FREIGHT NOTES NUMBER 6 FALL 2009



Freight Notes

The Newsletter of the Mississippi Valley Freight Coalition





The Future of Great Lakes Shipping--Ernie Wittwer, MVFC Facilitator

The states of the Mississippi Valley Freight Coalition have advocated a seamless, multimodal freight system that uses each of the modes to their greatest advantage. With the Great Lakes and Rivers of the region, maritime is a key part of that system, but what is the likely future of maritime in the region, particularly of freight on the Lakes?

Two speakers at the recent Ohio Freight Conference addressed Great Lakes shipping. Terry Johnson, Administrator of the St. Lawrence Seaway Development Corporation, and Jim Weakley, President of the Lake Carriers Association, both had good news/ bad news messages.

Administrator Johnson began his remarks by recounting the Seaway's efforts to establish container traffic through the Seaway into the Great Lakes. He noted the rail industry's historic opposition to containers moving on the Seaway, but reported progress in discussions with that industry. Railroads really do not want to carry overweight containers or hazardous materials. The damage caused by the former is too great and the exposure to liability related the latter is too great. Heavy containers and containers holding hazardous materials would thus seem to be a niche that that ships could logically fill. He also noted that the equipment needed by ports to handle containers is fairly standard and inexpensive. Several lake ports already have such equipment. Ships are available to carry containers and union workers are willing to be flexible to promote containers in the Seaway. He even held out hope of gaining some relief from the Harbor Maintenance Tax to promote the service. So that was the good news: We might have a niche to begin container service through the Seaway.

The bad news was in two parts: State administered ballast water rules are difficult to deal with, and, in some cases, impossible to conform to. The second part of the bad news is a draft EPA rule that would ban the burning of bunker fuels in all vessels. This is the very heavy fuel that

powers nearly all lake vessels. The rule did not cover lake vessels when

it was being drafted, but as published, it does. If enacted, it would require the refitting of the entire lake fleet. Given the age of that fleet, it would likely mean a significant reduction in the number of vessels operating on the lakes.

Jim Weakley's comments continued the good news-bad news format. His good news: Funding was obtained to replace an aging Coast Guard Ice Breaker and the second Poe-sized lock was not de-authorized, although funding must still be found for it to be built (see photos at right).

His bad news is what he called the Dredging Crisis. Normal

Kept second Poe-sized Lock from being deauthorized.

Combine
Two
Locks

Davis
&
Sabin
Locks

Into
One

From the Editor:

This issue of the Freight Notes contains articles by several CFIRE folks reporting on recent events. These events should be of interest to most of you.

Ernie Wittwer

In This Issue:

Great Lakes

Shipping......I

Indiana Logistics

Freight Research

OSOW Permitting.....4

Transportation Workforce...5

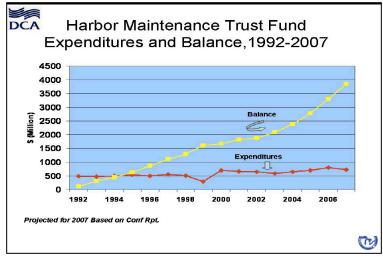
Asset Management and

Freight.....6

fluctuations in lake levels have combined with inadequate dredging budgets to effectively close one lake port and reduce the others by as much as 54 inches below their authorized draft levels. A reduction in channel depth forces a reduction in the loads carried by vessels. Smaller loads equal less efficiency. It also equals more environmental impact per ton of freight moved.

One of the reasons for the inadequate funding for dredging is the Congress' refusal to spend the balance of the Harbor Maintenance Trust Fund (see the graphic to the right). Since the early 1990's the fund has had a growing balance. Of course, like all federal trust funds, the balance is on paper only. The dollars have been used to balance the total federal budget, so appropriating more of the dollars for the Army Corps of Engineers to do more dredging will increase the overall federal deficit.

Weakely may be right that we face a dredging crisis. Freight transport on the lakes seems clearly to be in crisis. Monthly tonnage reports for 2009 routinely begin with



headlines that read something like: Tonnage down by more than one-third over last year. Much of the decline must be attributed to the sickness in our economy, but are we making it worse by under investing in the freight moving resource or by promulgating well-intentioned, but only partially thought-out rules?

Clearly we have to return to some sanity in our federal budgeting processes. Inevitably that will mean spending fewer dollars for some things. We also clearly have to take steps to protect clean air and water, as the environmental rules are intended to do. The issues are significant and complex enough to demand a broader public policy discussion. Moving freight by highway and rail also requires investment, and it also has negative environmental impacts. We ought not become maritime budget cutters or maritime environmentalists. We should consider all the trade-offs involved in those decisions.

All presentations from the summit can be found at: http://tmacog.org/OCF_09/OCF_09 followup.htm

Indiana Logistics Summit Assembles Industry, Public Agency, and Academic Perspectives—Bob Gollnik, Cfire

On September 22, Indiana Logistics, Purdue University and the Ports of Indiana hosted the 7th annual Indiana Logistics Summit. The summit successfully gathered industry representatives and other transportation professionals with expertise in all four modes of freight transportation for the daylong event. Indiana's billing as the 'Crossroads of America' teamed with its industrial land availability and ample accessibility to infrastructure presents an attractive option for production and distribution activities, and the five sessions provided a platform for the various perspectives on current and future logistics issues in the state and region.

The Summit kicked off with *Indiana-The State of Logistics*, an overview of the state's rankings across more than 30 logistics categories. The Ports of Indiana released the report based on information gleaned from numerous Federal and State sources. Indiana was among only a handful of states to rank in the top-ten in all categories. Indiana's logistics features, emphasized by Rich Cooper, CEO, Ports of Indiana, include: 1st in pass-through interstates, 1st in rail tons of primary metals, 2nd in rail tons of petroleum products terminated, 2nd in rail tons of waste & scrap material terminated, 2nd in world's largest FedEx air hubs (Indianapolis), 2nd in pass-through truck tonnage, 3rd in total freight railroads, and 5th in rail carloads. Full details of the report can be found at the Indiana Logistics website: http://www.indianalogistics.com/.

FREIGHT NOTES SUMMER 2009

The following session focused on *Industry Outlook from Ocean, River, Rail, Truck, and Air Logistics*. Representatives from Indiana Rail Road Co., AEP River Operations, Celadon Trucking, Federal Marine Terminals, and DB Schenker discussed the effects of recent economic downturns and approaches to dealing with the current business climate. While speakers acknowledged that the state of the economy has directly impacted freight volumes and profit margins, they also noted that it has led to discovering innovative ways of streamlining operations, as well as improved quality and service.

Distribution centers were the focus of the next session, entitled, *Innovation and Evolution of Distribution Centers at the "Crossroads of America"*. Presentations from Integrated Distribution Services, a provider of integrated logistics services with specialties in retail and transportation management, Langham Logisitics, a full service global supply chain provider, and Brightpoint Inc., a major distributor of wireless devices and in logistic services provider to the wireless industry, expanded upon comments provided by shippers. Despite issues presented by a depressed economy these industries remain optimistic that a rebound is on the horizon, and also stress that opportunities still remain in today's economic climate.

The final two sessions were A Study of Agriculture Logistics: How a small town bridge influenced a region's economy, and Unlocking the Productivity of Your Supply Chain in a Down Economy. The Indiana Soybean Alliance and Indiana Corn Marketing Council recently completed a study which analyzed infrastructure and economic impacts as they pertain to grain, biofuels, livestock, and agricultural & food processing in the state. The study highlights the critical link between local transportation infrastructure and economies, and suggests how and why each city or rural area, county public works office, and state agency should be aware of the economic value of the infrastructure. Ronald Bohl, Director of Supply Chain for Eli Lilly & Co. described efforts to streamline global supply chain movements through information sharing improvements and other measures. Bohl's perspective was unique as the global pharmaceutical supply chain relies on an intricate and specialized system to successfully distribute the correct products to the correct locations while still maintaining profitability.

The prevailing theme of the summit, similar to that heard throughout the rest of the US, was that effective freight movement is reliant upon air, water, road, and rail systems, and infrastructure investment should be increased and targeted accordingly. Further, industries expect that demand for freight services has slowed, but has not stopped entirely; therefore we should continue to prepare for future growth projections.

Presentations and additional information can be found at the Indiana Logistics website:

http://www.indianalogistics.com/summit/2009.htm

CFIRE Hosts Freight Research Workshop—Bob Gollnik, CFIRE

On October 20th the Center for Freight & Infrastructure Research & Education (CFIRE) hosted *Freight Research at University Transportation Centers: Integrating Efforts* a one-day workshop at the Hotel Maya in Long Beach, California, which focused on defining more productive and collaborative means of researching freight transportation at UTCs. The workshop served as a precursor to the METRANS National Urban Freight Conference and was well attended. In all, the workshop had nearly 50 participants, including representatives from 18 UTCs, along with a number of state and local agencies.

The workshop was a response to USDOT's call for better coordination of research efforts, and built upon a similar event in 2007. The agenda was designed to provide attendees: an opportunity to build professional networks, a greater understanding of critical freight research issues, and further knowledge of research efforts at other UTCs and agencies.

In addition to research updates from key UTCs, the workshop included a 'speed networking' event, and facilitated working groups organized around four broad research areas: Freight Economics, facilitated by Teresa Adams (UW-Madison) and Denver Tolliver (North Dakota State University); Freight Planning, Logistics, & Supply Chain, facilitated by Joe Petrolino (National Transportation Research Center, Inc); Environment & Emissions, facilitated by Larry Rilett (University of Nebraska); and Infrastructure and Materials, facilitated by Marty Lipinski (University of Memphis).

CFIRE staff is currently working to compile input from breakout sessions and related attendee input into a single summary document for distribution. CFIRE intends to use the workshop results to supplement and lead the national dialogue on freight research topics and future collaboration. For additional information, or to request a summary report, email Bob Gollnik (Gollnik@engr.wisc.edu). Workshop products will be posted as they are completed on CFIRE's website at: http://www.wistrans.org/cfire/IntegratingEfforts/index.html

Enhancing the Flow of OSOW Freight in the Mississippi Valley Jason Bittner. CFIRE

There can be little doubt that the balance between wealth generation through economic growth and preservation of the nation's infrastructure is more obvious than in the issue of permitting of overdimensional and overweight loads throughout the upper Midwest region. The Mississippi Valley states vary in topography, system age, and principal commodities, however they share many commonalities such as climate, the importance of Chicago as a multimodal hub, and growing public budget deficits. These states also take a variety of views with respect to permitting of such oversize and overweight loads. Some permits are issued by departments of transportation, some by departments of revenue, and others in standalone motor vehicle units. Some states have fees as low as \$10 with no bridge review fees while others include mileage and weight based options. In each case, however, the states will make every effort to find a route for any possible permit load.

At the October 14-16 Mississippi Valley Committee on Highway Transport Meeting in Springfield, Illinois, this variety was fully displayed. The committee, which was dormant for several years but resurrected in 2007 by a handful of the MVC states, aims to:

- Provide representation for the central region of the nation in regard to highway transportation issues,
- Provide a forum for discussion and share best practices as it deals with statutes, regulations and industry requests,
- Promote ITS/CVO applications that result in efficient movement of goods and a safe transportation system, and
- Communicate the work and recommendations of this committee to state DOTs, the motor carrier industry and other organizations.

The committee's agenda featured presentations from a variety of industry and state representatives. The Mississippi Valley States of Wisconsin, Missouri, Iowa, Illinois, Kansas were in attendance and Minnesota provided a report by proxy.

Committee chair Michelle Teel of the Missouri DOT opened the meeting with some observations on the

growth of the committee's activity and also emphasized the commitee's website (www.mississippivalleycommittee.org) as an important tool for sharing state information. While the number of OSOW permits issued across the region will be slightly down this year compared to 2008, the number issued will still exceed previous averages. Load sizes and weights are increasing across the nation.

Illinois DOT's chief engineer, David Johnson, provided an overview of the state's current transportation challenges. While optimistic in general, Johnson noted that budget deficits, government scandals, and growing demands on state employees have hampered



state operations in Illinois.



Doug Ball, Vice President of the Specialized Carriers and Rigging Association, detailed some of the primary issues of importance for his organization. The Specialized Carriers & Rigging Association (SC&RA) is an international trade association of more than 1,300 members from 43 nations. Among the items he highlighted were uniformity from state to state across the region and planning coordination. He focused on his industry's top issues - included in them are pilot car training and certification requirements, weekend travel uniformity, federal regulatory impacts related to size and weight or divisible loads, permit requirements, and design issues like roundabouts for lengthy loads.

The issue of divisible loads – a dated concept rooted in a FHWA memo of 1984– continued in the following sessions as Steven Todd, Illinois DOT, Bo Delong of the Delong Companies, and I presented issues related to the movement of goods in international containers. Todd detailed a recent court case (Village of Palantine vs State of Illinois) where the state's authority to issue permits for international containers was challenged by the local village. The court ruled that the state could make such policy decisions based on the interpretation of the FHWA South Carolina memo. Todd also highlighted the growth of containerized grain operations in northern Illinois. While only 8 facilities transloaded grain into international containers in 2003, 130 such facilities were now operating, with most in the greater Chicago area.

DeLong focused on the impact that the lack of standardizing containerized load handling had on his business. The company, in its fourth generation of DeLong family ownership, has 250 employees, including about 110 employees at its headquarters and grain elevator in Clinton, Wisconsin. DeLong estimated that there was an economic savings of \$400 per container if the containers could be loaded to ocean line weights and transported from the elevators. At approximately 100,000 containers per year, this would mean \$40,000,000 returned to the producers.

Illinois allows a permitted move for these configurations. Wisconsin only allows them for dried distillers grains (as a waste product) and only to 90,000 gross vehicle weight. Key states that don't currently offer permits for international containers are Indiana, Ohio, and Iowa.

The presentation I gave focused on a Wisconsin DOT policy research project looking at containerized loads. The principal industries in Wisconsin that would benefit from changes to the current practice of defining international containers as divisible loads would be grain, forest products, and small machines. However,

without federal leadership on redefining the allowable weight on the interstate system, the full economic benefits of changes may not be realized. The issues of infrastructure damage, safety concerns, and similar public policy concerns also need to be weighed against the potential economic benefits.

The group then considered issues related to a pilot car task force that has produced recommendations and guidance for standardizing certifications and use of pilot cars. The task force noted that uniformity of administration and regulation was the largest concern for the trucking industry.

State updates included updates on automation of



various permitting functions, new fees, impacts of state furloughs, and other partnering efforts. Industry representatives were provided an opportunity to raise issues and among many observations was that regional permits may be rarely used. Industry reps also pointed at issues of harmonization between the states over issues like length of permit validity, night movements, and home rule issues where individual counties and municipalities issue their own OSOW permits on top of state issued permits.

On the second day, the states hosted roundtable discussions on specific issues including local permitting, empty trailer movements, trunnion trailers, wind energy loads, and new legislative actions. Presentations on the Minnesota and Wisconsin Cross Border Permitting effort and the Exporters Competitive Maritime Council were also featured. The cross border effort has allowed for movements in the border area between the two states under the larger joint WinnDOT series of activities.

Presentation materials and summary information will be posted at the committee's website: www.mississippivalleycommittee.org.

Editor's Note: Our last newsletter announced a planned peer exchange that would bring the experiences of other states with a history of issuing multi-state OSOW truck permits to the Mississippi Valley states. That event has now been cancelled.

Transportation Workforce--Greg Waidley, CFIRE

The 6th Annual sySTEMnow (Strengthening Youth in Science, Technology, Engineering and Mathematics [Now! Means now!]) Conference, coordinated by the Engineers & Scientists of Milwaukee, was held on October 20-21st in Milwaukee, Wisconsin. This event has become a highly effective means to bring together educators, business and industry, and policy-makers in order to exchange best practices, develop partnerships, and raise awareness of STEM-related activities.

This year's conference was special in that it was two days in length in order to allow for some unique tours. Some of those included a behind the scenes look at Discovery World, a tour of the Milwaukee Area Technical College, a first hand look at Brown Deer High School's Project Lead The Way program, and a tour of Bradley Technical High School's computer integrated manufacturing facility. In addition to the tours, there were some great presenters, including John Abele, who is the founder and chairman of Boston Scientific and the Governor of Wisconsin, Jim Doyle.

Given the crisis situation the U.S. is dealing with in terms of recruiting and retaining a highly qualified and diverse technical workforce, these kinds of efforts by STEM leaders and those active in STEM fields is of the utmost importance.

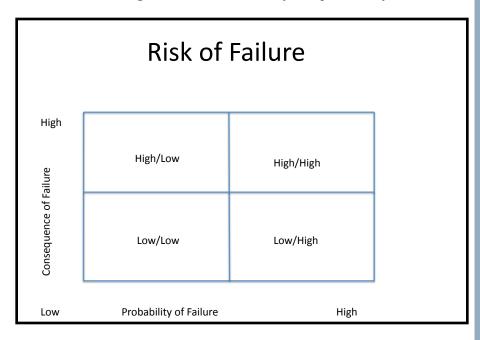
Editor's Note: The conference described in this article is an important effort to increase the number of young people involved in math and science. CFIRE has been working with other university transportation centers around the country and with various agencies and industry groups to develop strategies for meeting the workforce needs of the transportation industry in the future. STEM is but one strategy that will have to be employed to meet those needs.

Freight and Asset Management--Ernie Wittwer, MVFC Facilitator

I recently spent two days at the Eighth National Asset Management Workshop. Practitioners and academics from around the country and the world came together to talk about asset management. For those of you who may not be up on transportation lingo, asset management is simply a set of tools and processes that can be used to maximize the impact of budgets on the service and condition of transportation infrastructure. Essentially, it involves managing toward defined goals, using the best available data and analytic tools to inform decisions, managing for the long-term and creating transparent and accountable procedures. Since this newsletter is typically dedicated to issues related to freight, you might reasonably ask why I'm talking about asset management.

One of the most useful issues for freight came from a speaker from the utility industry, that is the notion of risk. Risk, as practiced by utilities, considers two issues: the probability of facility failure and the

consequence of failure. When they first began considering these dimensions of risk, some utilities found that they were spending time and dollars ensuring that facilities with very low probability of failure



and little consequence of failure were being maintained at very high levels. The graphic below illustrates these dimensions. Obviously, the goal for the managers of utilities is to spend most of their time and budget dealing facilities that fall into the "High/High" quadrant, that is those that have a high probability of failure and a high consequence of failure.

The importance of this for freight is simply that all freight facilities are not equal. Some are very stable, with low the probability of failure. Some have redundant capabilities, reducing the consequence of failure. In the current climate of very limited resources, considering both of these factors could allow those resources to be used to the greatest benefit.

A second feature of asset management that should be of importance to the freight community, at least on the infrastructure side, is managing toward a goal. As your agency makes investment decision related to the movement of freight, do you have clearly defined objectives?

Without clear objectives, it will be very difficult to measure progress or to even evaluate alternative investments.

Finally, the other element is using the best data available. Certainly, good data has been an issue that has plagued public sector agencies as they have attempted to deal with freight. There is much that is unknown, but as those investment or operating decisions are made, has an effort been made to involve industry groups that might provide insights into the needs and consequence of investments?

Asset management may seem a bit off the topic for a freight newsletter, but it's all about how budgets are allocated and the impact of that spending, topics that should be of concern to the freight community.

The Mississippi Valley Freight Coalition and the Center for Freight and Infrastructure Research and Education

CFIRE Director, Teresa Adams adams@engr.wisc.edu or 608-263-3175

Coalition Facilitator and Editor Ernie Wittwer wittwer@.wisc.edu or 608-890-2310

Researcher, Bob Gollnik gollnik@engr.wisc.edu or 608-262-6639

Deputy Director, Jason Bittner bittner@engr.wisc.edu or 608-262-7246

Research Manager, Greg Waidley gwaidley@engr.wisc.edu or 608-262-2013

www.mississippivalleyfreight.org

cfire.wistrans.org

Mailing Address: 2205 Engineering Hall 1415 Engineering Drive Madison, WI 53706-1691