Towards the peak

Theodore Prince looks at the problems and pressures affecting the US’ intermodal rail industry. Can it maintain its strong performance this year, and avoid deterioration as the peak season approaches?

International container traffic volume in 2006 has remained strong, and popular sentiment expects a smooth peak season. However, beneath the robust growth lies a range of intriguing intermodal possibilities that merit attention as we approach the peak season.

Outside of actual maritime terminal operations – particularly, labour relations – intermodal rail is routinely mentioned on the short list of threats to a seamless global supply chain. However, barring some major anomaly, the North American rail industry appears ready to move this year’s traffic.

Published transit times for 2006 are frequently slower than they were 10 years ago. Even so, the rail industry’s focus is increasingly on providing reliable service – rather than ‘best-case’ schedules that give inconsistent results. As a result, railroads have simplified their operations using a variety of tactics.

Network simplification concentrates scarce resources where they do the most good for the most traffic. This means that certain markets and services have been eliminated (euphemistically termed ‘de-marketed’.)

Operating plans are currently adhered to much more rigorously than in the past, as there is an increasing recognition that rapid – and varied – responses can cause more harm than good. While historically, it has been commonplace for operations personnel to control the this rail industry, such a culture is being increasingly resisted, in order to achieve long-term stability.

And railroads appear to be continuing to hire workers, add locomotives and increase network infrastructure (for example, double/triple-tracking mainlines).

No major problems are presently debilitating the system, although local issues are always a concern. This year, the wary eye is on the Pacific North West (PNW). In response to past problems in southern California, many ocean carriers have added vessel capacity to the PNW in the form of new calls, or enlargement of existing strings. Some worry that the network might not be able to accommodate another sizeable increase in volume. This volume problem is complicated by the fact that traffic growth is not limited to intermodal – it includes such major commodities as export grain.

Special attention is being focused on Tacoma, which has added significant terminal capacity over the past several years. The Tacoma Municipal Belt Line (TMBL), which is involved in every rail move, is largely unnecessary for unit train moves, and this increases the time mainlines are blocked while a train is assembled. Because the TMBL is a lucrative revenue source for the City, the port authority has never forced this antiquated system aside. That lack of attention could backfire on Tacoma this year.

While Canadian Pacific Railroad (CP) and Canadian National (CN) have worked together to solve the rail issues in Vancouver (BC), the acquisition of CP Ships by Hapag-Lloyd has relocated significant volume from Fraser Surry to Deltaport, and there is some concern about terminal congestion this summer.

Railroads also worry about unfair criticism regarding service problems. A recent study by Drewry Shipping Consultants put this into perspective, discovering that liner vessels only arrive on time 57% of the time. The magnitude of late arrivals stretched from: one-day late, 22%; two days, 7%; and three or more, 4%. The study highlighted that 10 transpacific vessel strings were on
time less than 30% of the time. Railroad service compares favourably to these metrics. And, although the distance might be shorter, unlike the wide-open ocean, an out-of-time train is extremely disruptive to a rail network and can easily cause cascading delays.

Consequently, railroads have imposed greater discipline on heretofore disorganised operations. In addition, the companies have worked to increase the volume of on-dock movement to help avoid handling international traffic at their crowded intermodal terminals.

Moreover, many railroads have allocated the number of units for ocean carriers to bring into rail ramps on any given day. While these allocations are commonly undersubscribed during much of the year, ocean carriers are increasingly running into limits during peak season. Allocations are intended to prevent serious traffic peaks from overwhelming an intermodal railyard on any single day, but they also force traffic to remain in the marine terminal. There is some concern – as yet unproven – that permitted allocation might be less than the weekly volume. This could result in weakened performance at the marine terminal.

Some railroads have started to collect sailing information about export loads, so that sailings can be met, and rail operations optimised. This type of collaboration represents a major step towards levelling intermodal volumes throughout the week.

In an effort to overcome railroad-imposed allocations, some lines have actually started to dray containers from one marine terminal to another, and utilise the second’s on-dock facility. This is common with lines in an alliance calling at multiple terminals in a port region.

Railroads have also become more disciplined about on-dock operations. Marine terminals are being held to certain levels of performance; there must be a minimum number of outbound cars for movement (eg four cars does not make a train), individual cars must be loaded to a single destination; and stowage utilisation must be high. Ironically, in some cases, this increases the need for off-dock movement – which can run into the allocation problem.

Increasingly, railroads have stressed a need for equipment balance. Many contracts between railroads and ocean carriers necessitate a certain level of balance. Some railroads enforce a strict one-for-one system. For on-dock operations, balance is a matter of self-protection. Inbound trains guarantee cars available for outbound loading.

Railroads focus intensively on chassis, and ocean carriers’ chassis have long been a bane to railroad terminal operations. Empty chassis consume scarce space, and complicate unloading operations by requiring a line’s container to be matched with a chassis from the same line.

Railroads favour a chassis pool where all lines use the same pool. The pool concept has been successfully implemented in marine terminals – for example, at Maher Terminals (in New York) and Hampton Roads. After years of discussion, the Union Pacific Railroad (UP) implemented an ocean carrier chassis pool in Denver last year. Only pool chassis were allowed to remain empty in the yard. Non-pool-chassis users were required to undergo live lifts. BNSF has recently joined this, so there will be a single, Denver pool.

This pool was created through the Ocean Carrier Equipment Management Association (OCEMA), a US-based association of 18 ocean carriers. OCEMA established a subsidiary, Consolidated Chassis Management (CCM), to handle day-to-day pool operations. Following Denver, OCEMA pools were set to be implemented in Salt Lake City and Memphis. The operational deadlines for both locations had to be extended. And, even now, one or more railroads could implement chassis pools without OCEMA – although a pool without the OCEMA umbrella might be too risky for some companies.

There are some noteworthy pricing market mechanisms currently in the pipeline, which could also impact the relationship between rail and liner shipping companies.

First, railroads are increasing their rates in line with market conditions. This is not limited to intermodal, but is happening with all commodities. For customers undergoing rate negotiations after the expiration of a long-term ‘legacy’ contract, new price levels can be jarring.

And carriers have been introducing new capacity into the market, which could be a problem. While the Asia-North American market has not (yet) been inundated with capacity, there is concern about the lagging demand in the Asia-Europe trade. Some feel it might result in the redeployment of new capacity away from that market to North America, and will accelerate market distress.

Recent pricing by liner operators is starting to reflect these two factors.

Inland point intermodal (IPI) pricing by ocean carriers has never been economically rational, as the marginal revenue is less than the marginal cost, but lines are starting to dramatically raise their prices to inland points. This is happening through both surcharges and underlying contracts.

Meanwhile, market observers report that port-to-port pricing for the US West Coast (USWC) is somewhere between measured retreat and freefall.

The combination of these two pricing events, along with external logistical matters, has made transloading cargo even more attractive. Consequently, the operating paradigm of intact containers being loaded on-dock could change to an increase in transloading from marine to domestic containers.

It has become evident that most ocean carriers are concerned about truck capacity. The market for trucking services is not homogenous, although certain factors are consistent across the industry.
Many drayage companies experience a driver turnover of 100-200% annually. This has created the need to pay drivers more. Not only do wages increase, but there is a significant overhead in recruiting and screening potential drivers.

The cost of insurance continues to rise, and many customers demand additional coverage. Some trucking company owners have actually assumed this risk on a retained basis, increasing their exposure to catastrophic loss. Some companies, faced with insurance problems, now review potential drivers more strictly. This is an admirable and understandable policy, but one that could easily result in lost business due to insufficient drivers.

Diesel fuel represents a significant expense, due to general conditions in the petroleum market. In June, diesel cost approximately USD3/gallon – almost a 25% increase from the previous year. Today, refinery output is down, and any external trauma to the refining infrastructure – such as Hurricane Katrina last year – could rapidly throw this market into complete turmoil.

On June 1, 2006, ultra-low sulphur diesel (ULSD) became the new standard for diesel fuel. Refiners are required to ensure that 80% of their output complies with the new standard (intended to reduce emission of sulphur compounds, blamed for producing acid rain), by lowering the allowable amount of sulphur than was present under previous requirements. Not only is this fuel more expensive to refine, but it also contains slightly less energy content.

In the intermodal marketplace for drayage, several potential problem areas exist. Preliminary legislative attempts have been discussed in California to implement a medallion system, which would restrict port access to selected truckers.

While this idea has the laudable intention of increasing the overall quality of port trucking, it would be applied through a questionable economic method. Furthermore, reduction in available truckers – and the resultant potential of port-wide unrest – would probably eradicate any possible benefits.

The growth of off-dock movement, whether for intermodal or local cargo, increases the demand for truckers. As volume continues to grow, and the percentage of on-dock drops, trucker shortages could become chronic.

The PierPASS programme, which seeks to shift off-dock volume to off-peak periods, is a success when measured by volume. But the programme has not been fully embraced by the trucking community – it forces a change in work hours without any appreciable benefit. The shipper saves USD100 when units are moved at night, but few truckers have realised any financial benefit. Also, many truckers believe that inefficient terminals are still slow. There is
concern that PierPASS might be the cause of significant trucker discontent this peak season.

While not yet a critical problem, increased security is an industry pall on the horizon. Many believe that the implementation of the transportation worker identification credential (TWIC) at the end of the year could result in the exclusion up to 40-50% of existing drivers in the harbour drayage community.

The above-mentioned factors could well contribute to cost-based rate increases. In addition, several general concerns exist.

Not only are ocean carriers abandoning intermodal moves, but many are also seeking to relinquish responsibility for store-to-door delivery and pick-up. The result would be more customer responsibility for trucking. This will realign contractual parties for the trucker from the ocean carrier to the shipper or consignee. Many truckers will welcome this arrangement, which is much better in terms of rate levels, ease of doing business and absence of arbitrary condition. The result will be less supply and higher rates for the truckers left to work directly for the lines.

The growth of bi-modal carriers providing door-to-door service (for example, JB Hunt, Schneider, Swift and Pacer Stacktrain) will consume more of the capacity for quality intermodal truckers. Supply and demand pressure on lines will intensify. As railroads cease to provide intermodal equipment, bi-modals have the option of providing their own. Due to the traffic imbalance, bi-modals will probably seek to further encourage eastbound transloading from southern California – with all its inherent market implications.

Financial re-engineering of intermodal truckers is expected to continue. Recently, the industry watched Hub Group acquire Comtrak, one of the most admired operations in the business. At the same time, RoadLink – a large operation, formed by rolling up multiple regional carriers – allegedly underwent a series of transactions, without consummating a deal. As drayage consumers acquire trucking companies, the amount of capacity for the general marketplace is reduced.

Despite considerable apprehension, the industry seems to be as prepared as far as possible for peak season. Real concern exists regarding the system’s lack of resilience. Any major deviations could short-circuit the inland transportation system. Act of God events – such as hurricane, flooding or earthquake – or any type of security breach or terrorist event could put the system in ‘gridlock from lockdown’.

A major event would create instant problems, but observers worry about a slow death, too. The network is so inter-related that even minor service deteriorations contain the potential to proliferate and expand into serious service problems. Insufficient infrastructure and utilisation, which continues to increase, pose an ongoing threat to the industry’s future and the US’ economic success. It is to be hoped that the industry will escape such a fate this year.