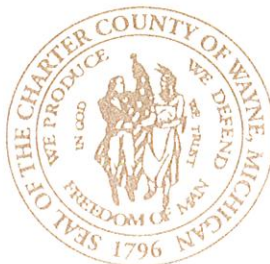


Office of Legislative  
**Auditor General**

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December 10, 2018

**FINAL REPORT TRANSMITTAL LETTER**

Honorable Wayne County Commissioners:

Enclosed is our final copy of the Office of Legislative Auditor General's, Department of Information Technology Telecommunications Services Performance Audit. The report is dated October 7, 2016; DAP No. 2015-57-014. The report was accepted by the Committee on Audit at its meeting held on November 28, 2018; and formally received by the Wayne County Commission on December 6, 2018.

If you have any questions, concerns, or desire to discuss the report in greater detail, we would be happy to do so at your convenience. This report is intended for your information and should not be used for any other purpose. Copies of all Office of Legislative Auditor General's final reports can be found on our website at: <http://www.waynecounty.com/elected/commission/oag/legislative-auditor.aspx>.

Marcella Cora, CPA, CIA, CICA, CGMA  
Auditor General

**REPORT DISTRIBUTION**

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**Prosecuting Attorney's Office**

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**Wayne County Executive**

**County of Wayne, Michigan**

**Wayne County Department of Information  
Technology**

**TELECOMMUNICATION SERVICES**

**Performance Audit**

**October 7, 2016**

**DAP NO. 2015-57-014**

***EXECUTIVE SUMMARY***

**Type of Engagement, Scope, and Methodology**

The Office of Legislative Auditor General conducted a performance audit of the Wayne County Department of Information Technology (DoIT), Telecommunication Services Unit. This type of engagement provides an objective analysis to assist management and those charged with governance and oversight.

Our objectives for this engagement were to: 1) Assess the Control Environment Over Telecommunications Services; and, 2) Evaluate Whether Telecommunication Services Are Provided in the Most Cost- Effective Manner.

The fieldwork was substantially completed on October 7, 2016, and the scope of our engagement was for October 1, 2013 through September 30, 2015. The principal methodology used for this engagement was limited to interviews with key members of management, inquiries, examination of documents, observations, and analytical procedures.

**Introduction**

Telecommunication Services is a unit within DoIT that provides administration of landlines, mobile telephones, voicemail, data circuits, voice and data wiring and electronic fax. All of the expenditures within the unit are chargebacks to county business units as either a direct or shared cost. Total expenditures for the Telecommunication Services Unit for fiscal year 2014 and 2015 were approximately \$2.5 million which were allocated out to the various county departments, agencies, and elected officials as a chargeback.



## Summary of Issues

<b><u>AUDIT OBJECTIVE #1: ASSESS THE CONTROL ENVIRONMENT OVER TELECOMMUNICATION SERVICES</u></b>	
<b>Issue Identified</b>	<b>Type of Issue</b>
#2015-01 – Non-Existent Controls Over Cellular Devices	Material Weakness
#2015-02 - No Formal Comprehensive Policies and Procedures for Telecommunications and Bring Your Own Devices Policies Should Be Reviewed.	Control Deficiency
#2015-03 – Not Always in Compliance with Own Device Policy	Control Deficiency
#2015-04 – Lack of Retention Policy for Pertinent Documents.	Control Deficiency
#2015-05 – Lack of Reconciliation of Active Landlines/VOIP lines with billings.	Control Deficiency
#2015-06 – Lack of Monitoring of Cellular Telephone Usage	Material Weakness
#2016-07 – Lack of Monitoring of Cellular Global Travel Packages	Significant Deficiency
#2015-08 – Compliance with Ordinance No. 98-59	Control Deficiency
#2015-09 – Not Maintaining Log for Assigned Accessories	Control Deficiency
#2015-10 – Possible Under Utilized Cellular Telephone Usage	Control Deficiency
#2015-11 – Possible Savings Through Increased Use of Bring Your Own Device	Control Deficiency
<b><u>AUDIT OBJECTIVE #2: EVALUATE WHETHER TELECOMMUNICATION SERVICES ARE PROVIDED IN THE MOST COST EFFECTIVE MANNER</u></b>	
<b>Issue Identified</b>	<b>Type of Issue</b>
#2015-10 – Possible Under Utilized Cellular Telephone Usage	Control Deficiency
#2015-11 – Possible Savings Through Increased Use of Bring Your Own Device	Control Deficiency

## Views of Responsible Officials

We discussed the issues and corresponding recommendations with the Wayne County Department of Information Technology – Telecommunication Services Unit officials. Management's comments are incorporated within the report.

### **Corrective Action Plan**

A Corrective Action Plan (CAP) will be requested approximately 30 days after this report is formally received and filed by the Wayne County Commission. If sufficient corrective action is not taken, a follow-up review may be necessary.



## **REPORT DETAILS**

## **PURPOSE / OBJECTIVE**

The Office of Legislative Auditor General conducted a performance audit of the Wayne County Department of Information Technology, Telecommunication Services Unit. This type of engagement provides an objective analysis to assist management and those charged with governance and oversight. The information provided can help improve program performance and operations, reduce costs, facilitate decision making by parties with responsibility to oversee or initiate corrective action and contribute to public accountability.

Our objectives for this engagement were to: 1) Assess the Control Environment over Telecommunications Services; and, 2) Evaluate Whether Telecommunication Services Are Provided in the Most Cost-Effective Manner.

## **SCOPE**

We conducted this performance audit in accordance with Generally Accepted Governmental Auditing Standards (GAGAS) issued by the Comptroller General of the United States. 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 the evidence obtained provides a reasonable basis for our conclusions based on our audit objectives.

The scope of our work primarily covered the period of October 1, 2013 through September 30, 2015. The fieldwork for this engagement was substantially completed on October 7, 2016.

## **METHODOLOGY**

To address the objectives outlined for this engagement, we obtained an understanding of the Wayne County Department of Information Technology, Telecommunication Services Unit activity. We interviewed officials within the Department of Information Technology; performed walkthroughs with key personnel in DoIT of the Service Request (SR) process; as well as how the information is generated and compiled for county-provided cell phones that are issued to employees and county contractors. We obtained an understanding of the Bring Your Own Device Program and how devices are connected to the county's network.

We randomly selected county cell phone accounts to test if the request to issue a cell phone was supported and billings appear reasonable. We analyzed three (3) months of billings for county-owned cell phones to determine if the bills appeared reasonable and employees were on the most economical plan. Finally, we met with management officials to discuss our findings, obtain their

input, and their concurrence and/or disagreement with the report's conclusions, findings and recommendations.

## BACKGROUND

The mission of the Department of Information Technology (DoIT) is to provide information and services, utilizing technology, (i.e. communications and hardware), software engineering, business continuity, technology management and technological tools needed to perform their business effectively and efficiently.

Telecommunication Services is a unit within DoIT that provides the following services:

- Landline administration
- Mobility administration
- Voice mail administration
- Voice and data wiring installations and repairs
- Electronic fax administration
- Data circuit administration

Telecommunication Services Unit's management of the county's cell phones excludes the Department of Health, Veterans and Community Wellness and the Wayne County Commission who manage their own cellular phones. The unit's financial information is recorded in business unit 25806 in the county's general ledger. All of the expenditures within the unit are chargebacks to county business units as either a direct or shared cost. The county's telephone bills are received and paid centrally. The bills are detailed by phone number with the exception of the VoIP telephones which are not billed. Each business unit receives monthly charges for their direct phone costs. In addition to the phone bills, the county incurs administrative costs for maintaining the telecommunication system. These administrative costs are shared among user departments and are allocated based on the number of users per business unit. Total expenditures for the Telecommunication Unit were approximately \$2.5 million as shown below:

### Telecommunication Expenditures Fiscal Years 2014 and 2015

Charge	FY 2014	FY 2015
Chargebacks	\$ 21,364	\$ 32,973
Telephone Costs	1,837,846	1,873,319
Long Distance Service	123,646	115,015
Equipment & Repair	122,344	135,957
Cellular Phone Service	400,722	325,380
<b>Total</b>	<b>\$2,505,922</b>	<b>\$2,482,644</b>

The county has contracts with AT&T for telephones including cellular phones. Based on the listing provided by the Telecommunication Services Unit, the county has a total of 2,209 phones assigned to individuals, of which 346, or 17 percent, are VoIP and the remaining 1,683, or 83



percent, are landlines. We were provided a listing of 416 individuals provided a county cell phone. There were six (6) different cellular phones available to county employees based on their position. The six (6) phones and the number issued are:

**Types and Quantity of Cellular Phones  
May 2016**

Type of Phone	Number Issued
BlackBerry Z10	190
Samsung SGH-a837	209
RIM 3900	2
Apple iPhone 5s	12
BlackBerry Q10	2
LG CU405	1
<b>Total Cellular Phones</b>	<b>416</b>

**ASSESS THE CONTROL ENVIRONMENT OVER  
TELECOMMUNICATION SERVICES**

**Objective No. 1 – Assess the control environment over telecommunication services.**

**Conclusion:**

During our audit of the Wayne County Department of Information Technology - Telecommunication Services program, we determined that the program did not have adequate control over the acquisition, use, and monitoring of telecommunication services. Specifically, there are formalized policies and procedures for the use of personal mobile devices but there are not formalized policies and procedures for the use of desk telephones or county-provided cellular telephones including the requisition, authorization, restrictions, and monitoring of desk and county-provided cellular telephones which resulted in the misappropriation of county cellular telephones and other electronic devices. While DoIT has policies and procedures for personal mobile devices, the policies are not always being adhered to. In addition, the county provides accessories such as car and wall chargers, but after the initial distribution, the county must pay for additional accessories. However, the county does not maintain a listing of the accessories provided which could result in multiple devices being provided that DoIT is not aware of.

**Non-Existent Controls Over Cellular Devices**

One of the functions of the DoIT Telecommunication Services Unit is to oversee the county's mobility administration for devices accessing the county's network. All devices purchased and ordered through the county's contract with AT&T are county owned assets issued to county employees for work related purposes. As such, the devices should be subject to inventory accountability and tracking; (i.e., master inventory listing, reconciliation, and asset verification).

The OAG requested from DoIT, and was provided, listings of all county-owned cell phones issued to employees. According DoIT officials, the only cellular telephones issued to employees were a Blackberry, Samsung Rugby or a few iPhones for employees working in the wastewater treatment facility. However, during our review of the AT&T September 2015 cellular billing detail, the OAG noted that there were ten (10) Samsung Galaxy Note 4 tablets included in the billing. The OAG was not aware of the tablets prior to reviewing the billing detail. The tablets were listed as issued to employees in the following departments:

### Questionable Cellular Devices

Department	Device	Cost of Device
CEO	Samsung Galaxy 4	\$49.99
Corporation Counsel	Samsung Galaxy 4	\$0
DPS	Samsung Galaxy 4	\$49.99
DPS	Samsung Galaxy 4	\$0
DPS	Samsung Galaxy 4	\$0
HHS	Samsung Galaxy 4	\$0
Personnel	Samsung Galaxy 4	\$0
Prosecuting Attorney	Samsung Galaxy 4	\$0
Sheriff	Samsung Galaxy 4	\$49.99
Sheriff	Samsung Galaxy 4	\$0

Seven (7) of the ten (10) tablets were billed to the county at a cost of \$0; while the remaining three (3) tablets were billed at a cost of \$49.99 each to the county. The three (3) tablets with the \$49.99 billed cost were issued to employees in the CEO, DPS and Sheriff departments.

During our meetings with Telecommunication Services management, these tablets were never mentioned as an option for the county employees' use. In addition, the tablets did not appear on the listing provided by DoIT of county provided cellular devices, nor were the devices on the Wayne County Mobility Pricing sheet as an option available to employees.

As a result, we inquired of DoIT management regarding the Samsung Galaxy Note 4's; they initially stated that six (6) tablets were obtained at the request of the Public Health Department with three (3) issued to Public Health. Three (3) tablets remained in DoIT. DoIT management noted that the Galaxy device is not offered to county employees and this purchase was a onetime exception to fulfill the department's need. However, as noted in the table above, these tablets have been issued to six (6) other county departments. The OAG made further inquiries concerning these additional tablets and were subsequently informed by DoIT management that these devices were not authorized, nor were they in the county's possession. As a result of our continued inquiries, the OAG was informed that the matter was referred to the Prosecuting Attorney's Office.

In August 2016, the Prosecuting Attorney's Office contacted our office and requested the OAG determine the extent of the unauthorized purchases and obtain confirmation that unauthorized devices were indeed not in the possession of county employees.



Our office performed additional audit procedures that included obtaining and reviewing all AT&T cellular telephone bills for the period of April 2014 through April 2016 and compiling a list of all non-standard cellular phone orders. We then confirmed with the intended recipient of the device according to the billing whether they received and/or were in possession of the device. For those individuals that did not initially respond, we sent additional confirmation inquiries. Based on our additional audit inquiries and confirmations, we confirmed, at a minimum, 202 devices were purchased and received through the county's cellular phone contract with AT&T that were not in the possession of either the county or a county employee. We were also requested and provided a preliminary value of over \$114,000 for these 202 devices per listed AT&T pricing. In September 2016, this additional information was provided to the Prosecuting Attorney's Office who began an investigation. In May 2018, formal charges were filed by the Prosecuting Attorney's Office in connection with embezzlement and larceny of cellular telephones and electronic devices. In September 2018, a plea agreement was reached and on September 19, 2018 the individual was sentenced.

Based on our review, we determined that the internal control environment over the process of ordering cellular telephones and other electronic devices was non-existent. This lack of controls contributed to the misappropriation of the cellular telephones and electronic devices. Specifically, we found there were no formal policies and procedures over the process that would include ordering of the cellular devices, authorization of the orders, receipt, monitoring and tracking of devices. More important was the lack of segregation of duties over the purchasing and/or ordering of cellular devices, receipt of the goods, and review of the cellular invoices. The same individual controlled all aspects of the transaction which allowed the misappropriation to take place and go undetected for so long. In addition, the county lacked a comprehensive inventory of all devices received by the county and did not perform periodic reconciliations, including additions and deletions from the listing, and physical verification of the devices.

**Recommendation #2015-01 – Material Weakness:**

We recommend that the Department of Information Technology Telecommunication Services Unit management:

- A. Develop a procedure over the ordering, receiving, maintaining inventory, and approving cellular phone bills for payment that, at a minimum, ensures segregation of duties.
- B. Maintain a comprehensive inventory of all cellular devices that includes all devices ordered by the county and ensure that the inventory is updated for all additions and disposals.
- C. Perform a periodic physical inventory of county devices to ensure that all county-owned mobile devices are accounted for.

**Views of Responsible Officials:**

This report was accurate at the time (2016), and has since been addressed. There are controls in place and will be explained in the corrective action plan as a retroactive report.



## **No Formal Comprehensive Policies and Procedures for Telecommunications**

The DoIT does not have formal written policies and procedures over desk and county provided cellular telephones. While we were provided a copy of DoIT Policy Number 80P10002 05 issued in 2011 and revised in 2014, which merely outlines the acceptable process for requesting, changing, and cancelling access to Wayne County IT systems; and does not provide the necessary guidance over desk and county provided cellular telephones.

Although policies and procedures for the county provided cellular telephones have not been established, we were provided a copy of the Cellular Telephone Agreement Form which references itself as a policy. The agreement requires the employee to acknowledge the terms of the agreement. However, an effective policy for county provided cellular telephones would include procedures over the requisition, authorization, and monitoring to ensure the telephones are being issued and used appropriately and in the most cost-effective manner including the following:

- Device issuance, activation, and distribution;
- Device return and deactivation;
- Usage and call plan monitoring;
- Inventory including accountability and device tracking.

Policies and procedures provide guidance for meeting an organization's objectives and describe the steps employees are to take when performing their day-to-day responsibilities and establish accountability. Comprehensive policies and procedures provide guidance for assigning county-issued cell phones, accessories, and outline a uniform procedure for requesting equipment and accessories, sets the standards for monitoring use of equipment, and provides the expectations for reconciliation of billings.

Not having comprehensive policies and procedures regarding the issuance and usage of desk telephones and county-provided cellular telephones increases the risk that telephones are inappropriately issued and used.

## **Bring Your Own Device Policies Should be Reviewed**

We were able to obtain and review the County's Policy Number 80P10018 03, Personal Mobile Device (and Use) Policy (BYOD), issued February of 2013 and revised in November 2013. The policy outlines the requirements of the mobile device, restrictions on the use of the mobile device within the Wayne County environment, and the approval necessary to obtain access to county IT systems using the mobile device. However, the policy has not been updated since 2013. Given the recent increase in organizations going to the BYOD platform and changes in technology, a periodic review should be performed to ensure the policy is thorough, complete, and addresses associated risks.

Also, not conducting periodic reviews of the BYOD policy could put the county at risk for potential data breach. Given the significant advancement in cellular technology, it is important that policies and procedures regarding them are updated to keep up with changes.

### **Recommendation #2015-02 – Control Deficiency – Operational**

We recommend that the Department of Information Technology – Telecommunication Services Unit management:

- A. Develop and issue a comprehensive telephone policy and procedure for desk and county-owned cellular telephones that includes guidance for issuance, authorization, acceptable usage, and monitoring of the phones.
- B. Periodically review all telecommunication policies and procedures to ensure any changes in technology, industry trends or processes are reflected in the county's policy and procedures.

### **Views of Responsible Officials:**

This report was accurate at the time (2016). Policy updates are in progress as part of the changes to technology that have been underway.

### **Not Always in Compliance with Bring Your Own Device Policy**

Wayne County Policy #80P10018 03, Personal; Mobile Devices (and Use) Policy defines the requirements of mobile devices and the restrictions placed on the devices within the Wayne County environment. The policy states that DoIT Network Security will oversee the registration and will periodically audit registration of the devices for adherence to the policy. Some of the significant areas where DoIT should periodically audit for compliance include:

- 1.) Only current Wayne County employees, contractors, and consultants will be given authorization to access county resources.
- 2.) All individuals must have Mobile Device Management (MDM) software installed.
- 3.) All individuals must accept terms of the MDM software.
- 4.) The personal mobile device must be running the minimum operating system (OS) versions to participate.
- 5.) All mobile devices should have an anti-virus application loaded and running when performing business functions.
- 6.) Messages sent from a business email account, should include a signature line stating that the message is being sent from a mobile device.
- 7.) County data may not be transferred to internet sites that are not under contract with Wayne County.
- 8.) All mobile devices will require a pin, password, or other authentication method for unlocking the device.

However, during our review and inquiry, we were informed by Department of Information Technology (DoIT) management that the oversight of the registration of personal mobile devices is completed by the Air Watch and BES systems when devices are setup and registered. The individual has to accept the terms of the Mobile Device Management terms of use (MDM). However, DoIT Network Security is not performing periodic audits of the registration to ensure adherence to the policy. Specifically, there are no periodic audits that would ensure that only current employees, contractors and consultants have access, devices are running the latest Operating System (OS) software and devices have a method for unlocking the device. In



addition, individuals are given access to the county's resources for two (2) days before the MDM software requires the employee to agree to the software. After two (2) days, if the employee does not agree, access is removed.

Based on our review, DoIT Network Security Management is not performing periodic audits to ensure compliance with the policy because the devices are registered initially with the Air Watch and BES system, which allows tracking for inventory purposes and remote access to devices.

Not performing periodic audits of the key compliance issues of the policy could increase the risk of security breaches to the county's systems. In addition, not requiring individuals to immediately accept the MDM software could result in unauthorized access to county resources.

#### **Recommendation #2015-03 – Control Deficiency – Design**

We recommend that the Department of Information Technology – Network Security management comply with their internal policy #80P10018 03, and periodically audit the registration of various devices and ensure compliance with key policy requirements.

#### **Views of Responsible Officials:**

The technology or procedures that were in place in 2016 do actually address this issue. Auditing of cellular phones is automatically enforced. If a user violates the restrictions, they lose access automatically. It is not clear as to why that information was not provided in the audit.

#### **Lack of Retention Policy for Pertinent Documents**

The DoIT Telecommunications Unit does not always maintain the Telephone/Voicemail/Cell Phone Service Request Form that supports the authorization of a telephone or county issued cell phone. Nor do they maintain the "Cellular Telephone Agreement Form" that is required to be signed by each individual issued a county-provided cell phone that provides the guidance that must be abided with. We requested copies of the service request and "Cellular Agreement Form" for 15 individuals selected in our sample. DoIT only had on file an approved service request which had been electronically submitted through the county's service request system (HEAT) for four (4), or 27 percent, of the individuals with a county-provided cell phone. Two (2) other individuals that should have been in the HEAT system were missing their forms, and the remaining nine (9) service requests were submitted manually prior to the HEAT system and a copy was not maintained. More importantly, DoIT did not have the "Cellular Telephone Agreement Form" signed by the individual provided the county-owned cell phone acknowledging that they understood the requirements including no personal usage of the phone.

In addition, DoIT does not maintain the DoIT Change of Access Request Form which is support that county-provided cell phones and accessories are properly returned and deactivated. Nor is there support to ensure that BYOD phones are deactivated upon separation and, as a result, we were not able to perform test procedures in this area.

Management stated that once the request for the telephone is complete, the request form is not maintained. Management does not have a retention policy in place to include DoIT Change Of Computer Access Request Forms or the Telephone Request Form. In some instances, the user was issued the telephone prior to the Service Request submission and a hard copy of the request



form was not maintained. Management also stated that the “Cellular Telephone Agreement Form” is not maintained by DoIT.

It is important for every organization to have an established Record Retention Policy (RRP) that provides for the retention and destruction of documents and other records maintained by the organization.

By the Telecommunication Services unit not having a retention policy in place that includes the DoIT Service Request form, there is no support that county-provided cell phones were properly authorized, deactivated, and cell phones and accessories returned. More important, having a signed “Cellular Telephone Agreement Form” on file is the support that the individual understands the rules and requirements when issued a county-provided cell phone.

#### **Recommendation #2015-04 - Control Deficiency - Design**

We recommend that the Department of Information Technology – Telecommunication Services Unit management:

- A. Develop a retention policy that includes DoIT Service Request Forms for authorization of county-provided cell phones and the DoIT Access Change Request Form upon an employee’s separation from employment as support that the devices and accessories are returned and deactivated.
- B. Maintain the “Cellular Telephone Agreement Form” for each individual issued a county-provided cell phone and ensure it is maintained in the file as long as the individual has the cell phone.

#### **Views of Responsible Officials:**

This report was accurate at the time (2016), and has since been addressed. The Department of Information Technology will provide an explanation in the corrective action plan as a retroactive report.

#### **Lack of Reconciliation of Active Landlines/VoIP with Billings**

During our review of the AT&T detailed billings for landline/Voice Over Internet Protocol (VoIP) phones, we requested a listing of all landline/VOIP telephone numbers. DoIT management provided the listing containing 2,029 active telephone numbers assigned to individuals. Of these 2,029 phone lines, 1,683, or 83 percent, were landlines while 346, or 17 percent, were VoIP lines. The listing, which was a download of the Outlook directory, only contained telephone numbers associated with an individual. Phone lines not assigned to an individual were not included. We were not able to verify the accuracy of the listing and noted that some numbers were assigned to multiple individuals.

In order to test the validity of AT&T billings, we first compiled a list of the VoIP and landlines within the OAG’s office. We then compared the phones assigned to individuals in the OAG’s office to the listing of telephone numbers provided by DoIT. All the OAG telephone numbers assigned to individuals were included on the listing. We were not able to trace the one VoIP, which is a conference room phone, and the two (2) landlines; one assigned to an old fax

machine, and the other for emergency purposes if the VoIP lines go out of service, because the listing does not include telephone numbers not assigned to individuals.

We then requested the monthly detailed AT&T billings in order to trace the OAG's assigned telephone numbers to the respective bill. Management only provided the summary page of each bill and not the detail. In addition, according to DoIT management, VoIP telephones are not included on the AT&T billings as they are part of the circuit billing. However, because we did not have the detail, we were not able to trace the two (2) landlines in the OAG's office, nor were we able to determine how much those phones cost.

Department of Management and Budget's Policy No. 13004, *Accounts Payable Policy* states, in part: "...every expenditure that is paid by the county...represents a valid business expense...." This policy also requires: "...a valid invoice...."

Moreover, a reconciliation process was not in place to ensure the AT&T bills reflect all active lines before payment is issued. Without a reconciliation process in place, the possibility exists that payments may be made for telephone lines that are inactive and should not have been billed.

#### **Recommendation #2015-05 – Control Deficiency – Design**

We recommend that the Department of Information Technology – Telecommunication Services Unit management document and implement reconciliation procedures to ensure the billings are only for valid phone lines.

#### **Views of Responsible Officials:**

This report was accurate at the time (2016). We are updating these processes as part of the changes to technology that have been underway.

#### **Lack of Monitoring of Cellular Phone Usage**

The county has cellular telephone plans for each of the employees issued a county cellular telephone. The cellular telephone plans could be 300, 600 or 1,000 pooled minutes with 5,000 free minutes for nights and weekends, as well as free AT&T-to-AT&T mobile calls. The majority of the employees have the 300 minute plan.

When county employees are provided a cellular telephone, the employee signs a Cellular Telephone Agreement Form. The county's Cellular Telephone Agreement Form contains, in part, the following: "I acknowledge that I have read and that I understand and agree to comply with this cellular telephone policy. I recognize and accept that use of the county cellular telephone for personal business is absolutely prohibited.... I further understand that use of the cellular telephone for non-county purposes is subject to disciplinary action."

To determine whether cellular telephone usage was reasonable and appropriate, for the scope of our engagement, October 2013 through September 2015, we reviewed detailed AT&T cellular phone billings for a sample of 45 county employees. From this sample, we identified 11, or 25%, of the employees were exceeding their cell phone plan minutes. As a result, we performed a further analysis of the July 2015, August 2015, and September 2015 billing download to determine how significant the overage was for all employees. From the AT&T billing download,



we used ACL, (a data analysis tool) to perform our analysis. For this three month period, there were total airtime charges in the amount of \$41,073, (164,292 minutes @ \$0.25), over the employees' plan minutes. This represented 145 cell phones assigned to employees that exceeded their allotted plan minutes. The total overage for the three (3) months for the cell phones ranged from \$0.50 to \$3,360.95. Five (5) employees in the three (3) months had airtime charges exceeding \$1,500.

We performed a more in-depth analysis of the five (5) employees whose airtime charges exceeded \$1,500, which included reviewing the detailed phone bills for one month. Based on this review, it was questionable whether all of the calls were county work related. For example, one (1) individual, for a three-day period, had 331 minutes in calls to one (1) telephone number that did not appear to be either a county cell phone or county work number. There also were a few days where the minutes for one number were over 190 minutes, or almost 40%, of a 480 minute work day. When we reviewed a three-day period for another employee that had the highest overage for the period, we noted this employee spent 499 minutes calling a number that also did not appear to be either a county cell phone number or county work number.

Based on our review, it does not appear that management reviews the detailed billings to determine if the airtime overages are reasonable, if the employee is on the appropriate minute plan or whether the cell phone usage is even appropriate. Devices should be actively managed and monitored to ensure inappropriate personal use of the devices does not go undetected.

Not monitoring the AT&T cellular plans for reasonableness of usage, increases the potential for employees to abuse their cellular telephone usage resulting in the county paying more for cellular telephone service than it should.

While the county does not pay additional charges for the excess airtime charges, reducing the amount of airtime overages could result in the county being able to eliminate some of the cell phones that have minimum usage but are necessary to cover the overage for other county employees.

#### **Recommendation #2015-06 – Material Weakness**

We recommend that the Department of Information Technology – Telecommunication Services Unit management, on a periodic basis, perform a detailed review of cell phone usage for individuals exceeding their allotted plan minutes to ensure employees are using their cell phones in accordance with county policy and/or have the appropriate cell phone plan.

#### **Views of Responsible Officials:**

This report was accurate at the time (2016). We are updating these processes as part of the changes to technology that have been underway.

#### **Lack of Monitoring of Cellular Global Travel Packages**

When a county employee, who possesses a county-issued cell phone, leaves the United States they may have an international data package enabled on their phone to provide work related connectivity. However, the package should be cancelled upon the employee's return to the United States.



The OAG reviewed 29 monthly detailed cell phone bills from April 2014 through August 2016. Our review identified eight individuals that had international data packages added to their cellular phone plans. For five (5) of the eight (8) individuals that had the packages added, the packages were subsequently removed after a month or two. However, three (3) individuals had the international data packages on their plans for the entire 29 months of our review. The following table outlines the monthly international packages that were billed to the county:

### **Monthly International Cellular Phone Packages**

Indiv.	Global Travel Minutes		World Connect	World Traveler	Data Global Add-On Package		Data Global Add-On Package		Total Monthly Cost
	Minutes	Cost			Size	Cost	Size	Cost	
A	80 (Europe)	\$60	\$3.99		120 MB	\$30.00	200	\$30	\$123.99
B			\$5.99		20 MB	\$24.99	50	\$10	\$40.98
C				\$5.99	50 MB	\$24.99			\$30.98
<b>Total Monthly Charges</b>									<b>\$195.95</b>

We could not determine how long the plans were enabled; however, one (1) individual stated their plan may have been added in 2013. The total amount billed for the 29 months that could have been avoided was \$5,682.55.

According to DoIT management, these plans are temporary and require cancellation when no longer needed (generally no more than one month). However, DoIT management stated that these plans did not cancel automatically and their cancellation was missed. Because these plans were never cancelled, the county incurred at least \$5,682.55 in unnecessary billings.

#### **Recommendation #2015-07 – Significant Deficiencies**

We recommend that the Department of Information Technology Telecommunication Services Unit management implement procedures to ensure international travel packages contain an automatic cancellation date.

#### **Views of Responsible Officials:**

This report was accurate at the time (2016), and has since been addressed. The Department of Information Technology will provide an explanation in the corrective action plan as a retroactive report.

#### **Compliance with Ordinance No. 98-59**

Wayne County Enrolled Ordinance No. 98-59, Section 1, Section 3 (A) states that If an audit or a financial or operations analysis is conducted upon an activity or operation within any executive branch department by an audit firm, management consultant, or agency other than the staff of or a contractor for the Legislative Auditor General, the department director shall send an information copy of that audit or management or operations analysis report to the Legislative Auditor General within ten (10) days after receiving that report. If a final report is not issued within 45 days after a preliminary report has been submitted, a copy of the preliminary report



shall be forwarded to the Legislative Auditor General together with any corrective memoranda which have been exchanged in response to the preliminary report.

The OAG inquired whether there were audits or analysis done on Telecommunications. Our office was informed that the county had executed a contract in 2011 with TelAdjust, Inc., for a Telecommunications Line and Billing Audit. A copy of the contract was provided to the OAG. The audit services were performed and the vendor billed the county a total fee of \$108,730 between August 2012 and February 2014. As a result of the services, the county received a credit of \$326,148 from AT&T. The only contractual provision required of TelAdjust was providing weekly status reports to DoIT. Management indicated that the weekly status reports were not maintained by the department. In addition, there was no contract deliverable for TelAdjust to provide a written report documenting the outcomes of their engagement. Therefore, when the audit was performed, the OAG was not provided a report on the results of the audit as required under Enrolled Ordinance No. 98-59.

DoIT Telecommunication Services management has changed since the audit was performed. The employees who managed the audit project are no longer employed by the county. Moreover, not having an executed contract which required a final written report at the conclusion of the audit did not allow DoIT management to determine if the objectives of the audit had been satisfied. In addition, failing to provide a report on the results of the audit to the OAG placed DoIT in violation of Enrolled Ordinance No. 98-59.

**Recommendation #2015-08 – Control Deficiency - Operational**

We recommend that the Department of Information Technology Telecommunication Services Unit management ensure that:

- A. All future requests for audit services include, as a deliverable, a final report at the conclusion of the engagement and forward a copy of the outcomes report to the OAG, as required under Enrolled Ordinance No. 98-59.
- B. All deliverable documents are maintained by DoIT for reference.

**Views of Responsible Officials:**

The Department of Information Technology (DoIT) has every intention of complying with this ordinance. Going forward, all executed contracts will include a deliverable of a final report at the conclusion of the engagement. DoIT will maintain all deliverable documents for reference.

**Not Maintaining Log for Assigned Accessories**

Wayne County has a cooperative agreement with AT&T for cellular services. Per the agreement, the county receives the telephones and accessories, costing up to \$60, free of charge. During our review of purchases of devices and accessories, we were informed by Department of Information Technology (DoIT) management that the county pays for the additional device accessories. The additional accessories such as car chargers, wall chargers, and cases range from \$17.50 to \$35.00. However, the Telecommunication Services Unit does not maintain an inventory of the accessories, nor could they quantify how many accessories have been purchased. Moreover, there is no limit as to how many accessories a county employee or contractor can receive within



a particular timeframe since there is no documentation of the accessories provided to each employee.

According to Small Business Enterprise, best business practices state that proper inventory and tracking provides an opportunity to measure both the cost and the quantity of an item. However, Management did not believe maintaining an inventory of accessories was necessary because of the relatively minimal dollar amount.

As a result of the Telecommunication Services unit not maintaining an inventory of what mobile accessories have been purchased, nor tracking what accessories are provided to county employees and contractors DoIT was unable to determine: (1) the dollar impact to the county; or, (2) if employees are abusing their privilege of receiving mobile accessories.

**Recommendation #2015-09– Control Deficiency – Design:**

We recommend that the Department of Information Technology – Telecommunication Services Unit management track the mobile accessories purchased and provided to employees and implement within their policies and procedures a limit on how many accessories an employee and/or contractor can request within a certain time period.

**Views of Responsible Officials:**

Accessories that come with the device have no cost to Wayne County. Therefore, the Department of Information Technology (DoIT) will begin to track replacements. There is no way for DoIT to enforce a limit on the number of replacement accessories an employee or contractor can request, however DoIT will periodically review our records and notify departments and elected officials when an employee or contractor is requesting excessive accessories.

**EVAULATE WHETHER TELECOMMUNICATIONS SERVICES ARE PROVIDED IN THE MOST COST-EFFECTIVE MANNER**

**Objective No. 2 – Evaluate Whether Telecommunication Services are Provided in the Most Cost-Effective Manner.**

**Conclusion**

Telecommunication Services unit may not be providing telecommunication services in the most cost-effective manner. Specifically, the county has some cellular telephone users that are either not using their telephones or using less than 10 percent of their plan minutes. In some of these instances the individuals are on 1,000 minute plans. In other instances, some individuals are well exceeding their 300 minutes that were included in their plan. Finally, the county could possibly save money if an analysis was performed to determine if it is more cost effective to have individuals that are in the BYOD program and have a county-provided cellular phone give up their county-provided telephone.



### **Possible Under Utilized Cellular Phone Usage**

To maximize the efficiency of the county's resources, cellular devices should be utilized and assigned properly based on their expected use. Specifically, the county has cellular telephone plans for each employee issued a county cellular telephone. The cellular telephone plans could be 300, 600 or 1,000 pooled minutes, with 5,000 nights and weekend minutes at no charge. The majority are 300 minute plans. The minutes for the plans are pooled; therefore, if one employee goes over their minutes, the overage in airtime is allocated back from the pooled minutes.

We conducted an analysis to determine if the county cellular device plans were properly utilized. To do this, we reviewed the September 2015 AT&T detailed cell phone bill. For this billing, there were 446 cell phones; 432 employees had 300 minute plans and 14 employees had 1,000 minute plans. The total plan minutes available for these 446 employees were 143,600. These minutes were part of the pooled plan minutes, excluding nights and weekends or AT&T mobile-to-mobile minutes for which there is no charge. Of the 446 employees, a total of 328, or 73 percent, were within their plan minutes. Of the 446 employees with phone plans, 118, or 27 percent, either used no minutes or less than 10 percent of their allotted minutes. Of these 118 employees, 47 did not have any minutes listed on the detailed billings including five (5) employees that had 1,000 minute plans. See the table below for a breakdown:

**September 2015 Cellular Phone Billings  
Breakdown of Plans and Minutes Used**

Minutes in Plan	Total Minutes Allowed	Employees With Plans	Employees with No Minutes Used	Employees Used < 10% of Allotted Minutes	Employees Within Their Allotted Minutes	Used Over Their Allotted Minutes
1,000	14,000	14	5	3	14	0
300	129,600	432	42	68	314	118
<b>Total</b>	<b>143,600</b>	<b>446</b>	<b>47</b>	<b>71</b>	<b>328</b>	<b>118</b>

For the September 2015 billing, of the 143,600 minutes available, 121,713, or 85 percent, of the minutes were used that were not nights and weekend or mobile to mobile minutes, for which there is no charge. However, of the 121,713 minutes used, 58,568 minutes, or 49 percent, was the result of employees exceeding their allotted minutes. The overage charge was \$14,642 which was covered by an allocation from the total pool plan minutes. That is, minutes available from other employees who used less than their plan minutes.

We then attempted to quantify what it costs the county for cell phones for employees that are either not using the phone or underutilizing them. For the month of September 2015, the county paid approximately \$3,547.50 for cell phones for employees that may not actually have needed the phones based on their usage.



### September 2015 Cellular Phone Billings Breakdown of Plans and Minutes Used

Employees Using Less Than 10% of Minutes	300 Minute Plan	1,000 Minute Plan	Total
118	108	8	
Cost Per Plan	\$30.00	\$52.50	
<b>Total Cost</b>	<b>\$3,240</b>	<b>\$420</b>	<b>\$3,660</b>

According to DoIT officials, the plan allows the minutes from employees that are underutilizing their minutes to be available in the pool to cover other employee plan minute overages. However, by not performing a periodic review of county cell phone usage, including an analysis of overages to determine whether it is more cost effective to not provide cell phones to employees that are underutilizing their plans, could result in the county paying for plans that are not being used. For the month of September 2015, this could have resulted in a savings of \$3,660 just for the cell phone usage or an annual savings of as much as \$43,920.

#### **Recommendation #2015-10 – Control Deficiency – Operational:**

We recommend that DoIT:

- A. Perform an analysis of county cell phone usage to determine if it is cost beneficial to remove the underutilized phones, determine if there is a better plan, or consider the employee utilizing the BYOD.
- B. Consider increasing the minute packages for those employees who consistently exceed their plan minutes if, after an analysis, it is determined the high usage is reasonable, necessary, and in accordance with the county's cellular telephone policy.

#### **Views of Responsible Officials:**

The Department of Information Technology (DoIT) regularly reviews low and no-usage phones and recommends to departments that they have those phones removed. DoIT also regularly reviews overuse reports and addresses any anomalies. Periodically, DoIT works with AT&T to move devices into the appropriate plan. The Department of Information Technology will continue to work with the supplier to ensure the best use of pooled minutes and appropriate plans.

#### **Possible Savings Through Increased Use of Bring Your Own Device**

Bring Your Own Device (BYOD) refers to the emphasis on device interoperability within an organization to allow employees to seamlessly connect their own devices (e.g. smart phones and tablets) thereby allowing an organization to save money. The county provides cell phones to employees and also allows the employee to connect their personal device to the county system.

In order to determine the extent of the program, we obtained a listing of individuals participating in the Bring Your Own Device (BYOD) program at the county. We compared these individuals to the listing provided of individuals provided a county cell phone. We noted that 57 individuals have a county-provided cell phone and also participate in the BYOD. For the September 2015



AT&T billing statement, the county spent \$3,024 on the county-provided cell phones. We determined that all but one (1) of the 57 individuals have 300 minute plans. Of these 57 individuals, six (6) individuals went over their plan minutes. But more important, 37 individuals, or 64 percent, used less than 100 plan minutes. Had these 37 individuals not had a county-provided cell phone and used their own device, the county could have saved as much as \$1,760 for their monthly cell phone charges.

In addition, there are no policies and procedures that outline who may be provided a county cell phone or any type of analysis performed to determine if it is more cost effective to request individuals use their own device rather than also receiving a county cell phone.

According to a study released by Cisco and reported in *Forbes*, companies can save up to \$3,150 per employee by implementing a comprehensive BYOD plan. Based on our analysis, the county could save as much as \$36,000 annually by having employees use their own device rather than supplying them with a county cell phone.

**Recommendation #2015-11 – Control Deficiency – Design:**

We recommend that the Department of Information Technology:

- A. Perform an analysis to see if the county could save money by requiring those individuals participate in the BYOD program rather than receiving a county-provided cell phone.
- B. Consider implementing policies and procedures that outline who may be provided a county cell phone and whether an individual requires both a BYOD and county-provided cell phone.

**Views of Responsible Officials:**

The Department of Information Technology is and will consider cost/policy as Wayne County continues to move towards mobile applications.

**OAG OVERALL CONCLUSION**

Department of Information Technology – Telecommunication Services Unit spent about \$2.5 million in fiscal years 2014 and 2015 to provide telecommunication services to county departments, agencies and other elected officials. The expenditures are then allocated out as a chargeback. In this audit, we determined that the program did not have adequate controls in place over the acquisition, use, and monitoring of telecommunication services. As a result, the County was exposed to the risk of inefficient cellular phone use, abuse, and identified misappropriation of county assets which resulted in an individual being charged and ultimately sentenced for embezzlement and larceny of cellular telephone and other electronic devices. In addition, in this economic climate, as the county is looking for ways to reduce costs, this could be an area where the county could reduce costs and provide more oversight to ensure that services are being provided in the most economical manner.

There are eleven (11) findings and eighteen (18) recommendations related to this audit report. Eight (8) of the recommendations are classified as Control Deficiency or low risk, one (1) is considered a Significant Deficiency or medium risk, and two (2) are considered Material Weaknesses or high risk.

We discussed the issues and corresponding recommendations with the Wayne County Department of Information Technology – Telecommunication Services Unit officials. Management's comments for the Telecommunication Services Unit have been included in body of the report.

A Corrective Action Plan will be requested approximately 30 days after this report is formally received and filed by the Wayne County Commission. If sufficient corrective action is not taken, a follow-up review may be necessary.

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This report is intended solely for the information and use of the Wayne County Department of Information Technology – Telecommunication Services Unit and the Wayne County Commission and is not intended to be and should not be used by another other than these specified parties. This restriction is not intended to limit the distribution of the report, which is a matter of public record.

Sincerely,

A handwritten signature in dark ink, reading "Marcella Cora". The signature is fluid and cursive, with the first name "Marcella" being more prominent than the last name "Cora".

Marcella Cora, CPA, CIA, CICA, CGMA  
Auditor General



# **Appendix A**

## **Definition of Internal Control Deficiencies**

**Control Deficiency (low risk)**

A control deficiency exists when the internal control design or operation does not allow management or employees, in the normal course of performing their assigned functions, to prevent, detect or correct errors in assertions made by management on a timely basis. A deficiency in design exists when (1) a control necessary to meet the control objective is missing or (2) an existing control is not properly designed so that, even if the control operates as designed, the control objective is not met.

A deficiency in operation exists when a properly designed control does not operate as intended, or when the person(s) performing the control does not possess the necessary authority or qualifications to perform the control effectively.

**Significant Deficiency (medium risk)**

A matter that, in the auditor's judgment, represents either an opportunity for improvement or significant deficiency in management's ability to operate a program or department in an effective and efficient manner. A significant deficiency in internal control, or combination of deficiencies, that adversely affects the organization's ability to initiate, authorize, record, process or report data reliably in accordance with applicable criteria or framework such that it is more than a remote likelihood that a misstatement of the subject matter that is more than inconsequential will not be prevented or detected.

**Material Weakness Deficiency (high risk)**

A significant deficiency that could impair the ability of management to operate the department in an effective and efficient manner and/or affect the judgment of an interested person concerning the effectiveness and efficiency of the department. A significant or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of subject matter will not be prevented or detected.