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**CP: 2016 Customer
Safety Winter Focus
Letter**

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industry track**

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Railroad & Policy Updates

On December 15, 2016, the Canadian Pacific Railway (“CP”) published their “2016 Customer Safety Winter Focus Letter” and submitted this letter to customers. The safety points regarding industry track are valuable and and such, we’ve recapped the safety letter below. You should contact the CP directly with questions, concerns and comments or read a copy of their Customer Safety Handbook at <http://www.cpr.ca/en/customer-resources/customer-safety>. You can contact Tealinc if you need guidance in following these rules.

Dear Valued Customer,

Canadian Pacific (CP) has the lowest train accident frequency rate of any North American Class I railway. We are proud of this fact and of the work we do to maintain our safe operating record. A large part of this success is a result of our partnership with you, and we are asking for your ongoing support to help us prevent future railway-related accidents by ensuring all railway equipment is handled correctly, handbrakes are applied, your track is maintained properly, and that your property has no restricted clearance or tripping hazards.

Historically 15-20% of all CP train accidents occur on industry track. Through our business partnership our goal is to reduce this number together. Safety is good business for everyone, and your attention to track condition is vitally important as we prepare for winter. This letter outlines how you can assist us in achieving this goal.

Further to assist you our Customer Safety Handbook provides clear direction on safe rail operations, with specific focus on industry track. This handbook will help educate your employees on the hazards of rail operations and raise their situational awareness.

There are five key areas we want to highlight:

1. Track Maintenance: depending on your location, federal and/or provincial/state regulations require monthly track inspections by a qualified inspector. Please make these inspection records available upon request by CP or any regulatory inspector. If your track is not maintained to regulatory standards, we will not be able to safely switch on your property, which may result in suspension of service and/or additional tariffs. This is of particular importance as we work with you on improved service reliability.

The risk of derailment increases if mud, snow, ice and debris collect on and around tracks, more so within flange ways at crossings. Installation of rubber seals (available from railway equipment suppliers) between the rail and crossing materials will minimize the amount of debris accumulating within these flange ways. Ensure crossings are constructed in a manner that has a defined flange way on the gauge side of the rail. Note that gravel

Cars must be properly loaded and all doors, hatches and outlet gates must be fully closed prior to dispatching any railway car.

Railcars must not be moved while handbrakes are fully or partially applied. This can lead to skidding or excessive heating – both detrimental to the structural integrity of the track and wheels

When it comes to rail, experience is king. Learn from the successes and failures of your predecessors

dumped into the track to form a crossing does not provide the required stability and this practice has resulted in many derailments in winter.

2. Restricted Clearance Hazards: serious injuries can occur if clearances are restricted. Your facility must be free of side and overhead clearance restrictions. If inevitable, such restrictions must be clearly identified by warning signs and communicated to CP. Please review your plans with us prior to making any changes to rail clearance restrictions. Gates leading into your facility must open fully and be properly secured in all weather conditions (including when the ground is frozen) to prevent them from swinging closed during switching operations; reducing the risk of injury to our employees.

3. Loading and Containment: cars must be properly loaded and all doors, hatches and outlet gates must be fully closed prior to dispatching any railway car.

4. Equipment Securement and Handling Requirements: complete details on equipment securement and handling requirements are included in the Customer Safety Handbook. However, one very important point: railcars must not be moved while handbrakes are fully or partially applied. This can lead to skidding or excessive heating – both detrimental to the structural integrity of the track and wheels. Additional information is available in the short video entitled “Please Release Me...Let Me Roll”; click the following: <http://www.aar.com/wdprc/>

5. Housekeeping Conditions: one of the leading causes of personal injuries at customer facilities is slips, trips and falls. Please ensure your facility is free of walking hazards such as weeds, debris, material and spills and that snow and ice is cleared or sanded.

Winter Planning:

If your facility is not cleared of snow and ice ahead of your next scheduled service, contact your local CP Operations office immediately to advise when it will be clear (see the following web address for a complete listing):

<http://www.cpr.ca/en/customer-resources/customer-safety>. This will ensure service on your next available scheduled service day and avoid a temporary suspension of service.

To schedule a CP Safety Audit, obtain information on contractors available for an inspection or maintenance of your track, information on our 3rd Party Operating Process, and available training resources, please contact your local CP Operations office.

Mechanical Brief with Steve Christian

The advancements that mankind has made were always made on the shoulders of those that came before. Each generation takes the knowledge and experiences of those who came before and advance them for the next generation. The railroad industry is no exception to this. When I reflect back on my time in the industry, the changes are astounding. Steam engines to Diesel-Electric locomotives, friction bearings to roller bearings, pencils and paper to computers are just a few examples.

When I reflect back on my time in the industry, the changes are astounding. Steam engines to Diesel-Electric locomotives, friction bearings to roller bearings, pencils and paper to computers

The original mega merger that formed Burlington Northern... was a predecessor of railroad mergers yet to come. Lessons were learned from that merger that benefited subsequent mergers

One memory I will always carry with me is watching the agent at Oxford, Nebraska receiving train orders by telegraph for a train that was going to pass the depot. He listened to the telegraph while he typed the train orders on a manual typewriter. Once completed, he would roll up the orders in the middle of a string that was tied into a circle. It was attached to a stationary pole next to the mainline up at locomotive cab level. The circle of string was stretched out so that the open area was perpendicular to the track. When the train approached, the head brakeman would open the locomotive window and extend his arm so that his arm point forward through the string's open center. The string and message would be released from the pole and be threaded on his arm as the train passed. We sure have come a long way to the true instant messaging available today.

Another memory that sticks in my mind is the original mega merger that formed Burlington Northern. I remember seeing brand new cascade green SD45 locomotives and brand new cascade green boxcars and covered hoppers being run on CB&Q (Burlington) trains that only had "BURLINGTON" stenciled on them prior to the BN merger. We had stencils on hand that said "NORTHERN" well in advance of merger day so that we could apply them once the merger was completed. Merger day seemed like it was always just around the corner and then when we thought it was finally here, it was delayed again. Railroad mergers were nothing new, but this was the first mega merger. The Great Northern, Northern Pacific, CB&Q and Spokane, Portland & Seattle had years to work on the merger plans due to the many years of study and arguments to the Interstate Commerce Commission. Even with the long time to plan and the many millions of dollars spent, there were a multitude of problems making past competitors into a cohesive unit. I was a very young carman's helper at the time. Obviously, I was not in a position to affect very much, but I followed it closely and believe that this merger paved the way for all the large railroad mergers to follow. I believe that each subsequent merger benefited from the costly lessons learned from the previous mergers. This is a prime example of taking the knowledge and experiences of the railroad mergers that came before to make subsequent mergers easier and less costly. Perhaps the UP-SP merger was the exception to this.

As a manager of several car repair shops I was involved in testing experimental products and railcar modifications for railroad suppliers, car builders and fleet owners. Electric utilities always seemed the most eager to be on the cutting edge of something new. Lightweight cars with lightweight components were always easy bait to get utilities to participate. I remember when stub sill rotary dump gondolas were in their early years and utilities were eager buyers. The return on investment on these cars, based on the additional coal they could haul, made them a very attractive investment. However, the builders had not yet perfected the transmission of the buff and draft forces from the stub sill through the car without causing damage by way of cracking and buckling at the transition areas.

There were several years that my shops made a big share of their revenue applying one fix, then another fix, etc. as we reinforced one area only to chase the problem to another. The payback from the extra coal hauling scenario didn't work out since a large number of the cars were always in the shop. After several years of trial and error by the car builder's

Alignment of the parts is the most critical to getting it to work right. At the manufacturer's plant there are jigs and fixtures that position everything in the correct position... a car shop can't afford them so less accurate and less efficient means are used

The first party to take the challenge of creating something new and innovative, more often than not, pays a heavy cost for being first

Learn from the successes and failures of others and if you're going to proceed, know how to intelligently evaluate your risks

engineers and field service personnel, they finally had design that actually worked. As the result, any utility that purchased cars after all that mess had cars that incorporated all the design changes that worked. In other words those buyers reaped the rewards from the bad experiences of the car owners that came before them. The utilities that had the original design cars had cobbled up cars that were a maintenance nightmare for years to come. It was a huge price to pay for being the "guinea pig".

There were also retrofits for changing manually operated gates on open top hoppers to pneumatically operated and, believe it or not, going back to manual from pneumatic. They both could be accomplished today fairly well but the learning curve on doing this was both expensive and painful. Going from manual to pneumatic was the most problematic. Alignment of the parts is the most critical to getting it to work right. At the manufacturer's plant there are jigs and fixtures that position everything in the correct position before securing. These jigs and fixtures are expensive to make but pay for themselves in the production of thousands of cars. A car shop can't afford this, so less accurate and less efficient means are used. To top it off, there is always brake rigging, air piping or some other car component that is in the way of the door mechanism being installed. The original concept seemed pretty straight forward but the actual installation proved anything but. The cars owners who did this found that it was a bad idea. Others who considered doing the conversion walked away based on the experiences of their predecessors. Again, it was a huge price to pay for being the "guinea pig". The ones that waited were awarded for their patience.

Well, by now you should be able to follow my ramblings. As we move into a new year, there are talks about customers working with car builders to develop new and innovative railcars. While the goals are to speed up loading and unloading and remove the personnel hazards associated with both and while the technology is an intriguing project that I would like to see accomplished, it seems to me that there are many hurdles to overcome.

Remember that in many instances, you may be becoming the prime example where it would be better to let someone else lead the way. During times of innovation, goals to be a trailblazer can actually have the opposite outcome than what the goals are and what a nightmare that could be.

The first party to take the challenge of creating something new and innovative, more often than not, pays a heavy cost for being first. The ones who follow take advantage of the originator's experiences. Learn from the successes and failures of others and if you're going to proceed, know how to intelligently evaluate your risks.

As always, Tealinc stands ready to employ our many years of experience (successes, failures and everything in between) in the railroad industry to work for you. Our consulting services will help you evaluate your risks in innovation. Happy Holidays!

Steve Christian is the Manager Value Creation-Railcar Performance Manager for Tealinc, Ltd. You may contact Steve directly in his Colorado office at (719) 358-9212 or via email at steve@tealinc.com.

AAR reports weekly rail carloads for November up 0.4%; intermodal up 1.9%

Carloads of grain, chemicals, crushed stone, sand and gravel up; petroleum and petroleum products, coal and motor vehicles parts down

"There are glimmers of hope in rail traffic data in November, with carloads and intermodal totals both up over last year — something that hasn't happened for carloads in 22 months and for intermodal in nine months"

Railroad Traffic

The Association of American Railroads (AAR) [reported December 7, 2016] weekly U.S. rail traffic, as well as volumes for November 2016.

Carload traffic in November totaled 1,319,008 carloads, up 0.4 percent or 5,406 carloads from November 2015. U.S. railroads also originated 1,319,189 containers and trailers in November 2016, up 1.9 percent or 24,329 units from the same month last year. For November 2016, combined U.S. carload and intermodal originations were 2,638,197, up 1.1 percent or 29,735 carloads and intermodal units from November 2015.

In November 2016, 11 of the 20 carload commodity categories tracked by the AAR each month saw carload gains compared with November 2015. These included: grain, up 18.6 percent or 20,209 carloads; chemicals, up 1.9 percent or 2,829 carloads; and crushed stone, gravel, and sand, up 2.5 percent or 2,714 carloads. Commodities that saw declines in November 2016 from November 2015 included: petroleum and petroleum products, down 15.4 percent or 9,813 carloads; coal, down 2 percent or 9,282 carloads; and motor vehicles and parts, down 3.5 percent or 3,134 carloads.

Excluding coal, carloads were up 1.7 percent or 14,688 carloads in November 2016 from November 2015.

Total U.S. carload traffic for the first 48 weeks of 2016 was 12,123,218 carloads, down 9 percent or 1,195,299 carloads, while intermodal containers and trailers were 12,478,621 units, down 2.5 percent or 322,386 containers and trailers when compared to the same period in 2015. For the first eleven months of 2016, total rail traffic volume in the United States was 24,601,839 carloads and intermodal units, down 5.8 percent or 1,517,685 carloads and intermodal units from the same point last year.

"There are glimmers of hope in rail traffic data in November, with carloads and intermodal totals both up over last year — something that hasn't happened for carloads in 22 months and for intermodal in nine months," said AAR Senior Vice President of Policy and Economics John T. Gray. "Hopefully, these results are indicators of continuing future growth for the manufacturing economy, for trade, and for rail traffic. It appears that economic fundamentals are trending toward more positive results than have been seen in the recent past."

Crude Oil Carload Update

The AAR also reported U.S. Class I railroads originated 48,978 carloads of crude oil in the third quarter of 2016, down 7,476 carloads or 13.2 percent from the second quarter of 2016 and down 52,189 carloads or 51.6 percent from the third quarter of 2015.

Visit the AAR at:

<https://www.aar.org/newsandevents/Press-Releases/Pages/2016-12-07-railtraffic.aspx>

**Aggregates
production dips in
third quarter;
higher for year**

**Crushed stone
down 3 percent
compared to the
third quarter of
2015**

**The estimated
production for
consumption of
crushed stone in
the third quarter of
2016 decreased in
six of the nine
geographic
divisions compared
with that sold or
used in the third
quarter of 2015**

Industrial Inside

An estimated 687 million metric tons (Mt) of total construction aggregates was produced and shipped for consumption in the United States in the third quarter of 2016, a slight decrease compared with that of the third quarter of 2015. The estimated production for consumption in the first nine months of 2016 was 1.78 billion metric tons (Gt), an increase of 5 percent compared with that of the same period of 2015, according to Jason Willett, crushed stone commodity specialist for the U.S. Geological Survey (USGS).

An estimated 397 Mt of crushed stone was produced and shipped for consumption in the United States in the third quarter of 2016, a decrease of 3 percent compared with that of the third quarter of 2015. The estimated production for consumption in the first nine months of 2016 was 1.05 billion Gt, an increase of 6 percent compared with that of the same period of 2015.

The estimated U.S. output of construction sand and gravel produced and shipped for consumption in the third quarter of 2016 was 290 Mt, virtually unchanged compared with that of the third quarter of 2015. The estimated production for consumption in the first nine months of 2016 was 732 Mt, an increase of 4 percent compared with that of the same period of 2015.

Portland (including blended) cement consumption decreased by 3.9 percent in the third quarter of 2016 compared with that of the third quarter of 2015. Consumption in the first nine months of 2016 increased by 3.1 percent compared with that of the same period of 2015.

The estimated production for consumption of construction aggregates in the third quarter of 2016 decreased in six of the nine geographic divisions compared with that sold or used in the third quarter of 2015. Production for consumption decreased in 22 of the 43 states for which estimates were made.

The five leading states were, in descending order of production-for-consumption, Texas, California, Michigan, Pennsylvania and Ohio. Their combined total production for consumption was 197 Mt, a decrease of 5 percent compared with that of the same period of 2015 and represented 29 percent of the U.S. total.

The estimated production for consumption of crushed stone in the third quarter of 2016 decreased in six of the nine geographic divisions compared with that sold or used in the third quarter of 2015. Production for consumption decreased in 24 of the 46 states for which estimates were made.

The above estimates are based on information reported to USGS on its quarterly sample survey of construction aggregates producers.

Read the entire article at:

<http://www.rockproducts.com/news-late/16033-aggregates-production-dips-in-third-quarter-higher-for-year.html#.WFk694WcFaR>

Finally: Fed raises rates for first time in 2016

Yellen: "Economic growth has picked up since the middle of the year. We expect the economy will continue to perform well"

The Fed hinted that it could raise rates at a faster pace next year. Most Fed officials now project three or more rate hikes in 2017

A big spending plan would spark demand for many goods, which could cause inflation to

Financial Focus

America finally got a rate hike this year.

The Federal Reserve increased its key interest rate by 0.25% on [December 13, 2016]. It signified the Fed's confidence in the improving U.S. economy. Rising rates will affect millions of Americans, including home buyers, savers and investors.

Fed officials raised its target for short-term interest rates by 0.25 percentage points to a range of 0.50% and 0.75%.

It was just the second time in a decade that the Fed has raised rates. The first was in December 2015.

"Economic growth has picked up since the middle of the year," said Janet Yellen, the Fed's chair. "We expect the economy will continue to perform well."

The Fed slashed rates to zero in 2008 in the midst of the financial crisis and kept it there during the Great Recession and beyond.

The rate increase indicates that the U.S. economy no longer needs the Fed's crutches and consumers and businesses can afford to pay more to borrow. America has added jobs for 74 consecutive months and the country's unemployment rate has fallen to 4.6%, its lowest level since 2007. The U.S. economy has expanded for seven years, even though the pace of growth has been slow.

The Fed's rate hike "should be viewed essentially as good news -- the Fed sees enough strength" in the economy, says Vincent Reinhart, chief economist at Standish, an investment firm in Boston.

The Fed hinted that it could raise rates at a faster pace next year. Most Fed officials now project three or more rate hikes in 2017. In September, Fed officials predicted they would only raise rates once or twice next year. The stock market fell after the decision was announced and Yellen's news conference was underway. The Dow fell over 100 points.

Yellen indicated that the Fed's role in the economy is starting to recede and that Congress will start taking over that job of helping stimulate the economy.

Fiscal policy is "not obviously needed to provide stimulus," she said. Yellen clarified that it didn't mean she was "trying to provide advice to the new administration or Congress," but said that her staff has been in touch with transition team of President-elect Donald Trump.

[December 7, 2016] move could be the first of more. Some economists believe the Fed will need to raise rates more often -- and perhaps at higher levels -- if President-elect Donald Trump spends big on infrastructure.

"With the economy much closer to full employment now and a strong likelihood of a fiscal stimulus next year...we expect the Fed to accelerate

accelerate from its low levels. The Fed will have to fight inflation by raising rates

The Fed is clearly comfortable with how the U.S. economy is currently performing”

the pace of [rate hikes] next year," says Paul Ashworth, chief U.S. economist at Capital Economics.

A big spending plan would spark demand for many goods, which could cause inflation to accelerate from its low levels. The Fed will have to fight inflation by raising rates.

However, nothing is certain with the Fed. That truth bore out this year. Fed leaders originally projected raising rates four times in 2016. But after a slew of setbacks, such as low oil prices earlier in the year, Fed officials only felt comfortable with this one rate hike for the entire year.

The Fed released a new forecast [December 7, 2016] and it projects U.S. economic growth this year to be 1.9% and next year to be 2.1%, both slightly better than the Fed's previous projection in September.

Overall, the Fed's rate increase reflects its confidence in the economy, experts say.

"The Fed is clearly comfortable with how the U.S. economy is currently performing," says Scott Anderson, chief economist at Bank of the West in San Francisco.

Learn more at:

<http://money.cnn.com/2016/12/14/news/economy/federal-reserve-rate-hike-december/>

The Edge with Darell Luther

Happy New Year! I hope 2016 treated you and your company as best you could expect.

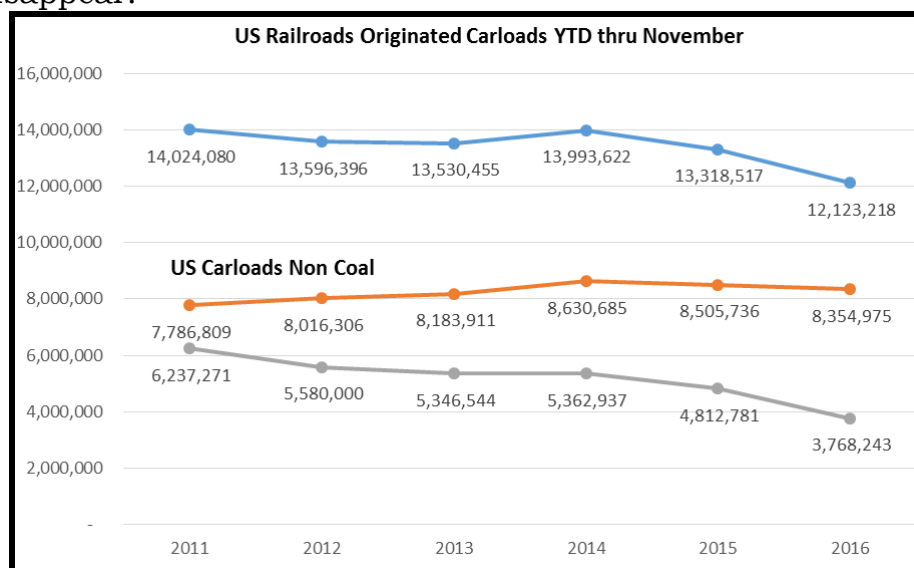
In looking back, 2016 was a tough year in the rail industry. Railroads continue to feel the loss of energy related (coal, crude oil, frac sand, etc.) business while other industrial products shippers suffered from a lackluster economy. This rail industry is a multi-billion dollar industry that generates positive and negative impacts that domino out to participants at every level. One domino effect of the continued railcar load reductions has been for railroads to cut back employment levels (you need fewer employees to run trains if they aren't there to run), reduce maintenance of way expenditures, reduce capital projects and return leased equipment to their owners. These suppliers in turn reduce their expenditures for roads, aggregate, steel, railcars, parts, electricity, water, insurance and so on. The labor force is either furloughed or laid off and in many cases these losses are causing a significant knowledge loss.

However, all is not lost despite a trying 2016. It's starting to look like 2017 may be a stabilizing year and we could possibly enjoy some growth in 2018. That's take a look at some of the indicators.

Historical Railroad Originated Carloads

In looking at the statistics of the last six years, historical railroad originated carloads peaked in 2014. There was a significant increase in non-coal railcar loadings prior to 2014, a slight decline in 2015 and a slightly more moderate decline in 2016. The nearby

declines in originated traffic are energy related focused predominately on crude oil rail shipment reductions and, to a lesser degree, frac sand shipments. At the same time, coal originated railcar loadings have seen significant declines since 2011 to 2016. Coal originated railcar loadings have fallen some 40% from 2011 to 2016. Measuring the coal originated railcar loadings decline from 2015 to 2016, we see a little over one million railcar loads disappear.



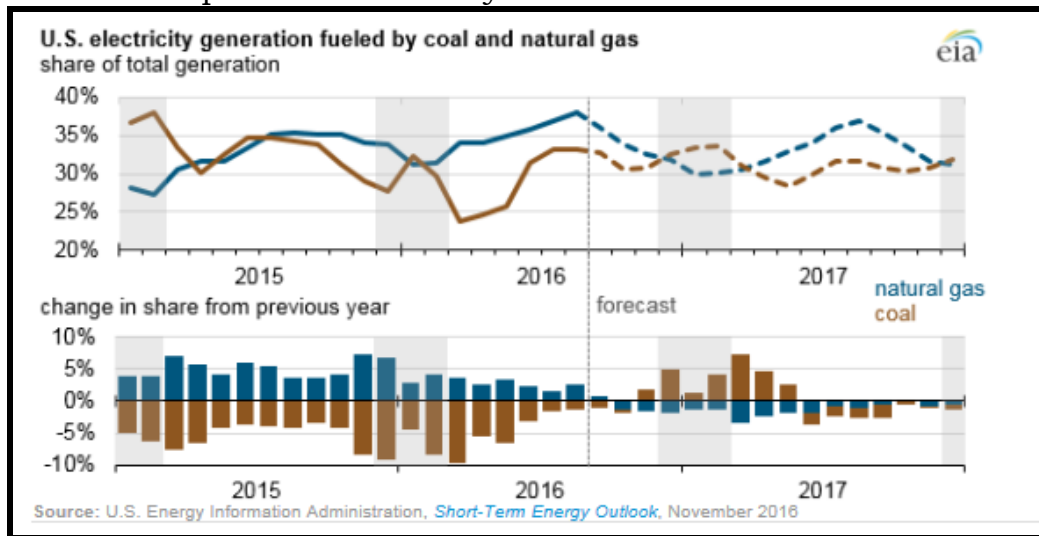
So where is the silver lining? First, we need to concentrate on where we can move the railcar loadings needle. In the table below we see the U.S. Rail Traffic Originated Carload Year to Date through December of each year. You'll see that in order of originated carloads, the commodity groups stack up as follows, Coal – 31%, Chemicals and Petroleum – 16%, Agriculture and Food Products – 15%, and Nonmetallic Minerals – 14%. The rest of the commodity groups are generally indicators but don't have as much railcar loadings impact as the top four groups.

US Rail Traffic Originated Carloads	Year to Date				% of Total Clds	
	2016	2015	Change	Pct Change	2016	2015
Agricultural & Food Products	1,873,819	1,829,670	53,140	2.9	15%	14%
Chemicals & Petroleum	1,998,127	2,124,486	126,359	-5.9	16%	16%
Coal	3,768,243	4,812,781	(1,044,538)	-21.7	31%	36%
Forest Products	484,483	524,785	(40,302)	-7.7	4%	4%
Metallic Ores & Metals	1,025,813	1,086,324	(60,511)	-5.6	8%	8%
Motor Vehicles & Parts	860,715	845,222	15,493	1.8	7%	6%
Nonmetallic Minerals (aggregate)	1,640,312	1,690,559	(50,247)	-3	14%	13%
Waste & Nonferrous Scrap	183,041	157,168	25,873	16.5	2%	1%
All Other Carloads	288,674	256,522	32,152	12.5	2%	2%
Total Carloads	12,123,227	13,327,517	(1,204,290)	(0.099)		

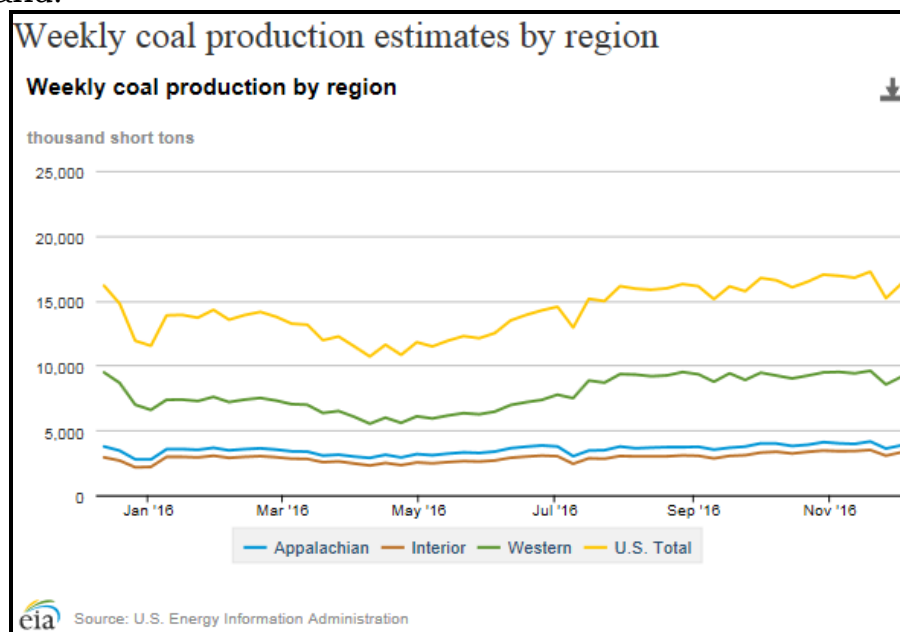
Coal

Let's start with the big railcar loading driver – coal. It appears that we may be at the bottom! According to the Energy Information Administration's chart below, there has been a near term increase in coal production. Overall, the trend since early 2016 has been relatively flat to growing in the second half of the year. And coal railcar loadings have slowed their fourth monthly declines to around 2%. Natural gas prices have stabilized and in some regions are increasing causing coal to become more in favor with certain geographic regions. Natural gas for at least the first quarter of 2017 is expected to cede first place energy production supply back to coal. Utilities, particularly investor

owned, have generally switched to natural gas at favorable locations and scrubbers have been installed or are in process where they make economic sense as well.



So we should see some stabilization in this area. Additionally, with Trump's administration it seems we have a new political climate that should reduce the war on coal and at the least level the playing field and, at best, provide some favorable legislation. Now just to work off the few ten-thousands of coal railcars that are surplus to current demand!



Chemicals & Petroleum

When we look at the Chemicals and Petroleum group, is two name-sake commodities are two quite diverse commodity groups. The chemicals group is generally a pretty steady commodity group and in fact is up 19,495 carloads (approximately 1.3%) through December 3. It's the petroleum group that's suffered following in the footsteps of the price of oil and to a lesser degree some pipeline impacts. Petroleum is down 145,854 carloads or 21.7%. As the price of oil moves, so shall the carload originations. So far OPEC has agreed to cut 1.2 million barrels-per-day in production and Russia and non-OPEC member countries have agreed to cut half as much. It makes a near term uptick in the price of oil and we'll see how close OPEC and others manage to stay to their commitments.

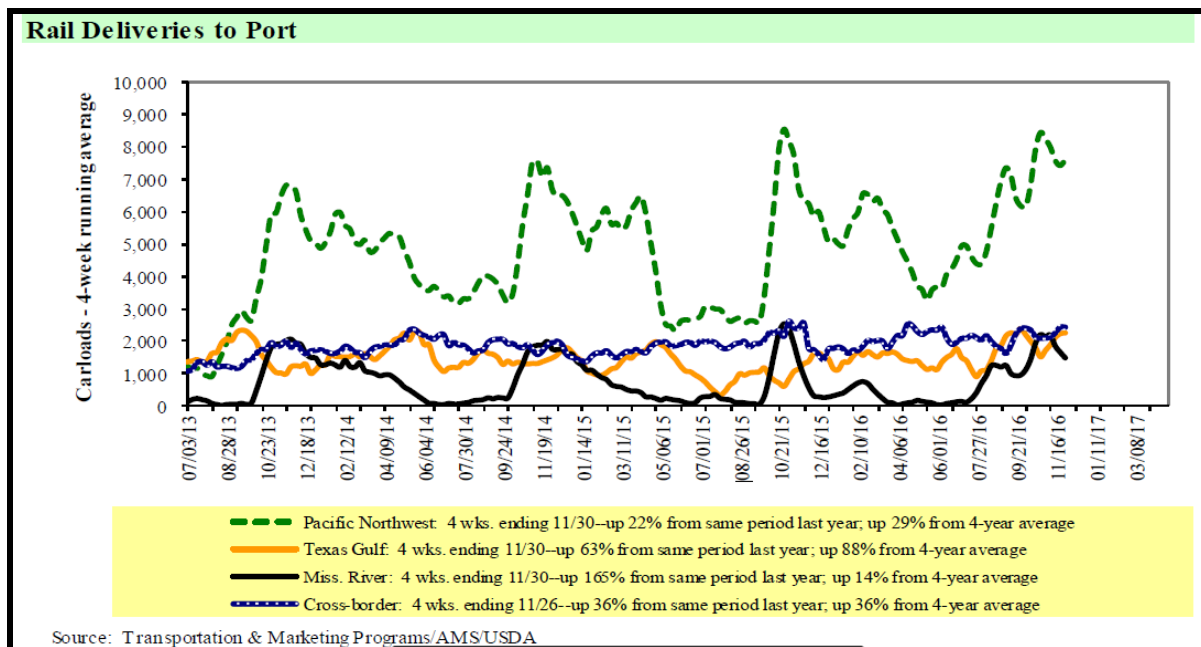
Grain

Grain is an interesting commodity. Being perishable, it has to get to an end consumer in the food chain (human or animal) or it has no value. I classify grain as a “push” commodity. When the price goes up, the farmer stores a bit more waiting for higher prices, then prices go down and the farmer plants even more to compensate for lower prices and then stores as much as he can afford before the prices get to an equilibrium. When the strength of the dollar and export competition allows grain to move to a market, the farmer is running out of operating money and sells every bushel possible (pushes it out the door versus having a demand price number he’s satisfied with) to make up for the loss in the price per bushel. Volume drives price (or at the least significantly influences it) and over the past couple of years we’ve had record corn and soybean crops. We’re coming off a 13.9 billion bushel corn (old crop) and are projected to be north of 14 billion bushel corn new crop. It has to go somewhere and domestic demand, including a healthy chunk for ethanol, is pretty saturated. Look for the old crop corn (2015 crop year) to carry us into first quarter and given the prices look for new crop to follow in volumes higher than one may expect.

A big driver in these markets is the ability to export commodity.

According to Tom Vilsack, Secretary of Agriculture - USDA, in a November 30, 2016 press release from the USDA, *“The expected volume of 2017 exports is noteworthy, with bulk commodity exports expected to surpass last year's record levels - led by soybeans at a record 55.8 million metric tons, and corn, up 11 percent from last year, to 56.5 million metric tons. The volume of cotton exports is expected to begin recovering and most livestock and poultry products should see moderate increases in export volume as well.”*

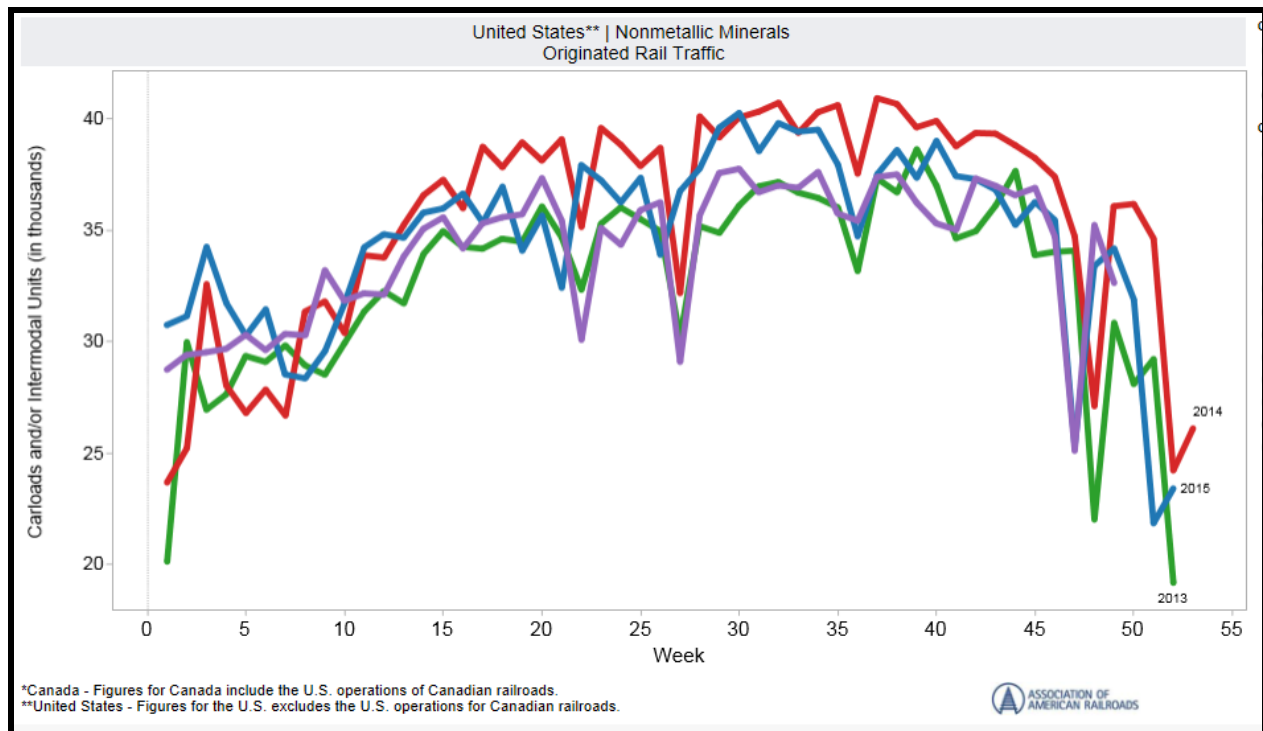
The export grain market is also getting some help from bulk shipping rates out of the Gulf and Pacific Northwest as are somewhat reflected in the rail deliveries to each major port.



Nonmetallic Minerals

If there ever was a group of commodities that measure infrastructure investments and health this is it. Primarily comprised of crushed stone, sand and gravel, cement, gypsum, ground minerals, phosphate rock, etc. this group is what you put in the ground or use to build on top of the ground supporting simple things like soil health, buildings, bridges, highways and host of other projects we generally take for granted unless they're broken.

Crushed stone, sand and gravel account for the majority of this group, some 1,062,120 carloads year to date through December 3, 2016. This is down by approximately 3.3% from the previous year. Of the crushed stone, sand and gravel group, about 27% is industrial or frac sand, hence the reduction in this group. Overall though, despite the slight down turn in frac sand shipments, we're seeing seasonal stability to railcar originations of nonmetallic minerals.



There was, prior to electing a new set of leaders for our country, and continues to be a political climate in place that seems to be supportive of continued infrastructure investments and a reduction in paperwork requirements to implement shovel ready jobs. On December 4, 2015, President Obama signed the **Fixing America's Surface Transportation (FAST) Act** (Pub. L. No. 114-94) into law—the first federal law in over a decade to provide long-term funding certainty for surface transportation infrastructure planning and investment. The FAST Act authorizes \$305 billion over fiscal years 2016 through 2020.

And there is certainly healthy demand in the market. According to the Federal Highway Administration, states considered to be in the best condition have 25% of their roads that need attention and the states to be considered in the worst have an excess of 50%. A rising tide floats all boats and this is certainly an area that applies.

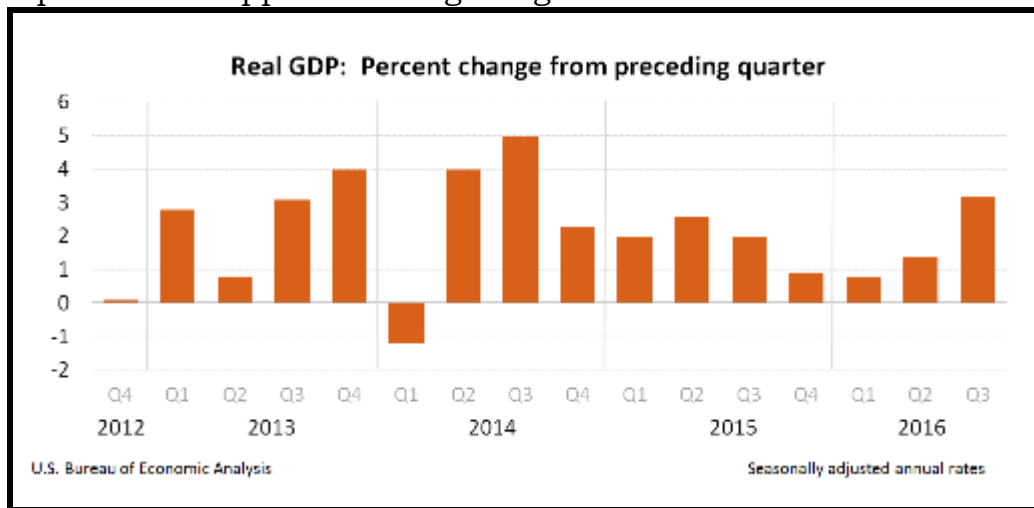
The railroads are still trying to figure this one out though, especially for construction and cement aggregates. Take the state of California for instance. It has a consumption rate of

77.1 million metric ton of sand and gravel and 34.6 million metric ton of crushed stone per year (source: US Federal Highway Administration, US Geological Survey). Yet only a small portion of this is handled via rail. Interestingly, a good deal of aggregates are shipped in from British Columbia, Canada (see Polaris Materials) to San Francisco, Richmond and Long Beach. My question to the Class I's, "if the Canadians can haul it down on a boat why can't you haul it out of the Sierra's?" I couldn't pass that one up!

All in all, there are actually three positives for this group: 1) the FAST Act seems to be working, 2) there is plenty of demand that can be evaluated and potentially converted to rail and 3) the economy and oil industry seem to be getting a little healthier every day.

Waste and Nonferrous Scrap

Albeit not a large contributor to railcar load originations, the numbers posted by this group are significant in that they seem to track Gross Domestic Product (GDP). This commodity group is up 16.5% year to date through November for railcar loadings. A significant portion of this is fly ash used in the construction industry. GDP is up 2.9% for the third quarter and appears to be getting healthier.



Railroads

There are five Class I railroads in the United States, they are 1) BNSF, 2) Union Pacific (UP), 3) Norfolk Southern (NS), 4) Kansas City Southern (KCS) and 5) CSX Transportation (CSX). These railroads outlook for the economy in whole is probably as close to reality as one can get when evaluating the health of the transportation industry and right now the general consensus is that they are following volumes down, adjusting variable operating costs (employees, equipment leases, etc.), as quickly as they can, and not sticking their necks out to project a lot of increased growth optimism for 2017 except a resurgence in intermodal. Capital programs that were in place for 2016 have been reduced somewhat in the near term to match the business environment for any particular commodity transportation requirements be it an improvement in sidings, new industrial track, equipment, etc. Railroad Q3 year-to-date operating ratios have gone up slightly to BNSF 66.9%, UP 64.1%, CSX 69%, NS 68.7%. Revenues are down in the eight to twelve percent range being primarily driven by energy related commodities (coal, petroleum/crude oil, etc.). And it's too soon to project any 2017 capital plans, except for UP which projects spending 15% of revenue on capital improvements.

A couple of quotes taken from UP presentations or press releases give us a ray of hope that for well-run companies, like all Class I's (hey I didn't say I liked their rates or accessorial charges, but you have to admit they're pretty well run), there's a bottom to falling railcar loadings. An analogy is that 2017 looks like it's the same as having a bruise on your arm. We just need to let the blood absorb back into the skin before it clears up!

Omaha, Neb., October 20, 2016 – Union Pacific Corporation (NYSE: UNP) today reported 2016 third quarter net income of \$1.1 billion, or \$1.36 per diluted share compared to \$1.3 billion, or \$1.50 per diluted share, in the third quarter 2015. “Continued momentum from our productivity initiatives, as well as positive core pricing, helped partially offset the decline in total carload volumes. While many of the same volume challenges have continued throughout the year, we are keeping a laser focus on our six value tracks. This strategy ensures we provide our customers with an excellent value proposition and service experience, while efficiently and safely managing our resources,” said Lance Fritz, Union Pacific chairman, president and chief executive officer.

“The macroeconomic environment still has its challenges - an unstable global economy, the relatively strong U.S. dollar, and continued soft demand for consumer goods. However, certain segments of the economy, such as grain and energy, are showing signs of life,” Fritz said. “Closing out 2016 and heading into next year, we are optimistic about the opportunities that lie ahead. In the coming months we will continue to do what Union Pacific does best - operate a safe, efficient, and productive network while providing an excellent customer experience and delivering solid shareholder returns.”

2017 Outlook... should we do this?

At the risk of being wrong right away, our outlook for 2017 is that first quarter will maintain a status quo, seasonality will take some volumes out of the second quarter and the first part of third quarter and we should have some blue sky by fourth quarter.

Here's to wishing that your 2017 is brighter than your 2016. Here's to wishing you exceptional successes, health and happiness well beyond the next four quarters!

We look forward to earning your business!