Audit Report

Maryland Department of Transportation State Highway Administration

March 2022



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DEPARTMENT OF LEGISLATIVE SERVICES
MARYLAND GENERAL ASSEMBLY

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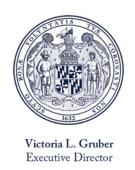
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DEPARTMENT OF LEGISLATIVE SERVICES OFFICE OF LEGISLATIVE AUDITS MARYLAND GENERAL ASSEMBLY

Gregory A. Hook, CPA Legislative Auditor

March 29, 2022

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 Maryland Department of Transportation (MDOT) – State Highway Administration (SHA) for the period beginning July 1, 2017 and ending October 31, 2020. SHA is responsible for the planning, construction, improvement, maintenance, and operations of the State highway system.

Our audit disclosed certain procurement related issues and insufficiency in information system security settings. Specifically, SHA did not publish certain contract awards on *eMaryland Marketplace Advantage* (*eMMA*) as required, including 3,114 snow removal contracts totaling \$316.4 million. Furthermore, SHA did not adequately safeguard vendor proposals submitted electronically for certain ongoing procurements expected to result in awards for an estimated 66 contracts for architectural and engineering services totaling \$411.8 million. In addition, certain SHA employees may have potentially violated State ethics laws by having relationships with certain contractors and SHA did not take permissible disciplinary actions against certain of these related contractors when their performance was determined to be unsatisfactory. Finally, certain outdated software and security-related settings on SHA computers were not sufficient to provide SHA with adequate assurance that its computers were properly protected.

Our audit also included a review to determine the status of the eight findings contained in our preceding SHA audit report. We determined that SHA satisfactorily addressed six of these findings. The remaining two findings are repeated in this report.

MDOT's response to this audit, on behalf of SHA, 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. Additionally, as allowed by our policy, we have edited MDOT's response to remove certain language unrelated to the finding and overly detailed information regarding information systems security.

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

Respectfully submitted,

Gragory a. Hook

Gregory A. Hook, CPA

Legislative Auditor

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* Denotes item repeated in full or part from preceding audit report

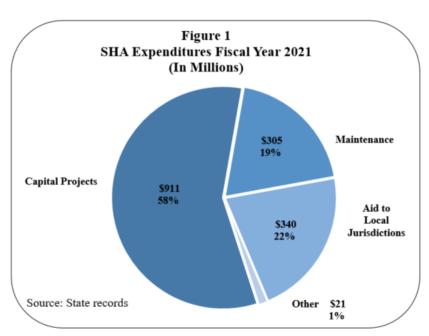
Background Information

Agency Responsibilities

The State Highway Administration (SHA) is responsible for the planning, construction, improvement, maintenance, and operations of the State highway system. SHA operates numerous facilities throughout the State, including a headquarters in Baltimore City, seven district offices, and the Statewide Operations Center (including the Coordinated Highways Action Response Team - CHART).

According to the State's accounting records, SHA's expenditures totaled approximately \$1.6 billion (special funds of \$852 million and federal funds of

\$725 million) during fiscal year 2021. The majority of SHA's expenditures related to capital projects for the construction and system preservation of State highways, roads, and bridges, related maintenance. and State and federal aid to local jurisdictions for the construction and maintenance of local roads (see Figure 1).



Resource Sharing Agreements (RSAs)

On August 3, 2018, we issued a performance report on *Telecommunication Resource Sharing Agreements* which contained several findings related to SHA. This audit report included a number of findings related to selected agencies, but emphasized the need for the Department of Information Technology to exercise greater oversight of the RSAs entered into by State agencies in general. The performance audit included the following select findings related to SHA.

- SHA did not maintain comprehensive records of RSAs, inventories of Stateowned telecommunication towers and fiber optic cables for potential resource sharing, and inventories of private company equipment installed on towers;
- SHA did not treat certain agreements as resource sharing resulting in lost opportunities to maximize compensation;
- SHA did not verify all monetary compensation was received;
- SHA did not always include adequate provisions to protect State interests, and
- SHA executed and renewed resource sharing agreements without proper approvals.

The Maryland Department of Transportation, on behalf of SHA, agreed to the findings and recommendations in the August 2018 report.

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 January 30, 2019. As disclosed in Figure 2 below, we determined that SHA satisfactorily addressed six of these findings. The remaining two findings are repeated in this report.

Figure 2 Status of Preceding Findings

	~			
Preceding Finding	Finding Description	Implementation Status		
Finding 1	State Highway Administration (SHA) procedures to identify State property damaged by traffic accidents using Maryland Department of State Police (MSP) records and to invoice for these damages were not comprehensive. We identified more than 8,700 accidents during our audit period from MSP records that may have caused damage to State property and could be subject to recovery by the State.	Not repeated		
Finding 2	SHA did not have adequate procedures in place to ensure the SafeZones program vendor complied with all contract requirements.	Not repeated		
Finding 3	SHA did not always follow established procedures at the one SHA district office that we examined to ensure the propriety of payments to vendors for snow and ice removal contracts.	Not repeated		
Finding 4	SHA did not comply with certain State procurement-related reporting and publication requirements for contract awards totaling \$77.1 million.	Repeated (Current Finding 1)		
Finding 5	SHA did not have comprehensive written procedures to resolve, in a timely manner, certain highway construction-related expenditures that had been suspended from the federal reimbursement process, and related follow-up efforts were not always documented.	Not repeated		
Finding 6	(Policy Issue) SHA had not completed a comprehensive review of physical security practices in place at its district offices to ensure that equipment and supplies were adequately protected from loss or misappropriation.	Not repeated		
Finding 7	SHA lacked proper internal controls over corporate purchasing cards to prevent or detect unauthorized purchases.	Not repeated		
Finding 8	Certain outdated software and security-related settings on SHA computers were not sufficient to provide SHA with adequate assurance that its computers were properly protected.	Repeated (Current Finding 4)		

Findings and Recommendations

Procurements

Finding 1

The State Highway Administration (SHA) did not comply with publication requirements for certain contract awards totaling \$333.4 million.

Analysis

SHA did not comply with publication requirements on *eMaryland Marketplace Advantage* (*eMMA*)¹ for certain contract awards totaling \$333.4 million. Publishing awards on *eMMA* provides transparency to the general public over State procurements including information about each winning bidder and the amount of the related award.

- SHA did not publish 3,114 contract awards for emergency snow and ice removal² totaling \$316.4 million for fiscal years 2018 to 2021. State law requires SHA to publish contracts procured as emergency procurements, which includes snow and ice removal contracts, on *eMMA* within 30 days of contract award. SHA management advised us that it believed its annual reporting of snow and ice removal contracts as emergency procurements to the Board of Public Works (BPW) satisfied all publication requirements under State law. However, SHA legal counsel confirmed that the snow and ice removal contract awards should be posted to *eMMA* within 30 days of contract approval and execution since they are considered emergency procurements.
- Our test of five architectural and engineering service contract awards during the period from June 2019 through June 2020, totaling \$35.5 million, disclosed that three contracts were not published on *eMMA* within 30 days of execution as required by State law. Specifically, one contract awarded on June 18, 2020 totaling \$3.0 million was not published on *eMMA* as of June 15, 2021 and two contracts totaling \$14.0 million were published 46 and 103 days after execution. State law requires architectural and engineering service contracts be posted to *eMMA* 30 days after contract execution.

¹ eMaryland Marketplace (*eMM*) is an internet-based, interactive procurement system managed by the Department of General Services (DGS). Effective July 2019, DGS replaced *eMM* with *eMaryland Marketplace Advantage* (*eMMA*).

² State law allows SHA to procure contracts for the pretreatment and removal of snow and ice from Maryland bridges and roadways as emergency procurements in order to avoid or mitigate serious damage to public health, safety, or welfare. These are annual contracts procured prior to the start of each winter season. SHA's utilization of the contract is contingent on the level of winter events during each season and unexpended balances do not carry over from season to season.

A similar condition related to different contract types was commented upon in our two preceding audit reports.

Recommendation 1

We recommend that SHA comply with State procurement laws by publishing contract awards on *eMMA* within 30 days of contract award, as required (repeat).

Finding 2

SHA did not have adequate safeguards in place to secure vendor proposals for architectural and engineering services submitted and stored electronically.

Analysis

SHA did not have adequate safeguards in place to secure vendor proposals (expressions of interest and technical proposals) for architectural and engineering services submitted and stored electronically. Beginning in April 2020, SHA instructed vendors to submit their proposal documents for architectural and engineering contract solicitations directly to a Procurement Office shared email account. The proposal documents in the shared email account, which were not encrypted or password-protected, were then transferred to a shared file folder on SHA's network. Thirty-two employees had access to either the shared email account or to the shared file folder prior to the bid submission deadlines for the solicitations. Consequently, confidential competitive information could be accessed and disclosed to other prospective candidates without detection.

During the period from April 2020 through April 2021, SHA solicited 15 architectural and engineering procurements that required emailed submissions. SHA estimated that 66 contracts totaling \$411.8 million could ultimately be awarded through the 15 solicitations.

Upon bringing this issue to SHA's attention, it attempted to implement corrective action by requiring vendors to submit proposals on *eMMA*, which has security configurations for secure storage and transmission of electronically submitted bids and proposals. However, DGS subsequently advised SHA that *eMMA* would not have the functionality to handle electronically submitted bids and proposals for qualifications-based-selection (QBS) procurements (such as for architectural and engineering services). When using QBS, potential vendors submit an expression of interest, then a technical proposal for evaluation, and the award is made without consideration of price, which is negotiated later after the award. According to DGS, its Office of State Procurement plans to provide written

guidance to State agencies in the future on how to handle bids and proposals for QBS procurements.

Recommendation 2

We recommend that SHA establish adequate safeguards to secure vendor proposals submitted and stored electronically against improper access. In addition, since *eMMA* presently does not have the functionality for qualifications-based selection procurements (such as for architectural and engineering services), SHA should consult with DGS to ensure that it implements the best corrective action for securing related vendor proposals.

Possible Ethics Violations

Finding 3

Certain SHA employees potentially violated State ethics laws by overseeing contracts in which a qualifying relative had a financial interest and certain of these employees did not properly disclose that financial interest as required. In addition, permissible disciplinary action was not taken when certain of these related contractors performed unsatisfactorily.

Analysis

Certain SHA employees potentially violated State ethics laws by overseeing contracts in which a qualifying relative³ had a financial interest (owned or was an employee) in the contractor and certain of these employees did not properly disclose that financial interest as required. In addition, SHA did not document its rationale for not taking permissible disciplinary action when certain of these related contractors performed unsatisfactorily.

We performed an analysis to identify potential conflicts of interest between SHA employees and contractors doing business with SHA and identified one employee who had a qualifying relative with a financial interest in a SHA contractor. Our review of contract documentation related to this employee disclosed that while this employee did not participate in work related to this contractor, the employee did not disclose the relationship to SHA or the State Ethics Commission (Commission) as required by SHA's policy. In addition, in the course of our review, we identified two other employees that participated in contracts with two contractors in which their qualifying relatives had a financial interest. Specifically, we noted the following conditions.

³ A qualifying relative is defined in Maryland Public Ethics Law Section 5-501 as a "spouse, parent, child, brother, or sister."

- One SHA employee directed and monitored a contractor that employed the employee's qualifying relative. We noted at least 12 documented instances where the employee participated in matters involving this contractor, including representing SHA in discussions, directing operations when this contractor was performing work, and checking the contractor's personnel in and out of their shift. The employee did not disclose the relationship to SHA or the Commission, as required. During our audit period, this contractor was issued three contracts totaling \$886,300, and received payments totaling \$385,146.
- A second SHA employee participated in the oversight of a contractor where a qualifying relative worked. This employee had previously disclosed the relationship to SHA, and based on the advice of the Commission, SHA established a non-participation agreement that the employee signed, which prohibited the employee from participating in matters involving the contractor. However, we noted at least 26 documented instances where the employee participated in matters involving this contractor, including receiving contractor invoices and checking the contractor's personnel in and out of their shift. During our audit period, this contractor was issued three contracts totaling \$640,700 with payments totaling \$427,813.
- A third SHA employee (who was identified in our initial analysis) had a qualifying relative who owned a company doing business with SHA and another qualifying relative who performed services for the same company. The employee did not disclose these relationships to SHA or the Commission, as required by SHA policy. We did not identify instances in which the employee participated in matters involving this contractor. During our audit period, this contractor was issued two contracts totaling \$120,100, with payments totaling \$84,248.

Our review also disclosed that SHA did not assess monetary penalties or terminate the contracts with the contractors noted above in the first and third bullet, who did not comply with the contract terms. For example, the contractor in the first bullet, was paid \$385,146 and its contract stated that it may be terminated if the contractor did not report two or more occurrences of equipment failures to SHA. The contractor repeatedly failed to report equipment failures and SHA did not terminate the contract or document its justification for not taking corrective action. SHA did not have documentation evidencing which employees were involved in the decision to not take corrective action and therefore, we could not determine if the SHA employee with the qualifying relative was involved in these decisions. We were advised by district management personnel overseeing

these contracts that contract terminations were subject to professional judgement on the part of SHA employees and were rarely taken for any contractor.

We consulted senior management personnel at the Commission who advised that the aforementioned relationships with the first two employees above could potentially be a violation of State ethics law. Referral of a matter to the Commission by a State agency does not mean that a violation took place. Any final decision as to whether violations of State ethics laws did or did not occur would ultimately be made by the Commission.

Recommendation 3

We recommend that SHA

- a. refer the matters discussed above to the Commission and take action to comply with any decisions that the Commission provides on these matters, and
- b. take available corrective action when contractors do not comply with the terms of the contract or document the justification for waiving available disciplinary actions when performance was unsatisfactory.

Information Systems Security and Control

Background

The SHA Office of Information Technology supports employee use of numerous information technology applications which operate on the Maryland Department of Transportation data center mainframe and various server platforms. Certain of SHA's systems are either web-based or cloud-hosted applications which employees can access from remote locations. As of September 2020, SHA had over 3,900 computers in operation.

Finding 4

Two malware protection controls were not sufficient to provide adequate assurance that SHA computers were properly protected from security risks.

Analysis

Two malware protection controls were not sufficient to provide adequate assurance that SHA computers were properly protected from security risks. Our September and October 2020 testing disclosed the following conditions.

Certain SHA computers had not been updated with the latest releases for a
certain software product known to have significant security-related
vulnerabilities. Although the vendor for this software product frequently

provides software patches to address these vulnerabilities, these computers had not been updated for these patches. Specifically, 9 of 14 computers tested which had the software product installed were running an outdated installed software version, having a software release date of January 2019.

• Host-based firewalls were not enabled on the 3 of the 10 laptop computers tested. If these laptops were used outside of the SHA network, they would be susceptible to attack from untrusted traffic.

The State of Maryland *Information Technology Security Manual* states that agencies, at a minimum, must protect against malicious code (viruses, worms, Trojan horses) by implementing protections (anti-virus, anti-malware) that, to the extent possible, include a capability for automatic updates. Similar conditions were commented upon in our preceding audit report.

Recommendation 4

We recommend that SHA

- a. promptly install all critical security-related software updates for commonly vulnerable applications on all computers (repeat), and
- b. ensure that all laptop computers are protected by an enabled and properly configured host-based firewall (repeat).

Audit Scope, Objectives, and Methodology

We have conducted a fiscal compliance audit of the Maryland Department of Transportation (MDOT) – State Highway Administration (SHA) for the period beginning July 1, 2017 and ending October 31, 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 SHA'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 procurements and disbursements for highway design, construction, and maintenance, as well as SHA's operating expenditures, federal funds, equipment, and information systems. We also determined the status of the findings contained in our preceding audit report.

Our audit did not include certain payroll support services (such as processing of personnel transactions and maintenance of employee leave records) provided by MDOT – Secretary's Office to SHA. In addition, our audit did not include an evaluation of internal controls over compliance with federal laws and regulations for federal assistance programs and an assessment of SHA'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 SHA.

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 July 1, 2017 to October 31, 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 SHA'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 the finding, the results of 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 and MDOT's Financial Management Information Systems (such as revenue and expenditure data), 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. 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.

SHA'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 SHA, 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 SHA'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 SHA that did not warrant inclusion in this report.

The response from MDOT, on behalf of SHA, 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 MDOT regarding the results of our review of its response.



Office of the Secretary

Larry Hogan Governor Boyd K. Rutherford Lt. Governor James F. Ports, Jr. Secretary

March 23, 2022

Gregory A. Hook, CPA Legislative Auditor Office of Legislative Audits The Warehouse at Camden Yards 351 West Camden Street, Suite 400 Baltimore MD 21201

Dear Mr. Hook: 6 all

Enclosed please find responses to the audit report from the Office of Legislative Audit for the Maryland Department of Transportation State Highway Administration for the period beginning July 1, 2017 and ending October 31, 2020.

If you have any additional questions or concerns, please contact Ms. Jaclyn D. Hartman, MDOT Chief Financial Officer at 410-865-1035 or jhartman1@mdot.state.md.us. Of course, you may always contact me directly.

Sincerely,

James F. Ports, Jr.

Secretary

Attachment

cc: Mr. William J. Bertrand, Director of Finance, MDOT SHA

Ms. Lisa B. Conners, Deputy Administrator, MDOT SHA

Mr. Mark Crampton, Assistant Secretary of Operations, MDOT

Ms. Jaclyn D. Hartman, Chief Financial Officer, MDOT

Mr. R. Earl Lewis, Jr., Deputy Secretary of Policy, Planning, and Enterprise Services, MDOT

Mr. Sean Powell, Deputy Secretary of Operations and Homeland Security, MDOT

Ms. Tolulope Shoyemi, Director of Audits, MDOT SHA

Mr. Timothy E. Smith, Administrator, MDOT SHA

Agency Response Form

Procurements

Finding 1

The State Highway Administration (SHA) did not comply with publication requirements for certain contract awards totaling \$333.4 million.

We recommend that SHA comply with State procurement laws by publishing contract awards on *eMMA* within 30 days of contract award, as required (repeat).

	Agency Response	
Analysis		
Please provide additional comments as deemed necessary.	None.	
Recommendation 1	Agree Estimated Completion Date: 8/31/2022	
	Is of MDOT SHA will take the following corrective actions to address the issues noted:	
	 For the 2021-2022 snow season, the Statewide Financial Manager will post a public notice with a memorandum that includes the blanket purchase order, vendor name, contract award, and the original award amount. This action will be completed by April 1, 2022. Beginning in the 2022-2023 snow season, we will require that each District and office post the contract award in eMMA before the Office of Finance activates the blanket purchase order. This will be an additional step in the existing approval process and quality assurance/quality control (QA/QC) checklist. Contract processes and templates are finalized and distributed by August 31st before each snow season. For architectural/engineering (A/E) contracts, we will add eMMA 	
	posting confirmation to the QA/QC checklist for blanket purchase orders over \$50,000 and require proof of posting to be attached. The eMMA Contract ID number must be posted for blanket purchase order activation. This action will be completed immediately.	

Agency Response Form

Finding 2

SHA did not have adequate safeguards in place to secure vendor proposals for architectural and engineering services submitted and stored electronically.

We recommend that SHA establish adequate safeguards to secure vendor proposals submitted and stored electronically against improper access. In addition, since *eMMA* presently does not have the functionality for qualifications-based selection procurements (such as for architectural and engineering services), SHA should consult with DGS to ensure that it implements the best corrective action for securing related vendor proposals.

	Agency Response	
Analysis		
Please provide additional comments as deemed necessary.	None.	
Recommendation 2	Agree Estimated Completion Date: 7/15/2021	
Please provide details of corrective action or explain disagreement.	of MDOT SHA has reverted to sealed envelope submission of technical proposals, as explained below.	
	 In May 2021, MDOT SHA directed all A/E procurement officers to receive Technical Proposals through eMMA for newly advertised contract series. For contract series already advertised, each procurement officer was directed to issue an amendment to the solicitation requiring each offeror to submit their Technical Proposal on a USB drive in a sealed envelope. (eMMA does not allow changes to the solicitation type after advertisement.) Technical proposals were then secured in a locked file room until the due date and time, when the envelope was to be opened in the presence of two State employees. On December 21, 2021, the eMMA Help Desk informed MDOT SHA that the Triple Envelope process was not designed for Qualifications Based Selection, stating, "eMMA really only recognizes one 'phase' of proposal submission. So when a solicitation is Open (out on the street), vendors have to submit all parts of their proposal, both general, technical, and financial." MDOT SHA has received all Technical Proposals as required in COMAR 21.05.03.02G, Receipt of Proposals, since July 15, 2021. 	

Agency Response Form

• On March 11, 2021, SHA's Office of Procurement and Contract Management (OPCM) revised the template document for a request for technical proposals (RFTP). New language in the template states the following:

The Technical Proposals in response to this RFTP are due no later than 12:00pm EST. on [Due Date] via USB and delivered to OPCM, 707 North Calvert Street, C-405, Baltimore, Maryland 21202. Technical Proposals received after the deadline time will not be accepted, no matter how transmitted, and will be returned unopened to the Consultant.

MDOT SHA will continue to consult with the Department of General Services to ensure that it implements the best corrective action for securing related vendor proposals since eMMA does not provide this functionality.

Agency Response Form

Possible Ethics Violations

Finding 3

Certain SHA employees potentially violated State ethics laws by overseeing contracts in which a qualifying relative had a financial interest and certain of these employees did not properly disclose that financial interest as required. In addition, permissible disciplinary action was not taken when certain of these related contractors performed unsatisfactorily.

We recommend that SHA

- a. refer the matters discussed above to the Commission and take action to comply with any decisions that the Commission provides on these matters, and
- b. take available corrective action when contractors do not comply with the terms of the contract or document the justification for waiving available disciplinary actions when performance was unsatisfactory.

Agency Response			
Analysis			
Please provide additional comments as deemed necessary.	None.		
Recommendation 3a	Agree	Estimated Completion Date:	4/29/22
	details of The MDOT SHA Ethics Coordinator has an internal process that is		
corrective action or explain disagreement.	followed when made aware of possible conflicts of interest between an		
	employee and a qualifying relative who is employed by a firm that does business with MDOT SHA. This includes contacting the employee's senior manager to obtain information about the qualifying relationship and how the District/Office plans to avoid any interaction between the MDOT SHA employee and the qualifying relative and/or the qualifying relative's employer. Once the requested information is received, a Non-Participation Plan is developed and implemented through the employee's Senior Manager and signed by the employee. The executed Non-Participation Plan is sent to the State Ethics Commission for review and approval. This same process is employed if the matter deals with an employee who is deemed to have a non-qualifying relative under the State Ethics Laws. In these cases, a Mitigation Agreement is developed and implemented		

Agency Response Form

through the employee's Senior Manager, signed by the employee, and sent to the State Ethics Commission for review and approval.

The MDOT SHA Ethics Coordinator immediately began the process of developing a Non-Participation Plan for the employee identified by the Auditors. We learned that the employee's son no longer works for the specific contractor referred to in the audit. However, we were made aware that another son of the same employee is working for a different snow vendor contractor. The Commission approved a Non-Participation Plan on February 14, 2022, which is now in place.

MDOT SHA made the State Ethics Commission aware of this violation as mentioned in the Audit regarding non-compliance of the Non-Participation Plan that was in place. The appropriate disciplinary action was given to the employee who did not comply with the Non-Participation Plan. MDOT SHA updated the Non-Participation plan which was approved by the State Ethics Commission on February 14, 2022. Additionally, we put a Mitigation Agreement in place, which was approved by the State Ethics Commission on February 14, 2022, to address the relationship between the MDOT SHA employee and his nephew, who is the owner of the company that does business with MDOT SHA.

During the Audit, we were made aware of the relationship between the MDOT SHA employee and their qualifying relatives, who owns and is employed by a firm that does business with MDOT SHA. MDOT SHA acted and followed our internal process to develop and implement a Non-Participation Plan. MDOT SHA was made aware on August 19, 2021, that the company no longer does business with MDOT SHA. MDOT SHA's Office of Procurement and Contract Management confirmed on August 23, 2021, the company had no active procurements. MDOT SHA did not proceed with the Non-Participation Plan that was being developed given there were no active procurements and/or business relationship with the relative's company.

The MDOT SHA Ethics Coordinator and the MDOT SHA Organizational Development Division worked with the State Ethics Commission to establish training for MDOT SHA which will begin in April 2022. This will cover all aspects of the Maryland Public Ethics Law including employees who have relationships with vendors or vendor employees who are not qualifying relatives to capture these

Agency Response Form

	relationships under a Mitigation Agreement for State Ethics Commission approval.		
Recommendation 3b	Agree	Estimated Completion Date:	2/15/2022
	of MDOT SHA will take corrective action when contractors do not comply		
corrective action or	with contract terms through the use of the "Notice of Unsatisfactory		
explain disagreement.	Performance Form" and any justifications for waivers of disciplinary		
	actions will be documented.		

Agency Response Form

Information Systems Security and Control

Finding 4

Two malware protection controls were not sufficient to provide adequate assurance that SHA computers were properly protected from security risks.

We recommend that SHA

- a. promptly install all critical security-related software updates for commonly vulnerable applications on all computers (repeat), and
- b. ensure that all laptop computers are protected by an enabled and properly configured host-based firewall (repeat).

	Agency Response	-
Analysis		
Please provide additional comments as deemed necessary.	None.	
Recommendation 4a	Agree Estimated Completion Date:	9/30/2022
Please provide details of corrective action or explain disagreement.	orrective action or to the latest version of our software products. MDOT SHA will ensure	
Recommendation 4b	Agree Estimated Completion Date:	5/1/2022
corrective action or	of MDOT SHA will turn on the configuration to activate "host-based" on all devices and turn on the privilege level security. This prevents malware from damaging a PC and helps organizations deploy a bettermanaged desktop.	

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