



Small Tools Audit



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August 19, 2024

Small Tools Audit Executive Summary

Objective

This audit was conducted to determine whether adequate internal controls exist to monitor assets under the five thousand-dollar (\$5,000) threshold.

Background

The City of Charlotte's Aviation, Charlotte Water, Fire, and Transportation department purchases small tools to help maintain its daily operations.

Most departments define small tools as inventory used in the department's day to day operations that cost under \$5,000.

Each department process for handling small tool inventory differs from one another as there is not a city wide policy for non capitalized assets.

Conclusion

The internal controls implemented by the Aviation, Charlotte Water, Fire and CDOT (Street Maintenance and Engineering & Operations division) departments are adequate to monitor small tools.

Highlights

Departments have established adequate controls for safeguarding and purchasing small tools inventory.

- Each department maintains a separate area for small tool inventory.
- Access to warehouses requires badge, key, or code authentication.

While departments use procurement policies as a guideline for small tools purchases, there is no city-wide policy governing non-capitalized assets.

- Each department follows the Procurement Policy and Procurement Card Policy when procuring small tools inventory.
- Departments have informal practices related to handling and safeguarding small tool inventory.

Charlotte Water recently implemented a barcode system and locker/vending machines as a formalized way to track inventory.

- The barcoding system was implemented on February 27, 2024, and is fully operational. The system can generate a real time inventory listing.
- The locker/vending machines were installed in February 2024. The lockers accommodate a range of products including Personal Protective Equipment, large/heavy items, and power tools.

Actions Planned

Aviation, CDOT, CFD, and Charlotte Water have accepted all recommendations and are working to implement corrective actions.



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The City of Charlotte does not discriminate on the basis of disability. We will provide auxiliary aids and services, written materials in alternative formats, and reasonable modifications in policies and procedures to persons with disabilities upon request.

To make a request, please contact the [Internal Audit ADA Liaison](#) via email or phone (980-257-7997).

Objective

This audit was conducted to determine whether adequate internal controls exist to monitor assets (small tools) under the five-thousand-dollar (\$5,000) threshold.

Background

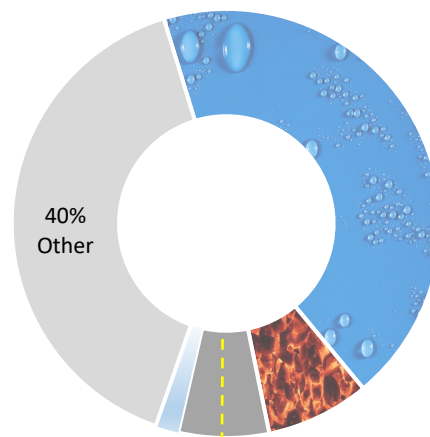
The Capital Asset Policy (FIN 23) establishes standardized procedures for use by departments in the financial management of capital assets. The minimum initial capitalization threshold for machinery and equipment is \$5,000. There is no city-wide policy governing the recording of items (small tools) that fall under the \$5,000 threshold.

Small tools are defined as inventory used in day-to-day departmental activities, costing under \$5,000. Each department has its processes for managing small tool inventory, as there is no city-wide policy for non-capitalized assets. These tools are procured either through contracts, P-Cards, or purchase orders.

For FY 2022 and FY 2023, the city spent \$2,488,420 and \$2,601,640 on small tools, respectively. For this audit, we focused on the Aviation, Charlotte Water, Fire and Charlotte Department of Transportation (CDOT) departments which comprised 60% of total expenditures.

FY23 Small Tools City-wide Expenditures

Department	FY2023 Small Tool Expenditures
Charlotte Water	\$ 1,136,633
Fire	\$ 203,421
CDOT	\$ 177,389
Aviation	\$ 45,317
Other (9 departments)	\$ 1,038,880
TOTAL	\$ 2,601,640



■ Charlotte Water ■ Fire ■ Transportation ■ Aviation

Findings and Recommendations

1. Departments have established adequate controls for safeguarding and purchasing small tools inventory.

Auditors conducted site visits and audit sampling across all departments' warehouses to assess the effectiveness of small tools inventory controls. The following controls were observed during the visits:

- Each department maintains a separate area for small tool inventory.
- Access to warehouses requires badge, key, or code authentication.
- Charlotte Water employs 8-12 surveillance cameras in each warehouse for enhanced security.
- Aviation operates a logistic counter with access restricted to CLT Airport badge holders for tool sign-outs.
- CDOT (Engineering & Operations) secures small tools in a caged area accessible only by the Inventory Warehouse Coordinator.
- CDOT (Street Maintenance) limits inventory specialists to a maximum monthly spend of \$1,600 on P-cards.
- Fire Station Captains exclusively request purchasing needs through Fire Logistics.

Auditors judgmentally selected 10-18 items from each department. Items were selected from respective warehouses and accounted for to verify accuracy of records. Minor exceptions were noted during the visits.

2. While departments use procurement policies as a guideline for small tools purchases, there is no city-wide policy governing non-capitalized assets.

During interviews each department noted that they follow the Procurement Policy and Procurement Card Policy when procuring small tools inventory. Transportation (Engineering & Operations Division) incorporates information about tools and equipment into the employee handbook.

The City of Charlotte does not have a city-wide policy specifically addressing small tools or assets under \$5,000. Despite the absence of formal written departmental policies, it appears that all audited departments have informal practices related to handling and safeguarding small tool inventory.

Written policies would enhance the training process for new employees by minimizing confusion regarding the handling and safeguarding of small tools. Moreover, these written policies would establish guidelines and standards for effectively managing small tool inventory.

Recommendation: Departments should have written policies and controls for the management of uncapitalized assets (Small Tools). A risk assessment should be performed to determine the assets most vulnerable to loss and those items should be tagged with serial numbers. Suggested items to include in the policies are:

- Conduct a thorough inventory to identify all uncapitalized items
- Perform a year-end physical inventory
- Deletions (items taken out of service) should be shown on the inventory list as a strikethrough with a documented reason to provide an audit trail. The same process should be followed for lost or stolen items

Value Added: Compliance; Risk Reduction

Aviation Response: Aviation agrees with recommendation. Aviation Maintenance division has already begun the process of drafting procedures to further minimize loss of the most vulnerable small tools. The policy will be completed by October 31, 2025.

CDOT Response: CDOT Agrees. The CDOT will develop a policy for the procurement, recording, and tracking of small tools that meet certain criteria and are able to be inventoried. This policy will be completed by December 31, 2024. CDOT staff will develop categories of items that will be tracked and ensure that a departmental system is in place to accurately record and update small tool inventories. Written performance expectations for the Storekeepers and their supervisors will be developed to ensure compliance with conducting routine inventories and the maintenance of any tracking system. These expectations will be incorporated during the performance review process for each employee.

Charlotte Water Response: The department concurs with Internal Audit's recommendation of creating written policy and procedure; the department will move forward with that effort and focus on uncapitalized assets that are most vulnerable to loss. After a risk assessment occurs, appropriate tracking efforts will be considered in the development of the departmental policy and procedures. The current ERP project has taken a large portion of staff availability. To implement a productive and worthwhile approach the creation of the policies and procedures will be implemented by July 31, 2025.

Fire Response: Fire agrees. CFD is in the initial stages of evaluating the implementation of an inventory management system. It will extend to station and apparatus inventory over time. To fully bring this project to fruition, an investment in software and personnel are required. Completion dates for this project will be based on funding. During the next budget cycle, a new request for funding will be made. New inventory management policies and procedures will be established as part of this project by October 31, 2025.

3. Charlotte Water recently implemented a barcode system and locker/vending machines as a formalized way to track inventory.

Auditors conducted visits to the Zone 2 warehouse (Charlotte Water) in late 2023, to assess the small tool inventory processes. Sign-in/out procedures were observed to monitor tool usage; however, there was no established procedure or system for tracking the total on-hand inventory of small tools.

During the initial visit, department representatives mentioned discussions about implementing a barcode system to enhance inventory tracking. Additionally, plans were underway to introduce an electronic locker/vending machine, allowing employees to access tools by scanning their badges.

During subsequent visits, auditors were informed that the barcode system and the locker/vending machines were in the testing phase.

The barcoding system was implemented on February 27, 2024, and is fully operational. Inventory was verified at the time of implementation, and the system can generate a real time inventory listing.

The locker/vending machines were installed in February 2024. The machines are maintained and serviced by MSC Direct. The lockers accommodate a range of products including Personal Protective Equipment, large or heavy items, and power tools. They provide 24/7 secure access, and the vendor receives reports when products need to be refilled. The locker items are separate from the barcoded inventory.

Recommendation: Charlotte Water should test and if necessary, modify the systems put in place to track inventory. This could/should consist of performance evaluation, user feedback and data accuracy.

Value Added: Efficiency; Risk Reduction

Charlotte Water Response: The department concurs with Internal Audit's recommendation. Once the systems have been in place for a full year, March 31, 2025, tests will be performed, and modifications made if necessary.

Conclusion

The internal controls implemented by the Aviation, Charlotte Water, Fire and CDOT (Street Maintenance and Engineering & Operations division) departments are adequate to monitor small tools.

Distribution of Report

This report is intended for the use of the City Manager's Office, City Council, and all City departments. Following issuance, audit reports are sent to City Council and subsequently posted to the [Internal Audit website](#).

Scope, Methodology, and Compliance

Scope

The scope of the audit will cover the procedures and policies on handling small tools for the Aviation, Transportation, Charlotte Water, and Fire department for fiscal year 2022 & 2023.

Methodology

To achieve the audit objectives, auditors performed the following:

- Gained an understanding on the processes used by each department regarding small tools.
- Reviewed Munis small tool expenditure data for FY 2022 & 2023 for the selected department/divisions.
- Interviewed relevant department personnel from the Water, Fire, Transportation, & Aviation department.
- Conducted site visits to the Charlotte Water, Fire, Transportation, & Aviation department.
- Took samples from Barcloud (Fire), Street Maintenance inventory spreadsheet, Aviation's logistic & fleet spreadsheets, a randomly selected invoice from Zone 2 operations, and Cityworks (Transportation – Engineering & Operations) to trace those items to their assigned warehouses.

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.

Government auditing standards require that we determine which internal controls are material to the audit objective(s) and obtain an understanding of those controls. To evaluate internal controls, the City Auditor's Office follows the Committee of Sponsoring Organizations of the Treadway Commission's Internal Control – Integrated Framework (COSO Framework) as included in Standards for Internal Control in the Federal Government (GAO Green Book).

In planning and performing the audit, auditors obtained an understanding of the processes used throughout the management of small tools and the associated internal controls; assessed the

internal control risks; and determined the following internal control components were significant:

- **Control Environment** – The set of standards, processes, and structures that provide the basis for carrying out internal control across the organization.
- **Control Activities** – The actions management establishes through policies and procedures to achieve objectives and respond to risks.

Internal control deficiencies that are significant within the context of this audit's objective(s) are stated in the Findings and Recommendations section of this report. For additional information regarding internal control components and the related principles of internal control, please see Appendix A.

Appendix A

The Five Components and 17 Principles of Internal Control

<p>Control Environment</p>	
<p>Risk Assessment</p>	<ul style="list-style-type: none"> 6. Management should define objectives clearly to enable the identification of risks and define risk tolerances. 7. Management should identify, analyze, and respond to risks related to achieving the defined objectives. 8. Management should consider the potential for fraud when identifying, analyzing, and responding to risks. 9. Management should identify, analyze, and respond to significant changes that could impact the internal control system.
<p>Control Activities</p>	<ul style="list-style-type: none"> 10. Management should design control activities to achieve objectives and respond to risks. 11. Management should design the entity's information system and related control activities to achieve objectives and respond to risks. 12. Management should implement control activities through policies.
<p>Information & Communication</p>	<ul style="list-style-type: none"> 13. Management should use quality information to achieve the entity's objectives. 14. Management should internally communicate the necessary quality information to achieve the entity's objectives. 15. Management should externally communicate the necessary quality information to achieve the entity's objectives.
<p>Monitoring</p>	<ul style="list-style-type: none"> 16. Management should establish and operate a monitoring mechanism that monitors both internal and external activities that impact the control system and evaluate the results. 17. Management should remediate identified internal control deficiencies on a timely basis.