

**Bureau of Transportation Statistics
Advisory Council on Transportation Statistics
Semiannual Meeting Minutes
September 10, 2015**

Members Present:

Michael Walton (ACTS Chair), University of Texas at Austin
Barbara Fraumeni, Central University for Finance and Economics
Hermann Habermann, Committee on National Statistics
Paul Jovanis, Pennsylvania State University
David Lee, Airlines for America
Joseph Schofer, Northwestern University

Members Not Present:

Alicia Carriquiry, Iowa State University
Leanna Depue, Missouri DOT
Michael Replogle, Institute for Transportation and Development Policy

OST-R Leadership Present:

Gregory Winfree, Assistant Secretary, OST-R
Timothy Klein, Acting Director, OST-R OTPO
Patricia Hu, Director, BTS
Rolf Schmitt, Deputy Director, BTS

Noted Visitors:

Tom Palmerlee, Transportation Research Board
Steve Pierson, American Statistical Association
Alan Pisarski, Transportation Research and Policy Consultant
Kitty Smith, Council of Professional Associations on Federal Statistics

Presenters:

William Chadwick, Assistant Director, BTS OAI
Jamie Loughridge, Technology Officer, BTS

Glossary of Acronyms and Terms:

AASHTO	American Association of State Highway and Transportation Officials
ACTS	Advisory Council on Transportation Statistics
BTS	Bureau of Transportation Statistics
Crowdsourcing	Obtaining data by enlisting the services of others, typically unpaid, to provide it.
DRIVE Act	Developing Roadway Infrastructure for a Vibrant Economy Act
FAA	Federal Aviation Administration
FITARA	Federal Information Technology Acquisition Reform Act
HTF	Highway Trust Fund
OAI	Office of Airline Information
OMB	Office of Management and Budget
OST-R	Office of the Assistant Secretary for Research and Technology (formerly RITA)
OTPO	Office of Technology Policy and Outreach
RITA	Research and Innovative Technology Administration (now OST-R)
SORN	System of Records Notice
Web Scraping	Software technique of extracting data from Internet websites.
[Group] = Denotes group discussion, as opposed to overview or presentation topic.	

Introductions and Meeting Outline – Conducted by Michael Walton, ACTS Chair

- All individuals present gave self-introductions.
- Chairman Walton gave a brief overview of agenda items and discussion topics; and called for any additional agenda items to be added as the meeting moves forward.

Welcome and Update on OST by Assistant Secretary Gregory Winfree

- The upcoming DOT airline “report card” that will likely be in the news was mentioned as an example of the importance of BTS data.
- RITA to OST-R transition: There is still a bit of uncertainty because of the change. It heightens the importance of ACTS’ part in the interrelationships of BTS and DOT. ACTS members are strongly recommended to contact/correspond with DOT leadership; education and information from external experts would help them better understand BTS’ mission.
- **Action Item: ACTS members should reach out to DOT leadership to help them better understand BTS’ mission and value.**
- There has been a push for real time data from DOT leadership; BTS needs to determine how best to play into the call for real time data. There are questions about what data are important enough to keep, which to discard, and to whom the data belongs.
- [Group] How do we get BTS’ message to decision makers?
 - BTS should be represented in the National Academy of Sciences study and workshop in November on the study of alternative and hybrid data for federal statistical agencies.
- **Action Item: Contact the Committee on National Statistics to determine if BTS could be part of the study and the November workshop.**
- [Group] BTS often gets blamed for data gaps that are beyond BTS’ control. BTS should provide access to data across the DOT enterprise within constraints of a fixed budget.
- [Group] In the eyes of DOT leadership, BTS is in competition with Google as a source for data. Maybe BTS should not compete, but BTS should consider new ways of doing business.

Perhaps crowdsourcing data is a viable option. This would be a dramatic change for a government statistical agency.

- [Group] Boundaries are changing between ‘inside’ vs. ‘outside’ sources of data such as crowdsourcing. Rather than create similar data sources, BTS should focus on interpreting what the new data from sources like Google mean to public officials.
- [Group] Regarding real time data, what are the questions to answer and where does BTS fit into the scenario? BTS could perform web scraping and provide data in a shorter timeframe, but runs the risk of misguiding decisions with biased data. Providing data trend analysis for future decision-making is BTS’ business, and it may be best to stick with that.
- There has been a request from DOT executive leadership to design a statistical dashboard using real time data. There will be a presentation on this later in the meeting.
- [Group] The President’s budget indicates that BTS funds are being used for OST-R staff: will the funds be returned to BTS if funding allocations change?

Review of Action Items from Last Meeting and Progress Report – Conducted by BTS Director Patricia Hu

- Previous Action Item #1: ACTS to look into an approach to educate DOT leadership on how BTS can produce/deliver data products in a timelier fashion. An internal set of strategies was developed, and Assistant Secretary Winfree, BTS Director Hu, and BTS Deputy Director Schmitt met with the DOT Deputy Secretary in June to discuss short term and long term strategies for expediting delivery of products, especially on the web.
 - A suggestion was offered about establishing a timeline for distributing the data, both before and after data is received by BTS, regardless of the data source.
 - There are still a lot of processes for compiling data and performing quality assurance. BTS is looking into a way to shorten the timeline by automating the processes.
 - [Group] What is the problem that ACTS is trying to solve, and how does this response help? DOT leadership is encouraging the collection of real time data and enabling this data to be made available to stakeholders in a timelier fashion in order to facilitate making more informed decisions.
- Previous Action Item #2: Explore ideas for a dashboard containing real-time transportation information for DOT leadership.
 - This is in progress and a mock-up is presented later in the meeting.
- Previous Action Item #3: Be sure that state CEOs receive state-specific BTS publications at the same time as Congressional staff do so that the state DOTs are not blind-sided. Consider distributing materials through AASHTO.
 - This was completed.
- Previous Action Item #4: Consider using peer reviews and self-evaluations to report agency outputs rather than focus on inputs.
 - BTS is exploring ways to do this.
- Previous Action Item #5: ACTS members agreed to meet in executive session and provide comments on FITARA to OMB.
 - This was completed.
- Previous Action Item #6: ACTS will review current state of DOT response to Statistical Directive No. 1 and propose additional strategies for DOT to consider for all required responsibilities.

- This is still in discussion. Progress update on this item will be included in future ACTS meetings.
- Previous Action Item #7: Develop a plan to collect stakeholder/user feedback on how BTS data is currently used and what specific data/formats could increase data access.
 - Need to put a SORN in place before BTS can elicit input from stakeholders, as data collection privacy is important as well as an OMB requirement. BTS is currently working with the CIO's office to move forward with this.
- **Action item: Establish a new SORN and OMB PRA package so feedback data can be collected. Once BTS gets the SORN for obtaining customer feedback, BTS should discuss with ACTS the privacy implications.**
- **Action item: Provide two (2) sets of individual state reports from States by the Numbers to AASHTO for distribution to the executive committee at the annual meeting.**

Implications of the DRIVE Act for BTS – Presented by Timothy Klein

- The DRIVE Act has passed in the Senate. The House of Representatives has not introduced its bill. Under the DRIVE Act, BTS' funding would be moved from the HTF to appropriated General Funds. If that provision of the DRIVE Act is enacted, BTS will compete with the rest of OST for scarce annual appropriations and BTS will need to make major programmatic changes if it shifts from no-year to 1-year funding.
- [Group] BTS has been assured that removing BTS' funding from the HTF is not based on a vendetta, or even policy. It is more about finding ways to pay for other activities covered by the HTF.

Response to the DRIVE Act – Discussion by ACTS members

- [Group] The Port Performance program in the DRIVE Act is a much more aggressive effort than originally proposed by the Administration. If BTS gets assigned this duty, challenges include extending deadlines and establishing an agreeable process for reporting, as well as extracting data from the various private operating units within the ports
- [Group] There is no provision in the current DOT appropriations bill for BTS. If the DRIVE Act is enacted, OST will need to find funding for BTS within its existing appropriations if the Department is operating under a continuing resolution.
- [Group] Would the move to General Funds be advantageous because it would move BTS out of the focus of the authorizing committees? Some members are concerned that BTS would be a target, because appropriators don't necessarily understand BTS' work and the importance thereof.

Briefing on Aviation Data Programs – Presented by William Chadwick (moved from afternoon time slot)

- Airline data is the most highly demanded and widely distributed dataset out of OAI. There are a lot of national news headlines surrounding airline data and statistics. We need to figure out how to improve delivery of the product (timeliness, data quality, etc.).
- The various data tracked by OAI (as mandated by the FAA) includes Air Traffic, Origin & Destination, Airline Financials, and Airline Performance.
- There are 125 carriers that must report their air traffic data on a monthly basis. Timelines have been established for reporting the data; while some aspects of the timelines are regulated, much is scheduled by OAI. Specific uses of the data include determining mail

rates, fuel subsidies, and airliner safety/fitness. Additionally, the FAA allocates funds for airport improvements based on this data. Challenges of this data include cross-checking datasets against each other, and airline reporting timeframes. Data checks only cover so much, meaning errors can happen; analysts come in to cross-check data when anomalies are found.

- OAI data are collected under rulemakings and under an Interagency Agreement with FAA. Some of it (labeled restricted or quarantined) is never shared or used at all. On the commercial side, OAI sells a very small amount of legacy data.
- OAI and FAA cannot change data submitted by carriers. Some consultants adjust OAI data for analysis to compensate for known data problems.
- Data timeliness versus accuracy: accuracy is more important than timeliness. There is some backfilling of the data by people who know and understand the data. But this goes back to data relevance and quality, which are the most important attributes to most of the population.
- The approach to collecting passenger origin-destination data is based on old technology and old forms of ticket processing in the airline industry, and could be modernized to capture all air travel and not just 10 percent of the tickets.
- Data quality checks in OAI are relatively quick, but working with carriers to correct problematic data submissions take time.
- OAI data are a unique public resource. Aviation analysts from around the world envy and use the OAI dataset in spite of its shortcomings.

BTS Product Delivery and User Experience – Presented by Jamie Loughridge

- The goal of BTS' product delivery and user experience is to disseminate information, improve the product user experience, and provide simple visual analytics. The backend of the system is a 3-tiered approach using Tableau, Drupal, and Socrata to access various databases.
- BTS is currently prototyping a web-based dashboard to replace the monthly Multimodal Transportation Indicators report to provide fresher data with a more modern look.
- The prototype mock-up dashboard illustrates the various dynamic factors available for the user to obtain data. The proof of concept takes the flat pictures of the Multimodal Transportation Indicators report and places them in a user-friendly interface. The dashboard allows for real time data, which is in high demand by the public. It provides future possible realities using trend data, placing it in a real time data environment. It also provides descriptive statistics and fresh, discretized data.
- [Group] Could FAA air traffic data be included as part of this dashboard?
- **Action item: Consider publishing a transportation Fact of the Day.**
- **Action item: Convene 2-3 people (Joe Schofer, Alan Pisarski, & BTS representative) to continue dashboard discussion.**

The Role of Real Time Data in BTS – Discussion by ACTS Members, with Presentation by Joseph Schofer

- The demand for real time data is based on the assumption that decisions require the most up-to-date information, which is true for operations but not for investment and policy that are driven by trends and forecasts. Data should be fresh, but not necessarily real time.
- [Group] Accumulating real time data can be useful in measuring temporal and geographic patterns in transportation..

- [Group] One role that BTS fills is interpreting data and presenting trends versus simply collecting data. Delivery of real time data is not really BTS' business. BTS' value is in providing analysis of data. BTS' role is important in the real time data business, because BTS captures real time data and uses it for historical analysis against current real time data. It also raises the question if real time data is actually worth publishing as we get it, especially considering data decay rates.
- [Group] BTS is not the only entity answering the call for data; currently there are many others that collect and disseminate real time data more efficiently than BTS could. However, BTS should consider building real time performance measures.
- BTS should explain what real time data means (context), how to get real time data, and how good real time data are; BTS should not collect real time data; BTS should compile real time data for analysis of micro-temporal variations; if BTS publishes real time data, BTS should be ready to answer senior leadership questions inspired by the data.
- Forecasting was raised as an issue but discussion was deferred; this could be a potential future topic.
- **Action Item: More discussion about real time data is needed in future meetings.**

Public Comments and Wrap-Up

- Michael Walton called for any last comments regarding the DRIVE Act. Group may need advising about where ACTS can come into play or who ACTS may be able to influence. Getting to the right people at the right time may be difficult, but it needs to be done.
- If BTS' budget is thrown into General Funds instead of the HTF, it will require radical redesign of how BTS operates.
- Michael Walton held a private discussion with ACTS members on future membership.
- Michael Walton asked Paul Jovanis to chair the public comments portion of the meeting. Paul asked for public comments at the time listed on the published agenda. No one had requested the opportunity to provide comments before the meeting, and no one offered comments when given the opportunity at the end of the meeting. The meeting was adjourned.