

NORTH DAKOTA UNIVERSITY SYSTEM  
CONNECTND CAMPUS SOLUTIONS

# Status of Recommendations

For the Report Dated September 13, 2006

May 12, 2009

ROBERT R. PETERSON  
STATE AUDITOR

Office of the State Auditor  
Division of State Audit

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STATE AUDITOR  
ROBERT R. PETERSON



PHONE  
(701) 328 - 2241  
FAX  
(701) 328 - 1406

STATE OF NORTH DAKOTA  
**OFFICE OF THE STATE AUDITOR**  
STATE CAPITOL  
600 E. BOULEVARD AVENUE - DEPT. 117  
BISMARCK, NORTH DAKOTA 58505

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## TRANSMITTAL LETTER

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May 12, 2009

Honorable John Hoeven, Governor  
Members of the North Dakota Legislative Assembly

William G. Goetz, Chancellor  
North Dakota University System

A fundamental objective of the Office of the State Auditor's work is to bring about improvements through recommendations. To achieve this, our recommendations need to be timely and effectively implemented. The Legislative Audit and Fiscal Review Committee (LAFRC) has requested the Office of the State Auditor to perform follow-up work after presentation of audit reports to the Committee. The LAFRC has also requested the Office of the State Auditor report those agencies which have not implemented audit recommendations.

The Office of the State Auditor has conducted an audit follow-up on the information system audit of the North Dakota University System's ConnectND Campus Solutions system, issued September 13, 2006. The North Dakota University System was contacted and limited testing was performed. Our conclusions are based on limited tests, and there is a possibility that more substantial testing might have changed our conclusions.

This report addresses the recommendations that: have been fully implemented, partially implemented, and not implemented.

As a result of the follow-up review, six recommendations were determined to be fully implemented, two were determined to be partially implemented, and two were determined to be not implemented. The following pages identify these recommendations and the North Dakota University System's responses.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Bob Peterson".

Robert R. Peterson  
State Auditor

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## RECOMMENDATIONS FULLY IMPLEMENTED

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### Inappropriate access to Social Security Numbers

#### **Original Condition:**

Several screens throughout the system display social security numbers. This increases the risk of improper disclosure of Social Security Numbers. The Family Educational Rights and Privacy Act guidelines indicate Social Security Numbers should not be used as identifiers. NDUS collects and uses Social Security Numbers because federal reporting requires the use of Social Security Numbers.

#### **Recommendation:**

We recommend NDUS design roles to ensure access to social security numbers is properly restricted.

#### **Action Taken:**

The NDUS has implemented masking of SSNs. If, or how much of, a SSN is displayed depends on a user's roles and primary permission list which is associated with the user's need for that information.

#### **Summary of Testing:**

We reviewed Campus Solutions and noted that Social Security Numbers can be hidden completely, limited to last four characters, or displayed in full based on individual user needs.

### Screens not restricted to user's institution

#### **Original Condition:**

Information on certain screens is not restricted to a user's institution. This increases the risk of improper disclosure of information. NDUS knew of this problem prior to the audit and corrected some screens, but has not reviewed and secured all screens. Access should be provided based on the individual's demonstrated need to data.

#### **Recommendation:**

We recommend NDUS secure necessary screens so information is restricted to a user's institution.

#### **Action Taken:**

More PeopleSoft-delivered functions in Campus Solutions 9.0 are secured by institution than was the case in Student Administration 8.0. There are still, however, functions that they have not secured by institution, nor have we modified the system in those areas to

secure by institution. There will continue to be exceptions for data that is properly shared among institutions.

**Summary of Testing:**

We reviewed screens in Campus Solutions and noted that they were being restricted by the user's institution.

**Default accounts not locked**

**Original Condition:**

Some default accounts delivered with the System were not locked, increasing the risk of unauthorized access. Hackers target default accounts when attempting to gain access to systems. NDUS had not thoroughly reviewed all default accounts. Control Objectives for Information Technology, issued by the Information Systems Audit and Control Association, state management should perform a regular review of all accounts and related privileges.

**Recommendation:**

We recommend NDUS perform a regular review of default accounts to ensure they are locked.

**Action Taken:**

This has been implemented.

**Summary of Testing:**

We reviewed default accounts and noted they were locked.

**Inappropriate superuser account**

**Original Condition:**

One individual with superuser access no longer required that level of access, causing information and processes not necessary for the individual to be available to him. NDUS lacks procedures to regularly review superuser accounts. Control Objectives for Information Technology, issued by the Information Systems Audit and Control Association, state management should perform a regular review of all accounts and related privileges.

**Recommendation:**

We recommend NDUS perform a regular review of superuser accounts to determine if they are necessary.

**Action Taken:**

This has been implemented. A report is sent monthly to Directors and Associate Directors to review and respond to the Security Team.

**Summary of Testing:**

We reviewed the procedures used by NDUS to review superuser accounts and reviewed superuser access with NDUS personnel.

**Credit card numbers inappropriately stored****Original Condition:**

Schools inappropriately enter and store credit card numbers in the System, increasing the risk of credit card fraud. Payment Card Industry Data Security Standards which apply to merchants accepting credit card payments state that a merchant has the duty to protect stored data relating to such payments. NDUS does not have a formal policy against storing credit card numbers.

**Recommendation:**

We recommend NDUS develop a formal policy to ensure credit card numbers are not stored in ConnectND Student Administration.

**Action Taken:**

Credit card information is not being stored in Campus Solutions. We have outsourced credit card processing to TouchNet, which provides PCI-compliant services.

**Summary of Testing:**

We pulled information from the receipt table and viewed screens on Campus Solutions for selected receipts to ensure credit card numbers were not being stored.

**Accounting line table does not agree to state accounting system****Original Condition:**

The student financials accounting line table in the System does not agree to the corresponding accounting line table in ConnectND Finance. The table in ConnectND Student Administration is not always updated when the posting process runs. Queries and reports based on the accounting line table in ConnectND Student Administration may not be reliable. The North Dakota University System lacks a reliable process to detect errors. Adequate controls should be in place to ensure that work performed is routinely verified.

**Recommendation:**

We recommend NDUS implement a reliable process to ensure the accounting line table reconciles between ConnectND Student Administration and ConnectND Finance.

**Action Taken:**

Campuses are regularly reconciling Student Financials transactions in both systems.

**Summary of Testing:**

We reconciled the accounting line table between ConnectND Campus Solutions and Connect ND Finance.

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## RECOMMENDATIONS PARTIALLY IMPLEMENTED

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### Backdating effective dates for dropped classes

#### **Original Condition:**

The date schools entered dropped classes into the system and the effective date for those drops did not always agree. The effective date is sometimes 6 months or more prior to the entered date. NDUS lacks controls to prevent backdating dropped classes. This could misstate the third week enrollment reports and could cause financial aid to not be properly disbursed. Data should be entered timely and accurately to ensure reliability.

#### **Recommendation:**

We recommend NDUS strengthen controls to prevent backdating the effective date when a class is dropped.

#### **Action Taken:**

A NDUS committee comprised of representatives from financial aid, student records, academic, student and administrative affairs and faculty met to resolve several issues regarding enrollment policies and procedures, including backdating. The most major change recommended and adopted to resolve backdating concerns was extending the enrollment census date from the 15th day to the 20th day of the term. This extension provides additional time between fee payment (12th day) and census date (20th day) for campuses to contact students who have not paid and make arrangements for payment or cancel the students prior to census date. See specifically SBHE policy 440, section 1 and 830.1 which were revised by the SBHE in December 2007. The policies can be viewed at: <http://www.ndus.nodak.edu/policies/default.asp?ID=287>

There will continue to be legitimate instances of backdating, as noted in the original response.

#### **Summary of Testing:**

We reviewed and noted the changes made to the policy. We also analyzed classes that are dropped after the 20<sup>th</sup> day of the term, but backdated to a date before the 20<sup>th</sup> day of the term. We noted a significant decrease in the number of classes backdated, but still noted a considerable number of classes that were not being dropped timely, but were being backdated to a date of or before the 20<sup>th</sup> day of classes. Nonetheless, the backdating did not materially impact enrollment reporting, and thus, we believe enrollments are accurately reported.

#### **Future Action to Be Taken:**

The North Dakota University System should continue to focus on updating dropped classes in a timely manner and ensuring that dropped classes are not improperly backdated.

**Agency Response:**

Agree. The NDUS has developed a three pronged approach to address this on an ongoing basis. A report is near release to allow campuses to more closely monitor backdating activity. The Registrar's group will be asked to develop policies and procedures regarding the use of backdating. They will also explore the possibility of using "dynamic dating" as a partial alternative to backdating use. Lastly, training will be provided to appropriate campus personnel on these activities. There will continue to always be legitimate reasons for using backdating to ensure complete and accurate enrollment activity.

**No formal contingency plan****Original Condition:**

NDUS lacks a formal contingency plan for the System. As a result, NDUS may not be properly prepared for contingencies. In July 2002, Governor John Hoeven directed all state agencies and facilities to develop business continuity/disaster recovery plans. NDUS gave higher priority to other concerns during implementation.

**Recommendation:**

We recommend NDUS develop a formal contingency plan for ConnectND Student Administration.

**Action Taken:**

The NDUS has completed a disaster recovery planning exercise. The next phase of that process, determining what backup facilities we can afford, is underway.

**Summary of Testing:**

We reviewed NDUS' formal contingency plan. While the plan is very thorough on technical documentation, it fails to address some other areas, such as, but not limited to, designation of key personnel, facilities to be utilized, and alternative procedures to be used during the disaster.

**Future Action to Be Taken:**

The North Dakota University System should continue to develop and enhance their contingency plan.

**Agency Response:**

The NDUS is working with ITD to determine the feasibility of having disaster recovery facilities available from ITD. Disaster procedures will be adapted depending on whether we are able to have a backup site available or whether we'd need to determine how we would recover using current facilities. Both possibilities were considered in the disaster planning activity.

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## RECOMMENDATIONS NOT IMPLEMENTED

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### Password changes not required

#### **Original Condition:**

NDUS is not requiring password changes for non-student accounts in the System. NDUS turned off password change controls for all accounts as student accounts created more of a work load than the help desk could handle. Good security controls include regular password changes to prevent the risk of user accounts being compromised.

#### **Recommendation:**

We recommend NDUS require passwords to be changed for non-student accounts every 60-90 days.

#### **Action Taken:**

Implementation of password expiration is a global setting, applying to all users -- students and non-students alike. The ConnectND Oversight Committee discussed password expiration in 2006 and did not want to require students to change their password more than 2 or 3 times a year, roughly once per semester. The primary driver behind this position is that if students change passwords near the end of a term, then leave campus and don't use their access to the system, it's very likely they will forget their password when they return to campus. This seemed like a recipe for increasing the frustration of students as well as increasing the number of Help Desk calls at critical times like the beginning of a semester. This issue is being discussed within the CND staff now, because as we open up eApps for HRMS, student employees will need to access that information and we want to ensure that they have a good experience in doing so. One way to accomplish that is to sync logins and passwords in all three systems. In order to do that, a better "forgot my password" mechanism should be in place. We are doing preliminary research into methods to accomplish that. If we can do that, we could then look at setting Campus Solutions passwords to expire every 90 days like the other two systems.

#### **Summary of Testing:**

We verified password changes are not required in Campus Solutions. We also spoke with ITD about procedures they use on ConnectND applications regarding password controls. We believe similar procedures could be used by NDUS to require password changes for non-student accounts, while not requiring students to change their password.

#### **Future Action to Be Taken:**

The North Dakota University System should implement procedures requiring passwords to be changed for non-student accounts every 60-90 days. Failure to do so increases

the risk that user accounts may be compromised and data may be inappropriately disclosed or changed.

**Agency Response:**

Agree. NDUS will implement password expiration in the Campus Solutions system. In order to minimize the impact on students, we will implement a process similar to the ITD process mentioned by the auditors for student accounts.

**Backdating effective dates in GL interface table**

**Original Condition:**

Schools backdate the effective dates on the item GL interface table. Because of this, the item GL interface table cannot be reconciled with the accounting line table. The North Dakota University System lacks edit checks to prevent backdating of effective dates. Data entered for processing should be subject to a variety of controls to check for accuracy, completeness, and validity.

**Recommendation:**

We recommend NDUS implement controls to prevent backdating of item GL interface effective dates.

**Action Taken:**

No edits have been put in place to prevent backdating on the GL tab of an item type. We are not sure if this is even possible. We have trained and encouraged users to NOT back date the last tab of an item type.

**Summary of Testing:**

We noted instances where the GL interface table was changed and the effective date backdated. However, the accounting line files in Student Administration and Finance show the correct information and the transactions are recorded to the General Ledger properly.

**Future Action to Be Taken:**

No future action is necessary in this area.

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Division of State Audit

Office of the State Auditor  
600 East Boulevard Avenue – Department 117  
Bismarck, ND 58505-0060

(701) 328-2241