



**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

ITS/Intermodal Freight Operational Test Project

prepared for

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

prepared by

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

in association with

VZM/TranSystems

January 29, 1999

January 29, 1999

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.

A handwritten signature in black ink, appearing to read "Cathy Erickson". The signature is fluid and cursive, with a small dot above the 'i' in Erickson.

Cathy Erickson
Senior Associate

CLE/ef/6560
Enclosure

New York City Listening Session

Memorandum

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

FROM: Lance R. Grenzeback

DATE: December 20, 1998

RE: New York Listening Session – Meeting Notes
ITS/Intermodal Freight Program
Wednesday, December 16, 1998

The meeting was held in Conference Room 8/9, World Trade Institute, One World Trade Center, 55th Floor, New York, New York. A list of the names and affiliations of the meeting participants is attached to this memorandum.

SUMMARY

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

Market

Impediments to intermodal freight movement

- Freight volumes through the region will double by 2040; the region does not have the space or funds to build extensive new terminals, rail yards, and truck terminals.
- The introduction of mega-container ships capable of carrying 4,000 or more container TEUs will strain the capacity of the port and customs operations.
- The sale of Conrail to CSX and Norfolk Southern will lead to a restructuring of intermodal rail services and an increase in the volume of intermodal traffic. This may strain the capacity of intermodal rail terminals and related facilities.
- Some import/export information management systems such as the Automated Export Reporting System are reaching the end of their useful life systems.

- The market penetration of automatic vehicle/equipment identification tags is low. There are few economic incentives for motor carriers and container and chassis owners to purchase and maintain AVI/AEI tags. This makes it uneconomical for terminal operators to rely on tags and readers for gate clearance.
- The EZ-Pass toll tags are sold for a single vehicle type; the EZ-Pass system cannot automatically identify changes in truck configuration (e.g., between tractor only and tractor with a container-on-chassis trailer) and adjust toll fees accordingly. Intermodal motor carriers have been slow to adopt EZ-Pass because it is not cost-effective for their operations.
- Sixty percent of municipalities in the region restrict nighttime truck deliveries; this forces carriers to make pick-ups and deliveries during congested daytime hours.
- There has been relatively little coordination between the marine-side and land-side on freight transportation issues; the biggest challenge in the region will be getting people to the table.
- The Federal Government does not fully appreciate the scope of freight movement through the New York region, its importance to the regional and national economy, the magnitude of the effort needed to improve freight movement.

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

- The Port Authority is working on a port information system that will tie together customs, terminals, railroads, and motor carriers.
- The I-95 Corridor Coalition is funding the FleetForward operational test, which is providing real-time traffic information to improve motor carrier operational efficiency and safety.
- The region has developed regional and sub-regional ITS architectures to interconnect public sector traffic management agencies; however, there are few links with private sector as yet.
- ALK is developing en-route systems (communications and information management technology) that improve motor carriers' capabilities to make routing decisions and conduct electronic business transactions from the truck cab.
- Detailed information on container movements by ship and barge are available in EDI form.
- Maher Terminals is using an OCR (optical character reader) system to process upwards of 4,200 trucks, containers, and chassis through its gates each day. At this time, OCR systems are more cost effective than RFI tag systems.

- Internet-based electronic data interchange systems are available, cost effective, and easy to use compared with established EDI software.
- ITS applications for managing the flow of intermodal containers are being investigated by the Port Authority as part of its port strategy study and by the NYC Economic Development Corporation as part of its port development and cross-harbor rail tunnel studies.

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

- Tag chassis for better management of chassis pools; use the tagged chassis as traffic probes to improve information on intermodal freight movement and traffic flows.
- Tag or otherwise identify hazardous materials moving by container; consistent and uniform information on hazmat movements would improve handling and safety for steamship lines, terminal operators, and motor carriers.
- Use ITS technology to manage (by appointment or pricing) commercial parking spaces in the highly congested New York central business district.
- Develop uniform gate clearance systems at the region's terminals.
- Provide real-time information of tide conditions and channel depths to pilots; link vessel traffic management systems more closely to terminal and gate management systems.

RFP

Scope of operational tests and anticipated benefits

- The operational tests should focus on moving more and better information among shippers, carriers, terminal operators, and receivers.
- Uniformity and interoperability are critically important.
- The operational tests must consider international freight operations.
- Operational tests must consider carefully their impact on data privacy and business confidentiality.
- The operational tests must include a public outreach effort to explain freight issues and benefits to the industry and the public.

Operational test roles and responsibilities

- All parties, especially government agencies involved in international freight movements, must be involved in the development of projects.
- The Federal Government should act as the catalyst and champion for uniform systems.
- The Federal Government should provide more funds for the program; the amount proposed (i.e., \$1.5 million over two years) is inadequate to the scale of the problem.
- The Bi-State Motor Carriers Conference might be utilized to help smaller carrier, warehouse operators, etc., get access to information technology.

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

New York Listening Session, December 16, 1998

Mike Onder, U.S. DOT ITS JPO

Lillian Borrone, PANYNJ-Port Commerce

Larry Sposi, PANYNJ-Port Commerce

Karen Ryan Tobia, PANYNJ-Port Commerce

Ted Matthews, NJDOT-Freight

Gerhardt Muller, USMMA

Charles Ukegbu, NYCDOT-Planning

Paul Gessner, PANYNJ-Policy

Anne Morris, City University

Alain Kornhauser, Princeton

Peter Rosenthal, PANYNJ-IT

Peter Pessuti, U.S. Customs

Bill Silberman, Stevedore Services

Dick Jones, Bi-State MC Conference

Roger Nortillo, Maher Terminals-Logistics

Frans van Riemsdyk, Maher Terminals

Hardy Huang, Evergreen

Stu Hauser, D. Hauser, Inc.

Ray Noonan, Rail Head Services

Ron Mudrak, H&M International-MIS

Don Lotz, PANYNJ-Intermodal

Michael Day, PANYNJ

Ed Knoesel, PANYNJ-Dredging
Andrew McGovern, Sandy Hook Pilot
Linda O'Leary, American Waterways
Andrew Genn, NYCEDC
L. E. Wetsel, Norfolk Southern
Ed Coyle, DOD-Logistics
Kate Quinn, FHWA-NYC
Jeff Hirsch, MARAD
Victoria Cross Kelly, PANYNJ-Port Commerce
Mr. Lewis, U.S. Customs
Ed Mark, NYSDOT-Mobility
John Hummer, NJTPA-Intermodal
Carl Seiberlich, VZM/TranSystems
Lance R. Grenzeback, Cambridge Systematics

New York City Listening Session Notes

Mike Onder/U.S. DOT ITS JPO

Opened the meeting at about 2:15 p.m. and welcomed the meeting participants. The purpose of this meeting is to discuss the development of national ITS/Intermodal Program. Materials and a letter of invitation explaining the purpose of session were sent to you; however, the letter does not mention international trade. I want to assure you that the ITS/Intermodal Program will consider international trade applications.

In prior conversations, the freight industry has asked us to consider developing an ITS program. They have told us that there is role for ITS in freight industry; and that IT systems can be linked together to benefit both public and private freight interests. We want to explore that issue today.

First, I would like to provide you with some background, then ask for feedback on your interests. In 1995 we held a meeting in Baltimore to explore the industry's interest in developing ITS applications for freight. The meeting was an outgrowth of ISTEA (Intermodal Surface Transportation Efficiency Act of 1991). We wanted to explore a partnership between ITS and the intermodal industry. Was there interest? Should we consider an intermodal architecture in future? We found that we needed to learn more about freight industry, and the industry needed to learn more about ITS.

The Baltimore conference was followed by a more successful conference that was held in Reston, Virginia in June 1998. One of the action items that came out of that conference was a call by the private and public sectors for the U.S. DOT to facilitate the development of an ITS program for intermodal freight. The approach recommended was to work with the industry to develop operational tests and use the experience of working together in the tests to come up with a better understanding of each other's interests and needs.

Today, we want to hear what you have to say about 1) intermodal issues and bottlenecks, and 2) ITS initiatives and opportunities.

Asked for self-introductions. (See list of meeting participants at the end of the meeting notes.)

Cambridge Systematics and VZM/TranSystems are putting together a design document for a request for proposal (RFP) for ITS/intermodal operational tests. We have been putting money together that can be used as seed money by consortiums of public agencies and private sector firms to try to put a first stake in ground for an ITS/Intermodal Program.

The U.S. DOT is not an intermodal agency; we are still very much a group of modal agencies. The Secretary of Transportation wants to make it more intermodal. He has launched our "OneDOT" initiative, trying to see if we can work together to bridge our stovepipe operations. The ITS/Intermodal Program is part of the OneDOT effort. We have asked Congress for \$1.5 million in seed money for ITS/intermodal operational tests. We plan to issue the RFP in February or March and hope to award the grants as soon as possible thereafter. This listening session in New York is the sixth of six listening sessions ... we

saved the best for last. The results of this meeting will be used as input to our business planning and to help design the RFP.

I would like to go around the room and ask each one of you what you see as your most important intermodal issues and bottlenecks, and where you think there are opportunities for ITS initiatives.

Lillian Borrone/PANYNJ-Port Commerce

I welcome this opportunity to get the parties together. We want to compete for [ITS/intermodal] funds, even if they are scarce. We live on a harbor that is at the edge of doubling the volume of freight flows it handles over the next 15 years. We will move forward on a number of initiatives to meet this growth. We will move forward on deepening the waterway channels. We expect to see a program of other initiatives that will lead to more port, rail, and road development serving the freight movement through the harbor. We expect to see growth in domestic demand as well as international demand; for example, we expect to see air freight traffic increase as well as port and rail freight traffic. We are on verge of significant increase in freight flows in the region, and we must act to manage them.

We have been working with Customs and brokers to improve customs systems that tie together terminals, railroads, and truck providers. We are working with the states, cities, and federal agencies on corridor programs. We are working to build a port information network that ties all port and waterside systems feeding into the landside systems. We are putting money into this effort. You will see that this region is serious about ITS and about the region's commitment to move freight.

We need to work on landside issues just as much as on channel dredging and port facilities. We realize that the port- and land-sides are not working together today. We need to work through the future of region's water and landside freight systems, and determine where there are important links. We need to determine the future vision and how will it evolve. We are starting to accumulate existing systems and beginning to link them together. We want to see how we can best serve our customer base. We will use the ITS initiative as starting point.

Larry Sposi/PANYNJ-Port Commerce

I have been involved in ITS and have represented the Port Authority at ITS and other associations working on ITS applications. One of the lessons that we have learned is that IT or ITS technology for ports must be applicable throughout the U.S.. We have been involved with the I-95 Corridor Coalition's work to get trucks up the highways to the ports. We need to tie these efforts together. Bill Hamlin is co-chairing the ITS America Intermodal Steering Committee. That group wants to tag all chassis. That project could fit in as part of a project that we want to do under this [ITS/Intermodal] program. We are looking for other ideas and initiatives as well, and may want to develop a more extensive proposal.

Karen Ryan Tobia/PANYNJ-Port Commerce

I am working with Larry and will be taking over his responsibilities when he retires. I wanted to meet people involved in the industry and learn what you need to make your business run more smoothly.

Ted Matthews/NJDOT-Freight

NJDOT has participated in the TruckDesk (now FleetForward) project being developed by the ATA Foundation and the I-95 Corridor Coalition. We are getting more involved in ITS because we are straining at the seams out there. This morning I attended a meeting with CSX and Norfolk Southern. One of the issues we discussed was what the merger will mean in terms of motor carrier movement: How will CSX's and NS' intermodal growth impact motor carrier movement in New Jersey? Will it add motor carriers to the highways or remove motor carriers from the highways? ITS is not a panacea, but it is a portion of the solution.

Gerhardt Muller/USMMA

I would like to make two points: First, I believe that it is very important to tie what you are doing with ITS and intermodal freight into international operations: How do our systems fit in with systems at the other end of the line? Do we need common protocols? We must be flexible to adjust to changes in trading patterns, regulations, policy, and the attitudes of customers. The attitude of intermodal customers is critical. Second, how do we get the word out about technology and concepts involved in an ITS/intermodal program? That requires giving thought to the structure of program. The bottom line is that an ITS/intermodal program must be doable and have credibility with its customers.

Charles Ukegbu/NYCDOT-Planning

I am representing NYCDOT and NYSDOT. I recently moved from NYSDOT to NYCDOT. I have been involved in ITS implementation in the I-95 and TRANSCOM programs. I chaired the NYC metro area ITS plan. The main challenge we found was that agencies looked only at their own jurisdiction. The Port Authority is the only one with the scope of jurisdiction to pull it all together.

Freight movement has become a key issue on the state and city DOTs' priority lists. I believe that freight ITS should be incorporated into the long-range transportation plans. We have identified things like incident management as important because incidents affect trucks and automobile travelers. We have developed a subregional architecture; and we have regional ITS architecture, that is, the protocols to share information on incidents among the 26(?) agencies involved. Our subregional architecture feeds the regional architecture. It ties in the metropolitan area agencies; but how do we tie in the private sector? We must build in an outreach program and build on the NYMTC work. Other agencies that have private sector contacts must continue the work to be done in ITS.

Most agencies do not have a traffic operations center, and those that do cater to their own mode. The traffic operations agencies only patch holes and fix lights; they have no links with police. This is changing; now the NYC Police are in the NYCDOT traffic operations center. This helps us to share information; and it will help get information to carriers. We will do what ever is necessary to keep the roads open.

The NYCDOT is open and willing to work with the private sector to respond to the RFP. We hope that a proposal would benefit from what public sector could do.

Paul Gessner/PANYNJ-Policy

Intermodal means moving goods physically and moving information. Freight data are critical for good movement and help public sector make decisions about investment on capacity, etc. We would not be moving freight just by making physical additions to our freight system; we must take advantage of ITS as an opportunity to help move freight in another way.

Alain Kornhauser/Princeton

I teach at Princeton and have a company, ALK, which is in the ITS business. I represent those who are developing systems to make freight work better. We are promoting en route commerce; that is, e-commerce when you are moving. Freight moves, but commerce needs to be going on while freight is moving. To support this we are creating en route commerce, which is built on data communications.

Step one is you need to know where everything is. We are developing in-vehicle gizmos, such as the I-95 FleetForward demonstration, to do this. We also are working with FreightLiner Corporation to develop onboard communications capabilities for e-commerce. We are working with SmartRoute on a project that will go into operation in January to put FM sideband receivers in vehicles in the DC area so that users would not be barraged by all information for all road segments. The new system will filter the information and give them only the information for their road ahead. The onboard system will get all the information, but only sends back to user what is needed. It is a "smart system." We need to pare down the information to what is necessary to the user; this is the key. We think this is the approach that will make ITS useful to the freight industry.

Peter Rosenthal/PANYNJ-IT

I work in the Port Authority's information services group. We are looking at how we can tie together the port and airport in Newark. We are also looking at the roads that tie them together and at the rails.

Peter Pessuti/U.S. Customs

Customs has played a significant role in port development and EDI. We have developed individual modules to interchange data with customers. We have long-standing work to share data; but some of these systems have reached the end of their life span. We are in a major quandary on how to move forward.

We want to control cargo movement. We do a fairly good in controlling international freight moving through the first port of call, but we do not do as good a job as freight moves inland, especially when it moves beyond the first port; for example, to a container freight station. We need to do more work.

This conference might impact our approach to that. Overall, we are interested in port development. We understand that mega-ships like the Regina Maersk, will have an important impact on resources and ports, including customs. We need to have better control over the freight if we are to handle the volume of freight in the future. We have a long history of sharing and developing information systems; we want to hear how ITS impacts freight movement.

Bill Silberman/Stevedore Services

We have lots of information. We can tell you what is moving when and where. We could give it to others if the lines give us permission. The terminal gets EDI off of the manifest and we keep track of moves through gates. The conference sends the information out every half hour in the form of EDI records. That includes information on freight moving by barge. I send this information to the lines; it could go to others for managing their freight movement.

Dick Jones/Bi-State MC Conference

The trucking industry is last link in the chain to the customer. It is the most visible link. We are very concerned about issues involving exchange of equipment from one mode to another; and in sharing of responsibility for roadworthiness of chassis among motor carriers, shippers, and the lines. We need to even out responsibilities for safety and maintenance. This is the chief objective in our current work.

Roger Nortillo/Maher Terminals-Logistics

I would like to focus on three topics: First, an area that we need to focus on is hazmat cargo movement through ports and roadways; and we need to consider the whole spectrum of hazmat cargo types. The European Community is developing smart cards to handle information about hazmat as it moves through their systems. Hazmat affects many nodes because it cannot be handled automatically as is general cargo. We need to think about using a centralized database or a smart device to protect ourselves.

Second, technology must be used in the same fashion across all modes. At the airport I get a ticket from the computer, but when I check in at the next gate, they still type information into the system. What information? Why is that necessary? We need to look at interoperability of these systems.

Third, EZ-Pass has been introduced. It is expanding and effective for tolls; but only 10-15 percent of the population sends in to get a tag. We have not put enough work into getting users to sign up. We will have the same problem with the intermodal industry. Any ITS applications need to be practical and we need to work to get them implemented and integrated into general use.

Mike Onder/U.S. DOT ITS JPO

We have seen your inbound gate operations. Can you tell us more about it?

Roger Nortillo/Maher Terminals-Logistics

Twelve years ago we introduced the use of Amtech tags, which identified trucks as they drove past the reader poles. We used the information to calculate how long the trucks were in our yard. We gave them credits for time on our terminal if they were delayed too much. We are now using OCR (optical character readers) for clearing all trucks entering our gates. We're now clear up to 4,200 trucks per day. We are using OCR because it does not require the truck company or steamship line to make a capital investment [in transponders mounted on the truck or container]. Tags are okay for a closed loop system, but not an open system. We would not go to EZ-Pass until we see a higher penetration rate.

Dick Jones/Bi-State MC Conference

The problem was that the community would not adopt the technology. About 75-80 percent of drivers are owner-operators. SeaLink issues its identification cards to an individual driver; but what about the vehicle tag? Who issues and pays for those?

Roger Nortillo/Maher Terminals-Logistics

We have handled 1.8 million transactions since June. We have a 96 percent accurate read rate; we clean up the balance with visual assist. Our only investment is at the node. At 15 mph we get a read of the chassis number.

Charles Ukegbu/NYCDOT-Planning

EZ-Pass is not an open architecture; but the penetration rate is now two million tags for toll facilities. What incentives would help the motor carriers use the tags?

Ray Noonan/Rail Head Services

The problem with EZ-pass is that the price is the same for a bobtail as for a tractor hauling a semi-trailer. We pointed this out in the planning of the program, but apparently it was overlooked. Without variability in pricing, it is hard for carriers to use. We have EZ-Pass on our straight trucks, but not on intermodal trucks. You'd wind up paying the same price when you go in empty [tractor only] as when you come out with a pick-up [tractor with container on chassis].

Roger Nortillo/Maher Terminals-Logistics

This a good example of where the technology works, but we have to spend the effort to make it practical.

Dick Jones/Bi-State MC Conference

The issue with EZ-Pass was mentioned in the original designs and solutions were offered. How do you adjust the tolls if the truck changes configuration five or six times per day, which is common? This will be an issue for the New Jersey Turnpike, too.

Mike Onder/U.S. DOT ITS JPO

That's a good example of the type of problem that we are working on. Part of the problem with transponders is the lack of standardization, especially between tractor- and trailer-tag standards. The U.S. DOT is now funding standards work, but because of sunk-cost, agencies are generally unwilling to risk changes that could drive up the cost of their systems. We are looking instead at ways to transition to more interoperable tags for toll collection and other uses. On January 28 we are meeting with toll authorities in this region to figure out a way to get better interoperability. One idea we are looking at is a national broker, maybe one or maybe several. The motor carrier could deal with one broker and the broker would deal with the toll authorities. We are also looking at use of transponders at several gates, including use of transponders by motor carrier at their own yards.

Roger Nortillo/Maher Terminals-Logistics

I am not a proponent of tag technology; I would like to see greater use of OCR. There are millions of containers and chassis, so it is not cost-effective to tag them all. Tagging

containers is only cost-effective in closed-loop systems such as Matson's in Hawaii. We should not jump on tags that have proven ineffective before. We need to look more widely at technology.

Dick Jones/Bi-State MC Conference

The technology to make EZ-Pass work is available. The Pennsylvania Turnpike can weigh a truck in motion as it approaches the toll booth and bill the truck by class and weight. The system is used to issue the card today, but it could be automated. Nationwide credit bureau are second step; first, we need transactions that work in a timely fashion.

Anne Morris/City University

The New York central business district is seen as an impossible space to operate in; docks are inadequate and parking spaces are congested. What can you do to help carriers get in and get out?

Dick Jones/Bi-State MC Conference

We have looked at suggestions about night shipping and receiving; but 60 percent of municipalities restrict deliveries after 8:00 p.m. at night. This forces deliveries into day-time when it is most congested.

Anne Morris/City University

We need to use space and time more effectively. Perhaps we should manage time by appointment?

Dick Jones/Bi-State MC Conference

If you cannot get through traffic, parking space does not matter. We have a growing public issue on restrictions; the public wants to push trucks off I-287, which trucks just paid for.

Stu Hauser/D. Hauser, Inc.

I am confused, and I am the first one who has to deal with all of you to put a trip together. (Described a story of moving a sailboat from NY to a lake in the mountains of Mexico.) I use this story for the course I taught at the college because it defines intermodalism.

Some issues for us to consider: First, how are you going to get everybody to buy in? You have to have pay-back to the person you want to join the system. For EZ-Pass, if there is no payback, then they would not use it. You must create savings, otherwise you would not get action.

Second, you need all the agencies onboard. There is a dichotomy between domestic and international. Import is more complex and it is the first part of many freight transactions. Without buy-in by all the government agencies, you'll lose 35 percent of the freight movements. The major problem is with government agencies not buying in. You do not need all at the beginning, but all of them must be put in the development plans. Hazmat is especially important.

Third, there are many message sets such as EDI, EDIFACT, etc.; however, there are now extremely easy EDI systems available through the Internet. Availability is great and they are cheap. They could be made available and cost-effective. You do not have to go out and buy a 400-page ANSI book. The GE system, for example, is very simple to implement.

Fourth, systems must be developed with uniformity. ITDS may be more than they can chew. Uniformity is critical, especially for international shipments.

Fifth, Federal Express has taught us that they deal in the information business – when, where, etc. That’s what our customers want to know. So carriers are no longer just in the cargo business, they are in the information business – selling information to customers on where, when, etc. The payback for investing in better information systems can be in time, not just dollars.

Sixth, the role of government can make a tremendous impact if they look at themselves as developers of a uniform system. Government should not get involved in particular system characteristics. The government should allow us to argue (as we do with customs) and work out the system details. They should promote the benefits of uniformity.

Break from 3:45 to 4:00 p.m.

Frans van Riemsdyk/Maher Terminals

I am involved in the sales and marketing end of the business. Any infrastructure investment should be complemented by ITS. We have a unique, mature infrastructure (maybe even decaying). Even if we find the dollars for infrastructure, where do we build? The challenge is how do we do more with what we have. If the volume doubles, do we double the capacity of the infrastructure? The issue is urgent; we must accelerate the introduction technology. These listening sessions must generate a sense of urgency. We have serious competition from Canadians; we are seeing more freight from Halifax and Vancouver. They are competing on the basis of infrastructure. They are in rural areas with the capacity to grow and expand. It is difficult for us to duplicate that competitive edge, therefore, we must invest in technology to make our region and service competitive.

Hardy Huang/Evergreen

As a shipping company we are concerned about safety and efficiency. Also, uniformity is very important.

Ray Noonan/Rail Head Services

Our company is involved in trucking, warehousing, and customs brokering. We are big on uniformity. If we can move a container the same way from one country to another legally, it reduces costs. Today the issue is weight. Standards are needed that are same for the U.S., Canada, and overseas.

When we develop ITS applications for intermodal, we need to look at the small operator, one with say 20-100 trucks. They have very different needs and capabilities. We need the ability to move information among small carriers. They do breakdown of containers and transport. If they cannot get information down to end users such as CFS operators, then people send their freight through other ports.

The other big issue is getting information through Customs. We are using EDI with other carriers; we can move the cargo faster than the paper. We need an update of the Customs service soon. We should also look at standardization among ports. Q: Use of parkways by small vehicles? A: We do not get into small parcel.

Ron Mudrak/H&M International-MIS

We have the same problems as defined above. Owner-operators are problematic for quality control and safety. We work with Customs. We are very EDI-oriented so that customers do not have to wait for release. EDI process is expensive given the number of customers. There must be simpler way to do EDI given that today use of EDI is almost mandatory.

Ray Noonan/Rail Head Services

Can we use Bi-State to purchase some of the technology to help equip smaller companies, warehouses, and carriers? We need to look at the less-than-container-load side of the business. They work as a gateway for customers. Perhaps with lower interest rates they could buy updated equipment?

Dick Jones/Bi-State MC Conference

People have mentioned the need for standardization. Maher is good, but others do not use it. Larry [Sposi] has been working for interchange among terminals, but it would not work if each terminal has a different system. It is not cost-effective. Also we need to make sure the current systems that we have stay in place. What happens if the current Customs system breaks down? The Federal Government does not understand the importance of the system. Standardization is very important.

Don Lotz/PANYNJ-Intermodal

We are a seaport, and therefore are intermodal. Seamless through-movement is critical. I suggest that we have four major issues that we must look at: First, our current highway capacity is major issue, but we also may face an issue with railroad capacity into and out of the region. We will soon see two railroads (or three depending on how you count them) operating in same area that was once occupied by one railroad. How can they operate without additional capital investment?

Second, we need to look at standardization of AVI readers. Amtech is alive and well, but we need universal readers if we are to deal with other types of tags for seamless movement through the port.

Third, the location of equipment is not the issue; it is the location of the shipment! The equipment can get lost, but the ultimate question asked by our customers is: "Where is the shipment?"

Fourth, we must address new issues such as reworking EZ-Pass so that it works with different truck configurations. And we must be aware that there will be other applications, beyond ETC, for which we want to use tags; for example, Do we want to use tags as probes? Probably, but that raises the issues of speeding and tickets, which are politically sensitive issues. We need to make sure that we do not use technology beyond its original application without the agreement of the users. We may be able to provide advance

notification of arrivals at marine terminals, but concerns about privacy issues may defeat the extension of ITS unless they are well worked out in advance.

Unidentified speaker

I would like to see more technology applied to intermodal operations. We need to gain more efficiencies in movement of freight from dock-to-dock, not just when the ship leaves and arrives.

Andrew McGovern/Sandy Hook Pilot

The marine system is moving quickly toward AIS for standardization in tracking ships. We will be tracking ships 100 miles out when they are inbound. We will know when they are likely to dock. And we also will be able to get information to the ship on berth availability, etc. This will be a major improvement on the today's situation where we often have ships arriving without a confirmed berth.

Currently we are squeezing 10 lbs. into a 5 lbs. bag. New York has mature infrastructure today; we need to be looking at and applying technology today. We are looking to tie the marine and landside systems together so that we can track ships and freight worldwide eventually. But, we must show our customers the advantage of this investment. Many of the nodes to make this system work are in place today, but we do not get the information that customers need out to them so that they can use it.

Linda O'Leary/American Waterways

We need critical information in a timely fashion. If the pilots have real-time information on tides and channel clearances, etc., then they can bring ships in on time. This saves money and makes the harbor safer. We need to invest in terminals; the channels must go deeper; and we must implement the recommendations on information networks. We need to work better and smarter if we want New York to function efficiently and competitively.

Andrew Genn/NYCEDC

The EDC is charged with responsibility for economic development in the City. We have been working on a port strategy study for the City's port facilities and an MIS study for a cross-harbor rail tunnel. We have been working more closely with the Port Authority on these issues, as Lillian Borrone described earlier. We also have been working to coordinate our work more closely with related freight planning work in New Jersey and Connecticut.

The starting point our work, as for the Port Authority work, has been the projection of growth through 2040. To accommodate this growth, we must reuse land; we cannot make new land. This is a real challenge. The City believes that there is a role for Howland Hook and Brooklyn in meeting future demand for freight movement through the port. But Brooklyn has pronounced transportation problems - the infrastructure is not just mature, it is in bad shape. In order to make a port in Brooklyn work, we are going to need to use the BQE and other roadways that will themselves be under reconstruction. We need to use these transportation facilities as efficiently as possible.

As part of our work on the Cross Harbor MIS we are looking at both short- and long-term solutions. We are working on rail-car float bridges as a short-term use; and as a long-term solution, we looking at a cross-harbor rail-freight tunnel. If a tunnel is in place, then we

can develop [Brooklyn's] Sunset Park. We are looking at a system to move boxes west (the majority of boxes) as well as east to an inland port facility. But given the capacity constraints of the BQE and other roadways, this will require a high level of ITS sophistication. To move boxes reliably and efficiently, we will need to know when the box comes off and exactly where it is going. All the systems that we have talked about today – gates, EDI, WIM, etc., – must come into play.

L. E. Wetsel/Norfolk Southern

I second the comments about the importance of greater uniformity to better intermodal movement and the importance of being able to identify and track hazmat shipments. Uniformity is very important to the railroads; exceptions to the standards are hard and expensive for the railroads to handle. Overall, we must increase the velocity of the freight moving through the terminal; and in general, the paperwork is determinant of velocity. Maher has done well on this aspect. The railroads can provide information to the port; and the port can provide information to the railroads, but today the systems do not talk to one another. We must really work on this as an industry. In fact we desperately need to work on this. We look forward to working with this group on these issues.

Ed Coyle/DOD-Logistics

I head an automatic identification project, the AIT Program, for the USDOD. The military has been using automated identification technology for 10 to 15 years, but we have not standardized our technology and it is important that we do this. We are no longer the post-WWII military with large forces stationed around the world with the supplies in place to support them. We are now very dependent on transportation; half of our forces are in the U.S.; the other half is overseas.

We have worked with carriers here and abroad to improve our logistics systems. We have invented our own system, which uses data-rich RF tags; we have put up our own readers; and we try to match tags to freight and vehicles so that we can watch the movement of our shipments. But the approach is problematic.

We need to get more and better information from our partners. The freight moves well, but the paperwork is the bottleneck. We need better access to information to find our equipment; to answer questions like: “Where is the part we need for the helicopter?” RF devices are useful, but they are now old technology. We need a good way to get data collected as the event happens and move that information to the people who need it. Our supply sergeants in Bosnia use three web sites – mostly commercial – to get the information they need.

Our experience in Desert Storm showed us the extent of the problem. We could not find information to get at supplies and so we had to open the containers and plow through them or order a new shipment sent to the Gulf.

As a customer, the DOD wants to know when freight moves and wants to make moment-to-moment decisions. Understanding the pipeline condition is extremely important. We are doing measurements on our current systems and will make decisions on our AIT work in the near future. This group in NY must decide as a group that they will make the port competitive. It can be done by changing the business processes; we have seen it work. The DOD found that its stovepipe operations needed to be dropped to get more of an agile system.

I've been interested in your comments on the problems and opportunities for ITS. The key issues is will be whether information system improvements add value to DOD as a shipper and therefore to other users.

Question: Are there alternatives to tagging all containers? Coyle: In developing our AIT prototype we looked at the sweep of identification technologies from linear to Qualcomm. We have not invented new technology; we have used existing technology and linked them to create information systems. We use Savi for a data-rich tag; but we are also using optical memory cards. The key to improvement is changing the way information is used in the business process. We will share the results of our AIT work with DOT and others this spring.

Jeff Hirsch/MARAD

The U.S. DOT is strongly committed to working toward the "OneDOT" goal announced by Secretary Slater. The U.S. DOT officials in the Northeast, including MARAD, are working on landside port access impediments to New England ports. We also are working with the I-95 Corridor Coalition on a model that can be used to help truckers route around impediments. Overall, we are working to tie port to landside.

Kate Quinn/FHWA-NYC

About 16 years ago I worked in an air cargo company that could provide tracking information on it freight shipments along the whole route of travel so that we could tell our carriers when and where, etc., the freight was. We provided this information so that they could preplan distribution and tell the receivers when it would arrive. What we are talking about here today is developing a better and more sophisticated system. To make this work the public and the private sectors must cooperate; it cannot be just a private-sector initiative or just a public-sector initiative. It is imperative that the region develop a better system.

New York and New Jersey must work together because we are facing some real challenges. We have seen progress in integration in the discussions over issues such as the Cross Harbor tunnel. We also have seen it in discussions of how we will handle our limited ability to expand the port and highways that serve freight. Our major challenge is bringing people to the table. How can we work together better to meet our visions? We heard about the problems of doing this over the dredging issues at the recent Coast Guard hearings. We need to look not just at the technology, but also at public outreach to explain why these issues are important.

Carl Seiberlich/VZM/TranSystems

Intermodal means the movements of freight within an end-to-end controlled system. Multimodal is the movement of freight across more than one mode of transportation which may or may not be coordinated. Within the intermodal system, the movement of information is just as important to the customer as the physical movement of the freight. Intermodal goals as stated cannot be achieved if sub-optimization occurs within a mode which degrades the end-to-end system by increasing cost or transit time.

John Hummer/NJTPA-Intermodal

Today's Newark Star Ledger carries an article reporting that the public wants to toll trucks on I-287 with the objective of driving the trucks off I-287 - this in a state that just dropped HOV lanes. We have major capacity problems. It is important that the Federal

Government understand the national interest in this region's harbors and freight systems; and for the Federal Government to provide funds so that localities can partner with the railroads, trucking companies, and distribution centers to increase throughput.

We have an aging infrastructure that is handling growing volumes of freight in a small area (e.g., 500,000 lifts on 500 acres). Improved intermodal operations by the Norfolk Southern could perhaps divert one million truckloads off the highways on to rail. But if the volume through the port doubles or more than doubles over the next decades, we cannot pour enough concrete to meet the need. We must find other solutions. We, like Rip Van Winkle, are waking up after a 30-year sleep. We must find better ways to move freight between the ports and inland points. The Federal Government needs to become a partner with the freight industries and aid local communities. This is critical because freight equals economic development.

Mike Onder/U.S. DOT ITS JPO

That issue was discussed extensively at the recent Waterways Conference. We heard a strong message on how DOT must work to address these problems.

Alain Kornhauser/Princeton

There is nothing on the horizon to help north-south through truck traffic moving to New England over I-287.

Lance Grenzeback/Cambridge Systematics

Made a 10-minute presentation of the preliminary recommendations for a national ITS/ Intermodal Program. (Copies of the presentation slides are attached to the meeting minutes.)

Alain Kornhauser/Princeton

Funding the ITS/Intermodal Program at \$500,000 or even \$1.5 million over the next year is grossly inadequate. This region is a major economic engine generating a huge volume of freight and jobs. The Federal Government needs to understand the magnitude of what we are dealing with here in the New York-New Jersey region. The amount of funding that you are proposing would not even begin to touch the problem. It is not even a serious effort.

General discussion followed on the need for concerted action by the region; opportunities to leverage other public and private funds; and the strong need for more effective federal leadership in the intermodal freight area, especially in setting standards for data interchange with the intermodal industry.

Meeting closed at 6:10 p. m.