SURFACE TRANSPORTATION

Efforts to Address Highway Congestion through Real-Time Traffic Information Systems Are Expanding but Face Implementation Challenges

Why GAO Did This Study

Growing congestion on our nation's roads results in wasted time and fuel, which adversely affects the economy and the environment. State and local government agencies and private companies disseminate real-time traffic information to help travelers decide whether to use alternative, less congested routes. Legislation enacted in 2005 required the U.S. Department of Transportation (DOT) to establish the Real-Time System Management Information Program, in order to provide states the capability to monitor traffic and travel conditions on major highways and share that information. As requested, this GAO report addresses, among other things, (1) how the public and private sectors disseminate real-time traffic information to the public, (2) actions DOT has taken to establish the Real-Time System Management Information Program, and (3) experts' views on the need for a nationwide real-time traffic information system and its potential characteristics.

To conduct this study, GAO visited sites in California and Florida, which have well-developed traffic information systems; reviewed and analyzed DOT reports and data; and interviewed transportation officials, experts, and other stakeholders. GAO is not making any recommendations at this time because DOT has not finalized the proposed rule it issued in January 2009, and there was no consensus from the experts GAO interviewed as to whether an increased federal role in this area is appropriate or what this role might be.

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What GAO Found

States and local agencies and the private sector use a variety of services and technologies to disseminate real-time traffic information to the public. For example, state and local agencies deploy electronic traffic signs and services that provide information via a nationwide 511 phone number, and private companies operate Web sites that provide information for cities across the country. The coverage provided by these services and technologies is expanding, but there are gaps in coverage and variations in aspects of real-time traffic information, such as the quality of the data collected and the extent to which state and local agencies share their data. The private sector is expanding coverage, in part by using newer technologies to increase the collection of traffic data. Like the public sector, the private sector faces limitations to its coverage and data quality.

To establish the Real-Time System Management Information Program, DOT's Federal Highway Administration (FHWA) issued a proposed rule in January 2009 that, when finalized, could improve the coverage, quality, and sharing of traffic information. The rule proposes requirements for states to make available certain traffic information, such as travel time, on major highways and to meet data quality standards, including standards for timeliness. State and local government officials GAO interviewed said that these improvements would allow the public to better select the most efficient route to reach their final destination, which could reduce congestion and yield other benefits. Yet state and local officials also told GAO that the proposed rule's time frames to develop the program are too short and would be difficult to implement without additional funds. DOT expects to issue the final rule in February 2010 and is currently considering options to address such concerns. According to FHWA, its division offices will monitor states' compliance with the final rule.

Experts GAO interviewed generally agreed that a nationwide real-time traffic information system is needed to help address current gaps in information coverage and inconsistencies in data quality. Many of these experts noted that reported mobility and environmental benefits, such as travel time savings and reduced emissions, could be increased under a nationwide system. However, experts held varying views on the potential characteristics of such a system. Some said that the anticipated results of current efforts related to real-time traffic information by DOT, states, and the private sector would lead to the development of a nationwide real-time traffic information system and considered these efforts sufficient. Others envisioned a nationwide system that would go beyond current efforts. For example, in their visions, DOT would take a strong leadership role or partner more with the private sector to disseminate information. However, experts cited potential challenges in designing and implementing a nationwide system, including reaching consensus on the form of the nationwide system and funding constraints.

DOT reviewed a draft of this report and provided a technical comment that GAO incorporated.

_____**United States Government Accountability Office**