

## Reduce Freight Transportation Costs with Intermodal Service

Intermodal transportation offers an important opportunity to lower shipping costs while cutting carbon emissions. Transporting a medium- to long-distance load via intermodal costs 15 to 40 percent less than moving the same load by truck. And studies show that shipping by rail is three to four times more fuel-efficient – and therefore more environmentally friendly – than shipping over the road (OTR).

Although transportation managers often shied away from rail in the past, many companies today make intermodal a key element of their transportation strategies. This paper looks at some of the best reasons for using intermodal, examines why some shippers are reluctant to put freight on the rails, and offers six tips for using intermodal successfully.



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## OTR Challenges

**Cost:** With the price of diesel often topping \$4 per gallon, shipping by truck has become increasingly expensive. According to the Association of American Railroads, a train can move a ton of freight an average of 469 miles on one gallon of fuel. That kind of efficiency allows railroads to charge less than OTR carriers. Railroads do impose fuel surcharges – but they're lower than the ones that trucking companies add to their bills.

**Capacity:** Finding a truck to take a load where it needs to go, when it needs to get there, is sometimes a problem. One reason for tight capacity is the shortage of longhaul drivers.

"Drivers are a different breed than they were 15 to 20 years ago, when they would just jump in a truck and be gone for weeks at a time," says Garry Old, president and chief executive officer at COFC Logistics, a Toledo, Ohio-based firm that markets 53-foot containers to intermodal marketing companies (IMCs) and third-party logistics companies (3PLs).

As the economy improves, and new hours-of-service (HOS) regulations for U.S. drivers go into effect in July 2013, observers expect trucking capacity to become even tighter.

"The driver shortage is an ongoing issue in the truckload business where the turnover of drivers is 100 percent," says Giles Taylor, president of Boston consulting firm Trans-Solutions. "The problem gets worse during high-demand periods such as produce season, when shippers pay a premium for space on trucks coming out of Southern California and Mexico. When you're on the rail, you avoid that."

**Environmental Impact:** Customers, government agencies and consumer advocate groups all are putting pressure on companies to reduce their environmental impact. For shippers, cutting fuel consumption is an obvious way to shrink their carbon footprint while also saving money.

A ton of freight shipped by train produces two-thirds less in greenhouse gas emissions than the same volume shipped by truck, according to the U.S. Department of Transportation's SmartWay Transport Partnership.

The Carbon Estimator tool on the BNSF Railway web site calculates that shipping one 14.9-ton intermodal container from Los Angeles to Saint Louis would produce 43 percent less in CO2 emissions than shipping the same load by truck.

## Misconceptions About Intermodal

Historically, shippers have often declined to use intermodal because of beliefs they held about the quality, reliability and safety of the service. Some of those problems were real in the past, but the railroads have largely solved them. Other objections were based on misconceptions.

*Let's take a look at each of these issues:*

### Rail is much slower than OTR

Without a doubt, an intermodal move is usually slower than a move by truck. But often the lower cost of intermodal shipping can be worth a day or so of extra transit time. And the railroads have developed expedited service offerings to accommodate the most urgent freight. Some of the speeds for those expedited packages actually rival over-the-road transit times.

## From OTR to Intermodal, by the Numbers

- Weber Logistics currently ships freight over the road from a warehouse east of Los Angeles to a customer's facility in New Jersey. If the freight moved to an intermodal service, the cross-country trip would take two days longer, but it would cost \$1,000 less.
- During the 12-month period that ended in February, 2012, the fruit drinks company Ocean Spray switched 616 truckloads worth of product, going from a New Jersey distribution center to its facility in Florida, to an intermodal service. Ocean Spray estimates that it saved 40 percent on transportation for those loads and generated 65 percent less emissions, thanks to the mode shift.
- According to John Maldonado, director of global logistics at Evenflo, which markets baby products, it costs the company about \$1,100 less to ship a container via intermodal than OTR.
- BNSF Railway's Next Generation Intermodal Service delivers 95 percent on-time performance for door-to-door deliveries, the company says.



### Rail is unreliable

Although rail delays were a genuine problem in the past, U.S. railroads today have gained a reputation for on-time performance. As a result, some of the best-known OTR carriers in the U.S. now put freight on the rails. For example, in 2012 FedEx Freight's CEO Bill Logue told *Logistics Management* that intermodal represented ten to 12 percent of his company's total linehaul mileage.

The Container Store, a national retailer, has actually seen on-time performance increase since it started delivering to stores in certain markets via intermodal, says Tom Sangalli, the company's logistics and transportation director. Rail transportation poses a smaller risk of delay due to equipment breakdowns, he says.

### Freight on rail is more likely to be damaged or stolen

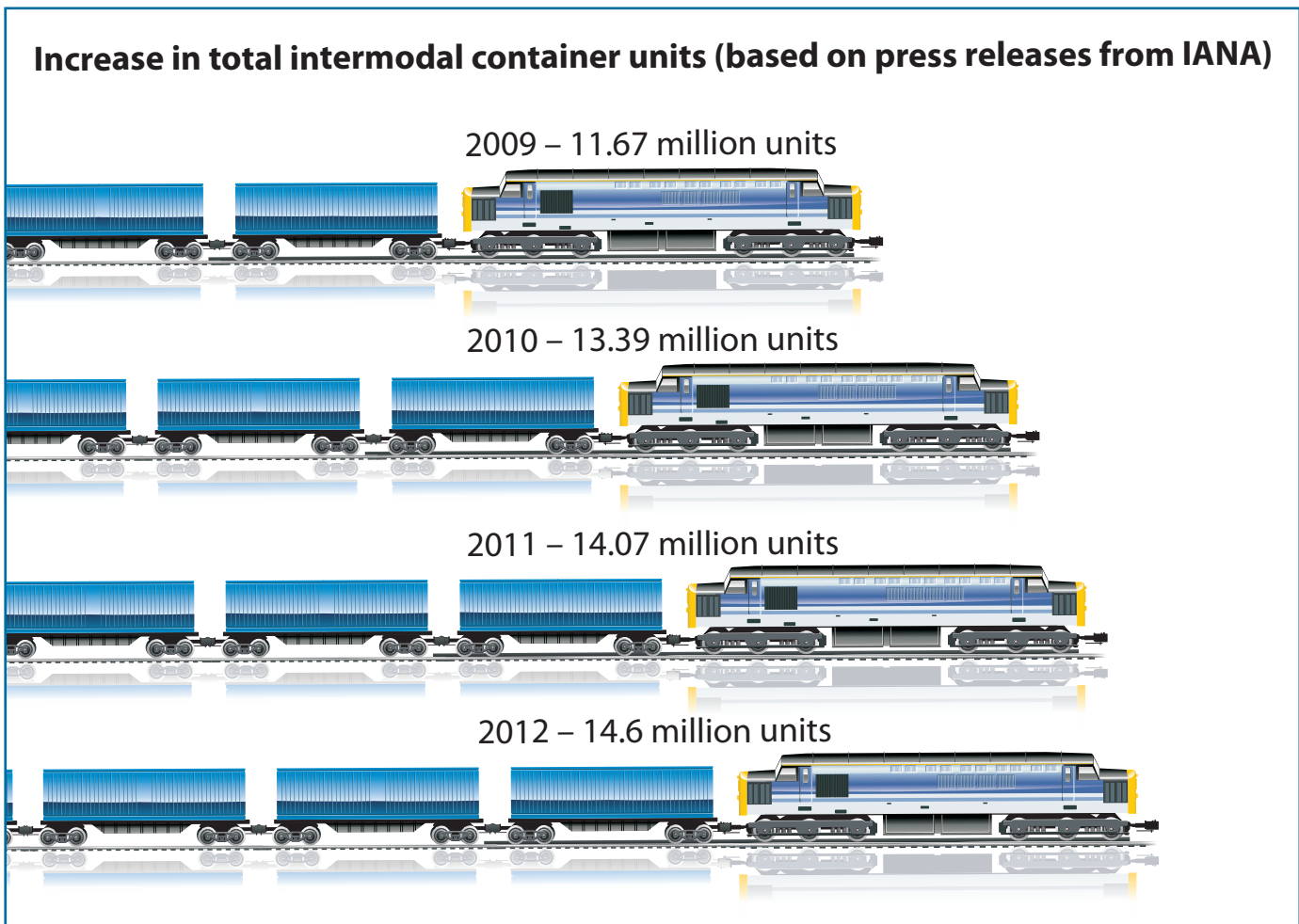
Containers moving on solid blocks of flatcars rarely sustain damage, especially if the freight is blocked and braced correctly, says Olds. "If you're new or converting freight, the railroads will definitely help you figure out the best way to

secure your loads," he says. "Today's flatcars are designed to sway and bounce less than models of the past, providing a smoother ride."

A container car also provides a security advantage, especially for the bottom box in a double stack. The doors of that container are locked well into the rail car unit, so it's far more secure than an over-the-road truck just moving down the highway.

### You can't track freight while it's on the rail

Railroads generally collect location data at specific checkpoints along a route. Unless they install GPS units on containers, they don't provide the real-time visibility that many motor carriers can. But shippers often find status information from the railroads sufficient to their needs. Class I railroads offer technology for tracking shipments, as do many third-party providers of intermodal services. Visibility tools from 3PLs integrate data from the railroads with tracking information from other sources, letting a shipper monitor a load seamlessly from pickup to delivery.



*More shippers are recognizing intermodal as a cheaper, greener option for freight and rising intermodal volumes reflect this attitude shift.*

## Six Tips for Getting the Most Out of Intermodal Service

### 1. Be flexible.

Good forecasts and careful analysis can reveal opportunities to modify your supply chain to support intermodal transportation. If you can keep more inventory in stock, for example, you might be able afford an extra day or two in transit. Adjustments in the timing and size of orders might also make certain lanes good candidates for intermodal.

### 2. Match the mode to the need.

Intermodal works best for longer hauls – trips of maybe 750 miles or more. But it doesn't work equally well for every lane. It works when rail travel doesn't add a great deal of transit time, or when the prospective savings justify the cost of holding extra inventory. It may not be the best option when the final destination is too far from the intermodal terminal to make the numbers work, or the disadvantages of a longer lead time outweigh the benefits that a mode switch would provide.

### 3. Put your eggs in two baskets.

To reduce risk and ensure that you always have enough product in the pipeline, consider dividing freight on the same lane between intermodal and OTR.

### 4. For imports, transloading saves even more.

"You can get three 40-foot high cube containers into two 53-foot containers," says Maldonado. That means you'll ship two intermodal containers on the rail instead of three ocean containers, reducing your costs. Crossdock operations come with costs of their own, he cautions, but for companies shipping larger volumes they can be a sound investment.

### 5. Learn the schedules.

Make sure you can get your load to the origin ramp in time to be picked up. Also, know when the train is due at the destination ramp. Does that schedule allow you to get the load drayed to consignees in time to meet service requirements and delivery windows?

### 6. Don't forget about drayage.

No matter how good your experience with the railroads, if the carriers hauling containers to and from the ramps let you down, intermodal could become a losing proposition. Work with reliable drayage companies, or with a trusted 3PL that provides excellent local transportation.

While intermodal volumes have increased in recent years, there is still a great deal of room for companies to take advantage of the benefits this mode provides. By implementing a well-designed intermodal strategy, shippers can achieve significant savings and move closer to their environmental sustainability goals.

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*Founded in 1924, Weber Logistics is a third-party logistics company that provides warehousing, transportation, and port logistics services on the West Coast. With distribution centers throughout California and a fleet of trucks for dry and temperature-controlled deliveries, Weber gives growing companies flexible, scalable distribution solutions for their West region customers.*

