


## INTEROFFICE MEMORANDUM



**TO:** Anthony Nicks, County Auditor  
*Office of the County Auditor*

**FROM:** Shin Kim, Interim CIO/Director   
*Department of Information Technology*

**DATE:** January 30, 2015

**SUBJECT:** Amended Audit Response and Remediation Plan

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I would like to extend my appreciation for the opportunity to meet with you and your team to review and discuss the Department of Information Technology's (DoIT) Responses to the Audit Department's Findings. As a result of that meeting, DoIT received valuable feedback on: the need to provide more specific information on a remediation plan; clarification from Audit on what was intended on two Findings that were misinterpreted; and guidance on the tone and responsiveness of DoIT's Responses to two other Findings.

This memorandum was prepared in an attempt to improve DoIT's Response based on the feedback we received at our roundtable. It includes amended responses for the clarified Findings and those suggested to be unresponsive. Also, the memorandum includes a chart which more clearly sets forth our remediation plan in the form of long and short term action items with a time frame for implementation. The most critical component of DoIT's remediation plan includes an independent evaluation of the Department, the objective of which will be to (1) assess the current operational model, and (2) provide recommendations for the most effective and efficient strategic direction in the future.

Once again, thank you for allowing DoIT to meet with you and your team to discuss the Findings and Responses in order to collaborate on the best path forward.

**Cc: Patrick O'Connor, Interim County Manager**

## Amended DoIT Findings Responses

### **FINDING 5 – Failure to obtain background check for contractor/sub-contractor**

*Best practices indicate that individuals employed in positions that have access to sensitive information undergo and successfully pass background checks. According to the contract, all candidates must agree to and pass a thorough background check by the Fulton County Police prior to being accepted. We found no evidence that the DoIT requested and conducted a Fulton County Police background check. During our audit, we discovered that a sub-contractor who provides telephony/technical support and administration for Fulton County has a felony arrest record. Due diligence pertaining to the performance and successful passing of a background check conducted by the Fulton County Police Department appears not to have been performed by DoIT. In the absence of a thorough background check, the DoIT was not able to adequately determine if the contractor and/or sub-contractor was appropriate for the job and work environment or if the contractor and/or sub-contractor posed a potential threat to Fulton County employees or customers as they have access to sensitive, personal-identifiable information via Fulton County systems/records.*

#### **Recommendation**

*DoIT should follow the guidelines specified in the contract. In addition, any employee, contractor or sub-contractor and its employees who have access to Fulton County sensitive systems and/or records should have a thorough background check performed. This background check should be successfully passed prior to employment and access being granted to Fulton County systems/records.*

#### **Amended DoIT Response**

DoIT agrees that any contractor or employee who has access to County systems and data should be required to have a background checks. Further, DoIT agrees that although background checks were done by the vendors, DoIT did not request they be forwarded for review and approval. Lastly, DoIT agrees to document and codify the process that details how employees/contractors/service representatives get access to County systems and data.

### **FINDING 6 – Lack of Knowledge Transfer Plan for Fulton County upon Departure of Vendor**

*Good business practice dictates that an organization that is not permanently outsourcing services will develop a knowledge transfer or transition plan to ensure contracted services can be performed by existing full-time staff through training. Typical plans will outline:*

- A project timeline that includes services to be provided;*
- The length of time those services will be provided;*
- Training to current full-time employees; and*
- A follow-up component prior to departure of a vendor.*

We discovered during the course of our audit that no transition or knowledge transfer plan exists for contracted vendors upon their departure from the organization. The current contracted vendor has been on sight for a decade, which indicates management's dependence on the vendor.

According to management, having the vendor available is an attempt to right source; however, the goal of true "right sourcing" is to reduce costs in modernizing an organizations communication platform. The current model being used does not appear to reduce costs and is not cost effective. Based on management documentation and memorandums for project justification, it seems that there is no intention by management to implement a knowledge transfer plan for the contracted vendors. In the absence of knowledge transfer, reliance on the contracted vendor for service will continue for an indefinite period of time. If adequate knowledge transfer methodologies were in place Fulton County would have the opportunity to reduce costs for services as there are capable full-time staff available to provide these same services. Please see the table below for an example that exists within the Infrastructure Division of the DoIT.

Infrastructure Division - Storage, Server, Database and Domain (SSDD) Section						
Fulton County Full-Time Employees			Professional Service Contractors			
Name	Job Title	Salary and Benefits	Name	Job Title	Salary	
Employee 1	Assistant Director	\$ 112,201.00	Contractor 1	Oracle Database Administrator	\$ 356,896.40	
Employee 2	Network Manager	111,670.00	Contractor 2	Sr. Database Administrator	349,440.00	
Employee 3	Network Administrator	101,443.00	Contractor 3	Sr. Database Administrator	299,520.00	
Employee 4	Network Administrator	94,528.00	Contractor 4	Storage Administrator	299,520.00	
Employee 5	Network Administrator	93,607.00	Contractor 5	Storage Administrator	299,520.00	
Employee 6	Network Administrator	91,016.00	Contractor 6	Program Manager	261,040.00	
Employee 7	Network Administrator	83,158.00	Contractor 7	Oracle Database Administrator	203,923.20	
Employee 8	Network Administrator	81,956.00	Contractor 8	Program Manager	166,400.00	
Employee 9	Network Administrator	78,554.00				
Employee 10	Network Manager	75,101.00				
Employee 11	Network Administrator	71,580.00				
Employee 12	Network Specialist	62,373.00				
Employee 13	Network Specialist	58,050.00				
Total		\$ 1,115,237.00	Total		\$ 2,236,249.60	

The DoIT is currently paying full-time staff and contracted vendors in the Infrastructure Division \$3.3M; however, if the implementation of knowledge transfer plan was to occur these costs could be reduced significantly.

**Recommendation**

A knowledge transfer plan needs to be developed when possible that allows for the reliance on outside vendors to be reduced unless there is a plan to permanently outsource a particular service.

**Amended DoIT Response**

DoIT agrees to include a knowledge transfer component when contractors are utilized to reduce the reliance on outside vendors wherever practical. DoIT is currently working with the Personnel Department in an attempt to create additional permanent positions within the IT Department to reduce the reliance on outsourced skill sets. The establishment of those positions is subject both to Personnel Board and Board of Commissioners approval.

Furthermore, the County Manager has authorized an RFP to obtain a reputable and independent organization to perform a comprehensive IT assessment. The RFP will include recommendation on how to address outsourcing and knowledge transfer in a manner that is efficient and cost effective.

Finally, although there are instances where knowledge transfer has been successful with the Professional Services contracts that were in place, DoIT has found that, historically, when full-time employees gain specialized skill sets from contractors, they quickly find more lucrative positions elsewhere. Moreover, in some instances, the certifications and specialized skill sets required did not lend themselves for transfer of knowledge to staff. Additionally, the continued reduction in full-time staff resources made it impossible for full knowledge transfer to occur. DoIT has seen a constant reduction in staff from 137 positions in 2008 to 121 positions in 2014, which forced full-time staff to be fully utilized on daily support, on-going projects and tasks. Note the above reductions are even more drastic when you consider DoIT merged 18 staff members from the Department of Environmental & Community Development when GIS was merged into DoIT in 2010.

#### **FINDING 10 – Excessive Dependency on Contracted Vendor for the Operation of IT Systems**

*Good business practice dictates that an organization should retain control over its network and data systems. During our audit investigation, it was discovered that Fulton County does not maintain adequate control over its network and data systems. A memorandum dated November 14, 2014 from the Interim Director of the DoIT states that failure by Fulton County to renew existing contracts with contracted vendors would result in:*

- *"Significant system downtime on mission-critical applications due to various major system outages. Applications include but not limited to Odyssey Unified Management System, Jail Management System, Tax Management Systems, Financial & Purchasing Management System, HR & Payroll Management System, and Integrated Library Management System;*
- *Significant network downtime on systems and employee workstations due to uncontrolled cyber-attack and malware outbreak;*
- *Possibility of non-compliance with the Georgia Records Act and Fulton County Code to retain records and data;*
- *Significant data loss of mission-critical applications in the event of major outage;*
- *Disruption of services in email systems, conventional telephone systems, data storage management, virtual server management, database management, and file storage such as H:\ and P: drives;*
- *Significant performance issues on major applications ;*
- *Face challenges to keep up with technical changes and response time in the event of system disruption;*
- *Higher Oracle licensing cost dealing with Oracle directly and face cost increase annually; and*
- *Oracle and SQL databases for major applications will remain unchanged and unpatched."*

*Due to the County's failure to maintain adequate control over the network and data systems, the County is at risk of losing access to its data, experiencing shutdown, disruption and/or delay time in mission essential applications, which impacts the organizations ability to operate and provide service to its citizens. Should the contracted vendor default on any of its agreements or cease to exist, the County would experience significant risks and liabilities and result in the inability to successfully operate and provide service to citizens.*

#### **Recommendation**

*The DoIT should immediately take action to ensure all network and data systems are controlled by Fulton County and not a contracted vendor. A management strategy should be implemented that outlines steps to be taken to regain control over the County's network and data system. This plan should include the development of an override system to which only the County has access to ensure complete control over systems in the event a vendor needs to be replaced and have access denied to the County's systems.*

### **Amended DoIT Response**

DoIT agrees that while outsourcing can effectively bring about efficiencies, it does inherently carry with it the threat of dependency any contractor performance for the delivery of service. This fact makes it imperative that a back-up plan be put in place to ensure that, in the event that the vendor becomes unavailable or unable to perform the work, the County can remain operational.

DoIT's past contingency plan for vendor dependency was to utilize a multi-vendor award for On Demand IT Professional Services. Should any one vendor default on any agreement or cease to exist, the County, through the appropriate procurement and contracting processes, would have been able to continue to support all critical IT operations by utilizing the other vendor to acquire resources as needed. However, as evidenced by present circumstances where the Board in its discretion elected not to renew those contracts, it is clear that the "back-up" or alternate plan must incorporate "in-house" resources.

Toward that end, DoIT is working with the County Manager and Department of Personnel to acquire additional permanent positions to reduce reliance on outsourced resources. In addition, this specific matter will be a key component of the comprehensive IT assessment - how to utilize outsourcing where required, but also how to do so in a manner to insure internal control and the inclusion of a contingency plan.

DoIT fully intends to follow the recommendation of Internal Audit and utilize the independent assessment to provide guidance on how to effectively use outsourced vendors where needed, while maintaining control and safety of critical County systems and information.

## REMEDIATION PLAN

### Fulton County Government Department of Information Technology Audit Issued December 12, 2014

SHORT TERM REMEDIATION ACTION		LONG TERM REMEDIATION ACTION	
Action(s)	Period	Action(s)	Period
<b>Finding 1 – Lack of contract oversight</b>			
DoIT will formally document contract monitoring and administration procedures consistent with the Purchasing Code.	30 days	DoIT will participate annually in Contract Administration training or as required by the Department of Purchasing.	Ongoing
DoIT will schedule and document regular technical meetings for contract resources to: set goals and priorities, review accomplished objectives, and set plans for technical achievements.	30 days	DoIT will continue to schedule and document regular technical meetings for contract resources to: set goals and priorities, review accomplished objectives, and set plans for technical achievements.	Ongoing
<b>Finding 2 – Lack of payroll records for contract employees</b>			
DoIT will enhance the documentation process to better capture work of programs of services contractors who are not required to “clock in”.	30 days	DoIT will develop and maintain quarterly reports of contractor hours and deliver for Contract Administrator and County Manager review.	Ongoing
DoIT will incorporate contractors who are required to “clock in” to the County’s Kronos time keeping system.	Completed	DoIT will continue to incorporate contractors who are required to “clock in” to the County’s Kronos time keeping system.	Ongoing
<b>Finding 3 – Advanced payment of invoices</b>			
DoIT will work with the Department of Purchasing to review existing contracts to determine where a payment variation is necessary and amend accordingly.	60 days	DoIT will continue to work with the Department of Purchasing to ensure payment variations are in place where necessary or to draft contracts to appropriately reflect the payment schedule for services rendered.	Ongoing
<b>Finding 4 – Cost of salaries exceed that of comparable counties</b>			
DoIT will issue request for assessment proposal (RFP).	120 days for RFP to be crafted and submitted to Purchasing	DoIT will present vendor award to the BOC for approval and follow recommendations of assessment for new solicitations.	6-9 months
<b>Finding 5 - Failure to obtain background checks</b>			
DoIT will ensure a background check is performed on any employee or contractor who has access to County data or systems.	Completed	DoIT will schedule and document annual background check on contractors who have access to County data or systems.	Ongoing

DoIT will create a written procedure to monitor and control access to County systems and data.	30 days	DoIT will follow the written procedure to monitor and control access to County systems and data.	Ongoing
<b>Finding 6 – Lack of Knowledge Transfer Plan</b>			
DoIT will include knowledge transfer plan as part of the assessment plan.	120 days	DoIT will incorporate knowledge transfer into any new solicitation for contracted services where it is practical.	Ongoing
<b>Finding 7 – Violation of Procurement Policy</b>			
DoIT will review and follow all contract provisions.	Completed	DoIT will follow and monitor all contract provisions in future contracts.	Ongoing
<b>Finding 8 – Bid Process Lacks Adequate Controls</b>			
DoIT will validate all solicitation responses and scores with the Purchasing Department for future solicitations.	Completed	DoIT will continue to validate all solicitation responses and scores with the Purchasing Department for future solicitations.	Ongoing
<b>Finding 9 – Vendor Advantage Resulting From Longevity</b>			
DoIT will seek to utilize reputable and independent organization to perform a comprehensive IT assessment that will include guidance on how to improve its business practices and oversight/management of contracts.	120 days for RFP to be crafted and submitted to Purchasing	DoIT will present vendor award to the BOC for approval and follow recommendations of the assessment for future solicitations.	6-9 months
DoIT will inform the County Manager and Director of Purchasing and Contract Compliance of the existence or appearance of the existence of informal relationships.	Completed	DoIT will work with the Purchasing Department to conduct a review of each instance when the same IT contractor receives an award for the same contract greater than 3 times in a row.	Ongoing
<b>Finding 10 – Excessive Dependency on Contracted Vendor for the Operation of IT Systems</b>			
DoIT will immediately take action to ensure all county network and data systems are controlled by Fulton County and not a contracted vendor by: <ul style="list-style-type: none"> <li>Documenting the methods of administrative access to network and data systems.</li> <li>Documenting the user names and passwords for network and data systems.</li> </ul>	Completed	Documenting the methods of access along with user names and passwords only partially addresses the issue of contractor dependency as the skillsets needed to fully administer the systems by FTE staff must also be developed and retained with competitive compensation. DoIT is working with the Department of Personnel to create and fill new positions.	9-12 months
<b>Finding 11 – Violation of the County Code of Ethics</b>			

DoIT will ensure all contractors and sub-contractors are aware of County rules and policies by: <ul style="list-style-type: none"> <li>• Providing the relevant documents to vendors and obtaining written acknowledgement of receipt.</li> <li>• Immediately inform the County Manager and Director of Purchasing and Contract Compliance if any information is obtained suggesting a violation of County rules and policies.</li> </ul>	30 days	DoIT will ensure all contractors and sub-contractors are aware of County rules and policies by: <ul style="list-style-type: none"> <li>• Providing the relevant documents to vendors and obtaining written acknowledgement of receipt.</li> <li>• Immediately inform the County Manager and Director of Purchasing and Contract Compliance if any information is obtained suggesting a violation of County rules and policies.</li> </ul>	Ongoing
<b>Finding 12 – Lack of Evidence of a Disaster Recovery Plan</b>			
DoIT will assess the current state of the DR/BC project and implement interim procedures and processes.	60 days	DoIT will complete the DR/BC project including the update of the DRP and regular scheduled tests.	9-12 months
<b>Finding 13 – Lack of a Full-Recovery Testing</b>			
DoIT will assess the current state of the DR/BC project and implement interim procedures and processes and a schedules to test.	60 days	DoIT will complete the DR/BC project including a routine schedule of full testing of the recovery of IT systems.	9-12 months
<b>Finding 14 – Conflict of Interest</b>			
DoIT will restructure to remove the employee in question from the supervision of the contractor with previous business relationship.	Completed	DoIT will continue to provide mandatory essential training classes for all supervisors in the department.	Ongoing
<b>Finding 15 – Lack of Training</b>			
DoIT will develop a knowledge transfer plan and conduct training sessions by utilizing temporary contractors.	60 days	DoIT will work with the Department of Finance to identify ongoing training needs and secure funding.	Ongoing
<b>Finding 16 – Misclassification of Expenditures in the Asset Management System</b>			
Implement a control procedure using our Finance Budget Analyst to ensure costs and expenses are accurately recorded and correctly expended.	30 days	Work with the Department of Finance to modify the object codes in non-agency to ensure accurate reflection of telecom and network expenses.	Ongoing
<b>Finding 17 – Contractor Performance Evaluations lack Evidence of Ratings</b>			
DoIT will develop formal measurement tools to track and monitor vendor performance.	30 days	DoIT will follow the Fulton County Purchasing Code and ensure that contract administration requirements are met to properly monitor vendor performance.	Ongoing