



STATE OF MISSISSIPPI
OFFICE OF THE STATE AUDITOR
STACEY E. PICKERING
AUDITOR

March 11, 2013

Single Audit Management Report

H. Carey Webb, State Aid Engineer
Mississippi Department of Transportation
Office of State Aid Road Construction
P.O. Box 1850
Jackson, MS 39215-1850

Dear Mr. Webb:

Enclosed for your review are the other audit findings for the Mississippi Department of Transportation – Office of State Aid Road Construction for the Fiscal Year 2012. In these findings, the Auditor's Office recommends the Mississippi Department of Transportation – Office of State Aid Road Construction:

1. Strengthen controls over the approval of bridge inspection payments;
2. Review employee approval levels in the Statewide Automated Accounting System;
3. Establish a disaster recovery process and store information and back-ups off-site;
4. Establish a program of IT governance; and
5. Develop a formal change management process.

Please review the recommendations and submit a plan to implement them by March 28, 2013. The enclosed findings contain more information about our recommendations.

During future engagements, we may review the findings in this management report to ensure procedures have been initiated to address these findings.

This report is intended solely for the information and use of management, individuals charged with governance, Members of the Legislature and federal awarding agencies and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

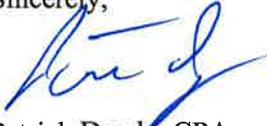
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I hope you find our recommendations enable the Mississippi Department of Transportation – Office of State Aid Road Construction to carry out its mission more efficiently. I appreciate the cooperation and courtesy extended by the officials and employees of the Mississippi Department of Transportation – Office of State Aid Road Construction throughout the audit. If you have any questions or need more information, please contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "Patrick Dendy".

Patrick Dendy, CPA

Director, Department of Audit

Enclosures

SINGLE AUDIT FINDINGS

In conjunction with our audit of federal assistance received by the State of Mississippi, the Office of the State Auditor has completed its audit of the State's major federal programs administered by the Mississippi Department of Transportation – Office of State Aid Road Construction for the year ended June 30, 2012. This audit was conducted in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, and Office of Management and Budget (OMB) Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*. The Office of the State Auditor's staff members participating in this engagement included Amy Buller, CPA, Emily McHan, Kyle Goldman and Mike Ferguson, CISA.

Our procedures and tests cannot and do not provide absolute assurance that all federal legal requirements have been met. In accordance with Section 7-7-211, Miss. Code Ann. (1972), the Office of the State Auditor, when deemed necessary, may conduct additional procedures and tests of transactions for this or other fiscal years to ensure compliance with legal requirements.

Internal Control over Compliance

Management of the Mississippi Department of Transportation – Office of State Aid Road Construction is responsible for establishing and maintaining effective internal control over compliance with requirements of laws, regulations, contracts and grants applicable to federal programs. In planning and performing our audit, we considered the Mississippi Department of Transportation – Office of State Aid Road Construction's internal control over compliance with requirements that could have a direct and material effect on a major federal program.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. *A material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be deficiencies, significant deficiencies, or material weaknesses. We did not identify any deficiencies in internal control over compliance that we consider to be *material weaknesses*, as defined above. However, we noted other deficiencies in internal control over compliance that require the attention of management that we have reported on the attached document "Other Audit Findings." These are identified under the headings **Other Control Deficiencies**, as items Oth-01 and Oth-02, and **EDP Control Deficiencies**, as items Oth-03, Oth-04 and Oth-05.

Compliance

We have audited the Mississippi Department of Transportation – Office of State Aid Road Construction's compliance with the types of compliance requirements described in OMB Circular A-133 Compliance Supplement that could have a direct and material effect on each of the State's major federal programs administered by the Mississippi Department of Transportation – Office of State Aid Road Construction. Compliance with the requirements of laws, regulations, contracts, and grants applicable to each of its major federal programs is the responsibility of management. Our audit fieldwork included examining, on a test basis, evidence about the Mississippi Department of Transportation – Office of State Aid Road Construction's compliance with those requirements and performing such other procedures as we

considered necessary in the circumstances. The results of our auditing procedures disclosed no instances of noncompliance that are required to be reported by OMB Circular A-133.

OTHER AUDIT FINDINGS

In planning and performing our audit of the federal awards received by the Mississippi Department of Transportation – Office of State Aid Road Construction for the year ended June 30, 2012, we considered internal control over compliance with the requirements that could have a direct and material effect on the major federal programs. Matters which require the attention of management were noted. These matters which do not have a material effect on the agency's ability to administer major federal programs in accordance with applicable laws, regulations, or provisions of contracts or grant agreements involve other control deficiencies.

A *deficiency in internal control* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis.

**CFDA/Finding
Number**

Finding and Recommendation

Other Control Deficiencies

**ACTIVITIES ALLOWED/UNALLOWED
ALLOWABLE COSTS/COST PRINCIPLES**

20.205

Highway Planning and Construction

Federal Award Number and Year: All construction projects have an individual award of federal funds. The findings below affect all projects. The award year is fiscal year 2012

Oth-01

**Controls Should Be Strengthened Over the Approval of Bridge
Inspection Payments**

Finding:

During our review of 20 of a total of 82 payments related to bridge inspections at the Mississippi Department of Transportation - Office of State Aid Road Construction, we noted three instances in which approval by program personnel was not present on the supporting documentation.

Agency procedures require a review of supporting documentation be performed by program personnel prior to payment of invoices for bridge inspections to ensure the payments fall within the allowable activities and amounts for the bridge inspection program. Failure to perform a review of supporting documentation for bridge inspections prior to payment of invoices could allow errors or misstatements to occur and not be detected promptly and/or unallowable activities to be paid for with federal funds.

Recommendation:

We recommend that controls be strengthened over payments for bridge inspections at the Mississippi Department of Transportation – Office of State Aid Road Construction to ensure a review of supporting documentation is performed and documented by program personnel prior to payment as evidenced by the initials and date of the reviewer.

Oth-02

A Review Should Be Performed of Employee Approval Levels in the Statewide Automated Accounting System

Finding:

During our review of employee approval levels in the Statewide Automated Accounting System (SAAS) at the Mississippi Department of Transportation - Office of State Aid Road Construction for fiscal year 2012, we noted the following problems.

Five employees in quarter one, four employees in quarter two, three employees in quarter three, and one employee in quarter four had the ability to enter and apply all agency levels of approval for disbursements. Two of the employees in quarters one, two, and three also had signature authority for payment vouchers. The agency corrected the Statewide Automated Accounting System (SAAS) approval level access in quarter four for all but one employee.

Seven employees in quarter one, six employees in quarter two, and five employees in quarter three had the ability to enter and apply all agency levels of approval for journal vouchers. One employee in quarter one had the ability to enter and apply all agency levels of approval for J2JG's. The agency corrected the SAAS approval level access in quarter four.

Nine employees in quarter one, eight employees in quarter two, and seven employees in quarters three and four had entry and all agency levels of approval for revenues.

Good internal controls require duties to be segregated so no one individual has the ability to initiate, authorize, and record a transaction. Failure to ensure segregation of duties could allow unauthorized or erroneous transactions to be recorded in SAAS and not be detected promptly.

Recommendation:

We recommend the Mississippi Department of Transportation - Office of State Aid Road Construction review employee approval levels over disbursements, journal vouchers, and revenue in the Statewide Automated Accounting System (SAAS) to ensure duties are adequately segregated.

EDP Control Deficiencies

Oth-03

A Disaster Recovery Process Should Be Established and Information Back-ups Should Be Stored Off-site

Finding:

During our review of the information system controls at the Mississippi Department of Transportation – Office of State Aid Road Construction, we noted the agency has not established a disaster recovery process. As a result, the agency cannot fully ensure the information system can be restored in a timely manner. Disaster recovery involves defining and documenting plans to help sustain and recover critical information technology resources, information systems, and associated business functions. *Control Objectives for Information and Related Technology* (CobiT, Section DS4), as well as recognized industry best practices, require a written disaster recovery plan be developed and tested regularly to provide orderly recovery of vital functions in the event of a hardware or environmental disaster. Failure to maintain an adequate recovery plan could impede the agency's ability to regain computer operations in the event of a disaster.

There are a number of steps that an organization can take to prevent or minimize the damage to automated operations that may occur from unexpected events. One example is routinely backing up data files and programs and securely storing them at an off-site location. Such actions maintain the organization's ability to restore data files, which may be impossible to re-create.

The Mississippi Department of Transportation - Office of State Aid Road Construction is currently performing daily back-ups of computer systems, however, the back-ups are not being stored off-site. Without off-site storage of back-up files and applications, material damage could be realized by the agency and its processes should a catastrophic event occur involving the agency's building and servers. Risk and probabilities of material loss escalates in relationship to the longer an exposure goes unmitigated.

Recommendation:

We recommend the Mississippi Department of Transportation – Office of State Aid Road Construction implement a plan to ensure all back-up files are stored off-site on a regular basis in a safe and secure location. This process should be documented in the Office of State Aid Road Construction Disaster Recovery Plan. We further recommend the agency develop and implement a disaster recovery plan documenting procedures to be followed during an emergency. Once the plan is completed, it should be subjected to proper testing, and employees should be made aware of their responsibilities in the event of a disaster.

Oth-04

A Program of IT Governance Should Be Established

Finding:

Information technology (IT) governance is the leadership and organizational structures and processes that ensure an organization's IT investments sustain and extend business strategies and objectives. IT governance decision-making frameworks and processes help define how all IT investment decisions will be made, where accountability lies for those decisions and the ongoing management of IT investments and technology standards.

Policies, procedures, and standards define IT organizational behavior and uses of technology. They are a part of the written record that defines how the IT organization performs services that support the organization. Policy documents should be developed and ratified by IT management. IT policies typically cover topics such as security processes, risk management, roles and responsibilities, development practices, operational practices, incident management, project management and vulnerability management.

During testwork performed at the Mississippi Department of Transportation – Office of State Aid Road Construction, we noted that the agency has not established a program of IT governance. The lack of a written program of IT governance and its effective implementation may cause issues with project overruns and poor value to cost measurements.

Recommendation:

We recommend the Mississippi Department of Transportation – Office of State Aid Road Construction establish governance through an IT steering committee that will be responsible for setting long-term IT strategy and ensure that IT processes will effectively meet the agency's business needs. Additionally, we recommend the agency implement a program of IT governance that will address change management, quality management, security management, performance optimization and establish an effective organizational structure and clear statements of roles and responsibilities.

Oth-05

A Formal Change Management Process Should Be Developed

Finding:

Proper controls on program changes are important to maintain assurances that only program changes authorized by management are placed into production. This principle is supported by CobiT AI6 Manage Changes which states, "All changes, including emergency maintenance and patches, relating to infrastructure and applications within the production environment are formally managed in a controlled manner."

Our testwork revealed the Mississippi Department of Transportation – Office of State Aid Road Construction has no formal change management procedures. The most significant logical control for a sound program change control environment is the protection of the production object code libraries from unauthorized modification. Modified code should only be moved into production libraries via a documented procedure with approval. Programmers should not be allowed to directly place a program into production. Programmers should not be allowed to also perform quality assurance testing on their own work. Support for changes should be documented within change management software or on standardized change management forms.

Recommendation:

We recommend the Mississippi Department of Transportation – Office of State Aid Road Construction develop written policies and procedures to govern the change management process for all application systems. In the evaluation of controls surrounding the application systems, the agency should also implement best practice program change controls that would include the following practices:

- Document changes in a formal manner.
- Achieve a higher segregation of duties in the programming process.
- Provide for sign-off where appropriate for assignment and completion of program change steps.
- Provide for separate quality assurance from the programmer making the changes.
- Limit moves of completed code changes into production to personnel other than the programmer making the change.
- Restrict programmers' access to production data or production code.