**INTRODUCTION**

The Office of Internal Audit (OIA) performed a follow-up of Audit No. 13-104, Telecom Use and Expense during fiscal year (FY) 2017. The purpose of this follow-up is to report on the progress made by the Chief Administrative Officer and the Department of Finance & Administrative Services (DFAS) – Information Technology Services Division (ITSD) in addressing the audit findings and recommendations. Our follow-up procedures rely on the department providing the status of the recommendations.

A follow-up is substantially less in scope than an audit. The objective is to report on the status of corrective action regarding the audit findings and recommendations.

We limited our scope to actions taken to address the audit recommendations from the final audit report dated December 11, 2013 through the submission of actions taken on January 12, 2017.

**BACKGROUND**

Telecommunication (Telecom) services support the communication needs of the City. Internal controls to ensure the accuracy, efficiency, and optimization for Telecom services were the focus of the audit. The audit evaluated the City’s landline, cell phone and pager services. The City’s 911 Emergency System is a standalone system and was not included in the audit.

The City spent an annual average of $5.9 million on telecom services from FY14 to FY16, and is projected to spend $5.1 during FY17. Telecom services support the City’s 25 departments and 5,825 full-time budgeted positions. Between 2016 and 2017 the number of landlines maintained by the City decreased from 7,069 to 5,008 as a result of the conversion from private branch exchange to voice over internet protocol (VoIP). The City also currently maintains 1,492 cell phones and 68 pagers. The City’s Telecom services are inherently complex and require comprehensive internal controls to be performed on a routine basis.

DFAS-ITSD became the Department of Technology and Innovation (DTI) effective November 1, 2014.

**SUMMARY**

The six recommendations addressed in the original audit report have been fully implemented.

The status of the recommendations is identified by the symbols in the following legend:

- [Green] Fully Implemented
- [Blue Star] Resolved
- [Yellow Diamond] In Process
- [Red] Not Implemented
**Recommendation #1** DFAS should:

- Use the comprehensive internal control framework outlined by Governmental Auditing, Accounting, and Financial Reporting to develop, implement, and perform comprehensive internal controls that ensure the accuracy, efficiency and optimization of telecom services. Internal controls should be documented within City policies and procedures.
- As outlined in City policy, report to the City Administration on all telecom usage and related expenditures to ensure the cost effectiveness of the City’s telecom systems and networks.
  - Reports should contain enough detail to allow the City’s Administration to understand key use and cost efficiency issues and help them manage the telecom services of the City by department and as a whole.
- Update the City’s Wireless Request Form (WRF) to capture relevant use and data needs that would allow ITSD to match wireless use with the most cost effective plans. An example of an updated form can be found in Appendix C.
- Work with the City Administration to update the City’s policies and procedures to reflect the wireless device issuance process and approval requirements.

The Chief Administrative Officer (CAO) should:

- Update Administrative Instruction 8-1 to include a wireless business need definition and associated minimum requirements that must be complied with for the issuance and retention of cell phones and other wireless devices. The update should also require a complete and approved WRF prior to the issuance of any wireless device.

**Response:** “DFAS agrees with the findings. DFAS will scope and develop a detailed Telecom process improvement plan to implement the recommendations in the audit findings. DFAS/ITSD will need to procure outside services for this project (to develop and implement the financial controls and business processes). DFAS/ITSD will look to current budget for the professional/technical monies to fund this project.

“A recent upgrade to the Telecom Expense and Billing Software system, AnchorPoint, will facilitate many of the recommendations (as AnchorPoint can now provide the management and usage reports required to identify and report costs to departments).

“DFAS will also provide the input to AI 8-1 (as recommended) such that the CAO can update the Instruction.”

**Estimated Completion Date:** “Timeline: Obtain professional services and develop the Telecom process improvement plan by June 30th, 2014. Upon completion of the plan, execute the plan with intentionality to complete the plan by December, 2014.”

**Status Reported by DTI:** “A wireless steering committee was developed with DTI and DFAS to help direct and monitor progress of changes and cost from the department level down.”
An updated wireless policy and procedure; and wireless request form was approved by the TRC (Technical Review Committee), ISC (Information Services Committee) and published. Latest revision September 2016.

The Telecommunication Usage Policy was last updated June 2015.

DTI will continue to review and update these policies and procedures on a yearly basis.

With the help of PSU and the use of Survey Monkey, DTI has been communicating the new updated wireless policy and procedure; and wireless request form to all City staff with a City issued wireless mobile device. As staff reviews the information they enter their information signifying that they have read and understand the information. The department liaisons are notified of any staff who have not completed the Survey Monkey; and any staff that does not complete the review will have their City issued cell phone suspended. It will be the responsibility of the department cell phone liaison to ensure their staff has completed the review of the policy and procedures.

Monthly cell phone reports are now consistently sent out to department liaisons. Information provided consists of their department expenditures, monthly charges and equipment charges; and zero usage. The zero usage reports consist of all cell phones with zero activity for the past 3 months on a monthly basis. After 6 months any zero usage cell phones are disconnected.

In addition, we will be publishing a data usage and accessory purchase report.”

Fully Implemented

DTI formed a wireless steering committee on July 22, 2015, which focuses on reducing cell phone costs for the City by changing policies and procedures, creating standards, streamlining efficient ordering with proper approvals, and making departments responsible for cost, tracking, and justification of usage. DTI updated the Mobile Device Policies and Procedures as well as the Wireless Request Form. The updates are communicated to City employees via Survey Monkey. DTI communicates cellphone usage, related expenses and zero usage to all departments monthly.

Although it was not communicated in the status report, we verified with the CAO on January 13, 2017 that AI 8-1 was updated to include a wireless business need definition and associated minimum requirements that must be complied with for the issuance and retention of cell phones and other wireless devices. The update requires a complete and approved WRF prior to the issuance of any wireless device.

Recommendation #2: DFAS should:
• Continue to leverage technology to reduce the City’s landline service costs by implementing VoIP services throughout the City.
A strategic plan should be developed and proposed to the City Administration for the full conversion to VoIP.

- Contact regionally comparative cities that have leveraged technology to reduce the costs of landline services in an effort to identify disparities that could have positive cost and efficiency impacts on Albuquerque’s services.

Response: “DFAS agrees with the finding and as described, the cost difference is primarily due to the City’s dependence on leased lines and legacy PBX phone switches. The ability for the City to move to owned fiber and VOIP will drastically reduce the expenses that make up the $5.1m operating budget.

“It is likely that we will need to go to the GO Capital Bond program to finance the capital cost of a fiber/VOIP system that will service the inventory of City service buildings and facilities. We will continue to leverage the current VOIP build-out (doing what we can now). We will also contact those City’s that appear to have better cost optimization practices in place.”

Estimated Completion Date: “Timeline: The City is currently in the process of developing a strategic VOIP master plan that includes budget requirements and a step-wise process for implementation. The VOIP plan will be completed by February 28th, 2014.”

Status Reported by DTI: “DTI began the deployment of the new VoIP services / phone environment July 2015. Phase 1 of the VoIP project allowed DTI to terminate a $1 million/year support contract with Black Box. Phase 1 ended Dec 2015 and converted the majority of the City phones approx. 3,000 in 30+ offices/departments over to VoIP. Phase II is currently in progress and is projected to end Jan 2017. Phase II is moving another approx. 1,000 phones to VoIP, in approx. 70 offices.

“With this deployment, each location will either have a reduction in phone lines or large T1/PRI phone trunks removed. Saving City funding approximately $300,000 / year.

“The cost of the VoIP project will be paid for by these cost savings and return on investment should be released in 5 years.”

Green Fully Implemented

DTI is finalizing Phase II of the deployment of VoIP, which will save approximately $300,000 per year. The cost of the VoIP project will be fully paid by July 1, 2021. DTI contacted four regionally comparative cities, through a survey, that have leveraged technology to reduce the costs of landline services. Two of the four cities responded to the survey.

Recommendation #3: DFAS should:

- Work with the landline service provider to establish a master contract for the City’s landline service needs. The contract should contain the elements required by the City Purchasing
Ordinance (Scope of Services, Vendor Compensation, Liability, etc.) and include the appropriate City Approval. Contracts should clearly disclose the cost of services and provide a mechanism for reconciliation with publicly regulated rates.

- If a contract cannot be established, then DFAS should work with the City’s Purchasing Division to establish an annual review process that ensures the City is obtaining the most advantageous price for landline services.
- Establish internal controls to work with the City’s telecom service provider to determine if landline service charges comply with publicly regulated rates and are free of erroneous service costs.
- Ensure the City’s landline service provider includes the detail outlined within the New Mexico Slamming and Cramming Act that would allow City staff to verify the cost and accuracy of billings. Electronic detail for paper summary invoices should be a strict requirement in order to streamline the verification process.

Response: “DFAS agrees with the findings. We will work with incumbent telecom provider(s) and the City Purchasing Division to implement the recommendations. This will be an element in the overall Telecom process improvement plan.”

Estimated Completion Date: “Timeline: Obtain professional services and develop the Telecom process improvement plan by June 30th, 2014. Upon completion of the plan, execute the plan with intentionality to complete the plan by December, 2014.”

Status Reported by DTI: “DTI has worked with CenturyLink to establish a flat rate for any analog phone lines. Prior rates varied from around $60-$80 per month per line. Today, with the new agreement, the City pays $28 per month per line with no disconnect charges. In addition, we increased CenturyLink data line bandwidth to 34 City offices from 3-5Mb to 40Mb for approximately the same monthly cost.

“With the deployment of VoIP, the majority of any landline or leased line usage for phone traffic will be discontinued through CenturyLink (our primary voice carrier) and migrated to SIP (provided by Level 3). This effort is projected to reduce the City’s telecom budget by another $300,000, from above.

“We have been working with City Legal to help and support our efforts with CenturyLink to ensure that we are paying only for the appropriate tariffed rates for each telco service. The tariffed rates guaranty we are in compliance with the PRC approved rates or the publicly regulated rates and are free of erroneous service costs.”

Fully Implemented

DTI has established a master contract for each service provided by the landline service provider. Each month an evaluation of cost for each service is reviewed. If there is an issue, the landline service provider is contacted for an explanation. The landline service provider includes detail of
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<table>
<thead>
<tr>
<th>Recommendation #4: DFAS should:</th>
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<tr>
<td>• Establish internal controls and methodologies for the annual analysis and adjustment of telecom overhead rates.</td>
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<tr>
<td>• Work with OMB to analyze and adjust telecom administrative and maintenance overhead rates to ensure they accurately capture the cost of service they are intended to support.</td>
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<tr>
<td>• Work with OMB and the City Administration to determine a course of action for reducing the Communication Fund’s $1.3 million balance.</td>
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<tr>
<td>• Evaluate the Communication Fund balance on an annual basis and address recovery variances with OMB in an effort to remain compatible with the characteristics of the fund.</td>
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**Response:** “DFAS agrees with the findings. We will work with OMB to implement the recommendations. This will be an element in the overall Telecom process improvement plan.”

**Estimated Completion Date:** “Timeline: Obtain professional services and develop the Telecom process improvement plan by June 30th, 2014. Upon completion of the plan, execute the plan with intentionality to complete the plan by December, 2014.”

**Status Reported by DTI:** “The telecom overhead rates are tied to the internal services required to maintain and support the City’s phone environment. DFAS / Budget reviews these charges on a quarterly and annual basis with DTI to ensure that we are able to cover the support and are not overcharging City Departments. These rates are evaluated and adjusted annually and applied to departmental budgets.

“We have been working with City Legal to help and support our efforts with CenturyLink to ensure that we are paying only for the appropriate tariffed rates for each telco service. The tariffed rates guaranty we are in compliance with the PRC approved rates or the publicly regulated rates and are free of erroneous service costs.

“DTI began the deployment of the new VoIP services / phone environment July 2015. Phase 1 of the VoIP project allowed DTI to terminate a $1 million/year support contract with Black Box. Phase 1 ended Dec 2015 and converted the majority of the City phones approx. 3,000 in 30+ offices/departments over to VoIP. Phase II is currently in progress and is projected to end Jan 2017. Phase II is moving another approx. 1,000 phones to VoIP, in approx. 70 offices.

“With the deployment of VoIP, the majority of any landline or leased line usage for phone traffic will be discontinued through CenturyLink (our primary voice carrier) and migrated to SIP (provided by Level 3) This effort is projected to reduce the City’s telecom budget by another $300,000, from above.

“Annually, DTI sends out a “total charge” report, which includes all telephone related charges (cell
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phone, land line, VoIP, data circuits, etc) to each City department director and liaison. Feedback is requested for all discrepancies or “mischarges”; and corrected by DTI.

“We can see that our working capital balance [WCB] is moving toward a more reasonable level than what it was before. WCB was as follows:

<table>
<thead>
<tr>
<th>FY</th>
<th>Amount</th>
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<tbody>
<tr>
<td>FY12</td>
<td>$632,687</td>
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<tr>
<td>FY13</td>
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<tr>
<td>FY16</td>
<td>$316,125</td>
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<tr>
<td>FY17</td>
<td>Current fiscal</td>
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Fully Implemented

DTI is reviewing telecom support charges with DFAS Budget annually to ensure that costs are covered, but departments are not overcharged. DTI sends each department a report showing all telephone related charges and requests feedback to ensure discrepancies are corrected. DTI has reduced the Communication Fund’s $1.3 million balance. DTI is evaluating the balance annually and addressing recovery variances with DFAS Budget.

Recommendation #5: DFAS should:

- Continue to streamline telecom chargeback processes with a goal to post chargeback entries no later than 30 days after the end of each month.
- Provide City departments with greater support and information for landline services.

Response: “DFAS agrees with the findings. We will work with City Departments to implement the recommendations. This will be an element in the overall Telecom process improvement plan.”

ESTIMATED COMPLETION DATE: “Timeline: Obtain professional services and develop the Telecom process improvement plan by June 30th, 2014. Upon completion of the plan, execute the plan with intentionality to complete the plan by December, 2014.”

Status Reported by DTI: “In the fall of 2016 DTI was able to obtain an additional contract staff person to help ensure reporting and department change requests are completed in a timely (monthly) basis.

“DTI has been meeting with department liaisons at least once a year to ensure they are current with any changes and allow us to answer any questions they may have.”
**Fully Implemented**

*DTI hired an additional person to streamline the telecom chargeback process to ensure it is completed monthly, and meets with department liaisons at least once a year to ensure they are current with information and answer questions.*

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**Recommendation #6: DFAS should:**

- Ensure ITSD’s Telecommunications Management Group understands their responsibilities for proactively addressing and ensuring the accuracy, efficiency and optimization of the City’s telecom services.
- Develop quarterly telecom use and expense reporting requirements for ITSD’s Telecommunications Management Group to ensure compliance with City’s policies and the intent to optimize the cost effectiveness and efficiency of telecom services.

**Response:** “DFAS agrees with the findings. We will use the management reports provided within AnchorPoint to implement the recommendations. This will also be an element in the overall Telecom process improvement plan.”

**Estimated Completion Date:** “Timeline: Obtain professional services and develop the Telecom process improvement plan by June 30th, 2014. Upon completion of the plan, execute the plan with intentionality to complete the plan by December, 2014.”

**Status Reported by DTI:** “Annually, DTI sends out a “total charge” report, which includes all telephone related charges cell phone, land line, VoIP, data circuits, etc. to each City department director and liaison. Feedback is requested for all discrepancies or “mischarges”; and corrected by DTI.

“Monthly cell phone reports are now consistently sent out to department liaisons. Information provided consists of their department expenditures, monthly charges and equipment charges; and zero usage. The zero usage reports consist of all cell phones with zero activity for the past 3 months on a monthly basis. After 6 months any zero usage cell phones are disconnected.

“DTI is in the process of developing and will be publishing a data usage and accessory purchase report; by wireless device and department.

“DTI is working with our telco vendors to ensure the City is getting the best service for the price.
- Verizon worked with the City to determine how many pooled telephone minutes were paid for and used each month. From this effort, Verizon is now providing the City a Zero Minute plan which allows us to more closely pay for only what we use (in telephone minutes) each month. This is accomplished because the telephone minutes are “pooled.”
- CenturyLink worked with the City to secure a flat rate for POTs / analog lines”

**Fully Implemented**

*DTI communicates regularly with City departments to ensure the accuracy, efficiency, and optimization of telecom services, and works with the telecom vendors to ensure the cost effectiveness and efficiency of telecom services received by the City.*
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SUBMITTED:

______________________________
Senior Information Systems Auditor

REVIEWED:

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Contract Auditor

APPROVED:

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Lawrence L. Davis, Acting City Auditor
Office of Internal Audit

APPROVED FOR PUBLICATION:

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Chairperson, Accountability in
Government Oversight Committee