AUDITOR GENERAL
DAVID W. MARTIN, CPA

DEPARTMENT OF HIGHWAY SAFETY AND MOTOR VEHICLES
FLORIDA REAL TIME VEHICLE INFORMATION SYSTEM
Information Technology Audit

SUMMARY

The Department of Highway Safety and Motor Vehicles (Department) maintains the Florida Real Time Vehicle Information System (FRVIS) that facilitates the collection of fees associated with motor vehicle and vessel registrations and titles.

Our audit focused on evaluating selected information technology (IT) controls applicable to FRVIS revenue recognition and funds distribution processing during the period January 2008 through March 2008. In addition, we determined the status of corrective actions regarding prior audit findings disclosed in audit report No. 02-215, Finding Nos. 2 and 3.

The results of our audit are summarized below:

<u>Finding No. 1:</u>   Change management controls for FRVIS needed improvement.

<u>Finding No. 2:</u>   Certain security controls related to FRVIS needed improvement. Specific details of these issues are not disclosed in this report to avoid the possibility of compromising Department data and IT resources.

<u>Finding No. 3:</u>   FRVIS incorrectly assessed certain license tax and credit amounts.

BACKGROUND

The Department of Highway Safety and Motor Vehicles, Division of Motor Vehicles, is responsible for the registration and titling of motor vehicles, vessels, and mobile homes. The Information Systems Administration (ISA) Division is responsible for meeting the information technology needs of the Department and maintaining FRVIS.

Section 320.02(1), Florida Statutes, requires that motor vehicles operated or driven on the roads of Florida shall be registered in the State. Chapter 320, Florida Statutes, specifies various fees and taxes that shall be charged in connection with the registration of a motor vehicle or mobile home. Chapter 328, Florida Statutes, addresses registration fees associated with vessels.

FRVIS is the application system maintained by the Department to issue and account for motor vehicle, mobile home, and vessel registrations and titles. Local tax collector and tag agent offices throughout the State process registration and title transactions through FRVIS. FRVIS processed 28,805,453 transactions for the collection of $1,313,739,595 in revenue from fees and taxes associated with motor vehicle, mobile home, and vessel tags, titles, and registrations during the 2006-07 fiscal year. The funds collected are distributed to various State agencies and non-State entities in accordance with governing Florida Statutes.

FRVIS is composed of two processing environments. The first is a distributed environment that consists of the servers at tax collector and tag agent offices that process registration and title transactions. The distributed portion of the system is coded in the Uniface programming language. The second environment is the host portion that consists of the back-end processing that is conducted centrally at the Department. The host portion of the system is coded

in the Common Business Oriented Language (COBOL) and Procedural Language/Structured Query Language (PL/SQL).

Finding No. 1:
Change Management Controls

Effective controls over changes to application programs and systems are intended to ensure that only authorized and properly functioning changes are implemented. Change management controls include procedures to ensure that all changes are properly authorized, tested, and approved for implementation. Examples of change management controls that are typically employed to ensure the continued integrity of application systems include:

➢ Providing written evidence of the authorization of changes by the applicable system owner.

➢ Updating system and user documentation accordingly whenever changes are implemented.

➢ Separating the responsibility for moving approved changes into the production environment from the individuals who developed the changes.

Our audit disclosed aspects of the Department's change management controls for FRVIS that needed improvement. Specifically:

➢ Authorizations of changes were not consistently documented and maintained. According to the Department's ISA Data Center Work Request Orders, Procedure Number 013, requests for programming services were to be submitted to ISA on a Work Request Order (WRO) form. WROs were to be used to document programming service requests and related approvals. However, some programming service requests did not have corresponding WROs. The programming service requests that lacked WROs either required less than 8 hours of work, were the result of an enhancement list, or were a reported production error. Under these conditions, there is an increased risk that unauthorized or erroneous changes could be moved into the production environment without timely detection.

➢ FRVIS system documentation and program code revision logs or comments within the program code were not consistently updated to reflect program changes. This increased the Department's risk that changes to the system may not be adequately understood, thus making the system more difficult to maintain.

➢ It was the Department's practice to have the developer modify and implement middleware changes into the host production database. Additionally, developers implemented changes to host procedure libraries that contained frequently used job control language. Under these conditions, there is an increased risk that unauthorized or erroneous changes could be moved into the production environment without timely detection.

Recommendation: The Department should enforce effective change management controls that include authorization documentation, updated system documentation, and program revision logs or comments within the program code for all program changes to FRVIS. The Department should also restrict developers from making changes to the host production database and separate the responsibilities for developing and moving program changes to the host production environment.

Finding No. 2:
Security Controls

Security controls are intended to protect the integrity, confidentiality, and availability of data and IT resources. During our audit, we identified certain Department security controls related to FRVIS that needed improvement. Specific details of these issues are not disclosed in this report to avoid the possibility of compromising Department data and IT resources. However, appropriate Department staff have been notified of the specific issues. Without adequate security controls, the integrity, confidentiality, and availability of data and IT resources may be compromised, increasing the risk that Department data and IT resources may be subject to improper disclosure, destruction, or modification.

Recommendation: The Department should implement the appropriate security controls to ensure the continued integrity, confidentiality, and availability of Department data and IT resources.

Finding No. 3:
Assessment of License Taxes and Credits

Section 320.08, Florida Statutes, specifies the license taxes that are to be levied and imposed for registration based on factors such as vehicle type, use, and weight. Section 320.14(2), Florida Statutes, specifies how license taxes for certain types of vehicles should be prorated for registration periods of less than one full year. Section 320.14(5), Florida Statutes, also provides that a license tax of less than $5 may not be charged unless otherwise provided by law. Section 320.0609(5), Florida Statutes, states that, when transferring a registration, the pro rata license tax amount remaining for the original vehicle will be applied to the license tax amount charged for the replacement vehicle.

Our audit disclosed instances where FRVIS incorrectly assessed certain license taxes and credits. Although the monetary amount of the incorrect assessments was not material to the overall revenue recorded by FRVIS, the instances noted required corrective action by the Department to ensure compliance with the provisions of State law. Specifically:

➢ FRVIS did not have a fee schedule (tables in the system that determine the fee and tax amounts assessed) entry for a wrecker with a certain gross vehicle weight. In response to audit inquiry, Department staff indicated that FRVIS would be modified to address the missing fee schedule entry. The Department, after our audit inquiry, determined that 2,226 instances of incorrect assessments had occurred since October 1, 1999, for a total underassessment of $105,593.

➢ The weight range in FRVIS that determined the license tax assessed for selected trailers for hire (nonpowered vehicle drawn by a motor vehicle which is used for compensation or consideration) was incorrect. In response to audit inquiry, the Department determined that 240 instances of incorrect assessments had

occurred since October 1, 1999, for a total underassessment of $8,333.

➢ The license tax amounts in FRVIS assessed for trailers for hire in selected prorated registration periods were incorrect. In response to audit inquiry, the Department determined that a total of 55 instances of incorrect assessments had occurred since October 1, 1999, for a total overassessment of $580. Department staff further indicated that refunds would be issued in accordance with refund provisions in State law.

➢ FRVIS did not assess at least $5 for prorated license taxes in all instances. In response to audit inquiry, Department staff indicated that the FRVIS program code would be modified to ensure that the license tax assessment on an original transaction was not less than $5. The Department further determined that 88 instances of underassessments had occurred since October 1, 1999, for a total underassessment of $110.

➢ The transfer credit amounts granted in FRVIS for motor vehicles for hire (powered vehicle or recreational vehicle which is used for compensation or consideration) carrying under nine passengers were incorrect for vehicles weighing between 25,950 and 26,000 pounds. In response to audit inquiry, Department staff determined that no instances of incorrect credits had occurred since October 1, 1999.

➢ FRVIS prorated the vessel registration certificate fees assessed for registration periods of less than a year. However, there is no statutory authority permitting the registration certificate fees to be prorated.

Recommendation: The Department should make appropriate FRVIS changes to ensure the accuracy of FRVIS processing and the license taxes assessed to taxpayers.

PRIOR AUDIT FINDINGS

Finding No. 2 above included issues repeated from our audit report No. 02-215. Other IT deficiencies noted in the prior audit that were within the scope of this audit have been corrected or were in the process of being corrected.

OBJECTIVES, SCOPE, AND METHODOLOGY

The objectives of this IT audit were to determine the effectiveness of selected general and application controls related to FRVIS and to determine whether the Department had corrected, or was in the process of correcting, prior audit findings disclosed in audit report No. 02-215, Finding Nos. 2 and 3.

The scope of our audit focused on evaluating selected IT controls related to FRVIS revenue recognition and funds distribution processing during the period January 2008 through March 2008. In conducting our audit, we interviewed appropriate Department personnel, observed processes and procedures, used computer-assisted audit techniques, and performed various other audit procedures to test selected controls related to FRVIS.

We conducted this IT audit in accordance with applicable 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.

AUTHORITY

Pursuant to the provisions of Section 11.45, Florida Statutes, I have directed that this report be prepared to present the results of our information technology audit.

David W. Martin, CPA
Auditor General

MANAGEMENT RESPONSE

In a letter dated June 12, 2008, the Executive Director provided responses to our preliminary and tentative findings. This letter is included at the end of this report as APPENDIX A.

This audit was conducted by Daniel Pearce and supervised by Shelly Posey, CISA. Please address inquiries regarding this report to Jon Ingram, CPA, CISA, Audit Manager, via e-mail at joningram@aud.state.fl.us or by telephone at (850) 488-0840.

This report and other audit reports prepared by the Auditor General can be obtained on our Web site (http://www.myflorida.com/audgen/); by telephone (850) 487-9024; or by mail (G74 Claude Pepper Building, 111 West Madison Street, Tallahassee, Florida 32399-1450).

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APPENDIX A

MANAGEMENT RESPONSE

Electra Theodorides-Bustle
Executive Director

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Tallahassee, Florida 32399-0500
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A SAFER
FLORIDA
HIGHWAY SAFETY AND MOTOR VEHICLES

Charlie Crist
Governor

Bill McCollum
Attorney General

Alex Sink
Chief Financial Officer

Charles H. Bronson
Commissioner of Agriculture

June 12, 2008

Mr. David W. Martin, CPA
Auditor General
Claude Pepper Building, G74
111 West Madison Street
Tallahassee, Florida 32399-1450

Dear Mr. Martin:

Pursuant to Section 11.45(4)(d), Florida Statutes, enclosed is a copy of this agency's response to the preliminary and tentative audit findings regarding your information technology audit of:

Department of Highway Safety and Motor Vehicles
Florida Real Time Vehicle Information System

The professionalism exhibited by your staff during this audit was evident and appreciated. If you should need additional information, please contact Mr. Laurence W. Noda, Inspector General, at (850) 617-3104.

Sincerely,

Electra Theodorides-Bustle
Executive Director

ETB/ed
Enclosure

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Department of Highway Safety and Motor Vehicles
Florida Real Time Vehicle Information System
Information Technology Audit

Finding No. 1: Change Management Controls

Effective controls over changes to application programs and systems are intended to ensure that only authorized and properly functioning changes are implemented. Change management controls include procedures to ensure that all changes are properly authorized, tested, and approved for implementation. Examples of change management controls that are typically employed to ensure the continued integrity of application systems include:

- Providing written evidence of the authorization of changes by the applicable system owner.

- Updating system and user documentation accordingly whenever changes are implemented.

- Separating the responsibility for moving approved changes into the production environment from the individuals who developed the changes.

Our audit disclosed aspects of the Department's change management controls for FRVIS that needed improvement. Specifically:

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- FRVIS system documentation and program code revision logs or comments within the program code were not consistently updated to reflect program changes. This increased the Department's risk that changes to the system may not be adequately understood, thus making the system more difficult to maintain.

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Recommendation: The Department should enforce effective change management controls that include authorization documentation, updated system documentation, and program revision logs or comments within the program code for all program changes to FRVIS. The Department should also restrict developers from making changes to the host production database and separate the responsibilities for developing and moving program changes to the host production environment.

Response:

The Department is actively engaged in multiple initiatives to enforce effective change management process controls to ensure that all changes to the production environment are logged appropriately. These change management controls include authorization documentation, updated system documentation, and program revision logs/comments within the program code for all program changes to FRVIS. We also are refining the work order process to require logging of requests of eight hours or less, including program corrections, and implementing a release notes process for software releases. We will develop a detailed action plan that will restrict developers from making changes to the production database and to separate the responsibilities for developing and moving program changes to the production environment. A portion of the initiatives will be completed during the first quarter of the 2008-09 fiscal year, with the remaining to be completed during the second quarter of the 2008-09 fiscal year.

Finding No. 2: Security Controls

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Recommendation: The Department should implement the appropriate security controls to ensure the continued integrity, confidentiality, and availability of Department data and IT resources.

Response:

The Department is addressing the confidential recommendations related to the FRVIS audit to ensure the continued protection of Department data and IT resources. We will develop a detailed action plan as a high priority initiative to strengthen specific security-related controls in the areas discussed. Plan implementation will provide additional assurances regarding the security and availability of the Department's information resources. Such assurances have always been recognized as a key responsibility in maintaining the automated systems that serve the public in the areas of motorist services.

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Finding No. 3: Assessment of License Taxes and Credits

Section 320.08, Florida Statutes, specifies the license taxes that are to be levied and imposed for registration based on factors such as vehicle type, use, and weight. Section 320.14(2), Florida Statutes, specifies how license taxes for certain types of vehicles should be prorated for registration periods of less than one full year. Section 320.14(5), Florida Statutes, also provides that a license tax of less than $5 may not be charged unless otherwise provided by law. Section 320.0609(5), Florida Statutes, states that, when transferring a registration, the pro rata license tax amount remaining for the original vehicle will be applied to the license tax amount charged for the replacement vehicle.

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- The weight range in FRVIS that determined the license tax assessed for selected trailers for hire (nonpowered vehicle drawn by a motor vehicle which is used for compensation or consideration) was incorrect. In response to audit inquiry, the Department determined that 240 instances of incorrect assessments had occurred since October 1, 1999, for a total underassessment of $8,333.

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- The transfer credit amounts granted in FRVIS for motor vehicles for hire (powered vehicle or recreational vehicle which is used for compensation or consideration) carrying

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under nine passengers were incorrect for vehicles weighing between 25,950 and 26,000 pounds. In response to audit inquiry, Department staff determined that no instances of incorrect credits had occurred since October 1, 1999.

▪ FRVIS prorated the vessel registration certificate fees assessed for registration periods of less than a year. However, there is no statutory authority permitting the registration certificate fees to be prorated.

Recommendation: The Department should make appropriate FRVIS changes to ensure the accuracy of FRVIS processing and the license taxes assessed to taxpayers.

Response:

The Department has made or has scheduled to make the appropriate changes to the fee schedule tables and the FRVIS code to ensure compliance with State law in five of the six situations described in finding No. 3. We believe compliance determination regarding the proration of vessel fees is a matter of interpretation. Specifically:

▪ Changes will be made to the FRVIS code to account for the incorrect fee schedule entry for wreckers of a certain gross vehicle weight and to ensure that the base tax fee assessment on an original transaction is never less than $5.00. These changes to the FRVIS code will be implemented by June 30, 2008.

▪ Three other FRVIS corrections were made as of April 19, 2008. The effected areas included the following:

  – Fee schedules that determined the license tax assessed for selected trailers for hire (non-powered vehicle drawn by a motor vehicle which is used for compensation or consideration).
  – The license tax amounts in the fee schedules in FRVIS that assessed fees for trailers for hire in selected prorated registration periods. The Department will initiate refunds to all customers overcharged due to this error.
  – The transfer credit amounts granted in FRVIS for motor vehicles for hire (powered vehicle or recreational vehicle which is used for compensation or consideration) carrying less than nine passengers for vehicles weighing between 25,950 and 26,000 pounds.

▪ The Department recognizes the difficulty in determining whether it was the intent of the Legislature to prorate vessel fees only during the conversion (changing from June renewal to a birth month renewal period) or as a permanent method of fee assessments for registration periods of less than a year. The Department will seek legislative clarification during the 2009 legislative session.

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