

July 6, 2012

VICE CHANCELLOR LAWRENCE

Subject: Final Audit Report No. M12A001
CatCard Audit

Attached is the final report for Audit No. M12A001: CatCard Audit. It includes action plans that were developed by members of your staff. These action plans will be entered into the TeamCentral Database and monitored until completion. With the issuance of this final report, please destroy any previous draft versions.

I appreciate the assistance provided to me by your staff during the review. If you should have any questions, please feel free to contact me.



Todd Kucker
Internal Audit Director
UC Merced Internal Audit Services

Attachment

cc: SVP Vacca
Chancellor Leland
Associate Chancellor and Chief of Staff Young
Vice Chancellor Miller
Associate Vice Chancellor Nies
Assistant Vice Chancellor Ahmed
Assistant Vice Chancellor Atkins
Director Souza
Director Groesbeck
Director Toth
Supervising Locksmith Fimbrez
Interim Chief Information Officer Gorham
Information Security Officer Fellin

**UNIVERSITY OF CALIFORNIA, MERCED
INTERNAL AUDIT SERVICES**

**CatCard Audit
Report No. M12A001**

July 6, 2012

Work Performed by:
Todd Kucker, Internal Audit Director

Purpose and Scope

Internal audit has completed an audit of UC Merced's campus card (CatCard) operations, which was part of the fiscal year 2012 audit plan. The primary objectives of the audit were to evaluate CatCard access to secured areas and to evaluate controls over funds maintained in the CatCard system. The audit steps were designed to cover the following:

- To review controls over setting up, monitoring, and removing building access;
- To review controls over, and accounting for refundable plan balances; and,
- To determine whether IT access in the CatCard system is properly managed.

The audit focused on building access and CatCard plan balances during July 1, 2011 through April 30, 2012.

Background

The CatCard is a multi-service identification card for students, faculty, staff, and affiliates of the university. (Affiliates are non-employees who have approval to receive access to a campus building. Affiliates include vendors and contractors who need building access to complete their university business and parents of children at the university-run preschool). The CatCard is used on campus to:

- Identify people as students, employees, and approved affiliates
- Access secured buildings and offices
- Check resources out from the library
- Purchase meals on campus
- Photocopy and print using campus printers
- Purchase textbooks, supplies, and other items at the campus store
- Access the recreation center
- Pay for campus laundry services

The CatCard office is responsible for issuing new CatCards and managing the Diebold CS Gold campus card system. The office is made up of two full-time employees. The university's dining services director is also the director over the CatCard Office.

When a new CatCard is to be issued to a student, employee, or affiliate, the CatCard Office requires the new patron to provide a government-issued identification, such as a driver's license or passport, and a picture is taken of the cardholder which is included on the card. The CatCard office employees set up different plans in the CS Gold system that enable the cardholders to add money to the card that can be used for different purposes on campus. For students, different campus meal plans can be purchased and a laundry plan enables students to use campus laundry machines. While meal plan money can only be used by students to purchase meals, students and employees can add money to flex plans which act like a prepaid debit account that enables purchases of food, books, copies, etc.

To add money to plans, students, parents, and employees can make a payment at the cashier's office, send in a payment, add money on one of the campus's three CSVT

machines (ATM-like machines), or add money online using the university's electronic payment site (ePay). ePay enables a cardholder to pay using a credit card or E-Check, which is where the cardholder's bank account and routing information is captured in the ePay system for a resulting ACH payment.

Card plan balances are managed in the CS Gold system by the CatCard office. As most of the plan balances are refundable to the cardholders, the total of the refundable balances are recorded as a liability on the university's balance sheet. To record the liability and to properly record sales on CatCards, Accounting Services receives reports from the CatCard office. Originally, when plan balances began to be recorded in the CS Gold system, the decision was made to also record all refundable plan transactions in a control subsidiary ledger of the university's financial system. As a result, many thousands of the same transactions have been recorded in both the CS Gold system and financial system in order to enable Accounting Services to properly recognize sales revenues as they occur.

The university's locksmith department is responsible for setting up building access on the CatCard and for managing the many electronic locks on buildings and rooms on the campus. To add access to an employee card or affiliate card, department management services officers (MSO's), administrative directors, and faculty members in charge of particular labs contact the supervising locksmith to approve particular door access and allowable times of entry, which the locksmith sets up in the CS Gold system. Once the access has been set up, a cardholder can scan the card in front of the door's card reader to open the door.

To disable building access, departments notify the locksmith department or the employees who manage the university's identity management system (IDM) to disable CatCard building access. When a former employee is separated in the payroll system, the system is set up to interface with the CS Gold system and disable CatCard building access. When a separation could be confrontational, departments contact the locksmith or identity management employees to schedule disabling access in advance. The registrar's system also interfaces with the CS Gold system to disable student access when a student leaves the university. Departments who approve affiliate access are responsible for assigning expiration dates for the affiliate access and monitoring when the access is no longer needed.

Conclusion

Based on the review, we concluded that business practices appear to be adequate to provide reasonable assurance that building access and CS Gold system access are properly controlled. It appears that processes related to managing funds on the CatCards needs improvement. Overall, we noted the following areas for improvement:

Areas for improvement

- A more effective and efficient reconciliation of CatCard plan balances should be implemented
- Available funds from E-Check payments should be limited until the deposit clears

- The CatCard Office's budget deficit should be corrected and an ongoing funding plan agreed upon
- More than one employee should be involved in setting up and monitoring building access in the CS Gold system
- Policies and procedures for handling dormant accounts should be developed
- Balances to test the CS Gold system should not be set up in the live system
- Disabling affiliate access to buildings could be improved

Observations and Management Action Plans

1. A more effective and efficient reconciliation of CatCard plan balances should be implemented

During the audit, we noted errors in CatCard plan balances that were not identified by the current double recording of CatCard transactions. The current process of recording the CS Gold transactions in a sub-ledger of the financial system is not effective at identifying unusual changes in CS Gold plan balances as there is no periodic reconciliation of the balances in both systems.

As there are refundable plan balances, Accounting Services needs information from the CS Gold system in order to properly record the campus card liability and to properly recognize revenue from these plans. It is a time-consuming, manual process to account for CatCard transactions as there is not an interface between the CS Gold system and the university's financial system. To record all of the transactions in the refundable plan balances, an employee in the CatCard office downloads all daily activity to spreadsheets then cuts and pastes all of the daily information into a journal entry template. These are then sent to Accounting Services to be uploaded into the financial system. Accounting Services prints and obtains approval for each entry, then posts the information to the financial system.

After the time-consuming work required to record cardholder transactions in the financial system, there is not a process to reconcile the financial system balance of the liability with the CS Gold cardholder balances. Several unsuccessful attempts have been made to complete a working reconciliation process. Differences were noted when we compared the CS Gold balances with the sub-ledger balances. From discussion with the employees involved with these processes, it appears that there were errors in the manual entries years ago which have never been fixed. The balances in the two systems could not be properly reconciled until all of these differences are identified.

During the audit, we noted an error that resulted in incorrectly adding \$1,240 to three students' laundry plan balances in CS Gold during August 2011. The balances were incorrectly increased without a corresponding deposit. The current processes did identify the error. The error was finally noted and corrected during

April 2012 when one of the students attempted to transfer the large balance in the laundry plan to another plan.

Management Action Plan:

The CatCard Office will create a procedure and process to automate reporting of transaction journals from CS Gold to the university's financial system, eliminating the possibility of human error. Administrative Computing and Systems (ACS) will play a significant role in the development of this function. Manual deposits and plan to plan transfers entered by CatCard Office employees or any non-CSVT location will be logged and e-mailed nightly to Accounting Services. The CatCard office will also create automated reports that will be e-mailed to Accounting Services for reconciliation purposes on a monthly and per request basis. The CatCard Office will also develop custom reports upon request for Accounting Services to utilize in the reconciliation process. A process will be established as an administrative "check and balance" with the goal of identifying situations such as the three patrons who were erroneously allocated \$1,240 to their laundry plans instead of the residential meal plan.

This action plan will be completed by July 15, 2012.

2. Available funds from E-Check payments should be limited until the deposit clears

One way that a cardholder can add money to a CatCard account is by utilizing the university's electronic payment collection site, ePay. In ePay, cardholders can add money to their CatCard plan balances by using a credit card or by entering bank account and routing information so the money can be pulled directly from a checking or savings account. After the deposit is set up in ePay, the cardholder has immediate access to the funds. There are limitations with ACH transactions (E-Check) which do not allow systems to verify that there are funds in the particular account. This puts the university at risk for loss as a cardholder has access to the money before the funds are actually pulled from the bank account.

During the audit, we noted an instance where a student used the ePay system to add \$695 to a card. Less than two hours after adding the money to the CatCard, the student had spent almost the entire balance at the bookstore. Six days later, Accounting Services received notice that the payment had rejected. The payment was reversed in the CatCard system, and the student ended up with a negative balance of (\$681.88) that was owed to the university. The student eventually paid back the university more than two months later. Other instances were noted where cardholders had immediate access to funds although they provided erroneous bank account information in ePay.

As cardholders currently have immediate access to funds before the deposits clear, the university is at risk of a cardholder setting up phony deposits in ePay.

Management Action Plan:

The CatCard Office will work with Administrative Computing and Systems to develop a front line process to flag E-Check deposits so CS Gold is aware of the tender type for each deposit. For E-Check deposits over \$100, an automated process will then be put in place to hold and release funds after 72 business hours. Transactions under \$100 will immediately post to CS Gold. A patron's ability to make E-check deposits may be revoked after three failed transactions.

The action plan will be completed by September 30, 2012.

3. The CatCard Office's budget deficit should be corrected and an ongoing funding plan agreed upon

During the audit, we noted that the CatCard Office has had a fund balance deficit since fiscal year 2008. At June 30, 2011, the fund balance deficit was (\$157,826). The deficit balance has been caused by a disagreement as to how to fund first time issued CatCards and the door readers. Prior to fiscal year 2008, funding for these costs was provided by administration. After the costs were incurred for fiscal year 2008, it was decided that a different source of funds to cover these costs should be identified. Rather than putting a sustainable plan in place, the continuing disagreement over funding has resulted in allowing the deficit to grow each year since 2008.

CatCard Office employees have worked with the university's Budget Office to come up with potential ways to solve the deficit and provide ongoing funding. If the current deficit is not dealt with, the CatCard Office will have difficulty investing in updated technology that could be of service to the university.

Management Action Plan:

Prior to the CatCard Audit, the Director of the CatCard Office authored a memo and proposed a five year budget to address the current budget deficit. The memo stresses the need to resolve CatCard Office's debt due to non-payment from Administration and proposes a decentralized funding model for first time issued cards instead of a centralized university funded model. The proposed five year budget would allow the CatCard Office to move forward and prepare for technological upgrades, etc.

The plan to fund the CatCard Office's budget deficit was completed before this report was issued.

4. More than one employee should be involved in setting up and monitoring building access in the CS Gold system

During the audit, we reviewed how building access on CatCards is set up and disabled. We noted that only one employee, the supervising locksmith, sets up all building access and also monitors that the CS Gold system administrators don't set up CatCard access to buildings. Currently, no other employee reviews the access set up in the CS Gold system. This employee sets up approved access to many sensitive areas around campus, including laboratories, data centers, physical plant, student housing, and the university-run preschool.

We also noted that having one employee set up all building access on the campus will soon become unmanageable. As the campus continues to grow and new buildings are put into operation, the number of doors will continue to increase the overwhelming responsibility of this employee. For example, when the Science and Engineering II Building is completed in 2014, this building will add close to another 200 doors, many of which are labs, which this employee would have to set up and help manage.

It appears that additional staffing for the Locksmith department should be considered so an additional employee can be trained to set up and review building access. With another properly trained employee in the department, the employees would have sufficient knowledge of the CS Gold system and the sensitive areas around campus so the two employees could properly review and approve building access set up by the other employee.

Management Action Plan:

Facilities Management will put together a short term solution by cross training a manager in Facilities to review building access changes by the University Locksmith in CS Gold.

This action plan will be completed by July 31, 2012.

Facilities Management will obtain additional staffing to fulfill the required building access monitoring in the Lock and Access Department to support the new buildings coming online, e.g., Science & Engineering Building 2, Housing 4, and other additional academic buildings.

This action plan will be completed by December 31, 2014.

5. Policies and procedures for handling dormant accounts should be developed

During the audit, we reviewed inactive (dormant) refundable CatCard balances in CS Gold and in the financial system. As of March 31, 2012, there were 421 balances totaling \$7,145 which have not changed since June 30, 2009 and 925 balances totaling \$11,224 that have not changed since June 30, 2010. It appears that the number of dormant balances is increasing.

UC Merced is exempt from the state of California escheatment rules so the university is not required to turn over unclaimed property to the state. There is currently not a policy to clear these dormant CatCard balances. As a result, the systems are becoming more difficult to review as there are many old, dormant plan balances.

Management Action Plan:

Accounts left inactive for greater than 18 months with a balance of \$5 or less will be expired in CS Gold and the remaining funds allocated to the University. Accounts with \$5.01 - \$50.00 will be swept after 18 months and assessed a \$5 administrative fee. A process will be developed to notify patrons with more than \$50 left on their account that will consist of a hardcopy letter to a confirmed address in Banner. Discussions are currently taking place regarding a "maintenance fee" for accounts left inactive with greater than \$50.

Updated Cat Card Terms and Conditions will be posted on the Cat Card website and will clearly define the process for unclaimed funds.

The action plan was completed before this report was issued.

6. Balances to test the CS Gold system should not be set up in the live system

During our review of plan balances in the CS Gold system, we identified a test balance in the live system. As a student number and name was assigned to the test account, it was not immediately apparent that the balance had only been set up to test whether ePay could correctly add payments to the test account.

Test information in live data hurts the reliability of the real data as the test account balances have to be identified and backed out to get to the correct total for plan balances. Also, there is a risk that funds set up in the test account could be misused. The CatCard office manager zeroed out the test account balances during the audit. A test system should be used during testing rather than using the live system.

Management Action Plan:

The Cat Card office will be upgrading from CS Gold 5 to CS Gold 6 in December 2012. Included in this upgrade will be a test system and database for code testing.

The action plan will be completed by December 31, 2012.

7. Disabling affiliate access to buildings could be improved

During the audit, we reviewed procedures related to monitoring affiliate access. To control affiliate access, expiration dates are usually set up in the university's identity management system which shut off CatCard access on these affiliate cards. We noted the following issues:

- Former employees were noted with affiliate card access where expiration dates were not set up in the system. The separated employees needed access to buildings after their employee access was shut off by the payroll system. While these former employees have not recently used the affiliate access, the access has not been properly disabled.
- Two affiliates tested had not used the access for many months. As the expiration dates had not yet been reached, it appears that the affiliates had building access even though they no longer needed the access.

Management Action Plan:

The Information Security Officer will review affiliate accounts set up in the university's identity management system (IDM) on a quarterly basis. Part of the review will be to verify that expiration dates have been set up for active accounts and to determine whether affiliate accounts which have not been recently used are still needed. The Information Security Officer reviewed and disabled the accounts noted during the audit.

The action plan will be completed by September 30, 2012.