HARFORD COUNTY, MARYLAND
Office of the County Auditor

TECHNOLOGY INVENTORY CONTROLS

Report Highlights

Why We Did This Audit

The primary audit was conducted as part of the County Auditor's risk-based Annual Audit Plan approved by the County Council for FY2015.

What We Found

We noted that controls should be improved to ensure all devices are needed.

What We Recommend

Management should ensure inventory is routinely reviewed and remains appropriate.

Council Members and County Executive Glassman:

In accordance with Section 213 of the Harford County Charter, we have performed an audit of Harford County's controls over Network Security Monitoring. During that audit, we noted an issue, unrelated to the network monitoring controls, that warranted reporting and follow-up action. At management's request, we have issued this supplemental report to delineate this issue from the key objectives of the Network Security Monitoring Audit.

Specifically, we noted the County's technology inventory may be larger than needed. This issue may be impacted, in part, by the County's ongoing network improvements and computer refresh programs. New devices are purchased, added to the network, and/or decommissioned frequently and related documentation is not updated timely or older devices are not surplused timely.

More detailed results of our findings and recommendations for improvement follows this letter. We would like to thank the members of management for their cooperation during the audit; their response follows our findings and recommendations. The audit team is available to respond to any questions you have regarding this report.

Sincerely,

Chrystal Brooks, CPA

Chrystal Brooks
County Auditor

cc: Mr. Ted Pibil, Director of Info. and Comm. Technology
        Mr. Billy Boniface, Director of Administration

REVIEW RESULTS

We have audited Harford County's controls over Network Security Monitoring for the period of 7/1/2013 through 4/15/2015. Our opinion, findings, objective scope and methodology for the project can be found in audit report 2015-A-01A.

While conducting those procedures, we noted that computer inventory appeared excessive. This matter was outside of the scope of our audit objectives, but warranted formal reporting so that follow-up action could be monitored.

Areas for improvement are described in the Findings and Recommendations section of this report. Management has been provided an opportunity to respond to this report; the response provided follows the recommendation.

FINDINGS AND RECOMMENDATIONS

Finding Number: 2015-A-01.03 Technology Inventory

Computer inventory appears excessive.

Analysis: We attempted to confirm that computers are routinely updated with anti-virus and malware software by selecting a sample of devices to identify the most recent virus definition update. The antivirus software definitions are pushed out to each computer that is connected to the County's network daily. If a computer is turned off when updates are sent, the updates are processed when the computer logs on to the network. Management was able to provide macro level data showing how many machines were updated each day, but not which specific machines had been updated. Instead of testing individual computers, we compared the report provided to the County's inventory and found that there were significantly more computers in the inventory.

Specifically, we noted that 1,145 computers had received the daily update, but we noted approximately 2,220 desktop and laptop computers (1,955 excluding backups and items in storage) in the County's inventory system. Of those, approximately 650 were all-in-one machines. We also noted nearly 1,900 monitors in inventory, which is approximately 315 more than the number of computers that might need monitors.

The difference between the number of active machines and the number of inventory items is an indication that the County may be maintaining excessive inventory.   The location

notes for some inventory items indicated that they are being held in storage rooms. Based on our discussions with management, when computers are refreshed by ICT, each department is responsible for removing the old (replaced) computer from inventory. Based on the notes for some items, it appears that this is not always completed in a timely fashion. Additionally, in our testing of monitored networking devices, we were advised that a number of networking devices have been decommissioned, but remain in the County's inventory.

Inventory that is not being used represents cash that is not available for other uses and requires the County to keep track of an additional device.

Recommendation: We recommend management review inventory that is not currently in use to determine whether some items may be surplused.

Management Response: Management is unable to determine how the Auditor derived the numbers associated with the inventory of equipment in order to give a specific response. However, Management maintains only enough inventory to enable the County to replace equipment timely and to be able to supply workstations for deployment in case of emergency. Management does agree that a County-wide comprehensive policy concerning when and what inventory should be surplused needs to be developed.

Expected Completion Date: 12/31/2016

Auditor's Note: Management was provided a copy of the inventory details that we used (provided by Risk Management), but needs to agree that list to the ICT records.

BACKGROUND INFORMATION

The primary audit is considered a 'Performance Audit' because the procedures described above required the audit team to draw conclusions about conformance with contract terms and the adequacy of management's processes unrelated to specific financial transactions. Accordingly, to comply with §213(c) of the Harford County Charter, the audit was approved by the County Council in resolution 029-14.

Harford County management is responsible for establishing and maintaining effective internal controls. Internal control is a process designed to provide reasonable assurance that objectives pertaining to the reliability of financial records, effectiveness and efficiency of operations including safeguarding of assets and compliance with applicable laws, rules and regulations are achieved. Because of inherent limitations in internal control, errors or fraud may nevertheless occur and not be detected.

The audit was performed in accordance with Generally Accepted Government Auditing Standards (GAGAS). Those standards require that we plan and perform the audit to obtain sufficient evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Audit Team:

Chrystal Brooks
CPA, CIA, CGAP, CISA, CGFM, CRMA
County Auditor

Laura Tucholski
CPA, CIA, CFE, CRMA
Managing Auditor