During the last year, there were three major events affecting railroad traffic that could potentially affect future tie demand.

First, world economic growth slowed due to weakness in most major emerging markets (BRICS = Brazil, Russia, India, China: See Figure 1), while developed economies, such as in the Eurozone and Japan, remained stagnant.

The second ongoing event was an urge to address growing concerns about climate change. The United States and other governments continued their push for curbing greenhouse gases emission, culminating in the Paris talks with voluntary pledges to cut greenhouse emissions.

And, finally, the president signed into law two acts of Congress. Late in October, the Surface Transportation Extension Act extended the deadline to implement the Positive Train Control (PTC) system by three years. And, only at the last minute, Congress passed an “Omnibus” spending bill with many tax incentives such as the energy tax credit and the short line tax credit.

All three situations have had an effect on the U.S. economy and the amount of railroad traffic in North America, causing revisions in railroad CAPEX planning for 2016 and possibly 2017.

To the first point, the world economic slowdown pushed several central banks to further lower interest rates, and/or embark on quantitative easing (Eurozone, Japan). This had the indirect effect of devaluing their currency against the U.S. Dollar (USD). The Chinese added stimulus to their economy by directly devaluing the Yuan in the foreign exchange markets. Together with the anticipated rise of interest rates in the United States, the U.S. dollar has appreciated significantly against a basket of major currencies over the last two years by 20.4 percent on annual average. Due, in part, to these two factors, commodity prices declined significantly.

In the case of oil, prices were also affected by increased production in the United States and to some degree by Saudi Arabia and Russia (Figure 2). Just last year, the imbalance of supply and demand resulted in oil price decline by 48 percent (annual average bases). Analysts are still wondering where the bottom will be. As a result, U.S. oil companies lowered CAPEX spending, which had a negative effect through their supply chain and this included the railways. Rail provided not only the transport of crude oil but also the transport of many items that were used to build oil rig infrastructure and for oil fracking.

In the face of a strengthening dollar, manufacturing sectors in the United States also suffered from muted exports. The U.S. net exports, as a contribution to percentage change in real GDP, were down on average 0.55 percent for the same period (FED, Bureau of Economic Analysis). However, considering these headwinds, the U.S. economy fared relatively well, and the job market improved.

The second ongoing event is the effect

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**Figure 1**

**Annual GDP Growth**

Source: World Bank. Note: WSJ recently reported Brazil’s 2015 GDP -4.5%, Reuters reported China’s 2015 GDP 6.8% and India’s revised 2013 GDP 6.6% and 2014 7.2%.

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**Figure 2**

**Total Oil Supply (Thousand Barrels Per Day)**

Source: EIA
of government climate change policies and their impact on marketplaces. These policies have had a negative impact on the railroads and potential tie demand. Through EPA regulations, the U.S. government particularly targeted utilities that generate electricity with coal, citing evidence that coal-fired power plants are among the most significant CO2 emitters. Power generation in the United States consumes, on average, 93 percent of domestically produced coal (EIA). Because of the regulations, and the abundance of cheap natural gas, the share of coal as an energy source has been on the decline. Once a major driver of growth, reduced coal use has negatively affected rail traffic (see Figure 2 - 10-year trend).

A third significant event was the enactment of the Omnibus Spending Bill in which tax incentives for renewable energy investment were renewed but also brought some positives for railroads. Even though renewable energy sources are expected to rise, further dampening the demand for coal, Congress also retroactively passed tax incentives for small railroads, and extended that tax credit through 2016. This, plus extending the deadline for meeting the PTC mandate, offers opportunities for railroads to maintain flexibility in investing in other infrastructures, for example, in track maintenance.

Directly and/or indirectly, the ripple effects of these events was, and continues to be for the foreseeable future, reflected in railroad traffic weakness.

In 2015, Class 1 railroad traffic declined 2.5 percent, while short line traffic declined by 8.7 percent. In the case of Class 1s, total traffic decreased by 6.1 percent. The most significant contributors to the decline were coal, chemicals and metallic ores/metals decreasing by 12 percent, 3 percent and 12 percent, respectively. These three categories represent 60 percent of carloads and 30 percent of total traffic.

For the short lines, the situation was similar. Coal shipments declined by 30 percent, metal and metal products by 18 percent and chemicals by 1 percent. Together, they represent 37 percent of all the traffic (AAR and RMI Index reports).

To some degree, the decline was mitigated by an increase in intermodal, agricultural products and motor vehicle categories for some railroads. The decline in railroad traffic had a negative effect on the bottom line for most of the major railroads’ as expressed in their annual/quarterly SEC filings. As a result, railroads have begun to announce lower CAPEX expenditures for 2016. Point in case, BNSF recently announced its intention to decrease CAPEX spending from $6B in 2015 to $4.3B for the coming year. Also, UP and KCS announced a reduction of 10 to 11 percent, CSX by 6 percent, and NS by 12 percent. However, CN plans to increase CAPEX from $2.7B to $2.9B. Furthermore, most companies improved their efficiency, and at least CN expects improved pricing above inflation in coming year. Thus, the decline in CAPEX does not necessarily mean direct correlation to lower expenditures for track maintenance, at least for now.
MARKET FORECAST

What Can We Expect In 2016 & 2017?
The weakness in the global economy is expected to continue, as underscored by the International Monetary Fund lowering its world GDP forecast for 2016 and 2017 by 0.2 percent for each year to 3.4 and 3.6 percent, respectively (October 2015 forecast). The dollar may also appreciate further (Source: November S&P forecast). Therefore, weakness in the commodities markets and U.S. manufacturing sector may continue. Despite these headwinds, the U.S. economy should grow by 2.4 percent percent respectively (recent S&P forecast revision).

Included in that economic growth scenario could be upside potential for the intermodal story to add better than average expansion for rail revenues. Rail pricing stability across the sector, with growth exceeding rail cost inflation may also provide a tailwind (these positives are reflected in the upside scenario). Greater world economic weakness or further direct or indirect currency manipulations, affecting U.S. GDP growth to a more significant degree than expected, could present a further drag on tie demand (downside scenario).

In light of the current conditions and uncertainty of world economic aspects, RTA presents three scenarios for tie demand in 2016-2017:

**Base Case Tie Demand Forecast**

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**Downside Scenario**

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**Upside Scenario**

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**Market Forecast**

In February, Anthony Hatch, Senior transportation analyst focused on surface transportation and in particular rail and intermodal service, provided a review of railroads’ performance during Q4 2015 as well as a look at some lingering challenges and expectations for what lies ahead for the railroads in 2016 and beyond.

How did the railroads perform during the fourth quarter of 2015? As BNSF’s Matt Rose has recently noted, railroads have suffered for a year now in the face of an energy depression, manufacturing recession and slower growth in consumer spending.

Rail investor sentiment has suffered to an even greater degree. After all, rail revenue declines (averaging 9 percent in the quarter) were as much a result of fuel surcharges going away as anything else. However, pricing remained strong, despite pessimism, and operating ratios averaged 65 percent. This is hardly indicative of an industry in trouble.

We still have yet to hear reports from BNSF via Berkshire Hathaway, and, given their extraordinary service (and thus productivity) recovery, the reports may tilt major rail earnings into the “win” category.

Talk a little more about investor sentiment in the face of the economic picture.

For investors, railroad financial performance expectations remain weak, quantified by stock pricing performance and emphasized by the Q&A occurring in the rail earnings calls to date. It doesn’t help, of course, that the overall economic picture is cloudy and that investors believe in the old maxim, “what’s past is prologue.” Coal remains the biggest issue. Visibility into the daily operational aspects is poor, which also doesn’t bolster investors confidence in the sector.

Are there bright spots?

Most certainly. Rail service has returned to and exceeded earlier record performance levels. This is helped, of course, by lower volumes and the mix shifting from slow to faster throughput. But, more importantly, the massive, targeted expenditures in the network, crews and power have also had a tremendous positive effect.

Is that one of the reasons for the improved productivity you have reported on?

Without doubt. Productivity improvement is the flip side of record service performance. They go hand in glove and have buffered the downsides we have mentioned. Productivity was the primary driver in the record margin performance that occurred despite the volume/revenue shortfalls.

You’ve mentioned price stability. Can you talk about that and why it may be a positive for rail moving forward?

Volumes were, in fact, down 6 percent for the quarter, accelerating downward as the year and quarter went on and starting January poorly. Coal was down 12 percent for the year. Only autos have been positive. And, despite great earnings and confidence expressed by companies that have reported so far, that cycle has not peaked. Nonetheless, the markets are not as sure. Investors see steel shipments remaining a nightmare. Plus anything tied to commodities remains under pressure. It’s too early to call the grain harvest this year, but the dollar and
existing stockpiles—plus falling land prices—suggest that farmers aren’t coming to the rescue in 2016. So, it’s up to intermodal and the consumer once again.

On the other hand, pricing definitely remained firm, up 3 to 4 percent, and well above “rail inflation.” This occurred despite those deep-seated fears from the financial community, which erroneously linked pricing to shipping volumes rather than to service.

**What is the outlook for the railroads in the coming months?**
Better days are ahead. Year over year quarterly performance comparisons will improve and coal will stabilize. Also, autos, which continue to look promising, will play a role in the improvement in intermodal shipping, which will also benefit from more efficient service levels and the end of oil price declines. Truck and driver issues are still a major problem for trucking, so the intermodal story will go on. Chemical shipments expanding will be a big deal, getting more visible by yearend into 2017-2019. This will add some 20 percent to chemical/plastics carload volumes and provide even more intermodal opportunities.

**What do you expect in terms of capital expenditures for the year?**
CAPEX can and is coming down by some 13 percent not because of the near-term volumes but because big projects, capacity expansion and debottlenecking projects are reaching end-stage levels. We think cash flow can now be directed toward a rebalancing, with higher share buybacks and increasing dividends possible.

**You have talked about M&A. Where are we now?**
The mergers and acquisitions story remains unresolved. The players seeking to move on Norfolk Southern are not done yet, but a fair amount will be learned over the next few weeks as we head toward the May NS board meeting.

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