

TO: THE COMMON COUNCIL

DATE: April 10, 2012

FROM: THE DEPARTMENT OF
AUDIT & CONTROL

SUBJECT: Inventory Audit of Laptops and
Telecommunications Devices

With the advancements in technology, its use in the workplace has increased exponentially over the last few years. Particularly as it relates to the public sector, its introduction has been slow at times, and fairly swift and unchecked in others. Incumbent upon government is the responsibility to contain costs and establish sufficient internal controls to protect taxpayer dollars. Adequate policies and controls are an important part of this process.

This audit has been developed to examine the record-keeping and internal controls of mobile telecommunications devices and laptop computers within the City of Buffalo. "Telecommunications devices" is an all-encompassing term that includes cellphones and smart phones (Blackberrys and Droids) that may be issued to City of Buffalo employees for business use. "Laptop computers" generally refers to the traditionally understood folding screen and keyboard configuration, but can also reference tablets and other flat screen computing devices.

In general, we found that there is no overall strategy as it relates to mobile electronic and telecommunications devices. The responsibilities are split between the Department of Management Information Systems ("MIS"), the Department of Public Works, Parks & Streets (through its Division of Telecommunications, Utilities & Franchises), the Police Department and the Fire Department. The result is a mix of controls (or lack thereof) and no central accountability.

We believe this is an opportunity to be seized by the incoming Chief Information Officer. Whoever is appointed to that position should follow through on our recommendation to take the management of the telecommunications function from Public Works and bring it under the auspices of MIS. The Charter already contemplates this power in some degree. More formal action by the Council would be necessary to confirm and solidify this duty.

There is general agreement amongst all parties that telecommunications devices should be managed under one department. While there remain concerns over adequate manpower, the consensus is that the operation would be better under a unified command.

If you have any further questions on this matter, please feel free to contact the Department of Audit and Control.

DEPARTMENT HEAD: Mark J. F. Schroeder

TITLE: Comptroller

SIGNATURE:

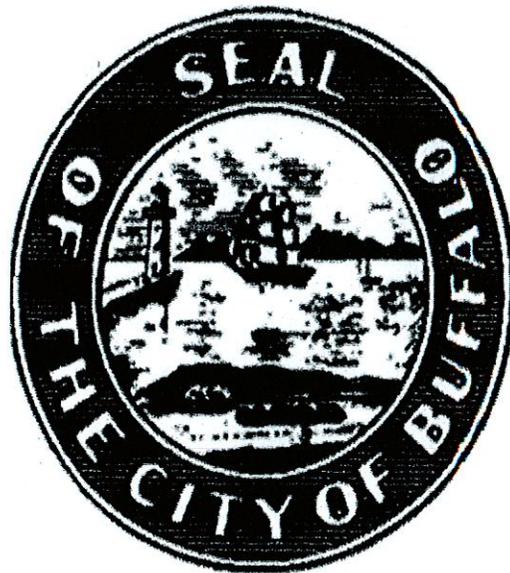


CITY OF BUFFALO
DEPARTMENT OF AUDIT & CONTROL

INVENTORY AUDIT OF LAPTOPS and
TELECOMMUNICATIONS DEVICES

MARK J. F. SCHROEDER

COMPTROLLER



DARRYL McPHERSON

CITY AUDITOR

APRIL 2012

INTRODUCTION

With the advancements in technology, its use in the workplace has increased exponentially over the last few years. Particularly as it relates to the public sector, its introduction has been slow at times, and fairly swift and unchecked in others. Incumbent upon government is the responsibility to contain costs and establish sufficient internal controls to protect taxpayer dollars. Adequate policies and controls are an important part of this process.

This audit has been developed to examine the record-keeping and internal controls of mobile telecommunications devices and laptop computers within the City of Buffalo.

“Telecommunications devices” is an all-encompassing term that includes cellphones and smart phones (Blackberrys and Droids) that may be issued to City of Buffalo employees for business use. “Laptop computers” generally refers to the traditionally understood folding screen and keyboard configuration, but can also reference tablets and other flat screen computing devices.

The analysis that follows has been separated into two datasets: one addressing laptop computers, the other mobile telecommunications devices.

AUDIT OF LAPTOP EQUIPMENT

There are numerous City of Buffalo Departments utilizing laptop computers representing a significant investment in equipment. Acquisition of a laptop is based upon (a) management discretion, (b) securing of funds and (c) council approval. The City of Buffalo may choose to purchase laptops through a New York State purchase contract or through a formal bid in order to obtain lowest price. Quantity and brand are specified by the Department or Division Head. A buyer from the Division of Purchase places the order with the vendor. The buyer consults with the Management Information Systems Department (MIS) to verify hardware and software compatibility. MIS personnel place ID tags on laptops and record the purchase in a database.

The City of Buffalo fixed asset policy defines “A fixed asset as any item with a value of \$10,000 or more and an estimated life of at least five years”. Laptops do not meet these criteria and therefore are not treated as fixed assets. Fixed assets are recorded in the MUNIS while laptop purchases are inventoried by MIS as noted above.

Audit Scope

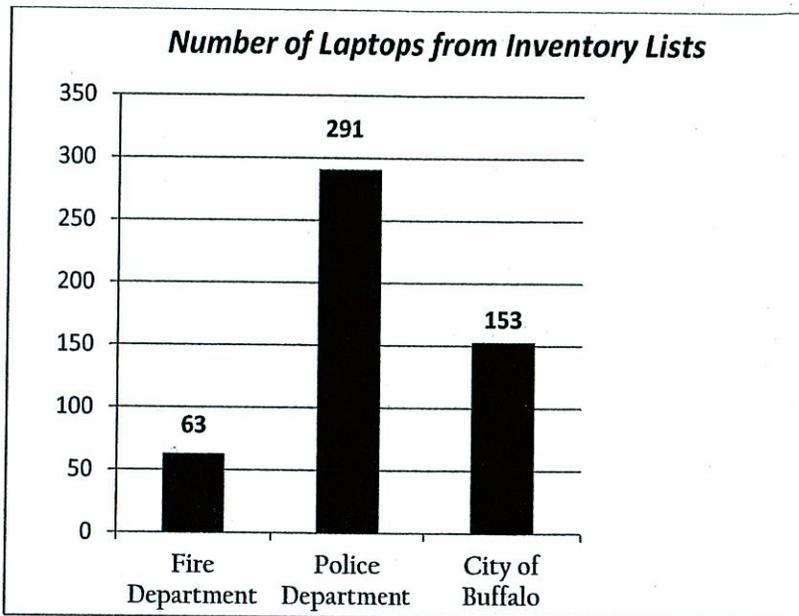
The audit verified the existence and internal control over City of Buffalo laptops in the custody of the following user groups: the Buffalo Fire Department, the Buffalo Police Department, and all other City of Buffalo administrative departments. The audit was conducted during calendar year 2011.

Audit Objective

The audit objective was to verify existence and custody of City of Buffalo laptops through a sample physical inventory. The audit identified the equipment through verification of

Manufacturers Serial Numbers as well as corroboration of location and custody of the equipment by the assigned individual and/or department.

Inventory lists were provided by the following user groups: City of Buffalo Management Information Systems, Police Department and Fire Department. A total of 507 laptops comprised of 63 Fire Department laptops, 291 Police Department laptops and 153 City of Buffalo laptops were listed. An additional 75 laptops purchased by the City for use by Housing Inspectors are not yet in use and were not included in the inventory lists. The graph below depicts this Inventory.



The audit will discuss each organization's inventory separately as follows.

Fire Department Laptops

The Fire Department maintains their organization's inventory of laptops. **Nineteen** laptops out of **sixty-three** (30%) were sampled by auditors and all were found, which provided a 95% confidence level statistically. Auditors found the inventory list to be reliable and accurate in terms of serial numbers, location and custody. The laptop list included purchase order detail. A disposal list was requested, but not received by the auditors.

Total no of Laptops	Sample Size	Verified	Scrapped	Not Verified
63	19	19	0	0

Police Department Laptops and Mobile Computer Terminals

The Police Department maintains their organization's inventory of laptops. Their 291 laptops are comprised of 247 Mobile Computer Terminals known as "MCTs" and 44 police laptops. These two types of equipment will be discussed separately.

Mobile Computer Terminals

The 247 Mobile Computer Terminals are divided into two groups: 204 MCTs are deployed in cars and 43 are held by the Police information technology staff. The deployed MCTs are harnessed into a mount located on the dashboard of each police car and locked into place. Seventeen percent of the Mobile Computer Terminals were verified against the list and were found to be recorded accurately in terms of serial numbers, location and custody. Internal control is safeguarded through use of a key to remove or swap out any MCT in need of repair. Keys are kept with designated personnel for heightened security. Replacement of the MCT must take place at Police Headquarters and a specific form, the "Laptop pickup/drop off receipt", is filled in to record each transaction. The Police Department does a commendable job labeling their MCT equipment. Each MCT is etched with identifying information *e.g.*, Buffalo Police Dept, Central Phone number, etc. The branding is done by the Fire Department Radio personnel.

Police Laptops

The police inventory listed 44 laptops distributed to Districts, Chiefs and administrative employees. The audit sample of police laptops revealed 82% verified, 12% scrapped, and 6% could not be verified.

Total no of Laptops	Sample Size	Verified	Scrapped	Not Verified
44	17	14	2	1

The list was found to be in relatively good condition with minimal inaccuracies. There are two outside vendors utilized by the Buffalo Police Department for laptop maintenance and disposal. A disposal list was requested, but not received by the auditors.

Other City of Buffalo Departmental Laptops

Auditors requested an inventory list of laptops from MIS personnel. Several printed lists were provided. These lists were overlapping; therefore auditors consolidated the records to create a centralized inventory list of 153 laptops. Auditors then physically inventoried these laptops through scheduled visits to individual departments. During the inventory 10 additional laptops not on the list were identified. These were then added to the centralized inventory list. However, 69 laptops from the list could not be verified. **This equates to a 45% unverified amount**, as shown below:

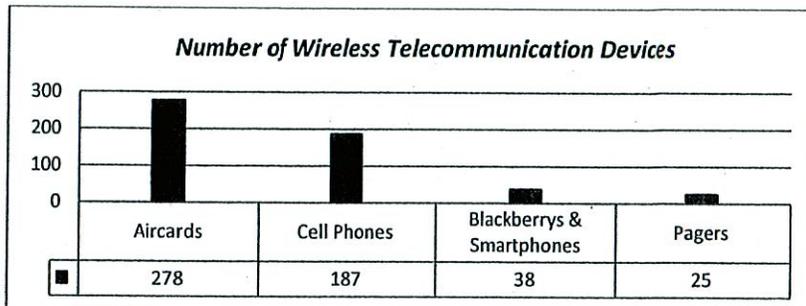
and pagers. The audit will examine department procedures for selecting phone plans, assignment of cell phones to employees, usage and associated expense.

Audit Scope:

1. Obtain and validate an inventory of cell phones, smart phones, pagers and aircards.
2. Research wireless telecommunication policies and procedures related to issuance, disposal and appropriate use of devices.

Inventory of Wireless Devices

The audit identified **528** wireless devices based on August 2011 invoice records i.e.; **278** aircards, **187** cellular phones, **38** Blackberrys/Smart phones and **25** pagers.



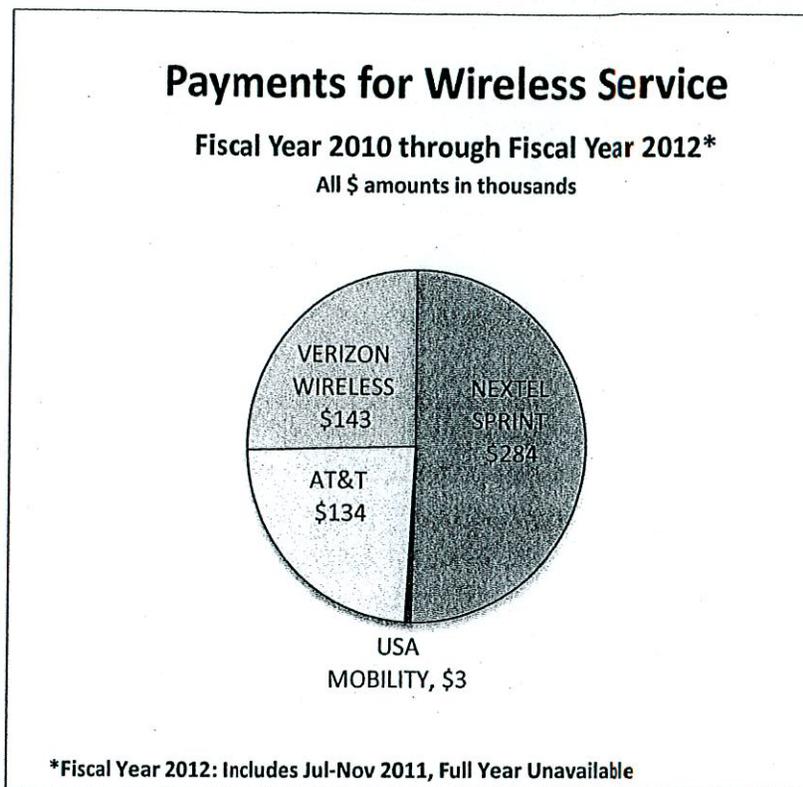
Fifteen departments were found to have wireless devices in use.

The Police and Fire Departments are the heaviest users of wireless telecommunication devices. The chart below shows the number of devices by organization.

Count of Wireless Telecommunication Devices				
	2011	2010	Amount Variance	% Variance
POLICE	338	339	-1	0%
FIRE	73	62	11	18%
PUBLIC WORKS	46	41	5	12%
ASSESSMENT	14	14	0	0%
BUILDINGS DIV.	11	11	0	0%
MIS	8	6	2	33%
PARKING	7	7	0	0%
PARKS	7	6	1	17%
CITIZEN SERVICES	6	5	1	20%
OTHER DEPARTMENTS	18	22	-4	-18%
Total	528	513	15	3%
Data Based on August 2011 invoice data				

There are four vendors that provide telecommunication services to the City of Buffalo: Verizon Wireless, Sprint/Nextel, AT&T Mobility, and USA Mobility Wireless. Service contract pricing

for equipment and provider connection charges are obtained from the New York State Office of General Services, (NYS OGS) Telecommunication Contracts. As such, the City's vendors are not selected by a City operated competitive bidding process. Payments for these services totaled \$565,000 from Fiscal Year 2010 through November 2011 in Fiscal Year 2012.



Funds for Telecommunications are sourced from the General Fund and the Special Revenue Fund. A full 43% is from federal and state grants, e.g., Federal Drug Enforcement Agency; Federal Justice Assistance Grant; Federal Weed & Seed Program; State Operation Impact Grant; State Auto Theft Grant, and Urban Area Security Initiative Grant. These grant funds are utilized by the Fire and Police Departments to purchase telecommunication devices and services.

Police and Fire have the majority of wireless devices due to the "**Implementing Recommendations of the 9/11 Commission Act of 2007 (Public Law 110-53 – August 3, 2007)**". This Act specifies that emergency personnel must have all the necessary means of communication in the event a public disaster occurs. Public Works, Parks & Streets and Assessment & Taxation employees have cell phones and Blackberry devices to support their duties performed off City Hall premises. Department of Management Information Systems ("MIS") employees have Blackberrys for responding to computer/network related emergencies outside their office setting.

Departmental Responsibility

According to Section 15-21 of the City of Buffalo Charter, the Department of Public Works, Parks and Streets, Division of Telecommunications, Utilities and Franchises (“Telecommunications Division”) represents the City of Buffalo in negotiating telecommunication services, monitors compliance with agreements and identifies and examines cost savings in telecommunication services.

As is true with the laptops, the technical expertise related to the selection and deployment of telecommunication services resides within the three user groups, i.e., City of Buffalo, serviced by the MIS Department, and the Buffalo Police Department and Buffalo Fire Department, each serviced by their internal information technology staffs.

Issuance/Disposal of Telecommunication Devices

Each department or division head contacts the Division of Telecommunications, Utilities and Franchises to request issuance of telecommunications devices. The Telecommunications Division will in some cases order the device, in other cases the order will be forwarded to the vendor for fulfillment. In situations where the department or division head needs to be consulted about device types and capabilities, MIS will be contacted prior to order submission. The Commissioner of Public Works, Parks & Streets has partnered with the MIS Department to identify cost savings opportunities offered by specific providers.

The Telecommunication Division receives devices from employees upon separation then retains the device for further use. Devices that are broken or unusable are returned to the Department of Management Information Systems for disposal.

Approval of Invoices

Wireless telecommunication invoices are reviewed and approved for payment by the respective users’ departments. A review of invoices found:

- (a) Instances of incorrect service amounts charged compared to NYS OGS pricing
- (b) Inconsistencies in features allowable among different providers
- (c) Differences in allowable minutes among providers
- (d) Charges from third party subscriptions
- (e) Past due balances
- (f) 411 search charges
- (g) Charges for text messaging.

Recommendations

1. *We recommend* the Department of MIS review and enhance the Telecommunications Policy with emphasis on clearly defining roles and responsibilities among all City divisions.
2. *We recommend* a specific review of benefits associated with consolidating with a single or fewer providers based on service and price. In the past grant funding of mobile devices influenced the selection of provider. As funding sources change the evaluation of vendor selection should be focused towards consolidation.
3. *We recommend* the creation of a database that contains an inventory of telecommunication devices with appropriate levels of detail related to the devices' acquisition and maintenance.
4. *We recommend* the creation of a unique object ledger account for the capture of wireless telecommunications costs. Currently these costs are charged to multiple supply or equipment accounts and are not easily isolated.

Telecommunication Devices Audit Conclusion

The Division of Telecommunications, Utilities and Franchises is the department that has responsibility for telecommunication devices. We believe a telecommunications policy must provide guidance to user departments. Due to constant changes in today's technology, departments and divisions must monitor usage and have a grasp on optimal selection of providers.

CONCLUSION

The overarching takeaway one has from reviewing the City of Buffalo's treatment of laptops and telecommunications devices is that the systems currently utilized are too decentralized. While Police and Fire successfully manage their inventory, the rest of the City lacks cohesion. Jurisdiction is widely spread, and there is an apparent lack of accountability when it comes to the management of these devices. In an effort to effectuate this change in operation, *we recommend the Common Council and Administration consider amending the Charter to transfer the function of telecommunications management from the Division of Telecommunications, Utilities and Franchises from the Department of Public Works, Parks and Streets to the Department of Management Information Systems.* The aspects of utilities and franchises should stay with Public Works, but there needs to be a clear line of authority where the evolving realm of technology is concerned. With the command and control of the City's data systems in the purview of MIS, it makes logistical sense to incorporate the telecommunications functions to this area.

AFTERWORD

Follow-up meetings with the Acting Chief Information Officer, the Commissioner of Public Works, Parks & Streets and the Director of Telecommunications, Utilities & Franchises reflected similar thoughts. There was general agreement that telecommunications devices should be managed under one department.

While there remain concerns over adequate manpower, the consensus was that the operation would be better under a unified command. They agreed with many of the Audit's recommendations and found that it accurately reflected the current situation.