

WEST VIRGINIA LEGISLATURE
Joint Committee on Government and Finance

Stacy L. Sneed, CPA, Director
Legislative Post Audit Division
Building 1, Room W-329
1900 Kanawha Blvd., E.
Charleston, West Virginia 25305-0610



Area Code (304)
Phone: 347-4880
Fax: 347-4889

Memorandum

To: Members of the Post Audits Subcommittee

From: Aaron Allred, Legislative Auditor
Stacy Sneed, CPA, CICA, Director, Legislative Post Audit Division
Amber Shirkey, CPA, CFE, CICA, Manager, Legislative Post Audit Division
John Signore, CPA, Manager, Legislative Post Audit Division
Joshua Potter, CPA, Auditor III, Legislative Post Audit Division
Mike Jones, Auditor II, Legislative Post Audit Division
Kristina Taylor, Auditor II, Legislative Post Audit Division
Diana Humphreys, Auditor I, Legislative Post Audit Division

Date: June 19, 2013

Subject: Fleet Optimization Study

Objectives and Background

In accordance with the request from the Legislative Auditor, we conducted a study to determine if West Virginia has policies and/or procedures in place at the state or agency level to minimize mileage driven while maximizing the number of inspections conducted, and to determine if the Mobi.Plan as utilized by the Texas Department of Agriculture would be beneficial to West Virginia.

The Mobi.Plan is a system utilized by the Texas Department of Agriculture implemented to assist in their fleet planning and optimization of inspection costs. It is a multifaceted optimization software system designed to transform service enterprises from batch operations with limited visibility, latent analysis, and piecemeal execution to real-time systems with transparent operations. The Mobi.Plan is broken into segments: allocation, operation, field, and analytics, with each containing two or three modules. The Mobi.Plan can be installed one module at a time until the full suite is installed or the user can install only those modules they need to enhance their current operations.

Scope of Work Performed

The audit team gathered available information regarding inspection route planning from the West Virginia Fleet Management Division of the Department of Administration. We identified agencies tasked by WV Code to conduct inspections, and then excluded those inspections contingent upon a triggering event. Using auditor judgment, the ten agencies deemed most likely to benefit from the optimization of inspection routes

were chosen for further examination, and sent a questionnaire. Upon review of the answers provided, three agencies were excluded, as the agencies indicated the inspections previously identified as routine were not regularly occurring. A follow-up questionnaire was sent to the final population of seven agencies to determine the number of inspectors, number of yearly inspections and number of inspections conducted per day. Each agency was then interviewed to document the process used to plan and route each inspection. The final population was comprised of the following agencies and divisions:

1. Division of Environmental Protection - Oil and Natural Gas Division
2. Division of Environmental Protection - Special Reclamation
3. Division of Environmental Protection - Air Quality
4. West Virginia Alcohol Beverage and Control Administration
5. West Virginia Department of Agriculture
6. Department of Military Affairs and Public Safety - Fire Marshal Fire Inspection Division
7. Department of Military Affairs and Public Safety - Fire Marshal Fire Department Services.

To investigate the possible benefits of the Mobi.Plan implemented by the Texas Department of Agriculture the audit team contacted Neil Cook of the Texas Department of Agriculture via email. At the request of Mr. Cook, the audit team then conducted a conference call to discuss the development, implementation, benefits, and costs related to the Mobi.Plan. Mr. Cook detailed the many changes required when developing Mobi.Plan, including changes to multiple existing software programs, as well as tailoring the inspections to fit Mobi.Plan, costing the Texas Department of Agriculture \$83,000. The Texas Department of Agriculture incurred a cost of \$175,000 during the first seven months of implementation to move inspections to the Mobi.Plan. The cost estimate given was \$100,000 per year for the software plus an additional \$1,000 per inspector signed up on the Mobi.Plan. Ongoing maintenance was estimated at 10% of the employee's time plus \$12,000.

Objectives Answered

1. Upon review of documentation obtained for the study it was determined the State of WV does not have any written policies or procedures concerning route planning for agencies that use fleet vehicles.
2. None of the seven agencies conducting regular and routine inspections reviewed for this study have written policies and/or procedures in place for planning efficient routes, nor do they utilize specialized software or other tools in planning inspection routes; however, all seven agencies make a conscious effort to minimize mileage and fuel usage while maximizing the employee's time.
3. The Mobi.Plan would not provide sufficient benefits to West Virginia to justify the extensive cost to develop, implement, and maintain the system.

Recommendation

While the agencies studied are currently making a concerted effort to reduce costs associated with inspections, we recommend the development of written policies and procedures concerning route planning for agencies using fleet vehicles. We also recommend agencies develop written policies and procedures on planning and routing their respective inspections to minimize the economic impact to West Virginia.