

**City of Austin**  
**Urban Forest Management Plan (DRAFT)**  
**December 10, 2010**

## **1. Continuing Care of Municipally Owned Trees**

### **Introduction**

Right-of-way tree work is largely handled by the Urban Forestry Program, with occasional assistance from other city departments where jurisdictions may overlap. The Program is responsible for an estimated 125,000 trees along approximately 2,200 miles of road ways. The Program is also responsible for an estimated 165,000 trees within approximately 4,700 acres of actively managed parkland. The Program assists in managing an additional 11,300 acres of land maintained as a combination of natural forests, watershed protection zones and greenbelts. The Program also assists in managing trees along approximately 62 miles of trails within otherwise unmanaged areas.

The Urban Forestry Program strives to prevent the removal of any publicly owned native tree whenever possible. If a potentially hazardous tree is especially large or otherwise significant, the City of Austin may accept an elevated level of risk and the tree may be placed on the program's Monitor List. The decision to closely monitor and care for a publicly owned tree, instead of remove, is carefully scrutinized.

The number of trees on the Monitor Tree List fluctuates as trees are regularly added and removed from the list for a variety of reasons. Every tree poses some level of risk; however a tree becomes a hazard when it is past an acceptable level of risk. Trees are assessed for their level of risk using a form (6) based on nationally recognized standards, and adapted specifically to the urban forest of Austin. Community leaders and residents may be willing to accept an elevated level of risk for specific trees.

Potentially hazardous trees are often added to the list. Large and/or significant trees, or trees which may be impacted by construction activity, may be added to the list whether they show signs of decline or not. Trees are removed from the list when they are rehabilitated, show no signs of decline for an appropriate period of time after construction activity or are removed from public property. Trees on the Monitor Tree List are closely monitored and inspected on a regular rotation; every 3 months, 6 months or 1 year. More frequent or special inspections are also made as necessary during construction activity or other major events.

The Urban Forestry Program spends the majority of its time responding to and addressing concerns and complaints from citizens on a reactionary basis. However, the Program performs proactive inspections and maintenance work whenever resources allow and is actively implementing a system of documenting tree maintenance in parks. The Documenting Park Maintenance SOP (12) shows how records will be maintained until a tree management software program is acquired. The program's Hazard Evaluation Form (6) shows the criteria used to evaluate potentially hazardous trees.

The Urban Forestry Program removes approximately 700 – 1000 trees every year. The Program's Fiscal Year 2009 Accomplishment Report (5) and Fiscal Year 2010 Accomplishment Report (6) provide statistics for tree removals and pruning. The Public Tree Notice (11) is a door hanger used to inform homeowners of removals or pruning work to be performed in their neighborhood.

## **1.1 Identification and Removal of Hazardous Trees**

**Background:** Complaints and concerns about trees expressed to the Program through 311 is the primary method by which trees issues are brought to the attention of the Program.

**Goal:** Continue to utilize the 311 call center as a single point of contact for citizen complaints

**Background:** Employees within many other city departments regularly interact with public trees in the course of their regular duties. If these employees had basic training, they could help the Program identify hazardous individuals or entire target areas, saving time and money.

**Goal:** Educate and utilize City employees to identify hazard trees.

**Background:** The Monitor Tree List is used to closely and proactively monitor the health and safety of significant trees while limiting the amount of liability the City of Austin is exposed to.

**Goal:** Continue to utilize the Monitor Tree List

**Background:** Proactive maintenance improves tree health and longevity which reduces the number of trees which must be removed each year.

**Goal:** Establish a cyclic trimming program with a goal of a 5 year rotation.

## **1.2 Timeliness**

**Background:** The Urban Forestry Program is the primary agency which responds to emergency tree issues during and after normal business hours and received 340 such requests during fiscal year 2009 and 476 requests during fiscal year 2010.

**Goal:** Respond to emergency situations within 1 hour. This may not be logistically possible during severe storm events as a queue will quickly build up.

**Background:** The Urban Forestry Program received 1,962 routine maintenance requests during fiscal year 2009 and 2,515 routine maintenance requests during fiscal year 2010. Of all the routine maintenance requests received, the majority is submitted by private citizens. Routine maintenance requests are considered over-due after 30 days.

**Goal:** Respond to routine maintenance requests within 10 days from the time they are assigned to the Urban Forestry Program.

**Background:** The Urban Forestry Program reviews all utility line clearance work to be performed on all property owned by the City of Austin.

**Goal:** Review and return utility vegetation work plans within 10 business days.

### **1.3 Quality of Work**

**Background:** Submittal of accomplishment reports provide hard numbers which show the successes and efficiency of the Urban Forestry Program.

**Goal:** Produce monthly accomplishment reports within 5 business days after the last day of the month. Supplement that report with the number of work orders completed and requested as soon as those become available.

**Background:** Meeting expectations, and exceeding them where possible, provides the Urban Forestry Program with ammunition to request additional funding to add program staff and increase the ability to perform proactive work.

**Goal:** Assign work to in-house crew and contracted crew with set timelines and measures of efficiency

**Background:** Inspections performed to investigate complaints or concerns from citizens provide a valuable opportunity to interact with and educate thousands of individuals each year who call 311.

**Goal:** Call the work order 'requester'. Inform them of work to be performed and when. Educate them where possible on the role of the Urban Forestry Program.

## **2. Planting New Trees**

### **Introduction**

The Parks and Recreation Department has a goal for the Urban Forestry Program to plant 2,000 trees per year.

For the 2010-11 planting season, professional forestry staff will be visiting each nursery in the area and selecting individual trees in an effort to acquire the highest quality stock available.

Comprehensive planting plans are developed months before the trees are installed. First, existing trees and potential planting locations are inventoried using handheld GPS/data collectors. This information is uploaded to GIS software to create a plan which shows existing trees and proposed trees, as well as other significant site characteristics. Approval from the park manager and park planning staff is requested prior to moving forward with plans. Input is requested from partner groups and neighborhood associations. Planting days often involve at least one public relations element such as signage or a large event.

Planners, park managers and neighborhood groups are involved whenever possible to ensure planting designs are sustainable and to avoid future site conflicts. Trees are usually planted by volunteers overseen by forestry staff or urban forest stewards. After planting new trees, supplemental water is provided for a minimum of two years by newly installed irrigation or by water truck.

The Urban Forestry Program strives to forge new partnerships with other organizations each year including non-profit groups and neighborhood associations. The Program also collaborates on new projects with existing partners such as Austin Energy, the municipal electric utility owned by the City of Austin. One such project accomplished during the 2010-11 planting season is the creation of an arboretum of about 30 small sized trees suitable for planting beneath power lines.

The Program's Fiscal Year 2009 Accomplishment Report (5) includes numbers of trees planted during the 2008-09 planting season. A more detailed description including numbers and locations can be found in the Planting Site Details spreadsheet (7). Longhorn Shores Planting Plan (10) is an example of a planting plan.

## **2.1 Planting**

**Background:** The Urban Forestry Program strives to increase species diversity by planting a wide variety of native and adapted trees, some of which are difficult or impossible to find in a nursery.

**Goal:** Study the possibility of starting a nursery to produce trees for planting on public property

**Background:** Measures of efficiency and performance allow employees to evaluate current policies, identify possible improvements and set goals

**Goal:** Identify a survival percentage to achieve and set a goal

**Background:** Many high-profile and high-traffic areas are under-stocked

**Goal:** Develop a list of priority planting locations

**Background:** Volunteer tree planting events are the Program's greatest publicity tool.

**Goal:** Establish a specific number of special events such as Arbor Day, Veteran's Day and It's My Park Day

## **2.2 Cooperation with Planting Partners**

**Background:** Collaborating with other organizations greatly increases the Program's impact in the community.

**Goal:** Form new and lasting partnerships with other organizations. Collaborate on new projects with existing partners.

**Background:** Austin has an abundance of people willing to volunteer their time and services to enhance the quality of the urban forest. The Urban Forestry Program strives to meet the needs of the community while efficiently utilizing volunteer time. The Urban Forestry Program has two types of partners – individuals and groups – and two types of needs – planting and maintenance.

**Goal:** Develop an addendum to the existing adopt-a-park agreement to outline the partnership with either type of partner addressing either type of need.

## **3) Inventory**

### **Introduction**

In 2008, the City of Austin hired a private firm to perform a sample inventory. The data was used to infer conclusions about the entire street tree population. A conservative estimate would be approximately 125,000 street trees. The result of their work can be viewed in their report (9) to the City of Austin.

In 2010, the Urban Forestry Program performed an analysis using GIS of the existing managed park space and calculated an average number of trees per acre. The results show that the Program is responsible for approximately 165,000 trees within 4,700 acres of managed park land. The other approximately 11,300 acres of land under the care of the Parks and Recreation Department is listed as greenbelts and preserves where the trees are not actively managed.

The Urban Forestry Program is currently reviewing tree management software programs to assist in maintaining and updating the tree inventory as well as tracking the maintenance records of individual trees. Special consideration is being given to ensure the new software will mesh well with the existing work order system.

### **3.1 Inventory**

**Background:** The Parks and Recreation Department is currently working in conjunction with the Urban Forestry Board to establish a city wide canopy coverage goal

**Goal:** Establish a city-wide canopy coverage goal including a timeline of accomplishments

**Background:** Software designed specifically for urban forest management provides an invaluable tool by combining records management and GPS data into one system which increases efficiency and quality of service.

**Goal:** Acquire urban forest management software to manage the existing data and data to be collected in the future

**Background:** Thousands of park trees are captured each year with GPS/Data collectors. Analysis of this information highlights priority areas for future planting, maintenance or removal work.

**Goal:** Continue to new add data to the existing tree inventory and update existing data wherever possible

**Background:** Sharing information between City departments saves time and money by reducing overlap where unnecessary

**Goal:** Maintain existing inventory database to be accessible to all city departments

**Background:** The Urban Forestry Program has successfully applied for grant funding to hire intern staff and purchase accompanying GPS/data collection units to inventory public trees. The equipment and the interns have both proven themselves to be invaluable

**Goal:** Continue to keep at least one intern on staff whenever possible. Re-apply for grant funding if necessary.

## **4. Budget/Funding Sources**

### **Introduction**

The annual budget of the Urban Forestry Program is approximately \$1.5 million – which is approximately 3% of the budget of the Parks and Recreation Department. As of January 2011 the Urban Forestry Program will consist of 24 full time regular employees, 1 part time administrative assistant and 1 intern. An informal survey of other successful urban forestry programs from across the country found that the Urban Forestry Program is currently understaffed. Based on the size of the population of trees for which the Program is responsible, it is currently understaffed by 35 – 50 employees.

New development in the city of Austin must be approved through a site review process which allows different city departments to comment on proposed changes. The Urban Forestry Program is responsible for ensuring that impacts to trees on public property comply with city code, while the City Arborist Program mirrors that effort for trees on private property.

When developers are unable to comply with City of Austin code, they must mitigate for damages which occur to trees, including any trees removed. Mitigation by planting replacement trees on the same site is most preferable. However, if developers are unable to reasonably accommodate replacement trees on the same site, they are allowed to make monetary payments. Mitigation for impacts to trees on private property goes to the Urban Forest Replenishment Fund (UFRF) and mitigation for impacts to trees on public property goes to the Planting for the Future Fund (PFF).

Although the UFRF is managed by the City Arborist Program, it supplies the Urban Forestry Program with new trees to be planted on public property including parks and medians. The UFRF also funds the Urban Forest Grant Program which was established to promote urban forest conservation and other projects which benefit Austin's urban forest.

The PFF is managed by the Parks and Recreation Department. It is used exclusively for planting trees and is funded by mitigation for impacts to trees on public property as well as about \$20,000 in annual donations from private citizens via the Austin Energy monthly bill.

The budget (3) of the Urban Forestry Program includes actual spending from fiscal year 2010 and projected budget for fiscal year 2011. The Forestry Personnel Organizational Chart (2) shows the structure of the Urban Forestry Program, and provides names and titles. The fiscal year for the City of Austin is October 1 – September 30.

## **4.1 Budget**

**Background:** The Urban Forestry Program is currently understaffed considering the amount of responsibility placed upon it.

**Goal:** Increase the Program's general fund budget to accommodate additional employees and equipment

**Background:** The UFRF and the PFF are both excellent and accessible funding sources for the Urban Forestry Program and its partners

**Goal:** Continue to utilize the UFRF and PFF as funding sources for special projects

# **5) Outreach and Community Involvement**

## **Introduction**

The Urban Forestry Program utilizes its own website as the main conduit for conveying information to the general public, other city departments and commercial tree care companies. The Program strives to keep the most current and relevant information on the website and a Facebook page regarding on-going projects, volunteer opportunities and tree care practices. Information on the website also includes tree ordinance Chapter 6-3 Trees and Vegetation. The Program updates information in-house.

In the fall of 2008, the Urban Forestry Program launched the Urban Forest Steward Class, a 20 hour classroom program designed to teach citizens about basic tree care and urban forestry. Urban Forest Stewards are encouraged to assume leadership roles in tree planting or tree maintenance volunteer projects. Austin Parks Foundation began providing assistance to the program in the fall of 2010 by advertising and providing online registration on their site.

Leaf for a Leaf is a partnership between the City of Austin Library System and the Urban Forestry Program to promote the idea that borrowing books from a library instead of purchasing books is a form of recycling, which conserves forest products. Leaf for a Leaf also promotes the Urban Forest Steward Class.

## **5.1 Programs**

**Background:** The Urban Forestry Program receives a significant amount of volunteer assistance during tree planting events. Creating additional opportunities for citizens to volunteer would increase the amount of assistance.

**Goal:** Continue providing opportunities for community involvement through volunteer work and expand volunteer opportunities by diversifying work types available

**Background:** The Urban Forest Steward class is offered by the Urban Forestry Program to citizens interested in the urban forest. The class is a partnership between the Urban Forestry Program, Austin Parks Foundation and the City of Austin Library Department. Goals include public outreach and education and volunteer training.

**Goal:** Continue training volunteers as Urban Forest Stewards and utilize existing Stewards to supervise other volunteers.

## **5.2 Public Education**

**Background:** Developing a large and involved ‘fan base’ is contingent upon public education about the role of the Urban Forestry Program. Potential volunteers often seek out opportunities posted on the website of different non-profit groups, as well as the PARD website itself.

**Goal:** Improve the quality, volume and timeliness of information available to the public through the Urban Forestry Program website and Facebook page. Post information regarding on-going projects and volunteer opportunities.

City of Austin, Urban Forestry Program Website  
<http://www.ci.austin.tx.us/parks/forestry.htm>

## **6) Professional Standards**

### **Introduction**

The City of Austin has been a Tree City USA for 18 years. Requirements for the designation of Tree City USA include presence of a Tree Board or Department, a tree care ordinance, a tree related program with an annual budget of at least \$2 per capita, an Arbor Day observance with a Proclamation, and submittal of an application which documents these requirements, yearly.

The City of Austin received a Tree City Growth Award for calendar year 2008. This award is obtained by submitting an application to the National Arbor Day Foundation which demonstrates that yearly expenditures for tree programming has met or exceeded the previous year’s budget and that the tree-related department has improved its projects according to a provided point system requirement. The Urban Forestry Department intends to continue attaining the certification and award yearly, which shall entail meeting the standards set out by the National Arbor Day Foundation and improving programming in the department each year.

The Urban Forestry Program currently employs seven ISA Certified Arborists, including a Municipal Specialist and a Utility Specialist. The ISA ‘promotes the professional practice of arboriculture and fosters a greater worldwide awareness of the benefits of trees.’ ISA certification assures that individuals who practice arboriculture are qualified to do so.

Just as the ISA certifies individuals, the Society of Municipal Arborists (SMA) certifies professional municipal programs. Accreditation of the Urban Forestry Program by the SMA would show taxpayers why they should be proud of their forestry program, prove to them that their dollars are yielding results and give the City of Austin elected officials and managers something to boast about.

For a program to become SMA accredited, the program must have an ISA certified arborist on staff; must be a current Tree City USA and have acquired a Tree City Growth award in the last



five years; must show preference to private companies accredited by the Tree Care Industry Association; must incorporate the most recent industry standards for safety and tree care practices into the program; must pledge adherence to a code of ethics; and must have an urban forest management plan approved by the local governing body.

The nationally recognized standards for the urban forestry industry are maintained by the American National Standards Institute as follows: Z 133.3 Safety, A300.1 Standards for Tree Care and Z 60.1 Standards for Nursery Stock. The policies of the Urban Forestry Program are based on these three standards.

### **6.1 Maintain Tree City USA status and pursue the Tree City Growth Award**

**Background:** The Urban Forestry Program fulfills the requirements for this nationally recognized standard each year.

**Goal:** Fulfill requirements and submit application for Tree City USA status

**Background:** The Urban Forestry Program continues to improve each year and should seek recognition for its achievements.

**Goal:** Fulfill requirements and submit application for Tree City Growth Award each year

### **6.2 Encourage Employees to Pursue International Society of Arboriculture (ISA) Certification**

**Background:** ISA Certification is a nationally recognized achievement in the field of Urban Forestry and advances employee's professional development.

**Goal:** Provide employees who do not yet have ISA certification the necessary opportunities to become a certified arborist or certified tree worker.

**Background:** Maintaining certification requires earning 30 Continuing Education Units (CEUs) every 3 years. Requiring CEUs to maintain certification ensures continued competence.

**Goal:** Provide employees with the necessary opportunities to maintain their ISA certification

**Background:** ISA offers multiple levels of certification as an individual advances in the field of urban forestry.

**Goal:** Encourage employees to achieve other certifications beyond certified arborist such as Municipal Tree Specialist

### **6.3 Acquire Society of Municipal Arborists Accreditation**

**Background:** SMA accreditation is a nationally recognized achievement, with benefits similar to those CAPRA provides for the entire Parks and Recreation Department.

**Goal:** Acquire Society of Municipal Arborists Accreditation for the City of Austin, Urban Forestry Program

## **7) Enforcement of Ordinances**

### **Introduction**

The Urban Forestry Program is responsible for the enforcement of ordinances which protect trees on public property. The Program currently reviews site plans for future development to avoid conflicts with protected trees. The Program also investigates vehicle crash cases which involve damage to trees on public property.

The Urban Forestry Program is tasked with recovering lost value when public trees are illegally removed, injured in a vehicle crash or injured during construction activity. The value lost is determined using a nationally recognized process developed by the Council of Tree and Landscape Appraisers (CTLA).

The Program's Fiscal Year 2009 Accomplishment Report (5) includes a total of paid claims for illegal damage to public trees. The Illegal Damage spreadsheet (8) is an example of the system used to track illegal damage to public trees. The Trees and Vegetation ordinance (4) includes language concerning illegal damage to public trees.

### **7.1 Site Review**

**Background:** Trees are often overlooked, neglected, damaged or unnecessarily removed during construction activity.

**Goal:** Play an active role in the site review process to ensure impacts to publicly owned trees during new development comply with city code.

**Background:** Homeowners and developers are often given very different and conflicting advice from City of Austin employees.

**Goal:** Work with the Planning and Development Review Department (PDR) to cross train employees on the site review process. Educate PDR employees on the importance of trees, as well as regulations during development.

### **7.2 Damage to Public Trees**

**Background:** The responsibility of recovering lost value when public trees are damaged is time consuming and warrants a new position.

**Goal:** Create a new position within the Urban Forestry Program to handle crash cases, illegal removals and site inspections of new development to ensure impacts to publicly owned trees comply with city code

**Background:** Trees injured by vehicle crashes often require supplemental treatment. The system the Program currently uses is inefficient, though necessary.

**Goal:** Develop a system for treatment of damaged trees, possibly involving a service agreement contract, in order to streamline the process of billing damages for crash cases