

Audit Report

Comptroller of Maryland Information Technology Division Annapolis Data Center and Network Operations

April 2024

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.



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DEPARTMENT OF LEGISLATIVE SERVICES
MARYLAND GENERAL ASSEMBLY**

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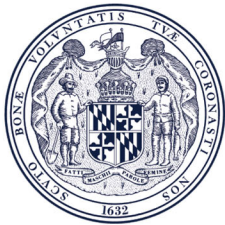
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Victoria L. Gruber
Executive Director

DEPARTMENT OF LEGISLATIVE SERVICES
OFFICE OF LEGISLATIVE AUDITS
MARYLAND GENERAL ASSEMBLY

Gregory A. Hook, CPA
Legislative Auditor

April 22, 2024

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 audited the Comptroller of Maryland (COM) – Information Technology Division (ITD). ITD operates the Annapolis Data Center which provides computing resources and operates as a computer services bureau for COM and other customer agencies. ITD also operates an internal network that provides services including internet, Statewide Government Intranet (SwGI), and remote access, and file sharing to all COM divisions and offices. This audit represents the second of two fiscal compliance audits of the ITD and consists of an internal control review of the data center and network administered by ITD. Our audit did not include ITD's fiscal operations which are audited separately by us and are reported upon in an audit report of the same name.

Our audit disclosed certain cybersecurity-related findings. However, in accordance with the State Government Article, Section 2-1224(i) of the Annotated Code of Maryland, we have redacted the findings 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 findings fall under the referenced definition. The specifics of the cybersecurity findings were previously communicated to those parties responsible for acting on our recommendations.

Our audit also included a review to determine the status of the four findings contained in our preceding audit report. However, since these are cybersecurity-related findings, the current status of these findings has been redacted.

COM's response to this audit, on behalf of ITD, is included as an appendix to this report; however, consistent with the requirements of State law, we have redacted all elements of COM's response since they are related to the cybersecurity findings. 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 ITD. We also wish to acknowledge COM's and ITD'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, flowing style.

Gregory A. Hook, CPA
Legislative Auditor

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Background Information

Agency Responsibilities

The Information Technology Division (ITD) operates the Annapolis Data Center as a computer service bureau, and all operating costs are reimbursed by user agencies that are charged for services performed. ITD also develops and maintains application systems for agencies under the Comptroller of Maryland (COM) and provides data center disaster recovery capabilities. Additionally, ITD maintains the mainframe operating system and security software environment in which many agency applications are executed. Some of the applications supported by ITD include the State's integrated tax system (COMPASS¹), the State's payroll systems, the State's Financial Management Information System, and the State's Medicaid Management Information System.

ITD operates an internal network that provides services, including internet and statewide intranet access, email, and file sharing, to all divisions and offices of COM. According to the State's records, ITD fiscal year 2022 expenditures totaled \$42 million.

Status of Findings From Preceding Audit Report

Our audit included a review to determine the status of the four findings contained in our preceding audit report dated July 27, 2020. However, since these are cybersecurity-related findings, the current status of these findings has been redacted.

¹ COMPASS is the State's new integrated tax system being implemented over several years in four phases to replace its legacy mainframe tax system, SMART. The first and second phases were launched in July 2020 and February 2021, respectively.

Findings and Recommendations

Information Technology

We determined that the Information Technology section, including Findings 1 through 3 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 are 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 findings, including the analysis, related recommendations, along with COM’s responses, have been redacted from this report copy.

Finding 1
Redacted cybersecurity-related finding.

Finding 2
Redacted cybersecurity-related finding.

Finding 3
Redacted cybersecurity-related finding.

Audit Scope, Objectives, and Methodology

We have audited the Comptroller of Maryland (COM) – Information Technology Division (ITD). Fieldwork associated with our audit of ITD was conducted during the period from February 2022 to January 2023. 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 ITD's internal control over the Annapolis Data Center and the COM network and to evaluate its compliance with applicable State laws, rules, and regulations for the computer systems that support COM and ITD data center user agencies. Specifically, given ITD's widespread responsibility for the COM network, our audit included an evaluation of the security control environment for all portions of the COM network controlled by ITD. A description of the specific information systems and related control functions addressed by the audit have been redacted from this report as required by State Government Article Section 2-1224(i) described below.

In planning and conducting our audit, we focused on the major areas of operations based on assessments of significance and risk. As noted, the areas addressed by the audit have been redacted from this report. We also determined the status of the findings contained in our preceding audit report for ITD's data center and network operations.

Our audit did not include ITD's fiscal operations which are audited separately within an ITD fiscal operations audit report. The most recent fiscal compliance report that covered ITD's fiscal operations was issued on February 2, 2022.

To accomplish our audit objectives, our audit procedures included inquiries of appropriate personnel, inspections of documents and records, certain tests to evaluate the effectiveness of controls, and to the extent practicable, observations of ITD's operations. We also 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.

ITD'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 (including information systems resources); 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 ITD, 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 ITD's ability to operate information systems resources 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 ITD that did not warrant inclusion in this report.

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 judgement, we concluded that all findings in this report fall

under that definition. Consequently, for the publicly available audit report all specifics as to the nature of cybersecurity findings 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 these cybersecurity findings have been communicated to ITD and those parties responsible for acting on our recommendations in an unredacted audit report.

The response from COM, on behalf of ITD, to our findings and recommendations 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 the State Government Article, Section 2-1224 of the Annotated Code of Maryland, we will advise COM regarding the results of our review of its response.

Exhibit 1
Listing of Most Recent Office of Legislative Audits
Fiscal Compliance Audits of Comptroller of Maryland Divisions
As of March 2024

Name of Audit		Areas Covered	Most Recent Report Date
1	Revenue Administration Division	<ul style="list-style-type: none"> • Processing, evaluating, verifying, and recording tax data as reported by taxpayers and other parties • Collection of tax receipts • Distribution of tax refunds 	01/22/24
2	Central Payroll Bureau	<ul style="list-style-type: none"> • Management of the State payroll system • Non-budgeted funds maintained for payroll deductions • Critical information systems • Support services to other units of the Comptroller for processing payroll timekeeping records 	10/05/23
3	Information Technology Division (Fiscal Operations)	<ul style="list-style-type: none"> • Procurement • Equipment • Support services to other units of the Comptroller for monitoring information technology related services and maintaining information technology equipment inventory records 	02/02/22
4	Field Enforcement Bureau	<ul style="list-style-type: none"> • Confiscated property • Business licenses • Routine inspections 	09/07/21
5	Compliance Division	<ul style="list-style-type: none"> • Investigations, collection of delinquent taxes, and other taxpayer compliance activities related to individual income taxes • Audits and investigations, collection of delinquent taxes, and other taxpayer compliance activities related to business taxes • Identification, collection, and distribution of unclaimed property 	12/18/20
6	General Accounting Division	<ul style="list-style-type: none"> • State agency vendor payment processing • Vendor table maintenance • State agency working funds • Corporate purchasing card program 	11/09/20
7	Office of the Comptroller Bureau of Revenue Estimates	<ul style="list-style-type: none"> • Capital grants monitoring • Procurement and disbursements • Corporate purchasing cards • Support services to other divisions of the Comptroller, such as processing invoices, maintenance of accounting records, human resources, and related fiscal functions 	08/29/19



COMPTROLLER of MARYLAND

Brooke E. Lierman
Comptroller

Andrew Schaufele
Chief Deputy Comptroller

April 4, 2024

108 Carroll Street
Annapolis, Maryland 21401

Dear Mr. Hook:

Enclosed is the Comptroller's response to your report on the Information Technology Division issued in March 2024.

We have carefully reviewed each finding, and we believe that our responses fully address each recommendation contained in the report. Should you need additional information or clarification, please contact David Hildebrand, Director, Office of Risk Management by email at dhildebr@marylandtaxes.gov or by telephone at 410-260-7768.

The Comptroller appreciates your objective appraisal of our operations and your recommendations for continuous improvement and commends your auditors for their professionalism and thorough review.

Sincerely,

Robert O'Connor Digitally signed by Robert O'Connor
Date: 2024.04.09 11:26:42 -0400

Robert O'Connor
Chief Information Officer

John U Hiter Jr Digitally signed by John U Hiter Jr
Date: 2024.04.11 09:32:05 -0400
John Hiter

Director, Annapolis Data Center

Cc: Honorable Brooke Elizabeth Lierman, Comptroller



Comptroller of Maryland - Information Technology Division - Annapolis Data Center and Network Operations

Agency Response Form

Information Technology

The Office of Legislative Audits (OLA) has determined that the Information Technology section, including Findings 1 through 3 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 are subject to redaction from the publicly available audit report in accordance with the State Government Article 2-1224(i). Although the specifics of the following findings, including the analysis, related recommendations, along with COM’s responses, have been redacted from this report copy, COM’s responses indicated agreement with the findings and related recommendations.

Finding 1
Redacted cybersecurity-related finding.

Agency Response has been redacted by OLA.

Finding 2
Redacted cybersecurity-related finding.

Agency Response has been redacted by OLA.

Finding 3
Redacted cybersecurity-related finding.

Agency Response has been redacted by OLA.

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