



TRANSPORTATION RESEARCH BOARD

OF THE NATIONAL ACADEMIES

How We Travel: A Sustainable National Program for Travel Data Special Report 304

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Study Charge

- **Assess the state of travel data** at the federal, state, and local levels;
- **Develop a strategy** for structuring, conducting, and funding the collection of essential passenger and freight data.

Motivations for Study

- **Erosion of key data programs**

- Insufficient, inconsistent, non-existent funding
- Lack of reliable and timely performance measures
 - e.g., origin-destination freight and passenger flows and mode service characteristics.

- **Performance-based** funding and management need good data.

It's getting harder

(1) to get money for data collection;

(2) to get people to give us data;

...But when it's hard to get money for anything,
it's time to get smart about how we spend it.

Good Data Supports Decisions to Fulfill National, State, & Local Goals

*It's really about
decision making!*

- **Jobs & Competitiveness**
 - Accessibility, capacity, quality of service
 - O-D flows by commodity & mode
- **System renewal - SGR**
 - Facility condition, utilization → value
- **Congestion mitigation**
 - Location, intensity & impacts on travel
- **Safety**
 - Crash patterns, exposure, demographics
- **Environmental sustainability**
 - Vehicle travel by mode, type & location
- **Livability**
 - Demographics & travel, modes & facilities

Good Data Supports Decisions Across Geographies & Perspectives

- **National**
 - Intercity passenger travel
 - HSR and less
- **Regional**
 - Freight corridors & terminals
 - Port capacity & access
- **Private sector**
 - Electric vehicles
 - Range requirements



Principal Findings

- Transportation data are deficient in **coverage**, **detail**, **timeliness**, and **integration** for supporting analysis of current and emerging issues.
- **Coordination** across public and private data collection efforts can improve the quality and efficiency of transportation data programs.
- Beyond money, advancing the state of transportation data requires overcoming **technical**, **behavioral**, and **institutional barriers** to data collection, integration, and sharing.

Program Recommendations

A **National Travel Data Program** should be organized and sustained that includes:

- A **core federal program** covering passenger and freight;
- A national program that is **tightly integrated** with state, regional, local, and private data programs through common definitions and geographies;
- **Collaboration** across cooperating entities led by the federal government.

What is New? – Passenger Data

- Improved, expanded, and sustained collection of **household travel data**.
 - Continuous survey process
- Renewed **intercity travel survey**.
 - Current data are more than 15 years old
 - 10 year survey interval + 5 years updates
- A low-cost, continuous **national panel survey**.
 - Track trends, responses to policies and events
 - Omnibus

What is New? – Freight Data

- Expanded, improved, and sustained collection of **commodity movements**.
 - Renewed Commodity Flow Survey [CFS]
- New **supply chain survey** of logistics patterns to measure how freight really moves. [SCS]
- Restored survey of **vehicles** to track **fleet size, characteristics, and utilization**.
 - Vehicle Inventory and Use Survey [VIUS]
- New survey of US component of **international freight**. [IFS]

Leadership Recommendations

- Leadership role should be assigned to **Secretary of Transportation:**

- Should speak for **national program.**

- **RITA/BTS** should:

- **Lead collaboration** of public and private agencies and nonprofits to organize and implement National Travel Data Program.

- **Invest** aggressively **in research**, design, and testing of new approaches and alternative methods for data collection, integration, management, analysis, and dissemination

Why BTS?

What is New? -- Research

- Address **barriers to survey response**.
 - Internet, incentives, privacy protection tools
- Advance **technologies for data collection**.
 - Non-intrusive tracking, response methods
- Forge new **public-private data sharing** arrangements.
- Develop **continuous data collection methods**.
- Promote **innovation and experimentation**.

Collaborative Role for Private Sector

- Key **data source**
 - Vehicle and people tracking
- **Efficient** services
 - Data collection, fusion, and distribution
- **Data customer**

Must address privacy and purchasing

Federal Support

- Program needs **sustained funding** of about **\$15-20 million/year** (about \$9-14 million above current levels).

Data Invoice

<u>Miles driven</u>	<u>Amount</u>
1,500	1¢



- USDOT should develop a **multi-year plan** and report progress to Congress and stakeholders.

What Could a National Travel Data Program Do for Us?

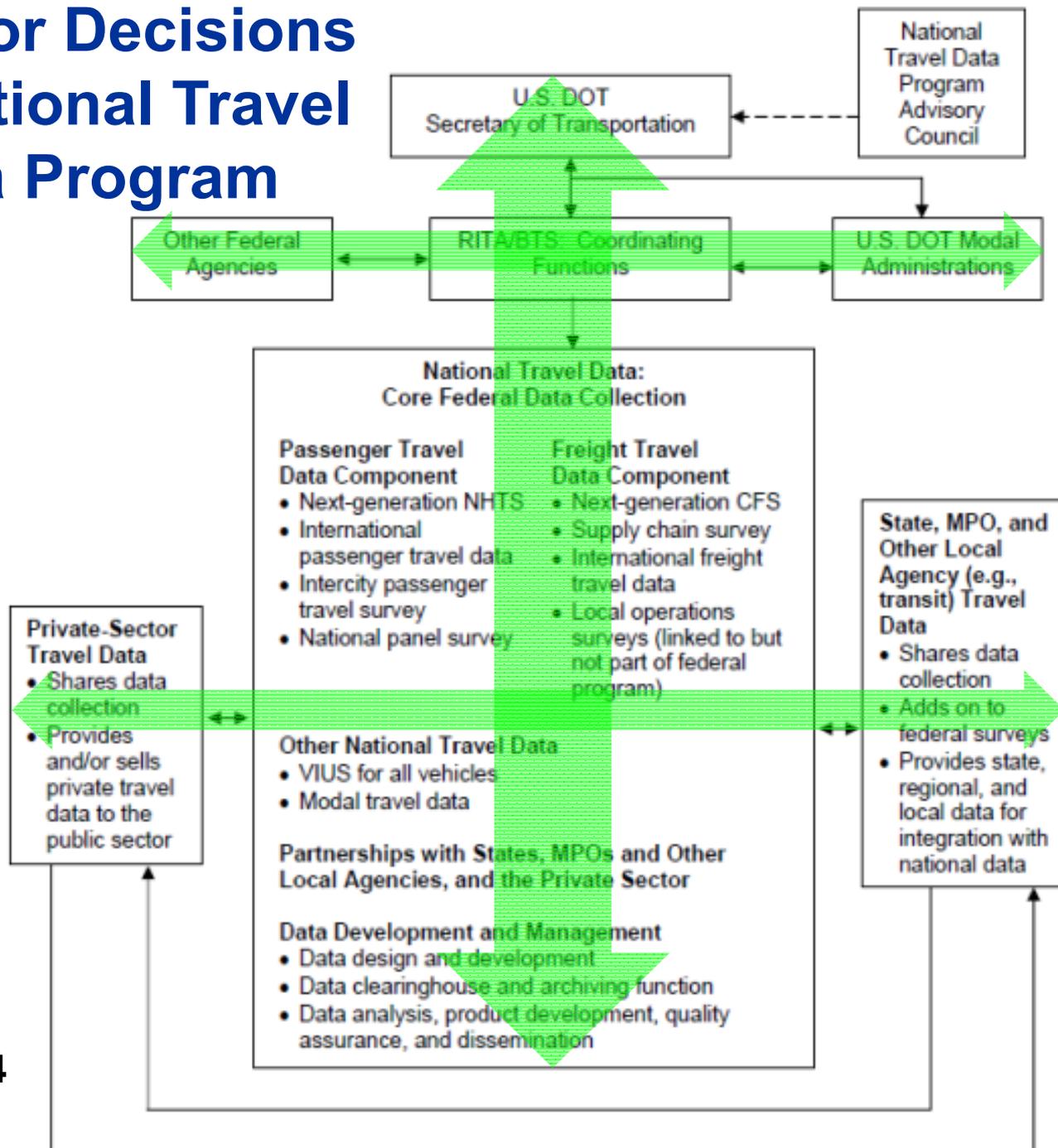
- **Inform passenger rail planning** & decision making [Intercity travel survey]
 - Investments in new & improved facilities, services
 - Timely national & regional intercity passenger travel data
 - Mode share trends, service attributes
- Support **regional transportation planning** [NHTS]
 - Transport investment decisions for smaller areas
 - Better data to estimate travel models

National Travel Data Program II

- Guide **energy policy & taxation decisions** [VIUS]
 - Value of **incentives for fuel efficient vehicles**
 - Fleet characteristics (vehicle types, propulsion systems, and fuels), utilization
- Inform **freight facility planning & management** [CFS,SCS]
 - Access planning for intermodal terminals, DCs
 - Supply chain characteristics (scale, location, utilization)
 - Mode diversion opportunities
 - Disruption management – who's using it for what?
 - Interregional commodity flows by mode

Data For Decisions

- A National Travel Data Program



Selling Data in a Down Market



Tough Times



Uphill Battle

- **Connect to decision making**
- **Deliver actionable products**
- **Reveal data sources**
- **Build coalitions**



Preaching to the Choir

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