



PROGRAM EVALUATION DIVISION

NORTH CAROLINA GENERAL ASSEMBLY

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More Accurate State Vehicle Utilization and Cost Data Needed: RFP Issued by DOA for Fleet Management Vendor Includes Integration of Telematics

The Program Evaluation Division (PED) has issued six reports on state agency fleet management including the March 2012 report, *Motor Fleet Management Uses Best Practices, but Needs Telematics to Strengthen Accountability*.

- **Finding:** Telematics offers a cost-effective solution to improve accountability and provide complete vehicle utilization information. By integrating wireless communications, vehicle monitoring systems, and GPS location devices, telematics provides complete vehicle utilization data, identifies and confirms misuse, reduces reliance on state agencies, and promotes more efficient vehicle utilization. Cost estimates suggest implementation of basic telematics services could be cost-effective due to estimated reductions in vehicle utilization.
- **PED Recommendation:** The General Assembly should direct the Department of Administration (DOA) to install basic telematics services on state-owned passenger vehicles.



During its 2013–14 session, the General Assembly responded by requiring telematics and fleet management system planning and reporting by the Office of the State Chief Information Officer (CIO).

- [S.L. 2013-360, Section 7.16 \(a\)-\(d\)](#):
 - tasked the CIO to develop an implementation plan for a statewide motor fleet management system and required the Office of State Budget and Management (OSBM) to assist agencies with implementation and to identify funding from current and proposed projects and applications; and
 - required the CIO to begin quarterly status reporting in October 2013 to the Joint Legislative Oversight Committee on Information Technology and the Fiscal Research Division on an implementation plan for a fleet management information system and to report on the feasibility of a vehicle tracking system as recommended by the Program Evaluation Division by November 2013.
- [S.L. 2014-100, Section 7.1 \(b\)](#) appropriated funds for enterprise resource planning; in response, the CIO and the Governor's NC Government Efficiency and Reform (NCGEAR) initiative jointly proposed an Enterprise Resource Planning (ERP) system encompassing all core state business activities such as fixed assets, human resources, fleet management, and grants management. The General Assembly had earlier enacted [S.L. 2013-360, Section 7.14](#), which required the CIO to oversee an Enterprise Grants Management system committee that also made recommendations regarding fleet management.

The CIO did not meet the requirements of [S.L. 2013-360, 7.16 \(a\)-\(d\)](#) relative to fleet management or telematics. As a result, there has been no independent feasibility study of telematics.

- The CIO did not submit quarterly reports on joint CIO/OSBM fleet management beginning October 2013.
- The CIO did not report on the feasibility of a state vehicle tracking system by November 2013.
- The CIO and Grants Management Committee met on April 21, 2014 and submitted a letter on September 24, 2014 to the Joint Legislative Oversight Committee on Information Technology and the Fiscal Research Division with the following conclusions regarding a vehicle management system:
 - *The committee recommends that priority focus and funding be given to implementing an ERP (Enterprise Resource Planning) solution to modernize the financial management capabilities. Enterprise Grants Management should be addressed once the ERP plan is determined and underway.*

- *Although the direction of a vehicle management system was not the responsibility of the committee, the committee also recommends deferral of this system pending decisions on the financial components of the statewide ERP system.*¹

As required by [S.L. 2014-100, Section 7.1 \(b\)](#), the CIO and NC GEAR team did recommend an Enterprise Resource Planning (ERP) system including fleet management but assigned it lower priority relative to addressing financial components.

- The ERP proposes integration of multiple, disparate financial and administrative management systems.
- Upon state approval of a \$301 million budget, the ERP would address core financial components first before the end of the seven-year project. All other business activities including central fleet would be completed in outyears of the project.
- The proposed ERP alluded to telematics but did not address the specific requirements delineated in [S.L. 2013-360, Section 7.16](#) relative to vehicle tracking systems.

Having considered results of informal telematics tests, the Department of Administration (DOA) issued a Request for Proposal for a fleet management service provider in September 2015. DOA considered telematics for several years and received informal quotations and limited test results from several potential vendors.

- Verizon Telematics Networkfleet independently financed and conducted a limited pilot test of the company's GPS-based vehicle monitoring software. The pilot monitored 76 state vehicles over a seven-month period. Verizon shared results with DOA. On February 23, 2015, Verizon presented findings to the Joint Legislative Program Evaluation Oversight Committee. Verizon found that
 - 11.69% of the 76 vehicles were unused or not being regularly used during the 7-month pilot period. 6.39% of vehicles averaged zero utilization for the 7-month pilot period and 5.39% had 1-to-5 days of utilization. Verizon extrapolated from this data that 896 of the 7,662 vehicles controlled directly by the Department of Administration's Division of Motor Fleet Management (MFM) could be eliminated.
 - MFM could save \$678,546 annually in fuel costs just by eliminating idling events over 10 minutes in duration.
 - Operators of the pilot vehicles exceeded posted speed limits by over 5 MPH a total of 5,000 times and by over 10 MPH a total of 2,000 times per month.
- On September 22, 2015, DOA's Division of Purchase and Contract issued a Request for Proposal (RFP) for a fleet management service provider with an October 23, 2015 proposal opening date.² The RFP is well-structured, definitive regarding contract requirements, and includes integration of telematics in proposed solutions.

Had the CIO completed the feasibility studies required by 2013 session laws, DOA could have benefited from study findings and addressed them in the September RFP. PED anticipates strong interest in reporting effects attributable to a new provider fleet management solution, particularly in terms of benefits derived from telematics information.

PED recommends accumulation of vehicle utilization and cost baselines to assist the State in seeking efficiencies for the DOA in-house system or to gauge costs and benefits of large-scale outsourcing solutions.

If DOA contracts for a fleet management service provider and begins accumulating experience data from telematics, DOA and the General Assembly should be in a much better position when gauging the costs and benefits of continuing the DOA in-house vendor-guided fleet management system or evaluating outsourced solutions available from national rental car companies.

When seeking business or responding to states and other large governments, national rental car corporations offer substantial expertise and hundreds of dispersed locations for customer service and vehicle fueling and maintenance. They manage by data; have economies of scale; benefit from market share buying leverage when dealing directly with vehicle manufacturers; and are highly skilled in timing and negotiating sales of depreciated but well-maintained vehicles to national used car outlets.

¹ September 24, 2014 letter from Chris Estes, CIO and Chair of Grants Management Steering Committee, to the Joint Legislative Oversight Committee on Information Technology and the Fiscal Research Division.

² RFP number 201501238 available online October 6, 2015 at <https://www.ips.state.nc.us/ips/AGENCY/PDF/10995000.pdf>.

However, there are data gaps and barriers which if not filled or overcome beforehand will complicate any scale-up decision, whether through DOA vendor management or to a more ambitious outsourcing of total fleet management to a national rental car company. Circumstances or workload overlooked or underestimated by the State when contracting may lead to successful contractor requests for amendments and supplemental agreements at a premium price as has been the State's experience with other large state contracts, e.g. the 2009 State Health Plan contract with Blue Cross Blue Shield and the more recent Department of Health and Human Services contracts for NCTracks and NCFast. In this scenario, state options may be limited if the State no longer has an in-house solution as a fallback.

Statutory carve-outs exempting selected agencies from DOA fleet management will be a complication.

When PED counted state vehicles as of 2011, the State owned approximately 28,000 total vehicles. However, the recent Department of Administration RFP is requesting a solution for the approximately 7,000 vehicles managed directly by DOA. It will be complex and time-consuming to take to scale any in-house or outsourced solution for agencies historically operating fleets through statutory carve-outs. Agency data may not be compatible with new systems. Agencies understandably may insist that any new system preserve confidentiality of data used by their management related to law enforcement vehicles and that certain types of vehicles are specialized in use (e.g., prisoner transport, off-road use, firefighting, etc.) and should be bought, maintained, and operated only by agency employees. Agencies will also be reluctant in general to relinquish control over vehicle assignment, model selection, and accessories and will press to maintain carve-outs.

Other states are implementing telematics for their motor fleets.

- June 2015 – Wyoming's Department of Administration implemented 1,600 monitors through Verizon's Networkfleet GPS telematics system. The system is already in use at the Wyoming Department of Transportation and in other commercial vehicles throughout the state. Wyoming expects \$360,000 to \$720,000 in annual fuel savings alone, which in addition to expected operational savings should exceed the system's \$363,000 annual cost.
- July 2015 – The California Department of Corrections and Rehabilitation's Division of Adult Parole Operations has implemented web-based fleet management software for 1,500 vehicles. Savings have not yet been determined.
- July 2015 – Caltrans (California Department of Transportation) has outfitted its fleet of 7,500 sedans, trucks, snowplows, and portable signs with GPS devices provided by Verizon Networkfleet. Caltrans reported its 12-month fuel expenses dropped 18% from July 2014, when it began installing the devices, to June 2015. However, Caltrans officials are uncertain how much of that decrease can be attributed to the system because average fuel prices also fell significantly during that time.
- August 2015 – Louisiana is installing GPS tracking devices on its entire 10,543-vehicle fleet and expects the \$10 million project will save \$30 million over the next five years by reducing the cost of fuel, maintenance, and insurance.
- August 2015 – The Michigan Legislature is considering a bill that would roll out a GPS-based telematics initiative for 120 vehicles in the state fleet to save money on fuel and "crack down" on employees who misuse government vehicles.
- August 2015 – The Washington State Department of Enterprise Services Fleet Operations is in the planning stages of commencing a six-month pilot project implementing telematics on 350 vehicles on assignment with the top ten agencies with respect to volume of vehicles.

The Program Evaluation Division will continue to follow up on fleet management and telematics and report results to the Joint Legislative Program Evaluation Oversight Committee if warranted.

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Appendix: Program Evaluation Division Reports on State Motor Fleet Management

2013-04 Centralized Fleet Operations Will Improve Management and Oversight of Department of Public Safety Vehicles (April 2013)

The General Assembly directed the Program Evaluation Division to evaluate fleet management among major law enforcement agencies. This report focuses on the 2,398 law enforcement vehicles owned and operated by the Department of Public Safety (DPS). The management and oversight of law enforcement vehicles in DPS is fragmented and decentralized and does not meet best practices. Furthermore, despite a directive to consolidate, DPS has yet to formalize a plan for centralized fleet management operations. The General Assembly should direct DPS to develop a plan and proposal for the implementation of a centralized fleet management program that meets best practice standards.

2012-12 Stronger Reporting and Management Structure Would Improve State Bureau of Investigation Vehicle Oversight (November 2012)

The General Assembly directed the Program Evaluation Division to evaluate fleet management among major law enforcement agencies. This report focuses on the 384 vehicles operated by the Department of Justice's State Bureau of Investigation. Although the bureau implemented policies and procedures related to vehicle operation and had introduced an electronic vehicle information tracking system, the evaluation identified weaknesses associated with a decentralized management structure and gaps in internal controls. The General Assembly should require the Department of Justice to adopt a fleet management approach by strengthening policies and procedures, conducting annual internal vehicle audits, and modifying data reporting and use.

2012-08 Key Ideas from Five Program Evaluation Division Reports on State-Owned Vehicles and Permanent License Plates (June 2012)

This report provides a summary of five PED reports on state-owned vehicles and permanent license plates.

2012-06 Ineffective Policies and Diffuse Oversight Result in Inefficient Use of State-Owned Vehicles (April 2012)

North Carolina agencies and institutions that own 200 or more vehicles have not fully implemented fleet management best practices. Weak and diffuse oversight results in inefficient use of vehicles because no single entity is responsible for ensuring appropriate and efficient use of state-owned vehicles. This lack of statewide oversight limits accountability for state-owned vehicle use. Other states with state fleet management offices demonstrate that centralized supervision of state-owned vehicles improves accountability and operational efficiency. The General Assembly should strengthen supervision of all state-owned vehicles by establishing the Division of State Fleet Management in the Department of Administration to manage passenger vehicles, supervise agencies and institutions that own non-passenger vehicles, and manage the statewide fleet management information system.

2012-02 Motor Fleet Management Uses Best Practices, but Needs Telematics to Strengthen Accountability (March 2012)

The Division of Motor Fleet Management (MFM) operates in accordance with most fleet management best practices, but the division can improve management and accountability. MFM's reliance on state agencies for management and oversight makes it difficult to hold agencies accountable, and it does not have sufficient information to determine the correct number of passenger vehicles to meet state government needs. Telematics offers opportunities to improve accountability and provide information needed to analyze vehicle utilization. Curtailment of vehicle replacement in recent years has led to an older and less reliable fleet, and recent changes to the rate structure may limit funding for vehicle replacement. With improvements in management and the use of technology, MFM can continue to meet the state government need for passenger transportation services.

2011-07 Inadequate Data and Fleet Information Management Weaken Accountability for North Carolina's Vehicles (December 2011)

North Carolina lacks adequate information to determine the appropriate size and mix of state-owned motor vehicles for state government needs. Although state agencies and institutions can provide data on the number, use, and cost of their fleets, the State does not have a central data source to verify the accuracy of this information. State agencies and institutions are not required to collect the necessary data for vehicle utilization assessments. As a result, many do not collect this information at all. This report recommends directing state agencies and institutions to update vehicle registration records for all state-owned vehicles and requiring collection and reporting of vehicle information through a statewide fleet management system.