

Call for Papers

Coming out of the Global Financial Crisis (GFC) there is a greater need to optimize the supply chains subject to the current economic and environmental constraints. Specifically, new frameworks, partnerships, methodologies, models, and practices need to be explored. Accordingly, the TRB's Intermodal Freight Transportation Committee (AT045) is soliciting research papers on the following topics for review and possible inclusion in the 2011 TRB Annual Meeting program.

- Emissions Associated with Intermodal Freight Flows – How are emissions resulting from intermodal freight moves quantified and evaluated? Of particular interest is the application of the EPA MOVE model to analyze intermodal freight flows. Also of interests are (1) case studies that analyze actual emissions from intermodal services, (2) how the emissions are valued and assigned to various modes/trip segments, and (3) how monitoring programs are developed and implemented.
- Siting of Major Intermodal Cargo Hubs, Inland Distribution Centers, and Land Use – What are the site selection criteria and decision factors for siting inland ports, freight intermodal terminals, and warehouse distribution centers? What are the economic and environmental considerations? Are there case studies of effective local land use planning for major cargo hubs? What role can/should inland distribution centers play in the intermodal network? Key issues are (1) best practices of successful inland distribution centers, (2) key public policy issues to consider when determining support of a facility, (3) advantages and disadvantages of inland distribution centers, and (4) the role inland distribution centers can play in consolidating intermodal freight movements.
- Inland Navigation and Short Sea Shipping (SSS) – What role can inland navigation and short sea shipping play in the intermodal supply chain? What is the tradeoff between barges and trucks in terms of congestion, environmental, and economic impacts? What are the infrastructure and investment needs that must be done in order to make SSS competitive? What possible role can the public sector play to support SSS?
- Impact of Panama Canal expansion on the U.S. Freight System (including port, rail, intermodal facility and highway) – How will the expansion affect carriers' choice of ports? Do larger containerships translate to improved supply chains? What impact will larger vessels have on East Coast ports and their surrounding inland ports, distribution centers, and road infrastructure? From a systems perspective, what is the optimal distribution of goods via the system of ports that maximizes freight efficiency? The committee is interested in receiving empirical research papers, especially those with industry and academic partnership.
- Is There a Role for Freight on a Future High-Speed Rail Passenger System – Can the freight transportation system be enhanced through use of the excess capacity on the future U.S. high speed passenger rail system? How could the ability to transfer a significant portion (e.g. > 5%) of our nation's long haul freight on high speed rail impact and potentially improve supply chains? Would a high-speed rail freight capability be competitive as an alternative to high-value time-sensitive goods that are currently conveyed as air cargo (e.g. nighttime use of high-speed rail by UPS and FedEx)? Would a high-speed rail freight capability provide the impetus to reverse the decades-long trend of mode shift from rail to truck for refrigerated agricultural products (e.g. California Central Valley)? If focused exclusively on passengers, how would a high-speed rail

system impact the existing freight rail system? What are the air quality benefits of moving freight from truck to high-speed rail?

- Comparative Measures for Evaluating Freight System Efficiency and Performance - There has been considerable work done on developing freight performance and efficiency measures, but can these measures be useful in comparing over-the-road with intermodal freight that also entail greater mileage, transfer costs (terminal and drayage), connectivity and availability factors between the modes, and time-sensitivity/reliability requirements?
- Improving Exports Intermodal Logistics – The intermodal market suffers from a container imbalance problem: imports are far greater than exports. Can intermodal accessibility be improved for the specialty grains and other important U.S. export products? As intermodal volumes increase, will this improve export intermodal economics, improving problems such as container repositioning, long distances to intermodal terminals, and overweight restrictions for the drayage leg?