

ITS/Intermodal Freight Program

Listening Sessions: Status Report

U.S. Department of Transportation
Office of the Secretary
Office of Intermodalism

December 1998

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Objectives of Listening Sessions

- Assess the market for an ITS/intermodal freight program
 - Impediments to intermodal freight movement
 - Current IT and ITS applications to intermodal freight operations
 - Opportunities for public-private cooperation to accelerate the application of ITS to intermodal freight operations
- Discuss the scope of an RFP for ITS/intermodal freight operational tests
 - Types of projects and anticipated benefits
 - Participant roles and responsibilities
 - Proposal submission and selection process

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Schedule of Listening Sessions

Seattle	November 4
Norfolk	November 10
Chicago	November 19
Los Angeles	November 24
Houston	December 9
New York	December 16

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Listening Session Agenda

- Introductions
- Purpose of the Program
- Session Objectives
- Discussion:
 - Intermodal Freight Issues and Bottlenecks
 - ITS Initiatives and Opportunities
- ITS/Intermodal Freight Program: Preliminary Recommendations
- Next Steps

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ITS/Intermodal Freight Program

Preliminary Recommendations

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Objective

- Initiate an ITS/intermodal freight program that will promote the application of ITS technology to:
 - Enhance the safety, reliability, and responsiveness of the intermodal freight system
 - Contribute to the national goals of economic growth and national security

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Study Background

ITS and Intermodal

- Increasing use of information technology and ITS in intermodal freight movement
- Emerging applications for ITS in:
 - Trip management – e.g., supply chain management
 - Node management – e.g., rail terminal, port, and airport management
 - Link management – e.g., tracking and asset management of trucks, chassis, rail equipment, vessels
- Study issue: Are there opportunities to accelerate the application of ITS to intermodal freight movement?

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Study Background (continued)

Intermodal ITS and Federal Role

- Increasing Federal interest in intermodal freight movement due to:
 - Global economic competition
 - Regulatory and safety concerns
 - National defense and security
- However, intermodal industry is driven primarily by private sector, not the public sector
- Historically, Federal role has focused on funding, regulation, and safety
- Study issue: What is the appropriate Federal role in an ITS/intermodal program?

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Intermodal Freight Issues and Trends

- Rapid growth in global trade; increasing business and carrier competition
- Large number of diverse stakeholders; changing roles for private and public sector organizations
- Outmoded information exchange practices; shifting from paper to electronic environment
- Rapidly evolving information technologies; increasing uncertainty and financial risk

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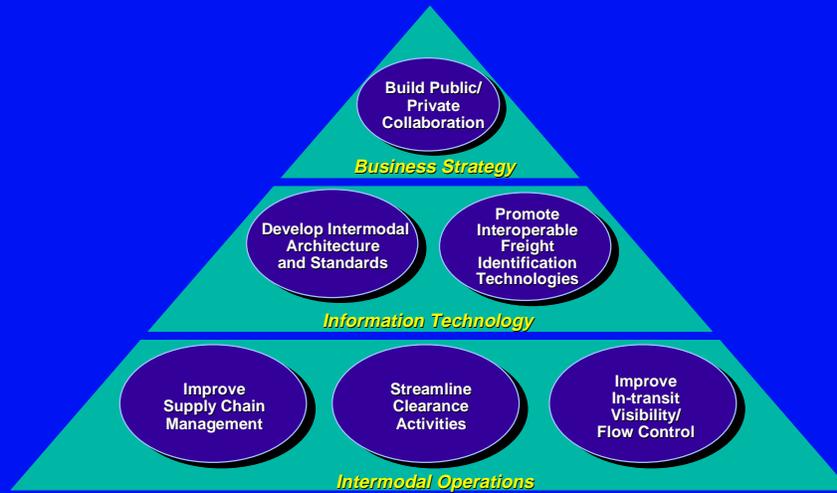
Intermodal Freight Issues and Trends (continued)

- Increased responsiveness to shipper/receiver; pushing for integrated supply chain management
- Need for better asset management; looking for more efficient use of company equipment as well as gray boxes, common chassis pools, etc.
- Inadequate intermodal infrastructure; demand outstripping capacity at ports and terminals
- Increased theft of cargo; need for better security

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Opportunities for ITS/Intermodal Initiatives



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National ITS/Intermodal Program Elements Preliminary Recommendations

- Business Strategy
 - Forums and business case
- Information Technology
 - Demonstration projects and technical assessments
- Intermodal Operations
 - Demonstration projects and technical assessments

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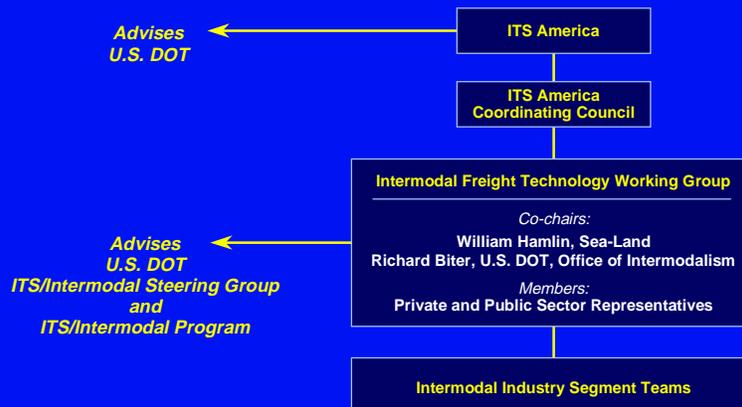
National Public-Private Intermodal Forum

- Establish an Intermodal Freight Technology Working Group to:
 - Promote dialogue between the private and public sectors
 - Assess costs and benefits of ITS applications
 - Encourage application of ITS to intermodal freight
 - Promote interoperability among industry stakeholders
 - Improve communication and technology transfer between DOD and commercial freight applications

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Intermodal Freight Technology Working Group Organization



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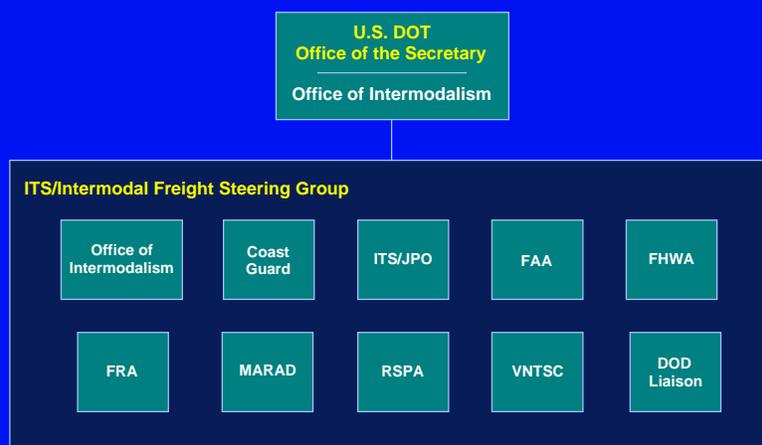
U.S. DOT ITS/Intermodal Steering Group

- Formalize U.S. DOT ITS/intermodal freight steering group
- Responsibilities:
 - Coordination of U.S. DOT ITS/intermodal activities and initiatives
 - Support of regional and state intermodal initiatives
- Members:
 - Office of Intermodalism
 - Coast Guard
 - ITS/JPO
 - FAA
 - FHWA
 - FRA
 - MARAD
 - RSPA
 - VNTSC
 - DOD liaison

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U.S. DOT ITS/Intermodal Freight Steering Group Organization



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Regional and Local Intermodal Forums

- Host regional forums to increase stakeholder collaboration and improve cooperation
- Promote local intermodal freight advisory groups to address problems unique to those areas

Education and Training Initiatives

- Expand current ITS training and education to cover ITS/intermodal applications
- Educate the intermodal industry about the costs and benefits of ITS applications and interoperability
- Develop electronic clearinghouse of best practices for use by public and private sector

Information Technology

Demo Projects and Technical Assessments

- **Intermodal architecture and standards development**
 - Develop ITS architecture for intermodal freight movement
 - Develop standards for freight identification technologies to ensure interoperability

- **Interoperable technologies**
 - Demonstrate uniform chassis tagging
 - Demonstrate hazardous materials tag
 - Demonstrate security tag
 - Monitor and evaluate DOD's AIT project

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Intermodal Operations

Demo Projects and Technical Assessments

- **Supply chain management**
 - Demonstrate viability of end-to-end supply chain management
 - Encourage evolution and dissemination of supply chain management techniques
 - Monitor DARPA initiatives; transfer lessons learned to commercial sector

- **In-transit visibility**
 - Demonstrate dray in-transit visibility with en-route truck identification technology

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Intermodal Operations ***Demo Projects and Technical Assessments (continued)***

- Clearance
 - Demonstrate standardized automated gate clearance systems
 - Monitor and evaluate video and optical character recognition technologies
 - Streamline Customs clearance
 - Monitor international border clearance operational tests; transfer lessons learned to ports

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Regional Platforms

- Use regional platforms to coordinate and demonstrate public and private ITS/intermodal applications
- Candidate regional platforms:
 - Existing public-private sector collaboration
 - ITS technologies being deployed
 - Focus on intermodal activities or infrastructure improvements
 - High degree of interest from public and private sectors
- Candidate locations include:
 - West, Pacific Northwest, Northeast, Mid-Atlantic, Southeast, Gulf, and Midwest

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Regional Platforms



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Schedule



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Budget

Initiative	1999	2000	2001
Operational tests	\$500 thousand	\$1 million	
Research and development	\$150 thousand		
Support	\$100 thousand		