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May 20, 2022

**Via Electronic Filing**

The Honorable Martin Oberman, Chairman  
The Honorable Michelle Schultz, Vice Chairman  
The Honorable Patrick Fuchs  
The Honorable Robert Primus  
The Honorable Karen Hedlund  
Surface Transportation Board  
395 E Street, SW  
Washington, DC 20423-0001

**Re: Docket No. EP 770(1) – *Urgent Issues in Freight Rail Service---Railroad Reporting***

Dear Chairman Oberman, Vice Chairman Schultz, Board Members Fuchs, Primus, and Hedlund:

In compliance with the Surface Transportation Board's May 5, 2022, decision, Union Pacific respectfully submits its service recovery plan. Union Pacific concurs in the points raised by the Association of American Railroads in its May 18, 2022, filing in this docket. We urge the STB to give AAR's filing careful consideration.

Please contact me if you have any questions.

Sincerely,



Craig V. Richardson

Enclosure

cc: Ms. Cynthia T. Brown, Chief,  
Section of Administration, Office of Proceedings

Surface Transportation Board

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Docket No. EP 770 (Sub-No. 1)

Urgent Issues in Freight Rail Service—Railroad Reporting

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Union Pacific Railroad Company

Service Recovery Plan

May 20, 2022

## Union Pacific EP 770(1) Service Recovery Plan

The Surface Transportation Board (“STB” or “Board”) has directed Union Pacific to file a service recovery plan to describe the actions the railroad is taking to improve service and the metrics by which it will measure improvement. The STB has also directed Union Pacific to provide a weekly update for the next six months containing the following seven metrics:

1. Weekly Average Terminal Dwell Times for the largest eleventh to twentieth terminals;
2. Weekly Average Number of Train Starts Per Day (sorted by train type);
3. Inventory breakdown by privately owned, TTX-owned, and railroad owned cars;
4. Weekly average recrew rate and rate for each “operating division;”
5. Industry Spot & Pull percentage and percentage for each “operating division;”
6. Weekly average number of local (L) trains cancelled per day and the aggregate number of local trains cancelled per week, broken down by cause (crew, other); and,
7. Trip Plan Compliance (“TPC”): Original Estimated Time of Arrival (“ETA”) +24 hours.

Finally, the STB directed Union Pacific to report employee statistics monthly by operating subdivision and system.<sup>1</sup>

Union Pacific already provides, with minor exceptions, most of the data specified in the May 5th Order on our website,<sup>2</sup> to the Board, and to the Association of American Railroads. Union Pacific will consolidate and update that information to demonstrate improvement and support the details of the service plan detailed below.

### I. Union Pacific’s Operating Service Recovery Plan to Improve Network Fluidity.

Until recently, congestion continued to build as our cars per carload rate increased from 7.6 in January 2022 to 8.9 by the middle of April 2022. This congestion resulted in resources becoming more constrained as demand remained strong across the network, including in our Central Corridor (i.e., Chicago to Green River, WY) and into Northern California and the Pacific Northwest.

Union Pacific has made process improvements, detailed below, that have yielded improved fluidity and will clear congestion across the network. Specifically, Union Pacific has focused on

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<sup>1</sup> This human resources data tracking our progress will be reported monthly in our supplemental data filing, per the Board’s Order.

<sup>2</sup> Union Pacific publicly displays its’ Key Performance Metrics at <https://www.up.com/investor/key-metrics/>. Union Pacific also relays much of this data during monthly meetings with the STB’s Office of Public Assistance, Governmental Affairs, and Compliance, in Union Pacific’s ongoing series of customer communications (see Customer’s Communications from Kenny Rocker, Executive Vice President Marketing & Sales, (January 2022 to May 2022) at <https://www.up.com/customers/announcements/customernews/allcustomernews/CN2022-1.html> (January 5, 2022), <https://www.up.com/customers/announcements/customernews/allcustomernews/CN2022-4.html> (February 4, 2022), <https://www.up.com/customers/announcements/customernews/allcustomernews/CN2022-8.html> (March 16, 2022), <https://www.up.com/customers/announcements/customernews/allcustomernews/CN2022-15.html> (April 11, 2022), and <https://www.up.com/customers/announcements/customernews/generalannouncements/CN2022-21.html> (May 6, 2022)).

increasing and redistributing three critical resources: (1) crews; (2) locomotives; and (3) freight cars. The increases and redistributions were supported with analyses that matched resource supply against train count demand to provide a more consistent and reliable service product.

Diligent implementation of those continuous process improvements has started to pay off. Performance has improved since mid-April 2022: operating inventory has decreased by approximately 11,000 cars, cars per carload has decreased from 8.9 to 8.6, and there has been a 4% to 8% improvement in train velocity and car dwell. These changes have caused car velocity to increase from 177 miles per day (“mpd”) to 189 mpd.

We anticipate that our focus on crews, locomotives, and freight cars will result in continued, steady improvement over the next six months.

#### (1) Crew Initiatives

As communicated in our voluntary weekly updates to the Board, we have temporarily relocated approximately 150 train, engine, and yard (“TE&Y” or “train service”) employees to immediately provide additional crew supply for a number of specific hubs. This borrow-out number includes an additional 80 employees since April 26, 2022. These employees are currently in place and qualified for train service within their new operating territories.

Our train service hiring and training has steadily increased since the fourth quarter of 2021. As of May 6, 2022, Union Pacific has started 667 employees in training and graduated 223 train service employees so far this year. Employees currently training are scheduled to graduate by early August.

Union Pacific is well-positioned to achieve its goal of hiring, training, and graduating 1,400 employees by year’s end.

#### (2) Locomotive Initiatives

Since the beginning of this year, Union Pacific has already added 150 locomotives to the network. Although current locomotive supply is sufficient for our restoration efforts, Union Pacific will prepare 300 additional locomotives for a return to service in anticipation of additional growth expected later this year and early next year. The gradual addition of these 300 locomotives will also enhance Union Pacific’s ability to respond to new and significant network disruptions. Even as we supplement available power resources, Union Pacific is continuing its locomotive modernization and overhaul programs. These technology initiatives will improve the reliability of our locomotive fleet. Those reliability improvements will, in turn, reduce variability on the network and improve our service consistency.

Union Pacific is confident that as freight car congestion decreases across the network, discussed below, a more fluid network will result. Improved fluidity promotes faster train velocity, which cascades to incremental locomotive supply. All of these improvements will propel a more consistent, reliable service, which Union Pacific fully understands is key to being an integral part of the national supply chain network.

### (3) Freight Car Initiatives

Union Pacific continues to implement plans that work toward reducing 8% to 10% of our system-owned rail car fleet. By selectively storing Union Pacific-controlled cars, we will reduce network congestion and create additional train velocity. This additional train velocity effectively will allow movement of more carloadings and more gross ton miles without increasing congestion.

Simultaneously, Union Pacific is continuing to work with private car shippers that have elevated operating inventory on the network (as compared to late January 2022). Through that extensive dialogue, Union Pacific and its customers have mutually agreed to remove 1% to 3% of private railcars on the system. These car reductions will further improve car velocity and reduce cycle times for the remaining cars on the network.

#### *A. Union Pacific has modified its transportation plan to reduce variability.*

Union Pacific is taking other measured steps to improve network fluidity. Union Pacific continuously evaluates ways to reduce variability across its network. Removing variability from the network is critical as it results in unanticipated demand for resources and interrupts the timing and flow of the cars attempting to move across the network.

Union Pacific's terminals are currently running in a fluid manner. However, we continue to look for ways to reduce switching demand within the manifest network, which in the past has been a catalyst for congestion. This analysis requires a comprehensive overview of car flows throughout the network and continuous evaluation of the most logical and efficient routing options while considering resource and capacity constraints. A reduction in switching demand would reduce terminal dwell time and improve car velocity.

Union Pacific is confident these key actions will improve service and help restore network fluidity.

#### *B. Union Pacific will use key performance indicators to track network fluidity and efficiency.<sup>3</sup>*

Union Pacific will use five key performance indicators to show whether fluidity is improving across the network: (1) Car Velocity, (2) Operating Inventory, (3) Cars per Carload, (4) First Mile-Last Mile ("FMLM"), and (5) Trip Plan Compliance ("TPC").

#### (1) Car Velocity<sup>4</sup>

Car velocity provides insight into the efficiency of the freight cars currently circulating on our network by measuring the average daily miles a car moves on Union Pacific's network. The measure includes the time from release/interchange to placement/interchange (loaded and empty). Reductions in terminal dwell time and improvements in train velocity will directly translate to

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<sup>3</sup> Union Pacific believes providing specific projections may distort markets. These projections are subject to multiple risks and uncertainties. Union Pacific directs the Board to its Security and Exchange Commission ("SEC") filings concerning forward looking statements. They can be found here:

<https://www.sec.gov/edgar/browse/?CIK=100885&owner=exclude>.

<sup>4</sup> Union Pacific publicly displays its car velocity numbers at <https://www.up.com/investor/key-metrics/>.

improved car velocity. This improved car velocity, in turn, will allow for more cargo to be transported without adding additional freight car resources to the network.

## (2) Operating Inventory<sup>5</sup>

Union Pacific defines operating inventory as its active inventory minus cars placed at customers' facilities.<sup>6</sup> Stated differently, operating inventory is total inventory less cars stored less cars placed at customer. This number is a proxy for the cars that are currently being handled/managed.

Union Pacific is seeing a significant surplus in operating inventory across the network. This surplus is a primary contributor to network congestion. Our operating inventory from January to April of this year has increased by approximately 30,000 cars or around 17%. This rate of increase is extremely high compared to previous years where the rate of increase was about 2,000 cars in the same period.

Through implementation of the operating plan, discussed above, Union Pacific anticipates that operating inventory will decrease on the network relative to our carload demand.

## (3) Cars per Carload

Cars per carload is the operating inventory required to generate one revenue carload and is calculated by dividing operating inventory by the average daily number of revenue carloads. When cars per carload increases, more time was required, and more freight cars were utilized to move the customers desired volume across the network.

## (4) FMLM

FMLM measures whether, according to the car schedule, a manifest car was spotted or pulled on-time or early plus 8 hours. If a manifest car misses its schedule because of: (1) the customer was not ready for service, or (2) if the customer submitted additional spotting or pulling instructions after the customer had already received service that particular day, a new schedule will be established, and the car will be measured on a subsequent day. In short, this metric measures the percent of time that the local service schedule provided to the customer was achieved.

## (5) TPC

The Board has requested Union Pacific provide data for TPC plus 24 hours, and the explanations below capture how Union Pacific is calculating what the Board is requesting.

### a. TPC Manifest

TPC Manifest measures the actual transit of a car from release from industry or the interchange received event until constructive or actual placement or delivered at interchange versus the original

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<sup>5</sup> Union Pacific shares this number publicly at <https://www.up.com/investor/key-metrics/>.

<sup>6</sup> Active inventory is gross inventory minus the number of stored cars. Gross inventory is the total number of cars on the network, including stored cars and cars at customers' facilities.

schedule provided to the customer plus 24 hours. It measures the percent of the time the schedule originally provided to the customer was achieved.

b. TPC Intermodal

TPC Intermodal measures the actual transit for an intermodal box from its gate reservation, actual in-gate into the ramp, or the interchange received event until the box is grounded at the destination ramp or delivered at interchange relative to the agreed upon commitment provided to the customer plus 24 hours. It measures the percent of the time the agreed-upon customer commitment was achieved.

c. TPC Bulk

TPC Bulk measures the actual transit of cars on a Bulk train from departure from industry or the interchange received event until constructive or actual placement or delivered at interchange versus the original schedule provided to the customer plus 24 hours. It measures the percent of the time the schedule provided at departure to the customer was achieved.

*C. Conclusion*

An efficient rail system free from excessive congestion and delay is vital to a robust supply chain and national economy. Union Pacific must recover the system by improving the above key performance indicators and precisely executing the detailed service plan above. Union Pacific anticipates that our key performance indicator metrics will recover to levels achieved earlier in the year, which will enable us to move our customers' freight more reliably and consistently.