

## International Trade and Transport

**ROBERT HARRISON**, *University of Texas at Austin*

The United States is an established part of a global economy comprising regional comparative advantages and linked together by a complex, multimodal transportation system. Global competition requires a thorough understanding of the wide range of cultures, production processes, technologies, and trade transportation patterns that form international markets. This requirement translates into a need to understand the transportation of goods, materials, and people between these regional economies as well as the shape and size of resulting trade transportation patterns, potential changes in those patterns, and the consequences. Improved international trade data, better transportation systems analysis, and the use of new technologies such as transportation modeling using sophisticated transportation geographic information system (GIS-T) software will be essential to maintaining future global competitiveness. The Committee on International Trade and Transportation intends to provide insight and vision to improve the quality of international trade data and to expand the use of modeling tools such as GIS-T in conducting international trade transportation research.

### ISSUES

The committee will address a wide range of trade and transportation issues in the new millennium. These probably will include

- Improving the availability and accuracy of international trade data,
- Analyzing international trade transportation, and
- Observing trends in international trade transportation.

International trade transportation analysis depends on the collection, accuracy, completeness, cost-effectiveness, and timely distribution of international trade data. International trade data issues will be an ongoing concern in the new millennium. Because of increased automation and the application of new technology (e.g., bar coding) in the processing of international trade shipments, it should be possible to provide more accurate and timely trade data. These data should contain additional information that will be valuable to planners and trade transportation analysts: transport origin or destination; modes of transportation; and commodity description, value, and weight. It is envisioned that a new, more complete international trade database will be created and that this new trade database should be included in the Bureau of Transportation Statistics comprehensive transportation database that is mandated under Transportation Equity Act for the 21st Century (TEA-21) legislation.

Another important issue in the new millennium will be the implementation of more accurate and timely international trade transportation analyses so as to enhance

infrastructure planning and national competitiveness. The improvement of powerful new tools such as GIS-T modeling, advanced information technology, and improved data will become more important. Technology such as the Internet should make international trade more available and cost-effective, and technologies such as bar coding should produce real-time information.

Other issues will revolve around trends such as just-in-time inventory, corporate consolidation of transport carriers, increased containerization, megaships, concentrated load center ports, feeder ports, port infrastructure, and land bridges. Increased containerization will result in a need for container megaships, port infrastructure investments, and the movement of containers across U.S. land bridges. Pacific Coast seaport expansion projects, the growth and importance of Pacific trade, and the development of Pacific trade agreements on shipping costs [e.g., the Asia Pacific Economic Cooperation (APEC) Forum] will alter the pattern of trade corridors and the patterns of transportation within the United States. The efficiency of the U.S. international trade transportation system will have a direct impact on U.S. competitiveness.

## **POLICIES**

Policies important to international trade transportation in the next millennium include international trade agreements, ports, trade corridors, and new technology. The impact of the wide variety of economic units that make up the global economy and the effectiveness of trade agreements that reduce trade barriers between these units will require policies to deal with the increased volume and value of international trade. The most important policies will be with respect to the World Trade Organization (WTO), which began in the middle of the 20th century as the General Agreement on Tariffs and Trade (GATT). WTO will continue to reduce trade barriers and encourage regional trade agreements. Important trade transportation policy issues will include those among WTO member countries; within economic regions (e.g., the European Union); customs areas (e.g., MERCOSUR); Canada, the United States, and Mexico under the North American Free Trade Agreement (NAFTA); and developing trade regions (e.g., APEC).

Trade transportation policies will be needed to support the growing importance of ports and trade corridors. Land, sea, and air ports will need to be recognized as the gateways that are at the origin and destination of trade corridors. A policy will be needed to support the analysis of shifting volumes of trade through land, sea, and air ports and the effect that these shifts have on trade corridors. Implementation of this policy has begun in the TEA-21 legislation (Title 1A, Section 1111) requirement that the U.S. Department of Transportation define trade corridors of national significance.

For trade corridors to be fully developed, policy will have to emphasize the importance of gathering and providing more accurate and timely trade data. Policies also will need to be developed that support the use of new, more powerful tools of trade transportation analysis, such as GIS-T.

Although most policy will be directed to the liberalization of trade and efficient trade transportation, some products—such as defense technology and other strategic materials—will require policies of control. We also will need to develop policy to examine trade data issues related to public versus private investments and to develop approaches that address profit versus social equity. These issues link directly to such macro policies as sustainability, which is a key issue that will be examined in the next century.

**FOCUS**

In terms of the critical role of this committee, we will encourage the improvement of trade and transportation data collection and analysis, which will range from the improvement of databases to system modeling with powerful GIS-T products such as TransCAD©. Currently, areas of data (such as the destination and mode of transportation of imports after they enter the United States at land, sea, or air ports) are missing. The committee also will address problems with the use of origin and destination data from customs forms, including commodity coding issues, weight, and the identification of true shipment origins and destinations.

As we prepare for the next century, the committee will seek to better establish and improve our understanding of international trade and transportation systems. Topics will include GIS-T methods and models for estimating the impacts of global real-time vehicle and cargo information systems on U.S. trading practices, as well as the potential for change. They also will include the effects of GATT/WTO, NAFTA, APEC, and other international trading agreements on the current and future patterns of international trade transportation. In addition, we will identify transportation-related opportunities and constraints on future U.S. trade flows.

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