Strategies for improved collection of national travel data

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Good travel data are essential to measure and monitor the performance of the U.S. transportation system and to help guide policy choices and investments in transportation infrastructure, says a new report from the National Research Council that calls for the creation of a national travel data program. Current data are inadequate to support decision making in the transportation sector.

"Each day our transportation network serves hundreds of millions of travelers and handles millions of tons of freight, yet we are not collecting the data necessary to analyze demands on the system," said Joseph L. Schofer, chair of the committee that wrote the report and associate dean of the Robert R. McCormick School of Engineering and Applied Science, Northwestern University, Evanston, Ill. "To help us better manage and improve our transportation system, we need federally funded core travel data well-integrated with data collected from states, metropolitan planning organizations (MPOs), transit agencies, and private-sector data providers."

The committee recommended that the U.S. Department of Transportation take the lead in creating the "National Travel Data Program" despite the department's past failures to develop an effective travel data program. DOT's Research and Innovative Technology Administration and Bureau of Transportation Statistics should carry out the design and management of the program and work cooperatively with other government agencies, private-sector data providers, and professional and nonprofit associations to organize and implement the

program. The committee also called for a program advisory council that broadly represents travel data constituencies to provide strategic advice directly to the secretary of transportation on the design and conduct of the program and on emerging data needs.

At present, travel data collection activities are scattered throughout DOT and other federal agencies. The states, MPOs, and the private sector also collect travel data, primarily for their own uses. The most comprehensive travel data are gathered by the federal government using periodic surveys. Coverage of these surveys is incomplete, sample sizes frequently are insufficient to support meaningful analyses, and the results often are not timely. Moreover, funding for these surveys is subject to shifting political priorities, which can place them at risk for cancellation.

The report recommends that DOT and its data partners aggressively invest in the design, testing, and deployment of new methods and technologies for data collection as well as advance the current travel data collection system by employing more consistent data definitions, stronger quality controls, better integration of data sets, and more strategic use of privately collected data. In addition, development of more common formats for state and regional travel data would enable greater integration and aggregation of these data across jurisdictions for analysis and decision making.

The next generation of travel data collection activities should be developed and implemented under the National Travel Data Program, the report said. On the passenger side, this would include a more robust National Household Travel Survey, a revived intercity passenger travel survey for surface transportation modes, and a new continuous national panel survey to track traveler behavior and trends over time.

Collection of freight travel data requires a major reorientation, the

report notes. It should include the Commodity Flow Survey as well as a new industry-based, logistics-oriented supply chain survey to support analysis of the economic impacts of freight logistics and related public infrastructure investment requirements. Local operations surveys are also needed to understand local freight flows, particularly within metropolitan areas.

Given national interest in energy efficiency and environmental impacts of both passenger and commercial vehicles, the committee recommended reviving a vehicle inventory and use survey.

To ensure the collection, integration, and dissemination of these core travel data, the recommended National Travel Data Program will require sustained federal funding estimated by the committee to be between 15 million and 20 million dollars annually. Current annual federal spending on core travel data is about 6 million dollars. Schofer noted, "The next reauthorization of surface transportation legislation offers the opportunity to secure the funding. With billions of investment dollars at stake, the proposed modest increment in funding of 9 million to 14 million dollars to ensure better outcomes is both necessary and prudent."

Provided by National Academy of Sciences

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