ITS/Intermodal Freight Operational Test Project

listening sessions

proceedings

prepared for

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

prepared by

Cambridge Systematics, Inc.

in association with

VZM/TranSystems

January 29, 1999

listening sessions proceedings

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150 CambridgePark Drive, Suite 4000
Cambridge, Massachusetts 02140

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Re: Listening Sessions Proceedings

Dear Attendee:

Enclosed you will find a summary, notes, and the slide presentation from the meeting you attended this fall to discuss information technology and intelligent transportation systems (ITS) applications across the intermodal freight system that can enhance productivity and safety. The "listening session" was conducted as part of a new initiative in which the U.S. DOT will solicit and fund proposals for operational tests to demonstrate improvements in intermodal freight operations from information sharing.

Listening sessions were held in Seattle, Norfolk, Chicago, Los Angeles, Houston, and New York City. The objectives of each session were to assess the market for an ITS/intermodal freight program and to discuss the scope of ITS/intermodal freight operational tests.

If you are interested in the proceedings from any one of the other five listening sessions that were held, you may find the proceedings on the Cambridge Systematics website at http://webservices.camsys.com/national.htm under the U.S. DOT ITS/Intermodal Freight Operational Test Database icon. Please feel free to call me at (617) 354-0167 if you have any questions about the listening sessions or the operational test project.

Sincerely,

CAMBRIDGE SYSTEMATICS, INC.

Cathy Erickson
Senior Associate

CLE/ef/6560
Enclosure

Norfolk Listening Session

Memorandum

TO: Chip Wood, U.S. DOT Secretary's Office of Intermodalism

FROM: Jason Schrieber

DATE: December 28, 1998
RE: Norfolk Listening Session – Meeting Notes
ITS/Intermodal Freight Program
Tuesday, November 10, 1998

The meeting was held at the offices of the Virginia Port Authority (VPA), Norfolk, Virginia. A summary of the meeting follows. Attached are an agenda, a list of attendees, full meeting notes and a copy of the presentation on the National ITS/Intermodal Freight Program: Preliminary Recommendations.

SUMMARY

The objectives of the meeting were to assess the market for an ITS/intermodal freight program and to discuss the scope of a request for proposals (RFP) for ITS/intermodal freight operational tests. The following issues were discussed:

Market

Impediments to intermodal freight movement

- Hampton Boulevard, the main access road to the Hampton Roads ports, is a constant source of congestion and traffic conflicts, particularly when traffic backs-up out of the harbor tunnel near peak periods.

- Thirty to 40 percent of containers at the ports are empties. Repositioning empty containers and chassis causes significant added congestion and delays at the ports.

- An estimated 18,000 trucks enter and exit the Hampton Roads area each day. However, local freight planning is impeded by a limited amount of available information. Truck counts have not been performed on any city roads, and information about truck, container and dray movements is purely anecdotal. Routing and time sensitivity information is nonexistent.

Current IT (information technology) and ITS applications to intermodal freight operations

- The Virginia Department of Transportation (VDOT) has developed a real-time surveillance and traveler information system on 20 miles of regional highway with plans to expand to 120 miles.

- Several shipment tracking databases are used by local shipping lines, including the Global Transportation Network (GTN) operated by the Department of Defense (DOD).

- Norfolk Southern described the use of a "California Gate" in Savannah where hand-held computers and video cameras help to quickly identify and process trucks arriving and departing the terminal gate.

Opportunities for public-private cooperation to accelerate the application of ITS to intermodal freight operations

- Separate shipping lines, ports and railroads maintain extensive freight shipment databases. While these databases contain similar information, they are incapable of sharing information electronically. A standardized interface or data exchange protocol project would enable separate freight stakeholders to better accommodate customer needs and avoid delays and congestion.

- Incorporation of Norfolk Southern's Strategic Intermodal Management Systems (SIMS) or "California Gate" technologies at the Norfolk terminals would help alleviate delays at the terminal gate.

- Norfolk Southern suggested incorporating its automated system for advanced notification of train arrivals into a traveler information or signal timing system to divert traffic from rail grade crossing conflicts.

Request for Proposals (RFP)

Scope of operational tests and anticipated benefits

- One specific site or a physical facility should be selected.

- Operational concept should be discrete, tangible, and well-defined.

- In order to improve the effectiveness of operational testing funds, it was suggested that the proposal build upon existing systems or capabilities to avoid design and development costs.

- Evaluation cost should be minimized in order to maximize development and demonstration of the operational concept.

Operational test roles and responsibilities

- The work would be conducted in coordination with the Regional Planning Commission as opposed to being part of the Intermodal Management System.

- VPA, Virginia International Terminals (VIT) and Norfolk Southern all expressed interest in being active contributors to a proposal.

Proposal submission and selection process

- Web posting of the business plan, a reference document for responding to the RFP, is scheduled for January 1999; issuance of the RFP, February 1999; and selection of awards, April 1999. Selection is through a competitive process, and one or two awards are anticipated.

Attachments

List of Attendees

Norfolk Listening Session, November 10, 1998

Chip Wood, Office of Intermodalism

Carl Seiberlich, VZM/TranSystems Corporation

Dwight Farmer, Hampton Roads Planning District Commission

Bob Merhige, Virginia Port Authority

Rick Knapp, Virginia International Terminals

Thomas Finkbiner, Norfolk Southern Corporation

Richard Grenville, Stevedoring Services of America

Paul Chertoff, NOL (USA), Inc.

Andy Bayuk, Universal Maritime Service Corporation

Davis Gray, Norfolk Airport Authority

J.J. Keever, Hampton Roads Maritime Association

Frank Mach, Maritime Administration South Atlantic Region

William Richards, Military Ocean Terminal Fleet Industrial Supply Center

Ray Kirby, Norfolk Naval Base

Jason Schrieber, Cambridge Systematics

Cathy Erickson, Cambridge Systematics

Norfolk Listening Session Notes

Chip Wood/OST

The objectives of the six listening sessions are to go around the country, find out what the regional priorities for intermodal freight movement are, and determine how intermodal stakeholders would design an operational test of electronic information exchange to facilitate intermodal freight.

Dwight Farmer/HRPDC

- Intermodal Industry Advisory Committee formed to look at issues affecting intermodal freight movements
- Hampton Roads Planning District comprises 16 local governments
- Participants want to know how containers move through the region
- Sources that exist at present are anecdotal
- Spoke of NDOT Smart Traffic Center. Surveillance of 20 miles of freeways; real-time traveler information; eventually 120 miles – all of region's urbanized area.
- Potential to marry intermodal information needs with capabilities of Smart Traffic Center?

Discussion

- Note many autonomous information systems
- Need electronic communication
  - Based on multiple modes
- Beginning to make needed links that will facilitate cargo flow.

Rick Knapp/VIT

- Perhaps concentrate on truck movements, e.g., plan gate arrivals
- Inform truckers of congestion on Highway 64.
  - Do not have the flexibility of cars if there is a traffic problem (construction, incidents)

Chip Wood/OST

What kinds of truck information are available?

Rick Knapp/VIT

No information on routing or cargo information such as time sensitivity

Discussion

- Truckers know route times, congestion on highways
- What they want to see improved is waiting time at terminal
- Notion that although waiting times can be improved, cannot altogether be eliminated

Rick Knapp/VIT

Problem of empty containers – try to organize their movement so as not to disrupt traffic. While containers may not be needed at port, chassis are needed.

Chip Wood/OST

How much traffic is the result of repositioning containers?

Paul Chertoff/NOL

30-40 percent of containers at depot are empties. (Question of a regional depot from the group)

Rick Knapp/VIT

Lifting on/off rail is expensive – need for automation (application of technology)

Discussion

- Recent intermodal project to examine shared facilities (private and DOD) – too many players got involved (especially Federal)

(Back to information systems that are in place and support intermodal freight)

- **William Richards/MOTFISC**
- Talks of Automated Manifest System
- Information is available through EDI
- Global Transportation Network (GTN)
  - Close to real-time information on location of goods
- Current projects
  - In-transit visibility
  - RFID tags

New Ideas

- For future, automatic readers for containers
- Mention of need to shorten movement of freight; instead of going into/out of Norfolk – go direct to destination
- Overseas Customs Clearance

Chip Wood/OST

- Almost any pilot test in this area would concentrate on traffic modes.
- Ask how many trucks a day at terminals?

Rick Knapp/VIT

- Congestion at terminals varies with time; fluid, dynamic
- Not sure how information would help ease congestion

Tom Finkbiner/NS

- Use hand-held computers and video cameras to identify trucks coming into gates. Experience with technology is that there are no common standards between railroads, railroads with customers, railroads with truckers, etc. Video use at California Gate in Chicago.
- There are tactical steps in using technologies

Rick Knapp/VIT

Another misconception is that terminals schedule trains at their desire (other misconception is that congestion at gates can be solved.)

Tom Finkbiner/NS

Providing information is not always an answer to traffic problems – sometimes, what to do with information, is it valuable?

Break

Cathy Erickson of **Cambridge Systematics** gave a presentation on preliminary recommendations for the ITS/Intermodal Freight Program.

Focus on pilot test in Norfolk Region

Tom Finkbiner/NS

- Use California gate technology at local terminals (e.g., NIT or PMT)
- Apply SIMAS (Strategic Intermodal Management Asset System)

- EDI–transmitted bill of lading married with document given at gate (entered with hand-held computer). Driver doesn't get out of truck.

- Link traffic signal crossings with railroad grade approaches, in order to divert traffic to grade-separated

Discussion

- Control of access to information is important
- Base a project on data standards? No
- ITDS handout from Carl Seiberlich

Dwight Farmer/HRPDC

18,000 trucks enter/exit Hampton Roads area each day at external station; does not include "internal" trips. Need to know motor carrier perspective on usefulness of real-time information about terminal congestion

Discussion

Extend hours of operation of terminal would reduce congestion at terminal. Rick Knapp notes that this is a good idea but there are problems with the labor contract.

Suggestion from the group: Take proposal ideas to Inland Transportation Committee (Rick will handle.)