Strategic Urban Forestry Management Plan

"Moving Fitchburg Forestry Forward"

DRAFT REPORT

Prepared for: The City of Fitchburg

Prepared by: Eocene Environmental Group

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Appendices

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Project Purpose

The “Moving Fitchburg Forestry Forward” project end-point is a strategic urban forestry management plan by the end of the year. The plan will outline what urban forestry resources the City of Fitchburg currently has, identify goals and objectives for the urban forestry program, and create a plan on how to accomplish these goals and objectives. The plan must be vertically integrated with relevant City of Fitchburg plans and policies such as The City of Fitchburg Parks and Open Space Plan, The City of Fitchburg Comprehensive Plan, The City of Fitchburg Mission, Vision, and Values, and the Forest Management Plan for McGaw Community Park. An important part is understanding the City of Fitchburg’s capacity to manage and retain urban tree canopy on public and private property.

Funding for this Urban Forest Strategic Plan was provided by the Wisconsin Department of Natural Resources Urban Forestry Program and the USDA Forest Service Urban and Community Forestry Program. This institution is an equal opportunity provider.

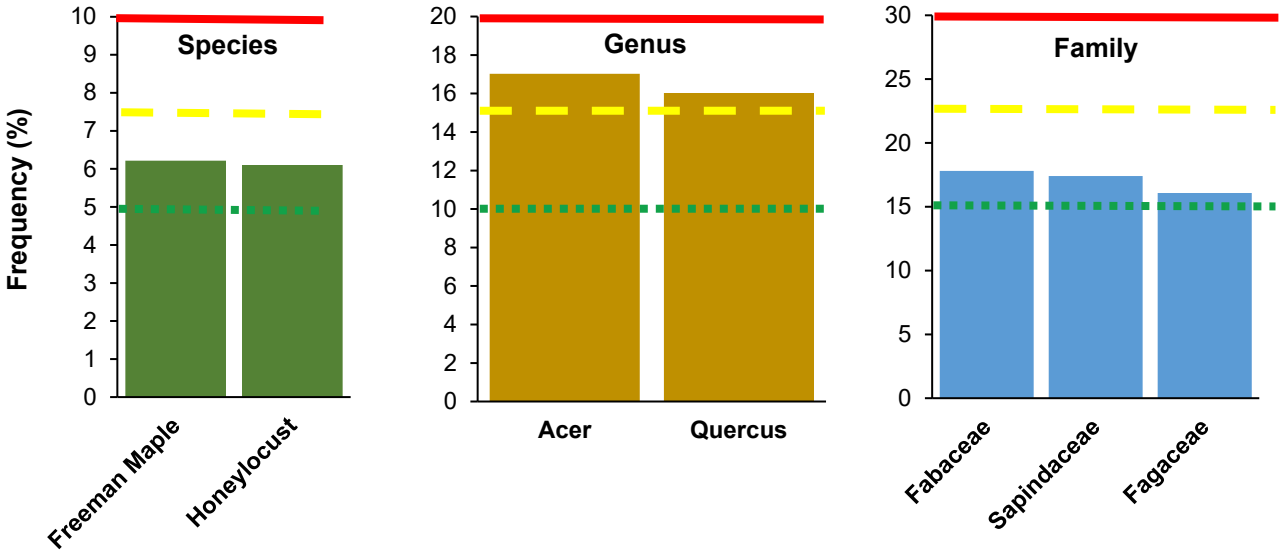
Executive Summary

The City of Fitchburg has a long history of urban forestry activities. The community has invested in staff, equipment to undertake operations, and a dedicated forestry budget. With the resources allocated, the staff accomplishes much. The staff are passionate about city trees and are stewards of the urban forest. Staff stewardship was evident in a review of the current state of forestry operations. The high marks also arose through meetings with city staff and a public opinion survey.

This executive summary provides details on the development of the strategic urban forest management plan. A review of Fitchburg's urban forestry operations was crucial for understanding the management of the urban forest. The State of the Urban Forest provides details on the current tree inventory. A Tree Canopy Assessment further describes the current tree cover and closeness to a 30% tree canopy goal. Community engagement occurred, with key findings from a public opinion survey presented along with detailed findings in an appendix. City staff were interviewed through a SWOT assessment to determine strengths, weaknesses, opportunities, and threats to the urban forestry program and tree population. Finally, the report presented key findings and recommendations, along with the details that follow.

State of the Urban Forest

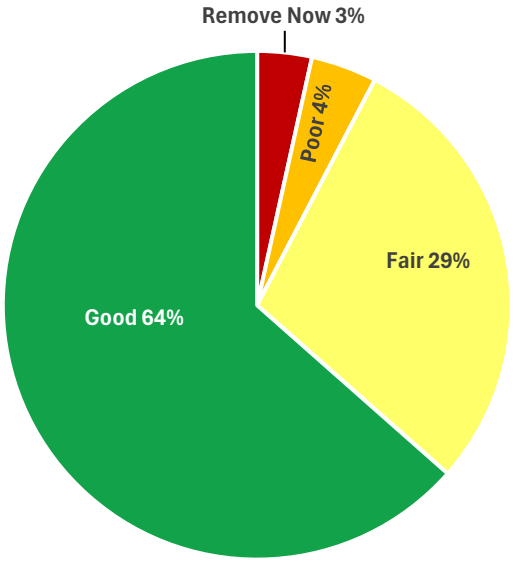
The state of the community tree resource provides a snapshot of the tree population at a specific moment. The public tree inventory highlights many strengths of the tree population. Data is collected and updated



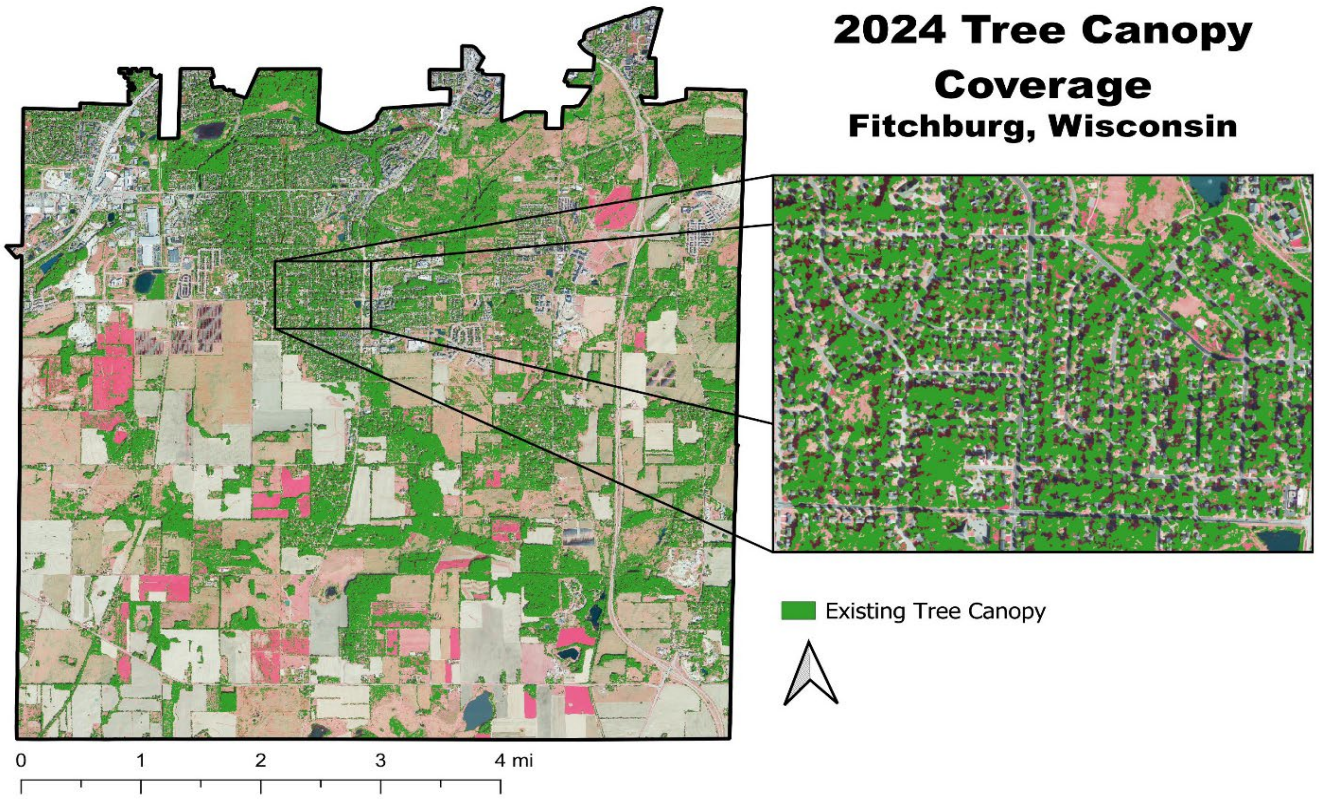
Comparison of taxonomic status for species, genus, and families that exceed 5-10-15% (green dotted line), mid-point (yellow dashed line), and 10-20-30 (red solid line) tree diversity guidelines.

regularly through an in-house-created tree inventory program. A work order system is near deployment and ready for staff training and deployment. The inventory itself includes:

- A total of 129 distinct species, 55 genera, and 30 families occur across Fitchburg's streets, parks, rights-of-way, and public properties.
- Few trees are dominant, and the diverse tree inventory makes the urban forest resilient to pests.
- A heritage tree program recognizes old trees estimated to be 200 years or older, as well as specimen trees in the city.
- The tree code is well developed, with a few minor areas for potential changes to the ordinance, the tree policy, or both.
- The overwhelming majority of the trees (93%) are in the higher condition categories, with 64% rated as Good and 29% rated as Fair.
- The tree canopy has been growing over the past decade and now covers 25% of the land area, approaching the 30% goal.



Tree condition rating distribution.



Tree canopy coverage throughout the City of Fitchburg, WI in 2024.

SWOT Assessment

City of Fitchburg staff provided observations on the urban forestry program. Urban forest management and operations shed light on the Strengths, Weaknesses, Opportunities, and Threats. Key findings include:

Strengths

- Enthusiastic staff who are good at what they do, versatile even outside of forestry (jack of all trades)
- New tree inventory integrated within a GIS and spatial GPS
- New(er) equipment (bucket truck, two chippers)
- The Tree Advisory Committee is very active and advocates for operational involvement

Weaknesses

- No dedicated forestry operations staff
- No field staff formally trained in arboriculture, and only one certified arborist on staff (Anna)
- Few staff have training for the larger bucket truck, and there is a lack of interest in others to learn the large bucket truck
- Shared employees and equipment among departments (e.g., GIS staff, Public Works staff), and sometimes one department needs resources

Opportunities

- 1-2 Additional FTEs and employees earning ISA certifications
- Unofficial agreements to help other cities when they have big storms
- Implementation of the new work order system and staff structure
- Grants for planting trees (e.g., Million Tree Grant, Alliant Energy, WI DNR)

Threats

- Homeowners often think the tree in the ROW in front of their property is their tree
- Homeowners are required to plant two trees and then perceive it as their tree rather than the city's role, or when they are asked not to plant in that area, and then the city plants a tree
- Oak decline from abiotic (precipitation and temperature) and biotic (e.g., two-lined chestnut borer)
- Limited redundancy of personnel for extended leave absence

Program Review

Reviewing Fitchburg's urban forestry operations is crucial for understanding the management of the urban forest. Like tracking the tree population, this knowledge is key to identifying what the community needs to manage it effectively. Knowing the current state of the forestry program is also vital for planning a healthy, sustainable tree population that benefits the community.

Community and Staff Profile

This profile describes how the forestry program is organized and the responsibility of public tree management. Forestry work can be accomplished through staffing, contracting, or both. Key findings include:

- Fitchburg is below the comparison staffing level by approximately 1.5 to 2 urban forestry FTE.

Benchmark assessment of Fitchburg's community and staff profile.

Benchmark Comparison		Current Benchmark Situation in Fitchburg
Street tree responsibility: 74% of Midwest communities were responsible for street trees	↑	The city is responsible for rights-of-way tree management
Years with a person responsible for tree care: 29 years; 34 years in the Midwest	↑	An employee is currently responsible for tree care, with 24 years of experience with various staff members
Staff qualification: 60% of communities had a Certified Arborist on Staff	→	Certified arborist identified as on staff, field staff lacking the credential
Staff responsible for trees: an arborist/forester located in a Parks or Public Works Department	↓	No arborist or forester, duties are split between city departments
Staffing level: 5.3 Full Time Equivalent (FTE) public employees involved in the tree program, including managers	↓	3 FTE (6 staff) from a city forester (1 FTE) and shared parks staff (~ 2 FTE)
Total Forestry Budget: $477,094 (mean); $291,943 (median)	↓	$177,500 (estimated $156,500 staff and $21,000 report tree activities budget)
Budget per public tree: $51.86; Midwest $45.28	↓	$12.02 ($177,500 / 14,761 trees)
Forestry Budget as a percentage of the total municipal budget: 0.63%	→	0.52% estimated allocated to forestry
Per capita forestry budget: $13.54; $15.15 Midwest	↓	$4.90 ($177,500 / 36,197 people = $4.90)
Tree Inventory: 68% have a tree inventory	↑	Inventory exists and is up to date
Canopy goal: 23% have (14%) or are developing (9%) a canopy goal	↑	Have a 30% canopy goal by 2050
Average per capita all public trees: 0.83; 0.50 Midwest	→	0.41 trees per capita
Average per capita vacant planting sites all locations: 0.03; 0.03 Midwest	↑	0.02 (Estimated 800 planting sites / 36,197 people
Reactive vs. systematic tree care: 58.7% systemic (regularly scheduled) tree care	↓	Reported 90% reactive (2024 survey response)
Arbor Day Tree City USA: 83% are Tree City USA	↑	Tree Cities of the World (above Tree City USA) and several growth awards

- Responsibility for urban forestry is shared between staff in the Parks & Forestry Department and the Public Works Department.
- Fitchburg currently has a public employee dedicated to overseeing the city's urban forest, and the city needs to maintain this role.
- An additional staff position with primary responsibility for forestry operations is required to implement the recommendations in this Plan.

Tree Care Funding and Budgets

Resources are needed to undertake forestry management and operations. Funding is required to pay employees, hire contractors, purchase trees, and procure the equipment and supplies needed to maintain the tree population. Key findings include:

- The city has a dedicated budget for forestry operations, currently approximately $177,500, from a reported $21,000 budget for tree care activities (2024 tree care activities survey) and staff ($156,500 – 2 FTE maintenance staff and 1 FTE Urban Forester/Naturalist).
- Relative to peer benchmarks, the forestry budget is about 1/5 (on a per-tree basis) to 1/3 (on a total budget or per capita basis) of the total amount.
- Fitchburg is similar to other cities in that it contracts out some work; approximately $3,500 of the $21,000 tree maintenance budget is spent on contracted work.

Community Tree Management

Managing a tree population requires information to inform management decisions. Goals are also essential for planning, managing, and evaluating tree programs. Key findings include:

- The city has an up-to-date public tree inventory.
- The current tree canopy is near 25%, and the 30% goal is attainable by continuing current operations, provided no major storms or insect/disease issues result in tree mortality.
- Tree inspections are regularly conducted; however, 90% of tree maintenance is reactive rather than systematic and planned.
- A systematically planned operation, such as scheduled young-tree pruning, can yield estimated savings of $250,000 in avoided future costs.
- City staff regularly conduct tree risk assessments, yet lacks a formal policy on who performs the work, qualifications, the assessment approach, steps to mitigate tree risk, and a time frame for the assessment.

Community Opinion and Engagement

Community members' involvement in the outcomes of a forestry program is essential. This occurs through a variety of methods,

including a formal committee, engaging community members in operations such as tree planting, and periodic engagement through opinion polls and public meetings.

- Fitchburg is a certified Arbor Day Tree City of the World, one of only two in Wisconsin and among 210 worldwide, and has been recognized through growth awards 13 times.
- An active Tree Advisory Committee assists with the review and provides advice on the forestry program through regular scheduled meetings.
- The City of Fitchburg includes volunteers in its urban forestry program, with an estimated 25 people providing over 500 hours annually.
- Outreach occurs through a dedicated forestry website, the recent public opinion survey, public meetings, and review of the draft management plan.

Operational Review Summary and Key

The forestry program has many positive findings and opportunities to build upon the current program. The key findings from above and in the report provide greater details. Specifically, though, a summary of these findings includes:

- ***Dedicated Funding*:** A base forestry budget currently exists; however, the funding level is near the bottom (50% to 75%) compared to peer communities.
- ***Current Staffing*** Levels: Fitchburg currently has 1 FTE dedicated to urban forestry management, which is 1.5 to 2 FTE below the recommended level.

- ***Current Tree Inventory:*** Fitchburg now has a comprehensive, in-house-developed and maintained inventory that is up to date.
- ***Tree Ordinance in Place:*** Fitchburg's tree ordinance and code surpass the basic standards of Tree City USA and Tree Cities of the World.
- ***Responsible for Street Trees:*** City ownership of street trees aligns with other Midwest communities, giving the city authority over their maintenance.
- ***Build Technical Capacity:*** Create a dedicated operations staff arborist with 100% of time allocated to forestry.
- ***Shift to Proactive Maintenance:*** Move from a 7-year pruning cycle to a 5-year pruning cycle.
- ***Implement Systematic Inspections:*** Conduct tree inspections to determine which pruning is needed.
- ***Rebalance Budget Investment:*** Investing in a proactive tree maintenance budget through a young-tree structural pruning program will likely pay for this work through reduced future tree maintenance costs.

Finally, goals and objectives were created to guide strategic planning. A total of five goals with 19 associated objectives are presented below. Each goal and objective includes policy statements and related effort levels and timeframes, explained later in the plan.

Goal 1: Enhance the city's urban forest by developing metrics to evaluate progress towards meeting urban forest goals

Objective 1.1: Establish staffing requirements and budget needed to manage the tree population effectively.

Objective 1.2: Collect relevant data on taxonomy, tree condition, tree diameter, and maintenance recommendations.

Objective 1.3: Use an electronic system to issue work orders and monitor completion details such as staff involved, time taken, and issues encountered.

Objective 1.4: Use the urban forestry and other city mission and vision statements to guide the urban forestry program decision-making.

Goal 2: Integrate industry standards into the planting, establishment, and maintenance of the city's urban forest

Objective 2.1: Manage the Urban Forest through a written operations plan for tree maintenance activities.

Objective 2.2: Create a technical manual for urban forestry operations.

Objective 2.3: Develop appropriate training and credential recommendations for urban forestry staff.

Objective 2.4: Create a tree risk management policy.

Goal 3: Develop and implement a woodlot management policy for the city's approximately 300 acres of woodlands

Objective 3.1: Implement a city woodlot management policy that manages woodlots for desirable plant communities and minimizes undesirable species abundance.

Objective 3.2: Use the existing public governance methods and community engagement approaches to direct woodland management and stewardship efforts.

Objective 3.3: Assist private landowners with woodlot management.

Goal 4: Integrate urban forestry into existing city and infrastructure goals

Objective 4.1: Assess the urban forest ecosystem service benefits.

Objective 4.2: Identify urban forest disservices and strategies to reduce impact.

Objective 4.3: Update and maintain a storm emergency management policy for the urban forest.

Objective 4.4: Improve neighborhood health and equity through targeted tree planting and maintenance in priority neighborhoods.

Goal 5: Encourage and promote active community involvement in urban forestry planning and management.

Objective 5.1: Develop a volunteer program recruitment strategy.

Objective 5.2: Identify areas of the city below the tree canopy goal and take action through tree planting.

Objective 5.3: Maintain an urban forestry outreach initiative through the current urban forestry website.

Objective 5.4: Formalize the memorial tree policy/operation process and mapping.

Introduction

The City of Fitchburg's urban forest is a crucial resource for residents and visitors. The Strategic Urban Forest Management Plan seeks to assess the current condition of the urban forest, understand community needs, and develop a framework for future planning. Engaging the community through surveys, public meetings, and reviewing a draft of this Plan was essential for making well-informed recommendations. This strategy also aligns with the City of Fitchburg's existing plans. For example, this Plan incorporates the 2030 Comprehensive Plan to guide a Policy Framework Hierarchy of Goals, Objectives, and Policies (Appendix A). Several policies within the 2030 Comprehensive Plan support this Plan, such as:

- Encourage the planting and maintenance of trees, and the management of invasive species, within the park and open space system to ensure the health of the urban forest.
- Develop a Tree Protection Ordinance, a Tree Diversity Plan, and a tree canopy of 30% in the urban service area.
- Maintain and protect mature trees on public property and along public streets to enhance the urban forest and urban wildlife habitat.

TREE CITIES OF THE WORLD™

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Arbor Day Foundation

Existing parks and forest management plans also provide valuable guidance for this Strategic Urban Forestry Management Plan. For example, the Open Space and Recreation Plan: 2025–2030, Action Item 10 (Maintain and enhance the city's tree canopy, forests, savannas, and prairies to protect and preserve the city's vegetative resources and broader ecosystem) recommends developing a City Strategic Urban Forestry

Urban Forestry Mission Statement

The division of Urban Forestry aims to understand and maintain the city's urban forest. Through effective management practices, the division works to keep trees in good health, minimize the risk of injury and property damage, and maximize the benefits of the urban forest to the community.

Management Plan for city-owned woodlots. Therefore, this Plan supports and advances this goal.

Many individuals contributed to developing the Plan outlined below. Community members who shared their opinions through surveys and public meetings played a vital role in shaping the goals, objectives, and policy recommendations. Staff from the City of Fitchburg provided data and documents to illustrate the current state of the urban forest. Finally, the urban forestry team at Eocene Environmental Group conducted the analysis of the urban tree population, summarized public and staff meetings, and reviewed existing documents and the city tree code. The Draft Strategic Urban Forestry Management Plan presented here reflects the efforts and dedication of many people who worked on this groundbreaking document, which aims to guide urban forestry and support the "Moving Fitchburg Forestry Forward" initiative.

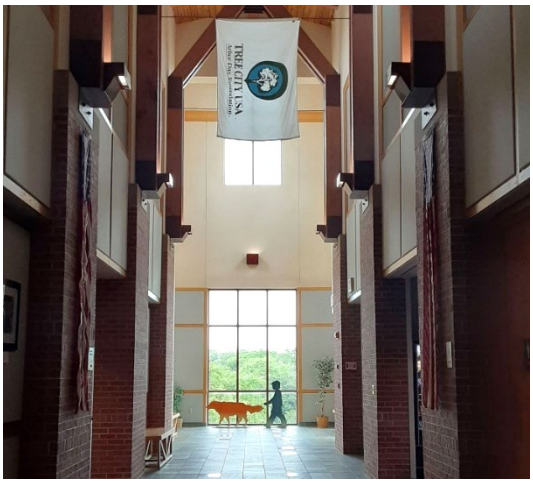
Historical Perspective

The City of Fitchburg, Wisconsin, is relatively new as an incorporated place, having been incorporated as a statutory city in 1983. The Public Land Survey created the township in the early 1830s (Kinney, undated). Before that, the land had ancestral ties to the Ho-Chunk Nation, as well as to the Fox (Meskwaki) and Sauk, who share a historical connection to the land (De Laruelle, 2025). Today, the community has over 34,000 residents and covers 35.2 square miles.

Initially, after the time of Indigenous peoples, land use centered on agriculture, including crop and livestock farming. The landscape changed from what government surveyor Lorin Miller described in 1833: "This is a good township of land, mostly gently rolling with good soil; is not well watered; otherwise holds out many inducements to the farmer. It has some springs and streams on the east side. On this township we saw many deer and prairie wolves" (Miller 1880 in Kinney, undated). Retail stores and places of worship appeared during the early years of the land's agricultural development. A railroad stop in Fitchburg Village was established by the late 1880's.

Today, the City of Fitchburg still includes land used for agriculture. Much land has been transformed into housing, commercial, and retail developments, public open spaces, government facilities, and other uses. Over this 150-year history of changing land use, trees have remained a vital connection. Fitchburg evolved from a wooded landscape with varying tree density and areas dominated by large prairies. This link between forest and prairie aligns well with the current effort to develop a Strategic Urban Forestry Management Plan titled "Moving Fitchburg Forestry Forward."

Urban forests are an integral part of the built environment, consisting of trees and other plants.



Fitchburg's commitment to managing its tree population is evidenced by its designation by the Arbor Day Foundation as one of only two Tree Cities of the World in Wisconsin. Recognizing the vital connection among open spaces, the urban forest, and land-use decisions, the City of Fitchburg successfully secured funding through the Wisconsin Department of Natural Resources Urban Forestry Grant Program. This grant-funded project aims to develop a strategic decision-making plan. This Plan includes a description of the current state of the urban forest, governance, and operations. Evaluating the current situation involves urban forestry benchmarks, industry standards, and best management practices. Urban forestry benchmarks provide a comparative perspective on a community's urban forestry program with peer communities. Industry standards are essential because they provide the context for developing standard practices through written specifications. At the same time, best management practices guide current knowledge on effectively implementing industry standards. Collectively, these three provide essential context for assessing the

current state of an urban forestry program and identifying what is working well and where there is room for improvement.

An essential part of this Plan is identifying strategic goals and proposing methods to achieve them. The development of the Plan involved reviewing existing city documents and engaging community members through surveys, public meetings, and outreach. City staff also participated in the Plan's development through five SWOT (Strengths, Weaknesses, Opportunities, and Threats) planning sessions. The following planning documents cover these details and recommendations.

Urban Forest Overview

A desirable city provides residents with access to quality shops and restaurants, reliable services, well-maintained parks and green spaces, and other elements that enhance a high quality of life within the community. Although often in the background, trees play a vital role in many of these elements—offering shade, anchoring neighborhood parks, lining residential streets, and shaping the character of public spaces. A city's urban forest includes trees and other plants on both public and private land.

While trees symbolize natural beauty, they are also an essential part of infrastructure that should be managed and valued as significant assets. Unlike most municipal infrastructure, trees tend to appreciate over time when properly cared for rather than depreciate. As trees grow and mature, they provide increasingly greater environmental, social, and ecological benefits.

Managing a Healthy Urban Forest

Diversity is crucial when developing and maintaining a tree population capable of withstanding change. A healthy urban forest should include a wide variety of species, different tree ages, and distribution across various types of locations. Relying too much on a single species creates vulnerability—an event like a pest, storm, or development project could wipe out the entire canopy if that species is vulnerable. Fitchburg's experience with emerald ash borer (EAB) serves as a warning. It led not only to significant tree and benefit losses but also to budget impacts and increased pressure on forestry operations.

To avoid these catastrophic losses, urban forestry best practices have established guidelines for age and species diversity, for planting and establishing trees, for tree care, and for decision-making criteria for tree removal when necessary. Generally, tree age should be balanced, with many

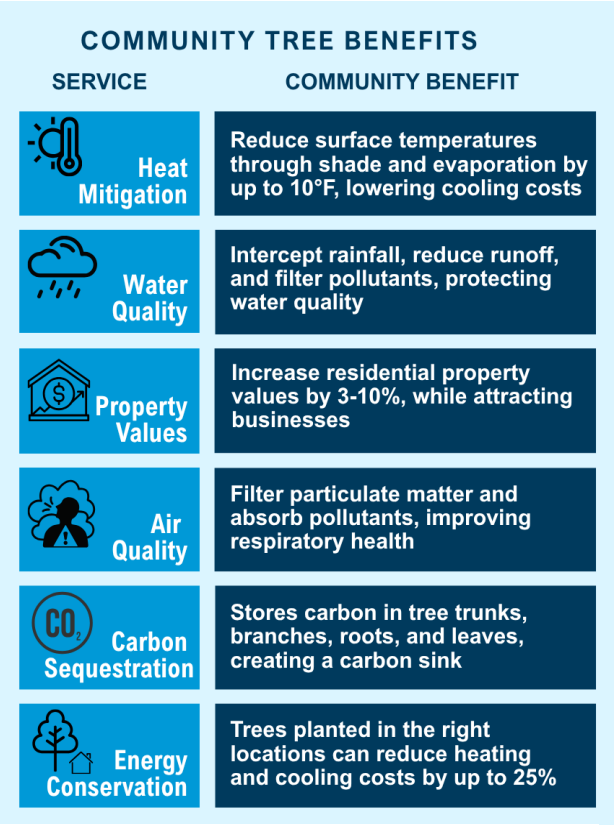
young trees replacing older ones as they die. For species diversity, established metrics guide species composition and recommend diversity thresholds. This balance of species is part of a diversification strategy that prepares a city for new challenges while maintaining the tree canopy to support vital ecosystem and community services. Choosing suitable trees and using correct planting and establishment methods are essential. Finally, inspecting and assessing trees for maintenance needs and potential risks is vital to maintaining a healthy, safe urban tree population.

Trees and Community Well-Being

Beyond the measurable environmental and economic benefits, urban trees significantly improve human health and boost social cohesion. Research shows that tree canopy coverage reduces stress, increases physical activity, and improves social interactions. Tree-lined streets and shaded parks promote walking and outdoor exercise, serve as gathering places, and help build a community's identity. For Fitchburg, investing wisely in urban forestry assets and programs is an investment in the community.

Site Conditions and Growing Environment

Climate and soil are crucial factors that influence which trees and plants are suitable for an area. The City of Fitchburg has a temperate continental climate with potentially hot summers and cold winters. The city gets about



Facts from McPherson & Simpson, 2003; Sander et al., 2010; U.S. Department of Energy, n.d.)

37.5 inches of rain each year. Trees growing in Fitchburg must be able to withstand United States Department of Agriculture (USDA) Hardiness Zones 5a and 5b. Zone 5a has an average minimum temperature of -20°F to -15°F, while Zone 5b ranges from -15°F to -10°F. The average annual temperature is 49.3°F, with lows around -14°F and highs up to 94°F (National Weather Service, 2025). The region is susceptible to extreme weather events such as thunderstorms and ice storms, which can affect tree health, structure, and resilience. The city mostly has silt loam soils of various kinds (Soil Staff Survey, 2025). Other soil types include muck soils, loams, sandy loams, and clay loams. However, in developed areas, the native soil profile is often altered through excavation, replacement, and mixing, which can influence tree selection and planting decisions.

State of the Urban Forest

The state of the community tree resource provides a snapshot of the tree population at a specific moment. Understanding the current tree inventory is crucial for making management decisions. A land cover and tree canopy assessment also offers essential information for planning. Quantifying land use changes and variations in tree canopy across the landscape is necessary. An increase in tree canopy reflects past tree planting and preservation policies. These assessments are therefore vital to monitor the current situation, which is key to achieving the expected benefits from trees.

Tree Inventory Assessment

A tree inventory provides data to support management decisions. The City of Fitchburg maintains a tree inventory system in an ESRI ArcGIS database. A brief quality control review shows the inventory is in excellent condition. There are some minor suggestions for data entry, such as improving species recording and tree condition ratings. The inventory is regularly updated to reflect management actions, such as planting, removal, and maintenance, as well as measured attributes, such as tree size, health, and location. Fitchburg GIS staff developed a data-collection and work-order system with an interface for GPS-recorded spatial locations. Currently, the collected data include tree trunk diameter, height, condition, taxonomic classification (species, genus, and family), location, and utility wire conflicts. The data collected from June 27, 2025, are used to summarize the current state of the urban forest that follows.

Species Composition and Diversity

A total of 129 distinct species, 55 genera, and 30 families occur across Fitchburg's streets, parks, rights-of-way, and public properties. The most frequently observed species were Freeman maple (6.2%), thornless honeylocust (6.1%), and black locust (4.5%). Other common species included common hackberry (4.3%), Kentucky coffeetree (4.2%), northern red oak (3.6%), bur oak (3.4%), silver maple (3.2%), littleleaf linden (3.0%), and swamp white oak (3.0%) (Figure Species Distribution).

Tree species diversity is essential to creating a resilient, healthy urban forest that can withstand challenges such as pests,

diseases, storms, and the effects of climate change. A diverse tree population reduces the impact of these risks. To maintain this balance, many municipalities follow the 5-10-15 rule, aiming to limit any one species to no more than 5%, any genus to 10%, and any family to 15% of the total tree population. These targets help prevent dependency on a small number of species and promote long-term stability. While these 5-10-15 goals are ideal for setting safety limits, a more practical upper limit is the 10-20-30 threshold, which still encourages diversity while allowing flexibility based on existing conditions or limited planting options. The guidelines provide a benchmark for a more attainable, adaptable, and sustainable approach to urban forestry. Fitchburg's

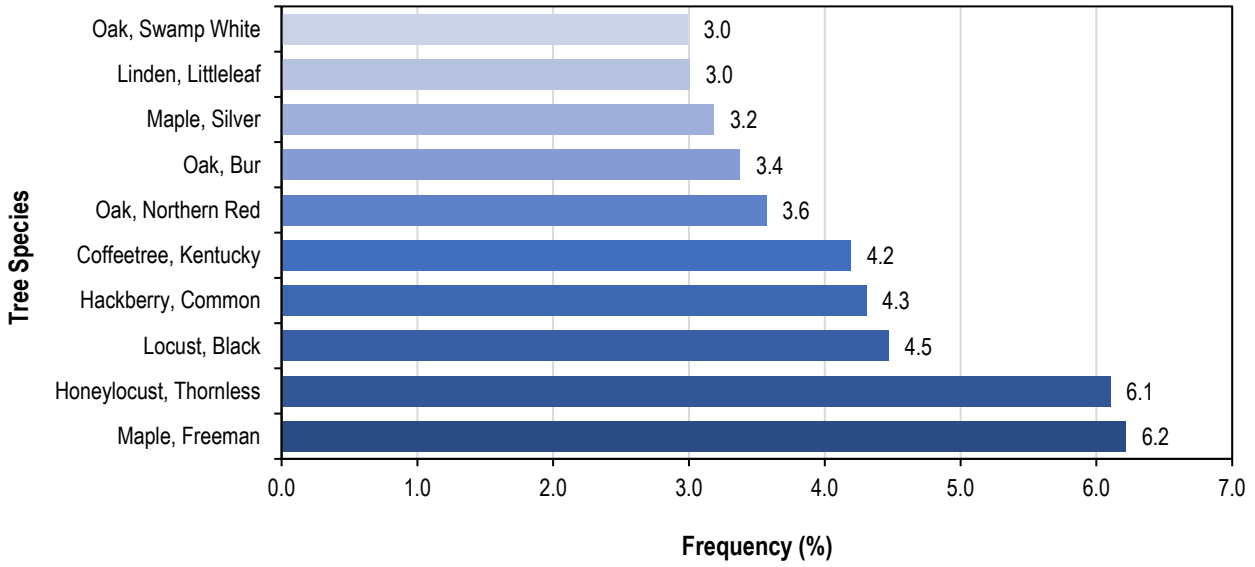


Figure Species Distribution. Tree species population distribution in the City of Fitchburg, WI.

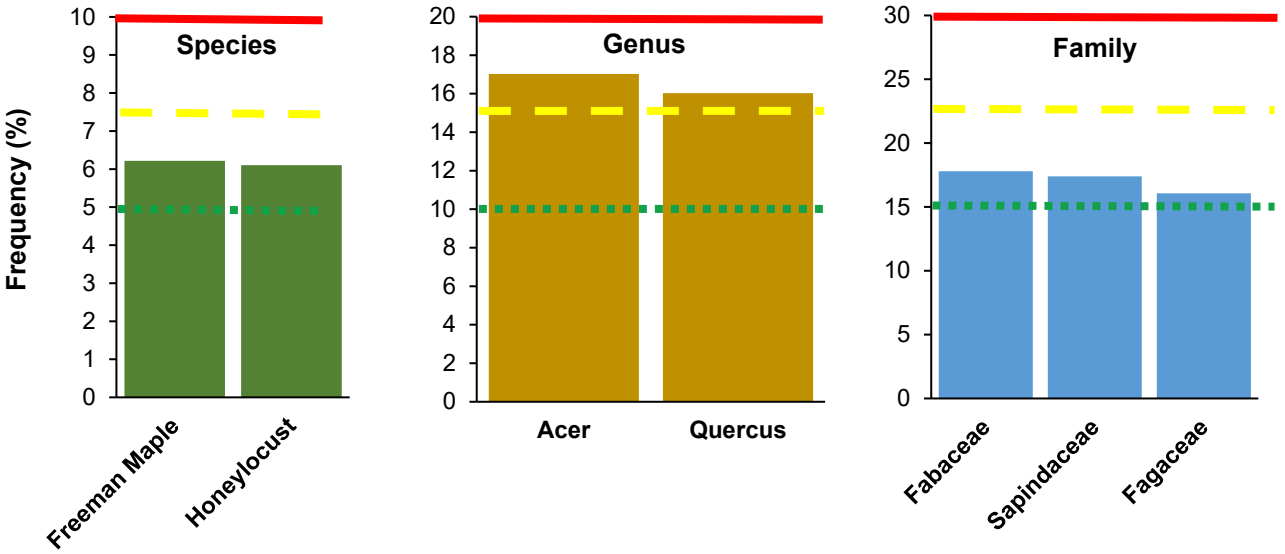


Figure Guidelines. Comparison of taxonomic status for species, genus, and families that exceed 5-10-15% (green dotted line), mid-point (yellow dashed line), and 10-20-30 (red solid line) tree diversity guidelines.

inventory data showed that two species, two genera, and three families are above the 5-10-15 guideline but below the 10-20-30 guideline (Figure Guidelines). Although these concentrations do not exceed the upper limit, it remains ideal to continue diversifying plantings to reach the lower limits. Fortunately, Fitchburg's high diversity—129 unique species—demonstrates that many different tree species can thrive in the city's urban environment, providing a broad array of options for future plantings.

Tree Size and Age

Tree size, often measured by trunk diameter (inches) and total height (feet), acts as an indicator of the age of the tree population. Similar to species diversity, age diversity is also important. To maintain a healthy, growing tree canopy, it is essential to have both small and large trees; smaller trees help restore canopy cover, provide ecological benefits, and replace larger trees as they die.

The diameter distribution of Fitchburg's urban forest shows an uneven-aged tree population (Figure Diameter Distribution). This distribution is positive and indicates young trees that will be important for the future of the urban forest. These trees will also replace the larger, older trees as they naturally die. The tree diameter distribution also reveals a gap in planting during a recent period (the 4–6-inch class). The Great Recession of 2008 and the following years explain this gap as a result of reduced tree planting due to budget constraints. While the current structure supports future growth, it also highlights the need to continue the planting plan and maintain mature trees.

Tree Condition

Tree condition ratings offer a crucial snapshot of each tree's overall health, structural soundness, and projected longevity in the urban forest. In Fitchburg, trees were classified as Good, Fair, Poor, and Remove Now (Figure Condition). The

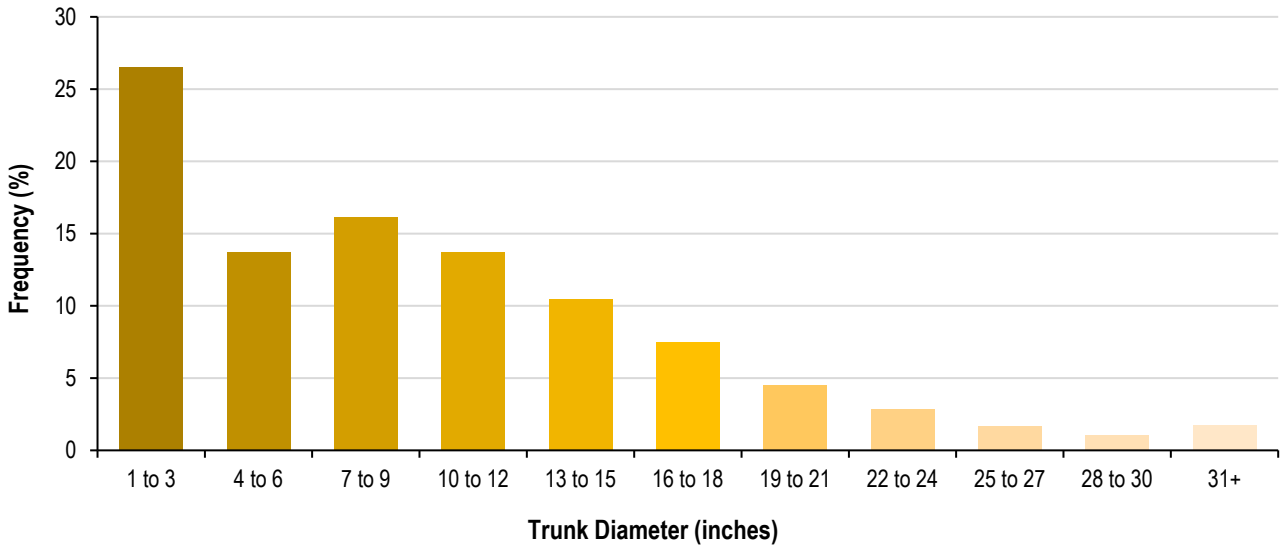


Figure Diameter Distribution. Tree diameter distribution of public trees in the City of Fitchburg, WI.

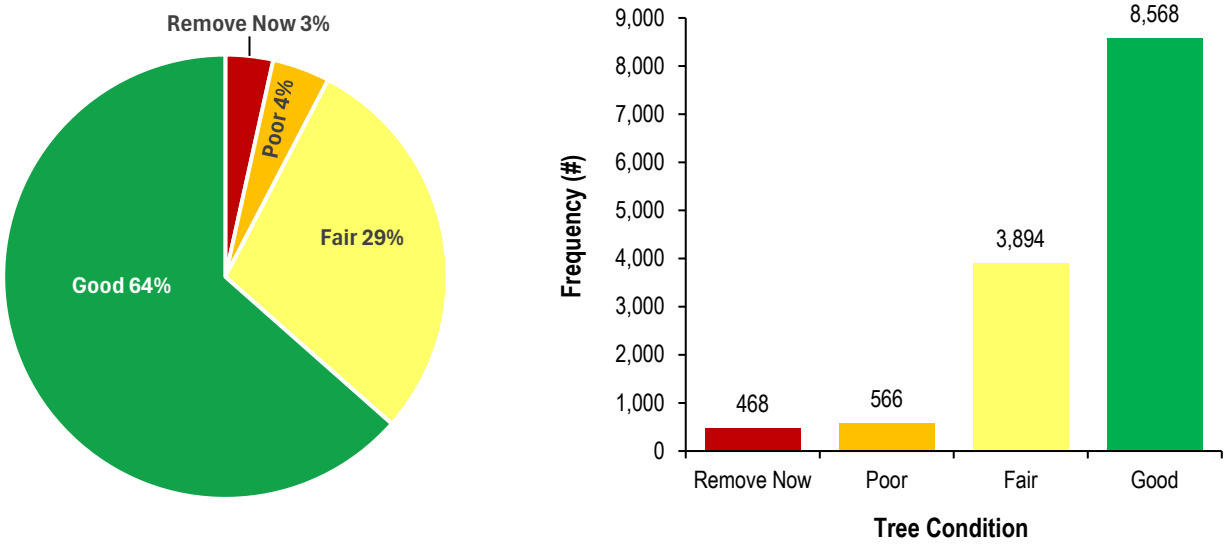


Figure Condition. Tree condition rating distribution.

overwhelming majority of the trees (93%) are in the higher condition categories, with 64% rated as Good and 29% rated as Fair. This distribution indicates a generally healthy, well-maintained urban forest, where most trees positively contribute to canopy cover and require relatively little corrective maintenance. Conversely, the Poor (4%) and Remove Now (3%) categories point to short- and medium-term management needs, such as structural pruning, risk mitigation, or removal. These ratings help illustrate the level of investment required to maintain public safety and long-term canopy health. The high proportion of Good-condition trees suggests greater urban forest resilience and lower overall management costs in the near future.

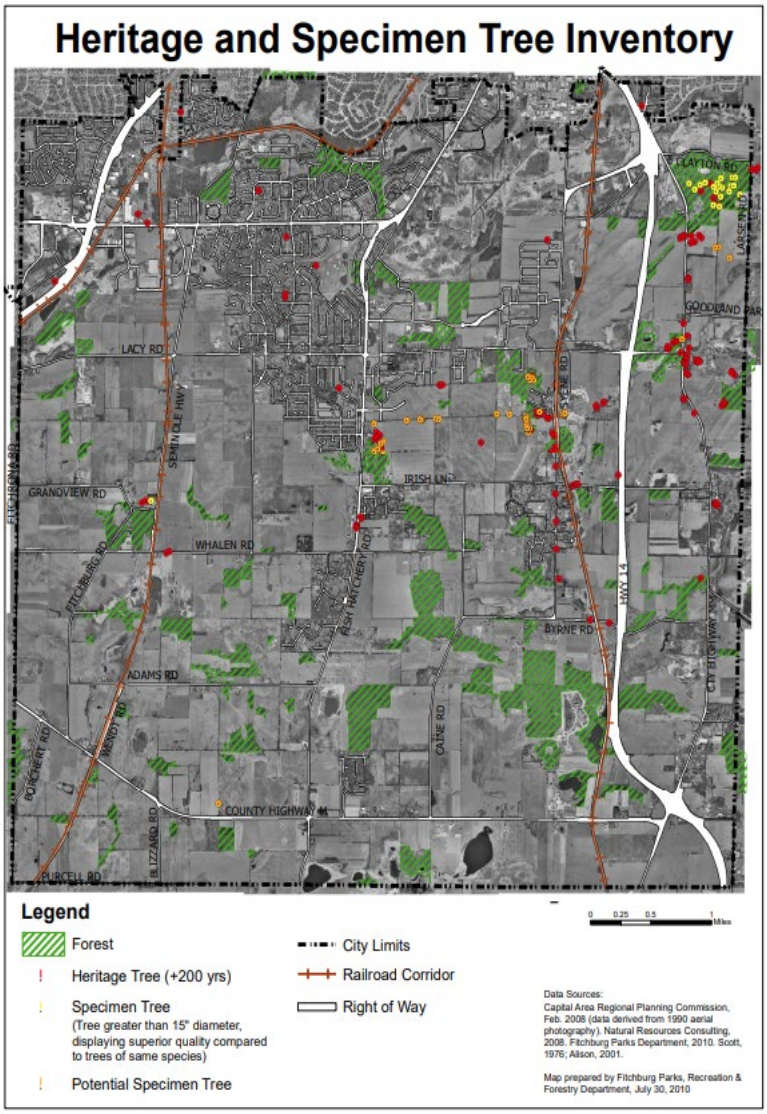
While the four tree condition ratings provide a foundation for managing trees, other tree condition rating systems offer alternative approaches. One such system uses 21 categories; each scaled from 0 to 100% in 5% increments. The Council of Tree and Landscape Appraisers' (CTLA) tree condition rating system classifies trees into six groups based on percentage. These are dead (0%), critical (5 to 20%), poor (25 to 40%), fair (45 to 60%), good (65 to 80%), and excellent (85 to 100%). The CTLA method offers more detail in rating trees for their potential longevity. This informs near-term needs on how many trees to plant to replace those likely to die. A mean tree condition score is calculated, with the average tree population score at 73.2%. The tree condition percentage also plays a key role in determining the trees' monetary value. Additionally, it helps reduce conflicts for evaluators when assigning trees to one of the defined categories.

Heritage / Specimen Tree Inventory

The urban forest today reflects past decisions. Communities are both built within existing forests and planted with trees. To recognize trees of past significance, the city has a heritage and specimen tree inventory. The original land survey from the 1830s provided the basis for identifying potential trees for this designation.

Heritage Trees: Heritage trees are estimated to be 200 years old or older, based on their size. To be classified as heritage trees, white or bur oaks need a trunk circumference measured at 4.5 feet above ground level of at least 10 feet, and pin, black, and red oaks need a trunk circumference of 11 feet.

Specimen Trees: Specimen trees are those with a diameter of 15 inches or more that exhibit superior quality and characteristics compared to other trees of the same species.



Adapted from: https://fitchburghistory.org/fitchburg-heritage-trees/

Heritage Tree at Vroman Farmstead (Image From Fitchburg Historical Society)

Heritage Tree at Oak Meadow Park. (Image From Fitchburg Historical Society)

Tree Canopy and Land Cover Assessment

A tree canopy and land cover assessment provides an overview of how much of the city's land is covered by features such as tree canopy, impervious surfaces, or water. It typically includes both public and private property. A tree canopy assessment explicitly describes the percentage of land area covered by tree canopy relative to other land cover types, such as bare soil, grass, impervious surfaces, or water. The 2030 Comprehensive Plan defines tree canopy as the above-ground portion of a tree community, formed by mature tree crowns, consistent with the typical definition used in tree canopy assessments (City of Fitchburg, 2020). The evaluation offers an aerial view of current land cover conditions and shows how the urban forest has changed over time. With this information, the city can plan more effectively for the future.

Methods

Fitchburg's current and historical land cover was estimated through a sample-point assessment within the municipal boundary (Figure Land Cover). Using this method, 3,000 geospatial points were randomly generated and manually classified by a reviewer based on 2024 satellite imagery. An assessor evaluated each sample point as Agriculture, Bare Soil, Grass and Herbaceous, Impervious Surface, Tree Canopy, Water, and Wetland (Figure land class). The high-resolution imagery from the National Agriculture Imagery Program (USDA, 2022) provides 4-band (RGBNIR) imagery at 60-centimeter resolution. Additionally, 1,000 sample points were classified using historical imagery from 2018 and 2013, available through NAIP at 60-centimeter and 1-meter resolution, respectively. Before initiating point classification, a calibration using 50 sample points was performed. Calibration aims to identify potential issues with the imagery and review any features unique to the project area. After calibration, the primary evaluator classified each sample point for each time period. Quality control involved a secondary evaluator independently classifying 10% of

What is a Tree Canopy Assessment?

A tree canopy assessment shows how much land is covered by trees, including those on public and private property. In addition to tree canopy, the assessment measures the percentage of land covered by bare soil, grass, herbaceous plants, impervious surfaces (such as roads), or water.

What a Tree Canopy Assessment is Not! A tree canopy assessment offers an aerial view of what's above the land surface, but it doesn't provide details about individual tree attributes. Typically, this data is gathered during a tree inventory, where people visually evaluate each tree. Using both methods together gives valuable information for urban forest planning and management.

the sample points for each year, and both evaluators agreed that the sample points were tree canopy, with 94.7% agreement in 2024.

Figure Land Cover. Example land cover classifications.

Findings

The land cover analysis shows notable shifts have occurred over the last decade (Figure Land Cover %). Tree canopy increased nearly 6% (31% absolute increase) from 2013 (18.8%, 1.2% SEM) to 2024 (24.7%, 0.8% SEM), a significant increase over a decade. Reasons for the rise include successful tree planting, tree preservation during development, and natural regeneration. Water and wetland areas remained relatively stable with only minor fluctuations. Overall, Fitchburg is experiencing incremental urban development while simultaneously expanding its tree canopy, which can help offset the impacts of impervious surface associated with development.

When viewed from above, slight decreases in agriculture, bare soil, grass & herbaceous surfaces, and impervious surfaces occurred between 2013 and 2024. Agricultural land decreased slightly from 41.0% to 39.3%,

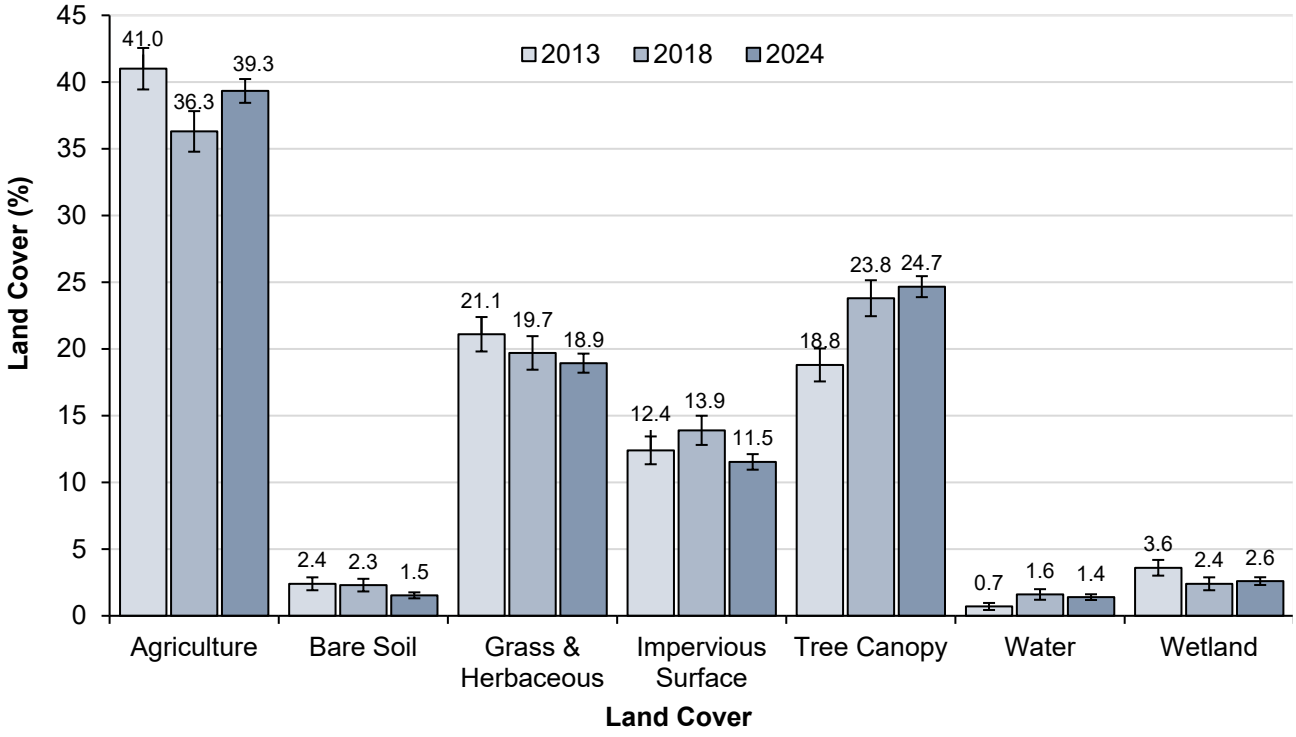


Figure Land Cover %. Tree canopy coverage throughout the City of Fitchburg, WI, in 2013, 2018, and 2024.

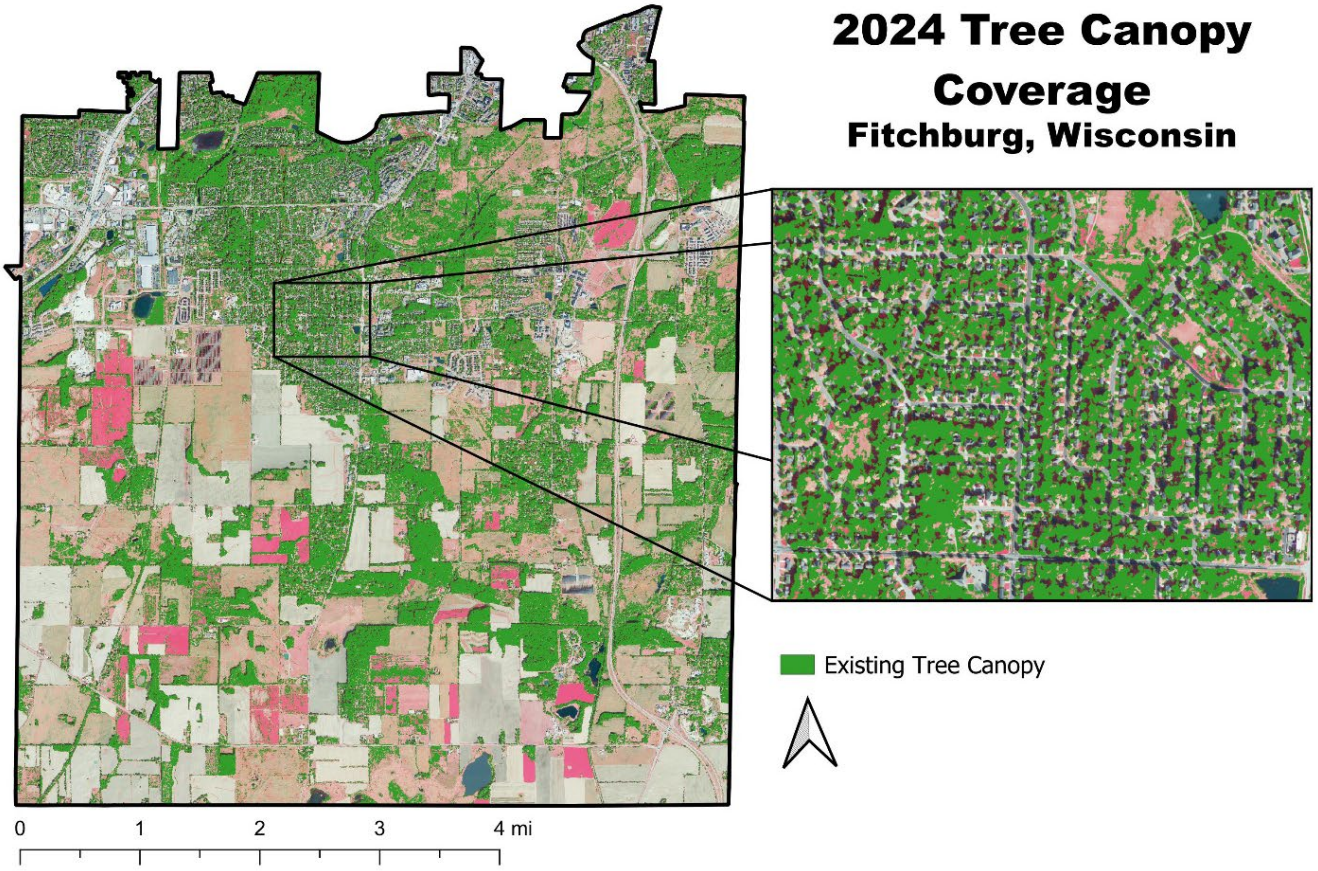


Figure Tree Canopy Map. Tree canopy coverage throughout the City of Fitchburg, WI in 2024.

likely due to ongoing development or conversion to other uses (Table Land Cover). Bare soil also declined slightly (2.4% to 1.5%) due to reduced exposure of the ground, decreased soil surface disturbance, or tree canopy growth over this surface. Grass and herbaceous cover also showed a decrease (21.1% 18.9%), likely due to conversion to other land cover or, more likely, to tree canopy growth over this land cover. Likewise, the decrease in impervious surfaces (e.g., buildings and roads) from 12.4% to 11.5% is likely due to tree canopy growth over this surface.

Table Land Cover. Percent Landcover by Year. (SEM is the Standard Error of the Mean)

Land Cover Type	2013	2013 SEM	2018	2018 SEM	2024	2024 SEM
Agriculture	41.0	1.6	36.3	1.5	39.3	0.9
Bare Soil	2.4	0.5	2.3	0.5	1.5	0.2
Grass & Herbaceous	21.1	1.3	19.7	1.3	18.9	0.7
Impervious Surface	12.4	1.0	13.9	1.1	11.5	0.6
Tree Canopy	18.8	1.2	23.8	1.3	24.7	0.8
Water	0.7	0.3	1.6	0.4	1.4	0.2
Wetland	3.6	0.6	2.4	0.5	2.6	0.3
Totals	**100.0**	**N/A**	**100.0**	**N/A**	**100.0**	**N/A**

Current Tree Code

The city code provides a governance framework to promote a desired outcome in the community. The City of Fitchburg oversees tree regulations through Chapters 6, 24, and 54. Chapter 6 establishes authority for a Tree Advisory Committee and the governance structure (Appendix B). Chapter 24 regulates trees during development. Meanwhile, Chapter 54 offers general guidance for managing the public tree population. These chapters were reviewed for their content, with observations on relevance and potential conflicts with current standards and Best Management Practices (BMPs) for tree care (Appendix C).

Chapter 24 provides guidance on protecting desirable tree species (e.g., various oak and hickory species, sugar maple, hackberry, honey locust, white pine, and American basswood) during the subdivision process for the preliminary plat. A tree preservation plan must be submitted for specific desirable tree species, with trunks over 6 inches in diameter at 4.5 feet above ground. The developer is required to submit a tree preservation plan for review by the plan commission and city staff, including the city forester. This plan should outline the approach to conserving important trees and include details such as parcel location, buildings and impervious surfaces, grading areas, tree characteristics and placement, the trees targeted for preservation, measures to protect them, any proposed removal of desirable trees, and the qualifications of the plan preparer.

Chapter 24 | Section G | Tree Preservation Plan Details

(1) The name and address of property owner and subdivider;

(2) Delineation of the buildings, structures, or impervious surfaces situated thereon or contemplated to be built thereon;

(3) Delineation of all areas to be graded and limits of land disturbance;

(4) Size, species, and location of all desirable trees located within the area to be developed, surveyed by a certified arborist or an individual with similar training and experience. Where conditions warrant generalization of the tree inventory due to density, such as a wooded site, the city will accept a plan where information is collected on randomly selected trees to obtain overall condition, size, and species characteristics of the area;

(5) Location of all desirable trees on all individual lots;

(6) Measures to protect desirable trees in accordance with the City of Fitchburg Tree Protection Guidelines;

(7) Identification of all desirable trees proposed on the plan to be removed within the construction area; and

(8) Name, qualifications, and signature of person or persons preparing the plan.

The existing tree preservation code is concise, clear about its intent, and detailed for compliance. The ordinance stems from the 2015 urban forestry survey, which included a question on tree preservation to gauge community support. There was strong backing for the developed code. However, it is unclear how effective tree preservation remains after development. Post-construction monitoring is necessary to determine whether trees designated for preservation stay intact and healthy. Monitoring serves as an evaluation of the ordinance's success, using tree health and survival within the first several years and up to 10 years post-construction as evaluation criteria.

A June 2023 Tree Protection Guidelines document exists to guide tree preservation. When created, this document included relevant, current standards and BMPs for trees and construction. Since then, updated ANSI A300 standards and International Society of Arboriculture (ISA) BMPs have been developed. The guideline states, "The guidelines are subject to updates in concert with updates to these publications." A revised Tree Protection Guidelines document is recommended to incorporate these updates, including the ANSI A300 consolidated standards, ISA BMPs for Trees and Construction, and ISA BMPs for Root Management.

Chapter 54 contains regulations that govern the management of trees on public lands. The code refers to the city forester as either the City Parks Director or a qualified designee. Qualification requirements specify that the individual must be an employee or consultant with a bachelor's degree in forestry (or another relevant field) or a Certified Arborist. This chapter determines which public plantings of trees and shrubs are suitable based on plant and site limitations. Examples of these limitations include intersection sight triangles, setback distances, avoiding planting incompatible plants under utility lines, and available space. The code also describes the permit process for growing and maintaining trees on public streets or areas. It outlines the authority of the city forester and indicates when a permit is required for public trees. Additionally, the city pays for costs related to public trees.

Chapter 54 is clearly written and provides essential details for defining tree management in Fitchburg. Although the code primarily guides public tree management, it also briefly addresses public nuisances, stating that a tree or shrub becomes a nuisance if it "May endanger life, health, safety, or welfare of persons or property, public or private." This clause authorizes managing diseases or insect infestations—such as Dutch elm disease, oak wilt, or emerald ash borer—that, if left unmanaged, could have epidemic consequences, as well as trees with imminent failure risks, all of which could harm the public if not addressed. Public tree management falls under the city's authority. Private citizens can undertake maintenance of public trees through an approved permit. During review, places in the code where modifications could be beneficial were identified. While maintaining the code as it still provides an

essential and practical governance framework, suggested changes include:

1) The code does not directly specify trees that are not to be planted; instead, it leaves this decision to the city forester, who determines which plants are best suited. This approach is desirable as it allows flexibility in plant selection, which may change over time. Developing or updating a tree planting guide is recommended to clarify this goal.

2) The minimum size for public tree plantings is a 1.5" caliper, measured at 12" above ground. Consider changing the minimum caliper size to allow planting smaller-diameter trees. This can potentially reduce planting costs and allow smaller trees to become established sooner. The current measurement above ground differs from ANSI Z60.2, which specifies a measurement 6" above ground for trees with a caliper of 4" or less. It is advisable to revise the minimum size to permit smaller trees, with approval from the city forester, and to specify the height of a caliper measurement on the tree stem, as per ANSI Z60.2, Nursery Standard.

Tree Care Standards involve practices that, when implemented today, prepare trees for the future and help prevent issues such as trunk splitting.

3) While "trimming" is a common term for removing or reducing tree branches, ANSI A300 Tree Care Standards use the term "pruning." The term "trimming" is not used or referenced within these standards. Therefore, updating the code to replace "trimming" with "pruning" and to reference pruning in accordance with A300 standards and ISA pruning BMP recommendations is recommended.

4) The construction safeguards section requires protective measures during construction. The code requires installing protective barriers at least 3 feet from trees and shrubs. However, this distance might not be enough to prevent damage that could harm a tree's health or structural stability. The city forester has the authority to approve whether these barriers are sufficient before construction begins. A recommended change is to specify that protective barriers are at least 3 feet away and to include a reference to verify that the barriers effectively safeguard tree health and stability.

SWOT Assessment

Periodically, it is essential to assess what is working well and what is not to evaluate the program's effectiveness and efficiency. A SWOT (strengths, weaknesses, opportunities, and threats) analysis provided a framework for the City of Fitchburg to assess the current state of urban forestry. Participants from the Parks and Forestry Department, the Public Works Department, and the GIS Coordinator provided their direct knowledge of forestry activities and operations. Five separate SWOT meetings occurred over 6 hours on 7/22/2025 and 8/13/2025, involving operations and leadership staff. In brief, the participants received instructions that their task for the SWOT analysis is simple: to provide honest, open dialogue, as they are the subject-matter experts.

A primary goal of a SWOT analysis is to identify the factors that inform urban forestry management and operations decisions and to develop a strategy. The SWOT analysis helps identify the internal strengths and weaknesses (S & W) of the forestry program. It also explores external opportunities and threats (O&T). The SWOT results provided important background information for developing the strategic urban forestry management plan.

SWOT Findings

The SWOT assessment offers valuable insights, highlighting both positive outcomes and areas for growth, threats to urban forestry, and potential opportunities. Examples from each of the four categories are as follows, along with a complete summary in Appendix D.

Strengths

The passion, enthusiasm, and dedication of staff were evident just by listening to them during each SWOT meeting. This passionate language was used repeatedly by field staff, particularly when supervisors and managers praised them for outstanding outcomes achieved despite limited time and resources. Equipment was another positive message, with workers pleased with newer equipment in excellent condition. Staff also liked the variety of work and a jack-of-all-trades mentality. The support by managers and the city for training, education, and credentials was evident. Other strengths included extensive institutional knowledge, excellent GIS/GPS technologies, and access to well-trained seasonal staff. Several people noted an active Tree Advisory Committee.

Weaknesses

The identified weaknesses provide insights that, when addressed, will improve the state of the urban forest. The lack of full-time staff dedicated primarily to urban forestry maintenance was evident from several meetings. When asked about understaffing to complete identified work needs, 2 FTE below the required level were repeatedly mentioned. This number also aligns with the benchmark study, which shows Fitchburg is 2 FTE below the average for comparable peer groups. The current street tree pruning cycle was stated to span between 5 and 7 years, with 7 years being more common. Additionally, street tree pruning was

described as a clearance program rather than a means of structurally training trees. A frequent concern was the lack of communication and alignment between the work required and the work orders assigned to staff. Field staff often expressed resistance to and concerns about using technology. Staff also expressed concerns about the lack of a succession plan and the risk of losing institutional knowledge. Although support exists for taking the ISA Certified Exam, field staff are hesitant to pursue it, primarily because of the risk of failing. The ability to respond to all grant opportunities is a weakness due to a lack of dedicated time for grant writing.

Opportunities

Many potential opportunities through external means, when leveraged, can help advance the urban forestry program. External factors might include collaborating with businesses, non-profit organizations, or other groups outside of city functions. Alternatively, an external group could be a city department outside the program's current department. The organizational structure benefits from the extensive arboricultural and urban forestry expertise available in Dane County for technical support when needed. Fitchburg residents are very supportive of urban forestry, and many volunteer with related projects. Access to grants that support urban forestry is also essential. The local DNR regional office, with an urban forestry coordinator, is beneficial. Having access to skilled arboriculture contractors and existing debris management agreements is crucial for storm response when internal capacity is overwhelmed. Collaboration with staff from various city departments and a willingness to work together further strengthen these efforts.

Threats

Nothing is ever so good that it can't get better, and never so bad that it can't get worse. This expression is about the future and factors outside staff's control, but if risks and threats are anticipated, the impact can be lessened. Therefore, identifying threats is helpful for planning. One threat is a lack of staff redundancy. A long-term employee absence will affect urban forestry work. Changes in the mayor's and council's priorities can affect a program. Storms and more frequent extreme weather events (e.g., extended dry periods, larger-than-normal rainfall events, and hotter temperatures) contribute to tree mortality. For example, oak trees are at greater risk of decline due to increased weather extremes, making them more susceptible to native pests. Traffic and safety concerns in work areas also pose risks. Homeowners often think the tree in front of their home is their tree rather than a city public asset, as specified in the city code. A similar conflict can arise when a homeowner believes a tree is public when it is actually private. Additionally, Wisconsin levy limits affect budgets and the ability to fund programs at needed levels.

Community Engagement

Community engagement actively involves community members in decision-making. The engagement in Fitchburg involved educating the public about the strategic urban forestry management plan and gathering their interests and concerns regarding trees. A public opinion survey collected people's preferences and experiences with the urban forest. Public meetings, including several open house sessions, and the City of Fitchburg website promoted the project and the survey.

Community Engagement Approaches

Survey

Working with Fitchburg staff and the Tree Advisory Committee, an informative survey was developed. Dissemination of the survey included both electronic and paper formats, as well as English and Spanish versions. The study aimed to gather community members' opinions on green space preferences, access issues, barriers, and urban forest management. Surveys were distributed at two community events and were available for pick up at City Hall, the library, and other public buildings. The city website and printed signage encouraged participation. Questions from a 2015 urban forestry survey allowed comparisons to analyze changes over time. Demographic questions also helped compare respondents to the overall community population.

Open House

Public input occurred through three in-person open house meetings. These included the Community Night Out on August 13 and a neighborhood meeting on August 14. Participants at an open house on September 24 heard about survey results and provided additional input. During this

phase, we learned about the community's opinions on Fitchburg's urban forest, proximity to trees, and ideas for improving the future urban forest. We also promoted the project and answered general questions about tree care.

Tree Advisory Committee

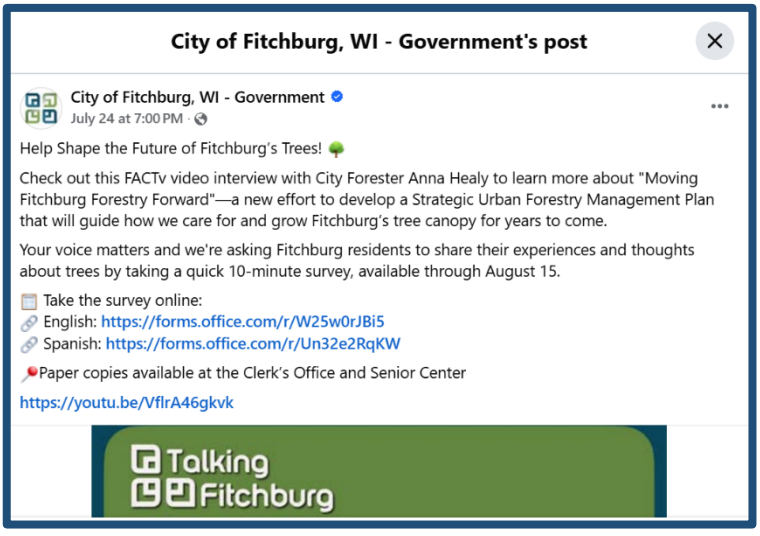
Active involvement of the Tree Advisory Committee (TAC) was crucial for testing ideas and refining the engagement approach based on their feedback. Five meetings took place. The TAC also reviewed the draft and final reports and offered comments.

Website and Social Media

The City of Fitchburg's website and social media pages helped to promote the project. The media approach was crucial for sharing the community survey and boosting attendance at public meetings.

Survey Results

Survey responses revolved around people's experiences with trees, their perceptions of the city's tree management, and demographic details. Appendix E provides a summary of responses for each question. The survey results reflect those who took the time to respond. A total of 366 people responded, or 1% of the community's total population. Compared to the US Census, the respondents had a higher proportion who had attained a higher education degree, were 45 years of age or older, and identified as white or Caucasian. Thus, the results represent those who responded.



Importance of Trees to People

Trees are essential to Fitchburg's residents. Over 95% believe that having trees in their neighborhood is either extremely important (82%) or very important (15%). They value the shade (59% of respondents), aesthetics (50%), wildlife (48%), and environmental benefits (38%) that trees provide. The tree coverage linked to these benefits has either increased (43%) or remained the same (42%), which is significantly higher ($p<0.001$) than in 2015.

Respondents also recognize the benefits of trees and consider them highly valuable. On a scale of 1 to 5, with five being very important, the cooling effect (4.6), groundwater protection (4.6), soil erosion reduction (4.6), air pollution decrease (4.6), and noise reduction (4.5) all received very high importance ratings. While these benefits were also rated highly in the 2015 survey, their importance is now statistically greater ($p<0.001$). Additionally, respondents appreciate the visual beauty of trees (4.6), their role as visual buffers (4.0), and their importance to local businesses (4.0). These three ratings were statistically similar to the 2015 survey.

However, trees also have disadvantages (**Figure Drawback**). Respondents indicated that debris from leaves (25%), falling branches (9%), and fruit (7%) were concerns. Concerns also relate to maintenance (16%) and property damage (10%) as potential issues. Nearly 1 in 5 (19%) respondents reported no drawbacks. When asked whether they had a negative experience with a tree, most said no (52%), followed by costly maintenance (40%).

Access to green space is vital for promoting healthy communities and individuals. Green space can be as simple as having access from a home or neighborhood. Few respondents had no trees (1%) or only a few trees (13%) visible from their homes. Most had three or more trees, which aligns with the 3-30-300 idea discussed later. Furthermore, over 85% could view three or more trees from their home. Additionally, over three out of four respondents (78%) indicated their neighborhood had a 30% or greater canopy cover. The '3-30-300' rule emphasizes the importance of having access to at least a 30% canopy where people live. Access to parks and green space by walking is also crucial, with nearly three out of four respondents (74%) located within a 5-minute walk. This aligns with the 3-30-300 rule, which states that 300 meters (~900 feet) equals a five-minute walk to a park or greenspace. When walking more than five minutes, respondents are less likely to visit parks or green spaces daily. Access to parks is essential, and fortunately, it's easy for Fitchburg residents (Figure Park Access). Over 80% indicated they either visit a green space daily (46%) or weekly (36%).

Management of Trees by the City

Actively managing the urban forest is essential for effectively gaining the benefits of trees. Most respondents said street trees were adequately cared for (66%) or well cared for (22%). This high regard is statistically similar (p=0.12) to the results from 2015 (Figure Street Care). Respondents also appreciate the visual diversity of their streets, with 72% saying it is sufficient, while, about 1 in 4 respondents (28%) say it is not enough and advised on what they would like to see in street trees (Figure Desire Care). When asked about areas for improvement, planting (41%), maintenance (39%), and tree selection (32%) were most often mentioned.

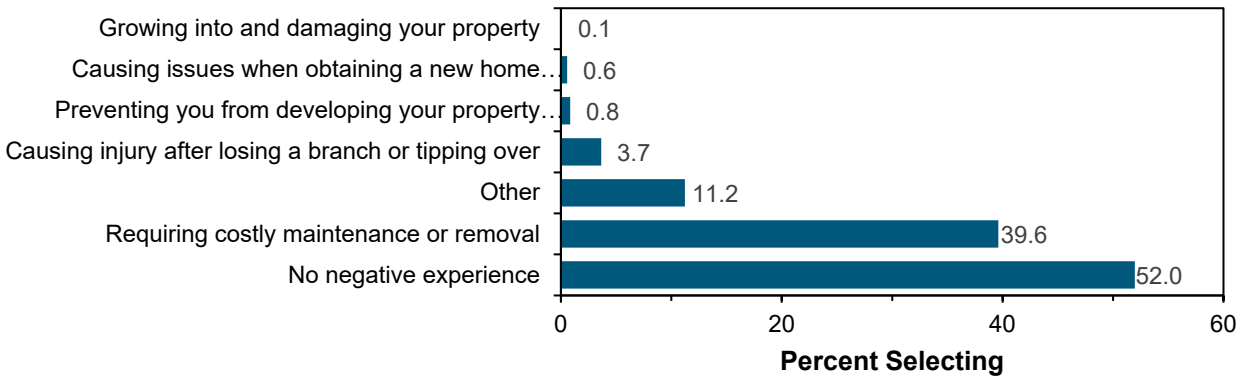


Figure Drawback. Negative experiences and drawbacks with trees. (n=356 respondents, 421 total selections)

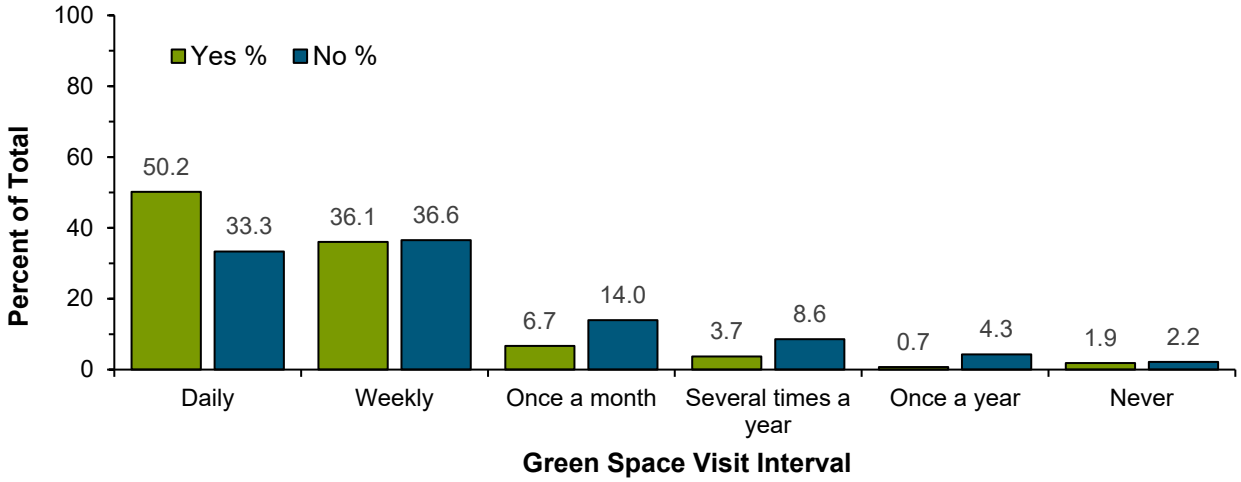


Figure Park Access. Proximity to a park within a five-minute walk and frequency of visiting. (n=362)

Respondents also responded to questions about urban forest management practices. Over 75% of respondents strongly support (51%) or support (26%) the restoration and maintenance of native trees on public lands. Similarly, 52% strongly support and 26% support removing invasive shrubs on city property. When asked which statement best reflects their opinion on managing trees in public parks and woodlots, 69% chose removing invasive shrubs and replacing them with native trees and shrubs (Figure Restoration). A small portion (14%) expressed interest in allowing all trees and shrubs to grow with minimal intervention. Regarding management of city woodlots, the preferences were:

- 62% favor removing invasive species and planting native trees and shrubs,
- 14% support restoring oak savanna, and
- 18% prefer leaving them alone and letting nature take its course.

Finally, respondents gave their perspective on incentives and funding options for urban forestry. When asked whether they would plant trees on their property with a monetary incentive, 57% said yes, and 29% indicated they needed more information, results similar to those in 2015 (Figure Incentive). Few said no (4%) or that the question was not applicable (10%). Funding support came from a question about willingness to pay additional annual property taxes to improve maintenance and protection of existing city trees. Options ranged from $0 (23% of respondents) to $40 (26%), with $40 being the most common choice. On average, the median preferred amount was $20, and the mean was $22.24 (1.81 SEM).

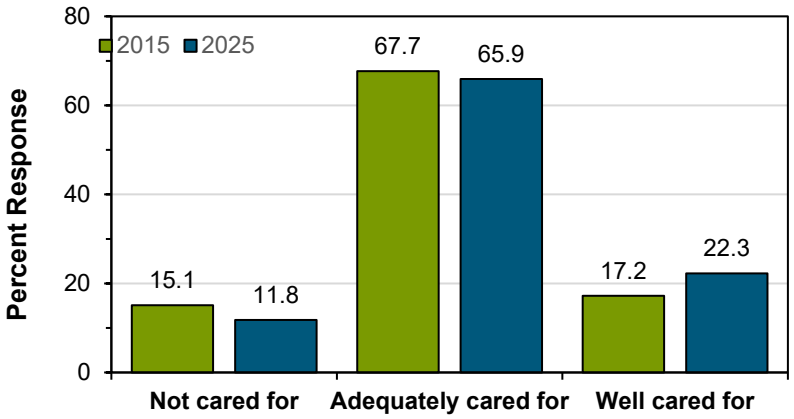


Figure Street Care. Opinion on the level of care given to street trees. (n=364)

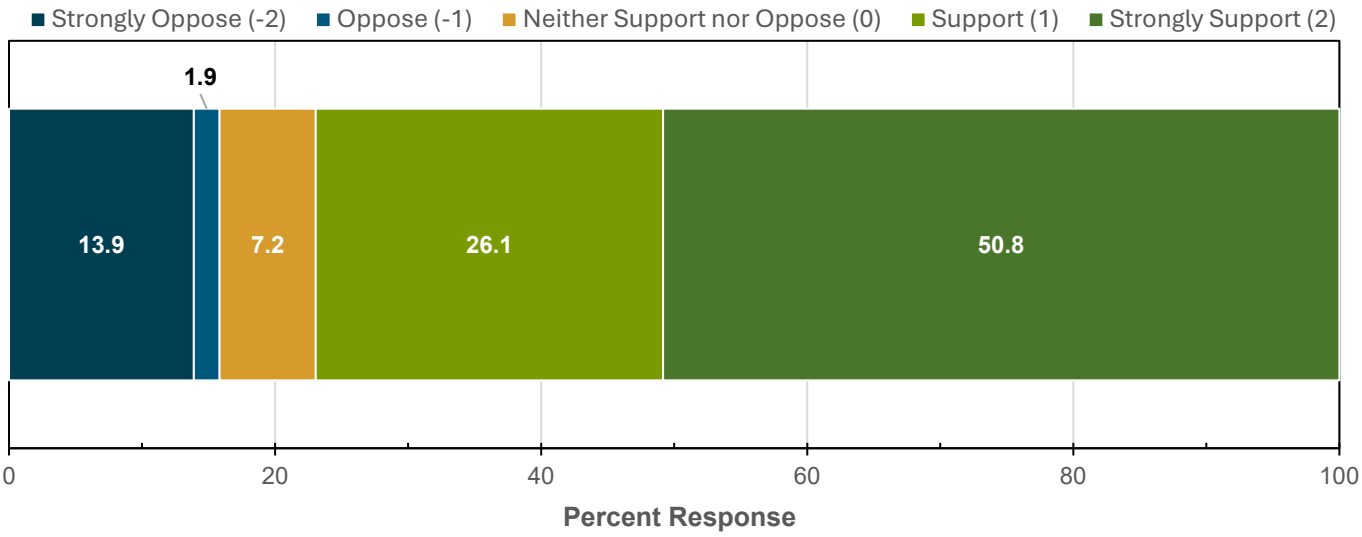


Figure Restoration. How strongly would you support or oppose removal of invasive shrubs on City property? (n=360)

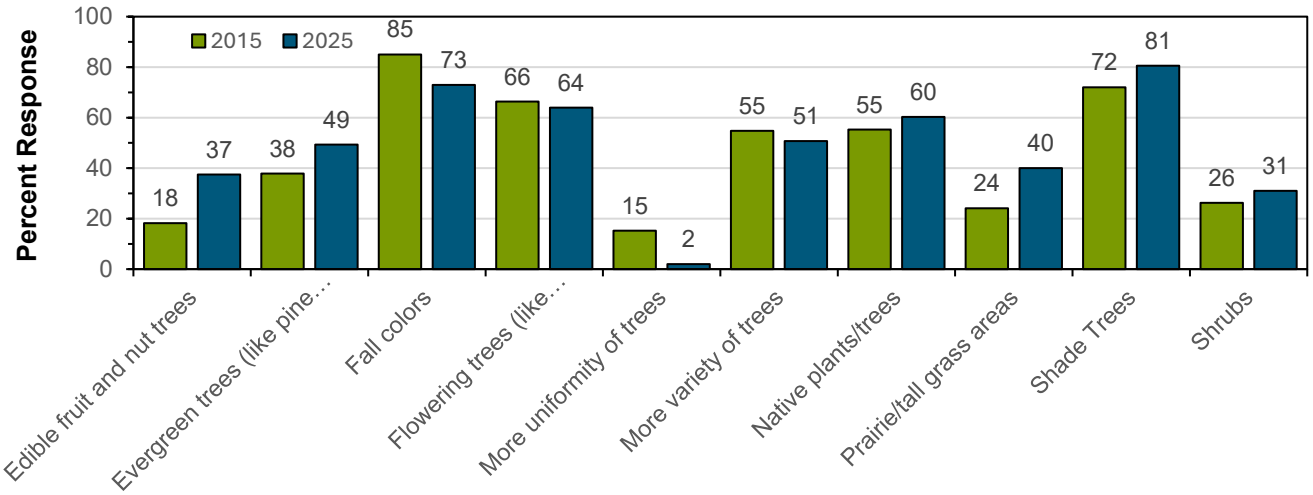


Figure Desire. I would like to see the following in my park or on my street? (n=355 and 1733 selected choices)

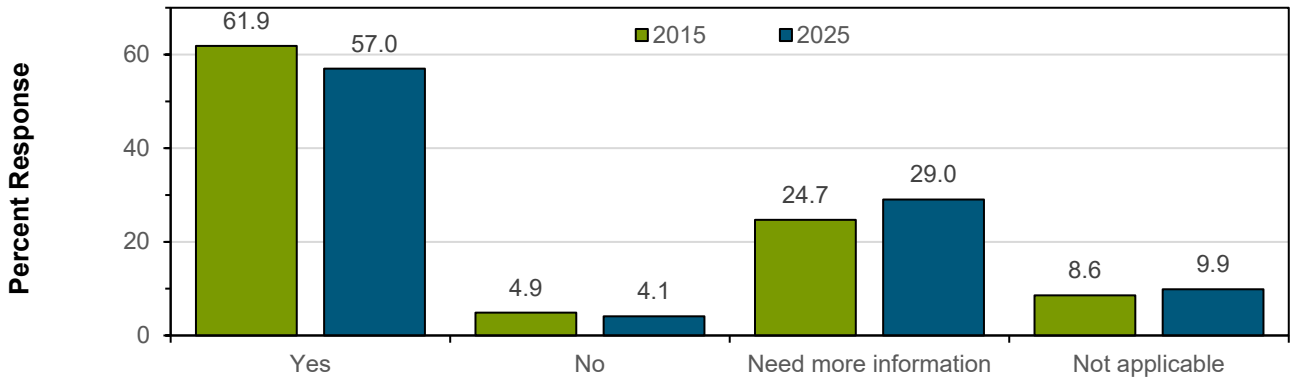


Figure Incentive. Would you plant trees on your property if offered a monetary incentive? (n=365)

Program Review

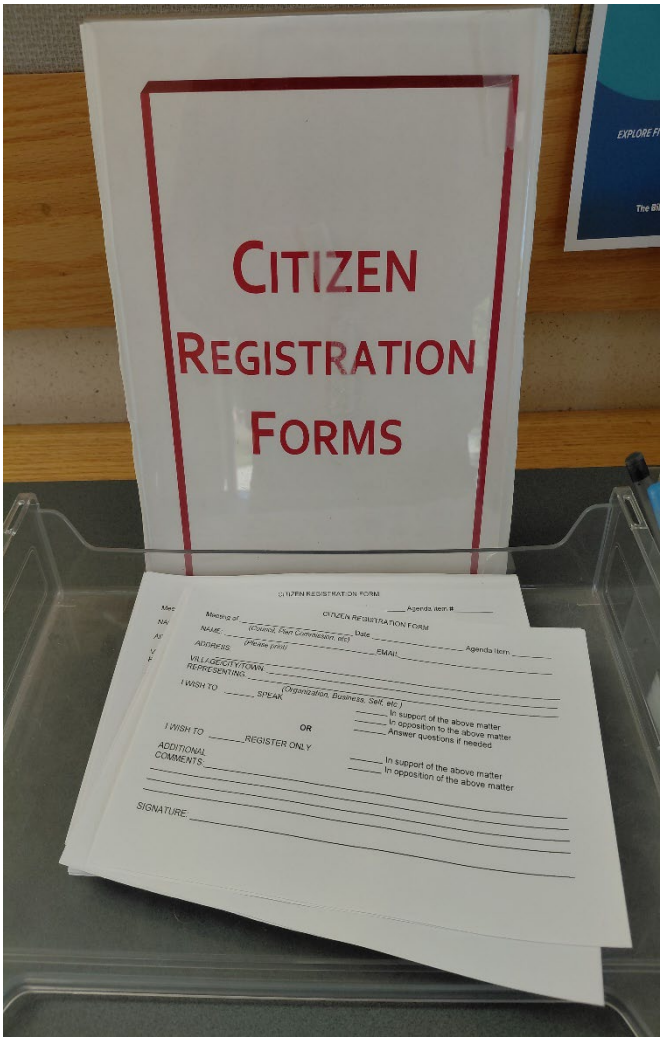
Reviewing Fitchburg's urban forestry operations is crucial for understanding the management of the urban forest. Similar to tracking the tree population, this knowledge is key to identifying what the community needs to manage it effectively. Knowing the current state of the forestry program is also vital for planning a healthy, sustainable tree population that benefits the community.

An operational and program review assesses the city's resource distribution for urban forestry by comparing its funding, tree maintenance efforts, and staffing levels with those of similar communities across the United States. Benchmarking data were collected from the national assessment of municipal tree management (Hauer & Peterson, 2016). For this review, evaluations considered the city's estimated 2025 population of 36,197 and its Midwest Census Bureau geographic region. Comparisons were also made nationally based on Fitchburg's population range of 25,000–49,999 residents. To account for inflation from the study date to now, 2014 dollars were converted to 2025 dollars (with a real increase of 1.39) using the U.S. Bureau of Labor Statistics' Consumer Price Index Inflation Calculator (U.S. Bureau of Labor Statistics, undated).

The program review is structured into the following major functional areas:

- Community and Staff Profile
- Tree Care Funding and Budgets
- Community Tree Management
- Community Opinion and Engagement
- Review Summary and Key Findings

The forestry program comparison was assessed using three indicators: developed or meeting (↑), under development or approaching (→), and undeveloped or below (↓) the reference metric.



Community and Staff Profile

Fitchburg is below the comparison staffing level by approximately 1.5 to 2 urban forestry FTE (Table 1). This compares communities in the Midwest and those with a similar population. Staff also suggested a 2 FTE below the staffing need during the five SWOT meetings. Responsibility for urban forestry is assigned between staff in the Parks and Forestry Department and the Public Works Department. Ideally, all tree-related activities would be centralized under an Urban Forestry program (e.g., within a division, department, or operations designation) to ensure consistent policies, coordinated programs, adherence to best practices, and efficient resource allocation. In this population group, a forestry program staffing model assigns an arborist or forester to either the Parks & Recreation Department or the Public Works Department, with primary responsibility for daily tree management operations.

Fitchburg currently has one public employee dedicated to overseeing the city's urban forest, and the city needs to maintain this role. An additional staff position with primary responsibility for forestry operations is required to implement the recommendations in this plan. Without an additional dedicated urban forestry professional, Fitchburg has limited capacity to execute this management plan, conduct routine tree inspections, or coordinate the preventive maintenance required to shift from reactive spending to strategic maintenance. The city's options to fill this critical gap include:

- Train an existing employee as an arborist. Even dedicating a few days per week would provide oversight and coordination.
- Hire a new staff member, either full-time or part-time, depending on budget and workload.
- Contract for services, which provide budget flexibility, but restricts long-term permanence.

Table 1. *Benchmark assessment of Fitchburg's community and staff profile.*

Benchmark Comparison	Current Benchmark Situation in Fitchburg
Street tree responsibility: 74% of Midwest communities were responsible for street trees	↑ The city is responsible for rights-of-way tree management
Years with a person responsible for tree care: 29 years; 34 years in the Midwest	↑ An employee is currently responsible for tree care, with 24 years of experience with various staff members
Staff qualification: 60% of communities had a Certified Arborist on staff	→ Certified arborist identified as on staff, field staff lacking the credential
Staff responsible for trees: an arborist/forester located in a Parks or Public Works Department	↓ No arborist or forester; duties are split between city departments
Staffing level: 5.3 Full Time Equivalent (FTE) public employees involved in the tree program, including managers	↓ 3 FTE (6 staff) from a city forester (1 FTE) and shared parks staff (~ 2 FTE)

Tree Care Funding and Budgets

The city allocates funding specifically for urban forestry (Table 2). An estimate of the budget was based on a reported $21,000 budget for tree care activities (2024 tree care activities survey) and staff ($156,500 – 2 FTE maintenance staff and 1 FTE Urban Forester/Naturalist). Funding comes primarily from the general fund (95%), along with forestry grants (3%), donations (1%), and tree memorials (1%). Within the peer population group (25,000 – 49,999 people), the forestry allocation (budget and staff estimate) is approximately 1/3 of either the total forestry budget or the per capita amount. On a per-tree basis, Fitchburg spends approximately 1/5 of the mean amount of national peer communities. Within the Midwest peer group (all communities), the forestry allocation is still below average for the total budget (1/2 below), per capita (2/3 below), and per public tree (3/4 below) metrics. The percentage of the forestry budget relative to the total municipal budget was also lower than the national peer group.

Fitchburg is similar to other cities in that it contracts out some work; approximately $3,500 of the $21,000 tree maintenance budget is spent on contracted work. Tree planting is mostly contracted. Although contracting offers flexibility, contractors may charge higher hourly rates than in-house staff. Contractors have specialized training and equipment to remove large trees efficiently and safely when city staff lack these skills. However, staff have received training in tree removal and chainsaw use through the Game of Logging program several years ago. While contractors are essential to Fitchburg, it is also crucial for the city to retain the ability to perform in-house tree maintenance tasks, such as watering, mulching, and small tree pruning, when skills and time permit. Relying solely on contractors can be costly and time-consuming. And contractors often cannot respond quickly to non-emergency issues, unless specifically stated in a contract.

Table 2. *Benchmark assessment of Fitchburg's tree care funding.*

Benchmark Comparison		Current Benchmark Situation in Fitchburg
Public funding for tree operations (pruning, removals, education): 85% allocated funding; 88% in the Midwest	↑	The city is responsible, and funding is allocated explicitly for tree care
Total Forestry Budget: $477,094 (mean); $291,943 (median)	↓	$177,500 (estimated $156,500 staff and $21,000 report tree activities budget)
Budget per public tree: $51.86; Midwest $45.28	↓	$12.02 ($177,500 / 14,761 trees)
Forestry Budget as a percentage of the total municipal budget: 0.63%	→	0.52% estimated allocated to forestry
Per capita forestry budget: $13.54; $15.15 Midwest	↓	$4.90 ($177,500 / 36,197 people = $4.90)

Community Tree Management

The city has an up-to-date public tree inventory (Table 3). The inventory began in 1999, and as work occurs (tree planting, maintenance, removal), records are updated at the time of work or soon after. Fitchburg should continue to maintain the inventory, updating it as trees are planted and removed. Fitchburg also has a stated 30% tree canopy goal, which is common among similarly sized cities. A goal to reach 30% is set for 2050. The current tree canopy is near 25%, and the 30% goal is attainable by continuing current operations, provided no major storms or insect/disease issues result in tree mortality. Although canopy goals can be an essential tool for monitoring tree cover and change, one-size-fits-all goals do not account for variations in land use, community opinion, and other factors unique to a city.

Metrics such as neighborhood-level canopy goals and the 3-30-300 rule (Konijnendijk, 2021) have become increasingly relevant, as they better reflect the connection between urban forestry and human health, climate, and sustainability goals. For example, American Forests previously suggested a 15% canopy cover goal in downtown and industrial areas, 25% in light commercial and urbanized residential areas, and 50% in suburban residential areas (McPherson et al., 2002). They now recommend developing goals related to a location's geography and land use. The 3-30-300 rule states that everyone should be able to see three trees from their home, have 30% canopy cover in their neighborhood, and be within 300 meters (~5-minute walk) of a park or green space. This guideline goes beyond canopy cover by incorporating urban forest metrics that elevate human health and well-being. The community survey section addressed proximity to trees and green spaces.

Table 3. *Benchmark assessment of Fitchburg's tree management.*

Benchmark Comparison	Current Benchmark Situation in Fitchburg
Tree inventory: 68% have a tree inventory	↑ Inventory exists and is up to date
Canopy goal: 23% have (14%) or are developing (9%) a canopy goal	↑ Have a 30% canopy goal by 2050
Average per capita all public trees: 0.83; 0.50 Midwest	→ 0.41 trees per capita
Average per capita vacant planting sites all locations: 0.03; 0.03 Midwest	↑ 0.02 (Estimated 800 planting sites / 36,197 people)
Reactive vs. systematic tree care: 58.7% systemic (regularly scheduled) tree care	↓ Reported 90% reactive (2024 survey response)
Tree inspections: 89% conduct routine tree inspections	↑ Inspections regularly conducted
Storm response system includes trees: 53% include trees as a part of the emergency response system	↓ Emergency response management does not include trees, nor is forestry a part of "storm" meetings

Fitchburg has almost 0.47 public trees per capita, similar to the Midwest mean value. Only 800 vacant planting spots were reported in the 2024 tree activities survey. This planting level reflects a 95% stocking level, meaning 95% of identified planting locations have a tree. This situation is also noteworthy, given the emerald ash borer and the need for proactive tree replacement.

Fitchburg's tree inspections focus on reactive tree care, which is a concern. Street tree pruning along city streets is often a response to clearance rather than proactive structural tree pruning. Tree pruning scheduling is reactive, responding to locations where maintenance trucks are hitting tree canopies along streets. A reported 90% of tree work is reactive. This number results from trees along streets visited cyclically every 7 years, as mentioned during the SWOT meeting. The cycle is lower than the desired five-year inspection and pruning cycle. Scheduled tree inspections are essential for identifying maintenance needs and proactively assessing tree risk. Moving to a proactive approach would allow staff to identify issues before they become costly or before emergencies, reducing the amount of unscheduled work. Research shows that early, structured maintenance is less expensive than deferring maintenance when trees are mature (Vogt et al., 2015). The savings are approximately $50 per tree, and structural pruning of young trees also improves overall tree health and public satisfaction. This approach translates into approximately $250,000 in avoided future costs by implementing a structural pruning program for the approximately 5,000 trees in Fitchburg with a stem diameter below 7 inches. A more proactive program will help Fitchburg save time and money, increase the benefits trees provide, and strengthen community trust and support.

Tree risk management is an integral part of managing a tree population for public safety. While trees rarely cause fatalities, an active tree risk program helps reduce personal injuries, property damage, and service disruptions. City staff regularly conduct tree risk assessments using the ISA Tree Risk Assessment BMP and Tree Risk Assessment Qualifications (TRAQ) guidelines. The city lacks a written tree risk management policy. Such a policy is needed and should specify who performs the work, qualifications, the assessment approach, steps to mitigate tree risk, and a time frame for the assessment.

Community Opinion and Engagement

Community engagement and outreach are key parts of urban forestry efforts. Tree requests serve as one measure to gauge the public's engagement and satisfaction with city trees and maintenance. Forestry tracks approximately 80 public service requests each year. An urban forestry or tree resources website effectively informs the public and supports the program by providing a dedicated online resource for tree care and city tree information (https://www.fitchburgwi.gov/636/Urban-Forestry).

Fitchburg is a certified Arbor Day Tree City of the World, one of only two in Wisconsin and among 210 worldwide (City of Fitchburg 2025). The city has been a Tree City USA for 28 years and has continued to earn growth awards, receiving them 13 times over that period. The City of Fitchburg includes volunteers in its urban forestry program. The Tree Advisory Committee is an example. They meet regularly and provide guidance and oversight. Volunteers also assist with tree care activities such as tree planting. Volunteers receive training and instruction before undertaking an activity. An estimated 25 people volunteer, providing over 500 hours annually. One limitation of the current program is a lack of staff time to further develop volunteer activities.

Table 5. *Benchmark assessment of Fitchburg's community opinion and engagement.*

Benchmark	*Current Benchmark Situation*	
Per capita public tree requests (complaints, pruning, etc.): 0.0082; 0.0095 in the Midwest	↑	0.0022 (80 requests / 36,197 population)
Urban forestry website: 45% have a dedicated urban forestry website	↑	A dedicated forestry website exists
Arbor Day Tree City USA: 83% are Tree City USA	↑	Tree Cities of the World (above Tree City USA) and several growth awards

Operational Review Summary and Key Findings

The urban forestry program accomplishes a lot with the current staff and budget. Creative grant writing, an up-to-date budget, an active Tree Advisory Committee, volunteer involvement, passionate staff, and other factors are key to its success. The assessment of the operation demonstrates management ability and the city's preparedness to care for its trees. The operational evaluation highlights both challenges and opportunities for Fitchburg's urban forestry program. The following key findings from benchmarking stand out against industry standards.

Operational Assets

Dedicated Funding: Fitchburg allocates approximately $177.5K annually, which is 0.52% of the total municipal budget. Funding demonstrates a fiscal commitment to urban forestry and an understanding of its importance to the community. However, the funding level is near the bottom of peer communities (50% to 75%).

Current Staffing Levels: Fitchburg currently has 1 FTE dedicated to urban forestry management. This position fulfills many roles, including managing the tree population, and is vital. Additionally, about 2 FTE are accounted for through various staff members' assigned tree work. The benchmark assessment also shows that the program is roughly 2 FTE below the staffing levels of peer communities. Staff consistently emphasized this point based on identified tree care needs and staff availability. Therefore, 5 to 6 FTE is typical for urban forestry needs relative to peer communities.

Current Tree Inventory: Fitchburg now has a comprehensive, in-house-developed and maintained inventory, a crucial management tool that over 30% of similar cities lack. This data-driven approach improves the city's capacity for strategic planning and decision-making. About 95% of identified planting locations currently have a tree. The GIS staff created tools to assist with data collection and reporting through the city's website.

Tree Ordinance in Place: Fitchburg's tree ordinance and code surpass the basic standards of Tree City USA and Tree Cities of the World. Its tree preservation code and policies are vital for maintaining the tree canopy, which development can affect. A review of ordinance chapters has identified potential areas for update and improvement. However, as it stands, the tree code is adequate to guide urban forestry efforts.

Responsibility for Street Trees: City ownership of street trees aligns with other Midwest communities, giving the city authority over their maintenance. This allows for consistent standards of care and lowers costs compared to individual owners managing their nearby trees. The city's responsibility for managing public trees is outlined in the tree code.

Operational Opportunities

Build Technical Capacity: A lack of a dedicated operations arborist, with 100% of time allocated to forestry, leaves the city without the expertise needed to manage its valuable tree assets. The urban forester is currently at capacity for daily oversight and management of the program. Establishing an arborist position, either through training existing staff, hiring new staff, or hiring a consultant, will be the single most critical investment for Fitchburg's future urban forest.

Shift to Proactive Maintenance: Fitchburg's reactive tree care should shift to a proactive, systematic approach. With the existing pattern, tree work too often occurs only when trees become problematic. Reactive work can result in expensive remediation rather than minor, proactive maintenance. Switching to more systematic work can reduce the costs of reactive tree management. Tree pruning occurs about once every 7 years. A shift to a 5-year cycle is recommended. Increased staffing or contracting is needed for this goal.

Rebalance Budget Investment: The current forestry budget is low compared to peers. Investing in a proactive tree maintenance budget through young-tree structural pruning will likely pay for this work by reducing future tree maintenance costs. Moving toward a balance of planting, pruning, and removals will create a more sustainable cycle that maintains existing trees and builds the future canopy.

Implement Systematic Inspections: Fitchburg staff inspect trees with work permits in place. However, the absence of dedicated field staff is a key reason why approximately 90% of the work is reactive. Managing trees proactively is an important goal. A staffing shortage prevents Fitchburg from identifying tree issues early, before they become significant problems requiring urgent attention.

Both the operational review and the tree inventory assessment show that Fitchburg has solid assets to build upon. The dedicated funding, inventory data, and existing infrastructure capacity to support trees serve as the foundation for the city's path forward. The following management strategies use Fitchburg's tree assets and operational strengths while addressing the identified challenges. The framework will give the city a clear plan to improve its trees and management, increasing benefits for the greater Fitchburg community.

Strategic Recommendations

An essential outcome of this Plan is the development of strategic goals. These goals result from a review of the urban forestry program, public engagement, and existing city plans. The goals, objectives, and policies follow the policy framework outlined in the 2030 comprehensive plan (City of Fitchburg 2020). The planning horizon uses a priority level divided into four categories (Table: Example Priority). There are five goals and 16 objectives to act on over the next five years (Table: Action Prioritization). Goals, objectives, and policies are from Haines et al. 2005 as follows:

Goals are general statements of desired outcomes of the community.

Objectives are more specific and are a subset of goals, providing measurable strategies.

Policies are "operational" actions that a community undertakes to meet its goals and objectives.

Goal 1: Enhance the City's urban forest by developing metrics to evaluate progress towards meeting urban forest goals.

Objective 1.1: Establish staffing requirements and budget needed to manage the tree population effectively.

Policy: Assess the current staffing level and compare it to similar peer groups based on population and the Midwest census region.

Effort: Moderate. Staff identify work needs based on tree population and maintenance to set time, budget, and equipment requirements through annual planning and budgeting.

Priority: One (1-3 years) to start, then ongoing

Objective 1.2: Collect relevant data on taxonomy, tree condition, tree diameter, and maintenance recommendations.

Policy: Maintain a tree inventory through the in-house GIS system and update it as work occurs.

Effort: Minimal. Staff updates the tree inventory as work is completed or as soon after (e.g., within 30 days)

Priority: Ongoing

Table Example Priority. Priority levels and color coding.

Priority Level
Priority one – Substantial progress or completion within 1-3 years of Plan adoption
Priority two – Substantial progress or completion within 3-5 years of Plan adoption
Priority three – Substantial progress or completion in five or more years of Plan adoption
Policy/ongoing action – Substantial progress or completion as demand dictates

Objective 1.3: Use an electronic system to issue work orders and monitor completion details such as staff involved, time taken, and issues encountered.

Policy: Deploy the GIS work order system by acquiring necessary tablets or devices, training staff on the technology, and collecting feedback during deployment.

Effort: Minimal. Staff issue work orders through in-house developed systems, require upfront training with updating work order systems, replace the paper system, and link to the tree inventory.

Priority: One (1-3 years) to start, then ongoing

Objective 1.4: Use the urban forestry and other city mission and vision statements to guide the urban forestry program decision-making.

Policy: Review the current forestry vision for alignment with work objectives and update the vision or work plan as needed.

Effort: Minimal. Staff review vision and mission statements, modify as needed, and present to the Tree Advisory Committee for review and approval.

Priority: One (1-3 years) to start, then ongoing

Goal 2: Integrate industry standards into the planting, establishment, and maintenance of the city's urban forest.

Objective 2.1: Manage the Urban Forest through a written operations plan for tree maintenance activities.

Policy: Develop and Implement an Urban Forestry Operations Plan that includes target timelines for tree activities such as inspection cycles, structural pruning, tree establishment after planting, and more.

Effort: Staff time or external consultant assistance in documenting the operations currently ongoing and future desired outcomes.

Priority: Two (3-5 years) then ongoing

Objective 2.2: Create a technical manual for urban forestry operations.

Policy: Use established industry standards to ensure the safe and reliable application of arboriculture and urban forestry methods.

Effort: Staff develop written specifications for arboriculture and urban forestry operations.

Priority: Two (3-5 years)

Objective 2.3: Develop appropriate training and credential recommendations for urban forestry staff.

Policy: Create staff clarification requirements for each job description and develop an urban forestry staff work plan to establish and maintain the necessary skill set for work activities.

Effort: Minimal: Review existing staff training and credential requirements in job descriptions, and update or develop them, integrating them into the annual employee review and development program.

Priority: Two (3-5 years)

Objective 2.4: Create a tree risk management policy.

Policy: Create a tree risk management policy that specifies who is responsible for performing the work, qualifications, the assessment approach, steps to mitigate tree risk, the assessment timeframe, the system to be used, and the timeframe for abatement.

Effort: Moderate. Develop a tree risk management policy and use the existing city process for its approval.

Priority: One (1-3 years)

Goal 3: Develop and implement a woodlot management policy for the city's approximately 300 acres of woodlands.

Objective 3.1: Implement a city woodlot management policy that manages woodlots for desirable plant communities and minimizes undesirable species abundance.

Policy: Review existing woodlot management plans, revise as needed, and carry out the implementation.

Effort: Minimal. Use existing plant inventory and staff knowledge to guide proposed work.

Priority: One (1-3 years)

Objective 3.2: Use the existing public governance methods and community engagement approaches to direct woodland management and stewardship efforts.

Policy: Make informed decisions that support the public interest for the greatest community benefit through public woodlots.

Effort: Moderate. Use the existing woodlot management policy adopted by the common council to manage public woodland.

Priority: One (1-3 years)

Objective 3.3: Assist private landowners with woodlot management.

Policy: Add technical resources to the city forestry website on managing private woodlots and host or participate in a workshop in Fitchburg, or partner with surrounding communities.

Effort: Minimal. Continue hosting workshops as we have in the past, and potentially create a list of woodland consultants.

Priority: One (1-3 years)

Goal 4: Integrate urban forestry into existing city and infrastructure goals.

Objective 4.1: Assess the urban forest ecosystem service benefits.

Policy: Implement an i-Tree ecosystem study using the existing city tree inventory to assess the impact of trees on stormwater retention, air pollution reduction, and related monetary values.

Effort: Minimal. Import the existing tree inventory into i-Tree to develop an ecosystem assessment of the public tree inventory.

Priority: One (1-3 years)

Objective 4.2: Identify urban forest disservices and strategies to reduce impact.

Policy: Implement management approaches to reduce urban forest disservices, including liabilities arising from infrastructure damage, personal injury, and service disruptions.

Effort: Moderate. Create an assessment of trees and liabilities (e.g., tree risk, curb damage, leaves and stormwater, etc.) and create methods to minimize tree-related issues.

Priority: Three (within 5 years)

Objective 4.3: Update and maintain a storm emergency management policy for the urban forest.

Policy: Review the current trees and storms planning approach, and update agreements with neighboring communities and private contractors.

Effort: Moderate. Review existing trees and storm plans, and update or develop a trees-and-storms plan.

Priority: Two (3-5 years)

Objective 4.4: Improve neighborhood health and equity through targeted tree planting and maintenance in priority neighborhoods.

Policy: Direct tree planting, maintenance, and preservation efforts to priority neighborhoods to address canopy gaps and support public health outcomes.

Effort: Moderate. Use the existing tree canopy assessment to target tree planting in areas below the 30% tree canopy goal, and

work with the Healthy Neighborhoods Program.

Priority: Two (3-5 years)

Goal 5: Encourage and promote active community involvement in urban forestry planning and management.

Objective 5.1: Develop a volunteer program recruitment strategy.

Policy: Implement the volunteer strategy to coordinate tree planting, pruning, and other community urban forestry activities.

Effort: Moderate. Requires staffing capacity that is lacking to develop and coordinate volunteer program activities.

Priority: Two (3-5 years)

Objective 5.2: Identify areas of the city below the tree canopy goal and take action through tree planting.

Policy: Promote tree canopy expansion on public and private lands through community partnerships with landowners within defined planning and management areas.

Effort: Minimal. Use existing tree canopy data to review areas below the 30% canopy goal.

Priority: Ongoing

Objective 5.3: Maintain an urban forestry outreach initiative through the current urban forestry website.

Policy: Evaluate current arboricultural and urban forestry educational materials and revise as needed.

Effort: Minimal. Update website as needed to promote educational materials for private tree planting, establishment, and care.

Priority: Ongoing

Objective 5.4: Formalize the memorial tree policy/operation process and mapping.

Policy: Develop or update the existing memorial tree program and publish tree locations online through the urban forestry dashboard.

Effort: Moderate. Formalize the memorial tree policy and operation and create an on-line system that shows tree locations and details of the memorial tree.

Priority: Three (within 5 years)

Table Action Prioritization. Action item prioritization for urban forestry goals.

Priority Level	Action Items
Priority one – Substantial progress or completion within 1-3 years of Plan adoption	1.1, 1.3, 1.4, 2.4, 3.1, 3.2, 3.3, 4.1
Priority two – Substantial progress or completion within 3-5 years of Plan adoption	2.1, 2.2, 2.3, 4.3, 4.4, 5.1
Priority three – Substantial progress or completion in five or more years of Plan adoption	4.2, 5.4
Policy/ongoing action – Substantial progress or completion as demand dictates	1.2, 5.2, 5.3

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Appendix A

The Strategic Urban Forestry Management Plan is a standalone document that connects with the City of Fitchburg's existing plans. In particular, the Growing Fitchburg 2030 City of Fitchburg Comprehensive Plan Policy Framework was used to develop goals, objectives, and policies in this plan. For reference, goals from the 2030 Comprehensive Plan; the City of Fitchburg Parks, Open Space, and Recreation Plan: 2025–2030; and Resolution R-220-24 City Of Fitchburg Forest Management Plan Update that relate to urban forestry are provided below.

2030 Comprehensive Plan

Recreation Policy Framework

Goal 1: Improve the City's park and open space system by enhancing outdoor recreation, enhancing natural resources, and practicing ecological stewardship.

Objective 1.2: Continue the process of improvements to existing parks in order to meet current recreational needs.

Policy 1.2.2: Encourage the planting and maintenance of trees and the management of invasive species within the park and open space system in order to ensure the health of the city's urban forest.

Objective 1.3.: Plan and design parks and open space to sustain environmentally sensitive features and reduce negative environmental effects.

Policy 1.3.1: Ensure that the environmental and aesthetic qualities of the city are preserved and enhanced, and explore opportunities for public art and other prominent recreational amenities.

Policy 1.3.2: Preserve and maintain selected wooded areas, vegetative cover, streams, ponds, natural drainage ways, and other natural resources in and around the city.

Policy 1.3.3: Develop and maintain programs to control detrimental and encourage beneficial insects and other wildlife.

Policy 1.3.4: Maintain or improve the quality of water resources in the city.

Resources, Energy & Communications Policy Framework

Goal 1: Protect and rehabilitate the natural environment.

Objective 1.3: Protect all natural resources.

Policy 1.3.6: Develop a Tree Protection Ordinance, a Tree Diversity Plan, and a tree canopy of 30% of the urban service area.

Objective 2.1: Continue to require new developments or sub-divisions to dedicate sufficient land acreage for recreational purposes, or contribute funds for future recreation and open space land acquisition.

Goal 2: Provide public access to unique natural areas.

Objective 2.2: Preserve and maintain selected wooded areas, vegetative cover,

streams, ponds, natural drainage ways, steep slopes and other natural resources in and around the city.

Policy 2.2.2: Maintain and protect mature trees on public property and along public streets to enhance the urban forest and urban wildlife habitat.

City of Fitchburg Parks, Open Space, and Recreation Plan: 2025 – 2030

The Parks, Open Spaces, and Recreation plan was developed to set goals and a vision for this community resource. Goals 4 and Vision 10 are directly connected to the Strategic Urban Forestry Management Plan; therefore, their details are provided for convenience, as follows. Additionally, specific forest resources in upland and wetland settings are included in the Appendix. Finally, the recreation plan explicitly references community parks and the linkage of developed plans addressing woodland and forest management.

Goal 4: Integrate Fitchburg's park, open space, and recreation land, and uses and facilities therein, with a comprehensive City-wide trail/path system, stormwater management system, quality tree canopy, and environmentally sensitive area system.

Action 10: Maintain and enhance the city's tree canopy, forests, savannas, and prairies, so as to ensure protection and preservation of the city's vegetative resources and broader ecosystem: Sociable and Solitude

a. Develop a City Urban Forestry – Strategic Management Plan and forest management plans for city-owned woodlots. Funding source: Grant assisted internal staff project Volunteers constructing monarch way station at McKee Farms Park Source: City of Fitchburg

b. Plant diverse species of trees in system properties and City right of way and use park and open space properties to help implement the city's 30% urban service area tree canopy goal, including prioritizing preservation of existing mature trees in those properties. Work with other departments to preserve mature trees in City projects when feasible.

c. Continue efforts to remove invasive vegetation and replace with native species/appropriate understory plants that encourage more wildlife interest/healthy habitat.

d. Provide a variety of wildlife habitats in City natural areas including standing and fallen, dead and dying trees.

e. Explore development of an arboretum and "tree-growing incubator" at suitable system properties. Funding source: CIP funded

f. Evaluate opportunities to convert underutilized turf grass spaces in existing parks to native landscapes.

g. Solar power generating infrastructure proposed on a system property will be reviewed for potential conflicts with existing and planned tree canopy. The 30% tree canopy goal for the urban service area should be considered when siting solar infrastructure on system properties. This applies both to infrastructure to serve the system property and infrastructure to provide power outside of the system property.

Upland Resources

Numerous forest, prairie and grassland natural areas are located on City system properties. The city should maintain these

properties according to best management practices and any management plans developed by the city. Additionally, forest and prairie restoration and management plans provide options for resource management based on an assessment of the site, including vegetation, habitat classification, topography, hydrology, and wildlife. These plans identify specific operations, a maintenance schedule, and resources for completion of a management prescription. The plans also set forth long range goals for site management and maintenance. Furthermore, feedback from this Plan's stakeholder engagement process indicated system users are interested in the potential of an arboretum at a system property.

The city should develop forest management plans for all City-owned woodlots, with Dawley Conservancy receiving the highest priority. Additionally, the city should implement vegetation management plans for all City-owned prairies. The city should also evaluate underutilized mowed grassy areas for additional opportunities to expand or create new prairies.

Ecosystem Management Features (Stormwater Facilities and Wetland Buffers)

In the city's urban areas, best management practices dictate the first 100 feet of a 300-foot wetland buffer be native vegetation, such as prairie grass with related oak openings. Buffers at 100 feet or less in width should utilize native vegetation as long as it does not conflict with other facilities. Existing woodlots within the buffer are to remain with enhancement encouraged by removal of invasive species and other forest management or restoration methods. Agricultural production is allowed within buffers, but it is preferred that the activity be organic.

Community Parks

Fitchburg has five community parks, one of which (The Hub) is expected to be constructed in 2024. The city underwent a master planning process for the Terravessa Agriculture Park in 2023-2024, which is expected to be classified as a community park after it is developed.

1. McGaw Park (78.5 acres) – 5236 Lacy Road

This park is the largest in Fitchburg and is well-suited for organized league activities such as youth ball, adult softball, and soccer, and community events such as softball tournaments. The park contains four lighted softball diamonds, youth ball field, lacrosse field, shelter with restrooms, picnic tables, two tennis courts, four sand volleyball courts, full-court basketball, play equipment, multi-use path, three parking areas, two park identification signs, eight pickleball courts, bicycle parking, a bike share station, and landscaping. The shelter can be reserved for picnics and gatherings for up to 200 people. A 30-acre woodland includes a 1.5-mile-long natural surface trail. The park also has a two-acre prairie area located near the northern entrance and various tallgrass areas. S. Johnson Park is adjacent to the east side of McGaw Park.

The McGaw Park Natural Resources Management Plan was developed in 2016, and implementation was partially approved by the Common Council in 2018. The natural resources management plan divided the woodlands of McGaw Park into five management areas. The Common Council passed Resolution R-17-18 approving the management plan in areas one and five with a five-year implementation plan. The resolution specifies that further approval and implementation of the management plan in areas two, three, and four requires Park Commission and Common Council review and approval.

Resolution R-220-24, City Of Fitchburg Forest Management Plan Update

Alder Vafadari and Alder Dantzler Jr.
Introduced by

PARKS
Prepared by

Tree Advisory Committee, Park Commission
Referred to

December 10, 2024
Date

RESOLUTION R-220-24

CITY OF FITCHBURG FOREST MANAGEMENT PLAN UPDATE

WHEREAS, the McGaw Park Master Plan, approved by the Common Council in January of 2012, included policy 2-1.1 to "create a management plan, for approval by the Parks Commission, for control of invasive species with a desire to protect the wooded area."; and

WHEREAS, the Forest Management Plan for McGaw Community Park and Seymour Johnson Neighborhood Park (Management Plan) was completed in 2016 with the Common Council approving partial implementation of the Management Plan in January 2018 (R-17-18); and

WHEREAS, this Management Plan included 5 distinct work areas; and

WHEREAS, Resolution R-17-18 approved implementation of the Management Plan only in areas 1 and 5, and

WHEREAS, Staff recommends implementation the Management Plan to include all work areas 1, 2, 3, 4, and 5; and

WHEREAS, updates to the Management Plan shall include planting a buffer of native trees and shrubs along the park boundary as appropriate; and

WHEREAS, Staff is further recommending the development of a City policy on public forestry management for all public woodlots.

NOW BE IT HEREBY RESOLVED, by the Common Council of the City of Fitchburg, directs staff to update the Forest Management Plan for McGaw Community Park and Seymour Johnson Neighborhood Park, including the implementation, for work areas 1, 2, 3, 4, and 5, and

BE IT FURTHER RESOLVED, by the City of Fitchburg Common Council that it directs Staff to create a City of Fitchburg Forestry Management Policy for all public woodlots.

Adopted this 11th day of February 2025.

_____
Julia Arata-Fratta, Mayor

_____
Tracy Oldenburg, City Clerk

Appendix B

The Tree Care Advisory Committee is an official committee of the City of Fitchburg. The TAC has authority from Chapter 6 of the municipal code. Details of the committee include:

Meetings

Held January, February, March, April, May, June, September, and October.

Agendas & Minutes

Tree Advisory Committee agendas are available prior to the meetings. Minutes are available following approval.

View Agendas and Minutes

Meetings agendas and notes presented at: (https://agendas.fitchburgwi.gov/OnBaseAgendaOnline/)

Members

Members serve 3-year staggered terms.

Composition

The committee shall have seven members: one alderperson and six residents of the city. Each member shall have, to the highest extent practicable, a working knowledge of arboriculture, a love for trees, and a demonstrated interest in the enhancement, maintenance and protection of Fitchburg's urban forest. The Tree Advisory Committee shall receive primary staffing and support from the city forester.

Summary of Duties

The Tree Advisory Committee shall act as an advisory committee to the Park Commission. The Tree Advisory Committee shall provide oversight of the city's forestry program and urban forest, including but not limited to, advising the Park Commission and Common Council on policies for maintenance, planting programs, tree preservation, vegetation management, public outreach, and such other matters on which the city forester/naturalist desires input.

(https://fitchburgwi.gov/616/Tree-Advisory-Committee)

Appendix C

ARTICLE III. TREES AND SHRUBBERY

DIVISION 1. GENERALLY

Sec. 54-50. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

City forester means the city parks director or a qualified designee of the city parks director.

Maintenance and protection means any trimming, pruning, injecting, fertilizing, treating, bracing, surgery or cutting of trees or shrubs above or below ground level, except such operations which are conducted by a department of the city.

Public area means any public way, park or other lands owned or leased by the city.

Public nuisance means any tree or shrub or any part thereof which:

(1) Interferes with the use of public areas;

(2) Is infected with a plant disease;

(3) Is infested with injurious insects or pests;

(4) Is injurious to public improvements; or

(5) May endanger life, health, safety or welfare of persons or property, public or private.

Public way means any public street, road, highway, walkway, drainageway or part thereof.

Qualified designee means that city employee or consultant:

(1) Who is a certified arborist or who holds at least a bachelors degree in forestry, botany, agrobiology, plant pathology, or other appropriate discipline;

(2) Who is designated to act as the city forester by the city parks director.

Terrace means:

DIVISION 4. TREE ADVISORY COMMITTEE

Sec. 6-550. Created.

A tree advisory committee is hereby created.

(Ord. No. 2017-O-11, § 1, 5-9-2017)

Sec. 6-551. Membership.

The committee shall have seven members: one alderperson and six residents of the city. Each member shall have, to the highest extent practicable, a working knowledge of arboriculture, a love for trees, and a demonstrated interest in the enhancement, maintenance, and protection of Fitchburg's urban forest.

(Ord. No. 2017-O-11, § 1, 5-9-2017)

Sec. 6-552. Powers; duties; responsibilities.

The tree advisory committee shall act as an advisory committee to the park commission. The tree advisory committee shall provide oversight of the city's forestry program and urban forest, including but not limited to, advising the park commission and common council on policies for maintenance, planting programs, tree preservation, vegetation management, public outreach, and such other matters on which the city forester/naturalist desires input.

(Ord. No. 2017-O-11, § 1, 5-9-2017)

Sec. 6-553. Staff.

The tree advisory committee shall receive primary staffing and support from the city forester.

(Ord. No. 2017-O-11, § 1, 5-9-2017)

(1) The area between the edge of pavement or curb, or proposed curb, and the property line;

(2) Each median strip and all unpaved areas in cul-de sacs.

Trees and/or shrubs means all wood vegetation presently standing or hereafter planted.

Vision plane is a triangular plane located 30 inches above the curb elevation bounded by two 45-foot legs along the curb intersecting at the intersection corner. In the volume above and below this plane objects including plant materials of any description shall not exceed an elevation 30 inches, above the curb. This restricted view plane shall be required in any residential or commercial development from the effective date of the ordinance from which this article is derived, at any intersection which is not controlled by a stop and go traffic signal or arterial stop sign.

(Comp. Ords. 2009, § 32.03)

Sec. 54-51. Intent and purpose.

It is hereby declared to be the policy of the city to regulate and control the planting, removal, maintenance and protection of trees and shrubs within public ways and public areas of the city to:

(1) Eliminate and guard against dangerous conditions which may result in injury to persons using the streets, sidewalks or other public areas;

(2) Promote and enhance the beauty and general welfare of the city;

(3) Prohibit the undesirable and unsafe planting of trees and shrubs located in public areas; and

(4) Guard all trees and shrubs, within the city against the spread of disease, insects or pests.

(Comp. Ords. 2009, § 32.01)

Sec. 54-52. Application.

This article shall apply to all trees and shrubs, which threaten the life, health, safety or welfare of the public or of any public area, now growing or hereafter planted:

(1) Within public areas; and

(2) In or upon any private premises.

(Comp. Ords. 2009, § 32.02)

Secs. 54-53—54-77. Reserved.

DIVISION 2. ADMINISTRATION AND ENFORCEMENT

Sec. 54-78. Authority of city forester.

(a) *Public trees and shrubs.* The city forester is authorized to maintain, protect, remove, and replace trees or shrubs located in public ways or public areas, or to cause such work to be done as may be necessary to insure public safety in accordance with ANSI standards and the protection of property from injury or damage.

(b) *Private trees and shrubs.*

(1) Whenever any tree, shrub or part thereof, growing upon private property, constitutes a public nuisance because it:

a. Interferes with the use of public areas;

b. Is infected with a plant disease, insect or pest; or

c. Endangers life, health, safety or welfare of persons or property;

the city forester shall notify the record owner of the parcel or lot upon which such tree or shrub is located.

(2) The notice shall be in writing, shall identify the nuisance, shall specify the treatment or abatement required, and shall state the time within which the owner must abate the nuisance. The owner shall be afforded at least 30 days to abate the nuisance unless the city forester determines that immediate action is necessary for public safety. If the owner fails to abate the nuisance within the specified time, the city forester shall do so forthwith at the owner's expense and shall then give the owner written notice of the charge for doing so. If such charge is neither paid nor appealed within 30 days of the date of such notice, it shall be entered on the tax roll, pursuant to Wis. Stats. § 66.60(16), as a special charge against the parcel on which the tree or shrub was growing.

(3) The city forester shall maintain a record and accounting of any work done pursuant to this section for which an assessment may be made. Such record shall include:

a. A description of the lot or parcel of land affected;

b. The name and address of the owner of record, as shown on the tax rolls;

c. A description of the nuisance and of the steps taken to abate it; and

d. An itemization of the charges or expenses incurred by the city to abate the nuisance.

(Comp. Ords. 2009, § 32.04)

Sec. 54-79. Appeals.

(a) *From determination of public nuisance.* Any property owner aggrieved by a determination of the city forester that any tree or shrub situated on his/her property constitutes a nuisance may appeal such determination to the board of appeals. The board shall not overrule the city forester unless the greater weight of the credible evidence, including but not limited to any expert testimony, offered at the appellate hearing supports the conclusion that no such nuisance exists.

(b) *From abatement charges imposed.* Any property owner aggrieved by the charges imposed for abating a nuisance attributable to his/her lot or parcel may appeal to the board of appeals. The board shall determine whether the abatement charges imposed were reasonable and if not, shall adjust them, upward or downward, as may be appropriate. The charge so determined by the board of appeals shall be paid within ten days after the date notice of the board's determination is mailed to the aggrieved property owner. If it is not so paid, the charge shall be entered and added to the tax roll, pursuant to Wis. Stats. § 66.60(16), as a special charge.

(Comp. Ords. 2009, § 32.05)

Sec. 54-80. Interference with city forester prohibited.

No person shall prevent, delay or interfere with the city forester or with any agent or employee of the city in their performance of any duties imposed by this division. Upon prior notification to the owner or occupant, the city forester shall be permitted to enter upon any private property during normal business hours (7:30 a.m. to 4:00 p.m., Monday through Friday) to carry out such duties.

(Comp. Ords. 2009, § 32.09)

Secs. 54-81—54-103. Reserved.

DIVISION 3. TREE AND SHRUB MANAGEMENT

Sec. 54-104. Plantings in public ways and areas.

(a) *Public plantings.* The city forester shall determine the placement of any trees and shrubs which are to be planted in any public way or public area as well as the best suited species for any particular planting site with respect to:

(1) Growth habits, shape, form, health, disease and pest resistance;

(2) Conflicts with wires, lights, pavements, traffic, pedestrians, sewers, water mains; and

(3) Space availability.

The locations for planting shall be determined by the city forester.

(b) *Land divisions and subdivisions approved after January 1, 1998.* Land divisions and subdivisions submitted for review after December 31, 1997, shall comply with section 15.09(10) of the city land division ordinance, as well as the provisions of this division.

(Comp. Ords. 2009, § 32.06)

Sec. 54-105. Planting, maintenance and removal.

(a) *Permit required.* No person, other agents or employees of the city acting within the scope of their employment, shall plant, remove, brace, trim, prune, cut above or below the ground, disturb or alter any tree or shrub in any public way or public area or cause such acts to be done by others, without first obtaining a written permit from the city forester as hereinafter provided. However, no permit shall be required to cultivate, fertilize, mulch or water public trees or shrubs.

(b) *Permit conditions.* Whenever the city forester determines that any proposed planting or work is in accordance with the provisions or this division and of the subdivision ordinance, a permit shall be issued that specifies the work to be done and the species, variety, size and location of any trees or shrubs which may be planted. All work authorized by the permit shall comply with this division and be completed within six months after the date on which the permit was issued.

(c) *Permitted users of rights-of-way.* Any public utility other than the city municipal utility, any cable television company, any telecommunications company, and any other permitted user of municipal rights of way shall obtain an annual permit from the city forester authorizing such user to trim, cut, or remove trees or shrubs situated within public ways or public areas upon 24 hours advance written notice to and the written authorization of the city forester. The city forester may only permit such work to proceed if it is within the public interest and consistent with the purpose and intent of this division.

(d) *Costs of removal, maintenance, and protection of shrubs and trees.* Except as otherwise expressly provided in this division, the cost of removal, maintenance and protection of all trees and shrubs in public ways and public areas shall be borne by the city.

(Comp. Ords. 2009, § 32.07)

Sec. 54-106. General rules and regulations.

(a) *Planting.* The number, species and sizes of all trees and shrubs to be planted in public ways or public areas as well as the manner of planting shall be determined and approved by the city forester before planting is commenced. An approved plant and tree species list shall be kept on file with the city parks department and city board of public works which shall be subject to periodic review.

(b) *Vision plane to be maintained.* After the effective date of the ordinance from which this division is derived, no trees or shrubs shall be planted within the vision plane of any public way or public area.

(c) *Placement of trees.* A minimum distance of 35 feet shall be maintained between trees in public ways, unless otherwise authorized by the city forester after considering site circumstances and plant species. Trees planted within public ways shall be at least 1 1/12-inch diameter, measured 12 inches above grade. Trees shall not be planted closer than two feet from any established or proposed curbline or from the inner line of any established sidewalk or proposed sidewalk.

(d) *Trimming.* Trees and shrubs standing and/or overhanging any public way shall be kept trimmed so that the lowest branches provide a safe overhead clearance. The city forester may waive this requirement for newly planted trees upon determining that any such tree or shrub will not interfere with safe public travel, or endanger public safety.

(e) *Construction safeguards.* During construction operations, each contractor or builder shall erect suitable protective barriers three feet outside trees and shrubs which could be injured during construction, and shall obtain the city forester's approval of the adequacy of such barriers before construction is commenced. No person shall fasten any sign, rope, wire or other material to or around or through any public tree or shrub without first obtaining permission from the city forester, except in emergencies such as storms or accidents.

(Comp. Ords. 2009, § 32.08)

Sec. 54-107. Damage to trees and shrubs prohibited.

(a) No person shall do any of the following without first obtaining the permission of the record owner or the occupant of the parcel or lot upon which trees or shrubs are located:

(1) Break, injure, mutilate, kill or destroy any tree or shrub;

(2) Permit any animal under such person's control to break, injure, mutilate, kill or destroy any tree or shrub;

(3) Permit any fire to injure any portion of any tree or shrub;

(4) Permit any leak to exist in any gas line within the root zone of any tree or shrub;

(5) Permit any toxic chemical to seep, drain, or be emptied on or about any tree or shrub; or

(6) Permit electric wires to come into contact with any tree or shrub.

(b) No person shall fasten any sign, rope, wire or other material to or around or through any public tree or shrub without first obtaining permission from the city forester, except in emergencies such as storms or accidents.

(Comp. Ords. 2009, § 32.10)

Chapter 24 - LAND DIVISION

(g) Tree preservation plan. The city has an interest in preserving and maintaining desirable trees, which are defined as tree specimens belonging to the following tree species: white oak (Quercus alba), red oak (Quercus rubra), black oak (Quercus velutina), bur oak (Quercus macrocarpa), chinkapin oak (Quercus muehlenbergii), pin oak (Quercus palustrus), northern pin oak (Quercus

ellipsoidalis), swamp white oak (Quercus bicolor), shagbark hickory (Carya ovata), bitternut hickory (Carya cordiformis) hackberry (Celtis occidentalis) white pine (Pinus strobus), sugar maple (Acer saccharum), honey locust (Gleditsia traicanthos), and American basswood (Tilia americana) and have stems with a diameter that meets or exceeds six inches measured at four and one-half feet (1.37 m) from the ground on the uphill side. Subdivider shall provide a tree preservation plan for review by the plan commission and city staff, including the city forester. The tree preservation plan shall describe the strategy for preserving desirable trees, and shall including the following:

(1) The name and address of property owner and subdivider.

(2) Delineation of the buildings, structures, or impervious surfaces situated thereon or contemplated to be built thereon.

(3) Delineation of all areas to be graded and limits of land disturbance.

(4) Size, species, and location of all desirable trees located within the area to be developed, surveyed by a certified arborist or an individual with similar training and experience. Where conditions warrant generalization of the tree inventory due to density, such as a wooded site, the city will accept a plan where information is collected on randomly selected trees to obtain overall condition, size, and species characteristics of the area.

(5) Location of all desirable trees on all individual lots.

(6) Measures to protect desirable trees in accordance with the city of Fitchburg Tree Protection Guidelines.

(7) Identification of all desirable trees proposed on the plan to be removed within the construction area.

(8) Name, qualifications, and signature of person or persons preparing the plan.

(Ord. No. 2010-O-09, § 15.04, 10-12-2010; Ord. No. 2023-O-11 , § 1, 7-25-2023)

APPENDIX D

SWOT Assessment

The list of findings below combines all five meetings. A primary goal of a Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis is to identify the factors that inform urban forestry management and operations decisions and to develop a strategy based on them. The SWOT analysis will highlight the internal strengths and weaknesses of the forestry program (S&W). It will also examine external opportunities and threats (O&T). The results of the SWOT analysis will inform strategic urban forestry planning and support decision-making by developing a strategic urban forestry management plan.

Strengths

- Employee passion for the work they do
- Enthusiastic staff who are good at what they do, versatile even outside of forestry (jack of all trades)
- Dedicated staff who take pride in their work (which can be unglamorous, but do not need the glory)
- New(er) equipment (bucket truck, two chippers)
- City council recognizes cost savings with in-house tree work
- Diversity of work/versatility
- Can do almost all of the work in-house (2-3 trees contracted ever)
- City support/budget for employee advancement (e.g., training, certifications, education, conferences)
- Increase in tree planting (contracted out)
- Have access to plenty of contractors
- Efficiency in completing work
- Institutional knowledge among staff
- New tree inventory
- GIS & GPS systems
- Cooperation within and between departments
- Ability to respond to storms promptly
- The Tree Advisory Committee is very active and advocates for operational involvement
- The Parks committee is similarly very active
- Access to excellent summer seasonal intern (UW-Madison and UW-Stevens Point)
- People of Fitchburg want to preserve trees
- People understand the benefits of the trees
- Support planting and maintenance

Weaknesses

- No dedicated forestry operations staff
- No field staff formally trained in arboriculture, and only one certified arborist on staff (Anna)
- Staff don't specialize in one thing (jack of all trades)
- It could be challenging to find an arborist who will do non-tree-related park work (jack-of-all-trades aspect again).
- Emails and phone calls are the only way communications happen between people
- Work Order System
- Technical arborist abilities vary among staff (e.g., pruning cuts and approach); only one person expressed confidence in making correct pruning cuts
- Budget and funding for projects can change
- Shared employee among departments (e.g., GIS staff, Public Works staff)
- Few staff have training for the larger bucket truck, and there is a lack of interest in others to learn the large bucket truck

- Equipment is shared between streets and parks. Sometimes one department needs it, and then they have to find something else to do in parks instead of tree work, mainly for Christmas trees
- Much institutional knowledge in one person for various jobs (e.g., GIS, arborist work)
- Employee's resistance to adopting new technology
- No chainsaw safety training in 8-10 years (last done with FISTA and chainsaw safety)
- More trees than the ability to take care of (two more FTE needed)
- Tree work can be based on political or homeowner motivations instead of operational needs
- Forestry work is only done in fall/winter (minus urgent removals and storm response)
- Always behind on pruning
- 5-7 year tree rotation with some variation (longer for park trees)
- Unable to train prune consistently
- Not enough people to water new trees
- Lack of communication about the "whys" to the park's staff about work orders or planting decisions
- Different priorities for work orders, and sometimes parks workers go directly to Anna to get info about tree work needs because not all information always gets on paperwork
- Lack of understanding of the reasoning behind work order prioritization has led to issues in the past
- Parks employees don't feel the forester should be under the parks department. They believe it should be under a common department (e.g., Public Works Department or Parks)
- Conflict with "upper-level" staff at times affects the park's staff
- Trees can be removed based on what citizens want and not necessarily operational needs, ultimately, Anna's decision
- Staff don't see value in training, pruning, or ISA certifications
- Younger staff seem uninterested in tree work
- Parks staff structure
- Many ash trees left to remove (400-500 ash trees remain)
- Budget – not increasing, slow to get approval for purchases
- Diversity of Work could make it hard to hire another certified Arborist in parks
- Parks staff are resistant to technology
- When staff go on leave or vacation, work falls behind and may not catch up
- Staffing compensation through pay
    - ACT 10 affected pay structure and ability to compensate at rates based on experience and time in the position.
    - Staff may know what others make or performance evaluations through sharing
    - Pay & performance multi-step system up to 125% pay plan increase
- 1 GIS employee
    - GIS budget can change with elected officials
    - Not all staff members embrace technology produced
- Political priorities vs operation needs (this tree needs to come down first when there are other higher priorities)
- Growth of Fitchburg and staffing did not increase to meet new workloads through development
- Missed opportunities as a result of staffing limitations
- Tree terrace width has decreased over time from 10 feet to 5 feet, typically now
- Smart codes and zoning density decrease tree planting on private lands
- Limited ability for grant writing and no grant writer for the city on staff or on retainer
- Lack of succession planning

Opportunities

- 1-2 Additional FTEs
- Employees earning ISA certifications
- Full-time ISA Arborist reporting to Anna

- Collaborating with the streets department (help chip or clearance prune)
- Renting a chipper when needed
- Lead worker could be an arborist
- Additional arborist hired under the city forester
- Unofficial agreements to help other cities when they have big storms
- Formal agreement with contractors or municipalities for extreme weather or brush
- Implementation of the new work order system and staff structure
- Updating intergovernmental agreements with local municipalities regarding storms and debris management
- Potential to develop storm response agreements with contractors
- Have debris management draft plan
- Add archive section to tree inventory
- Deploy the work order system developed by GIS staff
- Employees could embrace technology (e.g., iPad and ESRI work order system)
- Hiring a park manager/director could provide leadership if a correct hire is made
- Grants for planting trees (e.g., million tree grant, Alliant Energy, WI DNR)
- Urban Tree Alliance and a strong connection through tree planting in healthy neighborhood locations
- Proximity to Madison and urban forestry expertise trickles down
- Regional forestry staff meet periodically
- Regional DNR office in Fitchburg and local urban forestry staff (Brian Wahl)
- UW-Madison and research ongoing in the city (e.g., Renz Weed Science Lab)
- Intergovernmental agreements with local public agencies for storm and debris management (not expired but needs updating)

Threats

- Homeowners often think the tree in the ROW in front of their property is their tree
- Homeowners required to plant two trees and then perceive their tree rather than the city's role, or when they were asked not to plant in that area and then the city plants a tree)
- Traffic (safety issue)
- ~100 ash trees left
- No summer seasonal position
- Pest issues such as EAB and large oak trees dying (reason unclear)
- Windstorms
- Injuries as a result of staff shortages (e.g., rush to complete work)
- Localized flooding/saturated soils
- More brush at the Public Works facilities
- Lack of leadership at the Parks Director Level
- Council and elected positions changing priorities and budgets
- Conflict entrepreneurs who dominate governance meetings through misleading people and the council
- errace challenges and moisture stress are a result of construction altering native soils and rainfall
- Oak decline from abiotic (precipitation and temperature) and biotic (e.g., two-lined chestnut borer)
- Soil compaction from people under trees in parks (e.g., lack of mulch)
- Wisconsin levy limits are limiting the budget (budget can only go up a certain % no matter the need, net new construction)
- Limited redundancy of personnel for extended leave absences

APPENDIX E

Fitchburg Urban Forest Planning Community Survey

We need you to be heard about your experiences and opinions with trees and green spaces in Fitchburg. This will enlighten the Fitchburg Parks, Recreation and Forestry Department about your desire for the future urban forest. The survey should take about 10 minutes of your time. Share your story by August 15, 2025 through the printed survey, direct HTTP link or QR code for the language version you prefer. **(Note Survey Was Extended to September 15th)**

English Version Link: https://forms.office.com/r/W25w0rJBi5

Spanish Version Link: https://forms.office.com/r/Un32e2RqKW

English Version QR Code

Spanish Version QR Code

Your response is vital to help develop the Fitchburg Strategic Urban Forestry Management Plan for the future. This will also help us update our 2015 Fitchburg Urban Forest Survey Results (https://www.fitchburgwi.gov/636/Urban-Forestry). We thank you in advance for your insight.




Instructions

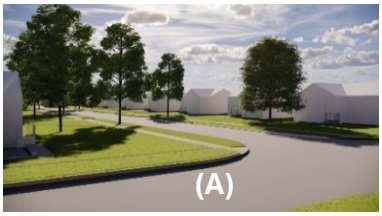
Please provide your best response to the following questions. Your response is anonymous and will be summarized as a part of all responses. Read each question and answer as specified. There are three sections Experience with Trees, Management of Trees, and Demographic Information.

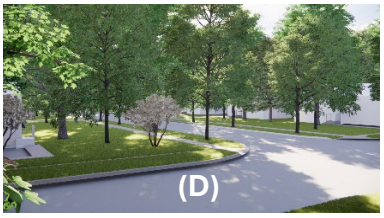
Experience with Trees

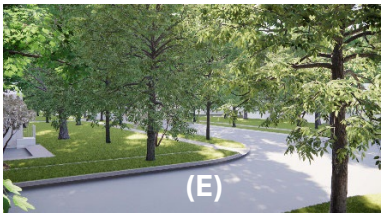
1) Having trees in my community or neighborhood is _____. (select one choice) (n=364, Mean Index Score = 4.8)

Ranking	Number	Percent
Not important (1)	1	0.3
Somewhat important (2)	1	0.3
Moderately important (3)	10	2.7
Very Important (4)	55	15.1
Extremely Important (5)	297	81.6
Totals	**364**	**100**

2) Which of the following images (letter) best represents the tree cover/shade in your neighborhood? (n=364)







My neighborhood doesn't have trees.
(F)

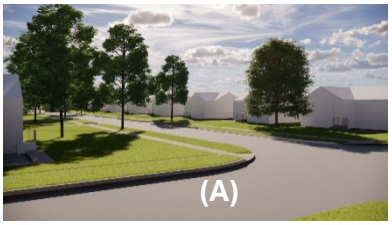
Circle the letter represents your image A | B | C | D | E | F

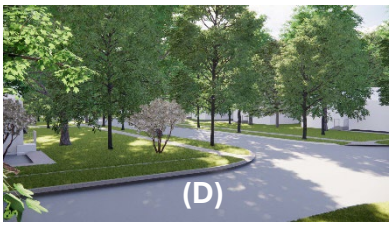
Ranking	Number	Percent
A (~10%)	81	22.3
B (~30%)	80	22.0
C (~50%)	72	19.8
D (~70%)	42	11.5
E (~90%)	78	21.4
F (~0%)	11	3.0

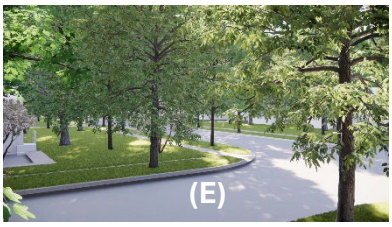
3) Compared to most other neighborhoods in the City of Fitchburg, my neighborhood has _____ trees. (select one choice) (n=364)

Ranking	Number	Percent
Fewer	62	17.0
The same amount of	150	41.2
More	152	41.8

4) Which of the following images (Letter) would you prefer your neighborhood to look like? (select one choice) (n=364)







My neighborhood doesn't have trees. **(F)**

Circle the letter represents your image A | B | C | D | E | F

Ranking	Number	Percent
A (~10%)	3	0.8
B (~30%)	24	6.6
C (~50%)	102	28.1
D (~70%)	89	24.5
E (~90%)	145	39.9
F (~0%)	0	0.0

5) Since moving to my neighborhood, the tree cover/shade has _____. (select one choice) (n=366)

Ranking	Number	Percent
Decreased	60	16.8
Stayed the same	149	41.6
Increased	157	42.9

6) When I look out of the windows of my home, I see _____. (select one choice) (n=366)

Ranking	Number	Percent
No trees (0)	5	1.4
A few trees (1-2)	49	13.4
Several trees (3-7)	101	27.6
Many trees (7-11)	118	32.2
A forest/woodland environment (12 or more trees)	93	25.4

7) How much time does it take to walk from your home to the nearest park, green space, or natural area? (n=356)

_____ Minutes

Median = 5, Mean 5.49, Standard Error Mean 0.33, Range 0 to 60
74.3% of respondents live within 5 minutes of park, green space, or natural area

8) How frequently do you visit/recreate in this park, green space, or natural area? (select one choice) (n=364)

Ranking	Number	Percent
Daily	167	45.9
Weekly	131	36.0
Once a month	31	8.5
Several times a year	19	5.2
Once a year	6	1.6
Never	7	1.9
Not applicable	3	0.8

9) What, if any, are the top benefits you associate with trees in your community or neighborhood? List up to three benefits. (n=344 respondents, 939 keywords)

Keyword	Number	Percent of Keywords	Percent of Respondents
Aesthetics	172	18.3	50.0
Calming	39	4.2	11.3
Cooling	55	5.9	16.0
Environmental	129	13.7	37.5
Monetary	19	2.0	5.5
Nature	24	2.6	7.0
Noise Reduction	29	3.1	8.4
Other	44	4.7	12.8
Privacy	40	4.3	11.6
Shade	203	21.6	59.0
Wildlife	165	17.6	48.0
Wind Reduction	20	2.1	5.8

10) What, if any, are the drawbacks associated with the trees in your community or neighborhood? List up to three drawbacks. (n=310 respondents, 412 keywords)

Keyword	Number	Percent of Keywords	Percent of Respondents
Comment	17	4.1	5.5
Cost	14	3.4	4.5
Damage to Property	31	7.5	10.0
Debris (Falling branches/trees)	27	6.6	8.7
Debris (Fruit)	21	5.1	6.8
Debris (Leaves)	77	18.7	24.8
Insects & disease	14	3.4	4.5
Invasive Species	10	2.4	3.2
Maintenance	48	11.7	15.5
None	60	14.6	19.4
Obstruction	16	3.9	5.2
Other	66	16.0	21.3
Tree selection	11	2.7	3.5

11) Have you ever had a negative experience with a tree? (Check any that apply) (n=356 with n=421 listed negative experiences)

Selected Choice	Number	Percent of Total	Percent of Respondents
No negative experience	185	43.9	52.0
Growing into and damaging your property	37	8.8	0.1
Causing injury after losing a branch or tipping over	13	3.1	3.7
Requiring costly maintenance or removal	141	33.5	39.6
Preventing you from developing your property given local protections	3	0.7	0.8
Causing issues when obtaining a new home insurance policy	2	0.5	0.6
Other	40	9.5	11.2

12) Given the choice to select from the following topical areas, please rate the importance to you. (n=356 to 363)

(CHECK THE APPROPRIATE RESPONSE)

	Very Unimportant (1)	Unimportant (2)	Neither Unimportant or Important (3)	Important (4)	Very Important (5)	Index Score
Sunlight access for solar PV electrical panels	14.6	14.9	32.9	28.7	9.0	3.0
Tree planting agreements on private property	15.0	11.7	31.5	30.4	11.4	3.1
Sidewalks on both sides of the street	26.2	14.9	20.4	24.0	14.6	2.9
Shade from tree canopy	0.3	0.3	4.7	35.3	59.4	4.5

13) Please rate the importance to you of the following economic, social and environmental benefits provided by public trees? (public trees are those along the street ROW, in medians, in parks, and on other public properties) (n=356 to 361)

(CHECK THE APPROPRIATE RESPONSE)

	Very Unimportant (1)	Unimportant (2)	Neither Unimportant or Important (3)	Important (4)	Very Important (5)	Index Score
Increase property values by improving the curb appeal of the neighborhood	3.3	2.8	9.7	38.1	46.1	4.2
Reduce cooling and heating costs	1.9	0.3	7.8	29.1	60.9	4.5
Trees in business and commercial districts attract visitors/customers	3.0	4.4	18.3	39.6	34.6	4.0
Visual beauty	1.7	0.0	1.9	25.2	71.2	4.6
Visual buffer between pedestrians and streets	1.9	4.5	18.1	32.0	43.5	4.1
Provide sense of place to neighborhood and community	1.7	0.8	8.7	30.4	58.4	4.4
Calm and reduce traffic speed	2.8	3.9	20.8	32.6	39.9	4.0
Reduce crime levels	12.8	7.8	34.1	23.5	21.8	3.3
Reduce stress and improve mood	1.7	0.6	5.6	25.4	66.8	4.6
Provide nesting habitat and food sources for butterflies, birds, bees, and other wildlife	1.4	1.4	3.0	18.6	75.6	4.7
Reduce noise pollution	1.4	0.6	6.1	25.9	66.0	4.5
Reduce levels of particulate matter and other air pollutants	1.4	0.6	4.8	19.1	74.2	4.6
Reduce global warming gases, like carbon dioxide	2.2	0.6	3.9	14.5	78.8	4.7
Reduce soil erosion caused by stormwater	1.4	0.0	3.3	24.5	70.8	4.6
Roots filter out pollutants and protect groundwater	1.1	0.6	4.2	24.0	70.2	4.6
Cooling effect on heat from asphalt and buildings	1.1	0.6	4.7	21.4	72.1	4.6

Management of Trees

14) The trees on my street are? (select one choice) (n=364)

Ranking	Number	Percent
Not cared for	43	11.8
Adequately cared for	240	65.9
Well cared for	81	22.3

15) What, if any, things could be improved about the City of Fitchburg's public trees? List up to three things (public trees are those along the street ROW, in medians, in parks, and on other public properties) **(n=251 respondents, 426 keywords)**

Keyword	Number	Percent of Keywords	Percent of Respondents
Comment	46	10.8	18.3
Invasive	9	2.1	3.6
Maintenance	98	23.0	39.0
Other	46	10.8	18.3
Planting	103	24.2	41.0
Preservation	43	10.1	17.1
Selection	81	19.0	32.3

16) The visual diversity of trees on my street is? (select one choice) (n=363)

Category	Number	Percent
Not enough	101	27.8
Enough	261	71.9
Too much	1	0.3

17) I would like to see the following in my park or on my street? (Check all that apply) (n=355)

Category	Number	Percent of Total	Percent of Respondents
Edible fruit and nut trees	133	7.7	37.5
Evergreen trees (like pine or spruce)	175	10.1	49.3
Fall colors	259	14.9	73.0
Flowering trees (like cherry or redbud)	227	13.1	63.9
More uniformity of trees	7	0.4	2.0
More variety of trees	180	10.4	50.7
Native plants/trees	214	12.3	60.3
Prairie/tall grass areas	142	8.2	40.0
Shade Trees	286	16.5	80.6
Shrubs	110	6.3	31.0

18) How strongly would you support or oppose restoration and maintenance of native trees on public lands? (select one choice) (n=360)

Category	Number	Percent
Strongly Oppose (-2)	50	13.9
Oppose (-1)	7	1.9
Neither Support nor Oppose (0)	26	7.2
Support (1)	94	26.1
Strongly Support (2)	183	50.8

19) Which of the following would be your first choice of where the city should plant trees?? (select one choice) (n=337)

Category	Number	Percent
Along streets	153	45.4
Along rural right-of-ways	6	1.8
In commercial/industrial areas	29	8.6
In parks	117	34.7
In people's yards	14	4.2
Near streams, natural and/or forested areas	18	5.3

20) Which of the following statements most closely represents your opinion about trees? (select one choice) (n=363)

Category	Number	Percent
Allow individuals to remove trees as they wish	22	6.1
Preserve as many as possible	149	41.0
Preserve only large or unique trees	23	6.3
When trees are removed, replace them	141	38.8
Other	28	7.7

21) Would you plant trees on your property if offered a monetary incentive? (select one choice) (n=365)

Category	Number	Percent
Yes	208	57.0
No	15	4.1
Need more information	106	29.0
Not applicable	36	9.9

22) How much would you be willing to pay in additional annual property taxes to better maintain and protect existing city trees? (select one choice) (n=363)

Amount ($)	Number	Percent
0	85	23.4
2	21	5.8
6	5	1.4
10	44	12.1
14	3	0.8
20	53	14.6
30	21	5.8
40	96	26.4
Other	35	9.6

Median $20, Mean $22.24, $1.82 Std Error Mean, Range $0 to $500

23) How strongly would you support or oppose removal of invasive shrubs on City property? (select one choice) (n=362)

Category	Number	Percent
Strongly Oppose (-2)	50	13.8
Oppose (-1)	10	2.8
Neither Support nor Oppose (0)	22	6.1
Support (1)	93	25.7
Strongly Support (2)	187	51.7

24) Which of the following statements most closely represents your opinion about managing trees in public parks / woodlots? (select one choice) (n=363)

Category	Number	Percent
Allow all trees and shrubs to grow with little to no management	51	14.0
Remove invasive shrubs	42	11.6
Remove invasive shrubs and replace them with native trees and shrubs	252	69.4
Clear these areas of trees in favor of athletic fields	0	0.0
Other	18	5.0

25) Which of the following would be your first choice of how the City should manage woodlots? (select one choice) (n=339)

Category	Number	Percent
Leave them alone and let nature take over	66	18.4
Remove invasive species and plant native trees and shrubs	224	62.4
Restore oak savanna	49	13.6
Comments of paper survey	20	5.6

Demographic Information

26) Which best explains your connection to the City of Fitchburg? (select one choice) (n=358)

Category	Number	Percent
Live here	281	78.5
Work here	5	1.4
Live and work here	70	19.6
Don't live or work here	2	0.6

27) How many years have you lived in your current neighborhood _____? (Fill in the blank) (n=337)

_____ Years **(mean = 15.9, Std. Error Mean = 0.76)**

Category	Number	Percent
Less than 3 years	36	10.7
3 to 5 years	50	14.8
6 to 10 years	83	24.6
11 to 20 years	55	16.3
21 years or more	113	33.5

28) If you live in the City of Fitchburg, in which neighborhood do you live? See neighborhood map (below) to answer. (n=336)

Neighborhood	Number	Percent
Braeger Court	0	0.0
Briarwood	0	0.0
Byrnewood	14	4.2
Chapel Valley	2	0.6
Country Heights	0	0.0
Country Vineyard	1	0.3
Crescent Crossing	6	1.8
Dunn's Marsh	3	0.9
East Fitchburg	21	6.3
Fahey Fields	8	2.4
Forsythe Downs	0	0.0
Greenfield	17	5.1
Harlan Hills	2	0.6
Hatchery Hill	1	0.3
Highfield Reserve	3	0.9
Highlands of Seminole	20	6.0
Hillside Heights	0	0.0
Jamestown	2	0.6
Lacy Heights	7	2.1
Leopold	1	0.3
Maple Lawn heights	0	0.0
Mickelson's Woods	7	2.1
Morning Sun	0	0.0
Nakoma Heights	0	0.0

Neighborhood	Number	Percent
Nesbitt Heights	0	0.0
Nine Springs	2	0.6
Northeast Fitchburg	0	0.0
Oak Meadow	17	5.1
Pine Ridge	0	0.0
Quarry Hill	14	4.2
Quarry Vista	2	0.6
Seminole Forest	24	7.1
Seminole Hills	9	2.7
Seminole Ridge	15	4.5
Southdale	0	0.0
Sterling Meadows	4	1.2
Stoner Prairie	4	1.2
Swan Creek	34	10.1
Terravessa	10	3.0
Timber Lake Knolls	0	0.0
Tower Hill	13	3.9
Uptown Crossing	1	0.3
Western Hills	0	0.0
Waterford Glen	3	0.9
Wildwood	19	5.7
Wildwood South	11	3.3
Willow Run	0	0.0
Other	39	11.6

29) Which of the following best describes your housing type? (select all that apply) (n=335)

Category	Number	Percent
Apartment	16	4.8
Duplex	6	1.8
Condominium	30	9.0
Group home	0	0.0
Mobile home	0	0.0
Single Family Housing	282	84.2
Unhoused	1	0.3
Other	0	0.0

30) Which of the following best describes your current housing situation? (select all that apply) (n=334)

Category	Number	Percent
Own	311	93.1
Rent	19	5.7
Living with others but not paying rent	3	0.9
Living with others but assisting with paying rent	1	0.3

31) Which of the following identities best describes you? (select all that apply) (n=351)

Category	Number	Percent
American Indian	2	0.6
Asian	4	1.1
African American or Black	2	0.6
Hispanic, Latinx, or Spanish Origin	9	2.6
Native Hawaiian or Pacific Islander	0	0.0
White or Caucasian	280	79.8
Prefer not to say	46	13.1
Two or More Races	8	2.3

32) What is your age group? (n=334)

Category	Number	Percent
Under 18	3	0.9
18-24	7	2.1
25-34	34	10.2
35-44	79	23.7
45-54	39	11.7
55-64	54	16.2
65+	118	35.3

33) What is the highest level of education you have attained? (n=337)

Category	Number	Percent
No high school diploma	2	0.6
High school diploma or equivalent (GED)	3	0.9
Some college but no degree	20	5.9
Associate degree	21	6.2
Bachelor degree	131	38.9
Graduate degree	160	47.5

Thank you so much for completing this survey. You may return it through any of these:

Bring or mail to City of Fitchburg | City Hall | 5520 Lacy Road | Fitchburg, WI 53711