
***WIRELESS COMMUNICATION USAGE
FOLLOW-UP
(A2021-02F)***

April 2024





OUR MISSION

Provide independent, objective assurance and consulting services designed to add value and improve the City of Fayetteville’s operations.

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ORIGINAL REPORT HIGHLIGHTS

Wireless Communication Usage (A2021-02)

Original Report Issued:
August 2021

Objective: Assess the City's wireless communication usage to identify areas of risk and opportunities for potential savings.

Scope: Device usage from February 11, 2020 through March 10, 2021.

Background

- The City utilized a convenience contract with the State of North Carolina to establish Verizon wireless communications accounts.
- Verizon Wireless was the City's primary vendor for wireless services and was available for all City departments.
- Verizon offered specific service plans designated for National Security, Public Safety, and First Responders with priority network service.
- Verizon Wireless maintained a website, utilized by City management that detailed and summarized the City's wireless activity to include monthly billing and device usage.
- The Verizon website provided City management with the ability to add and change service plans and purchase equipment and device accessories.

Highlights:

- The City had not established an oversight process, to include acceptable standards for managing device usage.
- The City did not have guidelines on selecting cellular service plans. Therefore, the plans selected were not always the most cost effective.
- Plans used were not at the State contracted rates.
- Plans varied based on the allowance of minutes, data and messaging causing additional monthly service fees and overages.
- A centralized inventory of devices was not maintained by the Information Technology Department.
- Devices returned by employees to be reassigned, disconnected, or disposed were reset to factory settings, dismantled for parts or destroyed without documenting the device's identification information.

WHY THIS MATTERS

The City and its management have an obligation to be responsible stewards of City resources. Lack of controls and oversight of City programs such as wireless communications devices and usage could lead to loss of public trust.

Additional consequences include but are not limited to:

- Expending City resources on underutilized devices and non-contracted cellular service plans; and
- The inability to efficiently and effectively manage devices.



Action Since Original Audit Report

Wireless Communication Usage Follow-Up (A2021-02F)

The Office of Internal Audit has completed follow-up on the Wireless Communication Usage Audit approved by the Audit Committee on August 5, 2021.

Objective and Scope

Determine whether management implemented corrective actions to the audit recommendations reported by the Office of Internal Audit.

The scope of the follow-up audit was limited to the findings and accepted recommendations in the original audit of wireless communication usage. This included a review of departmental and citywide policies and procedures, wireless device inventory documentation and Verizon account reporting.

Notice of Change in Operations

The scope of the original audit covered the City’s Verizon Wireless accounts and included the Police and Fire departments. Following the issuance of the original report in August of 2021, the Police and Fire departments discontinued service with Verizon Wireless and assumed sole responsibility of the wireless devices within their respective departments. Therefore, follow-up audit testing did not include services provided to either the Police or Fire departments.

Background

The original audit report, dated August 2021, had seven agreed upon recommendations. The audit provided management with recommendations to:

- Develop written policies and procedures;
- Conduct a full wireless device inventory;
- Evaluate appropriate service plans for all devices; and
- Establish a centralized inventory.

Summary Results

7 of 7 recommendations were agreed upon in August of 2021

For the October 27, 2022 Audit Committee meeting, management stated they no longer concurred with the recommendation to use Oracle Cloud for small asset management. Therefore, testing included an evaluation of **6** agreed upon recommendations to determine if corrective actions were implemented as reported. The Department implemented two recommendations by establishing written policies and procedures and ensuring devices are on the most appropriate service plans.

Management requested a full-time employee to implement the responses in the original audit. However, a full-time employee was not approved. Therefore, IT created a system that required user department’s collaboration to provide the necessary oversight. To further strengthen controls, Internal Audit encourages the Information Technology Department to continue working towards full implementation of the remaining recommendations.

The Office of Internal Audit has concluded the Wireless Communication Usage Follow-up Audit and expresses appreciation for the assistance provided by Department staff.



FULLY IMPLEMENTED

2



PARTIALLY IMPLEMENTED

0



NOT IMPLEMENTED

4

Finding 1 – Improving management oversight related to cellular service plans could result in cost savings.

Recommendation 1.1	Establish written guidelines that outline user department requirements for oversight and accountability. These guidelines should include but not limited to: <ul style="list-style-type: none"> Identify clear delineation of responsibilities related to the City’s wireless communication function within the Information Technology Department and applicable departmental personnel; Monthly review of invoices for billing irregularity, overage charges, and zero and underutilized usage with actionable follow-up; Documenting the business need for devices that must remain active regardless of usage; Documenting management exceptions to City-wide standards for device distribution; Timelines and reasons for the suspension and deactivation of cellular service plans; and Utilizing Verizon Wireless hotspots in lieu of activating cellular service on multiple devices.
SUMMARY OF ORIGINAL FINDING	
CURRENT OBSERVATION	Internal Audit reviewed City policies and Department standard operating procedures provided by Information Technology (IT) management. Policies and procedures were updated to establish clear areas of responsibility for IT staff members and end user administrators.
DETERMINED STATUS	IMPLEMENTED

Recommendation 1.2	Assign devices to the appropriate contracted service plan prior to deploying the device to the assigned individual or department.
SUMMARY OF ORIGINAL FINDING	
CURRENT OBSERVATION	Usage of wireless data varied across users and devices. Based on the varying data usage, IT determined that paying the Public Safety Plan monthly service fee which provided unlimited data usage to all users was not the most cost effective. Therefore, the Information Technology Department reviewed data usage by user/device and selected the most cost-effective service plan for each group of users. The Department stated the usage is monitored regularly to ensure the devices are on the most cost-effective plans.
DETERMINED STATUS	IMPLEMENTED

Finding 2 – Inventory Management controls over devices associated with cellular services were not established.

Recommendation 2.1	Complete and document a full inventory of all active devices to ensure existence.
SUMMARY OF ORIGINAL FINDING	
CURRENT OBSERVATION	A full inventory of all active devices was not completed. Effort to manage inventory was made by implementing a Monthly Review Checklist process to be completed by end user administrators and returned to IT. However, this process does not require that department staff verify device existence. Additionally, not all departments were completing the review.
DETERMINED STATUS	NOT IMPLEMENTED

Recommendation 2.2 SUMMARY OF ORIGINAL FINDING	Establish a centralized inventory of all devices and track all information necessary for devices to be traced to an individual, a piece of equipment, or a specific location, to include the individual responsible.
CURRENT OBSERVATION	Consistent with observations in the original audit, a centralized inventory of all devices was not established. The IT Department utilized the Verizon MyBiz portal to track inventory, however the portal does not allow tracking of inactive devices. Additionally, information used to identify some devices in the MyBiz portal was generic and did not provide sufficient information to trace the devices back to the individual user. For example, a device name listed as "I-Pad."
DETERMINED STATUS	NOT IMPLEMENTED

Recommendation 2.4 SUMMARY OF ORIGINAL FINDING	Follow established City standards for properly documenting the surplus and removal of all devices past their usable life cycle.
CURRENT OBSERVATION	<i>City Policy #603 IT Acceptable Use</i> provided direction for properly documenting the surplus and removal of all devices past their usable life cycle. The IT department did not track or notify departments when devices reached "end of life" stage. In an interview with department management, Internal Audit was informed that end of usable life was never intended to be tracked for mobile devices. Management stated the policy would be updated.
DETERMINED STATUS	NOT IMPLEMENTED

Recommendation 2.5 SUMMARY OF ORIGINAL FINDING	Establish written guidelines requiring a periodic departmental inventory for device existence.
CURRENT OBSERVATION	The Verizon Account Administration standard operating procedures required department administrators to complete the Monthly Review Checklist which requires the validation of inventory. However, the checklist did not specifically address verification of device existence, and no additional follow-up by the IT department was done for departments who did not complete the monthly review. Additionally, the standard operating procedures did not provide guidance on verifying device serial numbers against the City's centralized inventory records. Furthermore, a full inventory conducted by departments monthly may not be realistic, especially for the larger departments.
DETERMINED STATUS	NOT IMPLEMENTED