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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Cambridge Systematics, Inc.
150 CambridgePark Drive, Suite 4000
Cambridge, Massachusetts 02140

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January 29, 1999

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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

Los Angeles Listening Session

Memorandum

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

FROM: Cathy Erickson

DATE: December 22, 1998

RE: Los Angeles Listening Session – Meeting Notes
ITS/Intermodal Freight Program
Tuesday, November 24, 1998

The meeting was held at the offices of the Southern California Association of Governments (SCAG), Los Angeles, California. A summary of the meeting is presented first, followed by more detailed notes. A list of participants is found at the end of this memorandum.

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

- Goods movement region is extremely large, making effective area-wide intermodal freight management difficult.
- Highway capacity for access to Los Angeles International Airport is poor.
- Port terminal capacity is limited and will be exacerbated by predicted huge increases in container movements.
- Moving cargo from marine terminals onto the highways creates major chokepoints.
- Warehousing of empty containers strains a facility's capacity.
- Communications standards, especially for operators of metropolitan freeway systems to communicate with steamship companies or motor carriers, do not exist.

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

- PrePass weigh station preclearance system for enrolled motor carriers exists at 20 facilities in California, including San Onofre in Southern California.

- Electronic toll collection is being demonstrated in the state on I-80 at the Carquinez Bridge in the San Francisco Bay Area.

- Intermodal Dispatch system shared by trucking companies and terminals at the Ports of Los Angeles and Long Beach provides real-time terminal information including container arrival and shipping dates, container location and status, and bill of lading numbers.

- California is a pilot state in the Commercial Vehicle Information Systems and Networks (CVISN) project.

- International electronic border clearance capabilities are being demonstrated at the California-Mexico border.

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

- Provide freeway or corridor traffic information specifically tailored to motor carrier operational needs, e.g., congestion and incidents.

- Develop a public-private traffic information network consisting of information from ATMS/ATIS (Advanced Traffic Management Systems/Advanced Traveler Information Systems) deployments plus container (or vehicle) tracking information (from transponders). Develop an Internet-accessible clearinghouse for this and other useful information.

- Track the movement of containers to help avoid deadhead (empty cargo) miles.

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.

- Operational concept should be based on customer demand rather than be technology-driven.

- Performance measures should be carefully thought-out in advance of starting the test.

- Truckers should be the primary area for assessing benefits.
- Evaluation cost should be minimized in order to maximize development and demonstration of the operational concept.

Operational test roles and responsibilities

- Both public and private sector participants contribute information that synergistically improves the value of all information.

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

Agenda

- Introductions
- Opening Remarks
  - Purpose of the Program
  - Session Objectives
- Participant Perspectives of Intermodal Freight Issues and Bottlenecks
- Discussion – one hour
- Break
- ITS Initiatives and Opportunities
- Presentation on ITS/Intermodal Freight Program: Preliminary Recommendations
- Private Perspectives on Testing Intermodal Concepts
- Next Steps

List of Attendees

Los Angeles Listening Session, November 24, 1998

Jay Winter, Steamship Association of Southern California

Steve Longbotham, Marine Terminals Corporation

Capt. Karsten Lemke, Zim American Israeli Shipping Company

Phillip Wright, Hanjin Shipping

Masa Morimoto, Port of Los Angeles

Kerry Cartwright, Port of Long Beach

Michelle Smith, L.A. County Metropolitan Transportation Authority

David Stein, Southern California Association of Governments

Kristine Leiphart, Southern California Association of Governments

Doug Wylie, Caltrans

Lynne March, Caltrans

Bill Felts, Caltrans

Michelle Fell, Caltrans

Pamela Marston, FHWA/FTA Metropolitan Office

Richard Walker, MARAD

Cathy Erickson, Cambridge Systematics, Inc.

John Vickerman, VZM/TranSystems

Daniel Smith, The Tioga Group

Los Angeles Listening Session Notes

Richard Walker, MARAD, opened the meeting, gave introductory remarks, and asked for reports and perspectives from the participants, which follow.

David Stein and Kristine Leiphart,
Southern California Association of Governments (SCAG)

- Southern California Freight Advisory Committee has been formed.

- Regional Transportation Plan was prepared and adopted by SCAG. It includes access to airports, exclusive truck lanes, and ITS applications.

- Access to airports is a major problem – the need exists for more capacity for trucks and goods movement in and out of Los Angeles International Airport (LAX). Development of a goods-only airport (using old military airports) is seen as a potential solution to LAX's congestion problems.

- Exclusive truck lanes are proposed – based on conducted benefits/costs analyses, exclusive truck lanes serving the ports have the greatest potential for producing congestion and air quality improvements. State Route 60 (in the year 2010), and Interstates 5, 15, and 710 (in the year 2020) are candidate highways. A truck lane task force has been formed. A two-year feasibility study precedes construction.

- ITS applications are important potential solutions to capacity problems. Inability to add highway capacity necessitates looking at technology-related solutions.

Doug Wylie, Caltrans

- PrePass system is installed at 20 weigh stations in California. Pre-approved carriers equipped with transponders may bypass weigh stations.

- Electronic toll collection (ETC) is being demonstrated in the state on I-80 at the Carquinez Bridge in the San Francisco Bay Area. ETC is available on the toll roads in Orange County.

- Automated Highway System was demonstrated in San Diego.

- Various corridor ATMS use loop detector data for traffic management.

- State ITS/CVO Strategic Business Plan is being developed, and will be completed at the end of 1998.

Michele Fell, Caltrans

- Interstate 5 ITS Priority Corridor includes a CVO element that recognizes CVO's unique information needs and regulatory structure that is in place for ensuring compliance.

- Strategic plan is in the approval process. Approvals by state and MPO agencies are expected next year. In it, ITS will be established as a primary mitigation measure for various problems.

- In January 1999, an RFP for a CVO communications infrastructure will be issued.

Bill Felts, Caltrans

- "California Transportation Plan" will be used for improving freight movement in the state. One objective is to mainstream ITS.

- Air cargo intermodal study looks at how to expand capacity through new technology.

Questions and group discussion of the ITS Priority Corridor followed the Caltrans overviews. Major points follow in the next paragraph.

- The ITS Priority Corridor includes SCAG, the San Diego Association of Governments, and private sector participation. The two associations oversee the development of the Southern California Strategic Plan, which is based on numerous regional strategic plans. Unlike the I-95 corridor, the I-5 is not a linear corridor, i.e., it consists of multiple corridors. The showcase of corridor projects includes traffic management centers with networks of loop detectors, closed-circuit television (CCTV), service patrols, and ramp meters. The primary focus of the showcase is the development of a communications infrastructure.

(Reports and perspectives resume.)

Kerry Cartwright, Port of Long Beach

- Electronic data interchange (EDI), ATMS, and provision of ATIS information to truckers, are of interest because of their potential to facilitate the delivery of goods to the port. Toll collection, as on Route 110 (a main feeder to the port), is cited as affecting the movement of trucks to the port.

- Infrastructure improvements to support the provision of real-time information to truck drivers delivering goods to the port, especially drivers on Routes 710 and 110, are desired. Improvements could include changeable message signs, CCTV in key locations, and highway advisory radio.

- Expressed interest in performance measures. In this regard, truckers would be a primary focus area for assessing benefits. Perhaps trucks with transponders could be used for data collection (as in the Transit-Probe project where transponder-equipped buses are used to collect data).

Masa Morimoto, Port of Los Angeles

- Steamship companies are collaborating with trucking companies to exchange container information in a dispatch system.

- The port has limited capacity with tremendously increasing container movements. Expressed desire for federal funding to ease congestion.

- Terminal capacity is sufficient if all nodes in the supply chain management operate 24 hours per day, e.g., trucking companies pick-up and deliver 24 hours.

Phillip Wright, Hanjin Shipping

- Elaborated on the Dispatch system – Dispatch system receives information from various sources and from the point of inception indicates where containers are.

- Noted that if containers actually are tracked, using transponders, the information could be linked with information provided through an ATMS, such as loop detector information, to provide fuller, real-time travel information.

Discussion of information sharing and communications standards follows.

- Need for communications standards, especially for steamship and trucking companies to communicate with operators of freeway systems, was expressed by ***Karsten Lemke, Zim American Israeli Shipping Company***. This raises the issue of proprietary systems and the necessity of preserving the investments of operators of legacy systems.

- ***Pamela Marston, FHWA/FTA,*** noted that the kernels of information that could be shared must be identified. Interoperability is extremely important. Cooperation in terms of identifying information to be shared and moving towards standards is necessary.

- Mr. Wright offered that the chokepoint is moving cargo from terminals to the highways. This is where ITS needs to come in. Infrastructure improvements can help relieve this situation and can be in the form of information networks wherein the public contributes information (real-time ATIS/ATMS) and the private sector contributes information (from dispatch systems).

- Asset utilization, trucks "carrying air" (empty containers), and warehousing of empty containers were mentioned as prime areas for ITS application. Empty containers were stressed as placing heavy demands on capacity. How can ITS and information technology be used to address these related topics?

Cathy Erickson, Cambridge Systematics, gave a short presentation on intermodal impediments and opportunities for ITS/intermodal initiatives. **John Vickerman, VZM/ TranSystems,** gave a short overview of the schedule for issuance of the RFP and acceptance of proposals.

Mr. Walker opened a discussion of ITS/intermodal opportunities in the Los Angeles region. Major points are found in the following three bullets.

- ***Dan Smith, The Tioga Group***, noted that benefits to be realized from the operational test must be clearly understood and reflect that the ITS application is a good investment. Customer demand should drive the test, not the quest to apply a technology to a problem.

- Capt. Lemke stressed that open communication among participants will be a significant factor in the success of a project.

- Ms. Erickson presented an overhead depicting how intermodal freight flows can be mapped physically (truck-gate-port, etc.) with attendant information flows (dock appointment, notification of arrival, bill of lading, etc.). Attendees agreed that points where information is unavailable must be identified for freight flows to be improved.

The group made the following suggestions for a Los Angeles pilot test:

- Focus on one specific site or a physical facility.

- For any project, calibrate it today for comparison of the effects (outcome) of ITS application.

- Try to minimize the cost of the evaluation in order to maximize development of the operational concept.

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

- Goal should be to provide real-time information to truckers to facilitate the transport of goods to and from ports. Freeway or corridor information that is specifically tailored to motor carrier operations including their primary routes could be provided from ATMS/ATIS. Information from transponders on trucks or containers could be combined with the ATMS information, providing a basis for a network or clearinghouse, for enhanced coverage and applicability.

- Tracking the movement of containers also could help motor carriers avoid deadhead miles and improve overall asset utilization.

- Internet should be used as the mechanism for information exchange.