



ISTEA AND INTERMODAL PLANNING

TRB Releases Fourth Report on ISTEA Planning Issues

CHRISTINA S. CASGAR AND JAMES A. SCOTT

TRB Special Report 240, *ISTEA and Intermodal Planning: Concept, Practice, and Vision*, is available from the Transportation Research Board, Box 289, Washington, D.C. (telephone: 202-334-3213 or 3214).

In December 1992 the Transportation Research Board conducted a National Conference on the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and Intermodal Planning Issues to identify those issues involved in carrying out the new planning requirements of ISTEA. The conference was chaired by C. Michael Walton of the University of Texas. The report findings are contained in TRB Special Report 240—*ISTEA and Intermodal Planning: Concept, Practice, and Vision*. The report includes the proceedings of the conference and an examination of how ISTEA legislation defines the structure of transportation programs for the federal government and every state and metropolitan area in the United States.

Intermodal Cooperation on Conference Planning

The conference was a landmark occasion: it was the first TRB conference to be cosponsored by all five modal administrations of the U.S. Department of Trans-

portation (DOT). Accordingly, conference participants represented every mode of transportation, and their contributions were the essence of this endeavor. The synergy of intermodal planning ideas that emerged proved to be as exciting as ISTEA itself and certainly as challenging. The words "intermodal" and "efficiency" in ISTEA offer a promising and challenging combination of planning concepts, requiring broad vision and wide expertise. This language suggests nothing less than visionary approaches to the planning, funding, and delivery of transportation programs and services. The diversity of the conference participants and their harmonious efforts to shape an intermodal planning agenda demonstrated that pooled expertise must be the new, if not yet affirmed, approach to addressing the vision for transportation.

Changing Institutional Concerns and Structures

Conference participants agreed that ISTEA framed an initial architecture for transportation initiatives and planning, which includes recognition that the needs of transportation consumers are changing.

Travel patterns, markets, and logistics are undergoing rapid change and, more dramatically, becoming globalized. The logistics of goods and passenger transport force new transport activities that in turn necessitate planning initiatives to meet diverse objectives. Although maximum mobility for both goods and passengers is a goal of transportation, it must now be accomplished with profound respect for the environment. Intermodal efficiency requires today's transportation professionals to infuse the planning process with state-of-the-art technical systems and to further develop systems that are compatible with and include consideration of overarching environmental and social concerns.

Partnerships

Partnerships between the public and private sectors and between local and federal agencies are integral to this new mandate. As an example, conference participants heard how the operations of one private-sector freight carrier were restructured to achieve intermodal efficiencies. Drawing on this example, participants concluded that partnerships, albeit challenging and demanding, must be customized and will

Christina S. Casgar is Marine Transportation Specialist and James A. Scott is Transportation Planner, TRB.

vary according to the specific or targeted objectives of the partners. Nonetheless, there was a consensus that, from the U.S. DOT to state DOTs and metropolitan planning organizations (MPOs), partnerships need to be developed in order to include their input with transportation consumers in the planning process.

Freight Interests Require Attention

Conference participants agreed that freight interests should be more fully integrated into the transportation planning and programming process because they represent significant transportation partners. Private-sector freight operators have introduced and used the concept of seamless transportation, and their experiences may well serve to guide new public-sector initiatives. Personal mobility is now intertwined with goods mobility, and the twin concepts demand equal attention.

C. Michael Walton will lead a follow-up conference on Intermodalism: Making the Case, Making it Happen, in December 1994. The success of the first Intermodal Planning Conference prompted DOT to sponsor with others a second intermodal conference. The focus of the December 1994 conference will be a series of commissioned papers and an examination of best-case practices in intermodalism. The sponsoring federal liaisons for this second project are: Dane Ismart, Federal Highway Administration; Lawrence J. Kiernan, Federal Aviation Administration; Richard Walker, Maritime Administration; Robert G. Owens, Federal Transit Administration; John F. Cikota, Federal Railroad Administration; and Nancy Harris, Office of Intermodalism.

An Evolving System that Requires Training and Research

Intermodal planning, although recognized as a goal, is an evolving dynamic practice, not a static targeted concept. A framework tempered by experience is needed to enhance the practice or application of such planning. Conference participants concluded that a planning approach should include a "system" inventory, development of a mobility index, identification of intermodal performance measures, large-scale training and education on intermodal planning, analysis of national freight corridors, and development of an informational infrastructure to predict transportation flows over time.

ISTEA is the harbinger of a new era in transportation. In creating ISTEA, Congress recognized that a new framework had to be established for transport systems planning and implementation that would take into account the demands of global economic and environmental sensibilities. The act outlines a new agenda and recognizes that flexibility in planning and funding requires that imagination and innovation be included in solutions to transportation problems. Inherent in the quest for those solutions will be the need to test new planning models and to analyze how resources are applied to those solutions. This three-day conference established the beginning of an intermodal action agenda. Specific research recommendations and action items included

1. Document ongoing efforts by MPOs, states, and the private sector to conduct intermodal planning and cross-modal analysis. Special consideration should be given to identifying successful efforts and confronting and resolving institutional barriers.

2. Document progress of the states in the development of multimodal plans and intermodal management systems. The research should examine broad issues of statewide concern, such as rail, air, and highway corridors affecting the state or a group of states, and identify techniques for addressing these issues.

3. Quantify the costs and benefits of modal alternatives, life-cycle costs, long-term subsidy requirements, and external costs in present value terms:

4. Develop multimodal and intermodal performance measures and standards that can be used for planning and for monitoring the performance of the intermodal system. This includes the possible development of a mobility index.

5. Develop tools to identify and measure the impacts of intermodal operational improvements on the transportation system. With regard to planning tools, special consideration should be given to the use of geographic information system technology.

6. Update research in consensus-building techniques and conflict resolution.

7. Examine the application of improved electronic technology for enhanced decision support, service provision, and reliability.

8. Examine the impact of intermodal operations on facility designs, curbside management, and transportation corridor use.

9. Examine nontransportation mobility options (e.g., telecommunications and paperless record keeping) and the impact of land use planning in an intermodal context.

10. Document regulatory and institutional issues that affect the creation and ongoing operation of intermodal transportation planning, including cost and labor effectiveness, jurisdictional issues, and stakeholder participation.

11. Examine various approaches to developing an intermodal management system, and develop effective strategies for implementing them. As part of this effort, the data and data-collection needs of such systems should be examined carefully.

The next action steps to enhance the prospects of intermodal planning should include

1. The federal government, probably through the U.S. DOT, should identify a limited number of high-priority national freight corridors to complement the National Highway System. In this study, improvements needed to facilitate global competitiveness should be identified, and a process for involving states, MPOs, governmental agencies, and the private sector

Steering Committee for Intermodal Planning Issues Conference

C. Michael Walton, *Chairman*, University of Texas, Austin
David Preston Albright, Alliance for Transportation Research
Gregory P. Benz, Parsons Brinckerhoff Quade and Douglas, Inc.
Lawrence D. Dahms, Metropolitan Transportation Commission
Albert C. Eisenberg, American Institute of Architects
Thomas L. Hardeman, United Parcel Service
Jack D. Helton, Sea-Land Service, Inc.
Lester A. Hoel, University of Virginia, Charlottesville
Michael P. Huerta, Office of Intermodalism, U.S. Department of Transportation
Gloria J. Jeff, Michigan Department of Transportation
Richard R. Kelly, Port Authority of New York and New Jersey
David D. King, North Carolina Department of Transportation
Richard F. Marchi, Massachusetts Port Authority
David F. McInnes, Atchison, Topeka, and Santa Fe Railway Company
Michael D. Meyer, Georgia Institute of Technology
Kenneth H. Murdock, U.S. Army Corps of Engineers
Raymond J. Rought, Minnesota Department of Transportation
Sarah J. Siwek, Los Angeles County Transportation Commission
Janice M. Titus, Lambert-St. Louis International Airport
W. Douglas Varn, National Railroad Passenger Corporation
M. John Vickerman, Vickerman, Zachary, Miller.

The conference was preceded by three earlier TRB conferences aimed at clarifying the complex planning issues involved in ISTEA implementation. Available from TRB are the earlier conference reports: TRB *Special Report 237, Moving Urban America*, a discussion of the new responsibilities for MPOs and states as they grapple with urban mobility and Clean Air Act mandates; *Transportation Research Circular 406, Transportation Planning, Programming, and Finance*; and *Transportation Research Circular 407, Transportation Data Needs*.

For additional information on the TRB conferences and resultant publications, see page 32.

in multistate efforts to plan and improve these corridors should be recommended.

2. Educational materials that explain the intermodal policy and substantive provisions of ISTEA should be developed and widely distributed.

3. Intermodal and multimodal players should convene their interest groups to develop a broad-based advocacy agenda for building on the multimodal and intermodal aspects of ISTEA.

4. Aviation reauthorization legislation should establish planning links between airport system and master plans and ISTEA state and regional plans. Consistency should be required, as should cooperation and consultation.

5. Technical guidance materials should recognize the different institutional structures and decision-making environments that exist throughout the United States. Subsequent regulations and technical guidance should provide flexibility in terms of the type and timing of response

that is considered acceptable. However, the technical guidance that follows should provide some level of consistency across the many different responses.

6. On the premise that the best way to further a concept is to demonstrate it, case studies and demonstrations of good intermodal planning practice should be developed. It was noted that the Federal Highway Administration has already funded case studies and that ISTEA provides funds for state intermodal planning demonstrations. However, these case studies and demonstrations might not be reflective of what is needed to advance understanding of intermodalism. An example of such a demonstration might be the integration of an urban area's congestion management system.

7. To further advance intermodalism in future years, educational materials appropriate for college transportation programs should be developed and disseminated to educators.