RAILROAD WEEK IN REVIEW
October 12, 2018

"Emerging markets are markets you can't emerge from in an emergency." — Dennis Cox, CEO, Risk Reward Limited

"Rail will remain critically important to many industries but, to the overall transportation economy, their relative impact will continue to weaken." — Rod Case, Partner, Oliver Wyman

I keep coming back to the argument in favor of a natural resource focus for short lines. To that I would add commodities from grain to canned goods — beer and wine included. There seems to be general agreement among WIR readers that truckloads — and intermodal boxes by extension — are mainly consumer goods and manufactured products whose volumes are subject to the whims of the economy.

On the other hand, commodities — stuff that would hurt if you dropped it on your foot — are not as subject to economic ups and downs — you gotta heat and eat. That said, the railroads have to maintain tight margins on these relatively low-rated commodities. That means maximizing revenue per revenue ton-mile while keeping avoidable costs — costs you don't incur if you don't move the car — under control.

As we see repeatedly, the best way to keep costs down is to do the same thing the same way every day, and to minimize "unplanned events." Oliver Wyman's Jason Kuehn has a slide showing *some* unplanned event hits 25 percent of all North American trains every day. In his sample year, he found re-crews and unscheduled work accounted for nearly two-thirds of the unplanned events. Moreover,

> You see a lot of times — as in the recent past — when the railroad has gone into ad hoc management style. You'll say okay we didn't do this yesterday, so put it on this train today and make this stop even though it's not in the schedule of that train. Yet that impacts the entire performance of the network.

The way to get out of ad hoc management is to make sure every act acts as a progressive move for the asset. And that's what Precision Scheduled Railroading (PSR) is all about.

Canadian Pacific's presentations on "intermodal demand management" (slide 27) and "precision scheduled marketing" remind me of Conrail and the Missouri Pacific in pre-merger days. Both railroads could schedule cars from origin dock departure to destination dock arrival, a useful tool when trying to minimize transit times, avoiding yards and local freights on days they didn't work, assuring arrival on the customer's schedule, not the railroad's.

Union Pacific bought the MoP in 1982, bringing over the car management system. I used it in the 1990s for my steel-fabricating client who was sending slit coils in box cars from the slitting plant in Hammond, Indiana, to five UP-served manufacturing facilities. Our objective was to insure cars would arrive at the destination dock when wanted by the customer.

That done, not only did our work get more truckloads into boxcars, but it enabled the customer to grow its base in the UP-served markets. The trip plan process worked because it was built from the ground up on the MoP starting in the 1960s. Known as the Transportation Controls System (TCS), it was the Service Design group — the very group that would use it — that designed it. (CP has taken the same approach 50 years later because it works.)

TCS was a major step toward eliminating Unplanned Events. It directed every event for every car on the MoP, tracked same so every car could hit the right schedule, and fed empty cars to the system to meet movement orders. As a result, TCS not only satisfied car tracing, traffic reporting, demurrage, and car accounting functions, but also improved communications between the MoP and its customers.

As I mentioned above, TCS was alive and well on the UP 20 years ago. I could bill a car on a short line in Montana and get a trip plan to a Norfolk Southern station in Pennsylvania, and measure trip plan compliance against the plan launched with the car. What happened in the meantime, I cant't say, except that now in 2017 UP wants to bring TCS back to the ex-MoP.

Can they? In a departure from her usual excellent sell-side analyst notes, Allison Landry of Credit-Suisse writes that she thinks so.

> It's been done before. The present UP North/South Corridor is former MoP, the TPC pioneer. The MoP had the first automated car scheduling, a key part of PSR, and this high-density manifest carload corridor is highly conducive to PSR. It promotes fluidity because trains can be built so they don't have to go through multiple yards. As such, the Mid-America corridor is an ideal place for UP to start rolling out PSR.

Allison further notes that the UP Division map shows essentially three straight lines radiating out of Chicago: to central Texas, to LA/LB, and to the PNW. Of these, the Texas lines are former MoP and SP heavy manifest freight line segments. To them add the ex-CNW properties north of Chicago and you get the toughest operating divisions with a high percentage of single-car moves.

You have to run to plan — calling audibles on Unplanned Events just won't work. Allison concludes, "For these reasons, we think an argument can be made that the Mid-America corridor is an ideal place to start, as it's been done before." I agree, and for that reason I think CP's Intermodal Demand Management will work for manifest carloads.

Demand management seeks to smooth train sizes so that every train is a big train. A year ago, CP was running 6,000-foot intermodal trains four days a week, and 12,000-foot trains the other three days. If they could run 10,000-foot trains every day, CP would create another 10,000 feet of capacity every week. Mid-week peaks are eliminated, while consistent train sizes improve asset utilization and network balance. And the customers benefit from greater dock-to-dock consistency.

Applied to the manifest carload segment, you can encourage customers to load and release cars by destination, filling up trains and emptying yards. As you saw above, we did exactly that on the UP steel moves of 20 years ago. And, as Allison says, having been there before creates an environment receptive to doing it again. Color me encouraged.

I bring up the subject of emerging markets in a railroad context because these nations run from rich to poor in natural resources. Brazil is resource rich, while China remains a big importer of raw materials and on balance is resource poor. Thus emerging market countries rich in natural resources (Brazil, e.g.) benefit as other emerging markets countries like China and India industrialize.

The US benefits because it can send everything from potash to coal to lumber to emerging market counties and get back stuff we can't make as well *and* import finished goods to the interior. The railroads can do both.

Wednesday's 831-point Dow sell off hammered Consumer Discretionary hardest, off 6.1 percent. Energy including coal and petroleum prods fell 3.2 percent and utilities lost the least, down 83 basis points. Ag products gained 2.5 percent.

Fewer consumer discretionary dollars will hit emerging markets exports and intermodal containers first. But emerging markets still need to keep making stuff and they rely on imports from cotton to coal to do it. They need to eat, and North American grain helps feed them. As a result, I'm not really concerned about the effect of the stock market sell-off as it relates to Heat & Eat carloads off the short lines.

Finally, year-to-date AAR North American revenue units were up 2.6 percent through September, continuing the trend of sequential month-to-month gains. Most commodities are posting monthly gains, albeit small, whereas the rate of increase for intermodal boxes has fallen off in recent weeks. Thus my preference for the Heat & Eat sector — toys for tots has little effect.