Smart Use of Equipment

The economic downturn has not eliminated the pressure on the Ports of Los Angeles and Long Beach to operate more efficiently. Both ports are coping with existing capacity constraints and the need for additional container storage space to accommodate an expected increase in demand over the long term. Substantial investments and improvements in both physical capacity and operational efficiencies will continue to be necessary.

However, physical expansion is currently constrained by the limited supply of available land in close proximity to the ports and the escalating environmental and community concerns related to port development. That means, at least in the short term, a focus on improving the productivity and efficiency of terminal operations and the use of available terminal space.

One way for the ports to become more efficient is through better equipment management, including chassis. In the U.S., chassis – along with the containers that rest on the chassis – are largely owned by ocean carriers or shipping lines. Carrier-owned chassis are a legacy of containerization, which allowed for the development of a true intermodal system in this country.

By controlling the chassis, ocean carriers had access to other portions of the U.S. domestic market. But as containerization spread to Europe and Asia trucking companies or cargo owners provided the container chassis. As a result, the practice of shipping lines owning the chassis is unique to the United States, and many have used the size of their fleet and reliability of their equipment as a way of branding their services.

For truckers however, the current system means a lot of inefficient equipment repositioning. In particular, it means they are required to make extra moves between different operational areas or facilities and the designated chassis storage areas for different shipping lines, to drop off or pick up a specific chassis for use by a specific customer, and to exchange (a.k.a. swap or flip) a chassis between moves for pick up or delivery of containers for different steamship lines.

But there is pressure for change. For one thing, chassis have become more uniform with time. Recent federal guidelines with regard to maintenance standards and chassis “roadability” make it less likely that one piece of equipment will differ greatly from another piece of equipment owned by a different ocean carrier. This reduces the need for equipment branding and for some in the industry is good reason to reconsider the standard way of doing business.

So is the economic climate. Lean times demand leaner business operations. Ocean carriers are less and less interested in being in the equipment business because it costs money. At the very least, they are interested in doing away with a business model that makes the chassis available free of charge to truckers.
But changing an entire industry's way of doing business is not easy. That's why it was big news when Maersk, the world's largest shipping line, decided to change its equipment management structure in 2009. Maersk owns some 90,000 chassis in this country, a significant percentage of the 550,000 chassis in use. Maersk's ChassisLink, launched in August 2009 in the Port of New York and New Jersey, charges truckers a daily fee – initially $11 – which allows them to use a Maersk chassis any way they want and make as many trips as they want until it is returned. Despite the new fee, that's a good deal for a trucker looking to avoid a lot of non-revenue trips returning chassis to their owners before picking up a new load.

The Maersk model has taken off. Since 2009, most major ocean carriers have begun charging for chassis use, rolling out programs on the east coast and then moving them west. Some have even begun the process of divesting themselves of the equipment altogether. This means that truckers have to invest in their own equipment or lease chassis through a neutral third party.

Ocean carriers have a third alternative to either a chassis charge or to divestiture. They can pool their chassis with other shipping lines when moving containers. The operation of chassis pools can be set up in different ways. One common method is to have the carriers make available their own chassis to the pool on slow days for 'pool credit' and then use this credit to pay for the times when they need to borrow extra chassis from the pool on busy days. If carriers do not want to contribute any of their chassis to the fleet, they also have the option of simply paying a fee for using a chassis from the pool. A third option is to use all 'neutral chassis' in a cooperative pool, taking advantage of the services of a leasing company.

Chassis pools may offer some short term relief here in Southern California to the problem of capacity constraints. Smaller pools do exist at the Ports of Los Angeles and Long Beach, but there is no single port-wide pool where a chassis can be used by all shipping lines and their customers.

Multiple smaller chassis pools may not realize the maximum possible benefit that could be gained through a single large chassis pool, but a single pool may simply not be feasible for a container throughput as large as that handled in the San Pedro Bay. Smaller incremental change is the best alternative.

Regardless, we know that change is coming. It's already underway. Chassis are expensive and there is an increasing understanding that the cost of a chassis should also include maintenance, stocks and the real estate on which it is stored. Good equipment management makes sense whether we're in a recession or not.

The author wishes to thank Hanh Le-Griffin of the University of Southern California who contributed research to this article. Dr. Thomas O'Brien is the director of research for the Center for International Trade and Transportation at CSULB and associate director for Long Beach Programs for the METRANS Transportation Center, a partnership of USC and CSULB. For past articles in this series, please go to www.ccpe.csulb.edu/IndustryArticles.)