

OFFICE OF THE CITY AUDITOR  
PERFORMANCE AUDIT  
March 2023

# Implement City Tree Management Regulation to Help Achieve City Tree Canopy Goals



**KANSAS CITY  
MISSOURI**

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March 13, 2023

Honorable Mayor and Members of the City Council, and Members of the Board of Parks and Recreation Commissioners:

City trees are assets that provide significant benefits to residents such as reducing air and water pollution, moderating high temperatures, and increasing property values. The city's Urban Forest Master Plan, approved by the City Council in 2020, set a goal to increase the tree canopy to 35%. The Urban Forest Master Plan also places an emphasis on managing city trees as one strategy to address climate change. The city's regulation for managing city trees is Administrative Regulation 5-7 (March 2021).

Our audit focuses on determining whether city departments remove and replace city trees in a way that supports the city's goal to increase the tree canopy.

The audit found the Parks and Recreation Department is not effectively overseeing city departments' removal and replacement of city trees. Administrative Regulation (AR) 5-7 establishes policies and procedures for tree removal and replacement within city property and city right-of-way. The regulation names the Parks and Recreation Department as the responsible party overseeing the management of city trees. In their response to the audit, Parks Department management indicates they cannot implement the AR because it has not been approved by the Parks Board. Parks management has not brought the administrative regulation before the board. During the course of the audit, Parks Department management told us the AR was the policy they were working to implement. See Appendix B and C for additional information.

City departments do not always follow city removal and replacement requirements because the Parks and Recreation Department has not created the required permits and process to manage this activity. The permit process should ensure the city's foresters are reviewing all city tree removals by departments. This helps preserve as many existing trees as possible and ensure departments replace removed trees appropriately. Additionally, when the Parks and Recreation Department is involved in city tree replacement, they do not consistently enforce replacement rates.

The Parks and Recreation Department has also not clearly identified who has the authority and responsibility in their department for implementing the city tree management regulation. Because of the additional responsibilities which will result from implementing the regulation, the department needs to conduct a staffing analysis to determine their staff needs.

The city's tree management regulation has some outstanding issues that need to be resolved. The Parks and Recreation Department is unsure if project funding sources limit their ability to place money into the Tree Replacement Fund. These limitations could severely restrict the department's ability to comply with city tree replacement requirements. The current regulation does not address city departments' procedures for planting of new trees that do not first involve a tree removal. This leaves a gap in the Parks and Recreation Department's monitoring and tracking abilities.

Because the regulation is new and the Parks and Recreation Department's responsibility for managing city trees has expanded, the Parks Department needs to communicate processes they develop to implement the regulation to city departments.

The Parks and Recreation Department does not have a complete city tree inventory or consistently document changes to the inventory they do have. A complete and current city tree inventory is needed to effectively manage the city's trees.

We make recommendations to implement the city tree management regulation, assign responsibility and authority within the Parks and Recreation Department for implementation, determine and report staffing needs, clarify and add provisions for new tree plantings to the regulation, communicate the regulation to all departments, and maintain a tree inventory.

The draft report was sent to the director of parks and recreation department on January 20, 2023, for review and comment. His response is appended. We would like to thank management and staff in the Parks and Recreation Department for their assistance and cooperation during this audit. The audit team for this project was Kara Jorgensen, Vivien Zhi, and Sue Polys.

  
Douglas Jones, CGAP, CIA, CRMA  
City Auditor

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# Report Title

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# Introduction

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## Audit Objective

*Do departments remove and replace city trees in a way that supports the city's goal to increase the tree canopy?*

To answer our objective, we reviewed city tree related ordinances, administrative regulations, plans, processes, and data; interviewed city staff; and compared policy and plans to departments' practice.

We conducted this audit in accordance with Government Auditing Standards.

See Appendix A for additional information about the audit objective, scope, methodology, and compliance with auditing standards.

During our audit work, we identified an issue with city code that was not directly related to the scope of this audit. We communicated this information in a separate memorandum to the City Attorney in December 2022.

We also identified a grant opportunity related to street trees in the Infrastructure Investment and Jobs Act. Because of the potential time sensitivity of this information, we communicated this information in a separate memorandum to the director of the Parks and Recreation Department in May 2022.

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## Background

### Tree Benefits and City Tree Goals

City trees are assets that provide significant benefits to residents. Those benefits include reducing air and water pollution, decreasing energy costs, moderating high temperatures, improving public health, and increasing property values. The city's Urban Forest Master Plan estimated the existing tree canopy<sup>1</sup> provides \$28.2 million worth of services annually to residents.<sup>2</sup>

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<sup>1</sup> A tree canopy is land covered by trees (with leaves on) when viewed from above. Tree canopy cover is a percent calculation of land covered by trees with leaves on when viewed from above.

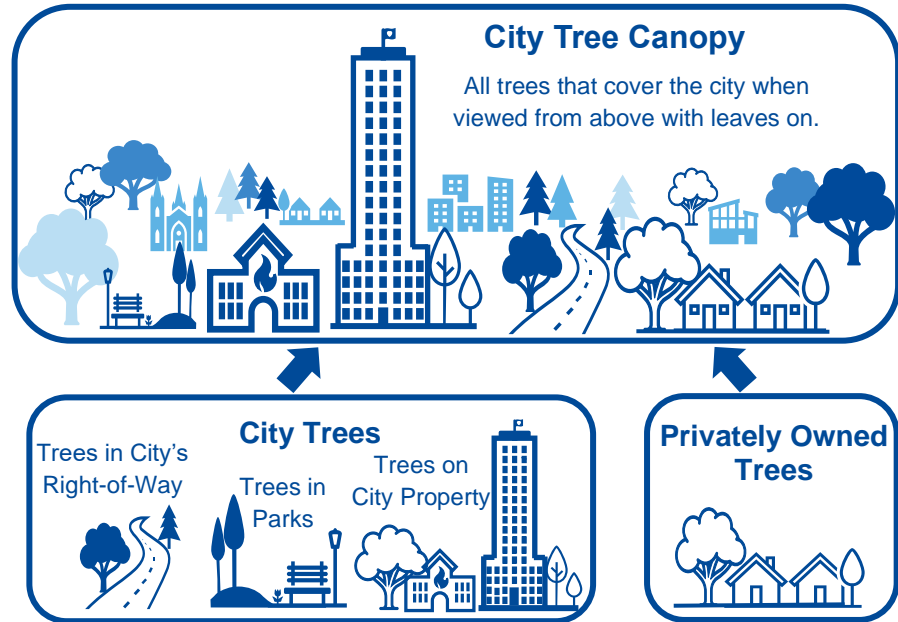
<sup>2</sup> Kansas City, Missouri: Urban Forest Master Plan, Davey Resource Group, Fall 2018, p. 2.

## Implement City Tree Management Regulation to Achieve City Tree Canopy Goals

In 2018, the city's estimated tree canopy was 31% of the land area within the city limits.<sup>3</sup> The city's Urban Forest Master Plan, approved by the City Council in 2020, set a goal to increase the tree canopy to 35%.<sup>4</sup>

The city's tree canopy is made up of city owned and managed trees (city trees) and privately owned trees. City trees are located:

- in Kansas City, Missouri parks,
- on other city-owned property, and
- in the city's right-of-way.



### City Departments Impact on City Trees

The Parks and Recreation Department manages all city trees. Management of city trees includes maintenance of a tree inventory, approval of the removal of existing trees, establishment of tree planting specifications, development of a tree planting plan, and tree maintenance such as pruning. The department's foresters provide technical expertise related to trees including inspecting tree health and advising whether a tree can be saved or must be removed.

City departments (Water Services, Public Works, etc.) manage or contract for construction projects that sometimes require the removal and/or planting of city trees. *Administrative Regulation 5-7*, "Tree Canopy Preservation and Expansion" (city tree management regulation) are the policies and procedures for all departments to follow for the removal and replacement of city trees.

<sup>3</sup> Kansas City, Missouri: Urban Forest Master Plan, Davey Resource Group, Fall 2018, p. v.

<sup>4</sup> Resolution 200143, May 21, 2020.

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## Findings and Recommendations

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### City Tree Management Regulation Not Implemented, Departments Should Work Together to Protect and Expand City Tree Canopy

Because the city tree management regulation<sup>5</sup> has not been implemented, city departments that remove and replace city trees are not always following procedures established to support the city's goal to protect and expand the city tree canopy. Trees are vital to the city's strategy to address the climate and ecological emergency. Trees clean the air and provide oxygen, cool and beautify the city, and provide a habitat for wildlife.

To achieve the city's goals of a healthy and growing tree canopy, the city needs to revise and implement the city tree management regulation to ensure:

- A professional forester with appropriate expertise approves city tree removal and planting;
- Live city trees are preserved whenever possible;
- More city trees are planted than removed;
- Appropriate tree species are planted in approved locations;
- Policies and procedures are clearly communicated to all departments;
- Funding sources are properly used; and
- An accurate and complete tree inventory is maintained.

#### Implement and Communicate City Tree Permit Requirement and Tree Replacement Rate

**The Parks and Recreation Department did not create a permit process to manage departments' removal and replacement of trees.** In March 2021, the city manager issued new Administrative Regulation 5-7, Tree Canopy Preservation & Expansion, (city tree management regulation). The regulation requires all city departments to obtain permits from the Parks and Recreation Department for city tree removal and replacement.

The city tree management regulation identifies the Parks and Recreation Department as responsible for reviewing permit requests and determining whether to allow the removal of city trees. (See Exhibit 1.) Instead of issuing a permit, Parks and Recreation staff have varying practices to receive requests and communicate decisions.

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<sup>5</sup> The audit report refers to *Administrative Regulation 5-7, "Tree Canopy Preservation and Expansion"* as the "city tree management regulation."



Exhibit 1: City Tree Management Regulation’s Permitting Process



Source: *Administrative Regulation 5-7, “Tree Canopy Preservation and Expansion”*, March 2021.

The city tree management regulation requires a permit process to assist in managing and enforcing tree removal and replacement activity. Without this permit process in place, the Parks and Recreation Department cannot:

- ensure city trees are preserved whenever possible;
- track whether departments replace trees as required or pay the Tree Replacement Fund for the cost of replacement trees; and
- monitor whether departments plant approved tree species in approved locations.

Recommendation

To ensure there is a consistent, documented approval process that holds departments accountable to the city regulation for city tree removal and replacement, the director of the parks and recreation department should ensure staff implement a permit process in accordance with Administrative Regulation 5-7.

**The Parks and Recreation Department should enforce the tree replacement rate.** The city tree management regulation requires departments that remove city trees to replace those trees based on the size of the removed tree. For example, the removal of a 1” - 5” diameter street tree<sup>6</sup> should be replaced by two 1” diameter trees. The replacement rate increases as the diameter of the tree removed increases. (See Exhibit 2.)

Exhibit 2: City Tree Management Regulation Tree Replacement Rate of Street Trees Removed<sup>7</sup>

Diameter of Tree Removed	Replacement Rate
1” – 5”	2 to 1
6” – 10”	3 to 1
11” – 16”	4 to 1
17” – 23”	5 to 1
24” – 31”	6 to 1
32” +	8 to 1

Source: *Administrative Regulation 5-7, “Tree Canopy Preservation and Expansion.”*

<sup>6</sup> Trees that are in the right-of-way along the city’s streets, boulevards, and parkways.

<sup>7</sup> Administrative Regulation 5-7 has a different replacement rate for city trees in undeveloped natural/wooded areas. The rate increases as the percent of the area’s tree canopy affected by removals increases.



The Parks and Recreation Department continues to allow an outdated tree replacement ratio on sidewalk projects. Public Works' sidewalk replacement projects frequently result in the removal of mature city trees, yet the Parks and Recreation Department allows two trees to replace every one tree removed regardless of street tree size.

The replacement rates of one tree removed to multiple planted was established to help compensate for the size of mature trees removed from the city's canopy. A small 1" diameter tree does not come close to providing the canopy cover of a mature, 30" diameter tree. To help the city to achieve its tree canopy goals, departments must follow the tree replacement ratio when trees are removed.

Recommendation

To help compensate for the tree canopy lost through the removal of city trees, the director of the parks and recreation department should require the tree replacement rates, defined in Administrative Regulation 5-7, are consistently followed.

**Parks and Recreation should communicate the city tree removal and replacement policies and procedures to all city departments.** The Parks and Recreation Department needs to clearly communicate its authority over all city trees and departments' responsibility to obtain city tree removal permits. Parks and Recreation needs to require departments to replace trees by the required rate and to follow other procedures outlined in the city tree management regulation. This should help the city achieve its goal to increase the city's tree canopy.

It is important for the Parks and Recreation Department to communicate its new responsibility for managing all city trees. Some departments were not previously required to request the Parks and Recreation's approval to remove and replace city trees unless the trees were on Parks and Recreation Department land.

It is also critical for city departments to understand the regulation's required tree replacement rate. The cost of replacing city trees can be significant. Departments need a clear understanding of tree replacement costs during project planning. Those costs can then be incorporated into construction costs or departments can find alternatives to removing existing trees.

Recommendation

To ensure city departments are aware of the city's rules and their responsibilities when planning to remove and replace a city tree, the director of the parks and recreation department should review Administrative Regulation 5-7 with each department to communicate Parks and Recreation's responsibility to manage all city trees; and departments' responsibilities related to required tree permits; tree replacement rates; and tree replacement costs.

**Parks and Recreation Should Clarify Some Sections of the City Tree Management Regulation**

**The city may not be able to place money from projects into the Tree Replacement Fund<sup>8</sup> as originally planned.** The city developed a calculation where in lieu of replanting city trees as part of a project, the project can pay funds into the Tree Replacement Fund. The fund is needed because not all projects have adequate space in the project area to plant the required number of trees. The Parks and Recreation Department can use the Tree Replacement Fund to plant city trees in suitable locations elsewhere in the city. Many city projects use bond funding or are funded through the Public Improvement Advisory Council (PIAC) which may limit how and where funds can be used.

Parks and Recreation management said they received conflicting information from the Law Department about whether bond funds can be placed into the Tree Replacement Fund. For example, general obligation bonds that fund some city department construction projects can only be spent on project types specifically approved by the ballot language. Parks and Recreation management has not followed-up with the Law Department to address the potential restriction.

Additionally, Parks and Recreation management said the Public Improvement Advisory Council (PIAC) project funds that are awarded by council district may also require funds to be segregated. Without clarification on the use of projects funds in the Tree Replacement Fund, the Parks and Recreation Department may not appropriately segregate and track project money.

Recommendation

To ensure proper use of project funds as required by their funding sources, the director of parks and recreation should clarify whether bond funds can be placed in the Tree Replacement Fund and determine how money can be segregated to ensure they are spent according to their funding source restrictions.

**The city tree management regulation should also address a process for planting city trees that do not first involve tree removal.** The city tree management regulation only provides direction for tree removal and replacement. Parks and Recreation staff said they often do not know about new trees because the Forestry Division is not notified. The regulation does not provide any direction to departments for planting new city trees when no tree is first removed. Projects can involve tree planting but not tree removal. For example, the city is considering an initiative where the Neighborhood Services Department would coordinate planting 10,000 trees over three years.

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<sup>8</sup> *Administrative Regulation 5-7*, "Tree Canopy Preservation and Expansion," March 9, 2021, p4.

The Parks and Recreation Department has planting specifications including species restrictions, location, and planting methods. However, Parks and Recreation staff does not formally monitor tree plantings by other departments so there is no assurance these specifications are followed. Revising the city tree management regulation to require departments to notify the Parks and Recreation Department whenever city trees are planted helps ensure tree planting specifications are followed and new trees are added to the city tree inventory.

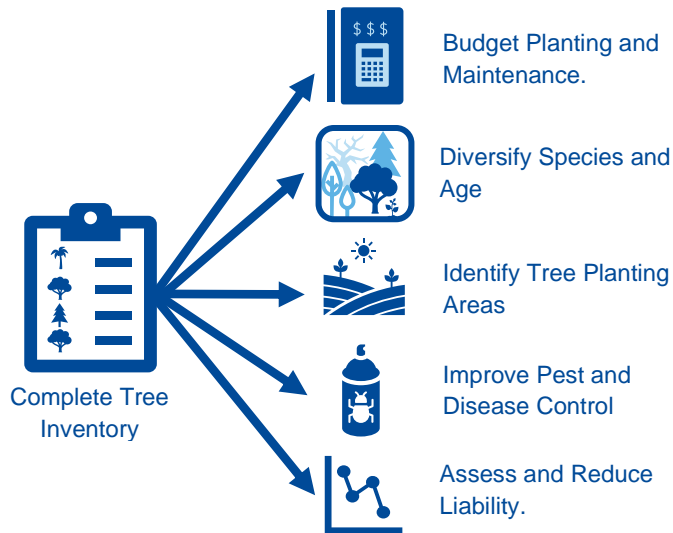
Recommendation

To improve the communication and adherence to city tree planting specifications, the director of parks and recreation should propose to the city manager revisions to Administrative Regulation 5-7 including adding permitting and planting specifications for planting city trees which do not involve a prior tree removal.

**Parks and Recreation Department Does Not Maintain a Complete City Tree Inventory**

The Parks and Recreation Department’s inventory of city trees is not complete, and the existing tree inventory has not been maintained. A tree inventory is a record of tree location and tree characteristics such as species and size. A complete and updated tree inventory is a necessary tool for managing the city’s trees. (See Exhibit 3.)

Exhibit 3. Tree Inventory as Tool for Asset Management



Source: Kansas City, Missouri: Urban Forest Master Plan – Fall 2018 and Parks and Recreation Department staff.

**Inventory Data Updated**

 Ash Tree Removals by Forestry Contractors

 All Plantings by Forestry Contractors

**Not Updated**

 Non-Ash Tree Removals by Forestry Contractors

 All Removals by Other Contractors, Departments, and Developers

 All Plantings by Other Contractors, Departments, and Developers

Sources: City Auditor’s Office data comparison and Forestry Division.

**Recommendation**

**A process to update the tree inventory is needed.** The Parks and Recreation Department does not know how many city trees are removed or planted in a year. The department has largely not maintained their 20 year-old street tree inventory and does not update the inventory with city trees planted by developers or other city departments. Trees planted by the Parks and Recreation Department contractors are generally added to the inventory.

The department does not consistently update changes to previously inventoried trees. For example, tree maintenance performed by the Parks and Recreation Department’s contractors responding to 311 requests are not updated in the inventory. Tree condition and maintenance are important characteristics that should be updated in the tree inventory. Tree condition helps when developing a proactive maintenance plan and identifying trees that need more frequent inspections or treatment. The only part of the tree inventory the department has consistently updated is the city’s ash trees. The Parks and Recreation Department’s efforts to keep records of ash tree maintenance is critical to slowing the species death from the emerald ash borer.<sup>9</sup> This allowed the city to replace the ash trees in stages and continue to monitor the infestation.

Parks and Recreation staff said they do not have enough time to maintain the existing tree inventory. Staff also said the tree asset management system used for the tree inventory is not user friendly and is time consuming.

To help ensure the Parks and Recreation Department has the necessary tree inventory data to manage the health of the city trees and tree canopy, the director of parks and recreation should develop a written process for staff to maintain the existing tree inventory data and ensure tree removals and plantings of all city trees are added.

**A complete inventory of city trees can help manage the city’s tree canopy.** The inventory of city trees does not include most trees in city parks or other city properties. The city’s initial city tree inventory did not include this information. The city’s Urban Forest Master Plan noted Parks and Recreation department needed a complete and updated inventory of city trees for adequate management to the city’s tree canopy.<sup>10</sup>

Parks and Recreation Department management expressed concerns about the lack of funding available to conduct a comprehensive inventory of city owned trees. The Infrastructure

<sup>9</sup> Emerald ash borer is an invasive beetle that attacks ash trees.

<sup>10</sup> Kansas City, Missouri: Urban Forest Master Plan, p. 36.

Investment and Jobs Act (IIJA) signed into law in November 2021 could provide funding for a tree inventory. The IIJA's Healthy Streets Program will provide grants that can be used to expand the tree canopy including the conducting of a tree inventory.

Recommendation

In an effort to obtain funding to conduct an inventory of all city trees, the director of parks and recreation should work with the Office of Environmental Quality to submit a grant application to the Infrastructure Investment and Jobs Act Healthy Streets Program when the Federal government opens the grant application period for these funds.

**Parks and Recreation Should Clarify Staff's Responsibility and Authority for City Trees**

Staff authority and responsibility within the department for implementing the city tree management regulation<sup>11</sup> and maintaining the city tree inventory is not clear. Management is responsible for establishing organizational structure, assigning responsibility, and delegating authority for an organization to achieve its objectives.

The unclear authority and responsibility have contributed to the slow implementation of the regulation that was signed in March 2021.

The city tree management regulation assigns some responsibilities to the Parks and Recreation Department's Forestry Division and some specifically to the city forester. The Forestry Division has a position titled "city forester." There are other Parks and Recreation staff with the position of "forester". The city forester, other staff foresters, and the environmental manager approve city tree removals and replacement plans. The city forester does not supervise all of the foresters and so does not have authority or responsibility to ensure all are following an agreed upon process.

Plans from departments and divisions affecting city trees are sent to different Parks and Recreation staff for review. Because there is a lack of clarity of who is responsible for implementing the city tree management regulation, the process for reviewing tree removal and replacement plans, documenting decisions, and enforcing replacement rates varies among staff.

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<sup>11</sup> *Administrative Regulation 5-7, "Tree Canopy Preservation and Expansion,"* March 9, 2021.

Similarly, some foresters involved in the removal, replacement, and maintenance of city trees update changes in the tree inventory and some do not. No one has the responsibility for ensuring the tree data is maintained.

Recommendation To ensure the department can manage city trees and work toward achieving the city’s tree canopy goals, the director of parks and recreation should assign the responsibility and authority within the Parks and Recreation Department for the implementation of Administrative Regulation 5-7 and the maintenance of the city tree inventory.

**Parks and Recreation Department Should Assess Staffing Impact of Managing All City Trees**

The Parks and Recreation Department has not completed an analysis to determine the impact on staffing of implementing the city tree management regulation. Approving the removal and replacement of all city trees increases the number of trees for which the department is responsible. The increase in trees and added processes will require additional site visits, tracking, financial management, and inventory maintenance. Implementing the permit fee and Tree Replacement Fund should provide an increase in revenue that could help the department meet additional responsibilities.

Recommendation In preparation to implement Administrative Regulation 5-7, the director of parks and recreation should evaluate staffing needs based on increased workload related to managing all city trees and provide that information to the Board of Parks and Recreation Commissioners and the City Council for budget consideration.

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**Recommendations**

1. The director of the parks and recreation department should ensure staff implement a permit process in accordance with Administrative Regulation 5-7.
2. The director of the parks and recreation department should require the tree replacement rates, defined in Administrative Regulation 5-7, are consistently followed.
3. The director of the parks and recreation department should review Administrative Regulation 5-7 with each department to communicate Parks and Recreation’s responsibility to manage all city trees; and departments’ responsibilities related to required tree permits; tree replacement rates; and tree replacement costs.

4. The director of parks and recreation should clarify whether bond funds can be placed in the tree replacement fund and determine how money can be segregated to ensure they are spent according to their funding source restrictions.
5. The director of parks and recreation should propose to the city manager revisions to Administrative Regulation 5-7 including adding permitting and planting specifications for planting city trees which do not involve a prior tree removal.
6. The director of parks and recreation should develop a written process for staff to maintain the existing tree inventory data and ensure tree removals and plantings of all city trees are added.
7. The director of parks and recreation should work with the Office of Environmental Quality to submit a grant application to the Infrastructure Investment and Jobs Act Healthy Streets Program when the Federal government opens the grant application period for these funds.
8. The director of Parks and Recreation should assign the responsibility and authority within the Parks and Recreation Department for the implementation of Administrative Regulation 5-7 and the maintenance of the city tree inventory.
9. The director of parks and recreation should evaluate staffing needs based on increased workload related to managing all city trees and provide that information to the Board of Parks and Recreation Commissioners and the City Council for budget consideration.



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## Appendix A: Objective, Scope and Methodology, and Compliance Statement

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We conducted this performance audit of city trees under the authority of Article II, Section 216 of the Charter of Kansas City, Missouri, which establishes the Office of the City Auditor and outlines the city auditor’s primary duties.

A performance audit provides “objective analysis, findings, and conclusions to assist management and those charged with governance and oversight, with among other things, improving program performance and operations, reducing costs, facilitating decision making by parties with responsibility for overseeing or initiating corrective action, and contributing to public accountability.”<sup>12</sup>

### Why We Did This Audit

The City Council’s declaration of a climate and ecological emergency<sup>13</sup> and the approvals of both the Climate Protection and Resiliency Plan<sup>14</sup> and the Urban Forest Master Plan<sup>15</sup> provide policy direction for the city to actively address climate change. The Urban Forest Master Plan’s emphasis on conserving and restoring city trees through proactive management is one strategy to address climate change.

The city’s trees are in decline due to age, disease, and weather. Because maximum benefits from trees are not realized until trees are mature, it is important to focus efforts on tree preservation and expansion immediately and remain consistent with these efforts. While the Parks and Recreation Department is responsible for management of city trees, actions by other city departments, such as the Public Works and the Water Services departments, affect city trees. Successful department coordination of tree removal and planting impacts the city’s ability to achieve its climate and tree canopy goals.

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<sup>12</sup> Comptroller General of the United States, [Government Auditing Standards](#) (Washington, DC: U.S. Government Printing Office, 2018), pp. 10, 11.

<sup>13</sup> Resolution 210967, November 4, 2021.

<sup>14</sup> Resolution 220596, August 25, 2022.

<sup>15</sup> Resolution 200143, May 21, 2020.

**Audit Objective**

This report is designed to answer the following question:

- Do departments remove and replace city trees in a way that supports the city's goal to increase the tree canopy?

**Scope and Methodology**

Our audit focuses on the Parks and Recreation Department, Forestry Division's procedures related to managing city trees and other departments' activities involving city trees. Our audit methods included:

- Reviewing city tree related administrative regulations, plans, processes, and ordinances to understand city requirements and policies.
- Interviewing staff that have a part in the planning, removal, planting, and reporting of city trees to understand current practices.
- Comparing city policies and plans to department practices to identify differences.
- Comparing tree inventory data to observations to assess city tree inventory data accuracy.
- Reviewing city tree related city code and consulting with the Law Department to understand current authoritative orders.
- Reviewing plans involving street trees and plan review processes to understand current practices.
- Reviewing city budgets and the Urban Forest Master Plan's estimates to identify potential funding limitations to implementing city tree goals.
- Reviewing tree related contracts to identify recent cost changes.
- Approximating resources needed to use United States Department of Agriculture's iTree Canopy tool to estimate tree canopy cover and benefits.

**Statement of Compliance with Government Auditing Standards**

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 objective. No information was omitted from this report because it was deemed confidential or sensitive.


While conducting the audit, we identified an issue with city code that is not directly related to the scope of this audit. We communicated this information in a separate memorandum to the City Attorney on December 13, 2022.

We also identified a grant opportunity related to street trees in the Infrastructure Investment and Jobs Act. Because of the potential time sensitivity of this information, we communicated this information in a separate memorandum to the director of the Parks and Recreation Department on May 16, 2022.

### **Scope of Work on Internal Controls**

We assessed internal controls relevant to the audit objective. This included assessing the design, implementation, and operating effectiveness of processes to manage the actions of departments related to city tree removal and replacements including Administrative Regulation 5-7, Tree Canopy Preservation & Expansion. We also assessed the design, implementation, and operating effectiveness of processes to ensure recording accuracy of city tree inventory changes. We identified internal control deficiencies related to control environment, control activities, and information and communication. Deficiencies are discussed in the body of the report.

## Appendix B: Director of Parks and Recreation’s Response



### Inter-Departmental Communication

## Parks and Recreation Department

**RECEIVED**


FEB 13 2023

CITY AUDITOR'S OFFICE

**Date:** February 13, 2023

**To:** Douglas Jones, City Auditor

**From:** Christopher Cotten, Director of Kansas City Parks and Recreation 

**Subject:** Response to Performance Audit: *Implement City Tree Management Regulation to Achieve City Tree Canopy Goals*

**1. The director of the parks and recreation department should ensure staff implement a permit process in accordance with Administrative Regulation 5-7.**

Agree in Part See city auditor's comments about the department's response to recommendation #1 on page 20.

AR 5-7 was never approved by the Board of Parks and Recreation Commissioners. For Parks and Recreation employees to enact any provision of the AR it will need to go to the Board for approval. The AR does not specifically state that Parks and Recreation should create this permitting process. However, it would likely have to be involved. Implementing a permitting process will require 2.0 FTE increase in staffing. This will be needed to manage the permitting system, reviewing requests, issuing permits, and inspecting compliance. Funding for the two additional FTEs should be in place prior to full implementation of the AR. We are recommending that the FTEs be funded out of the 2060 capital improvements fund.

**2. The director of the parks and recreation department should require the tree replacement rates, defined in Administrative Regulation 5-7, are consistently followed.**

Agree

AR 5-7 was never approved by the Board of Parks and Recreation Commissioners. For Parks and Recreation employees to enact any provision of the AR it will need to go to the Board for approval. All staff involved will be directed to apply the rates stated in the AR 5-7 and to do so consistently.

**3. The director of the parks and recreation department should review Administrative Regulation 5-7 with each department to communicate Parks and Recreation's responsibility to manage all city trees; and departments' responsibilities related to required tree permits; tree replacement rates; and tree replacement costs.**

Agree in Part

AR 5-7 was never approved by the Board of Parks and Recreation Commissioners. For Parks and Recreation employees to enact any provision of the AR it will need to go to the Board for approval. Once the additional staffing in item one is provided, and a permitting process has been established, Forestry staff will provide presentations to each department detailing the items mentioned. We are recommending that the FTEs be funded out of the 2060 capital improvements fund.



- 4. The director of parks and recreation should clarify whether bond funds can be placed in the tree replacement fund and determine how money can be segregated to ensure they are spent according to their funding source restrictions.**

Agree In Part

AR 5-7 was never approved by the Board of Parks and Recreation Commissioners. For Parks and Recreation employees to enact any provision of the AR it will need to go to the Board for approval. Once presentations have been made to each department, it will be incumbent upon each department to determine budgeting for any projects involving tree removals and planting, and any fund sources they will use to comply with the AR 5-7. Parks will segregate and track fund sources according to information provided by each department.

- 5. The director of parks and recreation should propose to the city manager revisions to Administrative Regulation 5-7 including adding permitting and planting specifications for planting city trees which do not involve a prior tree removal.**

Agree In Part

AR 5-7 was never approved by the Board of Parks and Recreation Commissioners. For Parks and Recreation employees to enact any provision of the AR it will need to go to the Board for approval. This broadens the scope of the AR significantly and would require a two additional FTEs to manage the permitting system, reviewing requests, issuing permits and inspecting compliance. We are recommending that the FTEs be funded out of the 2060 capital improvements fund.

- 6. The director of parks and recreation should develop a written process for staff to maintain the existing tree inventory data and ensure tree removals and plantings of all city trees are added.**

Agree in Part

See city auditor's comments about the department's response to recommendation #6 on page 20.

AR 5-7 was never approved by the Board of Parks and Recreation Commissioners. For Parks and Recreation employees to enact any provision of the AR it will need to go to the Board for approval. A document can be created to ensure consistency in how staff is maintaining tree inventory data. One additional FTE will be required to work with departments to collect data from departments for "all" city trees, import it in to Cartegraph (tree asset management system) and maintain it. We are recommending that the FTEs be funded out of the 2060 capital improvements fund.

- 7. The director of parks and recreation should work with the Office of Environmental Quality to submit a grant application to the Infrastructure Investment and Jobs Act Healthy Streets Program when the Federal government opens the grant application period for these funds.**

Agree in Part

See city auditor's comments about the department's response to recommendation #7 on page 20.

AR 5-7 was never approved by the Board of Parks and Recreation Commissioners. For Parks and Recreation employees to enact any provision of the AR it will need to go to the Board for approval. A staff member will be assigned, if the necessary staffing to complete the grant requirements are in place. We are recommending that the FTEs be funded out of the 2060 capital improvements fund.

**8. The director of Parks and Recreation should assign the responsibility and authority within the Parks and Recreation Department for the implementation of Administrative Regulation 5-7 and the maintenance of the city tree inventory.**

Agree In Part

AR 5-7 was never approved by the Board of Parks and Recreation Commissioners. For Parks and Recreation employees to enact any provision of the AR it will need to go to the Board for approval. If all previous staffing requirements as noted above have been met the Conservation Manager and the City Forester will be charged with this responsibility. We are recommending that the FTEs be funded out of the 2060 capital improvements fund.

**9. The director of parks and recreation should evaluate staffing needs based on increased workload related to managing all city trees and provide that information to the Board of Parks and Recreation Commissioners and the City Council for budget consideration.**

Agree

AR 5-7 was never approved by the Board of Parks and Recreation Commissioners. For Parks and Recreation employees to enact any provision of the AR it will need to go to the Board for approval. This step will be requisite to completion of any of the other steps noted. We are recommending that the FTEs be funded out of the 2060 capital improvements fund.

Summary:

We do not disagree with the fundamental need of these recommendations for implementation of AR 5-7. We disagree that neither the Director of Parks and Recreation nor the Board of Parks and Recreation Commissioners were given time for proper consideration of the AR and its impact on funding and staffing requirements.

As previously stated, the Board of Parks and Recreation Commissioners was not given an opportunity to assess AR 5-7 regarding staffing and financial considerations. See sec. 1008 of the City Charter:

**sec. 1008. Disbursement of park funds.**

*The Board of Parks and Recreation Commissioners may expend money belonging to the park district funds or appropriated to the Parks and Recreation Department from the general fund, or available from any other source, for the construction or maintenance of parks, parkways, boulevards, roads or other public property under its control.*

Without this opportunity, the Park Board and the Director of Parks and Recreation were not able to assess the need for adequate funding for the necessary staff for implementation of AR 5-7.

Pending a more robust staffing assessment, we estimate that 4 new forester positions and 2 new administrative staff, funded by the 2060 Capital Improvements Fund, will be needed to properly implement AR 5-7. The new staff will monitor permitting processes, assess removals, manage tree planting contracts, monitor newly planted trees, handle public inquiries, manage the tree inventory, coordinate with other departments, manage the Capital Improvement Sales Tax Fund-Tree Planting and other activities associated with the implementation of the AR.





## Inter-Departmental Communication Parks and Recreation Department

RECEIVED

**Date:** March 6, 2023  
**To:** Douglas Jones, City Auditor  
**From:** Christopher Cotten, Director of Kansas City Parks and Recreation  
**Subject:** Response to Performance Audit: *Implement City Tree Management Regulation to Achieve City Tree Canopy Goals*

MAR 06 2023

CITY AUDITOR'S OFFICE

A handwritten signature in black ink, appearing to be "C. Cotten", written over the "From:" line.

In response to your comments regarding the implementation of AR 5-7, while we agree, that ultimately, much of the responsibility for implementation of AR 5-7 will rest in the hands of Parks and Recreation's Forestry Division, we disagree that Parks has been given the resources needed to accomplish this in the time given.

[See city auditor's comments about the director's comment on page 21.](#)

At the time the audit was initiated, staff were aware that work was needed to implement the AR, but just prior to that, there was confusion as to how much work had been done prior to passage of the AR. Staff were playing catchup as it became clear that much of what was needed for full implementation had not been accomplished. There were several other factors impeding implementation, lack of staffing, a complete turnover in upper administration at Parks, the Park Board had not been made aware of the AR, and, not least, the Urban Forest Master Plan had, has not, been funded.

AR 5-7 attempts to fulfill on of the Urban Forest Master Plan *Strategy 4: Improve Tree Protection Code: Task #3. Adopt an internal tree protection policy.* Additionally, *Strategy 8: Complete an Updated Inventory and Management Plan of Public Trees* is mentioned in the audit. The Urban Forest Master Plan (UFMP) was passed by Council in 2020. The UFMP specifically tasks the City Manager with finding increased funding to the Forestry Division of an additional \$1,000,000 per year for five years. Increasing overall funding by \$5,000,000 annually in perpetuity. No additional funding has been provided to Parks and Recreation for implementation of the UMFP, AR 5-7, nor the new "Tree Preservation Ordinance," if passed. This funding is needed to have the necessary staff in place prior to an attempt to implement new codes.

Finally, as was made aware to you, staff has spent an extra ordinary amount of time and resources focused on the houseless issue which is a matter of safety for the citizens of Kansas City and the users of the Parks system.



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## **Appendix C: City Auditor's Comments on the Director of Parks and Recreation's Response**

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Under Government Auditing Standards, when an audited entity's response comments are inconsistent with findings, conclusions, or recommendations or do not adequately address recommendations, auditors should evaluate the comments. If they disagree, auditors should explain in the report their reason for disagreement with management's comments.

This appendix is the city auditor's written comments on the Parks and Recreation Department's response to this audit. The department's response is Appendix B.

I appreciate the director of the parks and recreation department's response to the City Tree audit recommendations that was submitted on February 13, 2023. The director agrees with the approach taken by Administrative Regulation (AR) 5-7 as indicated by his agreement or partial agreement with the audit recommendations. However, he stated the AR was not approved by the Parks and Recreation Board of Commissioners (Parks Board) and for any of it to be implemented by Parks staff it would need to go to the Parks Board for approval.

The Parks Board should be given an opportunity to adopt this AR in support of the city's tree canopy goals. The director told us he has not presented the AR to the Parks Board for consideration. Parks staff also found no mention in Parks Board minutes that it was presented to the Board by prior Parks and Recreation Department (Parks Department) administrations.

Development of the Administrative Regulation began in 2018 by a policy KC Green Team and was signed by the city manager in March 2021. KC Green is a volunteer effort of Kansas City departments and employees. The teams work to assist the city in meeting its sustainability goals. Parks Department staff participated in the development of the AR. The city forester was a member of the development team and later his current supervisor was also involved.

My disagreement with Parks Department management's comments stem from their representation that they should not be held responsible for implementing the AR without the Parks Board's approval when throughout the course of this audit, the department represented the AR as their responsibility to implement. Parks Department management and staff did not raise a concern about the Parks Board not approving the AR during our audit work and only brought this up in response to our findings.

During meetings and interviews, staff described AR 5-7 as one of their policies and described their difficulties in working to implement the regulation.

- In our entrance meeting with Parks Department management, we asked for their internal policies and procedures, and they cited AR 5-7.
- During our next meeting with Parks management, we asked whether AR 5-7 was approved by the Parks Board. Management told us that it was not approved but the Board knew about it. There was no concern expressed at that time about the AR needing to be presented to the Board.

## *Implement City Tree Management Regulation to Achieve City Tree Canopy Goals*

- In several interviews with Parks Department staff during this audit, we asked questions about their implementation of AR 5-7. Staff made the following comments indicating that implementation was under way.
  - Staff said they were having trouble setting up the Tree Fund, which was established by the AR. A few months later that was accomplished.
  - Staff said since the issuance of AR 5-7, the Forestry Division is more involved in projects that affect city trees. But in the past, the Forestry Division was not involved.
  - When reviewing plans for the Parks Department Development Review Committee, Parks staff reminds departments of the new AR and that trees must be replaced at appropriate ratios. And if the department can't replace them on site, payment to the tree fund is expected.
  - Staff said AR 5-7 was in early implementation and that the plan was to use CompassKC for tree permits but it was not in use yet.
  - Staff said tree removals should be integrated into the permit process so the Forestry Division can track this activity through CompassKC. Staff said they need to work with the Parks' planning section to establish that process.
  - Staff said the AR has not been implemented. Staff said other city departments are aware of AR 5-7, but are not being proactive in notifying the Forestry Division. There needs to be more staff to look at projects, and the permitting process needs to be defined.

### Comment to Recommendation 1

In their response to recommendation 1, management stated that "the AR does not specifically state that Parks and Recreation should create this permitting process. However, it would likely have to be involved."

While the AR does not say that the Parks and Recreation Department must create a permit process, the AR does say:

- The Parks and Recreation Department is the responsible department to oversee the management of trees located on City property and within the city right-of-way.
- The Forestry Division of Parks and Recreation will review the tree permit application and evaluate the request to determine whether to approve or deny the request.
- Permit Fees – Removal and replacement costs are subject to rates are established and authorized by the Board of Parks and Recreation Commissioners.

The Parks Department may need the assistance of other departments to set up the permit system. As the department who will receive and approve the permits, the Parks Department should coordinate and ensure development of the permit process outlined in the AR.

### Comment to Recommendations 6 and 7:

Recommendations 6 and 7 are not reliant on implementation of AR 5-7 and therefore the Parks Board's adoption of the AR does not impact these recommendations:

- a written process for staff to maintain the existing tree inventory data and ensure tree removals and plantings of all city trees, and
- submitting a grant application for city trees.

In addition to a written response to the audit recommendations, the director of parks and recreation submitted a memo with additional comments on March 6, 2023. (See page 18) In his memo the director wrote "...we disagree that Parks has been given the resources needed to accomplish this in the time given." in reference to our comments and findings regarding implementation of Administrative Regulation 5-7.

Our audit does not report the Parks and Recreation Department has all needed resources. We do report (page 10) the department has not completed an analysis to determine staffing needed to implement the AR. We recommended the department evaluate staffing needs based on increased workload related to managing all city trees and provide that information to the Board of Parks and Recreation Commissioners and the City Council for budget consideration.