City of Austin

AUDIT REPORT

Forestry Management Audit

August 2012

A Report to the Austin City Council

Mayor
Lee Leffingwell

Mayor Pro Tem
Sheryl Cole

Council Members
Chris Riley
Mike Martinez
Kathie Tovo
Laura Morrison
Bill Spelman

Office of the City Auditor

City Auditor
Kenneth J. Mory
CPA, CIA, CISA

Deputy City Auditor
Corrie E. Stokes
CIA, CGAP

REPORT SUMMARY

The Urban Forestry Board has not established a Comprehensive Urban Forest Plan for the Urban Forester to implement, and the Urban Forester has not presented a standard of care for trees and plants for a public hearing and adoption by the Urban Forestry Board, as mandated in City Code. In addition, we noted operational inefficiencies within the Forestry program that limit the Forester's ability to comply with duties mandated in City Code.

AUDIT NUMBER: AU12104

TABLE OF CONTENTS

GOVERNMENT AUDITING STANDARDS COMPLIANCE

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

AUDIT TEAM

Rachel Snell, Assistant City Auditor, CIA, CFE, CICA
Patrick Johnson, Auditor-in-Charge, CICA
Chris Shrout, Auditor

Office of the City Auditor
Austin City Hall
phone: (512)974-2805
email: oca_auditor@austintexas.gov
website: http://www.austintexas.gov/auditor

Copies of our audit reports are available at http://www.austintexas.gov/auditor/reports

August 2012

Audit Report Highlights

Why We Did This Audit

This audit was conducted as part of the Office of the City Auditor's FY 2012 Strategic Audit Plan.

What We Recommend

We recommend that the Urban Forestry Board and Urban Forester comply with City Code requirements; that the PARD Director ensure that the Urban Forester reports at an appropriate organizational level, and has the resources necessary to achieve forestry objectives as required in City Code; and that the PARD Director and Urban Forester correct operational inefficiencies.

For more information on this or any of our reports, email oca_auditor@austintexas.gov

FORESTRY MANAGEMENT AUDIT

Mayor and Council,

I am pleased to present this audit on Forestry Management.

BACKGROUND

The City's Urban Forester and the Parks and Recreation Department (PARD) Forestry staff seek to provide public tree care services in order to provide the Austin community with a safe and healthy urban forest. In FY 2012, the Forestry group's approved budget was $1,660,575 with 24 FTEs. The duties of the urban forester are defined in City Code chapter 6-3, which also requires the Urban Forestry Board to develop and revise a Comprehensive Urban Forest Plan for the Urban Forester to administer.

OBJECTIVE AND SCOPE

Our audit objective was to evaluate whether the PARD Forestry group is achieving City Code-defined objectives. The scope of our audit was October 2008 through June 2012.

WHAT WE FOUND

We found that key elements for a successful forestry program are not in place. For example, the City's Urban Forestry Board has not established a Comprehensive Urban Forest Plan, and the Urban Forester has not presented a standard of care for trees and plants to the Urban Forestry Board.

In addition, we identified operational inefficiencies and control weaknesses within the Forestry program. For example, we noted inefficient forestry planning and staffing issues, no supervisory review of work performed, and information system challenges which hinder the effective management of the urban forest.

Resource and authority limitations, coupled with these operational inefficiencies effectively limit the City's Urban Forester from complying with duties as mandated in City Code, increasing the risk of negative impact to tree health and creating potentially unsafe tree conditions in public areas.

We issued two recommendations to address our findings. We appreciate the cooperation and assistance we received from PARD staff during this audit.

Kenneth J. Mory, City Auditor

BACKGROUND

The City's Urban Forester and Forestry staff seeks to provide public tree care services in order to provide the Austin community with a safe and healthy urban forest. In FY 2012, the Forestry group's approved budget was $1,660,575 with 24 FTEs. The duties of the Urban Forester are defined in City Code chapter 6-3, which also requires the Urban Forestry Board to develop and revise a Comprehensive Urban Forest Plan for the Urban Forester to administer.

OBJECTIVES, SCOPE, AND METHODOLOGY

This performance audit of Forestry Management was conducted as part of the Office of the City Auditor's FY 2012 Strategic Audit Plan, as presented to the City Council Audit and Finance Committee.

Objective

Our audit objective was to evaluate whether the PARD Forestry group is achieving City Code-defined objectives.

Scope

The audit focused on PARD Forestry activities from October 2008 through June 2012.

Methodology

To accomplish our audit objectives, we performed the following steps:

- Interviewed key PARD staff and forestry stakeholders;
- Evaluated applicable laws, policies, and procedures, including key information systems;
- Considered fraud, waste, and abuse risks;
- Conducted field visits to inspect forestry work; and,
- Reviewed randomly selected work orders for completion.

AUDIT RESULTS

Several key elements for a successful forestry program are not in place, limiting the ability of the Forestry group to comply with City Code.

The City's Urban Forestry Board has not established a Comprehensive Urban Forest Plan, and the Urban Forester has not presented a standard of care for trees and plants to the Urban Forestry Board. Because these are not in place, the Urban Forester is unable to comply with duties as mandated in City Code. In addition, we identified operational inefficiencies and control weaknesses, such as inefficient forestry planning and staffing issues, no supervisory review of work performed, and information system challenges that hinder the effective management of the City's urban forest.

FINDING 1: The City's Urban Forestry Board has not established a Comprehensive Urban Forest Plan as mandated in City Code § 6-3-5, hindering the Urban Forester's ability to administer the Plan as mandated in City Code § 6-3-4.

The City Code requires the Urban Forester to administer the Comprehensive Urban Forest Plan (Plan), and the Urban Forestry Board (Board) is required to develop and revise the Plan with the assistance of the Urban Forester. In addition, the Board's bylaws require that the Plan be submitted to the City Council for adoption prior to implementation. Although the Board's requirement to develop a Plan dates back to 1992, an adopted Plan currently does not exist. The Board's CY 2011 Annual Review and Work Plan notes that the "Comprehensive Urban Forest Plan working group made substantive progress and will continue meeting to ensure a timely product is compiled;" however, completion of the Plan is not listed in the Board's goals and objectives for CY 2012.

According to PARD staff, the department is working with the Board to develop a plan. However, the Board Chair stated that he does not anticipate that a Plan would be developed by the end of 2012. Therefore, the Urban Forester is unable to administer a Plan in accordance with City Code.

FINDING 2: The City's Urban Forester has not presented a standard of care for trees and plants for a public hearing and adoption by the Urban Forestry Board as mandated in City Code § 6-3-6, which limits public input into forestry tree care operations.

City Code requires that the Urban Forester use a standard for tree care from the current edition of the National Arborists Association Standards, or other recognized national standard. In addition, the City Code states that the Urban Forester must present the standard for tree care to the Board and make the standards and related rules available to the public. While the Urban Forester stated that they use nationally recognized guidance from the American National Standards Institute, those standards have not been presented to the Board for review or adoption. In addition, we were unable to verify if the work performed by Forestry staff meets the standards. Forestry staff stated that they were not aware that the standards needed to be presented to the Board. As a result, the public has not had an opportunity to provide input related to the standard of care for trees and plants on public property.

FINDING 3: Resource and authority limitations as well as operational inefficiencies effectively limit the City's Urban Forester from complying with duties as mandated in City Code § 6-3-4 and § 6-3-7, increasing the risk of negative impact to tree health and creating potentially unsafe tree conditions in public areas.

According to City Code, the Urban Forester is required to manage the City's urban forest, administer the Plan, and supervise and coordinate with responsible city departments to plant, maintain, or remove trees on public property. In addition, § 6-3-7 notes that "[a] person may not hinder or obstruct the urban forester in the performance of the urban forester's official duties."

We found that there is little to no preventative maintenance performed on trees, and most work performed is in response to emergency circumstances. In addition, Forestry staff reported that PARD management restricted the performance of tree maintenance in certain areas of the City including cemeteries, Zilker Park, and some downtown squares. According to PARD management, maintenance was restricted in cemeteries due to questions related to whether or not the vendor was responsible for tree maintenance as per the contract. Furthermore, PARD management stated that Zilker Park maintenance was restricted due to the need for additional public input.

Forestry staff reported that the Urban Forester's responsibility related to supervising and coordinating with other departments is not aligned with the Urban Forester's authority. The Urban Forester position reports through a division manager, an assistant director, and the PARD Director, and therefore, would not have the ability to supervise staff in other City departments. We also noted internal communication issues that hindered coordination. However, during the audit, we were provided a draft memorandum of understanding between PARD management and the Public Works Department regarding management of trees in the right-of-way.

Additionally, we noted several operational inefficiencies. For example:

- Multiple electronic systems are used to track work orders, but are not regularly updated and one is not operating properly, which negatively impacted productivity
- A backlog of over 500 non-emergency work orders that had not been entered into the electronic work order system as of May 2012
- A backlog of completed paper work orders that had not been updated or closed out in the electronic system
- Budget reduction of approximately 8% since 2008
- Vacancies and turnover in key administrative, work crew, and supervisory positions, including the Urban Forester, which has effectively reduced staffing by a full work crew and contributed to work order backlogs

We visually inspected work for ten randomly-selected work orders and found that the work had been completed as indicated for nine of the ten (90%) work orders selected. In one instance, a dead tree that was noted on the work order as removed was still standing near a park bench. For the ten work orders reviewed, there was no indication of supervisory inspection of completed work to ensure it met quality standards and was completed as indicated and performed in a timely manner. In addition, we noted that the hours worked information reported on the paper work orders (the time it takes to complete the work order) may not be reliable. Forestry staff estimated that the time reported was reasonable for only five of the ten (50%) work orders.

Due to the weaknesses described above, the Urban Forester is unable to effectively comply with duties as mandated in City Code. Furthermore, weaknesses and inefficiencies in tree maintenance increase the risk of negative impacts on tree health and create potentially unsafe tree conditions in public areas.

Other Observations

Staff reported that work crews must deliver tree trimmings to a single drop site at Hornsby Bend. PARD management recognized that localized drop sites could reduce travel time and increase the number of work orders that crews can address, but indicated that no alternative drop sites have been implemented. Also, Forestry staff reported that the work crew scheduling process does not rely on geographic or other data-driven tools to maximize efficiency, but is judgmental and more of an "art."

RECOMMENDATIONS

The recommendations listed below are a result of our audit effort and subject to the limitation of our scope of work. We believe that these recommendations provide reasonable approaches to help resolve the issues identified. We also believe that operational management is in a unique position to best understand their operations and may be able to identify more efficient and effective approaches and we encourage them to do so when providing their response to our recommendations. As such, we strongly recommend the following:

1. **The City's Urban Forestry Board should establish a Comprehensive Urban Forest Plan with the assistance of the Urban Forester, and the Urban Forester should submit a formal standard of care for trees and plants to the Board for review and adoption, in accordance with City Code.**

MANAGEMENT RESPONSE: **Concur.** Refer to Appendix A for management response and action plan.

2. **The PARD Director should ensure that the Urban Forester reports at an appropriate organizational level, and has the resources necessary to achieve forestry objectives as required in City Code. Additionally, the PARD Director and the Urban Forester should ensure that operational inefficiencies are corrected.**

MANAGEMENT RESPONSE: **Concur.** Refer to Appendix A for management response and action plan.

APPENDIX A

MANAGEMENT RESPONSE

City of Austin
Austin Parks and Recreation Department
200 South Lamar Boulevard, Austin, Texas 78704

August 3, 2012

Mr. Kenneth J. Mory, City Auditor
Office of the City Auditor

Subject: Forestry Management Audit AU12104

Dear Mr. Mory:

Attached is the Parks and Recreation Department's (PARD) response to the Forestry Management Audit draft report dated August 2012.

I have reviewed the draft report of the Forestry Management Audit and am pleased to report that much of the work necessary to meet the two recommendations has been underway for some time, or is near implementation stage. We expect that all components of the recommendations will be fully implemented by August of 2013.

PARD will continue working with the Urban Forestry Board (UFB) toward the completion of the Comprehensive Urban Forest Plan (CUFP), which has been underway in earnest since 2011. That work has included UFB retreat and visioning session, Working Group meetings, and public input forums. In June, the UFB approved the outline for the CUFP. Pending adoption of the CUFP, staff will work with interdepartmental stakeholders to adopt a citywide Standard of Care for Trees and Plants (SCPT) based on industry-recognized national tree care standards.

The Urban Forester's authority under City Code is to establish the standard of care for public trees and plants in the City of Austin. This authority is one of oversight of other departments' purview to the standards outlined in the industry-recognized national tree care standards to ensure that trees are preserved, protected and cared for on public land across departments. Those standards will be utilized pending the adoption of the SCTP. This role clearly differs from performing day-to-day supervision of the Forestry Program.

Resource limitations of the Comprehensive Urban Forestry Program directly impact operational inefficiencies. Twenty-four PARD Forestry Program employees are charged with management of the 300,000 public trees in the City of Austin. We are challenged to constantly seek additional funding to improve operation efficiencies; employees explore ways to increase the efficiency of methods utilized in the performance of our duties; and attack the issues of resource limitations at every opportunity.

We are committed to improving our efforts in managing Austin's urban forest. There can be no progress without change, and no change is meaningful without careful assessment. To that end, we welcome and concur with the recommendations found within in this audit report.

Sincerely,

Sara L. Hensley, CPRP, Director
Austin Parks and Recreation Department

Cc: Marc A. Ott, City Manager
Bert Lumbreras, Assistant City Manager
Cora D. Wright, Assistant Director
Kimberly McNeeley, Assistant Director

K Mory letter
Page 2

APPENDIX A

MANAGEMENT'S ACTION PLAN

	Recommendation Text	Reported Status	Last Date Reported
01	The City's Urban Forestry Board should establish a Comprehensive Urban Forest Plan with the assistance of the Urban Forester, and the Urban Forester should submit a formal standard of care for trees and plants to the Board for review and adoption, in accordance with City Code.	Underway	
Implementation Status	**Staff Findings**	**Person Responsible**	**Target Date**
	Staff concurs with the recommendation that the Urban Forestry Board (UFB) should establish a Comprehensive Urban Forest Plan (CUFP) as mandated by City Code 6-3-5. (See Action 1.1) Staff have been working with the UFB since 2011 on the CUFP, including the formation of working group comprising staff and UFB members, a UFB retreat and visioning session, public input forums, and approval at the June UFB meeting of an outline for the CUFP. While a Standard of Care for Trees and Plants (SCTP) has not been presented to the UFB for approval in the absence of an adopted CUFP, the Forestry Unit has utilized the International Society of Arboriculture and Tree Care Industry Association (formerly National Arborists Association) standards and best-management practices in performing tree care.	Pat Fuller Angela Hanson	
	Proposed Actions / Explanation of Actions?		
	1.1 – Establish City of Austin Comprehensive Urban Forest Plan – Staff will continue to work with the UFB to complete the CUFP. Staff will continue to support the board by writing the Plan with UFB input, engaging interdepartmental stakeholders, and soliciting additional public review and comment. 1.2 – Adopt a Standard of Care for Trees and Plants (SCTP) –Staff will work with interdepartmental stakeholders to adopt a citywide SCTP based on industry-recognized national tree care standards, including but not limited to those of the Tree Care Industry Association (formerly National Arborists Association) and the International Society of Arboriculture.	Angela Hanson Angela Hanson	May, 2013 August 2013 *Align with Pending adopted CUFP*

Rec Num	Recommendation Text	Reported Status	Last Date Reported
02	The PARD Director should ensure that the Urban Forester reports at an appropriate organizational level, and has the resources necessary to achieve	Underway	

	forestry objectives as required in City Code. Additionally, the PARD Director and the Urban Forester should ensure that operational inefficiencies are corrected.		
Implementation Status	**Staff Findings**		
Underway	The Urban Foresters authority under the Code is to establish the standard of care for public trees and plants in the City of Austin. This authority is one of oversight of other department's activities relative to how that department's staff manages trees and plants under their purview to the standards outlined in the STCP (or the ISA and TCIA standards in the interim). This differs from performing a supervisory role of another department's personnel. Staff also recognizes the dual role of the PARD Urban Forestry Program Manager is one that as the Urban Forester is responsible for duties and responsibilities outlined in City Code as well as the duties of a forestry manager within the Parks and Recreation Department. Conflicts arise when the duties and responsibilities of this dual role are not aligned or sufficiently resourced. Staff concurs with the portion of this finding that outlines the lack of desired preventative maintenance performed on trees—extended periods of severe drought has worsened the problem. The resources available for urban forestry management have not kept pace with the size and scope of the urban forest resource. Therefore, urban forest management has shifted from a comprehensive approach including preventative maintenance and planning to focus on primarily safety issues and emergency response. The extraordinary amount of damage to the urban forest brought about by periods of severe drought has further decreased the ability of current resources to achieve the desired level of preventative maintenance on trees. Several methods are utilized to leverage any and all available resources to direct maintenance work to existing service contracts and non-profit groups that complete Forestry approved work such as tree watering/mulching. PARD Forestry Unit utilizes MicroMain as its only one work-order system. The 3-1-1 reporting system is not designed as a work order system. The lack of program interface between MicroMain and the 3-1-1- system result sin duplicated data entry and therefore contributes to work ineffiencies.		
	Proposed Actions / Explanation of Actions?	**Person Responsible**	**Target Date**
	2.1 – Organizational Level of Forestry –The Urban Forester's duties and responsibilities will be further defined through the adoption of the UFCP and SCTP. These strategic documents will clarify citywide Forestry policy, organizational structures, resource requirements and operational standards and protocols. PARD staff will also address department level resource deficiencies during the FY14 budget process.	Sara Hensley Pat Fuller	October 2013

	2.2a – Improve Operational Efficiency – The work order backlog is being remedied with the utilization of a special team of PARD employees. PARD is also working with our CTM Department to establish an effective program with 3-1-1 to reduce the duplication of data entry. Finally, staff will continue leveraging volunteers and donations by non-profit groups to complete Forestry-approved work, as well as initiating service contracts	Angela Hanson	December, 2012
	2.2b – Restore PARD Forestry Unit Capacity – The Forestry Unit will expedite the hiring of all vacant FTEs. Additionally, staff currently on approved leave of absence are expected to return to full duty within the next two months.		November 2012
	2.3 – Quality Control / Quality Assurance Improvements – Forestry Unit Supervisor, as well as Team Leaders, will ensure quality of staff work by conducting regular performance checks, including a review of daily job tasks completed and timely and accurate data entry into the work order system. This will require the development of data entry protocols		August 2012