



**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

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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.

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

Chicago Listening Session

Memorandum

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

FROM: Lance R. Grenzeback

DATE: November 24, 1998

RE: Chicago Listening Session - Meeting Notes
ITS/Intermodal Freight Program
Thursday, November 19, 1998

The meeting was held at the Executive Conference Room, FAA Regional Office, O'Hare Lake Office Center, 2300 East Devon Avenue, Des Plaines, Illinois. An agenda and a list attendees are 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

- Local and corridor data on freight movement is weak; public agencies cannot set priorities for improvements or ITS investments.
- High volume of rubber-tire interchange (perhaps as high as one-third of rail-related truck moves) adds to congestion.
- Driver shortages, especially for night shifts, force carriers to schedule most moves during the day. Off-peak moves are not cost-effective; they are low revenue moves.
- Draymen cannot afford to absorb the cost of shifting freight moves from time-slot to time-slot or terminal to terminal to avoid congestion. Demand of JIT shippers also reduces flexibility to reroute freight.

- Draymen have different information needs because of differences in cost structures and types of operation.
- Chassis shuffling – necessitated by the need to match proprietary containers and chassis – is time consuming and expensive for rail terminal operators.
- At-grade rail crossings – there are 1,946 in the Chicago area – create safety and congestion problems.
- Small carriers – typically operating at a two percent margin (or less) – cannot afford the sophisticated IT and ITS equipment or expertise.
- ITS programs have focused too much on data collection, not enough on information dissemination and problem-solving.
- Traffic information is not accurate or timely enough to influence driver and dispatcher decisions for short trips, which account for many of the truck moves in the Chicago area.
- Traffic operations centers cannot predict truck movements/throughput, therefore cannot optimize corridor signals, etc.
- Carriers have difficulty predicting exact rail arrival times; sometimes this creates problems scheduling pick-ups. Scheduling pick-ups at terminals is complicated by variability of train arrival times and lack of information about container dwell time at terminals.

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

- Illinois DOT initiated the Gary-Chicago-Milwaukee Priority Corridor Program, which has developed traffic management, traffic information incident management, and CVO programs. The GCM Program received no further funding under TEA-21.
- The state and city traffic operations centers focus on traffic surveillance and provision of travel time information.
- Illinois DOT is developing and funding a traveler information service for motor carriers.
- The Illinois tollway system has implemented I-Pass, an electronic toll collection system.
- Upper Mississippi Waterways Association members are developing software to track barge movements using GPS.
- A consortium, which includes the motor carrier industry, is testing a gate clearance system at O'Hare Airport. The system uses smartcards and biometrics to identify drivers delivering air freight.

- Argonne National Laboratory and the City are developing a system to provide first responders with information about hazardous materials involved in truck and rail accidents.
- The Cicero Avenue arterial project will provide travel information (e.g., congestion, parking availability, etc.) to airport passengers.
- Chicago Area Transportation Study (CATS) has been focusing on improving intermodal freight connectors.

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

- Improve pick-up and delivery scheduling at terminals by expanding information exchange among railroads and carriers.
- Develop models to predict outbound truck traffic outbound from terminals; use this information for traffic signal prioritization and corridor traffic management.
- Use train schedules and control systems to predict train arrivals at at-grade railroad crossing; provide information to motor carriers and traffic operations centers for route planning and traffic management.
- Tag chassis to reduce delays in matching containers and chassis with terminals.
- A common or general information brokerage probably would probably not work.

RFP

Scope of operational tests and anticipated benefits

- Address concerns about data privacy/business confidentiality, especially among private sector parties.
- Focus on private sector efficiency, safety and productivity; consider customer satisfaction.
- Focus on better asset management, which will result in greater productivity, etc.
- Involve labor and measure labor satisfaction with changes.
- Provide quantifiable measures for decision-makers and public.
- Measure benefits in terms of improved “cycle times.”
- Use proven technology; consider system sustainability.

- Do not focus on financial benefit of individual operators; it will be hard to measure given variability among firms, etc.
- Focus project so that it is institutionally viable.

Operational test roles and responsibilities

- Consider a neutral lead for operational tests; if the private sector leads the operational test, it might stifle the exchange of information, technology, or intellectual property because of the competitive nature of industry.
- The RFP should define evaluation requirements: Who is responsible? Who pays?

Proposal submission and selection process

- (No specific comments.)

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

Chicago Listening Session, November 19, 1998

Chuck Kadlec, Illinois Transportation Association

Jeannie Lamp, United Parcel Service

Mitch Loftus, Galaxy Transport, Inc.

Dan Murray, American Trucking Associations Foundation

Ferdinand P. Serpe, Esq., Illinois Transportation Association

Thomas Doussard, Union Pacific Railroad

Gerald Rawling, Chicago Area Transportation Study

James Johnson, Illinois DOT

Robert L. Severson, Wisconsin DOT

Charles Sikaras, Illinois DOT

Tom Brand, Federal Aviation Administration

Bill Brownell, Federal Highway Administration

Steven Call, U.S. DOT

Floyd Miras, Maritime Administration

Michael C. Nighbert, FHWA/OMC

Lance Grenzeback, Cambridge Systematics

Carl Seiberlich, VZM/TranSystems

Chicago Listening Session Notes

Chip Wood/U.S. DOT

- Opened meeting at 9:10 a.m. Explained that the purpose of the meeting was to discuss ITS applications that would benefit intermodal freight movement. Key issue is: How can we make public and private information available for public sector traffic management and private sector asset management? Asked for self-introductions. (See attached attendance list.)
- Noted that Congress has funded ITS programs for some years. Recently funded studies of freight and intermodal studies. We now have reports describing freight movement, demand, and issues; yet Congress would like to see actual deployments of ITS applications for intermodal freight. We have not yet shown that ITS deployments yield benefits for freight community and intermodal operations.
- We are looking for input from state, local, and private officials. What are the opportunities to marry public and private platforms (e.g., traffic management and cargo tracking) to improve intermodal freight movement?
- Have held listening sessions in Seattle and Norfolk; next sessions scheduled for LA, Houston, and NYC. Will combine results of listening sessions with information from other studies and conferences into a report to be delivered in January 1999. The report will serve as resource document for a request for proposals (RFP) to be issued by the U.S. DOT in February. The RFP will solicit proposals for ITS/intermodal operational tests.
- Up to \$500K to be given to one or more entities to test improvements in operations from information sharing. U.S. DOT proposes to award the grant directly to the people who design the operational test, without modifying the proposal. We believe that the test designers ought to be able to execute the test without interference from U.S. DOT Washington.
- Our deadline is to close the RFP process in March 1999, and make the operational test awards in April. We believe that this process will address Congressional interest in intermodal applications of ITS. If the operational tests are successful, the tests will convince people of value of ITS for freight and intermodal operations, and the program will grow. If there is no interest, then the program will not be funded further.
- Reviewed agenda items. We would like to review ITS and freight applications from the states' perspectives; then the MPO's perspective; then open the floor for discussion. We would like to hear your opinions on the question: What are your priorities for data interchange applications? At 11:00 a.m., we will give you a short presentation on what we have learned about IT and possible ITS applications for intermodal freight operations. In the second half of our discussions we will focus on what should be done in Chicago. If there is an ITS/intermodal operational test in Chicago, who would participate? Who might run it? What would be the focus of the test? What selection criteria should be included in the RFP?

Chuck Sikaras/Illinois DOT ITS

- Briefed the group on state activities related to intermodal freight operations. In 1993 the states of Illinois, Indiana, and Wisconsin set up the Gary-Chicago-Milwaukee (GCM) Corridor Program. Funding was provided by ISTEA. It was a multistate and multimodal planning effort. We put together a corridor program plan covering ATIS, transit, incident management, CVO, traffic signal integration; mayday notification, and DOT transponder systems. We developed a plan for funding in June 1995, and received \$18M in federal funds over five years to spend on our high priority projects.
- In 1997 we updated the plan, but TEA-21 subsequently eliminated priority corridors, requiring the GCM corridor to compete nationally on merits of its projects. Our prior work positioned us well, giving us a leg up on other regions. In FY98/99 Congress earmarked funds to specific projects and unfortunately, Illinois and Indiana did not get any of the 1998/1999 monies.
- We are working now to complete the projects funded earlier under the GCM program. Our focus in Illinois is on ATIS. IDOT is focusing on traffic surveillance, providing travel time for the entire Chicago expressway system, and providing the information to TV, transit, etc. In the future we will add incident information via the web. We also are working with Indiana and Wisconsin to provide information about lane closures and ramp closures. We are planning to make it available to truckers as well. We see our role as getting information out to the public so that they can make decisions.
- The other focus in our GCM ITS/CVO program was to get open solicitations from any entity that wanted to develop a public-private partnership proposal. We asked them to submit proposals to the GCM coordination workgroup (which includes the DOTs and the FHWA). TranSmart and the ATAF submitted a proposal for a CVO traveler information project. The GCM corridor will provide \$100K for this project; there will also be \$200K of private funding for the project. The project has been endorsed; we are now entering contract negotiations.

Bill Brownell/FHWA ITS

- Asked that people interested in receiving a copy of the GCM program to leave their business card with Chuck or Bill. Noted that one of the significant gains from the GCM program has been the development of a strong institutional platform. Developing and applying the technology is relatively easy; getting people to the table is hard. The TranSmart/ATAF project to be funded by the GCM program is exciting. He would like to see information targeted to CVO operators so that they can divert routes based on status of routes, accidents, etc.; have not seen much of this as yet. There has been discussion, but no implementation. He senses strong interest in this if it works; it should be a good test.
- Argonne National Laboratory and the city are working on an ITS project that would alert first responders when a crash involves hazardous materials. The system would provide information on the vehicle and its cargo so that responders know what equipment to bring. The system is built around notification and hazmat lookup capabilities.

Chuck Sikaras/Illinois DOT ITS

- Commented that the hazmat project will begin shortly with 50 percent of the total necessary funding available at the present time. They are working with the city fire department and others to get the contract in place. Developing a strategy for responding to hazmat incidents is complicated by the different materials and jurisdictions involved.
- Another initiative is the Cicero Avenue arterial project between I-55 and 63rd Street. We are developing an ITS project that will provide travel information for airport passengers. It will include parking information, a kiosk at the CTA center, signalization, etc. A CVO component might be appropriate because of the high CVO volumes and proximity to intermodal yards.
- Each of the states has invested heavily in traffic operations (provided several examples); however, he noted that IDOT does not consider its Corridor Transportation Information Center a control center, rather it is a center for distribution of information.

Rob Severson/WSDOT Freight

- He represents Wisconsin DOT's planning and multimodal freight group; he is sitting in for Phil DeCabooter. He has read the various ITS program documents; his interest and emphasis is multimodal freight and freight forecasting. He would like to see the transportation system use ITS as part of the freight forecasting process. They use Reebie data on freight flows, but data at the local and corridor level is weak. They need better freight flow data for planning. E.g., what corridors should we upgrade? He also sees potential in ITS for railroad grade crossing safety.
- He feels the private sector is years ahead of the public sector in using IT for management; he worked with Schneider National for some years. Schneider has highly developed IT systems. The system works from the bottom up. The data are sent to railroads for coordination of freight movements, not just to the Schneider office and driver. He thinks that state should help build upon this capability.

Gerald Rawling/CATS

- Noted that the meeting had already proved valuable to him; this was the first time he had heard about the Cicero corridor work. Explained that CATS does long-range planning and prepares the region's TIP (investment package). Given the scale and importance of the freight and intermodal industry to the Chicago economy, CATS has worked for 25 years to involve the freight industry in transportation planning and investment. CATS has built a freight advisory task force that is used to build consensus on actions to be implemented by others.
- CATS has been preoccupied by identifying and improving intermodal connectors (for the DOT's NHS initiative). Generally, the MPO (CATS) is in the transportation hardware business, and as a result, CATS has been a little distanced from ITS. However, he has not seen much yet of ITS, and admits to a built-in cynicism about ITS systems. For example, an over-height detector may be good, but if the truck is warned it cannot go forward, then what? Does it back up into the expressway? Emphasized the importance of looking at the overall implementation implications of ITS.

Fred Serpe/Illinois Transportation Association

- He represents the motor carrier industry. Motor carriers have grave needs; the industry is completely in support of ITS for motor carrier applications. The program needs to focus on the little daily needs for the industry; for example, we have an issue with viaduct clearances that are posted improperly, or viaducts where ice raises trucks so that the van hits the bridge. We need to use ITS to address these issues which affect the efficiency and safety of truck operations in Chicago.
- Security at O'Hare is issue that the motor carrier industry is currently working on. The project is working on verifying the driver, truck, and cargo to prevent terrorism as well as theft. It is a live project that will be wrapped up next March. The motor carrier industry is poised and ready to help if it can.
- Concerned that we have discussed intermodalism for two decades, but have focused mostly on motor carriers and the railroads. Must include ITS and intermodal for the barge and shipping industries. He attended recent meetings with Coast Guard on Mississippi River traffic. Motor carriers are interested in more than just truck/rail intermodal; need to look at maritime as well.

Chip Wood/U.S. DOT

- We are talking about IT for any and all intermodal truck-related operations. A question for the motor carrier industry: Is ATIS information useful? How would better information help you? Any opportunities to use better information in Chicago?

Fred Serpe/Illinois Transportation Association

- Some ITS information is very useful, especially for sophisticated carriers that can make use of it. For the rest of industry (e.g., mom-and-pops) it is more difficult because they are small carriers. Must make sure that all the industry can use the information.

Chuck Kadlec/Illinois Transportation Association

- He has been involved in ITA since last August; prior to that he spent 20 years with the trucking industry in Chicago. Noted that meetings like this one are valuable to connect the right people. Mentioned that the ITA is participating in several other projects through Northwestern to reduce accidents and incidents.

Fred Serpe/Illinois Transportation Association

- ITA will have an ITS/intermodal proposal to submit in February because good transportation is important to the motor carriers in Chicago. Cited as an example the fact that UPS has over 4,800 UPS trailers going out by intermodal service every day.

Jeannie Lamp/UPS Region Air Manager

- Information is positive; but the real measure of its effectiveness is its ability to solve the problem. Just sharing information is not sufficient; we must take the system the next step and align the traffic systems to solve the problem. We want solutions, not just notification.

Carl Seiberlich/VZM/TranSystems

- Question to motor carriers: What incentive do we have to bring in the small carriers?

Fred Serpe/Illinois Transportation Association

- Speed and time. Today the industry is operating at a two percent profit margin and that is considered healthy. The margin used to be 60 percent! Carriers want to save money and get to next destination. If the information is out there, and it helps business, then they will use it.

Chuck Sikaras/Illinois DOT ITS

- Described how they think about truck movements and the issues related to the movements. Internal-to-external or external-to-internal: issue is how to route trucks through and around, especially when travel is regional. Biggest problem is with internal-to-internal moves such as movement of local commodities, off-rail moves, off-distribution center moves, etc. Issue is how do we help them. Their travel times range from 45 minutes to 2½ hours for some moves. No reliability in moves. See use of I-Pass [electronic toll collection system] on the Illinois tollroad system is growing. Is there potential for use in getting information for intermodal?

Chip Wood/U.S. DOT

- What is perspective from the railroad? Question to Tom Doussard: Can you link rail IT systems to motor carriers? Any opportunities?

Tom Doussard/Union Pacific System Development

- The railroads have well-defined systems to track freight across the country, down to the car and container level. At hubs, we have information from the truck lines on who the drayman is and who the receiver is. Information is moved by EDI, etc. Information is available about when containers are deramped. This information could be shared with other entities. But what does that mean? The fact that a container is grounded does not necessarily mean that the truck will go out the gate immediately; we might need additional information on dwell time on ramps in order to predict when trucks will hit the streets.

Chip Wood/U.S. DOT

- Pilot test does not need to solve all problems for all stakeholders. We are looking for modest projects and modest results for just \$500K. There might be value in gate processing information. For example, could we anticipate gate surges when is freight discharged?

Jeannie Lamp/UPS Region Air Manager

- If you have this information, could you then modify traffic signal patterns? That is good example of how an area and carriers could benefit from better interchange of information.

Gerald Rawling/CATS

- In yesterday's brainstorming session someone told me that the railroads can provide motor carriers with up to three hours pre notification. Is this true? Would this help to preposition drayage operations? Is there a benefit?

Tom Doussard/Union Pacific System Development

- We could and do share this information with the drayage operators.

Jeannie Lamp/UPS Region Air Manager

- Agreed. We do get information from the railroads.

Tom Doussard/Union Pacific System Development

- Noted that given the complexity of the rail network, three miles out in Chicago may be too far or not far enough out to provide accurate information on train arrival time. The rail system operation is very complex with many unanticipated changes.

Chuck Sikaras/Illinois DOT ITS

- Would better information speed movement of trucks along corridor? This might address problems of theft in yard and along streets in tougher areas of city. But what is the impact of traffic signal prioritization on cross streets?

Jeannie Lamp/UPS Region Air Manager

- If better information and better traffic management could increase security in definitive way along corridor, then that would help the motor carriers.

Chip Wood/U.S. DOT

- Welcomed Dan Murray/ATAF

Fred Serpe/Illinois Transportation Association

- Asked Dan to talk about the needs of industry; noted that Dan has been representing the industry on ITS issues in the GCM corridor program.

Dan Murray/ATAF

- Chicago is the ultimate testbed for ITS. It is the nation's largest intermodal center and a good place to look for opportunities. The trucking industry today is very sophisticated in its use of defense technology. The industry wants to move from studies to deployment. We are at the point where we need to make multiple systems talk to each other.

Chip Wood/U.S. DOT

- What we heard in Norfolk last week was the need to marry railroad information and ATMS (automated traffic management systems). Tom Finkbiner of Norfolk Southern suggested that if they could provide advance notification of train arrivals, then through ATMS we could provide information to motorists so that they could divert from non-grade-separated crossings to grade-separated crossings. This would save time for many people. Is this idea applicable idea in Chicago? How many at grade crossings might be affected?

Gerald Rawling/CATS

- We have 1,946 at-grade railroad crossings!

Jeannie Lamp/UPS Region Air Manager

- Reducing delay for motor carriers at railroad grade crossings is critical for freight movement.

Chuck Sikaras/Illinois DOT ITS

- A problem with rerouting carriers around grade crossings is that there are so many restrictions on trucks and routing that the information to reroute may arrive too late or there may be no alternative routes. We are working on a railroad grade crossing warning system involving 300 vehicles to alert operators if a train is present. Idea is good, but is it applicable? Is there a payoff for carriers?

Chip Wood/U.S. DOT

- At an earlier meeting, Carl said there must be an incentive for the private sector to participate. What are the cost factors? What value do you place on traffic congestion? How do you determine the best investment? What do you expect to get out ITS?

Jim Johnson/Illinois DOT Planning

- From the state perspective, we need information on when trucks are moving and where they are going. We have a road system with needs all over, so we need to know which routes are the most important. If we do not know the truck traffic volumes, then we do not know which roads are most important and should be given priority. For the railroads, once the traffic is out the gate, it disappears, so its hard for them to give us the information.

Tom Doussard/Union Pacific System Development and Jeannie Lamp/UPS Region Air Manager

- Noted that the information about moves is available now.

Chip Wood/U.S. DOT

- Do the draymen make decisions on when and where they move?

Mitch Loftus/Galaxy Transport

- It is a complex issue. It ranges from Schneider, which has control over every truck, to Galaxy, which uses all owner-operators (O/O) and does not have or want that control because of the business implications. [I.e., it would make Galaxy the employer and the O/O's direct employees thereby reducing the business benefits to each.] Today, we just give the box to the O/O along with the origin-destination information. We have no direct control over the O/O's route. It is not clear how better information on who gets the box would really predict traffic.
- Our biggest problem today is hiring enough drivers. Cushing (another drayage operator located near Galaxy) and Galaxy both have signs out for drivers. The railroads may have a train in, but we would not have enough drivers to pick up all the traffic. The U.S. mail gets priority; but a container of toys for stores in a mall might sit in the yard for hours or a day or more. Information on traffic conditions would be helpful, but trucks have to stay on designated truck routes. We need to improve infrastructure; for example, tie traffic signals together to react to changes in load. We can

get information about traffic conditions out over the radio (all the drivers use them), but how useful is it?

Gerald Rawling/CATS

- I am told that 33 percent of moves are bobtails moving among terminals. True? Is there a future in improving load matching?

Mitch Loftus/Galaxy Transport

- Not the case in our company. We do not have one-third bobtails or empties moving in our operation. The number seems very high.

Rob Severson/WSDOT Freight

- Optimizing movement through load matching would require more coordination among drivers. Driver labor shortage is a problem. Twenty-five percent of Schneider's drivers were independent contractors. Their mindset regarding IT is that "Big Brother" is watching them. The company's purpose in introducing IT (satellite tracking and communications) was efficiency, not surveillance. The biggest problem was ramping and deramping. Problems there affected other links in the chain; each stage has to work in the chain of moves.

Mitch Loftus/Galaxy Transport

- The ramping problem has not been solved. Congestion at ramps is still a problem. The railroads have problems with scheduling too.

Steve Call/FHWA Mobility

- Cannot invest in ITS for better access without better ramp operations.

Tom Doussard/Union Pacific System Development

- We have invested in ramping/scheduling, but we still have problems in marrying chassis with containers. If we are short of chassis, then we must ground the boxes or mount them on someone else's chassis and sort it out later. The process [of shuffling containers and chassis] is time consuming, confusing, and adds to congestion. The railroads are working on this.

Lance Grenzeback/Cambridge Systematics

- In Seattle, APL told us that they were considering tagging chassis as an alternative to tagging all the boxes. Would this work in Chicago? Has it been discussed?

Dan Murray/ATAF

- Not much; it would require more information coordination than exists today.

Chip Wood/U.S. DOT

- Gerald said that one-third of containers in Chicago are moved by rubber-tire interchange from railroad to railroad. Is this true?

Tom Doussard/Union Pacific System Development

- The number seems large, but I do not know. Most of the rail-to-rail interchange of containers is probably steel-wheel interchange.

Floyd Miras/MARAD

- Rail centers are our hub ports. As a former traffic manager, I know that steel-wheel interchanges may take three plus days. If you miss an interchange, you may not be able to hit a sailing window in Baltimore; you miss the ship. It happens in Chicago and happens frequently.

Tom Doussard/Union Pacific System Development and Mitch Loftus/Galaxy Transport

- Agreed that interchange is an occasional problem, but argued the decisions to switch between steel and rubber interchanges are usually made well ahead of Chicago. The shippers and carriers know who screws up given windows.

Gerald Rawling/CATS

- We estimate that there are 14,500 rail-related truck moves daily in Chicago: one-third arrivals, one-third departures, and one-third rail-to-rail via rubber tire.

Chip Wood/U.S. DOT

- If you have one-third rail-to-rail via rubber tire moves, then do you know their origins and destinations? Is there any predictability in the moves that can be relayed to the traffic management systems people?

Gerald Rawling/CATS

- Time is more the issue than origins and destinations. Train matching is often problematic; however, if we could organize information on truck moves by time to the point of predicting throughput, then we could leverage other systems such as the traffic signal systems.
- Question about the feasibility of off-peak intermodal moves?

Mitch Loftus/Galaxy Transport

- We could do cross-town moves after hours; however, these are usually low revenue moves. Its hard to get people to work those late night hours; they are often cost-ineffective for carriers and O/Os.

Chuck Kadlec/Illinois Transportation Association

- You can get some to work late hours, but it is expensive to get people for a graveyard shift. Most of the railroads are open 24 hours, so the operations are feasible, but there are no drivers.

Floyd Miras/MARAD

- It sounds like one solution is to use the \$500K from an ITS/intermodal operational test for late work bonuses.

Gerald Rawling/CATS

- Is the issue just the outbound surge, not the inbound surge? Do inbound trucks arrive round the clock?

Mitch Loftus/Galaxy Transport

- The problem is usually with outbound. For inbound, there may be some backup for priority trains with a cut-off time; for example, for an 8:00 p.m. cut-off time, some clients may have several loads that are timed to just meet that cut-off time. Overall, it is not a major problem.

Tom Doussard/Union Pacific System Development

- The railroads publish cut-off times and train schedules; the carriers have those. We also let customers know when containers and trains arrive.

Gerald Rawling/CATS

- Do you get queuing outside terminals?

Tom Doussard/Union Pacific System Development

- Generally we have sized the gates to accommodate queues. Since we have multiple ramps, we have pretty well distributed the inbound traffic. For example, Global One takes only traffic for certain destinations. These are published ahead of time.

Steve Call/FHWA Mobility

- If Schneider could not get something ramped in Seattle, then it would take the load to Portland because if you missed the missed cutoff in Seattle, it would be two days until the next train. It was cheaper to truck it to Portland. Schneider used regional accounts/drivers to reposition their freight.

Mitch Loftus/Galaxy Transport

- Generally, sudden changes like that are not practical. It is a cut-throat business. People will change carriers and routes to save \$5; however, a spur of the moment change would force everyone to recalculate the overall cost. The drayman would not make that decision on their own because they cannot afford to pay for it and they would be the ones stuck with the cost unless it was approved ahead of time.

Gerald Rawling/CATS

- This discussion is valuable; what we hearing is “do not give us solutions that we do not need.”

Mitch Loftus/Galaxy Transport

- The problem of shifting freight from time slot to time slot is difficult because some shippers have very tight JIT schedules. The auto manufacturers believe that JIT works on a continental basis, so their freight often is not available six hours ahead of time. Shifting freight from time slot to time slot is not likely or easy.

Dan Murray/ATAF

- Pointed out that each carrier and type of operation has different information needs because of their different cost structures and shipper/receiver needs. Does not see that a general information brokerage would be effective; an information brokerage service would need to be more specialized.

Meeting break from 10:45 a.m. to 11:00 a.m.

Lance Grenzeback/Cambridge Systematics

- Made 15-minute presentation of the preliminary recommendations for a national ITS/Intermodal Program. (Copies of the presentation are attached to the meeting minutes.)

Jeannie Lamp/UPS Region Air Manager

- How would intellectual property be handled in the ITS/intermodal program RFP? Is there a consultant onboard that would do the work, etc.?

Lance Grenzeback/Cambridge Systematics

- This is no consultant onboard for the work. Each region would have to propose its own team and could hire a consultant or not. Likewise, there are no fixed guidelines on how a region would conduct their operational test, or who would lead, or who would control the intellectual or operating rights to the operational test. It would be up to the local consortium to propose an appropriate structure and management for the test, subject of course to the need to account for expenditure of the funds. Since in intermodal freight operations we are dealing with largely private sector operations, an ITS/intermodal program might be largely driven and controlled by the private sector – in contrast to the current CVO, ATMS, or ATIS, work which is primarily a public sector responsibility.

Chip Wood/U.S. DOT

- Asked Dan Murray to describe their current project on truck access control at O'Hare Airport.

Dan Murray/ATAF

- Concern about domestic and foreign terrorism at the airport has prompted a review of security issues regarding air freight/air cargo. This triggered work to improve security at O'Hare. The ATAF is working on a project with the airport that uses smartcards, encoded with driver biometrics, to insure that the drivers entering O'Hare are properly identified. The project explored voice identification, retinal scans, thumbprints, handprints, etc., as means of biometric identification. Thumbprints are to be used at O'Hare. The driver swipes the card, which brings up his or her CDL. The driver then provides a thumbprint to verify identification.
- The project is now assessing false acceptance/false rejection rates. The measure of efficiency is time on the mat; other measures may be added. We are looking closely at qualitative issues, such as drivers' attitudes and acceptance by the FAA security experts and motor carrier managers. We've conducted focus groups and meetings with FAA security specialists, some of whom still want to "look'em in the eye." We

also are considering the value of the system for enforcement. (E.g., if there were an incident, the system would improve our ability to track the cargo back to its origin and determine who delivered what and when.) San Jose State University is conducting the evaluation. DOD and NSA are funding the evaluation of the smartcard security.

- There are opportunities for other uses; but there also are concerns about other uses of data. Many are terrified of “interoperability” that violates privacy and business confidentiality. For example, carriers and drivers want to know if the system ties to DWI and other MC-safety and performance-related databases. We are looking at how education can be used to allay these concerns.
- We expect to be wrapping up by May 1. We see the project as offering benefits to carriers; for example, better tracking of shipments to O’Hare and improved truck security (e.g., who was last person to close the truck?). We have doubled the potential measures of benefits over the course of the study. Of the remaining issues, the biggest one deals with expansion of this program to other areas.

Chuck Sikaras/Illinois DOT ITS

- Does the project provide for automatic notification of change of employees or employment status?

Dan Murray/ATAF

- Yes, that is covered by the FAA requirements. However, we did not ask the motor carriers to replace their existing system with this new system.

Chuck Sikaras/Illinois DOT ITS

- What is the reliability of the system?

Dan Murray/ATAF

- There are only one chance in 800 million that the same two people will match on one thumb. However, about 0.08 percent(?) of drivers can not be registered because of scar tissue on their thumbs. We are looking into alternatives. The system is more sophisticated than the old FBI fingerprint cards; the system measures temperature, density, moisture, etc. not just the thumbprint lines.

Jeannie Lamp/UPS Region Air Manager

- The current security systems at airports are so ineffective that this system, even with flaws, is an improvement.

Dan Murray/ATAF

- The initial grant was for \$1.5 million of which half was for hardware; with lower hardware costs today the hardware portion would be half of what it was.

Chuck Kadlec/Illinois Transportation Association

- ITA has been participant in this process. They wanted to sign up 3-4,000 drivers, but there were not that many drivers involved in air freight. Today we have about 1,000

drivers involved. We found that there are more different drivers picking up freight than delivering in-bound.

Chuck Sikaras/Illinois DOT ITS

- Can non-ITA and non-ATA drivers and companies participate? Answer was “Yes.”

Floyd Miras/MARAD

- Noted that the Upper Mississippi Waterway Association was developing software to track barges by GPS. The software would improve in-transit visibility and asset management for barge operators and their shippers. Passed out copies of news article.

Chip Wood/U.S. DOT

- What are the major opportunities in Chicago area? Do you have an intermodal freight movement problem that might be addressed by information technology? What are your expectations about how the program should be set up?

Jeannie Lamp/UPS Region Air Manager

- What is objective [of the operational test]? We have heard several possible applications proposed; they are varying and broad. We need an objective and a project narrow enough in scope to be effective. As examples: Improved transit time from rail to delivery; or improved information on unit load advisories (for asset management).

Dan Murray/ATAF

- The test should focus on private sector efficiency, safety, and productivity; and should identify public sector benefits; however, the RFP should not dictate the measures.

Chip Wood/U.S. DOT

- We are not anticipating requiring specific measures, but we would like to provide examples of the types of measures that should be considered.

Carl Seiberlich/VZM/TranSystems

- Can we list objectives on the flip chart? Chip Wood will write them down.

Gerald Rawling/CATS

- One should be asset management, from which we can derive other benefits, such as labor productivity. Assets are manageable electronically.

Steve Call/FWHA Mobility

- Suggested “reduction of idle time for freight between modes.”

Carl Seiberlich/VZM/TranSystems

- Should not we also include “meet customer expectations: reduced cost, transit time, etc.” “Do not lose it, do not break it, and get it there on time.”

Chuck Sikaras/Illinois DOT ITS

- Suggested “use proven ITS technology.” We spent an inordinate amount of time and money on technology improvement and testing; cannot afford that on a \$500K budget.

Dan Murray/ATAF

- Suggested “system self-sustainability.” The question asked in the O’Hare project was “When the pilot project is done, is the system self-sustaining?” Do not want to put the equipment in a closet at the end of the day.

Chuck Sikaras/Illinois DOT ITS

- Agreed; officials want to know the long-term O&M costs for an ITS system. Suggested “Does system enhance transportation on the network (or keep congestion at a neutral point)?”

Dan Murray/ATAF

- Suggested: “see financial benefit.” What is the incidence of costs and benefits to rails, trucking, etc.? What is the policy regarding regulatory compliance? Does it reduce the regulatory costs of compliance? There does not have to be reduction; but we need to know the impact. Could the project help meet or ease the cost of regulatory compliance?

Chuck Sikaras/Illinois DOT ITS

- Suggested “flexibility or expandability to the system.”

Steve Call/FHWA Mobility

- Suggested “want all carriers to have the ability to play in system.” Do not want to exclude carriers.

Lance Grenzeback/Cambridge Systematics

- Do you want your demonstration to have a geographic focus? Local, or metropolitan, or regional, or GCM...? The physical scope would affect cost.

Chuck Sikaras/Illinois DOT ITS

- That will be big issue. As an example, I-80 changes jurisdictions five times in a short distance. We need to pick a project that is doable or implementable. What are the institutional issues that might prohibit the project being implemented? Institutional coordination is a desirable outcome.

Jeannie Lamp/UPS Region Air Manager

- (Response to question from Lance Grenzeback concerning institutional property rights) If the designer of the project controls it (and perhaps the intellectual property rights), then we must think through who gets those rights. The private sector is very competitive. If you give the project to the private sector, then it could skew results. The O’Hare project was given to university to protect against that problem.

Dan Murray/ATAF

- At O'Hare, we cut a deal with the system designer that they kept algorithm, but O'Hare wanted to own the rights to run the system after the pilot phase, so that they could operate it without strings attached.

Chuck Sikaras/Illinois DOT ITS

- Will U.S. DOT want an independent evaluation? Are those costs to be borne inside or outside of the contract?

Chip Wood/U.S. DOT

- What illustrative efficiency measures could be applied to a project? E.g., travel time?

Dan Murray/ATAF

- Suggested "reduced labor costs."

Gerald Rawling/CATS

- Suggested "tons or ton-miles." "Loaded-miles per 24 hours, etc." Other productivity measures? Number of loads per tractor per hour? Too academic?

Mitch Loftus/Galaxy Transport

- These measures would not necessarily track to the real world. Each O/O contractor is an independent entity; it is very hard to average over the fleet.

Steve Call/FHWA Mobility

- Suggested "measurement of satisfaction of laborers at rail hubs."

Mitch Loftus/Galaxy Transport

- IANA is missing from list of participants shown in the presentation as participating in the ITS America committee; suggest that you add their name to the list.

Steve Call/FHWA Mobility

- Suggested "customer satisfaction."

Mitch Loftus/Galaxy Transport

- Do not worry about that. If your customers are not satisfied and shift to other carriers, then you lose money and you quickly get the message.

Dan Murray/ATAF

- Suggested "reduced cost of maintaining and operating the information systems themselves."

Chuck Sikaras/Illinois DOT ITS

- Suggested "outside influences."

Gerald Rawling/CATS

- Suggested “cycle time.”

Jeannie Lamp/UPS Region Air Manager

- Agreed that cycle time is a better descriptor.

Chuck Sikaras/Illinois DOT ITS

- Media and the public like quantifiable data; e.g., “ramp meters improve service by x percent.” We should look to that sort of data.

Chip Wood/U.S. DOT

- This exercise lets us know how difficult it is to articulate a framework for an ITS/Intermodal Program. We do not want to make things so prescriptive that we make it impossible to do the project. We want to have you identify the problem and be confident that you can use existing platforms, etc., so that results can be achieved and evaluated in a relatively short time.
- Thanked group for its time and effort. This has been an excellent forum with good ideas, good perspectives. It has been very encouraging to have good industry and government representation at efforts for collaborative problem solving. If you have any additional ideas or comments, please send us a note.

Meeting closed at 12:30.