

PART 4

OPEN SPACE MANAGEMENT MISSION

Cemeteries

Community Gardens

The Emerald Necklace

Public Shade Trees



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Public Shade Trees

INTRODUCTION

Boston’s public shade trees – those lining its streets and avenues, and those found in its parks, playgrounds, cemeteries, urban wilds, and squares – help make Boston a beautiful city. The city recognizes trees as aesthetic and social resources as well as an important component of the urban ecosystem, providing environmental protection. The public shade tree goals for Boston are to enable stewardship of the existing legacy of mature trees and effective planning for future planting and maintenance needs.

The aesthetics of the urban forest can be pictured easily: the stately elms of Mt. Vernon Street, the middle-aged oaks of American Legion Parkway, the magnificent London Plane trees of Chelsea Street, the newly replenished boulevards of Blue Hill Avenue and Columbia Road, and the tree-lined streets of many of the older neighborhoods. In parks there are countless examples of varied types: woodlands dotted throughout Franklin Park and the Emerald Necklace; informal and formal park plantings ranging from Dorchester Park to Post Office Square.

The urban forest as a beneficial ecosystem has been documented through environmental research over the last several years. Trees return oxygen to the air, filter dust and the harmful rays of the sun, provide shade, protect people and property from wind and weather, reduce air conditioning and heating costs for adjacent buildings, and generally contribute to the physical well-being of the city’s residents. Street trees also link highly developed spaces with more forested areas. They act as a green corridor that physically and emotionally connects us to nature.

The urban forest, as a social resource, is a less tangible quality that must be defined by a series of processes. Trees help residents to define their neighborhood and its special character. The single most popular request at the department is for tree pruning



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or planting. In many cases neighborhoods have organized to plant missing trees. The planting of trees fosters community spirit and helps some neighborhoods to rebuild their image and sense of identity. They also contribute to improved property values.

CURRENT INITIATIVES

Reinvestment in the city's park system through the 1990s has led to the revival of an organized and consistent implementation policy. Public shade tree maintenance and management is now at the forefront of the Parks Department's policy agenda. In 1988, the Department assembled a Shade Tree Advisory Committee made up of private citizens and experts in tree care. The Committee was instrumental in selecting a Superintendent of Trees for the City of Boston. With the new management of trees, the Department has effectively worked toward eliminating a backlog of constituent tree maintenance requests (i.e., pruning and removal) and initiated a systematic approach to tree maintenance citywide. It has also embarked on efforts to coordinate city agencies regarding tree planting and has improved utilization of contract funds to address tree maintenance and planting. The Department is increasing its community programming in an effort to educate the public and involve residents in their neighborhood's tree maintenance.

The Comprehensive Shade Tree Policy for the City of Boston was initially developed in 1993 and is currently in revision. The policy is a document that brings together all regulations, technical specifications, operations, and programs. As a publicly visible document, implemented and enforced by the Parks Department, it is used to enhance Boston's urban forest and contribute to a more beautiful, comfortable, and healthy environment for Boston's residents and visitors.

Recently the Department has focused its attention on boulevards. Boulevards are the gateways and major thoroughfares of Boston. It is important that these gateways greet people and emphasize the importance of trees in our urban environment. Through partnerships with the Public Works Department (PWD) and the Massachusetts Highway Department (MHD), extensive planting projects have been completed and are planned for the future. These plantings will link the neighborhoods of Boston as a unified community of trees.

THE NEXT FIVE YEARS

The Parks Department is the agency with regulatory and operational responsibilities for public shade trees. Being the lead agency for citywide policy as well as maintenance and planting provides an effective framework to manage tree planting on public property, and to augment tree maintenance, planting, public education, and programming.

Tree policy issues can be generally sorted into the following three categories:

- Statutory Responsibility and Regulations
- Planting, Inventory, and Maintenance
- Community Involvement and Programming

Based on these categories, the following sections summarize both city policy and recommendations that will be acted upon in the next five years.



Statutory Responsibility and Regulations

The Parks Commissioner is by statute (Chapter 87, Massachusetts General Laws) the Tree Warden of the city. Together with the Superintendent of Trees, the Commissioner is responsible for establishing a work plan for trees within the statutes and regulations that have already been established. The current draft of the Comprehensive Shade Tree Policy brings all regulations, technical specifications, operations, and programs together for review and adoption by the Parks Commission. By virtue of its mandate to maintain public shade trees, it is essential that the Parks Department be involved in all decision-making regarding planting of trees on public land by city agencies.

During the past nine years, the Parks Department has undergone significant changes in its statutory responsibilities. In particular, tree management has been consolidated under the Department, which reviews and recommends changes to infrastructure plans that affect public trees. The Department has worked most closely with the Public Works Department in this respect. The most common issue on which both departments cooperate is sidewalk reconstruction. The mandates of both departments – healthy trees and safe sidewalks – are ensured through a process of notification and review. Both departments also work together on “amendments to private property” that impact public trees. Both the Parks Department and the Public Works Department must approve any activity undertaken by a private individual or entity that requires the removal of a public tree. That private individual or entity must replace the tree or trees on a per-caliper-inch basis in a location and per specifications approved by the Parks Department.

Recommendations

- Adopt by vote of the Parks Commission the updated Comprehensive Shade Tree Policy for the City of Boston.
- Formalize a permitting process for public and private agencies and individuals undertaking tree planting, tree maintenance, or construction affecting public shade trees in accordance with the stated Tree Policy.
- Formalize a notification and review process with the Public Works Department to include the submittal of new reconstruction plans at least six months in advance of the construction date. Work with the Public Works Department to have a Public Works liaison appointed to coordinate with the Parks Department on contracts that affect public trees.
- Review BRA and EDIC specifications and plans that impact public trees.
- Invite a Public Works staff member to be a member of the Shade Tree Advisory Committee.

Inventory, Planting, and Maintenance

Over the Parks Commission's 125-year history the tree inventory has been replenished through city budget expenditures on improvements to streets and parkland. With the exception of the Emerald Necklace, little historical data exists to substantiate a general sense among tree advocates that the inventory contains too few young trees relative to the percentage of mature trees. A visual inspection of streets provides subjective confirmation, and the Emerald Necklace master plans identify mature trees as an issue for the future. The Parks Department has undertaken a technology initiative that will provide for tree management based on accurate, real-time data. The technology initiative has several components including an html-based (i.e., web-based) database and hand-held geographic positioning units. The data gathered during biannual tree plantings and weekly maintenance inspections will be used to build a comprehensive inventory of Boston's public trees.

Inventory

In 1997, a stem-by-stem inventory of Boston's urban forest (approximately 50,000 trees at the time) was initiated. It was a significant step in gathering management data to be used in enhancing Boston's green infrastructure. The Parks Department worked with the United States Forest Service and community volunteers to map and assess the size, species, and condition of the city's trees. In the first two years, all of Allston-Brighton, most of Roslindale, and parts of both the South End and East Boston were inventoried.

The Allston-Brighton Community Development Corporation (ABCDC) started its Street Tree Inventory Program in 1996 with a grant from the Massachusetts Department of Environmental Management. In partnership with the Boston Parks and Recreation Department, a stem-by-stem inventory of the Allston-Brighton neighborhood was conducted. The street trees of the neighborhood were inventoried beginning in June of 1996, completed in the late summer of 1997, and a database was created in 1998. To complete the Allston-Brighton Street Tree Inventory, about 45 volunteers worked for an estimated total of 300 hours in addition to their training. Eighty miles of streets were covered (about 10% of Boston's total) and 2,278 trees were counted with 39 different species identified.



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Planting

Each street tree signifies the Mayor's commitment to a green Boston. The Boston Parks Department plants approximately 1,000 new street trees every year. There are two planting seasons: fall (mid-September to November); and spring (mid-March to June). Between the years of 1994 and 2001, approximately 7,891 trees were planted throughout Boston's neighborhoods.

The Parks Department is the agency that has final responsibility for the long-term care and viability of the urban forest. With this in mind, the Department has reviewed the Sidewalk Design specifications proposed by the Transportation Department, and plans to review other agency specifications.

Maintenance

Maintenance is particularly critical in the first years after a tree is planted. Planting specifications include provisions for watering and tree replacement in the event that the tree does not thrive.

The Maintenance Division's Urban Forestry Unit is responsible for the pruning and removal of all trees under the jurisdiction of the Parks Department. In addition they supervise specialized treatments for disease such as Dutch Elm Disease and respond to such emergencies as snowstorms and hurricanes. The Department will typically prune over 2000 trees, remove nearly 400 trees, and answer over 500 emergency tree calls annually. In recent years the Urban Forestry Unit has initiated a more systematic approach to tree maintenance. Each year the Department prunes on a street by street basis, allowing it to better utilize funding and more effectively manage the urban forest. This more systematic approach has reduced the backlog of street tree maintenance requests and reduced the number of tree emergencies.

Recommendations

- Develop and implement an inventory for street and parkland trees. Use an inventory database capable of tracking new plantings, maintenance operations, and removals, and integrating with all other related city departments' utility inventories.
- Explore measures to increase the maintenance and planting capacity of the present workforce.
- Develop a citywide street tree and parkland planting and maintenance plan.
- Establish maintenance criteria for all plantings.
- Develop and implement a comprehensive urban forestry training program for Department staff.

COMMUNITY INVOLVEMENT AND PROGRAMMING

The Parks Department initiated a community tree program in 1992 in three neighborhoods: East Boston, Mattapan, and the South End. The Department provided training in tree maintenance and inventory work, and the community provided complementary manpower. The volunteer street tree inventory project followed in 1996 under the auspices of the Allston-Brighton Community Development Corporation in cooperation with Massachusetts Department of Environmental Management and the Parks Department.

The Department has outlined a new community forestry project which aims to provide Boston residents with straightforward information with regards to tree planting and care, basic ecology, and environmental ethics. The goal of this project is the development and practice of urban forestry by residents. This can be accomplished through a tangible and consistent public education program that enables communities to set planting and maintenance priorities, undertake local educational programs, and raise funds for local projects. The informational unit of the project includes development of a street tree brochure as well as planting and pruning doorknob hangers. The Department has a website for its Street Trees/ Urban Forestry unit, which is constantly updated [<http://www.cityofboston.gov/parks/streettrees.asp>].

Public/private partnerships are a consistent ingredient in successful community-based environmental management programs. A balance is struck between what each partner offers to the whole, whether it is financial or social capital. The new community forestry effort will allow the Parks Department to direct its fiscal, technical, and physical resources towards supporting functioning groups. Efforts will also be directed towards building neighborhood capacity in neighborhoods that lack effective leadership. In order to use community participation to restore and maintain Boston's urban forest, the Department

will sponsor educational programs to include seasonal tree walks, street tree inventory training, and lectures.

The Department also sponsors special programs in tree planting. Arbor Day has become an annual event in the Department's Urban Forestry Unit. In 2002, the Department hosted an Arbor Week program. The events target both children and adults and include community tree planting, tree walks, and tree care workshops. In prior years, the Department organized the Cooperative Tree Planting Program that successfully combined the investment of residents in the purchase of trees with the Parks Department's abilities in planting and maintenance. Although this program is no longer active, its essence has been incorporated into the new community forestry agenda – residents invest in their local spaces by partnering with each other and the Parks Department to plant and care for public trees.



Franklin Park

The Shade Tree Advisory Committee, reactivated in 1992, meets and reviews policy regarding Boston's public shade trees. The group is currently revising the Shade Tree Policy. In addition to statutory responsibilities, the group also addresses issues such as tree inventory, fundraising, and public education. The advisory committee examines all these issues and local tree projects in the broader context of sustaining a diverse and structurally viable urban forest.

Recommendations

- Support community efforts to establish partnerships to advocate for and to support tree issues in Boston.
- Formalize a workshop series that provides technical support to neighborhood-based tree care and advocacy groups.
- Establish an educational strategy to acquaint citizens and public agency personnel, specifically Parks Department, Public Works, BRA, EDIC, and Boston Transportation Department, with basic Parks Department procedures for care of trees.
- Expand Arbor Day and other urban tree programming, including education for all ages.
- Develop environmental education programs with an arboriculture focus for the Boston Public Schools.
- Partner with other public agencies and private organizations to raise funds for tree care and programming.
- Join a community forestry association and attend community forestry events in order to keep abreast of the current theories and practices.