BEFORE THE
SURFACE TRANSPORTATION BOARD

URGENT ISSUES IN FREIGHT RAIL SERVICE	))))	**Ex Parte No. 770**

JOINT WRITTEN SUBMISSION OF ARIZONA ELECTRIC POWER COOPERATIVE, INC., FREIGHT RAIL CUSTOMER ALLIANCE, AND NATIONAL COAL TRANSPORTATION ASSOCIATION

Emily F. Regis
Fuel Services Manager
Arizona Electric Cooperative, Inc.
1000 S. Highway 80
Benson, AZ 85602

Ann Warner
Spokesperson, Freight Rail Customer Alliance
Ann Warner LLC
300 New Jersey Avenue, Suite #900
Washington, D.C. 20001

John Ward
Executive Director
National Coal Transportation Association
1616 17th St., Suite 266
Denver, CO 80202

Robert D. Rosenberg
Peter A. Pfohl
Andrew B. Kolesar
Slover & Loftus LLP
224 Seventeenth Street, N.W.
Washington, D.C. 20036
202.347.7170

Attorneys for Arizona Electric Cooperative, Inc., Freight Rail Customer Alliance, and National Coal Transportation Association

Dated: April 22, 2022

BEFORE THE
SURFACE TRANSPORTATION BOARD

URGENT ISSUES IN FREIGHT RAIL SERVICE	))))	**Ex Parte No. 770**

JOINT WRITTEN SUBMISSION OF ARIZONA ELECTRIC POWER COOPERATIVE, INC., FREIGHT RAIL CUSTOMER ALLIANCE, AND NATIONAL COAL TRANSPORTATION ASSOCIATION

Arizona Electric Power Cooperative, Inc. ("AEPCO"), Freight Rail Customer Alliance ("FRCA"), and National Coal Transportation Association ("NCTA") (jointly, "Joint Shippers") respectfully submit this written submission to accompany their in-person presentation to the Surface Transportation Board ("Board" or "STB").

I. Joint Shippers Representatives for the Hearing

The following individuals will be appearing before the Board on behalf of the Joint Shippers. Emily F. Regis is the Fuel Services Manager and also serves as the President of NCTA and the Vice President of FRCA. Ann Warner is the spokesperson for FRCA. John Ward is the Executive Director of NCTA. Robert Rosenberg of Slover & Loftus LLP will appear as counsel for AEPCO, FRCA, and NCTA.

II. Identity and Interest of the Joint Shippers

AEPCO is a nonprofit rural electric generation and transmission cooperative in Arizona. AEPCO serves six member nonprofit distribution cooperatives that provide retail electric power to more than 400,000 residences and business in Arizona, California, and New Mexico, predominately in lower income areas. AEPCO relies on the Union Pacific Railroad ("UP"), BNSF Railway ("BNSF"), and a short line to deliver coal for its power plants. AEPCO is a member of FRCA and NCTA. AEPCO is also a member of the Western Coal Traffic League and joins in the League's separate written submission.

FRCA, www.railvoices.org, is an umbrella membership organization that includes large trade associations representing more than 3,500 electric utility, agriculture, chemical, and alternative fuel companies and their consumers. The mission of FRCA's growing coalition of industries and associations is to obtain changes in Federal law and policy that will provide all freight shippers with reliable rail service at competitive prices.

NCTA, www.movecoal.org, is a non-profit corporation comprised of electric utilities, coal producers, shippers of coal-related commodities, and entities that produce, repair, and manage all facets of railcar component parts and systems as well as services for railcar operations. Its primary purpose is to promote the exchange of ideas, knowledge, and technology associated with the transportation and beneficial uses of coal.

III. Documentation of Service Problems

To help document the nature and extent of the deterioration in rail service, the Joint Shippers are submitting three studies or reports. Mss. Regis and Warner and Mr. Ward have each substantial personal involvement in the compilation and presentation of data for all three studies and will be prepared to discuss them at the hearing.

The first, attached as Exhibit A, is the Utility Update that Ms. Regis and Philip Obie of Santee Cooper presented to the Board's Rail Energy Transportation and Advisory Committee ("RETAC") at its April 20, 2022 meeting. Among other things, the study reviews the extent of coal inventory challenges created by the railroads' service problems, explains how the lack of train crews is a major cause of the service problems, documents the deterioration in train velocity and dwell over the past two years, and reviews the results of a joint survey by NCTA, FRCA, and the National Rural Electric Cooperative Association ("NRECA") of on-time performance for the period July--December 2021, which reveals how utilities have been broadly affected by the deterioration in railroad service.

The second, attached as Exhibit B, is a presentation that Ms. Regis made at the NCTA Spring Conference held April 13, 2022, on the results of a Utility On Time Performance Survey of NCTA members covering the period July 2021--December 2021. This report is a more detailed presentation of some of the information that was provided at the RETAC meeting in Exhibit A. Of particular note is that 92% of the respondents report that rail service issues have impacted their company's coal transportation, 60% report that rail service is worse in 2021 than it was in 2019 and 2020, and 64% report that their companies had to modify their operations in the second half of 2021 because of railroad service issues, disruptions, and delays. 50% of the respondents quantified the adverse impact at $1 million to $10 million, and 20% quantified the impact at $10 million to $20 million.

The third, attached as Exhibit C, is the results of a survey taken April 13, 2022, of utility members at the recent NCTA Spring Conference. Only one-third of the respondents reported that they were receiving satisfactory rail service, and two-thirds reported that their rail service was poor. Over half of the respondents reported that their rail service is getting worse. 89% reported that railroad service has negatively affected their utility's ability to maintain adequate coal inventories, and 78% reported that they had missed planned coal shipments. 0% reported receiving timely and accurate scheduling information form their railroad, and 0% expressed confidence that railroad service will improve soon based on actions the railroads are taking.

In addition, Ms. Regis will be prepared to explain the service problems that AEPCO has experienced.

IV. Additional Substantive Comments

A. Major service disruptions have become recurrent

The rail industry and its customers are confronting another costly and widespread service disruption. Disturbingly, they seem to arise about every eight years, *i.e.*, 2013-2014, 2004-2006, and 1996-1998, and are in addition to more localized disruptions that occur, such as with Precision Scheduled Railroading ("PSR").

The current situation follows the same pattern as previous service crises, particularly in that there have been warnings for at least two years. Also as before, the railroads repeatedly said that everything is fine, despite snowballing evidence to the contrary. Again, as before, the consequences are that the railroads have benefitted, while shippers, receivers, the end-use customers, and the general economy have suffered. The railroads are again quick to frame any regulatory intervention as nothing less than "reregulation," even as shippers suffer poor service, demand goes unmet, and railroad operating ratios continue to fall even as their profits and stock prices continue to soar.

B. The current problems stem from Precision Scheduled Railroading

The current service disruptions differs from the past disruptions in two significant respects.

First, the stakes are even higher as the nation is recovering from the pandemic, and shortages of goods contributes to both rampant supply chain problems and inflation. The service problems also carry national security ramifications, particularly in terms of the ability to provide exports to vital allies and stabilize global markets.

Second, the problems this time can be directly attributed in substantial part to the railroads' embrace of PSR. The broad adoption of PSR principles contributes to the breadth and depth of the service problems.

The immediate problem is not a lack of adequate track infrastructure to meet growing demand. For the past six months, the railroads have actually handled less volume than they did a year earlier. The problem also does not appear to be a lack of locomotives *per se*, but instead the substantial number that have been placed in storage and the carriers' limited ability to return them to active service.[1]

The more immediate cause is the reduction in employee headcounts, particularly train and engine crews, that was driven by PSR and the carriers' directive to reduce operating ratios. *E.g.*, https://www.wsj.com/articles/union-pacific-to-cut-nearly-3-000-jobs-11579798292 (January 23, 2020). Experienced train crew and other

[1] However, the railroads appear to have disposed of a significant number of locomotives. Limitations on their ability to return locomotives to service appear tied to headcount reductions.

personnel were furloughed, impairing the railroads' ability to meet the needs of customers and the general economy. *E.g.*, https://www.wsj.com/articles/shortage-of-railroad-workers-threatens-recovery-11626953584 (July 22, 2021). Those furloughed employees then found other employment or decided that the railroad wages were not sufficient to overcome the demanding work conditions. The railroads now find themselves having to compete in a tougher job market to attract new employees that need to undergo substantial training. *E.g.*,https://www.wsj.com/articles/union-pacific-says-covid-19-left-railroad-understaffed-11642706298 (January 20, 2022). An exacerbating factor is the railroads' focus on longer trains that may have worked on a stopgap basis and contributed to operating ratio reductions, but creates second-order complications, particularly passing sidings that cannot accommodate the longer trains, unless the railroads undertake needed capital expenditures.

C. Additional data and intervention are needed to address structural limitations in the transportation and financial markets

As before, there is a dearth of data that would help illuminate where the operating problems are most acute. Of particular concern is whether the challenges relate to long-haul operations or to the local delivery segment. For that reason, FRCA, NCTA, and others requested that the Board require the railroads to make available separate data on first-mile/last-mile service for non-unit train traffic. *See* https://prod.stb.gov/wp-content/uploads/FRCA-NCTA-NITL-PRFBA-Letter-of-Concern-SUBMITTED.pdf; https://prod.stb.gov/wp-content/uploads/FRCA-NCTA-NITL-PRFBA-Reply-to-AAR-UP-Responses-to-Letter-of-Concern-SUBMITTED.pdf. The railroads opposed such efforts with claims that the data is irrelevant and too burdensome to produce. *E.g.*, https://prod.stb.gov/wp-content/uploads/AAR-response-to-FRCA-09102020.pdf. The continuing and growing problems confirm the need for the data, and there is every reason to think that the railroads already have and regularly utilize the data in their operations.

The railroads' standard response to the request for first-mile/last-mile data or any other oversight or intervention into their operational and commercial practices is that such proposals constitute "reregulation" that will leave the railroads unable to compete in a highly competitive transportation marketplace and quickly return the industry to the pre-Staggers Act era, to the detriment of the carriers and its shippers alike. Such claims are misplaced for the following reasons.

First, the state of the railroad industry is in no way comparable to that of 40-plus years ago. The Berkshire Hathaway acquisition of BNSF occurred over a decade ago, and at a substantial premium to the fair market value of the physical assets. More recently, both Canadian Pacific and Canadian National were able to attract funding to support bids at massive premiums for Kansas City Southern, a carrier that remains revenue inadequate by the Board's own yardstick. Attracting capital is not a problem for the railroad industry as it amply rewards its investors.[2]

Second, railroad claims that they need to retain full flexibility to contend in a highly competitive market for transportation services are substantially overstated. If the

[2] For example, UP achieved a 41.9% return on its equity in 2021. *See* https://www.up.com/cs/groups/public/@uprr/@investor/documents/investordocuments/pdf_unp_4q21_er_news_release.pdf (at p. 6 of the pdf).

market were so competitive, railroads would not be able to raise their rates relative to their costs, and competition would require them to pass any efficiency gains through to their customers. Instead, railroads have been able to use PSR as a vehicle to reduce their operating ratios. Operating ratio reductions reflect operational gains and/or rate increases that the railroads retain for themselves and do not pass through to their customers. The railroads' ability to achieve repeated reductions in their operating ratios over time constitutes strong evidence in and of itself that the market is not competitive. The accelerating service problems provide even more opportunities for the railroads to increase rates without providing meaningful service assurances. Without exposure to meaningful competition, financial penalties, or regulatory oversight, the railroads have little incentive to focus on good customer service or fulfilling their common carrier service obligation.

Third, the railroads are wrong when they claim that any regulatory intervention will drive up rates because the railroads will have to make investments or maintain resources that are unneeded or that customers will be unwilling to pay for, a position the railroads sometimes term "not building the Church for Easter Sunday."

The problem is that Easter Sunday has now persisted for several years, and the problems are getting worse. Shippers had substantial problems with PSR, even before the Covid pandemic. The nation's economic recovery has only made those problems more exposed. Under PSR, the railroads have substantially underinvested and underspent in their systems. In the words of a former Board Chairman, they have done less with less. Again, the poor service might be slightly more tolerable if the savings were being passed through, but they are not. Instead, the railroads' operating ratios go down, and their rates, profits, and stock prices go up.

D. The railroads have adequate resources to address and avoid the service problems, but prefer to fund dividends and buybacks

The railroads' ability to invest the funds needed to provide adequate service is readily apparent. To give one example, UP announced on February 3, 2022, its new program to buyback up to 100 million shares over the three years ending March 31, 2025. *See* https://www.up.com/media/releases/dividend-share-repurchase-nr-220203.htm. At the time, it stock price was $250/share, meaning the buybacks could total $25 billion, if not more. *E.g.* https://www.wsj.com/articles/stock-buybacks-are-on-course-for-another-record-11647304495 (March 15, 2022). In contrast, UP's announced target for capital expenditures for 2022 is just $3.3 billion, as reflected at slide 8 of the pitchbook that UP prepared in February 2022 for a Barclays conference. The pitchbook, available at https://www.up.com/cs/groups/public/@uprr/@investor/documents/investordocuments/pdf_unp_barclays_pitchbook.pdf, is attached as Exhibit D.

The pitchbook also notes at slide 47 that UP returned to stockholders $41.3 billion or 145% of (GAAP-adjusted) net income during 2017-2021, and that its cashflow conversion target for 2022-2024 is 100% (slides 9 and 49). UP, like the other railroads, has ample the funds available to support adequate service, but choses to send those dollars elsewhere. For example UP states on slide 51 of its pitchbook that it is "Investing for Growth," but the slide show capital spending for each year in 2018-2022 is below 5% of revenue. Slides 51 also shows the ongoing reductions in the operating ratio, and slide

53 shows its "Growing Return on Invested Capital." The result is the poor service that UP and other railroads seek to address by asking for "voluntary" railcar reductions from shippers under threat of forced reductions or "metering" as needed. *See* https://www.up.com/customers/announcements/customernews/generalannouncements/CN2022-15.html.

UP and the other railroads would have invested in adequate service if the transportation or financial markets demanded that they do so. However, the transportation market lacks effective competition overall, as reflected in the decreasing operating ratios discussed previously. For its part, the investment community has rewarded the railroads with soaring stock price gains in recent years, linked to the reductions in operating ratios, which constitutes a substantial component of executive compensation. A railroad CEO that displayed insufficient zeal in pursuing PSR and lower operating ratios would likely soon be replaced by someone who did. Since the market and their investors are not supplying adequate incentives for the railroads to provide adequate service, it is up to the Board to do so.

E. The Board should take targeted actions to address the problems

Railroad service problems have reached a point where it is incumbent upon the Board to take appropriate action. FRCA appreciates that the Board may be reluctant to micromanage the railroads' day-to-day activities, but other options are available.

First, when it comes to reducing or rationing service, the railroads (and it is not just UP) should be required to be transparent. Service curtailments leave the railroads with even more power to determine winners and losers among firms, sectors, regions, and communities. Without transparency, shippers, the public, and the Board will have no ability to ascertain if the cutbacks are being applied fairly and appropriately and if shippers have other recourse. Railroad management is incented to favor profits and operating ratios, not volumes, which may harm freight moving in high volumes at relatively low mark-ups. The transparency should extend to reporting both "voluntary" and forced reduction in customer and carrier trainsets and inventory, and to other measures taken by railroads to reduce or control service, including restrictions on new service and train/volume nominations and mandated use of "forecasting tools."

Second, the railroads should be required to present specific, detailed action plans for how they will remedy their problems, including specific milestones in terms of the measures they will take, the results that they expect to achieve, and timing of service restoration. The railroads should then be required to submit weekly progress reports showing the measures that they have or have not taken and the results they have or have not achieved. Under this approach, the railroads will have flexibility to develop their action plans, but they will also have accountability for implementing those plans and demonstrating their effectiveness.

Third, because neither the transportation nor the financial markets provide sufficient incentive for the railroads to provide adequate service, the Board should exercise its authority to do so. Limits should be established on the ability of the railroads to utilize scarcity pricing and otherwise benefit from the operational and service problems that they have created. The railroads should face downside exposure when service suffers due to factors within the railroads' reasonable control. Two types of mechanisms are proposed for the Board's consideration.

The first mechanism is that the Board should exercise its existing authority to impose financial penalties on the railroads for failing to provide adequate service, including their failure to fulfill their common carrier obligation. Under 49 U.S.C. § 11901(a), the Board is empowered to assess a penalty of $5,000, which when increased by inflation is $8,736. An $8,736 penalty may not appear significant on its face. However, the penalty is "for each violation," and "[a] separate violation occurs for each day the violation continues." The penalties could quickly become substantial if applied on a daily basis to individual railcars that are delayed, private railcars that cannot be placed into service, and/or demand for railroad-supplied railcars that cannot be met. On that basis, the dollars should quickly become large enough to get the railroads' attention.

The second mechanism is that the Board should act to limit the ability of railroads and their investors to be enriched from the carriers' substandard service performance. In particular, the railroads' ability to engage in stock buybacks and dividend increases might be suspended until service performance returns to adequate levels. At a minimum, the Board could take such practices into account in determining whether to impose penalties under 49 U.S.C. § 11901(a) and/or in assessing whether the railroad is fulfilling its common carrier obligations under 49 U.S.C. § 11101.

In addition, or as an adjunct, the Board could suspend the applicability of commodity and traffic exemptions under 49 U.S.C. § 10502. In view of the widespread service failures, such exemptions now impede the Board's ability to carry out the national transportation policy at 49 U.S.C. § 10101. In particular, (1) competition and demand are no longer sufficient to establish reasonable rates and service levels; (2) more federal regulatory involvement is needed; (3) railroads are not providing efficient rail transportation despite earning more than adequate revenues; (4) the rail system is not meeting the needs of the public and the national defense; (5) due to their poor service, the railroads are not providing effective competition and coordination between rail carriers and other modes; (6) rates are no longer reasonable for captive shippers and even for those that might appear to have competitive options, despite railroad earnings that exceed the level of revenue adequacy; (7) the railroads continue to benefit excessively from regulatory barriers to entry and exit; (8) railroad service problems are a detriment to public health and safety; (9) rail service is not being provided in many instances, much less efficiently; (10) the railroads are relying on general approaches to rationing service and not considering individual circumstances; (11) the service problems stem in substantial part from failing to provide wages and working conditions appropriate for attracting and retaining needed railroad employees; (12) the railroads are benefiting from the exploitation of their market power at the expensive of shippers, both captive and not; (13) the railroads are not making adequate data available; (14) the service problems are impeding energy conservation; and (15) suspension of exemptions is needed so that service problems can be addressed and resolved.

It may well be appropriate to grant additional remedial authority to the Board, but the above measures are already available to the Board by statute and fully warranted under the circumstances. The Board should act to address the service disruptions because the problems are pervasive, the disruption is costly, and the railroads lack adequate incentive to avoid the problems in the first place.

The previous major railroad service collapses or meltdowns were in 2013-2014 and 2004-2006, or about every eight years, in addition to the more localized or less widespread disruptions that have resulted from PSR and other railroad actions. Each time, shippers, the public, and the economy suffered, but railroads emerged even better off. This time, the Board should address not only the immediate problems, but also take effective action to address the root cause and give the railroads effective long-term incentives to provide adequate service to their customers, so that today's problems will not be repeated in the next eight years.

Respectfully submitted,

Emily F. Regis
Fuel Services Manager
Arizona Electric Cooperative, Inc.
1000 S. Highway 80
Benson, AZ 85602

John Ward
Executive Director
National Coal Transportation Association
1616 17th St., Suite 266
Denver, CO 80202

Ann Warner
Spokesperson, Freight Rail Customer Alliance
Ann Warner LLC
300 New Jersey Avenue, Suite #900
Washington, D.C. 20001

/s/ Robert D. Rosenberg
Peter A. Pfohl
Andrew B. Kolesar
Slover & Loftus LLP
224 Seventeenth Street, N.W.
Washington, D.C. 20036
202.347.7170

Attorneys for Arizona Electric Cooperative, Inc., Freight Rail Customer Alliance, and National Coal Transportation Association

Dated: April 22, 2022

Exhibit A

Utility Presentation made to the Surface Transportation Board
Rail Energy Transportation and Advisory Committee on April 20, 2022

Utility Update

Rail Energy Transportation Advisory Committee

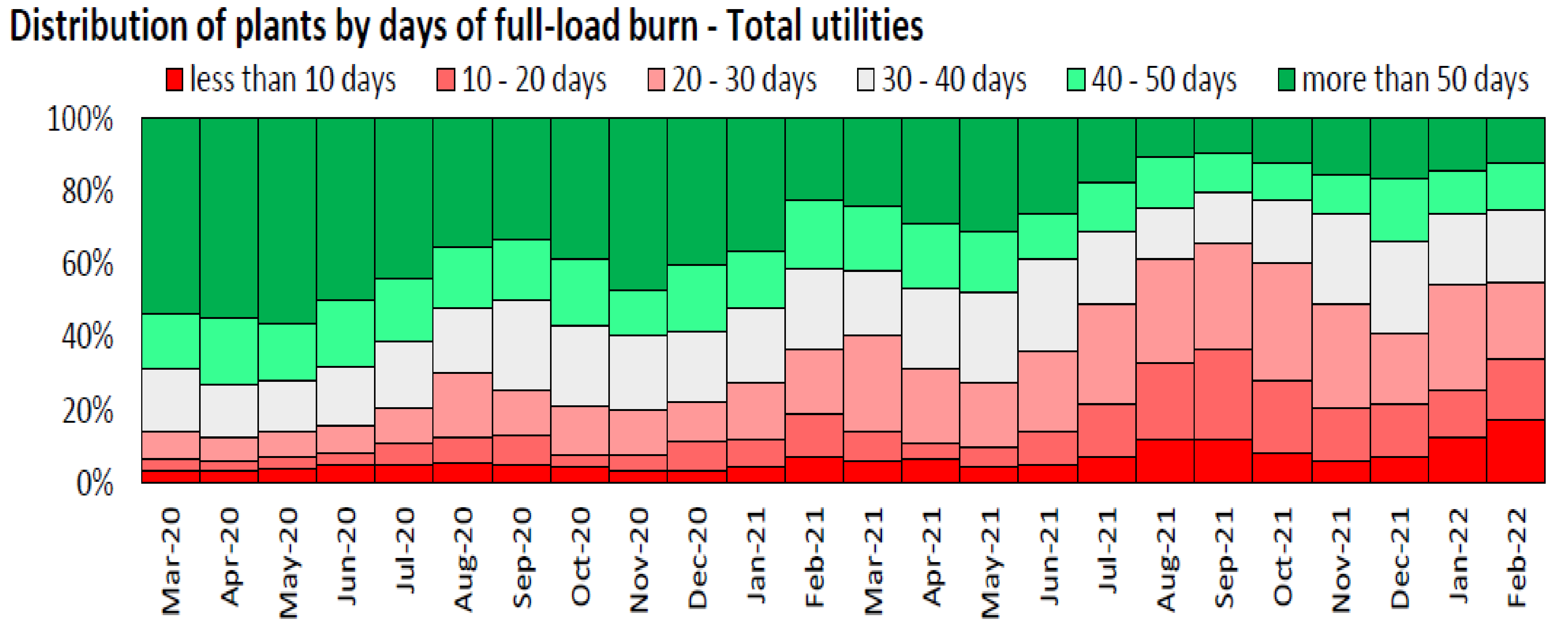
April 20, 2022

Utility Perspective

- Inventory Updates / Challenges
- Railroad Challenges / Affects
- On Time Performance Survey / Concerns

Inventory Challenges

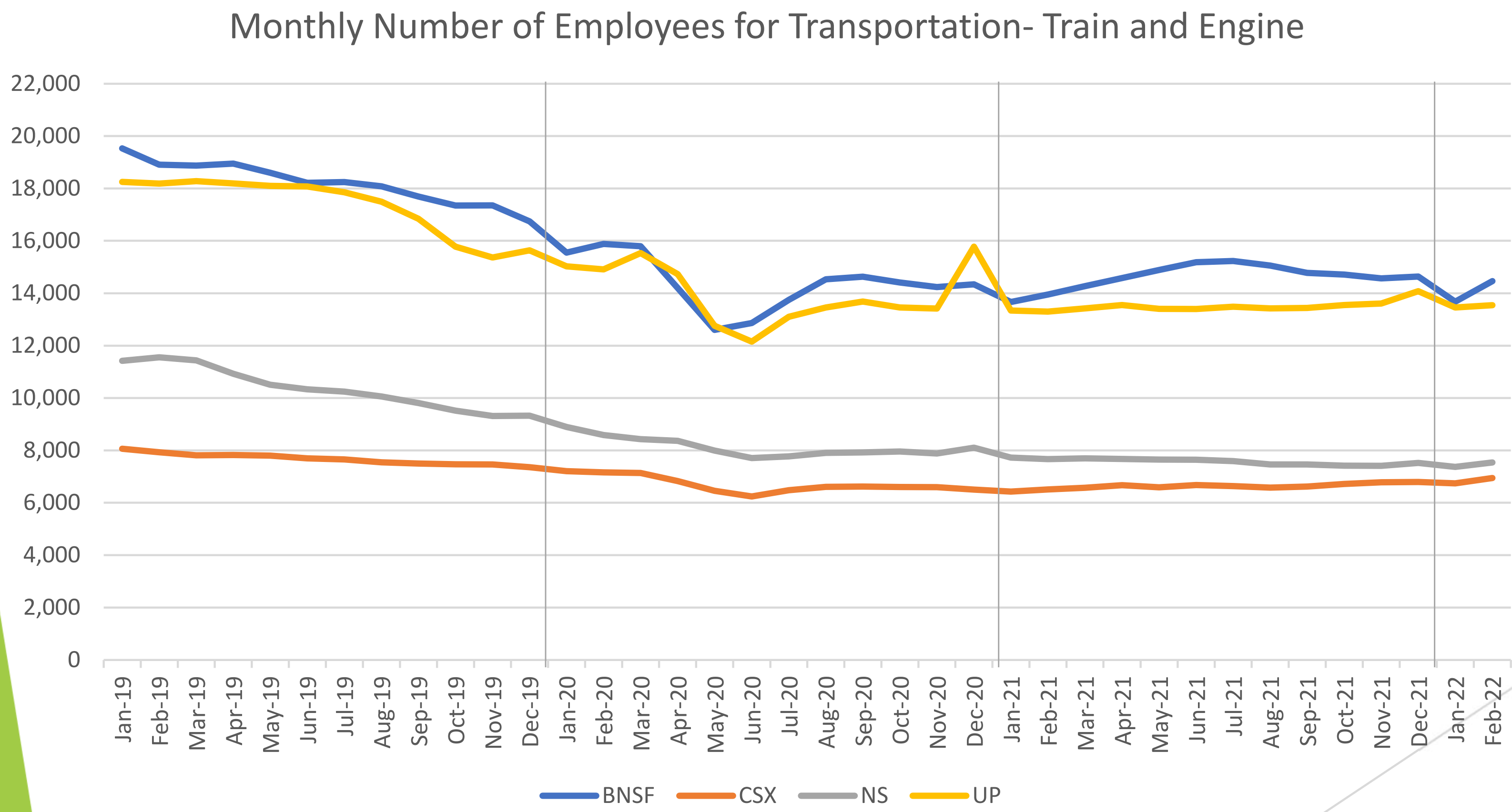
- The percentage of Utilities with days of inventory with 30 days or less continues to grow.



Source: 2022 Energy Venture Analysis- Coal Stockpile Report February 2022

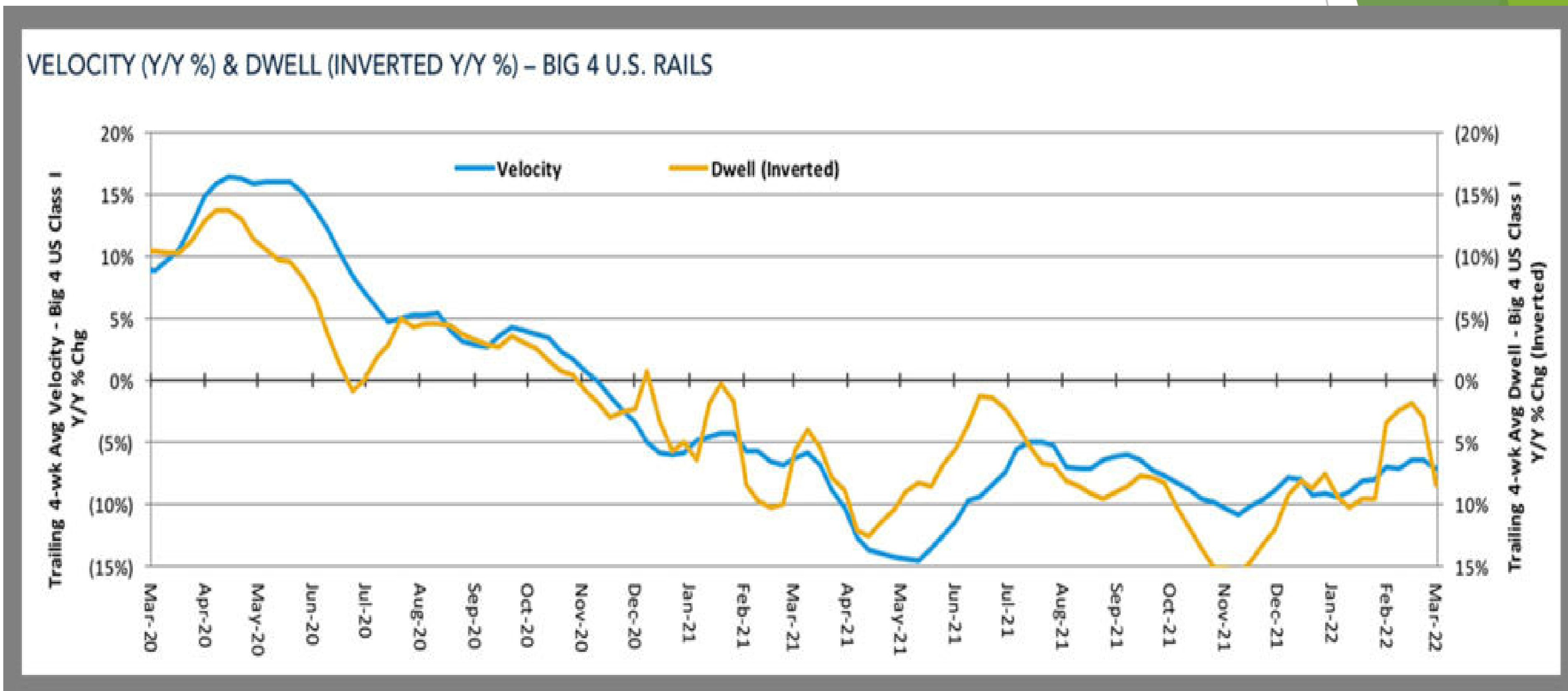
Railroad Challenges

- Hiring continues to remain relatively flat for Train and Engine employees



__Sources__
https://www.stb.gov/reports-data/economic-data/

Two-Year Trends Avg Train Velocity Four Class I Railroads



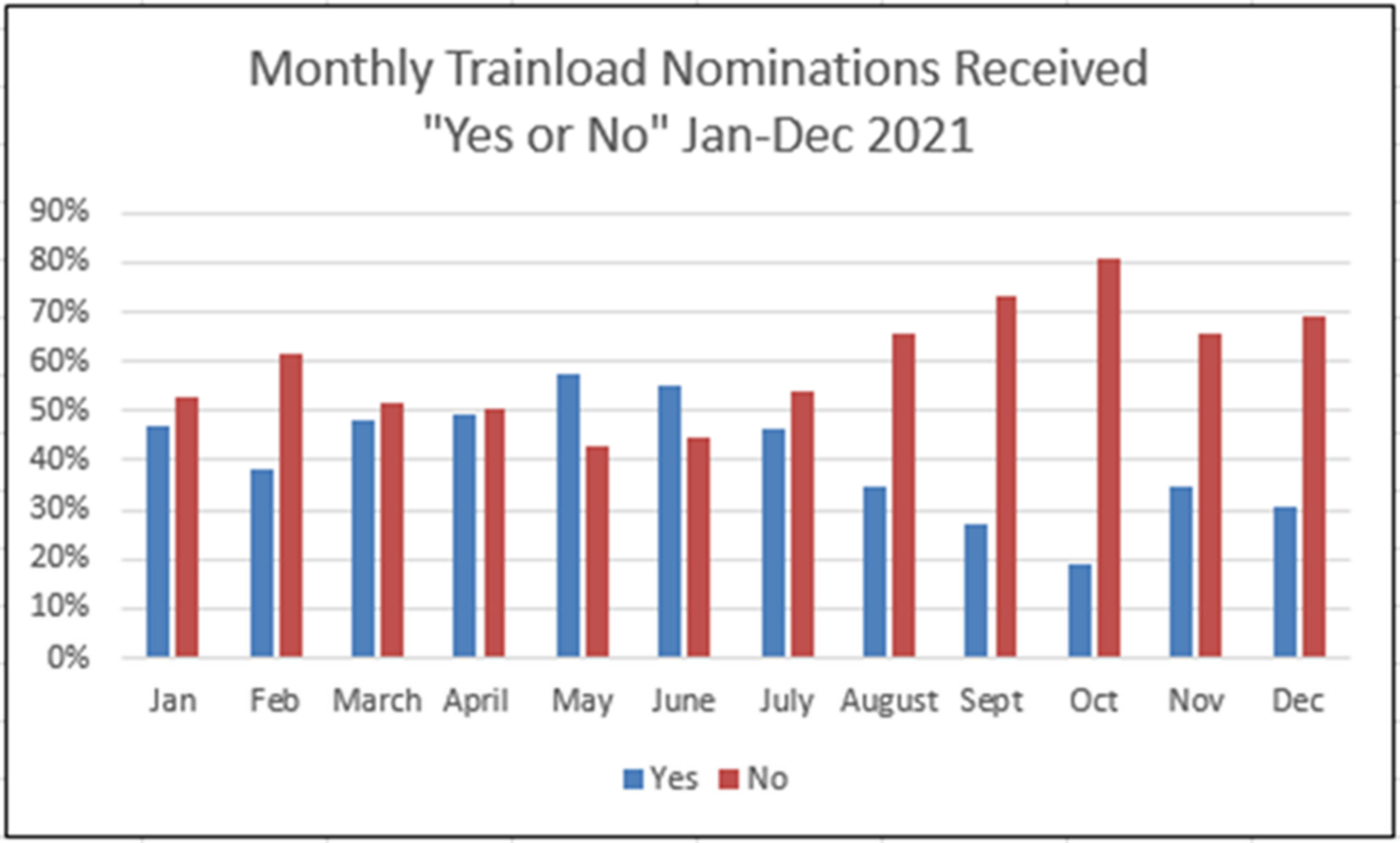
Susquehanna Financial Group

Decrease Velocity of 7% Y/Y. Terminal dwell up 8% on four week basis

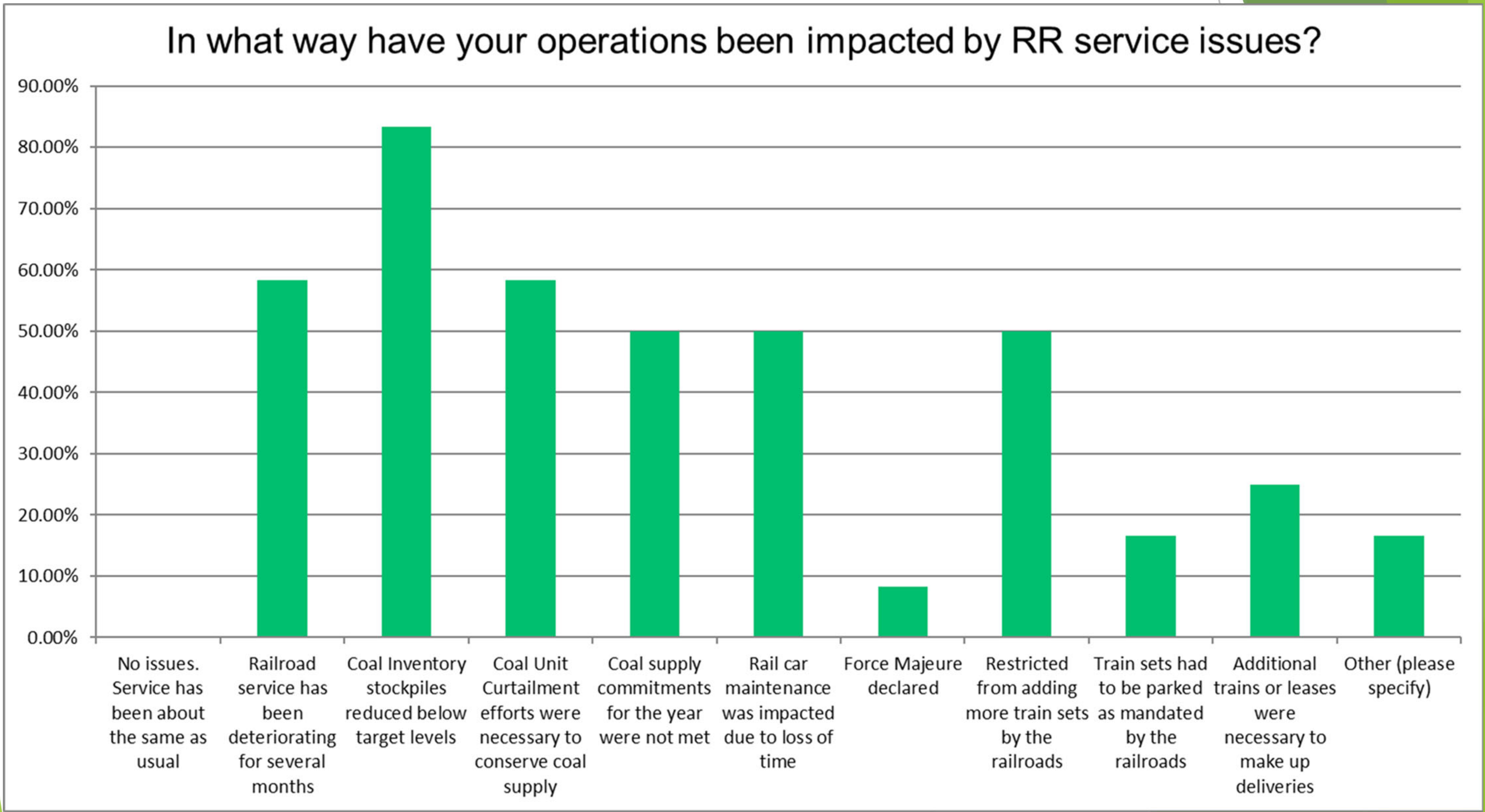
NCTA/FRCA/NRECA On Time Performance Survey July-Dec 2021

- NCTA/FRCA/NRECA: OTP Survey Data Collected since Aug 2019 to Dec 2021– 6 month periods
- 28 Plants Reported Shipper Perspective Railroad Performance Data
- 92% reported Rail Service Issues have impacted utility operations
- 60% reported Rail Service worse than it was in 2019 and 2020
- 64% reported modifying operations in 2021 due to Rail Service
- Railroads Serving Plants Reported:
  - BNSF, UPRR, NS, Multi-RR
- Four Coal Supply Regions - Mine Sources Reported:
  - SPRB, NPRB, Rockies, NAPP, ILB

Shipper Trainload Monthly Nominations Received Jan-Dec 2021



28 Plants responded how RR service issues have impacted operations



Shipper Quotes and Concerns

- "…Railroads seem to be worried about velocity and reducing set count on their systems…"
- "… the railroad elected to park half of my rail fleet…"
- "Service issues related to locomotive power problems and lack of crews have been ongoing for several months"
- "Lack of crews may be the biggest issue, our railroad will leave an unloaded train on our site for up to 2-3 days until another set is unloaded, then they send a crew to double the trains and depart"
- "…our communication with the railroads was great. They were all forthcoming with their challenges…"
- "Communication (with the Railroads) was terrible"
- "Increased bunching of trains caused us to incur costs to add coal to our stockpile…"
- "All 4 major providers had issues with crews, power and communication in 2021…"
- "Reduction in employees that worked the 24 hour desks resulted in terrible communication and lack of crews kept trains sitting"

Questions / Discussion

Exhibit B

On Time Performance Survey of
National Coal Transportation Association (“NCTA”) Members
covering the period July 2021-December 2021,
as Presented at the NCTA Spring Conference held April 13, 2022

NCTA's Freight Rail Coalition

Utility On Time Performance Shipper Survey

NCTA Spring Conference

April 13, 2022

Presented by
Emily Regis
Fuel Services Manager/NCTA President
Arizona Electric Power Cooperative, Inc.

NCTA/FRCA/NRECA Utility Members On Time Performance Survey

- On Time Performance (OTP) data from the Shipper Perspective
- Valid (anonymous) data showing different shipper experiences than RR metrics stories
- OTP Transit time service metrics are a value as benchmark and logistics and planning tool for shippers
- OTP data has become useful in dialogue with STB & GAO

  1. FRCA written comments submitted to STB Reauthorization hearing March 2022 held by House Railroads, Pipelines & Hazardous Materials (Railroads) Subcommittee.

  2. Submitted to Government Accountability Office in response to PSR study and follow up to meetings held with FRCA and WCTL

  3. Used in discussions with STB's Rail Energy Transportation Advisory Committee (RETAC)

NATIONAL COAL TRANSPORTATION ASSOCIATION NCTA

Freight Rail Customer Alliance

National Rural Electric Cooperative Association
A Touchstone Energy® Cooperative

Fourth On Time Performance Utility Shipper Survey
July 2021- Dec 2021

- First Survey: August 2019-July 2020
- Second Survey: August 2021-December 2020
- Third Survey: January 2021- June 2021
- Fourth Survey: July 2021-Dec 2021
  - ✓ Represents 28 Plants
  - ✓ 4 Coal Supply Regions: SPRB, NPRB, Rockies, NAPP
  - ✓ Class I Railroads, Multi Line & Short-line Movements
  - ✓ Mine to plant transit time per railroad and coal mine region per one-way mileage grouping
  - ✓ Monthly Nominations Fulfilled by the carriers: Yes/No – How many short?
  - ✓ Voluntary participation - Utility member identity confidential

Shipper Survey Metrics – Why it's Important

Unit Train Coal Round Trip Transit Time – Logistics and Planning

- Shipper forecasting of train sets and loadings to meet plant coal supply demand
- Communications with Railroads to plan for equipment/crews
- Coal Producers trainload slotting process and fulfilling nominations

Round Trip Transit Time

- Days in Transit per unit train shipment of coal, minus the loading time (mine) and unloading time (plant): Total Round Trip Cycle in Day
- Monthly Trainload Nominations (tons) submitted to RR
- Coal Producers need to know nomination schedule for coal production planning and fluidity of train loading process

OTP Data from July 2021-Dec 2021
28 Plants Responded

The utilities are shippers on the UPRR, BNSF Railway and Norfolk Southern.

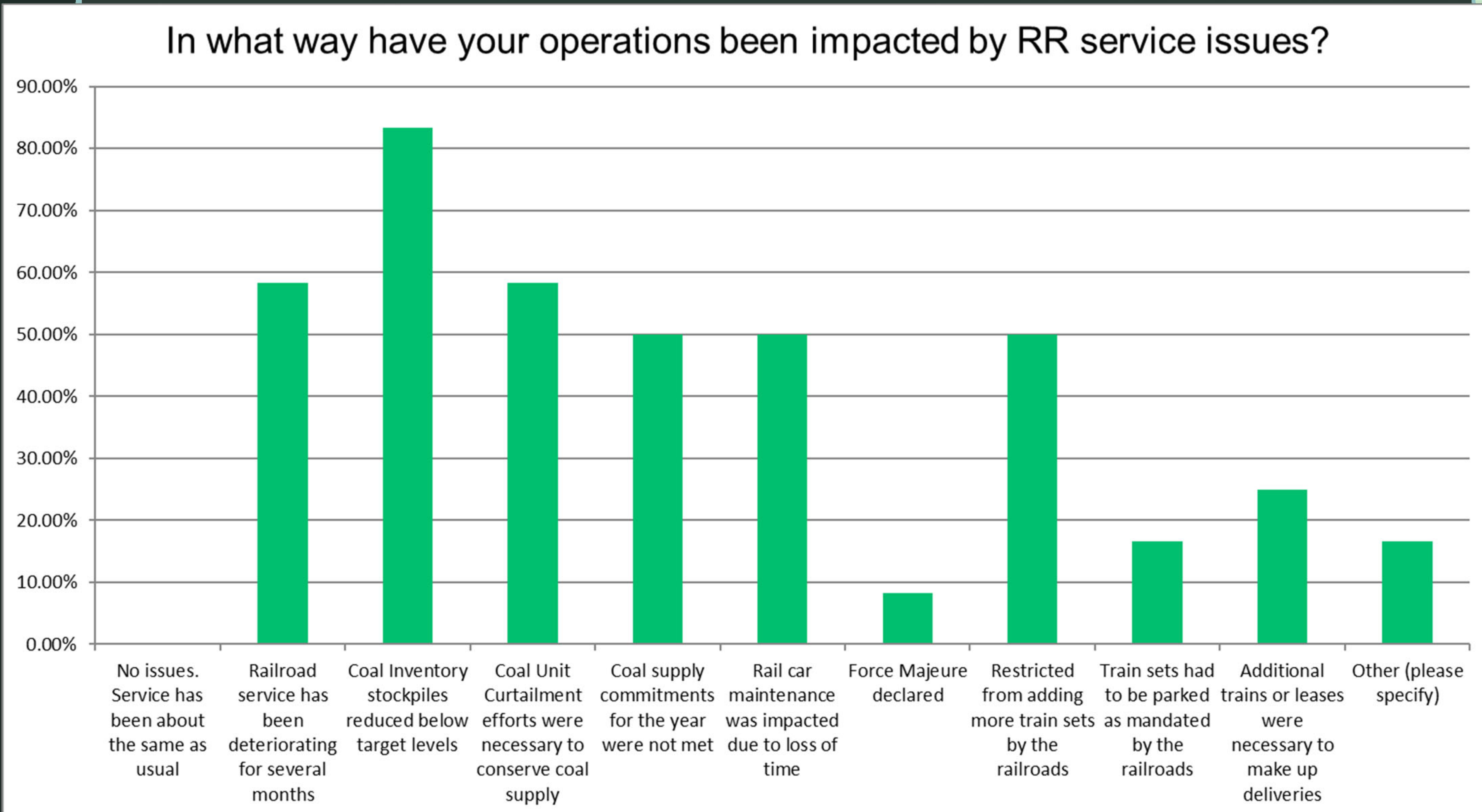
Coal Supply regions include SPRB, NPRB, Rockies, NAPP, CAPP, ILB

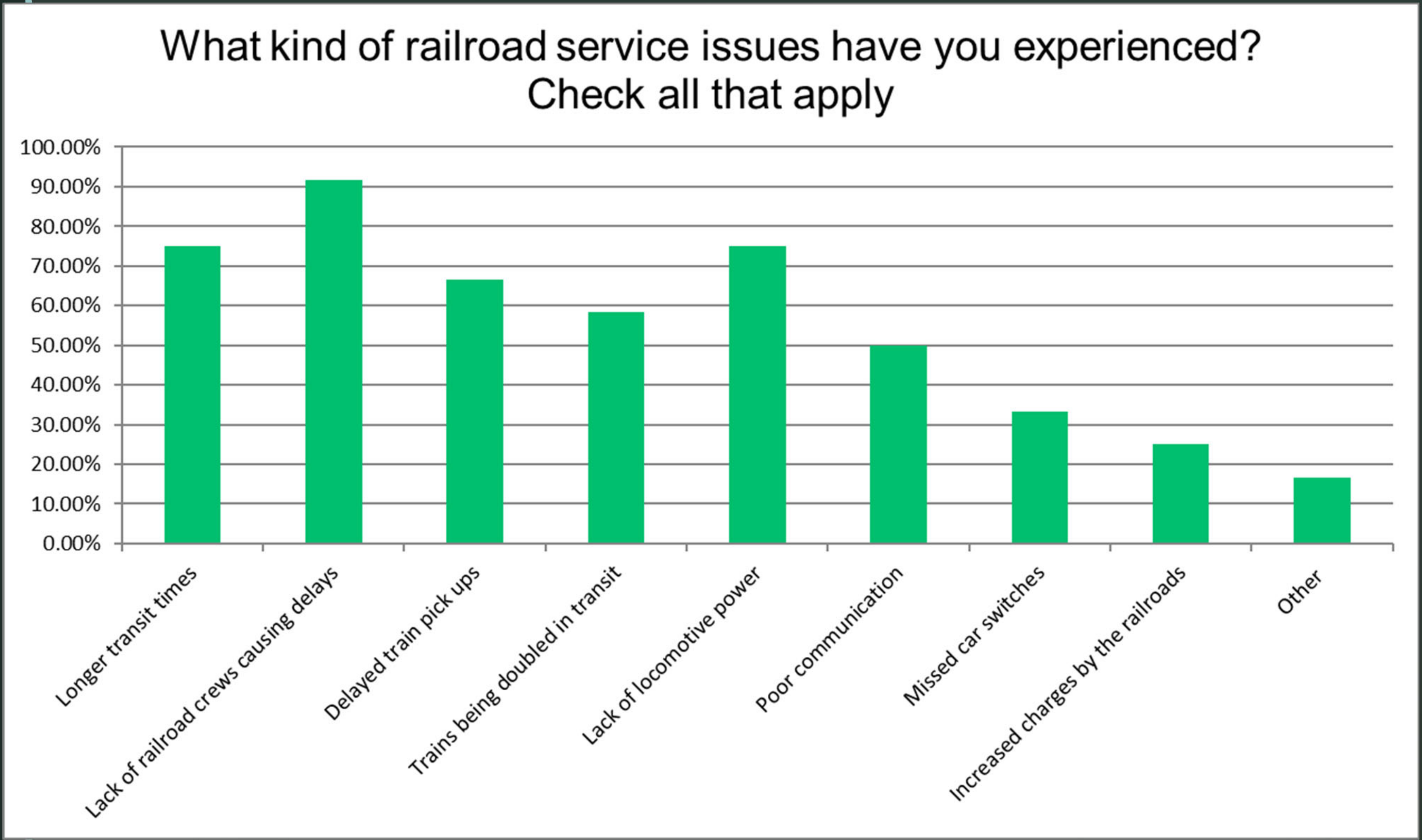
Utilities were asked how rail service Issues have impacted their company's coal transportation:

- 92% reported rail service issues that have impacted their company's coal transportation.

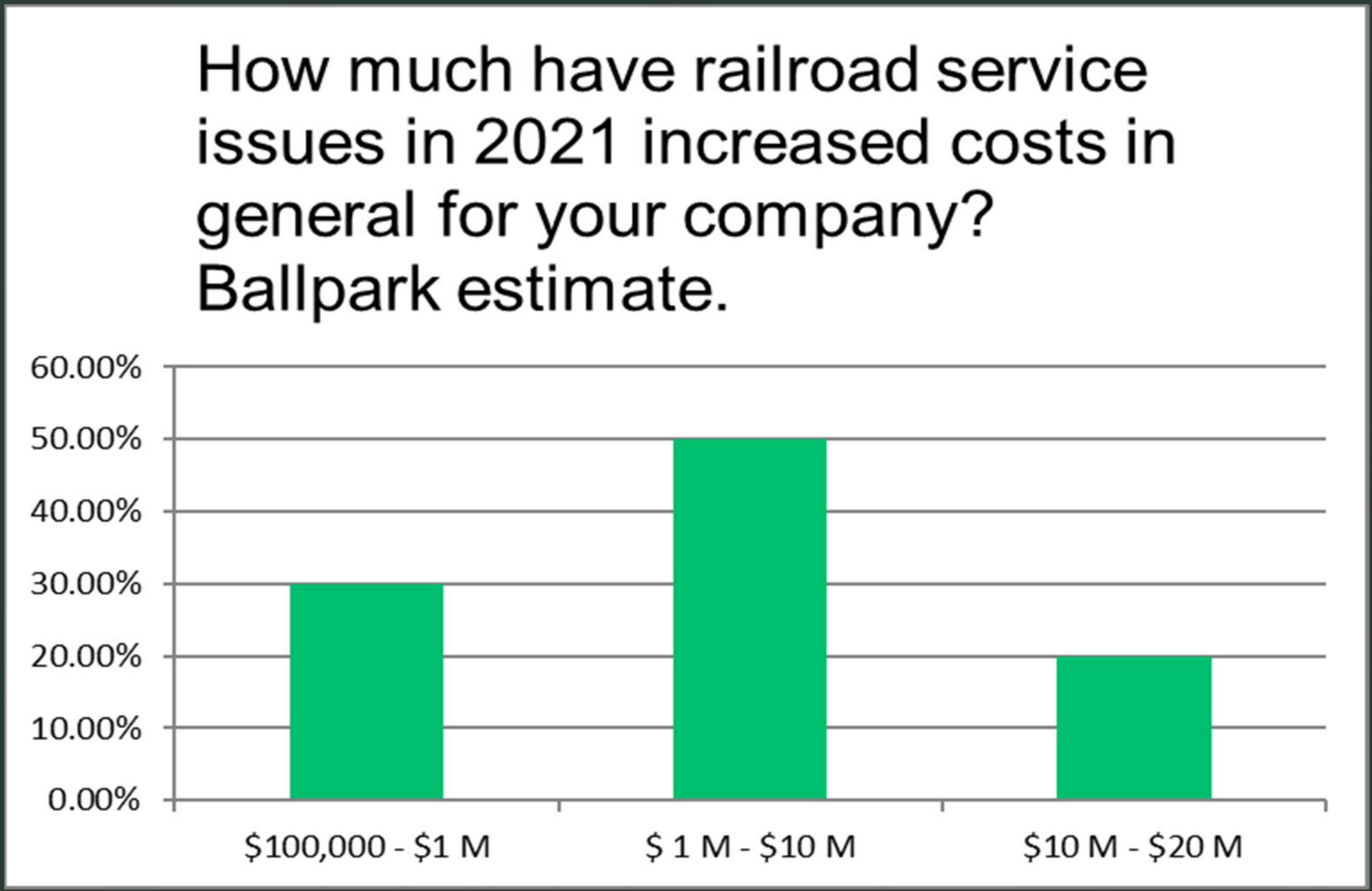
- 60% reporting railroad service as worse than it was in 2019 and 2020.

- 64% of those respondents also reporting that their company had to modify its operations in the second half of 2021 because of railroad service issues, disruptions, and delays.


In what way have your operations been impacted by RR service issues?
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
No issues. Service has been about the same as usual
Railroad service has been deteriorating for several months
Coal Inventory stockpiles reduced below target levels
Coal Unit Curtailment efforts were necessary to conserve coal supply
Coal supply commitments for the year were not met
Rail car maintenance was impacted due to loss of time
Force Majeure declared
Restricted from adding more train sets by the railroads
Train sets had to be parked as mandated by the railroads
Additional trains or leases were necessary to make up deliveries
Other (please specify)


What kind of railroad service issues have you experienced?
Check all that apply
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
Longer transit times
Lack of railroad crews causing delays
Delayed train pick ups
Trains being doubled in transit
Lack of locomotive power
Poor communication
Missed car switches
Increased charges by the railroads
Other

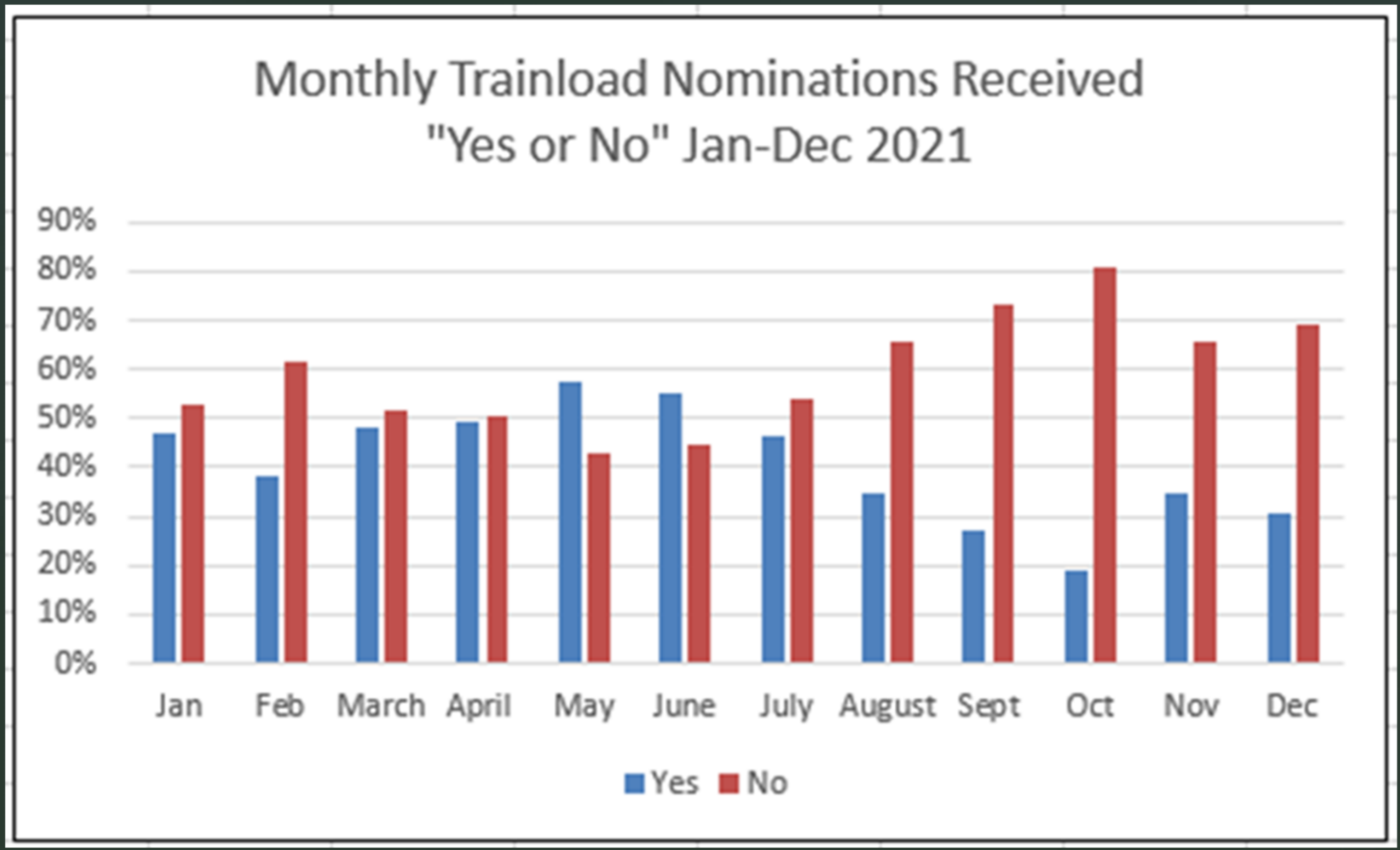
Over 90% of Utilities reported that Railroad service issues have increased costs for their company



Utilities attributed the additional costs to:

Answer Choices	Responses	
Extra costs for purchase power to replace coal generation	50.00%	5
Extra costs for natural gas to replace coal generation	40.00%	4
Additional train leases were necessary to make up deliveries	30.00%	3
Increased labor costs at your company to manage inventory or other production issues	70.00%	7
Had to make spot purchases of coal from other mines because railroads could not deliver from contracted mine sources	30.00%	3
Other	20.00%	2

Monthly Trainload/Volume Nominations Received or Missed



Of the 16 Plants that Moved SPRB Coal July – Dec 2021 What % on BNSF, UPRR, NS and Multi-Line RR

SPRB Shippers	July	Aug	Sept	Oct	Nov	Dec
BNSF	6%	13%	11%	14%	15%	16%
Multi	30%	30%	30%	30%	30%	30%
NS	20%	13%	20%	30%	17%	30%
UPRR	14%	18%	12%	12%	22%	18%

16 Plants Reported Shipping Coal From SPRB Region

Avg % of monthly trainloads received compared to the forecast nomination schedule
Equal to, 10% better/worse, 20% better/worse, 30% better/worse

SPRB Plants (16)	Equal to	10% Better	10% Worse	20% Worse	30% Worse
July	31%	6%	19%	25%	19%
Aug	38%	6%	19%	6%	31%
Sept	6%	6%	44%	19%	19%
Oct	6%	6%	50%	6%	31%
Nov	25%	6%	13%	44%	13%
Dec	19%	6%	25%	38%	13%

4 Plants Reported Shipping Coal From the NPRB Region

Avg % of monthly trainloads received compared to the forecast nomination schedule
Equal to, 10% better/worse, 20% better/worse, 30% better/worse

NPRB Plants (4)	Equal to	10% Worse	20% Worse	30% Worse
July	50%	50%	0%	0%
Aug	25%	25%	25%	25%
Sept	50%	25%	25%	0%
Oct	25%	0%	75%	0%
Nov	0%	50%	50%	0%
Dec	25%	25%	0%	50%

4 Plants Reported Shippng Coal from the ILB Region

Avg % of monthly trainloads received compared to the forecast nomination schedule
Equal to, 10% better/worse, 20% better/worse, 30% better/worse

ILB Plants (4)	Equal to	10% Worse	20% Worse	30% Worse
July	50%	0%	0%	50%
Aug	0%	25%	0%	75%
Sept	0%	0%	0%	50%
Oct	0%	0%	0%	75%
Nov	0%	0%	25%	75%
Dec	0%	0%	0%	100%

Shipper Quotes: Observations and Concerns July- Dec 2021

- "…Railroads seem to be worried about velocity and reducing set count on their systems…"
- "… the railroad elected to park half of my rail fleet…"
- "Service issues related to locomotive power problems and lack of crews have been ongoing for several months"
- "Lack of crews may be the biggest issue, our railroad will leave an unloaded train on our site for up to 2-3 days until another set is unloaded, then they send a crew to double the trains and depart"
- "…our communication with the railroads was great. They were all forthcoming with their challenges…"
- "Communication (with the Railroads) was terrible"
- "Increased bunching of trains caused us to incur costs to add coal to our stockpile…"
- "All 4 major providers had issues with crews, power and communication in 2021…"
- "Reduction in employees that worked the 24 hour desks resulted in terrible communication and lack of crews kept trains sitting"

Thank you

Questions?

Exhibit C

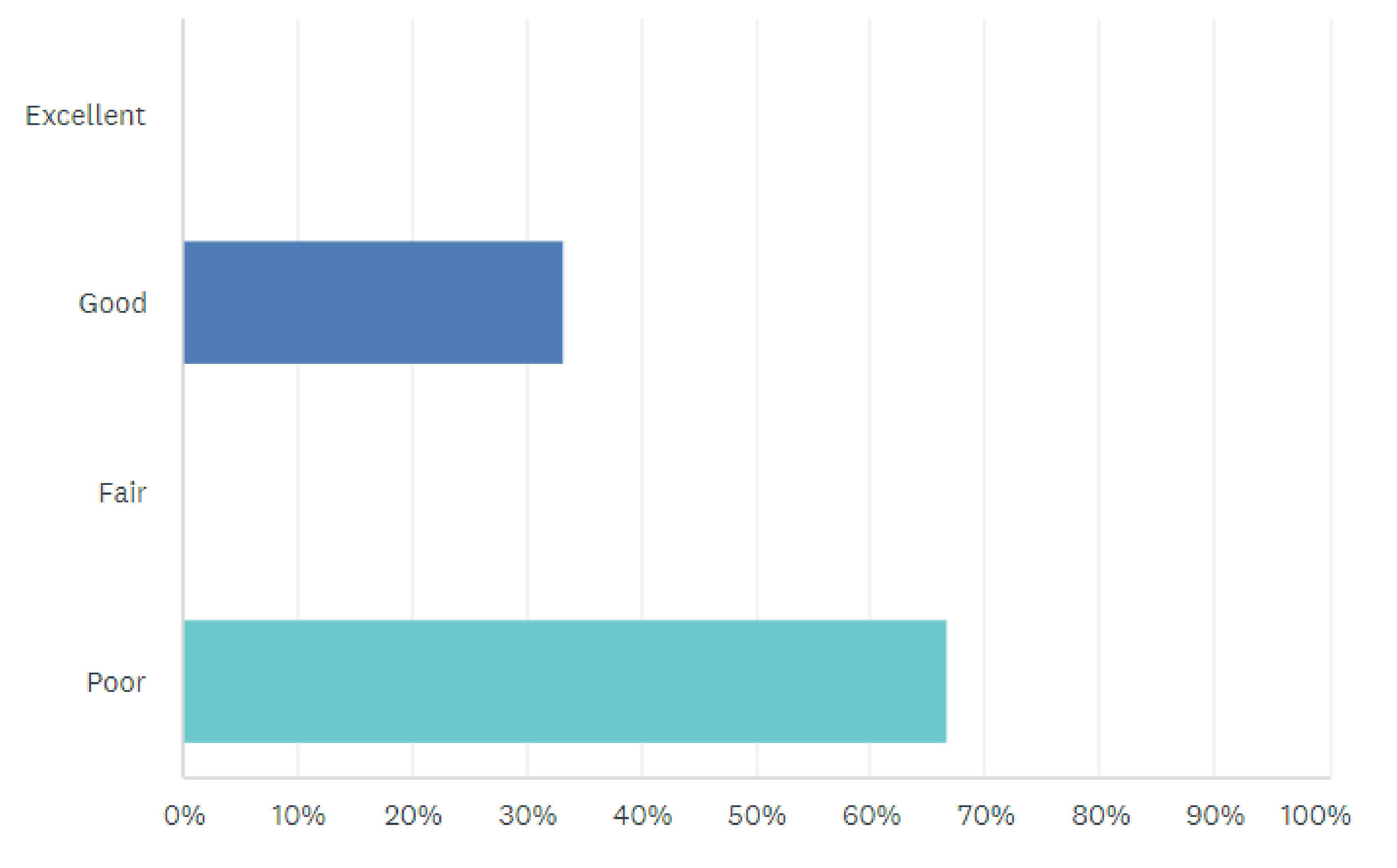
Results of Survey taken April 13, 2022,
at National Coal Transportation Association's Spring Conference 2022

Railroad Service Trends Survey

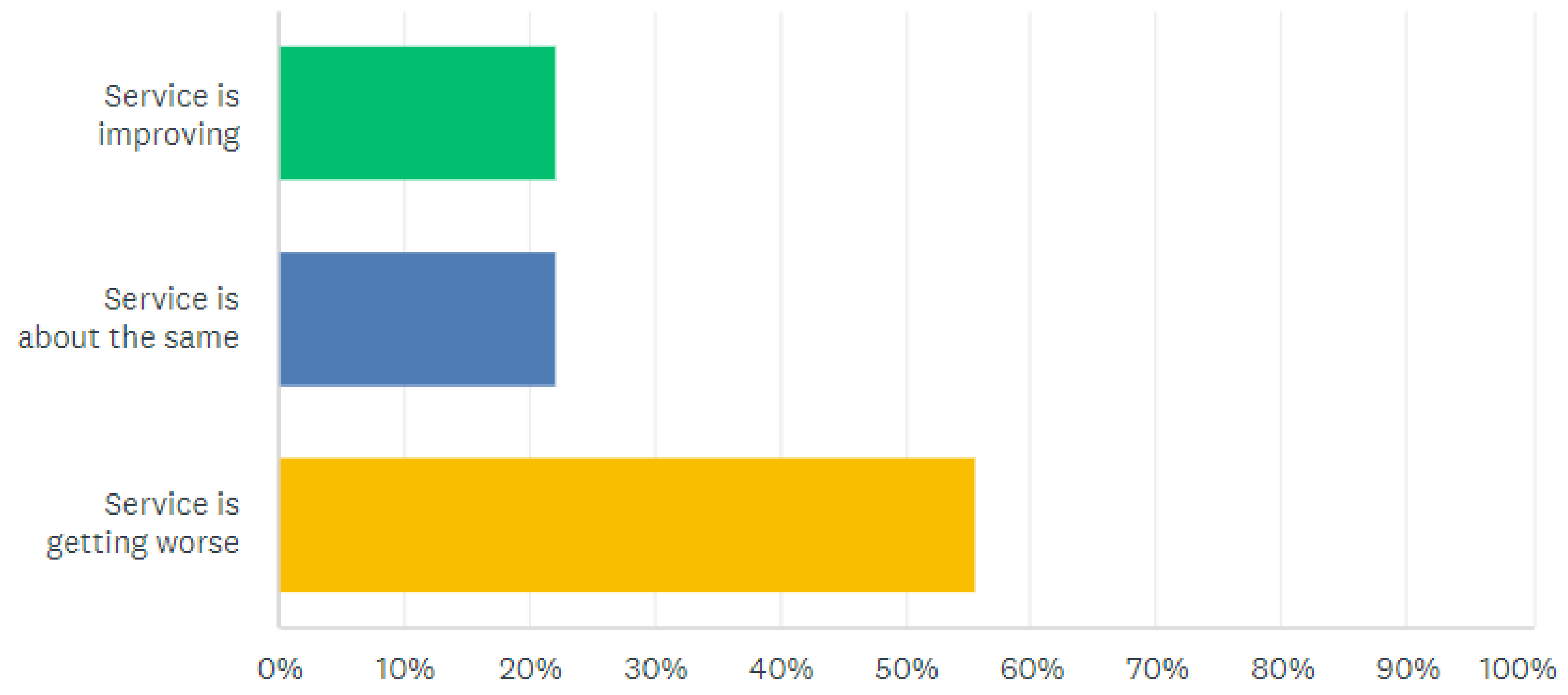
NATIONAL COAL TRANSPORTATION ASSOCIATION
SPRING CONFERENCE
NEW ORLEANS, LOUISIANA
APRIL 13, 2022

UTILITY ROUNDTABLE

How would you rate the overall service you are receiving currently from Class I railroads?



How would you rate your railroad service today compared to a year ago?



Please select all of the statements below that apply to you and your utility.

- Railroad service levels have negatively affected my utility's efforts to maintain adequate coal inventories. **88.89%**
- My utility has experienced missed coal shipments that were planned. **77.78%**
- Railroad service levels have negatively affected my utility's ability to dispatch electricity from coal-fueled generating stations. **66.67%**
- I can't depend on scheduling information from my railroad(s) because it changes frequently or is inaccurate. **55.56%**
- My utility experiences serious and recurring railroad service issues. **44.44%**
- My utility receives generally good service from its railroad(s). **33.33%**
- My utility experiences occasional railroad service issues that are usually resolved in a timely manner. **33.33%**
- Railroads have clearly communicated to my utility regarding their plans for improving service. **22.22%**
- I regularly receive timely and accurate scheduling information from my railroad(s). **0.00%**
- I am confident that railroad service will improve soon based on actions the railroads are taking. **0.00%**

Other Comments

- Lack of communication from our railroad carriers has been ongoing for several months. They also don't appear to be communicating well with each other in regards to interchange issues.
- Service seems to be improving, however the railroad is still unable to meet nominated tons.
- Rail is a key fuel supply risk that has required constant monitoring.
- RR has delivered >90% of our nominations.
- Combo trains, slower cycle times, train bunching, railroad parked our trains, railroad cannot say when they will improve, we are worried that our contracted coal will not be delivered let alone the amount of coal we will need.

Exhibit D

Union Pacific Corporation
Current Business Update and Outlook
February 2022

https://www.up.com/cs/groups/public/@uprr/@investor/documents/investordocuments/pdf_unp_barclays_pitchbook.pdf

UNION PACIFIC CORPORATION

February 2022

Cautionary Information

This presentation and related materials contain statements about the Company's future that are not statements of historical fact, including specifically the statements regarding the Company's expectations with respect to economic conditions and demand levels, its ability to improve network performance, its results of operations, and potential impacts of the COVID-19 pandemic. These statements are, or will be, forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements also generally include, without limitation, information or statements regarding: projections, predictions, expectations, estimates or forecasts as to the Company's and its subsidiaries' business, financial, and operational results, and future economic performance; and management's beliefs, expectations, goals, and objectives and other similar expressions concerning matters that are not historical facts.

Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times that, or by which, such performance or results will be achieved. Forward-looking information, including expectations regarding operational and financial improvements and the Company's future performance or results are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the statement. Important factors, including risk factors, could affect the Company's and its subsidiaries' future results and could cause those results or other outcomes to differ materially from those expressed or implied in the forward-looking statements. Information regarding risk factors and other cautionary information are available in the Company's Annual Report on Form 10-K for 2020, which was filed with the SEC on February 4, 2022. The Company updates information regarding risk factors if circumstances require such updates in its periodic reports on Form 10-Q and its subsequent Annual Reports on Form 10-K (or such other reports that may be filed with the SEC).

Forward-looking statements speak only as of, and are based only upon information available on, the date the statements were made. The Company assumes no obligation to update forward-looking information to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking information. If the Company does update one or more forward-looking statements, no inference should be drawn that the Company will make additional updates with respect thereto or with respect to other forward-looking statements. References to our website are provided for convenience and, therefore, information on or available through the website is not, and should not be deemed to be, incorporated by reference herein.

SERVE GROW TOGETHER WIN

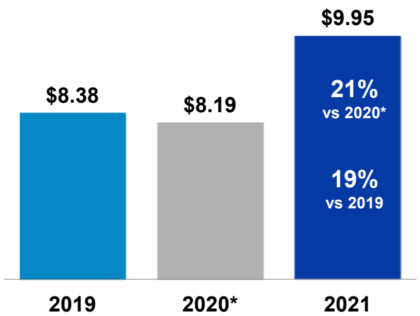
VALUES
Passion for Performance
High Ethical Standards
Work as a Team

CURRENT BUSINESS UPDATE AND OUTLOOK

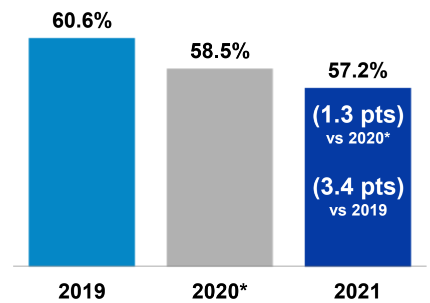
February 2022

2021 Financial Results

Earnings Per Share



Operating Ratio



Key Themes

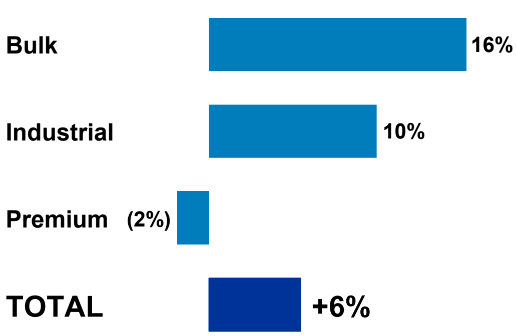
Strong Core Results	Weather / Wildfires / Incidents	Global Supply Chain Disruptions

** 2020 results exclude Brazos non-cash impairment charge. See Union Pacific website under Investors for a reconciliation to GAAP.*

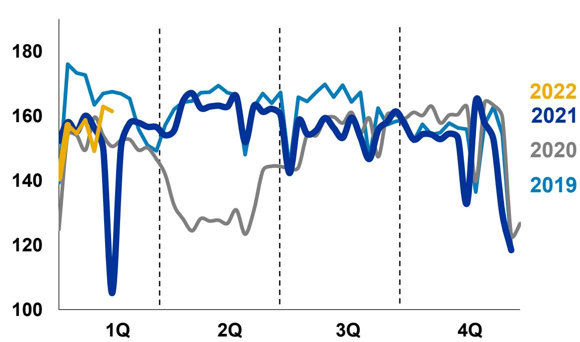
First Quarter Volume To Date

First Quarter Volume To Date*

(Year Over Year Change)

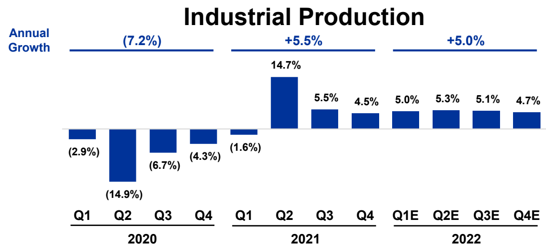


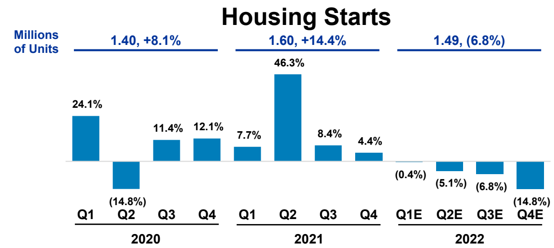
7-Day Weekly Carloadings
(000s)

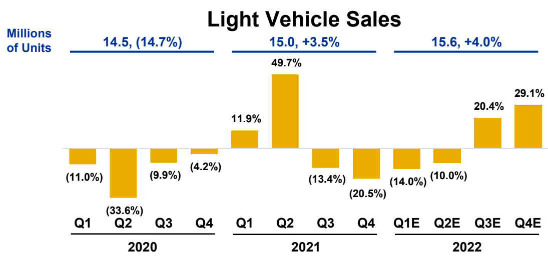


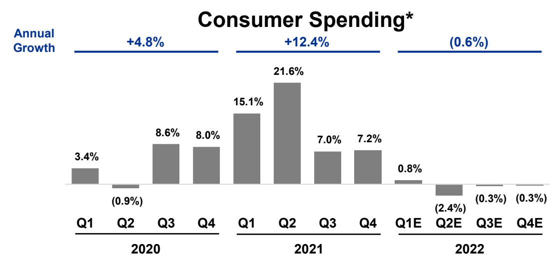
* Volume through February 18

Economic Outlook









Source: IHS Markit U.S. Economic Outlook, February 2022

** Durable and Nondurable Goods; excludes Services*

2022 Volume Outlook

Bulk

- + Fertilizer
- + Coal
- ? Grain and Grain Products

Industrial

- + Industrial Production
- + Chemicals and Plastics
- – Forest Products

Premium

- + Auto Sales
- + Domestic Intermodal
- ? International Intermodal

A Look Ahead to 2022

- 2021 Investor Day Three Year Guidance Remains Intact
- Full Year Volume Growth Exceeding Industrial Production
- Pricing Gains in Excess of Inflation Dollars
- Operating Ratio of ~55.5%
- Capital Spending of $3.3 Billion
- Dividend Payout Target of 45% of Earnings
- Share Repurchases in Line with 2021

Industry Leading Financial Results

2022 – 2024

Revenue Growth

Volume: Exceed Industrial Production, ~3% CAGR

Core Price Gains Above Inflation $

Profitability

~55.5% Operating Ratio Full Year 2022; Industry Leader

Mid to High 60% Incremental Margins

Low Double Digit EPS Growth CAGR

Capital, Leverage, and Returns

Capital Investments <15% of Revenue

Strong Investment Grade Credit Rating

ROIC ~17%

Cash to Shareholders

~100% Cash Conversion

Share Repurchases $18 - 19 Billion

Dividend Payout Ratio 45%

SERVE – OPERATIONS OVERVIEW

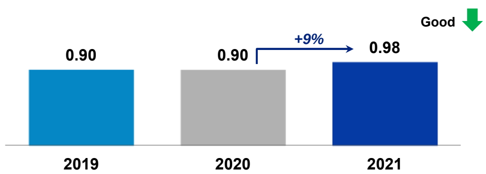
February 2022

2021 RESULTS

Safety – World Class Safety Performance Goal

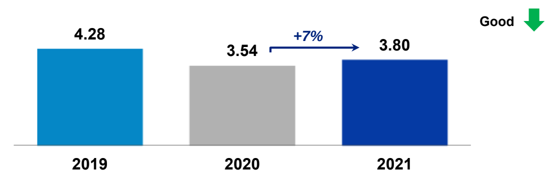
Employee

(Reportable Personal Injury Incidents Per 200,000 Employee-Hours)



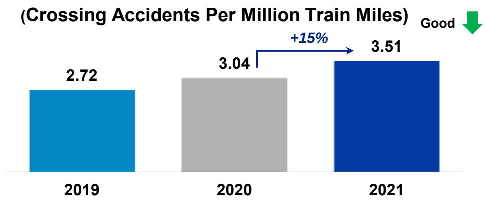
Rail Equipment

(Reportable Derailment Incidents Per Million Train Miles)



Public

(Crossing Accidents Per Million Train Miles)



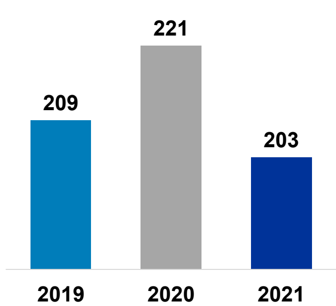
- Enhance Safety Programs
- Risk Identification and Mitigation
- Using Technology

2021 RESULTS

Key Performance Metrics

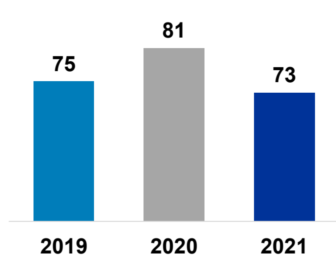
FREIGHT CAR VELOCITY*

(Daily Miles per Car)



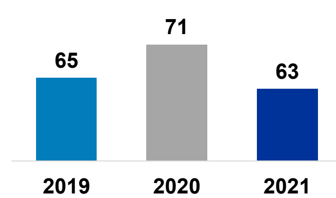
INTERMODAL TRIP PLAN COMPLIANCE

(% of Boxes On Time)



MANIFEST/AUTO TRIP PLAN COMPLIANCE

(% of Cars On Time)



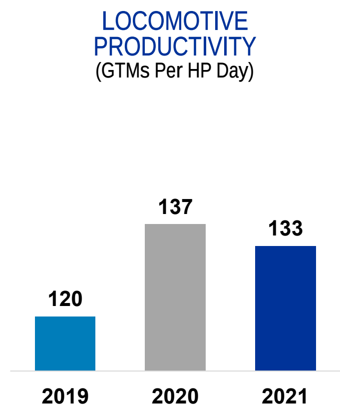
Drivers

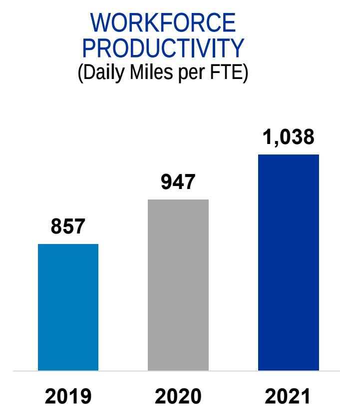
Wildfires and Bridge Outage | **Global Supply Chain Disruptions** | **COVID / Crew Availability**

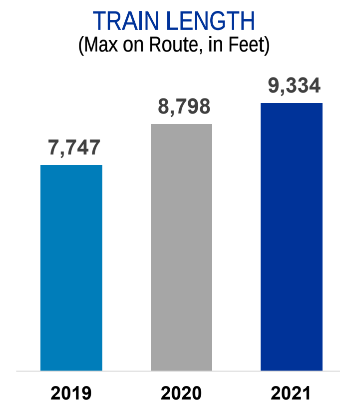
*Prior years have been realigned to conform to the current year presentation.

2021 RESULTS

Key Performance Metrics





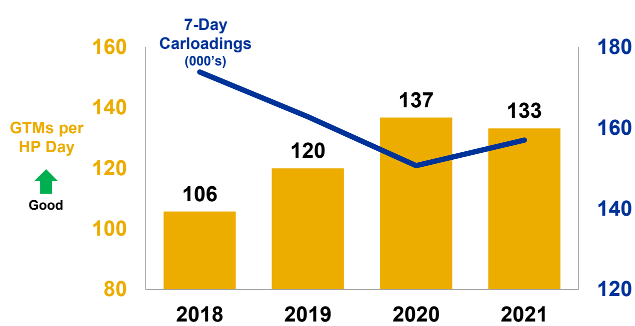


Drivers

Network Recovery Actions	Labor Efficiency	Continuous Improvement

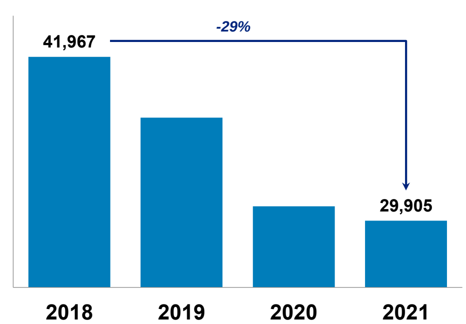
Efficient Asset and Resource Utilization

Locomotive Productivity



Driven by less units, increased train length and reduced dwell

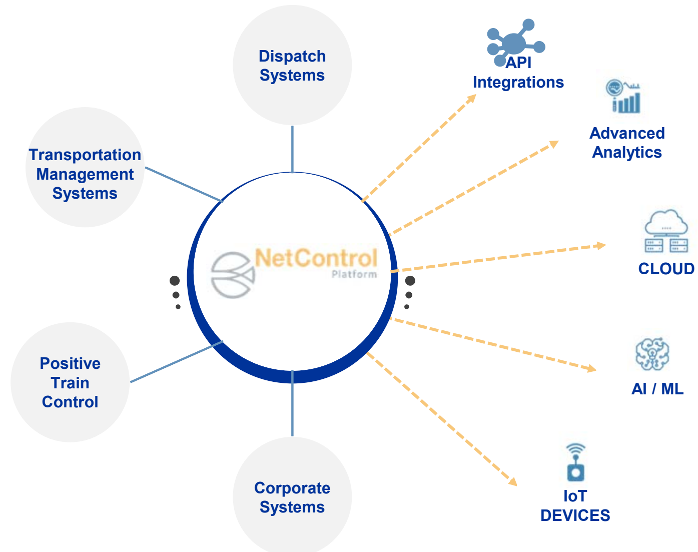
Force Levels



Driven by asset utilization and process improvements

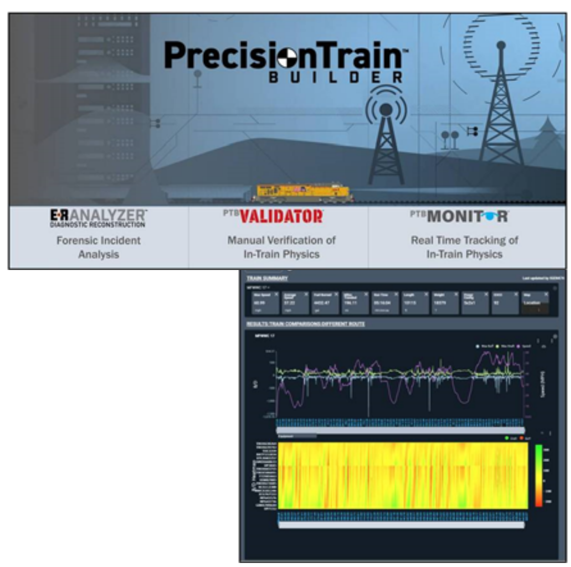
Foundational Platform Enabling a Connected Future

- Connects Operational Systems
- Enables Smart Capabilities
- Provides Frictionless Integrations
- Delivers Ability to Evolve with Business



Terminal Planner & Precision Train Builder

- Optimizes Terminal Connections and Train Profiles
- Creates Terminal Capacity
- Enables More Efficient Operation
- Improves Customer Experience



Engineering Technology – Rail Sensor

Improving Reliability, Performance and Efficiency

Geometry Car

Boxcar

Locomotive

Semi Autonomous
Track Inspections via:

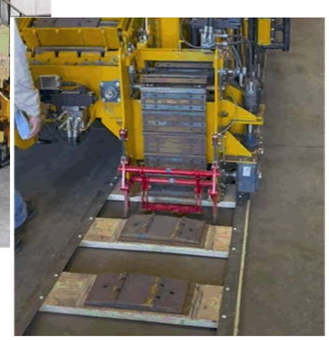
- Geometry Car
- Boxcars
- Locomotives

Engineering Renewal Automation

Simplifying the Process and Reducing Touch Points

Wood Tie Unloading

Tie Plate Distribution Automation

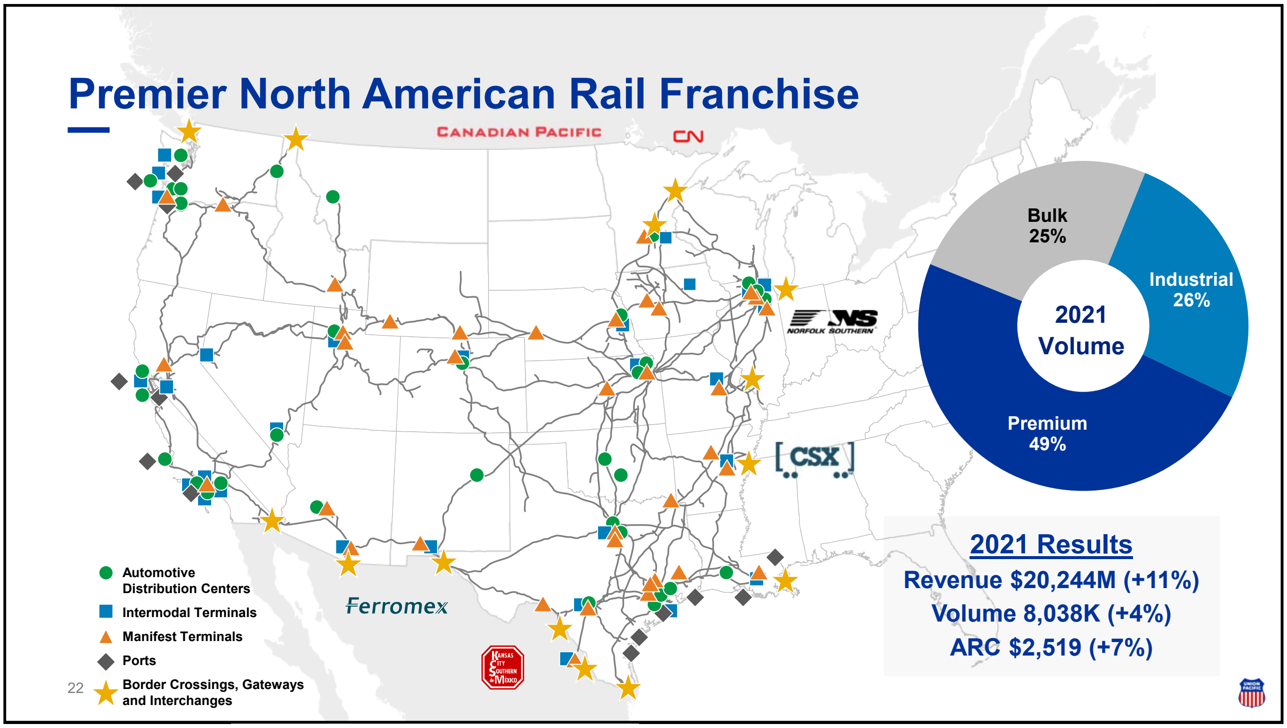


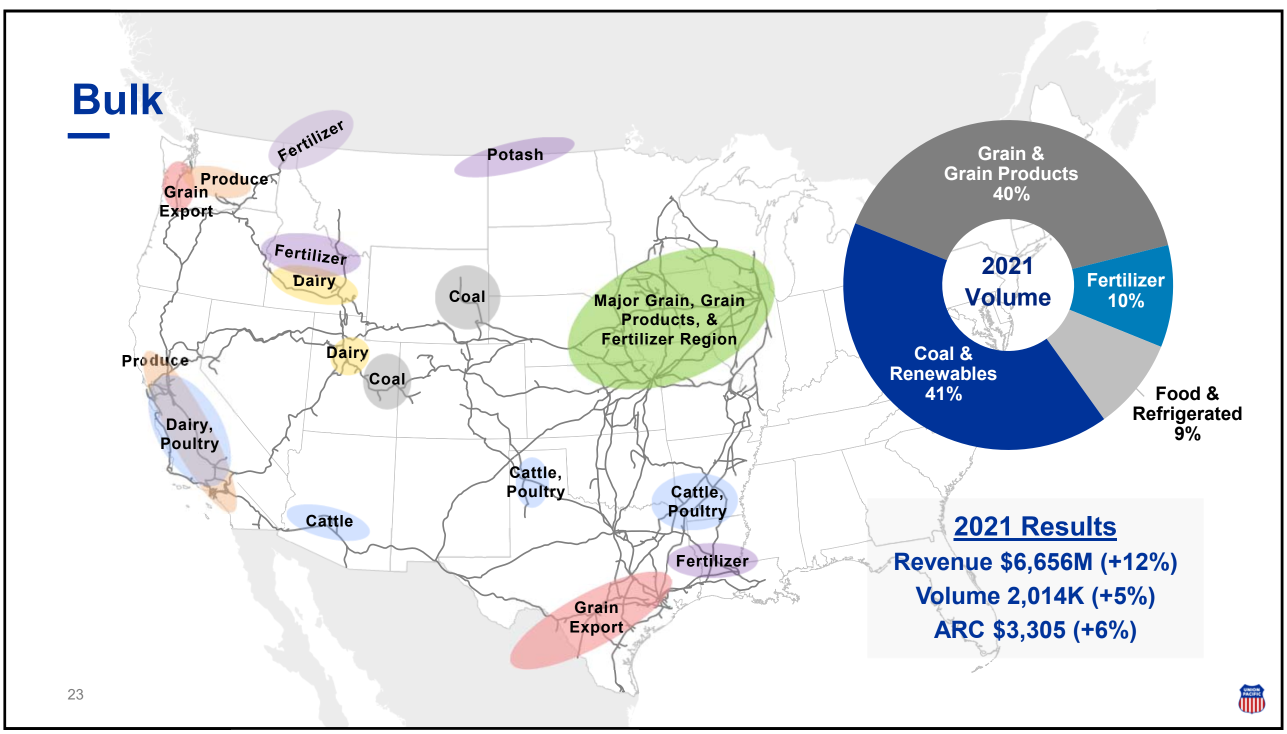
Intermodal Excellence – Enhancing the Driver Experience

- Driver Maps
- Improving Ramp Signage
- UPGo
- Digital Tutorials
- New Gate Technology

GROW - BUSINESS TEAM REVIEW

February 2022


Premier North American Rail Franchise
Canadian Pacific
CN
NS Norfolk Southern
CSX
Ferromex
Kansas City Southern de México
Automotive Distribution Centers
Intermodal Terminals
Manifest Terminals
Ports
Border Crossings, Gateways and Interchanges
Bulk 25%
Industrial 26%
Premium 49%
2021 Volume
2021 Results
Revenue $20,244M (+11%)
Volume 8,038K (+4%)
ARC $2,519 (+7%)
22

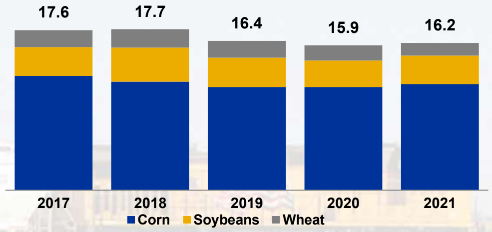

Bulk
Fertilizer
Potash
Produce
Grain Export
Fertilizer
Dairy
Coal
Major Grain, Grain Products, & Fertilizer Region
Produce
Dairy
Coal
Dairy, Poultry
Cattle, Poultry
Cattle, Poultry
Cattle
Fertilizer
Grain Export
Grain & Grain Products 40%
Fertilizer 10%
Food & Refrigerated 9%
Coal & Renewables 41%
2021 Volume
2021 Results
Revenue $6,656M (+12%)
Volume 2,014K (+5%)
ARC $3,305 (+6%)
23

Grain

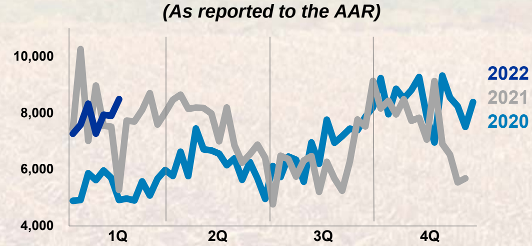
Volume Drivers & Outlook

- **Feed demand:** Global protein consumption will increase driven by a growing population and higher standards of living
- **Exports:** Export demand is expected to decrease according to the USDA
- **UP network:** Advantages through efficient access from the Midwest to key domestic markets and export terminals

U.S. Grain Stocks*
(Bushels in Billions)



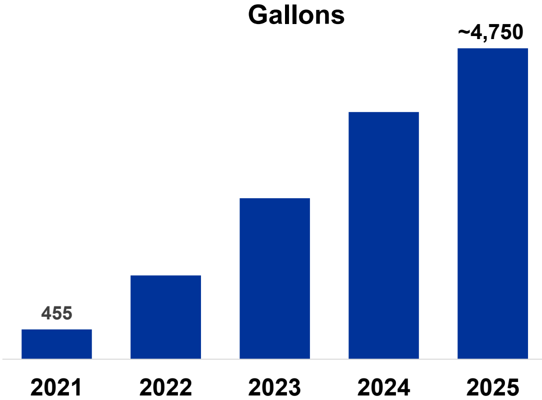
UNP Weekly Grain Carloads**
(As reported to the AAR)



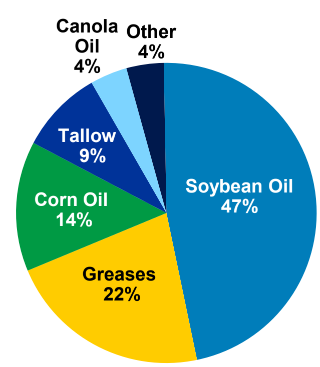
*Source: Quarterly Grain Stocks Report Issued by USDA - December
**Through February 19, 2022

Capitalize on ESG through Renewable Diesel

Existing and Announced Renewable Diesel Production By Planned Production Gallons



Feedstock Inputs to Biomass Diesel Industry

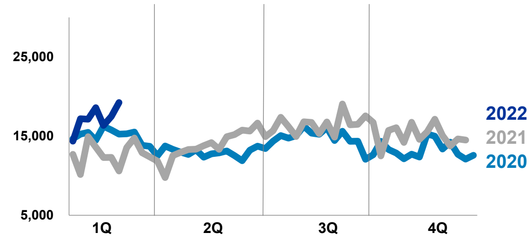


Coal

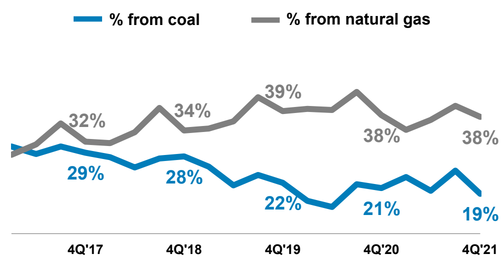
- Volume Drivers
  - Weather impacts demand
  - Natural gas prices
  - Coal inventory levels

UNP Weekly Coal Carloads*

(As reported to the AAR)



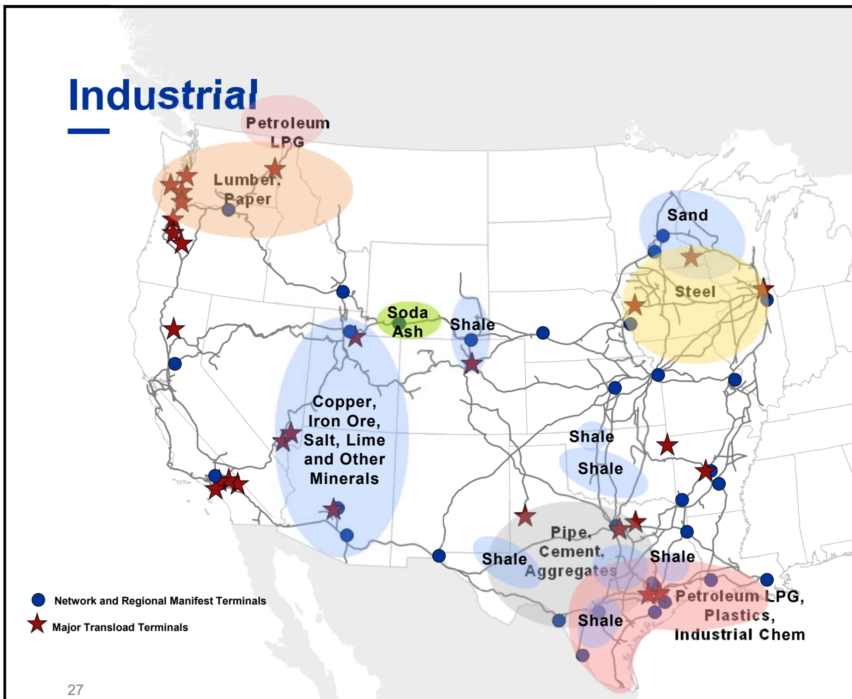
Electricity Generation Market Share**

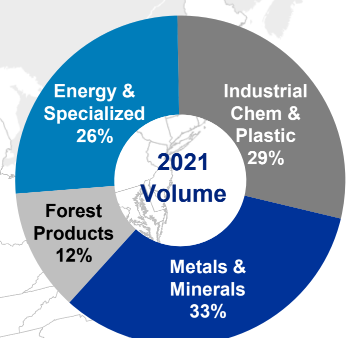


*Through February 19, 2022

**Source: U.S. Energy Information Administration (EIA)

Industrial





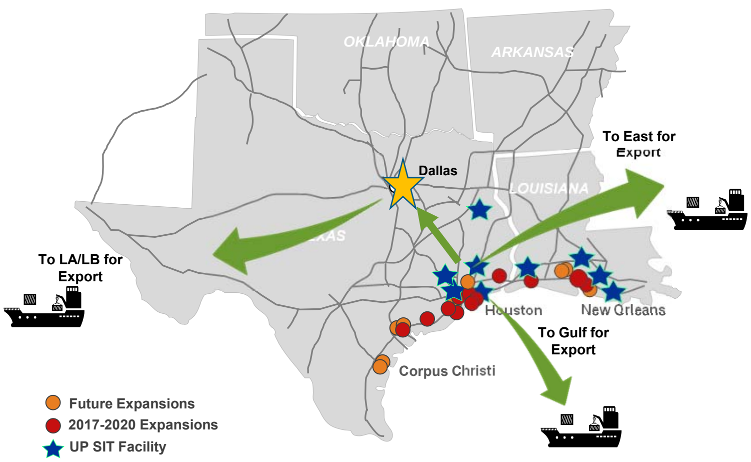
2021 Results

Revenue $7,323M (+11%)

Volume 2,112K (+6%)

ARC $3,467 (+4%)

Strong Franchise to Support Plastics Growth



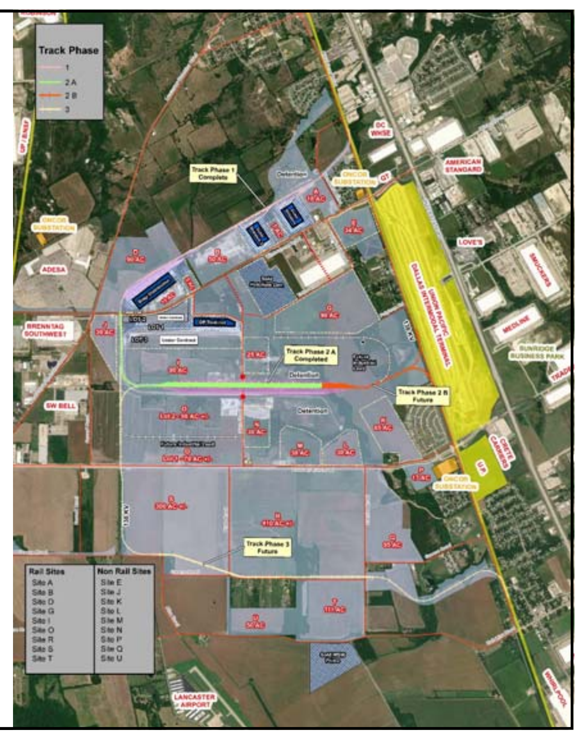
- $209 billion completed and planned petrochemical investment in Gulf*
- Industry leader in plastics rail transportation
  - Comprehensive product offerings & service excellence
  - Expansive Storage in Transit (SIT)
  - Export Optionality
  - Dallas to Dock service solution for export plastics

*Source: American Chemistry Council, February 2021

Prime Pointe Industrial Park

Hutchins, TX (12 miles south of Dallas)

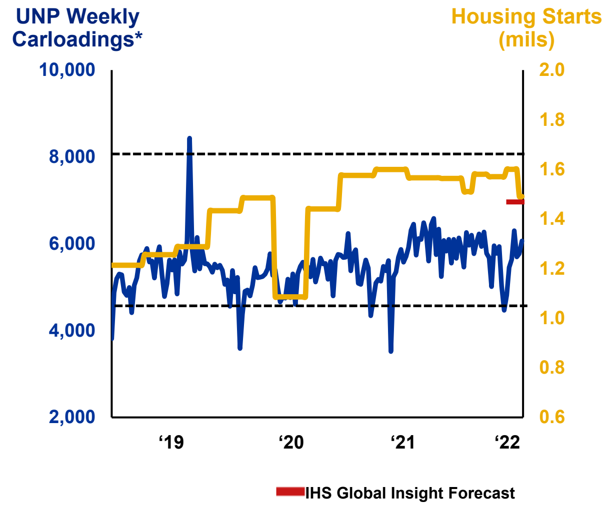
- 3,000-acre site for premier rail service
- Close proximity to Interstates 45, 20, 30 and 35
- Adjacent to UP's Dallas Intermodal Terminal
- Rail-served sites for manufacturing and distribution along with refrigerated/cold storage
- Shovel ready sites increasing customers speed to market



Housing Trends

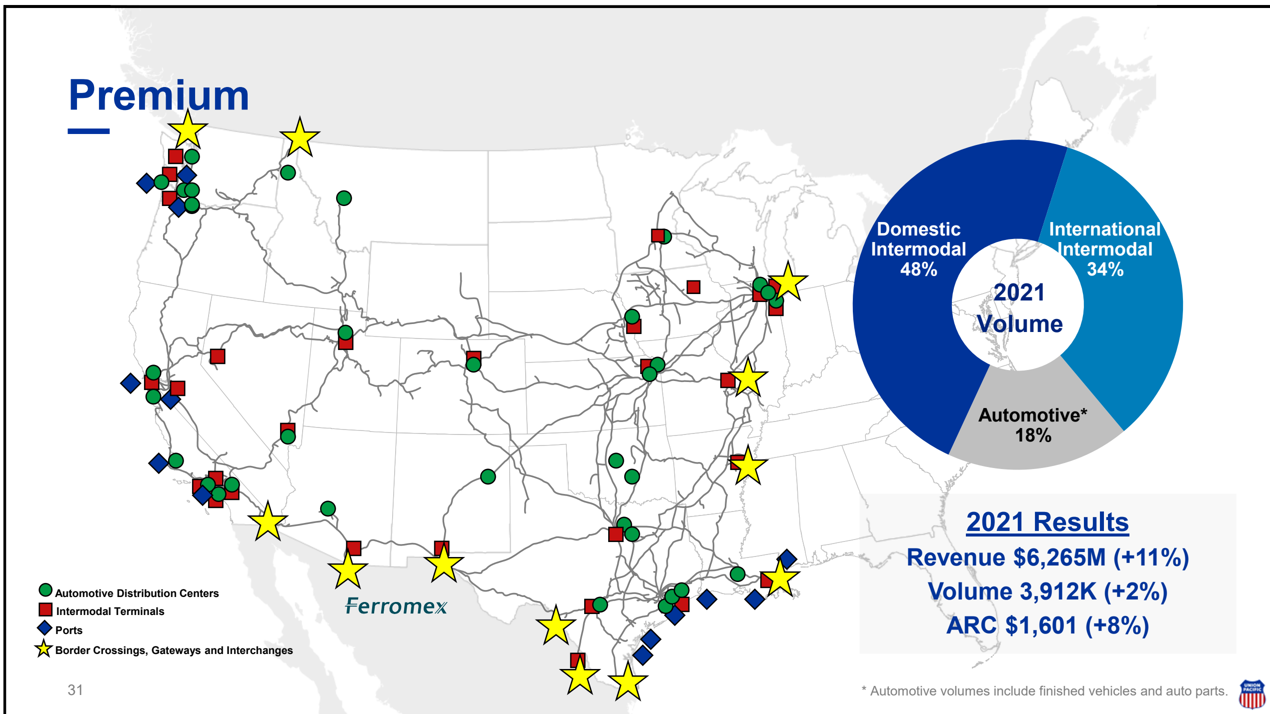
- UP lumber, stone & glass business correlates with housing starts
- Housing also drives appliances, roofing, rebar, aggregates, and cement demand
- Housing related shipments represent ~5 % of current UP volumes

Lumber, Stone & Glass



*Through February 19, 2022

Premium



2021 Results

Revenue $6,265M (+11%)

Volume 3,912K (+2%)

ARC $1,601 (+8%)

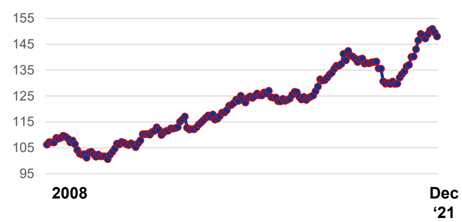
* Automotive volumes include finished vehicles and auto parts.

Highway Conversion Growth Opportunities

Transportation Mode
(By Tonnage)

Truck	Rail	Water
82%	12%	6%

Cass Truckload Linehaul Index



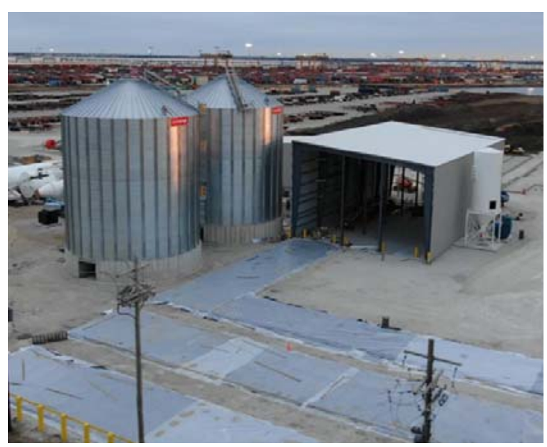
- Highway conversion opportunities in all business groups
- High insurance costs
- Drug & alcohol testing
- Truck capacity
- Loup

Source: Cass Information Systems, Index uses January 2005 as its base month, U.S DOT Bureau of Transportation Statistics

Global IV Grain Transload

CGB ENTERPRISES, INC. GAVILON

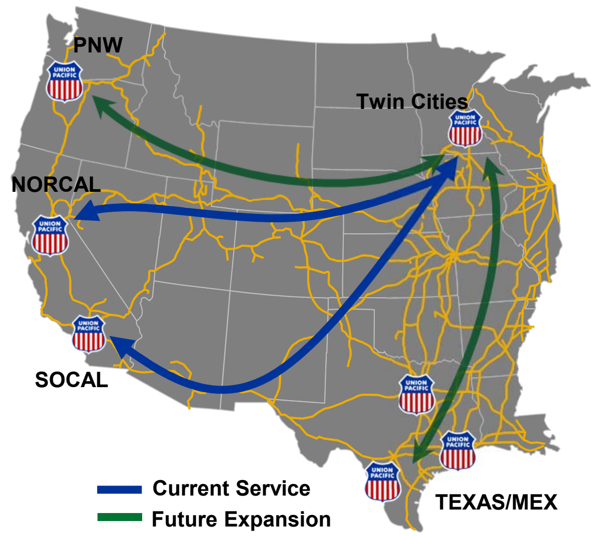
- Union Pacific grain facility operated by JCT, 50/50 joint venture between Consolidated Grain and Barge and Gavilon Grain
- Competitive Joliet area transload with on site containerization
- Converting empty containers to loaded westbound exports from Chicago
- Aligns international service product to be more competitive
- First Loads – First Quarter 2022



Twin Cities Intermodal Terminal

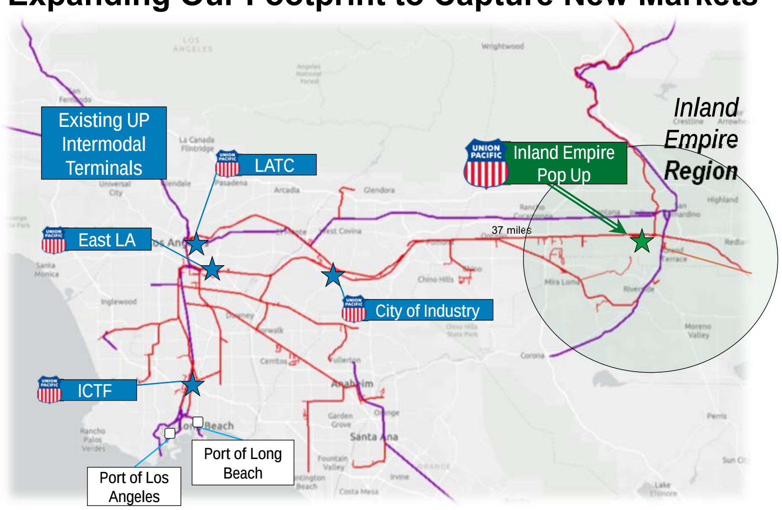
Expanding Market Reach for Growth

- Opened pop-up Twin Cities Intermodal Terminal in January 2021
- Located in heart of the Twin Cities metropolitan area
- Gives customers in the Twin Cities metro efficient access to Union Pacific's intermodal network
- Expansion expected to be completed at the end of 2022 for full intermodal terminal build capable of 100,000 annual lifts



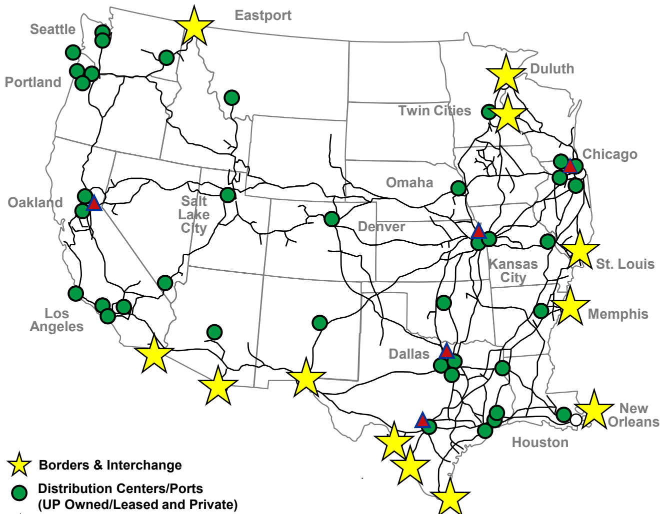
Inland Empire Intermodal Terminal

Expanding Our Footprint to Capture New Markets

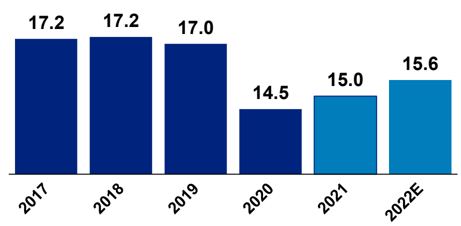


- Inland Empire is the fastest growth region in California
  - 2 million imports (in cargo capacity units) trucked annually to Inland Empire
  - Estimated ~15 million truckloads of long and short haul freight
- Increasing our footprint in 2022 and expanding in future years
- Initial service offering to/from Chicago
- Additional markets to be added throughout the full build

Finished Vehicles

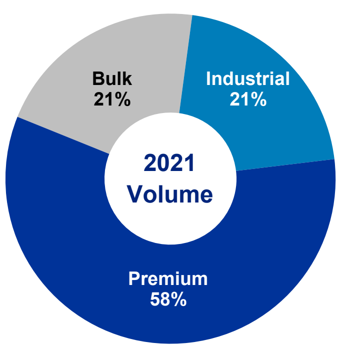


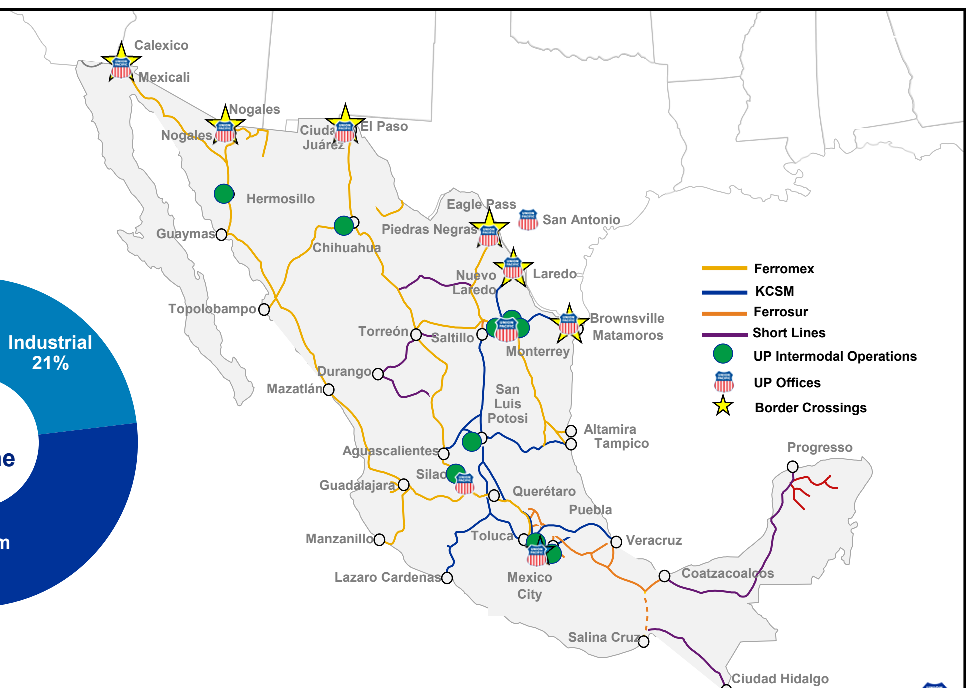
U.S. Light Vehicle SAAR*



*Source: IHS Markit U.S. Economic Outlook, February 2022

Mexico





Commercial Focus – It’s All About the Customer

Win with Lower Cost Structure

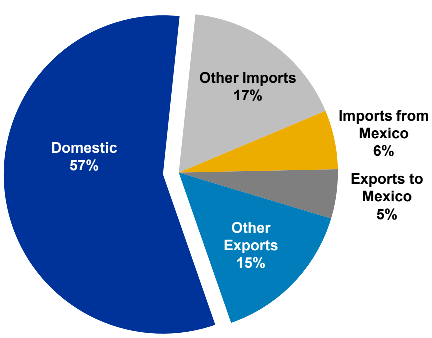
Working Collaboratively

Customer Centricity

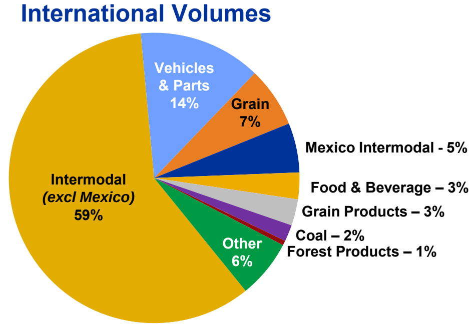
Expand our Network Reach

International Trade

2021 Freight Volumes



International Volumes



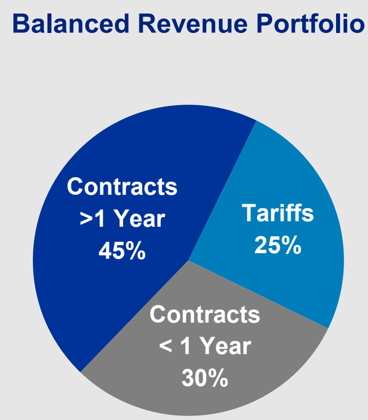
Diverse Franchise Creates Opportunity

Off-Shoring/Near-Shoring of U.S. Manufacturing

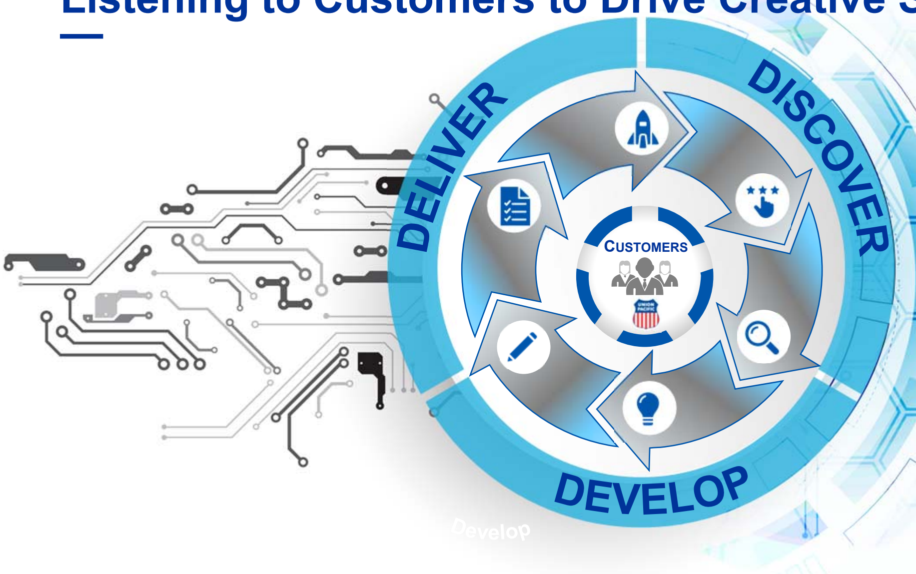
Demand for Grain & Food

Pricing Fundamentals

- Lower cost structure from PSR allows UP to be more competitive in the market
- Balanced portfolio provides flexibility for repricing as value grows
- Pricing dollars in excess of inflation dollars



Listening to Customers to Drive Creative Solutions



- Shifting culture to be more customer-centric
- Engaging Technology Team directly with customers
- Delivering enhancements faster and with more agility

Customer Obsession in Technology

Designing from a Customer Perspective

Customer Focused, Transparent and Streamlined work processes to deliver results faster

Product

Shifting from a project mindset to a customer-centric continuous delivery product organization

Digitization

Customer experience, market intelligence, visibility & supply chain integration for growth

Data Analytics

Create a modern data foundation to create insights and intelligent experiences that are focused on the customer

Improving the Customer Experience Through APIs

- Developed approximately 50 integration services for customers based on their needs
- Real-time access to data between applications and devices
- Streamline and automate workflows
- Enables customer to take action on their shipments from their interfaces
- Expands visibility into the supply chain

Shipment
Learn about your shipment(s) including their locations, events, product, status and ETA

Location/Tracks
Display information about tracks at your facility

Order In
Request rail car if you are an *Order In* customer

Release
Identify rail cars to be released to/from an industry track

Equipment
Display details and characteristics of specific equipment IDs

Cases (Service Issues)
Retrieve case (service issue) status, details and responses

Gate Reservation
Provides intermodal specific services, like create and view gate reservations

Accounts/Contacts
Retrieve information associated with your business(s) and people

UPGo - Intermodal
Provides intermodal driver services to expedite the intermodal terminal experience

Loup – Providing Total Supply Chain Logistics

LOUP

Wholesale Intermodal

Door-to-Door Service

Retail Auto Parts

Just-In-Time Performance

Carload

Traditional Rail

Carrier Relations

Execution Capacity

VALUE ADDED SERVICES

- EQUIPMENT AND CAPACITY SOLUTIONS
- INVENTORY MANAGEMENT
- NETWORK OPTIMIZATION
- VISIBILITY
- MILITARY SERVICES
- WAREHOUSING
- TRANSLOADING
- DRAYAGE SOURCING
- CROSSTOWN SERVICES

Developing Rail Solutions for Customers to Grow

Locating Customers on UP

- 25+ Focus Sites
- AccessUP – Streamlining customer track projects

Partnering with Loup

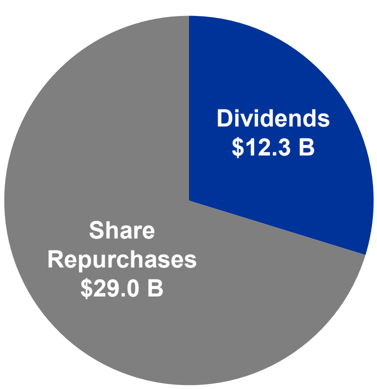
- Investing in the Transload Network
- 15+ Railports

WIN - FINANCIAL REVIEW

February 2022

Rewarding Shareholders and Delivering Value

2017 – 2021



$41.3 Billion Returned to Shareholders

90%
Annual Dividend per Share Increase

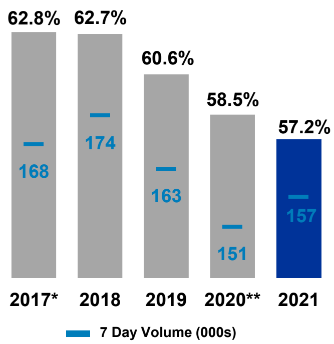
184 Mil Shares Repurchased
22% Reduction in Avg. Share Balance

Returned 145% of Net Income* to Shareholders

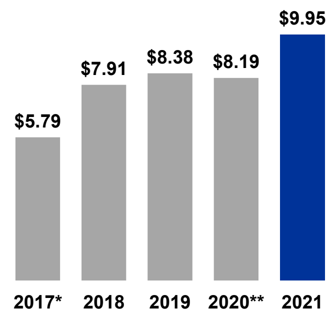
* 2017 Net Income adjusted to exclude the impact of Corporate Tax Reform and 2020 Net Income adjusted to exclude the Brazos non-cash impairment charge. See Union Pacific website under Investors for a reconciliation to GAAP.

Expanding Margins and Driving Returns

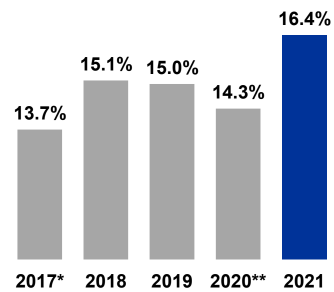
Operating Ratio
(Percent)



Earnings Per Share



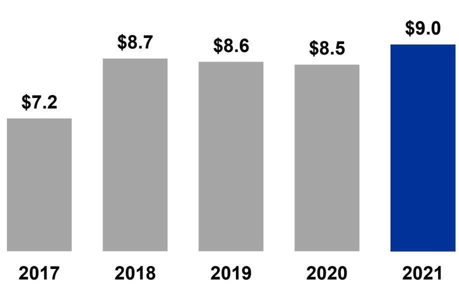
ROIC***



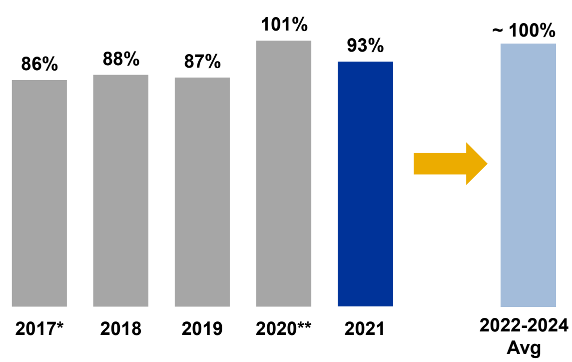
* 2017 Adjusted to exclude the impact of Corporate Tax Reform.
** 2020 Adjusted to exclude the Brazos non-cash impairment charge.
*** See Union Pacific website under Investors for a reconciliation to GAAP.

Strong Cash Generation

Cash From Ops
($ in Billions)



Cash Flow Conversion***

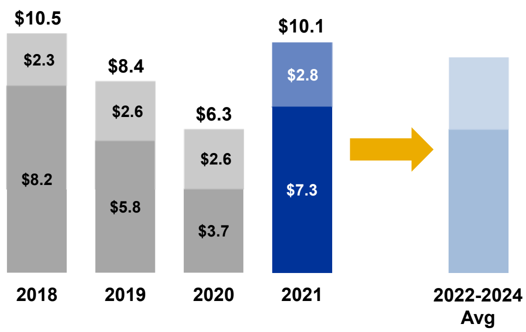


* 2017 Adjusted to exclude the impact of Corporate Tax Reform.
** 2020 Adjusted to exclude the Brazos non-cash impairment charge.
*** See Union Pacific website under Investors for a reconciliation to GAAP.

Growing Shareholder Value

Cash Returns to Shareholders

($ in Billions)

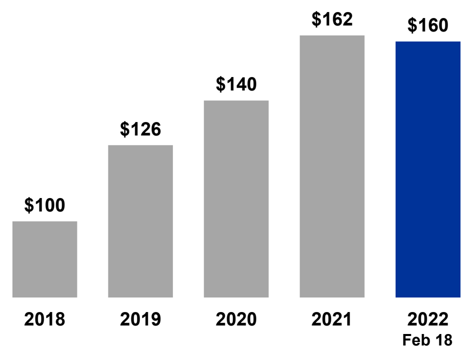


Dividend Target Payout of 45% of Earnings

$18 - $19B Share Repurchases 2022 - 2024

Market Cap

($ in Billions)

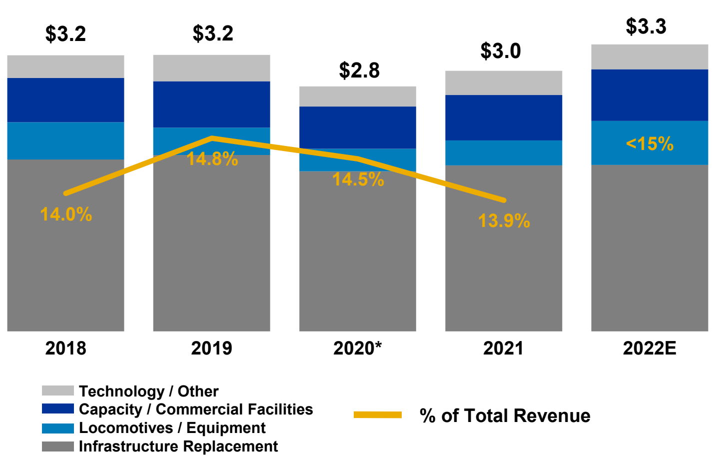


~60% Growth in Market Cap Since 2018

Investing for Growth

Capital Spending

($ in Billions)

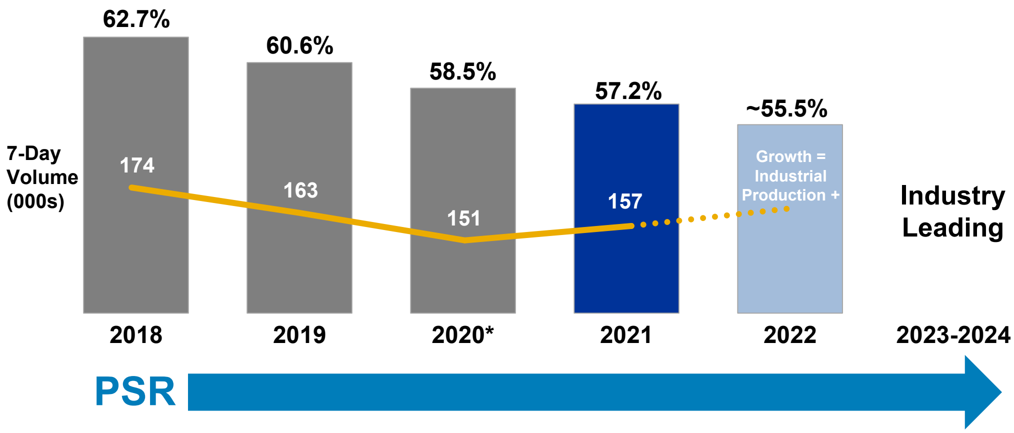


2022 Capital Plan	*$ Billions*
Infrastructure Replacement Including Energy Management Systems	**$1.9**
Capacity / Commercial Facilities	**$0.6**
Locomotives / Equipment	**$0.5**
Technology / Other Including Positive Train Control	**$0.3**

- Return-focused capital program
- Productivity initiatives to offset inflation pressures

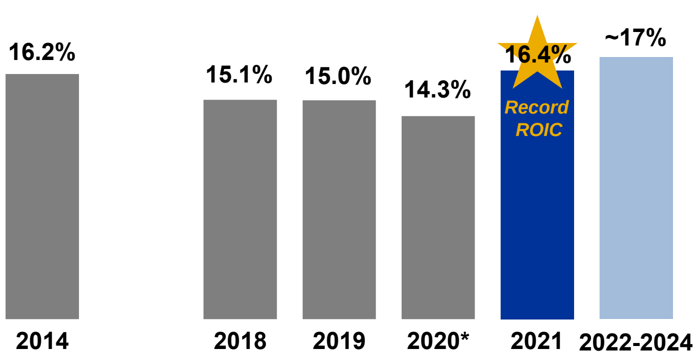
* Excludes Brazos impairment. See Union Pacific website under Investors for a reconciliation to GAAP for Union Pacific's results.

Clear Path to Industry Leading Operating Ratio



* Excludes Brazos impairment. See Union Pacific website under Investors for a reconciliation to GAAP for Union Pacific's results.

Growing Return on Invested Capital*



Maintaining Strong Investment Grade Credit Rating

Reduced Capital Intensity

Delivering Consistent Financial Performance

* Excludes Brazos impairment. See Union Pacific website under Investors for a reconciliation to GAAP.

TOGETHER - ENVIRONMENTAL, SOCIAL, AND GOVERNANCE

February 2022

ESG at Union Pacific

ENVIRONMENTAL	SOCIAL	GOVERNANCE
• Net Zero by 2050 • 26% absolute reduction in Scope 1 and 2 GHG emissions by 2030 • Alternative fuel blend targets for 2025 and 2030 • Climate Action Plan published in 2021 • Planet Tracks sustainability business resource group	• 11% women by 2030 • 40% people of color representation by 2030 • Increasing YOY spend with diverse suppliers by 25% • Investing in our communities through Community Ties	• Integrating ESG risk into ERM • Conducting Climate Scenario Analysis in 2022 • TCFD, SASB, CDP reporting in 2022 • Evolution of ESG KPIs in executive compensation scorecard

Championing Environmental Stewardship

Climate Action Plan Supports UP Strategy

SERVE

Improve operational efficiency and minimize fuel consumption

GROW

Offer sustainable supply chain solutions

WIN

Decarbonize our footprint and the environment

TOGETHER

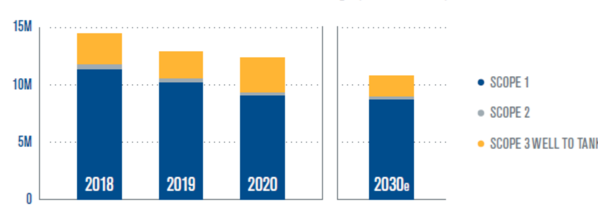
Engage our stakeholders and align interests

Science-Based Targets

Reduce absolute scope 1 and 2 GHG emissions from operations 26% by 2030 against a 2018 baseline

- Includes locomotive well-to-wheel
- Goal type: Absolute v. Intensity Goal
- Target intensity: Well below 2º versus 1.5º
- Re-evaluate in 2025

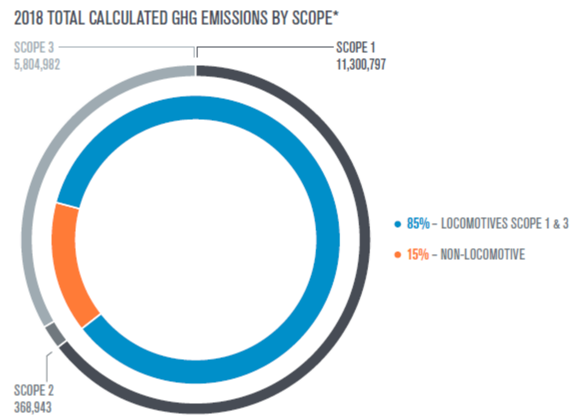
GHG EMISSIONS RELATED TO SBTi COMMITMENT – CO_2e (METRIC TONS)*



*Restated data reflects an emissions factor change for Scope 3 fuel and recalculation for Scope 2 purchase electricity.

Reducing Locomotive GHG Emissions

- Reduced fleet requirements allow us to retire less efficient locomotives
  - Modernizing existing fleet improves reliability
  - Increasing train length reduces fleet requirements
  - Rail cleaning technology improves tractive effort, requiring fewer locomotives
- Improving fuel consumption reduces GHG emissions
  - Energy Management Systems (EMS)
  - Idling Technology



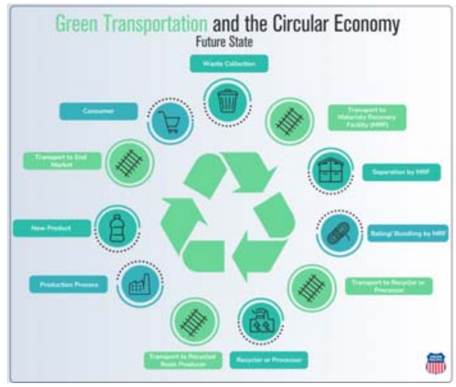
*Restated data reflects an emissions factor change for Scope 3 fuel and recalculation for Scope 2 purchase electricity.

Adding Battery Electric Locomotives to UP Fleet

- Announced acquisition of 20 total battery-electric locomotives from Progress Rail and Wabtec
- Total investment expected to exceed $100 million including locomotives and yard infrastructure
- Locomotives will be used in yard operations in California and Nebraska to test performance in warm and cold weather
- For every 10 battery-electric locomotives used, approximately 4,000 tons of carbon will be eliminated annually, the equivalent of removing 800 cars from the highway
- Locomotives will arrive in late 2023, with complete delivery expected by late 2024

Sustainable Supply Chain Solutions

- Helping customers reduce Scope 3 GHG emissions
  - Moving freight by train versus truck **reduces GHG emissions by up to 75%**
  - **Avoided 22.9 million tons CO_2e** in 2021
  - Carbon Emissions Calculator
    - Calculate GHG emissions savings
    - Sending emissions savings estimate to customers since 2013
- New market opportunities:
  - Electric vehicles and components
  - Low carbon fuels and feedstocks
  - Renewable energy markets
  - Recyclables



"If just 10% of the freight shipped in the largest trucks went by rail instead, we would be removing 3,300,000 cars from the road."
– President Joe Biden

Moving Environmentally Responsible Products

Biofuels are the Future

Use of biofuels represent the highest potential GHG reduction project in our 10-year plan

Biofuels are relatively carbon neutral

Biofuels are fuels made from renewable sources: soy, corn, canola, palm oil, tallow, etc.

Two types of Biofuel diesel exist today:
- Biodiesel
- Renewable Diesel

OEM’s limited use to B5 & R30

Biofuels are in short supply & subsidies are needed to make them economic

Building a Sustainable Future 2030

Investing in Our Workforce

Diversity & Inclusion

Talent Attraction, Development, and Retention

Driving Sustainable Solutions

Improved Customer Service

Profitable and Responsible Growth

Championing Environmental Stewardship

Sustainable Transportation for Our Customers

Strengthening Our Communities

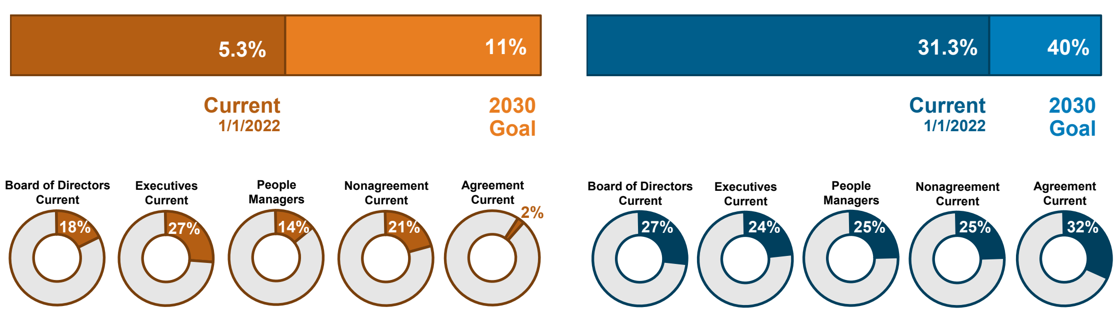
Investments Where We Work and Live

Four Pillars of Diversity & Inclusion

Diversity & Inclusion

Female = 100% Improvement
(Goal compared to 2019 at 5.5%)

People of Color = 36% Improvement
(Goal compared to 2019 at 29.4%)



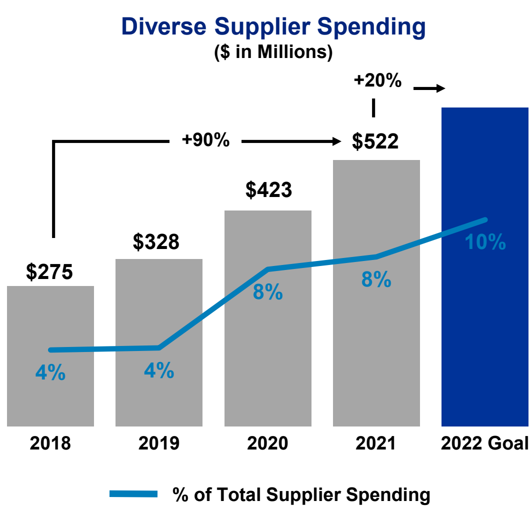
WE ARE ONE

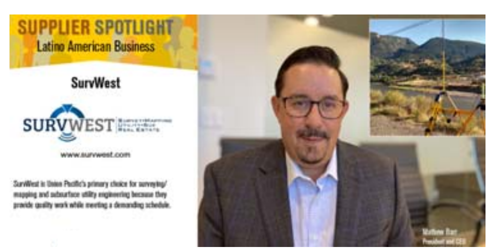
Expanding Educational Opportunities

- Innovative partnership with the University of Nebraska at Omaha
- Reimburse employees 100% of tuition* for classes to earn an undergraduate or graduate degree, or a certification program directly related to the employee's job

*Up to a maximum of $5,250 per calendar year

Growing Diverse Supplier Spending





40 YEARS SUPPLIER DIVERSITY

Strengthening Our Communities

$6.4M Community Spaces

- **200** Community buildings constructed or enhanced.
- **1,600** Green spaces created or enhanced.
- **400** Public spaces cleaned.

$4.1M Workforce Development

- **38,000** Trained in job skills.
- **9,800** Job placements.
- **1.1M** Hours of career-related classroom training provided.

$3.5M Safety

- **112,000** Trained in safety procedures.
- **23,000** Hours of safety training.
- **4,300** Emergency services equipment procured.

$9.4M Local Community Support

Corporate Sponsorships, Memberships and local needs grants.

$3.3M Matching Gifts

GivePlus and Fund for Effective Government (FFEG)