

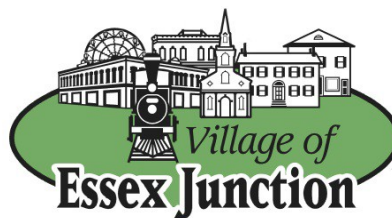
Village of Essex Junction

Urban Forest Management Plan



Prepared by: Village of Essex Junction Tree Advisory Committee

Funded by: Vermont Urban & Community Forestry Program



January 7, 2016

Essex Junction Urban Forest Management Plan

Village of Essex Junction, Vermont

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Executive Summary

This document provides the framework for a long-term urban forest management plan for the Village of Essex Junction, hereafter referred to as the Village, which can be consulted by residents, Village departments, and the Planning Commission.

The Essex Junction Tree Advisory Committee, established in January 2014, and hereafter referred to as the Committee, partnered with the Vermont Urban & Community Forestry Program (VTUCF) to compile the information and plans needed to maintain and enhance the urban forest within the Village. The completion of a public tree inventory in 2014, the adoption of a Tree Ordinance in 2013, and the establishment of a tree budget have poised the Village to properly manage its urban forest. The maintenance and planting portion of this management plan will be revisited each year and enhanced every five years to ensure that both short-term and long-term goals are being met.

The Committee recognizes that maintaining and enhancing the urban forest provides invaluable benefits to the economic, environmental, and social well-being of the community. Benefits include: reducing energy use through shading, moderating storm water flows, improving economic sustainability, reducing air pollution, removing carbon from the atmosphere, protecting water quality, providing habitat for wildlife, and supporting the physical and mental health of residents. The urban forest gives the community an aesthetically pleasing value, while providing a place for recreation and inspiration.

The main vision for the Village, as outlined in this document, is twofold. First, it is to protect its heritage by maintaining the health and structure of the existing urban forest. Second, it is to improve its aesthetic character by expanding the number of trees planted on public and private land. Creating this public-private partnership is critical to the success of a healthy and expanded tree canopy. The goals outlined in this document focus on planting, maintenance, partnerships, funding, and community engagement.

The Committee has developed this urban tree management plan to guide the growth, management, and sustainability of trees in the Village. The Committee will assess the needs of the urban forest, as potential future threats such as invasive pests, climate change, and development, become reality.

II. Definitions

- Certified Arborist: A person certified by the International Society of Arboriculture as having specialized knowledge, experience, and training related to arboriculture.
- Diseased Tree: Any tree or shrub with a combination of structural defects and/or a health condition, which makes it subject to a high probability of failure.
- Hazardous Tree: Any tree or shrub, public or private, with visibly defined structural defects likely to cause failure of all or part of the tree, and be a danger to public safety.

- Public Tree: All trees and shrubs on any Village park or other property owned or controlled by the Village on any public street, alley, median, sidewalk, or highway within the public right-of-way, as well as school district trees.
- Public Right-of-Way: Right-of-Way is measured from the center line of any road within the Village. Distance out from centerline will vary depending on individual streets. This information is available from the Department of Public Works.
- Private Tree: Any tree or shrub or any substantial portion of a tree, shrub, or plant which is in a private location along a public right-of-way.
- Street Tree: Any tree or shrub located on either side of all streets, avenues, bike paths, and located within the bounds of all Village right-of-ways.
- Tree: Any self-supporting woody plant together with its root system, growing upon the earth with one trunk of at least three inches in diameter at a height of four and one-half feet above the ground, or a multi-stemmed trunk system with a definitely formed crown.

I. Inventory, Tree Maintenance and Tree Planting Plan

Goals

- I. Use the public tree inventory to implement a proactive and systematic maintenance regime for the Village that supports the planning, planting, and care of trees both on public and private land.
- II. Continue to diversify the species, age composition, and distribution within the Village's urban forest structure to prepare for potential future threats and challenges, such as climate change, developmental pressures, Dutch elm disease, the emerald ash borer, and the Asian longhorn beetle.
- III. Plant a minimum of 10 trees (on public and/or private property) every fiscal year to enhance the Village's urban forest.
- IV. Work directly with the Village of Essex Junction Public Works Department to monitor the maintenance and health of public trees and implement the systematic maintenance regime.
- V. Update the public tree inventory every 10 (ten) years.

Inventory

This section outlines the results of the public tree inventory that was conducted by interns with University of Vermont's Land Stewardship Internship Program in the summer of 2013 and a VTUCF intern in the summer of 2014. The inventory results provide a description of the composition and condition of the trees that fall within the public right-of-way (ROW) of the Village of Essex Junction, Vermont. The goal of the inventory was to:

- Determine the composition of the Village of Essex Junction's urban forest;
- Identify all the public trees within the ROW boundaries by location, condition, and species;
- Link inventoried trees to an address, a unique tree number, and GPS location;
- Determine the location and number of potential tree planting sites, both on public property and on private front and side yards;
- Determine which trees are in need of professional consulting and assessment.

The characteristics recorded for each tree were the size, overall health, location, and species. In total, 614 public trees along 95 streets were inventoried in the Village. This information benefits the Village by providing baseline information on the urban forest needs and structure while establishing a foundation for urban forest planning. Only street trees that fall within boundaries of the public ROW were inventoried, which was determined using records from

Essex Junction’s Public Works Department. Additionally, potential tree planting sites on public and private land were identified.

The seven most prevalent public tree species in order from most frequent to least frequent are: green ash (*Fraxinus pennsylvanica*), littleleaf linden (*Tilia cordata*), Norway maple (*Acer platanoides*), pine (*Pinus sp.*), silver maple (*Acer saccharinum*), red maple (*Acer rubrum*), and northern red oak (*Quercus rubra*) as shown in Figure 1. The “other” category reflects nearly half of the Village’s public trees, however each of those species has less than a 5% representation in the total population. A list of these trees can be found in Appendix B.

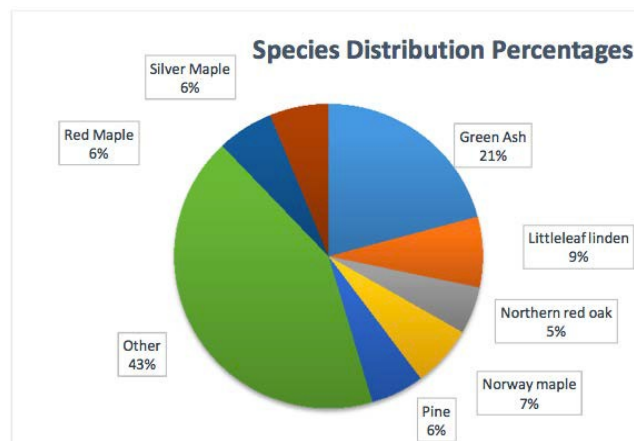


Figure 1. The distribution of tree species by percent composition. Other represents tree species with less than a 5% distribution.

Currently, there is a large variety of tree species within the public ROW. This represents resiliency and adaptability from potential future threats to the urban forest. However, green ash is the most represented tree in the Village, making up over one-fifth of the trees. After Dutch elm disease killed the majority of elm trees, which were the predominant street tree in Vermont communities during the 20th century, green ash was planted in high numbers as a replacement tree along many residential streets. This monoculture trend poses a potential future problem, as now these ash trees are threatened by the arrival of the emerald ash borer. You can learn more about this invasive, as well as other threats, on www.vtinvasives.org. A diverse urban forest is more resilient and adaptable to imposing threats.

Diameter at breast height (DBH) was recorded for each public tree; this measures how large the tree is in girth, which can be correlated to its relative age. As shown in Figure 2, the dominant DBH size classes of the public Village trees are 6-12” and 12-18”. This indicates a fairly young urban forest with not many large, older trees present. Having greater age diversity also creates resiliency and adaptability in the urban forest. With a commitment to maintaining existing trees and continuing the effort

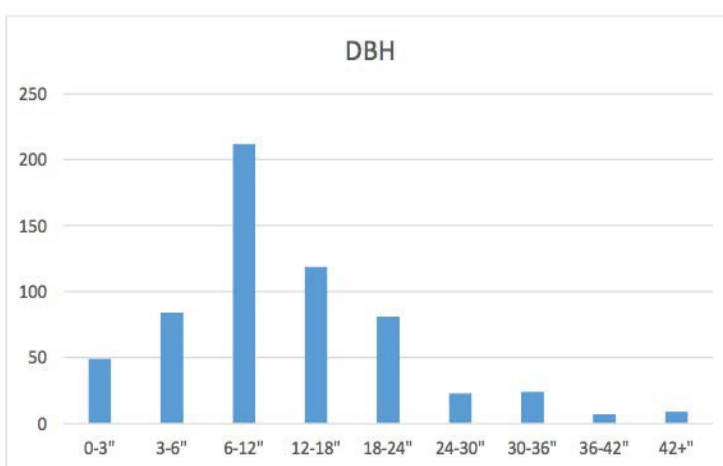
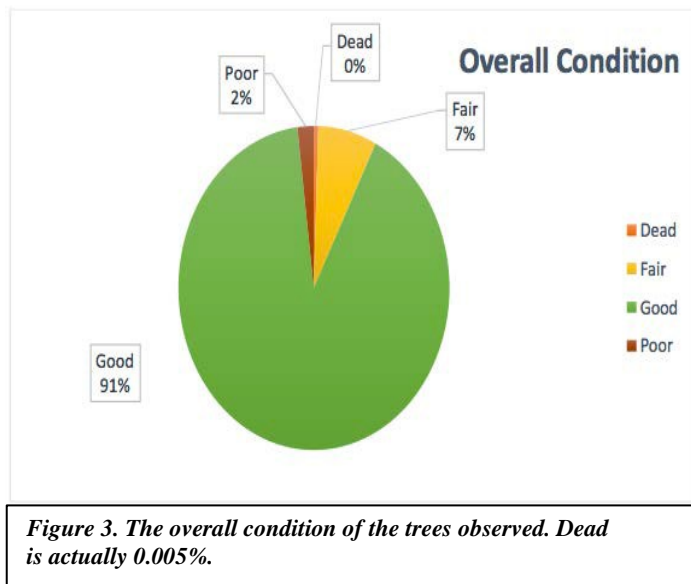


Figure 2. The number of trees percent within each DBH range (inches).

to plant new and young trees, the Village will begin to see an increase in age and size class diversity.

Each tree inventoried was characterized as in “good”, “fair”, “poor”, or “dead” condition, shown in Figure 3. With 91% of the trees rating as “good”, the Village’s urban forest is currently in overall good health. Only 7% of the trees were rated “fair”; these trees should be prioritized for maintenance. The trees that were designated as “poor” or “dead” will likely need to be removed and replaced, as they are in decline.



Since the inventory was completed, these trees have been inspected and removed if necessary.

In addition to the public tree inventory, the VTUCF 2014 summer intern assessed the overall urban forest canopy using the i-Tree Canopy tool, a free online application developed by the USDA Forest Service. i-Tree Canopy allows users to assess total tree cover over an area based on randomly-generated map points and user-defined land cover types. The tool also assigns dollar values to the benefits associated with the overall tree canopy cover. The aim of this assessment is to help citizens and decision-makers better understand the existing and potential tree canopy – encompassing public and private land – in their community.

This assessment tool also helps with preparedness for climate change. One expected threat to Vermont as the climate begins to shift is an increase in precipitation, which can lead to greater saturation and erosion. Assessing the current condition of the Village’s tree canopy helps determine steps to take towards climate resiliency. A key feature of this tool is assessing the relationship between infrastructure and natural systems. By designating randomly selected points with a land cover type, the VTUCF intern was able to produce a picture of the full canopy of the Village encompassing both public and private land; 101 points were assessed within the 4.55 square mile boundary of the Village. The descriptions of land cover included in the assessment were: tree (T), low-lying vegetation (LLG), agriculture (A), impervious (I), building (B), wetland (WL), water (W), other (O). The results, shown in Figure 4, can serve to inform planning for future tree plantings and development opportunities in the Village.

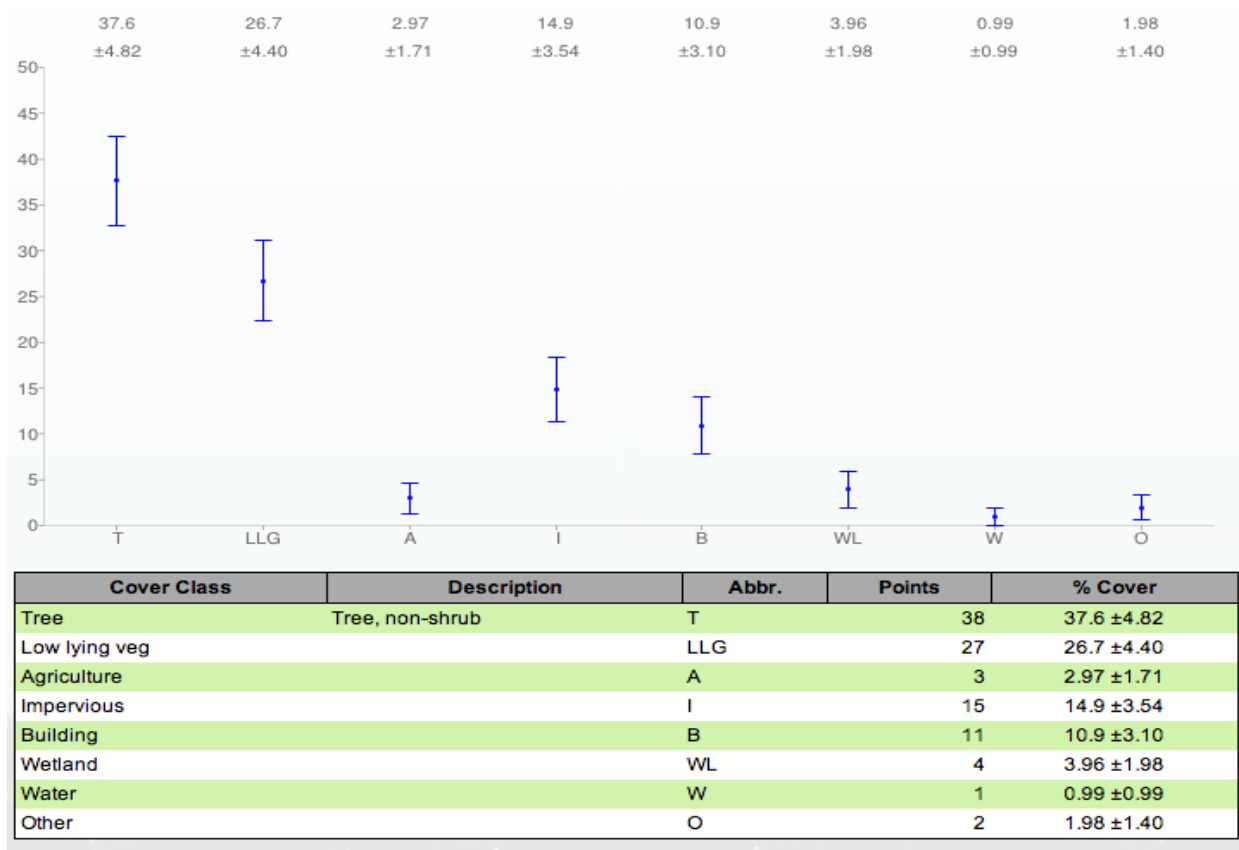


Figure 4. Land cover distribution percentages.

As seen in Figure 4, the Village has approximately 38% tree cover. Nationally, many cities have goals to maintain a minimum of 35-40% canopy cover, and while Essex Junction currently falls within that range, there is potential to increase canopy cover particularly in the 27% of land characterized as low-lying vegetation and grass. Awareness and attention to overall canopy cover can guide urban forest management goals and maximize the potential for the estimated benefits provided by the overall (public and private) tree canopy cover, outlined in Figure 5.

Abbr.	Benefit Description	Value	±SE	Amount	±SE
CO	Carbon Monoxide removed annually	\$39.91	±5.11	941.40 lb	±120.61
NO2	Nitrogen Dioxide removed annually	\$68.70	±8.80	2.57 T	±0.33
O3	Ozone removed annually	\$3,577.96	±458.41	25.56 T	±3.28
PM2.5	Particulate Matter less than 2.5 microns removed annually	\$7,396.31	±947.62	1.24 T	±0.16
SO2	Sulfur Dioxide removed annually	\$12.01	±1.54	1.62 T	±0.21
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	\$2,597.51	±332.79	8.56 T	±1.10
CO2seq	Carbon Dioxide sequestered annually in trees	\$100,785.06	±12,912.61	5,204.94 T	±666.86
CO2stor	Carbon Dioxide stored in trees (Note: this benefit is not an annual rate)	\$2,541,105.34	±325,567.06	131,232.82 T	±16,813.58

Figure 5. Tree Benefits.

The benefits that a healthy urban forest and tree canopy cover can bring to a community are invaluable. However, in recent years many assessment tools have been developed to use models to assign a monetary value to these benefits. According to the i-Tree assessment tool, the Village's public trees currently annually contribute \$114,477.46 in benefits. This value reflects a suite of benefits provided by trees and is associated with the well-being of Village citizens, as well as surrounding communities.

The public can view an interactive tree inventory on the Agency of Natural Resources website, using their Atlas tool, accessible online.

Tree Maintenance

The primary purpose of this urban forest management plan is to increase the benefits of the Village's municipality owned urban forest. Proactively maintaining the Village's public trees will enhance the quality of life for residents and increase the ecological health of the surrounding landscape. As shown in Figure 5, current economic and environmental benefits provided by the urban forest is reason enough to continue improving its quality and health.

An urban forest's health is directly linked to its maintenance. In this respect, the maintenance of the urban trees within the Village should be one of the top priorities. Maintenance has been neglected in the past, but as the community's tree stewardship efforts move forward, we will strive for a proactive – not reactive – public tree management program. The primary public tree caretakers will continue to be the Public Works Department in partnership with the Committee and the Essex Junction Tree Warden. Section II of this plan further outlines operations and responsibilities of tree maintenance.

Since 2012, the Committee and Public Works employees have been periodically training with the Essex Junction Tree Warden and Matt Leonard from the Vermont Department of Forests, Parks, and Recreation to gain skills and proficiency in proper tree pruning and maintenance techniques. In the event that there is a pruning or maintenance situation that cannot be properly completed by Public Works employees, they will consult with the Committee and the Tree Warden to contract that work to a tree care professional.

The challenges that the Public Works Department has faced in the past in regards to maintaining the public trees are:

- Large tree roots pushing up sidewalks;
- Branches blocking signs and street lights;



Figure 6. Department of Public Works pruning a little of linden tree.

- Low canopy heights interfering with road maintenance (i.e. street sweepers, pedestrian traffic, etc.);
- Trees impairing sight visibility in intersections;
- Tree roots compromising the underground infrastructure, such as sewage, storm, and water lines.

To address these maintenance challenges in the future, all tree planting projects coordinated by the Committee will be planned to avoid these issues and the Public Works Department will be involved in decisions about tree planting location(s).

Planting Plan

As already discussed in this plan, urban trees provide community benefits, such as managing storm water, increasing canopy and shade coverage, and creating an aesthetically pleasing environment. The plan incorporates increasing tree canopy coverage, with an initial focus on the commercial district and Village Center.

The tree inventory revealed that there are over 300 potential planting sites throughout the Village. Figure 6 depicts a public tree planting opportunity on Park Street near the Five Corners. Many of these potential planting sites are on private land (front or side yards), which supports the goal of increasing citizen involvement. A complete street list of planting opportunities can be found in Section II of Appendix B.



Figure 7. Example of a public planting opportunity on Park Street.



Figure 8. Dying crab apples were removed (left) and replaced with 3 Autumn blaze maples (right) on Central Street.

There has already been work completed based on the Village's initial inventory which was completed in 2013. Trees assessed to be in "poor" or "dead" condition have been removed and replaced near the cemetery and on Central Street (Figure 8). Over the past three years, the Village has focused on planting trees in the Five Corners and the gateway streets leading to the downtown area. There have been 23 trees planted, funded and supported by the Preservation Trust of Vermont grant program and VTUCF. The focus on this area is founded on the belief that creating an aesthetically pleasing entrance into the heart of the community gives citizens and visitors a clear vision of Village environmental, economic, and social priorities.

The Committee is committed to increasing the number of trees on public and private property while at the same time ensuring that important historic and cultural properties that give Essex Junction its unique street character are enhanced, not obscured, by new plantings. Many of these sites are more favorable to long-term tree health due to larger growing space, more soil volume, moisture availability, reduced soil compaction, and reduced effects of road salt.

Contingent on funding on an annual basis and interest from Essex Junction property owners, the Committee and the Public Works Department will offer to plant a tree on private property (those priority sites identified in the inventory) and maintain it for one or two years. Tree care pamphlets will be available from the Committee if requested by the property owner. The benefits of partnering with private landowners are not only an increase in urban forest canopy, but also reduced tree maintenance responsibilities for the Village. To increase the number of trees planted in the Village, the Committee will offer workshops and events that spread awareness surrounding the benefits of urban trees. Building awareness will lead to an increase in private landowner participation. A full description of these initiatives can be found in Section III.

For all tree plantings in the Village, the tree and site selection process is the responsibility of the Committee working in concert with Public Works and the Community Development Department. The Vermont Tree Selection Guide created by VTUCF (available at www.vtcommunityforestry.org) will be consulted, as well as other tree selection guides. Preference will be given to local nurseries as tree vendors. Currently, the Village is investigating the possibility of partnering with The Center for Technology Essex (CTE) to establish a Street Tree Nursery, which could provide trees for the Village of Essex Junction.

II. Partners, Operations and Funding

Goals

I. Create a five-year timeline with associated budget that can be revisited and refined each fiscal year from 2014–2019.

II. Strengthen local collaboration among the Tree Advisory Committee, the Planning Commission, Community Development Department, Public Works Department, and Village Trustees.

III. Continue collaboration with the Vermont Urban & Community Forestry Program to explore state and federal funding opportunities to assist and support the program.

Operations and Partners

The main goal of the Committee is to strengthen existing partnerships and foster new collaborations to further the maintenance and stewardship of Essex Junction's urban forest. The Committee provides oversight for the planting, maintenance, protection, and removal of trees on public streets, parks, and other Village-owned properties. Since the Committee's establishment in 2014, the Public Works Department has engaged in tree planting and maintenance with guidance from the Committee. The Committee meets monthly, and all meeting minutes and agendas can be found on the Village of Essex Junction website (www.essexjunction.org/tree-advisory-committee).

The Committee partners with the following organizations to assist with the outlined goals:

- Essex Junction Public Works Department
- Village of Essex Junction Community Development Department
- Village Planning Commission
- Essex Junction Trustees
- Essex Junction Tree Warden
- Essex Junction Recreation and Parks
- The Essex Junction School District
- The University of Vermont
- Vermont Urban & Community Forestry Program, Department of Forests, Parks, & Recreation
- Vermont Department of Agriculture
- Green Mountain Power

The Public Works Department, in partnership with the Committee and the Essex Junction Tree Warden, is responsible for maintaining the public ROW trees and implementing the planting plan. The general maintenance and planting responsibilities of Public Works is not a part of the Committee's budget.

The Committee hopes to partner with the Essex Junction Planning Commission and Community Development Department in the future to review landscape plans and tree selection in development applications, when tree planting is proposed on Village owned property as part of

the development application, as outlined in the Village Tree Policy. The Committee may also serve as an advising body, when needed, regarding tree species selection, site selection, and placement.

VTUCF has been a key supporter and stakeholder in establishing the Committee as a Village advisory organization. The Village was awarded a canopy Grant from VTUCF in 2013 which was utilized to fund the initial public tree inventory of the Village, the development of this management plan, and training for Committee members and Public Works employees in urban tree maintenance. In 2013 VTUCF also selected Essex Junction as a pilot community for a project titled, *The Care of the Urban Forest*, funded by the USDA Forest Service, and focused on assisting priority Vermont communities in moving their tree programs forward. Working with VTUCF supports the Committee and has enhanced the Committee's partnerships with the University of Vermont and the Vermont Department of Forests, Parks and Recreation.

Funding

The Tree Advisory Committee annual budget is included in the Public Works Department's Operations and Maintenance budget. These funds are allocated for tree plantings, educational outreach, tree removals, tree care and maintenance. Additionally, the Committee will seek and apply for funding opportunities as they arise, such as grants from the VTUCF and the USDA Forest Service.

III. Community Engagement and Outreach

Goals

- I. Engage community members through outreach programs that encourage citizen involvement in the stewardship of trees in the community.
- II. Increase the Village's overall tree canopy cover by actively encouraging residents and business owners to plant trees on private land.
- II. Coordinate Arbor Day activities with local schools such as tree plantings on school grounds, Village parks, or other public land.
- III. Apply for Tree City USA designation through the National Arbor Day Foundation and fulfill annual designation requirements in line with the Village of Essex Junction Tree Policy.

Community Engagement and Outreach

One of the primary purposes of this management plan is to engage private landowners, business owners, and all other future stakeholders by increasing awareness of all benefits—environmental, economic, and social wellbeing—of tree planting.

Enhancing community outreach and stewardship of the urban forest has been a priority of the Committee. In 2014 the Committee held its first “Planting Tree and Care Workshop,” and will continue to offer other workshops. The initial workshop was successful, with the Essex Junction Tree Warden teaching 18 participants about the basics of tree biology and tree care. Over the 2014 summer season, the Committee had an informational table at the Five Corners Farmer’s Market. Citizens were educated on future threats to trees, as well as the Committee’s role in the Village. The committee has also worked to engage the youth of the community through such events as Arbor Day, which in Vermont falls on the first Friday in May; the first two celebrations were held at Summit Street School. Students who participated in Arbor Day 2013 can be seen helping to plant a public tree in Figure 9.

A variety of local and social media has been contacted to promote the Committee’s outreach activities. A few examples include: The Essex Reporter, Front Porch Forum, Facebook, and the Village Newsletter.

The next step for developing outreach will be informing the public on how they can view the urban tree inventory data online. Empowering citizens to access information about the types of public ROW trees along their property will connect them to their community trees and will encourage them to be active stakeholders in the urban forest. The Committee plans to enhance its website to include additional resources for the community. These next steps build upon the goal of engaging community members with the development of the Village's urban forest.

Like the urban forest, which is constantly evolving, it is the hope that through community engagement this plan will be a living document and continue to evolve.



Figure 9. Children planting a tree on Arbor Day

Appendix A: Essex Junction Tree Policy

I. Purpose

It is the purpose of this policy to promote, protect, and enhance public health, safety, and general welfare by providing a mechanism for the planting, maintenance, protection, and removal of trees and shrubs on public streets, parks, and Village-owned properties within the Village of Essex Junction. This policy also provides for the establishment of the Essex Junction Tree Advisory Committee to engage citizens in the stewardship, management, and recognition of the Village's tree resources.

II. Definitions

- Certified Arborist: A person certified by the International Society of Arboriculture as having specialized knowledge, experience, and training related to arboriculture.
- Diseased Tree: Any tree or shrub with a combination of structural defects and/or a health condition, which makes it subject to a high probability of failure.
- Hazardous Tree: Any tree or shrub, public or private, with visibly defined structural defects likely to cause failure of all or part of the tree, and be a danger to public safety.
- Public Tree: All trees and shrubs on any Village park or other property owned or controlled by the Village on any public street, alley, median, sidewalk, or highway within the public right-of-way, as well as school district trees.
- Public Right-of-Way: Right-of-way is measured from the center line of any road within the Village. Distance out from centerline will vary depending on individual streets. This information is available from the Department of Public Works.
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- Street Tree: Any tree or shrub located on either side of all streets, avenues, bike paths, and located within the bound of all Village right-of-ways.
- Tree: Any self-supporting woody plant together with its root system, growing upon the earth with one trunk of at least three inches in diameter at a height of four and one-half feet above the ground, or a multi- stemmed trunk system with a definitely formed crown.

III. Jurisdiction/Authority

The Trustees shall appoint a Tree Warden, under 24 V.S.A. § 871. The Tree Warden may appoint a Deputy Tree Warden under 24 V.S.A. § 2505. Through its Tree Warden, the Village shall have control of all Public Trees and shall have the authority to plant, maintain, protect, and remove such trees.

IV. Administrative Responsibilities/Administration

The Trustees shall appoint a Tree Advisory Committee for specific purposes as outlined in the Tree Committee's Charter. The Essex Junction Tree Advisory Committee shall be an advisory organization that works with the Tree Warden to promote the improvement and preservation of a healthy environment of the Village as it relates to Public Trees.

The Essex Junction Tree Advisory Committee shall consist of at least four Essex Junction residents and one Essex Junction municipal staff person, all whom shall be appointed by the Trustees. Members will serve staggered terms of three years and will serve without compensation.

The Essex Junction Tree Advisory Committee and the Essex Junction Tree Warden shall be responsible for the following activities:

- a. Develop a street tree master plan;
- b. Conduct a street tree inventory;
- c. Assist Village staff and the Essex Junction Planning Commission in reviewing all landscape master plans.
- d. Assist Village staff and the Essex Junction Planning Commission in updating Land Development code regarding tree planting and maintenance requirements;
- e. Educate citizens of the Village about benefits and care, and threats to trees; and
- f. Organize an annual Essex Junction Arbor Day celebration.

V. Provisions for the Management of Community Trees

The Village is supportive of planting and maintaining trees along its streets, roads, and on other Village and private property. The benefits of street trees are well documented and this policy is consistent with and recognizes those benefits.

The Village shall have the right to plant, maintain, and remove Public Trees as may be necessary to insure public safety, or to preserve or enhance the symmetry and beauty of public right of ways and Village property as set forth in the following guidelines.

a. Tree Planting

- i. All Public Trees shall be planted in accordance with American National Standards Institute (ANSI) A300 Standards for Tree Care Operations.

- ii. Trees shall be selected from the booklet, “Recommended Trees for Vermont Communities”, published by Vermont’s Urban & Community Forestry Program, a copy of which shall be maintained by the Tree Advisory Committee and available for public viewing at the Village Office.
- iii. All newly planted public trees will carry a one year maintenance and replacement guarantee
- iv. No person shall plant any tree within Village right-of-ways or Village property without written permission of the Tree Warden and Community Development Director.
- v. Trees should be sited based on above and below ground site condition. All Public Trees will be planted at a minimum of 30 feet from intersections.

b. Tree Maintenance

- i. All Public Tree care shall be in accordance with the ANSI A300 Standards for Tree Care Operations.
- ii. All contractors who work on Public Trees shall have on staff a certified arborist.
- iii. It shall be the responsibility of any person owning property bordering on a public street, sidewalk, recreational path, or other public right-of-way to ensure trees or shrubs that are dead, diseased, or injured do not pose an unreasonable risk of property damage or bodily injury occurring within such public right-of- way.

c. Tree Removal

- i. In accordance with 24 V.S.A. § 2502, the Village Tree Warden may remove any Public Tree that is diseased, dying, or dead which create a hazard to public safety or threaten the effectiveness of disease or insect control programs.
- ii. If, in the opinion of the Tree Warden, a Public Tree constitutes no hazard to public safety and is determined to be healthy but needs to be removed, then the Tree Warden will warn a public hearing and shall be in accordance with 24 V.S.A. § 2509:

A Public Shade Tree within the residential part of a municipality shall not be felled without a public hearing by the tree warden, except that when it is infested with or infected by a recognized tree pest, or when it constitutes a hazard to public safety, no hearing shall be required. In all cases the decision of the Tree Warden shall be final except that when the Tree Warden is an interested party or when a party in interest so requests in writing, such final decision shall be made by the Trustees.

- iii. Two weeks before the scheduled removal of the tree the public will be notified via the Trustees meeting and/or paper of record and a sign will be posted on the Public Tree of the proposed action to be taken and the Public Hearing time, date, and place.

iv. Anyone contesting the removal of a Public Tree must do so to the Tree Warden between the time of posting the tree removal notice and the hearing, at the hearing or within 24 hours of the decision having been made. After informing the Tree Warden, a written appeal must be submitted within two weeks to the Tree Warden and the Trustees. The Tree Warden will notify the appellant by certified mail of the hearing with the Trustees; the decision of the Trustees will be final.

d. Tree Protection

- i. No Public Tree shall be pruned, removed, or harmed in any way without the written permission of the Tree Warden.
- ii. Any construction within the outer most drip line of Public Trees requires consultation with the Tree Warden who may provide specific written requirements for additional protections.

VI. Control of Hazardous Trees and Trees Infested with a Pest or Pathogen

The Village, in consultation with the Tree Warden, may remove or cause to be removed any Public or Private Tree or part thereof which is in an unsafe condition or which by reason of its nature is injurious to the Village infrastructure or other public improvements, or is affected with any injurious disease, insect, or other pest, in accordance with 24 V.S.A. § 2511:

When an insect or disease pest infestation upon or in public or private shade trees threatens other public or private trees, is considered detrimental to a community shade tree preservation program or threatens the public safety, the tree warden may request surveys and recommendations for control action from the commissioner of agriculture, food and markets. On recommendation of the commissioner of agriculture, food and markets, the tree warden may designate areas threatened or affected in which control measures are to be applied and shall publish notice of the proposal in one or more newspapers having a general circulation in the area in which control measures are to be undertaken. On recommendation of the commissioner, the tree warden may apply measures of infestation control on public and private land to any trees, shrubs or plants thereon harboring or which may harbor the threatening insect or disease pest. He may enter into agreements with owners of such lands covering the control work on their lands, but the failure of the tree warden to negotiate with any owner shall not impair his right to enter on the lands of said owner to conduct recommended control measures, the cost of which shall be paid by the municipality.

If the Tree Warden shall determine with reasonable certainty upon inspection or examination that any hazardous tree herein defined exists in or upon any private premises within the Village, and may damage or cause injury in the Village ROW, he/she may notify the owner of such premises,

or their agent, in writing that said nuisance tree must be treated, trimmed, removed, or otherwise abated. Said written notice shall specify the nature and exact location of the hazardous tree, the manner in which the hazard shall be abated, and the time limited in which the hazard shall be abated which shall not be less than fifteen (15) days after issuance of said notice unless the Tree Warden shall determine that immediate action is necessary for public safety.

Adopted by the Village Trustees on 11/12/13.

Appendix B: Essex Junction Tree Data

I. Trees with less than 5% representation within the public ROW.

American elm	broadleaf evergreen large	elm	quaking aspen
Austrian pine	broadleaf evergreen medium	European mountain ash	red cedar
Balsam fir	broadleaf evergreen small	gingko	red mulberry
basswood	Chinese elm	honey locust	red spruce
birch	coniferous evergreen large	Japanese tree lilac	scarlet oak
black locust	coniferous evergreen medium	lilac	Scotch pine
blue spruce	cottonwood	maple	serviceberry
box elder	crabapple	Norway spruce	staghorn sumac
broadleaf deciduous large	eastern red cedar	oak	sugar maple
broadleaf deciduous medium	eastern redbud	pear	tulip tree
broadleaf deciduous small	eastern white pine	plum	white ash

II. Planting opportunities by street.

Business/ Residential	Street	Vacant Private	Vacant Public	Vacant Town	Grand Total
R	Abnaki Ave	9			9
R	Acorn Circle	2			2
R	Adams Ct	3			3
R	Arlington St	6			6
R	Aspen Dr	16			16
R	Athens Dr	1			1
R	Beech St	2			2
R	Briar Ln	1			1
R	Brownell Dr	3	1		4
R	Camp St	2			2
B/R	Central St	3			3
R	Cherokee Ave	5			5
R	Cherry St	1			1

Business/ Residential	Street	Vacant Private	Vacant Public	Vacant Town	Grand Total
R	Corduoy Rd	4			4
R	Countryside	4			4
R	Curtis Ave	3			3
R	Cushing Dr		1		1
R	Drury Dr	4			4
R	Dunbar Dr		3		3
R	E Williams St	12			12
R	East St	6			6
R	Edgewood Dr	6			6
R	Elm St	1			1
R	Fairview Dr	9			9
R	Grandview Ave	14			14
R	Grant St	1			1
R	Greenwood Ave	1			1
B/R	Hiawatha Ave	1			1
R	Hillcrest Rd	1			1
R	Iroquois Ave	16			16
B/R	Jackson St	9			9
R	Juniper Ridge	1	1		2
R	Killoran Dr	1			1
R	Kiln Dr	4			4
R	Lamoille Ave	1			1
R	Lavoie Dr		1		1
B/R	Lincoln St	1			1
B/R	Main St	4		2	6
R	Mansfield Ave	2			2
B/R	Maple St	22	1		23
R	Maple St Ext	3			3
R	Mason Dr	2			2
R	McGregor St	2			2
R	Mohawk Ave	4			4
R	Murray Rd	10			10
R	North St	3			3
R	Oneida St	1			1
B/R	Park St	6			6
B/R	Pearl St	5			5
R	Pine Ct	3			3
B/R	Prospect St	2			2

Business/ Residential	Street	Vacant Private	Vacant Public	Vacant Town	Grand Total
R	Redwood Terrace	7			7
R	Rivendell Dr	2			2
R	Rosewood Ln	6			6
R	Rotunda Ave	6			6
R	S Summit St	17	3		20
R	Seneca Ave	8			8
R	South St	13	1		14
R	South St Ln	2			2
R	Southview Rd	2			2
B/R	Summit St	2			2
R	Sycamore Ln	3			3
R	Tamarack Dr	6			6
R	Tyler Dr	3			3
R	Upland Rd	5			5
R	Villa Dr	4			4
R	W Hillcrest Rd	1			1
R	Waverly St	1			1
B/R	West St	15	2		17
R	Williams St	1			1
R	Woods End Dr	5			5
R	Wrisley St	1			1
	Grand Total	333	14	2	349

References

USFS Urban Tree Canopy Assessment Pittsburgh Urban Forest
management Plan [http://www.essexjunction.org/boards/tree-
advisory-committee/](http://www.essexjunction.org/boards/tree-advisory-committee/)