

Research Report
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**2013 Barge and Rail Symposium:
Moving Freight Between Multimodal Systems**

Our Mission

We provide services to the transportation community through research, technology transfer and education. We create and participate in partnerships to promote safe and effective transportation systems.

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2013 Barge and Rail Symposium: Moving Freight Between Multimodal Systems

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Overview

Symposiums and peer exchanges are critical venues in which researchers meet and exchange new ideas and share the results of projects with colleagues. These gatherings are particularly important for multidisciplinary research areas. Despite knowledge rapidly developing in these fields, too often conversations do not take place between individuals who occupy different research niches. This delays efforts to implement new solutions to critical, everyday problems. Currently, there is no annual meeting at which researchers doing work on freight transportation shipped on the inland waterways and railways gather to present their findings to a broad cross section of government, industry, and academic stakeholders. Given the role multimodal freight movements will play in steering US economic growth over the next 20-30 years, this oversight demanded corrective action.

This corrective action came in the form of the 2013 Barge and Rail Symposium organized by the Kentucky Transportation Center. This conference promoted discussions between stakeholders researching the US inland waterway system and rail network as well as businesses who rely on these transportation assets. With freight transportation as its focal point, the 2013 Barge and Rail Symposium established a collegial environment in which new bonds were forged between major stakeholders and researchers as they discussed challenges and opportunities associated with moving freight in an economic, efficient, and sustainable manner through multimodal systems. In addition to informative conference presentations, participants at the Barge and Rail Symposium had the chance to visit a number of facilities that are an integral part of multimodal freight networks, such as the McAlpine Locks and Dam, to gain firsthand knowledge of their daily operations. The 2013 Symposium balanced insightful presentations with hands-on field experience, giving attendees a memorable experience and, more crucially, it set the stage for future collaborations between researchers and public and private stakeholders.

Background and Conference Planning

At the Transportation Research Board's (TRB) 2013 annual meeting, representatives from the Kentucky Transportation Center (KTC) spoke with members of the TRB's Inland Water Transportation Committee and Freight Rail Transportation Committee about the possibility of holding a joint conference. The proposed conference would bring together members of the two TRB committees, and it would be organized and hosted by KTC. Both committees endorsed the idea of a conference that addressed the challenges of multimodal freight transportation, as it has remained an understudied problem. It also brought together two groups that – historically – lacked a strong working relationship. Moreover, no previous conference had so ambitiously sought to bring together researchers from different fields to discuss the most compelling and pressing questions confronting multimodal freight transport. Having received funding from the Multimodal Transportation and Infrastructure Consortium to host a conference that explored current research on the US inland waterway system, KTC was ideally positioned to perform the majority of conference planning.

Representatives from the Freight Rail Transportation Committee, Inland Water Transportation Committee, and KTC identified Louisville, Kentucky as an ideal location to hold the inaugural *2013 Barge and Rail Symposium: Moving Freight Between Multimodal System*. Traditionally the Freight Rail Transportation Committee held its annual *SummerRail* meeting during the summer.

To maintain this schedule, representatives scheduled the 2013 Symposium for August. In April 2013, conference organizers circulated a Call For Papers (CFP) through several outlets, including the TRB email distribution list, the KTC email contact list, and to organizations and entities in the freight rail and inland water transportation communities that expressed interest in the Symposium. Figure 1 reprints the as-issued CFP. Conference organizers also solicited plenary presentations from key figures in the barge and rail community. Since the 2013 Symposium subsumed the *SummerRail* meetings, a main priority of the organizing committees was to maintain the spirit and practices found at these gatherings. *SummerRail* meetings stressed the importance of technical tours and getting out in the field for firsthand experiences. Knowing that many conference participants look forward to these outings, the conference set aside one day to focus exclusively on tours of nearby barge and rail facilities.

Conference Participation

Over 130 attendees from twenty states participated in the conference. On the first day, there were three breakout sessions, during which researchers gave 25 presentations on various aspects of multimodal freight transport. Presenters hailed from academia, government, and private industry. There were also two plenary presentations given on day one. Randolph Resor, a Policy Analyst from the Office of the Secretary, U.S. Department of Transportation, delivered the first of these. Mr. Resor provided an overview of the implications of widening the Panama Canal on future freight distribution practices and patterns in the U.S. Paul Jaenichen, the Acting Administrator for the US Maritime Administration, also spoke at lunch the first day. His remarks focused on the importance of sustaining a vibrant multimodal freight transportation network over the long-term, and it also touched on the importance of promoting new interdisciplinary collaborations between researchers and key industry stakeholders to expand the capacity and resiliency of the U.S. freight network.

The conference's second day offered participants a chance to take part in a series of field experiences to learn about local facilities intimately tied to multimodal freight transportation. To expose attendees to a taste of the historical dimensions of railroads, the first stop was at the Kentucky Railroad Museum. Here participants were treated to a tour of the museum, which included a brief overview of the critical role railroads have played during different periods in the state's history. This was followed by a train ride from New Haven, Kentucky to Boston, Kentucky. Following this, attendees returned to Louisville and toured the McAlpine Locks and Dam, a key node along the Ohio River for waterborne freight movements. Attendees received a welcomed treat here – they were fortunate enough to witness three barges locking through the facility. Although many of the attendees wanted to linger at McAlpine, they were soon ferried off to see the Falls of Ohio State Park before ending the day with a brief tour of Jeffboat Manufacturing and an evening reception graciously hosted by American Commercial Lines.

The conference's abbreviated third day included one plenary presentation and a panel discussion. Tammy Nicholson, Director of the Rail Division at the Iowa Department of Transportation gave a plenary presentation on the intermodal initiatives currently underway in Iowa, a state uniquely framed by rivers on its eastern and western borders, with an intricate network of rail lines that weaves across its landscape. Ms. Nicholson addressed the importance of state governments having a long-term strategy to promote intermodal freight movement.

The conference wrapped up with a panel discussion moderated by Chuck Knowles, the Deputy Director of KTC. This discussion brought together stakeholders to discuss strategies to increase collaboration between private industry and academic researchers. While there have been many instances of successful collaboration in the past, panelists agreed that researchers can play an expanded role in the future to assist organizations as they confront challenges related to freight transportation via inland waterway and rail lines alike.

After the conference wrapped up, KTC prepared a press release recapping the conference's most notable activities and achievements (Figure 2). This press release appeared in UKNow, a daily digest of the most important news and happenings affecting the University of Kentucky. Subsequently, Kentuckians for Better Transportation, an organization dedicated to improving all facets of transportation in the State of Kentucky, picked up the press release as well, using it to tout the Symposium's success as well as the contribution it made to productively expanding the discussion about multimodal freight transportation.

Figure 1 – As-Issued Call for Papers

**2013 Barge and Rail Symposium:
Moving Freight Between Multimodal Systems**

August 14-16, 2013
Louisville, KY

Organized by:
Kentucky Transportation Center
and
Multimodal Transportation Infrastructure Consortium

Cosponsored by:
Committee on Inland Waterway Transportation
and
Committee on Freight Rail Transportation

Call for Papers

The 2013 Barge and Rail Symposium will be held August 14-16, 2013 in Louisville, Kentucky. The symposium will bring together academics, government officials, and members of private industry to discuss relevant issues and present research concerning the movement of freight via the nation's inland waterway and rail systems, those systems' interactions and interdependencies, and what steps can be taken to improve the functionality of both systems. Organizers are seeking papers on the following topics:

Multimodal Cooperative Competition:

- In what situations do barge and rail systems directly compete with one another? When do they complement one another? As rail capacity tightens, what changes can we anticipate with respect to modal realignments in freight transportation?

Multimodal Capacity Issues

- What effects do shared facilities have on the operations of rail (bridges) and waterways (locks)? What lessons can be learned from each mode? Are there lessons that can be borrowed from one mode and applied to another to improve efficiency and economic productivity?
- How does freight movement along inland waterways affect rail operations? A number of variables (river stage, drought, barge congestion) impact the speed at which freight can

move along waterways. What variables have the most significant consequences for the smooth functioning rail operations and intermodal freight movements more broadly?

Jobs, Economics, and Investments in Rail and/or the Inland Waterway System (may be specific to either area)

- How will future levels of federal funding impact the economic sustainability of (a) waterways, (b) short-line RRs, and/or (c) Class I RRs?
- Is there a role for private/industry funding of the inland waterway system?
- What strategies can help attract new workers into the waterway and rail transportation industries? What models of workforce development (e.g. high school or university-level training) have proven successful in recruiting new laborers to the industry? How can these initiatives be strengthened to improve the long-term security of the industry, and to promote workforce retention?

Presentation Formats

- Paper presentation: paper sessions will include 3 presenters with time allotted for discussion after each presentation. Each presenter will generally have 15-20 minutes to present with time for discussion.
- Poster presentation: posters will be displayed for informal browsing with an opportunity for interaction with presenter(s).

Submission of Abstracts and Registration

Abstracts or proposals should be 200 – 300 words in length and include three to five keywords. We ask each participant to include: name, any titles or affiliations you would like listed in the program, email address (please specify if you do not want your email included in the program). The abstract and registration links are available on the conference website at:

www.multimodaltransportationsymposium.com

The deadline for abstract submissions is June 15th, 2013. Please email any questions to MultimodalTransSymposium@gmail.com.

Additional conference information, including information on travel arrangements, technical tours, and an updated list of speakers will be posted on the conference website.

Conference Examines the Relationship Between Multimodal Transportation Systems

Lexington, KY – From August 14-16, leading representatives from private industry, government, and academia gathered at the Brown Hotel in Louisville for the 2013 Barge and Rail Symposium. This inaugural symposium provided an opportunity for invited presenters and experts on multimodal transportation to present cutting edge research focused on improving the speed and reliability of freight movement via the nation’s inland waterway and rail systems. The symposium fostered a productive exchange of ideas and laid the groundwork for enhancing the sustainability and long-term viability of the United States’ multimodal freight networks.

Sessions covered a variety of topics related to the past, present, and future of multimodal transportation. One of the critical themes to emerge from the conference was finding new ways to leverage knowledge about transportation systems’ crucial interactions and interdependencies to streamline freight movement. Many of the presentations confronted tough but rewarding questions about what steps are needed to bolster the multimodal efficiency of the nation’s inland waterways and rail infrastructure. The ideas that emerged through the symposium will benefit the efficiency of multimodal freight transportation.

In addition to presentation sessions, participants visited the Kentucky Railway Museum, McAlpine Locks and Dam, the Falls of the Ohio, and American Commercial Lines’ Jeffboat Manufacturing facility. These invaluable excursions gave attendees direct insights into the daily operation of the multimodal transportation systems that serve as critical links in the nations supply chains.

“We could not have been more pleased with the success of this conference,” said Dr. Joe Crabtree, Director of the Kentucky Transportation Center at the University of Kentucky. “The turnout was even greater than we had anticipated, and there was a wonderful exchange of information and ideas among the participants. I was particularly pleased to see the excellent interaction and cooperation that occurred among folks representing the different modes.”

The symposium was made possible through partnerships between the Transportation Research Board, the Multimodal Transportation & Infrastructure Consortium, and the Kentucky Transportation Center. Conference sponsors included American Commercial Lines, Genesee & Wyoming, Global Transportation Consultancy LLC, Patriot Rail, and the University of Louisville. Their generous support helped to make the Barge and Rail Symposium a tremendous success.