



URBAN FORESTRY
CITY OF STOW

Community Street Tree District
Management Plan
January 2025



City OF Stow
Tradition Centered. Future Focused.

City of Stow Community Street Tree District Management Plan

Mission Statement

It is the goal of the Stow Urban Forestry Commission to provide the public with environmental, economic, and aesthetic benefits of an actively managed urban forest now and for future generations. This will be accomplished through forward thinking leadership in urban forest management, tree planting and forest preservation.

Goals

The following are goals that must be reached to validate the mission statement.

1. Maintain the health and vigor of all trees in Stow's Urban Forest;
2. Plant the largest suitable tree for each approved site;
3. Actively engage residents in being a steward for Stow's Urban Forest;

Objectives

Strategies necessary to reach the goals.

1. For safety, remove or prune all dead and hazardous trees each year;
2. Prune each tree every 5 years.
3. Plant a diverse population of trees. Replace one tree for each tree removed. Annually replant 1/20 of the approved vacant sites as determined at the beginning of each year;
4. Educate the community decision-makers (Urban Forestry Commission members, residents, elected officials, hired employees, and volunteers) on the value and need for a sustainable urban forest;
5. Educate property owners on the need to maintain mulch around the tree in the tree lawn to a depth of 2 inches with a mulch/weed free zone of 4 inches around the base of the tree.

Annual Review

The mission statement, goals, and strategies shall be read and reviewed at the first Urban Forestry Commission meeting of each year. Amendments and commitments shall be documented and presented to City Council.

Actions

Actions that will meet the objectives.

Specifications

Specific rules for the actions.

Implementation

Performing the necessary actions.

Action 1

Inventory Newly Planted Trees

Specifications

Collect the following information on newly planted trees in Stow's right of way adjacent to public streets:

- Address – the address where the tree or approved planting site is located;
- Street – the street on which the address is located;
- On Street – the street that the tree or approved planting site is actually on;
- From Street and To Street (inventory will be completed in the same direction as a vehicle would be traveling);
- Side – front, side or rear of the property address;
- Site – actual number of trees or approved planting sites at the respective address;
- Species – existing tree species;
- Height – 0 to 5 feet; 5 to 10 feet; 10 to 20 feet; 20 to 30 feet; 30 to 40 feet; and over 40 feet;
- DBH – Diameter at breast height and measured in inches at 4.5 feet around the ground;
- Condition – good; fair; poor; dead/dying;
- Maintenance – critical concern; plant; young tree and mature tree;
- Priority – none; plant; raise; remove; stump; train;
- Wire Conflict – no lines; wires present and conflicting; wires present and not conflicting;
- Sidewalk damage – none; low (less than ½ inch); medium (1/2 to 2 inches); high (over 2 inches);
- Tree lawn width – 0 to 5 feet; 5 to 10 feet; over 10 feet;

Implementation

Data Storage:

- The tree and approved planting site inventory will be entered into the TreeKeeper's inventory program and housed on a server at Davey Resource Group, 295 S. Water Street, Ste. 300, Kent, Ohio 44240.
- Access to Stow's street tree inventory will be via the internet at <https://stowoh.treekeepersoftware.com> This website may be accessed by numerous City of Stow employees at one time providing efficient and effective use of the inventory. Current employees who have access are Mike Fletcher.
- Should issues arise contact:
 - Justin Stratton at Davey Resource Group – (330) 673-5685 ext.8043, jstratton@davey.com
 - James Kozak at Davey Resource Group – (330) 673-5685 ext. 8041, jkozak@davey.com

Action 1 Annual Review

Action 1 specifications and implementations shall be reviewed and approved at the first Urban Forestry Commission meeting of each year. The specifications and implementations shall be evaluated for effectiveness and, as deemed appropriate by the Urban Forestry Commission, be amended to improve performance. All changes shall be documented.

Action 2

Maintain an updated tree and planting site inventory.

Specifications

All information identified in Action 1 for completing an inventory of the existing trees and approved planting sites will be maintained in the TreeKeeper inventory program.

Implementation

- Within a two (2) week period after trees are pruned, removed or planted, the data in the Treekeeper inventory program will be updated.
- All updated tree and approved planting site information will be housed by Davey Resource Group on their server.

Action 2 Annual Review

Action 2 specifications and implementations shall be reviewed and approved by the Urban Forestry Commission annually. The specifications and implementations shall be evaluated for effectiveness and as deemed appropriate by the Urban Forestry Commission, be amended to improve performance. All changes shall be documented.

Action 3

Develop a comprehensive street tree planting design.

Specifications

- It is the intent of the Urban Forestry Commission to establish and maintain a sustainable diverse population of trees with a target of no more than 5% of the population in one species, 10% of the population in one genus, and 15% of the population in one family (5-10-15). The Urban Forestry Tree Commission shall adhere to a maximum of no more than 10% of the population be from one species; 20% of the population be from one genus; and, 30% of the population be from one family (10-20-30).
- To accomplish this, the Urban Forestry Commission will establish and maintain a Master Street Tree Planting List. Trees shall be selected to match the hardiness of the tree to the limitations of the site and the appropriate size of the tree with respect to each site.
- The List will support the following:
 - Planting of small trees under power lines;
 - Planting the largest sized tree that the approved site can accommodate;
 - Ensuring that trees are planted in sites where they will survive and thrive;
 - Using the tree species as identified in the List, regardless of the resident's preferences.
- Site Selection Parameters:

Clearance	Small Trees	Medium Trees	Large Trees
Overhead Wires	30 feet	30-60 feet	60 feet
Side Structures	20 feet	20-40 feet	40 feet
Tree Lawn Width	0-5 feet	5-10 feet	10 feet & up
From Intersection	35 feet	35 feet	35 feet
Visible Utilities	10 feet	15 feet	15 feet
Other Trees/Planting Sites	30 feet	40 feet	40 feet
Driveways	10 feet	10 feet	10 feet

Implementation

- All approved planting sites will be planted with trees as identified in the List.
- As new tree species arrive on the market, the Landscape Arborist, with input from the Urban Forestry Commission, will evaluate and determine if the new tree species should be added to the List.
- The List will be updated as new tree species are approved.

Appeals

If a homeowner believes that another tree species is more appropriate for an approved planting site, they may appeal the choice to the Urban Forestry Commission. Appeals may be either in writing or in person at a scheduled Urban Forestry Commission meeting. The homeowner's suggested species should be based upon scientific reasoning and be for the overall benefit of the Community.

The Urban Forestry Commission will review all written and oral appeals and render their decision in writing.

Action 3 Annual Review

Action 3 specifications and implementations shall be read and reviewed annually by the Urban Forestry Commission. The specifications and implementations shall be evaluated for effectiveness and as deemed appropriate by the Urban Forestry Commission, be amended to improve performance. All changes shall be documented.

Action 4

Conduct an annual hazard tree assessment and removal program.

Specifications

- Using the current street tree inventory, a query will be generated monthly in order to select trees that have been identified as dead.
- The current inventory will be updated within two weeks of prunings, removals and plantings. The city-wide inventory will also be field checked every five years.
- All trees on private property that have the potential of falling into Stow's right of way will be evaluated annually for potential hazards. If a tree is dead or poses a hazard to Stow's right of way, the property owner will be notified, in writing, that they must correct the situation within thirty (30) days of receipt of notification.
- Residents may also report a dead, dying or potentially hazardous tree that may threaten Stow's right of way.

Implementation

- The Landscape Arborist or Public Service Secretary will generate the monthly query.
- The Landscape Arborist will check all private trees that have the potential of creating a hazard by falling into Stow's right of way.
- The Landscape Arborist and/or designated employee, will identify dead, dying and potentially hazardous trees in Stow's right of way.
- Dead trees within Stow's right of way will be removed by the City of Stow within a week of notification, if possible.
- All potentially hazardous trees on private property that must be removed will be the property owner's responsibility. After 1 month, following notification, removal must be performed. If not, the City of Stow will coordinate removal and invoice.
- Stow's Urban Forestry Department employees are certified arborists through the International Society of Arboricultural.

Action 4 Annual Review

Action 4 specifications and implementations shall reviewed annually by the Urban Forestry Commission. The specifications and implementations shall be evaluated for effectiveness and as deemed appropriate by the Urban Forestry Commission, be amended to improve performance. All changes shall be documented.

Action 5

Regular educational sessions and Arbor Day activities.

Specifications

The Urban Forestry Commission and Landscape Arborist shall have a marketing plan that will consist of:

- Annual Stow Tree Fest activities suitable for Tree City USA requirements;
- An educational booth annually at a city event;
- At least two tree care articles per year on the Stow website, Stow email, or social media;
- One annual walking tour for residents, elected officials and city employees;
- Develop and maintain an updated Arboricultural Standards Manual for staff use in answering questions;
- Present an annual "State of the Urban Forest" presentation to City Council, as necessary.

Implementation

- The Landscape Arborist will be responsible for the submission of articles to the media.
- The Landscape Arborist, with assistance from the Urban Forestry Commission, will determine the theme required for the annual walking tour.
- The Urban Forestry Commission will prepare and present an annual multi-media and interactive presentation to City Council.

Action 5 Annual Review

Action 5 specifications and implementations shall be approved annually by the Urban Forestry Commission. The specifications and implementations shall be evaluated for effectiveness and as deemed appropriate by the Urban Forestry Commission, be amended to improve performance. All changes shall be documented.

Action 6

Annual work plan and budget.

Specifications and Implementations

- The Landscape Arborist shall prepare a proposed budget and submit same to the Director of Public Service by July 31st of each biennial year. This budget will serve to meet the goals and strategies of Stow's Community Street District Master Plan.
- To successfully manage Stow's Street Tree District, the Landscape Arborist shall allocate resources in the following manner:

Tree Removal	Highest Priority
Stump Grinding	↓
First and Second Year Watering	↓
5 year pruning cycle pruning	↓
Young tree training	↓
Site preparation	↓
Planting	Lowest Priority

- The Landscape Arborist may, as circumstances dictate, vary from the priority list only if it benefits the urban forestry program or community as a whole and will not reduce safety or cost effectiveness.
- As of March 13, 2023, the Landscape Arborist determined (from inventory) that there are 4,219 planting sites; therefore, the maximum number of trees to be planted each year will equal the number of trees removed in the previous year plus 211 (1/20th of total sites). The Landscape Arborist may choose to increase this number to complete the planting of a street but will account for the excess in future plantings.
- Newly planted trees shall be pruned every 5 years after planting. This pruning will train the trees for structure and form, reducing future costs of pruning the tree. Pruning will be consistent with ODNR "7 Steps to Young Tree Training." These steps are:
 1. Identify V-crotches or co-dominant branches and correct.
 2. Prune to leave one central leader when appropriate
 3. Select lowest, permanent scaffolding branch and release;
 4. Select permanent scaffolding branches and release;
 5. Limb up to maintain sidewalk, driveway, and street clearance.
 6. Remove dead or broken branches and water sprouts and suckers.
- All trees not included in the young tree training program shall be pruned once every five (5) years for structure and health according to ANSI (American National Standards Institute) A300 Standards. The ANSI A300 Standards can be found in the City of Stow Arboricultural Standards Manual which is on file in the Office of the Public Service Director, 3760 Darrow Road, Stow, Ohio.
- All newly planted trees will be watered via a gator bag, tree diaper, or other source which the City will provide. If the tree is on private property the property owner will fill as instructed.

- All trees shall be planted according to ANSI A300 Standards and Best Management Practices Series, entitled "Tree Planting". This Standard can be found in the City of Stow Arboricultural Standards Manual which is on file in the Office of the Public Service Director, 3760 Darrow Road, Stow, Ohio.
- The following represents the new Tree Planting Program, which was implemented by the City of Stow beginning in 2015:

PLANTING OF TREE LAWN / FRONT YARD TREES

STANDARD OPERATING PROCEDURE

The City of Stow has deemed the inclusion of trees along City streets as an important and necessary part of the City's infrastructure due to the environmental, economic, aesthetic, and storm water management benefits that trees provide to Stow and its residents. Therefore, the City of Stow administration has determined that a new plan should be established for the planting of trees to ensure that trees are provided for those areas where residents desire to have a tree established in their tree lawn. In addition, the administration hopes property owners will assist the City of Stow in maintaining a City-wide urban tree canopy cover of at least forty percent (40%) by planting trees in their front yards (and/or side yard, if a corner lot).

Therefore, the following program shall be the standard operating procedure for trees planted in the tree lawn or front yard (and/or side yard, if a corner lot) of homes within the City of Stow beginning in the year 2015 and going forward:

1. An application shall be established for residents desiring to have a tree planted in their tree lawn or front/side yard (see attached).
2. Residents shall be required to pay \$125.00 towards the purchase and installation of each tree, watering bag, and tree guard (prevents deer damage).
3. Any Stow resident who is a veteran, or active duty military personnel, or active duty/retired first responders and can provide verification of "honorable" status, may receive a \$50 discount per tree.
4. Any Stow resident who is unable to pay the associated fee AND has properly completed a Tree Planting Program – Affidavit of Indigence, may receive one (1) free tree.
5. All trees shall be selected by the City of Stow Landscape Arborist.
6. Applications shall be processed on a first come, first served basis until the allocated funds in the program are exhausted, at which time applications will be applied to the following year's funding.
7. Applications will be available at Stow City Hall, on the City's website at www.stowohio.org, or by calling (330) 689-5121.
8. Applications, including the appropriate fee, shall be submitted via regular mail or in person to: Public Service Dept., Stow City Hall, 3760 Darrow Road, Stow, Ohio 44224.

9. The application deadline is the last business day in October for the following spring.
10. It is the intention of the City of Stow for the trees to be planted during the spring planting season in conjunction with this program.
11. Before approval is granted, the Landscape Arborist shall inspect all sites where a tree has been requested to determine if there is sufficient room for a tree in accordance with the Community Management Plan.
12. A minimum tree lawn width of five feet (5') is required for the installation of a tree.
13. Minimum guarantee for tree survival shall be one (1) year from the date of planting.
14. Tree lawn trees shall be limited to one (1) per application unless the property is designated as a "corner lot" in which case two (2) trees shall be allocated.
15. Applications shall be time and date stamped upon receipt to ensure the proper order is followed by the administration.
16. Trees with a minimum caliper of two inches (2") shall be planted.
17. Funds cannot be approved retroactively by a resident after a tree has been purchased and planted in their front yard.
18. Trees planted in a resident's front/side yard shall be at least ten feet (10') away from all sidewalks.
19. The homeowner and City of Stow Landscape Arborist will agree upon the variety and location of any tree planted in the front/side yard.
20. All trees shall be planted by City of Stow employees. Residents requesting a tree to be planted in the front/side yard (private) on their property will need to sign a Work Right Agreement giving the City permission to do so.
21. Gator bags installed on a front/side yard tree (private) will become the property of the homeowner after installation for use as they see fit.
22. The filling of gator (watering) bags will be the sole responsibility of the homeowner when a tree is planted in the front or side yard of a residence.
23. Gator bags installed on a tree planted in the tree lawn area remain City of Stow property after use.
24. The City of Stow will be responsible for filling the gator bags on tree lawn trees for two (2) growing seasons after initial planting.
25. If an applicant applies for and receives a tree and re-applies for another tree the following year, the request will be placed at the end of the current list. They will only receive a tree if there are available funds and after all other first-time applicants have received a tree.

Assessment

All work will be tracked via the Tree Keeper inventory program. Thus, all dead and dying trees and stumps will be identified and removed. The number of trees pruned yearly in the 5 year pruning cycle will be identified and tracked, as well as, those trees in the young tree training program. All newly planted trees will be identified and placed in the young tree training and watering programs.

Action 6 Annual Review

Action 6 specifications and implementations shall be approved annually by the Urban Forestry Commission. The specifications and implementations shall be evaluated for effectiveness and as deemed appropriate by the Urban Forestry Commission, be amended to improve performance. All changes shall be documented.

Action 7

Long range (5 year) work plan and budget.

Specifications

- The Landscape Arborist, with input from the Urban Forestry Commission, will plant the approved sites as governed by budget and maximum numbers established in the List.
- When possible, the primary locations (having a curb and sidewalk) will be planted first. Once all primary locations are planted the secondary locations (having either a curb or sidewalk, but not both) will be planted. After all secondary sites are planted those sites that have neither a sidewalk or curb will be planted.
- Approved planting sites in areas with limited canopy cover can be considered first. Requests from residents will also be considered.
- The approved sites will be planted equally throughout the community to enhance the age diversity of the community.
- Conduct an annual Arbor Day tree planting at the Tree Fest celebration.

Implementations

- Based upon the allocated budget.
- Effective March 13, 2023, there are 5,921 street trees and 4,219 recognized planting sites in the City of Stow's right of way areas; thus, 211 trees should be planted each year for the next 20 years and approximately 1,184 trees should be pruned annually during a five (5) year pruning cycle.
- Requirement to plant one (1) tree annually for every tree that is removed in the right of way area.
- Must reach a fully stocked level of trees in the City right of way. 1/20th of the current planting sites must be planted annually; thus, 211 trees must be planted annually for the next 20 years in addition to the replacement trees.

Action 7 Annual Review

Action 7 specifications and implementations shall be approved annually by the Urban Forestry Commission. The specifications and implementations shall be evaluated for effectiveness and as deemed appropriate by the Urban Forestry Commission, be amended to improve performance. All changes shall be documented.

Action 8

Provide technical advice to other city boards and departments.

Specifications and Implementations

The Urban Forestry Commission and/or Urban Forestry Staff shall:

- Provide scientific research on City projects that will affect existing trees. i.e., sidewalk and storm water issues.
- Assist in designing new tree plantings in City parks and within City-owned open spaces.
- Assist the Building Department in reviewing new commercial building and landscaping plans with the goal of maximizing the landscape potential of the site.
- Provide information to the Public Improvement Committee of City Council concerning current insect and disease issues affecting trees and the Urban Forestry Management Plan.
- Provide information and facts to the Finance Committee of City Council concerning sufficient budget allocations required to maintain the existing tree population as identified in the tree inventory.

Action 8 Annual Review

Action 8 specifications and implementations shall be approved annually by the Urban Forestry Commission. The specifications and implementations shall be evaluated for effectiveness and as deemed appropriate by the Urban Forestry Commission, be amended to improve performance. All changes shall be documented.

Benefits of an Urban Forest

1. Environmental: Trees have been shown to improve the environment of the community by:
 - Removing carbon from the air, as well as, preventing carbon from being burned by reducing the need for air conditioning. Less air conditioning results in less electricity usage, thus resulting in less coal burned, thus less carbon dioxide and air pollution being emitted into the air;
 - Filtering out air pollution and harmful particles;
 - Improving

Source: USDA Forest Service

2. Economic: Trees provide a tremendous economic benefit to the community. Trees have been shown to:
 - Increase property values and resale values;
 - Reduce crime and vandalism, thereby reducing insurance rates;
 - Improve test scores and life decisions among school-aged girls, thus reducing the need for social service programs.

Sources: USDA Forest Service, University of Illinois

3. Social:
 - Reduce crime and vandalism, thereby reducing insurance rates;
 - Improve test scores and life decisions among school-aged girls, thus reducing the need for social service programs.
 - Reduce stress.

Source: University of Illinois

4. Health and Vigor:

Healthy, vigorous trees live longer and require less maintenance, which result in maximizing benefits while minimizing costs.

Sources: USDA Forest Service, University of Illinois

5. Largest Tree:

Large trees live longer and provide greater economic benefits than small trees. Undersized trees fail to maximize the potential of sites. This failure is lost value to the community.

*Sources: USDA Forest Service,
Cost Model by Alan Siewert, ODNR Division of Forestry*

6. Fully stocked:

Fully stocked means every available site has a tree growing in it. To maximize the benefits for the community, all sites need to be stocked and functioning. Fallow or empty sites result in loss of benefits to the community. Note: When restoring an urban forest, mass planting to restock to 100% rapidly is not desirable as it will cause a 'Baby Boom'. Restocking requires time to develop an all-age, stable population.

*Sources: USDA Forest Service
Theoretical Urban Forest Model by
Alan Siewert, ODNR Division of Forestry*