

## Not Your Grandfather's Intermodal By Walter Weart



Transportation of freight in containers was first recorded around 1780 to move coal along England's Bridgewater Canal. However, "modern" intermodal rail service by a major U.S. railroad only dates back to 1936. Malcom McLean's Sea-Land Service significantly advanced intermodalism, showing how freight could be loaded into a "container" and moved by two or more modes economically and conveniently. As with all new technologies, there were problems that slowed the growth, which influenced many potential customers to shy away from moving intermodal.

The railroad industry continued to develop intermodal transportation by creating handling techniques and service criteria to align intermodal as a competitor with over the road trucking. In the early days of intermodal, the railroads tended to be somewhat fragmented in their approach. Instead of concentrating on specific lanes the railroads tried to implement a strategy which, while attempting to grow the business, actually caused it to encounter problems.

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A driving force in the improvement of intermodal service was the rapid growth of intermodal marine transportation, where ocean containers were taken inland by rail and in some cases, even moved coast to coast in what was known as a "Land Bridge." This increased ocean-based traffic and provided incentive the railroad industry needed to focus on certain key lanes, as well as review how shipments were handled.

One of the most significant problems the railroads successfully overcame is the safe handling of trailers and containers. Techniques and methods used for carload traffic were inappropriate for intermodal. As the railroads moved more into containerization, they developed lane focused service patterns along with new types of equipment such as doublestack cars holding two containers versus trailers on wheels. The development of specialized rolling stock to transport containers as well as significant changes to how intermodal traffic was handled led to a very significant reduction in damage and a level of service where intermodal could compete with highway service for delivery time.

The true test comes from companies who utilize intermodal for a significant portion of their business, and have found it to be highly service-oriented and virtually damage free.

Shaw Industries Group, Inc., a Berkshire Hathaway Company and manufacturer of floor coverings, moves thousands of intermodal shipments annually.

"We have been using intermodal since the mid-1990s and have noticed significantly improved service by the railroads and this has allowed us to get past the stigma of slow service and potential damage," said Kevin Santori, Manager of Truckload and Intermodal Transport at Shaw. He adds that the consistency of service has allowed Shaw to increase its use of intermodal and has experienced virtually no damage to its shipments.

> "Intermodal provides us with an option that is particularly significant as we look at potential issues with motor carrier capacity

and availability," said Santori. He also mentions the fact that the intermodal service providers and their rail carrier partners have worked well with him to provide the service that Shaw requires.

Michelin, a major manufacturer of tires with 18 plants located in the United States, has been a user of intermodal for quite some time.

"We have had a long history of using intermodal going back to the trailer on flat car days and have found it to always be a very cost effective method to move product from our manufacturing plants to our distribution centers," said Wayne Jones, Michelin's Truckload Analyst. Jones added that Michelin pays the transportation charges on both inbound raw materials and outbound finished goods. To Michelin, the cost-effectiveness of intermodal is very important.



He explained that intermodal is being used to control prices as rails offer a less expensive option in some lanes and, in the long haul service, can sometimes be equal to single driver truckload service. For example, Jones points to the corridor between Greenville, SC to San Bernardino, CA and Woodburn, IN to Houston, TX.

Jones also points out that while motor carriers have capacity issues, intermodal offers low-priced capacity advantages. Another advantage of intermodal is the promise of less damage to the product than with truckload service, as the stop and start motion of the truck is absent from intermodal transportation.

Jim Gaw, Hub Group's Executive Vice President of Sales, has seen intermodal grow and evolve over the years, allowing him to be extremely optimistic about the future potential for intermodal as a significant service provider.

"I certainly have seen a lot of changes in the last 10 years as the railroads have made significant investments in their physical plant and changed service corridors to provide an extremely high level of service," said Gaw. As an example, he points to the Union Pacific railroad revitalizing the Sunset Corridor providing improved service between Southern California to Jacksonville, FL, Atlanta, GA and Charlotte, NC.

Another factor that has significantly helped intermodal is the mergers among the railroads, allowing much longer hauls and more efficient corridors without the necessity of interchange. The Norfolk Southern has moved aggressively to create the Crescent Corridor, providing service between Atlanta and the Northeast to create an intermodal pathway. The NS also worked on the Meridian corridor which had a similar result.

A significant factor in the success of intermodal is what Gaw defines as "fuel" between highway and intermodal. There can be as high of a 20 percent difference in fuel costs, making intermodal a much more effective buy. "With the decline in capacity in the motor carrier industry, we have noted that some customers are retaining motor carriers for certain lanes and increasing their use of intermodal for other lanes, allowing them to selectively place each mode where it has the most benefit from a cost and service standpoint," noted Gaw.

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Gaw has witnessed another aspect of the industry growing more important – sustainability and "going green."

"A number of companies have specific sustainability metrics and we have been able to help them with the use of our "Carbon Calculator," which provides them information to assist in meeting their corporate goals," said Gaw.

Speaking in terms of transit times, Gaw notes that intermodal service in certain lanes is as good as a single driver truckload, but provides consistent service compared to previous offerings. As part of this expansion, railroads are opening new ramps closer to customers, making intermodal more efficient in more markets.

In recent years, Hub Group has moved aggressively to acquire containers and become a major factor in the drayage portion of the intermodal move.

"Drayage has become more efficient. We are adding GPS tracking to our containers as well as tracking devices to our drayage tractors," says Gaw. By providing tracking service, the asset utilization of both containers and dray tractors will benefit their customers with supply chain visibility while allowing Hub Group to efficiently manage these assets.