



Office of Program Policy Analysis And Government Accountability

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REVIEW OF THE EQUIPMENT MANAGEMENT INFORMATION SYSTEM

REPORT ABSTRACT

- The Department of Management Services has taken some steps to address agency concerns with the Equipment Management Information System (EMIS), but could do more to reduce costs and make the system more useful to agencies.
- Many agencies are not satisfied with the performance or cost of EMIS and are not using the system as their primary source of fleet management information. However, the agencies with the largest fleets are generally satisfied with the system.
- Using commercial fleet management software instead of EMIS could produce significant cost savings and provide better fleet management information to agencies.

PURPOSE OF REVIEW

The Joint Legislative Auditing Committee requested that our Office examine vehicle fleet management activities of state agencies. As part of our review, we examined the Equipment Management Information System (EMIS) administered by the Department of Management Services (DMS) to determine how agencies use the system and whether it is meeting agency needs.

This report is one of a series that addresses the state's vehicle fleet management activities. Related reports address how state-owned vehicles that are assigned to individual employees are used, the use of employees' privately-owned vehicles, and the methods Florida uses to acquire and maintain its vehicle fleet.

BACKGROUND

Florida owns and operates over 23,000 motor vehicles, which represents a substantial investment and annual operating expense. These vehicles are operated by 26 governmental entities, excluding the State University System.

Studies of governmental vehicle management practices indicate that centralized information systems can help agencies manage their vehicle fleets efficiently and effectively. These systems can help ensure that preventive maintenance tasks such as oil changes are performed when needed, help manage fuel usage, and identify vehicles that are no longer needed or have high operating costs and need to be replaced.

EMIS is a computer-based system that maintains data on motor vehicles owned by Florida, including cars, trucks, vans, heavy equipment, and watercraft. The system was established in 1974. DMS administers EMIS as part of its statutory responsibility for the efficient and effective use of state motor vehicles.

EMIS maintains information on the location, usage, and maintenance of state-owned vehicles. Agencies may use EMIS to track fuel usage and mileage, monitor preventive maintenance, create and track repair work orders, and track vehicle acquisition and disposition costs. Agencies must provide updated information to EMIS on at least a monthly basis. DMS provides monthly reports to agencies that list vehicle inventories, summarize usage and cost data, and identify vehicles with exceptionally low or high usage and costs. As of February 1996, EMIS contained data on 23,724 state-owned vehicles representing 26 governmental entities.¹

¹ EMIS does not include information on vehicles owned by the State University System, which is statutorily exempt from using EMIS. DMS groups all judicial agencies (State's Attorneys and Public Defenders) as a single entity for some reporting purposes.

DMS charges agencies \$1.75 per month (\$21 per year) for each vehicle listed in EMIS. These fees are deposited into the Motor Vehicle Operating Trust Fund. In fiscal year 1994-95, DMS collected \$459,000 in fees and expended \$486,000 to operate EMIS.

We examined EMIS in two previous reports, published in 1990 and 1992.² Both reports identified significant weaknesses in the system. For example, we reported EMIS contained incomplete and erroneous data, which limited the system's usefulness to agency managers. We also reported that some agencies were maintaining their own fleet management systems because EMIS reports were outdated and did not meet agency needs.

FINDINGS

Many agencies are not satisfied with EMIS's performance or cost, although the agencies with the largest fleets are generally satisfied with the system.

Although EMIS is intended to serve as the state's primary fleet management system, many agencies are not satisfied with its performance and cost. As shown in Exhibit 1, 14 of the 25 agencies we contacted reported that EMIS does not meet their needs, and 19 indicated that EMIS is not worth the cost they pay to support the system. Only 11 of the agencies were generally satisfied with EMIS. Over half of the agencies reported using their own manual or automated systems to manage their vehicle fleets; these internal systems are used to supplement EMIS or are used in place of it.

However, we noted that the three agencies with the largest fleets (Departments of Transportation, Corrections, and Environmental Protection) were generally satisfied with EMIS. These agencies control almost 60% of the motor vehicles tracked by EMIS and reported that they regularly use the system for fleet management tasks such as tracking vehicle mileage, costs, and preventive maintenance. DMS officials indicated that the Department had placed its priority on working with these agencies to meet their needs. Many of the 14 agencies that were unsatisfied with EMIS had relatively few vehicles.

**Exhibit 1
Many Agencies Are Not Satisfied With the
Equipment Management Information System**

<i>Question</i>	Agency Response (N=25)	
	<i>Yes</i>	<i>No</i>
Does EMIS meet fleet management needs?	11	14
Does agency get moneys' worth from EMIS?	6	19
Would agency be adversely impacted if EMIS were eliminated?	7	18
Does agency maintain an in-house fleet management system?	14	11

Source: Office of Program Policy Analysis and Government Accountability survey of 25 state agencies that are required to submit monthly vehicle data and pay fees to the Department of Management Services to support the Equipment Management Information System.

Agencies cited difficulty of use, untimely reports, and inaccurate data as problems with EMIS.

Agency managers identified several reasons why they are not satisfied with the system. The most commonly cited factors were that the system was difficult to use, its reports were not timely, and its data were inaccurate.

Several agencies reported that EMIS was difficult for them to use and did not provide the information they needed. For example, four agencies reported that their staff lacked training needed to readily operate EMIS and did not know how to fully utilize the system's capabilities. In addition, several agencies reported that EMIS did not provide needed information such as reports on certain costs and vehicle uses. As a result, these agencies operate their own systems to track vehicle usage and costs.

Agencies also complained that EMIS reports are outdated when received and thus cannot be used for scheduling fleet management tasks. Seventeen of the 25 agencies submit monthly vehicle use logs to DMS for data entry and processing. These agencies must wait between one and two months to receive an EMIS report after they send in their monthly vehicle logs.³ For example, some agencies did not receive

² Report No. 11377, *Performance Audit of the Equipment Management Information System* (February 1990), and Report No. 11972, *Special Review of the Divisions of Building Construction, Facilities Management, Motor Pool, and Purchasing* (November 1992). These reports were issued by the Program Audit Division of the Office of the Auditor General prior to the creation of the Office of Program Policy Analysis and Government Accountability.

³ Eight of the 25 agencies reported that they currently perform on-line data entry. These agencies also have the capability to generate standardized and ad hoc reports using EMIS.

their November vehicle use report until late January. As a result, these agencies cannot use EMIS reports for critical tasks such as scheduling preventive maintenance because the work needs to be done before the reports are received.

Finally, three agencies noted that they are reluctant to use EMIS reports because they believed that data in the system are inaccurate and unreliable. We identified several problems with EMIS data. For example, EMIS cannot readily be used to identify statewide vehicle acquisition costs because this data is frequently missing. Also, data such as vehicle models, types, and location have not been entered using standard terms. For example, the model "Crown Victoria" has been entered using at least 32 different abbreviations and agencies have used at least 44 terms to designate that a vehicle is located in West Palm Beach. These data problems greatly limit EMIS's usefulness in analyzing state fleet management practices. DMS officials acknowledged that there were problems with EMIS data, but noted that agencies are responsible for the quality of data entered into the system.

DMS has taken actions to address agency concerns with EMIS, but could do more.

DMS officials acknowledged that EMIS users have not been adequately trained and supported, particularly those agencies with relatively few vehicles. However, DMS officials maintained that recent improvements will address these problems. For example, DMS has modified EMIS to make the system easier to use and has enabled agencies to generate, view, and print their own reports. DMS is developing a training video to help agency staff learn how to use EMIS. Also, DMS has given agencies the ability to enter data on-line and it has created edit checks to improve data timeliness and accuracy.

DMS could take additional steps to make EMIS less costly and more useful to agencies. For example, DMS could revise its EMIS billing structure to more accurately reflect system usage. At present, all agencies pay the same per-vehicle fee regardless of how they use EMIS. However, some agencies extensively use EMIS capabilities that are not needed or used by other agencies. For example, the Department of Transportation and Department of Agriculture and Consumer Services are the only agencies that use EMIS's Shop Work Order component, which tracks repair work done in these agencies' in-house garages. However, the costs of

maintaining this component are assessed to all agencies. Allocating costs on a utilization rather than a per-vehicle basis would more equitably distribute system costs.

DMS could also take steps to be more responsive to agency concerns and needs. DMS could conduct regular user surveys and establish an advisory users' group to help ensure that it is aware of agency problems with EMIS. DMS could also establish a Help Desk to answer questions and solve problems for agency users. DMS officials indicated that the Department is working to address these areas.

Switching to commercial fleet management software could produce significant cost savings and improve fleet management.

While DMS can improve EMIS, a better long-term solution would be to purchase a new system that would provide better fleet management information at a lower cost. It is likely that commercial software would have significantly lower operating costs and would pay for itself in a short time period.

EMIS is a relatively old computer application that is expensive to operate. The system was developed in 1974, and costs almost \$500,000 a year to operate, primarily because it operates on a mainframe computer system. About \$332,000 of EMIS's annual costs are charges for mainframe data processing and storage. DMS managers indicated that EMIS will require a major system re-write within the next five years. The costs of developing this new system cannot be accurately determined, but will likely be significant.

Several commercial fleet management software systems are available that appear to have features that are comparable or superior to EMIS and represent substantially lower operating costs. For example, companies we contacted indicated that mainframe-based systems can be purchased for about \$200,000. Systems that operate from personal computers (PCs) or client-server networks are available for less than \$50,000; these systems can have low operating costs because they do not require expensive mainframe data processing or storage.

Several states we contacted have purchased fleet management software from vendors and report satisfaction with these systems. For example, Texas currently uses a PC-based program to manage its fleet of 28,000 vehicles. This system was acquired in

1992 through a license agreement that provided for a one-time fee of \$150,000, and an annual maintenance fee of \$15,000. The California Department of General Services is in the process of converting its operations from a mainframe system to a PC-based fleet information system. California officials indicated that the PC-based software was acquired for \$100,000. The Department plans to allow other agencies to access this software at no cost.

Similarly, a number of cities and counties in Florida are using PC-based fleet management systems. For example, the City of Tallahassee recently replaced its mainframe-based system with a PC-based fleet management program. City administrators reported that the new system provides improved functionality and reduced operating costs.

We believe that DMS should carefully review the commercial fleet management software packages that are currently available from vendors. It appears likely that Florida could obtain a fleet management system that could better meet agency needs and have lower operating costs.

CONCLUSIONS AND RECOMMENDATIONS

EMIS has a history of operational problems and most agencies continue to report that they do not use the system as their primary fleet management data system. While DMS has taken some steps in recent years to improve EMIS and address agency problems, the system is approaching obsolescence.

Florida could likely realize significant cost savings and improve its ability to manage its motor vehicle fleet by acquiring a commercial fleet management software program. Systems currently available from vendors are being successfully used by other states and local governments, and appear to have capabilities that are equal, if not superior, to EMIS and offer significantly lower operating costs.

We recommend that:

- DMS and the State Council on Competitive Government develop specifications and issue an Invitation to Bid for a commercial fleet management software package. The State Council on Competitive Government is responsible for oversight of competitive bidding for government services. DMS should work with state agencies to ensure that the bid specifications include the fleet management information needs of user agencies. If DMS and the State Council on Competitive Government determine that the state can obtain a product that meets the state's needs and produces cost savings, DMS should discontinue the EMIS system and implement the new commercial fleet management system.
- In the short term, DMS take steps to make EMIS better meet agencies' needs, including conducting user surveys, establishing a user advisory group, providing additional training for agency staff, and revising the EMIS billing structure to more equitably allocate system costs to agencies.

AGENCY RESPONSE

The Secretary of the Department of Management Services agreed to explore options that would help meet the state's equipment management and reporting needs.

This project was conducted in accordance with applicable evaluation standards. Copies of this report may be obtained by telephone (904/488-1023), by FAX (904/487-3804), in person (Claude Pepper Building, Room 312, 111 W. Madison St.), or by mail (OPPAGA Report Production, P.O. Box 1735, Tallahassee, FL 32302). Web site: <http://www.state.fl.us/oppaga/>

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