

Audit Report

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**Department of Transportation  
State Highway Administration**

August 2009

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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**

August 6, 2009

**Karl S. Aro**  
Executive Director

**Bruce A. Myers, CPA**  
Legislative Auditor

Delegate Steven J. DeBoy, Sr., Co-Chair, Joint Audit Committee  
Senator Verna L. Jones, 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 November 16, 2005 and ending July 31, 2008. SHA is responsible for the planning, construction, improvement, maintenance, and operations of the State's highway system.

Our audit disclosed that SHA did not have a comprehensive process to verify labor charges for architectural and engineering design contracts to ensure that the charges were proper. For example, our tests disclosed that SHA processed certain contractor invoices for payment that included approximately \$3 million in labor charges even though the invoices lacked the information required by SHA to ensure the reasonableness of those charges.

SHA did not have adequate controls over its materials and supplies inventories that were valued at \$31 million and were stored at 35 locations. We also noted that SHA did not complete sales of excess real property in a timely manner, as required by State law.

We identified various internal control and record keeping deficiencies related to SHA's cash receipts, corporate purchasing cards, state vehicle fuel usage, and equipment.

An Executive Summary of our findings can be found on page 5. The Maryland Department of Transportation's response to this audit, on behalf of SHA, is included as an appendix to this report. We wish to acknowledge the cooperation extended to us during our audit by SHA.

Respectfully submitted,

Bruce A. Myers, CPA  
Legislative Auditor



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

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# Executive Summary

## Legislative Audit Report on State Highway Administration (SHA) August 2009

- **Processes in place to verify the accuracy of labor charges for architectural and engineering design contracts were not comprehensive. Our test of 29 paid invoices containing labor-related charges totaling approximately \$4.2 million disclosed that 15 invoices totaling \$3 million did not include sufficient detail information to enable SHA to ensure the reasonableness of the labor charges.**

SHA should adequately verify labor charges for architectural and engineering services, including ensuring that contractor invoices contain required detail information to determine the reasonableness of the labor charges.

- **SHA did not always timely dispose of excess real properties. Specifically, SHA did not complete related administrative reviews, issue required written notifications to certain interested parties, obtain independent appraisals, and put real properties up for auction, within time frames specified by State law and its internal policies.**

SHA should comply with the State law and its internal policies to ensure that excess real properties are disposed of timely.

- **Controls over materials and supplies inventories, for which SHA spent approximately \$25.7 million during fiscal year 2008, were inadequate. For example, certain supply custodians were also assigned other incompatible duties, required reconciliations to ensure that purchases were recorded were not always completed, and items identified as missing were not adequately investigated and resolved.**

SHA should take the recommended actions to improve controls and recordkeeping of materials and supplies inventories.

- **Local jurisdictions were not always assessed costs related to the traffic signal construction projects which, according to departmental policy, were required to be shared between SHA and the applicable jurisdictions.**

SHA should assess and recover the costs of traffic signal construction projects applicable to local jurisdictions, as required.

- **SHA authorized construction contractors to purchase certain sensitive equipment items (such as digital cameras and cell phones) on SHA's behalf, thereby bypassing State Procurement Regulations. Furthermore, the contractors retained these items after the projects were completed.**

SHA should purchase all equipment items in accordance with State Procurement Regulations and retain these items for its future use.

- **Cash receipts, which totaled approximately \$31 million during fiscal year 2008, were not adequately controlled and certain other collections were not timely deposited.**

SHA should adequately control cash receipts and timely deposit all collections.

- **Certain other control and recordkeeping deficiencies existed with regard to corporate purchasing cards, State vehicle fuel usage, and equipment.**

SHA should take the recommended actions to improve controls and recordkeeping in these areas.

## **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 2008 expenditures totaled approximately \$1.7 billion.

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

Our audit included a review to determine the status of 12 findings contained in our preceding audit report dated November 9, 2006. We determined that SHA satisfactorily addressed 9 of these findings. The remaining 3 findings are repeated in this report.



# Findings and Recommendations

## Architectural and Engineering Contracts

### **Finding 1**

**The State Highway Administration's (SHA) processes for verifying the accuracy of labor charges for architectural and engineering (A&E) design contracts were not comprehensive.**

### **Analysis**

SHA did not have comprehensive processes to verify the accuracy of labor charges for architectural and engineering (A&E) design contracts. We were advised by SHA management that its verification procedures included reviewing such charges for reasonableness when processing the related vendor invoices for payment and requiring its internal auditors to verify, during their audits of contractor records, that such charges were supported by time records prepared by contractor employees. However, we noted deficiencies with SHA's verification procedures.

Our test of 29 invoices, containing labor-related charges totaling approximately \$4.2 million, disclosed that 15 invoices totaling \$3 million did not include information required to ensure the reasonableness of the related labor charges. While the invoices included employee names, hours, and pay rates, the invoices did not include employees' job classifications. As a result, SHA could not assess the reasonableness of the labor charges applicable to the individual employees listed on the contractors' invoices since the hourly pay ranges differ for each employee job classification. SHA's written policies require that contractor invoices include employee job classifications so that SHA staff can verify the reasonableness of the labor rates charged.

In addition, SHA's internal audit unit audited only a small number of these contractors. During the period from July 2005 through May 2008, SHA made payments totaling approximately \$500 million to 148 contractors for A&E design services. As of June 30, 2008, SHA had only audited 15 of these contractors. It should be noted that these 15 contractors received approximately half of the payments made by SHA during this period. Nevertheless, the vast majority of the contractors have not been audited, including many of the contractors that, based on our tests, did not include employees' job classifications on their invoices.

In our preceding audit report, we noted that SHA did not generally require A&E design contractors to submit time sheets to support labor charges invoices. In response, SHA stated that its internal audit unit would conduct comprehensive audits to periodically verify labor-related charges.

### **Recommendation 1**

**We again recommend that SHA establish a comprehensive process to verify labor charges for A&E services. Specifically, we recommend that SHA**

- a. ensure that related contractor invoices contain all required information, including job classifications, and that such charges be verified, at least on a test basis, for reasonableness;**
- b. increase the number of audits performed of A&E contractors; and**
- c. recover any overcharges noted as a result of the internal invoice reviews and contractor audits performed.**

### **Excess Real Property Sales**

#### **Finding 2**

**SHA frequently did not comply with State law regarding the timely sale of excess real properties.**

#### **Analysis**

SHA frequently did not dispose of excess real properties as required by law. The Annotated Code of Maryland, Section 8-309 of the Transportation Article, requires that land acquired for state road projects that SHA subsequently determines to be in excess shall be promptly disposed of. However, our test of 20 real properties, determined by SHA to be excess, with total assessed values of at least \$6.3 million<sup>1</sup> disclosed the following conditions:

- Certain required internal clearance processes (for example, preparing a written memorandum that describes the property and explains why the property should be declared in excess) had not been completed for 6 of the properties tested for periods ranging from 64 days to 461 days beyond the required dates. SHA's *Internal Clearance Policy* requires that, once initiated, such processes be completed within 120 days.
- Eleven properties with assessed values totaling approximately \$5.4 million had not been put up for auction for periods ranging from 1½ years to 6 years after SHA determined the properties to be in excess. In addition, SHA had not obtained independent appraisals, as required, for 6 of these properties.
- Notifications that excess land parcels could be reacquired by the previous owners were not timely issued by SHA for 5 of the aforementioned 11 properties. Specifically, SHA did not issue the related notifications for 4 of

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<sup>1</sup> Assessed value is “at least” \$6.3 million because SHA did not have the correct parcel numbers for 6 properties tested and, therefore, could not readily obtain the assessed valuations for these 6 properties.

these properties until 2 months to 18 months after the required dates and failed to issue any such notification for the one remaining property.

The aforementioned law further provides that SHA shall notify the person(s) from whom a parcel of land was acquired, within 30 days of SHA determining the land to be in excess, that the land is available for reacquisition. Such notification shall also state that, if the right to reacquire the land is not exercised within 8 months of notification, SHA shall sell the land at public auction. Finally, the law requires that the sale price of excess real properties be based on the appraised market value and/or the original purchase price adjusted for interest since the date of purchase.

According to its records, as of December 24, 2008, SHA maintained 151 real properties that were available for sale, of which 84 had been appraised at a value in excess of \$21 million.

## **Recommendation 2**

**We recommend that SHA**

- a. comply with its internal policy to complete the internal clearance process on identified properties within 120 days of initiation;**
- b. take immediate corrective action to comply with State law regarding the timely sale of all excess real properties, including obtaining current appraisals, issuing required notifications to previous owners, and arranging for all such properties to be placed on public auctions; and**
- c. in the future, annually review its inventory of real properties, identify those properties considered to be in excess, and timely dispose of such properties.**

## **Materials and Supplies**

### **Finding 3**

**Controls over materials and supplies inventories were inadequate.**

### **Analysis**

Controls over materials and supplies inventories were inadequate. We noted the following conditions:

- Differences between expenditures recorded on the State's accounting records for materials and supplies purchased and the related amounts recorded on SHA's automated inventory system were not adequately investigated. Although SHA required that monthly reconciliation reports be generated for each location that maintained such inventories, and that identified differences be investigated and resolved, these reconciliations frequently were not prepared and retained. For example, as of October 3, 2008, 11 of SHA's 35

inventory storage locations had not completed the reconciliation reports for the month ended June 30, 2008. In addition, for those locations that submitted the reports, explanations for many of the differences identified were not adequately supported. During fiscal year 2008, expenditures recorded in the State's accounting records for materials and supplies exceeded the related amounts on SHA's records by approximately \$844,000. A similar condition was commented upon in our preceding audit report.

- As a result of physical inventories conducted by SHA during fiscal year 2008, significant adjustments were made to the perpetual inventory records for 7 of the 35 storage locations. These adjustments were made to bring the quantities recorded on the affected perpetual inventory records into agreement with the related physical counts. According to documentation prepared by SHA's Internal Audit Unit, it was necessary for 3 of these locations to adjust the inventory balances recorded on 12 percent to 34 percent of the items inventoried. Moreover, the physical counts completed at these 3 locations disclosed approximately 10,000 missing supply articles (consisting of 963 types of items, such as automotive supplies) totaling approximately \$266,000. Furthermore, although the dollar values of missing articles for 68 types of items each exceeded \$1,000, SHA could not substantiate that it had investigated these shortages in accordance with its standing policy. A similar condition was commented upon in our preceding audit report.
- Employees at numerous inventory storage locations performed incompatible functions, such as serving as custodian of the supply storeroom and maintaining the related perpetual inventory records. In an effort to enhance the controls in this area, SHA required all storage location supervisors to perform monthly reviews to ensure that withdrawal transactions recorded on the related inventory records were properly supported and authorized. However, our test of 10 shop locations, for which inventory withdrawals totaled approximately \$11.7 million during fiscal year 2008, disclosed that the required monthly reviews had not been performed for 6 locations for which withdrawals totaled \$7.8 million. Moreover, this review procedure was not effective since SHA did not complete all required monthly reconciliations of expenditures for materials and supplies inventories (see preceding comment).
- As of December 31, 2008, SHA had not performed timely and comprehensive follow-up reviews of certain significant audit findings that were identified by a contract auditor related to small procurement practices within 15 of SHA's inventory storage locations. The audit firm, hired by SHA in December 2006, issued 15 reports during the period from November 2007 through August 2008 which disclosed 34 different findings, many of which were noted at multiple locations, including locations we noted with control deficiencies. The findings primarily consisted of internal control, procurement, and

documentation deficiencies which represented violations of State Procurement Regulations and related SHA policies. For example, the firm's reports disclosed (1) that purchasing and receiving functions were not adequately segregated within 6 locations reviewed, (2) that 11 locations submitted certain invoices for payment that lacked required supervisory approvals, and (3) that 13 locations lacked various required documentation (such as, competitive bids) to support certain purchases. During fiscal year 2008, SHA spent approximately \$13.6 million for these small procurements.

The Department of General Services' *Inventory Control Manual* specifies the recordkeeping and control procedures that State agencies are required to have in effect for materials and supplies inventories.

SHA maintains materials and supplies inventories at 35 locations throughout the State and, according to its records, spent approximately \$25.7 million during fiscal year 2008 for related purchases. As of June 30, 2008, the book value of these inventories totaled approximately \$31.3 million.

### **Recommendation 3**

#### **We recommend that SHA**

- a. investigate differences between expenditures for materials and supplies recorded in the State's accounting records and the related amounts recorded in its automated inventory system, and retain documentation of such investigations (repeat);**
- b. investigate those differences which required significant adjustments to the applicable inventory records (repeat);**
- c. ensure that supervisory reviews of recorded inventory withdrawals are properly performed, and investigate all unsupported and/or questionable withdrawals; and**
- d. take timely and appropriate follow-up action to address the findings identified by the contract auditor, including a review of small procurements.**

## **Traffic Signal Construction Cost Sharing**

### **Finding 4**

**SHA did not always require local jurisdictions to share the cost of traffic signal construction projects, as required.**

### **Analysis**

SHA did not always require local jurisdictions to share the cost of traffic signal construction projects. We reviewed nine traffic signal construction projects that

were subject to local jurisdiction cost sharing, with estimated construction costs totaling \$1.1 million. Our review disclosed that for four projects, of which each required reconstruction of traffic intersections involving county roads, SHA had not billed the local jurisdictions required shared costs totaling approximately \$164,000. We were advised by SHA management that, in its opinion, the applicable local jurisdictions were not required to share the related project costs for reconstruction of existing traffic signals or installation of intersection traffic control beacons. However, a written directive issued by the Maryland Department of Transportation (MDOT) states, in part, that if the related project involves an intersection that has been in existence for at least five years or an intersection involving a county road, as was the case for the aforementioned four projects, SHA and the applicable local jurisdiction shall share the related installation costs.

During fiscal year 2008, SHA spent approximately \$9.7 million for traffic signal construction projects. SHA advised us that it collected approximately \$436,000 from the local jurisdictions during the same period.

#### **Recommendation 4**

##### **We recommend that SHA**

- a. require local jurisdictions to share the cost of traffic signal construction projects as required by MDOT written directives,**
- b. recover the aforementioned \$164,000 from the applicable local jurisdictions, and**
- c. identify any other traffic signal construction projects for which the related costs were not properly shared with local jurisdictions and pursue recovery of such costs, as required.**

#### **Construction Contracts**

##### **Finding 5**

**SHA authorized certain contractors to purchase sensitive equipment items on SHA's behalf, thereby bypassing State Procurement Regulations for these purchases. SHA also allowed the contractors to retain these items after the related construction projects were completed.**

##### **Analysis**

As part of the overall construction project procurement, SHA authorized certain contractors to purchase sensitive equipment items (such as digital cameras and cell phones) that were routinely used by SHA employees to monitor the related construction projects. However, because SHA authorized these items to be purchased in this manner that circumvented normal State procurement processes (including competitive bidding), SHA had no assurance that the items were

purchased at the lowest cost to the State. In addition, SHA permitted the contractors to retain these items after the projects were completed even though the associated costs were paid by SHA. We discussed these concerns with SHA management, and SHA could not adequately explain why the required items could not have been purchased by use of normal State procurement methods and why the contractors were permitted to retain items paid for by SHA.

According to a report provided to us by SHA, during the period from November 2005 through July 2008, SHA authorized its contractors to purchase 317 such items at a cost, including the related services (such as cell phone services), of approximately \$457,000. As of July 31, 2008, the contractors, on SHA's behalf, had purchased and received 251 such items and related services, at a cost totaling \$324,000.

A similar condition was commented upon in our preceding audit report.

#### **Recommendation 5**

**We again recommend that SHA purchase all equipment items used to monitor construction projects in accordance with State Procurement Regulations and retain such items for future use.**

### **Cash Receipts**

#### **Finding 6**

**Controls over cash receipts processed at SHA's headquarters location were inadequate. In addition, collections received at another location were not timely deposited.**

#### **Analysis**

SHA's headquarters location lacked adequate controls over cash receipts which totaled approximately \$31 million during fiscal year 2008. SHA received collections from numerous sources, including from local subdivisions toward the cost of the intercounty connector, and from sales of access permits and excess land. Specifically, two employees that had physical access to cash receipts also processed voids of recorded cash receipts transactions. In addition, these employees had the ability to modify their authorized user capabilities on SHA's automated cashiering system. Furthermore, voided transactions and changes to system user capabilities were not reviewed and approved by supervisory personnel. As a result, these employees could potentially misappropriate cash receipts and the misappropriations would not be readily detected.

In addition, collections received by SHA's Access Permit Division were not always deposited in a timely manner. Specifically, our test of 33 receipts totaling \$1.2 million received by the Division during fiscal year 2008 disclosed that 13 of these receipts totaling \$438,900 were not deposited for periods ranging from 4 to 65 days after the dates of collection. The Comptroller of the Treasury's *Accounting Procedures Manual* requires that receipts be deposited no later than the first business day after receipt. The Division received collections, which totaled approximately \$1.4 million during fiscal year 2008, from the sale of permits related to construction on the State's rights-of-way (for example, construction of driveways).

### **Recommendation 6**

**We recommend that SHA**

- a. ensure that employees having physical access to cash receipts not be able to modify their authorized system user capabilities and void recorded cash receipts transactions,**
- b. ensure that modifications to system user capabilities and voided cash receipts transactions are reviewed and approved by independent supervisory personnel, and**
- c. timely deposit all cash receipts.**

## **Corporate Purchasing Card Program**

### **Finding 7**

**Controls were inadequate over corporate purchasing card issuances.**

### **Analysis**

SHA lacked adequate controls over the issuance of corporate purchasing cards. Our review disclosed that two employees responsible for processing corporate purchasing card (CPC) credit applications also distributed the cards. As a result, these employees could obtain cards and make unauthorized purchases that may not be readily detected.

According to its records, as of June 30, 2008, SHA had 235 active corporate purchasing cards. Related expenditures totaled \$11.7 million during fiscal year 2008.

The Comptroller of the Treasury's *Corporate Purchasing Card Program Policy and Procedures (CPCP) Manual* requires that employees that submit CPC applications not be allowed to receive the related cards.

### **Recommendation 7**

**We recommend that SHA comply with the Comptroller of the Treasury's *CPCP Manual* and separate duties so that employees who process applications for purchasing cards do not also distribute the cards.**

## **State Vehicle Fuel Usage**

### **Finding 8**

**SHA did not adequately monitor state vehicle fuel usage and ensure that vehicle records were properly maintained.**

### **Analysis**

SHA did not adequately monitor vehicle fuel usage and ensure that vehicle records were properly maintained. Specifically, a report prepared by the Department of General Services (which administers the Statewide Fuel Management System) for fiscal year 2008 included approximately 52,000 vehicle fuel use error flags applicable to 2,100 SHA vehicle operators. Our limited review of this report, the reliability of which we did not verify, showed that 10 SHA drivers had been flagged a total of 650 times during the year for possible unauthorized usage of fuel. For example, according to the report, one driver dispensed fuel 61 times from July 3, 2007 through September 18, 2007, totaling approximately 1,000 gallons, while the vehicle was driven only 1,000 miles.

These error flags occur when illogical vehicle data (for example, negative monthly mileage or below average fuel consumption) are identified by the System. A report identifying these error flags accompanies each monthly commercial fuel invoice received by SHA, and SHA's shop supervisors were required to review the reports when approving the fuel invoices for payment. However, SHA advised us that it did not use the aforementioned reports because it does not believe the reports are accurate and reliable. For example, SHA advised that vehicle operators do not always enter the correct mileage when dispensing fuel. Furthermore, SHA acknowledged that it had not taken any steps to attempt to resolve the issues affecting the accuracy and reliability of the vehicle fuel usage reports so that the reports could be used as an effective tool to monitor vehicle fuel usage.

During fiscal year 2008, SHA expended approximately \$8.1 million on fuel for its state vehicles.

## **Recommendation 8**

**We recommend that SHA**

- a. take steps to resolve any deficiencies affecting the accuracy and reliability of the vehicle fuel usage reports, including ensuring that vehicle operators enter correct mileage readings; and**
- b. perform documented monthly reviews of vehicle reports, and investigate recurring fuel usage error flags and potential instances of unauthorized fuel usage.**

## **Equipment**

### **Finding 9**

**Recordkeeping and physical inventory procedures for certain equipment and vehicles were inadequate.**

### **Analysis**

SHA did not include equipment items pending disposal, including motorized equipment and other vehicles, on inventory count sheets used when conducting physical inventories. Moreover, certain employees that maintained custody of equipment and vehicles pending disposal could also update the related automated equipment records. As a result, these employees could erroneously classify an item as pending disposal and potentially misappropriate the item without detection. In addition, no independent comparisons were performed to ensure that all items initially classified as pending disposal were subsequently authorized for disposal by the Department of General Services, disposed of, and removed from the detail equipment records.

As of January 2009, SHA's equipment records included 173 items totaling approximately \$3.9 million designated as pending disposal.

## **Recommendation 9**

**We recommend that SHA**

- a. ensure all vehicles and equipment items pending disposal are included when conducting physical inventory counts;**
- b. ensure that employees with custody of vehicle and equipment items pending disposal not have the ability to update the detail equipment records; and**
- c. periodically verify that all equipment items classified as pending disposal have been authorized for disposal by the Department of General Services, disposed of, and removed from the detail equipment records.**

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

We have audited the State Highway Administration (SHA) for the period beginning November 16, 2005 and ending July 31, 2008. 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 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. The areas addressed by the audit included procurements and disbursements for highway design and construction and for SHA's operating expenditures, as well as payroll, cash receipts, accounts receivable, and equipment and materials and supplies inventories. 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. Our audit procedures included inquiries of appropriate personnel, inspections 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.

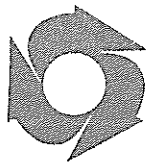
Because of inherent limitations in internal control, errors or fraud may nevertheless occur and not be detected. Also, projections of any evaluation of internal control to future periods are subject to the risk that conditions may change or compliance with policies and procedures may deteriorate.

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 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.

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



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

**Martin O'Malley**  
Governor

**Anthony G. Brown**  
Lt. Governor

**Beverley K. Swaim-Staley**  
Acting Secretary

July 31, 2009

Bruce A. Myers, CPA  
Legislative Auditor  
Office of Legislative Audits  
Department of Legislative Services  
Room 1202  
301 West Preston Street  
Baltimore MD 21201

Dear Mr. Myers:

Enclosed please find the Department's responses to the Legislative Auditor's Draft Audit Report dated July 16, 2009 for the Maryland Department of Transportation (MDOT) – State Highway Administration (SHA) for the period beginning November 16, 2005 and ending July 31, 2008. 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) (file name: SHALADraftReportResponses2009).

If you or your staff has any questions or needs additional information, please do not hesitate to contact 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 "Beverley K. Swaim-Staley".

Beverley K. Swaim-Staley  
Acting Secretary

Enclosure

cc: Ms. Betty Conners, Director, Office of Finance, SHA  
Mr. David L. Fleming, Chief Financial Officer, Maryland Department of Transportation  
Ms. Normetha D. Goodrum, Deputy Administrator for Finance, Information Technology and Administration, SHA  
Mr. Joseph J. Lambdin, Director, Office of Audits, MDOT  
Mr. Neil J. Pedersen, Administrator, State Highway Administration  
Ms. Sheri S. Sanford, Director, Office of Audits, SHA

**Maryland Department of Transportation  
State Highway Administration  
Draft Audit Report Responses  
Period November 16, 2005 to July 31, 2008**

**Architectural and Engineering Contracts**

**Finding 1**

**The State Highway Administration's (SHA) processes for verifying the accuracy of labor charges for architectural and engineering (A&E) design contracts were not comprehensive.**

**Response:**

- a. The Administration concurs with the auditors' recommendation. The Administration issued a letter dated April 30, 2009 to all A&E consultants reminding them of SHA's requirements to include job classifications on all invoices. The Administration also issued a memorandum dated April 30, 2009 to all SHA employees responsible for reviewing and paying consultant invoices reminding them of SHA's requirement that all consultant invoices include job classifications and of their responsibility to review labor rates for reasonableness based upon these job classifications. The April 30, 2009 letter to consultants and the April 30, 2009 memorandum to SHA employees included notification that, effective immediately, invoices submitted for payment that do not include employee classifications for the consultant and all subcontractors will be voided and the consultant required to submit a "corrected" invoice with the required information. SHA's Office of Audits (OA) also recently verified that each consultant is now including job classifications on their invoices by reviewing one of their recent invoices. The OA will continue to verify that employee job classifications are included on all invoices as part of their contract compliance audits.
- b. The Administration also concurs that SHA should increase the number of audits performed of A&E consultants and has, in fact, increased the frequency of audits, especially since the period reviewed by the Auditors. The OA completed 47 A&E consultant audits during the period February 2008 through June 2009.
- c. Also, the OA ensures the recovery of all overcharges that may be discovered as a result of internal invoice reviews and consultant audits performed.

**Excess Real Property Sales**

**Finding 2**

**SHA frequently did not comply with State law regarding the timely sale of excess real properties.**

**Response:**

- a. The Administration concurs with the auditors' recommendation. Monthly meetings are being held to discuss the internal clearances to ensure compliance with internal policies.
- b. The Maryland Department of Transportation's Office of Real Estate and the SHA's Office of Real Estate met on June 22, 2009 and will continue to meet every quarter to monitor the status of excess real properties to ensure compliance with State law.
- c. Also, beginning January 2010, the Administration will annually review the inventory of real properties, identify those properties considered to be in excess, and take necessary steps to ensure timely disposal of such properties.

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**Materials and Supplies**

**Finding 3**

**Controls over materials and supplies inventories were inadequate.**

**Response:**

- a. The Administration concurs with the auditors' recommendation to investigate differences between expenditures for materials and supplies recorded in the State's accounting records and the related amounts recorded in its automated inventory system, and retain documentation of such investigations. SHA's Office of Finance Inventory Management Section (IMS) performs a monthly reconciliation between the automated inventory system and FMIS, the financial system. Differences between the two systems are primarily the result of timing, an inherent part of inventory reconciliations, which often take months to resolve given the time that may pass between the receipt of an inventory item and when we receive and process the invoice. These detailed transactions are maintained in an "active list" until they are matched and considered resolved. Beginning in Fiscal Year 2010, the IMS will ensure documentation of these timing differences will be maintained on a monthly basis. The audit finding mentions a difference of \$844,000 in total reconciling items for the month of June 2008. All items were reconciled by the end of October 2008.
- b. The Administration agrees to investigate those differences which required significant adjustments to the applicable inventory records. The adjustments made to inventory locations are monitored on a monthly basis and reported to the Administrator and his leadership team. Any significant adjustments are investigated prior to this monthly meeting. Immediate action is taken, where necessary. SHA's Office of Audits (OA) will conduct more in-depth investigations at shops where adjustments significantly exceed 3%, regardless of the dollar amount, during the annual inventory verification that is conducted each spring. Also, the OA will work with the management of such shops to ensure that appropriate action is taken when the adjustments are significant. This may include providing additional training or management imposing disciplinary action, if warranted.
- c. The Administration agrees with the Auditors' recommendation that SHA ensure that supervisory reviews of recorded inventory withdrawals are properly performed, and investigate all unsupported and/or questionable withdrawals. As the Auditors mentioned, we require shop supervisory personnel to perform a random 10 item monthly spot audit of materials and supplies withdrawals. The IMS requires monthly certification from all locations. This information has been received each month for several years and reported to the Administrator and his leadership team on a monthly basis. These certifications have been maintained in IMS. Additionally, an IMS staff person has visited the shops on a periodic basis and performed random selections of withdrawal reports for review and verification. In order to address the locations that did not properly retain documentation to prove the monthly supervisory withdrawal reviews, IMS will require that the Assistant District Engineer – Maintenance review all documentation and sign certifying the random

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**Response #3 (continued):**

10 item monthly spot audit was performed beginning with the month of June 2009. This will be required until IMS determines the location is able to properly retain this documentation. We will also remind shop personnel that documentation to support the 10 item monthly spot audit must be maintained for at least 3 years or until the next audit is conducted. Finally, the monthly material and supplies reconciliations were current and have always included the initial purchase of inventory in FMIS against the receipt of inventory in the automated system. When a withdrawal occurs in the automated inventory system, it is recorded via an interface in FMIS which then allows a reallocation of expenditures between the initial purchase account to the program account where it is ultimately used. The review of withdrawals by the supervisor is an effective procedure to ensure the reasonableness of the withdrawal for use of that inventory in support of operations.

- d. The Administration also agrees to take timely and appropriate follow-up action to address the findings identified by the contract auditor, including a review of small procurements. The Administration has, in fact, implemented a comprehensive plan to address the audit findings related to maintenance shop procurement practices. SHA's Office of Procurement & Contracts (OPC) met with each of the 15 shops that were audited to discuss the findings included in the audit report for their shop in an effort to ensure that corrective action would be taken by the shop. SHA's Office of Audits (OA) prepared a Summary of Audit Findings for the 15 shops that were audited and met with each of the 13 shops that were not audited to discuss common audit findings in an effort to ensure that corrective action would be taken by the non-audited shops if they had similar issues. The Administration also developed a "Small Procurement Record Form" (SPR) in 2008 to replace existing forms to ensure that proper procurement procedures are followed and documented. The required use of the SPR was effective February 1, 2008 and is expected to result in significant improvements in compliance rates with small procurement policies and procedures. Beginning January 2009, OA began conducting annual internal audits at all 28 maintenance shops to determine compliance with small procurement policies and procedures, including policies and procedures cited for noncompliance in previous audits. Beginning in 2009, OPC, OA, and OOF have been meeting quarterly to identify at-risk areas (i.e., particular shops, certain personnel, recurring audit findings) for appropriate training and/or other actions, based upon audit findings, including compliance rates at each of the 28 shops. SHA's Office of Finance (OOF) is continuing to conduct annual reviews of credit card transactions to determine compliance with small procurement policies and procedures and credit card guidelines. Also, OPC continues to provide procurement certification and training on an on-going basis.

**Traffic Signal Construction Cost Sharing**

**Finding 4**

**SHA did not always require local jurisdictions to share the cost of traffic signal construction projects as required.**

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**Response:**

- a. The Administration concurs with the auditors' recommendation to require local jurisdictions to share the cost of traffic signal construction project as required by SHA written directive. SHA's current directive does not include cost recovery for traffic signal reconstructions by the local jurisdictions. SHA's Office of Traffic and Safety (OOTS) met with the Maryland Traffic Engineers Council on June 5. At this meeting, county representatives were told that OOTS would be issuing a new directive to replace the 1984 directive. The directive will include traffic signal total reconstructions and will state that such reconstructions will be cost shared, where applicable. The directive will be sent to the counties by August 31, 2009, and they will have 30 days to review and comment. The new directive will be issued no later than November 1, 2009.
- b. The Administration concurs with the auditors' recommendation to recover the aforementioned \$164,000 from the applicable local jurisdictions, where possible. Reconstructions of signals were not included in the SHA directive, which was generated at a time when new installations were primarily taking place. However, we will ask the local jurisdictions to participate in the intersection traffic control beacons construction work via a signed agreement. It should be noted that SHA will not bill a third party unless a signed agreement is in place.
- c. The Administration concurs with the auditors' recommendation to identify any other traffic signal construction projects for which the related costs were not properly shared with local jurisdictions and pursue recovery of such costs, as required. As mentioned above, signal reconstructions were not included in the 1984 directive. Any additional intersection traffic control beacon construction project identified will need to be under agreement with the local jurisdiction in order for SHA to seek reimbursement.

**Construction Contracts**

**Finding 5**

**SHA authorized certain contractors to purchase sensitive equipment items on SHA's behalf, thereby bypassing State Procurement Regulations for these purchases.**

**SHA also allowed the contractors to retain these items after the related construction projects were completed.**

**Response:**

The Administration concurs with the auditors' recommendation that SHA purchase all equipment items used to monitor construction projects in accordance with State Procurement Regulations and retain such items for future use when an SHA project manager requires equipment such as a cell phone, laptop, and/or digital camera, on a permanent basis. However, the majority of project managers only require these items to manage an active construction project. Additionally, the SHA capital program can fluctuate significantly as a result of funding availability, and in times when it is rising, SHA supplements its project management staff with consultants. The consultant project manager needs office equipment to support the project in the same manner as an SHA project manager. Most construction contracts are required to establish a field office at the project site, which includes a trailer, personal computers and/or laptops, telephones and/or cell phone, printers, desks, chairs and similar items.

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**Response #5 (continued):**

These office items are needed for the duration of the contract and then returned to the contractor. SHA would not want to begin purchasing trailers and all of the equipment needed to establish a field office. We realize there are sensitive items being purchased or reused by the contractor for the project management team; however, the burden of ensuring the asset is safeguarded and the compatibility issues of more advanced technology are borne by the contractor. Additionally, the majority of SHA construction projects are federally funded, which includes the reimbursement for field offices and the equipment needed to manage that field office. There is no practical way to fund the direct purchase of equipment required for the field office with federal dollars. The practice of requiring that the contractor provide a field office is one that is accepted nationally and supported by our federal partners as an eligible highway construction project expense.

**Cash Receipts**

**Finding 6**

**Controls over cash receipts processed at SHA's headquarters location were inadequate. In addition, collections received at another location were not timely deposited.**

**Response:**

- a. The Administration concurs with the auditors' recommendation that SHA ensure that employees having physical access to cash receipts not be able to modify their authorized system user capabilities and void recorded cash receipts transactions. Changes have been made to the automated cashiering system, which prohibit the two employees in question from changing their own user privileges. Two individuals who do not have physical access to cash receipts have had exclusive rights to this screen since March 2009. Any system access rights provided or changed will be documented on a new report that will also list the date and time.
- b. The Administration agrees with the auditors' recommendation that SHA ensure that modifications to system user capabilities and voided cash receipts transactions are reviewed and approved by independent supervisory personnel. A new procedure has been in place since March 2009 that requires all voids processed by one of the two employees within the automated cashiering system be approved by one of two supervisory employees who can not process voids. A voided cash receipt report is run each time, approved, and retained.
- c. The Administration agrees with the auditors' recommendation that SHA timely deposit all cash receipts. At this time, the Office of Finance Receipts & Disbursements Section performs a monthly reconciliation against the Access Permit Division cash receipt logs, which are in various locations across the state. On a daily basis, the Receipts & Disbursements Section will confirm via email that all Access Permit cash receipts have been logged and sent to the Section for deposit. This email confirmation will be printed and retained for documentation. Additionally, a new automated system is being developed at this time, which will require offices that receive checks to immediately record the receipt to ensure the Receipts & Disbursements Section tracks and deposits these checks as soon as possible.

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**Corporate Purchasing Card Program**

**Finding 7**

**Controls were inadequate over corporate purchasing card issuances.**

**Response:**

The Administration concurs with the auditors' recommendation that SHA comply with the Comptroller of the Treasury's *CPCP Manual*. We also agree with the recommendation that SHA separate duties so that employees who process applications for purchasing cards do not also distribute the cards. The Purchasing Card Program Administrators (PCPA), who processes credit card applications, no longer receives nor distributes the card to the cardholder. A non-PCPA employee within the Vouchers Payable Section receives the credit card, informs the PCPAs, and distributes the credit card to the cardholder at Corporate Purchasing Card training.

**State Vehicle Fuel Usage**

**Finding 8**

**SHA did not adequately monitor state vehicle fuel usage and ensure that vehicle records were properly maintained.**

**Response:**

- a. The Administration concurs with the auditors' recommendation. The Administration will issue a "Fuel Management System Billing and Driver Report Review Policy" by August 15, 2009. The Policy will reiterate the importance of entering correct vehicle information and using the correct fuel cards when refueling a fleet vehicle. The Policy will include detailed procedures to be followed by Fleet Coordinators when performing monthly reviews of vehicle reports, including performing investigations, where necessary.
- b. In addition, the Policy will require that monthly reviews be documented and retained for audit purposes. Certifications that reviews have been completed will be required by each location and maintained centrally within the Office of Maintenance, Equipment Division. In addition, random testing will be performed to ensure that monthly reviews are being performed properly.

**Equipment**

**Finding 9**

**Recordkeeping and physical inventory procedures for certain equipment and vehicles were inadequate.**

**Response:**

- a. The Administration concurs with the auditors' recommendation to ensure that all vehicle and equipment items pending disposal are included when conducting physical inventory counts. Beginning with fiscal year 2010, as part of the physical inventory count process SHA will implement a new policy that requires confirmation of vehicles and equipment items pending disposal and in the possession of a third party, i.e. auctioneer. Vehicle and equipment items pending disposal are considered on consignment and are located at the third party's location. A receipt from the third party auctioneer is kept on file by SHA's

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**Response #9 (continued):**

Office of Maintenance, Equipment Division to document that the auctioneer has accepted responsibility for disposing of the item at the time of delivery. These receipts are maintained in an active file, and a copy is forwarded to the Inventory Management Section (IMS). Beginning with fiscal year 2010, the active file will be reconciled against the detailed vehicle and equipment records in FMIS on a quarterly basis by IMS. Items that appear in the active file for two months or longer will be investigated.

- b. The Administration concurs with the auditors' recommendation to ensure that employees with custody of vehicle and equipment items pending disposal not have the ability to update the detailed vehicle and equipment records. The Equipment Division is responsible for maintaining the detailed vehicle and equipment records in FMIS. While it is necessary for certain employees to have access to FMIS, duties have been separated and FMIS access is available only to those who do not take custody of the vehicle and equipment items pending disposal.
- c. The Administration concurs with the auditors' recommendation to periodically verify that all equipment items classified as pending disposal have been authorized for disposal by the Department of General Services (DGS), disposed of, and removed from the detailed equipment records. IMS will perform a reconciliation of the active file on a quarterly basis, as mentioned above, which will include confirmation that the disposal has been authorized by DGS, disposed of, and removed from the detailed records.

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