# A Strategic Plan for Transportation Statistics

2003-2008

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

#### **June 2006**

This document is an extension of the Strategic Plan for 2000-2005 that has been updated based on the recommendations of the Interagency Council on Statistical Policy (ICSP) developed in 2004 and published in 2005. A Strategic Plan that is integrated with the goals of the Department of Transportation and the Research and Innovative Technology Administration will be developed to supersede this document.

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#### A Strategic Plan for Transportation Statistics 2003-2008

he Bureau of Transportation Statistics (BTS), a statistical agency within the Research and Innovative Technology Administration (RITA), U.S. Department of Transportation (DOT), compiles, analyzes, and publishes data and information needed for transportation decisionmaking, and generally coordinates DOT statistical programs. BTS also manages the National Transportation Library and the Office of Airline Information, and leads the federal effort in developing transportation geo-data to fulfill the vision of the National Spatial Data Infrastructure (NSDI).

As one of the federal statistical agencies, BTS maintains a special degree of objectivity and independence. Our products include reports to Congress and the Secretary of Transportation along with stakeholders in the transportation community. Special protections are in place to maintain confidentiality in our data collection. We do not advocate policies or programs. Our efforts focus on getting—and helping to objectively interpret—data that can be used to better inform decisionmaking, regardless of what the data show.

**Our Mission** 

What We Are About

Our mission is to lead in developing transportation data and information of high quality, and to advance their effective use in both public and private transportation decisionmaking.

Our mission is the starting point for all of our programs and actions. This is a broad responsibility that derives from the congressional legislation (see Appendix A), that created the agency and established the bounds for what we do.

Our mission is translated into a strategic direction by our vision.

### Our Vision for the Future

#### Where We Are Going

# Data and information of high quality will inform transportation policy decisions at all levels thus advancing the quality of life and economic well being of all Americans.

What does this look like over our time horizon through 2008 and beyond?

- BTS will become the leading source of multimodal transportation data for the federal, state, and local governments; metropolitan planning organizations; transportation-related associations; the private sector (including the freight community); and the public. BTS will also be the primary source of aviation and multimodal freight data.
- □ We will strive to ensure that the data required for significant transportation policy analysis are available.
- □ The data will be high quality and timely. We help establish the processes that will ensure that data are accurate, clean, and timely.
- □ We will improve the access to BTS data, so that more people will use it. People will use the data in many different ways to help make transportation better. High schools and colleges will use our data for teaching.
- □ We will also monitor our data to stay current on emerging trends as they unfold.
- □ We will publicize relevant results and circulate them, to stimulate the synthesis of even more information, and we will make sure that the essentials are delivered to those who can make transportation better.
- □ We will routinely observe system performance so we will know how well transportation is doing and find out where attention is needed. We will have the data to approach these areas and with effective solutions.

#### Who are our customers?

- Congress
- DOT
- Other federal agencies
- States, MPOs
- Local governments
- Universities
- Private sector
- General public

Our job is to support the five strategic goals of the Department of

Transportation – to enhance *safety, mobility, global connectivity, environmental stewardship, and security.* RITA/BTS can provide leadership for our part of the mission, and the goals that fall within, through the availability and effective use of data.

#### How Our Strategic Plan Will Work

We will measure our success not in terms of activities but of *outcomes*. We will do this in six key areas identified by the statistical agencies and statistical units represented on the Interagency Council on Statistical Policy (ICSP):

- \* **Relevance**—the degree to which products and services are useful and responsive to the needs of our customers and stakeholders.
- ❖ *Accuracy*—the correctness, validity, and reliability of data and information products.
- **Timeliness**—the timing of information releases.
- **Cost**—the dollar amount used to produce data products and services.
- **Dissemination**—the availability, accessibility, and distribution of products and services.
- \* Mission Achievement—the effectiveness of RITA/BTS information programs in satisfying our customers and stakeholders.

These six strategic areas reflect the key attributes of data and analysis, its production and utility that we have to get right if we are to accomplish our mission in a dynamic environment and realize the vision for BTS. By meeting these objectives, we will ultimately contribute to the larger strategic goals of DOT. But that will require great flexibility in what we do and how we do it.

Our *strategic goals* and *objectives* will be our guideposts for measuring success. Our *guiding principles* will provide general standards for *how* we must do our work in order to maintain our long-term effectiveness. Together, these make up the foundation for developing *strategies* and a mix of *initiatives* and *activities* that help us achieve success.

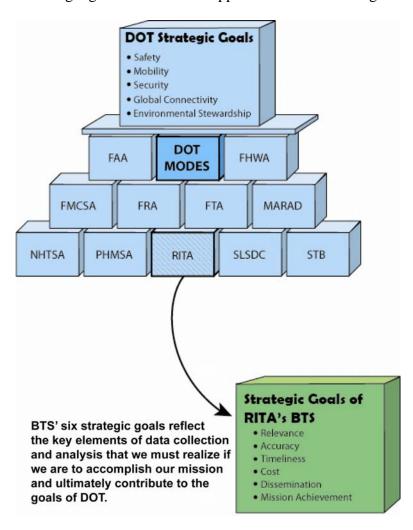
Our strategies and initiatives must be flexible. We will plan our activities and set milestones to track progress, but always with an eye on our strategic goals. The BTS Strategic Plan will guide decisionmaking and all other plans and work. This includes budget priorities, as well as decisions on program and project scope or direction.

#### **DOT's Strategic Goals**

#### Safety – Mobility – Global Connectivity – Environment Stewardship – Security

The overarching purpose of BTS' work is embodied in the strategic goals of the Department. The six BTS goals derived from the Interagency Council on Statistical Policy, and the performance goals derived from them, reflect the most important things that DOT aims to achieve. They focus programmatic efforts as well as budget priorities, and they convey to the public the value they get for their tax dollar. By concentrating on outcomes derived from our strategic goals, they help assure that what we achieve as an organization will be worthwhile.

The challenge for RITA/BTS in this context is to help develop data and analyses that are relevant, accurate, timely, cost-effective, accessible, and contribute to mission achievement. Clearly, the six BTS strategic goal areas should support the broader DOT goals.



And within this framework, lies several important and specific concerns that BTS must help address over the next several years:

#### **Data Needs for Safety**

- An ability to make comprehensive comparisons of fatality, injury, and accident rates across modes, with comparable scope and denominators.
- Better use of technology for collecting data and better methods for analyzing the data.
- Integration of databases to connect a variety of related records, achieve data synergy, and provide "one-stop shopping" for program managers and researchers.

#### **Data Needs for Mobility**

- A means of measuring user transportation cost and travel time with time series data.
- Better approaches for measuring access to various modes of transportation.
- A more complete understanding of variables influencing travel behavior.
- More timely and comprehensive data on the condition and use of the transportation system.
- More comprehensive data on the intermodal nature of the transportation system.

#### **Data Needs for Global Connectivity**

- More complete data on our import shipments.
- Better measures of productivity in the transportation sector.
- Better measures of the impact of transportation on the economy.

#### **Data Needs for Environmental Stewardship**

• Compilations of data on transportation emissions, noise, hazardous materials releases, and wetlands impacts.

#### **Data Needs for National Security**

• Better data on the impact on the transportation system of intentional acts and natural occurrences that disrupt or destroy portions of the transportation infrastructure.

### Strategic Goals & Objectives

# The Outcomes We Are Aiming to Achieve

**Relevance.** We intend to anticipate the needs of stakeholders, provide the information that is most useful and responsive to them, and demonstrate a thorough understanding of major transportation issues and trends.

Our goals for relevance to stakeholders:

- 1) By 2008, good data and sound analysis will underpin every DOT strategic goal and performance measure, and every major DOT program evaluation (as scheduled in the DOT strategic and performance plans).
- 2) By 2008, good data will be available to support a broad spectrum of major transportation policy decisions. BTS analyses of the data will also trigger major policy reviews.
- 3) By 2008, through the implementation of airline information Total Quality Management (TQM), BTS airline data will become the first choice of stakeholders as a database for aviation issues pertaining to the DOT strategic goals.
- 4) Geospatial data critical for the operation of the Crisis Management Center (CMC) will continue to be identified and expanded.

These goals align with our programs as follows:

	Goal	Goal	Goal	Goal
Program	1	2	3	4
Travel Statistics	X	X		
Freight Statistics	X	X		
Transportation Economics	X	X		
Air Transportation Statistics	X	X	X	
Geospatial Information	X	X		X
Systems Performance	X	X		
Methods and Standards	X	X		
National Transportation Library	X	X		

**Accuracy.** We will continue to provide data, analysis, and information of high quality for transportation decisionmaking that will be accurate, reliable, and objective.

Our objectives for accuracy:

- 1) Continue to ensure that all data that RITA/BTS collects meet high professional standards.
- 2) By 2006, statistical data standards will be implemented throughout RITA/BTS.
- 3) BTS will consistently use "good statistical practice" in its program and policy analyses, program evaluations, reports, and publications based on the BTS Statistical Standards Guide.
- 4) Confidentiality policies will be continually emphasized and communicated throughout BTS, and confidentiality will be maintained for all relevant data initiatives.
- 5) By 2006, all geospatial data created by RITA/BTS will pass rigorous quality standards and meet all federal and other applicable standards before distribution.
- 6) International Data Exchanges will be used to develop greater comparability in transportation data and measures with key U.S. trading partners.
- 7) Documentation for BTS data will be completed and continuously updated in order to prevent misunderstandings or misuse.

These goals align with our programs as follows:

	Goal						
Program	1	2	3	4	5	6	7
Travel Statistics	X	X	X	X		X	X
Freight Statistics	X	X	X	X		X	X
Transportation Economics	X	X	X	X			X
Air Transportation Statistics	X	X	X	X		X	X
Geospatial Information	X	X	X	X	X		X
Systems Performance	X	X	X	X		X	X
Methods and Standards	X	X	X	X		X	X
National Transportation Library						X	X

**Timeliness.** We intend to reduce the lag in data reporting so that decision makers have more timely information on the transportation system and the factors that affect it. Timeliness, quality and cost are related variables that must be balanced by the programmatic value that is associated with each. Timeliness can be improved in a variety of ways.

Our objectives for timeliness:

- 1) Every year, RITA/ BTS will work with the operating administrations to ensure that reliable estimates of performance results are available for the annual DOT Performance Report.
- 2) By 2006, BTS aviation data will be available in the public domain within 30 days of receipt.
- 3) Annual updates of the National Transportation Atlas Database (NTAD) will continue to be compiled and the CDs ready for distribution prior to the start of the annual ESRI (Environmental Systems Research Institute) International User Conference on GIS and mapping software.

These goals align with our programs as follows:

	Goal	Goal	Goal
Program	1	2	3
Travel Statistics			
Freight Statistics			
Transportation Economics			
Air Transportation Statistics		X	
Geospatial Information			X
Systems Performance			
Methods and Standards	X	X	
National Transportation Library			

**Cost.** We aim to provide data and analyses in a cost-effective manner. We will develop financial performance measures that determine the "true costs" of our programs.

Our objective for cost:

1) We will measure the dollar value of planned or implemented efficiencies.

These goals align with our programs as follows:

	Goal
Program	1
Travel Statistics	X
Freight Statistics	X
Transportation Economics	X
Air Transportation Statistics	X
Geospatial Information	X
Systems Performance	X
Methods and Standards	X
National Transportation Library	X

**<u>Dissemination</u>**. We intend to provide data and analysis products that are readily available, easily accessible, and widely distributed.

Our objectives for dissemination:

- 1) By 2008, stakeholder input and customer satisfaction will be an integral component of all programs, measured and incorporated in all product content and dissemination decisions.
- 2) By 2008, all major airline traffic and financial data sets for transportation will be accessible through the web via TranStats.
- 3) By 2006, research papers and reference material for transportation research will be readily available via the web.

These goals align with our programs as follows:

	Goal	Goal	Goal
Program	1	2	3
Travel Statistics	X		
Freight Statistics	X		
Transportation Economics	X		
Air Transportation Statistics	X	X	
Geospatial Information	X		
Systems Performance	X		
Methods and Standards	X		
National Transportation Library	X		X

**Mission Achievement.** We intend to provide data and analysis that meet the expectations of our stakeholders.

Our objectives for mission achievement:

- 1) The usefulness of BTS publications—as judged by customers and users—will improve measurably each year.
- 2) BTS will meet the specified mandates of our legislation such as the Transportation Statistics Annual Report (TSAR) and the National Transportation Atlas Database (NTAD).
- 3) BTS airline information will become an increasingly important element in the development of government aviation policies and decisions.
- 4) Transborder freight data and Border Crossing data will become increasingly important for the measurement of transportation movements, the value of international freight traffic, the monitoring of changes in U.S. trade.
- 5) The Commodity Flow Survey estimates of hazardous materials shipments will be used to conduct risk analysis involving the safety of hazardous materials transportation and to establish exposure levels for security assessments involving hazardous materials transportation.
- 6) BTS economic indexes will become essential components of the body of measures of the national economy.
- 7) By 2006, BTS will implement a data collection and dissemination program on U.S. ferry operations as mandated in SAFETEA-LU.
- 8) By 2008, BTS will complete the information needs assessment mandated by SAFETEA-LU.

These goals align with our programs as follows:

	Goal							
Program	1	2	3	4	5	6	7	8
Travel Statistics	X	X				X	X	X
Freight Statistics	X	X		X	X	X		X
Transportation Economics	X	X			X	X		X
Air Transportation Statistics	X	X	X			X		X
Geospatial Information	X	X						
Systems Performance	X	X			X	X		X
Methods and Standards	X	X	X	X	X	X	X	X
National Transportation Library	X	X						

We provide indicators of our progress towards some of these goals in Appendix B.

## Guiding Principles

#### How We Will Manage Our Work

Each decision we make and each strategy we construct, must meet certain basic norms for how we want to manage. Each of these guiding principles is necessary to ensure the long-term health and survival of BTS:

#### **Mandates**

- 1. We must meet our congressional mandates. They provide the basis for the very existence of BTS and reflect what Congress and the public expects of us.
- 2. *We must* stay within the scope of our mandates. We do not formulate policy options; we support those who do. We must remain objective and unbiased in our data and information.

#### Focus

- 3. We must focus first and foremost on relevant data. Providing our customers and stakeholders with the information they need to accomplish their goals is paramount.
- 4. We must stay abreast of all transportation developments and on top of the latest statistical and information technologies that are germane to the functioning of a statistical agency.

#### People

- 5. *We must* be customer oriented responsive to their needs and interested in their feedback.
- 6. We must work with data providers with mutual respect, including appropriate protections of confidentiality and concern for the burden of data collection. This will ensure access to quality data.
- 7. We must work cooperatively with collectors and users of transportation data in the private and public sectors to enhance our understanding of the entire system without danger of duplicating effort. The burden of reaching out rests with BTS.
- 8. We must continually nourish and sustain our staff—our key asset. Their intellectual capital is critical to our capabilities, and their personal and professional development are important long-term investments to be measured on a performance basis. If we ignore this, we cannot maintain our performance or retain our staff.

#### Approach

9. *We must* continually search for more efficient ways to do our work – to automate or streamline processes where possible, and design low

maintenance systems. The taxpayer expects us to spend every dollar wisely, and every efficiency permits greater opportunity for increasing our effectiveness. We may have to discontinue processes if they are not efficient.

- 10. We *must* move quickly and take risks. Rapid changes in technology and a complex policy environment directly affect our operations. We must keep up with the pace so we do not lose relevance.
- 11. We must always do our work with grace and humility—virtues unto themselves. We must also acknowledge that many of the best ideas are outside BTS and rely on others to help us achieve our mission.

#### **Strategies**

#### How We Will Achieve Our Goals

Our objectives are ambitious; our operating environment and data collection are very decentralized; and our resources are limited. So we must become more efficient. We must streamline our processes and the make best use of information technology.

Moreover, since most transportation-related data are collected by others, we can accomplish our work only with their support. We can garner this support by establishing a more prominent role for BTS—one of *natural leadership*. Such a role requires us to:

- develop a reputation for excellence,
- provide value to our partners, and
- stimulate demand for our help.

Finally, in order to assess our effectiveness, we must measure progress toward our objectives. These must be put into measurable terms and tracked, and then we need to intervene if problems arise.

Our strategies are aimed at helping to leverage resources, establish a leadership role, and manage for results. Collectively, these strategies will enable us to carry out our mission and realize our vision.

#### To Build the Organization...

1. **Retain a staff of strong methodological experts** in statistics and economics, and functional experts in all key areas of transportation, information technology, and geospatial information

- systems to serve as consultants, to improve the quality of transportation data and analysis, and to guide all BTS contract efforts.
- 2. **Develop broad information technology (IT) expertise among all BTS staff** to help identify opportunities for leveraging technology in our work. Ensure that all professional staff have some knowledge of database design and statistical tools.
- 3. In coordination with RITA, continuously evaluate the internal functioning of BTS through an employee survey, assessment, and improvement. This would include assessing the work environment, generally, as it relates to the overall performance of BTS. Use the results of this evaluation to improve processes, then re-measure and repeat. Coordinate with other federal statistical agencies for potentially useful comparisons.
- 4. **Develop the learning environment** to enhance professional development opportunities for the BTS workforce.

#### To Build the Programs...

- 1. **Expand our statistical research and data evaluation capability** to better inform the design of surveys, the development of links across data sets, and the exploration of transportation indicators.
- 2. **Develop a transportation statistics discipline** that is recognized for its quality by federal, academic, and private sector statistical communities because we cannot do all analysis ourselves.
- 3. Continually refine and market guidelines for good statistical practice. These guidelines should address the "life cycle" of our data (including collection, documentation, presentation, and interpretation) and the key attributes of our data as reflected in BTS' six strategic goals. We should also add substantially to the body of knowledge to help establish BTS' credibility with other statistical agencies.
- 4. Lead the DOT effort in compiling, organizing, and analyzing system performance data for the DOT Performance and Accountability Report and in measuring progress against the department's strategic goals and objectives.
- 5. **Develop a set of key indicators for transportation** that provide interesting and useful information to stakeholders.
- 6. **Focus resources and plans on meeting critical informational needs.** Adapt our existing surveys and data collections where practical, or develop new data collections to meet the most pressing needs of our customers and stakeholders. Make it a priority to work with other administrations to identify gaps in data and determine how to fill these gaps.
- 7. **Advance the National Transportation Library** by expanding the national network of libraries it created among the transportation libraries in the public, academic, professional, and private sectors, in order to increase timely access to the information that supports transportation policy, research, operations, and technology transfer activities.

- 8. **Advance our Geographic Information Systems** to increase the accuracy and resolution of the data; expand the scope of data collection to represent all transportation infrastructure of national interest and all DOT-funded projects; and make linkages with related data easy. Coordinate geospatial activity throughout the Department.
- 9. To work with the Federal Geographic Data Committee (FGDC) and the Office of Management and Budget (OMB) to ensure that DOT activities and OMB requirements are met.
- 10. Continually review to improve BTS products through user feedback.

#### To Build Relationships...

- 1. **Develop lines of communication and good, collaborative working relationships** with other DOT offices—including both operating programs and data programs. This will help us keep in touch with the major issues others are facing and better understand their needs and constraints.
- 2. **Expand our outreach efforts** to develop stronger relationships with our stakeholders—especially top policy and decision makers—and the media, and to improve the flow of feedback from users. Seek their advice on concepts, methods, data, and products, and integrate their advice into products and processes. Develop cross-functional teams for outreach.
- 3. **Find better ways of measuring customer satisfaction** with BTS products and services. Seek OMB approval to measure customer satisfaction.

From this strategic plan we will develop an annual performance plan with detailed measures to gauge progress against the strategic objectives.

# Appendix A BTS Legislative Authorities and Mandates

**Establishment**. The Bureau of Transportation Statistics (BTS) has been established within the Research and Innovative Technology Administration (RITA) of the Department of Transportation (DOT).

**Appropriations**. BTS is authorized \$27,000,000 for each of fiscal years 2005 through 2009 to carry out Section 111 of title 49, United States Code. This authorization is part of SAFETEA-LU, Safe, Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for Users, Public Law 109–59, signed by the President on August 10, 2005.

**Director.** BTS is headed by a Director appointed from the competitive service by the Secretary of Transportation. Director is qualified to serve by virtue of his or her training and experience in the collection, analysis, and use of transportation statistics. The Director serves as the senior advisor to the Secretary of Transportation regarding data and statistics.

BTS Responsibilities. The specific areas of responsibility for BTS are:

- 1) **Providing data, statistics, and analysis to support transportation decisionmaking.** BTS ensures that the statistics and information compiled support decisionmaking by the Federal Government, state and local governments, metropolitan planning organizations, transportation-related associations, the private sector (including the freight community), and the public.
- 2) **Coordination of data collection.** BTS coordinates the collection of information by working with the DOT operating administrations to establish and implement data programs and to improve the coordination of information collection efforts with other Federal agencies.
- 3) **Data Modernization**. BTS continually improves surveys and data collection methods to enhance the accuracy and utility of transportation statistics.
- 4) **Encouraging data standardization**. BTS promotes the standardization of data, data collection methods, and data management and storage technologies for data collected by the Bureau, the DOT operating administrations, states, local governments, metropolitan planning organizations, and private sector entities.
- 5) **Transportation statistics.** BTS collects, compiles, analyzes, and publishes a comprehensive set of transportation statistics on the performance and impacts of the national transportation system, including statistics on:
  - a) productivity in various parts of the transportation sector;
  - b) traffic flows for all modes of transportation;
  - c) other elements of the intermodal transportation database;
  - d) travel times and measures of congestion;
  - e) vehicle weights and other vehicle characteristics;
  - f) demographic, economic, and other variables influencing traveling behavior, including choice of transportation mode and goods movement;
  - g) transportation costs for passenger travel and goods movement;
  - h) availability and use of mass transit (including the number of passengers served by each mass transit authority) and other forms of for-hire passenger travel;
  - i) frequency of vehicle and transportation facility repairs and other interruptions of transportation service;

- j) safety and security for travelers, vehicles, and transportation systems;
- k) consequences of transportation for the human and natural environment;
- l) the extent, connectivity, and condition of the transportation system, building on the national transportation atlas database; and
- m) transportation-related variables that influence the domestic economy and global competitiveness.
- 6) **National spatial data infrastructure.** BTS is responsible for building and disseminating the transportation layer of the National Spatial Data infrastructure developed under Executive Order No. 12906, Coordinating Geographic Data Acquisition and Access: the National Spatial Data Infrastructure (April 1994). This includes coordinating the development of transportation geospatial data standards, compiling intermodal geospatial data, and collecting geospatial data that is not being collected by others.
- 7) **Issuing guidelines.** BTS issues guidelines for the collection of information by the Department required for transportation statistics in order to ensure that such information is accurate, reliable, relevant, and in a form that permits systematic analysis.
- 8) **Review sources and reliability of statistics.** BTS reviews and reports to the Secretary on the sources and reliability of the statistics proposed by the heads of the operating administrations of the Department to measure outputs and outcomes as required by the Government Performance and Results Act, and carries out such other reviews of the sources and reliability of other data collected or statistical information published by the heads of the operating administrations of the Department as requested by the Secretary.
- 9) Making statistics accessible. BTS makes statistics published readily accessible to the public.

**Intermodal Transportation Database**. In consultation with the Under Secretary for Policy, the Assistant Secretaries, and the heads of the DOT operating administrations, BTS establishes and maintains a transportation database for all modes of transportation. The database is to be suitable for analyses carried out by the Federal Government, the States, and metropolitan planning organizations. The database is to include:

- 1. Information on the volumes and patterns of movement of goods, including local, interregional, and international movement, by all modes of transportation and intermodal combinations and by relevant classification
- 2. Information on the volumes and patterns of movement of people, including local, interregional, and international movements, by all modes of transportation (including bicycle and pedestrian modes) and intermodal combinations and by relevant classification
- 3. Information on the location and connectivity of transportation facilities and services
- 4. A national accounting of expenditures and capital stocks on each mode of transportation and intermodal combination.

**National Transportation Library.** BTS establishes and maintains a National Transportation Library, which contains a collection of statistical and other information needed for transportation decisionmaking at the Federal, State, and local levels. BTS facilitates and promote access to the Library, with the goal of

improving the ability of the transportation community to share information and the ability of the Director to make statistics readily accessible. BTS works with other transportation libraries and transportation information providers, both public and private, to improve the coordination of information collection efforts.

**National Transportation Atlas Database.** BTS develops and maintains a national transportation atlas database that is able to support intermodal network analysis. It is comprised of geospatial databases that depict:

- 1. transportation networks
- 2. flows of people, goods, vehicles, and craft over the networks, and
- 3. social, economic, and environmental conditions that affect or are affected by the networks.

**Transportation Statistics Annual Report.** BTS must submit to the President and Congress a transportation statistics annual report which includes a comprehensive set of transportation statistics on the performance and impacts of the national transportation system, documentation of methods used to obtain and ensure the quality of the statistics presented in the report, and recommendations for improving transportation statistical information.

Mandatory Response Authority for Freight Data Collection. BTS has statutory authority to collect freight data. For any data collection request prepared and submitted within that authority, the owner, official, agent, person in charge, or assistant to the person in charge of any freight corporation, company, business, institution, establishment, or organization of any nature whatsoever, must answer completely and correctly to the best of the individual's knowledge all questions relating to the corporation, company, business, institution, establishment, or other organization, or to make available records or statistics in the individual's official custody.

**Transportation Data Access.** BTS shall have access to transportation and transportation-related information in the possession of any Federal agency, except information

- 1. for which disclosure another Federal agency is expressly prohibited by law; or
- 2. for which disclosure by the agency possessing the information would significantly impair the discharge of its legal authorities and responsibilities.

**Proceeds of Data Product Sales**. Funds received by BTS from the sale of its data products may be credited to the Highway Trust Fund (other than the Mass Transit Account) for the purpose of reimbursing the Bureau for the expenses incurred.

**Advisory Council on Transportation Statistics.** The BTS Director shall establish an advisory council on transportation statistics. The function of the advisory council is to:

- 1. advise the Director on the quality, reliability, consistency, objectivity, and relevance of transportation statistics and analyses collected, supported, or disseminated by the Bureau and the Department
- 2. provide input to and review the national transportation information needs assessment report to Congress, and
- 3. advise the BTS Director on methods to encourage cooperation and interoperability of transportation data collected by the Bureau, the operating administrations of the Department, States, local governments, metropolitan planning organizations, and private sector entities.

The advisory council is to be composed of not fewer than 9 and not more than 11 members appointed by the Director, who are not officers or employees of the United States. Each member is to have expertise in transportation data collection or analysis or application; except that 1 member is to have expertise in economics, 1 member is to have expertise in statistics, and 1 member is to have experience in transportation safety. At least 1 member is to be a senior official of a State department of transportation. Members must represent a cross-section of transportation community stakeholders. Members of the advisory council are appointed to staggered terms not to exceed 3 years, and may be renominated for 1 additional 3-year term. The Federal Advisory Committee Act, except section 14, governs the activities of the advisory council.

**Information Needs Assessment**. Not later than 60 days after the date of enactment of the SAFETEA-LU (October 9, 2005), the Secretary of Transportation shall enter into an agreement with the National Research Council to develop and publish a National transportation information needs assessment. The assessment shall be submitted to the Secretary and the appropriate committees of Congress not later than 24 months (October 2007) after such agreement is entered into. The assessment is to:

- 1. identify, in order of priority, the transportation data that is not being collected by BTS, the operating administrations of the Department, or other Federal, state, or local entities, but is needed to improve transportation decisionmaking at the Federal, state, and local levels and to fulfill the requirements for a comprehensive set of transportation statistics covering the performance and impacts of the national transportation system
- 2. recommend whether the data identified by the Information Needs Assessment should be collected by BTS, other parts of the Department, or by other Federal, state, or local entities, and whether any data is of a higher priority than data currently being collected
- 3. identify any data the BTS or other Federal, state, or local entity is collecting that is not needed
- 4. describe new data collection methods (including changes in surveys) and other changes BTS or other Federal, state, or local entity should implement to improve the standardization, accuracy, and utility of transportation data and statistics; and
- 5. estimate the cost of implementing any recommendations.

In developing the assessment, the National Research Council is to consult with the Department's Advisory Council on Transportation Statistics and a representative cross-section of transportation community stakeholders as well as other Federal agencies, including the Environmental Protection Agency, the Department of Energy, and the Department of Housing and Urban Development.

Not later than 180 days after the date on which the National Research Council submits the assessment (at latest April 2008), the Secretary shall submit a report to Congress that describes how the Department plans to fill the data gaps identified, stop collecting data that is no longer needed, plans to implement improved data collection methods and other changes, the expected costs of implementation, any findings of the assessment with which the Secretary disagrees, and any proposed statutory changes needed to implement the findings.

National Ferry Database. The Secretary of Transportation, acting through the BTS, shall establish and maintain a national ferry database. The database is to contain current information regarding ferry systems, including information regarding routes, vessels, passengers and vehicles carried, funding sources and such other information as the Secretary considers useful. Using information collected through the database, the Secretary shall periodically modify as appropriate the report submitted under section 1207(c) of the Transportation Equity Act for the 21st Century (23 U.S.C. 129 note; 112 Stat. 185-186). The Secretary shall compile the database not later than 1 year after the date of enactment of this Act (August 10, 2005) and update the database every 2 years thereafter; ensure that the database is easily accessible to the public; and make available, from the amounts made available for the Bureau of Transportation Statistics, not more than \$500,000 for each of fiscal years 2006 through 2009 to establish and maintain the database.

**Impact Measurement Methodology.** The Director of Office of Intermodalism and the Director of the Bureau of Transportation Statistics jointly

- 1. develop, in consultation with the modal administrations, and state and local planning organizations, common measures to compare transportation investment decisions across the various modes of transportation; and
- 2. formulate a methodology for measuring the impact of intermodal transportation on the environment; public health and welfare; energy consumption; the operation and efficiency of the transportation system; congestion, including congestion at the Nation's ports; and the economy and employment.

**Research and Development Grants.** The Secretary may make grants to, or enter into cooperative agreements or contracts with, public and nonprofit private entities (including state transportation departments, metropolitan planning organizations, and institutions of higher education) for:

- 1. investigation of the performance and impacts on the national transportation system and research and development of new methods of data collection, standardization, management, integration, dissemination, interpretation, and analysis;
- 2. demonstration programs by States, local governments, and metropolitan planning organizations to coordinate data collection, reporting, management, storage, and archiving to simplify data comparisons across jurisdictions;
- 3. development of electronic clearinghouses of transportation data and related information, as part of the National Transportation Library; and
- 4. development and improvement of methods for sharing geographic data, in support of the National Transportation Atlas Database and the National Spatial Data Infrastructure.

**Aviation Information.** The Secretary of Transportation is authorized to collect and collate transportation information that contributes to the improvement of the transportation system of the United States. Acting through the BTS, the Secretary collects and disseminates information on civil aeronautics (other than that collected and disseminated by the National Transportation Safety Board) including, information on

- 1. the origin and destination of passengers in interstate air transportation, and
- 2. the number of passengers traveling by air between any two points in interstate air transportation.

However, the Secretary may not require an air carrier to provide information on the number of passengers or the amount of cargo on a specific flight if the flight and the flight number are used solely for interstate air transportation and are not used for providing essential air transportation.

**Limitations on Statutory Construction**. Nothing in this section shall be construed to authorize the Bureau to require any other department or agency to collect data; or to reduce the authority of any other officer of the Department to collect and disseminate data independently.

**Prohibition on Certain Disclosures.** In general, an officer, employee, or contractor of the Bureau may not make any disclosure in which the data provided by an individual or organization can be identified; use the information provided for a nonstatistical purpose; or permit anyone other than an individual authorized by the Director to examine any individual report provided.

- 1. **Copies of reports.** No department, bureau, agency, officer, or employee of the United States (except the Director in carrying out his /her statutory obligations) may require, for any reason, a copy of any report that has been filed with the Bureau or retained by an individual respondent.
- 2. Limitation on judicial proceedings. A copy of a report provided by an individual or organization that has been retained by an individual respondent or filed with the Bureau or any of its employees, contractors, or agents shall be immune from legal process; and shall not, without the consent of the individual concerned, be admitted as evidence or used for any purpose in any action, suit, or other judicial or administrative proceedings. This shall apply only to reports that permit information concerning an individual or organization to be reasonably determined by direct or indirect means.
- 3. **Informing respondent of use of data.** In a case in which the Bureau is authorized by statute to collect data or information for a nonstatistical purpose, the Director shall clearly distinguish the collection of the data or information, by rule and on the collection instrument, so as to inform a respondent who is requested or required to supply the data or information of the nonstatistical purpose.

# Appendix B Indicators of Agency Progress in Meeting Goals

Performance standards for federal statistical agencies were established through efforts of the Interagency Council on Statistical Policy under the Government Performance Responsibility Act for use in completing the Administration's Program Assessment Rating Tool (PART). These standards are used to establish product quality and program performance goals for federal statistical agencies.

The BTS Strategic Plan addresses six interrelated goals covering product quality and program performance.

**Product Quality:** Product quality encompasses many attributes, including (but not limited to) relevance, accuracy, and timeliness. The basic measures in this group relate to the quality of specific products, thereby providing actionable information to managers. These are "outcomeoriented" measures and are key to the usability of information products. In some sense, relevance relates to "doing the right things," while accuracy and timeliness relate to "doing things right."

**Program Performance:** Program performance encompasses balancing the dimensions of cost, dissemination, and mission accomplishment for the agency as a whole; operating efficiently and effectively; ensuring that customers receive the information they need; and serving the information needs of the Nation. Costs of products or programs may be used to develop efficiency measures. Dissemination involves making sure customers receive the information they need via the most appropriate mechanisms. Mission achievement means that the information the program produces makes a difference. Hence, three key dimensions are being used to indicate program performance: cost (input), dissemination (output), and mission achievement (outcome).

Performance evaluation indicators measure BTS' performance toward each of six strategic goals. Below we briefly describe the six strategic goals, map them to OMB's performance standards for federal statistical agencies, and describe the indicators for each.

#### Relevance

**OMB Standard** – Relevance is the degree to which products and services are useful and responsive to users' needs. Relevance of data products and analytic reports may be monitored through a professional review process and ongoing contacts with data users. Product relevance may be indicated by customer satisfaction with product content, information from customers about product use, demonstration of product improvements, comparability with other data series, agency responses to customer suggestions for improvement, new or customized products/services, frequency of use, or responses to data requests from users (including policy makers). Through a variety of professional review activities, agencies maintain the relevance, accuracy, and validity of their products, and encourage data users and other stakeholders to contribute to the agency's data collection and dissemination programs. Striving for relevance requires monitoring to ensure that information systems anticipate change and evolve to

appropriately measure our dynamic society and economy. Qualitative or quantitative indicators may measure relevance.

**BTS Goal -** To anticipate the needs of decision makers and stakeholders by providing the information that is most useful and responsive to them through a thorough understanding of major transportation issues and trends.

**BTS Performance Indicators** - BTS has developed indicators for tracking information requests, product dissemination, and customer satisfaction with the BTS website. Relevance is evaluated through the following measures:

- Increase the number of congressional and government agency contacts regarding BTS information (increasing awareness in Congress and other government agencies of what we can provide).
- Increase the number of average daily unique visitors to the TranStats data warehouse site (increasing our customer base for our transportation data warehouse).

#### **Accuracy**

**OMB Standard** – Accuracy measures the important features of correctness, validity, and reliability of data and information products measured as degree of closeness to target values. For statistical data, accuracy may be defined as the degree of closeness to the target value and measured as sampling error and various aspects of nonsampling error (e.g., response rates, size of revisions, coverage, and edit performance). For analysis products, accuracy may be the quality of the reasoning, reasonableness of assumptions, and clarity of the exposition, typically measured and monitored through review processes. In addition, accuracy is assessed and improved by internal reviews, comparisons of data among different surveys, linkages of survey data to administrative records, redesigns of surveys, or expansions of sample sizes. Qualitative or quantitative indicators may measure accuracy.

**BTS Goal -** To provide high quality data, analysis, and information for transportation decisionmaking that is correct, valid, and reliable.

**BTS Performance Indicators** - BTS evaluates the accuracy of information products through the following measures:

- Maintain a minimum 80 percent response rate on the Commodity Flow Survey (CFS) (to reduce non-response bias).
- Increase the response rate on the Omnibus Household Survey (OHS) (to reduce non-response bias).

#### **Timeliness**

**OMB Standard** – Timeliness is the timing of information releases. Timeliness may be measured as time from the close of the reference period to the release of information, or customer

satisfaction with timeliness. Timeliness may also be measured as how well agencies meet scheduled and publicized release dates, expressed as a percent of release dates met. Qualitative or quantitative indicators may measure timeliness.

**BTS Goal -** Reduce the lag time in data reporting so that decision makers have a nearly "real-time" view of the transportation system and factors affecting it.

**BTS Performance Indicators** - BTS has developed indicators for its major programs. Timeliness is evaluated through the following measures:

- Improve average response time for general data and information requests from customers both government and private sector (to improve customer responsiveness).
- Increase the percentage of periodic airline traffic data releases that occurred on schedule (enable our stakeholders and customers predictable delivery of our datasets).
- Ensure that the annual release of National Transportation Atlas Database (NTAD) CD is available prior to the start of the annual ESRI (Environmental Systems Research Institute) International User Conference on GIS and mapping software (to provide timely support for research, analysis, and decision-making across all modes of transportation).
- Reduce response time for map requests by the DOT Crisis Management Center (CMC) and in support of the Continuity of Operations (COOP) plans (to improve emergency response by providing current and timely information).

#### Cost

**OMB Standard** – Cost is the dollar amount used to produce data products or services. The development and use of financial performance measures within the Federal Government is an established goal, and the intent of such measures is to determine the "true costs" of various programs or alternative modes of operation at the Federal level. Examples of cost data include full costs of products or programs, return on investment, dollar value of efficiencies, and ratios of cost to products distributed. Quantitative indicators may measure cost.

**BTS Goal -** Reduce the cost of recurring programs in order to provide data and analysis in a cost-effective manner.

#### **BTS Performance Indicators** – The BTS cost measures are:

- Improve cost efficiencies in the production of BTS' major data reference reports (Transportation Statistics Annual Report, National Transportation Statistics, and the Pocket Guide to Transportation Statistics).
- Improve cost efficiencies in acquiring international freight data (Transborder data).

#### **Dissemination**

**OMB Standard** – Dissemination is the availability, accessibility, and distribution of information products and services. Typical measures include: on-demand requests fulfilled, product downloads, degree of accessibility, customer satisfaction with ease of use, number of participants at user conferences, citations of agency data in the media, number of Internet user sessions, number of formats in which data are available, amount of technical support provided to data users, exhibits to inform the public about information products, issuance of newsletters describing products, usability testing of web sites, and assessing compliance with Section 508 of the Rehabilitation Act, which requires Federal agencies to make their electronic and information technology accessible to people with disabilities. Qualitative or quantitative indicators may measure dissemination.

**BTS Goal -** To provide data and analysis products that are readily available, easily accessible, and widely distributed.

**BTS Performance Indicators** – The BTS measures for dissemination are:

- Increase the number of National Atlas Transportation Database (NTAD) CD-ROMs distributed (to broaden the customer base for this product).
- Increase the number of datasets downloaded from TranStats (to broaden customer usage for this product).

#### **Mission Achievement**

**OMB Standard** – Mission achievement is the effect of or satisfaction with the statistical programs. For government statistical programs, this dimension responds to the question—have we achieved our objectives and met the expectations of our stakeholders? Under this dimension, statistical programs document their contributions to the goals and missions of parent departments and other agencies, the Administration, Congress, and information users in the private sector and the general public. For statistical programs, this broad dimension involves meeting recognized societal information needs and also addresses the linkage between statistical outputs and programmatic outcomes.

However, identifying this linkage is far from straightforward. It is frequently difficult to trace the effects of information products on the public good. Such products often are necessary intermediate inputs in the creation of high visibility information whose societal benefit is clearly recognized. The statistics produced by statistical agencies are used to track the performance of programs managed by their parent or other organizations related to topics such as crime, education, energy, the environment, health, science, and transportation.

Moreover, beyond the direct and focused uses of statistical products and programs, the statistical agencies and their products serve a diverse and dispersed set of data users working on a broad range of applications. Users include government policy makers at the federal, state, and local levels, business leaders, households, academic researchers, analysts at public policy institutes

and trade groups, marketers and planners in the private sector, and many others. Information produced by statistical agencies often is combined with other information for use in the decisionmaking process. Thus, the relationship between program outputs and their beneficial uses and outcomes is often complex and difficult to track. Consequently, agencies use both qualitative and quantitative indicators to make this linkage as explicit as feasible.

Quantitative measures may be used to reflect mission achievement. For example, customer satisfaction with the statistical agency or unit indicates if the agency or unit has met the expectations of its stakeholders. In the absence of preferred quantitative indicators, qualitative narratives can indicate how statistical agency products contribute to and evaluate progress toward important goals established for government.

**BTS Goal** – Provide (dissemination) high-quality data (accuracy) that fill transportation data gaps and advance their effective (relevancy and timeliness) use for transportation decisionmaking.

**BTS Performance Indicators** - BTS evaluates mission achievement through the following measures:

- Improve coverage of legislative mandates in the Transportation Statistics Annual Report (TSAR) (degree to which we support our legislative mandate).
- Track and increase the number of BTS products that contribute to the accomplishment of important, established government goals (meeting the agency mission).