

Audit Report

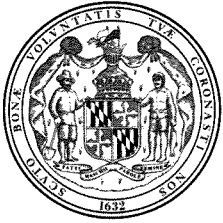
Maryland Higher Education Commission

October 2013



OFFICE OF LEGISLATIVE AUDITS
DEPARTMENT OF LEGISLATIVE SERVICES
MARYLAND GENERAL ASSEMBLY

-
- This report and any related follow-up correspondence are available to the public through the Office of Legislative Audits at 301 West Preston Street, Room 1202, Baltimore, Maryland 21201. The Office may be contacted by telephone at 410-946-5900, 301-970-5900, or 1-877-486-9964.
 - Electronic copies of our audit reports can be viewed or downloaded from our website at <http://www.ola.state.md.us>.
 - Alternate formats may be requested through the Maryland Relay Service at 1-800-735-2258.
 - The Department of Legislative Services – Office of the Executive Director, 90 State Circle, Annapolis, Maryland 21401 can also assist you in obtaining copies of our reports and related correspondence. The Department may be contacted by telephone at 410-946-5400 or 301-970-5400.
-



DEPARTMENT OF LEGISLATIVE SERVICES
OFFICE OF LEGISLATIVE AUDITS
MARYLAND GENERAL ASSEMBLY

Karl S. Aro
Executive Director

Thomas J. Barnickel III, CPA
Legislative Auditor

October 29, 2013

Senator James C. Rosapepe, Co-Chair, Joint Audit Committee
Delegate Guy J. Guzzone, Co-Chair, Joint Audit Committee
Members of Joint Audit Committee
Annapolis, Maryland

Ladies and Gentlemen:

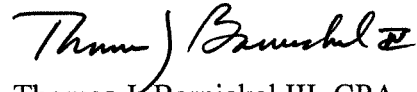
We have audited the Maryland Higher Education Commission (MHEC) for the period beginning August 3, 2009 and ending August 5, 2012. MHEC's key responsibilities are to provide statewide planning for and administer aid programs to Maryland's postsecondary institutions, and to provide financial assistance to students.

Our audit disclosed that MHEC needs to take certain actions to ensure that financial assistance awards to students were proper and that such awards were maximized. MHEC did not take intended actions to use accumulated scholarship funds to increase the number of need-based scholarship awards to eligible applicants on its waiting list. As of June 30, 2013, these unspent funds totaled approximately \$17.2 million. Based on grant award information for the 2011-2012 academic year, we estimated that 7,800 of the 31,000 applicants on MHEC's waiting list for that year could have received need-based scholarships. In addition, independent reviews of certain financial aid awards, such as those processed by colleges, were not performed or were not sufficient to ensure their propriety. Finally, MHEC did not ensure that student service obligations were fulfilled as a condition for certain career-based financial aid awards, or that students repaid the awards.

MHEC lacked sufficient procedures and controls over retirement payments for certain community college employees and collections received by mail. Our audit also disclosed security deficiencies related to MHEC's network. For example, certain sensitive personally identifiable information stored on a publicly accessible web server was not properly secured.

An executive summary of our findings can be found on page 5. MHEC's response to our findings and recommendations is included as an appendix to this report. We wish to acknowledge the cooperation extended to us during the course of this audit by MHEC.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Thomas J. Barnickel III". The signature is written in a cursive style with a large initial "T" and a stylized "B".

Thomas J. Barnickel III, CPA
Legislative Auditor

Table of Contents

Executive Summary	5
Background Information	7
Agency Responsibilities	7
Pending Litigation	7
Status of Findings From Preceding Audit Report	8
Findings and Recommendations	9
Financial Aid	
Finding 1 – The Maryland Higher Education Commission (MHEC) Did Not Take Action to Use Accumulated Unspent Scholarship Funds to Increase the Number of Need-Based Awards to Eligible Applicants	10
* Finding 2 – MHEC Did Not Independently Review Financial Aid Awards and Changes to Critical Information in its Automated Financial Aid System	11
* Finding 3 – MHEC Did Not Adequately Monitor Student Service Obligation Fulfillment as a Condition for Certain Financial Aid Awards	12
* Finding 4 – Delinquent Accounts Were Not Properly Pursued for Collection and Referred to the Central Collection Unit	14
Aid to Community Colleges	
* Finding 5 – MHEC Did Not Ensure that Retirement and Pension Contributions for Certain Community College Employees Were Proper	15
Information System Security and Control	
Finding 6 – Controls Over MHEC’s Intrusion Detection Prevention System Need Improvement	16
Finding 7 – Access Controls Over the Server Hosting the Maryland College Aid Processing System Website Were Not Adequate	17
Finding 8 – Sensitive Personally Identifiable Information Was Not Secured	18
Cash Receipts	
Finding 9 – Adequate Controls Were Not Established Over Mail Collections	19
Audit Scope, Objectives, and Methodology	21
Agency Response	Appendix
* Denotes item repeated in full or part from preceding audit report	

Executive Summary

Legislative Audit Report on the Maryland Higher Education Commission (MHEC) October 2013

- **MHEC did not take intended actions to increase need-based scholarship awards by using accumulated scholarship funds in the Need-Based Student Financial Assistance Fund. The Fund was established by Maryland Law in 2011 to provide a budgetary mechanism to properly account for unspent need-based funds to be used in subsequent years. As of June 30, 2013, the balance of the Fund totaled approximately \$17.2 million. Based on grant award information for the 2011-2012 academic year, we estimated that 7,800 of the 31,000 applicants on MHEC's waiting list could have received need-based scholarships (Finding 1).**

MHEC should take the intended actions to use the Fund for need-based scholarships.

- **Financial aid award determinations, such as those performed by colleges, were not independently reviewed to ensure their propriety and critical transactions recorded in the automated student financial aid system were not independently verified (Finding 2).**

MHEC should review financial aid awards in accordance with its policy and ensure that independent employees review critical transactions in its automated system.

- **Adequate procedures and controls were not in place to ensure students completed service obligations that were a condition for certain financial aid awards (such as working as a full-time nurse) or repaid the awards. As of March 2013, 6,170 students were subject to monitoring. Related accounts receivable totaled \$3.2 million as of June 30, 2012 (Findings 3 and 4).**

MHEC should implement recommended procedures to monitor service obligations and recover any amounts for which service obligations are not satisfied.

- **MHEC did not ensure that retirement and pension contributions for certain community college employees were proper and that the State was being properly reimbursed by community colleges, as required by State law, for contributions funded by federal assistance. In fiscal year 2012, retirement and pension contributions for community college employees totaled \$48.8 million and \$2.7 million was reimbursed by the community colleges (Finding 5).**

MHEC should ensure that the State's payments to community colleges and reimbursements from community colleges are proper.

- **Sufficient monitoring and security controls were not in place over MHEC's network. For example, network intrusion detection prevention scanning was not enabled for certain critical traffic flowing into its internal network. In addition, sensitive personally identifiable information stored on a publicly accessible web server was not secured (Findings 6 through 8).**

MHEC should take the recommended actions to improve network controls and security.

- **MHEC did not adequately control its mail collections, which totaled \$6.4 million in fiscal year 2012 (Finding 9).**

MHEC should take the recommended actions to ensure adequate controls are in place over collections received by mail.

Background Information

Agency Responsibilities

The Maryland Higher Education Commission (MHEC) provides Statewide planning, leadership, coordination, and advocacy for Maryland's postsecondary educational institutions. MHEC also administers several aid programs to these institutions and provides financial assistance to students. According to the State's records, during fiscal year 2012, MHEC provided approximately \$302.5 million in financial assistance to public and non-public institutions of higher education (including community colleges) throughout the State, provided more than 54,000 grants and scholarships totaling approximately \$119.7 million to students pursuing postsecondary education, and provided approximately \$11 million in other educational grants to various State, local, and private institutions. According to the State's records, MHEC's operating expenditures totaled approximately \$9.1 million during fiscal year 2012.

Pending Litigation

In 2006, the Coalition for Equity and Excellence in Maryland Higher Education brought a lawsuit against MHEC for alleged violations of the Civil Rights Act of 1964 and the Equal Protection Clause of the U.S. Constitution. The plaintiffs include former, current, and prospective students of historically black institutions in the State. The lawsuit argues operational budget funding, program duplication, and mission statement policies and practices continue to have a discriminatory effect on the State's historically black institutions. The plaintiffs are seeking legal protections for certain academic programs of historically black institutions and more than \$2 billion in additional funding for the institutions.

In June 2011, the U.S. District Court ordered MHEC and the Coalition to undertake mediation in an attempt to reach a settlement. However, a settlement could not be reached and a trial began on January 3, 2012. The parties were ordered to submit findings of fact and conclusions of law. As a result, oral arguments before the judge were conducted in October 2012.

On October 7, 2013, the Court ruled that the State's current funding formula has not disadvantaged the historically black institutions or provided them any less State-controlled funding than the traditional white institutions. The Court also ruled that current mission statement policies and practices were not proven to have a discriminatory effect on the State's historically black institutions. However, the Court ruled that current policies and practices of unnecessary

program duplication continue to have segregative effects as to which the State has not established sound educational justification. The ruling strongly suggested that the parties enter mediation to attempt to generate a suitable plan to address this problem and proposed to defer entry of judgment pending mediation or further proceedings if necessary to establish an appropriate remedy.

Status of Findings From Preceding Audit Report

Our audit included a review to determine the status of the seven findings contained in our preceding audit report dated August 13, 2010. We have determined that MHEC had satisfactorily addressed three of these findings. The remaining four findings are repeated in this report.

Findings and Recommendations

Financial Aid

Background

The Maryland Higher Education Commission (MHEC) administers a number of financial aid programs that are funded by State and federal funds. MHEC staff use information from several sources including the application for financial aid—the U.S. Department of Education’s Free Application for Federal Student Aid (FAFSA)—and data received from the colleges to determine whether applicants are eligible for one of MHEC’s financial aid programs. According to the State’s records, MHEC made more than 54,000 financial aid awards totaling \$119.7 million during fiscal year 2012, as detailed in Table 1. MHEC uses its Maryland College Aid Processing System (MD CAPS) to determine student financial aid awards based upon information recorded in the system and to maintain and track related information.

Table 1
Grants and Scholarships to Students
Fiscal Year 2012

Grants and Scholarships	Amount (millions)
Need-Based (Guaranteed Access, Educational Assistance, Part-time Grant, Graduate and Professional Scholarship)	\$ 81.4
Career-Based (Riley Fire and Emergency, Hoffman Loan Assistance, Workforce Shortage Assistance, Nurse Support Program)	18.7
Legislative (Senatorial and Delegate)	11.6
Merit-Based (Distinguished Scholar)	4.1
Unique Population and Other	3.9
Total	\$119.7

Source: 2014 Executive Budget Book

Finding 1**MHEC did not take action to use accumulated unspent scholarship funds to increase the number of need-based awards to eligible applicants, as intended.****Analysis**

MHEC did not use accumulated unspent scholarship funds to increase the number of awards to eligible applicants, as intended. Chapter 397 of the 2011 Laws of Maryland established the Need-Based Student Financial Assistance Fund which provided a budgetary mechanism to properly account for unspent need-based and certain unique-population scholarship funds remaining at fiscal year-end to be used in subsequent years. According to the State's accounting records, the Fund's balance has increased from \$9.9 million as of June 30, 2011 to \$17.2 million as of June 30, 2013.

During testimony it presented before the legislative budget committees in February 2012, MHEC acknowledged the need to use unspent funds to increase awards and reduce the waiting list of qualified applicants for Educational Excellence Assistance (EEA) scholarships (which includes both the Educational Assistance Grant and the Guaranteed Access Grant programs). MHEC indicated that there were 31,000 qualified need-based applicants who applied for the 2011 – 2012 academic year who were placed on its waiting list for that year. (A new waiting list is created annually based on the pool of eligible applicants and other factors unique for a given academic year.) MHEC stated its intention to increase scholarship awards during fiscal years 2012 and 2013 and to maintain a balance in the Fund of approximately \$1 million at the end of fiscal year 2013. For example, MHEC planned to adjust its financial qualification threshold for applicants and use accumulated funding to increase awards. Although adjustments to the financial qualification threshold were made in 2013, virtually no action was taken to use the balance in the Fund that had accumulated from prior years. The waiting list for the 2012 – 2013 academic year totaled approximately 16,400 applicants even though unspent funds totaled \$17.2 million.

According to MHEC's EEA scholarship records for fiscal year 2012, approximately 57,700 applicants were awarded scholarships totaling approximately \$129.6 million, of which 27,400 totaling \$68.5 million were accepted. Based on the grant award formula MHEC used in academic year 2011-2012 and the available Fund balance of \$17.7 million at June 30, 2012, we estimated that 7,800 of the 31,000 applicants on the waiting list could have received need-based scholarships.

Recommendation 1

We recommend that MHEC take the intended action to use funds available in the Need-Based Student Financial Assistance Fund for need-based scholarships.

Finding 2

MHEC did not independently review financial aid awards and changes to critical information in its automated financial aid system.

Analysis

Independent reviews of certain financial aid awards were not performed or were not sufficient to ensure their propriety. In addition, critical information maintained in its automated Maryland College Aid Processing System (MD CAPS) for all financial aid awards was not adequately controlled. MHEC's policy requires that an internal management review of financial aid programs be performed annually, on a test basis (approximately two to ten percent), to ensure that recipients are being awarded according to proper procedures. We reviewed and tested certain need-based (Educational Assistance and Guaranteed Access grants), merit-based (Distinguished Scholar), and career-based programs (Hoffman Loan Assistance, Nurse Support Program, Workforce Shortage Assistance). According to MHEC's records, financial aid awards totaling approximately \$68.5 million, \$4.1 million, and \$5.6 million, respectively, were made in these programs during fiscal year 2012. Our review disclosed the following conditions:

- MHEC did not perform independent reviews of the eligibility requirements (such as family income and Maryland residency) of any students receiving need-based Educational Assistance (EA) grant awards, as required by its policy. MHEC relied on colleges to verify the eligibility of selected students as required by the U.S. Department of Education; however, MHEC did not ensure, on a test basis, that these verifications were proper or were being performed. According to MHEC's records, for academic year 2011-2012, there were approximately 56,000 applicants for EA grants.
- Although Guaranteed Access (GA), Distinguished Scholar, and career-based grant applications and the supporting documentation were processed directly by MHEC financial aid personnel, a sufficient number of the determinations and any related adjustments to the student information, such as family income or grade point average, were not reviewed by independent personnel to ensure the awards were proper.

For example, according to MHEC's records, information on only 13 of the 1,801 GA applicants for 2012 (less than one percent) was independently verified even though MHEC's policy requires that two to ten percent of the awards be reviewed. These verifications resulted in the data on 6 applications being revised, including one that changed a student from "not eligible" to "eligible." Consequently, there is a lack of assurance that the awards were proper.

- Audit trails and monitoring reports of activity performed in MD CAPS were not reviewed by supervisory personnel to determine if critical changes affecting financial aid award amounts, such as adjustments to family income, were properly processed. For example, these monitoring reports could be used to select awards for independent verification purposes. As a result, MHEC lacked assurance that all such changes were authorized and accurately processed.

Similar conditions were commented upon in our preceding audit report. The condition regarding the failure to review modifications to critical data in the automated financial aid system has been commented upon in three preceding audit reports.

Recommendation 2

We recommend that MHEC

- a. review financial aid award determinations, in accordance with its policy, to help ensure the propriety of the awards (repeat);**
- b. ensure that employees who do not have the ability to modify such data use MD CAPS output reports to verify that all critical changes recorded are accurate and properly authorized (repeat).**

Finding 3

MHEC did not adequately monitor student service obligation fulfillment as a condition for certain financial aid awards.

Analysis

MHEC did not ensure that service obligations were fulfilled as a condition for certain financial aid awards. For example, recipients of nursing scholarships are required to work as a full-time nurse in Maryland for one year for each year the scholarship was received or repay their awards. Each award recipient is initially placed in deferral status while he or she is enrolled as a student. Once a recipient is no longer enrolled, he or she must fulfill the service obligation (service status) or repay the award (repayment status). MHEC's procedure was to send service obligation notices to recipients once the recipients had graduated or withdrawn

from an institution of higher education and were no longer receiving scholarship funds. The service obligation notices requested information on whether the recipients were fulfilling their service obligations and were to be sent each year until the full obligations were fulfilled. Employment reported by the recipients as fulfillment of service obligations was then to be confirmed with the employers.

We were advised by MHEC management, however, that for academic years 2010-2011 and 2011-2012, MHEC did not routinely issue service obligation notices to recipients. Rather, these notices were issued only when MHEC received scholarship inquiries from recipients regarding, for example, how to fulfill their service obligations. In November 2012, we tested 16 recipients of service obligation awards totaled \$203,500 who had graduated or withdrawn from college. These recipients had last received scholarship funds during the period from March 2002 through February 2011. In total, only 36 of 74 required returned notices were on file—none of which were dated after November 2010. For example, one recipient who had received awards for five years had no returned notices on file since 2008 after only working two and one-half years.

Furthermore, since service obligation notices were not sent as required, MHEC did not regularly confirm full-time work as fulfillment of service obligations and could not reliably determine when accounts should be placed in repayment status and transferred to MHEC's accounting department for repayment. Finally, although MHEC has the ability to generate reports of service obligation award recipients and their related statuses (that is, deferral, service, or repayment), as a result of these monitoring deficiencies, the recorded statuses were not reliable.

Similar conditions were noted in our preceding audit report. According to MHEC's records, during fiscal year 2012, MHEC awarded approximately \$11 million in nine financial aid programs with service obligation requirements. Additionally, according to MHEC's records as of March 11, 2013, there were 6,170 service obligation award recipients subject to monitoring. The recorded status of these recipients was as follows: 4,292 recipients had a service status, 1,287 recipients were in deferral status, and 591 recipients were in repayment status.

Recommendation 3

We recommend that MHEC

- a. ensure that service obligation notices and employer verifications are sent and returned in a timely manner (repeat);**
- b. take appropriate follow-up action when service obligations are not being performed, including placing the accounts into repayment status and properly transferring the accounts to the accounting department to initiate collection efforts (repeat); and**

- c. **ensure its records reflect an accurate status of all service award recipients.**

Finding 4

Delinquent accounts were not properly pursued for collection and referred to the Department of Budget and Management's Central Collection Unit.

Analysis

Delinquent service obligation accounts were not pursued for collection and referred to the Department of Budget and Management's Central Collection Unit (CCU) as required by its regulations. Our test of 20 past due accounts, totaling approximately \$142,600, disclosed 15 accounts, totaling \$96,300, that had not been actively pursued for collection even though no payments had been received for more than one year as of August 2012. Specifically, only one payment demand had been made for 8 accounts, only two demand notices had been made on 5 accounts, and, although three demand notices had been sent for 2 accounts, the unpaid accounts had not been forwarded to CCU.

This condition was caused in part by MHEC's failure to effectively monitor delinquent accounts using available accounts receivable system reports. According to these reports, as of February 2013, there were 80 active accounts with balances totaling approximately \$483,000 that had never received a payment or had not received a payment for more than one year. As of June 30, 2012, MHEC's accounts receivable totaled approximately \$3.2 million.

CCU regulations generally require that three written demands for payment be made on accounts at 30-day intervals and, if no payments are received, the accounts be considered delinquent and immediately referred to CCU for collection assistance. Similar conditions were commented upon in our two preceding audit reports.

Recommendation 4

We recommend that MHEC use available accounts receivable system reports and pursue delinquent service obligation accounts for collection in accordance with CCU regulations. Specifically, we recommend that

- a. **written payment demands be sent at 30-day intervals, and**
- b. **delinquent accounts be referred to CCU for collection assistance as required (repeat).**

Aid to Community Colleges

Finding 5

MHEC did not ensure that retirement and pension contributions for certain community college employees were proper.

Analysis

MHEC did not ensure that retirement and pension contributions for certain community college employees were proper. The State (through MHEC) funds the employers' portions of the retirement and pension costs for certain community college employees who are members of the Maryland State Retirement and Pension System. In fiscal year 2012, this funding totaled approximately \$33.6 million. The State (through MHEC) also funds a private optional retirement plan for certain community college employees as a way to attract and retain qualified professors. These payments totaled approximately \$15.2 million during fiscal year 2012. However, certain verifications were not performed to ensure MHEC's contributions were appropriate:

- Audits of community college records were not performed to determine whether community colleges properly reimbursed MHEC for certain retirement and pension contributions for members of the Maryland State Retirement and Pension System. Since the community colleges also receive federal financial assistance for some of these benefits, the community colleges are required to reimburse MHEC for the portion of these costs paid on behalf of employees that were covered by federal funds (that is, for which they received duplicate payments). According to MHEC's records, during fiscal year 2012, community colleges remitted approximately \$2.7 million to MHEC related to these duplicate payments.

According to State Law effective July 1, 2011, MHEC may examine the records of community colleges to determine whether the community colleges are properly reimbursing the State for costs covered by federal funds. Since the State already requires community colleges to submit annual audited financial statements, State law allows this determination to be incorporated into existing required audits or to be conducted as a separate independent audit.

- MHEC did not ensure the propriety of State funding for employer retirement contributions for community college employees who elected to participate in the private optional retirement plan. MHEC periodically made payments to the colleges to fund the related employer contributions. Although these payments were to be calculated based on 7.25 percent of each enrollee's

salary, MHEC did not verify the eligibility of the enrolled individuals and the accuracy of related salary information reported by the colleges. This condition has been commented upon in our four preceding audit reports. In correspondence relating to the preceding audit report, MHEC advised that it would consider including the verification of optional retirement plan payments in existing audits performed by community colleges' independent auditors. However, MHEC management advised us that the verifications were not requested of the independent auditors and were not included in the audits.

Recommendation 5

We recommend that MHEC

- a. ensure reimbursements from community colleges for retirement and pension contributions are proper, and**
- b. establish procedures that will ensure the propriety of amounts paid by MHEC to the community colleges for employees enrolled in optional retirement plans (repeat).**

Information System Security and Control

Background

MHEC's Office of Information Technology provides support for MHEC's information systems, applications, and technology. The Office operates an internal local area network with connections to multiple servers used for file and print sharing, email, application processing, and Internet connectivity. The network includes a firewall to help safeguard MHEC's information technology (IT) resources from outside security risks. The Office, with application vendor support, maintains the MD CAPS application, which stores personal, academic, and financial information for individuals applying for financial aid to attend Maryland colleges.

Finding 6

Controls over MHEC's intrusion detection prevention system need improvement.

Analysis

Controls over MHEC's intrusion detection prevention system (IDPS) need improvement. Specifically, we noted the following conditions:

- **Coverage** – Network IDPS scanning was not enabled for certain critical traffic that flowed from its neutral network zone to the internal network. In addition, although host-based IDPS was installed on MHEC's critical MD CAPS web server, the IDPS was not configured to drop suspicious decrypted

traffic; rather, it was in a passive configuration that only logged the suspicious traffic sent to the server.

- **Alerts** –IDPS alerts, which would notify key IT personnel of the occurrence of vendor-defined “critical” intrusion-related events, were not enabled.
- **Monitoring** – We were advised by MHEC personnel that the network IDPS logs were only reviewed on a monthly basis and that these reviews were not documented or retained. We were also advised that the host-based IDPS logs for a critical web server were not reviewed.

Strong network security uses a layered approach, relying on various resources structured according to assessed network security risks. Properly placed and configured IDPS can aid significantly in the detection/prevention of and response to potential network security breaches and attacks. Also, the Department of Information Technology’s (DoIT) *Information Security Policy* requires that agencies protect against malicious code and attacks by implementing protections including the use of IDPS to monitor system events, detect attacks, and identify unauthorized use of information systems and/or confidential information.

Recommendation 6

We recommend that MHEC

- a. enable IDPS scanning for all critical traffic flowing from its neutral network zone to the internal network;**
- b. enable IDPS email alerts which notify key IT personnel of the occurrence of vendor defined critical intrusion related events; and**
- c. perform regular reviews of IDPS logs (at least weekly), investigate unusual events, document these reviews, and retain this information for subsequent verification.**

Finding 7

Access controls over the server hosting the MD CAPS website were not adequate.

Analysis

Access controls over the server hosting the MD CAPS website were not adequate. The MD CAPS website’s default user account had unnecessary modification access to 1,484 files on the server hosting the website, effectively allowing any website user, under certain conditions, the ability to improperly alter the files. As a result of this condition, the MD CAPS web application was unnecessarily exposed to security risks and attacks.

According to the DoIT *Information Security Policy*, agencies must authorize, document, and monitor all remote access capabilities used on its systems. To accomplish this, each agency must grant access to information ensuring that access is strictly controlled, audited, and that it supports the concepts of “least possible privileges” and “need-to-know.”

Recommendation 7

We recommend that MHEC eliminate the unnecessary modification access granted to the MD CAPS website’s default user account.

Finding 8

Sensitive personally identifiable information was not properly secured.

Analysis

Sensitive personally identifiable information (PII) was not properly secured. As previously mentioned in this report, MHEC, on behalf of the State of Maryland, funded employer matching retirement contributions for community college employees electing to participate in a private optional retirement plan. We determined that sensitive PII (full names, salaries, and social security numbers) applicable to these community college employees was unnecessarily stored in plain text files on a publicly accessible web server. We were advised by MHEC personnel that, as of May 2012, this condition applied to at least 2,560 community college employees. We further determined that, in certain limited cases, student applicant PII was improperly retained in plain text log files on this same web server. Specifically, we noted log files in plain text containing sensitive PII for 222 student applicants.

This sensitive PII, which is commonly sought by criminals for use in identity theft, should be protected by appropriate information system security controls. Also, DoIT’s *Information Security Policy* requires that confidential information be protected with administrative, technical, and physical safeguards to ensure its confidentiality, integrity, and availability and to prevent unauthorized or inappropriate access, use, or disclosure.

Recommendation 8

We recommend that MHEC remove all plain text files containing sensitive PII from this web server and establish procedures to ensure that plain text files containing sensitive PII are not stored on publicly accessible web servers.

Cash Receipts

Finding 9

MHEC did not adequately control mail collections and ensure their accountability.

Analysis

MHEC did not have adequate procedures and controls over collections received by mail, which totaled approximately \$6.4 million during fiscal year 2012. For example, MHEC receives collections related to employee participation costs in MHEC's optional retirement plan. Specifically, our review disclosed the following conditions:

- Checks were not effectively controlled through restrictive endorsement and recordation immediately upon receipt. Rather checks were received by various MHEC employees and forwarded to a second employee to be restrictively endorsed and recorded.
- Deposits were not verified to their initial source of recordation. Instead, deposits were only verified to documentation of their recordation in the State's accounting records. Consequently, there is a lack of assurance that all collections were properly deposited. Furthermore, deposits were not always recorded in the State's accounting records in a timely manner to facilitate proper accountability. Our review disclosed that deposits made during the period from October 2011 to May 2012, totaling approximately \$3.9 million, were recorded in the State's accounting records more than 30 days after the date of deposit, rather than within 2 business days. For example, a deposit from February 16, 2012, totaling approximately \$314,000, was not recorded in the State's accounting records until June 1, 2012.
- The responsibilities for cash receipt and accounts receivable functions were not properly separated. Specifically, one employee involved in the deposit preparation process was also responsible for updating the related accounts receivable records. As a result, funds could be misappropriated and any misappropriation might not be readily detected. MHEC maintains receivables for service obligation award repayments. According to the State's records, during fiscal year 2012 approximately \$720,000 in service obligation repayments was received.

The Comptroller of Maryland's *Accounting Procedures Manual* requires collections be recorded and restrictively endorsed immediately upon receipt, deposited collections be independently verified to initial records, collections be

recorded in the State's accounting records within two business days of deposit, and the responsibilities for cash receipt processing be separated from the accounts receivable functions.

Recommendation 9

We recommend that MHEC

- a. record and restrictively endorse collections immediately upon receipt,**
- b. verify deposits against initial source of recordation to ensure all collections were properly deposited,**
- c. record collections into the State's accounting records within two business days of deposit, and**
- d. properly segregate the collections and accounts receivable functions.**

We advised MHEC on accomplishing the necessary segregation of duties using existing personnel.

Audit Scope, Objectives, and Methodology

We have audited the Maryland Higher Education Commission (MHEC) for the period beginning August 3, 2009 and ending August 5, 2012. The audit was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate 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.

As prescribed by the State Government Article, Section 2-1221 of the Annotated Code of Maryland, the objectives of this audit were to examine MHEC's financial transactions, records and internal control, and to evaluate its compliance with applicable State laws, rules, and regulations. We also determined the status of the findings included in our preceding audit report.

In planning and conducting our audit, we focused on the major financial-related areas of operations based on assessments of materiality and risk. The areas addressed by the audit included procedures and controls over financial aid, grants to nonpublic and community colleges, budgetary closeout transactions, cash receipts, accounts receivable, and information systems. Our audit procedures included inquiries of appropriate personnel, inspections of documents and records, and observations of MHEC's operations. We also tested transactions and performed other auditing procedures that we considered necessary to achieve our objectives. Data provided in this report for background or informational purposes were deemed reasonable, but were not independently verified.

MHEC's management is responsible for establishing and maintaining effective internal control. 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. Also, projections of any evaluation of internal control to future periods are subject to the risk that conditions may change or compliance with policies and procedures may deteriorate.

Our reports are designed to assist the Maryland General Assembly in exercising its legislative oversight function and to provide constructive recommendations for improving State operations. As a result, our reports generally do not address activities we reviewed that are functioning properly.

This report includes findings that we consider to be significant deficiencies in the design or operation of internal control that could adversely affect MHEC's ability to maintain reliable financial records, operate effectively and efficiently, and/or comply with applicable laws, rules, and regulations. Our report also includes findings regarding significant instances of noncompliance with applicable laws, rules, or regulations. Other less significant findings were communicated to MHEC that did not warrant inclusion in this report.

MHEC's response to our findings and recommendations is included as an appendix to this report. As prescribed in the State Government Article, Section 2-1224 of the Annotated Code of Maryland, we will advise MHEC regarding the results of our review of its response.

APPENDIX



Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor

Anwer Hasan
Chairperson

Danette G. Howard
Secretary

October 23, 2013

Thomas J. Barnickel III, CPA
Legislative Auditor
Department of Legislative Audits
Maryland General Assembly
301 West Preston Street Room 1202
Baltimore, Maryland 21201

RE: Maryland Higher Education Commission Legislative Audit

Dear Mr. Barnickell:

Enclosed are the Maryland Higher Education Commission's (MHEC) responses to the recommendations contained in the audit report on MHEC for the period beginning August 3, 2009 and ending August 5, 2012. MHEC commented on each of the report's nine (9) findings.

Thank you for reviewing our policies and procedures, and providing thoughtful suggestions and recommendations. MHEC has already implemented numerous corrective actions and is reviewing additional measures that will resolve the findings that are addressed in the report.

We appreciate your continued support of MHEC, and please do not hesitate to contact me at 410-767-3043 or dhoward@mhec.state.md.us if you have any questions or need additional information.

Sincerely,



Danette G. Howard, Ph.D.
Secretary of Higher Education

cc:
Anwer Hasan, Chairman, MHEC

Responses to latest audit draft received 10-12-13

Finding 1

MHEC did not take action to use accumulated unspent scholarship funds to increase the number of need-based awards to eligible applicants, as intended.

Recommendation 1

We recommend that MHEC take the intended action to use funds available in the Need-Based Student Financial Assistance Fund for need-based scholarships.

MHEC Response:

The Commission concurs with the recommendation.

MHEC agrees that it should develop a plan to address the Need-based Student Financial Assistance Fund balance and ultimately reduce the number of students that remain on the waiting list. The Office of Student Financial Assistance is currently in the process of evaluating procedural changes that will foster improvement to the awarding process. Additionally, MHEC has appropriated \$14 million of the \$17 million balance in the current fiscal year (FY 14) to the Educational Excellence Program to significantly reduce the waitlist.

Finding 2

MHEC did not independently review financial aid awards and changes to critical information in its automated financial aid system.

Recommendation 2

We recommend that MHEC

- a. review financial aid award determinations, in accordance with its policy, to help ensure the propriety of the awards (repeat);**
- b. ensure that employees who do not have the ability to modify such data use MD CAPS output reports to verify that all critical changes recorded are accurate and properly authorized (repeat).**

MHEC Response:

The Commission concurs with the recommendations.

The Director of OSFA has reviewed the policies and procedures for internal controls currently in place for financial aid programs administered by MHEC. Modifications to our internal Quality Assurance procedures will be made immediately to help ensure the propriety of awards processed by the department. As Finding 2 also noted, OSFA does not currently have an external audit process in place for schools performing verification on select Educational Assistance Grant recipients. Our current process requires schools to transmit account/award changes to us as a result of verification that they perform on these particular students. OSFA management will review current processes to determine next steps/best practices related to auditing of verification performed by our school partners. Review and corresponding recommendations will be completed by December 31, 2013.

MHEC agrees that it must monitor and better document employees' capabilities in MD CAPS system to ensure that access and authority levels are related to the employee's duties. OSFA will develop procedures that call for regular, periodic review and approval of staff's access levels. While all OSFA staff members have at least some basic level of system access, we will work with our MD CAPS system vendor to develop a procedure whereby reports detailing critical changes are generated on a periodic basis, and subsequently reviewed by supervisory-level staff within OSFA.

Finding 3

MHEC did not adequately monitor student service obligation fulfillment as a condition for certain financial aid awards.

Recommendation 3

We recommend that MHEC

- a. ensure that service obligation notices and employer verifications are sent and returned in a timely manner (repeat);**
- b. take appropriate follow-up action when service obligations are not being performed, including placing the accounts into repayment status and properly transferring the accounts to the accounting department to initiate collection efforts (repeat); and**
- c. ensure its records reflect an accurate status of all service award recipients.**

MHEC Response:

The Commission concurs with the recommendation.

Management staff within OSFA has initiated the process of improved monitoring of service obligation fulfillment for each of the programs that it administers. This will be a three step process 1.) We will review all service obligation records to verify the current status for each program recipient is accurate; 2) service obligation letters and employer verification forms will

be created, including automating the process by which these notices are generated; and 3) we will ensure that service obligations are being performed through the timely review of returned forms. Those recipients that fail to complete the necessary service obligation will be forwarded to MHEC's accounting department to initiate collection efforts.

Finding 4

Delinquent accounts were not properly pursued for collection and referred to the Department of Budget and Management's Central Collection Unit.

Recommendation 4

We recommend that MHEC use available accounts receivable system reports and pursue delinquent service obligation accounts for collection in accordance with CCU regulations. Specifically, we recommend that

- a. written payment demands be sent at 30-day intervals, and**
- b. delinquent accounts be referred to CCU for collection assistance as required (repeat).**

MHEC Response:

The Commission concurs with the recommendation.

OSFA sends service obligation request forms to each recipient who, as a condition to accepting the award, must verify that their service obligation has been completed. Three attempts are made to verify completion of their service obligation. If it is determined that the recipient has not met the terms and conditions of the service obligation, and a breach of contract has occurred, the scholarship is converted to a repayable loan. Likewise, if a recipient fails to respond to three (3) requests for verification that the service obligation has been fulfilled, then the scholarship is converted to a loan.

Once it has been determined that the scholarship must be converted to a loan, either as a result of a breach of contract or because the recipient failed to provide verification that the service obligation had been completed, the account is sent to MHEC's Accounting Division. The Accounting Division initiates repayment procedures with the recipient. Three attempts are made to secure repayment from the recipient. Should the recipient fail to respond to these requests for repayment, the Accounting Division refers the account to CCU for collections.

MHEC will comply with the written payment demands at 30 day intervals prior to the recipient being sent to CCU.

MHEC is working with the Central Collections Unit (CCU) to process these delinquent accounts electronically. The requested format was received from the Central Collections Unit and MHEC determined we can modify our existing records to accommodate this format. This process will expedite the referral of all delinquent accounts to CCU by January 1, 2014.

Finding 5

MHEC did not ensure that retirement and pension contributions for certain community college employees were proper.

Recommendation 5

We recommend that MHEC

- a. ensure reimbursements from community colleges for retirement and pension contributions are proper, and**
- b. establish procedures that will ensure the propriety of amounts paid by MHEC to the community colleges for employees enrolled in optional retirement plans (repeat).**

MHEC Response:

The Commission concurs with the recommendation.

MHEC will request all community colleges provide an exhibit within their FY 2014 audit requirements to verify all non-eligible pension reimbursements are accurately remitted back to the state.

As a result of previous audit findings related to the Optional Retirement Program, MHEC established new verification procedures in FY 2010 requiring all new applicants who are eligible to receive optional retirement benefits forward their eligibility certifications directly to the State Retirement Agency (SRA) for review and approval. These certifications, which are endorsed by the president of the community college and verified by the State Retirement Agency, establish eligibility and salary information for each applicable employee. A copy of the SRA approved certification form is submitted to MHEC and is compared to the corresponding invoices for clarity. MHEC will not reimburse the institution for payment if the required certifications are not on file at MHEC. Salaries are also verified against the corresponding invoices. Any modifications to the original certifications regarding salary compensation which results in different reimbursement requests from the institution are automatically flagged and differences must be explained and documented. Although verifications were performed as required, MHEC failed to formally document them. All future salary verifications will be properly documented on a test basis for compliance to satisfy the findings noted. These implementations will be documented in its procedures manual by the end of fiscal year 2014.

Finding 6

Controls over MHEC's intrusion detection prevention system need improvement.

Recommendation 6

We recommend that MHEC

- a. enable IDPS scanning for all critical traffic flowing from its neutral network zone to the internal network;**
- b. enable IDPS email alerts which notify key IT personnel of the occurrence of vendor defined critical intrusion related events; and**
- c. perform regular reviews of IDPS logs (at least weekly), investigate unusual events, document these reviews, and retain this information for subsequent verification.**

MHEC Response:

The Commission concurs with the recommendation

- a.) IDPS was enabled on the network perimeter public facing interface of the network. To address this finding and become fully compliant with DoIT's Information Security Policy for multiple layers of security, IDPS was enabled between the neutral zone and the internal network
- b.) Since the appliance itself is not capable of sending automated email notifications, a syslog server that collects intrusion related events has been configured to perform the function. MHEC is investigating other solutions to receive these alerts and will implement subsequent recommendations by the end of Fiscal year 2014
- c.) IT staff has established a review sign-off log to certify log files have been investigated on a more routine basis.

Finding 7

Access controls over the server hosting the MD CAPS website were not adequate.

Recommendation 7

We recommend that MHEC eliminate the unnecessary modification access granted to the MD CAPS website's default user account.

MHEC Response:

The Commission concurs with the recommendation

The account has been removed from the drive directory in question. The account was granted access during development of the system. Since the system is now in production it was determined that these access permissions to the directory were still in place but no longer applicable, henceforth it has been removed.

Finding 8

Sensitive personally identifiable information was not properly secured.

Recommendation 8

We recommend that MHEC remove all plain text files containing sensitive PII from this web server and establish procedures to ensure that plain text files containing sensitive PII are not stored on publicly accessible web servers.

MHEC Response:

The Commission concurs with the recommendation.

MHEC has discussed this issue with the MDCAPS developers. Although the PII logging information did reside on the same server, the log files were not accessible to the public. The system log files containing PII have been removed. The logs are being routinely monitored to ensure PII information is not captured.

Finding 9

MHEC did not adequately control mail collections and ensure their accountability.

Recommendation 9

We recommend that MHEC

- a. record and restrictively endorse collections immediately upon receipt,**
- b. verify deposits against initial source of recordation to ensure all collections were properly deposited,**
- c. record collections into the State's accounting records within two business days of deposit, and**
- d. properly segregate the collections and accounts receivable functions.**

We advised MHEC on accomplishing the necessary segregation of duties using existing personnel.

MHEC Response:

The Commission concurs with the recommendation.

- a.) New mail distribution policies which will correct the restrictively endorsed collection issues have been implemented.
- b.) New procedures that will verify deposits against the initial source of recordation to ensure all collections are properly deposited have been implemented
- c.) MHEC will ensure all deposits are posted to the FMIS accounting system as outlined in the Maryland State Accounting Manual in accordance with the State Treasurer.
- d.) Proper segregation of accounting duties will be performed according to State policy. MHEC is in the process of adding additional staff (60% FTE) to the unit beginning in FY14 to address these issues

AUDIT TEAM

Matthew L. Streett, CPA, CFE
Audit Manager

Stephen P. Jersey, CPA, CISA
Information Systems Audit Manager

Elaine D. Portnoy
Senior Auditor

John C. Venturella
Information Systems Senior Auditor

Peter C. Flack
Brittany M. Solomon
Staff Auditors