



**Mecklenburg County  
Department of Internal Audit**

Business Support Services Agency – Information Technology  
Computer Theft Investigation Follow-Up Audit  
Report 1574

April 19, 2016

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**Internal Audit's  
Mission**

To support key stakeholders in cultivating an environment of accountability, transparency and good governance.

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**Internal Audit Contacts**

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**Staff  
Acknowledgements**

Rick Kring, CISA, Auditor-In-Charge  
Deborah Caldwell, CIA, CISA, Information Technology Auditor

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**Obtaining Copies of  
Internal Audit Reports**

This report can be found in electronic format at  
<http://charmeck.org/mecklenburg/county/audit/reports/pages/default.aspx>



**MECKLENBURG COUNTY**  
**Department of Internal Audit**

**To:** Dena Diorio, County Manager

**From:** Joanne Prakapas, Director, Department of Internal Audit

**Date:** April 19, 2016

**Subject:** Business Support Services Agency – Information Technology Computer Theft Investigation Follow-Up Audit Report 1574

The Department of Internal Audit completed a follow-up audit on reported issues from the Business Support Services Agency – Information Technology Computer Theft Investigation Audit Report 1302 issued July 30, 2013. The objective of the follow-up audit was to determine with reasonable but not absolute assurance whether management took effective corrective action on the issues presented in the audit report.

Internal Audit staff interviewed key personnel, observed operations, reviewed written policies and procedures and other documents, and tested specific transactions where applicable. Internal Audit conducted this audit in conformance with The Institute of Internal Auditor’s International Standards for the Professional Practice of Internal Auditing.

**FOLLOW-UP SUMMARY**

There were ten recommendations in the Business Support Services Agency – Information Technology Computer Theft Investigation Audit Report 1302. The following table summarizes the results of the follow-up audits performed to date.

<b>Recommendation Summary</b>					
<b>Fiscal Year</b>	<b>Audit Report</b>	<b>Implemented</b>	<b>Open</b>	<b>Not Implemented</b>	<b>Withdrawn</b>
2015	1574		2		8

Details regarding the most recent follow-up audit are noted in the attached **Follow-Up Results** matrix. Recommendations considered implemented will be excluded from further review. For those that remain open, Internal Audit will conduct a follow-up audit at a later date to verify they are fully implemented and working as intended.

The cooperation and assistance of the Information Technology staff are recognized and appreciated.

- c: Deputy County Manager/Chief of Staff
- Assistant County Managers
- Deputy County Attorney
- Senior County Attorney
- Board of County Commissioners
- Audit Review Committee
- Chief Information Officer, Information Technology

**Follow-Up Results**

**Business Support Services Agency – Information Technology Computer Theft Investigation Audit Report 1302**

- **Implemented** – Audit issue has been adequately addressed by implementing the original or alternative corrective action plan (**I**)
- **Open** – Corrective action for audit issue initiated but not completed (**P**); Implemented but not operating as intended (**IO**); Not been addressed but management fully intends to address issue (**O**)
- **Not Implemented** – Audit issue not addressed and management has assumed the risk of not taking corrective action (**NI**)
- **Withdrawn** – Audit issue no longer exist due to operational changes (**W**)

				Implementation Status	
Issue	Recommendation	Management’s Risk Mitigation Strategy	Original Implementation Date	Current Status	Comments
1	Internal Audit recommends BSSA-IT develop formal, documented policies and procedures for its inventory management process for the Computer Replacement Project. The policies and procedures should include, at a minimum: <ul style="list-style-type: none"> <li>a. shipment receipt</li> <li>b. recordation</li> <li>c. physical inventory counts</li> <li>d. deployment</li> <li>e. physical security</li> </ul> In addition, the written policies and procedures should have a framework that establishes: <ul style="list-style-type: none"> <li>a. frequency of reviews</li> <li>b. staff roles and responsibilities</li> <li>c. staff training requirements</li> <li>d. communication requirements for internal and external stakeholders</li> </ul>	The action plan is for BSSA-IT to record its computer replacement procedures as a formal set of guidelines. The guidelines will be presented to Mecklenburg County’s Information Services and Technology Advisory Committee (ISTAC) for endorsement. Anticipated completion of the formal guidelines, including review by ISTAC: October, 2013.	10/2013	P (2)	Management indicated the recommendation is partially implemented due to facility and leadership changes, which delayed completion.
2	Internal Audit recommends BSSA-IT require the CREP team members to document all changes in custody for all computers received and stored at the HMA until deployment.	The action plan is for BSSA-IT to include custody transfer requirements in the computer replacement procedures being drafted as a formal set of guidelines. The guidelines will be presented to Mecklenburg County’s Information Services and Technology Advisory Committee (ISTAC) for endorsement. Anticipated completion of the formal guidelines, including review	10/2013	W	Internal Audit has withdrawn the issue and recommendation due to relocating the receipt, processing and retirement of computers to a different facility.

**Follow-Up Results**  
**Business Support Services Agency – Information Technology Computer Theft Investigation Audit Report 1302**

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		by ISTAC: October 2013.			
3	<p>Internal Audit recommends BSSA-IT:</p> <p>A. Coordinate with County Security to restrict the HMA computer work/storage room badge access to only individuals with legitimate business needs to access the room.</p> <p>B. Routinely monitor physical access reports for unauthorized or inappropriate access to the computer work/storage room.</p> <p>C. Coordinate with County Security to deactivate any generic HMA employee badges and ensure all those with authorized access only use their name-specific employee or contractor badge to enter the work/storage room.</p> <p>D. Work with County Security to utilize video surveillance equipment at key building points.</p> <p>E. Emphasize with Desktop Support staff, contractors and others with access to the HMA computer work/storage room the importance of securing all entry and exit points at all times.</p>	<p>The level of building security was not optimal at the time of the theft. BSSA-IT has not issued any master keys mentioned in the narrative. We cannot speak to the origins of those items or generic badges.</p> <p>A. The work room used by the computer replacement project team was rekeyed, a new work room in a more secure location within the building is now being used.</p> <p>B. Access reports will be reviewed monthly.</p> <p>C. Doors to the room have been secured with electronic locks with badge/card readers for which only BSSA-IT staff is granted access. Staff entering the room will be identified from use of their badge. Generic badges issued by other departments using the Hal Marshall Annex will not open the work room doors.</p> <p>D. Two security cameras to record movements will be placed within the room. This should be complete in late July or early August.</p> <p>E. Staff involved in the replacement project has been reminded to</p>	08/2013	W (5)	Internal Audit has withdrawn the issue and recommendation due to relocating the receipt, processing and retirement of computers to a different facility.

**Follow-Up Results**  
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		monitor ingress/egress security.			
4	Internal Audit recommends BSSA-IT conduct a periodic physical inventory count of new computer equipment received and stored at the HMA until deployment. The rate of new inventory turnover should drive the frequency of the inventory count. The physical inventory counts should be documented and reconciled to current inventory records. Discrepancies should be timely resolved and documented. The physical inventory counts and reconciliations should be performed by an individual without custodial or recordkeeping responsibilities over the computer equipment being inventoried. The physical inventory results should be reviewed and approved by management.	BSSA-IT will establish a regular true-up of the spreadsheet with PCs on premise and/or distributed. This will be included in the computer replacement guidelines referenced in the Issue 1 response. Anticipated completion of the formal guidelines, including review by ISTAC: October, 2013. BSSA-IT is also pursuing implementing, a cloud based application to inventory, monitor, and manage computers, as well as mobile devices.  Funding has been approved in the FY14 Capital Reserve budget to design and construct an appropriate work area for the computer replacement project team. The new work room will include a fenced or "cage" area to further secure computers.	10/2013	W	Internal Audit has withdrawn the issue and recommendation due to relocating the receipt, processing and retirement of computers to a different facility.
5	Internal Audit recommends BSSA-IT separate incompatible duties for custody and related transaction recordation for computer equipment received and stored at HMA until deployment. If adequate separation of duties is not possible, management should implement appropriate compensating controls.	The action plan is for BSSA-IT to include separation of duties requirements in the computer replacement procedures being drafted as a formal set of guidelines. The guidelines will be presented to Mecklenburg County's Information Services and Technology Advisory Committee (ISTAC) for endorsement.	10/2013	W	Internal Audit has withdrawn the issue and recommendation due to relocating the receipt, processing and retirement of computers to a different facility.

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		Anticipated completion of the formal guidelines, including review by ISTAC: October, 2013.			