

How We Travel

A Sustainable National Program for Travel Data

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Good travel data are essential to support the critical policy choices and multimillion-dollar investments made by decision makers. The travel data available today, however, are inadequate for these tasks.

To develop ways to meet the needs for public and private transportation policy analysis and decision making, the National Research Council of the National Academies appointed a study committee under the auspices of the Transportation Research Board (TRB) and the Committee on National Statistics (see box, page 49). In *Special Report 304: How We Travel: A Sustainable National Program for Travel Data*, the expert committee recommends the organization of a National Travel Data Program built on a core of essential travel data sponsored at the federal level and well integrated with travel data collected by states, metropolitan planning organizations (MPOs), transit and other local agencies, and the private sector.

Data Gaps and Needs

The U.S. transportation system serves hundreds of millions of travelers and handles millions of tons of freight each day, supporting personal goals and domestic and international commerce. As the following examples illustrate, critical data are lacking to inform policies and decisions affecting the system:

◆ A well-functioning transportation system is essential for business travel and tourism, but no national data have been collected since 1995 on long-distance, intercity passenger travel via surface transportation modes.

◆ A strong economy depends on state and regional investments in freight corridors to keep freight moving, but industry-based data on freight shipments, focused on supply-chain links and local goods movement, are not collected. Only coarse national-level data are available on intercity commodity flows.



PHOTO: NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

A North Carolina Department of Transportation project replaces road bridges near a railroad switching yard. Critical data are essential to the safety and stability of all U.S. transportation modes—freight, passenger rail, highways, and more.



Passengers check train schedules at New York's Penn Station. System users depend on accurate travel information; data integrated from various modes can be used to measure performance and ensure precision.

◆ Increased energy efficiency and reductions in greenhouse gas emissions from vehicular travel can reduce the transportation sector's adverse environmental impacts, but the data on vehicle use necessary to monitor progress are no longer being collected.

The federal government collects the most comprehensive data through periodic surveys, but the coverage of these surveys is incomplete, the sample sizes sometimes are insufficient to support meaningful analyses, and the results often are not timely. Moreover, because of shifting political priorities, funding for these surveys is at risk for cancellation.

Study Scope

The TRB Executive Committee initiated the study, with funding from TRB, the Research and Innovative Technology Administration (RITA), and the Federal Highway Administration, along with the American Association of State Highway and Transportation Officials through the National Cooperative Highway Research Program. The study committee was charged with assessing travel data collected at the federal, state, and local levels and defining an achievable and sustainable travel data system to support public and private transportation decision making.

The primary goal was to develop a strategy for structuring, conducting, and funding the collection of critical travel data. The study is national in scope, recognizing that travel data are collected and used at multiple geographic levels and by multiple sectors. The approach covers all travel modes, with a focus on measuring the performance of the transportation system as a whole.

Building on a Core

To support the wise use of public resources for transportation, particularly at a time of slow growth and massive budget deficits, a National Travel Data Program should be built on a core of essential travel data collected under federal sponsorship and coordinated with the travel data gathered by states, MPOs, transit and other local agencies, and the private sector. To manage and track the development and implementation of the program, a multiyear plan should be designed to assure Congress, the data partners of the U.S. Department of Transportation (DOT), and constituents that the National Travel Data Program is moving ahead.

U.S. DOT should be responsible for leading the effort, despite past failures to develop a comprehensive and effective travel data program, because these data are essential to its mission. The secretary of transportation should assume a leadership role, with program design and coordination carried out by RITA and its Bureau of Transportation Statistics (BTS), the federal statistical agency for transportation, which already has a mandate for data collection and coordination. A National Travel Data Program Advisory Council, representing major travel data constituencies, should be formed to provide strategic advice directly to the secretary of transportation.

In collaboration with its data partners, RITA should invest in researching and testing new methods for data collection, integration, management, and dissemination. The new methods should include continuous data collection and greater use of technology.

The committee estimated that the additional cost of collecting the required data would be \$9 million

A National Travel Data Program would provide comprehensive, effective data for efficient and better-informed decision making.

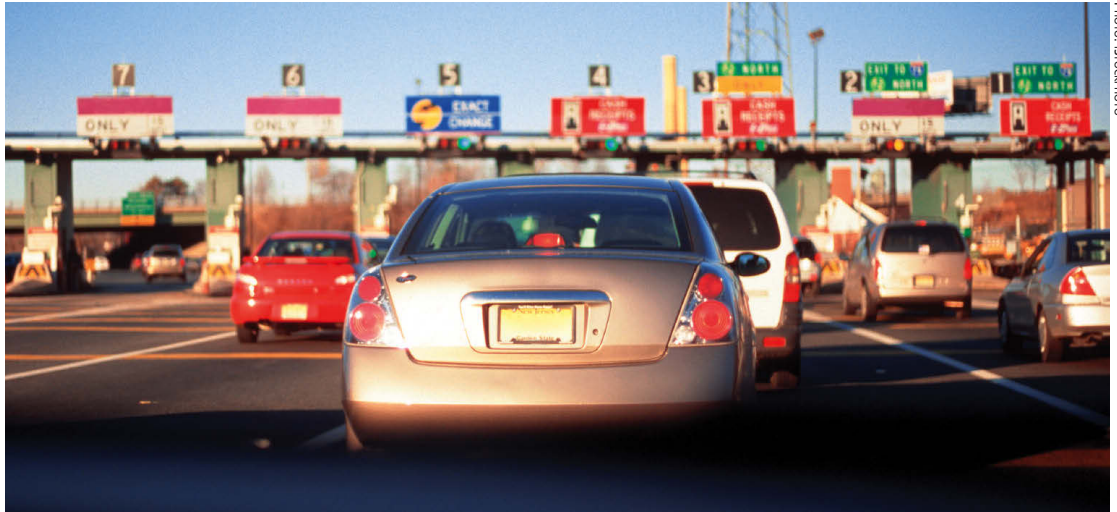


PHOTO: SHOCKPHOTO

to \$14 million annually, and additional funds would be needed for BTS to take on the coordinating role. The next reauthorization of surface transportation legislation offers a strategic opportunity to secure the necessary funding.

Detailed Findings and Recommendations

Program Concept

Addressing critical policy and investment issues—particularly in today’s constrained funding environment—requires a strategic, interlinked system of passenger and freight travel data. A strong federal role is necessary in organizing and combining travel data from numerous sources into a coherent national program that is well integrated in terms of data architecture—that is, the framework and relational structure—timing, and methods of data collection and sharing.

Collaborations and Partnerships

Developing the next generation of passenger and freight travel data surveys and data collection activities will require the participation and sustained support of many data partners. Private-sector data providers are key, because they generate, aggregate,

and disseminate data essential to transportation decisions. They must play an important role in the development of a National Travel Data Program.

U.S. DOT should work cooperatively with public agencies at all government levels, with private-sector data providers, and with professional and nonprofit associations to organize and implement a National Travel Data Program. The proposed program would 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.

A process for working collaboratively and on a continuing basis with states and MPOs is needed, to develop common formats to integrate state and regional travel data and to aggregate the data across jurisdictions for analysis and decision making. Opportunities for partnering with the private sector should be pursued for mutual benefits, to access and use private-sector data, yet protect proprietary interests and leverage private-sector expertise in data collection, aggregation, display, and dissemination.

Organization and Leadership

A successful National Travel Data Program that serves policy makers and planners will require an alignment of leadership, methods, funding, and the understanding of market requirements. U.S. DOT remains the logical and most appropriate agency to spearhead this kind of program, because good national travel data are central to its mission.

The secretary of transportation should assume the leadership role for the proposed National Travel Data Program, to ensure success at the federal level and to affirm that the data needs of U.S. DOT and the nation are met. RITA and BTS have the appropriate mission and mandate to carry out the design and management of the proposed program. Congress



PHOTO COURTESY OF PORT OF SEATTLE

A freight train leaves the Port of Seattle in Washington State. Data sharing between the public and private sectors could prove beneficial to both sides of the transportation industry.

should provide the necessary funding and should hold the department accountable for making progress in developing the needed data.

New Approaches

Realizing the vision of a well-integrated, coordinated National Travel Data Program will require addressing many significant barriers to data collection, integration, and sharing. Traditional methods of collecting data through large-scale, periodic surveys need to be adapted to gain public acceptance and to take advantage of evolving technologies and data collection approaches.

Through BTS and in collaboration with its data partners, RITA should invest aggressively in the design and testing of alternative methods for data collection, integration, management, and dissemination. A major redesign effort, for example, will be required if a new freight survey, focused on the supply chain, is to be mounted and if other gaps in freight travel data are to be filled.

Sufficient and Sustained Funding

Funding for federal travel data programs has been limited, considering the need for data, and has been inconsistent, threatening key program components and causing the elimination of others.

The proposed National Travel Data Program should receive sustained funding for its core activities, which by the committee's estimates would require \$150 million to \$200 million over the next decade—an average of \$15 million to \$20 million per year. The proposed funding represents a sustained increase of approximately \$9 million to \$14 million above current annual federal spending of approximately \$6 million on core travel data collection activities.

The funding would support the core national passenger and freight travel data surveys and the recommended design and development effort. In addition, BTS will need funding to fulfill its role in coordinating data and to establish a national clearinghouse and a data archiving function to facilitate data integration. Increased set-asides for data collection by states and MPOs also will ensure effective collaboration among these partners.

Constituent Support

Current federal travel data programs fail to meet all the needs of their customers; moreover, data users are widely dispersed and have no mechanism for voicing their needs. A National Travel Data Advisory Council representing the major travel data constituencies should be formed to provide strategic advice to the secretary of transportation on the

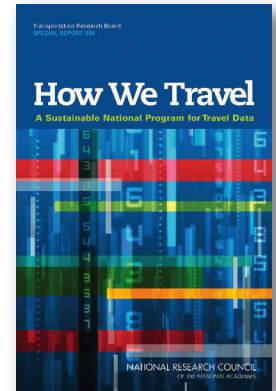
design and conduct of the National Travel Data Program and on emerging data needs.

Management and Accountability

An implementation plan establishing action steps, roles and responsibilities, and milestones is needed to ensure accountability to those who fund, develop, and use the National Travel Data Program. U.S. DOT should develop a multiyear plan for implementing the National Travel Data Program in collaboration with data partners; move rapidly to take the steps necessary to put the plan into operation; and report on progress biennially to Congress, its data partners, and its constituents.

Ensuring Better Outcomes

The nation depends on its transportation system. Managing the performance of the system depends on good data, the foundation for prudent and sound decisions. U.S. DOT should make substantial improvements in national travel data to support more effective management of the transportation system. With billions of dollars at stake, the investment of the modest increment in funding to ensure better outcomes, as recommended in this study, is both necessary and prudent.



Special Report 304, *How We Travel: A Sustainable National Program for Travel Data*, is available from the TRB online bookstore, www.trb.org/bookstore; to view the book online, go to <http://onlinepubs.trb.org/onlinepubs/sr/sr304.pdf>.

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