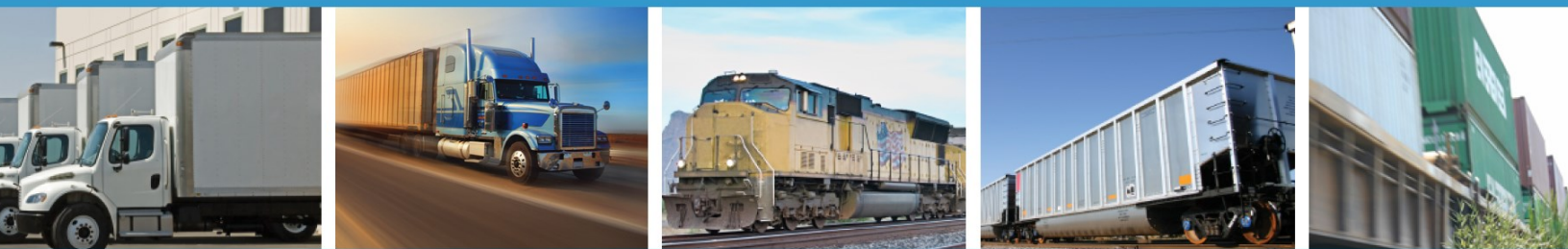


## Equipment Focus

Truck & Trailer Outlook  
Rail Equipment Outlook

## Freight Focus

Shippers Update  
Trucking Update  
**Rail Update**  
Intermodal



# Rail Update

*October 2021*



# Rail October 2021

## COMMENTARY (pg 23):

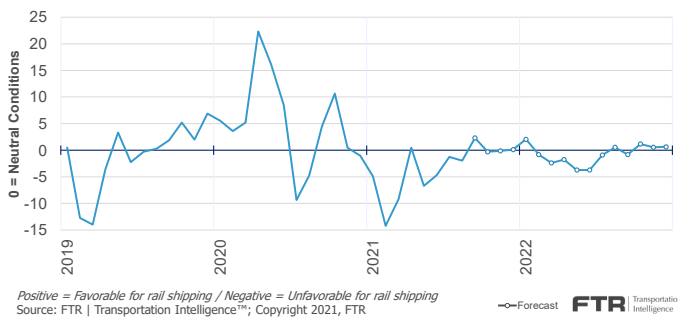
**Service issues are top of mind heading into winter.**

*Service levels should increase in the coming months, before winter begins.*

**The carload outlook came down in the latest month as volumes remain stubbornly below five-year average levels.**

### FTR Rail Shippers Conditions Index

RCI is a broad measure of railroad conditions – volumes, rates, service, etc.

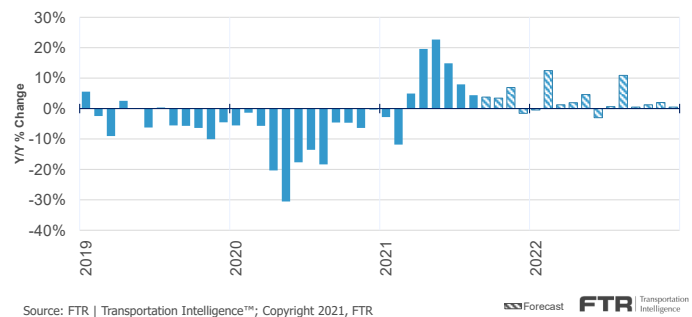


The Rail Shippers Conditions Index is expected to be fairly neutral for the balance of the year, before turning more negative early in 2022.

A larger influence of rates on the conditions shippers are experiencing will be the major negative factor next year.

See page 4 for more on rail conditions...

### Rail Carloads Outlook



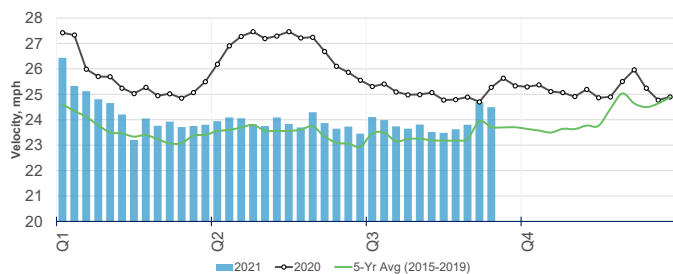
The view toward carload volumes in 2022 is that growth will occur for the second consecutive year, but that the rate of growth will ease back into the low single digits.

This is commensurate with a slowing global economy and significantly higher rail rates over the period.

See page 2 for more on the carloads outlook...

### Velocity: Total Rail

Weekly Reported Train Speed, Industry Average



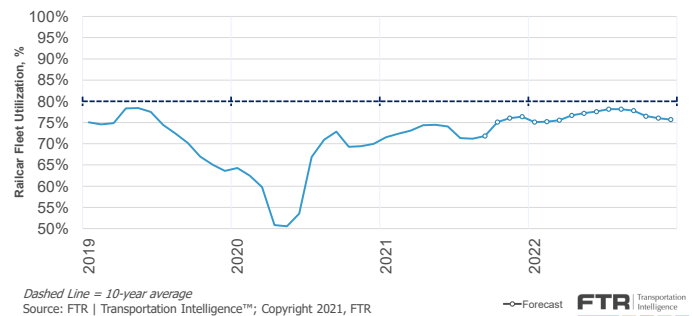
Velocity surged in the latest week, but it is unclear whether it is the start of a new pattern or simply a single week outlier.

Conditions should be improving on the U.S. Gulf coast and west coasts, which should aid service performance.

See page 3 for more on rail service...

### Railcar Utilization Outlook

Share of railcar equipment engaged in freight hauling



The general outlook for utilization is little changed this month, though some car types could exert upward pressure if present fundamentals persist.

It remains expected that utilization will claw back to its historical long-run average by the middle of next year.

See page 4 for more on capacity and utilization...



### Freight Indicators & Outlook

- The outlook for carload markets remained intact in the latest month, though some growth has shifted from 2021 to 2022 in the latest forecast.
- Further out, the 2023 expectation has come down to be even with the 2022 expected result.

The mix of commodities growing has changed drastically in the last couple of months, and that will have dramatic effects on the outlook for specific carload sectors.

The two most notable are automotive and coal. Automotive's supply chain struggles have been well documented in terms of the sector's inability to get semiconductors and other parts. It appears that the middle of next year is the earliest that the situation will begin to truly be resolved, so our expectations for automotive loadings have come down dramatically for this year, with a commensurate increase in 2022 expectations.

On the coal side, elevated natural gas prices that began earlier this summer have made coal competitive in all regions of the country for electricity demand and supports coal volumes. Given typical seasonal behavior, natural gas prices should continue to rise until next spring, providing upside support for coal volumes over the next two quarters. Coal loadings could be stronger than expected in 2022 if natural gas prices remain elevated longer.

### N.A. Rail Carloads Summary

Annual Growth Rate

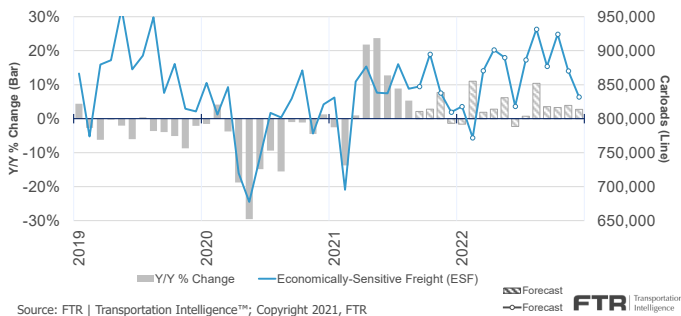
Traffic Group	2019	2020	Forecast		
			2021	2022	2023
Ag Products	-2.8%	4.8%	-0.3%	5.6%	4.6%
Automotive	-1.8%	-20.3%	0.9%	14.2%	5.2%
Chemicals	2.9%	-7.7%	2.9%	1.4%	1.3%
Coal	-8.4%	-23.8%	10.9%	-1.5%	-8.5%
Forest Products	-5.9%	-5.6%	4.9%	1.8%	1.1%
Metals	-4.0%	-9.7%	16.0%	-1.1%	-1.3%
Nonmetallic Minerals	-5.2%	-13.0%	4.3%	4.9%	2.8%
Other	0.8%	-3.8%	-0.1%	3.9%	1.9%
<b>Total</b>	<b>-3.6%</b>	<b>-11.1%</b>	<b>5.5%</b>	<b>2.5%</b>	<b>0.0%</b>

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

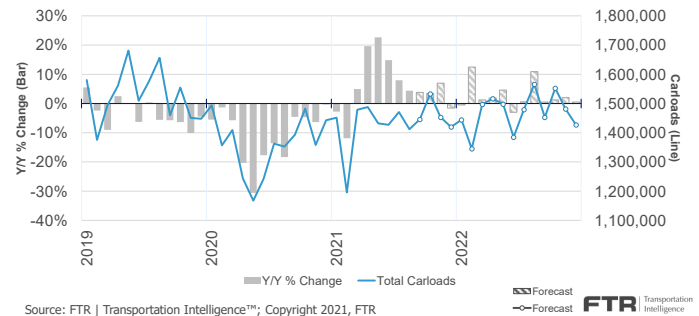
See pages 8-12 for more detailed analysis by traffic group...

See pages 16-22 for charts and graphs by commodity...

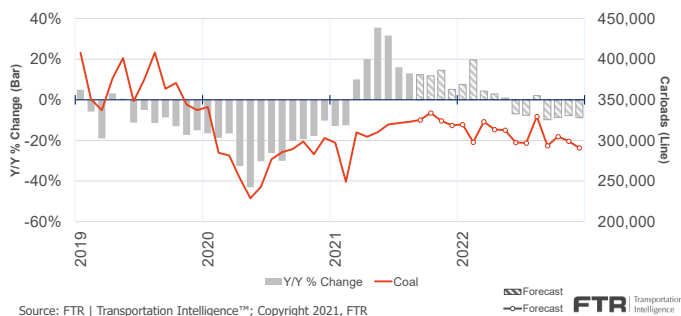
### Carload Outlook: Economically-Sensitive Freight



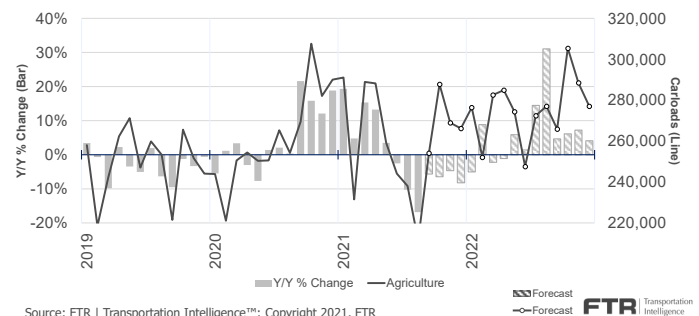
### Carload Outlook: Total



### Carload Outlook: Coal



### Carload Outlook: Ag Products





*Reported train metrics are imperfect indicators of service quality, in that they only deal with line-haul (not terminal) operations and also say nothing about service consistency. However, when speeds drop sharply, it is a good indication of service issues. Because of differences between railroads, these metrics should not be compared one to another; rather, each railroad's current performance should be viewed in the context of previous historical trends.*

### Carload Service Overview

	Latest Week	W/W %	Y/Y %
Velocity, mph	24.49	-0.8%	-4.5%
Dwell Time, hours	22.42	-2.7%	6.0%
Cars On Line, 000s	984.4K	-0.3%	2.1%

w/w = week-over-week / y/y = year-over-year

Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR

### Service Metrics

- Velocity shows a dramatic increase in the latest week, but more time is needed to know if it is sustainable or just a holiday-related blip.
- Dwell has fared better than velocity since the beginning, and that pattern has held up with dwell generally within an hour of its pandemic-aided low levels from 2020.
- Cars online held at recently established levels after a bump up about a month ago. It is a healthy sign that cars on line has not continued to rise.

The stability in cars online is a product of relatively stable volumes across many commodity groups and a belief that new cars won't be required to meet demand. It is possible that increasing congestion could lead to a need for more equipment, but other service metrics are stable heading into the fall and winter.

Velocity jumped in the latest week, but more data is needed to know if the gain is sustainable or a holiday-related blip in what has been an otherwise stable picture. Intermodal velocity is continuing to hold just below its long-run average in recent weeks, while overall velocity is generally at or just above that point.

Velocity should improve as carriers get a break from the western U.S. wildfires and complete repairs on lines damaged by flooding and downed trees after Hurricane Ida took aim at Louisiana.

Dwell time remains the service outlier, as it has through the last several quarters. It has held close to its 2020 level. It is not expected to change materially going forward except for normal seasonality.

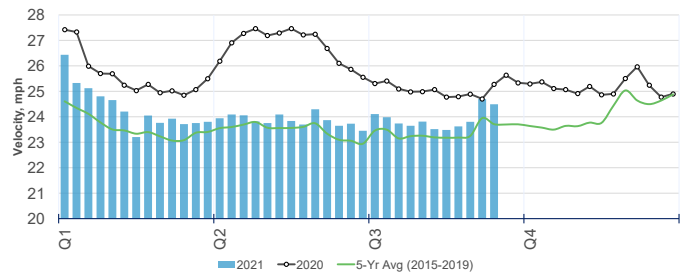
The discussions around dwell time remain fraught with angst as shippers suggest the publicly reported metrics paint too rosy a picture of the situation, but only counting the time railcars spend in a carrier yard and not at origin or destination.

The Surface Transportation Board is taking comment on that issue and others during an examination into what types of data and remedies are needed to improve first and last mile service to shippers.

See pages 13-15 for railroad specific charts on service metrics...

### Velocity: Total Rail

Weekly Reported Train Speed, Industry Average

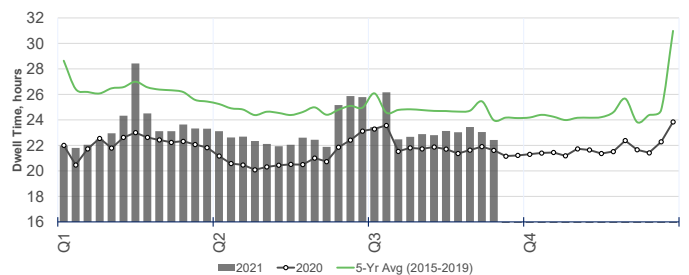


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR

FTR | Transportation Intelligence

### Dwell Time: Total Rail

Weekly Reported Terminal Dwell Time, Industry Average

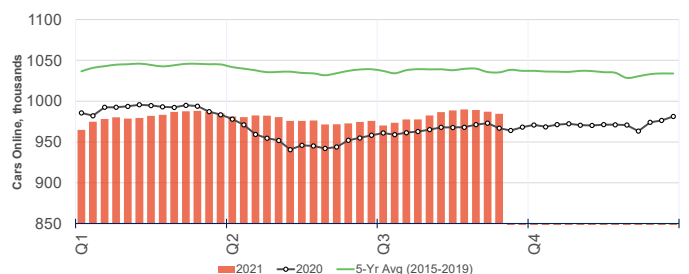


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR

FTR | Transportation Intelligence

### Cars Online: Total Rail

Weekly Reported Cars Online, Industry Total



Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR

FTR | Transportation Intelligence



### Carrier Conditions

- The Rail Shippers Conditions Index should hold in neutral territory for the balance of 2021 before turning negative in 2022.
- Railcar utilization is little changed this month, with the expectation remaining in place that it will improve to its long run average by the middle of next year.
- Rate increases should slow from levels experienced earlier this year, but there is upside from the presently forecast 2% figure for 2022.

The **Rail Shippers Conditions Index** will hold neutral ground for much of the rest of the year before turning sharply negative in 2022, as rail rates play a larger and larger role in the index. Service levels are also expected to not improve much from present levels, which will exert further downward pressure on the index over time.

**Railcar utilization** is little changed this month with an expectation remaining in place that it will approach its historical long run average by the middle of 2022. There could be upside pressure on utilization as underutilized coal cars come back into service to meet domestic demand or are scrapped to take advantage of strong scrap steel and aluminum pricing.

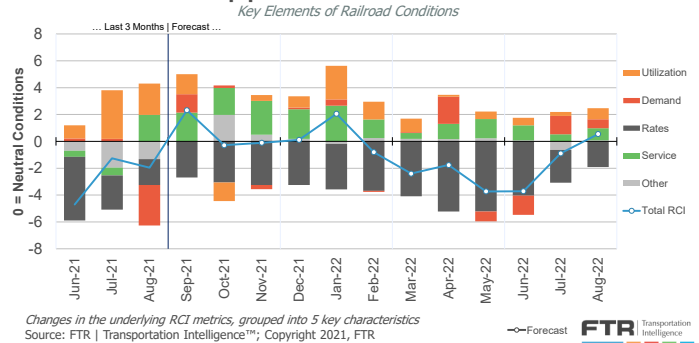
The gondola fleet is another fleet that is operating at a high level and adding cars to its fleet. If metal prices slow down in 2022, it is likely that older cars will come out of the fleet and leave the remaining cars more highly utilized.

Boxcars are another fleet that could support utilization gains over the next year as newer cars are added to the fleet and older, smaller cars are removed. There are a large number of older cars that could be scrapped while steel prices are elevated.

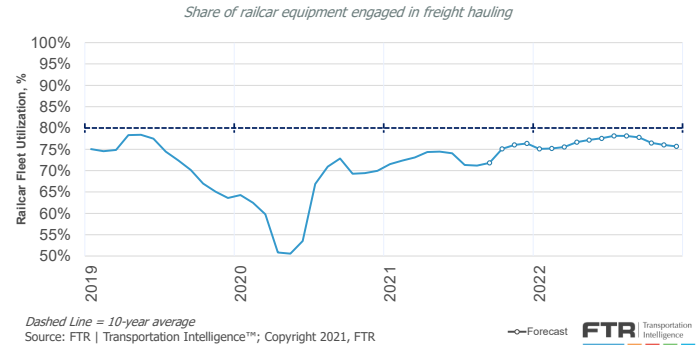
**Rail rates** are expected to have their rate of growth slow over the coming months and quarters for both carload and intermodal, but remain in positive territory next year compared with present levels.

The present expectation for carload rate growth of 2% next year is likely to be too low as inflation pressures labor and materials costs higher.

### Rail Shippers Conditions Index



### Railcar Utilization Outlook



### Rail Rate Overview

Index, 2008Q1 = 100	Q1'21	Q2'21	Q3'21	2022	2023
		F	F	F	F
<b>Rail Rate Index (excludes FSC)</b>	<b>154.34</b>	<b>156.61</b>	<b>155.82</b>	<b>158.81</b>	<b>162.44</b>
<b>Rate exc. FSC, y/y %</b>	1.9%	4.5%	1.4%	1.9%	2.3%
<b>Rate w/ FSC, y/y %</b>	0.3%	5.1%	2.9%	2.0%	2.3%

F = Forecast / FSC = Fuel Surcharge

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

### Public Railroad Carrier Data

#### Revenue, income, costs, and rates

Q1'21	Revenue	Net Income	Total Costs	Operating Ratio	Class I Operating Revenue	Class I FSC Revenue	Rev. per Tonmile (\$/tm)	Rev. per Tonmile xFSC (\$/tm)
\$ (Millions)	\$16,301	\$4,449	\$10,184	62.5%	\$17,253	\$698	\$0.0465	\$0.0446
Q/Q%	-1.3%	-7.3%	0.9%	2.2%	-2.1%	28.6%	1.7%	0.7%
Y/Y%	-2.3%	6.0%	-5.7%	-3.5%	-1.8%	-28.3%	0.3%	1.9%

Source: Company reports, FTR | Transportation Intelligence™; Copyright 2021, FTR -- FSC = Fuel Surcharge





### Summary

The economy is expanding at a robust pace but is starting to transition toward trend growth. The spread of the Delta variant has dampened some business activity and hurt employment growth in Q3. Despite some headwinds, the economy is still expanding at a healthy pace. COVID infections started to retreat in September, and more than 56% of Americans are fully vaccinated. The effect of the pandemic on the economy seems to be fading more with each wave that comes along. Shortages of semiconductors and other manufacturing inputs are restraining production and fueling inflation. We expect progress, although it may linger well into 2022.

### Consumer

Retail sales surprised on the upside in August, rising 0.7% and up 15.1% from a year earlier. There was a large downward revision to July's number, where sales fell 1.8%. Total sales excluding motor vehicles and parts were up 1.8% in August and 0.8% excluding autos and gasoline. Motor vehicle and parts sales fell 3.6% for the month. Most other sectors saw advances. Food and beverage establishments sales were unchanged, hurt by COVID fears. The report indicates a stronger consumer sector than thought a month earlier when sales declined sharply. The consumer remains healthy, although spending is shifting to services rather than goods.

### Manufacturing

The ISM manufacturing index increased 1.2 points in September to a strong reading of 61.1. However, the improvement did not come in areas most directly associated with transportation. The new orders component was unchanged at a robust 66.7, and production eased six-tenths of a point to 59.4.

U.S. industrial production increased 0.4% in August, but the impact of Hurricane Ida shaved 0.3 of a percentage point off of total production. Manufacturing increased by 0.2%, but the hurricane closed plants for petroleum-based products. Supply chain problems continue to limit output.

### Residential Construction

U.S. housing starts increased 3.9% in August to a seasonally adjusted annual pace of 1.615 million units. All the August strength came from the multi-family sector. Single-family starts fell 2.8% to a 1.076 million rate. The multi-family sector saw a 21.6% jump to 530,000. Future building looks more promising as permits rose 6.0% to a 1.728 million annual pace. Single-family permits increased 0.6% to 1.054 million, while the multi-family sector saw a 19.7% increase to 632,000. Single-family starts have been flat recently due to a lack of labor and high prices. Job growth coupled with slower price gains and very low mortgage rates should support continued construction.

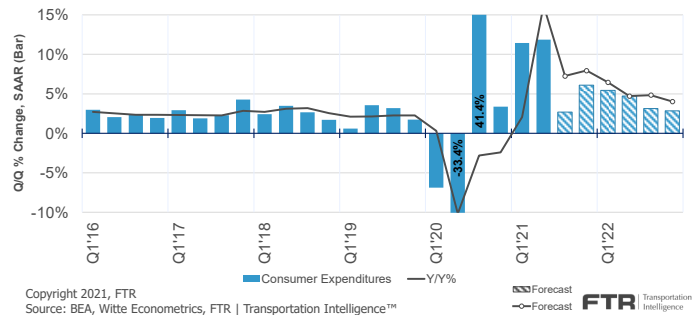
### Economic Outlook Overview

Q/Q % Change, SAAR	Q2'21	Q3'21F	2021F	2022F
<b>Real Gross Domestic Product (GDP)</b>	6.6%	4.8%	5.9%	4.7%
<b>Industrial Production (IP)</b>	6.2%	8.0%	6.1%	4.5%
<b>Goods Transportation Sector (GTS)</b>	4.8%	3.0%	11.6%	6.0%

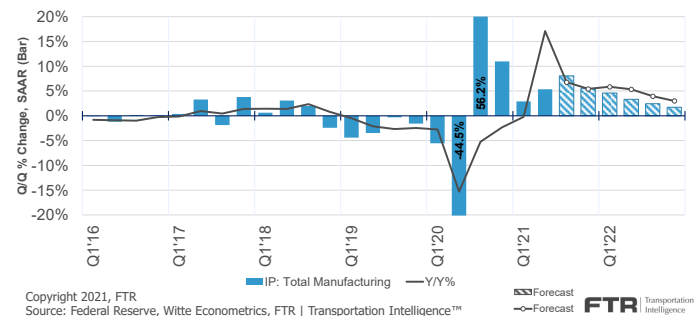
F = Forecast

Source: Witte Econometrics, FTR; Copyright 2021, FTR

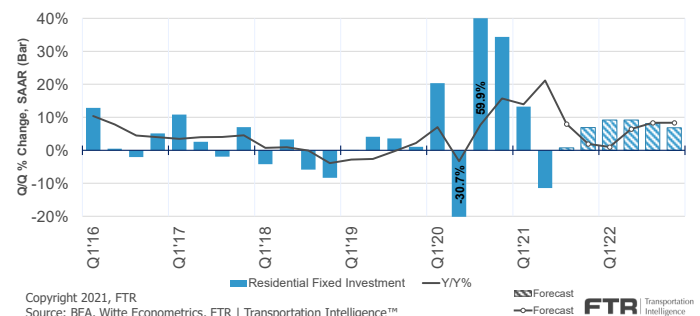
### GDP: Consumer Expenditures



### IP Outlook: Manufacturing



### GDP: Residential Investment





### Monthly Business & Economic Highlights

#### August's Economic Environment:

The mixed bag view of the economy re-emerges as Delta curtails some activity. Manufacturing held up, but payroll was weak.

	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Impact</u>	<u>Y/Y Chg.</u>	<u>Comments</u>
INDUSTRIAL PRODUCTION							
Total Industrial Production	0.6%	0.5%	0.8%	0.4%	▲	5.9%	Auto production held up surprisingly well following July's jump. Supply chains have not eased and production output continues to be impacted to some degree.
Total Manufacturing	1.0%	-0.2%	1.6%	0.1%	▲	6.2%	
Automobile and Light Duty Motor Vehicle Production	6.3%	-6.4%	14.8%	-0.7%	●	-11.3%	
BUSINESS INDICATORS							
Unemployment Rate	5.8%	5.9%	5.4%	5.2%	▲	-320 bp	The surge in coronavirus infections seems to have had a dampening effect on employment and services. Construction activity is being held up by strong demand for residential.
Job Creation (Payroll Employment)	614k	962k	1,053k	235k	●	6,041k	
ISM Manufacturing Index	61.2	60.6	59.5	59.9	▲	390 bp	
CONSUMER INDICATORS							
Consumer Confidence (Conference Board)	120.0	128.9	125.1	113.8	●	27.5 pts	Housing activity is running at a strong clip but is no longer surging. Retail improved in August, but not enough to make up for July's decline. Consumer sentiment has cooled.
Housing Starts	5.3%	4.0%	-6.2%	3.9%	▲	17.4%	
Retail Sales	-1.4%	0.9%	-1.8%	0.7%	▲	15.1%	
Consumer Price Index	0.6%	0.9%	0.5%	0.3%	●	5.2%	
OIL AND FUEL							
National Avg. Diesel/Gal.	\$3.217	\$3.287	\$3.339	\$3.350	▼	37.9%	While already elevated, diesel and crude pricing have continued to increase during September.
W. Texas Int. Crude Oil (\$Bbl.)	\$65.17	\$71.38	\$72.49	\$67.73	●	60.0%	

Impacts: ▲ = Positive / ▼ = Negative / ● = Neutral

Source: Federal Reserve, BLS, ISM, Conference Board, Census Bureau, EIA, FTR | Transportation Intelligence™; Copyright 2021, FTR

#### Employment

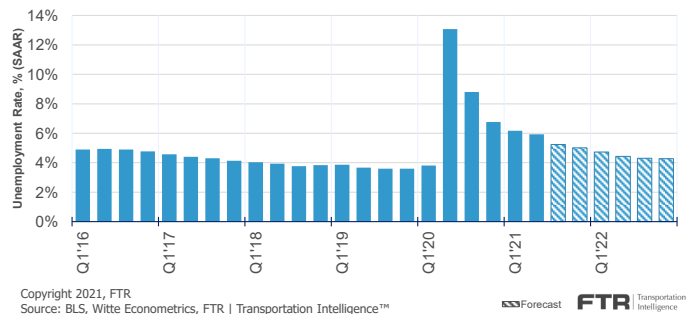
Payroll employment growth was sharply weaker in August at 235,000 jobs, seasonally adjusted. However, gains for July were revised up to 1.053 million. The number of unemployed edged down to 8.4 million after a large decrease in July. The unemployment rate fell to 5.2%. Both are greatly improved from the contraction but well above the 5.7 million and 3.2% rate before the pandemic began. The main August weakness was in hospitality/leisure, which was unchanged. Manufacturing added 37,000 and business services added 74,000. The report suggests that COVID-19 is still hurting the economy, but there is still a strong demand for workers.

#### Forecast Risks

The economy is expanding at a robust pace and has good momentum, but a rise in COVID infections has slowed services activity and hurt employment growth. However, infection rates have retreated and vaccination numbers are increasing. Some analysts speculate that COVID could fade and have only a modest effect on activity within a year. That would likely have an upside risk for economic growth. The supply chain problems persist, constraining production and boosting inflation. Part of the problem is a tight labor market. The pandemic may have impacted labor in a fundamental fashion that could restrain production and hurt overall economic growth for years.

See page 7 for detailed economic outlook...

#### Unemployment Rate Outlook



#### Economic Outlook Probabilities

##### GDP Forecast Confidence Levels

	Next 4 Quarters		Following 2 Years	
	GDP Range	Probability	GDP Range	Probability
<b>Faster Growth</b>	> 7%	20%	> 3%	25%
<b>Base Forecast</b>	5.0%	55%	2.5%	45%
<b>Slower Growth</b>	< 3%	25%	< 2%	30%

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR



### U.S. Economic & Industrial Outlook

Forecasts of key economic data

	2021				2022				Annual			
	Q1'21	Q2'21	Q3'21	Q4'21	Q1'22	Q2'22	Q3'22	Q4'22	2020	2021	2022	2023
F = Forecast			F	F	F	F	F	F		F	F	F
<b>Gross Domestic Product (SAAR)</b>												
<b>Real GDP</b>	<b>6.3%</b>	<b>6.6%</b>	<b>4.8%</b>	<b>5.9%</b>	<b>5.0%</b>	<b>4.3%</b>	<b>3.2%</b>	<b>2.5%</b>	<b>-3.4%</b>	<b>5.9%</b>	<b>4.7%</b>	<b>2.6%</b>
Consumer Expenditures	11.4%	11.9%	2.7%	6.1%	5.4%	4.7%	3.1%	2.9%	-3.8%	8.2%	5.0%	2.9%
Residential Fixed Investment	13.3%	-11.5%	0.7%	6.9%	9.2%	9.2%	8.1%	6.9%	6.8%	10.8%	6.0%	5.9%
Change-Business Inventories	-177.1	-81.1	86.6	53.0	30.0	30.0	33.1	0.3	-1.6	1.2	-1.4	0.6
Real Exports of Goods	-1.4%	6.2%	4.5%	3.1%	3.1%	3.1%	3.1%	3.1%	-10.2%	7.6%	3.4%	3.1%
Real Imports of Goods	10.6%	4.1%	6.7%	7.9%	7.8%	7.3%	7.4%	5.7%	-5.6%	14.8%	7.2%	5.6%
Goods Transportation Sector	10.0%	4.8%	3.0%	8.1%	6.6%	6.0%	5.9%	4.3%	-3.1%	11.6%	6.0%	4.4%
CPI Index	3.7%	8.4%	6.0%	4.7%	4.3%	3.8%	3.6%	3.5%	1.2%	4.4%	4.6%	3.5%
<b>Housing Starts - Millions (SAAR)</b>												
Housing Starts - Millions (SAAR)	1.60	1.59	1.62	1.65	1.64	1.63	1.61	1.60	1.40	1.61	1.62	1.58
% Change (SAAR)	6.1%	-3.2%	10.2%	5.7%	-1.4%	-3.4%	-5.0%	-2.8%	8.1%	15.6%	0.2%	-2.3%
<b>Auto Sales - Millions (SAAR)</b>												
Auto Sales - Millions (SAAR)	16.8	16.9	15.0	16.3	16.5	16.6	16.6	16.6	14.5	16.2	16.6	16.7
3 Month T-Bill Rate, %	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%	0.2%	0.4%	0.4%	0.1%	0.2%	0.5%
Moody AAA Bonds, %	2.7%	2.9%	2.7%	3.0%	3.1%	3.2%	3.3%	3.3%	2.5%	2.8%	3.2%	3.5%
Unemployment Rate, %	6.2%	5.9%	5.2%	5.0%	4.7%	4.4%	4.3%	4.3%	8.1%	5.6%	4.4%	4.2%
Federal Surplus, \$ (SAAR)	-\$4,089	-\$3,341	-\$2,599	-\$2,081	-\$1,992	-\$1,899	-\$1,871	-\$1,884	-\$3,110	-\$3,027	-\$1,911	-\$1,885

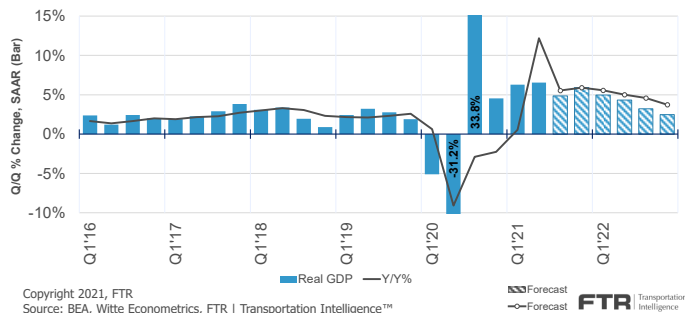
	2021				2022				Annual			
	Q1'21	Q2'21	Q3'21	Q4'21	Q1'22	Q2'22	Q3'22	Q4'22	2020	2021	2022	2023
F = Forecast			F	F	F	F	F	F		F	F	F
<b>Industrial Production (SAAR)</b>												
<b>Total IP</b>	<b>4.0%</b>	<b>6.2%</b>	<b>8.0%</b>	<b>5.1%</b>	<b>4.3%</b>	<b>3.5%</b>	<b>2.5%</b>	<b>1.7%</b>	<b>-7.2%</b>	<b>6.1%</b>	<b>4.5%</b>	<b>1.6%</b>
Manufacturing, Total	2.9%	5.4%	8.1%	5.5%	4.6%	3.3%	2.4%	1.7%	-6.4%	6.9%	4.5%	1.6%
Manufacturing, Non-Durables	-1.1%	12.3%	3.2%	4.9%	3.9%	2.7%	1.9%	1.2%	-4.4%	4.6%	3.8%	1.2%
Manufacturing, Durables	6.7%	-0.6%	12.6%	6.0%	5.2%	3.9%	2.9%	2.1%	-8.2%	9.0%	5.1%	2.0%
Mining	7.3%	22.7%	3.6%	6.9%	6.3%	4.6%	3.3%	2.6%	-14.2%	3.1%	6.1%	2.3%
Utilities	8.7%	0.6%	14.6%	1.2%	0.1%	3.9%	2.2%	0.8%	-3.4%	4.2%	3.1%	1.5%

Q/Q % Change, SAAR // F = Forecast

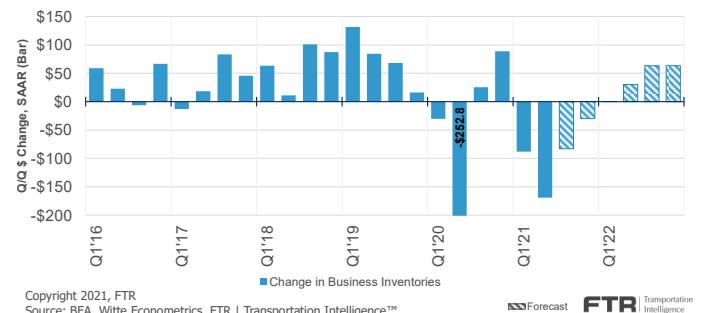
SAAR is Seasonally Adjusted Annual Rates or Seasonally Adjusted Quarter to Quarter Changes at Annual Rates.

Source: Witte Econometrics, Federal Reserve, BEA, FTR | Transportation Intelligence™; Copyright 2021, FTR

### Real GDP Outlook



### GDP: Business Inventories







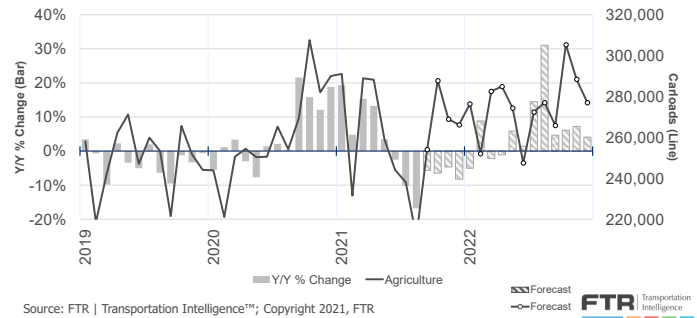
### Ag Products: First signs of harvest emerge in loadings

The last two weeks have provided hope that agricultural products volumes, and particularly grain, can outperform expectations as the first harvest volumes begin to move through the supply chain.

If the harvest comes in early as a result of a warm summer growing season and a desire to get ahead of the South American harvest early next year, volumes could outperform their existing expectations.

Despite a weak third quarter, grain is still expected to post a modest 2% gain above 2020 results. Next year's nearly 6% year-over-year growth for grain could be overly optimistic if South American farmers are able to take market share among Asian purchases of western grain.

#### Carload Outlook: Ag Products



#### Traffic Group: Agricultural Products

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
<b>Total Ag Products</b>	<b>211.36</b>	<b>254.15</b>	<b>287.81</b>	<b>791.46</b>	<b>703.58</b>	<b>823.01</b>	<b>3,129.6</b>	<b>3,304.2</b>	<b>3,455.3</b>
<b>P/P % Change</b>	-11.2%	20.2%	13.2%	-2.5%	-11.1%	17.0%			
<b>Y/Y % Change</b>	-16.9%	-5.7%	-6.4%	4.8%	-10.8%	-6.4%	-0.3%	5.6%	4.6%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

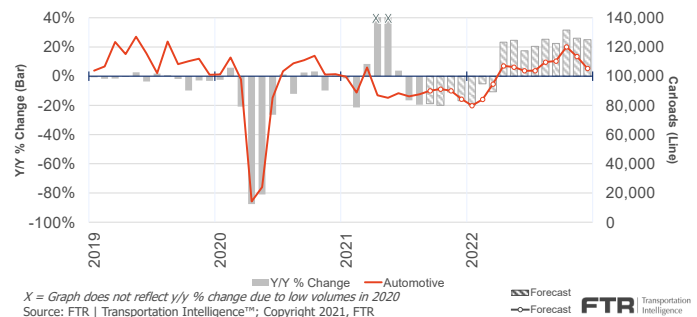
### Automotive: Lower for longer as supply constraints rage

Automotive volumes remain constrained by the shortages of semiconductors and other parts necessary to complete assembly of finished vehicles.

This dynamic leads to a sharp reduction in the expectation for automotive loadings through the first quarter of 2022. This timeline could be easily moved out if supply issues last longer than expected. Some in the automotive industry have suggested timelines as late at 2023 or 2024 for full resumption of production, but our expectation is that the issues will be resolved by the middle of next year.

Depleted inventories and pent up demand along with the above timeline provide upside potential to our forecast.

#### Carload Outlook: Automotive



#### Traffic Group: Automotive

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
<b>Total Automotive</b>	<b>87.56</b>	<b>90.08</b>	<b>91.21</b>	<b>260.53</b>	<b>263.88</b>	<b>265.54</b>	<b>1,084.4</b>	<b>1,238.5</b>	<b>1,303.0</b>
<b>P/P % Change</b>	1.5%	2.9%	1.2%	-11.5%	1.3%	0.6%			
<b>Y/Y % Change</b>	-19.5%	-18.9%	-19.9%	111.1%	-18.3%	-16.1%	0.9%	14.2%	5.2%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR



## Chemicals: Growth rates slowing over the next year

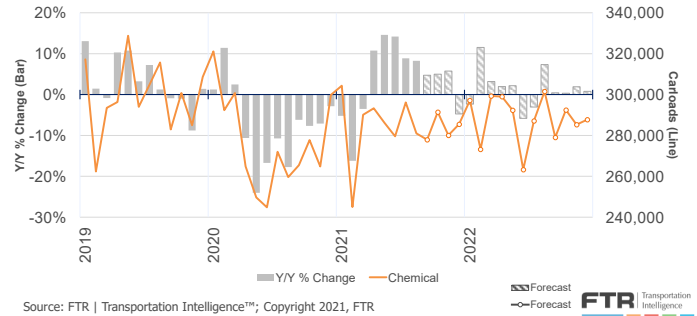
Chemicals growth is expected to slow over the coming years, particularly as the price of its primary feedstock, natural gas, increases.

While growth rates are expected to remain positive over the next two years, they will be roughly half of 2021's 3% gain compared with 2020.

Petroleum products is unlikely to materially change its run rate unless the price of crude oil pushes above the present range.

Recently volumes have declined sharply in response to facilities being knocked offline by Hurricane Ida that have been slow to come back online, and this has scaled back expectations in the near term.

### Carload Outlook: Chemicals



### Traffic Group: Chemicals

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
<b>Total Chemicals</b>	<b>280.99</b>	<b>277.92</b>	<b>291.43</b>	<b>859.08</b>	<b>855.05</b>	<b>856.92</b>	<b>3,410.4</b>	<b>3,457.5</b>	<b>3,502.3</b>
<b>P/P % Change</b>	-5.1%	-1.1%	4.9%	2.3%	-0.5%	0.2%			
<b>Y/Y % Change</b>	8.2%	4.7%	5.0%	13.1%	7.3%	1.7%	2.9%	1.4%	1.3%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

## Coal: Two quarters of support are on the horizon

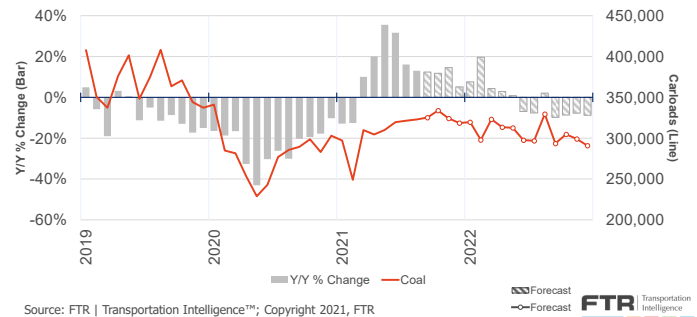
Coal is expected to maintain volume levels and perhaps surpass them into the winter as competing fuel natural gas continues its rise.

It is possible that coal being competitive in every region and from every coal producing basin could lead to a stronger result than the 0.7% presently expected for the fourth quarter.

Next year's expectations have a weaker second half outweighing a strong first half, but that could change dramatically in either direction based on natural gas prices.

Over the longer term, coal is expected to return to a slow decline from the late second quarter of 2022 into the future years.

### Carload Outlook: Coal



### Traffic Group: Coal

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
<b>Total Coal</b>	<b>322.84</b>	<b>325.31</b>	<b>333.86</b>	<b>934.35</b>	<b>969.49</b>	<b>976.70</b>	<b>3,736.6</b>	<b>3,679.1</b>	<b>3,367.9</b>
<b>P/P % Change</b>	0.5%	0.8%	2.6%	9.1%	3.8%	0.7%			
<b>Y/Y % Change</b>	13.0%	12.4%	11.8%	28.8%	13.8%	10.4%	10.9%	-1.5%	-8.5%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR



## Forest Products: A mixed bag over the next 12 months

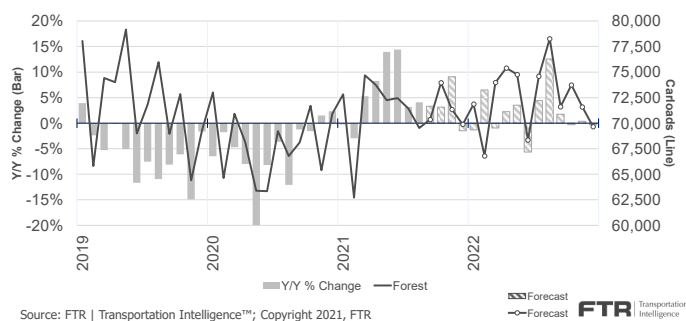
Forest products traffic is a mixed bag over the next 12 months with overall growth rates declining, in line with overall carload expectations.

Lumber and wood growth is forecast to slow to near zero in 2022, after a robust 2021 that has been marked by ups and downs. Even with the volatility, the sector's volumes are expected to grow by more than 7% compared with 2020.

Pulp and paper volume growth will also slow, though less dramatically than lumber and wood over the same period, ending 2022 2% above this year's levels.

Primary forest products is the sector expected to nearly triple its 2022 growth rate compared with this year.

### Carload Outlook: Forest Products



### Traffic Group: Forest Products

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
<b>Total Forest Products</b>	<b>69.53</b>	<b>70.37</b>	<b>73.96</b>	<b>218.45</b>	<b>211.34</b>	<b>215.18</b>	<b>855.2</b>	<b>870.7</b>	<b>880.6</b>
<b>P/P % Change</b>	-2.7%	1.2%	5.1%	3.9%	-3.3%	1.8%			
<b>Y/Y % Change</b>	4.1%	3.3%	3.2%	12.1%	3.5%	3.5%	4.9%	1.8%	1.1%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

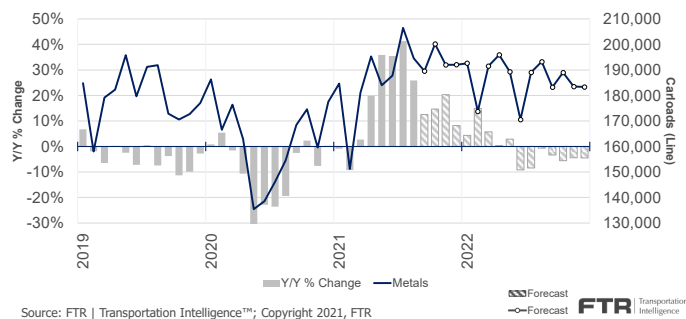
## Metals & Products: Next year will be nearly on par with this year

Absolute volumes will hold close to 2021 levels next year after 16% growth this year. The sector is expected to give back about 1% in 2022 after the robust 2021, still putting volume levels in a strong position.

Steel and aluminum prices will have a lot to say about the final outcome in this sector as, if prices stay high, volumes could easily increase over this year's result. But the assumption is that prices will slowly recede over the course of next year and, with it, put pressure on volumes.

Higher than expected automotive production could be a variable that keeps prices higher for longer by increasing demand, but the timing of the automotive recovery and its demand are still in limbo.

### Carload Outlook: Metal Products



### Traffic Group: Metals & Products

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
<b>Total Metals &amp; Products</b>	<b>194.56</b>	<b>189.53</b>	<b>200.16</b>	<b>566.97</b>	<b>590.57</b>	<b>584.20</b>	<b>2,258.8</b>	<b>2,235.0</b>	<b>2,206.8</b>
<b>P/P % Change</b>	-5.8%	-2.6%	5.6%	9.7%	4.2%	-1.1%			
<b>Y/Y % Change</b>	25.8%	12.5%	14.7%	29.8%	25.9%	14.2%	16.0%	-1.1%	-1.3%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR



## Nonmetallic Minerals: Not much change as industry waits on bill

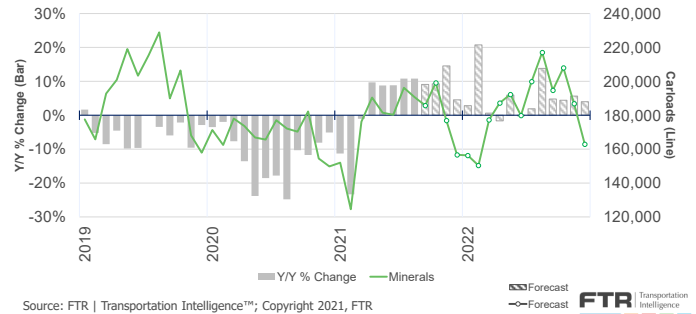
The fate of an infrastructure bill being debated in Congress will have impacts on the nonmetallic minerals sector, but the exact effects will not be known until a final bill is passed and its impact assessed.

The longer the debate drags on, the more limited its effects will be in 2022, and the likelihood increases that any effects will not be felt in this sector until 2023.

Present forecasts keep next year's growth rate steady with the present year before declining in 2023, but that could easily be reversed if the infrastructure bill demand is delayed.

Other construction demand should remain strong over the next few months.

### Carload Outlook: Nonmetallic Minerals



### Traffic Group: Nonmetallic Minerals

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
<b>Nonmetallic Minerals</b>	<b>190.70</b>	<b>185.79</b>	<b>199.13</b>	<b>552.14</b>	<b>572.65</b>	<b>532.69</b>	<b>2,110.2</b>	<b>2,212.6</b>	<b>2,275.6</b>
<b>P/P % Change</b>	-2.8%	-2.6%	7.2%	22.0%	3.7%	-7.0%			
<b>Y/Y % Change</b>	10.8%	9.1%	9.3%	9.1%	10.2%	9.5%	4.3%	4.9%	2.8%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

## Other Carloads: Non ferrous scrap expected to decline in 2022

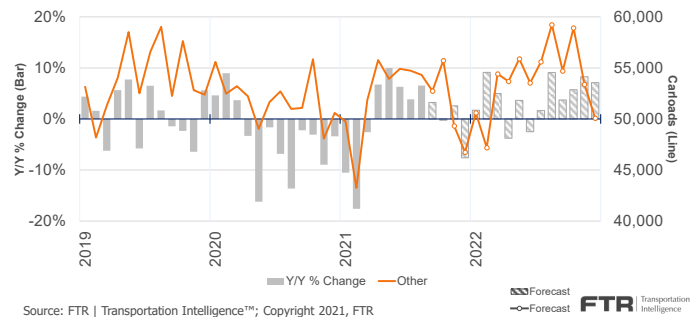
After a large growth in 2021, volumes are expected to decline slightly in 2022 before settling into a low growth pattern in 2023 and beyond.

One of the big drivers of this activity is non-ferrous scrap movements where traffic is expected to switch from a 10.5% year-over-year gain in 2021 to a 0.6% decline in 2022.

All other carloads will make up some of the slack as they are forecast to shift from a 5% volume decline in 2021 to a 6% gain in 2022.

Given the relatively small number of carloads involved, small changes can result in large swings on a percentage basis.

### Carload Outlook: All Other



### Traffic Group: Other Carloads

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
<b>Other Carloads</b>	<b>54.31</b>	<b>52.73</b>	<b>55.73</b>	<b>164.60</b>	<b>161.76</b>	<b>151.79</b>	<b>623.0</b>	<b>647.3</b>	<b>659.4</b>
<b>P/P % Change</b>	-0.8%	-2.9%	5.7%	13.6%	-1.7%	-6.2%			
<b>Y/Y % Change</b>	6.5%	3.2%	-0.2%	7.6%	4.5%	-1.8%	-0.1%	3.9%	1.9%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR



### N.A. Rail Freight: Traffic Groups & Utilization

Not Seasonally Adjusted (000s of Loadings Originated)

F = Forecast	MONTH							QUARTER				
	Jun-21	Jul-21	Aug-21	Sep-21F	Oct-21F	Nov-21F	Dec-21F	Q1'21	Q2'21	Q3'21F	Q4'21F	Q1'22F
<b>Total Carloads</b>	<b>1,427.10</b>	<b>1,470.58</b>	<b>1,411.85</b>	<b>1,445.89</b>	<b>1,533.28</b>	<b>1,452.86</b>	<b>1,419.89</b>	<b>4,126.19</b>	<b>4,347.59</b>	<b>4,328.32</b>	<b>4,406.03</b>	<b>4,286.75</b>
<b>Railcar Utilization Rate (% SA) <sup>2</sup></b>	<b>74.1%</b>	<b>71.3%</b>	<b>71.2%</b>	<b>71.8%</b>	<b>75.1%</b>	<b>76.0%</b>	<b>76.4%</b>	<b>72.3%</b>	<b>74.3%</b>	<b>71.4%</b>	<b>75.8%</b>	<b>75.3%</b>
<b>Traffic Groups</b>												
Ag Products	244.14	238.06	211.36	254.15	287.81	268.99	266.20	811.55	791.46	703.58	823.01	811.02
Automotive	88.35	86.24	87.56	90.08	91.21	90.07	84.26	294.42	260.53	263.88	265.54	258.63
Chemicals	279.60	296.14	280.99	277.92	291.43	280.02	285.47	839.38	859.08	855.05	856.92	869.70
Coal	319.67	321.34	322.84	325.31	333.86	324.18	318.67	856.09	934.35	969.49	976.70	940.83
Forest Products	72.46	71.44	69.53	70.37	73.96	71.34	69.88	210.22	218.45	211.34	215.18	212.65
Metals	187.72	206.47	194.56	189.53	200.16	191.99	192.05	517.02	566.97	590.57	584.20	557.87
Nonmetallic Minerals	180.25	196.16	190.70	185.79	199.13	176.95	156.61	452.67	552.14	572.65	532.69	483.84
Other	54.91	54.72	54.31	52.73	55.73	49.32	46.74	144.84	164.60	161.76	151.79	152.22
<b>Y/Y % Change <sup>1</sup></b>												
<b>Total Carloads</b>	<b>14.9%</b>	<b>7.9%</b>	<b>4.4%</b>	<b>3.8%</b>	<b>3.4%</b>	<b>6.9%</b>	<b>-1.6%</b>	<b>-3.1%</b>	<b>19.0%</b>	<b>5.4%</b>	<b>2.9%</b>	<b>3.9%</b>
<b>Traffic Groups</b>												
Ag Products	-2.6%	-10.3%	-16.9%	-5.7%	-6.4%	-4.6%	-8.2%	13.4%	4.8%	-10.8%	-6.4%	-0.1%
Automotive	3.8%	-16.6%	-19.5%	-18.9%	-19.9%	-10.9%	-16.9%	-5.6%	111.1%	-18.3%	-16.1%	-12.2%
Chemicals	14.2%	8.9%	8.2%	4.7%	5.0%	5.8%	-4.8%	-8.2%	13.1%	7.3%	1.7%	3.6%
Coal	31.6%	16.1%	13.0%	12.4%	11.8%	14.5%	5.2%	-5.6%	28.8%	13.8%	10.4%	9.9%
Forest Products	14.4%	3.2%	4.1%	3.3%	3.2%	9.1%	-1.5%	0.8%	12.1%	3.5%	3.5%	1.2%
Metals	35.5%	41.2%	25.8%	12.5%	14.7%	20.3%	8.2%	-2.3%	29.8%	25.9%	14.2%	7.9%
Nonmetallic Minerals	8.8%	10.8%	10.8%	9.1%	9.3%	14.5%	4.5%	-11.5%	9.1%	10.2%	9.5%	6.9%
Other	6.3%	3.8%	6.5%	3.2%	-0.2%	2.6%	-7.6%	-10.2%	7.6%	4.5%	-1.8%	5.1%

### Annual Data (000,000s of Loadings Originated)

F = Forecast	2020	2021F	2022F	2023F	2019	2020	2021F	2022F	2023F
<b>Total Carloads</b>	<b>16.306</b>	<b>17.208</b>	<b>17.645</b>	<b>17.651</b>	<b>-3.6%</b>	<b>-11.1%</b>	<b>5.5%</b>	<b>2.5%</b>	<b>0.0%</b>
<b>Railcar Utilization Rate (% SA) <sup>2</sup></b>	<b>63.4%</b>	<b>73.5%</b>	<b>76.6%</b>	<b>77.9%</b>					
<b>Traffic Groups</b>									
Ag Products	3.140	3.130	3.304	3.455	-2.8%	4.8%	-0.3%	5.6%	4.6%
Automotive	1.075	1.084	1.238	1.303	-1.8%	-20.3%	0.9%	14.2%	5.2%
Chemicals	3.313	3.410	3.457	3.502	2.9%	-7.7%	2.9%	1.4%	1.3%
Coal	3.369	3.737	3.679	3.368	-8.4%	-23.8%	10.9%	-1.5%	-8.5%
Forest Products	0.816	0.855	0.871	0.881	-5.9%	-5.6%	4.9%	1.8%	1.1%
Metals	1.947	2.259	2.235	2.207	-4.0%	-9.7%	16.0%	-1.1%	-1.3%
Nonmetallic Minerals	2.024	2.110	2.213	2.276	-5.2%	-13.0%	4.3%	4.9%	2.8%
Other	0.623	0.623	0.647	0.659	0.8%	-3.8%	-0.1%	3.9%	1.9%

#### Notes:

Traffic Groups tie to AAR Weekly Rail Traffic definitions.

SA: Seasonally Adjusted

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

<sup>1</sup> - Y/Y % Change: Current period vs. year-ago period.

<sup>2</sup> - Utilization Rate: Railcars in use as a percentage of total railcar population.

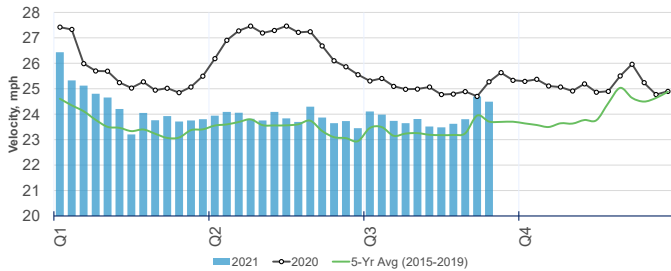




## Network Velocity

### Velocity: Total Rail

Weekly Reported Train Speed, Industry Average

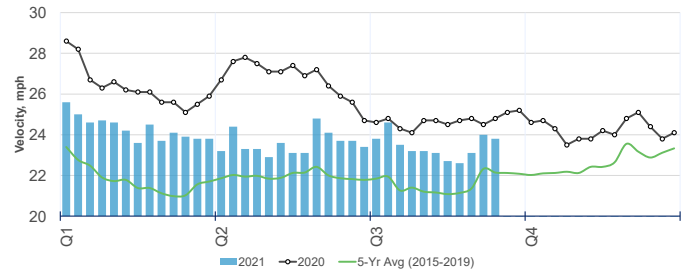


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Velocity: CSX

Weekly Reported Train Speed

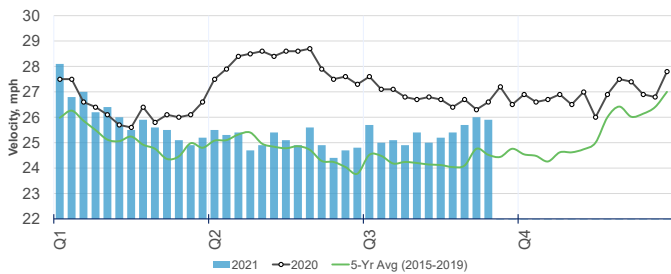


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Velocity: BNSF

Weekly Reported Train Speed

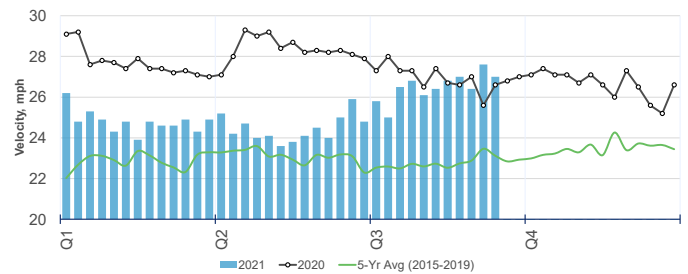


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Velocity: KCS

Weekly Reported Train Speed

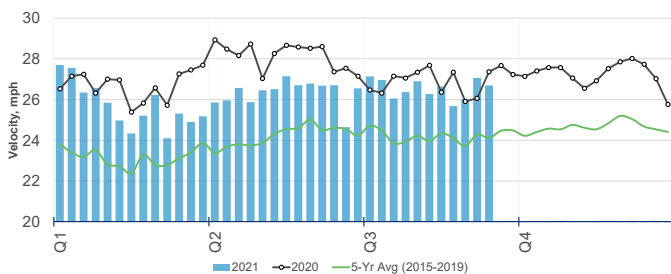


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Velocity: CN

Weekly Report Train Speed

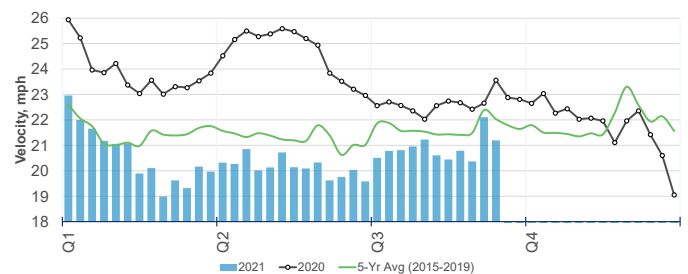


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Velocity: NS

Weekly Reported Train Speed

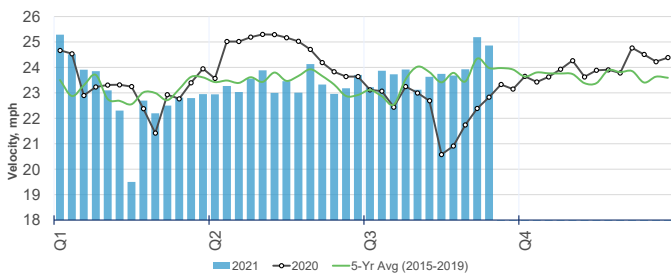


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Velocity: CP

Weekly Reported Train Speed

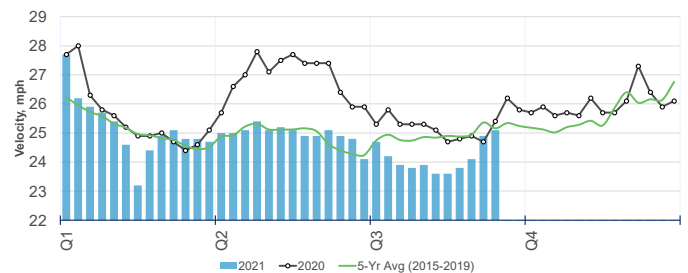


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Velocity: UP

Weekly Reported Train Speed



Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR

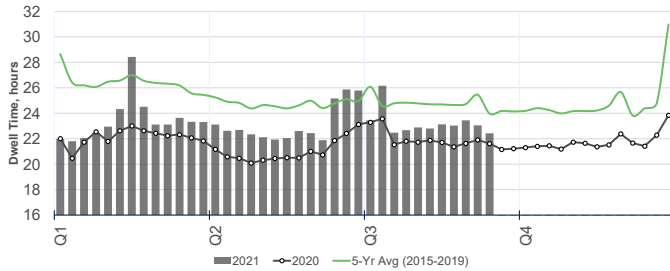




## Network Dwell Time

### Dwell Time: Total Rail

*Weekly Reported Terminal Dwell Time, Industry Average*

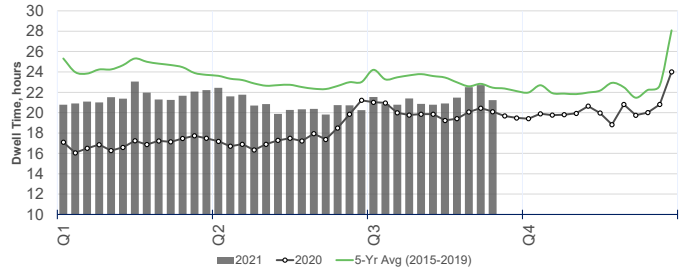


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Dwell Time: CSX

*Weekly Reported Terminal Dwell Time*

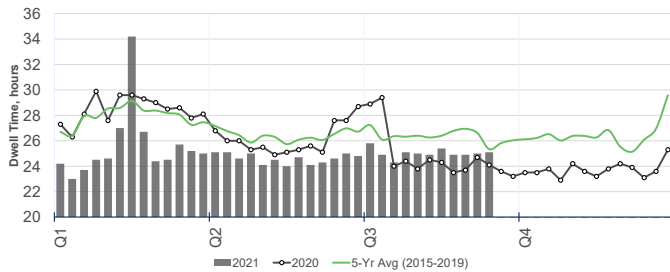


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Dwell Time: BNSF

*Weekly Reported Terminal Dwell Time*

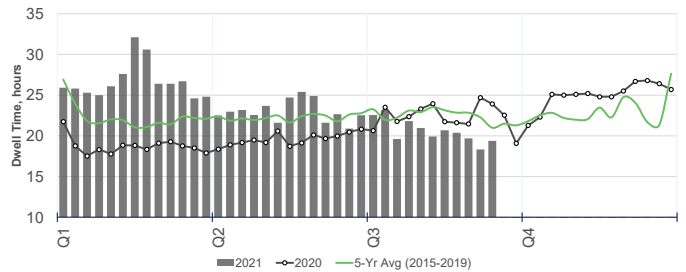


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Dwell Time: KCS

*Weekly Reported Terminal Dwell Time*

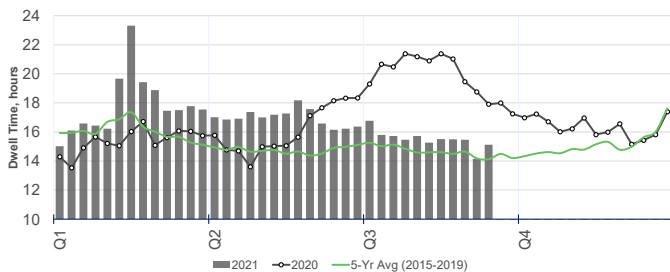


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Dwell Time: CN

*Weekly Reported Terminal Dwell Time*

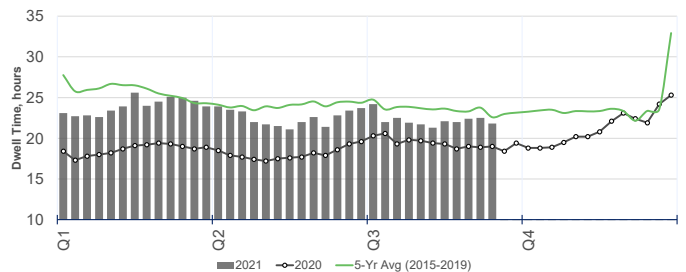


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Dwell Time: NS

*Weekly Reported Terminal Dwell Time*

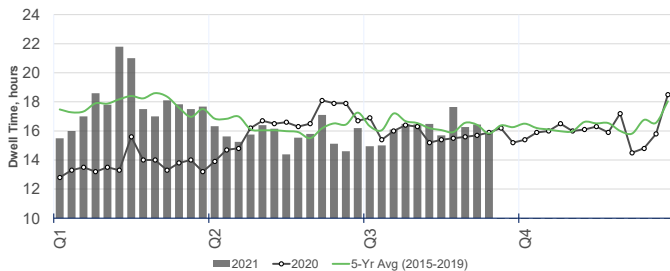


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Dwell Time: CP

*Weekly Reported Terminal Dwell Time*

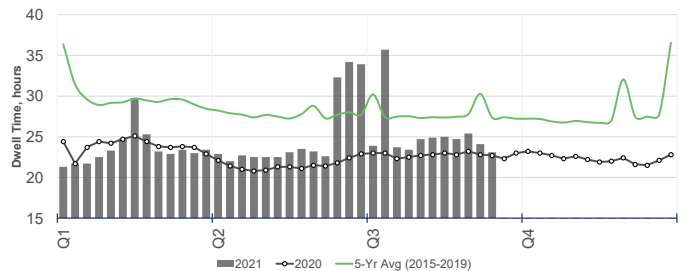


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Dwell Time: UP

*Weekly Reported Terminal Dwell Time*



Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR

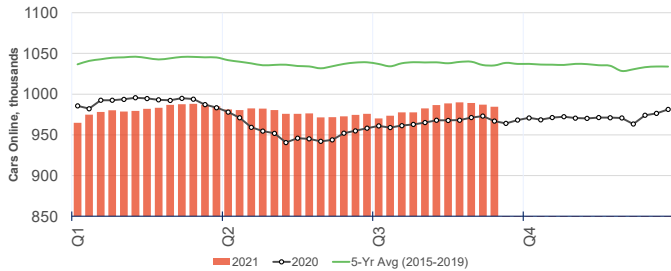




## Network Cars Online

### Cars Online: Total Rail

Weekly Reported Cars Online, Industry Total

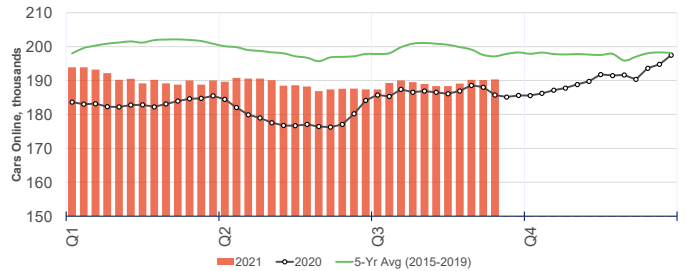


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Cars Online: CSX

Weekly Reported Cars Online

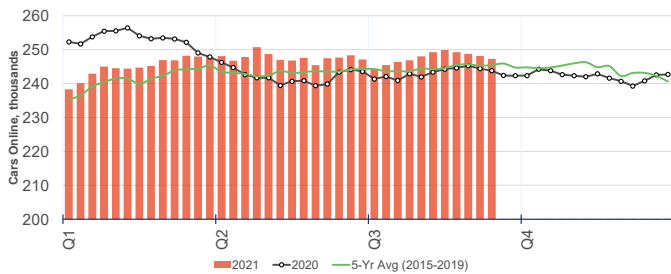


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Cars Online: BNSF

Weekly Reported Cars Online

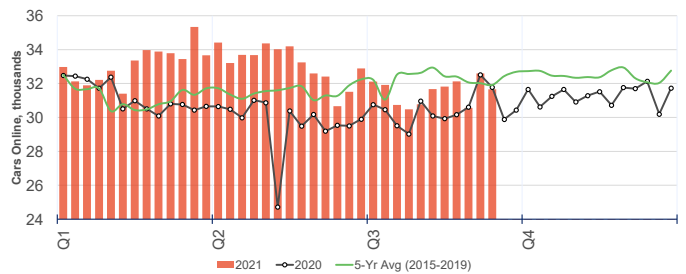


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Cars Online: KCS

Weekly Reported Cars Online

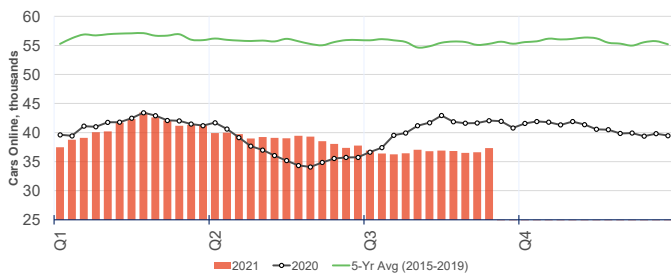


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Cars Online: CN

Weekly Reported Cars Online

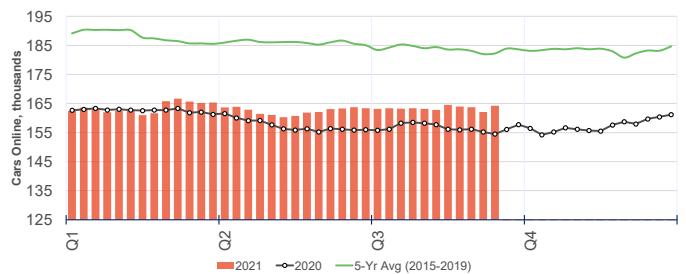


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Cars Online: NS

Weekly Reported Cars Online

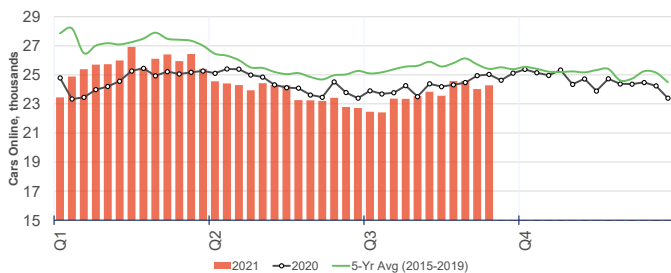


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Cars Online: CP

Weekly Reported Cars Online

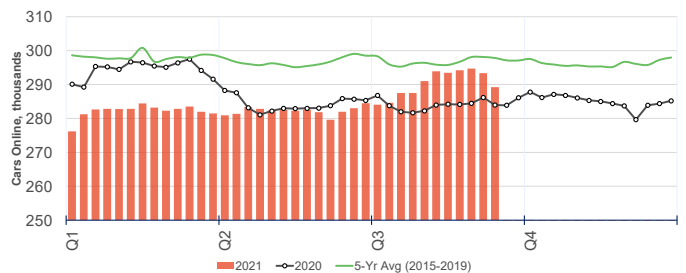


Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR



### Cars Online: UP

Weekly Reported Cars Online



Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR

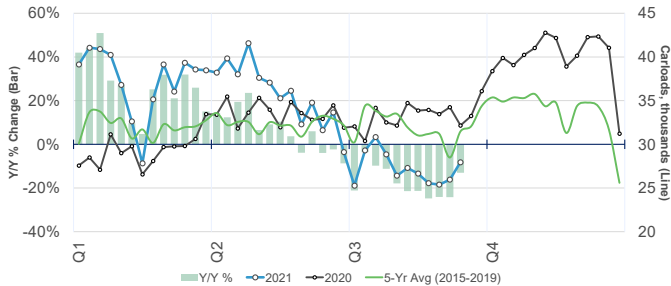




### Agricultural Products

#### Weekly Carloads: Grain

North America



##### Commodity: Grain

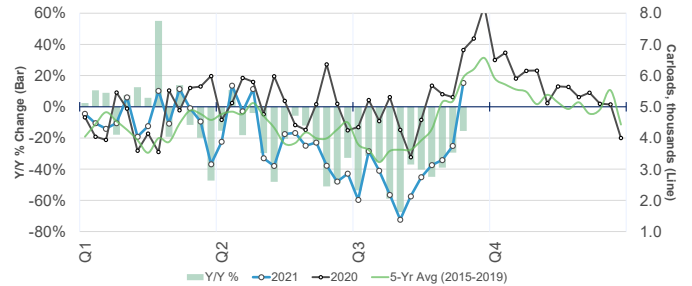
000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Grain	113.53	145.51	169.77	467.78	389.96	487.14	1,822.5	1,953.7	2,043.7
Y/Y % Change	-21.4%	-2.8%	-5.5%	7.0%	-11.6%	-7.2%	2.2%	7.2%	4.6%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

#### Weekly Carloads: Farm Products

North America



##### Commodity: Farm Products

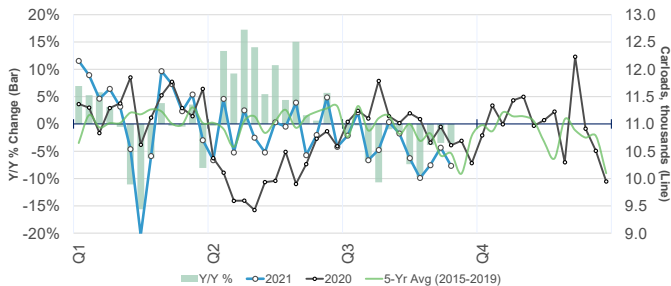
000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Farm Products	10.38	22.78	23.25	50.86	45.52	60.92	217.5	227.7	256.3
Y/Y % Change	-48.8%	-24.0%	-17.7%	-24.1%	-36.8%	-17.1%	-20.6%	4.7%	12.6%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

#### Weekly Carloads: Grain Mill Products

North America



##### Commodity: Grain Mill Products

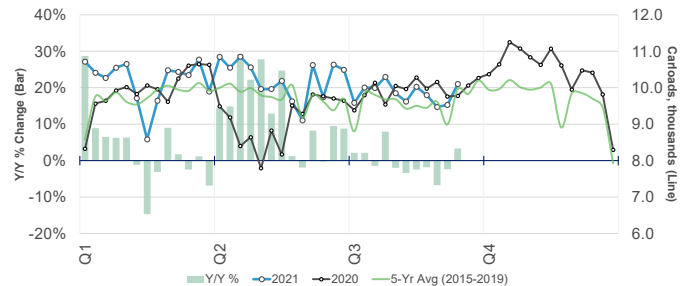
000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Grain Mill Products	45.32	43.44	48.30	140.73	137.67	143.71	565.6	583.5	602.6
Y/Y % Change	-3.0%	-6.1%	-4.8%	6.2%	-4.7%	-0.9%	-0.3%	3.2%	3.3%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

#### Weekly Carloads: Food & Kindred Products

North America



##### Commodity: Food Products

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Food Products	42.13	42.42	46.48	132.10	130.42	131.24	524.0	539.3	552.6
Y/Y % Change	-1.7%	-2.6%	-5.2%	11.3%	-0.5%	-3.6%	1.9%	2.9%	2.5%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

### Traffic Group: Agricultural Products

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
<b>Total Ag Products</b>	<b>211.36</b>	<b>254.15</b>	<b>287.81</b>	<b>791.46</b>	<b>703.58</b>	<b>823.01</b>	<b>3,129.6</b>	<b>3,304.2</b>	<b>3,455.3</b>
P/P % Change	-11.2%	20.2%	13.2%	-2.5%	-11.1%	17.0%			
Y/Y % Change	-16.9%	-5.7%	-6.4%	4.8%	-10.8%	-6.4%	-0.3%	5.6%	4.6%
Grain	-21.4%	-2.8%	-5.5%	7.0%	-11.6%	-7.2%	2.2%	7.2%	4.6%
Farm Products	-48.8%	-24.0%	-17.7%	-24.1%	-36.8%	-17.1%	-20.6%	4.7%	12.6%
Grain Mill	-3.0%	-6.1%	-4.8%	6.2%	-4.7%	-0.9%	-0.3%	3.2%	3.3%
Food Products	-1.7%	-2.6%	-5.2%	11.3%	-0.5%	-3.6%	1.9%	2.9%	2.5%

F = Forecast

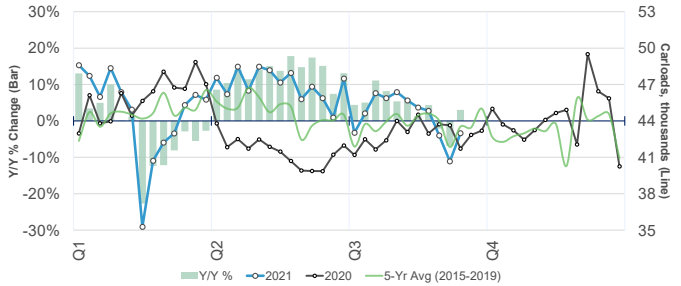
Source: FTR | Transportation Intelligence™; Copyright 2021, FTR



### Chemicals

#### Weekly Carloads: Chemicals

North America



Weekly Data. Source: AAR, FTR | Transportation Intelligence™; Copyright 2021, FTR

FTR | Transportation Intelligence

#### Commodity: Chemicals

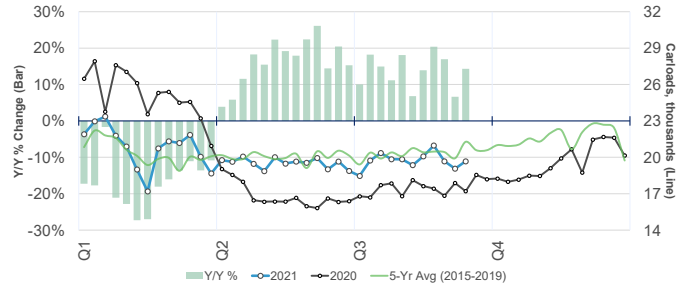
000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Chemicals	194.85	193.58	205.07	606.53	595.37	600.98	2,374.4	2,421.5	2,428.5
Y/Y % Change	5.2%	3.4%	5.0%	12.2%	5.2%	3.0%	4.0%	2.0%	0.3%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

#### Weekly Carloads: Petroleum Products

North America



Weekly Data. Source: AAR, FTR | Transportation Intelligence™; Copyright 2021, FTR

FTR | Transportation Intelligence

#### Commodity: Petroleum and Petroleum Products

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Petroleum & Products	86.15	84.34	86.36	252.56	259.69	255.95	1,036.0	1,036.0	1,073.8
Y/Y % Change	15.8%	7.8%	4.9%	15.3%	12.4%	-1.2%	0.5%	0.0%	3.6%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

### Traffic Group: Chemicals

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
<b>Total Chemicals</b>	<b>280.99</b>	<b>277.92</b>	<b>291.43</b>	<b>859.08</b>	<b>855.05</b>	<b>856.92</b>	<b>3,410.4</b>	<b>3,457.5</b>	<b>3,502.3</b>
P/P % Change	-5.1%	-1.1%	4.9%	2.3%	-0.5%	0.2%			
Y/Y % Change	8.2%	4.7%	5.0%	13.1%	7.3%	1.7%	2.9%	1.4%	1.3%
Chemicals	5.2%	3.4%	5.0%	12.2%	5.2%	3.0%	4.0%	2.0%	0.3%
Petroleum & Products	15.8%	7.8%	4.9%	15.3%	12.4%	-1.2%	0.5%	0.0%	3.6%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

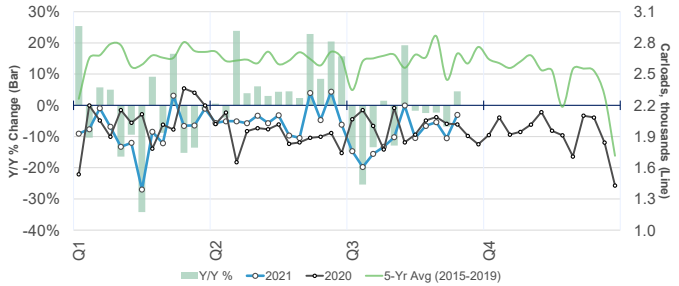




### Forest Products

#### Weekly Carloads: Primary Forest Products

North America



##### Commodity: Primary Forest Products

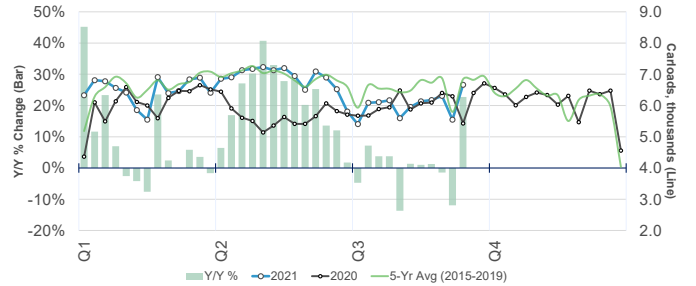
000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Primary Forest Products	8.60	8.73	9.65	26.85	25.38	27.14	104.1	108.2	107.0
Y/Y % Change	2.0%	3.7%	8.1%	7.5%	-2.8%	8.1%	1.3%	4.0%	-1.1%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

#### Weekly Carloads: Lumber & Wood

North America



##### Commodity: Lumber & Wood Products

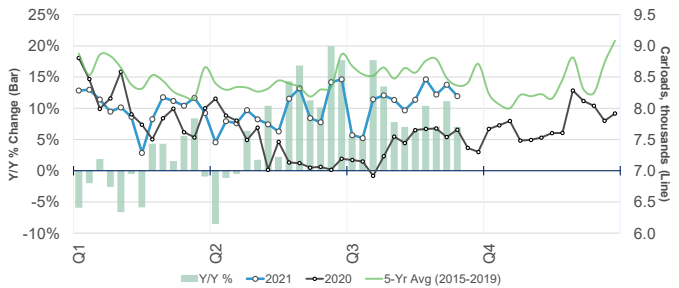
000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Lumber & Wood Products	25.76	27.78	29.36	89.30	80.64	82.98	335.6	338.4	343.4
Y/Y % Change	-1.1%	2.2%	3.5%	21.1%	0.4%	3.9%	7.3%	0.9%	1.5%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

#### Weekly Carloads: Pulp & Paper Products

North America



##### Commodity: Pulp & Paper Products

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Pulp & Paper Products	35.18	33.86	34.94	102.30	105.33	105.07	415.5	424.0	430.2
Y/Y % Change	8.8%	4.1%	1.6%	6.4%	7.8%	2.0%	3.9%	2.0%	1.4%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

### Traffic Group: Forest Products

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
<b>Total Forest Products</b>	<b>69.53</b>	<b>70.37</b>	<b>73.96</b>	<b>218.45</b>	<b>211.34</b>	<b>215.18</b>	<b>855.2</b>	<b>870.7</b>	<b>880.6</b>
P/P % Change	-2.7%	1.2%	5.1%	3.9%	-3.3%	1.8%			
Y/Y % Change	4.1%	3.3%	3.2%	12.1%	3.5%	3.5%	4.9%	1.8%	1.1%
Primary Forest Products	2.0%	3.7%	8.1%	7.5%	-2.8%	8.1%	1.3%	4.0%	-1.1%
Lumber & Wood Products	-1.1%	2.2%	3.5%	21.1%	0.4%	3.9%	7.3%	0.9%	1.5%
Pulp & Paper Products	8.8%	4.1%	1.6%	6.4%	7.8%	2.0%	3.9%	2.0%	1.4%

F = Forecast

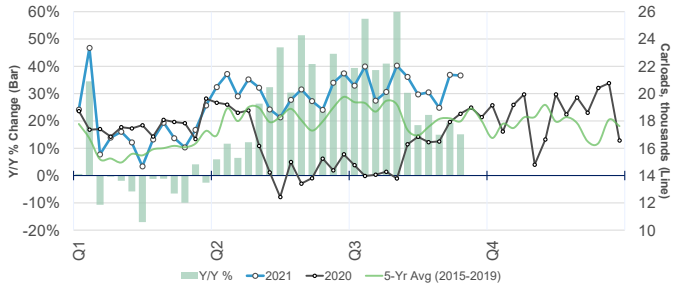
Source: FTR | Transportation Intelligence™; Copyright 2021, FTR



### Metals & Products

#### Weekly Carloads: Metallic Ores

North America



##### Commodity: Metallic Ores

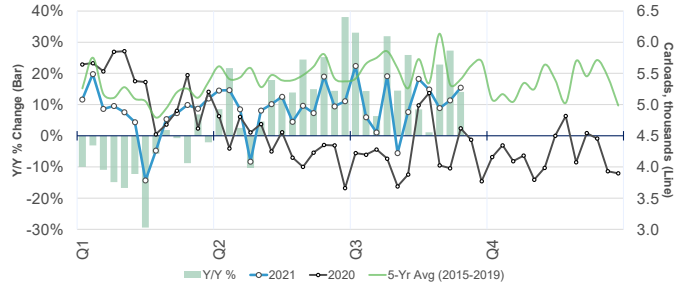
000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Metallic Ores	89.01	86.26	88.31	258.01	269.73	263.48	1,014.2	1,021.0	1,023.2
Y/Y % Change	26.9%	7.2%	9.3%	25.5%	25.4%	7.7%	13.5%	0.7%	0.2%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

#### Weekly Carloads: Coke

North America



##### Commodity: Coke

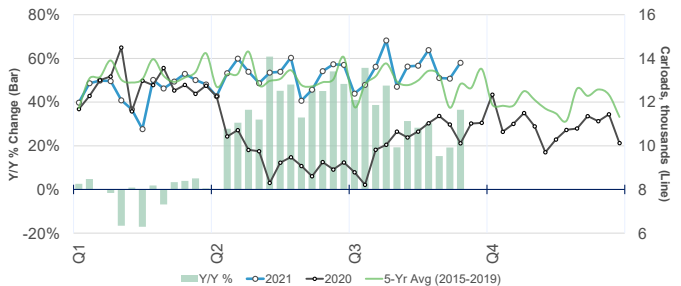
000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Coke	21.25	20.20	21.31	64.22	64.77	64.04	254.7	248.1	251.5
Y/Y % Change	11.6%	10.9%	15.1%	13.2%	15.6%	14.8%	7.7%	-2.6%	1.4%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

#### Weekly Carloads: Primary Metal Products

North America



##### Commodity: Primary Metal Products

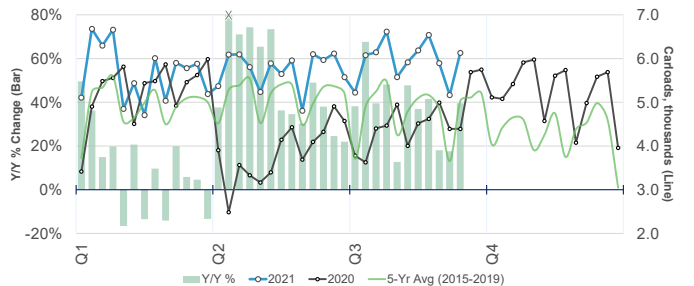
000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Primary Metal Products	58.32	56.71	60.78	170.68	176.47	173.98	681.3	652.7	643.6
Y/Y % Change	26.4%	19.1%	20.9%	37.1%	28.6%	21.3%	19.5%	-4.2%	-1.4%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

#### Weekly Carloads: Iron & Steel Scrap

North America



##### Commodity: Iron & Steel Scrap

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Iron & Steel Scrap	25.99	26.36	29.76	74.07	79.60	82.71	308.6	313.1	288.5
Y/Y % Change	34.7%	19.3%	19.2%	47.7%	30.8%	21.9%	24.9%	1.5%	-7.9%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

### Traffic Group: Metals & Products

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
<b>Total Metals &amp; Products</b>	<b>194.56</b>	<b>189.53</b>	<b>200.16</b>	<b>566.97</b>	<b>590.57</b>	<b>584.20</b>	<b>2,258.8</b>	<b>2,235.0</b>	<b>2,206.8</b>
P/P % Change	-5.8%	-2.6%	5.6%	9.7%	4.2%	-1.1%			
Y/Y % Change	25.8%	12.5%	14.7%	29.8%	25.9%	14.2%	16.0%	-1.1%	-1.3%
Metallic Ores	26.9%	7.2%	9.3%	25.5%	25.4%	7.7%	13.5%	0.7%	0.2%
Coke	11.6%	10.9%	15.1%	13.2%	15.6%	14.8%	7.7%	-2.6%	1.4%
Primary Metal Products	26.4%	19.1%	20.9%	37.1%	28.6%	21.3%	19.5%	-4.2%	-1.4%
Iron & Steel Scrap	34.7%	19.3%	19.2%	47.7%	30.8%	21.9%	24.9%	1.5%	-7.9%

F = Forecast

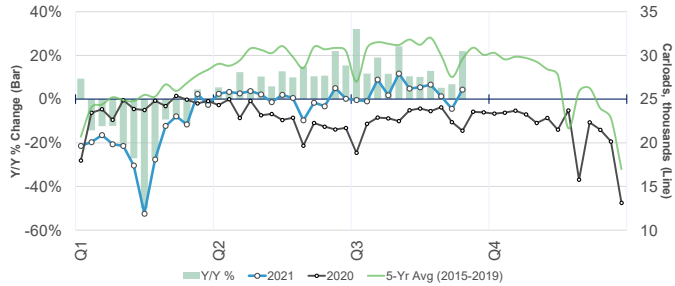
Source: FTR | Transportation Intelligence™; Copyright 2021, FTR



### Nonmetallic Minerals & Products

#### Weekly Carloads: Stone, Sand, Gravel

North America



##### Commodity: Crushed Stone

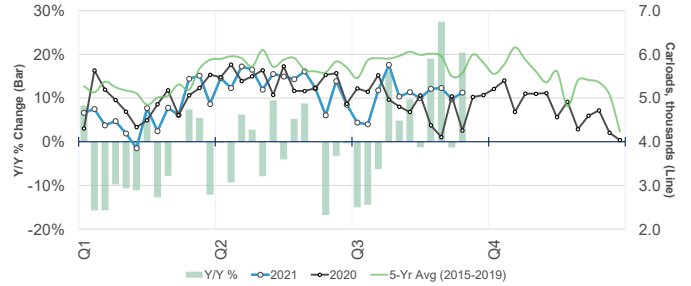
000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Crushed Stone	114.73	108.39	114.24	324.32	339.75	303.97	1,225.0	1,303.2	1,365.5
Y/Y % Change	13.7%	9.5%	9.4%	9.9%	13.1%	10.4%	3.8%	6.4%	4.8%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

#### Weekly Carloads: Nonmetallic Minerals

North America



##### Commodity: Nonmetallic Minerals

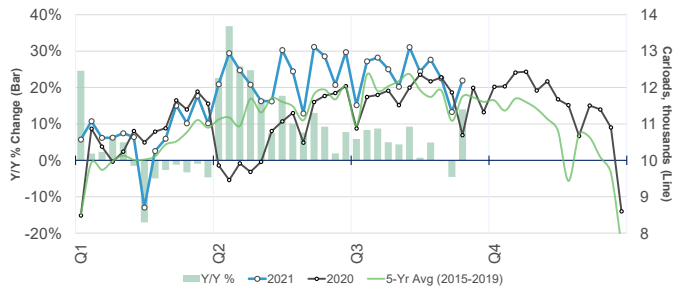
000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Nonmetallic Minerals	21.95	22.62	23.92	69.10	67.12	64.92	260.5	267.2	277.0
Y/Y % Change	12.8%	6.6%	4.4%	-1.7%	4.7%	4.5%	0.0%	2.6%	3.6%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

#### Weekly Carloads: Stone, Clay, Glass

North America



##### Commodity: Stone, Clay & Glass Products

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Stone, Clay & Glass Products	54.01	54.78	60.97	158.73	165.77	163.81	624.6	642.2	633.2
Y/Y % Change	4.4%	9.5%	11.1%	12.9%	7.1%	9.9%	7.1%	2.8%	-1.4%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

### Traffic Group: Nonmetallic Minerals

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Nonmetallic Minerals	190.70	185.79	199.13	552.14	572.65	532.69	2,110.2	2,212.6	2,275.6
P/P % Change	-2.8%	-2.6%	7.2%	22.0%	3.7%	-7.0%			
Y/Y % Change	10.8%	9.1%	9.3%	9.1%	10.2%	9.5%	4.3%	4.9%	2.8%
Crushed Stone	13.7%	9.5%	9.4%	9.9%	13.1%	10.4%	3.8%	6.4%	4.8%
Non-Metallic Minerals	12.8%	6.6%	4.4%	-1.7%	4.7%	4.5%	0.0%	2.6%	3.6%
Stone, Clay & Glass Products	4.4%	9.5%	11.1%	12.9%	7.1%	9.9%	7.1%	2.8%	-1.4%

F = Forecast

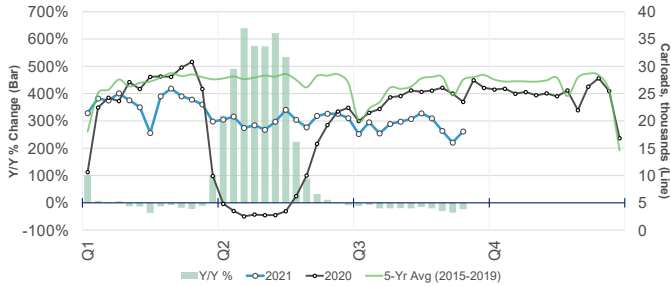
Source: FTR | Transportation Intelligence™; Copyright 2021, FTR



### Automotive & Coal

#### Weekly Carloads: Motor Vehicles & Parts

North America



Weekly Data. Source: AAR, FTR | Transportation Intelligence™; Copyright 2021, FTR

FTR | Transportation Intelligence

#### Commodity: Autos and Parts

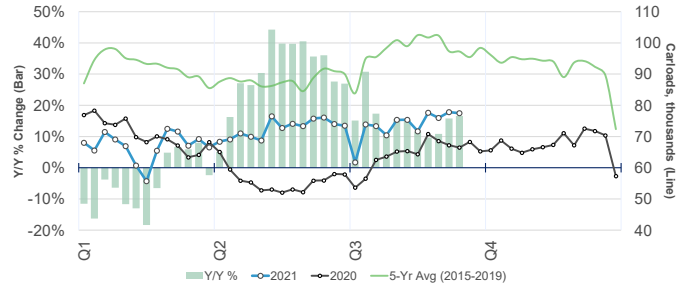
000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
<b>Autos and Parts</b>	<b>87.56</b>	<b>90.08</b>	<b>91.21</b>	<b>260.53</b>	<b>263.88</b>	<b>265.54</b>	<b>1,084.4</b>	<b>1,238.5</b>	<b>1,303.0</b>
<b>Y/Y % Change</b>	<b>-19.5%</b>	<b>-18.9%</b>	<b>-19.9%</b>	<b>111.1%</b>	<b>-18.3%</b>	<b>-16.1%</b>	<b>0.9%</b>	<b>14.2%</b>	<b>5.2%</b>

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

#### Weekly Carloads: Coal

North America



Weekly Data. Source: AAR, FTR | Transportation Intelligence™; Copyright 2021, FTR

FTR | Transportation Intelligence

#### Commodity: Coal

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
<b>Coal</b>	<b>322.84</b>	<b>325.31</b>	<b>333.86</b>	<b>934.35</b>	<b>969.49</b>	<b>976.70</b>	<b>3,736.6</b>	<b>3,679.1</b>	<b>3,367.9</b>
<b>Y/Y % Change</b>	<b>13.0%</b>	<b>12.4%</b>	<b>11.8%</b>	<b>28.8%</b>	<b>13.8%</b>	<b>10.4%</b>	<b>10.9%</b>	<b>-1.5%</b>	<b>-8.5%</b>

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

### Traffic Group: Automotive

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
<b>Total Automotive</b>	<b>87.56</b>	<b>90.08</b>	<b>91.21</b>	<b>260.53</b>	<b>263.88</b>	<b>265.54</b>	<b>1,084.4</b>	<b>1,238.5</b>	<b>1,303.0</b>
<b>P/P % Change</b>	<b>1.5%</b>	<b>2.9%</b>	<b>1.2%</b>	<b>-11.5%</b>	<b>1.3%</b>	<b>0.6%</b>			
<b>Y/Y % Change</b>	<b>-19.5%</b>	<b>-18.9%</b>	<b>-19.9%</b>	<b>111.1%</b>	<b>-18.3%</b>	<b>-16.1%</b>	<b>0.9%</b>	<b>14.2%</b>	<b>5.2%</b>
<b>Autos and Parts</b>	<b>-19.5%</b>	<b>-18.9%</b>	<b>-19.9%</b>	<b>111.1%</b>	<b>-18.3%</b>	<b>-16.1%</b>	<b>0.9%</b>	<b>14.2%</b>	<b>5.2%</b>

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

### Traffic Group: Coal

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
<b>Total Coal</b>	<b>322.84</b>	<b>325.31</b>	<b>333.86</b>	<b>934.35</b>	<b>969.49</b>	<b>976.70</b>	<b>3,736.6</b>	<b>3,679.1</b>	<b>3,367.9</b>
<b>P/P % Change</b>	<b>0.5%</b>	<b>0.8%</b>	<b>2.6%</b>	<b>9.1%</b>	<b>3.8%</b>	<b>0.7%</b>			
<b>Y/Y % Change</b>	<b>13.0%</b>	<b>12.4%</b>	<b>11.8%</b>	<b>28.8%</b>	<b>13.8%</b>	<b>10.4%</b>	<b>10.9%</b>	<b>-1.5%</b>	<b>-8.5%</b>
<b>Coal</b>	<b>13.0%</b>	<b>12.4%</b>	<b>11.8%</b>	<b>28.8%</b>	<b>13.8%</b>	<b>10.4%</b>	<b>10.9%</b>	<b>-1.5%</b>	<b>-8.5%</b>

F = Forecast

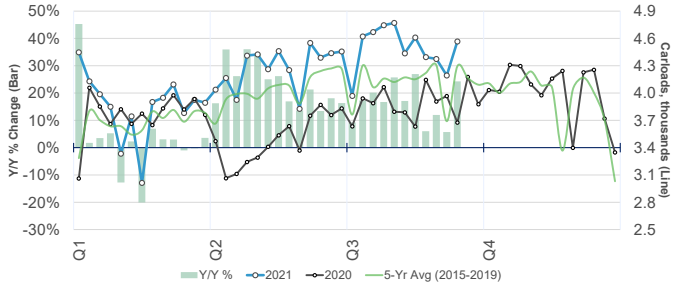
Source: FTR | Transportation Intelligence™; Copyright 2021, FTR



### Other Carloads

#### Weekly Carloads: Waste & Other Scrap

North America



Weekly Data. Source: AAR, FTR | Transportation Intelligence™; Copyright 2021, FTR

FTR | Transportation Intelligence

#### Commodity: Waste & Non-Ferrous Scrap

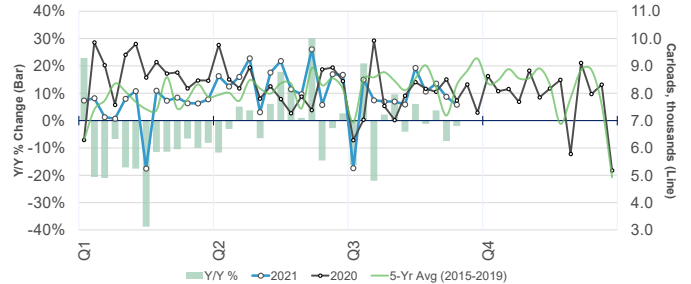
000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Waste & Non-Ferrous Scrap	19.53	19.11	20.31	55.01	59.19	55.29	218.7	217.3	220.1
Y/Y % Change	18.7%	11.7%	8.3%	20.7%	15.4%	5.4%	10.5%	-0.6%	1.3%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

#### Weekly Carloads: All Other

North America



Weekly Data. Source: AAR, FTR | Transportation Intelligence™; Copyright 2021, FTR

FTR | Transportation Intelligence

#### Commodity: All Other Carloads

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
All Other Carloads	34.78	33.62	35.42	109.60	102.57	96.49	404.3	430.0	439.3
Y/Y % Change	0.8%	-1.1%	-4.5%	2.1%	-0.9%	-5.5%	-5.0%	6.4%	2.2%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR

### Traffic Group: Other Carloads

000s of Carloads	Aug-21	Sep-21F	Oct-21F	Q2'21	Q3'21F	Q4'21F	2021F	2022F	2023F
Other Carloads	54.31	52.73	55.73	164.60	161.76	151.79	623.0	647.3	659.4
P/P % Change	-0.8%	-2.9%	5.7%	13.6%	-1.7%	-6.2%			
Y/Y % Change	6.5%	3.2%	-0.2%	7.6%	4.5%	-1.8%	-0.1%	3.9%	1.9%
Waste & Non-Ferrous Scrap	18.7%	11.7%	8.3%	20.7%	15.4%	5.4%	10.5%	-0.6%	1.3%
All Other Carloads	0.8%	-1.1%	-4.5%	2.1%	-0.9%	-5.5%	-5.0%	6.4%	2.2%

F = Forecast

Source: FTR | Transportation Intelligence™; Copyright 2021, FTR





## Service issues are top of mind heading into winter. *Service levels should increase in the coming months, before winter begins.*

The service situation remains a guessing game for shippers, but there is some clarity coming, at least on the merger front.

### **Service, service, service**

It feels like a broken record, but service remains a key uncertainty for carload and intermodal markets. Service and congestion are large issues that threaten to hold back growth in this and future years if shippers do not have confidence in the carriers' ability to deliver consistent transit times.

Service levels remain challenged, hovering right at or below their five-year average levels depending on what type of traffic is used for the comparison. Intermodal traffic is hovering below its five-year average, even as things improved a bit in recent weeks. The recent improvement was simply a seasonal uptick in velocity and not enough to change the dynamics from hovering below their five-year average.

Carriers should get a break in the next few weeks as they move past weather-related issues from Hurricane Ida along the U.S. Gulf coast and wildfires that plagued the western carriers earlier this summer turn the page as well. This should allow carriers some time to get their networks in order, after several months of disruption, before the winter sets in and the potential for more disruption occurs. The fourth and first quarters of the year are seasonally the most difficult times of the year to maintain service levels, as the industry was reminded this year after February's widespread weather-related issues snarled rail lines for months.

### **Service-sensitive volumes unlikely to slow**

Given the number of container ships waiting to enter berths in places like Los Angeles, Long Beach, New York/New Jersey, and Savannah, the amount of service-sensitive intermodal traffic moving on rail lines is unlikely to wane in the coming months heading into the Christmas holidays.

The ongoing service issues have limited volumes from forming a traditional peak and instead have

formed a peak plateau that could stretch through the end of the year, or later, as carriers seek to spread out the incoming volumes to avoid creating congestion on their lines and at their inland terminals. Dwell at inland terminals and moving containers efficiently through those terminals has been an ongoing chokepoint over the last few months. Chassis supply is unlikely to ease up until import flows abate, which becomes a chicken or egg question given that equipment providers and pools do not want to build the proverbial church for Easter Sunday demand levels.

### **STB primed to take a bigger role**

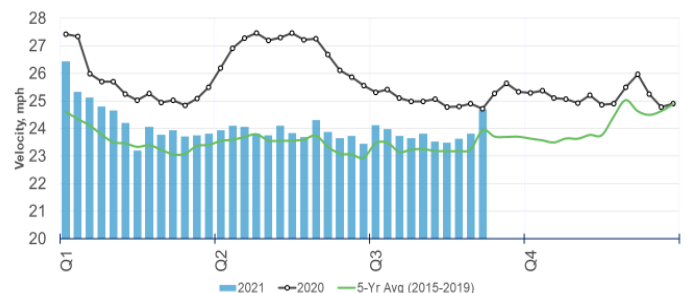
Comments by Surface Transportation Board (STB) officials over the last month suggest the agency is preparing to take a bigger role in getting to the bottom of service issues. Recent public comments suggest that some of the commissioners do not believe that railroads have done enough to fix the service issues that have beset shippers since the first quarter.

An active proceeding meant to address first- and last-mile service that has been notoriously opaque will aim to determine what data would help bring transparency to that part of rail service and add some triggers for when the agency may get involved.

Comments in that proceeding are due by December 17, and could shape how the board views what shippers need in this regard. The board is also looking at several other issues that could alter the balance of power between shippers and carriers.

### Velocity: Total Rail

Weekly Reported Train Speed, Industry Average



Weekly Data. Source: STB, FTR | Transportation Intelligence™; Copyright 2021, FTR

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Intelligence



### General Terms

#### Annualized rate

A rate of return for a given period that is less than 1 year, but it is computed as if the rate were for a full year.

#### Average Length-of-Haul

Total tonmiles divided by total tons.

#### Basis Points

A unit that is equal to 1/100 of 1%. If something increased from 2.2% to 2.8%, it increased 60 basis points.

#### Goods Transportation Sector

Components of GDP that are critical in demand for goods and thereby induce demand for transportation services.

#### M/M

Month over month. The difference in percentage or units when compared to the previous month.

#### New Truck Lead Time

The Backlog of Class 8 truck orders divided by the Build for a given month. Gives an indication of the average length of time in months for a fleet to take delivery of a new truck order.

#### Rail Carloads

Rail carloads is the seasonally adjusted number of carloadings originated in the United States plus loads that come to U.S. destinations from Mexico and Canada. Data in this report excludes intermodal loadings.

#### Rail Shippers Conditions Index (RCI)

A measure of market conditions that influence the rail shippers freight transport environment. This index tracks the changes representing five major conditions in the U.S. carload freight market. The conditions are: freight demand, freight rates, fleet capacity, carload service, and fuel price. The individual metrics are combined into a single index that tracks the conditions that influence the rail shippers freight transport environment. A positive score represents good, optimistic conditions; a negative score represents bad, pessimistic conditions.

#### Railcar Utilization Rate

This metric calculates the percentage of the total population of railcars that is required to move the N.A. rail freight. In general, a figure above 90% indicates a tight market where the majority of the railcar population is at work. A figure below 80% indicates a weak market where a significant portion of the population is idle or underutilized.

#### SAAR

Seasonally Adjusted Annualized Rate

#### Shippers Conditions Index (SCI)

This index tracks the changes representing four major conditions in the U.S. full-load freight market. The major conditions are: freight demand, freight rates, fleet capacity, and fuel price. The individual metrics are combined into a single index that tracks the market conditions that influence the shippers freight transport environment. A positive score represents good, optimistic conditions; a negative score represents bad, pessimistic conditions.

#### STCC

Standard Transportation Commodity Code (Similar to the SIC/NAICS Codes with a few added categories designed for transportation movements)

#### TEU

Twenty Foot Equivalent Unit. Used for reported port container statistics.

#### Ton

Tonnage. Ton Originated by specific mode (i.e. one ton of coal shipped by rail and then by water would be shown as two tons of coal). This is Domestic Traffic Only. Export movements are included only as far as the border or to a port in which it will be directly exported. The same is true for Imports. An import is counted once it reaches the border or a port.

#### Tonmile

One ton moved one mile = one tonmile.

#### Truck Driver Pressure Index

The index tracks carriers' need for additional drivers based on trends in the business cycle, demographics, and regulations. Business cycles create natural shortages (and surpluses) that stem from typical economic activity. Demographic changes in any given year are small and only add up after a significant time span. Regulations vary across the industry and are difficult to predict due to changing priorities and uncertain response.

The index baseline is zero, representing balance in the driver hiring environment. Positive readings suggest greater pressure on rates and utilization; negative readings suggest less pressure.

#### Truck Loadings

Truck loadings is the estimated number of truck loads originated in the United States plus truck loads that come to U.S. destinations from Mexico and Canada. It is tons divided by the average tons per load.

#### Truck Utilization Rate - "Active"

This metric calculates the percentage of the population of active trucks that is required to move the U.S. truck freight. In general, a figure above 95% indicates a tight market where the majority of the truck population is at work. A figure below 90% indicates a weak market where a significant portion of the truck population is idle.

#### Truck Utilization Rate - "Total"

This metric calculates the percentage of the total population of trucks that is required to move U.S. truck freight. In general, a figure above 90% indicates a tight market, a figure below 85% indicates a weak market.

#### Trucking Conditions Index (TCI)

This index tracks the changes representing four major conditions in the U.S. full-load truck market. The major conditions are: freight demand, freight rates, fleet capacity, and fuel price. The individual metrics are combined into a single index that tracks the market conditions that influence fleet behavior. A positive score represents good, optimistic conditions; a negative score represents bad, pessimistic conditions.

#### Y/Y

Year over year. The difference in percentage or units when compared to the same month, quarter, or time period of the previous year.



## **Trailer Types**

### **Dry Van**

An enclosed, rectangular, box trailer that carries general freight.

### **Refrigerated (Reefer) Van**

A refrigerated and insulated van used to transport temperature-sensitive freight.

### **Flatbed (Platform)**

A flat surfaced, open, trailer with no enclosure or doors.

### **Specialized (Specialty)**

There is a wide assortment of specialized trailers that are highly engineered for specific purposes (i.e. auto hauler, livestock, lowbed, oversized, etc.)

### **Tank (Tanker)**

A trailer with an enclosed, sealed, cylinder-shaped tank used to carry liquid or dry bulk freight.

### **Bulk/Dump**

This is a combined group of Dump trailers and Straight Trucks. A Dump trailer has an open-top box (bucket) used for hauling dirt, rocks or gravel. Discharge can be from end, bottom, or side. Straight Trucks have the trailing equipment permanently mounted to the chassis. The largest segment are Dump Trucks that haul stone and aggregates.

## **Railcar Types**

### **Box Cars**

An enclosed car which has doors. It is used for general service and for lading which must be protected from the weather.

### **Covered Hoppers**

A hopper car with a permanent roof and bottom openings for unloading. Used for carrying cement, grain, or other bulk commodities.

### **Flat Cars**

An open car without sides, ends or top, used principally for hauling lumber, stone, heavy machinery, TOFC/COFC equipment, etc.

### **Gondolas**

A car without a top covering which has straight sides and ends, the floor or bottom of which is approximately level. Used for bulk freight.

### **Open-Top Hoppers**

Cars having sides and ends but no roof with a sloping floor which will discharge its load by gravity through the hopper doors.

### **Tank Cars**

A car which consists of a tank for carrying liquids such as oil, molasses, vinegar, acids, compressed gasses and granular solids.

## **Freight Rates**

### **Dry Van**

Revenue per Loaded Mile. Spot/contract rates for Dry Van activity both with and w/o Fuel Surcharge (FSC).

Indexed to 1Q2008.

### **Refrigerated (Reefer) Van**

Temperature-Controlled (TC). Revenue per Loaded Mile. Spot/contract rates for Refrigerated activity both with and w/o Fuel Surcharge (FSC).

Indexed to 1Q2008.

### **Flatbed (Platform)**

Revenue per Loaded Mile. Spot/contract rates for Flatbed activity both with and w/o Fuel Surcharge (FSC).

Indexed to 1Q2008.

### **Specialized**

Revenue per Loaded Mile. Spot/contract rates for Specialized equipment both with and w/o Fuel Surcharge (FSC).

Indexed to 1Q2008. Note: Includes numerous types of trailer freight, but generally excludes tank trailers.

### **Less-Than-Truckload (LTL)**

Revenue per hundredweight. Contract rates for LTL moves. These are parcel, pallet, or less than full truckload moves by LTL carriers.

Indexed to 1Q2008.

### **Intermodal**

Revenue per Load. An estimate of pricing trajectory that is calculated based on the underlying cost pressures from dry van truckload and rail line-haul. Shown both with fuel surcharges (FSC) included and net of FSC.

Indexed to 1Q2008.

### **Rail Carload**

An estimate of U.S. Class I rail pricing power that is calculated from data reported to the STB. It measures revenue per tonmile and is shown both with fuel surcharges (FSC) included and net of FSC. It is impacted by both actual railroad rates and by changes in the mix of commodities moved.

Indexed to 1Q2008.



## **AAR Carload Commodity Definitions**

### **Chemicals**

Industrial chemicals, plastic resins, fertilizer, ethanol, hazardous materials, etc.

### **Coal**

Coal. Includes anthracite, bituminous, and lignite coal.

### **Coke**

Petroleum coke, coke produced from coal, and coal or coke briquettes

### **Crushed Stone, Sand & Gravel**

Crushed or broken stone, sand, aggregate, gravel

### **Farm Products Excluding Grain**

Primarily fresh fruits and vegetables. Includes all farm products except grains and soybeans.

### **Food Products**

Canned goods, meat and animal products, sugar, beverages, seed and vegetable oils, etc.

### **Grain**

Primarily corn, wheat, and soybeans but also includes oats, barley, rye, sorghum, etc.

### **Grain Mill Products**

Soybean meal, corn syrup, animal feed, flour, corn starch, milled rice, distiller's dried grains (DDG), etc.

### **Iron and Steel Scrap**

Iron and steel (i.e. ferrous) scrap

### **Lumber & Wood Products**

Lumber and dimension stock, plywood, etc.; does not include furniture

### **Metallic Ores**

Overwhelmingly iron ore, but some aluminum ore, copper ore, etc.

### **Motor Vehicles & Parts**

Finished vehicles, parts, auto and truck bodies, etc.

### **Nonmetallic Minerals**

Phosphate rock, rock salt, crude sulphur, clay, etc.

### **Petroleum & Petroleum Products**

Crude petroleum and products of petroleum refining such as liquefied gases, jet fuel, fuel oil, lubricating oils, asphalt tars, etc.

### **Primary Forest Products**

Wood raw materials such as pulpwood and wood chips

### **Primary Metal Products**

Primarily iron and steel products; some aluminum, copper, etc. Includes galvanized, and fabricated metal products, except ordnance materials, machinery, and transportation equipment.

### **Pulp & Paper Products**

Paperboard, pulpboard, fiberboard, printing paper, pulp, newsprint, boxes, industrial paper, etc.

### **Stone, Clay & Glass Products**

Ground nonmetallic minerals or earths, cement, lime, gypsum products, glass products, bricks and other clay products, abrasives, etc.

### **Waste & Scrap**

Non-ferrous scrap metal, scrap paper, construction debris, ashes, etc.

### **All Other Carloads**

Commodities not included in any of the above categories, excluding intermodal traffic

## **AAR Carload Summary Traffic Groups**

### **Agricultural Products**

Grain; Farm Products; Grain Mill Products; Food Products

### **Automotive**

Motor Vehicles & Parts

### **Chemicals**

Chemicals; Petroleum & Petroleum Products

### **Coal**

Coal

### **Forest Products**

Primary Forest Products; Lumber & Wood Products; Pulp & Paper Products

### **Metallic Ores & Metals**

Metallic Ores; Coke; Primary Metal Products; Iron & Steel Scrap

### **Non-Metallic Minerals and Products**

Crushed Stone, Sand & Gravel; Non-Metallic Minerals; Stone, Clay & Glass Products

### **All Other**

Waste & Non-Ferrous Scrap; All Other Carloads



### Rail Intermodal

#### Revenue Moves

Rail Intermodal Loadings of Units Originated. Intermodal is defined as a movement of a container or trailer via more than one mode of transportation (i.e. rail + truck or ship + rail or ship + truck). This data tracks intermodal movements that involve the rail mode. Such movements may involve the movement of International and Domestic Containers as well as Trailers via rail.

#### Intermodal

Counts intermodal rail revenue movements, defined as any movement of a container or trailer, whether loaded or empty, that generates revenue for the railroad. Empty movements of rail-owned containers and trailers typically do not generate rail revenue and therefore are not captured in the data.

A revenue movement typically encompasses the entire journey from when the container or trailer is placed on the rail at the originating intermodal terminal to where it is removed from the railcar at the terminating intermodal terminal and may involve movement over more than one railroad.

Long-haul movements passing through rail gateways, such as Chicago, that involve highway transfer between terminals will generally be counted as two separate movements unless traveling on a through bill of lading.

#### Intermodal Competitive Index (ICI)

This index tracks the changes representing five major conditions in the U.S. rail intermodal market. The major conditions are: freight demand, freight rates, truck capacity, rail service, and fuel price. The individual metrics are combined into a single index that measures the competitive posture of domestic intermodal vs. OTR Truck.

A positive score represents favorable conditions for intermodal to compete with truck; a negative score represents reductions in intermodal's ability to gain additional market share from truck.

#### Intermodal Market Segments

These figures track the movement of equipment, not freight. Domestic freight being moved in 20', 40', or 45' containers will be counted as INTERNATIONAL. International cargo transloaded into Domestic Containers or trailers is counted as DOMESTIC.

##### - International

Includes movements of Containers of the following lengths only: 20', 40', and 45'.

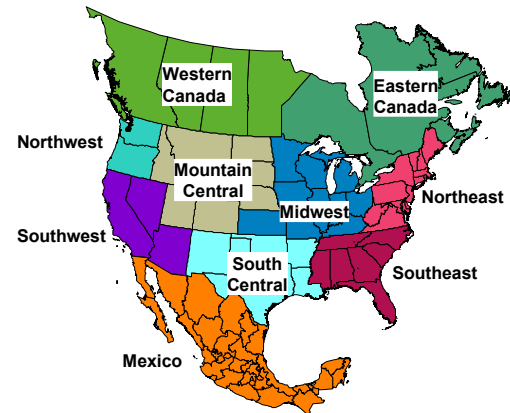
##### - Domestic

Includes movements of Trailers and all other Containers not included in International movements. Trailers of the following lengths: 20', 28', 40', 45', 48', 53'+. Containers of the following lengths: 48', 53'+. Reported movements of 28' containers are converted to 28' trailers, as all 28' containers are reportedly permanently mounted on chassis and moving as trailers.

#### Long-Haul Market Share

Average Length of Haul 550 miles or longer. Designated by Commodity at the 3-Digit STCC level.

### Intermodal Territories



### Sources

#### Association of American Railroads

Weekly Rail Traffic Report

#### Bureau of Labor Statistics (BLS)

Employment, Consumer Prices, Producer Prices

#### Federal Reserve

Industrial Production Statistics

#### FTR

Freight-cast Transportation Model

#### Intermodal Association of North America (IANA)

ETSO Database

#### Port Reports

Monthly Container Volumes

#### Rail Reports

Weekly Market Metrics

#### Surface Transportation Board

Public Use Waybill, Rail Reporting Metrics

#### Truck/Trailer OEMs

Monthly Market Indicators

#### Truckstop.com

Weekly Spot Market Indicators

#### U.S. Census Bureau

Economic Census, USA Trade, Monthly Indicators

#### U.S. Department of Commerce

Industrial Reports; Commodity Flow Surveys, Monthly Indicators

#### Wards Automotive

RS-3S (Truck Retail Sales), FS-3 (Truck Factory Sales)

#### Witte Econometrics

U.S. Econometric Forecasting Model





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