RESEARCH
PROJECT CAPSULE [11-2P]
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TECHNOLOGY TRANSFER PROGRAM

Development of DOTD GPS Technology Management Plan

JUST THE FACTS:

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POINTS OF INTEREST:

Problem Addressed / Objective of Research / Mehodology Used
Implementation Potential

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PROBLEM

Global positioning systems (GPS) have become a widespread technology in transportation applications as well as by the general public. Many sections within the Louisiana Department of Transportation and Development (LADOTD) are collecting GPS data in their daily production activities due to its advantages and convenience. Unlike the implementation of other new technologies, LADOTD has not established standards for GPS technology that address hardware, software, proper use, management, or training. Because there are numerous hardware and software platforms that require the use of different proprietary components, LADOTD sections that use GPS have had no guidance in their procurements. Costs vary widely as do the capabilities and appropriateness of the different combinations of hardware and software for specific applications. As a result, GPS solutions across the Department are not interoperable, and each requires their own training and procedures to ensure proper use. It is impossible to provide support or maintain the quality of data collection in this environment. Therefore, LADTOD needs a plan for GPS technology management.

OBJECTIVE

The objective of this short study is to develop a GPS technology management plan on best practices. The plan should provide standards for GPS use, management, and training for the Department. This objective will be accomplished by a comprehensive assessment of the current situation within the Department with respect to GPS technology use and management.

METHODOLOGY

Through research into the management of GPS technologies in various state agencies, along with discussions with GPS vendors and universities, a list of issues surrounding the management of GPS equipment along with recommended strategies for dealing with these issues will be compiled. The research team will then perform a detailed survey of LADOTD staff to quantify GPS use within the Department. Based on the results of the survey of existing use and the research of GPS management in other agencies, the team will develop a detailed GPS technology management plan for LADOTD.

IMPLEMENTATION POTENTIAL

The GPS Technology Management Plan for LADOTD will provide a comprehensive set of procedures to facilitate the purchase and use and maintenance of GPS technology in the Department. The plan will set standards for hardware and software purchases, staff training for use and care of equipment, equipment maintenance, data storage, and documentation procedures. When adopted, a standardized GPS Technology Management Plan should save the Department time and money by having everyone who uses GPS technology use the best equipment for the job, have the proper training, and allow the Department tc provide adequate support for the equipment.