

Bureau of Transportation Statistics Significant Accomplishments

Fiscal Year



U.S. Department of Transportation
Research and Innovative Technology Administration
Bureau of Transportation Statistics

PERFORMANCE

RESULTS

The BTS mission is to create, manage, and share transportation statistical knowledge with public and private transportation communities and the Nation.

RELEVANCE

The Bureau of Transportation Statistics is a component of the Research and Innovative Technology Administration (RITA). RITA also includes the Intelligent Transportation Systems Joint Program Office; Office of Research, Development & Technology; Transportation Safety Institute; and Volpe National Transportation Systems Center.

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UNITED STATES
DEPARTMENT OF TRANSPORTATION

BUREAU OF TRANSPORTATION STATISTICS ***Significant Accomplishments*** **Fiscal Year 2007**

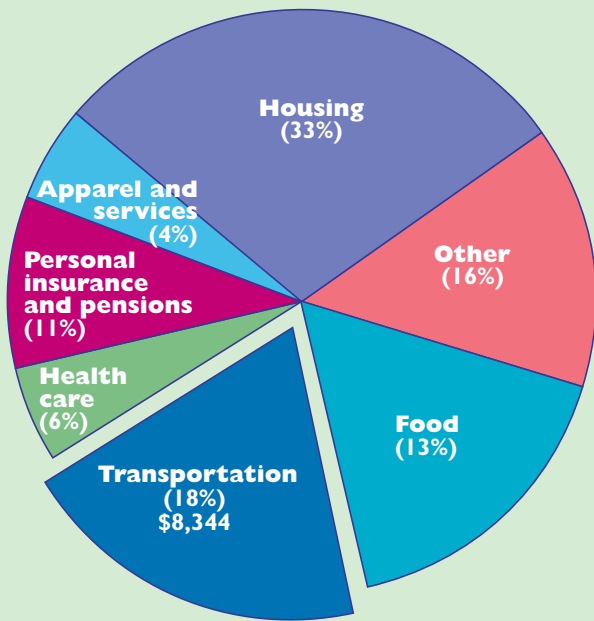
The Bureau of Transportation Statistics (BTS) was established within the U.S. Department of Transportation (DOT) in 1992 to collect, report, and analyze transportation data. Today, BTS is a component of the DOT Research and Innovative Technology Administration (RITA). RITA coordinates the U.S. Department of Transportation's ever-increasing range of innovative transportation activities, statistics, research, and technologies. RITA has several statutory missions, including comprehensive transportation statistics research, analysis, and reporting.

The BTS mission is to create, manage, and share transportation statistical knowledge with public and private transportation communities and the Nation. This mission is served by developing quality transportation data, promoting transportation knowledge through statistical products, and advancing effective use of this knowledge by

public and private transportation decisionmakers, researchers, and the American public. In sum, BTS is a high-performance, results-oriented organization, committed to creating, managing, and sharing transportation statistical knowledge.

Originally created under the *Intermodal Surface Transportation Efficiency Act* (ISTEA) of 1991, today BTS' authorizing legislation is the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU), which authorized \$27 million for the agency each year from 2005 through 2009. BTS is led by a Director, appointed by the Secretary of Transportation, who reports to the Administrator of RITA. BTS staff focus their expertise in transportation, statistics, economics, information technology, library science, and geographic information systems on a wide-range of transportation matters with authoritative results.

In 2005, the average American household spent three times as much on transportation as it did on health care.



obtaining—and helping to objectively analyze and interpret—data that will be used to increase the nation’s understanding of transportation topics and better inform decisions and policies. To achieve this goal, BTS engages in three central activities: creating, managing, and sharing transportation statistical knowledge.

Creating Transportation Statistical Knowledge

BTS designs and manages surveys, collects and interprets data from private organizations and governmental agencies, and reports results of statistical and economic analyses. The following activities exemplify the Bureau’s work in creating knowledge.

According to the Commodity Flow Survey, there were 2.2 billion tons of hazardous materials shipped in the United States in 2002, carried primarily by trucks (53%) and pipelines (30%).

The Bureau’s products include reports to Congress, the Secretary of Transportation, and stakeholders in the nation’s transportation community. BTS stakeholders include:

- Federal agencies,
- State and local governments,
- Metropolitan planning organizations,
- Universities,
- The private sector, and
- The general public.

BTS IS A KNOWLEDGE-BASED ORGANIZATION

As a federal statistical agency, BTS maintains a special degree of objectivity and independence in its statistical work. BTS does not advocate policies or programs, and special protections are in place to maintain confidentiality in data collection and dissemination. The Bureau’s efforts focus on

► Commodity Flow Survey

The Commodity Flow Survey (CFS) is the primary source of national data on the flow of goods and includes data on origin and destination, distance, and mode of transportation. Conducted every 5 years in partnership with the U.S. Census Bureau, the CFS obtains data on commodities shipped; their value, weight, and mode of transportation; and the origin and destination of shipments by manufacturing, wholesale, mining, and selected retail industries.

The CFS provides key information for understanding the use and performance of our nation’s freight transportation system. Data collection began in January for the 2007 CFS.



Transportation professionals rely on CFS data to analyze trends in goods movement, conduct hazardous materials risk assessments, forecast future demand for goods movement and associated infrastructure and equipment needs, and analyze commodity and vehicle flow patterns. The CFS is used by:

- State DOTs, metropolitan planning organizations, trade associations, and transportation entities to guide transportation policy and investment;
- Public policy analysts and transportation planners to assess the demand for transportation facilities and services, energy use, and safety risk and environmental concerns; and
- The private sector for freight forecasts and freight models.

The Commodity Flow Survey is the only source of nationwide data on domestic truck freight flows and the sole source of national-level flow data on hazardous materials shipments by highway and air collected by the federal government.

► **TransBorder Freight Data**

BTS ensures that high quality international data and analyses are available to all levels of government, the private sector, and individuals studying trade and transportation. BTS produces monthly statistics on U.S.-Canadian and U.S.-Mexican freight movements. BTS also provides monthly incoming border crossing/entry data for vehicles, containers, passengers, and pedestrians at the port level on the U.S.-Canadian and U.S.-Mexican borders. In fiscal year 2007, BTS unveiled a modernized, user-friendly, online system for retrieving the data.

Of the value of all goods moved in U.S.-International trade, more than one out of every three dollars is with Canada and Mexico.

BTS TransBorder data are used:

- By state and local governments for transportation infrastructure and logistics

planning, including border congestion analyses and freight corridor planning;

- By the Federal Highway Administration (FHWA) to implement the coordinated border infrastructure program and apportion funds to border states;
- By transportation planners to perform trade corridor studies, transportation pattern analyses, system capacity studies, and other research; and
- By other public and private users, including industry associations, academic researchers, and the private sector.

The Maine Department of Transportation used the BTS TransBorder data to develop an online tracking system to highlight truck and personal vehicle activity at major points of entry.

► **Airline Data**

BTS regularly collects a wide range of airline-related data. These data are used by customers within DOT, including the Office of Aviation Analysis and the Federal Aviation Administration (FAA). Stakeholders outside of DOT, such as Congress, the air transportation industry, researchers, academia, and the public, also rely on BTS airline data products and reports.

The Airline Service Quality Program collects data from 18 leading air carriers and 2 voluntary reporting carriers. The airlines electronically file their reports, which include on-time and delay data, cancellations, and reasons for delays. Airline traffic data are reported to BTS by all U.S. carriers (except on-demand air taxis), and include the number of passengers on nonstop flights and the weight of mail and freight. BTS also collects data on passenger origin and destination, and airline financial data.

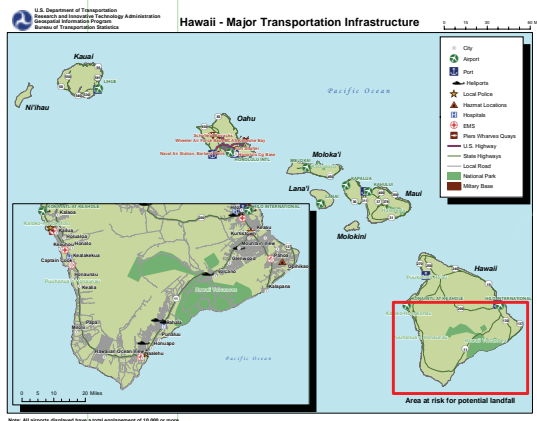
Airline statistics produced by BTS are regularly reported in the nation's leading media outlets. Data are available in monthly and quarterly press releases and on the BTS web site. The Office of the Secretary of Transportation uses the BTS airline data to generate the Air Travel Consumer Report. BTS is developing plans to expand the number of data

elements collected from the airlines to better report tarmac delay for diverted and canceled flights.

The Airline Information Program of BTS is the nation's only source of comprehensive airline traffic, financial, and performance data.

Managing Transportation Statistical Knowledge

BTS extracts and compiles data from a wide variety of sources to provide transportation professionals with current and relevant information. As a result, BTS is recognized internationally as a reliable source of data, statistics, reports, and related materials on numerous facets of transportation.



► Geospatial Information

BTS actively contributes to the nation's geospatial knowledge by developing software to improve the estimation of travel routes, and by collaborating with federal agencies and stakeholders to advance geographic data efforts.

In fiscal year 2007, BTS completed the development of an innovative software tool, called "GeoMiler," to help researchers better estimate freight travel. GeoMiler uses current Geographic Information Systems (GIS) technology to plot the likely routes used for each shipment. The estimated routes are then used to calculate mileage from the true origin to the true destination for each freight shipment, even when more than one freight mode is used. These computations are used in estimating

modal ton-miles of freight—a key measure for understanding the use and performance of the nation's freight transportation system. Developed for use with the Commodity Flow Survey, GeoMiler's integration of core GIS technology and its modeling approach can be used for any multimodal freight movement at all geographic levels. GeoMiler is now in full use for the 2007 CFS, and plans are underway to modify the GeoMiler application for use with the Census Transportation Planning Package to improve data on the location of workplaces at the tract and block level of geography.

BTS participated in the Steering Committee and Coordination Group meetings of the Federal Geographic Data Committee (FGDC), the policy-level interagency group responsible for overseeing Office of Management and Budget Circular A-16 related to activities and implementation of the National Spatial Data Infrastructure. The Steering Committee coordinates all federal geospatial activities between, among, and within agencies by establishing policy and providing guidance and direction to the member agencies. The Coordination Group advises on the day-to-day business of the FGDC, and is comprised of chairpersons of the 9 thematic subcommittees and 4 cross-cutting working groups, representatives from federal agencies, and stakeholder groups.

► National Transportation Library

Charged with improving the availability of transportation-related information needed by federal, state, and local decisionmakers, the National Transportation Library (NTL) provides timely access to information that supports transportation policy, research, operations, and technology transfer activities. The NTL serves as an online repository of transportation materials from public, academic, and private organizations. The NTL also:

- Publishes *TRIS Online* (Transportation Research Information Service), a product of the Transportation Research Board and the premier bibliographic database for the industry;
- Provides an Integrated Search tool that serves as a single point of entry to NTL's Digital Collection,

The University of California at Berkeley uses the BTS TRIS Online database to train faculty and graduate students on how to search for transportation information.

TRIS Online, and the Transportation Research Thesaurus;

- Networks with other transportation libraries, agencies, and organizations; facilitates the development of transportation library consortia; and leads the community in adopting new technologies to manage and provide access to information; and
- Offers professional reference, referral, and training services to help customers find statistics, reports, and transportation experts.

During fiscal year 2007, the National Transportation Library's Reference Team handled more than 5,000 requests for information per month from Congress, all levels of government, the media, academia, for-profit and nonprofit organizations, and the general public.

► **Transportation Services Index**

The Transportation Services Index (TSI) is a monthly measure of the volume of services performed by the for-hire transportation sector. It is the only national, multimodal, seasonally adjusted economic gauge of both passenger and freight transportation activity. It is released each month on a published schedule.

The TSI tracks monthly fluctuations in the output of transportation services. Together with other economic indicators, the index contributes to a better understanding of the current and future course of the economy.

The TSI covers the activities of for-hire freight carriers, for-hire passenger carriers, and a combination of the two. The freight transportation index consists of for-hire trucking, freight railroad services, inland waterway traffic, pipeline movements, and air freight. The passenger transportation index consists of local mass transit, intercity passenger rail, and passenger air transportation. These components were selected

to give the best coverage possible of the for-hire transportation industry.

Sharing Transportation Statistical Knowledge

The third component of BTS as a knowledge-based organization is its capacity to share knowledge with stakeholders and constituencies of America's transportation systems. BTS continuously disseminates information through its publications and popular web site.

► **Collaboration with Transportation Data Users and Producers**

BTS provides expert support for the National Academies' Transportation Research Board (TRB) and its committees. BTS presentations at the TRB Annual and Mid-Year meetings during fiscal year 2007 addressed a variety of transportation-related topics. BTS staff provided peer reviews for numerous TRB papers and are active members of TRB committees, including the Economic, Travel Survey Methods, Hazardous Materials Transportation, and Freight Transportation Data committees. BTS staff participated in project panels for several of TRB's Cooperative Research Programs, such as the National Cooperative Freight Research Program and the Hazardous Materials Cooperative Research Program.

BTS leads the Maritime Data Working Group, which is currently producing the third edition of the Maritime Trade and Transportation report. The report is prepared in support of the Committee on Marine Transportation (CMTS), a major effort to better coordinate marine transportation system activities, resources, and regulations. CMTS is led by DOT and other federal agencies with responsibility for an aspect of the U.S. marine transportation system. Members of the working group are the U.S. Maritime Administration, Saint Lawrence Seaway Development Corporation, U.S. Army Corps of Engineers, U.S. Coast Guard, Federal Maritime Commission, and U.S. Department of Agriculture.

Also in fiscal year 2007, BTS attended biannual meetings held by the National Academies' Committee on National Statistics (CNSTAT), which

works to improve the statistical methods and information on which public policy decisions are based. The Bureau actively participated in discussions with CNSTAT directors and staff on statistical topics related to transportation data, as well as other areas of interest that affect the overall federal statistical community.

BTS participates in the proceedings of the Council of Professional Associations on Federal Statistics (COPAFS), which are held quarterly in Washington, DC. COPAFS meetings provide a forum for members of the federal statistical community to interact with data users to hear their concerns and issues relating to the collection and dissemination of federal statistical information. For example, BTS staff attended the September 2007 meeting in which the new Confidential Information Protection and Statistical Efficiency Act (CIPSEA) was discussed, with particular emphasis on its impact on the collection of data through statistical surveys. Information was also presented on the benefits associated with the sharing of sampling information for businesses in the arrangement between the Bureau of Labor Statistics and the U.S. Census Bureau, and the potential of expanding data sharing with other federal statistical agencies in the future.

BTS assisted in the creation of an interagency working group on privacy issues through the Confidentiality and Data Access Committee of the Federal Committee on Statistical Methodology (FCSM) during fiscal year 2007. The purpose of the group is to identify agency experiences and practices, the relative importance of privacy issues at different agencies, public opinion about privacy concerns, and opportunities for collaboration among statistical agencies. The issues addressed through the working group are of particular importance because privacy concerns can be a major factor affecting respondents' perceptions of federal statistical agencies and their willingness to respond to survey requests. The working group's findings will support the development of relevant products by the FCSM, such as a Statistical Policy Working Paper or a seminar on privacy issues.

In May 2007, BTS participated in an American Community Survey (ACS) Peer Exchange sponsored by the Federal Highway Administration and Federal Transit Administration Transportation Planning Capacity Building Program and organized by the American Association of State Highway and Transportation Officials' Standing Committee on Planning Census Data Workgroup. The Exchange focused on best practices in the use of ACS data for transportation analysis, and included discussions of data applications, analysis techniques, and suggestions for making ACS data more useful to the transportation community. These issues are of particular importance since the ACS data will replace the Decennial Census long form's Journey to Work data as the source of information for the Census Transportation Planning Package, a set of special tabulations prepared by the U.S. Census Bureau and accessible on the BTS TranStats web site.

The Bureau is collaborating on a new initiative for the Interagency Council for Statistical Policy (ICSP) to foster innovation in the federal statistical community. Efforts include interagency knowledge transfer about the innovation processes, as well as specific products and solutions. The working group is preparing a guidebook on the principles and practices for statistical agency innovation similar to the Committee on National Statistics of the National Academies' *Principles and Practices for a Federal Statistical Agency*. The group also plans to identify issues that are likely to have a major impact on ICSP agencies over the next two decades and will be solved efficiently only through significant cross-agency innovation work.

► **Publications**

BTS publishes a variety of reports and products to meet the needs of transportation system stakeholders. All BTS publications can be downloaded from the BTS web site or obtained in hard copy from the BTS Bookstore at www.bts.gov.

In May 2007, BTS launched a new publications initiative intended to highlight developments or analyses of particular interest to transportation professionals. Technical Reports and Special Reports

During fiscal year 2007, more than 7,500 printed BTS publications were distributed in response to orders from the BTS Bookstore, requests through orders@bts.gov, and at conferences.

draw attention to selected topics and encourage readers to learn about the subject matter, using a brief, bulletin-style format. BTS released 6 Special Reports and 1 Technical Report in the inaugural year of this initiative:

Special Reports:

- *Increased Trade Spurs Growth in North American Freight Transportation*
- *A Decade of Growth in Domestic Freight*
- *Highway Bridges in the United States – an Overview*
- *The Transportation Services Index Shows Monthly Change in Freight and Passenger Transportation Services*
- *Making Connections: Intermodal Links in the Public Transportation System*
- *Trends in Personal Income and Passenger Vehicle Miles*



Technical Report:

- *How Freight Moves: Estimating Mileage and Routes Using an Innovative GIS Tool*

BTS routinely produces multimodal compilations of statistics on selected topics. The following publications were updated in fiscal year 2007:

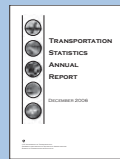


The **Pocket Guide to Transportation**, valued by a wide variety of audiences, is a quick reference to the changes in the United States transportation system over time and their impact on the nation's economy, safety, energy use, and the environment.



The **National Transportation Atlas Database** (NTAD), an annual 2-CD set,

contains geographic databases of transportation facilities across the country.



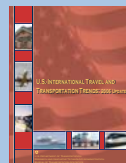
The **Transportation Statistics Annual Report** presents selected transportation data on 13 topics specified in the Bureau's legislative mandate.



National Transportation Statistics, updated quarterly online, presents a comprehensive compilation of statistics on the U.S. transportation system, including more than 260 data tables.



State Transportation Statistics presents a statistical profile of transportation in the 50 states and the District of Columbia.



U.S.-International Travel and Transportation Trends examines recent trends in U.S.-International travel overall, and overnight and same-day travel for all modes of transportation.



America's Container Ports presents statistics on domestic and international maritime container traffic and ports.



The **Compendium on Congestion** is a volume of current, peer-reviewed research on congestion, including issues and analyses across all modes.

► **Press Releases**

BTS issues regularly scheduled and one-time press releases that focus the attention of the media and the public on BTS products. In fiscal year 2007, monthly press releases provided updates on the Transportation Services Index, airline traffic, passenger airline employment, and North American surface freight; and quarterly press releases issued information on air fares and airline financials.

Press releases also announced the publication of BTS products, such as the special report on North American freight transportation and the ranking of U.S. international freight gateways in *America's Container Ports: Delivering the Goods*, the second annual update of the North American Transportation

Statistics (NATS) online database, and a directive to update the reporting air carrier and reportable airport list for on-time performance data and to clarify the reporting regulations.

The Bureau also provided significant support for the Office of the Secretary of Transportation's release of the monthly Air Travel Consumer Report, including simultaneously posting online year-to-date on-time performance tables and the ranking of on-time arrival and departure performance at major airports. Beginning in January 2007, BTS tables of airline taxi-out times have been posted online to coincide with the release of the Air Travel Consumer Report.

► **Web Site**

The BTS web site averaged over 20,000 visitors per day in fiscal year 2007, more than any other DOT component. BTS continually updates its web site with statistics and graphics displays of trends. The web site enables quick response to current events. For example, immediately after the bridge collapse in Minnesota, BTS posted data on the condition of bridges in the United States. Features of the BTS home page include recent statistical releases, facts about the airline and freight industries, economic trend data, and links to the National Transportation Library and BTS publications. The interactive capacity of BTS' TransStats web site allows users to select tables, analyze variables, create maps, or download data from a searchable index of over 100 transportation-related databases. BTS also provides,

and regularly updates, transportation indicators that are shown on the White House's economic briefing room web site.

BTS actively participated in several RITA and Departmental web sites initiatives:

- Provided significant staff resources and consultation to unify the various discrete public facing web components into a new "one RITA" web site redesign;
- Assisted in the design of the quarterly RITA employee satisfaction survey and adapted the survey for the web environment; and
- Provided consultation and proposed redesign ideas for the rebranding of the Department's congestion initiative website, www.fightgridlocknow.gov.

The FedStats web site (www.fedstats.gov) is the federal statistical system's web portal to the wealth of statistical information disseminated by the federal government. Twelve statistical agencies on the Interagency Council on Statistical Policy coordinate the site. BTS is one of the 12 member agencies, and has participated in discussions to shape how transportation statistical information can be disseminated to the public through FedStats. Since the launch of FedStats in May 1997, it has won numerous awards and citations for displaying statistical information easily and quickly for the general public. BTS has benefited from information shared in the monthly FedStats meetings, including best practices for displaying statistical information online. In addition, the Bureau utilizes the expertise of the staff that developed FedStats to inform BTS web site initiatives, including enhanced and expanded web dissemination activities planned in FY 2008.

BTS SUPPORTS DOT GOALS

BTS statistical programs and activities support the priorities of the U.S. Department of Transportation – contributing to initiatives in *safety, congestion, global connectivity, environmental stewardship, security, and organizational excellence*.

Safety

BTS collects data and produces studies on the safety and security of travelers, vehicles, and transportation systems. The Omnibus Household Survey collects data on-demand to provide information on the public's use and satisfaction with the transportation system, including personal safety and security while traveling. Researchers continue to use data from the 2001-2002 National Household Travel Survey to study the travel habits and demographic data of American business and leisure travelers. The survey provides a comprehensive and detailed look at the public's use of the nation's transportation system, including the time, distance, mode, and purpose of travel.

BTS is a key partner in the Confidential Close Calls Reporting System (C³RS) Demonstration Project, a major safety initiative sponsored by the Federal Railroad Administration (FRA) that has required BTS to work closely with railroad management and labor as well as FRA and the Volpe National Transportation Systems Center. Using its unique authority to protect the confidentiality of information collected for statistical purposes and its expertise in data collection and analysis, BTS developed and operates the C³RS. Railroad employees voluntarily submit reports to BTS on close calls that pose safety risks to railroad operations. BTS collects additional details to prepare an incident analysis report and sends the results, with all identifying information removed, to a Peer Review Team at the pilot site. The Peer Review Team reviews the incident report, determines the underlying causes of the close call, and develops recommended corrective actions to prevent further occurrences. Initial reporting from the first pilot site began in February 2007. The demonstration project will expand to include two to three more pilot sites and is planned to last for 5 years.

BTS staff regularly consult and collaborate with DOT agencies and outside organizations on data collection, survey design, and other statistical issues related to safety matters. Recent examples include advising the Federal Motor Carrier Safety Administration on research methods to study improving truck safety, working with the Office of the Secretary of Transportation to estimate




the transportation-related economic impacts in the event of a Pandemic Flu, and preparing and distributing maps of structurally deficient bridges in every congressional district in response to the August 1, 2007, bridge collapse in Minnesota.

BTS safety data and analyses are used in a variety of ways. For instance, the AAA (American Automobile Association) and California Department of Health use BTS data to analyze travel patterns, and the Federal Aviation Administration uses BTS data to evaluate airline safety, allocate safety inspection resources, and assess the adequacy of aviation safety regulations, standards, policies, and procedures.

Congestion

BTS studies on travel times and congestion measurement help decisionmakers determine the impact of congestion on the national transportation system and the U.S. economy. These projects cut across all modes: collecting line-haul speeds and terminal dwell times for railroads, reporting travel speeds and forecasting vehicle miles traveled on highways, and estimating the economic costs of congestion across modes.

BTS has developed new ton-mile measures for highways and pipelines so that consistent traffic estimates can be produced throughout DOT. The Bureau works collaboratively with the other DOT modal administrations, such as using Intelligent Transportation Systems (ITS) data from FHWA's monthly congestion reports to analyze detailed travel time and speed data from 20 urban areas in



the United States. Using data from the 2001–2002 National Household Travel Survey, BTS analyzed the percent of private vehicle trips in eight different time blocks, broken down by age groups, gender, rural/urban, income, and trip purpose. BTS also reported on average travel speeds for different age groups, gender, and rural vs. urban drivers.

BTS routinely issues press releases on on-time flight performance of 20 reporting air carriers, including the number of domestic flight cancellations, causes of flight delays, and rate of mishandled baggage per 1,000 passengers. Targeted analyses explain trends in travel, ranging from airline taxi-out delays to the long-term effects of the September 11, 2001 terrorist attacks on air travel.

Global Connectivity

Using a wide variety of data sources, BTS provides a detailed picture of the flow of people and goods to and from the United States. The Bureau compiles, validates, analyzes, and disseminates data on trade trends; movement of goods by land, sea, and air; and personal travel. Several reports on international transportation issues were published in fiscal year 2007, including *U.S. North American Trade and Freight Transportation Highlights*, a special report on the growth in freight transportation between the United States and its NAFTA partners—Canada and Mexico—and an analysis of passenger travel between the United States and other countries.

Monthly, BTS reports TransBorder freight flow data by commodity type, mode of transportation (rail, truck, pipeline, mail, air, and water), and port of entry/exit for U.S. exports to and imports from Canada and Mexico. Additionally, the Bureau makes available incoming Border Crossing data for vehicles, containers, passengers, and pedestrians for land ports on the U.S. borders with Canada and Mexico. For example, BTS prepared custom tables of the TransBorder and Border Crossing data for FHWA to calculate the fiscal year 2008 apportionment of funds to states under the Coordinated Border Infrastructure Program.


In partnership with the Transportation Research Board, BTS hosted a one-day North American Freight Data Workshop. The workshop fostered an information exchange among a diverse group of users and providers of North American border crossing and trade data. Workshop participants learned about improvements to the TransBorder freight data and Border Crossing data, and BTS staff learned more about the various ways in which the data are used by customers.

During the 2007 fiscal year, BTS continued its leadership role in the 13 year-old North American Transportation Statistics Interchange with Canada, Mexico, and other federal statistical and transportation agencies. In conjunction with this Interchange, BTS oversaw the U.S. efforts to update the North American Transportation Statistics Database, which supplies users with relevant, timely, and comparable transportation data and information for North America.

BTS staff met with the Economic and Trade Policy section of the Canadian Embassy, who were interested in learning about the BTS international trade and transportation data. The Canadian Embassy is interested in creating a more complete picture of the transportation of goods between Canada and the United States than presently exists. BTS staff presented the Canadian visitors with an overview of the Border Crossing data, TransBorder data, and airline data available on the BTS web site, as well as information on the North American Transportation Statistics Interchange. The Canadian Embassy staff plan to use the data provided by BTS in their research on trade and transportation flows between Canada and the United States.

Environmental Stewardship

BTS supports environmental stewardship by working collaboratively with national and international entities to share data and perform analyses. BTS represented the United States at the Energy and Environment Working Group of the North American Transportation Statistics Interchange in Ottawa, Canada. BTS staff are researching and gathering



data on energy and environmental indicators for the Interchange's on-line database. BTS provides statistics and analysis to the DOT Center on Climate Change and Environmental Forecasting, including its project to examine the effects of sea level rise on the nation's transportation infrastructure. The Bureau also serves as an active member of the technical oversight panel for the Transportation Research Board's Hazardous Materials Cooperative Research Program.

Other federal agencies rely on BTS products to inform their work related to energy and the environment. The Environmental Protection Agency uses air carrier traffic data provided by BTS to assess the level and frequency of service at American airports in order to determine the environmental noise impact of air-carrier operations. The Environmental Protection Agency also uses BTS air carrier fuel consumption data to estimate the level of greenhouse gases and other aircraft emissions. BTS coordinated monthly reporting on progress in restoring transportation infrastructure in the aftermath of Hurricane Katrina using data from DOT modal administrations, and these reports were released to the Office of the Secretary of Transportation and the Federal Coordinator for Gulf Coast Rebuilding. In fiscal year 2007, Bureau staff also provided quick response research to the White House Council of Economic Advisors on sales of different classes of vehicles, especially electric hybrids, in response to increases in fuel prices.

Security, Preparedness, and Response

BTS works with agencies within DOT and throughout the government to support efforts to improve the nation's security, preparedness, and response. BTS staff provided extensive geospatial mapping support for the DOT Crisis Management Center's (CMC) Exercise Pinnacle 2007, a biennial event held most recently from May 16 to 18, 2007, that comprehensively tests and evaluates our national continuity program's ability to effectively respond to and recover from a national emergency. Bureau staff began providing support in mid-April

in advance of the exercise, and support continued leading up to and throughout the exercise. In total, 14 maps were produced and delivered to the CMC. In addition to Exercise Pinnacle 2007, Geospatial Information Program staff supported the CMC throughout the fiscal year. In total, 53 maps were produced for various transportation incidents, hurricanes/tropical storms, and exercises.

The Department of Defense incorporates the Bureau's geospatial transportation data into the Homeland Security Infrastructure Protection Program. Additionally, in conjunction with the Transportation Security Administration, BTS developed a special Omnibus Household Survey to assess the general public's perception of and satisfaction with the nation's airport security checking procedures, resulting in a forthcoming report entitled *American Air Passengers and Their View of U.S. Airport Security Screening Procedures*.

Security and safety are paramount in transporting hazardous materials, especially when shipments travel through major metropolitan areas. According to the Bureau's Commodity Flow Survey, there were 2.2 billion tons of hazardous materials shipments in the United States in 2002. While the overwhelming majority of shipments arrive without incident, hazardous material shipments sent by pipelines,



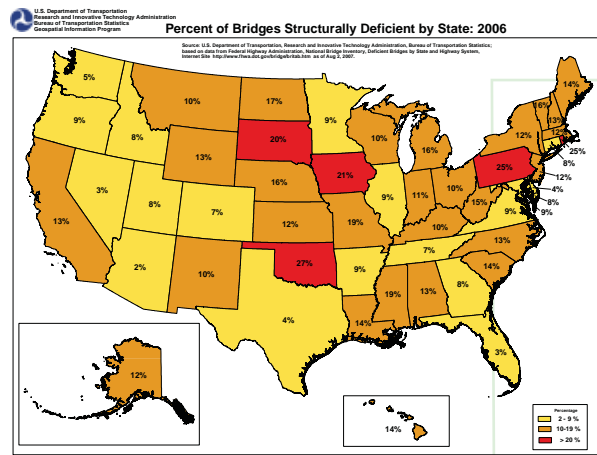
truck, and trains are vulnerable to accident or attack. In addition to analyzing the Commodity Flow Survey data, BTS has provided consultation to the Pipeline and Hazardous Materials Safety Administration and its work on oil pipeline sampling and hazmat research. The Bureau evaluated the statistical techniques that Pipeline and Hazardous Materials Safety Administration used to study the soundness of a length of the Prudhoe Bay pipeline to determine its readiness for return to service. Additionally, at the request of the Office of the Secretary of Transportation, BTS provided an assessment of a recently developed Hazmat Tracking Service and its proposed application for estimating hazardous materials shipments.

BTS responds to numerous requests for hazardous materials data from the general public, and the Bureau's data and analyses are used by metropolitan planning organizations, trade associations, and transportation facilities to analyze trends in travel behavior, forecast future travel demands, and determine infrastructure and equipment needs.

Organizational Excellence

The Bureau is dedicated to ensuring its data and analyses are relevant, timely, comparable, complete, accessible, and of high quality. Data users can count on the timeliness of scheduled releases, such as the monthly releases of the Transportation Services Index, TransBorder data, airline traffic and capacity data, airline on-time flight performance data, and the Air Travel Consumer Report. The Bureau also works with other agencies both within and outside the Department to improve the quality of transportation information, including providing consultation to FHWA on their Congestion estimation procedures for the Highway Performance Monitoring System.

BTS provides rapid response research for events and issues in transportation as they develop. BTS staff met with members of the House Transportation and Infrastructure Committee shortly after the August 1, 2007, collapse of the



I-35W bridge in Minneapolis to discuss information on structurally deficient bridges available for use by the committee and the general public. Working with committee staff, BTS established a schedule for providing the committee with geospatial maps of structurally deficient bridges for all 435 congressional districts, the 50 states and the District of Columbia, and the nation as a whole. This effort was completed within 4 weeks, and all of the maps and their associated data are currently available to the public on the Committee's website.

Additionally, BTS staff rapidly produced:

- An analysis for the Office of the Secretary of Transportation on the condition of highway bridges in the United States using the FHWA bridge classification data by year and state;
- Tables on the condition of highway bridges in the United States, using FHWA data, posted on the BTS web site;
- Maps of structurally deficient bridges in the City of Minneapolis and the state of Minnesota for the U.S. House of Representatives Committee on Transportation and Infrastructure and the DOT Crisis Management Center; and
- An analysis of the economic impact on passenger and freight traveling by all transportation modes that were potentially impacted: highways, water, air, and rail.

Within weeks, BTS published:

- *Highway Bridges in the United States—An Overview*, a special report explaining characteristics, condition ratings, and spending on bridges; and
- Approximately 500 maps requested by Congress of structurally deficient bridges.

CONTINUING WORK AND A VIEW TOWARD THE FUTURE

Several initiatives that BTS began in fiscal year 2007 will continue to advance and expand the Bureau's work.

The National Transportation Library is assuming maintenance of the Transportation Research Thesaurus, implementing the Transportation Libraries Roundtable—a monthly web conference on topics relevant to transportation libraries—and developing a “Collection Views” model of their Digital Collection. BTS will also publish a new edition of the *Sources of Information in Transportation* online bibliography.

BTS will continue to explore techniques for more efficient and less costly data collection, including online survey submission and data automation methods. The collection of airline data will be made more efficient through the use of the internet (i.e., e-filing of reports and data), which promises to expedite data processing and ease the reporting burden on the airlines. The eventual

implementation of the International Trade Data System will create an integrated, federal system for the electronic collection, use, and sharing of international trade and transportation data.

The BTS publication, *North American Freight Transportation*, will be updated in fall 2007 with the latest annual freight data and analysis of United States trade with Canada and Mexico, including transportation by truck, rail, pipeline, air, and water. The first data release of results from the most recent Commodity Flow Survey is scheduled for fall 2008. BTS will also publish a special report documenting monthly and seasonal trend results from an analysis of traffic volumes, speed, and travel time data collected by the FHWA from 20 urban areas.

BTS continues to look for new ways to assess and meet the varied needs of its customers. The Bureau is developing strategies for responding to recognized needs and identifying pressing issues within the transportation community. For example, web site visits and inquiries will be studied to identify topics of increasing interest and importance.

As BTS continues its course of producing relevant, accurate, and timely transportation data and analyses, it will pursue new opportunities for partnering, collaborating, and sharing information within the U.S. Department of Transportation and with external constituencies and stakeholders to meet the nation's present and future transportation statistical needs. 🔄

