

**INTERNATIONAL FREIGHT DATA FORUM: STATUS, USES, AND NEW  
DEVELOPMENTS  
APRIL 7-8, 2003**

**SUMMARY REPORT**

**OVERVIEW**

The International Freight Data Forum was a partnership between the Bureau of Transportation Statistics (BTS) and Transportation Research Board (TRB) to provide international freight data users with an opportunity to learn more about activities in this area and allow them to share their views on improving the agency's products and services. This report summarizes the major issues raised during the one-and-one half-day forum and the follow-up action plan.

The forum was organized into three sections: (1) overview of BTS data, analytical products and customer service, (2) the use of international freight data from a variety of perspectives, and (3) new developments in international trade and freight data.

After presentations from BTS staff on the current status of its work in the area of international trade and freight transportation, the participants were given a series of presentations from a diverse panel of data users. These presentations ranged from Federal Highway Administration (FHWA), to state DOTs, an MPO, and a representative from the private sector. The forum concluded with highlights from the development of the International Trade Data System (ITDS), new transportation security requirements, and the development of the new American Freight Data Program at BTS.

The forum was designed to provide BTS staff the opportunity to hear from data users in the field and identify common issues that need to be addressed. In order to facilitate this objective, there was a dialogue session to help BTS better understand what data is being used, how its customers are using data, what types of analytical products are most useful, and what BTS can do to be more responsive to its customers' needs. The guests helped to identify and prioritize various data gaps, analytical issues, and outreach/dissemination issues for BTS staff to concentrate on. The following sections summarize BTS' action plan in response to the guest's suggestions followed by the data, analytical, and outreach issues raised by the guests.

**SUMMARY ACTION PLAN**

At the end of the forum, participants suggested several action plan items to BTS for consideration and follow-up, all with the goal of improving availability and use of international freight data for policy and decisionmaking in both public and private sectors. BTS is currently taking steps to review how best to incorporate the suggestions into existing programs and where necessary take new initiatives to address the concerns and issues.

The most important recommendations and their subsequent key items from forum participants were on:

1. Expanding the scope and availability of international freight data
2. Strengthening stakeholder partnerships to improve data collection and availability
3. Improving dissemination of data documentation and information about existing data

**1. Expanding the scope and availability of international freight data**

- Initiate steps to study feasibility of truck survey in North America – new survey & models for use at local level
- Explore ITS options for data collection
- Explore more carrier sources – FAA Known Shipper Program
- Improving geographic detail and specificity of trade and freight data

**2. Strengthening stakeholder partnerships to improve data collection and availability**

- Continued coordination with Census, especially on Title 13 AES – new EL Series
- Continued coordination with Customs/ITDS
- Continued coordination with State DOTs and MPOs
- Partner with industry – understand dynamics of shipper & carrier decision-making
- Continued collaboration with counterpart agencies in Canada and Mexico to improve North American freight data
- Actively seek participation of data users in future efforts and activities

**3. Improving dissemination of data documentation and information about existing data**

- Develop better customer service procedures that can be used to respond to requests/questions and notify customers of new data releases, new products, and data workshops
- Develop more short how-to sheets on international freight data and other issues related to international trade and travel,
- Develop a listserv for Transborder, Border Crossing and BTS publications,
- Update BTS website so that it is more clear what data/information is available and post information on how BTS data is being used in the field.

Many of the participants from state and local agencies and the private sector acknowledged the difficulties in achieving these objectives and are willing to work with BTS and other Federal agencies involved in creating and publishing the needed international freight data. There was consensus among the participants that since state transportation officials make the bulk of transportation decisions, particularly investments in infrastructure, there should be concerted effort to involve them in data decisions.

## ACTIONS AFTER THE FORUM

In response to the forum, BTS has started to prioritize its response and seek ways to move forward on the above action plan recommendations. The table below summaries BTS' initial near-term steps and plans for continuing action.

**Table. Major Issues and Actions**

MAJOR ISSUE	NEAR-TERM ACTIONS BEING TAKEN	MEDIUM-TERM ACTIONS
<b>1. Expanding the scope and availability of international freight data</b>		
<ul style="list-style-type: none"> <li>▪ <b>Initiate steps to study feasibility of truck survey in North America – new survey &amp; models for use at local level</b></li> </ul>	<p>BTS is currently reviewing existing activities in the area of freight transportation. Part of this work includes an assessment of how the existing Commodity Flow Survey (CFS) could be improved and what new truck surveys could possibly be developed.</p>	<p>BTS will seek to work with the freight community to develop a comprehensive freight data “framework” for both domestic and international freight data needs.</p>
<ul style="list-style-type: none"> <li>▪ <b>Explore ITS options for data collection</b></li> </ul>	<p>BTS recognizes the need to partner with other agencies that are leaders in deploying ITS technology.</p>	<p>Clearly capturing the enormous information being collected in ITS systems will be an approach to pursue.</p>
<ul style="list-style-type: none"> <li>▪ <b>Explore more carrier sources – FAA Known Shipper Program</b></li> </ul>	<p>BTS plans to follow-up with the FAA to find out the impacts on this program on data.</p>	<p>Other carrier sources, particularly motor carriers needs to be studied and some pilot data collection started.</p>
<ul style="list-style-type: none"> <li>▪ <b>Improving geographic detail and specificity of trade and freight data</b></li> </ul>	<p>The ongoing BTS effort to review availability of freight data, noted above, includes discussion of improved geographic details. Additionally BTS is researching several confidentiality and disclosure methods that could be used to improve geographic details.</p>	<p>This is a critical effort that needs some longer-term research to determine the best combination of survey data, administrative data, and modeling needed to incrementally achieve this goal.</p>
<b>2. Strengthening stakeholder partnerships to improve data collection and availability</b>		
<ul style="list-style-type: none"> <li>▪ <b>Continued coordination with Census and Customs</b></li> </ul>	<p>BTS continues to meet with these agencies and is currently working with Customs to collect more detailed port level trade data</p>	<p>Partnering with Census and Customs is a major strategic goal for continued availability of trade and transportation data.</p>
<ul style="list-style-type: none"> <li>▪ <b>Continued coordination with the International Trade Data System (ITDS) Working Groups</b></li> </ul>	<p>BTS remains very active in the development of ITDS.</p>	<p>BTS plans to continue working with Customs and Census to ensure continuity of complete and timely data.</p>

<ul style="list-style-type: none"> <li>▪ <b>Continued coordination with State DOTs and MPOs</b></li> </ul>	<p>BTS is taking steps to better provide international freight data to states and MPOs. Following the forum, BTS staff met with AASHTO to discuss possible steps to begin improving data to states. Similar effort will be planned for MPOs.</p>	
<ul style="list-style-type: none"> <li>▪ <b>Partner with industry – understand dynamics of shipper &amp; carrier decision-making</b></li> </ul>	<p>BTS plans to actively seek private sector views in developing any new freight data program.</p>	
<ul style="list-style-type: none"> <li>▪ <b>Continued collaboration with counterpart agencies in Canada and Mexico to improve North American freight data</b></li> </ul>	<p>BTS remains very active in the North American Transportation Statistics Interchange, the primary forum for exchanging transportation data and information among Canada, Mexico, and the United States. BTS and Census are hosting the 2003 Interchange.</p>	
<ul style="list-style-type: none"> <li>▪ <b>Actively seek participation of data users in future efforts and activities</b></li> </ul>	<p>Working with our partners, BTS plans to have future data users forums to seek input for all major freight data activities.</p>	
<p><b>3. Improving dissemination of data documentation and information about existing data</b></p>		
<ul style="list-style-type: none"> <li>▪ <b>Develop better customer service procedures that can be used to respond to requests/questions and notify customers of new data releases, new products, and data workshops</b></li> </ul>	<p>Following the Forum, BTS has been working to develop appropriate means of gathering customers' information to better inform them about data products and services.</p>	<p>In the long run, BTS may have to seek OMB approval to better collect customer information to enable us better serve our customers.</p>
<ul style="list-style-type: none"> <li>▪ <b>Develop more short how-to sheets on international freight data and other issues related to international trade and travel,</b></li> </ul>	<p>Following the Forum, BTS has completed a Frequently Asked Questions (FAQ) brief for the Transborder and Border Crossing programs. These will be posted on the web by July 2003.</p>	<p>BTS plans to expand and update this documents to incorporate new changes in the data programs and respond to new inquiries from our customers.</p>
<ul style="list-style-type: none"> <li>▪ <b>Develop a listserv for Transborder, Border Crossing and BTS publications,</b></li> </ul>	<p>BTS is looking at alternative approaches to meeting this need.</p>	
<ul style="list-style-type: none"> <li>▪ <b>Update BTS website so that it is more clear what data/information is available and post information on how BTS data is being used in the field.</b></li> </ul>	<p>As part of an agency wide review of its website, the international freight data web pages will be reviewed and updated to better show the information available at the site. Currently BTS is working on adding more monthly transshipment information and is expected to have the data posted by end of Summer 2003.</p>	

The following sections are the priorities listed by the participants for improvement to BTS' data, analysis and analytical products, and outreach and customer service.

### **DATA ISSUES**

First and foremost, there is no single source of trade and transportation data. Data users must rely on incomplete and often incomparable data sources to conduct research and make decisions. Within this context, the following list of data collection/coverage issues were ranked and discussed.

1. Geographic data – Better inland O/D, state/substate, Mexican state of origin
2. Transshipments/intransits
3. Temporal aspects of trade and crossings – peaking, delays
4. Container data
5. Corridor level data
6. Multimodal/intermodal – “true” mode and transportation chain
7. Long haul trucking vs. drayage
8. Hazmat data
9. Low value shipments, esp. for air freight
10. Vehicle info & characteristics (i.e. vehicle configuration, carrier nationality)
11. Port and infrastructure specificity

By far the most common reoccurring theme throughout the forum was the need for better geographic data for the movement of international freight. Currently, tracking freight from its foreign point of origin to its final inland destination in the U.S. is a very imprecise process because critical transportation data elements are not collected on the import and export documentation filed with U.S. Customs. Similarly, data on international freight that moves through the U.S. from one foreign country to another (i.e. transshipments) is also imprecise and very incomplete. Better knowledge of transshipments or intransits are second on the list and important because of their contribution to the overall impact of international trade on the U.S. transportation system.

When assessing the issues associated with this ranked list, it is important to understand that many of these data issues are inter-related. Customs does not collect a shipment's destination beyond the port level and has limited data on how a shipment might arrive at a port. As a result of this data collection gap BTS' transshipment knowledge is limited. The information gaps are especially obvious for what combinations of transportation modes are used for delivery (multimodal/intermodal transportation chain), where the shipment is ultimately headed (inland O/D), or if the shipment is destined to markets in the U.S. or beyond (intransits). Customs does collect data on vehicle crossings and BTS processes a cut of these data and makes them available to its customers. However, there is no characteristic information about the vehicles, which would help BTS determine the vehicle configuration (long haul vs. drayage) or carrier nationality. Similarly, BTS has count data for container crossings but no data on the contents or exact size of the container.

## **ANALYSIS AND ANALYTICAL PRODUCTS**

The analysis of international freight data is one of the most important functions BTS serves. The data collected by BTS is integrated with a wide variety of other data sources to provide BTS customers with a comprehensive understanding of international trade and transportation. These analyses are developed in various formats from in-depth reports to short one-page fact sheets. BTS produces and disseminates products hard copy and online. An important objective of the forum was to get input from participants as to what analytical products were most useful and what new products BTS should be considering. This is a list of products and analytical activities prioritized by the forum's guests.

1. Coordinated trade data /data integration, analysis with other sources (CFS, carrier data, and state and national level data)
2. Database formats – review options (FIPS codes)
3. Geo-spatial analysis of trade/transport – mapping applications
4. Development of models
5. Turning tonnage into vehicles
6. Network flows (FAF expansion)
7. Development of standard conversion factors (value to weight ratios, etc.)
8. State and geographic focused analytical trade & transport products (trends & linked models)
9. Corridor level analysis
10. Transportation security links to trade & related analysis
11. Industry and economic development focus to trade and transport analysis
12. Short briefs – web and other
13. Products for non-technical audiences
14. National level, multimodal trend analysis

Forum participants indicated that they would like to see more analysis with geospatial data and information, such as the FHWA's Freight Analysis Framework, with more attention given to trade and transportation at the local, regional, and state level. The transporting patterns of industrial sectors needs to be further explored through the collection of more empirical data. Through this exploration, it was suggested that a clearer picture of freight movements in the U.S. could be drawn.

In terms of what BTS is already doing, participants liked the national level, multimodal trend analysis that BTS conducts. They generally liked having data and information available in multiple formats with varying levels of detail. They also liked that BTS products are often written for non-technical audiences. For the more technically minded, they would like to see BTS engaged in more data modeling exercises to fill in some of the major data gaps associated with corridor analysis and sub-national freight flows. Similarly, there was an interest in BTS being more active in the development of standard conversion factors for such things as value to weight ratios and estimating the number of vehicles based on tonnage.

## **OUTREACH AND CUSTOMER SERVICE**

BTS currently collects, processes, and disseminates international freight data in the form of Transborder Surface Freight Data and Border Crossing/Entry Data. In addition to releasing the data, BTS staff provides technical assistance and analytical support to BTS

customers who use the data for a wide variety of purposes. Internally, these data are used to develop analytical products, which in turn are also made available to BTS customers. In conjunction with setting priorities with regard to data collection, coverage and analysis, it was also important for BTS to get input from participants as to how it could improve its outreach and customer service functions. Here are the outreach priorities in ranked order.

1. Expand partnerships with private sector – esp. carriers
2. State level coordination – identify state needs (esp. re: ITDS)
3. Best practices – more info on how other customers are using int'l freight data
4. Coordinate with private data vendors
5. A-Z list of information on BTS website
6. Keep data free
7. Listserv/web forum for transborder/border crossing
8. Continued coordination with Canada and Mexico – disseminate more info on Interchange
9. Raise visibility of BTS products and services
10. More use/coordination with TRB
11. More technical assistance workshops
  - a. In disperse locations
  - b. Data in depth
  - c. Overview discussions

Number one on the list is expanding partnerships with private sector. This is a reflection of the fact that people want better geographic data for freight movements within the U.S. If BTS or a broader coalition of government agencies were able to capture the carrier information from companies that transport freight from the major international trade gateways to the final inland destination, BTS customers would benefit from much better data related to multimodal transportation chains and the true inland O/D of international freight. Number 4 on the list is also related because there are private companies that have developed modeling techniques that could supplement BTS data and provide BTS customers with better sub-national data.

Numbers 3 and 5 on the list are related because some participants expressed frustration that there wasn't more information available on new and innovative uses of international freight data. It was suggested that BTS should be more proactive in spreading the word about how people are using its data. Along these lines, there was also an interest in seeing BTS' website more clearly labeled in terms of what data/information is available.

Participants were in favor of continued coordination with Canada and Mexico as a means of improving the comparability of international freight data and increasing the understanding of how freight moves throughout North America. Similarly, BTS was also encouraged to partner more with TRB as a neutral forum for interfacing with international freight data users. There was also an interest in BTS arranging more technical assistance workshops. These workshops would be held in different locations around the country so that BTS could raise a higher profile for its data and analytical products. These workshops would also vary thematically with some being more in-depth

on a particular data issue and others being more broadly focused on a particular trend or issue area.

In terms of BTS' current international freight data programs, there was an interest in making some improvements to how customers access the data. The development of a listserv for Transborder and Border Crossing data was suggested as a means to better inform customers of updates and revisions of the data.

If you have any questions/comments about this report or the International Freight Data Forum please contact the international team at BTS.

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