Measuring the Transportation System from a Supply Chain Perspective

A Workshop

Wednesday, July 11, 2012
The Arnold and Mabel Beckman Center of the National Academies
Irvine, California

Organized by
Transportation Research Board
Freight Transportation Data Committee

Supported by
TRB Strategic Highway Research Program 2

http://www.trb.org/Calendar/Blurbs/166275.aspx
Measuring the Transportation System from a Supply Chain Perspective

The Transportation Research Board is one of six major divisions of the National Research Council, which serves as an independent adviser to the federal government and others on scientific and technical questions of national importance. The National Research Council is jointly administered by the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. The mission of the Transportation Research Board is to provide leadership in transportation innovation and progress through research and information exchange, conducted within a setting that is objective, interdisciplinary, and multimodal. The Board’s varied activities annually engage about 7,000 engineers, scientists, and other transportation researchers and practitioners from the public and private sectors and academia, all of whom contribute their expertise in the public interest. The program is supported by state transportation departments, federal agencies including the component administrations of the U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation.

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Several recent TRB data activities have concluded that critical supply chain data are lacking and thus unable to inform the research, planning, and policy making that impact freight movement, the transportation system, and the U.S. economy.

TRB Special Report 304: How We Travel: A Sustainable National Program for Travel Data (2011) identifies supply chain data as a major gap in transportation data.

The SHRP 2 C20 Freight Modeling and Data Improvement Strategic Plan (2011) also highlights the importance of public sector freight modeling and innovative approaches to data collection in enabling freight models to more accurately reflect the decision-making processes of private-sector freight shippers, receivers, and carriers. This suggests a supply chain approach.

In 2010 the TRB Freight Transportation Data Committee (ABJ90) organized a conference, Freight Data Research Roadmap, in which it identified supply chain data among the main shortcomings of comprehensive data collection. The conference summed up a strategic outline of research needs, Freight Data Research Roadmap: The Big Ideas.

The main objectives of this workshop are to

- Review current supply chain applications and data uses for the public sector,
- Explore the decision-making processes involved in public-sector investments and the value of enhanced supply chain information,
- Identify potential examples of specific public uses of supply chain data as well as the types of users who stand to benefit from its availability, and
- Identify future actions and research to further this approach.

The Fairmont Hotel will provide a 14-passenger shuttle van to transport workshop participants to and from the hotel and the Beckman Center.

- 7:00 a.m. Fairmont Hotel to Beckman Center
- 7:30 a.m. Fairmont Hotel to Beckman Center
- 5:30 p.m. Beckman Center to Fairmont Hotel
- 6:45 p.m. Beckman Center to Fairmont Hotel
### CONFERENCE AT A GLANCE

#### WEDNESDAY, JULY 11

- **7:15 a.m.–8:00 a.m., Dining Room**
  - Breakfast
- **8:00 a.m.–10:00 a.m., Huntington Room**
  - Introduction and Keynotes
- **10:00 a.m.–10:30 a.m., Atrium**
  - Break
- **10:30 a.m.–12:30 p.m., Huntington Room**
  - Industry Perspective on Supply Chain Networks
- **12:30 p.m.–1:30 p.m., Dining Room**
  - Lunch
- **1:30 p.m.–3:30 p.m., Huntington Room**
  - Public Transportation Management Perspectives
- **3:30 p.m.–4:00 p.m., Atrium**
  - Break
- **4:00 p.m.–5:30 p.m., Huntington Room**
  - Potential for Public Use of Supply Chain Data
- **5:30 p.m.–6:30 p.m., Executive Dining Room**
  - Planning Committee Debriefing (by invitation only)

#### THURSDAY, JULY 12

- **7:30 a.m.–1:00 p.m., Newport Room**
  - Planning Committee Working Session (by invitation only)
Wednesday, July 11

7:15 a.m., Dining Room
Breakfast

8:00 a.m., Huntington Room
Introduction and Keynotes
Scott Drumm, Port of Portland, presiding

This session sets the stage for the workshop’s discussions. Joseph Schofer summarizes the premise of How We Travel, a report that recommends more public use of supply chain data, and William Bostic discusses the U.S. Census Bureau’s use of supply chain data. Chris Caplice highlights the volatility that has characterized the economy in recent years and points out that it is imperative that the transportation industry gain a better understanding of economic trends. Marc-André Roy presents the findings of his NCFRP research on using current supply chain data to frame publicity issues in the Great Lakes Saint-Lawrence Basin.

**Linking Supply Chains to a National Travel Data Program**
Joseph L. Schofer, Northwestern University

**U.S. Census Bureau Supply Chain Research**
William G. Bostic, U.S. Census Bureau

**Future Global Scenarios and Impacts on Supply Chains**
Chris Caplice, Massachusetts Institute of Technology

**Use of Supply Chain Information in the National Cooperative Freight Research Program’s Great Lakes Study**
Marc-André Roy, CPCS Transcom Limited

10:00 a.m., Atrium
Break

10:30 a.m., Huntington Room
Industry Perspective on Supply Chain Networks
Joseph G. B. Bryan, Parsons Brinckerhoff, presiding

This panel discussion reviews several supply chain applications and discusses how they are employed by practitioners in various industries, including shipping, rail, and intermodal transportation. This session also considers the availability of supply chain applications for public use as well as potential opportunities and barriers to their implementation in other sectors.
Discussion Panel

Rail Carrier Perspective on Supply Chain Planning  
John Gray, Association of American Railroads

Shipper Perspective on Supply Chain Planning  
John Isbell, Starboard Alliance (formerly NIKE Logistics)

Supply Chain Design Perspective on Logistics Networks  
Steven D. Fox, Norbridge, Inc.

Third Party Perspective on International Supply Chains and Data Collection  
Christopher P. Mazza, International Asset Systems

12:30 p.m., Dining Room  
Lunch

1:30 p.m., Huntington Room  
Public Sector Perspectives on Supply Chain Networks  
Donald B. Ludlow, Cambridge Systematics, Inc., presiding

This panel discussion considers the various factors underpinning investment decision making in the public sector. Building on insights from the previous session, this panel gauges the potential value of supply chain data in light of how it impacts public sector–investment decision making.

Communicating the Role of Transportation to the Public  
Ken Allen, H-E-B (retired)

Metropolitan Planning Organization Perspective and Observations on the California Trade Corridor Investment Fund Program  
Christina Casgar, San Diego Association of Governments

Economic Development Perspective  
Bimla G. Rhinehart, California Transportation Commission

Importance of Railroad, Trucking, and Warehousing Data in Public-Sector Decision Making  
Gill V. Hicks, Cambridge Systematics, Inc.

3:30 p.m., Atrium  
Break
Potential for Public Use of Supply Chain Data

This session summarizes the findings of previous panel discussions and identifies specific public sector applications of supply chain data as well as users who would benefit from those applications. After a thirty-minute report, the workshop concludes by setting a research agenda to support the use of supply chain data to measure transportation system performance.

Committee Observations
Juan Carlos Villa, Texas Transportation Institute
Joseph L. Schofer, Northwestern University

Discussion

Planning Committee Debriefing

Thursday, July 12

7:30 a.m.–1:00 p.m., Newport Room
Planning Committee Working Session (by invitation only)
Breakfast and lunch will be served.

HOTEL AND CONTACT INFORMATION

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