

Audit Report

**University System of Maryland
University of Maryland, Baltimore County**

March 2016



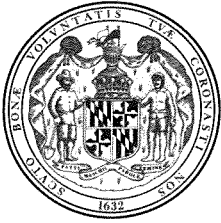
OFFICE OF LEGISLATIVE AUDITS
DEPARTMENT OF LEGISLATIVE SERVICES
MARYLAND GENERAL ASSEMBLY

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DEPARTMENT OF LEGISLATIVE SERVICES
OFFICE OF LEGISLATIVE AUDITS
MARYLAND GENERAL ASSEMBLY

Warren G. Deschenaux
Executive Director

Thomas J. Barnickel III, CPA
Legislative Auditor

March 23, 2016

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

Ladies and Gentlemen:

We have conducted a fiscal compliance audit of the University System of Maryland (USM) – University of Maryland, Baltimore County (UMBC) for the period beginning July 1, 2011 and ending March 18, 2015. UMBC is a comprehensive public institution of USM and provides a broad range of baccalaureate, graduate, and doctoral programs in the liberal arts and sciences and engineering disciplines.

Our audit disclosed that UMBC had not established sufficient controls over changes to student residency classifications, student financial aid, and payroll to ensure that only appropriate transactions were recorded in UMBC's records. In addition, we found that access to adjust the automated records maintained by UMBC for these functions was often granted to employees who did not require such access for their job duties or had conflicting responsibilities.

We also noted that UMBC had not adequately secured its information systems network. For example, password controls over administrative user access to certain firewalls and devices hosting these firewalls were inadequate.

Finally, internal control deficiencies were also noted regarding the use of corporate purchasing cards and the processing of disbursement transactions. For example, UMBC had not established necessary safeguards to prevent unauthorized disbursement transactions from being processed.

An executive summary of our findings can be found on page 5. The USM Office's response to this audit, on behalf of UMBC, is included as an appendix to this report. We wish to acknowledge the cooperation extended to us during the course of this audit by UMBC.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "TJ Barnickel III", is positioned above the printed name.

Thomas J. Barnickel III, CPA
Legislative Auditor

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Executive Summary

Legislative Audit Report on the University System of Maryland University of Maryland, Baltimore County (UMBC) March 2016

- **Changes to student residency status were not always verified for propriety and certain employees had unnecessary access to the financial management system that allowed them to record changes to student residency. Proper residency status for each student is critical to ensure that the proper amount of tuition (in-state or out-of-state) is charged (Finding 1).**

UMBC should ensure that reviews of student residency changes include residency changes made by all departments and that user access capabilities are restricted to those employees that require such access.

- **Controls over the payroll process could be improved as UMBC did not ensure that employees on multiple state payrolls were adequately investigated nor ensure that human resource and payroll capabilities assigned to employees on the financial management systems were adequately restricted (Findings 2 and 3).**

UMBC should investigate employees on multiple state payrolls and document their efforts and ensure user access capabilities are adequately restricted.

- **UMBC's network was not adequately secured. For example, intrusion prevention systems were not in place to protect the network from risks associated with encrypted traffic (Finding 4).**

UMBC should take the recommended actions to adequately secure the network.

- **UMBC did not ensure that employee capabilities on the financial management system were adequately restricted to prevent improper financial aid transactions and also did not establish additional controls to ensure the propriety of certain financial aid transactions posted to student accounts (Findings 5).**

UMBC should take the recommended actions to improve controls over financial aid transactions.

- **UMBC did not always comply with corporate purchasing card requirements and related procurement policies and procedures nor establish necessary safeguards to prevent unauthorized disbursement transactions from being processed (Findings 6 and 7).**

UMBC should comply with the corporate purchasing card requirements and the related procurement policies and procedures and also establish appropriate controls over disbursement transactions.

Background Information

Agency Responsibilities

The University of Maryland, Baltimore County (UMBC) is a comprehensive public research institution of the University System of Maryland and operates under the jurisdiction of the System's Board of Regents. UMBC offers a broad range of baccalaureate, graduate, and doctoral programs in the liberal arts, sciences, and engineering disciplines. Student enrollment for the Fall 2015 semester totaled 13,839, including 11,243 undergraduate students and 2,596 graduate students. UMBC's budget is funded by unrestricted revenues, such as tuition and fees and a State general fund appropriation, as well as restricted revenues, such as federal grants and contracts. According to the State's accounting records, UMBC's revenues for fiscal year 2015 totaled approximately \$404 million, which included a State general fund appropriation of approximately \$103 million.

Status of Findings From Preceding Audit Report

Our audit included a review to determine the status of the eight findings contained in our preceding audit report dated May 8, 2012. We determined that UMBC satisfactorily addressed these findings.

Findings and Recommendations

Student Residency

Finding 1

Controls over changes to student residency status were not sufficient.

Analysis

The University System of Maryland (USM) – University of Maryland, Baltimore County (UMBC) did not establish sufficient controls over changes to the student residency status (in-state or out-of-state) recorded in student accounts. Accurate student residency determinations are critical because of the significant differences between in-state and out-of-state student tuition rates. For example, the undergraduate tuition for Maryland residents was \$5,192 for the Spring 2015 semester, whereas the undergraduate tuition rate for out-of-state students was \$11,341.

- Although output reports of student residency changes were available for supervisory review and approval, these reports were not used to verify the propriety of changes made by all departments. Specifically, only changes made by the Registrar's Office were reviewed for propriety. Consequently, UMBC lacked assurance that all student residency changes made were appropriate. According to a report prepared by UMBC at our request, there were 7,149 changes made from out-of-state to in-state residency status during our audit period, of which 6,862 were made in departments for which the verification process had not been performed. Our testing did not disclose any improper residency status changes.
- UMBC did not ensure that capabilities assigned to individuals on the financial management systems were adequately restricted to prevent improper student residency transactions. For example, 44 users could record changes to a student's residency status even though the users did not require that capability to perform their job duties.

USM's Board of Regents' *Policy on Student Classification for Admission and Tuition Purposes* states that a student requesting a change in residency status must submit a USM *Petition for Change in Classification for Tuition* along with supporting evidence that provides clear and convincing evidence of his or her residency status, such as a valid Maryland driver's license. Additionally, the UMBC policy requires that changes to a student's residency status be subject to the review and approval of UMBC officials.

Recommendation 1

We recommend that UMBC

- a. review the output reports for student residency changes made by all departments, at least on a test basis;**
- b. document these reviews; and**
- c. restrict user access capabilities to those employees who require such capabilities to perform their job duties, and remove the aforementioned unnecessary access capabilities.**

Payroll

Finding 2

UMBC did not ensure that employees on multiple State payrolls were adequately investigated.

Analysis

UMBC did not ensure that employees appearing on quarterly reports received from the Comptroller of Maryland's Central Payroll Bureau (CPB) of employees simultaneously on multiple State payrolls (for example, worked for both UMBC and another State agency) were adequately investigated. These investigations should review the propriety of the payroll payments for simultaneous periods worked. Although UMBC's Payroll Department reviewed the reports, identified the departments in which such employees worked, and directed those departments to investigate the propriety of the dual employment and return a verification form to certify the departments' completion of the investigations, the Payroll Department did not monitor the departments to ensure verification forms were returned. In addition, the Payroll Department did not include for investigation employees who appeared on the reports, but were terminated at the time the reports were reviewed. Consequently, the propriety of payroll payments to these former employees during the time of their employment was not investigated.

The CPB report for the fourth quarter of calendar year 2014 included 123 UMBC employees identified as working at UMBC and another State agency. As of April 2015, 85 of these employees, including 18 terminated employees, had not been fully investigated by UMBC to ensure that the employees were not receiving payment twice for the same work hours. Based on the State's records, during calendar year 2014, 154 UMBC employees received payments totaling approximately \$2.9 million from UMBC and other State agencies during the same pay periods. The appearance of these employees does not necessarily indicate a problem since there may not have been overlapping hours reported to have been worked at UMBC and the other State agencies.

CPB has directed State agencies to investigate all employees appearing on the quarterly reports to ensure that they were not claiming hours for multiple jobs during the same time periods. According to the State's records, during fiscal year 2014, UMBC's payroll expenditures totaled approximately \$216 million.

Recommendation 2

We recommend that UMBC

- a. monitor departments to ensure that investigations of employees on multiple payrolls are completed in a timely manner,**
- b. retain documentation to support these monitoring efforts, and**
- c. include in the investigations employees who had been terminated.**

Finding 3

UMBC did not ensure that human resource and payroll capabilities assigned to individuals on the financial management systems were adequately restricted.

Analysis

UMBC did not ensure that capabilities assigned to individuals on the financial management systems were adequately restricted to prevent improper payroll transactions. Our review of 7 critical functions related to human resources and payroll determined that 19 system users were assigned unnecessary access to one or more of the critical functions. For example, 15 users could enter leave balance adjustments even though the users did not require this access for their job duties.

USM's *IT Security Standards* specify that institutions are responsible for ensuring that access rights reflect employee status, including changes in employee status.

Recommendation 3

We recommend that UMBC restrict user access capabilities for critical functions to those employees who require such capabilities to perform their assigned job duties, and remove the aforementioned unnecessary access capabilities.

Information Systems Security and Control

Background

UMBC's Division of Information Technology (DOIT) manages the development, maintenance, and support of UMBC's information technology infrastructure including support for academic teaching and research, networking, and business information systems. DOIT maintains a campus-wide network that supports both administrative and academic operations. The network includes internet connectivity, email, and various administrative systems and servers. DOIT maintains critical campus-wide applications, including financial, student administration, and human resources applications.

Finding 4

The UMBC network was not sufficiently secured.

Analysis

The UMBC network was not sufficiently secured.

- Although the network-based intrusion detection prevention system (IDPS) used by UMBC had the capability to decrypt and analyze encrypted network traffic received, this feature was not enabled. Furthermore, we determined that host-based intrusion protection systems (HIPS) were not in use on UMBC's servers that processed encrypted traffic. The absence of IDPS coverage for such encrypted traffic created a network security risk as such traffic could contain malicious exploits which would not be detected. Complete IDPS coverage includes the use of a properly-configured, network-based IDPS that analyzes encrypted traffic, and/or the use of a HIPS on critical servers, to aid significantly in the detection and prevention of, and response to, potential network security breaches and attacks.
- A shared administrator account, to which four employees had access, was used to administer several critical UMBC firewalls and the device hosting these firewalls. Allowing multiple employees to share the same account precludes accountability for administrative actions performed on the device and its hosted firewalls and is prohibited by the *USM IT Security Standards*.
- Password controls over administrative user access to the aforementioned firewalls and the device hosting these firewalls were inadequate. Our review disclosed that password requirements for length, complexity, age, and history were not implemented although the device hosting these firewalls had that capability. The *USM IT Security Standards* establish requirements for password length, complexity, age, and history.

- Access control rules on a network device allowed unnecessary connections to a network segment hosting numerous critical servers, thereby placing these servers at risk. The USM *IT Security Standards* state that firewalls should be configured to block all services not required and disable unused ports.

Recommendation 4

We recommend that UMBC

- perform a documented review and assessment of its network security risks from encrypted network traffic and identify how IDPS and/or HIPS coverage should be best applied to its network and implement this coverage;**
- discontinue the use of shared accounts to administer its firewalls and devices and create and use individual accounts for administrators;**
- implement password control settings for these firewalls and the device hosting these firewalls so that, at a minimum, they comply with the aforementioned USM *IT Security Standards*' requirements, and**
- configure its network control devices to limit access to only required servers over necessary ports.**

Student Financial Aid

Finding 5

UMBC did not ensure the propriety of financial aid transactions posted to student accounts.

Analysis

Adequate controls had not been established to ensure the propriety of financial aid transactions posted to student accounts.

- UMBC did not ensure that capabilities assigned to individuals on the financial management systems were adequately restricted to prevent improper financial aid transactions. Our review of 20 critical functions related to student financial aid determined that 14 system users were assigned unnecessary access to one or more of the critical functions or were assigned incompatible capabilities. For example, 13 users could add financial aid awards to the system and disburse the awards to students.
- For athletic and honors scholarships, the initial award amounts posted to student accounts were not independently reviewed for propriety since the

employees responsible for performing these reviews could also post and change award amounts.

- For federal direct loans, the employee responsible for reviewing the propriety of flags posted to and removed from student accounts and for certifying verification audits required by the United States Department of Education (DOE) was not independent since the employee could also record and remove flags, and was responsible for conducting the DOE required reviews of student eligibility. UMBC places flags on student accounts in certain circumstances, such as failure to maintain satisfactory academic progress, to prevent additional financial aid from being posted to the student's account. Also, at the direction of DOE, UMBC completes, on a test basis, verification audits of selected federal financial aid application data submitted by students to ensure students meet eligibility requirements. These verification audits are an integral part of the process to ensure the propriety of financial aid awards made.

According to UMBC's records, during academic year 2014, financial aid awarded to students totaled approximately \$93.0 million, including athletic and honors scholarships totaling \$18.4 million and federal direct loans totaling \$47.7 million.

Recommendation 5

We recommend that UMBC

- a. restrict user access capabilities to perform critical financial aid functions to those employees who require such capabilities to perform their assigned job duties, in a manner that ensures the proper segregation of duties;**
- b. ensure that supervisory personnel independent of the financial aid award process verify, at least on a test basis, the propriety of athletic and honors financial aid awards posted to student accounts;**
- c. ensure that such verifications are documented; and**
- d. ensure that the employee responsible for reviewing the propriety of flags posted to and removed from student accounts and for certifying the review of DOE verification audits cannot also record or remove flags or conduct the reviews.**

Corporate Purchasing Cards

Finding 6

UMBC did not always comply with corporate purchasing card requirements and related procurement policies and procedures.

Analysis

UMBC did not always comply with corporate purchasing card (CPC) requirements and related procurement policies and procedures. According to the issuing bank's records, as of March 2015, corporate purchasing cards had been issued to 269 employees, and the related expenditures totaled approximately \$15.8 million during fiscal year 2014.

- Our review disclosed that, during our audit period, UMBC repeatedly procured chemicals from one vendor, totaling approximately \$520,000, without consolidating and soliciting competitive bids and entering into a written contract as required. In this regard, most of these purchases were made by employees in various UMBC science and engineering departments who repeatedly purchased chemicals from this vendor using corporate purchasing cards. Although the individual purchases were valued at \$5,000 or less (the level requiring bids), combined purchases to this vendor for these chemicals significantly exceeded this level. Also, since the purchases were not consolidated, UMBC's leverage as a high-volume purchaser may not have been maximized.
- CPC bank statements were not always approved as required. Our review of 11 monthly bank statements during fiscal year 2015, with purchases totaling approximately \$399,000, disclosed that 4 of the bank statements, with purchases totaling approximately \$168,000, were not properly signed by both the cardholder's immediate supervisor and the cardholder. A documented review of bank statements and the corresponding documentation of expenditures incurred is critical because UMBC obtained an exemption from the Comptroller of Maryland's General Accounting Division from requiring its fiscal officer to review the monthly cardholder activity logs, which would have provided a secondary review of the CPC transactions. That exemption was granted, in part, because of control procedures that were purportedly in place, including the review of the bank statements.

The USM *Procurement Policies and Procedures* requires that contracts for goods or services of \$5,000 or more be awarded based on competitive bidding. The corporate purchase card program is not intended to replace current State procurement regulations or internal agency policies. In addition, the Comptroller

of Maryland's *Corporate Purchasing Card Program Policy and Procedures Manual* and UMBC's *Purchasing Card Program Policies and Procedures* require that supervisory personnel examine supporting documentation for expenditures made to ensure that they are appropriate, and document that review by signing, along with the cardholder, the related bank statements.

Recommendation 6

We recommend that UMBC

- a. consolidate procurements of similar goods to maximize buying power, when possible, and ensure that these procurements comply with the USM *Procurement Policies and Procedures*; and**
- b. ensure that bank statements are reviewed and signed by both the cardholder's immediate supervisor and the cardholder, as required.**

Disbursements

Finding 7

Proper internal controls were not established over the processing of disbursement transactions.

Analysis

UMBC did not adequately restrict user access capabilities and establish necessary safeguards to prevent unauthorized disbursement transactions from being processed. Specifically, three employees responsible for reviewing and approving disbursement batches, generating and approving the related disbursement transmittal lists, and releasing those batches to the Comptroller of Maryland's General Accounting Division (GAD) for payment, could also add or modify vendors in the system and alter the transmittal file (posted transactions) prior to releasing the batches to GAD. As a result, unauthorized disbursements could be processed without detection. According to the State's accounting records, UMBC processed disbursements totaling approximately \$94.2 million during fiscal year 2014. Our test of invoice payments processed did not disclose any inappropriate or erroneous transactions.

According to industry best practices, as described by the State of Maryland *Information Security Policy*, State agencies are responsible for ensuring separation of duties and assigning appropriate system permissions and responsibilities for agency system users.

Recommendation 7

We recommend that UMBC ensure that the employees responsible for approving and releasing disbursement transactions for payment be denied the capability to alter those transactions, including modifications to the related vendors.

Audit Scope, Objectives, and Methodology

We have conducted a fiscal compliance audit of the University System of Maryland (USM) – University of Maryland, Baltimore County (UMBC) for the period beginning July 1, 2011 and ending March 18, 2015. 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 UMBC's financial transactions, records and internal control, and to evaluate its compliance with applicable State laws, rules, and regulations.

In planning and conducting our audit, we focused on the major financial-related areas of operations based on assessments of significance and risk. The areas addressed by the audit included purchases and disbursements related to UMBC's operations, student accounts receivable, cash receipts, payroll, contracts and grants, information security over UMBC computer applications, and student financial aid. We also determined the status of the findings included in our preceding audit report.

Our audit did not include certain support services provided to UMBC by the USM Office. These support services (such as bond financing) are included within the scope of our audit of the USM Office. In addition, our audit did not include an evaluation of internal controls over compliance with federal laws and regulations for federal financial assistance programs and an assessment of UMBC's compliance with those laws and regulations because the State of Maryland engages an independent accounting firm to annually audit such programs administered by State agencies, including the components of the USM.

To accomplish our audit objectives, our audit procedures included inquiries of appropriate personnel, inspections of documents and records, observations of UMBC's operations, and tests of transactions. Generally, transactions were selected for testing based on auditor judgment, which primarily considers risk. Unless otherwise specifically indicated, neither statistical nor non-statistical audit sampling was used to select the transactions tested. Therefore, the results of the tests cannot be used to project those results to the entire population from which the items were selected.

We also performed various data extracts of pertinent information from the State's Financial Management Information System (such as revenue and expenditure data) and the State's Central Payroll Bureau (payroll data), as well as from the contractor administering the State's Corporate Purchasing Card Program (credit card activity). The extracts are performed as part of ongoing internal processes established by the Office of Legislative Audits and were subject to various tests to determine data reliability. We determined that the data extracted from these various sources were sufficiently reliable for the purposes the data were used during this audit. We also extracted data from UMBC's financial systems for the purpose of testing certain areas, such as student accounts receivable and financial aid. We performed various tests of the relevant data and determined that the data were sufficiently reliable for the purposes the data were used during the audit. Finally, we performed other auditing procedures that we considered necessary to achieve our audit objectives. The reliability of data used in this report for background or informational purposes was not assessed.

UMBC'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 relating to conditions that we consider to be significant deficiencies in the design or operation of internal control that could adversely affect UMBC'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 UMBC that did not warrant inclusion in this report.

The response from the USM Office, on behalf of UMBC, 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 the USM Office regarding the results of our review of its response.

APPENDIX



OFFICE OF THE CHANCELLOR

March 15, 2016

Mr. Thomas J. Barnickel III, CPA
Legislative Auditor
Office of Legislative Audits
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University of Baltimore

1925
University of Maryland
Center for Environmental
Science

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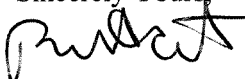
1966
University of Maryland,
Baltimore County

Re: University System of Maryland –
University of Maryland, Baltimore County
Period of Audit: July 1, 2011 through
March 18, 2015

Dear Mr. Barnickel:

I have enclosed the University System of Maryland's responses to your draft report covering the examination of the accounts and records of the University System of Maryland – University of Maryland, Baltimore County. Our comments refer to the individual items in the report.

Sincerely Yours,


Robert L. Caret
Chancellor

3-16-2016

Enclosures

cc:

Dr. Freeman A. Hrabowski, III, Ph.D., President, UMBC
Ms. Lynne C. Schaefer, Vice President for Administration and Finance, UMBC
Mr. James L. Shea, Chair, University System of Maryland Board of Regents
Mr. Robert L. Page, Associate Vice Chancellor for Financial Affairs, USM Office
Mr. David Mosca, Director of Internal Audit, USM Office

**RESPONSE TO LEGISLATIVE AUDIT REPORT
UNIVERSITY SYSTEM OF MARYLAND
UNIVERSITY OF MARYLAND, BALTIMORE COUNTY
JULY 1, 2011 TO MARCH 18, 2015**

Student Residency

Finding 1

Controls over changes to student residency status were not sufficient.

Recommendation 1

We recommend that UMBC

- a. review the output reports for student residency changes made by all departments, at least on a test basis;**
- b. document these reviews; and**
- c. restrict user access capabilities to those employees who require such capabilities to perform their job duties, and remove the aforementioned unnecessary access capabilities.**

University response

We concur and effective immediately, we have taken the following action:

- a. Reviewed, on a test basis, the output reports for student residence changes made by all departments;
- b. documented these reviews; and,
- c. restricted user access capabilities to those employees who require such capabilities to perform their job duties, and remove unnecessary access capabilities.

Payroll

Finding 2

UMBC did not ensure that employees on multiple State payrolls were adequately investigated.

Recommendation 2

We recommend that UMBC

- a. monitor departments to ensure that investigations of employees on multiple payrolls are completed in a timely manner,**
- b. retain documentation to support these monitoring efforts, and**
- c. include in the investigations employees who had been terminated.**

**RESPONSE TO LEGISLATIVE AUDIT REPORT
UNIVERSITY SYSTEM OF MARYLAND
UNIVERSITY OF MARYLAND, BALTIMORE COUNTY
JULY 1, 2011 TO MARCH 18, 2015**

University response

We partially concur.

The University System of Maryland (USM) recently distributed guidance detailing system-wide procedures and protocols for dual-employment situations. Based on this guidance, faculty (including lecturers & adjuncts) appearing on more than one state agency payroll listings of all categories, are to be excluded from the investigation requirement. In addition, this guidance provides that employees who are terminated as of the date the report is received are excluded from further investigation

Excluding faculty and separated employees significantly decreases the number of employees to be investigated. With this guidance, the UMBC employees identified on the cited CPB report would be reduced from 123 to 40. Out of those remaining 40, we were able to successfully investigate and verify 21.

Going forward, we will proceed as follows:

- a. Monitor the departments to ensure the investigations are completed in a timely manner per the USM guidance;
- b. Retain documentation to support these monitoring efforts; and
- c. In accordance with USM guidance, we will investigate terminated employees unless a terminated or separated employee has previously appeared on the dual-employment reports during the current year, and were successfully investigated, that employee need not be investigated again.

Finding 3

UMBC did not ensure that human resources and payroll capabilities assigned to individuals on the financial management systems were adequately restricted.

Recommendation 3

We recommend that UMBC restrict user access capabilities for critical functions to those employees who require such capabilities to perform their assigned job duties, and remove the aforementioned unnecessary access capabilities.

**RESPONSE TO LEGISLATIVE AUDIT REPORT
UNIVERSITY SYSTEM OF MARYLAND
UNIVERSITY OF MARYLAND, BALTIMORE COUNTY
JULY 1, 2011 TO MARCH 18, 2015**

University response

We concur.

We have (i) restricted user access capabilities for critical functions to those who require such capabilities to perform their duties and (ii) removed the unnecessary access capabilities.

Information Systems Security and Control

Finding 4

The UMBC network was not sufficiently secured.

Recommendation 4

We recommend that UMBC

- a. perform a documented review and assessment of its network security risks from encrypted network traffic and identify how IDPS and/or HIPS coverage should be best applied to its network and implement this coverage;**
- b. discontinue the use of shared accounts to administer its firewalls and devices and create and use individual accounts for administrators;**
- c. implement password control settings for these firewalls and the device hosting these firewalls so that, at a minimum, they comply with the aforementioned USM *IT Security Standards*' requirements, and**
- d. configure its network control devices to limit access to only required servers over necessary ports.**

University response

We concur and have taken the following action:

- a. Performed a document review and assessment of network security risks from encrypted network traffic and implemented SSL inspections through our IDPS to address these risks.
- b. Discontinued the use of shared accounts and assigned individual accounts to all individuals who are authorized to make administrative changes on our firewalls;
- c. Enabled the vendor password complexity feature on our firewalls to ensure our passwords meet USM requirements, and
- d. Reviewed and updated our network access controls to limit access to only required servers over necessary ports.

**RESPONSE TO LEGISLATIVE AUDIT REPORT
UNIVERSITY SYSTEM OF MARYLAND
UNIVERSITY OF MARYLAND, BALTIMORE COUNTY
JULY 1, 2011 TO MARCH 18, 2015**

Student Financial Aid

Finding 5

UMBC did not ensure the propriety of financial aid transactions posted to student accounts.

Recommendation 5

We recommend that UMBC

- a. restrict user access capabilities to perform critical financial aid functions to those employees who require such capabilities to perform their assigned job duties, in a manner that ensures the proper segregation of duties;**
- b. ensure that supervisory personnel independent of the financial aid award process verify, at least on a test basis, the propriety of athletic and honors financial aid awards posted to student accounts;**
- c. ensure that such verifications are documented; and**
- d. ensure that the employee responsible for reviewing the propriety of flags posted to and removed from student accounts and for certifying the review of DOE verification audits cannot also record or remove flags or conduct the reviews.**

University response

We concur and have taken the following action:

- a. User access capabilities for critical functions have been restricted to those employees who require such capabilities to perform their assigned job duties and in a manner that ensures a proper segregation of duties.**
- b. Supervisory personnel independent of the financial aid award process are verifying, at least on a test basis, the propriety of initial financial aid awards posted to student accounts.**
- c. The above verifications are being documented; and**
- d. The employee responsible for reviewing the propriety of flags posted to student accounts and for certifying the review of DOE verification audits cannot also record flags and conduct the reviews.**

**RESPONSE TO LEGISLATIVE AUDIT REPORT
UNIVERSITY SYSTEM OF MARYLAND
UNIVERSITY OF MARYLAND, BALTIMORE COUNTY
JULY 1, 2011 TO MARCH 18, 2015**

Corporate Purchasing Cards

Finding 6

UMBC did not always comply with corporate purchasing card requirements and related procurement policies and procedures.

Recommendation 6

We recommend that UMBC

- a. consolidate procurements of similar goods to maximize buying power, when possible, and ensure that these procurements comply with the USM *Procurement Policies and Procedures*; and**
- b. ensure that bank statements are reviewed and signed by both the cardholder's immediate supervisor and the cardholder, as required.**

University response

- a. We concur. We conducted a competitive procurement and issued the contract for the purchase of chemicals that maximizes our buying power and complies with the USM Procurement Policies & Procedures.
- b. We concur. While the 4 activity logs cited were signed by both the cardholder's immediate supervisor and the cardholder, we will re-emphasize that the bank statements must also be signed in our P-Card holder and supervisor training as well as during our new cardholder reviews.

Disbursements

Finding 7

Proper internal controls were not established over the processing of disbursement transactions.

Recommendation 7

We recommend that UMBC ensure that the employees responsible for approving and releasing disbursement transactions for payment be denied the capability to alter those transactions, including modifications to the related vendors.

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University response

We concur. By the start of the Fall 2016 semester, the function of approving and releasing disbursement transactions for payment will be transitioned to an independent alternative area. The individuals responsible for approving and releasing disbursements will not have the capability to alter those transactions, including modifications to the related vendors.

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