

Audit Report

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**University System of Maryland  
University of Baltimore**

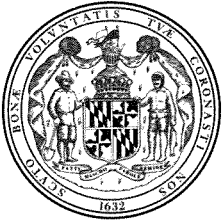
October 2014

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**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

October 1, 2014

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Executive Director

Thomas J. Barnickel III, CPA  
Legislative Auditor

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 conducted a fiscal compliance audit of the University System of Maryland (USM) – University of Baltimore (UB) for the period beginning July 6, 2010 and ending July 30, 2013. UB is an urban public institution offering a career-oriented education at the bachelor's, master's, and professional levels, with degree programs in law, business, and liberal arts with an emphasis on applied and professional degrees.

Our audit disclosed that UB had not established adequate procedures to ensure the propriety of student refunds. Certain control deficiencies were also noted with regard to cash receipts and a bank account maintained by UB. Finally, UB's computer network was not properly secured.

The USM Office's response to this audit, on behalf of UB, is included as an appendix to this report. We wish to acknowledge the cooperation extended to us during the course of this audit by UB.

Respectfully submitted,

Thomas J. Barnickel III, CPA  
Legislative Auditor



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## **Background Information**

### **Agency Responsibilities**

The University of Baltimore (UB) is a comprehensive public institution of the University System of Maryland and operates under the jurisdiction of the System's Board of Regents. UB is an urban university offering a career-oriented education at the bachelor's, master's, and professional levels, with degree programs in law, business, and liberal arts with an emphasis on applied and professional degrees.

Enrollment for the Spring 2013 semester totaled approximately 6,100 students. UB's budget is funded by unrestricted revenues, such as tuition and student fees, a State general fund appropriation, and restricted revenues, such as federal grants and contracts. According to the State's accounting records, UB's revenues for fiscal year 2013 totaled approximately \$137.7 million, including a State general fund appropriation of approximately \$27.7 million.

### **Status of Findings From Preceding Audit Report**

Our audit included a review to determine the status of the six findings contained in our preceding audit report dated July 15, 2011. We determined that UB satisfactorily addressed these six findings.

# Findings and Recommendations

## Student Accounts Receivable

### **Finding 1**

**The University of Baltimore (UB) had not established adequate procedures to ensure the propriety of student refunds.**

### **Analysis**

UB had not established adequate procedures to ensure the propriety of student refunds, which, according to UB's records, totaled approximately \$112.2 million between July 2010 and July 2013. Student refunds most often resulted from the posting of student financial aid.

Three employees responsible for identifying students who are due a refund were also responsible for recording student refunds on the automated payment records. These employees were also assigned system capabilities allowing them to release those refunds to UB's accounts payable unit for processing without independent supervisory review and approval. These same employees were assigned unnecessary system capabilities allowing them to process refunds greater than the student's credit balance. Although a post-processing review was performed to ensure the validity of certain refunds processed, the review included only refunds issued to the few students working in the Bursar's office, and accordingly, did not subject the vast majority of recorded refunds to verification.

### **Recommendation 1**

**We recommend that UB**

- a. expand the post-processing review of recorded refunds to ensure that all refunds are subject to verification on a test basis, and**
- b. restrict user's system capabilities to ensure that employees who can record refunds cannot release them for processing and that no employee can process a refund greater than a student's credit account balance.**

## Cash Receipts

### **Finding 2**

**Controls over collections received at the Bursar's office were not sufficient.**

#### **Analysis**

UB lacked sufficient procedures to ensure accountability over collections received at the Bursar's office, which totaled approximately \$12.1 million during fiscal year 2013, and that these collections were subsequently deposited to the State's account.

- A copy of the initial collection records generated when cash registers were closed each day was not forwarded directly to the employee in UB's Comptroller's office responsible for verifying all recorded collections were deposited. Instead, the original documents, along with the related collections, were placed in a vault which was accessible to several other UB employees prior to deposit. Consequently, such individuals could alter the original documents and misappropriate the accompanying funds without detection.
- UB did not always obtain the required signature from the armored transportation service provider responsible for taking collections to the bank. Our review of the 185 deposits picked up by the courier in fiscal year 2013, disclosed that 73, totaling approximately \$4.5 million, were not signed for by the provider. According to UB's armored transportation service contract, the vendor does not accept liability for a deposit unless its representative signs a document acknowledging receipt of the funds. As a result, accountability for any discrepancies may not be established.

#### **Recommendation 2**

**We recommend that UB**

- a. ensure that a copy of the initial cash receipts records is transferred directly to the employee responsible for verifying collections to validated bank documentation,**
- b. restrict access to the contents of the vault to employees whose duties require such access, and**
- c. ensure that the armored transportation service representative signs for each deposit picked up as required.**

## Bank Account

### **Finding 3**

**UB lacked adequate controls over check disbursements from its clearing account.**

#### **Analysis**

UB lacked adequate controls over its check clearing account, which was used to receive tuition payments from third party lenders and foreign students.

Disbursements from the account, which were generally transfers to the State's account, totaled approximately \$4.4 million between July 2010 and July 2013.

Specifically, three employees had the capability to prepare and generate a check from the account without independent supervisory review and approval, and one of these employees normally performed this function. Although these three employees did not have access to the blank check stock and the signature plate used by another employee when printing the checks on UB's automated system, this separation of duties did not provide sufficient control over the process because a review of the propriety of the checks issued was not performed by independent supervisory personnel.

Since the majority of the disbursements from the account are made to the State's bank account, controls could be enhanced by the use of electronic funds transfers.

#### **Recommendation 3**

**We recommend that UB**

- a. ensure that checks processed from the clearing account are reviewed and approved for propriety by independent supervisory personnel using supporting documentation, and**
- b. pursue the use of electronic funds transfers for disbursements to the State's bank account.**

## **Information Systems Security and Control**

UB's Office of Technology Services provides information systems support to UB through the implementation and maintenance of campus-wide applications, including financial, student administration, and human resources applications.

UB also operates an integrated computer network, which provides connections to multiple servers used for administrative and academic purposes. The campus network also includes email and file servers, firewalls, and Internet connectivity,

as well as multiple campus websites that function as entry points to many of UB's services.

#### **Finding 4**

**UB's computer network was not properly secured and protection of UB computers from malware needs improvement.**

#### **Analysis**

Adequate security measures had not been established to properly protect UB's critical network devices and malware protection for UB computers needs improvement.

- Firewall rules allowed numerous unnecessary connections to portions of UB's network, placing various devices at risk. For example, we noted that the Internet had unnecessary network level access to numerous network devices over 13 ports. We also noted that student computer labs had unnecessary network level access to numerous network devices over all ports.
- UB lacked assurance, on an ongoing basis, that anti-malware software was installed, up-to-date, and operational on many of its computers. UB utilized automated anti-malware consoles to manage the anti-malware software installed on its computers. However, we identified 117 active computers that were not listed on any of these consoles.

The USM *Guidelines in Response to the State IT Security Policy*, require that firewalls be configured to block all services not required, disable unused ports, and hide and prevent direct accessing of trusted network addresses from untrusted networks. These *Guidelines* further require that standard malware protection programs be installed, updated, and maintained on all workstations and servers.

#### **Recommendation 4**

**We recommend that UB**

- a. properly restrict access to critical network devices from untrusted third parties and untrusted segments (for example, the Internet and student computer labs) of the UB network; and**
- b. review all of its anti-malware consoles on a regular basis, and document these reviews to provide assurance that all UB computers are defined to the consoles and are running anti-malware software which is functioning properly and is up-to-date.**

## **Audit Scope, Objectives, and Methodology**

We have conducted a fiscal compliance audit of the University System of Maryland (USM) – University of Baltimore (UB) for the period beginning July 6, 2010 and ending July 30, 2013. 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 UB'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 cash receipts, student accounts receivable, purchases and disbursements, financial aid, payroll, and information technology systems. We also determined the status of the findings contained in our preceding audit report.

To accomplish our audit objectives, our audit procedures included inquiries of appropriate personnel, inspections of documents and records, observations of UB's operations, and tests of transactions. 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 UB's financial system for purposes of testing certain areas, such as student accounts receivable. 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 objectives. The reliability of data used in this report for background or informational purposes was not assessed.

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

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

The response from the USM Office, on behalf of UB, 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

September 22, 2014

Mr. Thomas J. Barnickel III, CPA  
Legislative Auditor  
Office of Legislative Audits  
State Office Building, Room 1202  
301 West Preston Street  
Baltimore, MD 21201

1807  
University of Maryland,  
Baltimore

1856  
University of Maryland,  
College Park

1865  
Bowie State University

1866  
Towson University

1886  
University of Maryland  
Eastern Shore

1898  
Frostburg State University

1900  
Coppin State University

1925  
Salisbury University

1925  
University of Baltimore

1925  
University of Maryland  
Center for Environmental  
Science

1947  
University of Maryland  
University College

1966  
University of Maryland,  
Baltimore County

Re: University System of Maryland –  
University of Baltimore  
Period of Audit: July 6, 2010 through  
July 30, 2013

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 of Baltimore. Our comments refer to the individual items in the report.

Sincerely,

William E. Kirwan  
Chancellor

WEK:mk  
Enclosures

cc:

Mr. Kurt L. Schmoke, UB  
Ms. Barbara Aughenbaugh, Assoc VP for Administration and Finance, UB  
Mr. James L. Shea, Chair, Board of Regents  
Mr. Anwer Hasan, Chairman, MHEC  
Ms. Catherine Shultz, Acting Secretary of Higher Education, MHEC  
Mr. Robert 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 BALTIMORE  
JULY 6, 2010 TO JULY 30, 2013**

**Student Accounts Receivable**

**Finding 1**

**The University of Baltimore (UB) had not established adequate procedures to ensure the propriety of student refunds.**

**Recommendation 1**

**We recommend that UB**

- a. expand the post-processing review of recorded refunds to ensure that all refunds are subject to verification on a test basis, and**
- b. restrict user's system capabilities to ensure that employees who can record refunds cannot release them for processing and that no employee can process a refund greater than a student's credit account balance.**

**University response**

UB agrees with the recommendations.

- a. UB expanded the post-processing review of recorded refunds to ensure a test basis review and verification.
- b. UB's access has been adjusted to ensure employees who record refunds can no longer release them for processing. Given the small staff in the Office of the Bursar; periodic exceptions may be necessary to ensure the timely processing of student refunds.

**Cash Receipts**

**Finding 2**

**Controls over collections received at the Bursar's office were not sufficient.**

**Recommendation 2**

**We recommend that UB**

- a. ensure that a copy of the initial cash receipts records is transferred directly to the employee responsible for verifying collections to validated bank documentation,**
- b. restrict access to the contents of the vault to employees whose duties require such access, and**
- c. ensure that the armored transportation service representative signs for each deposit picked up as required.**

**RESPONSE TO LEGISLATIVE AUDIT REPORT  
UNIVERSITY SYSTEM OF MARYLAND  
UNIVERSITY OF BALTIMORE  
JULY 6, 2010 TO JULY 30, 2013**

**University response**

UB agrees with the recommendations.

- a. The University of Baltimore has changed the closing process to require the cashier and supervisor to sign the closeout sheet. The cashiering system has been updated to include the daily totals on the cash register tape which removes the ability to manipulate totals on the closeout sheet. The Comptroller's Office employee responsible for verifying collections will review the closeout sheet and the register tape to ensure all collections are properly deposited.
- b. UB purchased and installed a new vault with two separate compartments; each with its own combination lock. One compartment houses the cashiers' banks and the other compartment houses the deposit(s) and closing paperwork. Access is restricted to the compartments based on job duties. Only the Bursar and Assistant Bursar have access to the compartment where the deposits are secured.
- c. UB agrees with this finding with one acknowledgement. UB stopped obtaining a signature from the armored transportation service provider because the provider began issuing electronic receipts generated by the driver. The receipt includes a date/time stamp, a bar code and the driver's six digit employee ID number, which serves as the digital signature. However, UB now requires the armored transportation service representative to sign a deposit log when each pick up is made.

**Bank Account**

**Finding 3**

**UB lacked adequate controls over check disbursements from its clearing account.**

**Recommendation 3**

**We recommend that UB**

- a. **ensure that checks processed from the clearing account are reviewed and approved for propriety by independent supervisory personnel using supporting documentation, and**
- b. **pursue the use of electronic funds transfers for disbursements to the State's bank account.**

**RESPONSE TO LEGISLATIVE AUDIT REPORT  
UNIVERSITY SYSTEM OF MARYLAND  
UNIVERSITY OF BALTIMORE  
JULY 6, 2010 TO JULY 30, 2013**

**University response**

UB agrees with the recommendations.

- a. UB has changed procedures. All checks are manually signed by a supervisor after a review of the supporting documentation.
- b. The University of Baltimore will continue discussions with the bank regarding the use of electronic fund transfer from our exchange account to the State's bank account.

**Finding 4**

**UB's computer network was not properly secured and protection of UB computers from malware needs improvement.**

**Recommendation 4**

**We recommend that UB**

- a. **properly restrict access to critical network devices from untrusted third parties and untrusted segments (for example, the Internet and student computer labs) of the UB network; and**
- b. **review all of its anti-malware consoles on a regular basis, and document these reviews to provide assurance that all UB computers are defined to the consoles and are running anti-malware software which is functioning properly and is up-to-date.**

**University response**

UB agrees with the recommendations.

- a.&b. The University of Baltimore agrees with the finding. Regarding both recommendations, of the fourteen issues noted, seven were remediated while the auditors were onsite, four will be resolved by December 2014 and the remaining three will be remediated by a projected date of April 2015. The last three are dependent on the initiation of more complex IT projects, including the integration of several autonomous networks and the rebuilding of low-level network security rules. April 2015 is therefore being provided as the projected completion date in order to account for project complexity and resolution of any unforeseen technical challenges but every effort will be made to complete the work before that time.

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