Draft Notes of April 22, 2021

Surface Transportation Board

Virtual RETAC Meeting 1:00 PM EDT April 22, 2021

Meeting commenced at 1:08 PM with opening welcome by Chairman Martin Oberman, followed by remarks from Vice Chairman Robert Primus, and Members Ann Begeman, Patrick Fuchs, and Michelle Schultz.

Members in attendance at the meeting were:

- Brian Fuller, Southern Co. – Committee Co-chair
- Ginger Adamiak, KCS
- Jeff Eliason, CHS
- Robert Guy, SMART TD
- Robert Hulick, Trinity
- Lee Johnson, Hess Corporation
- Ed McKechnie, Chambers Conlon & Hartwell
- John Miller, BNSF
- Phillip Obie II, Santee Cooper
- Anthony Reck, Paducah & Louisville Railway
- Bette Whalen, Lower Colorado River Authority
- Daniel Sabin, IANR – Secretary-Treasurer
- Kent Avery, PBF Refining
- Steve Ewers, Norfolk Southern Railway
- Brad Hildebrand, Cargill
- Mark Huston, Louis Dreyfus Corp.
- Adam Langson, CSX
- Dan McLaughlin, Union Pacific
- Doug Noem, SD Corn Growers Association
- James Rader, Greenbrier Management
- Emily Regis, Arizona Electric Power Coop

STB staff present were:

- Kristen Nunnally, RETAC DFO
- Lisa Novins
- Stephanie Borges
- Michael Small
- Danielle Gosselin
- Adam Kress
- Ellen Erichsen
- Amanda Gorski
- Lucy Marvin
- Craig Keats
- Bill Brennan
- Janie Sheng

Others present:

- Adam Sparger, United States Department of Agriculture
- Matt Cross, ATC Productions

Opening remarks by Brian Fuller

RETAC Rail Segment Co-Chair Vote:

Daniel McLaughlin, Union Pacific Elected Co-Chair
Industry Segment Updates

Oil Industry Segment Update

Lee Johnson of Hess Corporation presented the Oil Industry Segment Update (1:17 PM)

Oil Industry Segment Market Environment

- Global production/consumption was balanced except for Q-2 2020 drop in consumption due to the Covid-19 Pandemic. We are now nearing equilibrium and EIA is forecasting continued growth.
  - US Crude Oil Production was at a high of 12.86 million Barrels Per Day (MBPD) in November 2019 to a low of 10.20 MBPD in May 2020, a drop of 15.3%.
  - US land rig count down from 770 in March 2020 to 416 in April 2021.
  - New Mexico and Oklahoma combined production levels dropped from 1.65 MBPD in February 2020, then dropped to 1.52 MBPD in January 2021. Texas production levels dropped from 5.95 MBPD in February 2020 to 3.19 MBPD in May 2020, then recovered to 4.74 MBPD in July 2020 and held firm to 4.66 MBPD in January 2021. Total Texas, Oklahoma and New Mexico production was at 5.95 MBPD in February 2020, restoring to 6.18 MBPD in January 2021.
  - Crude by Rail (CBR) within PADD 3 and to West Coast dropped from a high of 12.86K BPD in February 2020 to zero in April 2020, climbing to 6.0 BPD in May 2020 and was up and down with current levels of 2.94 BPD in January 2021.
  - Williston Basin Production dropped from 1.56 MBPD in February 2020 to 0.90 MBPD in May 2020, then coming back to 1.15 MBPD in January 2021 with rail modal share CBR at a low level of 0.30 to about 0.18 during the same period with pipelines handling most of the production.
  - Total US and Canadian CBR climbed from 41.93K BPD in February 2020 to 269.36K BPD then dropped to 52.83K BPD in June 2020 peaking at 225.29K BPD in December 2020, then 165.32K BPD in January 2021. There has been no crude by rail to Canada since March 2020.
  - Canadian CBR to US destinations dropped from 327.57K BPD in February 2020 to 52.83K BPD in June 2020. Fluctuations since then have been as high as 225.30K BPD in December 2020 dropping to 165.25K BPD in January 2021.

Summary

- Global crude oil consumption exceeding production with equilibrium 3Q 2021
- WTI and Brent pricing have recovered and exceed pre-pandemic levels
• US production is down 15.3% and rig count is down 46% both YOY
• US Southwestern production has recovered and exceed pre-pandemic levels
• Southwest CBR is down 77% from already small pre-pandemic levels
• Bakken production is down 26.3%, pipe down 15.5% and rail down 40% YOY
• Total CBR in the US and Canada down 78% from January to June
• CBR volumes from US to Canada disappeared; Canada to US are down 38%; to the Gulf down 61%
• DAPL’s future uncertain with litigation ongoing; status conference held April 10th:
  • COE did not exercise its right to shut down DAPL over the vacated easement; for now
  • COE reported it plans to complete a new EIS by March 2022; court and plaintiffs frustrated
  • DOJ advised Court that the Administration will not shut down DAPL while EIS is conducted
  • Court date scheduled for April 19th has been continued 10 days; results are unpredictable
  • DAPL expected to pursue all available legal options
(Presentation completed 1:35 PM)

**Railcar Segment Update**

James Rader of Greenbrier Management Services provided the Railcar Industry Segment Report

Industry order activity was severely hampered by COVID-19 and energy market collapse.

**Freight Car Activity**

Freight car orders remained strong in 2018 with a drop off in orders continually in 2019 and first half of 2020 but with an increase in deliveries in 2019. Backlog has been reduced significantly since 2015.

**Tank Car Activity**

Strong tank car orders commencing in 2018 resulted in both increased deliveries and backlog of cars to be delivered with few cars ordered by Q-2 2020 and a backlog reduced to under 16,500 cars.

**Industry Deliveries have Declined Since Late 2019**

• Freight car orders were 13,626 in Q-2 2018 and at 2,704 in Q-4 2020
• Deliveries were 11,143 in Q-1 2018 and at 3,993 in Q-4 2020
• Backlog was up to 45,711 in Q-4 2018 and at 18,111 in Q-4 2020
• Tank car orders were 11,316 in Q-3 2018 and at 693 in Q-4 2020
• Deliveries peaked at 6,358 in Q-4 2019 and down to 2,223 in Q-4 2020
• Backlog was at a high of 35,452 in Q-1 2019 and down to 16,487 in Q-4 2020

**Railcar Delivery Outlook Expected to Contract**

• Limited orders in recent quarters is driving the lower 2021 delivery forecast
• Freight cars are expected to be the primary driver of deliveries over the next few years
• Flammable liquid regulations will pull-forward replacement demand for next 5 years
• Tank cars, 3,500-5,500 c.f. covered hoppers for grain, >5,500 cf covered hoppers for plastics and intermodal flat cars are expected to support future deliveries
Coal demand continues to decline, leading to older cars being scrapped

- Coal carloads are down 4.1% year-to-date through April 3, 2021
- The railcar fleet servicing coal will see continue attrition in the coming years.
- 28% of gondolas and 33% of open hoppers in the North American fleet are in storage as of March 2021.
- Current Estimated Fleet Sizes:
  
  Coal Gon about 98K  
  Coal Hopper about 94K

Percent of coal railcars in storage rose sharply starting in late 2019 before recent reductions in idle rates

- North American coal carloads are down 4.1% through Week 13 compared to the same time 2020
- Open hopper storage has recently spiked before starting to return to lower levels while gondola storage has steadily decreased over the last year.

Energy Related Cars Returning to Storage

- Covered hoppers have been coming out of storage, but remain well above historically normal levels, likely due to elevated Small Cube storage.
- Tank car storage has been decreasing consistently since this past summer but remains above pre-pandemic rates.

Liquified Natural Gas by Rail

PHMSA, June 2020

- The Pipeline and Hazardous Materials Safety Administration (PHMSA) issued a final rule authorizing the bulk transportation of liquified natural gas (LNG) by rail.
- Specifically, the rule permits the bulk transportation of LNG in DOT-113C120W9 (DOT-113) specification tank cars with enhanced outer tank requirements and additional operational controls.

Biden Administration

- The PHMSA final rule was challenged in the D.C. Circuit by several environmental groups and 15 states.
- The Biden Administration indicated its intent early on to review the LNG-by-rail rule.
- At the request of Congress, an ad hoc committee appointed by the National Academies of Sciences, Engineering, and Medicine will review DOT’s plans for LNG by rail. The review will last 24-months.
- The full-scale tank car impact testing and analysis of the DOT-113 tank car should be completed by the FRA this summer/fall. These tests should evaluate the performance and crashworthiness of DOT-113 specification tank cars for LNG by rail.
## Crude Oil Fleet Size & Composition

<table>
<thead>
<tr>
<th></th>
<th>Total Fleet</th>
<th>% DOT 111</th>
<th>% CPC-1232</th>
<th>% 117/120</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>40,333</td>
<td>54%</td>
<td>46%</td>
<td>0%</td>
</tr>
<tr>
<td>2014</td>
<td>50,803</td>
<td>33%</td>
<td>67%</td>
<td>0%</td>
</tr>
<tr>
<td>2015</td>
<td>48,920</td>
<td>14%</td>
<td>82%</td>
<td>4%</td>
</tr>
<tr>
<td>2016</td>
<td>24,865</td>
<td>3%</td>
<td>81%</td>
<td>16%</td>
</tr>
<tr>
<td>2017</td>
<td>21,569</td>
<td>1%</td>
<td>74%</td>
<td>25%</td>
</tr>
<tr>
<td>2018</td>
<td>25,470</td>
<td>0%</td>
<td>54%</td>
<td>46%</td>
</tr>
<tr>
<td>2019</td>
<td>32,361</td>
<td>0%</td>
<td>27%</td>
<td>73%</td>
</tr>
<tr>
<td>2020</td>
<td>26,377</td>
<td>0%</td>
<td>16%</td>
<td>84%</td>
</tr>
<tr>
<td>Q-1 2021</td>
<td>11,519</td>
<td>0%</td>
<td>8%</td>
<td>92%</td>
</tr>
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</table>

## Ethanol Fleet Size & Composition

<table>
<thead>
<tr>
<th></th>
<th>Total Fleet</th>
<th>% DOT 111</th>
<th>% CPC-1232</th>
<th>% 117/120</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>27,109</td>
<td>98%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>2014</td>
<td>30,734</td>
<td>93%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>2015</td>
<td>34,910</td>
<td>88%</td>
<td>11%</td>
<td>1%</td>
</tr>
<tr>
<td>2016</td>
<td>36,069</td>
<td>81%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>2017</td>
<td>38,885</td>
<td>66%</td>
<td>9%</td>
<td>25%</td>
</tr>
<tr>
<td>2018</td>
<td>37,676</td>
<td>50%</td>
<td>8%</td>
<td>42%</td>
</tr>
<tr>
<td>2019</td>
<td>36,970</td>
<td>34%</td>
<td>5%</td>
<td>62%</td>
</tr>
<tr>
<td>2020</td>
<td>36,580</td>
<td>26%</td>
<td>3%</td>
<td>70%</td>
</tr>
<tr>
<td>Q-1 2021</td>
<td>31,335</td>
<td>21%</td>
<td>3%</td>
<td>76%</td>
</tr>
</tbody>
</table>

## Other Flammable Liquid Fleet Size & Composition

<table>
<thead>
<tr>
<th></th>
<th>Total Fleet</th>
<th>% DOT 111</th>
<th>% CPC-1232</th>
<th>Pressure</th>
<th>% 117/120</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>40,205</td>
<td>71%</td>
<td>8%</td>
<td>21%</td>
<td>0%</td>
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<tr>
<td>2014</td>
<td>40,934</td>
<td>66%</td>
<td>13%</td>
<td>21%</td>
<td>0%</td>
</tr>
<tr>
<td>2015</td>
<td>41,893</td>
<td>66%</td>
<td>15%</td>
<td>19%</td>
<td>0%</td>
</tr>
<tr>
<td>2016</td>
<td>42,549</td>
<td>61%</td>
<td>18%</td>
<td>17%</td>
<td>3%</td>
</tr>
<tr>
<td>2017</td>
<td>42,844</td>
<td>54%</td>
<td>22%</td>
<td>16%</td>
<td>7%</td>
</tr>
<tr>
<td>2018</td>
<td>43,321</td>
<td>47%</td>
<td>24%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>2019</td>
<td>52,870</td>
<td>43%</td>
<td>26%</td>
<td>12%</td>
<td>19%</td>
</tr>
<tr>
<td>2020</td>
<td>59,666</td>
<td>37%</td>
<td>24%</td>
<td>9%</td>
<td>30%</td>
</tr>
<tr>
<td>Q-1 2020</td>
<td>46,347</td>
<td>24%</td>
<td>24%</td>
<td>9%</td>
<td>34%</td>
</tr>
</tbody>
</table>

**DOT 117J & DOT 120J Fleet Growth**

February 2021 – Fleet size increased by 5,339 cars, to 44,237 from January 2020
DOT 117R Fleet Growth

December 2020 – Fleet size increased by 5,745 cars, to 36,550 from January 2020

Over 50,000 Tank Cars Required to Replace/Retrofit to DOT-117J or retrofitted to DOT-117R by 2029

<table>
<thead>
<tr>
<th>Commodity/Car Type</th>
<th>2023</th>
<th>2025</th>
<th>2029</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol All DOT-111</td>
<td>10,654</td>
<td></td>
<td>10,654</td>
<td></td>
</tr>
<tr>
<td>Non-Jacketed CPC-1232</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crude Oil, Ethanol</td>
<td>4,153</td>
<td></td>
<td>4,153</td>
<td></td>
</tr>
<tr>
<td>Jacketed CPC-1232</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Flammable Liquids</td>
<td></td>
<td>35,771</td>
<td>37,385</td>
<td></td>
</tr>
<tr>
<td>Packing Group I, II, &amp; III</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>10,654</td>
<td>4,153</td>
<td>36,771</td>
<td>52,697</td>
</tr>
</tbody>
</table>

Cars per Month Required vs. Last Month Actual Production

<table>
<thead>
<tr>
<th>Production</th>
<th>Cars/Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cars/Month to Meet Deadlines</td>
<td>815-1,146</td>
</tr>
<tr>
<td>DOT-117 Production Avg. Last 3 Months</td>
<td>607</td>
</tr>
<tr>
<td>DOT-117R Production Avg. Last 3 Months</td>
<td>485</td>
</tr>
<tr>
<td>Total Production Last 3 Months Average</td>
<td>1,092</td>
</tr>
<tr>
<td>Surplus Production</td>
<td>-54 - 277</td>
</tr>
</tbody>
</table>

(Railcar presentation concluded at 1:50 PM)

Ethanol/Biofuels Segment Update

Jeff Eliason from CHS provided the Ethanol/Biofuels Segment Update:

US Corn Supply and Demand charts for years 2018-2020:

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Supply</td>
<td>16,508</td>
<td>15,883</td>
<td>16,126</td>
</tr>
<tr>
<td>Total Use</td>
<td>14,288</td>
<td>13,963</td>
<td>14,775</td>
</tr>
<tr>
<td>Carry Out</td>
<td>2,221</td>
<td>1,919</td>
<td>1,352</td>
</tr>
</tbody>
</table>

In millions of bushels

Corn is at its lowest supply level since 2012.

US Ethanol Production vs. Milling Margin

April 2021 Weekly Ethanol Production average an annualized estimate of 14.541 billion gallons with margins up 4.2 cents per gallon to 37.6 cents per gallon. Current production at 78% of available capacity.
In-Transit Inventory vs. Rail Performance

- Dwell time in terminals and train speeds influences the ethanol inventory on wheel adjustments, which requires more cars to handle the same volume levels. Four week rolling average in transit ethanol inventory increased as production has been somewhat restored from a 50% drop in gas consumption due to the pandemic. Dwell time has fluctuated with weather issues but train speeds have been mostly stable.

Monthly Biodiesel Production

Production volumes through December 2020 are running slightly higher than 2019 volumes and lower than 2018 volumes.

Renewable Diesel

Renewable diesel production is consuming an increasing level of feedstock and will increase from 39,014 million lbs. in 2013 to 47,224 million lbs. in season 2020-2021. The predominance of feedstock comes from soybean oil.

Summary

- Ethanol production still below pre pandemic levels by about 10%
- Ethanol exports for calendar 2020, totaled 1,438M Gals, 6.4% less than 2019 which totaled 1,536 MG, 11% less than in 2018.
- Margins in ethanol have tightened with rising corn prices, overshadowing increase in ethanol sales price.
- Margins in bio diesel have been suppressed due to feed stock pricing and increases in Renewable Diesel production will result in Non-Integrated Bio Diesel plants having difficulty staying afloat.
- Rail lease fleets-increasing steel prices impacting leases, about 1/3 of fleet still needs to be changed out, the preferential treatment of DOT 117J cars is slowing down the changeover.
- Rail service experiencing challenges on both power and crew availability-would like to see staffing continue to increase as we continue to utilize rail for distribution.

(Presentation concluded at 2:28 PM).

Utilities Segment Update

Bette Whalen of Lower Colorado River Authority presented the Utilities report

Effects of Covid on Utilities

- Difficult to parse out effects that could be solely attributed to Covid pandemic
- Possible that some effects could be a combination of PSR decisions and operating practices that have been implemented which may have been amplified when the pandemic occurred
- For utilities, there was a shift from commercial/office load to residential load causing utilities to analyze the change in electricity demand
- Trending 2020 vs 2019 in the US was a reduction of coal carloads of 44.0% and petroleum and products reduced by 25.7%. For 2021 vs. 2020, we are predicting a continued reduction in coal carloadings of 5.6% and petroleum and products reduced by 22.6%
• According to EIA on May 7, 2020 daily electricity demand impacts from COVID-19 mitigation efforts differed by region
• Shifts in demand for residential, commercial, industrial and transportation by region likely impacted shifts in rail transportation service by region

Morgan Stanley rail data-total carloads indicated varied coal loadings and impacts for each railroad separately indicating traffic volumes in 2019, compared to 2020 and YTD 2021.

NCTA OTP survey observations:
• Inconsistency for both shippers and rail carriers during 2020-some rail service improved, some declined, and some remained unchanged.
• Comments from shippers included:
  ▪ “projected ETAs are continuing to slip”
  ▪ “train bunching issues and combination trains with 300 cars arriving at once”
  ▪ “we never know when the RR crew will show up to pick up empty train after released from the plant – sometimes up to 24 hours later”
  ▪ “add a metric for when shipper requests RR to move/pick up empty train set and/or cars – RR may take 3+ weeks to pull an empty train”
• Modifications may be made to the survey to capture more real time data for shippers

Utility Segment Update

• Anecdotal information suggests that the effect of the pandemic has been different for utilities.
• Regional differences in rail service
• Regional differences in electricity demand shift
• Overlap of other contributing factors such as gas prices, weather events and PSR

(Railroad Employee Injuries 2000-2020: Down 52% (Per 100 employee equivalents).

(Railroads are safer than most other industries (Injuries per 200,000 employee-hours). Industries compared: Railroads; Mining; All private Industry; Construction; Inland water freight transportation; Manufacturing, Trucking; Food and beverage stores; Agriculture and Air Transportation. (List in order of safety performance).
Coal Generation Continues to Slip

Percentage of U.S. Coal Generated Electricity Generation:


Sharp Decline in Rail Carloads of Coal

Millions of originated carloads of coal for Class I railroads:

2007-7.5
2008-7.7
2009-6.8
2010-7.1
2011-7.1
2012-6.2
2013-6.0
2014-6.1
2015-5.3
2016-4.2
2017-4.5
2018-4.4
2019-4.0
2020-3.0

U.S. Rail Revenue from Coal

($ billions) AAR chart showed annual gross revenue for Class I railroads from 2007 through 2020. 2007 coal revenue about $11.8 billion, peaking in 2011 at about $16.2 billion, falling annually to about $9 billion in 2016 with slight upticks in 2017 and 2018 to about $10.2 billion, then dropping to about $9.1 billion in 2019 and $6.1 billion in 2020.

Coal as % of Rail Revenue

AAR chart showed annual coal % of revenue for Class I railroads from 2007 through 2019. 2007 at 21%, peaked in 2009 at about 24.7%, dropping annually to about 12.3% in 2019 and to 9.2% in 2020.

U.S. Rail Carloads of Crude Oil by Quarter

Chart-Annual Totals:

<table>
<thead>
<tr>
<th>Year</th>
<th>Originated</th>
<th>Terminated</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>409,949</td>
<td>482,525</td>
</tr>
<tr>
<td>2016</td>
<td>211,986</td>
<td>271,154</td>
</tr>
<tr>
<td>2017</td>
<td>128,967</td>
<td>208,036</td>
</tr>
<tr>
<td>2018</td>
<td>173,159</td>
<td>313,478</td>
</tr>
<tr>
<td>2019</td>
<td>213,563</td>
<td>387,430</td>
</tr>
</tbody>
</table>

U.S. Rail Carloads of Industrial Sand by Quarter
Chart showed 2012-2019 about 75,000 in 2012 climbing annually to about 140,000 in 2014; dropping annually to about 74,000 in 2015; climbing back to about 190,000 in 2017; then dropping continually to about 25,000 in Q-2 2019 and slightly higher to 51,000 at year end.

U. S. Rail Carloads of Ethanol

Chart showed mostly continual growth from about 65,000 in 2005 to about 340,000 in 2011; slight drop in 2012 to about 305,000, with a peak of about 370,000 in 2017 and ending at about 360,000 in 2018.

Massive Spending on Infrastructure & Equipment*

Chart showed $ Billions for Class I railroads:

- 2010-20.7
- 2011-23.3
- 2012-25.5
- 2013-25.1
- 2014-28.0
- 2015-30.3
- 2016-25.9
- 2017-24.8
- 2018-24.9
- 2019-25.1
- 2020-22.0

*Capital spending + maintenance expenses.

Railroad Spending on Infrastructure and Equipment:

Chart showed breakout of Class I spending by Infrastructure vs. Equipment

2001 nearly even between infrastructure and equipment at about $7.5 billion each. Continual increase to 2015 with about $14 billion in equipment and about $16.2 billion in infrastructure. Slight drops in both categories with 2019 spending at about $10.9 billion in equipment and $14.1 billion in infrastructure. 2020 was reduced at about $9 billion in equipment and $13.5 billion in infrastructure.

U. S. Rail Carloads of Coal vs. U. S. Electricity from Coal

Chart showed direct correlation of weekly coal carload originations with millions of megawatt hours produced by coal.

Total U. S. Rail Carloads

Chart showed six week moving average showed significant drop in Q-2 2020 carloads compared to same period 2018 and 2019, (maintained nearly level above 260,000 carloads in 2018 and about 250,000 carloads in 2019 vs. dropping to about 187,000 carloads in 2020). Traffic in 2020 restored to about 219,000 but still significantly below 2018-2019. Trend for 2021 indicates traffic levels under 2020 but climbing by week 13 to a higher level than the same point in 2020.

Total U. S. Rail Intermodal Units
Chart showed six week moving average showed significant drop in Q-2 2020 intermodal units compared to same period in 2018 and 2019, although a significant increase in Q-3 2020 exceeded 2019 levels of about 267,000 units and met higher 2018 performance of greater than 280,000 units in Q-3 with a significant drop in Q-4. 2021 is currently trending to exceed levels of both prior years.

**U. S. Rail Carloads of Coal**

Chart showed six week moving average with 2018 in range of 78,000 to 92,000 carloads; 2019 in range of 72,000 to 83,000 carloads; and 2020 dropped from 70,000 carloads in week 1 to 46,000 carloads in week 22. 2020 grew gradually to reach over 60,000 carloads by week 40 and ended under 60,000 carloads at year end. 2021 started at year end 2020 levels and is at about 63,000 carloads in week 13.

**Average Weekly U.S. Rail Carloads of Coal: January 2014 -September 2020**

Chart showed the average weekly carloads of coal dropped from a high of about 112,000 in 2014, dropping substantially in 2016 to a low of about 62,000 and slight increases through 2018 then dropping to a low of about 45,000 in early 2020. Ending week shown for 2020 showed an average of about 62,000 carloads. No data is shown yet for 2021.

**U. S. Carloads Excluding Coal**

Chart showed the six-week moving average of non-coal carloads which had considerable decline in Q-2, 2020, dropping from a high of about 170,000 carloads in Q-1 to under 140,000 carloads. Traffic levels restored to about 162,000 by the end of Q-3 and dropping further at year end to about 158,000. 2021 is trending about 169,000 carloads at the end of Q-1.

Mr. McLaughlin then provided the rail industry statement:

**Rail Industry Statement for the April 22, 2021 RETAC Meeting**

Chairman Oberman; Vice Chairman Primus; Commissioners Begeman, Fuchs, and Schultz; and fellow members of RETAC, good morning.

It is not surprising that when everything shuts down, the economy is going to suffer, and that’s what happened last year around this time. GDP, a measure of the total economy, fell an annualized 31% in the second quarter of 2020, by far the biggest quarterly decline in U.S. history.

It took some time, but people and firms figured out how to reconfigure their operations to get back to making and moving things, and many businesses in many regions opened back up. For railroads and others, this involved paying utmost attention to safety; implementing telework arrangements where practical; and making all the other changes we’ve gotten used to over the past year. The result was a strong rebound for the economy in the third quarter of 2020, with a corresponding increase in rail traffic volumes for many traffic categories.

Economic growth slowed sharply in the fourth quarter last year, to around 4%, driven largely to a surge in coronavirus cases and another round of shutdowns for much of the economy. Still, by the end of 2020, overall rail volumes were not that far off of 2019 levels.
Official data have not yet been released, but most economists think economic growth improved to around 6% in the first three months of 2021. The hope is this will be the beginning of a sustained economic surge. As vaccinations become more and more widespread and we get closer to “herd immunity,” covid-19 might finally be brought under control. That would increase consumer and business confidence, leading to more consumer and business spending, more business investment, and a stronger jobs market. The recently passed $2 trillion stimulus package, the most recent in a series of government covid relief packages, should spur economic activity in the months ahead as well.

To be sure, a rapidly growing economy in the near term is not guaranteed. Variants of the coronavirus might prove less susceptible to existing vaccines, while the number of people opting out of vaccines might have economic consequences. And vaccine rollouts in most other countries, including key U.S. export markets, are not as far along as they are in the United States.

That said, there is good reason to think that the worst is behind us. If that is true, demand for rail service can be expected to grow. Railroads are willing and able to meet this challenge safely and reliably.

Overall Class I carload volume fell 7% in 2020 from 2019, but, as is always the case, different rail markets changed at different rates and in different directions.

For coal, 2020 meant further carload declines. Historically, electricity generation accounts for more than 90% of U.S. coal consumption. According to the Energy Information Administration, coal accounted for 19% of total U.S. electricity generation in 2020, down from 23% in 2019, 28% in 2018, and 45% in 2010. U.S coal consumption was down to 477 million tons in 2020, the lowest since 1965 and down 19% from 2019. Meanwhile, U.S. coal exports, a significant share of which move by rail, were down 26% in 2020 from 2019.

As a consequence, Class I coal originations were down to 3.0 million carloads in 2020, down 25% from 2019 and the lowest for any year since the early 1970s. Coal carloads have continued to fall in the first quarter of 2021.

The pandemic led to a global oil and natural gas glut, causing reduced transportation demand for oil-related products. For example, originated carloads of crude oil on U.S. Class I railroads in 2020 were 138,000, down 35% from 2019 and down 72% from their peak in 2014. Class I terminated carloads of crude oil, which include crude oil that originated in Canada, were 236,000 in 2020, down 39% from 2019.

It is too soon to know the impact the revocation of the permit to finish construction of the Keystone Pipeline will have on crude by rail volumes, in part because energy markets remain unsettled. The United States is by far the main export market for Canadian crude oil, and the massive investments in recent years by Canadian oil producers will not simply be abandoned. That means Canadian crude oil has to get to market somehow. Railroads operating in the
United States have proven themselves fully capable of meeting crude oil transportation needs safely, reliably, and cost effectively, and they will continue to do so in the future.

The combination of reduced oil and gas extraction and the substitution of locally sourced frac sand in place of sand that had been shipped in by rail led to a 55% decline in 2020 in rail carloads of industrial sand, which is mainly frac sand.

On the positive side, rail carloads of grain, especially soybeans, surged in the second half of 2020 and into 2021, mainly because of higher exports to China and elsewhere. About one-third of U.S. corn and soybean exports move by rail, as do about two-thirds of wheat exports. Since the U.S. is the world’s biggest grain exporter, that means an extremely large amount of export grain moves by rail.

The other big positive for railroads right now is intermodal. Like other rail traffic categories, intermodal suffered a large volume decline at the start of the pandemic. However, unlike most other categories, intermodal passed 2019 levels around August of last year and then kept rising. October 2020 was the highest-volume month ever for U.S. intermodal up to that point, and October’s record was broken in January 2021.

The lesson is that trade is good for railroads. We see that for grain and for intermodal, but it also applies to various degrees to just about everything that railroads haul.

The historic winter storms in February and the subsequent bubble of traffic that needed to be worked off (into March) has been a headwind for rail performance in the first quarter of this year. The fluidity of rail intermodal is being impacted by congestion at West Coast ports caused by ongoing heavy — in some cases record-setting — port volumes that importers and port operators largely did not foresee. Railroads are working closely with their partners at ports and further inland to move the massive amounts of traffic being generated and to help ensure that the supply chain continues to work for U.S. producers and consumers.

As you know, the railroads and their employees initiated a new round of national collective bargaining under the Railway Labor Act by exchanging Section 6 notices in November 2019. This triggers a lengthy process that may include direct negotiations, mediation, arbitration, several cooling off periods, and in some cases, presidential appointment of an emergency board to recommend settlement terms. This process works: there have been no service disruptions arising from rail bargaining since 1992.

National negotiations pursuant to the Section 6 notices formally began in early 2020. After a brief pandemic-related interruption, the carriers and unions involved in the national negotiations have resumed a regular meeting schedule and continue to be engaged in direct negotiations.

The past decade has been the safest in rail history, and railroads continue to work diligently, in cooperation with policymakers, their employees, suppliers, and customers, to identify new technologies, operational enhancements, training, and other ways to further improve their
safety record. I’m happy to report that preliminary data indicate that the rail employee injury rate in 2020 was an all-time low, while the overall train accident rate showed substantial improvement from 2019.

Finally, President Biden recently announced his plan to rebuild the nation’s infrastructure and make our transportation systems more sustainable. Railroads support sensible infrastructure investment and associated efforts to address climate change. While the freight rail industry does not face the same funding challenges as other sectors — in large part because Class I capital spending and maintenance expenses have averaged $25 billion per year over the past decade — railroads stand as ready partners to craft well-designed, viable solutions that will keep our economy and nation moving forward. Railroads recognize that the right policies can ensure a healthy, multi-modal infrastructure network and they stand ready to work with policymakers to ensure this result.

This concludes my comments on behalf of the rail sector. I now invite individual railroads to offer their own comments.

No further comments from the railroads. Brad Hildebrand of Cargill asked what the railroads planned to do to restore service back to higher levels. Dan McLaughlin of UP and John Miller of BNSF responded that both railroads were bringing assets and people back to work with a success rate of about 75% so far on employees coming back to work from furlough.

Bob Guy from the SMART-TD asked why the operational challenges still exist. Dan McLaughlin from UP responded that the challenges have been primarily weather related and two large derailments also caused some traffic delays. Steve Ewers from Norfolk Southern discussed how the Class I railroads were working together for recovery while NS also has been restoring power and crews to the operations. He said that NS was improving but not quite yet where the want to be.

BNSF’s Miller discussed major snow and other weather events while traffic levels restored but recovery has now happened.

Ginger Adamiak from KCS reported that locomotive units were brought back in addition to some leased power, have completed 3 out of 5 conductor training classes and all the railroads were working well together toward recovery.

STB Board Member Patrick Fuchs asked what metrics are going to show recovery.

NS’s Ewers responded train speeds and dwell, car-miles handled per day, contact with customers and the overall health of the industry. KCS’s Adamiak responded on time performance, car speeds and dwell. CSX’s Adam Longson said not a perfect metric exists, but CSX uses trip plan results for a performance measurement. BNSF’s Miller replied to velocity, asset utilization and growth performance.
STB Vice Chairman Robert Primus asked about first-mile, last-mile performance. BNSF’s Miller responded that trip plan performance and customer by customer performance consistency was critical. NS’s Ewers added customer service performance, trip plan performance, local service performance and internal discussions about good service needed to grow traffic, what are the current challenges and what do we need to improve.

Vice Chairman Primus asked how the first-mile, last-mile metrics have been experienced. NS’s Ewers reported it was getting much better after February, UP reported Q-1 performance improved YOY. CSX’s Longson reported a tough winter experience but getting much better to an 85% score.

STB Board Member Michelle Schultz asked if the railroads monitor missed switches. All the carriers responded “Yes.” Board Member Schultz asked if the missed switch information was shared with shippers. All carriers responded “Yes.”

Brad Hildebrand of Cargill said, “Only two railroads are providing the information to customers.”

Emily Regis of Arizona Electric Power Cooperative asked if these other metrics could be reported to shippers. UP’s McLaughlin responded that it is difficult to create an “apples to apples” comparison. NS’s Ewers said it was hard to distinguish the various details among various industries.

The railroad industry updates concluded at 3:39 PM.

**Summary of Written Public Comments from Kristen Nunnally.**

There were none.

**Roundtable Discussion**

Discussion to try to get an October in person meeting if possible.

Discussion on how guest speakers have been helpful in the past.

Ed McKechnie asked about evolutions since RETAC was started and how much the transportation of energy by rail has changed since then.

The next meeting date needs to be determined.

The meeting concluded at 3:46 PM.

Daniel R. Sabin, Secretary and Treasurer for RETAC