



PUTTING RESEARCH TO WORK

# BRIEF

## Containerized Loads and Increased Truck Weights: Identifying Issues

Intermodal shipping containers, or ICs, are the primary mode for moving freight around the world, be it by sea, railway or highway. The standard design of the containers allows for very efficient loading and unloading of freight including simple procedures for changing modes of transportation. Wisconsin funnels more than 1.5 billion kilograms of goods and commodities over its highways to and from seven seaports, multiple rail yards and scores of individual businesses. Currently, less than 10 percent of these imports and exports are transported via ICs in Wisconsin; however, that percentage is growing as international trade grows. The planned expansion of the Panama Canal could further increase IC traffic in the upper Midwest. An important part of determining the future regarding ICs lies in understanding the economic costs and benefits of vehicle-weight regulations for trucks in Wisconsin.

### What's the Problem?

The current gross vehicle weight limit of all axles for truck traffic in Wisconsin is 80,000 pounds, except for nondivisible loads such as heavy machinery. Currently, ICs entering the Wisconsin highway system exceeding current GVW limits must be split into smaller loads, adding costs to shippers and carriers. Following the lead of a few other states, Wisconsin is considering revising current policy to allow GVW values above 80,000 pounds for divisible loads in some cases.

Additionally, regulations regarding the maximum load weight for international shipping containers are determined by individual states and vary significantly. Current FHWA guidelines allow each state the latitude to designate ICs as divisible or nondivisible loads, which provides another avenue for regulating IC traffic. Issues for consideration by Wisconsin include truck GVW limits, their consistency with neighboring states and the potential economic impacts of revising regulations.

#### Investigator



*"It's good to start looking at specific issues as international trade increases to Wisconsin—to be proactive rather than reactive, and remain economically competitive with our neighbors."*

—Jason Bittner  
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### Research Objectives

The objectives of this research include:

- Develop a better understanding of the effects of GVW regulations on international container traffic in Wisconsin.
- Describe the effect of GVW regulations on costs for Wisconsin businesses to export or import goods via ICs.
- Compare regulations in Wisconsin to neighboring and other representative states.
- Explore the implications for shippers and carriers operating in Wisconsin of changing the state's GVW regulations.

### Methodology

Researchers performed a literature review of truck size and weight issues, especially related to ICs. They analyzed the existing regulations in neighboring states and interviewed relevant members of their departments of transportation to further understand the details of several state policies. Finally, they interviewed three stakeholders—a grain shipper in southern Wisconsin, a Chicago-based intermodal trucking firm and a representative from the Wisconsin Agri-Service Association—regarding their perspectives concerning truck-weight regulations in Wisconsin.

Researchers had planned to analyze 2007 IHS Global Insight freight data, purchased by WisDOT, to sort out the details regarding what goods travel where within Wisconsin. This data was not available in time for development of the final research report, though the research team plans to provide an analysis of the IHS data to WisDOT in the spring of 2010.

## Project Manager



*“This report begins to identify the problem, but we need the detailed economic analysis in the end to determine how changing policy would affect the local economy.”*

–Peter Lynch  
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The Port of Milwaukee, the largest of seven seaports in Wisconsin, funnels millions of dollars worth of goods to and from destinations around the world. Currently, less than 10 percent of these goods travel via ICs.

## Results

Results from this research effort included:

- Wisconsin weight restrictions on IC traffic are more stringent than restrictions of bordering states.
- Currently, heavy-hauling carriers transport bulk shipments to Illinois where they are consolidated into ICs.
- Some major carriers are using higher permitted weight limits on state highways to transport loads, even long-distance traffic.
- Based on interviews of businesses, relaxing Wisconsin weight-limit regulations on ICs could allow more international cargo to be shipped directly from container yards in Wisconsin, providing an economic benefit to state businesses.

## Benefits and Further Research

This research showed that there are significant differences in Wisconsin weight limits with respect to neighboring states, and that there are constituencies within Wisconsin that would consider relaxing the current truck-weight regulations for ICs a significant economic benefit. However, further research is needed to determine whether such action would have a net benefit to Wisconsin's economy. In particular, detailed commodity analysis should help determine the effects of such changes in regulation on the entire range of businesses in Wisconsin. Additionally, this economic research must be balanced with concerns regarding safety and the deterioration of highway and bridge infrastructure. Research in these areas is ongoing.

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*This brief summarizes Project 0092-08-26, “Containerization Policy: Considering Increased Load Weight for Certain Circumstances of Freight in Wisconsin,” produced for the Wisconsin Department of Transportation Research Program, 4802 Sheboygan Ave., Madison, WI 53707.*

*Daniel Yeh, WisDOT Research and Communication Services*