsible for “Maintenance of Publicly-Owned Natural Areas” aka ConCom properties – with an assessed performance level of “Low”, given the lack of any forest management plans. It would be great if the recommendations could specifically acknowledge that we have no dedicated staff for land management and that any management that does occur is solely reactive and complaint driven. We’d like to see included the need to increase the capacity/resources for DPRS to conduct assessments and develop & implement management plans to improve our performance in managing 700+ acres of mostly forested area as a recommendation. (Although the recommendations section does include conducting an comprehensive urban tree canopy assessment, which could presumably include ConCom properties)

Funding – comma at the end.

19. Page 45 – add bullet point in front of tree pruning.
20. Page 47 – would be great to shed light on our \$50,000/year land management budget (for all con com property and all ED properties – tax title and other land for disposition), which covers all management (signage, illegal dumping, overgrowth, hazard trees, etc.).
21. Page 48 – Fees - what are we talking about here? We have a general concern about layering on fees.

Budget transfers – not sure who specifically we’re thinking has funding to re-allocate, but it may be worth a specific call out to whomever that is? Agree that the city should provide services to all it’s properties though Parks and consolidate where possible.

Grant opportunities – can you add understanding what we have on larger passive properties via baselines and condition assessments to understand threats to our larger forested tracts (e.g., invasives, etc.).

22. Page 49 – paragraph 1 – “city trees” clarify public shade trees (DPW&P parks & public streets)
23. Page 50 – Consider adding increasing awareness and communication – for example if trees are in GIS others are more aware of them and may be able to flag the need for a tree hearing, etc.

Tree inventory - do you define where else we need to conduct inventories? Can you reiterate here what’s missing from this plan’s scope that needs to be captured by future efforts more explicitly (e.g., schools, other public facilities, trees along private streets, etc.)?

24. Page 52 –Can you provide recommendations about what data and planning needs we have/ we’re missing for the larger forest as a whole (i.e. outside of public shade trees) – for example developing forest management plans or other plans/assessments for natural areas?
25. Page 54 – How was this benchmark determined? Can we raise the minimum to indicate we’re planting more trees than we’re removing to off-set climate impacts and emphasize that we’re

needing to re-plant in the same geographic area to address equity issues... it seems like a reasonable goal to say plant 2x as many trees as we remove?

26. Page 56/57 – Streetscape policy - Add develop standards for tree-grates in the public ROW (we don't have one and need one in more urban areas where we need to preserve sidewalk width; and subdivision regulations require guy lines).

Complete Streets – explicitly state public and private streets and add all city property (schools, municipal buildings, conservation land, etc.).

Open Space and Rec – emphasize need to understand canopy and potential for planting on conservation lands.

Now/Next – we would like to meet to discuss the less than full-throttle/green recommendation of the plan when it comes to trees – we have recommendations that may be more explicit than are public and are developing strategies now. One of the early-action plan headlines is to develop regulations for tree-protection. We'd like to get to revisit this with you and get to green and discuss what's needed to get that endorsement – we would be happy to meet and discuss but it's important for us to change for the final urban forestry plan – we want to get to green!

27. Pg. 58, in ordinance review under recommendations to strengthen city code – it would be great to add "Strengthen requirements for conserving existing trees and planting new trees in wetland resource areas, related riparian buffer zones, and the floodplain." To further resiliency and natural area protection goals.

Should the first bullet say "private" trees vs. public? If not – what do you mean, in the tree hearing/removal process?

Add create standard guidelines with details/specifications for tree-planting and infrastructure (e.g., grates) including minimum spacing and required offsets from intersections/infrastructure, etc. in some form of street design guidelines based on best practices?

28. Page 63 – was anything in a language other than English and/or was any demographic data of respondents collected? I'd call that out if so, compared to the Worcester population.

29. Page 66 - change policies and standards to explicitly reflect "including in street and site design"! Creation of standard guidelines with details/specifications for tree-planting and infrastructure (e.g., grates), including minimum spacing and required offsets from intersections/infrastructure, etc. in some form of street design guidelines based on best practices?

Spotted lanternfly has also been located in SE Worcester.

Ordinances/regulations – is there a way to help us prioritize (further restrict what) public shade tree removals we're permitting? Essentially develop more parameters for when it's appropriate vs. not - mainly with mature trees (e.g. shift a driveway away from a tree, etc.) that can also be applied to private trees?

Species & diversity – can we again emphasize the need for a current planting list and guidelines to get right tree right place? And development of requirements for variety (e.g. require each site to have no more than 20% of a given tree species, etc.)?

30. Page 67 – staffing/resources – can you emphasize planning staff and funding resources are limited to develop or contract to change regulations and manage conservation land (i.e. no dedicated staff for land management)?
  31. Page 71 – can we emphasize equity in planting priorities (i.e. areas historically disproportionately effected by under-investment and a need to intentionally off-set that by prioritizing EJ areas)?
  32. Page 71/73 Is there a way to suggest forest management plans and baselines for conservation properties here and increasing resources and staff for those as well? Urban forest BMP manual needs to integrate into other ordinances/regulations/guidelines in order to be effective (e.g., street design, subdivision, zoning, etc.) which requires coordination and funding. This also should discuss planning for invasive management (as we have lots of invasives already, like bittersweet, that are slowly taking down trees).
  33. Page 74 – add make data available to city staff/public in GIS
  34. Pg. 75, Action step 4.6 – “Revise City Codes and Ordinances to strengthen the protection of public trees”, it would also make sense to include private trees in this. It would be helpful to build off this recommendation in making any changes to the Wetlands Protection Ordinance or any other development-related ordinances such as Zoning & board/commission rules & regulations (e.g. subdivisions) that deal with private property and where infrastructure may become public (right now we require 0 shade trees in the ROW in subdivisions, trees are only required on private lots).
  35. Page 76 – 5.1 – infuse equity as a sentiment about where to plan to address health disparities and ensure investment in EJ areas.
  36. 5.3 – can we be clear that this can be developing a guideline set, including planting lists and context scenarios, that helps folks make this decision so it doesn’t have to be forestry? A tool owners and developers and planners can use to guide selection?
  37. Page 77 – can we make clear this needs to be an interdepartmental effort?
  38. Page 79 – 7.4 – add “in a variety of different languages”
  39. Page 81 – what is covered in state of the forest – just street/park trees? Can we encourage this to expand to be citywide too?
  40. Page 82 – 10.2 – Does this have to be limited to public property? Could we just say “Promote and require species diversity in tree planting.” Is the recommendation going to differ for private property? Can this just be more general?
- 10.3 – do we have a tree-planting list? Can we get a copy?

10.4 – including natural areas such as conservation land – developing updates to baseline plans and/or developing monitoring reports with photos.

41. Page 84 – 1.2 – we're updating our Hazard mitigation plan next year so this should be incorporated into hazard mitigation planning (forestry did not participate in this process to my knowledge the last time this was done).

42. Page 89 – 4.5 should include Transportation & Mobility, Planning & Regulatory Services

43. Page 90 - 4.6 should include Planning & Regulatory Services

4.7 – should include Conservation Commission and Planning & Regulatory Services

44. Page 91 – 5.1 needs to involve Transportation & Mobility

5.3 – needs to be more specific. When do we evaluate– do you mean create a decision tree  
Forestry is only deciding on some places – we need guidance elsewhere too!

45. Page 92 – both 6.1 and 6.1.1 – add Sustainability & Resilience/ Planning & Regulatory Services/  
Transportation & Mobility

6.4/6.5 - add Sustainability & Resilience/ Planning & Regulatory Services

46. Page 94 – 8.3 add Planning & Regulatory Services

47. Page 95 – 9.3 add “developers” to action step

48. Page 97 – both 10.1 - add Planning & Regulatory Services/Conservation Commission

10.2 – add Planning & Regulatory Services/Dept. of Public Facilities & DPW

10.3 – share the list with other staff

49. 10.4 - Include on conservation land

50. Page 99 – The plan doesn't really discuss the Tree Commission, it's role or the purpose of its creation, which I think is relevant to the plan and worth inclusion?

51. Page 100 – Moderate (E)- formatting

52. Page 105 – Wetlands Protection Ordinance restricts removals within 15' of any waterbody/wetland in the city.

53. Page 107 – Approved Tree List - We don't use this because they're not ALB resistant... (should be removed and just refer to an approved list.

"Requires tree plantings around new developments" should include "Zoning Ordinance, Article 5, Section V (C) (Landscape Design Standards); Zoning Ordinance - Off-Site Accessory Parking Requirements (Note 6 - Interior Landscaping)"

54. It would be nice to use graphics of Worcester in the plan if possible – I see some but not all?
55. Will this be translated into Spanish once it's final , or the Executive Summary?



The City of  
**WORCESTER**  
Department of Public Works & Parks

Department of Public Works & Parks  
Forestry Operations

50 Officer Manny Familia Way, Worcester, MA 01605

P | 508-799-1190 F | 508-799-1293

Worcestertrees@worcesterma.gov

# Urban Forest Master Plan

## Second Draft Comments

### January 2024

# Worcester Residents Invited to Comment on Urban Forest Master Plan

1 day ago



Worcester, Massachusetts, is finalizing its first Urban Forest Master Plan and is inviting public feedback. The Plan is a strategic approach to manage and grow Worcester's tree canopy, aiming to create a shared vision for the city's urban forest.

The city submitted the second draft of the Plan in October 2023 and is now encouraging residents to provide feedback to shape the final version. Public involvement in caring for, planting, and protecting the city's trees is considered vital to the Plan's success.

The city has set a deadline for public comment on January 10, 2024, giving residents enough time to review the Plan and share their thoughts. The city aims to ensure that the Plan meets the community's needs and aspirations.

The Urban Forestry Tree Commission will discuss the second draft at a meeting on January 17, 2024. This meeting will offer another chance for public engagement and discussion about Worcester's urban forest future.





The City of  
**WORCESTER**

To: Urban Forestry Tree Commission; Robert C. Antonelli Jr., Assistant Commissioner, DPW&P  
CC: Eric Batista, Worcester City Manager; Kerry Gray, Davey Resource Group, Inc.; Department of Sustainability & Resilience  
From: Mary Knittle, Chair of the Green Worcester Advisory Committee on behalf of the Committee  
Date: November 28, 2023  
Re: **Green Worcester Advisory Committee Statement on Urban Forest Master Plan Final Draft**

At its meeting on November 27, 2023, the Green Worcester Advisory Committee **voted unanimously to submit the following statement and recommendations** to the Urban Forestry Tree Commission, for its upcoming hearing on Wednesday, December 6, 2023, where the Urban Forest Master Plan (UFMP) final draft is expected to be heard and discussed:

The Green Worcester Advisory Committee (GWAC) commends DPW&P and Davey Resource Group on the thoughtful and detailed Urban Forest Master Plan (UFMP) final draft, an important action step toward realizing the Green Worcester Plan's goal of achieving climate resilience. Developing and implementing an UFMP is a key strategy (Action Step 6) in the GWP's Goal IV: *"Maintain, improve, connect, and expand quality natural systems in a linked network of parks, open spaces, and waterways, including street trees and public spaces."*

In keeping with the UFMP's stated intent of shifting to a proactive approach for growing and stewarding Worcester's urban forest, and recognizing the intensifying impact of the climate crisis on Worcester residents, the GWAC urges that the following two amendments be made to the UFMP final draft:

- 1) **Increase the tree replacement ratio to a *minimum* of 3:1 (three trees planted for each tree removed) using all available spaces, both public and private.** The draft 1:1 ratio just maintains the status quo for the tree canopy and potentially reduces it, given the decades it will take for a sapling to mature and replace benefits of older trees that have reached the end of their lifecycles and are the most likely trees to be removed.
- 2) **By January 2025, at the latest, define a tree canopy goal for the City, placing a priority on remediating heat islands, using readily available research.** This includes, but is not limited to, the 2022 Heat Island Study, the 2023 Tree Canopy Cover Assessment and Tree Benefits Report, research by Clark University and WPI, the Davey Resource Street Tree Inventory in the UFMP, and iTrec data. There is an abundance of data and expertise in the community to enable the City to define a goal that will guide planting priorities now, which can be refined as additional information becomes available. We cannot wait another two years, as recommended in the final draft UFMP, to complete yet another study, when the need to enhance our tree canopy is urgent. Since our present knowledge, existing studies, and the Green Worcester Plan all point toward the need to significantly increase Worcester's tree canopy, there should be no delay in getting started with more aggressive planting to achieve that goal, even before we know what the optimal canopy goal will be.

Thank you for your consideration.

Sincerely,

Mary Knittle, Chair of the Green Worcester Advisory Committee



## INTRODUCTION

**IN OCTOBER 2023**, the City of Worcester released a draft Urban Forest Master Plan (UFMP), issuing ten recommendations meant to guide the further preservation, management, and expansion of Worcester's urban forest—and in particular, Worcester's public "street trees." The UFMP is a vision, a first-step, intended to guide long-term budgets and inform other management plans going forward by the City's Forestry Operations, a unit of the Department of Public Works and Parks. The plan emphasizes a transformation from *reactive* to *proactive* management; not only engaging with resident concerns, but anticipating them. This marks a turn towards equity and the importance of climate resilience, while it stresses continued focus on prevention and protection against all manner of threats to the urban forest, whether pests (like the Asian Longhorned Beetle or the Spotted Lanternfly), disease, or other natural phenomena.

The phrase "urban forest" might simply evoke images of the trees that cover Newton Hill or Green Hill Park, but in reality the "urban forest" refers to all the trees (and other greenery) within the city limits. It covers the trees in the parks, certainly, but also street trees and residential trees. However, the Urban Forest Master Plan draft, while urging for a comprehensive tree canopy assessment,

focuses especially on Worcester's 23,137 street trees, and indicates a desire on the part of the City of Worcester to more proactively manage those street trees as a key part of that urban forest.

The release of the Urban Forest Master Plan follows a long history of urban forest management in the City, including 37 consecutive years as a Tree City USA recipient and 24 consecutive years as a Tree City USA Growth Award Recipient. The UFMP concept was first identified as part of the 2013 Open Space and Recreation Plan, and its development was further refined in the Green Worcester Plan released in 2020. Developing an Urban Forestry Plan was an integral aspect of the Green Worcester Plan's theme of Connected Green and Blue Spaces. Its authors called for an updated tree and canopy inventory, guidelines for tree removal and replacement, and to prioritize the expansion of trees of all kinds in the urban core. The planning process itself began in late 2021, with the first public meeting held on November 17, 2021, and was written with Davey Resource Group. The Urban Forest Master Planning process began just before the official start of the Urban Forestry Tree Commission. That Commission was first proposed at an August 10, 2021 meeting of the City Council, and began accepting applications for members on January 17, 2022.

## WORCESTER'S TREES

Trees within urban communities provide a number of environmental, economic, and health benefits to residents of those communities. For example, the 2020 Massachusetts Forest Action Plan estimates that "every 1% increase in tree canopy above a minimum 10% canopy cover brings a 1.9% reduction in energy needs for cooling and up to a 1.1% reduction in energy for heating" (Forest Action Plan, 2020, 142). According to Worcester's draft UFMP, trees filter particulate matter from the air and absorb other airborne pollutants; improve water quality through stormwater filtering and help to control and prevent flooding; can help to cool and shade areas that would otherwise absorb heat (such as roofing and asphalt); provide homes to local wildlife; lower utility bills "for the average household by \$100 to \$250 per year"; and can increase property values (UFMP, 2023, 23-26). The US Department of Agriculture Forest Service developed a tool, "i-Tree," that quantifies some of those benefits. In addition, trees have been shown through hundreds of studies to positively affect physical and mental health (see the literature review of Wolf, et. al, 2020, which separates the health benefits of trees into three categories of research - reducing harm, restoring capacity, and building capacity. Additionally, Table 2 at the end of this brief summarizes some of their findings).

## CURRENT CONDITIONS

According to a 2022 heat risk assessment conducted in Worcester, 37% of the city is covered by tree canopy, 36% by impervious surfaces, 24% by grass and other vegetation, and 3% is water (UFMP 2023, 29). That 37% of tree canopy is made up of 23,137 street trees (which are those trees only on public right-of-ways), numerous residential trees, and trees on other public and private lands within the city (a comprehensive tree canopy assessment has not, so far, been done by the City). Most of the City's street trees are in City Council District 1 (36%) and District 5 (27%), with the fewest in District 4 (6%).

One way to visualize the distribution of trees is through the "tree equity score" published by the organization "American Forests." Overall, Worcester's tree equity score is 89/100, but in some areas scores as low as 45. American Forests determines the equity score for a neighborhood through a combination factor of existing canopy cover, target canopy cover for a neighborhood, and then Census demographic, social, and economic data. A lower score indicates a higher priority for increasing tree canopy in a neighborhood. That map can be found below, or at [treeequityscore.org](https://treeequityscore.org), which explains their methodology in greater detail.



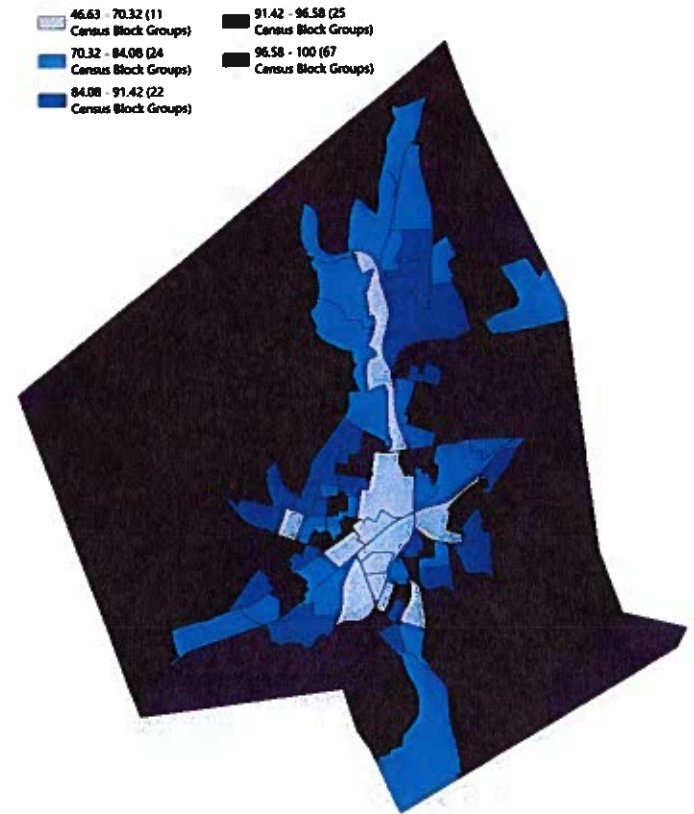
### RECOMMENDATIONS AND COSTS

Ultimately, the draft UFMP makes ten recommendations to improve the City's urban forest and to improve operations within the City's Forestry Operations and the Department of Public Works and Parks:

1. Establish proactive public tree management.
2. Increase city resources in pursuit of the first goal, and to support urban forest planning, operations, and education.
3. Create and improve urban forestry processes to support advancements from customer service to information management.
4. Support urban forest growth and preservation through expanded regulations, best management practices, and other guidelines.
5. Ensure there is adequate space for trees to grow and thrive.
6. Conduct a comprehensive urban tree canopy assessment.
7. Plant and care for trees citywide but especially in areas that improve sustainability and further equity goals.
8. Work with community and regional partners.
9. Create an Urban Forestry Communication and Outreach Plan.
10. Proactively monitor and address environmental threats (including pests and disease).

Many, if not all, of these recommendations require some budget increases, especially if the City wishes to move towards proactive management of public trees, rather than reactive. For Fiscal Year 2024, the City has budgeted \$575,101 towards salaries for Forestry, and an additional \$135,000 for overtime. The number of salaried positions between FY23 and FY24 have remained the same. Other costs, including ordinary maintenance, are included within the overall budget for the Division of Parks, Recreation, and Hope Cemetery, and are not otherwise separated in the annual budget document. However, according to the UFMP, the total Forestry budget, including salaries and maintenance, for 2022 was

### Tree Equity Score by Worcester Census Block Group



Source: American Forests' Tree Equity Score, [treeequityscore.org](http://treeequityscore.org)

\$1,692,593, and it has largely remained unchanged over the previous four years.

Many of the steps involved in achieving the recommendations will require additional funding, including expansion of the department's staff (see UFMP 2023, 78-109 for more information about each of the waypoints to implementing the ten recommendations). Table 3 on the final page shows the action steps for which there is a known, estimated cost (other steps indicate costs but do not estimate what they will be). Significantly, the UFMP Draft visualizes spending at least \$80.77 per street tree, which would require at least an additional

Table 1: Budgeted Positions in Forestry, City of Worcester

Position (# of Positions in Category)	FY23 Approved	FY24 Approved
Supervisor of Forestry (1)	\$87,727	\$90,003
Forestry Foreman (1)	\$62,432	\$70,388
Working Foreman, Craftsman (2)	\$88,419	\$131,000
Arborist (6)	\$261,796	\$283,710
Total (10)	\$500,374	\$575,101

Source: City of Worcester, FY24 Budget

\$500,000. Many of these costs could potentially be defrayed by grant money; though, the City's recent application for \$23.5 million from the Inflation Reduction Act to plant up to 7,000 trees was not granted, with no public reason why (see Schwan, September 2023). Grants also exist from the Massachusetts Department of Conservation and Recreation, Urban and Community Forestry Program—the "Greening the Gateway Cities" initiative provides grants for municipalities planting trees in urban areas. The report also examines potential new sources of funding to support these programs (see UFMP 2023, 52).

These costs, and other recommendations, the UFMP argues, are necessary if the City wants to take care of its aging tree inventory, increase tree species diversity, plant more trees in areas that have very few, ensure common standards for trees in the way of utilities, and to head off pestilential or disease-based threats. For example, the Asian Longhorned Beetle (ALB), discovered in 2008 in Worcester but likely here several years earlier, led to the removal of more than 30,000 public and private trees across the city in just seven years. With a shift in focus to proactive management, the hope is that threats will be caught earlier before trees need to be removed and, replanted. Both young and aging tree stock across the city will require maintenance going forward as well. Regular maintenance across a tree's life-cycle increases its benefits, while likely lowering its overall costs (deferred maintenance may lead to unexpected costs later, which can be difficult to quantify). See especially the literature review by Vogt, et. al, 2015 about maintenance and Lovett, et. al, 2016 about pests and pathogens.

### DOES THE PLAN DO WHAT IT PURPORTS TO DO?

Thanks to its nature as a long-term vision of Worcester's urban forest, while some of the UFMP's recommendations

could begin immediately with funding, others will take some time to complete. One, for example, is the comprehensive canopy assessment (to be done in regular intervals) that could then be used to prioritize tree planting areas across the city. Such an assessment is an integral part of the overall plan, and one that is necessary to get a true picture of Worcester's urban forest. However, the report points out that other studies have identified areas for planting that can begin while a full canopy assessment is underway. Some areas of the city, like Green Island, could use the trees today to mitigate heat and flood risks. Thanks to the 2022 street tree inventory conducted by Davey Tree Resources, the 2022 heat risk assessment conducted by Urban Climate Consulting LLC, and the Tree Equity Scores referenced earlier, many potential tree planting sites across the city are already known and the city could begin planting before the canopy assessment process is finished.

What the UFMP is *not* is a comprehensive plan and strategy for management of Worcester's urban forest. Rather, it is a set of recommendations to establish such plans and practices and to reorient city leaders and the community towards a more proactive view of tree care in the city.

### CONCLUSION

The benefits of the urban forest are many, and the Urban Forest Master Plan draft released in October 2023 is the City's continued attempt to protect and manage it for years to come. The implementation of this plan will require that the City provide new and expanded resources to Forestry to ensure Worcester residents can continue to enjoy the benefits of its urban forest. Proactive, preventative, care of Worcester's urban forest, may require a number of upfront costs, but could be more cost-effective in the long run.

### SOURCES

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Table 2: Researched Tree Benefits for Physical and Mental Health

Reducing Harm	Restoring Capacity	Building Capacity
Reduced Air Pollutants	Exposure to trees may promote cognitive and attention restoration	"Forest Walks" may promote immune system function
Reduce Air and Surface Temperatures	Exposure to trees, especially forested areas, reduces stress, depression, and anxiety	Street tree cover tends to correlate with higher levels of physical activity
Tree canopy is negatively correlated with heat-related ambulance calls	Exposure to trees, especially forested areas, may reduce cortisol levels	Street tree canopy associated with lower prevalence for overweight populations
There is some evidence that tree size, location, and health can reduce crime	Tree exposure may have positive effects on certain clinical populations	Street trees may promote social cohesion and trust in neighborhoods

Source: Wolf, et. al, 2020, *Urban Trees and Human Health: A Scoping Review*. These are just some of the studies reviewed in this sweeping literature review, and they note many of the potential effects of tree exposure on human health. As the authors note, more research needs to be done to better understand these correlations between trees and physical and mental health.

Table 3: Known Estimated Costs for Urban Forest Master Plan (Draft)

Action Step	Description	Estimated Cost-Range	Frequency	Notes
1.2	Use Street Tree Inventory to Develop Urban Forest Management Plan	\$25,000	One-Time	May be eligible for grant funding
1.2.1	Routine pruning schedule for established trees and the structural training of young trees	\$210,000-\$450,000	7 or 15 year Cycle	
1.4.1	Establish an Interim Funding Goal to exceed \$80.77 spent per street tree	\$500,000	Annual	
1.6 and 1.6.1	Assessments of Conservation Commission properties to identify species composition, threats, and opportunities	\$50,000	Annual	
2.1	Add and Hire New Arborist Position	\$150,000	Annual	
2.3	Contract with Partner Organizations	\$75,000	Annual	May be eligible for grant funding
2.5	Training Plans for Forestry Staff/ maintain certifications/ stay up to date on latest techniques	\$1,500	Annual	Estimated \$1,500 per employee; May be eligible for grant funding
2.6	Evaluate Establishment of an Urban Forestry Internship Program	\$30,000	Annual	May be eligible for grant funding
2.7	Implement goals of <i>Worcester Open Space and Recreation Plan Update 2021</i>	\$300,000	Annual	Includes new staff
3.5	Re-inventory and assess all trees and planting sites every 7-10 years	\$125,000-\$175,000	7 or 10 year Cycle	
4.7	Staff to enforce tree protection and preservation regulations on public property	\$150,000	Annual	Planning and Regulatory Services; Conservation Commission
6.1	Comprehensive UTC assessment without affecting operational resources	\$50,000-\$100,000	5 or 10 year Cycle	May be eligible for grant funding
7.3	Develop and Strengthen partnerships to support outreach efforts focused on increasing tree planting in low canopy areas	\$75,000	Annual	May be eligible for grant funding
9.2	Partner with New England Botanic Garden and Worcester Technical High School to create education and outreach materials	\$75,000	Annual	May be eligible for grant funding
10.4	Develop an Urban Tree Health Program to Scout and Monitor for Threats	\$75,000	Annual	May be eligible for grant funding

Source: City of Worcester, 2023 *Urban Forest Master Plan Draft*



January 10, 2024

Rob Antonelli and Urban Forestry Master Plan Team  
Worcester Parks & Recreation  
50 Officer Manny Familia Way  
Worcester, MA 01605

RE: Additional Comments on the Draft Urban Forestry Master Plan

Dear Rob and the Urban Forestry Master Plan Team,

Mass Audubon and the Broad Meadow Brook Wildlife Sanctuary team is pleased to see the Urban Forestry Master Plan moving forward. Thank you for this opportunity to provide additional comments and suggestions. We have also attached our previous comment letter from May 2023. Below is a list of our formal recommendations, with highest priorities highlighted:

**Formal Recommendations:**

1. Establish a proactive management program for Worcester's public trees that is beyond the current Customer Service based model.
2. Increase City staff and contractors to transition to a proactive public tree management program and support urban forest planning, operations, and education.
3. Revise and develop urban forestry processes to support improvements to customer service, service delivery, data, technology, and information management using national arboricultural standards and best management practices.
4. Expand and develop regulations, best management practices, and guidelines to support urban forest growth and preservation, specifically enforcing a 1:3 planting ratio.
5. Ensure there is adequate space for trees to grow and thrive in Worcester's challenging urban environment.
6. Conduct a comprehensive urban tree canopy assessment for the City of Worcester.
7. Continue tree planting and care citywide with attention to areas that advance city sustainability, resilience, and equity priorities.
8. Strengthen and develop partnerships with community and regional partners to support implementation of the Urban Forestry Master Plan.
9. Implement an urban forestry communication and outreach plan that supports the growth and care of Worcester's urban forest.
10. Expand development and implementation of a program to monitor and address environmental threats to Worcester's urban forest.

**Additional Observations and General Recommendations:**

With the pending adoption of a new Zoning Ordinance (as a result of the Worcester Now Next planning process), Mass Audubon see opportunities to **require tree planting as part of new and redevelopment projects in the city and ensure that there are very clear guidelines about tree planting, species to use, and ongoing maintenance.** Furthermore, no clearcutting of trees should take place before plans are approved and building permits issued. These guidelines should be adopted as soon as possible.

We see potential for interdepartmental collaboration with the planning and development process so that **all new development and construction results in a net gain of tree canopy,** so this requires integrated collaboration and regulations to protect trees so the Planning and Regulatory Services Division of the Economic Development Office working closely with DPWP





and the new Dept of Sustainability and Resilience. It is imperative to our climate goals that Worcester be constantly gaining tree canopy, thereby requiring all municipal departments and decisions made across the city to be committed to that outcome.

**We also see opportunity as outlined in the plan for public outreach and education** so that residents as well as incoming developers understand the review process that removal of a tree must go through for public street trees and why there are cases where big old loved trees must come down. There is huge opportunities to adopt bylaws that protect trees on private lands and ensure that the development and re-development of properties does not remove any trees unless absolutely necessary and if trees do need to be removed, they must be replaced elsewhere on the property or negotiated with the city and planted somewhere else in the city where more trees are needed to address heat island impacts. Worcester needs a net gain in tree coverage whenever a tree is removed. Trees are a key public asset essential to combating climate change.

We agree that the “City needs to continue tree planting and care citywide with attention to areas that advance city sustainability, resilience, and equity priorities. » Target: Fund, plant, and maintain a 1:1 replacement of trees within the right-of-way for those that are removed, while also encouraging partners to contribute by planting additional trees on private property. The objective is to ensure that, at a minimum, there is no net loss in tree canopy cover in the city. **Mass Audubon strongly supports the recommendation of the Green Worcester Advisory Board that a 1 to 3 ratio of tree replacement be required.**

We do understand that increased revenues and staffing are essential to achieve these goals. In order to achieve this, we recommend that the goals and action steps be further defined in order to advocate for and leverage the necessary funding.

The Plan Recommendations are all laudable and make good sense. We believe that Recommendations 2, 4, 8 and 9 are especially important but all are top 10 as presented.

It would benefit the City and this plan to have requirements and regulations in place right away that **require any tree removal for new development to be require optimal preservation of existing mature trees and replacement ratio based to ensure net gain of canopy cover.**

#### **Regarding Budget:**

Mass Audubon recommends revising and increasing the overall proposed budget in order to successfully implement the Urban Forestry Master Plan. Key points from the plan to consider:

Worcester’s per street tree spending, while higher than other northeast cities, **is 7% lower than “All Cities” and 39% lower than cities with populations similar to Worcester** between 100,000 and 249,999 people.

**A sustained increase of \$500,000 per year to Forestry’s budget is needed** for Worcester to achieve the \$80.77 per street tree average for cities with populations between 100,000 and 249,999. With this increase, Worcester could fund activities, including:

- addressing the backlog in tree maintenance work orders and requests.
- shifting to proactive maintenance, including implementing an annual street tree pruning cycle.
- increasing the use of contractors to support tree removal, tree planting, stump grinding, storm response, and tree maintenance activities for City projects and other departments.







- In addition to City budget dollars, alternative sources of funding should be explored to expand investment in Worcester's public urban forest (see sidebar in plan Exploring New Sources of Funding to Support Worcester's Urban Forest).

**Regarding Community Outreach and Education about the Plan:**

Referencing plan goals 8 and 9 regarding community partnerships and communication and outreach, Mass Audubon applauds the suggestion of hosting a Worcester Tree Summit and encourage inclusion of multiple community partners in the planning process in addition to collaborating with the New England Botanic Garden at Tower Hill.

We also applaud the idea of promoting "the City's Forestry webpage as a "one-stop-shop" for all things tree-related in Worcester" and encouraging partnering with New England Botanic Garden & Worcester Technical High School and others to create education and outreach materials on topics. **Mass Audubon looks forward to assisting with these education and outreach efforts.**

We strongly suggest that two designated members of the Tree Commission meet with the Consultants as well as you and Forestry Division staff to review all the submitted comments and incorporate selected suggestions into the plan for final adoption.

Finally, a comment regarding the wording of the vision statement. Overall, this striking vision is well stated but we really are not a model yet. As we strive to become that model, let's cross off "to continue" :

*Vision for Worcester's Urban Forest:*

*"Our vision is for Worcester's urban forest ~~to continue~~ to be a model of proactive management, sustainability, and climate resilience. We envision a city where the urban forest is well-cared for, with proactive measures in place to ensure its health and longevity. Through intentional planning and community engagement, we will ensure tree diversity and well-distributed tree canopy cover, care, and green spaces for the entire Worcester Community. Through nurturing a resilient and sustainable urban forest, we aim to create a greener, healthier, and more vibrant Worcester."*

We are not a model yet, but we are positive Worcester will be!

**Thank you for all the good work and focus that you personally, Commissioner Fink, and the Worcester Urban Forestry Commission is devoting to enhancing our trees in the city.**

A handwritten signature in black ink that reads "Jennifer Madson".

Jennifer Madson,  
Regional Director

A handwritten signature in blue ink that reads "Deborah D. Cary".

Deborah Cary,  
Community Advocacy and Engagement Manager

CC: Worcester Tree Commission





# Trees Matter in Worcester

**Caring for Worcester's trees is an investment in a healthier city for all of us. Here's why:**

- Trees filter out air pollution.
- Trees reduce flooding and control soil erosion.
- Trees keep streets and sidewalks cooler in summer.
- Trees help to save energy on air conditioning and heating bills.
- Trees provide habitats for wildlife.
- Trees improve health and well-being.
- Trees increase property values.
- Trees moderate the impact of climate change by capturing carbon dioxide and storing carbon.
- Trees provide traffic-calming benefits as well as shade for people walking and bicycling.



But some neighborhoods in Worcester lack trees that create these benefits.

That means the streets are much hotter in summer and colder in winter. It's more expensive to keep homes and apartments cool in summer and warm in winter. Air quality is worse, and flooding from storms more likely.

Most of these neighborhoods are densely populated by citizens who rent apartments and have less money to spend or save. To provide a more comfortable, livable, equitable environment in these "heat island" neighborhoods, we need to invest in planting more street trees.

To see which Worcester neighborhoods need more trees, visit [www.treeequityscore.org](http://www.treeequityscore.org)

# Trees Matter in Worcester

## How Worcester is stepping up to take better care of our trees:

- The Green Worcester Plan (GWP) places a priority on improving the City's urban tree canopy.
- An Urban Forestry Master Plan process is underway, including a comprehensive street tree inventory.
- A new Urban Forestry Tree Commission advises the Department of Public Works and Parks on best practices to improve our public tree canopy.
- The newly formed Green Worcester Advisory Committee advises the Department of Sustainability and Resilience on GWP implementation.
- Public input is welcome for the Urban Forestry Master Plan, Urban Forestry Tree Commission, and Green Worcester Advisory Committee. Visit <https://www.worcesterma.gov/city-clerk/public-meetings/agendas-minutes> for public meeting schedules, agendas and minutes.



### Sources

<https://www.arborday.org/trees/treefacts>  
[https://www.dec.ny.gov/docs/lands\\_forests\\_pdf/treespayusback.pdf](https://www.dec.ny.gov/docs/lands_forests_pdf/treespayusback.pdf)

## Our urban forest is everyone's responsibility. There are many ways to get involved!

350 Central Mass [350centralmass.org](http://350centralmass.org)

Blackstone Watershed Collaborative [blackstonecollaborative.org](http://blackstonecollaborative.org)

Cook's Pond Club [facebook.com/groups/411278699069088](https://www.facebook.com/groups/411278699069088)

EcoTarium [ecotarium.org](http://ecotarium.org)

Friends of Newton Hill [friendsofnewtonhill.org](http://friendsofnewtonhill.org)

Friends of Patch Reservoir [friendsofpatchreservoir.com](http://friendsofpatchreservoir.com)

Friends of Wetherell Park [parkspirit.org/friends-of-wetherell-park](http://parkspirit.org/friends-of-wetherell-park)

Greater Worcester Land Trust [gwlt.org](http://gwlt.org)

Mass Audubon/Broad Meadow Brook [massaudubon.org/get-outdoors/wildlife-sanctuaries/broad-meadow-brook](http://massaudubon.org/get-outdoors/wildlife-sanctuaries/broad-meadow-brook)

Mothers Out Front – Worcester [mothersoutfront.org/team/massachusetts/worcester](http://mothersoutfront.org/team/massachusetts/worcester)

NAACP Worcester – Environment & Climate Justice Committee [naacpworcester.org](http://naacpworcester.org)

New England Botanic Garden at Tower Hill [nebg.org](http://nebg.org)

Regional Environmental Council [recworcester.org](http://recworcester.org)

Tatnuck Brook Watershed Association [tatnuckbrook.org](http://tatnuckbrook.org)

WalkBike Worcester [facebook.com/walkbikeworc](https://www.facebook.com/walkbikeworc)

Worcester Garden Club [worcestergardenclub.org](http://worcestergardenclub.org)

These are just a few of the great organizations working to preserve and protect our City's trees and environment. All are welcome to join in this effort!

**From:** Grace C. Elton [REDACTED]  
**Sent:** Wednesday, January 10, 2024 5:04 PM  
**To:** WorcesterTrees  
**Subject:** Urban Forestry Master Plan Feedback

**Caution:** This email came from outside the City of Worcester. Do not click on links or open attachments unless you are sure you recognize the sender and you know the contents are safe.

Thank you for the opportunity to allow the public to comment on Draft #2 of the Urban Forestry Master Plan. The plan is comprehensive and inspiring. I was pleased to see my organization's name mentioned so many times as a current and future collaborator. New England Botanic Garden at Tower Hill is committed to helping to improve the City of Worcester's urban forest and look forward to helping implement this plan. Below are a few thoughts and recommended edits.

p. 75 Vision

Many parts of the plan talk about how Worcester is reactive about management, but the vision states that "Worcester's urban forest **continues** to be a model of proactive management..." This is misleading as the report contradicts this in many places. Removing the word "continues" would make this a stronger and more accurate vision statement.

p. 77 Recommendations

7. The goal of a 1:1 replacement of trees will not result in a net zero of canopy loss. To achieve net zero canopy loss, a more accurate goal would be inch for inch canopy replacement. i.e. When removing a 50" oak tree, it should be replaced with twenty five 2" caliper shade trees. Replacing a 50" oak tree with one 2" shade tree would result in a significant immediate net loss of canopy.

p. 93 Action Steps

In general, many of the action steps include writing policies, finding funding, and implementation and the majority list Forestry Operations as the responsible party. The plan's goal of increasing staff by only 1 forester seems inadequate to allow current staff to achieve all of this.

Many of the action steps list the priority as 2023. Should it be assumed that since we are now in 2024, that the timeline for all of these action steps has shifted a year, or will only the 2023 action steps be shifted to 2024, adding to the current 2024 list? What is the difference between FY2024 priority and 2024 priority? Is this a typo or is there a difference between calendar and fiscal year goals?

1.4.1 It was my understanding that the City Manager and City Council set the city's budget and that the Urban Forestry Tree Commission is advisory and has no authority to allocate funds to forestry. The City Manager and City Council should be listed as the responsible parties to increase the Forestry Budget by the \$500,000 goal.

Instances where my organization's name is incorrect:

p. 3 "Greater Worcester Land Trust New England Botanic Garden @ Tower Hill." You have merged two organization names on one line. Please separate them and change to 1. Greater Worcester Land Trust 2. New England Botanic Garden at Tower Hill (don't use @)

p. 47 Green Industry Involvement- change to "New England Botanic Garden at Tower Hill" not Gardens

P. 47 Regional Collaboration- change to "New England **Botanic** Garden at Tower Hill" not Botanical

Best regards,  
Grace Elton

**GRACE ELTON**

Chief Executive Officer

*(she/her)*

-----  
New England Botanic Garden at Tower Hill

508.869.6111 [REDACTED]

nebg.org

11 French Drive, Boylston, MA 01505



**From:** Julia Severens [REDACTED]  
**Sent:** Sunday, January 7, 2024 9:25 PM  
**To:** Worcestertrees  
**Subject:** Urban Forest Master Plan

**Caution:** This email came from outside the City of Worcester. Do not click on links or open attachments unless you are sure you recognize the sender and you know the contents are safe.

This is to support the recommendations proposed by the Green Streets Action Network, including:

Set 3 : 1 planting : tree removal goal, as opposed to  
1 : 1 in current draft  
Define a Tree Canopy Goal by Jan. 2025 etc.  
Plus 4 more recommendations.

Julia P. Severens  
11 Monroe Avenue  
Worcester, MA 01602

[REDACTED]

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**From:** kaper28 [REDACTED]  
**Sent:** Sunday, January 7, 2024 1:01 PM  
**To:** Worcestertrees  
**Subject:** Feedback on Worcester Urban Forest Master Plan

Caution: This email came from outside the City of Worcester. Do not click on links or open attachments unless you are sure you recognize the sender and you know the contents are safe.

I'm grateful that you have chosen a public and collaborative manner to create a lasting Tree Plan for Worcester.

My primary concern relates to the mental and physical health issues which are well researched in red areas where there are few trees: The heat difference alone is troubling, the morale issues are disturbing, the time line given apparently accelerating climate change is urgent. Creativity by the City Leaders and support from engaged citizens to further this agenda could go a long way to accelerating tree planing. Obstacles such as resistance from some neighborhood members could be overcome with educational sessions in many public forums: churches, scout groups, neighborhood associations, etc.

Funding of this priority needs to be a routine item in all new construction projects, not only for the new property, but for a wider area of Worcester.

I'm eager to see this plan put into action, without further studies

Sincerely,

Katharine Perkins

15 Terrace Drive, 01609



**From:** Paula Sommer [REDACTED]  
**Sent:** Tuesday, January 9, 2024 2:58 PM  
**To:** Worcesterstrees  
**Subject:** Feedback on UFMP

**Caution:** This email came from outside the City of Worcester. Do not click on links or open attachments unless you are sure you recognize the sender and you know the contents are safe.

Hello, I am glad that you are creating this master plan for Worcester. As it is still a work in progress, I am asking you to amend it to make it even stronger, in the following ways:

We need to jumpstart replacing our tree canopy. Please set a tree removal goal of 3:1 planting whenever a tree is removed. 1:1 replacement does not expand the tree canopy.

Our target tree canopy goal can be defined within a year with help from our existing studies and area experts. We do not need a further study and extra cost in money and time to get this done.

Target date for completion should be January 2025.

If city ordinances do not require tree planting as part of new development, this should be reviewed and updated. Tree planting should be part of any new development approved in the city.

No clear cutting should be allowed.

Thank you.

Paula Sommer  
57 Ellis Dr, Worcester

[REDACTED]

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**From:** Grace Bly <[REDACTED]>  
**Sent:** Wednesday, January 10, 2024 4:02 PM  
**To:** Worcesterstrees  
**Subject:** Feedback for Draft of Worcester Urban Forest Master Plan JAN 10, 2024

**Caution:** This email came from outside the City of Worcester. Do not click on links or open attachments unless you are sure you recognize the sender and you know the contents are safe.

After reading the final draft of the Worcester Urban Forest Master Plan, I noticed that some of the recommendations for changes presented by the public were not included.

These include defining a Tree Canopy Goal by January 2025. This could be done quicker and less expensively with help from area experts and information in existing studies, instead of waiting until 2026 to implement a plan.

In addition, it would seem to be most efficient to require that any development review present a plan for tree planting, to be approved.

A thorough review of zoning ordinances is needed to ferret out loopholes that may diminish the goals of tree planting and maintenance.

The sooner to have a well researched plan the better and then follow it the better. Time is NOT on our side.

Sincerely,  
Grace Blydenburgh

**From:** Evelyn Herwitz [REDACTED]  
**Sent:** Sunday, January 7, 2024 12:19 PM  
**To:** Worcesterstrees  
**Subject:** Feedback on UF Master Plan final draft

**Caution:** This email came from outside the City of Worcester. Do not click on links or open attachments unless you are sure you recognize the sender and you know the contents are safe.

Thank you for the opportunity to respond to the final draft of the Urban Forestry Master Plan. There is much in the plan that is thoughtful and detailed, presenting important guidelines and data for preserving, protecting, and growing Worcester's Urban Forest.

I wholeheartedly agree with the conclusion that the City needs a more pro-active approach to managing our urban forest. To that end, I urge you to push the envelope harder to ensure that we are more aggressively planting trees, with a clearly defined canopy goal to guide that process that favors planting on both private and public spaces, with a priority for planting in heat island/environmental justice neighborhoods. The climate crisis is accelerating, and we need to move faster to plant trees that will take decades to mature.

Specifically:

- Set a 3:1 planting:tree removal goal, as opposed to 1:1 in the current draft.
- Define a Tree Canopy Goal by January 2025, with help from area experts and information in existing studies, instead of paying for another consultant study with a deadline of sometime in 2026.

These recommendations are embellished in the November 28, 2023, Green Worcester Advisory Committee's memo to Rob Antonelli and the UFTC members, which I authored as vice chair of the GWAC. The statement was unanimously adopted by the GWAC at our November 27 meeting.

In addition, a group of tree advocates, including myself, met with DPW&P Commissioner Jay Fink on December 19 and shared concerns that we want to see addressed in the UFMP:

- Review and update City ordinances to require tree planting as part of new development in the City
  - Require tree planting to be part of any development plan and review.
  - Eliminate clear cutting prior to plan approval and building permit.
  - Review all zoning ordinances as part of Now | Next to tighten up loopholes regarding tree planting and maintenance.

While there was significant feedback given in the public meeting of the UFTC last spring and in writing, from both private citizens and members of Worcester municipal government, it appears that very little was incorporated into this final draft. In comparing the April draft to this final draft, the only additions that I found were a vision statement, and new action steps 1.6, 2.7, 3.5.2 and 4.8. The first two aim to support management of Conservation Commission land. 3.5.2

promotes sharing of tree inventory data with other City departments and the public, and 4.8 encourages developing a policy for tree planting that goes beyond individual requests for trees to consider “all viable planting locations.”

These are good additions, but do not go far enough to set more aggressive tree planting priorities that we need to implement now in order to be better positioned for anticipated continued warmer temperatures and record rainfall that will affect flooding and soil erosion.

Regarding the wording of the vision statement, I believe it would be more accurate to state: Our vision is for Worcester’s urban forest to be a model of proactive management . . . “ rather than “to continue to be a model,” given that shifting to a proactive process is a key message of the plan. I also urge you to add to the second to last sentence “. . . for the entire Worcester Community, with a priority on alleviating heat islands in environmental justice neighborhoods.” Let’s be clear and state our priorities for helping those neighborhoods in greatest need of the benefits of trees.

Clearly, increased revenues and staffing are essential to achieve these goals. But the goals and action steps needs to be defined, first, in order to advocate for and leverage the necessary funding.

Finally, this process of amending the draft should be transparent, with input and approval of the Urban Forestry Tree Commission. The fact that the December 16 meeting had to be cancelled due to member’s illnesses was understandable but unfortunate, because now the discussion at the January meeting is after the feedback deadline. The UFTC is the public’s voice in this process and must participate in revisions—which are included and which, rejected—as well as give the final approval of the document before it is sent to the City Manager and City Council.

Sincerely,  
Evelyn Herwitz

21 Chippewa Road  
Worcester, MA 01602

**From:** Alexander Elton [REDACTED]  
**Sent:** Tuesday, January 9, 2024 12:51 PM  
**To:** WorcesterTrees  
**Subject:** Master Plan feedback from District 5 Urban Forest Tree Commissioner Elton

**Caution:** This email came from outside the City of Worcester. Do not click on links or open attachments unless you are sure you recognize the sender and you know the contents are safe.

Good day,

I am Alexander J. Elton, the District 5 Urban Forest Tree Commissioner. This urban forest master plan provides many solid recommendations for Worcester's Forestry program and the City government. Below is my feedback on where the report needs to be improved before it will be acceptable.

- On pages 8, 40, and 49 of the Master Plan, Worcester's urban forest is valued at \$123,000. I understand how this number was obtained, but I don't see the value in including it in this report. This number makes the entire report seem ridiculous to a layman reviewing it. Why go to the effort if the urban forest only provides 100K in value to the City? Worcester's urban forest has a value many times higher than that number. Please remove this figure from the report. It does not help make a case for investing in the urban forest.
- On page 49, the report states, "The Worcester City Forester and a team of staff in DPW&P manage the street and parks trees through site plan and construction plan review for private and public projects." **This is false** and should be removed from the report. Recently, the UFTC had a member of the Planning Department speak to us about Forestry's involvement in site plan review for private projects. We were told that Forestry is not involved in the review process.
- Pages 64 and 72 of the master plan mention establishing ordinances/regulations for tree planting requirements for development projects. As the District 5 UFT commissioner, **I will not endorse this master plan until more comprehensive recommendations are made regarding tree and canopy requirements for all development in the City of Worcester.** Here is an example of the recommendations I would like to see in the report.  
<https://www.providenceri.gov/wp-content/uploads/2021/02/Zoning-Ordinance-Article15-Trees-Landscaping.pdf>
- Page 75 Vision for Worcester's Urban Forest states, " Our vision is for Worcester's urban forest to **continue** to be a model of proactive management." **This is false.** In this report and many UFTC meetings, the Forestry program describes itself as reactionary. Stating that Worcester's urban forest will continue to be proactive is misleading and confusing.

- Page 77 Recommendations item #7, a 1:1 replacement of trees, is described as "**no net loss in tree canopy cover in the city.**" **This is false.** Removing an established, potentially mature tree and planting back a 2-4" caliber tree is a net loss in tree canopy cover. I suggest you reevaluate this recommendation and provide one closer to reaching your stated objective of no net loss. Perhaps an inch-per-inch replacement.

I look forward to my feedback being incorporated into the next version of Worcester's Master Plan. As I previously stated, if there are not more comprehensive recommendations made regarding tree and canopy requirements for all development in the City, I will not be endorsing this plan.

If I can answer any questions or provide any other feedback, I am happy to do so.

A. J. Elton  
District 5 Urban Forest Tree Commissioner

**From:** [REDACTED]  
**Sent:** Tuesday, January 9, 2024 1:10 PM  
**To:** WorcesterTrees  
**Subject:** input on final draft UFMP

**Caution:** This email came from outside the City of Worcester. Do not click on links or open attachments unless you are sure you recognize the sender and you know the contents are safe.

Hello,

My input is this

The document still needs an overarching statement of vision/purpose to guide the readers' thinking throughout and inspire them. A brilliant example was offered at the autumn 2023 hearing and can be used without change. Otherwise, this is just a nuts and bolts to do list, with endless process.

1:1 replacement, change to 1:3 replacement. Let's put some acceleration in this. Otherwise, too much same 'ol status quo.

Throughout needs good editing. You say you want to become proactive managers instead of reactive. But in various sections you say maintain proactivity. You cannot maintain what you do not (yet) have.

The photos are mostly selected to show the beauty of the greenest portions of Worcester. How about right upfront show more of the green deserts and heat islands. We are in crisis and the overabundance of goody-goody photos will lull readers in complacency.

Objective: no net loss of canopy = standing in place. Not ambitious. Rather, change this to net gain of canopy (by X% over X time period(s)). That's change, that's progress.

The action plan should have clearer timelines, monitoring (when, how, by whom), assessment, corrective action, reporting. If you have no end goal (Worcester will be the greenest city with fewest heat islands for city its size by year X—and to get there we will do xyz). If you have no key end goal, how will you know anything has changed/improved.

Thank you for this opportunity. I look forward to a final version incorporating full community input.

Regards,

Susan Wobst  
*swSolutions*

[REDACTED]

[REDACTED]

[www.linkedin.com/in/susanwobst](http://www.linkedin.com/in/susanwobst)



[REDACTED]

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**From:** Sarah Kenward [REDACTED]  
**Sent:** Monday, December 4, 2023 5:50 PM  
**To:** Parks; Council  
**Subject:** community trees

**Caution:** This email came from outside the City of Worcester. Do not click on links or open attachments unless you are sure you recognize the sender and you know the contents are safe.

Hi,

I read this article today (a couple days after publication)

<https://www.telegram.com/story/news/2023/12/03/worcester-told-to-plant-more-trees-to-fight-climate-change/71746154007/>

One of the points mentioned was lack of funding for more trees. I poked around the city site and scanned the Urban Forest plan. Lilacs are counted as trees - or at least a particular species. The typical local lilacs make a bunch of shoots you can pull for free.

I moved into a house with a well-established lilac and dug up like a dozen shoots. About 6 years later they're 6 ft tall and doing great. I throw a shovelful of city compost on every spring and splash some water when we hit a long dry spell, but they mostly have to fend for themselves.

They aren't too big, are easy to maintain, are forgiving about pruning, don't seem susceptible to disease... and could be free. If you ask the community you should be able to get a lot of tiny shoots.

I imagine there are other bushes or perennials people have access to which could be shared easily. Tower Hill or the Conservation Commission, maybe the REC, might know best. They'll take longer to establish and might need little warning tags, but at little upfront cost.

Just a thought,

Sarah Kenward

[REDACTED]

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**From:** Joe Johnson [REDACTED]  
**Sent:** Tuesday, January 9, 2024 5:10 PM  
**To:** Worcesterstrees  
**Cc:** Worcester:Urban Design:JaneJacobsinthewoo; Ruth Seward [REDACTED]  
**Subject:** Please include more about Invasive Plant Management in the Urban Forestry Plan

**Caution:** This email came from outside the City of Worcester. Do not click on links or open attachments unless you are sure you recognize the sender and you know the contents are safe.

My comment about the Worcester's Urban Forestry Plan is it needs to do and say more about Invasive Plant Management. It only mentions invasive plants (as opposed to invasive trees ) once.

Oriental Bittersweet destroys and pulls down trees. Garlic mustard, knotweed, and privet prevent new tree seedlings from sprouting, and many other plants listed in the State Prohibited Plant list threaten the health of existing trees.

It's not just invasive trees that threaten a forest.

These plants are not well documented by any city resource I can identify.

I want the issues related to invasive plants addressed more in the Urban Forestry plan.

Respectfully submitted,

Joseph Johnson  
Tattan Farm Road, Worcester, MA

[REDACTED]

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**From:** Sarah [REDACTED]  
**Sent:** Tuesday, January 9, 2024 4:42 PM  
**To:** WorcesterTrees  
**Subject:** Urban Forest Master Plan

**Caution:** This email came from outside the City of Worcester. Do not click on links or open attachments unless you are sure you recognize the sender and you know the contents are safe.

Hello,

Upon review of the Urban Forest Master Plan document presented for public review, I would like to reiterate the concern noted in the report that many residents had brought forth regarding tree maintenance. Trees that are not well maintained can fall on objects or people causing property damage, bodily injury, or even death. With that in mind, I would implore you to expedite the removal of trees that are dead or in poor condition warranting removal as there are very few trees in this condition.

I applaud the effort to move towards a proactive method of maintaining urban forestry, but due to the risks involved in the planting and maintenance of trees, it is vital that proactive tree management be in place prior to adding additional trees to the city. Many residents would not have the knowledge to report a tree that is a hazard to property or persons and this danger would go unnoticed without proactive maintenance.

Please move forward with adding additional trees only after removal of hazardous trees has been completed and a proactive management program has been implemented. The stated timelines of three years (per page 76) is simply too long to have these hazards unattended. If additional requests need to be sent to councilors or other parties to assist in obtaining additional funding to expedite this prior to proceeding with the Urban Forest Master Plan, please feel free to advise.

Thank you for your time.

Sarah Moore  
Worcester, MA 01604

**From:** Elizabeth Fleming [REDACTED]  
**Sent:** Tuesday, January 9, 2024 8:59 AM  
**To:** Worcesterstrees  
**Subject:** Urban Forestry Master Plan feedback

**Caution:** This email came from outside the City of Worcester. Do not click on links or open attachments unless you are sure you recognize the sender and you know the contents are safe.

Dear Urban Forestry Tree Commission,

My name is Elizabeth Fleming and I'm a resident of Worcester who loves its green spaces. I'm writing to express my enthusiasm for the Urban Forest Master Plan and to urge you to make it even stronger by adopting the recommendations of the local green streets and native plant initiative.

Trees are more than just visual beauty; they're the lungs of our city, cleaning our air, reducing heat island effects, and providing crucial habitat for wildlife. The current 1:1 planting to removal ratio simply isn't enough to maintain these vital benefits, let alone expand them. Let's commit to a 3:1 ratio, showing our commitment to a healthier, more vibrant future for ourselves and future generations.

Furthermore, setting a concrete tree canopy goal by January 2025 is essential. We have so much data and expertise readily available; there's no need for another lengthy study. Let's act now and set a clear target for increasing our city's verdant heart. Action is imperative!

Finally, the following proposed action steps proposed are practical and impactful: Requiring tree planting in new developments, eliminating clear-cutting, and tightening zoning regulations are common-sense measures that ensure our trees are protected and our city continues to thrive in the way that WE determine, not the developers from the outside.

In addition, as one of the founding members of the Worcester Native Plant Initiative, I would be remiss if I did not mention tree choice. Though the city has a policy of right tree, right place, it seemingly refers to actual placement of the tree and whether that said tree interferes with traffic or utility wires. What right tree, right place means to me is different and refers to what trees actually belong in New England. We are in the midst of a climate crisis and also a biodiversity crisis. It is imperative that we plant trees indigenous to this area to address the biodiversity loss that is speeding up by the day. Insects, birds and the animals that eat them are dependent on the trees. We cannot have a thriving city if it is devoid of wildlife.

I urge you to consider these critical changes before finalizing the master plan. Let's make it a document we can all be proud of, one that truly reflects our city's love for nature and commitment to a sustainable future.

Thank you for your time and consideration.

Sincerely,  
Elizabeth Fleming  
Worcester Native Plant Initiative



# It will take significant cash to fight climate change. Has Worcester invested enough?

*One member of a city advisory committee feels Worcester likely needs to invest more cash in the fight to stop global warming.*



**Henry Schwan**

Worcester Telegram & Gazette

Published 12:48 p.m. ET Nov. 29, 2023 | Updated 1:57 p.m. ET Nov. 29, 2023

**WORCESTER** - The city has a plan to fight climate change, but it needs enough staff and money to get the job done.

That message was delivered Monday night when the city presented the first progress report the Green Worcester Plan. It's the city's blueprint for cutting greenhouse gas emissions and boosting electrification and energy efficiency.

The plan was unanimously adopted by the City Council in April 2021 and includes three primary goals:

- By 2030: 100% renewable energy for municipal facilities
- By 2035: 100% renewable electricity citywide
- By 2045: 100% renewable energy in all sectors including heating and transportation

## Challenges ahead

The seven-member Green Worcester Advisory Committee appointed by the city manager received a second draft of the progress report covering July 2021 to December 2023. It included numerous accomplishments and work to be done.

Committee member Ted Conna made it clear at Monday's meeting that it will be a challenge to meet the three primary goals without the city providing necessary manpower and cash.

"We have to be realistic about where we are on the path and how to get there," said Conna when he discussed the goal of all city-owned buildings running purely on renewable energy by 2030.

Conna noted the city's Greenhouse Gas Emissions Inventory that said emissions at city-owned buildings dropped 16% from 2009 to 2019. The inventory didn't include emissions reductions from the city's electricity aggregation program because it started after the inventory was done.

Conna noted it will be a challenge to cut the remaining 84% in just seven years.

"Maybe we need a bigger staff and double the budget," said Conna, referring to bringing additional resources to the city's Department of Sustainability and Resilience that is largely in charge of carrying out the Green Worcester Plan. "I think there's an argument that maybe we need more resources to get this done."

The department has a fiscal year budget that ends June 30 that is slightly more than \$527,000, including \$278,000 for salaries.

Immediately after Monday's meeting, John Odell, the city's chief sustainability officer who oversees the department, said "it would be great" if his department had more resources. However, he noted there's a finite amount of money in the city's budget that is divided up among all departments.

### **'Cautiously optimistic'**

When asked if the Green Worcester Plan's three main goals can be achieved with his department's current level of resources, Odell's reply was "cautiously optimistic."

"I'm optimistic that despite the incredible challenges still to come, I also think there are incredible opportunities that can come out of that," said Odell. "I think we can actually help move the needle (in) Worcester. And I think our state and federal government, to date, at least over the last few years, have done a lot to help make that happen. And I'm hopeful that that will continue."

As for the city's electricity aggregation program, Conna said it's important to get more residents signed up for the 100% renewable energy option.

Worcester has a contract with Houston-based Direct Energy to buy electricity in bulk, and cost savings are passed on to customers. All city residents are automatically enrolled in the plan, unless they choose to opt out. Roughly 8% to 12% opted out, according to Odell, leaving 88% to 92% in the aggregation program.

Customers have two choices in the aggregation program: Worcester Green Standard, which provides over 50% of electricity from renewable sources; and Worcester 100% Green, which supplies all electricity from renewable sources.

Roughly 64% of Worcester's aggregation customers chose Green Standard. Conna believes it's important to get more residents in the 100% Green program if the city is going to meet the Green Worcester Plan's goal of 100% renewable electricity citywide by 2035.

## 'Mother of all climate goals'

As for the plan's goal of 100% renewable energy in all sectors including heating and transportation by 2045, Conna called it the "mother of all climate goals."

He and other committee members noted a big challenge the city faces when it comes to converting existing residential and commercial buildings from fossil fuel heating and cooling systems to full electrification. Those buildings account for roughly 65% of the city's carbon emissions, according to city officials.

Noting that the city wants to be 30% free of fossil fuels by 2030 and the challenge of getting there given the city's large supply of old buildings that run on those fuels, Conna laid out his assessment: "It's going to take more resources than the city is currently giving to DSR (Department of Sustainability and Resilience) to pull off."

He continued: "I'm not suggesting the (progress) report to be a downer. I suggest we can't gloss over these things. There are benchmark goals for the plan, and we need to be realistic on what it will take to get there and spell it out. It's a balance of what is needed, and the progress being made."

Committee chairwoman Mary Knittle praised Odell's department for its work and progress on the Green Worcester Plan. Conna preferred Odell's department return with a final draft of the progress report that the committee would review during its January meeting.

Conna was raised to not sign things that I have not read," Conna told the committee. "We've gone a couple rounds (of review of the draft). It's getting better, it's almost there, and I would like

to see a finished product before I vote in favor of it.”

Instead, the committee reached consensus that each member would submit comments to Odell’s team. The comments will be considered for inclusion in the final draft. Any objections to the final report can be raised at the January meeting.

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# Worcester City's New Urban Forest Master Plan: Aiming at Enhanced Preservation and Growth for Local Residents

days ago



In October 2023, Worcester City presented a draft Urban Forest Master Plan (UFMP). The plan includes ten recommendations for the city's urban forest preservation, management, and expansion. The UFMP, mainly focused on public 'street trees,' is intended to guide the city's Forestry Operations in long-term budgeting and future management plans.

The UFMP suggests a shift from reactive to proactive management. The goal is to address and anticipate resident concerns, promote climate resilience, and protect the urban forest from threats.

These threats include pests like the Asian Longhorned Beetle and the Spotted Lanternfly, diseases, and other natural hazards. The UFMP is considered an initial step in a long-term vision for the city's urban forest, aiming to ensure its preservation and growth.

The plan is set to guide the city's Forestry Operations, a part of the Department of Public Works and Parks, in their future work. The UFMP represents a significant move towards a more sustainable and resilient urban forest in Worcester.

**Visit here for more details**

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**Tall trees, such as:**  
maple, oak, spruce,  
and pine

## Plant the right tree in the right place

Plant taller trees away from overhead utility lines





City of Worcester  
Customer Service Request System  
Work Order

Priority: STANDARD  
Status: Open

**Tree Inspection**

Description: caller stated she does not want city trees planted on her property

Additional Information: n/a

Primary: [REDACTED]  
Routes: Plow Route: [REDACTED] Sweep Route: [REDACTED] Sanitation Route: [REDACTED]

Entered by: StraceskiS Date / Time: 5/19/23 12:41 pm

Intake Script:

Question	Answer
Please provide a detailed location of the tree at this address.	n/a
Why does this tree need to be inspected?	n/a

Requestor: [REDACTED]  
WORCESTER, MA 01610

Cell: [REDACTED]

Activity Log:  
05/19/23 12:41PM StraceskiS Intake  
05/19/23 12:41PM StraceskiS Automatic Routing

