

Audit Report

---

**University System of Maryland  
Bowie State University**

May 2021

---



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

### **Joint Audit and Evaluation Committee**

Senator Clarence K. Lam, M.D. (Senate Chair)	Delegate Carol L. Krimm (House Chair)
Senator Malcolm L. Augustine	Delegate Steven J. Arentz
Senator Adelaide C. Eckardt	Delegate Mark S. Chang
Senator George C. Edwards	Delegate Nicholas P. Charles II
Senator Katie Fry Hester	Delegate Andrea Fletcher Harrison
Senator Cheryl C. Kagan	Delegate Keith E. Haynes
Senator Benjamin F. Kramer	Delegate David Moon
Senator Cory V. McCray	Delegate April R. Rose
Senator Justin D. Ready	Delegate Geraldine Valentino-Smith
Senator Craig J. Zucker	One Vacancy

### **To Obtain Further Information**

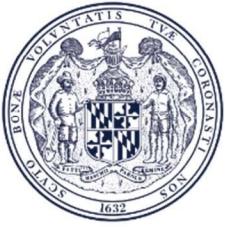
Office of Legislative Audits  
301 West Preston Street, Room 1202  
Baltimore, Maryland 21201  
Phone: 410-946-5900 · 301-970-5900 · 1-877-486-9964 (Toll Free in Maryland)  
Maryland Relay: 711  
TTY: 410-946-5401 · 301-970-5401  
E-mail: [OLAWebmaster@ola.state.md.us](mailto:OLAWebmaster@ola.state.md.us)  
Website: [www.ola.state.md.us](http://www.ola.state.md.us)

### **To Report Fraud**

The Office of Legislative Audits operates a Fraud Hotline to report fraud, waste, or abuse involving State of Maryland government resources. Reports of fraud, waste, or abuse may be communicated anonymously by a toll-free call to 1-877-FRAUD-11, by mail to the Fraud Hotline, c/o Office of Legislative Audits, or through the Office's website.

### **Nondiscrimination Statement**

The Department of Legislative Services does not discriminate on the basis of age, ancestry, color, creed, marital status, national origin, race, religion, gender, gender identity, sexual orientation, or disability in the admission or access to its programs, services, or activities. The Department's Information Officer has been designated to coordinate compliance with the nondiscrimination requirements contained in Section 35.107 of the United States Department of Justice Regulations. Requests for assistance should be directed to the Information Officer at 410-946-5400 or 410-970-5400.



DEPARTMENT OF LEGISLATIVE SERVICES  
OFFICE OF LEGISLATIVE AUDITS  
MARYLAND GENERAL ASSEMBLY

Victoria L. Gruber  
Executive Director

Gregory A. Hook, CPA  
Legislative Auditor

May 12, 2021

Senator Clarence K. Lam, M.D., Senate Chair, Joint Audit and Evaluation Committee  
Delegate Carol L. Krimm, 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) – Bowie State University (BSU) for the period beginning August 29, 2016 and ending April 30, 2020. BSU is a regional university offering a broad range of undergraduate and selected professionally oriented graduate programs.

Our audit disclosed that BSU had not established comprehensive controls over certain financial aid awards and adjustments to student accounts, and that BSU lacked sufficient procedures related to elements of the student refund process, including the safeguarding of sensitive student information. In addition, we found several information system security and control issues, including the lack of a process to ensure that critical user access capabilities on BSU's financial management systems were adequately restricted. Furthermore, sensitive personally identifiable information was maintained without adequate safeguards and identification, and BSU's internal network was not adequately secured. Our audit also disclosed that for certain purchases BSU circumvented procurement requirements and lacked comprehensive controls over invoice review, change order approvals, and manual overrides of automated controls.

Finally, based on our current audit assessment of significance and risk to our audit objectives, our audit also included a review to determine the status of four of the five findings contained in our preceding audit report. We determined that BSU satisfactorily addressed two of these findings. The remaining two findings are repeated in this report.

The USM Office's response to this audit, on behalf of BSU, is included as an appendix to this report. We reviewed the response and noted general agreement to our findings and related recommendations, and while there are other aspects of USM's response which will require further clarification, we do not anticipate these will require the Joint Audit and Evaluation Committee's attention to resolve. Finally, we have edited USM's response to remove certain vendor names or products, as allowed by our policy.

We wish to acknowledge the cooperation extended to us during the audit by BSU. We also wish to acknowledge USM's and BSU's willingness to address the audit issues and 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 prominent initial "G".

Gregory A. Hook, CPA  
Legislative Auditor

## Table of Contents

<b>Background Information</b>	5
Agency Responsibilities	5
Status of Findings From Preceding Audit Report	5
<b>Findings and Recommendations</b>	7
<b>Student Financial Aid and Account Adjustments</b>	
*    Finding 1 – Bowie State University (BSU) did not independently verify certain financial aid awards and manual adjustments to student accounts.	7
<b>Student Refunds</b>	
Finding 2 – BSU did not have sufficient procedures to ensure that valid refund information was transmitted to the vendor responsible for disbursing student refunds, and that the vendor properly issued all refunds and adequately safeguarded sensitive student information.	8
<b>Information Systems Security and Control</b>	
Finding 3 – BSU did not ensure that access to perform critical functions on its financial management systems was adequately restricted.	10
*        Finding 4 – Sensitive personally identifiable information was maintained without adequate safeguards and identification.	11
Finding 5 – Access to critical BSU internal network devices was not properly restricted, and intrusion detection prevention system coverage was not complete or adequate.	12
Finding 6 – Remote access to the internal BSU network by employees and authorized contractors used a single security authentication measure.	13
<b>Procurements and Disbursements</b>	
Finding 7 – For certain purchases, we found BSU circumvented procurement requirements and lacked comprehensive controls over invoice review, change order approvals, and manual overrides of automated controls.	14
* <b>Denotes item repeated in full or part from preceding audit report</b>	

**Audit Scope, Objectives, and Methodology**

16

**Agency Response**

Appendix

## **Background Information**

### **Agency Responsibilities**

Bowie State University (BSU) is a comprehensive public institution of the University System of Maryland (USM) and operates under the jurisdiction of the System's Board of Regents. BSU is a regional university that provides a broad range of undergraduate and selected professionally oriented graduate programs, including doctoral level programs in educational leadership and computer science. According to USM records, student enrollment for the fall 2020 semester totaled 6,250 students, including 5,354 undergraduate students and 896 graduate students. This includes both full-time and part-time students.

BSU's budget is funded by unrestricted revenues, such as tuition and a State general fund appropriation, and restricted revenues, such as federal grants and contracts. According to the State's records, BSU's revenues for fiscal year 2020 totaled approximately \$151.5 million, including a State general fund appropriation of approximately \$48.1 million.

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

Based on our current assessment of significance and risk relative to our audit objectives, our audit included a review to determine the status of four of the five findings contained in our preceding audit report dated October 31, 2017. As disclosed in Figure 1 below, we determined that BSU satisfactory addressed two of these findings. The remaining two findings are repeated in this report.

**Figure 1  
Status of Preceding Findings**

<b>Preceding Finding</b>	<b>Finding Description</b>	<b>Implementation Status</b>
Finding 1	BSU lacked an independent verification of certain financial aid awards, resulting in improper awards of \$54,000 going undetected.	<b>Repeated</b> (Current Finding 1)
Finding 2	BSU paid its building system maintenance and housekeeping service vendors without ensuring that the required level of services were received.	Not repeated
Finding 3	BSU did not verify the propriety of changes to student residency status and did not generate a comprehensive report of such changes to facilitate these verifications.	Not repeated
Finding 4	Sensitive personally identifiable information maintained by BSU was stored without adequate safeguards.	<b>Repeated</b> (Current Finding 4 )
Finding 5	Malware protection for BSU computers was not sufficient to provide BSU with adequate assurance that these computers were properly protected.	Not repeated (not followed up on)



# Findings and Recommendations

## Student Financial Aid and Account Adjustments

### **Finding 1**

**BSU did not independently verify certain financial aid awards and manual adjustments to student accounts.**

### **Analysis**

BSU did not independently verify certain financial aid awards and manual adjustments to student accounts. According to BSU's records, financial aid awards to students totaled approximately \$70.5 million during fiscal year 2019 (\$43.3 million for loans and \$27.2 million for grants and scholarships).

### BSU Did Not Verify Certain Financial Aid Awards and Related Adjustments

- BSU did not independently review scholarship decisions, such as for merit, diversity, and athletic scholarships, forwarded by various BSU departments to the Financial Aid Office for entry into the financial aid system. Our review of the 961 merit and 1,824 diversity grant scholarships awarded by BSU during academic years 2018 through 2020, disclosed that 11 merit scholarships and 7 diversity grant scholarships exceeded BSU's established award limit of \$2,000 by as much as \$4,000. Although we were advised that amounts may be awarded in excess of established limits, BSU did not document the rationale and justification for doing so in the cases we noted. Consequently, there was a lack of assurance that there was a reasonable and considered basis for providing awards in excess of the \$2,000 limit.
- BSU could not provide documentation of any supervisory review and approval of manual adjustments made to system-generated institutional financial aid awards posted to student accounts. Although legitimate reasons exist for making award adjustments (such as, when a student drops classes and is no longer eligible for an award), the adjustments should be subject to independent supervisory review and approval to ensure their propriety. We could not determine the value of these adjustments since BSU did not generate system output reports of the manual adjustments, which could be used by supervisory personnel to review and verify their propriety.

### System Output Reports Were Not Used to Verify Non-cash Credit Adjustments

Available system output reports were not used to independently verify the propriety of non-cash credits processed in student accounts, and no other mitigating controls were in place to effectively ensure that all credits processed

were valid. Consequently, the employee responsible for recording non-cash credits could do so without independent supervisory review and approval. Non-cash credits totaled approximately \$2.5 million in fiscal year 2019. Our test of non-cash credits recorded in student accounts did not disclose any improper credits.

Similar conditions regarding the lack of independent verification of financial aid awards and manual adjustments were noted in our preceding audit report.

### **Recommendation 1**

**We recommend that BSU**

- a. independently verify the propriety of financial aid awards and manual adjustments to financial aid awards using output reports (repeat),**
- b. document the reason and justification for any scholarship or grant award made to a student that exceeds the award limit established by BSU for that scholarship or grant, and**
- c. ensure that non-cash credits recorded in student accounts are independently reviewed and approved using available system output reports.**

### **Student Refunds**

#### **Finding 2**

**BSU did not have sufficient procedures to ensure that valid refund information was transmitted to the vendor responsible for disbursing student refunds, and that the vendor properly issued all refunds and adequately safeguarded sensitive student information.**

#### **Analysis**

BSU did not have sufficient procedures to ensure that valid refund information was transmitted to the vendor responsible for disbursing student refunds, and that the vendor properly issued all refunds and adequately safeguarded sensitive student information. A student is generally eligible for a refund when the student's total account credits (such as payments and financial aid awards) exceed the student's total account charges (such as tuition, fees, and housing). A BSU employee calculated student refunds and transferred the funds weekly to a vendor to issue the refunds to the students.

- One BSU employee had unilateral responsibility for providing the vendor with the refund information including the specific students and the amounts to be refunded. BSU did not have a process to ensure the information submitted by

the employee was accurate or to ensure that the vendor properly issued the student refunds. Although the vendor provided BSU with a confirmation of the refunds issued, BSU did not have a process to confirm that the vendor reported refunds were legitimate and actually disbursed. According to BSU records, student refunds totaled \$20.5 million during fiscal year 2019.

- BSU did not require or obtain an independent review of the automated system used by the vendor to ensure that sensitive student information residing on the vendor's system was properly safeguarded. State law requires that a unit of State government, including a public institution of higher education, or a third-party service provider under contract with the unit shall implement reasonable security procedures and practices to protect personal information. In addition, University System of Maryland (USM) *IT Security Standards* require USM institutions to obtain and review a control assessment report based on such a review performed by a recognized independent audit organization. The *Standards* provide several examples of acceptable reports, including the American Institute of Certified Public Accountants (AICPA) Service Organization Control (SOC) 2 Type 2 report.

The AICPA has issued guidance for various reviews of service organizations. Based on this guidance, service organizations (like the aforementioned vendor) may contract for an independent review of controls and the resultant independent auditor's report is referred to as a SOC report. There are several types of SOC reports, with varying scopes and levels of review and auditor testing. The aforementioned SOC 2 Type 2 report includes the results of the auditor's review of controls placed in operation and tests of operating effectiveness for the period under review and could include an evaluation of system security, availability, processing integrity, confidentiality, and/or privacy.

In response to our request, the vendor provided a SOC 1, Type 2 report, which it had obtained. However, SOC 1 reports are generally intended to focus on service organization controls relevant to financial reporting for user entities and would not provide BSU the degree of assurances necessary for confirming the security of sensitive student information. BSU advised us that it subsequently obtained from the vendor a SOC 2 Type 2 report.

## **Recommendation 2**

**We recommend that BSU**

- a. establish procedures to independently verify that accurate refund information is provided to the vendor;**
- b. ensure, at least on a test basis, that the vendor properly issued the student**

- refunds; and
- c. **comply with State law and USM *IT Security Standards* by periodically requiring, obtaining, and reviewing a control assessment report, such as a SOC 2 Type 2 report, to ensure sensitive student information provided to the vendor is properly safeguarded.**

## **Information Systems Security and Control**

### **Background**

BSU's Division of Information Technology provides information technology support to BSU through the operation and maintenance of campus-wide applications, such as the student administration, human resources, and financial management systems. BSU also operates an integrated administrative and academic computer network, which provides connections to multiple servers used for administrative and academic purposes. The network includes separate email and file servers, intrusion detection systems, and firewalls. BSU's network also connects to the Maryland Research and Education Network to send and receive data to and from other USM institutions and for internet connectivity. Students are provided limited access to BSU's network from dormitories and computer labs.

### **Finding 3**

**BSU did not ensure that access to perform critical functions on its financial management systems was adequately restricted.**

### **Analysis**

BSU did not ensure that access to perform critical functions within its financial management systems was adequately restricted. Specifically, BSU did not take action to eliminate unnecessary or incompatible access granted to certain employees that was included on quarterly reports of user access provided to management personnel for their review during calendar year 2020. We reviewed system capabilities assigned to 144 users for 42 critical functions related to student financial aid, student accounts, payroll and human resources, and procurements and disbursements and noted the following conditions.

- Four individuals who left BSU employment between October 2019 and May 2020 still had access to BSU information systems as of October 2020. For example, one former employee who left BSU in December 2019 still had access to change residency status.

- Thirteen employees had access to critical screens in financial aid, student accounts, or payroll and human resources, even though they did not require the access to perform their job duties. For example, 4 users who did not work in the Financial Aid Office had inappropriate or unnecessary access to change the federal verification status for such aid.
- Nineteen users, including 2 with access to critical screens noted above, had access to process critical student financial aid, student accounts, or procurements and disbursements transactions without independent approval. For example, 11 employees responsible for verifying the propriety of federal financial aid applications could also modify the financial data used to determine aid eligibility without independent approval.

### **Recommendation 3**

**We recommend that BSU**

- a. use available output reports to monitor user access to critical functions on its financial management systems; and**
- b. terminate any incompatible or unnecessary access, including those noted above.**

### **Finding 4**

**Sensitive personally identifiable information (PII) was maintained without adequate safeguards and identification.**

### **Analysis**

Sensitive personally identifiable information (PII) was maintained without adequate safeguards and identification. BSU operated a computer system which contained a significant amount of sensitive PII. As of July 2020, we noted that this system's database included 174,748 unique sensitive information records, which were maintained in a manner that made the information vulnerable to improper disclosure. This sensitive PII was properly accessible via two assigned employee accounts and a system account. BSU personnel advised us that this sensitive PII was subject to one form of a mitigating security control; however, it was not comprehensive.

Furthermore, although BSU had procedures for performing automated scanning of workstations for PII identification, it had not manually inventoried its applications nor completed similar scanning of its servers to achieve complete identification of PII across its entire IT environment. Detailed sensitive aspects of this finding were omitted from this report, however the related detailed information was

previously shared with BSU for purposes of implementing the following recommendations.

Similar conditions were commented upon in our preceding audit report. *USM IT Security Standards* state that USM institutions must protect confidential data while the data are in transit or at rest on any media.

#### **Recommendation 4**

**We recommend that BSU**

- a. perform an inventory of all of its systems, identify all sensitive PII, and delete all unnecessary sensitive PII (repeat); and**
- b. implement appropriate information security safeguards for the sensitive PII it maintains (repeat).**

#### **Finding 5**

**Access to critical BSU internal network devices was not properly restricted and intrusion detection prevention system coverage was not complete or adequate.**

#### **Analysis**

Access to critical BSU internal network devices was not properly restricted and intrusion detection prevention system (IDPS) coverage was not complete or adequate.

- Certain rules on the BSU network's firewalls allowed unnecessary network level access to critical internal network devices. Some of these rules involved virtual private network (VPN) connections, with access allowed to a broad range of users via specific services, despite the access being needed by only responsible information technology staff. Another rule granted excessive access from the student computer labs and the neutral public network zone servers to the entire administrative network and certain critical servers, via multiple services. This rule's intent was to ensure needed connectivity, but excessive access occurred as a result. The *USM IT Security Standards* state that firewalls should be configured to block all unneeded services, prevent direct access to hosts on trusted network from untrusted networks, and maintain comprehensive audit trails.
- Network-based IDPS inspection coverage did not exist for substantial amounts of untrusted traffic entering the BSU network. Specifically, we identified 22 firewall rules without defined network IDPS coverage applied that allowed traffic from the internet, BSU's neutral public network zone, and

other untrusted sources to certain BSU internal and neutral public network destinations. The lack of network IDPS coverage for this untrusted traffic creates a security risk as such traffic could contain undetected malicious data. The USM *IT Security Standards* require that institutions establish automated and manual processes for intrusion detection and/or prevention systems and state that host-based, network-based, or a combination of both systems may be utilized.

### **Recommendation 5**

**We recommend that BSU**

- a. configure its firewalls to properly protect all critical network devices, and**
- b. perform a documented review and assessment of its network security risks and identify how IDPS coverage should be best applied to its network and implement this coverage for traffic from all untrusted parties.**

### **Finding 6**

**Remote access to the internal BSU network by employees and authorized contractors used a single authentication measure.**

### **Analysis**

Employees' and authorized contractors' remote access to BSU's internal network, using a VPN connection, required a stronger security authentication measure than we found was in place during the audit. During our review, we were advised that approximately 170 individuals used such VPN-based remote network access.

These remote VPN connections into BSU's internal network did not require multi-factor authentication (MFA) for establishing access, and instead, access was provided based upon only single factor authentication. MFA uses two or more different credential factors to authenticate user network connections. Access to critical networks and resources requires layers of security protections which include use of MFA, to help prevent security risks tied to compromised user credentials.

Best practices, as specified in the State of Maryland *Information Technology Security Manual*, require that Maryland agencies must ensure that MFA mechanisms are employed for all remote access to networks.

### **Recommendation 6**

**We recommend that BSU implement multi-factor authentication for remote connections into the BSU network by employees and authorized contractors.**

## Procurements and Disbursements

### **Finding 7**

**For certain purchases, we found BSU circumvented procurement requirements and lacked comprehensive controls over invoice review, change order approvals, and manual overrides of automated controls.**

### **Analysis**

BSU split certain purchases circumventing USM and BSU procurement requirements and spending limits, did not verify rates charged on certain vendor invoices, and did not obtain required approvals for certain change orders. BSU also did not verify the propriety of manual overrides of automated procurement and disbursement controls.

- BSU artificially split certain purchases circumventing certain USM and BSU purchasing requirements and spending limits. Our test of 11 purchase orders totaling approximately \$1.1 million, disclosed that two purchase orders totaling \$193,595 and \$22,790 respectively, were issued to the same vendor on the same day, for essentially the same service (parking lot improvements). As a result, these purchases were made using the competitive simplified procurement process rather than competitive sealed procurement as required by USM policy for purchases of \$200,000 or more. USM's *Procurement Policies and Procedures* require that procurements not be artificially divided to create simplified procurements, which are defined as procurements under \$200,000. Disbursements to this vendor totaled \$346,360 during fiscal year 2020.

In addition, our review of two or more corporate purchasing card transactions totaling \$46,720 processed by the same cardholders on the same day from the same vendor identified two instances in which purchases were split into two smaller transactions circumventing BSU's single transaction spending limit at the time of \$3,000<sup>1</sup>. One set of purchases totaled \$5,253 and the other \$3,048. The remaining purchases totaling \$38,419 were all determined to be separate transactions.

- BSU did not compare rates invoiced by its food service vendor to the related rates specified in the vendor's contract. Our review of three fiscal year 2019 invoices totaling \$334,000 disclosed that certain rates invoiced and paid by BSU on all three invoices appeared to exceed the corresponding rates in the contract by approximately \$32,000. We were advised by BSU that the higher

---

<sup>1</sup> Limit was subsequently raised to \$5,000, effective July 1, 2019.



invoiced rates had been negotiated with the vendor to provide certain modifications to the contracted services. However, these changes were made without a formal change order to modify the contract as required by BSU's *Procurement Policy and Procedures*. BSU paid the vendor approximately \$4.8 million in fiscal year 2019.

- Our test of five procurements totaling \$26.7 million disclosed that change orders totaling \$120,000 processed by BSU units on two contracts totaling \$7.6 million were not submitted to the BSU Procurement Office for approval as required by BSU's *Procurement Policy and Procedures*.
- BSU did not verify the propriety of manual overrides of certain automated controls over procurements and disbursements. BSU's automated system performed certain matches of critical documents to help ensure the transactions were proper. For example, the system matched selected purchase order data to the corresponding invoice data prior to invoice payment. Our review disclosed that during our audit period certain employees processed manual overrides of these controls for 396 transactions totaling approximately \$1.2 million without any supervisory review and approval. Although there may be legitimate reasons for overriding these system controls, such as adjustments made to the invoice for vendor credits not reflected on the purchase order, manual overrides should be reviewed and approved by supervisory personnel prior to payment of the invoice. We reviewed approximately \$431,000 of the aforementioned \$1.2 million and found the transactions to be valid.

#### **Recommendation 7**

**We recommend that BSU**

- a. discontinue splitting purchases and ensure they are made in accordance with established USM and BSU requirements and spending limits,**
- b. verify rates invoiced by vendors to the applicable contract rates,**
- c. prepare required change orders for contract modifications and obtain required approvals for all change orders including those noted above, and**
- d. ensure that manual overrides of system controls are reviewed and approved by supervisory personnel.**

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

We have conducted a fiscal compliance audit of the University System of Maryland (USM) – Bowie State University (BSU) for the period beginning August 29, 2016 and ending April 30, 2020. 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 BSU'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, student financial aid, and corporate purchasing cards. The scope of the work performed in each of these areas was based on our assessments of significance and risk. Therefore, our follow-up on the status of the findings included in our preceding audit report was limited to those findings that were applicable to the current audit scope for each area.

Our audit did not include certain support services provided to BSU by the USM Office, such as bond financing, or by the University of Maryland, College Park (UMCP), which provided capital project management. These support services are included within the scope of our audits of the USM Office and UMCP, respectively. 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 BSU'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.

Our assessment of internal controls was based on agency procedures and controls in place at the time of our fieldwork. Our test of transactions and other auditing procedures were generally focused on the transactions occurring during our audit

period of August 29, 2016 to April 30, 2020, but may include transactions before or after this period as we considered necessary to achieve our audit objectives.

To accomplish our audit objectives, our audit procedures included inquiries of appropriate personnel, inspections of documents and records, tests of transactions, and to the extent practicable, observations of BSU's operations. 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 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). These 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 BSU'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.

BSU'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. As provided in *Government Auditing Standards*, there are five components of internal control: control environment, risk assessment, control activities, information and communication, and monitoring. Each of the five components, when significant to the audit objectives, and as applicable to BSU, were considered by us during the course of this audit.

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 BSU'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 BSU that did not warrant inclusion in this report.

The response from the USM Office, on behalf of BSU 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.

---

OFFICE OF THE CHANCELLOR

May 7, 2021

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 – Bowie State University  
Period of Audit: August 29, 2016 through April 30, 2020

Dear Mr. Hook:

Thank you for the work of your team and the recommendations you provided. 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 – Bowie State University. Our comments refer to the individual items in the report.

Sincerely yours,



Jay A. Perman  
Chancellor

Enclosures

cc: Dr. Aminta Breaux., President, Bowie State University  
Mr. Anthony Savia, Vice President, Administration and Finance, Bowie State University  
Mr. Wayne Felder, Controller, Bowie State University  
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  
Bowie State University**

**Agency Response Form**

**Student Financial Aid and Account Adjustments**

**Finding 1**  
**BSU did not independently verify certain financial aid awards and manual adjustments to student accounts.**

**We recommend that BSU**

- a. independently verify the propriety of financial aid awards and manual adjustments to financial aid awards using output reports (repeat),**
- b. document the reason and justification for any scholarship or grant award made to a student that exceeds the award limit established by BSU for that scholarship or grant, and**
- c. ensure that non-cash credits recorded in student accounts are independently reviewed and approved using available system output reports.**

<b>Agency Response</b>	
<b>Analysis</b>	
<p><b>Please provide additional comments as deemed necessary.</b></p>	<p>Prior to posting awards, including merit, and athletic scholarships submitted by various departments, the scholarship coordinator/assistant director reviews the awards to ensure that students have not exceeded the cost of attendance. Diversity/Institutional awards are awarded automatically through our system according to the criteria of being a first-generation student with a specific EFC.</p> <p>Awards are made in excess of the established amounts based on the professional judgement of the Director, Assistant Vice President, and Vice President of Enrollment Management. Professional judgment (PJ) is at the discretion of the financial aid administrator (FAA) and the school. In general, the FAA should use his or her own PJ decision by determining what will best address an unusual circumstance faced by a student.</p> <p>Additional guidance posted on Information for Financial Aid Professionals dated 3/05/2020 from the Office of Post-Secondary Education reiterates the following explanation on using professional judgement: Financial aid administrators (FAA) have statutory authority to use professional judgment to make adjustments on a case-by-case basis to the cost of attendance or the data elements used to calculate the EFC to reflect a student’s special circumstances; documentation must</p>

**University System of Maryland  
Bowie State University**

**Agency Response Form**

	<p>substantiate the reason for any adjustment. Institutions are reminded that regardless of how broadly an event may affect its student population, professional judgement determinations must be made and documented on a case-by-case basis.</p> <p>All awards above the criteria were made utilizing professional judgement and in accordance with the Department of Education regulations.</p>		
<b>Recommendation 1a</b>	Agree	<b>Estimated Completion Date:</b>	March 2021
<b>Please provide details of corrective action or explain disagreement.</b>	BSU will independently verify the propriety of financial aid awards and manual adjustments to financial aid awards using output reports.		
<b>Recommendation 1b</b>	Agree	<b>Estimated Completion Date:</b>	Immediately
<b>Please provide details of corrective action or explain disagreement.</b>	BSU will continue to apply professional judgement to adjust student awards on a case-by-case basis for special circumstances. When established award limits are exceeded the reason and justification will be documented.		
<b>Recommendation 1c</b>	Agree	<b>Estimated Completion Date:</b>	February 2021
<b>Please provide details of corrective action or explain disagreement.</b>	We have modified the system output report so that all non-cash credit transactions are captured. The report will be independently reviewed and approved monthly.		

**University System of Maryland  
Bowie State University**

**Agency Response Form**

**Student Refunds**

**Finding 2**  
**BSU did not have sufficient procedures to ensure that valid refund information was transmitted to the vendor responsible for disbursing student refunds, and that the vendor properly issued all refunds and adequately safeguarded sensitive student information.**

We recommend that BSU

- a. establish procedures to independently verify that accurate refund information is provided to the vendor;
- b. ensure, at least on a test basis, that the vendor properly issued the student refunds; and
- c. comply with State law and *USM IT Security Standards* by periodically requiring, obtaining, and reviewing a control assessment report, such as a SOC 2 Type 2 report, to ensure sensitive student information provided to the vendor is properly safeguarded.

Agency Response			
<b>Analysis</b>			
<b>Please provide additional comments as deemed necessary.</b>			
<b>Recommendation 2a</b>	Agree	<b>Estimated Completion Date:</b>	February 2021
<b>Please provide details of corrective action or explain disagreement.</b>	We have established new procedures to ensure that an independent staff member verifies that accurate refund information is provided to the vendor.		
<b>Recommendation 2b</b>	Agree	<b>Estimated Completion Date:</b>	February 2021
<b>Please provide details of corrective action or explain disagreement.</b>	On a test basis, an independent staff will ensure that the vendor properly issued the student refunds. The verification process will be documented, and the documentation will be maintained.		
<b>Recommendation 2c</b>	Agree	<b>Estimated Completion Date:</b>	Completed
<b>Please provide details of corrective action or explain disagreement.</b>	BSU has a process in place to request and review SOC 2 Type 2 reports from 3rd-party cloud vendors that we share confidential information with. BSU will ensure that this process is always complied with when contracting 3rd-party cloud vendors if confidential information will be shared. The referenced vendor provided us with the required SOC 2 Type 2 report in February 2021.		



**University System of Maryland  
Bowie State University**

**Agency Response Form**

**Information Systems Security and Control**

**Finding 3**  
**BSU did not ensure that access to perform critical functions on its financial management systems was adequately restricted.**

**We recommend that BSU**

- a. use available output reports to monitor user access to critical functions on its financial management systems; and**
- b. terminate any incompatible or unnecessary access, including those noted above.**

<b>Agency Response</b>			
<b>Analysis</b>			
<b>Please provide additional comments as deemed necessary.</b>			
<b>Recommendation 3a</b>	Agree	<b>Estimated Completion Date:</b>	May 2021
<b>Please provide details of corrective action or explain disagreement.</b>	We will continue to provide quarterly user access reports to management personnel and ensure the reports are used to monitor and correct user access to critical system functions.		
<b>Recommendation 3b</b>	Agree	<b>Estimated Completion Date:</b>	May 2021
<b>Please provide details of corrective action or explain disagreement.</b>	We will ensure that the necessary actions are taken to terminate any incompatible and unnecessary user access.		

**University System of Maryland  
Bowie State University**

**Agency Response Form**

**Finding 4**  
Sensitive personally identifiable information (PII) was maintained without adequate safeguards and identification.

We recommend that BSU

- a. perform an inventory of all of its systems, identify all sensitive PII, and delete all unnecessary sensitive PII (repeat); and
- b. implement appropriate information security safeguards for the sensitive PII it maintains (repeat).

Agency Response			
<b>Analysis</b>			
<b>Please provide additional comments as deemed necessary.</b>			
<b>Recommendation 4a</b>	Agree	<b>Estimated Completion Date:</b>	December 2021
<b>Please provide details of corrective action or explain disagreement.</b>	BSU is currently under contract with our DLP vendor to carry out agentless inventorying and PII scanning of our servers. We also currently have processes in place for the retention of PII on end-user devices. BSU will apply existing processes used for end-user devices to our server environment to address the retention of unnecessary sensitive PII. Agentless scans of servers will be tested before the end of April 2021		
<b>Recommendation 4b</b>	Agree	<b>Estimated Completion Date:</b>	December 2021
<b>Please provide details of corrective action or explain disagreement.</b>	BSU recently purchased a tool that has gone through initial testing and we are in the process of completing a staggered roll-out of this tool to devices containing confidential information.		

**University System of Maryland  
Bowie State University**

**Agency Response Form**

**Finding 5**

**Access to critical BSU internal network devices was not properly restricted and intrusion detection prevention system coverage was not complete or adequate.**

**We recommend that BSU**

- a. configure its firewalls to properly protect all critical network devices, and**
- b. perform a documented review and assessment of its network security risks and identify how IDPS coverage should be best applied to its network and implement this coverage for traffic from all untrusted parties.**

<b>Agency Response</b>			
<b>Analysis</b>			
<b>Please provide additional comments as deemed necessary.</b>			
<b>Recommendation 5a</b>	Agree	<b>Estimated Completion Date:</b>	May 2021
<b>Please provide details of corrective action or explain disagreement.</b>	BSU has an on-going project to address firewall rules. BSU will continue to review and refine our firewall rules. Specifically, we will refine the referenced firewall rules to ensure that least privilege access is implemented to effectively protect the BSU network infrastructure.		
<b>Recommendation 5b</b>	Agree	<b>Estimated Completion Date:</b>	March 2021
<b>Please provide details of corrective action or explain disagreement.</b>	BSU has remediated this finding and configured groups to ensure IDPS is applied to new policies.		

**University System of Maryland  
Bowie State University**

**Agency Response Form**

**Finding 6**

**Remote access to the internal BSU network by employees and authorized contractors used a single authentication measure.**

**We recommend that BSU implement multi-factor authentication for remote connections into the BSU network by employees and authorized contractors.**

<b>Agency Response</b>			
<b>Analysis</b>			
<b>Please provide additional comments as deemed necessary.</b>			
<b>Recommendation 6</b>	Agree	<b>Estimated Completion Date:</b>	December 2021
<b>Please provide details of corrective action or explain disagreement.</b>	BSU is currently pushing out MFA for campus resources in a staggered format.		

**University System of Maryland  
Bowie State University**

**Agency Response Form**

**Procurements and Disbursements**

**Finding 7**  
For certain purchases, we found BSU circumvented procurement requirements and lacked comprehensive controls over invoice review, change order approvals, and manual overrides of automated controls.

We recommend that BSU

- a. **discontinue splitting purchases and ensure they are made in accordance with established USM and BSU requirements and spending limits,**
- b. **verify rates invoiced by vendors to the applicable contract rates,**
- c. **prepare required change orders for contract modifications and obtain required approvals for all change orders including those noted above, and**
- d. **ensure that manual overrides of system controls are reviewed and approved by supervisory personnel.**

<b>Agency Response</b>			
<b>Analysis</b>			
Please provide additional comments as deemed necessary.			
<b>Recommendation 7a</b>	Agree	<b>Estimated Completion Date:</b>	Immediately
Please provide details of corrective action or explain disagreement.	<p>During the time-period of this Audit, Bowie State University Buyers were assigned purchase requisition processing responsibilities based on the “dollar amount” of each purchase requisition. Therefore, Buyers were not aware of situations when one department submitted multiple purchase requisitions for the same project, artificially splitting purchases, and circumventing BSU purchasing requirements and spending limits.</p> <p>Buyers are now assigned requisition processing responsibilities based on “individual departments”. Each Buyer is responsible for processing all purchase requisitions for a specific department. This will prevent artificially splitting of purchases, and circumventing BSU purchasing requirements and spending limits.</p> <p>During the time-period of this Audit, the Bowie State University Corporate Purchasing Card (CPC) Coordinator was monitoring “all CPC Transactions” looking for suspicious activity; to better identify instances</p>		

**University System of Maryland  
Bowie State University**

**Agency Response Form**

	in which purchases are split into smaller transactions circumventing the BSU single transaction spending limit. The CPC Coordinator is now monitoring on a routine basis all “Individual Cardholder’s Transactions” as well. This process will increase the probability that the CPC Coordinator will be able to identify split purchases.		
<b>Recommendation 7b</b>	Agree	<b>Estimated Completion Date:</b>	Immediately
<b>Please provide details of corrective action or explain disagreement.</b>	<p>The rates paid to the food service vendor were modified due to changes made to the meal plans. Specifically, the meal plans were changed, and new prices were negotiated to fall in line with the overall rate structure. With a modification in meal plans to offer more to the students (more flex dollars or more meals), the corresponding price charged by the vendor would increase. The action resulted in no overpayment to the vendor. However, the new amount should have been noted as an amendment to the contract along with a listing of the new meal plans.</p> <p>We will ensure that rates invoiced by vendors are verified to the applicable contract rates, including those noted in the audit.</p>		
<b>Recommendation 7c</b>	Agree	<b>Estimated Completion Date:</b>	Immediately
<b>Please provide details of corrective action or explain disagreement.</b>	<p>The BSU Procurement Office will provide written notification to all campus units responsible for managing contracts stating that in accordance with BSU Procurement Policy and Procedures, the Procurement Office is the only campus unit with authority to approve Change Orders. Therefore, Contract Managers cannot and should not unilaterally authorize any changes to contracts without the prior written approval (Change Order) of the BSU Procurement Office.</p>		
<b>Recommendation 7d</b>	Agree	<b>Estimated Completion Date:</b>	August 2021
<b>Please provide details of corrective action or explain disagreement.</b>	<p>Many of the overrides are necessary only because the system payment processing controls are too restrictive. We will review the system controls to ensure that they are appropriately configured. Once the controls are adjusted, we will ensure that all overrides are reviewed and approved by supervisory personnel.</p>		

AUDIT TEAM

**Adam J. Westover, CPA**  
Audit Manager

**R. Brendan Coffey, CPA, CISA**  
**Edwin L. Paul, CPA, CISA**  
Information Systems Audit Managers

**Lauren E. Franchak, CPA**  
Senior Auditor

**Edward O. Kendall, CISA**  
**Matthew D. Walbert, CISA**  
Information Systems Senior Auditors

**Tyshawna J. Ford**  
**Shantasia S. Johnson**  
**Dianne P. Ramirez**  
Staff Auditors

**Dominick R. Abril**  
**Peter W. Chong**  
**Charles O. Price**  
Information Systems Staff Auditors