

AUDITOR'S REPORT

CONTINUOUS AUDITING ANALYTICS CHANGE CONTROL MANAGEMENT FOR THE THREE MONTH PERIOD ENDED MAY 31, 2016



June 24, 2016

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HARRIS COUNTY AUDITOR

June 24, 2016

Mr. Mike Post
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RE: Continuous Auditing Analytics Change Control Management for the three month period ended May 31, 2016

The purpose of this letter is to present the results of the Continuous Auditing Analytics Change Control Management Review for the three month period ended May 31, 2016. Through the use of automated tools, the department monitors key data tables on a daily basis of the County's Integrated Financial and Administrative Solution (IFAS) System to ensure that any changes conform to relevant policies and procedures. Our procedures included the following analyses:

- 1) A daily analysis to monitor change controls relative to security, configuration, and user access on the County's IFAS System.
- 2) Routine monitoring and analysis of security override privileges relative to cash handling.

The enclosed Auditor's Report presents information concerning Change Control Management performed during the period. While a few minor items were identified, none were significant. We appreciate the time and attention provided by you and your staff during this ongoing engagement.

Sincerely,

A handwritten signature in blue ink that reads "Barbara J. Schott".

Barbara J. Schott
County Auditor

cc: District Judges
County Judge Ed Emmett
Commissioners:
R. Jack Cagle
Jack Morman
Steve Radack
Gene Locke
Devon Anderson
Vince Ryan
William J. Jackson

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OVERVIEW

BACKGROUND

Continuous Auditing performs auditing activities on an ongoing basis. This includes, but is not limited to:

- The Change Control Management Analysis that monitors changes within the County's financial system.
- The Cash Receipt Batch Security Analysis a monthly review of user access relative to cash handling.

CHANGE CONTROL MANAGEMENT ANALYSIS

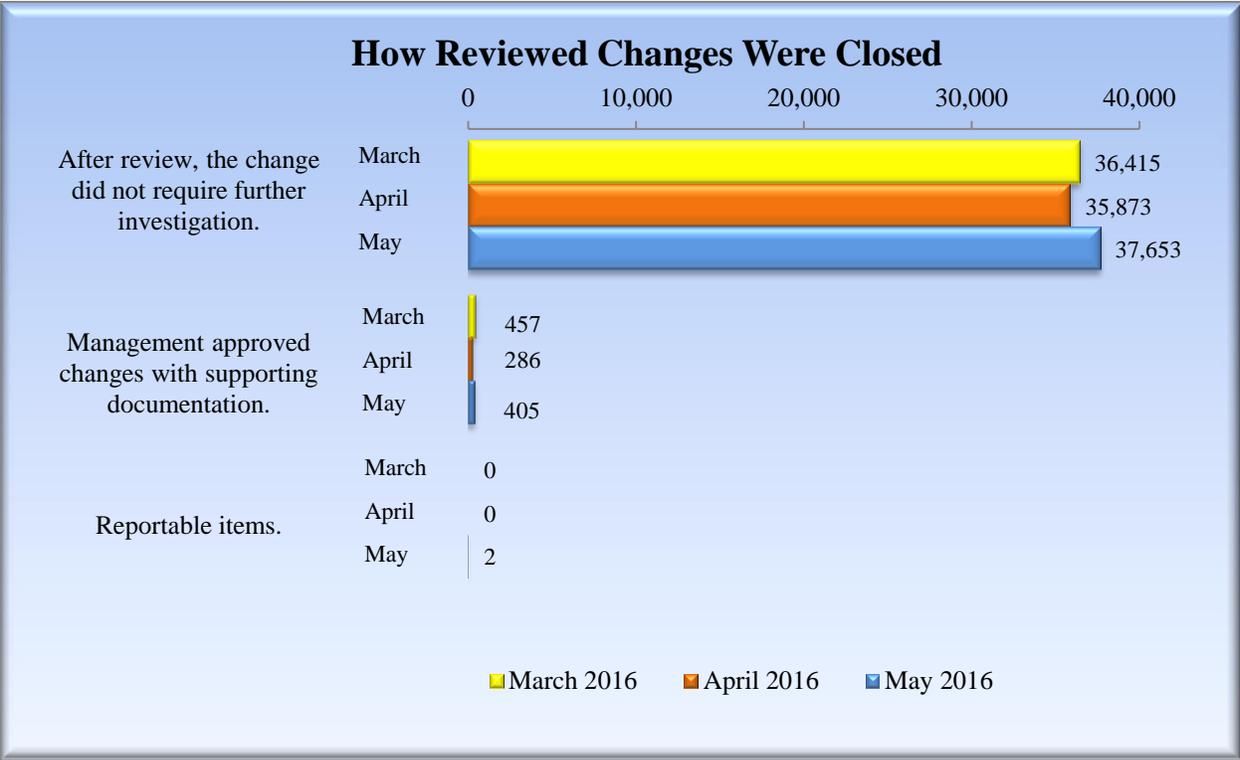
Monitoring Change Control Management is important, as changes to the financial system can affect not only what County personnel can do, but also how the system is configured to perform. For example, access should be assigned to County personnel on a "need to know" or "need to do basis". Unapproved changes to the system may create an issue with system security, configuration, or unauthorized access (e.g., the ability to post and approve transactions). Therefore, changes to security, configuration, and user access is monitored to ensure that system controls are in place and functioning as intended.

While Central Technology Services (CTS) is responsible for supporting the County's financial systems and data, Continuous Auditing works with CTS to monitor changes to the financial systems to ensure the data is properly maintained. On a daily basis, Continuous Auditing performs the following procedures:

- Obtains a download of key system tables provided by CTS.
- Compares every data element on key tables with the value from the previous day, noting any changes.
- Determines if the changes impact system security, configuration, or user access to financial systems.
- When necessary, obtains appropriate documentation showing management approval.

Daily, the Analysis performs over 4.3 million comparisons and identifies an average of 3,500 changes. As it is management's responsibility to approve changes and assess potential impact, Continuous Auditing does not evaluate the appropriateness of the change itself. The purpose of the analysis is to verify that proper Change Control Management is followed, ensuring the integrity of the system security, configuration, and user access to financial systems.

The majority of the changes do not affect security, configuration, or user access and require no further review. Remaining changes are analyzed to determine if the change requires supporting documentation. The chart below illustrates how the reviewed changes were resolved:



The top section of the chart reports the reviewed changes that were closed automatically or required an analytical assessment by Continuous Auditing. As a result of this assessment, Continuous Auditing was able to close the changes without requesting additional documentation (e.g., changes that decreased user access to the system).

The second section of the chart indicates changes that required management approval and supporting documentation. For the months of March through May, the changes requiring management approval were consistent with changes expected to occur on a monthly basis, including changes pertaining to payroll, personnel access and routine system maintenance.

The third section of the chart illustrates the reportable items for each month. Reportable items are changes that were made without management approval or not performed properly. For the months of March through May 2016, there were two (2) reportable items identified. The reportable items were identified during the month of May 2016 and these were due to a duplicate item created, inadvertently, by Central Technology Services (CTS), while granting access to a record. Continuous Auditing informed CTS about the duplicate item and they performed the necessary corrections. Since the duplicate records affected access to the system, as compared to processing, they did not pose an immediate risk to IFAS.

CASH RECEIPT BATCH SECURITY ANALYSIS

The Cash Receipt Batch Security Analysis identifies County employees that have the ability to distribute and update cash payment batches. Numerous locations around the County receive payments (cash, check, charge, etc.). The receipt of a cash payment is entered into the Cash Receipt function via batches. A batch is a grouping of transactions (usually by day, by shift, etc.). Two critical functions related to cash receipts are the ability to distribute (e.g., record) and update existing batches.

The ability to distribute allows the user to record the amount of cash received into a batch. The ability to update allows the user to open a batch created by another user and edit the information recorded (e.g., the user can change the amount received). Having access to perform both of these functions can be used to override internal controls and should be closely monitored, as the handling of cash has inherent risks not present with other types of transactions. To help identify and monitor individuals who have these control override privileges, a monthly report is produced by Continuous Auditing and distributed to Audit Services and Compliance Audit management. This report can be utilized to assess control risks when planning an audit engagement.

The Cash Receipt Batch Security Report is generated every month and provided to Audit Services and Compliance Audit management to review and consider for their engagements. The chart below illustrates the changes in the ability to distribute and update cash payment batches for County employees:

	Beginning of Period	Additions	Removals	End of Period
<i>Distribute</i>	77	8	3	82
<i>Update</i>	38	3	0	41

Continuous Auditing verified that management approved these additions.

RESULTS

Continuous Auditing noted two (2) reportable changes to the IFAS system. The reportable changes were addressed by Central Technology Services (CTS) and do not appear to have posed a risk to the IFAS system security, configuration or user access. In addition, Continuous Auditing's review of security override privileges, via the Cash Receipt Batch Security Analysis, confirmed that all changes were made with managerial approval.