

Audit Report

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

July 2019

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**OFFICE OF LEGISLATIVE AUDITS  
DEPARTMENT OF LEGISLATIVE SERVICES  
MARYLAND GENERAL ASSEMBLY**

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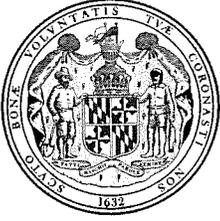
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DEPARTMENT OF LEGISLATIVE SERVICES  
OFFICE OF LEGISLATIVE AUDITS  
MARYLAND GENERAL ASSEMBLY

Victoria L. Gruber  
Executive Director

Gregory A. Hook, CPA  
Legislative Auditor

July 10, 2019

Senator Craig J. Zucker, Senate Chair, Joint Audit and Evaluation Committee  
Delegate Shelly L. Hettleman, House Chair, Joint Audit and Evaluation Committee  
Members of Joint Audit and Evaluation Committee  
Annapolis, Maryland

Ladies and Gentlemen:

We have conducted a fiscal compliance audit of the University System of Maryland (USM) – University of Maryland, Baltimore (UMB) for the period beginning July 1, 2015 and ending June 30, 2018. UMB is a comprehensive public institution of USM and provides professional and graduate level instruction through its schools of Dentistry, Law, Medicine, Nursing, Pharmacy, and Social Work, and its Graduate School.

Our audit disclosed that certain transactions recorded in automated systems used by UMB to process financial aid and disbursements were not adequately controlled. In particular, certain employees could increase a student's financial aid award amount or process certain types of disbursements, such as honorariums or stipends, without independent review and approval.

Our audit also included a review to determine the status of the eight findings contained in our preceding audit report. We determined that UMB satisfactory addressed seven of these findings. The remaining finding is repeated in this report.

The USM Office's response to this audit, on behalf of UMB, is included as an appendix to this report. We reviewed the response to our findings and related recommendations, and have concluded that the corrective actions identified are sufficient to address all audit issues.

We wish to acknowledge the cooperation extended to us during the audit by UMB. We also wish to acknowledge USM's and UMB's willingness to address the audit issues and to implement appropriate corrective actions.

Respectfully submitted,

A handwritten signature in black ink that reads "Gregory A. Hook". The signature is written in a cursive style with a large, prominent initial 'G'.

Gregory A. Hook, CPA  
Legislative Auditor

## **Background Information**

### **Agency Responsibilities**

The University of Maryland, Baltimore (UMB) provides professional and graduate level instruction through its schools of Dentistry, Law, Medicine, Nursing, Pharmacy, and Social Work, and its Graduate School. UMB students who receive instruction in health care professions obtain clinical experience at various health care facilities, including the University of Maryland Medical Center, which is a component of the University of Maryland Medical System Corporation.

Based on UMB's records for the Spring 2018 semester, UMB's enrollment totaled 6,687 students. UMB'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 records, fiscal year 2018 revenues totaled approximately \$1.2 billion, which included a State general fund appropriation of \$221.8 million. These records also indicated that UMB's expenditures for fiscal year 2018 totaled approximately \$1.2 billion.

### **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 September 22, 2016. As disclosed in the following table, we determined that UMB satisfactory addressed seven of these findings. The remaining finding is repeated in this report.

### Status of Preceding Findings

Preceding Finding	Finding Description	Implementation Status
Finding 1	UMB lacked an independent verification of adjustments to financial aid awards posted to student accounts, and certain employees had incompatible system access capabilities that allowed them to both adjust and disburse financial aid awards.	<b>Repeated</b> (Current Finding 1)
Finding 2	There was no independent verification to ensure that all fund requests for reimbursement of federal financial aid were received.	Not repeated
Finding 3	Several employees, including some who did not require the applicable system capabilities for their job duties, could process certain transactions, such as tuition waivers, without independent verification.	Not repeated
Finding 4	Certain employees were assigned system access capabilities to process purchase orders and disbursement transactions without independent review and approval.	Not repeated
Finding 5	Through an interagency agreement, UMB acquired certain information technology services totaling \$539,000 on behalf of the Maryland Longitudinal Data System Center, which allowed the Center to avoid using a competitive procurement process for those services.	Not repeated
Finding 6	UMB did not always use available output reports to ensure that only valid adjustments to its payroll were processed.	Not repeated
Finding 7	The UMB network was not sufficiently secured in that properly configured firewall rules and effective intrusion detection prevention system coverage did not exist.	Not repeated
Finding 8	UMB procedures were not sufficient for maintaining and securing numerous workstations against malware.	Not repeated

# Findings and Recommendations

## Student Financial Aid

### **Finding 1**

**The University of Maryland, Baltimore (UMB) lacked sufficient controls to ensure the propriety of financial aid award adjustments posted to student accounts.**

### **Analysis**

Sufficient controls were not established to ensure the propriety of financial aid award adjustments posted to student accounts. Specifically, manual adjustments to financial aid award amounts were not independently verified for propriety, and our testing disclosed that adequate documentation was not always available to support adjustments made. According to UMB's records, during fiscal year 2018, financial aid awarded to students, including loans, grants, and scholarships, totaled approximately \$169 million.

UMB's financial aid system automatically calculates award amounts and generates recommended financial aid award packages for students based on various eligibility criteria. UMB employees may manually record adjustments to these award amounts based on individual student situations, such as when a student drops classes and may no longer be eligible for the original award amount.

Although UMB's procedures required a financial aid counselor to prepare an adjustment form to document the amount and reason for each manual adjustment, the form required independent supervisory approval prior to posting the adjustment on the financial aid system only if the adjustment included a reduction in financial aid. Therefore, no supervisory approval was required if the adjustment was only to increase financial aid, and, in any case, the pre-approval process alone would not ensure that all adjustments actually posted to the system were proper and authorized. Our judgmental test of 15 manual financial aid adjustments totaling \$83,000 made during the 2017-2018 academic year disclosed that the required adjustment form could not be located for 6 adjustments totaling \$33,000 that increased financial aid. Finally, available system output reports were not generated to provide for independent supervisory reviews of the propriety of manual adjustments posted to student accounts by comparison to properly completed adjustment forms.

These conditions resulted in a lack of assurance that all financial aid awards posted to student accounts were proper. A similar condition regarding the use of

output reports to verify the propriety of recorded adjustments was commented upon in our preceding audit report.

### **Recommendation 1**

**We recommend that UMB establish sufficient procedures and controls to ensure the propriety of all financial aid award adjustments posted to student accounts. Specifically, we recommend that UMB**

- a. require adjustment forms to be prepared, approved, and maintained for all manual adjustments to financial aid awards recorded in student accounts; and**
- b. generate output reports of manual adjustments (increases and decreases) and independently verify the propriety of the adjustments posted to the system at least on a test basis (repeat).**

## **Disbursements**

### **Finding 2**

**UMB had not established sufficient procedures and controls to ensure the propriety of certain disbursements, such as honorariums and stipends.**

### **Analysis**

UMB had not established adequate controls over certain disbursement transactions, such as honorariums and stipends, processed in its automated system. As a result, unauthorized transactions could be processed that may not be readily detected.

- There were incompatible duties noted for the two employees who manually approved the request forms necessary to have these disbursement transactions processed in UMB's automated disbursement system. Specifically, after the approved forms were recorded by another employee into the disbursement system, these two employees were assigned system access capabilities to release the transactions to the Comptroller of Maryland – General Accounting Division (GAD) for payment. Furthermore, these two employees were authorized to and did certify the corresponding paper copy transmittal letter and invoices submitted to GAD in order for the disbursements to be processed. Finally, these two employees could add new vendors to the disbursement system. Accordingly, these two employees had virtually complete control over this process and could process improper disbursements without detection.

According to UMB's records, during the period from July 2015 through June 2018, these two employees approved disbursements totaling approximately \$2.2 million for these types of transactions. Our test of 10 of these disbursements totaling approximately \$87,500 noted that, for 4 disbursements totaling \$30,000, the same employee who approved the request for payment also certified the disbursements to GAD. Based on our review, these 4 disbursements were reasonable and adequately supported.

- Furthermore, two additional employees who recorded these disbursement requests in the system also had incompatible duties. Specifically, the system access assigned to these two employees allowed them to release the transactions to GAD for payment without further independent review and approval. While these two employees were not authorized to certify the corresponding paper documents submitted to GAD, the Comptroller of Maryland's *Accounting Procedures Manual* notes that this is not a sufficient compensating control since employees could forge the signature on the transmittal cover letter and not disclose it to the authorized signer.

#### **Recommendation 2**

**We recommend that UMB establish adequate procedures and controls to ensure that these disbursements, such as honorariums and stipends, are proper. Specifically, we recommend that UMB**

- a. require the request forms to be approved by employees who are independent of and do not have system capabilities related to other disbursement processing functions, and**
- b. ensure that these disbursement transactions can only be released for payment by employees who do not have the capability to record them in the disbursement system.**

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

We have conducted a fiscal compliance audit of the University System of Maryland (USM) – University of Maryland, Baltimore (UMB) for the period beginning July 1, 2015 and ending June 30, 2018. 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 UMB'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, student accounts receivable, cash receipts, information systems security and control, payroll, working funds, student financial aid, and corporate purchasing cards. Our audit included certain support services (such as processing of certain construction vendor payments) provided by UMB on a centralized basis for several other units of USM. We also determined the status of the findings contained in our preceding audit report.

Our audit did not include certain support services provided to UMB by the USM Office, such as bond financing. These support services 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 UMB'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 UMB'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 test items were selected.

We also performed various data extracts of pertinent information from the State's Financial Management Information System (such as expenditure and revenue 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 sources were sufficiently reliable for the purposes the data were used during this audit. We also extracted data from UMB's financial systems for the purpose of

testing certain areas, such as financial aid and 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 audit objectives. The reliability of data used in this report for background or informational purposes was not assessed.

UMB'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 UMB's ability to maintain reliable financial records, operate effectively and efficiently, and/or comply with applicable laws, rules, and regulations. Our report also includes a finding regarding a significant instance of noncompliance with applicable laws, rules, or regulations. Other less significant findings were communicated to UMB that did not warrant inclusion in this report.

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



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### OFFICE OF THE CHANCELLOR

July 2, 2019

Mr. Gregory A. Hook, CPA  
Legislative Auditor  
Office of Legislative Audits  
State Office Building, Room 1202  
301 West Preston Street  
Baltimore, MD 21201

Re: University System of Maryland – University of Maryland  
Baltimore  
Period of Audit: July 1, 2015 through June 30, 2018

Dear Mr. Hook:

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

Sincerely yours,

A handwritten signature in black ink that reads 'Robert L. Caret'.

Robert L. Caret  
Chancellor

### Enclosures

cc: Dr. Jay Perman, President, UMB  
Ms. Dawn Rhodes, Vice President for Administration and Finance, UMB  
Ms. Linda R. Gooden, 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

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

**Agency Response Form**

**Student Financial Aid**

**Finding 1**  
The University of Maryland, Baltimore (UMB) lacked sufficient controls to ensure the propriety of financial aid award adjustments posted to student accounts.

We recommend that UMB establish sufficient procedures and controls to ensure the propriety of all financial aid award adjustments posted to student accounts. Specifically, we recommend that UMB

- a. require adjustment forms to be prepared, approved, and maintained for all manual adjustments to financial aid awards recorded in student accounts; and
- b. generate output reports of manual adjustments (increases and decreases) and independently verify the propriety of the adjustments posted to the system at least on a test basis (repeat).

Agency Response			
<b>Analysis</b>			
Please provide additional comments as deemed necessary.			
<b>Recommendation 1a</b>	Agree	<b>Estimated Completion Date:</b>	6/30/2019
Please provide details of corrective action or explain disagreement.	UMB Financial Aid Office (FAO) processes adjustments and awards manually. FAO Counselors will prepare adjustment forms for all financial aid manual adjustments recorded in student accounts. Forms will also be prepared for manual awards recorded in student accounts except for the awards that are verified for accuracy by schools/departments. These forms will be approved and maintained by the FAO.		
<b>Recommendation 1b</b>	Agree	<b>Estimated Completion Date:</b>	6/30/2019
Please provide details of corrective action or explain disagreement.	System improvements were made by the FAO to enhance tracking and reporting functions. Therefore, output reports of increases and decreases in financial aid manual adjustments will be generated periodically and the propriety of these adjustments will be independently verified on a test basis.		

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

**Agency Response Form**

**Disbursements**

**Finding 2**  
**UMB had not established sufficient procedures and controls to ensure the propriety of certain disbursements, such as honorariums and stipends.**

We recommend that UMB establish adequate procedures and controls to ensure that these disbursements, such as honorariums and stipends, are proper. Specifically, we recommend that UMB

- a. require the request forms to be approved by employees who are independent of and do not have system capabilities related to other disbursement processing functions, and
- b. ensure that these disbursement transactions can only be released for payment by employees who do not have the capability to record them in the disbursement system.

<b>Agency Response</b>			
<b>Analysis</b>			
Please provide additional comments as deemed necessary.			
<b>Recommendation 2a</b>	Agree	<b>Estimated Completion Date:</b>	10/31/2019
Please provide details of corrective action or explain disagreement.	UMB is implementing a new financial system which is expected to go live in October 2019. Under the new financial system, all payment requests will be approved for payment and initiated in the financial system directly by campus department employees who do not have disbursement processing system capabilities. Approved payment requests will be sent through workflow to the payment processors in Accounts Payable. The payment processors will review the documentation and, if the request is adequately supported, will process the payment further. Payment processors will continue to have other disbursement processing functions. Accounts Payable employees will no longer have the ability to initiate payment requests in the new financial system, therefore these employees will not have complete control over the disbursement process.		
<b>Recommendation 2b</b>	Agree	<b>Estimated Completion Date:</b>	10/31/2019
Please provide details of corrective action or explain disagreement.	Accounts Payable employees who have the ability to electronically release disbursement transactions to GAD and certify the paper documents submitted to GAD will not have the ability to initiate/record payment requests into the new financial system. Therefore, as mentioned above, these employees will not have complete control over the disbursement process.		

AUDIT TEAM

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