Ready to get on board?

BY **MICHAEL LEVANS**, GROUP EDITORIAL DIRECTOR

Four intermodal experts discuss the realities of current utilization, rail service inconsistencies, and future infrastructure needs and offer practical advice for shippers who may be tentative about putting one of the "greenest" modes to better use.

Even though January '08 numbers indicate that volumes have softened, there's no escaping the elevated role intermodal transportation has taken in today's global transportation playbook.

Rising import volumes over the past four years have pushed intermodal to become the global standard for moving freight across the world's docks and back into the heartland for deeper distribution. According to the Association of American Railroads, in 2006 U.S. rail carriers handled 12.3 million intermodal loadings—a new record. Loadings dropped 2.1 percent from this record number over the course of 2007, says the AAR, due mainly to the slowing in the housing and automotive markets. But as we've been illustrating in recent case studies, this increased exposure to the mode has found some shippers turning to intermodal to cut costs and get freight off the roads for their longer hauls.

However, many shippers are still reluctant to fold intermodal into their long-term transportation plans due to the perception that it's plagued with service inconsistencies that render the mode unreliable for many of today's high-speed supply chains. Bottom line: Many shippers may not be ready—or prepared enough—to trade off speed for price.

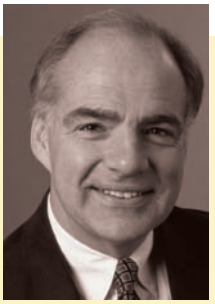
To deepen shipper understanding of just how intermodal could work better, we gathered four top rail intermodal experts—with roughly 160 years of total experience—to put the current realities into perspective and help shippers make a more educated decision about putting the mode to better use. Our panel consists of Gil Carmichael, senior chairman of the board of directors of the Intermodal Transportation Institute (ITI) at the University of Denver and former federal railroad administrator under President George H.W. Bush from 1989 to 1993; John Darling, a long-time industry expert and currently president of Venango River Rail Services based in Belvidere, Illinois; Tom Finkbiner, a past president of Pacer Stacktrain and Chairman of the ITI; and Ted Prince, the current president of Consolidated Chassis Management, LLC and past vice president, intermodal and international for Kansas City Southern Railway.

How would you summarize the current state of intermodal transportation usage in the U.S. heading into 2008?

John Darling: Intermodal usage has quadrupled since 1980, and it should remain the fastest growing segment of the transportation marketplace in today's global business environment. Over the long term,


Carmichael


Darling


Finkbiner


Prince

subject to fluctuations in world economic activity, international trade by itself should assure continued growth of intermodal usage.

Gil Carmichael: The intermodal freight system is in a dynamic and developing mode. While there is a current slowdown in domestic intermodal activity, that's largely being driven by events such as $100-barrel oil and companies like Wal-Mart having sales plateaus. However, if the private railroads can continue to generate $7 or $8 billion per year for infrastructure improvements, then shippers will keep asking the railroads to carry more intermodal containers for them, since economic and energy efficiencies of intermodal are significant.

Are shippers still treating it as a justifiable alternative?

Tom Finkbiner: Generally, shippers are pretty savvy. The trade-off in using intermodal is simply speed for price with a component of flexibility thrown in that favors intermodal transportation over trucks. In the past, intermodal has garnered an increasing share of traffic as more and more shippers learned how and when to use it. As a matter of fact, we're now in a period where intermodal grows and falls in accordance with GDP.

From your unique perspective, what are the key drivers pushing shippers to use more intermodal?

Ted Prince: Before last year, the driver shortage was a key factor driving intermodal demand because truckload cost was increasing and reliability was decreasing. Today, the cost of fuel—incorporated both in base rates and fuel surcharges—is a big driver.

Finkbiner: I agree with Ted, but I would stress that the key driver for shippers to use intermodal has been price. In the past, the "inconsistency" in transit time of intermodal offset the price advantage. Today, however, service is generally better, and shippers have learned through their own experience how best to take advantage of it.

Darling: I would add that "flexibility" is also a key driver. Customers are attracted to the ease with which intermodal carriage adapts to diverse locations, commodities, packaging, and schedules.

Carmichael: And due to its high fuel efficiency and lower cost of moving items, intermodal will continue holding the price-per-unit well below the inflation rate as long as it's justifiable.

What is the single biggest challenge facing the growth of the U.S. intermodal system?

Darling: Capacity limitations comprise the single greatest challenge confronting growth of the U.S. intermodal system. Congestion in the air, on the highways and railroads, and at the terminals, is slowing transit, exacerbating every weakness in the system and introducing more opportunities for disruption.

Finkbiner: John is right on the money. The transportation infrastructure is currently overtaxed, particularly in the rail segment. But I would say that the second biggest issue is the general mentality of railroads. For all of the protesting to the contrary, service in terms of definitive transit-time commitment is still not in the DNA of most railroads; however, they are acutely aware of capacity shortages and so try to push the price button.

But what can be done about "infrastructure" when it appears that no one on Capitol Hill is listening—or even cares? Where's the federal government in this discussion?

Prince: Consider this: Freight moves in national and international corridors, yet transportation is managed locally. The federal government is conspicuously absent from working to solve the capacity shortage threatening our entire economy. A great deal of "domestic" transportation is actually prior-or-subsequent international movement. The federal government encourages trade, but does nothing to support the movement of that trade.

Darling: Ted raises a great point. A corollary to capacity limitation is the absence of a coordinated national policy to identify and remedy congestion arising from an inadequate and decaying infrastructure and operating constraints. As of 2003, the cost of congestion in wasted time and fuel was estimated to be greater than $60 billion. However, the present jumble of infrastructure projects designed to address local issues offers no assurance that a proposed solution does not relocate the bottleneck—so it becomes someone else's problem.

Carmichael: That's correct. But the real challenge is changing the mindset of policy makers. Since we are dealing with private companies rather than state-owned highway departments, it is going to take significant public-private policy changes. The railroads spent about $8 billion this past year upgrading their tracks.

Congress needs to give them a 25 percent tax credit as an incentive to increase their investment in railroad improvements. If they do so, I think the railroads will increase their spending to $10-$15 billion per year. If that rate is maintained

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for 10 years, the result could be a doubling of U.S. rail capacity that will relieve stress on the highways and help reduce the huge amount of money needed just to keep the highway system functioning.

If these infrastructure challenges are overcome and the government listens and takes action, where do you see intermodal volumes five years from now?

Darling: Overcoming these challenges is likely to take more than five years. Complexities of establishing a national policy, obtaining public works funding and making identified improvements will last more than a decade. However, if the nation can agree on a coordinated congestion relief program and implement a well-funded assault on key corridor and terminal problems, then intermodal traffic should double from 2003 volumes by 2020 and triple by 2030.

Carhmichael: With a 25 percent tax credit, rail intermodal volumes could grow at least 5 percent a year at a compounded rate. We built "Interstate I" in the last century [the Eisenhower Interstate Highway System of 1956]. If we build 20,000 miles of double and triple track main lines in North America early in this century to serve what has become a global business environment, then we will have created "Interstate II" and intermodal volumes will continue to grow.

Finkbiner: I would add that volume is a very definitive metric. If railroads are successful in improving service and intelligently using the price card and developing the 600-900 mile lanes they can grow intermodal at 3X or more GDP. If not, intermodal volumes will begin to mirror carload volume growth.

Shippers tell us that they would like to put intermodal to better use. What advice do you have for shippers when they are weighing the intermodal option?

Darling: The best advice I can offer is to seek out a transportation professional that has the experience and skills to look at all the alternatives. Reliability issues are likely to continue until congestion in the corridors and at the terminals is relieved, but there may be avenues to mitigate some of those problems in the interim. However, opportunities for mitigation demand timely and accurate information. Intermodal options require focus on a few key metrics. Intermodal is not a static concept; it keeps changing and the user must be committed to a process of continuing review and improvement.

Finkbiner: I agree with John. The best way to play the intermodal service game is through the integrated service providers. I am talking about Hub Group, JB Hunt, Triple Crown, and Pacer Direct. All of these organizations have made it their business to deliver consistent service by leveraging all aspects of the service—providing equipment, drayage, and coordination.

It's best to let the people that are expert at dealing with inconsistency handle these problems. However, with that being said, many of these companies are too prone to say "service is the railroad's problem." If you market your company as an integrator then you choose the underlying railroad and you take the blame or the credit for the service delivered.

What is intermodal's biggest benefit? Greatest drawback?

Finkbiner: The benefit is price. The biggest drawback is service consistency. It's as simple as that.

Prince: And like all modes, intermodal has a "sweet-spot" in that it's a viable solution. It's not a panacea to solve all requirements. Unfortunately, anecdotal evidence and apocryphal word-of-mouth seem to scare many shippers from using it.

Darling: I would add that its greatest benefit is its flexibility. As we've noted, intermodal service can easily and rapidly adapt to diverse destination, product, packaging and other challenges. The biggest drawback to intermodal use is its susceptibility to delay and diversion arising from congestion in the main arteries and connections.

How much of role do you see rail intermodal playing in the "green" movement?

Prince: Rail is indeed a green solution; however, impact must be measured on a door-to-door basis, not ramp-to-ramp. In some cases, a truckload carrier with 2007 engines moving door-to-door has a smaller carbon footprint than a rail intermodal move that has pickup and delivery performed by tractors with older engines. However, there is no need for trucks and rails to engage in a war of attrition over who is "greenest." A cooperation model is economically and environmentally beneficial for the entire nation.

Darling: Railroad fuel efficiency has increased by almost 90 percent since 1980, and one gallon of fuel now moves one ton of freight about 420 miles. Moreover, eighty percent of all greenhouse gas emissions attributable to transportation come from trucks and passenger cars; whereas railroads contribute only 2.2 percent. Given that one intermodal train is equivalent to 300 trucks, the positive contribution of intermodal transportation on the environment is both obvious and immediate.

Carmichael: Back in 1989 The Federal Railroad Administration (FRA) gave me data that showed the "steel wheel on the steel rail" can carry a ton of freight nine times farther on a gallon of diesel fuel than a truck. Right now, the overloaded highways and airways are causing most of the environmental problems. The railroad carrying 280 containers doubled-stacked is probably the most ethical and environmentally friendly way to move goods.

In the middle of this century if the supply of oil starts declining, the railroad is the one mode of transportation that can easily switch to alternative fuels. Europe and Asia's high speed passenger trains have carried billions of passengers with almost no fatalities. And with today's technology we can safely move to higher speed freight and passenger trains for a lot less money than the "experts" are talking about investing in the old Interstate Highway System.