

**Performance Audit 14-03:  
Police Aircard Inventory  
Management**

**October 2014**

**City Auditor**

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# OFFICE OF INTERNAL AUDIT

## Stan Sewell, City Auditor

October 2, 2014

To: Mayor Andy Berke  
City Council Members

Subject: Police Aircard Inventory Management (Report #14-03)

Dear Mayor Berke and City Council Members:

The attached report contains the results of our audit of Police Aircard Inventory Management. Our findings indicate the City currently does not have proper controls in place to safeguard assets or control costs related to city-provided wireless data devices. We identified the following control deficiencies:

- No wireless data device policies to guide assignment and use of the devices,
- No business justification for each wireless data device assigned,
- No regular review of wireless data device bills to control costs and identify non-usage,
- Lack of an adequate inventory list,
- Failure to perform required physical inventories, and
- Lack of termination procedures to ensure the wireless data device is returned to the City and deactivated (or reassigned) when an employee leaves city employment.

In order to address the noted areas for improvement, we recommended actions to mitigate these control deficiencies. While the findings discussed below may not, individually or in the aggregate, significantly impair operations related to wireless data devices, they do present risks that can be more effectively controlled.

We thank the management and staff of the Police, Information Technology, and Purchasing departments for their cooperation and assistance during this audit.

Sincerely,

Stan Sewell, CPA, CGFM, CFE  
City Auditor

Attachment

cc: Travis McDonough, Chief of Staff  
Audit Committee Members  
Fred Fletcher, Chief of Police  
Brent Messer, Chief Information Officer  
Brent Goldberg, Chief Operating Officer

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## TABLE OF CONTENTS

AUDIT PURPOSE.....	1
BACKGROUND .....	1
Financial Information.....	2
FINDINGS AND RECOMMENDATIONS.....	2
Wireless data device inventory and services lack citywide oversight and accountability. ....	2
Effective inventory controls needed to ensure City assets are safeguarded from theft and abuse. ....	7
Supplemental Comment: IT Department. ....	11
Appendix A: Scope, Methodology AND Standards.....	12

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## AUDIT PURPOSE

This audit was conducted in accordance with the Office of Internal Audit's 2014 Audit Agenda. The objectives of this audit were to determine if:

- The Police Department has established appropriate criteria for assigning wireless devices to employees; and,
- The Police Department effectively manages the acquisition, tracking, usage and disposal of wireless devices (aircard, tablet, and MiFi devices only<sup>1</sup>).

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## BACKGROUND

In addition to cellular phone service, the City has a contract with Verizon Wireless to provide wireless data service for devices such as iPads, MiFi mobile hotspots, and modem aircards. These wireless data devices are provided under a blanket contract. The contracts are executed by the Purchasing Division and are cooperative agreements based on contracts established by the State of Tennessee and Metro Nashville.

The Information Technology Department is responsible for managing and processing payments. The assignment, ordering, usage analysis and tracking of the individual wireless data devices rest with each department. During the audit period, any “authorized contact” from the City could place orders with Verizon directly and have the data devices shipped to any address. After initiating this audit, the IT Department updated and removed all city personnel from the authorized contact list, except Purchasing and IT Department personnel.

The Police Department’s Administration & Support Division is responsible for the management of the wireless data device inventory. The Division orders new and replacement devices, safeguards the assets, assigns devices to personnel, maintains an inventory listing, handles disposition of surplus devices and suspends services as needed.

As of the April 2014 billing statement, the Police Department had 512 active wireless devices<sup>2</sup>. Under the contract terms, the cost of the

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<sup>1</sup> Aircards are wireless broadband data devices that enable users to access the internet with their laptops. The MiFi device creates a personal Wi-Fi cloud capable of sharing high-speed internet connectivity with up to 10 Wi-Fi enabled devices simultaneously.

aircard or mifi device is not charged to the city; however, a monthly service charge begins the day following shipment of the device.

### Financial Information

During fiscal year ending June 30, 2014, the City expended \$268,467 for wireless devices and wireless data services (excluding cell phone stipends). The Police Department's expenditures constitute 77% of annual expenditures.

Exhibit I: Wireless Data Device Expenditures, by Department

Department	FYE 6/30/13	FYE 6/30/14
General Govt & Agencies	18,601	20,763
Executive Branch	960	960
General Services	2,039	2,435
Human Resources	428	408
Human Services	3,123	-
Economic & Community Development	7,006	9,736
<b>Police</b>	<b>196,222</b>	<b>206,813</b>
Fire	5,947	7,652
Public Works	26,966	13,533
Parks Management	77	-
Education, Arts & Culture	5,796	-
Youth & Family Development	-	6,167
Total Expenditures	267,164	268,467

Source: Oracle Financial System

## FINDINGS AND RECOMMENDATIONS

### Wireless data device inventory and services lack citywide oversight and accountability.

City employees may be assigned wireless devices to use in the course of their employment when it provides an economic, efficient and secure solution to business needs. A justifiable business need to improve departmental operations should be balanced against the related costs for this technology. Ongoing costs should be closely monitored to ensure the best use of City funds.

Although the IT Department has issued comprehensive policies for city-issued cellular phones, the wireless data devices were not included in the *Cell Phone Policy*. Citywide oversight and accountability has not been established. In addition, the Police Department has not

<sup>2</sup> The Verizon April 2014 billing statement had 663 active data devices for all city departments.

developed departmental policies and procedures to manage its wireless data device inventory and services. The lack of policies and procedures, oversight and accountability has resulted in the City incurring unnecessary costs for services.

***Monthly expenses are not charged to the appropriate department –***

The current payment process for Verizon does not include a review and approval from each department. Instead, the sole approval and processing of the monthly statement rest with the IT Department. The IT Department prepares a monthly journal entry to allocate the charges to the respective departments.

To assist with payment allocation, the IT Department maintains cellular number and cost center information using an in-house database, TelMaster. When the billing details are downloaded from Verizon’s website, the TelMaster database is used to code each cell number with the appropriate cost center. In order to properly update the TelMaster database, the department heads must either inform the IT Department or directly input new device information into TelMaster. If the department fails to inform the IT Department or input the information into the TelMaster database, the cost associated with the cell numbers is allocated to the cost center “Non Allocated Telecom Services”. We noted sixty-one (61) cellular numbers on the April 2014 billing statement were allocated to this cost center.

***Monthly service charges exceeded negotiated contract price –*** Per the contracts on file, the monthly service charge for wireless data devices is \$34 (unlimited data) or \$24 (up to 2GB of data). Review of the April 2014 billing statement for price plan descriptions indicates several plan types that exceed the negotiated contract price. Examples of price plans are shown in Exhibit 2 below.

Exhibit 2: Verizon Price Plan Descriptions

Price Plan Description	Monthly Cost
4G Mobile Broadband 5GB	\$ 50.00
4G Mobile Broadband Unlimited	\$ 39.99
Corporate Mobile Broadband	\$ 39.99
Mobile Broadband	\$ 55.12
Mobile Broadband Unlimited	\$ 34.00

**Source:** Verizon Wireless - April 2014 Billing Statement

We analyzed the monthly service charges during the audit period and noted numerous devices with incorrect monthly charges. The monthly charges ranged from \$24 to \$55 per month. Using the contract rates, we estimate overbillings of \$45,900 during the audit period.

**Costs incurred for zero-usage devices** – Reports provided by Verizon show the City had 382 devices with non-usage for one or more months during the 20 month period under review. The City expended \$87,559 in total service charges on the devices identified. In Exhibit 3 below, the devices with more than 8 months of zero usage are highlighted by department. We found these devices averaged 16 months of non-usage. The remaining 282 devices had 2.5 months of average non-usage per device. The overwhelming majority of these 282 devices were assigned to the Police Department (Approximately \$20,000).

Exhibit 3 – Zero Usage Devices, by department<sup>3</sup>

Department	Number of Devices	Total Cost (\$)
Human Resources	1	472
General Services	1	676
Youth & Family Development	3	2,359
Fire	4	1,432
Public Works	8	3,825
Information Technology	11	6,375
Economic & Community Development	18	11,671
<b>Police</b>	<b>54</b>	<b>32,924</b>
All Other Devices	282	27,825
Total Expenditures		87,559

**Source:** Verizon Wireless

**Aircard and tablets assigned to former employees** – We compared Personnel records of current employees to the Police inventory record of users and found devices assigned to employees who were terminated, resigned, or retired. While we cannot conclude the former employees continued to benefit from the services, the lines have remained active on the City’s invoice. These services cost the City \$2,252 during the audit period. This does not include service costs associated with the four iPads discussed in our finding *Equipment was not returned to the City* later in this report.

### Recommendation 1:

We recommend the IT Department develop citywide policies and procedures for wireless data devices. We recommend the new policy be communicated to all departments and made available on the City’s intranet. The new policy should consider items such as:

<sup>3</sup> The usage analysis included 20 months of service, between November 2012 and June 2014. Data devices with less than 8 months of zero usage were combined under “all other devices”. Total cost includes only charges during the months of non-usage.



- **Who should receive a city-provided wireless data device** – The new policy should provide a framework for typical duties or positions that might require the use of a wireless data device. For example, the policy might establish types of authorized user groups such as “Field Personnel” for which a typical daily duty would require internet access from the field location.
- **Why it is necessary** – The policy should recommend departments establish and maintain application forms for each issued wireless data device that requires the supervisor (or administrator) to justify the business need for the device based on the employee’s job duties. The application should include basic asset information such as device, model number, cell number, and serial number. The application should also require the employee to acknowledge receipt of any relevant policies.
- **Define the role of Information Technology** – The policy should clearly outline the duties IT intends to perform.

***Auditee Response (IT Department):***

*IT is currently finalizing drafts of City-wide technology use policies that include provisions for issuing mobile devices (with and without wireless data services). The draft policies, due to be released around December 2014 or sooner, do include similar content as suggested; role definitions, necessity, business need, etc. IT has also established a technology purchase and replacement policy (issued July 25, 2014), and new acquisition procedures for all technology; part of the plan for all technology (including mobile wireless devices such as aircards) acquisition, assignment, and replacement to go through the IT Department. There are also new procedures that go along with this policy for more granular accountability and surplus handling that include thorough inventory tracking through use of a new central technology inventory system. Where appropriate, technology is also now assigned to individual City employees to ensure greater accountability and making the reclaiming of technology equipment easier when city personnel resign, retire, or are otherwise terminated.*

**Recommendation 2:**

We recommend the Police Department develop written policies and procedures for managing its wireless device inventory. The written policies should ensure proper internal controls, which include, but are not limited to; safeguarding inventory, segregation of duties, assignment and replacement criteria, tracking, usage/needs analysis, account terminations and surplus property disposition. The policies should incorporate any related city-wide policies.

***Auditee Response:***

*IT is in the process of establishing greater control mechanisms in conjunction with the Police Department and other departments to ensure proper accountability of data and device usage. This includes procedures and associated training for city employees and supervisors when assigning and accounting for technology equipment (and associated data accounts) to new or established city personnel.*

*Furthermore, since June of 2014, the Department of Information Technology and the Police Department have been formulating plans for the responsibility for police technology to be transferred to IT, including the issuance and central inventory of police technology.*

**Recommendation 3:**

We recommend the IT Department provide periodic usage analysis to each department. It should ensure individuals with oversight authority have access to the reports. The location of the report and authorized viewers should be communicated regularly to all departments.

***Auditee Response (IT Department):***

*IT, in conjunction with Purchasing, is currently investigating ways to provide granular accounting of usage and billing to department heads for regular analysis. The plan is for Purchasing to work with Verizon to see if the company can provide the billing data in a more useful format and then for IT to develop a business process internally that will allow each department/agency to review each device, its user, and data usage to determine if the information is accurate and usage appropriate (or even authorized). IT is also working with Verizon to get the company to create a report of low-usage devices that can be reviewed by administrators to ensure there is a valid reason for continuing service.*

**Recommendation 4:**

We recommend the Police Department periodically review their full roster of assigned data devices to determine whether they can deactivate those with no or minimal usage and whether all devices are assigned to current employees with a justified business need.

***Auditee Response:***

*The finding of the IT assessment mentioned in IT's response to recommendations 2 and 3 will cover most of recommendation 4. Also as part of the new technology replacement policy (issued July 25, 2014), departments / agencies will be asked to review all technology in*

*their areas for justified business need and continual usage before it is replaced or upgraded.*

#### **Recommendation 5:**

We recommend the IT Department, with the assistance of the Finance Department, analyze and recoup (or receive credit) the over-billed service charges identified in this audit.

#### ***Auditee Response (IT Department):***

*We concur. The Deputy Chief Operating Officer has initiated this discussion with Verizon.*

#### **Recommendation 6:**

We recommend the IT Department, with assistance from the Purchasing Division, develop effective monitoring procedures that ensure the City pays only the negotiated contract price. The formal policies and procedures should clearly define responsibilities of each department to ensure accountability and effective contract oversight.

#### ***Auditee Response (IT Department):***

*The procurement process for wireless devices has been revised. Only IT and Purchasing have the authority to purchase from Verizon. All orders now utilize the City's ERP system to carry out each purchase. This allows for the buyer to verify pricing, and allows for the review and approval of IT. The policies mentioned in the IT response to Recommendation 1 and 2 will cover the policy portion of recommendation 6.*

**Effective inventory controls needed to ensure City assets are safeguarded from theft and abuse.**

Per the *Internal Control and Compliance Manual for Tennessee Municipalities*, cities are required to maintain a record of “moveable, high-risk, sensitive property” and ensure that employees turn in “any city property, including keys, equipment, uniforms, etc.” before their final paycheck is processed. The City does not maintain a central inventory of wireless data devices. Rather, in accordance with the City's *Sensitive Minor Equipment Policy July 2012*, each department must maintain a list of its assets valued under \$5,000 and “moveable and vulnerable to theft”.

The Police Department has two divisions maintaining inventory records. The Technology Division maintains an inventory listing of wireless data devices; whereas, the Accreditation Division maintains an inventory listing (SME) of all department equipment including wireless data devices. City policies, as well as the compliance manual,

require the City Departments to perform an annual physical inventory. Any equipment not present should be reported with explanation to the Finance Department.

***Equipment was not returned to the City*** – Police Department policies<sup>4</sup> require employees to surrender all department property in their possession upon separation from employment. “Failure to return non-expendable items may obligate and cause the person to reimburse the department for the fair market or replacement value of the article(s), and/or face civil or criminal charges.” In addition, City Code Sec. 2-194 states “no city employee shall, without the consent of the city council, receive any money or gratuity or compensation in addition to his/her salary for any service he/she may render as an employee.”

In February 2013, five iPads were purchased, at a cost of \$624 each, for “the Chiefs to communicate more proficiently in the field.” Four employees retired in December of 2013 but failed to return the assigned iPads to the Department. We found the employees did not receive Council approval to keep the city-issued equipment nor did they purchase the equipment through a public auction as required by TCA 6-54-125.<sup>5</sup> In compliance with TCA 8-4-501 et al, we have reported this information to the Tennessee Comptroller’s Office.

We also found the annual inventory report submitted to the Finance Department in April 2014 was erroneous as it indicated the iPads were accounted for during the physical inventory. In addition, the City continued to pay for service on these iPads until February 2014.

***Inventory records had omissions and assignment errors*** - The Technology division’s aircard inventory system is manual in nature using an excel spreadsheet to record a cell number, assignment, and type of equipment. For the purpose of fulfilling the *Policy and Procedures Guide for Sensitive Minor Equipment (SME)*, the data devices are tracked by a second inventory listing maintained by the Accreditation division. The department’s SME inventory is maintained using single-user software, WASP. The inventory listing includes fields for the asset type, manufacturer, asset description, site, serial number and tag number. The serial number field for the recorded wireless data devices corresponded to the cellular number on the billing statement.

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<sup>4</sup> Source: *Chattanooga Police Department – Policy Manual, ADM-30 Department Property and Equipment Section III (Date of Issue 08/19/11)*

<sup>5</sup> TCA 6-54-125 states it is unlawful for any municipal official to purchase from the municipality any property declared to be surplus, except by bid at public auction during their employment, or for six (6) months thereafter.

We compared the April 2014 Verizon billing statement to both inventory listings maintained by the Police Department. We found both inventory listings to be incomplete. The aircard inventory listing failed to account for 123 wireless data devices with \$4,425 in April 2014 service charges. The SME inventory listing failed to account for 167 wireless data devices with \$5,823 in April 2014 service charges.

***Return of asset (and deactivation) procedures not defined*** - To comply with the *Internal Control and Compliance Manual for Tennessee Municipalities*, the Human Resources Department requires departments to submit a termination form for all employees leaving city employment. The form requires the return of all city-owned equipment, uniforms and tools.

While departments may maintain their own data device inventory, Personnel records do not indicate whether an employee has an assigned device. As previously stated, we found data devices assigned to former employees were still incurring monthly charges, in some cases, despite non-use. Instead of deactivating, some data devices could be reassigned. The Police Department has no formal policy or written support to ensure the deactivated or reassigned devices are updated on the respective inventory listings and properly disconnected, if necessary.

After we initiated this audit, the Police Technology Division has requested each division to inventory and report the data devices in its possession. Using this feedback, the division has created a new aircard inventory listing.

***Broken and replaced devices were discarded by the Police Department*** - To comply with City Code Section 2-542 (2) and the *Internal Control and Compliance Manual for Tennessee Municipalities*, the Purchasing Division developed surplus property policies and procedures found in the *Procurement Instruction Manual 2014*.<sup>6</sup> Both the current and predecessor policies require the department administrators to notify the purchasing division when property becomes surplus and eligible for transfer or scrapping.

Our audit found the Police Department failed to notify and request the Purchasing Division to dispose of wireless data devices. Instead, the devices were thrown away by the Police Technology Division.

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<sup>6</sup> The surplus property disposition policies were updated in 2014. Policies to address surplus property disposal could previously be found in the *Purchasing Manual Revised April 15, 2011*.

**Recommendation 7:**

We recommend the Police Department request the return of the missing iPads taken by retired employees and consult with the City Attorney regarding any legal actions City Administration deems necessary.

***Auditee Response:***

*Since the technology support for the Police Department is being transferred to IT, IT has sent formal letters to each of the retired City employees in question and requested that the missing iPads be promptly returned.*

**Recommendation 8:**

We recommend the Police Department ensure personnel are performing, at a minimum, the annual physical inventory as required by State laws and City policies.

***Auditee Response:***

*SME inventory is currently required to be performed quarterly by each department. The Police Department has counseled the employee in question concerning the importance of an accurate inventory and the requirements for archiving such an inventory.*

**Recommendation 9:**

We recommend the Police Department develop procedures to eliminate duplicate efforts when maintaining SME inventory.

***Auditee Response:***

*While both Police Chief Fletcher and CIO Messer are new to the City of Chattanooga, both have recognized the need for changes in inventory procedures, and have been collaborating on plans to transfer support and most of the technology inventory processes from the Police Department to IT's central technology inventory system in accordance with the IT technology purchase and replacement policy issued July 25, 2014.*

**Recommendation 10:**

We recommend the Police Department investigate the data devices currently on the billing statement to verify all devices are accounted for and properly assigned in its updated inventory listing.

***Auditee Response:***

*The Police Department agrees that it must investigate the data devices currently on the billing statements to verify that all devices are accounted for and properly assigned in its updated inventory listing. We are currently in the process of conducting an inventory of all related devices as a means of insuring that the listing is up to date. IT will periodically provide CPD with copies of related billing statements to enable CPD to conduct the recommended investigations.*

**Recommendation 11:**

We recommend the Police Department surplus personal property in accordance with the City's *Procurement Instruction Manual 2014*.

***Auditee Response:***

*We concur. The Police Department's practice is to follow the law and policy with regard to disposition of city property. We will conduct remedial training on Section 5.01 – Surplus Personal Property Policies and Procedures of the 2014 Procurement Instruction Manual, with all appropriate CPD Technology Personnel as a means of ensuring that Surplus Declaration Forms are completed and submitted to the department's Administrator to sign, declaring that items listed on the form are surplus and available for transfer or sale. CPD Technology staff members will also be provided with an electronic copy of the Surplus Declaration Form for easy accessibility as needed. Current Police Department leadership understands and recognizes the importance of following applicable law and policy and will work to impress this focus moving forward through training and accountability within the organization.*

**Supplemental  
Comment: IT  
Department.**

*Until there is a better centralized system for all City inventory, the IT Department is taking over inventory of all technology equipment city-wide, to be maintained in the IT central inventory system (as per the technology purchasing and replacement policy issued July 25, 2014). All new technology is assigned to employees and tied to their employee ID number. This is in progress to be retroactive on currently issued technology as well.*

*The comprehensive IT technology use policy (currently in draft) has provisions that cover accountability for technology assignments to individuals. The IT Department will also be working on procedures in conjunction with the Human Resources Department to ensure checklists for property recovery are created and followed by each department.*

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## APPENDIX A: SCOPE, METHODOLOGY AND STANDARDS

Based on the work performed during the preliminary survey and the assessment of risk, the audit covers the Police Department wireless data device inventory from November 1, 2012 to April 30, 2014. When appropriate, the scope was expanded to meet the audit objectives. Source documentation was obtained from Information Technology, Police and Finance departments as well as Verizon Wireless. Original records as well as copies were used as evidence and verified through physical examination.

To meet audit objectives, we researched laws, rules, regulations, and department policies related to wireless data devices and inventory controls. We interviewed Information Technology and Police staff with oversight responsibilities. We surveyed a sample of data devices shipped to the Police Department to verify the inventory records were complete and accurate. In addition, we analyzed Verizon billing statements during the audit period to identify usage and costs and to compare listed users against Personnel records of active and former employees.

The sample size and selection were statistically generated using a desired confidence level of 90 percent, expected error rate of 5 percent, and a desired precision of 5 percent. Statistical sampling was used in order to infer the conclusions of test work performed on a sample to the population from which it was drawn and to obtain estimates of sampling error involved. When appropriate, judgmental sampling was used to improve the overall efficiency of the audit.

We conducted this performance audit from April 2014 to August 2014 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.



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