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David A. Vaudt, CPA
Auditor of State

NEWS RELEASE

Contact: Andy Nielsen
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FOR RELEASE   March 13, 2007

Auditor of State David A. Vaudt today released a report on a review of selected general and application controls over the Iowa Department of Transportation's Resource Management System for the period May 5, 2006 through August 4, 2006.

Vaudt recommended the Department develop written procedures for system administration and establish procedures to log and monitor the actions of super users.

A copy of the report is available for review at the Iowa Department of Transportation, in the Office of Auditor of State and on the Auditor of State's web site at http://auditor.iowa.gov/reports/reports.htm.

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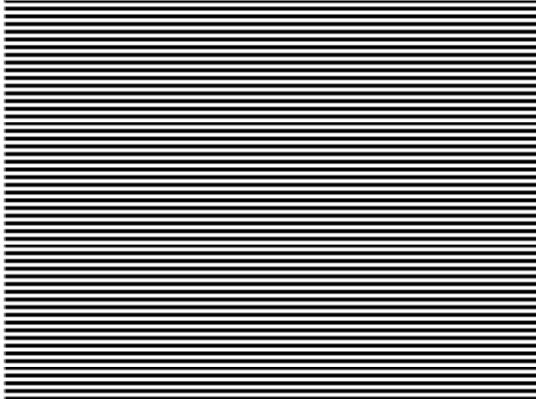
REPORT OF RECOMMENDATIONS TO THE
IOWA DEPARTMENT OF TRANSPORTATION
ON A REVIEW OF SELECTED GENERAL AND
APPLICATION CONTROLS OVER THE
RESOURCE MANAGEMENT SYSTEM

MAY 5, 2006 TO AUGUST 4, 2006

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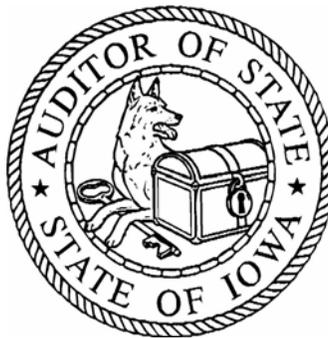
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David A. Vaudt, CPA
Auditor of State

January 30, 2007

To Nancy J. Richardson, Director of the
  Iowa Department of Transportation:

In conjunction with our audit of the financial statements of the State of Iowa for the year ended June 30, 2006, we conducted an information technology review of selected general and application controls of the Iowa Department of Transportation for the period May 5, 2006 through August 4, 2006. Our review focused on the general and application controls of the Iowa Department of Transportation's Resource Management System (RMS) as they relate to our audit of the financial statements. The review was more limited than would be necessary to give an opinion on internal controls. Accordingly, we do not express an opinion on internal controls or ensure all deficiencies in internal controls are disclosed.

In conducting our review, we became aware of certain aspects concerning information technology controls for which we believe corrective action is necessary. As a result, we have developed recommendations which are reported on the following pages. We believe you should be aware of these recommendations which pertain to the Department's general and application controls over the RMS. These recommendations have been discussed with Department personnel and their responses to these recommendations are included in this report.

This report, a public record by law, is intended solely for the information and use of the officials and employees of the Iowa Department of Transportation, citizens of the State of Iowa and other parties to whom the Iowa Department of Transportation may report. This report is not intended to be and should not be used by anyone other than these specified parties.

We would like to acknowledge the many courtesies and assistance extended to us by personnel of the Iowa Department of Transportation during the course of our review. Should you have questions concerning any of the above matters, we shall be pleased to discuss them with you at your convenience. Individuals who participated in our review of the RMS are listed on page 6 and they are available to discuss these matters with you.

DAVID A. VAUDT, CPA
Auditor of State

WARREN G. JENKINS, CPA
Chief Deputy Auditor of State

cc: Honorable Chester J. Culver, Governor
       Charles J. Krogmeier, Director, Department of Management
       Dennis C. Prouty, Director, Legislative Services Agency

Resource Management System General and Application Controls

A. **Background**

The Iowa Department of Transportation's Resource Management System (RMS) is a front-end system to the timesheet application and is used to accumulate payroll and travel information, as well as other internal data (accomplishment amounts, materials, labor, etc.) to manage resources used to accomplish specific tasks.

B. **Scope and Methodology**

In conjunction with our audit of the financial statements of the State of Iowa, we reviewed selected aspects of the general and application controls in place over the Iowa Department of Transportation's RMS for the period May 5, 2006 through August 4, 2006. Specifically, we reviewed the general controls: physical security, logical security, system administration, backup and recovery and service continuity; and the application controls: input, processing and output controls. We interviewed staff of the Department and we reviewed Department policies and procedures. To assess the level of compliance with identified controls, we performed selected tests.

We planned and performed our review to adequately assess those Department operations within the scope of our review. We developed an understanding of the Department's internal controls relevant to the operations included in the scope of our review. We believe our review provides a reasonable basis for our recommendations.

We used a risk-based approach when selecting activities to be reviewed. We focused our review efforts on those activities we identified through a preliminary survey as having the greatest probability for needing improvement. Consequently, by design, we used our finite review resources to identify where and how improvements can be made. Thus, we devoted little effort to reviewing operations that may be relatively efficient or effective. As a result, we prepare our review reports on an "exception basis." This report, therefore, highlights those areas needing improvement and does not address activities that may be functioning properly.

C. **Results of the Review**

As a result of our review, we found certain controls can be strengthened to further ensure the reliability of financial information. Our recommendations, along with the Department's responses, are detailed in the remainder of this report.

General Controls

(1) System Administration – Written procedures help to ensure compliance with Departmental policies, consistent application of policies and the retention of institutional knowledge. Written procedures do not exist for system administration of the platform supporting the RMS system.

Recommendation – The Department's IT Division should develop written procedures for system administration to guide consistency among system administrators, delineate the empowerment structure and document the steps required for the acquisition and installation of new software.

Response – The Department's IT Division will develop written procedures for system administration to document the current practices. This can be accomplished by January 1, 2008.

Conclusion – Response accepted.

Application Controls

(1) Super Users – There are two super users of the RMS system who can unapprove, change and then approve a timesheet after supervisory approval has been applied without the supervisor having any knowledge of the change. While these super users cannot change time sheets in their own cost center, these individuals could easily circumvent controls provided by the Department's segregation of duties.

Recommendation – The Department's IT Division should establish procedures to automatically notify supervisors of changes made to time sheets they have approved and log and monitor the activity of super users.

Response – The automatic notification to the supervisor if someone above the supervisor's approval makes a change to a timesheet is actually a Time Sheet System issue. A meeting was held with the Office of Employee Services (OES) to discuss this recommendation. It was discussed that not only could people in the Office of Maintenance approval chain (District and Central Office) make changes but this would also apply to people in OES. When someone above the supervisor's approval does make a change they are on the phone talking to the supervisor at the time that they are helping fix a problem with a timesheet entry. Changes are logged in the remarks section of the timesheet noting the update. Therefore, the supervisor is well aware that something is being changed on the employee's timesheet. If someone in the Office of Maintenance is helping a supervisor with a problem it is normally because the supervisor called them and is asking for help. If someone in OES is making a change to the timesheet they will call the supervisor and discuss why they are making the change. Most of these changes deal with time off entries that were recorded incorrectly. Therefore, OES feels that this recommendation is a duplication of what is currently being done, is not necessary, and at this time has decided that they do not want to request changes to be made to the Time Sheet System to automatically notify the supervisor of changes being made.

Also, OES is considering removing the authorization for the two "super users" so that they can not unapprove, change, and then approve timesheets after supervisory approval has been applied. They could still provide support for the supervisors but the supervisor would have to unapprove, make the changes, and then approve the timesheet.

Conclusion – Response acknowledged. The removal of super users' authorization ability or monitoring their authorizations is encouraged. Current procedures do not appear to provide a means to detect unauthorized changes.

<u>Staff:</u>

Questions or requests for further assistance should be directed to:

    Erwin L. Erickson, CPA, Director
    Patricia J. King, CPA, Senior Auditor II
    Andrew E. Nielsen, CPA, Deputy Auditor of State

Other individuals who participated on this review include:

    Shawn R. Elsbury, Staff Auditor
    Donald J. Lewis, Staff Auditor