

Audit Report

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**Department of Transportation  
State Highway Administration**

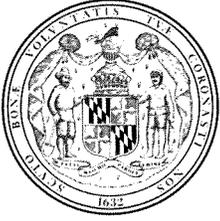
November 2012

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

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DEPARTMENT OF LEGISLATIVE SERVICES  
OFFICE OF LEGISLATIVE AUDITS  
MARYLAND GENERAL ASSEMBLY  
November 15, 2012

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Executive Director

Thomas J. Barnickel III, CPA  
Acting Legislative Auditor

Senator James C. Rosapepe, Co-Chair, Joint Audit Committee  
Delegate Guy J. Guzzone, Co-Chair, Joint Audit Committee  
Members of Joint Audit Committee  
Annapolis, Maryland

Ladies and Gentlemen:

We have audited the Department of Transportation – State Highway Administration (SHA) for the period beginning August 1, 2008 and ending June 30, 2011. SHA is responsible for the planning, construction, improvements, maintenance, and operations of the State's highway system.

Our audit disclosed a number of findings related to the approval and monitoring of architectural and engineering (A&E) contracts. SHA had not documented the basis for the maximum values of A&E contracts submitted to the Board of Public Works (BPW) for approval. SHA also used unexpended balances from various contracts to pay for work that was outside the scope of those contracts and extended contract expiration dates without BPW approval. Furthermore, SHA's process for determining the reasonableness of contract billings was not comprehensive as only a limited number of contractors were subject to audit to verify the propriety of the billings. During our audit period, expenditures on A&E contracts totaled approximately \$431 million. Certain similar conditions were noted in our November 2011 report on our special review of construction inspection services contracts, which is one type of A&E contract used by SHA.

Our audit also disclosed contract procurement and monitoring issues related to the Maryland SafeZones Program (that is, the automated speed monitoring program for highway work zones). SHA did not ensure that contractor performance benchmarks were established for the pilot program, and we noted certain issues regarding the reliability and readability of the photographed violations. Furthermore, the current contract for operating the automated speed monitoring system was executed even though the successful contractor's proposal, which was the only proposal received, did not comply with certain request for proposal requirements. Also, SHA's tests to ensure the speed monitoring system's accuracy were not as comprehensive as intended. SHA also lacked adequate assurance that the contractor was meeting a key performance requirement.

Finally, our audit disclosed that monitoring controls over certain critical computer mainframe files need improvement, that an SHA management employee potentially violated state ethics laws, and that SHA did not always adhere to MDOT's policy for granting administrative leave.

An executive summary of our findings can be found on page 5. The Department of Transportation's response to this audit, on behalf of SHA, is included in Appendix A to this report. Auditor's comments related to certain of the responses can be found in Appendix B. We wish to acknowledge the cooperation extended to us during the course of this audit by SHA.

Respectfully submitted,

  
Thomas J. Barnickel III, CPA  
Acting Legislative Auditor

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# Executive Summary

## Legislative Audit Report on State Highway Administration (SHA) November 2012

- **SHA's policies and procedures for architectural and engineering (A&E) contracts did not provide the necessary safeguards to ensure compliance with certain provisions of State procurement regulations and/or Maryland Department of Transportation (MDOT) guidelines. SHA had not documented, as required by MDOT guidelines, the basis for the maximum values of contracts submitted to the Board of Public Works (BPW). SHA also used funds from certain contracts to pay for work that was outside the scope of those contracts and extended contract expiration dates without obtaining BPW approval. Finally, SHA's process for determining the propriety of A&E contract billings was not comprehensive as only a limited number of contractors were subject to audit to verify costs previously billed to and paid by SHA.**

SHA should establish procedures to ensure compliance with State procurement regulations and MDOT policies, such as developing processes to ensure that contract modifications and extensions are submitted to BPW for approval. Furthermore, SHA should increase the number of A&E contracts subject to audit.

- **SHA did not ensure that performance benchmarks were established as provided in the pilot program contract for the Maryland SafeZones Program (that is, the automated speed monitoring program for highway work zones). Furthermore, the current contract for operating the automated speed monitoring system was executed even though the successful contractor's proposal, which was the only proposal received, did not comply with certain request for proposal requirements. Also, SHA's tests to ensure the speed monitoring system's accuracy were not as comprehensive as intended. SHA also lacked adequate assurance that the contractor was meeting a key performance requirement.**

SHA should improve its contract monitoring by ensuring that procurement and contract terms are complied with.

- **Monitoring controls over critical mainframe production files need improvement.**

SHA should activate certain security software settings and perform documented reviews of certain file accesses.

- **A management employee potentially violated State Ethics law by monitoring a contract with a firm where the employee's spouse was a senior executive. Also, SHA did not adhere to MDOT's policy for administrative leave granted to two employees.**

SHA should refer the aforementioned issue to the State Ethics Commission and establish procedures to address potential conflicts of interest. Also, SHA should comply with MDOT policy when granting administrative leave to employees.

## **Background Information**

### **Agency Responsibilities**

The Transportation Article, Section 8-201, of the Annotated Code of Maryland establishes the State Highway Administration (SHA) in the Maryland Department of Transportation. SHA is responsible for the planning, construction, improvement, and maintenance and operations of the State highway system. SHA operates numerous facilities throughout the State, including a headquarters in Baltimore City and seven district offices. According to the State's accounting records, SHA's fiscal year 2011 expenditures totaled approximately \$1.1 billion.

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

Our audit included a review to determine the status of the nine findings contained in our preceding audit report dated August 6, 2009. We determined that SHA satisfactorily addressed eight of these findings. The remaining finding is repeated in this report.



# Findings and Recommendations

## Architectural and Engineering Contracts

### Background

The State Highway Administration (SHA) contracted with multiple architectural and engineering (A&E) firms to provide consultant services for SHA construction projects. These A&E contracts, which included pre-established overhead rates and the maximum number of hours and salary amounts, contained broad descriptions of work in areas, such as planning, design, and construction inspection services, for an undetermined number of construction projects. A firm was then selected by SHA to perform work on a particular project that contained the specific scope of work such as, bridge inspections in a particular area of the State.

According to SHA records, during the period August 2008 through June 2011, there were 152 awarded contracts with 73 firms and contract awards totaled approximately \$503 million. During the same period, payments to vendors on all A&E contracts totaled approximately \$431 million.

In November 2011 and June 2011, we issued two special review reports on SHA in which we noted a number of contract-related issues. In particular, our November 2011 report disclosed that SHA did not document the basis for construction inspection contract award amounts, properly use certain contract funds, nor obtain Board of Public Works (BPW) approval for certain contract activity. Our current audit identified some similar findings, but included a broader range of contracts. In this regard, our audit covered all types of A&E contracts, instead of just construction inspection service contracts which is one type of A&E contract that was used by SHA and addressed in the special review reports. SHA's formal responses to the findings and recommendations included in those two reports indicated agreement and SHA's intent to implement corrective action for all A&E contracts. During this audit's fieldwork period, which ended April 2012, all necessary actions to address the findings had not been completed.

### **Finding 1**

**SHA had not documented, as required, the basis for the maximum values of A&E contracts submitted to the BPW for approval.**

### Analysis

SHA had not documented the basis for the maximum values of A&E contracts submitted to the BPW for approval as required by internal Maryland Department of Transportation (MDOT) A&E contracting guidelines. SHA management

advised us that these values were estimates, based on the amounts expended in the prior contracts, adjusted upward to account for an increase in firm labor costs. Furthermore, SHA advised us that documentation was not available to support the estimates of projected labor costs. Our test of four engineering services contracts, awarded during the period from October 2008 and June 2009, totaling \$17.5 million confirmed that SHA could not provide documentation supporting the amount of funds requested.

A similar comment related to construction inspection contracts was included in our Special Review of Construction Inspection Services Contracts at SHA report dated November 2011. In that review, we noted that SHA did not have support for the amount of funds requested for four contract awards tested which totaled \$34 million.

MDOT A&E Internal Guidelines state the total estimated cost of the services, including a summary of how the estimate was derived, shall be transmitted in a sealed envelope to the Executive Secretary of the Transportation Professional Services Selection Board (TPSSB) and shall remain unopened until the TPSSB meets to consider the final selection recommendation of the transportation agency head, which ultimately is submitted to the BPW for approval. The lack of adequate support for the funding requests is significant because, as noted in Finding 2, SHA used available funding authorization in certain A&E contracts to cover over-expenditures in other contracts.

### **Recommendation 1**

**We recommend that SHA establish a formal process to document the maximum values of A&E contracts submitted to the BPW in accordance with MDOT guidelines.**

### **Finding 2**

**As of August 2012, SHA's survey of contract costs identified a significant number of contracts for which work was performed that was outside the scope of those contracts, without obtaining required BPW approval.**

### **Analysis**

SHA used unexpended balances from various A&E contracts to pay for work that was outside the scope of those contracts. This process circumvented State procurement regulations that require a formal contract modification and BPW approval for a significant change in contract scope.

In response to a similar finding in our November 2011 special review report, SHA performed a survey to identify the total amount of all A&E contract costs incurred for unrelated work. As of August 2012, the survey had not been fully completed; however, those results preliminarily identified services costing \$21.7 million, charged to 105 contracts, that were for purposes outside the scope of those contracts.

Although the survey had not been finalized, our tests disclosed other instances that were not included in the survey results. Specifically, our tests of five A&E contracts disclosed that payments totaling \$2.4 million were attributable to work performed outside the scope of those contracts, of which \$974,000 was not identified by the survey. Board of Public Works approval had not been obtained to change the contracts.

As an example of the circumstances pertaining to these practices, we noted that \$1.3 million of the aforementioned \$2.4 million was charged to a \$14 million contract for pre-construction A&E services, such as project planning and environmental documentation. However, these payments were outside the scope of the contract because the services provided related to post construction A&E services, such as bridge and construction inspections. We were advised by SHA management personnel that this occurred because SHA depleted its bridge and construction inspection contract funds, but such services were still necessary. Therefore, SHA used other contracts with unexpended balances for this purpose.

SHA's use of contracts and/or task orders to perform work outside of the contract scope instead of requesting BPW approval for change orders violates State procurement regulations which require contract modifications that materially change the scope, amount, or any cost component of a contract by more than \$50,000 to be submitted to BPW for approval.

## **Recommendation 2**

**We recommend that SHA**

- a. develop procedures and controls to ensure contract funds are only used as authorized, and**
- b. promptly complete its survey and seek BPW approval for contract modifications as required.**

**Finding 3****SHA had extended contract expiration dates without BPW approval.****Analysis**

SHA had extended A&E contract expiration dates without BPW approval. Specifically, during our audit period we were advised by SHA management personnel that it was not SHA's practice to submit A&E contract period extensions to the BPW for approval, as required by State regulations. Consequently, SHA was able to retain unspent contract authorizations on contracts that otherwise would have expired. SHA usually communicated its intention to the contractors by sending letters which stated, "In order to utilize any remaining funds in this contract, we would like the completion date to be extended from..." According to a report produced by SHA, which we tested and found to be reliable, during the period August 2008 through June 2011, SHA processed 291 contract extensions, related to 204 contracts totaling approximately \$449 million. For example, our review of 10 extensions for contracts with original values totaling \$136 million disclosed that the extension periods ranged from one year to 18 months in duration. BPW approval was not obtained for the extensions and the unexpended balance for these contracts at the time of their extensions totaled approximately \$14.5 million.

State regulations require SHA to obtain BPW approval for significant modifications to contracts. We were advised by BPW staff that the nature of these contract time period extensions are considered significant and require BPW approval.

A similar condition was noted in our Special Review of Construction Inspection Services Contracts at SHA report dated November 2011. Specifically, we reported that SHA improperly extended contracts without BPW approval which allowed it to retain unspent contract funds. In May 2012, SHA submitted to the BPW contract extensions related to 391 A&E contracts (including the aforementioned 204 contracts) totaling \$783 million and retroactive BPW approval was granted on May 23, 2012.

**Recommendation 3**

**We recommend that SHA ensure that, in the future, BPW approval is obtained for significant contract modifications, including the extension of contract expiration dates.**

**Finding 4**

**SHA's process for determining the propriety of A&E contract billings was not comprehensive.**

**Analysis**

Although SHA had established a post-audit process for determining the propriety of A&E contractor billings for direct labor costs, which accounted for the majority of A&E contractual payments, only a limited number of contractors were selected for audit.

A&E contractor billing amounts primarily represent the number of hours worked and the hourly rate for each contractor employee working on a project, as well as associated overhead, as provided for in the supporting contracts and related task orders. The billings were accompanied by a payroll report identifying the contractor employees, their hourly rates and the number of hours worked on the applicable SHA project. The report was to be certified by a contractor official as to accuracy and completeness. Although SHA had a procedure to review the billed labor charges on invoices for overall reasonableness, the post-audits of contractor records conducted by the SHA internal audit unit verified that such charges were properly supported.

Our review disclosed that SHA's internal audit unit only performed a limited number of A&E contract post-audits to substantiate that validity of the labor costs billed by A&E firms and paid by SHA. Specifically, during fiscal year 2011, SHA made payments to approximately 150 A&E firms totaling \$134 million (primarily for labor and overhead); however, only 5 of these firms had been audited during fiscal year 2011. The extent of the fiscal year 2011 costs subject to audit was not readily available; however, payments to the five firms during fiscal year 2011 totaled approximately \$6.6 million. Since SHA was responsible for reimbursing the firm's actual labor costs, these audits provide a control to detect whether the labor charges billed to SHA corresponded to the firm's payroll records, in terms of labor rates and hours of services provided. A similar condition was commented upon in our preceding audit report.

**Recommendation 4**

**We recommend that SHA increase the number of audits performed of A&E contractors (repeat).**

## **Maryland SafeZones Program**

On May 19, 2009, Senate Bill 277 of the 2009 legislature was signed into law, effective October 1, 2009, authorizing the use of automated speed monitoring systems in highway work zones. On August 26, 2009, SHA established the Maryland SafeZones pilot program by participating in an intergovernmental cooperative purchasing agreement with a local Maryland jurisdiction, which had previously contracted with an automated speed enforcement and monitoring contractor. Using the agreement, SHA negotiated financial and operational terms and conditions that generally differed from those of the local jurisdiction, and agreed to pay the contractor a flat monthly rate of \$112,221 for two vehicles equipped with radar speed cameras, personnel, and other related services and equipment for the period October 2009 through June 2010, at a cost not to exceed \$1.2 million. The purpose of this program was to slow drivers in work zones and make work zones safer for workers, drivers, and their passengers.

On October 26, 2009, SHA advertised a Request for Proposal (RFP) for a competitively sealed proposal to select a contractor to operate the Maryland SafeZones program subsequent to the pilot program. This contract was awarded on June 22, 2010 for the period of July 2010 through June 2012, with a not to exceed cost of approximately \$8.1 million, to the contractor who operated the pilot program and who was the only respondent to the RFP. The contract also provides for three additional one-year renewal periods which, if executed, would bring the total cost to approximately \$21 million. Under this contract, the contractor agreed to operate a minimum of two vehicles up to a maximum of five vehicles equipped with laser speed camera equipment (at a monthly per vehicle rate of \$34,400). We were advised by SHA management that it has executed the first one-year renewal option.

### **Finding 5**

**SHA did not ensure that contractor performance benchmarks were established for the Maryland SafeZones pilot program as allowed by the contract.**

### **Analysis**

SHA did not ensure that performance benchmarks were established for the Maryland SafeZones pilot program as allowed by the contract. Specifically, SHA's contract for the pilot program called for benchmarks to be established to evaluate contractor performance; however, no benchmarks were established even though the contract required the contractor to provide a speed monitoring system capable of accurately measuring speeds and collecting readable license plates in

various environmental and operational conditions. Consequently, a key element in assessing the success of the pilot program was lacking.

An example of a useful benchmark that was not established was the reliability and readability of the photographed violations. Our review of related SHA records from the pilot program disclosed that the contractor's cameras captured 133,620 speed violations from October 2009 through June 2010. However, only 44 percent of those violations photographed were actually issued a citation because the remaining 56 percent were deemed unacceptable by SHA due to reliability and readability issues.

Although the primary purpose of the program was to enhance roadside safety in work zones, the aforementioned reliability and readability performance issues also impacted related revenue as each unacceptable violation represented a potential \$40 fine. This situation appears to have contributed to the revenue from the issued citations totaling approximately \$850,000 less than the contractor had estimated.

#### **Recommendation 5**

**We recommend that SHA, in the future, ensure that relevant contractor performance requirements are established and that actual results are monitored for evaluating performance.**

#### **Finding 6**

**SHA awarded a contract for operating the current Maryland SafeZones Program, even though the contractor's proposal was not in compliance with certain RFP requirements.**

#### **Analysis**

On June 22, 2010, SHA awarded a contract for operating the current Maryland SafeZones Program even though the contractor's proposal was not in compliance with two RFP requirements. Furthermore, a consultant hired by SHA did not conduct tests of the accuracy of the contractor's speed measuring equipment in accordance with SHA requirements. Our review noted the following conditions:

- At the time of the contract award and as of April 2012, the specific speed detection equipment (scanning LIDAR, a laser system) listed in the contractor's proposal, and ultimately used, was not reported by the International Association of Chiefs of Police (IACP) as conforming to its guidelines, as required by the RFP. The contract required that all equipment conform with IACP's speed detection equipment standards to provide assurance of its calibration and functionality. We were advised by a member

of the IACP, who was also a SHA consultant, that the scanning laser technology used was new and that IACP had not yet developed performance standards by which the system could be judged.

- The October 26, 2009 RFP required that the proposed equipment record a legible image of the violating vehicle's rear license plate 95 percent of the time, regardless of the time of day, environmental conditions, or vehicle positioning. However, in May 2010, during the bid evaluation process, this measure was changed to 90 percent, and we were advised by SHA management personnel that this was the result of the contractor asserting that it was unable to meet the 95 percent legibility measure.
- Prior to awarding the contract, SHA used a consulting firm to conduct a system accuracy test of the contractor's proposed equipment in an active highway work zone. However, the consulting firm deviated from SHA's testing instructions and therefore, the basis for the conclusion that the equipment met performance requirements is questionable. For example, SHA directed the consulting firm to have test vehicles perform 40 test runs in which the contractor's speed measuring equipment would be compared to two independent radars, one which was inside and one which was outside the vehicle. However, the consulting firm only conducted 18 test runs and only reported the results of 8 of those runs. Moreover, five of those eight reported runs were made using vehicles lacking independent interior radar, so the results could only be measured against one independent radar, rather than two as planned. Nevertheless, the consulting firm stated that the observed results fell within acceptable standards, and SHA's technical evaluation team gave an overall "good" ranking of the contractor for the applicable bid evaluation attribute. SHA could not provide a reasonable explanation or documentation regarding why the tests were considered sufficient.

SHA management advised us that these issues, including non-conforming equipment and the reduction in license legibility, were not considered a major deviation from the RFP requiring a new solicitation. Nevertheless, it calls into question whether any of these factors could have influenced or impacted the resultant lack of other bids and whether there was a reasonable basis for concluding that a new solicitation was not necessary.

#### **Recommendation 6**

**We recommend that SHA ensure that contractor bids are in compliance with RFP requirements and are thoroughly evaluated.**

**Finding 7****SHA lacked adequate assurance that the Maryland SafeZones Program contractor met a key performance requirement.****Analysis**

SHA lacked adequate assurance that the Maryland SafeZones Program contractor met a contract performance requirement regarding system results. In addition, the automated speed monitoring systems did not undergo an independent calibration check until nine months after implementation. Specifically, our review disclosed the following conditions:

- SHA did not have procedures to verify that the contractor accurately reported to SHA the instances in which violations were noted, but citations were not issued by the contractor. This is significant because the contractor was not responsible for rejections that were deemed the result of “uncontrollable events”, such as the image of a speeding vehicle’s license being obstructed by another vehicle. The contractor was responsible for “controllable events” such as images that were unclear because of lighting.

The contract included a performance requirement that the contractor issue citations at the rate of 90 percent of violations captured after excluding rejections deemed to be uncontrollable events. (The contract did not quantify an unacceptable or expected uncontrollable event rate.) According to the contract, the failure to reach this rate can result in liquidated damages of \$40 multiplied by the number of additional citations needed to meet this requirement. Although SHA had access to all the violation images, a formal documented review of these images was not performed. Without an independent review of the instances in which citations were not issued and were noted as the result of an uncontrollable event, there was a lack of assurance that the contractor met the 90 percent performance requirement. According to SHA records, in fiscal year 2011 the contractor captured 755,600 violations of which 152,800 (20 percent) of the violations were rejected due to uncontrollable events and, therefore, these violations were excluded from the performance rate calculation. After excluding images for uncontrollable events, the contractor reported to SHA that it had achieved a 93 percent performance rate during fiscal year 2011, which was greater than the 90 percent requirement and consequently, no liquidated damages were charged.

- The automated speed monitoring systems did not undergo a calibration check by an independent calibration laboratory until nine months after implementation. State law, and the contract, require that a work zone speed

control system undergo an annual calibration check performed by an independent calibration laboratory, and the law further provides that those results shall be admitted as evidence in any court proceeding for a related violation (speeding citation). The intent of this calibration check is to ensure that the equipment functioned in accordance with the manufacturer's specifications. The process of obtaining independent calibration certifications began on March 31, 2011, nine months after the contract's July 2010 inception and after our inquiries. SHA's position is that neither State law nor the contract specified the timing of the annual independent certifications and, consequently, the certifications obtained beginning in March 2011 satisfied any legal or statutory requirements. We did note that during that nine-month period calibrations were obtained by the contractor but were not independent. In our opinion, to help ensure the cameras were functioning properly when implemented, the independent certification should have been conducted at the beginning of the contract, and then annually thereafter as required by State law and the contract.

#### **Recommendation 7**

**We recommend that SHA develop formal procedures to monitor the Maryland SafeZones contractor to ensure that**

- a. violations rejected as being uncontrollable are properly classified, and**
- b. the automated speed monitoring systems undergo independent calibration testing in a timely manner.**

## **Information Systems Security and Control**

### **Background**

SHA's Office of Information Technology supports various information technology applications using the MDOT's mainframe computer system and servers. Critical applications include the Employee Management Information System (EMIS - internal payroll system) and the Advanced Traffic Management System (used for the collection, processing, and analysis of highway traffic data). SHA uses MDOT's security software to help secure critical mainframe based applications.

**Finding 8****Monitoring controls over critical mainframe production files need improvement.****Analysis**

Monitoring controls over critical mainframe production files need improvement. Specifically, we noted the following conditions:

- Security software settings (that is, the recording of events) were not activated for a critical administration account that was assigned to one individual who was authorized to use the related capabilities to directly modify key EMIS production database tables. Consequently, improper or unauthorized modifications made to critical database tables would not be identified for subsequent review.
- The procedures for the review of direct file accesses against critical EMIS mainframe files as recorded on a daily security report were not comprehensive. Specifically, reviews were only performed for access violations; direct file accesses against critical files were not reviewed for propriety.

As a result of these conditions, SHA was not in compliance with the provisions of the Department of Information Technology's *Information Security Policy* which requires that application and system auditing must be enabled to capture access, modification, deletion, and movement of critical information by each unique user and that procedures must be developed to routinely review audit records for indications of unusual activities, suspicious activities, or suspected violations.

**Recommendation 8**

**We recommend that SHA**

- a. activate security software settings for the aforementioned administration account to record direct modifications made to key EMIS production database tables, and**
- b. perform documented reviews of direct files accesses against critical EMIS files for propriety.**

## Ethics Law

### **Finding 9**

**A management employee and the employee's subordinates participated in the monitoring of a consulting services contract with a firm where the management employee's spouse was a senior executive, a potential violation of State ethics laws.**

### **Analysis**

A management employee and the employee's subordinates participated in the monitoring of a consulting services contract totaling \$5 million with a firm where the employee's spouse was a senior executive, which is a potential violation of State ethics law. Although a review of this employee's financial disclosure forms on file with the State Ethics Commission noted that the employee disclosed the relationship, we were advised by SHA management that it was unaware of the relationship. Furthermore, SHA had no mechanism to identify potential conflicts of interest.

Our tests of 49 task orders issued under the aforementioned consulting contract totaling \$966,112 disclosed that the SHA management employee participated in authorizing 32 task orders totaling \$341,036. In addition, our review of payments under the contract totaling \$479,751 disclosed that the employee's subordinates participated in the review and monitoring of tasks for the work performed and billed to SHA by the employee's spouse's firm.

State ethics laws state that an employee may not participate in a matter if a qualifying relative (such as a spouse) of the employee has an interest in the matter and the State employee knows of the interest. In addition, a Governor's Executive Order issued in February 2007 states that Executive Branch employees shall not hold financial interests that conflict with the conscientious performance of duty, that they shall act impartially and not give preferential treatment to any private organization or individual, and that they must endeavor to avoid any actions creating the appearance that they are violating applicable law or ethical standards. We were advised by State Ethics Commission staff that disclosure of the relationship on financial disclosure forms does not preclude an employee from complying with ethics laws or the Governor's Executive Order.

### **Recommendation 9**

**We recommend that SHA**

- a. immediately refer this issue to the State Ethics Commission and ensure compliance with the State ethics laws and the Governor's Executive Order with respect to the aforementioned contract and,**

- b. establish procedures to identify and address potential conflicts of interest related to State contracts.**

## **Administrative Leave**

### **Finding 10**

**SHA did not adhere to MDOT's policy for administrative leave granted to two employees.**

### **Analysis**

SHA did not adhere to MDOT's policy for administrative leave that was granted to two employees. Specifically, our test of 30 administrative leave transactions for 10 employees during the period December 2008 to May 2011 disclosed that leave was granted to the two individuals for reasons that were not provided for in MDOT's administrative leave policy.

Our review of the circumstances related to these two employees disclosed that the employees were initially placed on administrative leave in accordance with MDOT's policy that provides for administrative leave while investigations are being performed of allegations that may result in termination. However, SHA allowed the employees to remain on administrative leave for extended periods of time (approximately a year or longer) and paid the employees \$215,000 after the investigations were completed and the allegations were substantiated.

MDOT's policy defines administrative leave as leave with pay allotted to cover authorized absences from work under specified conditions. It further states that during the period required to investigate an incident involving work-related conduct that may result in termination, an employee may be placed on administrative leave. Although the granting of administrative leave to these employees was approved by an SHA upper management employee, the circumstances under which the leave was granted were not provided for under MDOT's policy.

### **Recommendation 10**

**We recommend that SHA adhere to the MDOT's policy for granting administrative leave to employees.**



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

We have audited the State Highway Administration (SHA) for the period beginning August 1, 2008 and ending June 30, 2011. 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 controls, and to evaluate its compliance with applicable State laws, rules, and regulations. We also determined the status of the findings included in our preceding audit report.

In planning and conducting our audit, we focused on the major financial-related areas of operations based on assessments of materiality and risk. The areas addressed by the audit included procurements and disbursements for highway design and construction and for SHA's operating expenditures, as well as speed enforcement, payroll, equipment, and materials and supplies inventories. Our audit procedures included inquiries of appropriate personnel, inspection of documents and records, and observations of SHA's operations. We also tested transactions and performed other auditing procedures that we considered necessary to achieve our objectives. Data provided in this report for background or informational purposes were deemed reasonable, but were not independently verified.

SHA provides certain payroll support services (such as the maintenance of employee leave records) to various units of the Maryland Department of Transportation (MDOT). These support services are included within the scope of our audit of SHA.

Our audit did not include an evaluation of internal controls for federal financial assistance programs and an assessment of SHA's compliance with federal laws and regulations pertaining to those programs because the State of Maryland engages an independent accounting firm to annually audit such programs administered by State agencies, including SHA.

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.

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 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.

MDOT's response, 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 SHA regarding the results of our review of its response.

APPENDIX A



**Maryland Department of Transportation**  
The Secretary's Office

**Martin O'Malley**  
Governor

**Anthony G. Brown**  
Lt. Governor

**Darrell B. Mobley**  
Acting Secretary

**Leif A. Dormsjo**  
Acting Deputy Secretary

November 14, 2012

Thomas J. Barnickel III, CPA  
Acting Legislative Auditor  
Office of Legislative Audits  
Department of Legislative Services  
Room 1202  
301 West Preston Street  
Baltimore MD 21201

Dear Mr. Barnickel:

Enclosed please find the Department's responses to the draft Legislative Auditor's Report dated October 2012, for the Maryland Department of Transportation (MDOT) – State Highway Administration (SHA), for the period August 1, 2008 and ending June 30, 2011. Additionally, an electronic version of this document has been sent to your office via email at [response@ola.state.md.us](mailto:response@ola.state.md.us).

If you have any questions or need additional information, please do not hesitate to contact me or Mr. David L. Fleming, Chief Financial Officer. Mr. Fleming can be reached at 410-865-1035.

Sincerely,

A handwritten signature in black ink, appearing to read "Darrell B. Mobley".

Darrell B. Mobley  
Acting Secretary

Enclosure

cc: Ms. Betty Conners, Director, Office of Finance, State Highway Administration  
Mr. Leif Dormsjo, Acting Deputy Secretary, Maryland Department of Transportation  
Mr. David L. Fleming, Chief Financial Officer, Maryland Department of Transportation  
Mr. Josh Pasch, Director, Office of Audits, State Highway Administration  
Ms. Melinda Peters, Administrator, State Highway Administration  
Ms. Lisa Rosenberg, Acting Director, Office of Audits, Maryland Department of Transportation

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**Architectural and Engineering Contracts**

**Finding 1**

**SHA had not documented, as required, the basis for the maximum values of A&E contracts submitted to the BPW for approval.**

**Recommendation 1**

**We recommend that SHA establish a formal process to document the maximum values of A&E contracts submitted to the BPW in accordance with MDOT guidelines.**

**Response:**

The Administration concurs with the auditor's recommendation and has established a documented process that supports the contract values based on historic expenditures and projected workloads. In response to the June 2011 OLA Special Review, a new process was implemented in July 2011, specifically for A&E contracts requiring an evaluation that includes expenditure history for the work being requested and current levels programmed for funding. Approval by the Deputy Administrator and the Office of Finance is required. In addition, MDOT issued new guidelines for requesting consultant services that requires each modal to form an internal working group consisting of staff from Engineering, Operations, Finance, Capital Planning, and Procurement, to develop evaluation criteria for requests for consultant services, to review requests for consultant services, and to reach agreement that the services are necessary and the amount of requested funding is appropriate and available. These requests are then submitted by the internal working group to MDOT with appropriate documentation. MDOT reviews the assessment and justification and makes recommendations for approval by the Secretary of Transportation. If a solicitation for services is not made within 6 months, the approval expires and a new request will be made. These processes that have been put in place will ensure that contract values are reasonable and based on an assessment of projected workloads.

The Administration wants to clarify the usage of the terminology of "pre-established overhead rates" and "maximum number of hours and salary amounts" as presented in the background. SHA establishes the reasonableness of the price proposals based on currently approved audited overhead rates and average salaries, which are included in the initial contract. Overhead rates are subject to change throughout the life of the contract based on SHA's approval of annual overhead audits, and salaries are reimbursed based on actual costs incurred by the consultant.

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**Finding 2**

**As of August 2012, SHA's survey of contract costs identified a significant number of contracts for which work was performed that was outside the scope of those contracts, without obtaining required BPW approval.**

**Recommendation 2**

**We recommend that SHA**

- a. develop procedures and controls to ensure contract funds are only used as authorized, and**
- b. promptly complete its survey and seek BPW approval for contract modifications as required.**

**Response:**

- a. The Administration concurs with the auditor's recommendation. The Administration issued a memorandum on March 9, 2011 to all senior managers directing that all tasks issued under A&E contracts be evaluated to determine that all work performed under the contract is authorized as work contemplated by the contract. Contract managers are required to verify as part of a checklist in the invoice payment process that work performed by the consultant is authorized under the contract. Also, the task order approval process will provide further documented proof. In addition, SHA undertook an extensive review of all tasks with invoices approved during the audit period and identified additional contracts with tasks approved for work that was beyond what was authorized in the original contract (although all of these involved expenditure of funds against properly authorized projects). This involved the review of thousands of task orders issued against hundreds of contracts over the three year audit period. Additional training for contract managers has been and continues to be provided.
- b. The Administration concurs with the auditor's recommendation. Where the contract price or a cost component of the contract price increased by \$50,000 or more, BPW approval will be sought retroactively as provided by the limitations on BPW delegation set forth in COMAR 21.02.01.04 C (1) (f). If, after completion of discussions with the BPW staff and the Office of the Attorney General, there are contracts requiring ratification as a result of a material change in scope, that approval will also be sought from the BPW. A list of contracts is being prepared to take to the BPW as stated in the response to the OLA Special Review to seek retroactive approval or, if applicable, ratification, by the BPW where necessary by December 2012. SHA has reviewed the additional tasks identified by OLA totaling \$974,000 that were not included on SHA's preliminary survey of out of scope tasks and determined that these tasks were performed within the scope of work identified in the original contract, and are not required to be submitted for retroactive approval by the Board.\*

**\*See Appendix B for related auditor's comment.**

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**Finding 3**

**SHA had extended contract expiration dates without BPW approval.**

**Recommendation 3**

**We recommend that SHA ensure that, in the future, BPW approval is obtained for significant contract modifications, including the extension of contract expiration dates.**

**Response:**

The Administration concurs with the auditor's recommendation. In response to the OLA Special Reviews, the A&E approval process for contract modification (time and money) has been enhanced by creating additional approval paths in the Department's Financial Management Information System (FMIS) and the development of a documented quality assurance review process to be conducted before approving any contract modifications. This new process has already been implemented for all Architectural and Engineering Service contracts and construction contracts. The approval paths are being phased in for all other types of contracts to ensure that all contract modifications requiring BPW approval are properly submitted before any changes can be made in FMIS.

**Finding 4**

**SHA's process for determining the propriety of A&E contract billings was not comprehensive.**

**Recommendation 4**

**We recommend that SHA increase the number of audits performed of A&E contractors (repeat).**

**Response:**

The Administration concurs with the auditor's recommendation to the extent that the number of incurred cost audits should be increased beyond five for A&E contractors.

The Administration would like to emphasize that its Office of Audits (OA) has been restructured, including the placement of a new Director with extensive experience in both internal and external auditing as well as risk based assessments on audit practices. The OA performs operational and compliance audits in addition to the audits of contractors. As an industry best practice and in order to maximize limited resources, the OA, under new leadership, will perform an annual risk assessment that takes all SHA units into consideration. The risk assessment is used to determine the annual audit plan. It should be noted that the number of incurred cost audits planned each year is subject to change based on that year's risk assessment.

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The Office of Audits (OA) selects consulting firms for audit based on a risk assessment. OA, using professional judgment, selects A&E firms identified as higher risk for the incurred cost audits. This risk is determined based on criteria, such as a history of findings; the date of the last audit; the nature, size and location of the consultant's operations; audit results from Overhead Audits performed (over 100 in FY11); and issues encountered by contract managers.

The Administration wants to clarify that most of the incurred cost audits cover an audit period of 2-4 years. As a result, the period of July 2010 through June 2011 (FY11) was also audited in FY12 and will continue to be audited in FY13 and FY14. As of June 30, 2012, A&E billings incurred in FY11 have been audited for 11 A&E contractors even though only 5 of the audits were performed in FY11.

In addition, 10 A&E firm audits (beyond the 5 cited in the auditor's analysis) were performed in FY11, specifically for their work on the ICC. The same contractors work on both ICC and non-ICC projects and perform the same type of work. The Office of Audits applies audit finding on these audits to non-ICC work performed by those firms.

It should be noted that Incurred Cost audits are a supplementary control over the accuracy of A&E contractor billings. SHA relies on a number of controls, both active and passive, to mitigate the risk that A&E billings are overstated. Overall, SHA approaches the review and approval of A&E billings using a standard of reasonableness. SHA has established:

- Required Standards for Consultant Invoices
- Standard Invoicing formats
- Invoice Verification and Contract Management Guidelines
- Invoice Payment Approval Checklist
- Training for Contract Managers
- Task upset limits (maximum cost) assigned to each task

The upset limit ensures that the overall cost of the work performed is reasonable based on the type of work and experience required to complete the work. Once the task limit is reached, no further billings are submitted and paid.

In addition, if a consultant is found to be intentionally overbilling the state, they risk eligibility as a responsible bidder and disbarment, which precludes them from working on any contracts for the State.

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**Maryland SafeZones Program**

**Finding 5**

**SHA did not ensure that contractor performance benchmarks were established for the Maryland SafeZones pilot program as allowed by the contract.**

**Recommendation 5**

**We recommend that SHA, in the future, ensure that relevant contractor performance requirements are established and that actual results are monitored for evaluating performance.**

**Response:**

In connection with Findings 5 through 7 (relating to the Maryland SafeZones Program) the Administration believes it is important to point out that the SHA program is a safety program, and its intention is to slow drivers down in construction work zones. Unlike the local automated speed enforcement programs, SHA's work zone program requires, by regulation, multiple large advanced warning signs and an electronic speed board that flashes the driver's actual speed in advance of the enforcement system. With this approach, every time that a system is deployed, the well-being of highway workers and highway users is enhanced. The accident rate in highway work zones is significantly higher than elsewhere on the State highway system and lives can be saved by providing the required advanced notice.

While the Administration concurs with the auditor's recommendation, we believe the finding does not appropriately reflect the nature of the one year pilot program and the impact of the rapidly changing technology.

During the pilot phase of the Maryland SafeZones Program, SHA became aware that the capture rate of the existing radar-based equipment, best suited for a single-lane monitoring environment as performed by a local jurisdiction, was not ideally suited for the highway environment. SHA learned that due to the volume of vehicles and the fact that multiple lanes required monitoring; the radar-based equipment could no longer be used. At the same time, new laser-based technology, better suited for multi-lane highways, became available. Discussions were held and a change was made to deploy laser-based technology. Utilizing laser-based technology has proven to function effectively in the multi-lane work zone environment.

Considering the uncertainty of the capture rate in the highway environment, the newness of the technology and a lack of other national programs from which the SHA could draw comparisons, the pilot program allowed us to learn how this type of program worked and determine the most appropriate performance specifications to be included in the RFP. It was from these determinations and research into the limited number of other programs, that the SHA derived the 95% requirement initially included in the RFP.

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During the pilot program, in order to monitor and evaluate the performance of the contractor and the program, SHA generated and reviewed monthly reports regarding program effectiveness and began weekly reporting to the SHA Administrator regarding the percentage of citations issued. This summary included documentation of issues associated with equipment or processes needing correction. The SHA also held monthly meetings with the Maryland State Police, Maryland Transportation Authority Police, and the contractor to discuss concerns with processes and equipment and develop recommendations on how these areas should be or could be improved. The pilot program was never intended to extend for multiple years. Therefore, these reports and meetings were used to develop and modify the Request for Proposals, advertised during the first year of the pilot program. This resulted in several necessary modifications to the requirements provided in the initial pilot program contract, including and most significantly the change to laser based technology.\*

**Finding 6**

**SHA awarded a contract for operating the current Maryland SafeZones Program, even though the contractor's proposal was not in compliance with certain RFP requirements.**

**Recommendation 6**

**We recommend that SHA ensure that contractor bids are in compliance with RFP requirements and are thoroughly evaluated.**

**Response:**

The Administration concurs with the auditor's recommendation to ensure that contractor bids are in compliance with RFP requirements and are thoroughly evaluated. However, in this procurement, SHA maintains there were no major deviations from the RFP and the Contractor's proposal was thoroughly evaluated based on the RFP requirements. The Administration also agrees with the procurement team's conclusion that these particular deviations from the RFP were not of a magnitude that required a new solicitation, and that the contract award was consistent with the Procurement Law and in the best interest of the State. At this time, competition for these services is very limited, and the Administration is committed to obtaining maximum competition as this area of evolving technology develops in the marketplace. The Maryland SafeZones Program procurement team included members from Maryland State Police and Maryland Transportation Authority Police with expertise in speed camera technology. This team continues to believe the procurement was in the best interest of the State and there is no evidence to suggest that the RFP changes cited in this finding would have affected competition. Each issue noted by the auditors did not represent a major deviation from the RFP requiring a new solicitation.

**\*See Appendix B for related auditor's comment.**

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- The IACP certification referenced by the auditors is another example that the highway automated speed enforcement technology is quickly evolving in a limited marketplace. At this time, because the IACP is not remaining timely with their review of the changing technology, IACP conformance currently is not a valid performance indicator. In fact, because the IACP has not kept up with the changes in ASE technology, references to conformance with IACP guidelines were removed from draft regulations for the Maryland SafeZones Program before the regulations were finalized. The RFP referenced conformance with IACP guidelines but did not require a certification from the IACP. Significantly, the RFP specifically allows for future technological advancement to be used.
- The expertise of the team participating in the field testing of the equipment was significant and the team appropriately determined that the equipment performance was sufficient to meet the goals of the program.

The procurement team also concluded, based on the advice of experts, that the RFP requirement to achieve 95% legible images of violating vehicles rear license plates was set at what was later to be determined to be an unreasonable level, and reduced the requirement to 90%. In June 2009, a task force presented information gathered from ASE programs from 4 states and a locality. Only one state had established a requirement for legible images which was set at 95%. With no other information available, SHA set 95% as the requirement for this program.\*

**Finding 7**

SHA lacked adequate assurance that the Maryland SafeZones Program contractor met a key performance requirement.

**Recommendation 7**

**We recommend that SHA develop formal procedures to monitor the Maryland SafeZones contractor to ensure that**

- a. violations rejected as being uncontrollable are properly classified, and**
- b. the automated speed monitoring systems undergo independent calibration testing in a timely manner.**

**Response:**

- a. The Administration concurs with the auditor's recommendation. Data, which included vehicle images captured by the vendor's automated speed enforcement (ASE) equipment, was downloaded to a database accessible to authorized personnel of the State Highway Administration (SHA), Maryland State Police (MSP), and Maryland Transportation Authority

**\*See Appendix B for related auditor's comment.**

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Police (MDTAP). Specifically, images related to uncontrollable violations, that could not, or prudently should not, be moved forward in the process of citation issuance are readily available for review by all involved parties. These reviews led to a need for new technology, which was implemented in spring of 2010 when the technology became available. The implementation of new technology resulted in the reduction of uncontrollable events. Although SHA did not have a formal process established to review these uncontrollable violations, SHA, MSP, and MDTAP staff did periodically review these violations and discussed questions or concerns related to the images with the vendor. SHA has established formal contract monitoring procedures that will include a requirement that the Administration conduct an independent review of controllable and uncontrollable events annually.

Each decision made by the Administration in connection with the RFP provisions of this contract and the administration of this contract was predicated on assuring that each citation issued was valid. While a different approach may have been beneficial to the State from a revenue perspective, at each turn, SHA made the decision necessary to assure confidence in the validity of the citations issued. Significantly, there is no evidence that any equipment failed the calibration requirements or that citations based on inaccurate equipment were issued.

- b. All required independent automated speed monitoring system calibrations were performed within the prescribed timeframes of the law and the contract. All statutory prerequisites to the issuance of all citations, including those requiring annual independent calibrations, were followed. There is no evidence that any equipment failed the calibration requirements, that citations based on inaccurate equipment were issued, or that there was any deficiency with regard to any evidence required by law. Therefore, the Administration does not concur with the portion of this finding indicating that, in the past, calibrations were not performed in a timely manner. There is no evidence that any of the ASE equipment was out of calibration. The Administration certainly agrees that timely annual calibrations of ASE equipment should continue.\*

### **Information Systems Security and Control**

**Finding 8**

**Monitoring controls over critical mainframe production files need improvement.**

**Recommendation 8**

**We recommend that SHA**

- a. **activate security software settings for the aforementioned administration account to record direct modifications made to key EMIS production database tables, and**

**\*See Appendix B for related auditor's comment.**

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- b. perform documented reviews of direct files accesses against critical EMIS files for propriety.**

**Response:**

- a. The Administration concurs with the auditors' recommendation and has implemented steps to respond accordingly. The MDOT Office of Transportation Technology Services (OTTS) has activated the recommended software settings. If and when the logon id is used, a report will generate, and, at that time, will be reviewed.
- b. MDOT concurs with the auditors' recommendation and will perform documented reviews of access journal logging entries for production data and program files. The reviews will be documented and retained with information indicating why the data file was accessed, whether or not the access was proper, and actions taken if the access was not proper.

**Ethics Law**

**Finding 9**

**A management employee and the employee's subordinates participated in the monitoring of a consulting services contract with a firm where the management employee's spouse was a senior executive, a potential violation of State ethics laws.**

**Recommendation 9**

**We recommend that SHA**

- a. immediately refer this issue to the State Ethics Commission and ensure compliance with the State ethics laws and the Governor's Executive Order with respect to the aforementioned contract and,**
- b. establish procedures to identify and address potential conflicts of interest related to State contracts.**

**Response:**

- a. The Administration concurs with the auditor's recommendation. SHA immediately addressed the issue to ensure the employee had no further involvement with the consultant services contractor in question. The employee in question has contacted and settled the matter with the State Ethics Commission.
- b. In response to the Special Review, ethics trainings have been held for SHA employees. Between July of 2011 and February of 2012, five ethics-oriented training classes were offered and attended by a total of 2014 employees. The topics offered included conflict of interest, secondary and post-separation employment and ethics potpourri which covered a number of ethics topics including, but not limited to, gifts, interactions with the contractor community, relatives,

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conflicts, etc. SHA will continue to proactively address potential conflicts of interest and will continue to educate employees on their personal responsibilities to comply with the State ethics laws.

- i. Beginning in February of 2013, another series of ethics trainings will be offered to SHA employees. It is anticipated that some of the topics that will be addressed are secondary employment and relatives in the workplace (conflicts of interest), gifts, etc.
- ii. SHA's Deputy Administrator for Administration is the designated SHA Ethics Coordinator, and serves as the point of contact for employees with ethics inquiries or concerns and works with the Office of the Attorney General at SHA, MDOT and SEC to resolve their questions.
- iii. Annually, SHA sends reminders to employees concerning their obligations to file disclosure statements, proper handling of gifts, holiday parties sponsored by the contractor community and other related matters.
- iv. SHA will continue to monitor ethics and relative hire issues and will implement policies, procedures and training programs to ensure that employees are kept abreast of SEC decisions and updates related to ethics and complying with the ethics law.

### **Administrative Leave**

**Finding 10**

**SHA did not adhere to MDOT's policy for administrative leave granted to two employees.**

### **Recommendation 10**

**We recommend that SHA adhere to the MDOT's policy for granting administrative leave to employees.**

### **Response:**

The Administration concurs with the auditor's recommendation. The two circumstances referenced in this finding involve personnel matters resolved consistent with the Secretary's authority to manage the Department. In those rare instances where paid leave is warranted for reasons not specifically listed in regulation and MDOT policy, and the leave is consistent with the Secretary's authority to manage the Department, specific written approval from the MDOT Secretary or authorized designee will be obtained before the leave is approved by SHA.

## **APPENDIX B**

### **Auditor's Comments on the Department of Transportation - State Highway Administration Response**

While the Department of Transportation – State Highway Administration (SHA) concurred with the recommendations included in the report, in some cases disagreement was indicated regarding the underlying conditions noted. Our comments addressing these disagreements are presented below. In accordance with State law, all areas of disagreement will be addressed through separate correspondence between this Office and the Department.

Finding 2: Our report identified \$974,000 in task orders as being attributable to work outside the scope of the contracts, which had not been identified in SHA's preliminary survey results of such situations. SHA's response indicated that its review disclosed that the tasks were performed within the scope of the work identified in the original contract and thus are not required to be submitted to the Board of Public Works for retroactive approval. We continue to believe that the work in question was outside the scope of the related contracts based on our review of a number of documents which described the work to be performed under the various task orders and contracts. In addition, this conclusion was confirmed with SHA management personnel during the audit.

Finding 5: Although SHA's response indicates concurrence with the recommendation, the response states that the finding does not appropriately reflect the nature of the pilot program and the impact of changing technology. While SHA's response recounts the pilot program process, it did not explain why relevant contractor performance requirements were not established.

SHA's response further states, in part, that the pilot program allowed SHA to determine the most appropriate performance specifications to be included in the Request for Proposal (RFP). We question this assertion since the pilot program began on October 1, 2009 and the RFP was advertised on October 26, 2009 (only 25 calendar days later), and considering the issue pertaining to changes to key RFP requirements noted in Finding 6.

Finally, SHA's response indicated that numerous steps had been taken to monitor and evaluate the pilot program. When asked during the course of the audit, SHA was not able to provide documentation of any such monitoring.

Finding 6: SHA's response indicates concurrence with the recommendation which was to ensure contractor bids are in compliance with RFP requirements and are thoroughly evaluated. However, the response seems to suggest that the recommendation does not apply to this situation. Specifically, SHA maintains that there were no major deviations from the RFP, the contractor's proposal was thoroughly evaluated, and there is no evidence to suggest the RFP changes cited in the finding would have affected competition. We believe that the two RFP requirements that were not met by the sole bidder were important since they related to the type of speed monitoring system equipment to be used and the equipment's performance. As stated in our report, we believe the circumstances we identified call into question whether any of these changes could have influenced or impacted the lack of other bids and whether a new solicitation was necessary. SHA's response states that there is no evidence to suggest that the changes affected competition; however, without rebidding this assurance is lacking.

Finding 7: Regarding independent calibrations of the automated speed monitoring systems, SHA's response indicated that all required calibrations were performed within the timeframes of the law and the contract, and that SHA did not concur with the portion of the finding that, in the past, calibrations were not performed timely. Our report did not state that the equipment calibrations were not performed within the requirements of the law or contract. Rather, our report stated that, in our opinion, to help ensure the equipment was functioning properly when implemented, the independent calibration should have been conducted at the beginning of the contract and, as required by State law and the contract, annually thereafter.

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