

Intermodal Freight Technology Working Group
Spring Meeting in Oak Brook, IL
April 30 – May 1, 2008

Agenda and Meeting Summary

AGENDA

Theme: “Industry and Government Partnering to Promote Freight Efficiency, Safety & Security through Technology”

April 30, 2008

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| 9:00 AM | Welcome and Opening Remarks The meeting will kick off with a welcome from the IFTWG Co-Chairs. | - Tony Furst (USDOT) - Ben Shelton (UP) |
| 9:00 AM | Electronic Freight Manifest (EFM) Project Update <ul style="list-style-type: none"> • Animated Presentation • Review of Adoption Plans EFM is a U.S. DOT R&D program that promotes and evaluates innovative e-business concepts, enabling process coordination and information sharing for supply chain freight partners through public private collaboration. | - Randy Butler (USDOT) - David Williams (Battelle) |
| 10:30 AM | Cross-Town Improvement Project (C-TIP) <ul style="list-style-type: none"> • Current Kansas City Project The movement of intermodal freight within the U.S. often requires the use of multiple truck/drillage moves in addition to the primary movement by rail or ship. The truck moves are often short, cross-town trips in or near metropolitan areas where freight terminals or warehousing and distribution facilities are located. C-TIP is a five part pilot demonstration that seeks to provide a sustainable solution to cross-town intermodal interchange issues. Fundamentally, the project consists of an integrated set of solutions that are aimed at removing inefficiencies by more closely linking operations among stakeholders, and enabling transportation providers with support tools that facilitate more informed operational decisions. | - Ron Schaefer (SAIC) |
| 11:30 AM | Day 1 Concludes | |

May 1, 2008

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| 8:30 AM | Collaborative Logistics Discussion Forum Part I: Uncovering the Opportunities This Town Hall session will focus on the identification of technology-based solutions from various perspectives, including: <ul style="list-style-type: none"> • Can you specifically identify where collaboration is not what it needs to be? • Can you specifically identify the effects of these “Collaboration breakdowns?” • What is the root cause of these breakdowns? | - Moderator: Paul Belella (Delcan) - Panelists: Bob Huffman (Norfolk Southern) Val Noel (Pacer Cartage) Angie Baggett (Landstar Systems) Tim Gicewicz (Heavy Transload) |
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- 10:15 AM Collaborative Logistics Discussion Forum** - All
Part II: Identifying Potential Solutions
 Building on the causes and effects identified in Part I, this session will explore the specific actions that could address these collaboration breakdowns, development of technology and the possible benefits of collaboration
- 12:00 PM Day 2 Concludes**

MEETING SUMMARY

Day 1

WELCOME AND OPENING REMARKS

Mr. Randy Butler, (FHWA) Program Manager for IFTWG, welcomed the meeting participants and outlined the schedule for the meeting. He drew attention to the fact that the agenda for Day 1 is focused on providing status and results information for two ongoing projects: the Electronic Freight Management (EFM) project and the Kansas City Cross-Town Improvement Project (C-TIP). He then asked attendees to introduce themselves.

Mr. Ben Shelton, (UP) IFTWG co-chair, thanked everyone for attending, stating that participation levels have been quite good and that this is essential to the group's success. He indicated that a significant level of effort has been undertaken to accomplish this and thanked all in attendance for participating in the meeting. He concluded his remarks by saying that the group's projects are progressing well and encouraged attendees to take part in the Day 2 activities, indicating that they would be very informative.

Mr. Tony Furst, (US DOT) IFTWG co-chair, thanked attendees for their participation and indicated that the key is the private sector indicating where improvements are needed. He offered that the government can help, but that industry must provide needs. He cited the example of the C-TIP project, where a solid business case sold it, enabling funding to be identified and obtained. He closed by encouraging those in industry to go out and communicate with colleagues regarding the group's work and to promoting participation.

IFTWG PROJECT UPDATES

Mr. Randy Butler, (FHWA) introduced the EFM project update, saying that work on the project has been ongoing for several years now and that it has been a very successful project. He continued by saying that the project is really about sharing information more efficiently, and that it is focused on expanding visibility and eliminating information "black holes." He indicated that Battelle has prepared an animated presentation for EFM and would be sharing it after his introductory remarks. He indicated that innovation will allow the freight community to address freight growth and that is why the USDOT is involved. He concluded by saying that the DOT wants to step away after the EFM is deployed and let industry run it and maintain it, and has promoted the development of an open, easily accessible architecture in order to facilitate that. He then introduced Mr.

David Williams of Battelle, who provided some opening remarks regarding the EFM animated presentation. Mr. Williams offered insights into how the EFM would be deployed for commercial use, stating that there are three basic steps that would need to occur. Step 1: establish agreements with partners. Step 2: establish rules for governance. Step 3: connect all partners using existing systems. Mr. Williams then initiated the animated presentation, indicating that copies of the presentation would be made available for anyone wishing to have one.

Mr. Butler then introduced Mr. Al Hovde of SAIC, who provided a brief overview of the evaluation of the Columbus EFM (CEFM) pilot deployment project. He began by highlighting the CEFM evaluation objectives, which are to evaluate impact in four study areas – usefulness, cargo visibility, logistics performance and deployment scalability. He outlined the evaluation approach, which is two-fold, and includes the measurement of actual performance and user acceptance. The plan is to conduct interviews and to execute an analysis of operations at each partner location. Mr. Hovde indicated that the first of two evaluation reports is due for release in May 2008, and the second in October-November 2008. He indicated that early results suggest that financial savings are currently approximately \$5+ per shipment. Additionally, qualitative results suggest improved timeliness of freight release, improved cargo status information, improved timeliness of supply chain information and improved data quality for supply chain partners are projected outcomes.

Mr. Butler continued the EFM discussion by taking questions from the attendees. Some of the responses are summarized here. Mr. Butler indicated that: 1) overall time savings were extrapolated; 2) there is a desire to expand EFM so it will be put to use for ocean cargo movements, as well; and, 3) There are currently no plans to address information arrival effects on invoicing and payments. Mr. Bulter concluded by stating that the DOT is interested in conducting case studies to see how different partners can join up and improve their own operations.

Mr. Butler then invited Mr. Ryan Paquet from the U.S. DOT Hazardous Materials Safety Administration to share briefly about the work being conducted within his organization, and how EFM may provide an opportunity to apply its concepts in the transport of hazardous materials. Mr. Paquet indicated that his organization focuses on public safety activities, particularly those associated with interfaces with the first responders. He highlighted the use of electronic shipping papers and that the goal is to eventually replace paper with electronic information. He added that in order for that to happen, changes would need to be made to the USC regulations that govern them. Ultimately, he indicated that the objectives are to facilitate data flow, to increase the amount of info available to responders, to improve accuracy of info and to create a standard communication method. He cautioned, however, that care must be taken to ensure that the use of things like EFM do not degrade safety. He continued by indicating that in order to progress toward electronic information, challenges will exist associated with getting responders on board and addressing legislative and regulatory requirements. He also stated that his organization will not require it to be integrated into business operations. He concluded that it is important that whatever solution is used, it cannot be tool-

dependent, and that the primary goal is to get info to responders before they arrive on the scene of an incident.

Mr. Butler then discussed the progress achieved with the C-TIP project. He showed the project work plan and indicated that a total of \$1.475 million has been secured to move forward with the pilot deployment in Kansas City. He then introduced Mr. Ron Schaefer from SAIC who provided a technical review of the progress of system development. Mr. Schaefer's brief overview included a review of the C-TIP results.

Mr. Butler concluded the project updates by informing attendees that they can find detailed information on each of the IFTWG projects on the IANA Web site. He then adjourned the Day 1 meeting with an invitation to take part in the Day 2 activities, which include a two-part session aimed at identifying specific challenges and formulating high-level project ideas.

Day 2

WELCOME AND OPENING REMARKS

Mr. Randy Butler, (FHWA) Program Manager for IFTWG, welcomed the meeting participants to the second day of the meeting and outlined the schedule for the day. He then introduced Mr. Ben Shelton and Mr. Tony Furst, the IFTWG co-chairs, and asked them to share some opening comments.

Mr. Shelton thanked everyone for attending and encouraged attendees to take part in the session, stating that the development of new projects is critical to the group's ongoing success.

Mr. Furst also thanked attendees for their participation and echoed Mr. Shelton's call for active participation in the identification of opportunities for the group to contribute to the ongoing effort to improve intermodal freight operations efficiency.

Collaborative Logistics Discussion Forum

Part I: Uncovering the Opportunities

This portion of the Day 2 agenda began with Mr. Paul Belella (Delcan) providing a brief overview of the goals, objectives and operating practices of the IFTWG. Mr. Belella reviewed the group's mission and approach, and introduced the day's topic, collaboration in the supply chain. He continued with an overview of how the sessions would progress through the meeting and the introduction of the panelists: Ms. Angie Baggett (vice president, power only services & special accounts, Landstar Systems), Mr. Bob Huffman (vice president, intermodal operations, Norfolk Southern RR), Mr. Tim Gicewicz (managing partner, CTI, heavy transload), and Mr. Val Noel (president, Pacer Cartage). Mr. Belella then showed the participants the specific questions that were to be addressed during the session, which was divided into two parts: the description of collaboration gaps, and the identification of potential solutions to be pursued by the IFTWG. Each of the panelists had been asked to identify one or more specific collaboration gaps to discuss during the meeting, and several of them prepared a two-slide presentation contain-

ing the answers. The intent was to promote discussion among the attendees regarding specific needs areas and to encourage the development of creative solutions that align with the mission of the IFTWG. The questions asked during Part I of the forum were as follows:

Collaboration Gaps

1. How common is this gap?
2. Would all of the stakeholders identified agree that it exists?
3. How critical is it that something be done soon?
4. How extensive would changes have to be to address it?

Ms. Baggett began the discussion by identifying two related collaboration gaps. The first was associated with obtaining information regarding specific security and access requirements for various port facilities. Specifically, she indicated that carriers like Landstar call on multiple ports and there currently exists no simple means for gathering port access requirements information at different facilities. This results in the need for carriers to spend a significant level of effort to locate, read through, decipher and distribute information to drivers and to complete actions necessary to ensure compliance. Additionally, information changes frequently and is sometimes inconsistent in level of detail from one port facility to the next.

Ms. Baggett defined the effects of this gap as delays that waste time and hours of service and decrease terminal throughput, contributing to congestion and increased emissions due to idling trucks. She then defined the “bottom line” impact: truckers consume fuel, and waste hours of service (HOS) while complying with requirements but gain no revenue in the process, thus creating a perception of port inefficiency, causing truckers to avoid moving freight at that port.

Ms. Baggett then proceeded to highlight a second collaboration gap. Specifically, she expressed concern regarding the multiple port/terminal access systems, their incompatibility with each other, and the potential for yet another standard to be introduced when the transportation worker identification credential (TWIC) systems are deployed at ports. The result, currently, is that truckers must carry multiple access cards and will be expected to add a TWIC card, as well. She indicated that some states, such as Florida, are pursuing standardized access cards (not including TWIC) which will help if carriers call only on ports in one state, but that Landstar is a nationwide carrier whose drivers may call on multiple ports in various states. Additionally, carriers such as Landstar must administer multiple programs for all of its associates (i.e., owner-operators).

Ms. Baggett defined the effects of this gap as similar to those for the previously discussed gap. Namely, truckers waste fuel and HOS when they misplace access cards or are unaware of variations in access systems across ports/terminals. She went on to express concern that there does not seem to be a great deal of collaboration taking place across the various port access stakeholders – specifically, truckers.

The next panelist to offer concerns was Mr. Bob Huffman. Mr. Huffman indicated that among the gaps he feels are most significant, the lack of advance information regarding

loads coming into and going out of terminals prevents railroads from optimizing internal operations, which results in delays processing truckers and forces suboptimal load management decisions. Mr. Huffman suggested that the root causes for this is that truckers don't typically provide advance information regarding ultimate destination and delivery requirements for individual loads until they arrive at the terminal. Mr. Huffman went on to clarify the cause by stating that truckers usually don't have the information until they retrieve loads from the shipper, and that there is no continuity of expectations or operating practices across the industry regarding information forwarding.

Mr. Huffman stated that the primary operational effect of not obtaining load information in advance of truck movements into or out of the terminals is that the terminals spend excessive amount of time repositioning loads within the terminal, particularly in grounded operations, and have to constantly reshuffle loads to make the most of capacity and satisfy prime customers. According to Mr. Huffman, the bottom line effect is that load repositioning and reduced throughput at terminals reduce profitability for railroads and truckers because resources are tied up doing unproductive things.

The next panelist was Mr. Tim Gicewicz. Mr. Gicewicz offered that a significant gap exists with regard to the coordination of information necessary for container pickup and terminations. Specifically, he highlighted bookings and rail billing, and chassis availability and rail charges (i.e., container lifts/storage fees). Elaborating on the issues, Mr. Gicewicz said that it is "hit or miss" when truckers arrive at a destination to interchange containers. Truck drivers can experience significant time delays (and subsequent frustration levels) during the information exchange process to pickup or terminate a container.

Mr. Gicewicz stated that the primary effects of this gap are that the incomplete and/or "surprise" information leads to gate congestion, which ripples through the system causing lost productivity and increased road traffic. Ultimately, he added that the delays and surprises in this process lead to added costs in dwell time, dry runs, forced schedule re-routing and rail/steamship charges.

The final panelist, Mr. Val Noel, offered a collaboration gap that was similar to some of the others offered. Specifically, he indicated that trucking companies serving port and rail terminals must spend excessive amounts of time accessing terminal facilities, locating loads for pick-up and quickly dropping loads. He added that gate reservation processes are designed to optimize terminal efficiency, not trucker operations, and that is particularly true among independent owner-operator trucks/fleets. He also indicated that equipment availability remains a problem.

Mr. Noel stated that the effects of these conditions are delays that waste time and hours of service and decrease terminal throughput, contributing to congestion and increased emissions due to idling trucks. The bottom line effects, as indicated by Mr. Noel, are that truckers consume fuel and waste HOS while complying with requirements, which creates real profitability problems for independent truckers.

Throughout the discussions for each of the gaps presented by the panelists, members of the panel and others in attendance asked questions regarding the specific conditions and effects, and provided additional information and insights into the root causes for current conditions. At the conclusion of Part I of the Collaboration Forum, Mr. Belella provided information about what would take place during the second part of the discussion, which would resume after a brief break. Specifically, he indicated that the following solutions-related questions would be addressed:

Solution Options

1. How important is technology to addressing the gap?
2. Are there any solutions that already exist that come close to providing the desired capabilities?
3. What kinds of systems might stakeholders have to invest in?
4. Would expanding any current systems do the job?
5. Would the expected benefits be large enough to offset the cost of a solution?

Part II: Identifying Potential Solutions

During Part II of the forum, panelists and other attendees addressed these questions, raising several different options for applying the group’s efforts to resolving the identified gaps. At various points during the discussion, specific actions were identified for one or more gap needs, and the discussion moved toward the next challenge. At the conclusion of the session, the participants had identified specific measures that could be undertaken and initial steps toward completing those measures were discussed. The table below provides a summary of these discussions and the results that emerged from them. It also provides a list of names of individuals that agreed to assist in further developing the ideas. Those that volunteered to provide this assistance were informed that they would be contacted to move the topics forward.

Collaboration Forum Outcome Summary

| Collaboration Gap | Effects | Proposed Measures | Potential Outcomes | Volunteers |
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| No simple means for gathering port access requirements information at different facilities | Delays that waste time, fuel and hours of service, and decrease terminal throughput, contributing to congestion and increased emissions | Facilitate the creation of a single point of access or portal for truckers to access consistent information regarding port/terminal security requirements | Reductions in lost time and profit stemming from truckers waiting at facilities and from motor carriers re-searching multiple sources | A. Baggett (Landstar) T. Furst (FHWA) R. Hart (International Asset Systems) M. Dempsey (Navis) |
| Multiple incompatible port/ terminal access systems, and the potential for yet another standard associated with upcoming TWIC systems deployed at ports. | Truckers must carry multiple access cards and will be expected to add a TWIC card. Truckers waste fuel and HOS when they misplace access cards or are unaware of variations in access systems. | Research current initiatives and coordinate with Transportation Security Administration personnel to ensure dray trucker concerns are considered. Invite TSA staff to participate in November meeting. | Improved coordination and collaboration among systems deployers may lead to reductions in administrative costs and access delays for motor carriers. | A. Baggett (Landstar) T. Furst (FHWA) R. Hart (International Asset Systems) M. Dempsey (Navis) |

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| <p>Lack of advance information regarding loads coming into and going out of terminals.</p> <p><i>And</i></p> <p>The coordination of information necessary for container pickup and terminations. Specifically, the bookings and rail billing, and chassis availability and rail charges.</p> | <p>Prevents railroads from optimizing internal operations, which results in delays processing truckers, and forces suboptimal load management decisions. Terminals spend excessive amount of time repositioning loads within the terminal</p> | <p>Define and execute a pilot test, possibly as an EFM case study, to facilitate information flow between truckers and rail intermodal facilities and measure the impacts on terminal and trucking efficiency.</p> | <p>Reduction in frequency of load repositioning moves within terminals, reduction in overall truck dwell time in terminals associated with retrieving or leaving loads.</p> | <p>R. Grijalva (Addison-Burnet) E. McQuillan (Optimization Alternatives) M. Thomas (Trinium) B. Cox (TransWorks) B. Walker (Profi Tools) C.W. Conner (Intermodal Insurance Co.)</p> |
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Once the solutions discussions had concluded, Mr. Belella provided the participants with information regarding what would happen moving forward. He indicated that those that had volunteered to support one or more of the initiatives would be contacted and asked to provide input to further specify the proposed approach to the initiatives. Additionally, some next steps were defined and taken as action items by some of the IFTWG leadership and support team members. These were as follows:

Tentative Action Items

| Action | Responsibility |
|--|----------------------|
| Establish contact within TSA for November meeting/TWIC coordination | T. Furst |
| Prepare and distribute information regarding proposed actions to panelists | P. Belella |
| Participate in initial efforts to further define proposed actions | Panelists |
| Provide additional information regarding EFM in response to requests | R. Butler |
| Explore potential for adding TWIC and environmental issues to agenda for November meeting | R. Butler/P. Belella |
| Support effort to gather more information regarding current status and proposed actions related to TWIC | P. Belella |
| Support effort to gather more information regarding the availability and distribution of port/terminal security access program information | P. Belella |

At the conclusion of the group discussion, Mr. Belella thanked all in attendance for actively contributing to the discussion of gaps and solutions, and for providing valuable insights into how the IFTWG can better serve the freight community.

ADJOURNMENT

Mr. Butler thanked everyone for participating in the meeting and indicated that he considered it one of the best IFTWG meetings in which he'd participated. He announced that the next meeting will be in conjunction with IANA's Intermodal Expo in Ft. Lauderdale in November 2008, and called the meeting to a close.