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New report confirms freight railroads are deeply connected to international trade

AAR research finds trade directly supports at least 50,000 U.S. rail jobs, 35 percent of rail revenues and 42 percent of carloads and intermodal units

Touchbase

April 2017

Railroad & Policy Updates

The Association of American Railroads (AAR) on March 29, 2017 released an assessment of trade's impact on the freight railroad industry, finding that at least 42 percent of rail carloads and intermodal units, and more than 35 percent of annual rail revenue, are directly associated with international trade.

Approximately 50,000 domestic rail jobs, accounting for more than \$5.5 billion in annual wages and benefits, depend directly on international trade, the analysis of 2014 data also found. If rail traffic indirectly associated with trade was included, the figures would be notably higher. With ample discussions in Washington policy circles today on the role of trade, imports versus exports and manufacturing, the data provide a reminder that today's global economy is firmly established and cannot be easily undone with rushed policy modifications. Doing so could have damaging and counterproductive effects on American workers and various industries – including a freight rail network that serves nearly every industrial, wholesale, retail and resource based sector of the economy.

"Efforts that curtail overall trade would threaten thousands of U.S. freight rail jobs that depend on it and limit essential railroad revenues used to modernize railroad infrastructure throughout North America," said AAR President and CEO Edward R. Hamberger. "For a highly capital-intensive industry that has spent \$26 billion annually in recent years, private investment is the lifeblood of a freight rail sector that must devote massive sums to safely, efficiently and affordably deliver goods across the economy. Upending the ability of railroads to do so by undermining free trade agreements that have done far more good than harm would have far reaching effects."

The report looked at a host of rail movements, analyzing data from the 2014 Surface Transportation Board (STB) Waybill Sample – the most recent data available at the time of the analysis – other government data, information from U.S. ports and Google Earth, among others. Waybill Sample contains data from a stratified sample of waybills submitted each year by freight railroads to the STB. Each waybill contains, among other things, information on the origin and destination of the shipment and the volume and type of product moved.

The scope of operations and reach into the U.S. economy discovered through the analysis was stark. In 2014, there were 329 million tons of exports handled, nearly double the still-sizeable 171 million tons of imports moved by rail.

Rail traffic associated with trade included movements of coal for export out of ports in Maryland, Virginia, the Gulf Coast and the Great Lakes; paper and forest products imported from Canada into the Midwest, as well as paper products exported from the Southern U.S; imports and exports of Canadian and Mexican automotive products to and from auto factories in "These numbers validate our view that U.S. policymakers should proceed with caution in their quest to reverse some impacts of globalization"

Union Pacific Railroad reminds customers to secure rail car doors and hatches prior to releasing such cars

"We are asking for your assistance in reminding your unloading personnel to close doors, hatches and gates before releasing the car empty." dozens of U.S. states; containers of consumer goods from Asia coming ashore in Los Angeles, Long Beach, Oakland, Tacoma, Savannah, Norfolk, and Newark; plastics shipped by rail from Texas and Louisiana to the East and West Coasts for export to Europe and Asia; iron ore mined in Minnesota and shipped by rail to Great Lakes ports; and grain grown in the Midwest and carried by rail to the Pacific Northwest and the Gulf Coast for export.

"These numbers validate our view that U.S. policymakers should proceed with caution in their quest to reverse some impacts of globalization," added Hamberger.

Read the entire article at:

https://www.aar.org/newsandevents/Press-Releases/Pages/New-Report-Confirms-Freight-Railroads-Are-Deeply-Connected-To-International-Trade.aspx

UP Releases Reminder: Secure Rail Car Doors and Hatches

On April 3, 2017, the Union Pacific Railroad (UP) released a statement reminding customers to secure rail car doors and hatches prior to releasing such cars. We find this notification of significant importance as we're seeing similar notices on the BNSF Railway. It's a good reminder to all of our readers, customers, shippers, loaders and unloaders that quality assurance should be paid to rail equipment prior to releasing your cars (system provided or privately owned or leased) into service. Text from the UP notice is provided below.

Union Pacific is committed to providing a high-quality fleet of rail cars to our customers, and we need your help. Recently, we have been experiencing a higher than normal rate of rail cars released empty with exterior doors, top hatches or bottom gates left open. Closing the doors, gates and hatches allows for a safer movement of the empty freight car, helps keep the interior clean for the next loading customer and minimizes damage in transit to these critical components.

Union Pacific requires that all consignees close doors, gates and hatches prior to releasing equipment from their facility as found in the National Railroad Tariff Document. If there is a mechanical issue with the door, hatch or gate, prohibiting the device to be closed, the car can be "Released With Defect" via our Equipment Placement and Release System. Releasing with defect helps improve fleet quality by ensuring that the damaged component is repaired before the car is spotted to the next customer.

We are asking for your assistance in reminding your unloading personnel to close doors, hatches and gates before releasing the car empty. Together we can ensure we have a safe, high-quality fleet to handle your business going forward.

View this Industrial Products announcement IP2017-9 on the Web

Railcar lease return process

For decades now I have participated in the return of railcars coming off lease (also referred to as end of lease returns, lease termination, leaseturnback, etc.) I have been on all sides of the lease termination process as a representative of the lessor, a representative of the lessee and as the manager of various shops where lease turn-backs take place. You may think that it is a relatively simple process; however, it rarely is. In fact, many of the lease returns become very complicated and stressful for all parties. My participation in the process has always been related to the mechanical condition of the cars. I have made "into lease" inspections, "lease termination" inspections and secured estimates for remedial repairs and cleaning to bring the cars as per lease agreement obligations, and overseeing the repair work and cleaning.

Mechanical Brief with Steve Christian

This month I'd like to share some of my observations and offer some suggestions to make the lease turn-back much easier and less stressful. The following points are listed in chronological order from lease inception to lease termination:

During the term of the lease make sure that all parties adhere to their mechanical responsibilities

Due diligence is still required to make sure everything is handled properly

- 1. Thoroughly inspect the railcars by a competent inspector before agreeing to lease the cars. This should include extensive notes and photos to memorialize the condition of the cars. Don't forget paint and interior lining condition and wear. Use all the inspection information to craft the lease language to include the remediation of any AAR/FRA/TC defects prior to accepting the cars.
- 2. Negotiate the lease agreement, to make it as specific as possible to nail down the mechanical responsibilities of all parties before, during and after the lease term. The mechanical inspection information should be used as a guide to zero in on specific verbiage to protect you at lease termination. By benchmarking the condition of the cars at the beginning of the lease, lease termination should be much easier. Personnel come and go and memories fade but language and pictures endure over the years. At this time, you can also incorporate any changes to the cars required for the service that you will put them into. Be sure the point of return and freight charges are spelled out. I always prefer a repair shop as the point of return. They can provide repair estimates so all parties and make the repairs without additional movements.
- 3. During the term of the lease make sure that all parties adhere to their mechanical responsibilities. That can be achieved by periodic inspections of the railcars and the comparison of the findings against the lease agreement. If there are issues, it is better to get them resolved during the term of the lease rather than later.
- 4. When the railcar is unloaded for the last time, it would be helpful to look at the car for damage and interior and exterior cleanliness. If the unloader leaves commodity in or on the car, you will most likely pay for removal. If they are responsible for removing the commodity, hold them to it.

If you follow the steps above, the lease termination process will be much easier and much more fair for all parties; however, due diligence is still Good guidance, good communication and good records will result in a successful railcar lease required to make sure everything is handled properly. You need to enlist someone who is knowledgeable in shop operations and deciphering estimates in AAR billing format. It only makes sense that the shop location used for lease termination will also perform repairs for the lessor. Sometimes the line is blurred between what each party is responsible for. This is where the person enlisted to assist you (mentioned earlier in this point) can really pay off.

I strongly encourage joint inspections between the lessor and lessee (or their agents) whenever possible at all stages of the term of the lease. Of course, there are many other things that come into play to make sure a fair railcar lease return takes place. Good guidance, good communication and good records will result in a successful railcar lease. As always, Tealinc has the experience, talent and resources to guide you through the entire process.

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 <u>steve@tealinc.com</u>.

Railroad Traffic

US freight rail traffic grew in double digits 12th week of the year

The total combined US traffic for the first 12 weeks of 2017 reached more than 6.1 million carloads and intermodal units, a rise of 3.2% compared to the same period last year Every week, the AAR (Association of American Railroads) publishes North American freight rail data for the previous week. The latest figures are for the week ended March 25, 2017, or the 12th week of the year. During that week, US rail traffic (BRK-B) rose 12.0% YoY (year-over-year) to more than 526,000 railcars compared to ~470,000 railcars in the week ended March 26, 2016.



US Weekly Rail Traffic 2017 vs 2016

US freight rail traffic volumes were on the fast track last week. US carloads rose 12.4% YoY to ~261,000 railcars, compared to more than 232,000 railcars in the week ended March 26, 2016. US intermodal volumes rose a

marginal 11.6% to ~266,000 units, compared to 238,000 units during the corresponding period last year.

Data from the first 12 weeks

Total US carload traffic for the first 12 weeks of 2017 was ~3.0 million carloads, a rise of 5.5% compared to the same week last year. Intermodal traffic rose 1.1% from its 2016 level.

The total combined US traffic for the first 12 weeks of 2017 reached more than 6.1 million carloads and intermodal units, a rise of 3.2% compared to the same period last year.

Coal played a vital role

According to AAR senior official John Gray, "The 19.2 percent increase in coal carloads in February 2017 was the highest percentage gain for coal since sometime before 1988 when our current record series began."

Gray added, "While it's an impressive gain, February 2017 was, unfortunately, also the second worst February in absolute terms for coal since sometime before 1988. It's all too representative of the challenges railroads are facing as their markets change."

Canadian and Mexican rail traffic

Canadian rail traffic (CNI) rose 13.1% YoY to more than 80,000 railcars, while Canadian intermodal traffic rose 21.7% to settle at ~63,000 units. For Mexican rail traffic (KSU), carloads reported a rise of 20.6% YoY during the week ended March 25, 2017. Its intermodal traffic surged 36.8% YoY in the same week.

Read more at:

http://marketrealist.com/2017/03/us-freight-rail-traffic-grew-indouble-digits-last-week/

Industrial Inside

U.S. Census data, now available through January 2017, indicates a slow pace of shipments from Canada-in part due to low quality-results in cuts to U.S. imports for most classes of wheat including Hard Red Winter, Hard Red Spring, Durum, and White Wheat. After an aggregate 10-million-bushel (bu) reduction, U.S. all wheat imports for 2016/17 are projected at 115 million bu. The still-strong U.S. dollar and ample wheat supplies in almost all major wheat-exporting countries anchor U.S. exports at the current projection, unchanged from last month. Higher projected 2016/17 wheat production for Australia and Argentina, two major U.S. trade competitors, further expands the record-high world wheat supplies.

2016/17 imports lowered, few balance sheet updates

Minimal changes to the all wheat balance sheet are made this month. Key market reports, due out at the end of March, will provide details on thirdquarter stocks and implied domestic use, including seed use associated with planting the 2017/18 wheat crop. U.S. Bureau of Census trade data indicate a slower pace of imports than previously projected, resulting in a 10 million bushel trim to the 2016/17 all wheat import figure, with cuts

"The 19.2 percent increase in coal carloads in February 2017 was the highest percentage gain for coal since sometime before 1988 when our current record series began."

Wheat Outlook: U.S. imports lowered by 10 million bushels on slow pace of Canadian shipments The still-strong U.S. dollar and ample wheat supplies in almost all major wheat-exporting countries anchor U.S. exports at the current projection

The pace of export sales continues to support the current 2016/17 projection of 1,025 million bushels (bu)

"the Columbia Snake River System is the number one U.S. wheat export gateway, moving 50 percent of the nation's wheat for export to overseas markets" distributed across all classes except Soft Red Winter wheat.



Figure 1: U.S. wheat imports by class¹

12016/17 imports are projected. Source: USDA, World Agricultural Outlook Board, WASDE.

Maintained strong pace of exports supports current projection

With another month of trade data available, the pattern of consistently stronger wheat exports in 2016/17, is affirmed. The pace of export sales continues to support the current 2016/17 projection of 1,025 million bushels (bu). USDA-Economic Research Service estimates of monthly wheat grain and product exports through January are, on average, nearly 18 million bu (grain equivalent) larger than during the same period in the previous year. Sales between September and January have been particularly strong and are up nearly 80 million bu (grain equivalent) over the same 5-month period in the previous marketing year. Notably, U.S. wheat exports surged despite December closures and ongoing delays at inland and coastal ports in the Pacific Northwest (PNW). Closures were due to heavy rains and severe sea conditions which have included large amounts of debris in the water and waves of significant height. Further, BNSF Railway reports that blizzards and avalanches in February disrupted grain rail transportation from the Midwest to the PNW.

In mid-December, the U.S. Army Corp of Engineers began a 14-week long closure of the Columbia- Snake River System to make repairs to the navigational locks that support a significant volume of commercial river traffic. The Pacific Northwest Waterways Association states "the Columbia Snake River System is the number one U.S. wheat export gateway, moving 50 percent of the nation's wheat for export to overseas markets."

In light of the importance of this system and related closures, the strong pace of U.S. wheat exports is even more remarkable and indicative of preparations made by the grain handling industry in advance of the extended river closure. However, port gridlock has recently been reported at PNW ports with up to 60 vessels awaiting loadings. Congestion at PNW ports is encouraging the use of alternative ports, especially those located in the Gulf Region. For example, for the week ending February 23, 2017, all Gulf ports moved more than 2.3 times the volume of wheat shipped via the Pacific Region. For the same week 1 year prior, total wheat shipments from the Pacific Region were more than 60 percent greater than total loadings from all Gulf ports.

U.S. wheat exports for 2016/17, in aggregate, were unchanged this month. However, the pace of shipments, as indicated by U.S. Census Bureau trade data, provide support for four class shifts. Hard Red Spring (HRS) is raised 5 million bu on strength of exports primarily leaving out of Gulf Ports. SRW exports are also raised 5 million to 90 million, though are still well-below the 5-year average export volume of 180 million bu. White wheat (WW) exports are lowered 5 million bushels based on the observed pace of exports to date that have been impacted by slow port loadings out of the PNW. Durum exports are also lowered 5 million bu to 20 million. The slowed pace of durum exports is attributed to quality concerns and weather-related transportation challenges that have affected movements from durum-producing regions in Northern Plains.

	Balance Sheet Item	Last Month (February) 2016/17	Current Month (March) 2016/17	Change from previous month	Previous Year 2015/16	Comments
						May-June Marketing Year
Supply	k .		Add	lion bushels (miī. bu)	
	Beginning Stocks	975.6	975.6	0.0	752.4	
	Production	2,309.7	2,309.7	0.0	2,061.9	
ŧ	Imports	125.0	115.0	-19.0	112.9	Based on lower than expected pace of imports, primarily from Canada, and for Durum (down 5 m bu.) HRS (down 3 mil. bu.), HRW (down 1 mil bu, and White (down 1 mil. bu.).
Ļ	Supply, Total	3,410.3	3,400.3	-30.0	2,927.2	Suppy reduced on lower imports.
Demand			MG	ion bushels		
	Food	960.0	960.0	0.0	957.4	
() 	Seed	61.0	61.0	0.0	67.2	
	Feed and Residual	225.0	225.0	0.0	152.2	
	Domestic, Total	1,246.0	1,246.0	0.0	1,176.6	
	Exports	1,025.0	1,025.0	0.0	775.1	
	Use, Total	2,271.0	2,271.0	0.0	1,952.0	
L	Ending Stocks	1,139.3	1,129.3	10.0	975.6	Reduced supplies is not offset by any use changes, resulting in lower ending stocks.

All wheat ending stocks lowered, remain highest since 1985/86

After accounting for reduced projected imports, all wheat ending stocks are reduced by 10 million bushels (bu) to 1,130 million bu. Even with the cut, 2016/17 ending stocks are 154 million bu higher than in 2015/16 and remain the highest since 1985/86. By class, reduced imports and shifting exports have ending stocks implications. Specifically, HRW ending stocks are reduced by 1 million bu, HRS is reduced by 8 million, SRW is reduced

The relatively-high ratio associated with the 2016/17 crop is primarily attributable to sizable production and carry-in which lifted total supply to 3,400 million bushels, the highest volume since the late 1980s

Above-average proportions of the Colorado, Kansas, Nebraska, and Oklahoma crop were rated as "good" to "excellent" through much of the growing season Expanded dryness and drought conditions effects on the emerging winter wheat crop are reflected in reduced year-toyear conditions ratings by 5 million, WW is raised 4 million and durum ending stocks are unchanged. The current all wheat stocks-to-use ratio at 0.50 is virtually identical to last year's figure, and compares to the 5-year average of 0.35. The relatively-high ratio associated with the 2016/17 crop is primarily attributable to sizable production and carry-in which lifted total supply to 3,400 million bushels, the highest volume since the late 1980s. Expectations of reduced production in 2017/18 and of modestly increasing use, as described in the recently-released transcript for the "Grains and Oilseed Outlook" speech, delivered at the February USDA Agricultural Outlook Forum-are expected to lower the stocks-to-use ratio to near 0.40 and move the ratio closer to average. A summary of USDA's long-term projections for wheat are provided as a special feature in this month's outlook.

Conditions in key HRW-growing states reflect warmer and drier winter weather

Record-high HRW yields for the 2016/17 marketing year were achieved through near-ideal growing conditions. Above-average proportions of the Colorado, Kansas, Nebraska, and Oklahoma crop were rated as "good" to "excellent" through much of the growing season. For 2017/18 winter wheat, conditions have been drier and warmer in key HRW growing areas. Expanded dryness and drought conditions in these States are captured by the U.S. Drought Monitor. The effects on the emerging winter wheat crop are reflected in reduced year-to-year conditions ratings. Specifically, the proportion of the wheat crop rated "good" to "excellent" in Colorado, Kansas, Nebraska, and Oklahoma for the week ending March 3 (week 8) is lower by 5, 16, 15, and 25 percent, respectively, as compared to the same week in 2016.

Read the entire article at: **www.xyz.com**

Financial Focus

Congratulations, America. The economy is finally back to normal.

That's what John Williams, the head of the Federal Reserve Bank of San Francisco, declared Wednesday.

"The data have spoken, and the message is clear: We've largely attained the hard-sought recovery we've been after for the past nine years," Williams told the Forecasters Club, a gathering of economists, in New York. He dubbed it a "Goldilocks economy."

Unemployment peaked at 10% after the Great Recession. Today it's just 4.7%, a level Williams said constitutes "full employment" because there will always be some job seekers, even in a healthy economy. Inflation is also "nearing" the Fed's goal of 2%, he said.

The Fed raised interest rates [in March] for only the third time since the financial crisis. The central bank is expected to raise rates two more times this year, but Williams hinted again that three more hikes might be

Fed official: U.S. economy finally back to normal

"The data have spoken, and the message is clear: We've largely attained the hardsought recovery

we've been after for the past nine years"	appropriate in 2017.
the past line years	He said [March 29, 2017] that the Fed is as close "as we've ever been" to achieving its goals of full employment and stable inflation.
	Williams argued that it's time for the Fed and Washington to shift from obsessing about "How do we achieve a sustained recovery?" and focus on "How do we sustain the recovery we've achieved?"
It's up to Congress, Trump, and businesses, to	But Williams does think the U.S. economy needs faster growth. The economy has struggled to expand much faster than 2% a year in this recovery. Last year, the economy only expanded 1.6%.
"unshackle the economy" by finding ways to get	President Trump has said he can deliver 4% growth. Treasury Secretary Steven Mnuchin has indicated that at least 3% is achievable.
more people into the workforce and increase productivity.	Williams and other Fed officials have said there's not much more the central bank can do to boost growth. It's up to Congress, Trump, and businesses, to "unshackle the economy" by finding ways to get more people into the workforce and increase productivity.
	Learn more at: <u>http://www.cnbc.com/2017/03/28/feds-fischer-says-he-sees-two-</u> more-rate-hikes-in-2017.html

The Edge

There seems to be some optimism in the economy. Look at the record stock market run up besting 20,000! The Association of American Railroads latest data shows weekly railcar loadings at 246,465 for the week reflecting 4.6% increase in loadings. The originated rail carload numbers certainly document growth in the near term with total rail carloads of originated rail traffic tracking ahead of 2016 but still behind the previous two years.



The primary carload group moving the needle appears to "surprisingly" be coal (see left chart below)! Coal is up 93k carloads in Jan/Feb 2017 over the same time in 2016. Higher natural gas prices and a cold and snowy winter certainly have helped the demand for coal fired generation. It appears that we have seen the bottom of the coal transportation demand cycle. At least this author certainly hopes we've seen the bottom. Energy (coal, oil, gas) are important industries contributing significantly to the economic health of our country.



Adding to the positive outlook continues to be grain railcar loadings (right chart below).

According to the USDA Economic Research Service, corn, which nears 40% of the rail transported grain commodities, is projected to be up from 13.6 billion bushels grown in crop year 2015/2016 to 15.226 billion bushels in crop year 2016/2017. All that corn will need a ride to a new home and much of it will be exported requiring a railcar or barge ride to a port.

On another front frac sand seems to be making a comeback due to a change in use. It seems the well drilling business continues to refine the use of frac sand and chemicals to remake the formula used in fracking. The coarse mesh sands are being replaced by finer mesh sands and the sand volumes are increasing around 3.5 to 3 times requiring significantly more sand to be used per hole drilled. There have been a few thousand "sand" railcars put back to work due to this phenomenon. Note the chart below where 2017 (red line) is tracking above prior years originations. Albeit this is not all "frac sand" it is heavily influenced by frac sand.



Oil and gas seem to be recovering their volumes albeit price seems to not be the overall driver. Cost savings and operational efficiencies are what's driving volumes. The reasoning is that large leaseholds, longer laterals, extra sand and "choking back" or

limiting production spikes are promoting more oil recovery per drilled hole. On a sobering note the petroleum (crude oil) hauling tank car fleet originations have significant challenges ahead of it from regulatory compliance of railcars to competition from pipelines. A good overview of the projected oil and gas recovery can be read at the RBN Energy blog site here: <u>https://rbnenergy.com/back-in-the-saddle-again-market-implications-of-the-2017-us-oil-and-gas-recovery.</u>

The economic prospects of 2017 certainly seem to be much better than 2016. Although we certainly won't assume we've recovered from our long economic dry spell and will proceed cautiously. We hope your prospects look brighter as well. If we can be of assistance please don't hesitate to call upon any of our team members.

We look forward to earning your business!