Audit Report

Maryland Longitudinal Data System Center

October 2023

Public Notice

In compliance with the requirements of the State Government Article Section 2-1224(i), of the Annotated Code of Maryland, the Office of Legislative Audits has redacted cybersecurity findings and related auditee responses from this public report.
Joint Audit and Evaluation Committee

Senator Clarence K. Lam, M.D. (Senate Chair)  Delegate Jared Solomon (House Chair)
Senator Joanne C. Benson  Delegate Steven J. Arentz
Senator Paul D. Corderman  Delegate Nicholas P. Charles II
Senator Katie Fry Hester  Delegate Andrea Fletcher Harrison
Senator Shelly L. Hettleman  Delegate Steven C. Johnson
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Senator Cory V. McCray  Delegate David Moon
Senator Justin D. Ready  Delegate Julie Palakovich Carr
Senator Bryan W. Simonaire  Delegate Stephanie M. Smith
Senator Craig J. Zucker  Delegate M. Courtney Watson

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October 16, 2023

Senator Clarence K. Lam, M.D., Senate Chair, Joint Audit and Evaluation Committee
Delegate Jared Solomon, 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 Maryland Longitudinal Data System Center for the period beginning December 3, 2018 and ending October 31, 2022. The Center is responsible for overseeing and maintaining the Maryland Longitudinal Data System, a statewide data system that contains individual-level student and workforce data from all levels of education and the State’s workforce. The Center is tasked with managing and analyzing these data to determine how students are performing and the extent to which students are prepared for higher education and the workforce.

Our audit disclosed a cybersecurity-related finding. However, in accordance with the State Government Article, Section 2-1224(i) of the Annotated Code of Maryland, we have redacted the finding from this audit report. Specifically, State law requires the Office of Legislative Audits to redact cybersecurity findings in a manner consistent with auditing best practices before the report is made available to the public. The term “cybersecurity” is defined in the State Finance and Procurement Article, Section 3.5-301(b), and using our professional judgment we have determined that the redacted finding falls under the referenced definition. The specifics of the cybersecurity finding were previously communicated to those parties responsible for acting on our recommendations.

The Center’s redacted response to this cybersecurity finding is included as an appendix to this report; however, in accordance with State law, we have reviewed
the original response to our finding 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 the Center and its willingness to address the audit issues and implement appropriate corrective actions.

Respectfully submitted,

[Signature]

Gregory A. Hook, CPA
Legislative Auditor
Background Information

Agency Responsibilities

The Maryland Longitudinal Data System Center is an independent unit of State government under the direction of a 15-member governing board. The Center is responsible for overseeing and maintaining the Maryland Longitudinal Data System, a statewide data system that contains individual-level student and workforce data from all levels of education and the State’s workforce. The Center is tasked with managing and analyzing these data to help determine how students are performing and the extent to which students are prepared for higher education and the workforce. The Center conducts research to improve the State’s education system and to guide decision-making by State and local governments, educational agencies, institutions, teachers, and other educational professionals.

The Center obtains and analyzes data through collaboration with the following 10 State entities:

1. Maryland State Department of Education
2. Maryland Higher Education Commission
3. Maryland Department of Labor
4. Department of Juvenile Services
5. Department of Human Services
6. Maryland Department of Health - Health Occupation Boards and Commissions
7. Morgan State University – School of Education and Urban Studies
8. University of Maryland, Baltimore - School of Social Work
9. University of Maryland, College Park - College of Education
10. University of Maryland, Baltimore County – School of Public Policy.

As of November 2022, the Center had collected data for school years 2008 through 2021 and was continuing to collect data for subsequent periods. According to the State’s records, during fiscal year 2022, the Center’s expenditures totaled approximately $2.5 million (See Figure 1 on following page).
Findings and Recommendations

Information Systems and Security Control

We determined that Finding 1 related to “cybersecurity”, as defined by the State Finance and Procurement Article, Section 3.5-301(b) of the Annotated Code of Maryland, and therefore is subject to redaction from the publicly available audit report in accordance with the State Government Article 2-1224(i). Consequently, the specifics of the following finding, including the analysis, related recommendation(s), along with the Center’s responses, have been redacted from this report copy.

Finding 1
Redacted cybersecurity-related finding.
Audit Scope, Objectives, and Methodology

We have conducted a fiscal compliance audit of the Maryland Longitudinal Data System Center for the period beginning December 3, 2018 and ending October 31, 2022. 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 the Center’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 interagency agreements with institutions of higher education and related disbursements, and information technology systems. Our audit did not include certain support services provided to the Center by the Maryland State Department of Education (MSDE). These support services (such as payroll processing, purchasing, maintenance of accounting records, and related fiscal functions) are included within the scope of our audit of MSDE. Our assessment of internal controls was based on agency procedures and controls in place at the time of our fieldwork. Our tests of transactions and other auditing procedures were generally focused on the transactions occurring during our audit period of December 3, 2018 to October 31, 2022, 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 the Center’s operations. Generally, transactions were selected for testing based on auditor judgment, which primarily considers risk, the timing or dollar amount of the transaction, or the significance of the transaction to the area of operation reviewed. As a matter of course, we do not normally use sampling in our tests, so unless otherwise specifically indicated, neither statistical nor non-statistical audit sampling was used to select the transactions tested. Therefore, unless sampling is specifically indicated in a finding, the results from any tests conducted or disclosed by us 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). 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. 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.

The Center’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 the Center, 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 a finding relating to conditions that we consider to be significant deficiencies in the design or operation of internal control that could adversely affect the Center’s ability to maintain reliable financial records, operate effectively and efficiently, and/or comply with applicable laws, rules, and regulations. This finding is also considered a significant instance of noncompliance with applicable laws, rules, or regulations.
State Government Article Section 2-1224(i) requires that we redact in a manner consistent with auditing best practices any cybersecurity findings before a report is made available to the public. This results in the issuance of two different versions of an audit report that contains cybersecurity findings – a redacted version for the public and an unredacted version for government officials responsible for acting on our audit recommendations.

The State Finance and Procurement Article, Section 3.5-301(b), states that cybersecurity is defined as “processes or capabilities wherein systems, communications, and information are protected and defended against damage, unauthorized use or modification, and exploitation”. Based on that definition, and in our professional judgment, we concluded that the finding in this report falls under that definition. Consequently, for the publicly available audit report all specifics as to the nature of the cybersecurity finding and required corrective actions have been redacted. We have determined that such aforementioned practices, and government auditing standards, support the redaction of this information from the public audit report. The specifics of the cybersecurity finding has been communicated to the Center and those parties responsible for acting on our recommendation in an unredacted audit report.

The response from the Center to our finding and recommendation is included as an appendix to this report. Depending on the version of the audit report, responses to any cybersecurity findings may be redacted in accordance with State law. As prescribed in State Government Article, Section 2-1224 of the Annotated Code of Maryland, we will advise the Center regarding the results of our review of its response.
October 13, 2023

Gregory Hook, Legislative Auditor
Office of Legislative Audits
351 West Camden Street, Suite 400
Baltimore, MD 21201

Dear Mr. Hook,

Enclosed are the Maryland Longitudinal Data System Center’s responses to the Legislative Auditor’s current audit of the MLDSC for the period beginning December 3, 2018 and ending October 31, 2022.

An electronic version was forwarded by email. If you have any questions or need additional information please feel contact me\(^1\) or Ms. Tejal Cherry, MLDS Center Chief Information Officer.\(^2\)

Sincerely,

Ross Goldstein
Executive Director

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Information Systems and Security Control

The Office of Legislative Audits (OLA) has determined that Finding 1 related to “cybersecurity”, as defined by the State Finance and Procurement Article, Section 3.5-301(b) of the Annotated Code of Maryland, and therefore is subject to redaction from the publicly available audit report in accordance with the State Government Article 2-1224(i). Although the specifics of the finding, including the analysis, related recommendations, along with the Center’s responses, have been redacted from this report copy, the Center’s responses indicated agreement with the finding and related recommendations.

Finding 1
Redacted cybersecurity-related finding.

Agency Response has been redacted by OLA.
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