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Alan H. Shaw
President & CEO

June 23, 2022

The Honorable Martin J. Oberman
Chairman
U.S. Surface Transportation Board
395 E Street, S.E.
Washington, D.C. 20423

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The Honorable Michelle Schultz
Vice Chairman
U.S. Surface Transportation Board
395 E Street, S.E.
Washington, D.C. 20423

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The Honorable Patrick Fuchs
U.S. Surface Transportation Board
395 E Street, S.E.
Washington, D.C. 20423

The Honorable Robert Primus
U.S. Surface Transportation Board
395 E Street, S.E.
Washington, D.C. 20423

The Honorable Karen Hedlund
U.S. Surface Transportation Board
395 E Street, S.E.
Washington, D.C. 20423

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

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

On behalf of Norfolk Southern Railway Company (Norfolk Southern), I am providing you our revised service recovery plan as required by the Surface Transportation Board's (STB) order, issued on June 13, 2022, ("Urgent Issues in Freight Rail Service – Railroad Reporting, Docket No. EP 770 (Sub-No. 1)).

Norfolk Southern has readily acknowledged that our service product is not performing at the level that we expect of ourselves and, more importantly, that our customers deserve and expect. On behalf of our entire organization, I can assure you that every Norfolk Southern employee, from our crews to our senior leadership team, is focused on the restoration of our service.

As Norfolk Southern has testified and discussed in our previously submitted plan, the foundation to restoring our network fluidity is to address crew shortages. At a time when we face a historically tight labor market, we remain focused on recruiting, training, and retaining our transportation crews. Concurrently, Norfolk Southern has begun adopting a new operating plan, TOP|SPG, that will enable us to better serve the changing

needs of our customers and continued consumer demand. TOP|SPG works by making our everyday operations simpler and more consistent.

This plan will not require operating changes for the vast majority of our customers. For customers who will see changes, our teams have been in communication with our customers to incorporate their feedback and to ensure we are providing a platform for growth.

Norfolk Southern has endeavored to provide a comprehensive service recovery report that is responsive to the questions and comments posed by the Board in its June 13 order. I would welcome the opportunity to provide you with a briefing on all aspects of the plan. Restoring the reliability of our national freight transportation network requires collaboration and cooperation between all stakeholders. I look forward to working with you in that shared goal.

Sincerely,

A handwritten signature in black ink that reads "Alan H. Shaw". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Alan H. Shaw
President & Chief Executive Officer

Operating Subsidiary: Norfolk Southern Railway Company

**URGENT ISSUES IN FREIGHT RAIL SERVICE –
RAILROAD REPORTING**

STB Docket No. Ex Parte 770 (Sub-No. 1)

**REVISED SERVICE RECOVERY PLAN FOR
NORFOLK SOUTHERN RAILWAY COMPANY**

JUNE 23, 2022

I. EXECUTIVE SUMMARY

Norfolk Southern Railway Company (“Norfolk Southern”) respectfully submits a revised service recovery plan that reflects the additional information requested by the Surface Transportation Board’s order of June 13, 2022, in the above-captioned docket (“June 13 Order”).

Our service recovery plan remains focused on combating the main obstacle to restoring network fluidity to more normal levels: a crew shortage in a historically tight labor market. Working to recruit, train, and retain more employees is plainly the critical step to recovering the service levels that we have. Consistent with the Board’s requests, the enclosed revised service recovery plan addresses other topics such as Norfolk Southern’s plans to deploy an improved operating plan and our ongoing efforts in customer service. But as we pursue these other steps, Norfolk Southern will not lose sight of the highest priority of quickly and safely recruiting and deploying new employees to meet the current and future demand for rail transportation services.

The STB has ordered Norfolk Southern to identify reasonable, achievable targets for employment levels, and to explain how those employment levels will translate into key service metrics like network velocity, dwell, and on-time-performance. Norfolk Southern has used its best efforts to comply with these requests, but it is important for all stakeholders to understand the difficulty in empirically tying projected employment levels to particular network service metrics, particularly on an accelerated time frame. We have created an internal econometric analysis from historical data to attempt to empirically tie the targeted employment levels to improvements in network service metrics. But the company urges all stakeholders—customers, employees, investors, the public, and this agency—to be mindful that these forward-looking statements are inherently speculative and subject to macroeconomic factors and tight local labor markets over which Norfolk Southern has little to any control.

Service recovery will not happen overnight. It takes time to recruit and train new employees for skilled and safety-critical careers in train operations. Because

labor markets are inherently local in nature, the efforts are having mixed geographic results as some key locations lag others. We are intensively working to hire the crews we need, and our ongoing efforts have begun to produce improvements that we expect to accelerate over time. As more resources become available, network fluidity will improve, as will the reported service metrics. It will take time for Norfolk Southern to recover in an extraordinarily tight labor market and a transportation landscape still reeling from broader supply chain disruptions. But we are committed to continue our aggressive efforts to restore our service to what we and our customers expect.

Norfolk Southern commends its employees for their dauntless efforts in this difficult environment. Thousands of employees have worked harder and longer through a historic pandemic. While service levels are not where they need to be, the tremendous efforts of all Norfolk Southern employees are bringing us closer to a service recovery. In the end, Norfolk Southern is a service company, whose mission is to provide safe and efficient transportation services. As this plan is executed, Norfolk Southern looks forward to restoring that workforce to the level needed post-pandemic to meet the current and future transportation needs of its customers.

This updated service recovery plan has two components. After a brief discussion of the root causes of the current service issues, Section III provides more specific details behind our hiring efforts, refinements to the operating plan, and ongoing customer service activities, as well as a discussion of energy management and locomotive power impacts to service. Section IV offers forward-looking targets for employment and projected service metrics.

II. CURRENT CHALLENGES

The Board asked for more detail regarding the service challenges faced by Norfolk Southern. As the Board is aware (June 13 Decision at 6-7), the root cause of Norfolk Southern's service challenges is a shortage of crews. Crew shortages are affecting the operations of Norfolk Southern in a number of ways.

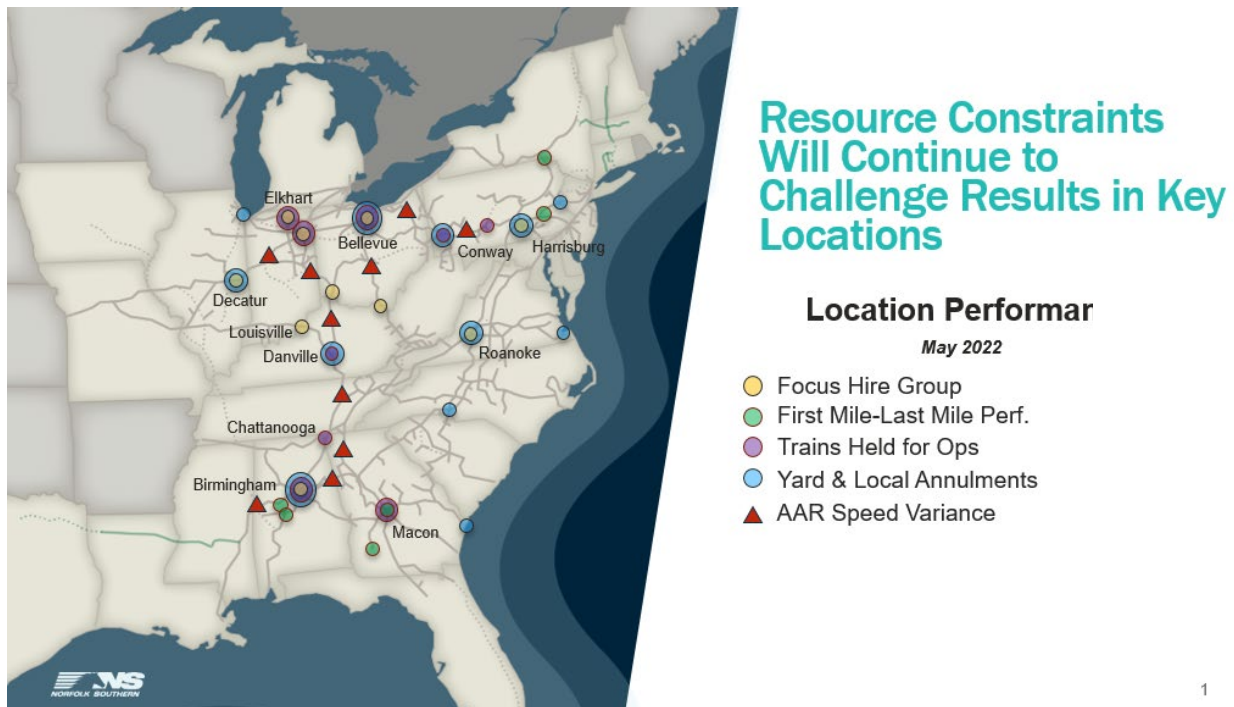
First and most fundamentally, a crew shortage results in Norfolk Southern running fewer trains than planned, which constrains our ability to meet the current demands. In instances where a train must hold for a crew, for example, because of hours-of-service restrictions or other availability challenges, that train will depart late and miss its departure window. Unlike other industries, Norfolk Southern cannot easily redeploy crews due to restrictive qualification requirements on each segment of the railroad, which challenges our ability to quickly adjust as service needs arise. A late departing train has a cascading impact across the network. Cars on that train are likely to miss connections at intermediate yards, thereby causing increased dwell time at the terminal. Missed connections result in congested yards, which further delay other traffic at those terminals. Additionally, locomotives on late trains are needed to power other trains on our network. Their unavailability can further exacerbate network congestion.

Second, a congested network is a slow network. When trains cannot keep to their schedule and are held outside of yards, that reduces velocity up through the main line. This can result in additional re-crews, which puts further stress on our workforce.

Because the Norfolk Southern rail network operates 24/7, there is no opportunity for a network “reset” (unlike in the airline industry, for example, where the network can be re-balanced overnight when operations cease). Therefore, the cascading impacts of congestion and stress on the network are exacerbated. It can take as many as 5 to 7 days to recover the network from just a few hours of challenging weather in one area of the network, as was experienced in early June in the Fort Wayne, IN area.

Figure 1 below illustrates the areas where crew shortages, e.g., resource constraints, continue to exert pressure on our network. For example, one of our most challenged locations is Birmingham, where trains are being held awaiting crews, resulting in local annulments. Train speed is challenged into and out of Birmingham as well. As indicated in this figure, other areas facing significant constraints on the Norfolk Southern network include, Bellevue, Decatur, Harrisburg, and Macon, which correspond to areas in which Norfolk Southern is also aggressively hiring.

Figure 1: Location-Specific Challenges



Norfolk Southern’s service recovery plan is therefore focused on those aspects of the root cause that are within its control. First, take aggressive steps to hire and train more employees. Second, improve the operating plan to provide better service with the resources it has available. And finally, to effectively communicate with customers so they understand what Norfolk Southern can, and cannot, do as service improves. The more specific details of this three-prong service recovery plan are described in the next section.

III. NORFOLK SOUTHERN SERVICE RECOVERY PLAN

A. Employment

In this section, Norfolk Southern addresses how it intends to remedy the current labor shortage and avoid future labor shortages. This section also addresses our system-wide goal for qualified Train and Engine (“T&E”) employees. Also included is detailed information about plans to incentivize hiring and retention and why Norfolk Southern thinks those plans will work. Labor force projections, as ordered by the Board, are included in Section IV below.

1. Current Specific Actions

The Board’s June 13 Order asserted that Norfolk Southern “did not identify any specific actions it intends to take to improve service, beyond referencing its ‘aggressive hiring practices’ and its new operating plan, ‘TOP | SPG.’” Norfolk Southern’s aggressive hiring practices and new operating plan are *precisely* the specific actions that will lead to improved service, with hiring taking special priority. Staffing is the lynchpin of Norfolk Southern’s service difficulties. *See, e.g.*, Norfolk Southern Service Recovery Plan, Docket No. EP 770 (Sub-No. 1), at 6–8 (filed May 20, 2022) (“NS SRP”); Hearing Transcript, Docket No. EP 770, at 297 (Apr. 26, 2022) (“training conductors is the number one priority, and the key ingredient for NS’s service recovery”); *id.* at 269, 271, 280–81, 293, 296, 297–98.

Norfolk Southern’s aggressive hiring practices are *the key* “specific actions” it is taking to improve service. Having explained that its service problems are resulting from T&E needs, Norfolk Southern’s service recovery plan specifically addressed actions to increase T&E headcount. *See, e.g.*, NS SRP, at 6-7 (explaining that, to onboard as many new conductors as possible, Norfolk Southern added resources to its Talent Acquisition, Health Services, and Technical Training teams to handle the higher volumes of job applicants and conductor trainees; explaining that it streamlined the hiring and onboarding process; explaining that it is training on two shifts at its technical training center to handle the increased volume of classes of conductors; explaining that to support those efforts it employed 35 additional full-time and contract trainers and was leveraging former conductors and engineers who are currently in other roles; explaining initiatives with its current workforce including availability bonuses, retirement deferral incentives, and

vacation buy backs; explaining reprioritization of deployment to areas of the network experiencing critical need; explaining its actions offering temporary transfer incentives to help address localized needs for months at a time as well as permanent transfer incentives).

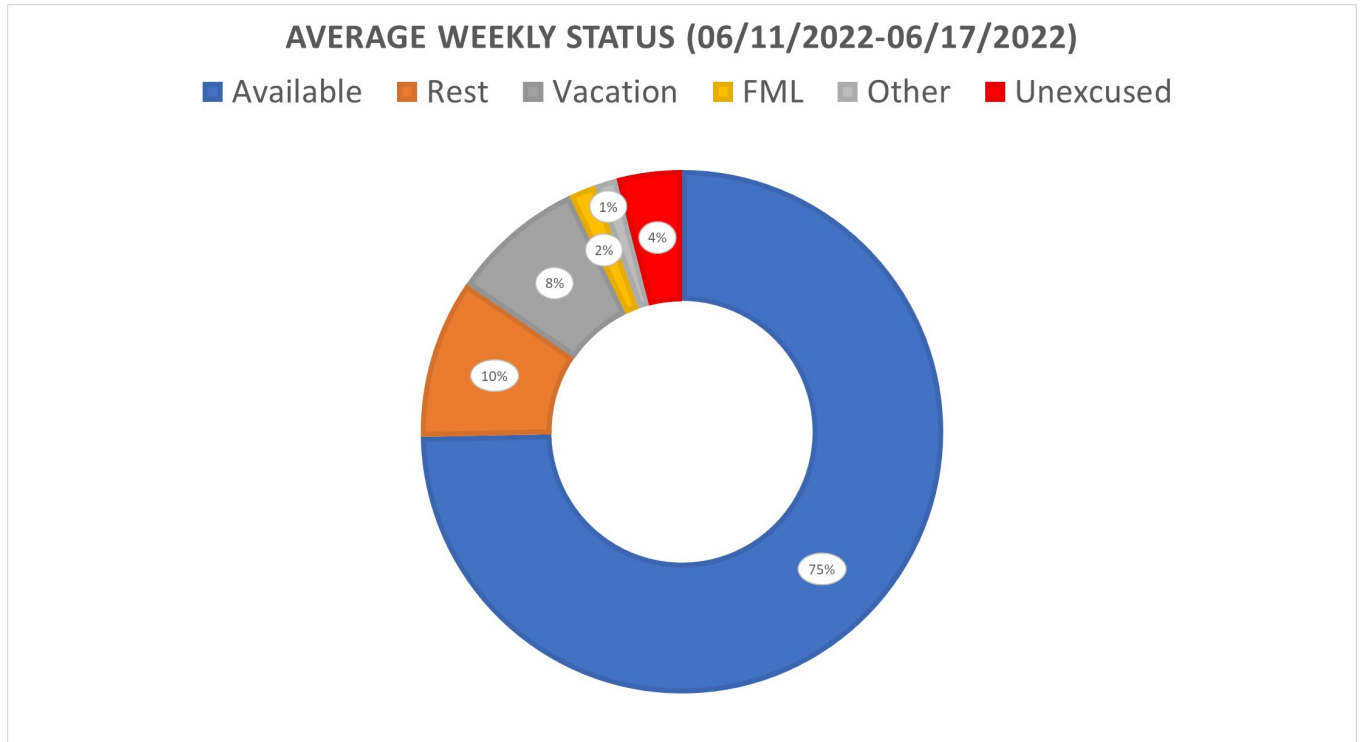
Moreover, Norfolk Southern voluntarily provided the Board with confidential, monthly reports to provide additional insight into its progress toward qualifying additional T&E employees. Norfolk Southern explained in those reports that increasing T&E headcount was an essential component of Norfolk Southern's service recovery. Norfolk Southern consistently explained that hiring is the key to improving its service, and has provided the Board with information in that regard at the hearing, in its service recovery plan, and voluntarily in confidential monthly reports. The Board is now seeking additional information on labor and employment, which Norfolk Southern will provide herein.

At present, our current system-wide goal for qualified T&E employees is 7543, accounting for attrition, with 7052 qualified T&E employees employed as of June 20, 2022. In the context of its directive regarding labor force targets, the Board recognized "that circumstances can change substantially in a year and that such changes could affect or supersede the ... labor force target that the Carriers will provide in response" to the Order. See also Hearing Tr. 442 (Member Fuchs: "I agree with your comment Mr. Chairman about you know no precise number," noting that "operating plans change, and then what you need in terms of assets and employees change"). Employee targets *will* inevitably change based on a variety of variables, such as the implementation of Norfolk Southern's new TOP|SPG operating plan, efficiency and availability of current workforce, fluctuations in business demand, economic factors (e.g., recession), and international conflicts, just to name a few. Norfolk Southern's T&E goals are projections, based on currently available data, as to the appropriate workforce size it will need to reliably handle the volume projections it has received from its customers.

The June 13 Order directed carriers to "provide additional context for their employment numbers, such as by including data in their plans and progress reports on the daily average number of employees not available for service, and if feasible, the cause of such unavailability." June 13 Order at 8. For the week ending June 17, 2022, Norfolk Southern's data shows that on average 75% of Norfolk Southern's total qualified T&E employees were available to work on a given day. Note however, the "available for work" number includes employees who work local or yard assignments who show as available on their scheduled rest day due to current technology limitations. Those employees are in fact not subject to call, meaning that they are on their scheduled rest day and are not in fact available for work. On average for the week ending June 17, 2022, six percent of those employees showing as "available" were in fact not subject to call, meaning that the average of qualified T&E available for work was in fact just 69% of total qualified T&E employees. That number fluctuated depending on day of week, with Sunday having the lowest availability over the week. The following Figure 2 illustrates the key drivers of crew

availability, which include FRA mandated rest, vacation, illness, and Family Medical Leave act absences, among others.

Figure 2: Average T&E Availability



Norfolk Southern will update this crew availability data in its bi-weekly progress reports.

On average, a qualified T&E employee will complete between 3.5 and 3.8 train starts per week.

The June 13 Order also asks for “detailed information about [the carriers’] plans to incentivize hiring and retention, including identifying—with specificity—the policies and incentives they intend to use to maintain an adequate labor supply along with an explanation of how those measures will attract and retain personnel.” The Order also asked Norfolk Southern to address “how specifically it will deploy new hires in its workforce.” June 13 Order at 13.

Norfolk Southern explained in its confidential reports that certain locations are receiving the greatest focus when it comes to deploying new hires. Norfolk Southern is submitting monthly a list of 10 critical hiring locations, which were identified based on a variety of factors, including current operational performance, turnover of existing workforce, strength of the training pipeline, strength of the pre-employment pipeline, and projected future increases in demand. Norfolk Southern is deploying new hires as quickly and safely as possible to these most critical locations. Hiring remains a challenging task in the current labor market, especially

in these locations where the unemployment rate remains below the national average, but Norfolk Southern is offering as many incentives as possible to attract qualified new T&E employees and to retain its highly valuable existing T&E workers.

As explained at the hearing, to attract new hires given the abundance of job openings, Norfolk Southern increased conductor *trainee* pay to \$185 per day in 2021, with additional bonuses up to \$5,000 paid at key milestones early in their tenure once they have completed training and have worked in the field for nine months. *See* Hearing Tr. at 276. That equates to more than \$23 per hour when a trainee is participating in classroom training, which is higher than equivalent private sector pay for trainees. Also as explained at the hearing, Norfolk Southern launched an employee referral bonus program to attract more qualified and reliable workers who are more likely to maintain their employment longer. Employees who refer conductor trainees are eligible for incentives that match those new hire bonuses. *See* Hearing Tr. at 276. We are also exploring supplemental pay for conductor trainees who work shifts longer than 8 hours.

To advertise these many benefits to attract potential new hires, Norfolk Southern has implemented an aggressive communication campaign, with advertisements via paid campaigns with ESPN, Google Search, radio, and other avenues like local newspapers and television stations in critical locations to supplement usual job postings. *See* Hearing Tr. at 278. We are also engaging local civic and military organizations, community colleges and high schools to create awareness and drive applicant flow for our conductor trainee opportunities. We are in the process of working with local leadership and labor leaders in these challenged locations to identify even more specific ways in which we can make our jobs more visible and attractive to candidates. In addition, we reached out to over 5,000 individuals who applied when we were not hiring at this historic rate and encouraged them to apply for our existing openings.

As noted in Norfolk Southern's May 20, 2022, Service Recovery Plan, Norfolk Southern has invested significant resources in its Talent Acquisition, Health Services, and Technical Training teams to ensure it can hire, train, and deploy new T&E employees as quickly as possible to safely and competently perform their duties. NS SRP at 7. Prior to its streamlining efforts, hiring and onboarding took approximately six months. Now, it takes trainees an average of about four months from hiring to work in the field due to the rigorous training requirements they must complete to ensure they can safely perform their work. This number will vary depending on a number of factors including, but not limited to, the number of territories on which to qualify, the amount of conductor trainees already working in a location, the availability of the necessary job assignments and the performance of the conductor trainee. *See id.*

Norfolk Southern is also training new hires as quickly and rigorously as possible, while ensuring that safety remains paramount both during training and

when conductor trainees mark-up. Norfolk Southern has been starting new classes of conductors every week this year and expects to continue at that rate through at least the first half of the year. To get qualified conductors into the field as quickly as possible, we are training on two shifts, and we employed 35 additional full-time and contract trainers and have leveraged former conductors and engineers who currently serve in other roles in the company to support the training as voluntary “adjunct instructors.” NS SRP at 6.

Norfolk Southern is also employing existing crew transfers to help relieve staffing deficiencies in critical locations. For example, we are thoughtfully transferring already-trained and qualified T&E workers from locations where our staffing levels are at or above 100% of the staffing goal to locations with the most critical staffing needs. From 2021 to date, we have offered both permanent and temporary transfer opportunities. Both programs are voluntary and temporary transfers typically involve six-month deployments at most locations. Thus far, we have made 133 total transfers to support staffing at critical locations, such as Birmingham, Decatur, Cincinnati, and Harrisburg, among others. These temporary transfers are in addition to our “Go Teams,” which are groups of employees who can be deployed quickly to serve short-term assignments in areas where the railroad is congested or facing crew shortages.¹ For these temporary transfers, we cover the costs of all meals and lodging for employees and offer increased pay to incentivize T&E employees to take these temporary jobs. The temporary transfer program has produced an improvement in local service metrics where the program has been utilized.

Norfolk Southern is also using three data-driven, short-term levers to increase T&E staffing in critical locations with currently employed T&E workers: availability bonuses, vacation buybacks, and retirement deferrals. Availability bonuses are short-term levers to minimize pressure on crew availability. We utilize these offers when we anticipate that mark-offs will be high to minimize the impact of crew shortages. Our evaluation of past use of availability bonuses has resulted in a consequential increase in availability and has led to higher rates of work attendance.

Norfolk Southern is hopeful these temporary and targeted availability incentives, as well as vacation buybacks, will help offset crew shortages, especially over the summer, a high vacation season. During high vacation times (e.g., summer

¹ At the beginning of the COVID-19 Pandemic, FRA granted relief from certain safety regulations, 49 C.F.R. §§ 240.321 & 242.301, to permit—under certain circumstances—a train to be operated if the locomotive engineer is qualified on the portion of track to be operated over and conductor is not qualified or whose previous qualification on the portion of track has expired. This provided additional flexibility to account for crew unavailability and preserve rail service, without a degradation to safety. That FRA order has since expired.

months, sports play-off weekends, holidays/days of commemoration), Norfolk Southern typically experiences an increase in crew unavailability and will use availability bonuses to incentivize work attendance and support our service recovery efforts. In addition, Norfolk Southern is leveraging availability bonuses on a location-specific basis where service is particularly challenged.

Norfolk Southern is investing heavily in availability bonuses, increasing employee attendance at critical locations like Cincinnati and Bellevue. Between February and March 2022, availability bonuses enabled Norfolk Southern to move approximately 250 trains that otherwise would not have moved and also released pressure on extra-board employees.

The vacation buyback program offers an incentive payment to employees in particular locations that are willing to work through an approved week of vacation. The employees are provided an incentive, paid for their vacation days, and paid for the work that they perform during that week. In 2022 to date, we have been able to generate more than 5000 additional hours of employee availability at our most challenged locations as a result of this program.

With our retirement deferral program, employees are incentivized to remain in active service until retirement, which must occur on or within sixty days after January 1, 2023. To date, we have been able to retain an additional 25 employees in key locations through this program.

With regard to retention efforts, Norfolk Southern has also focused on supporting positive workforce morale. For example, our new CEO, Alan Shaw, is spending significant time in the field with our T&E employees to understand their experiences, listen to their requests and suggestions, and strategize ways to further support them. In March, we launched a series of in-person workshops with senior leadership in our Transportation department to enhance communication and working relationships across that pivotal team and drive unity, trust, and alignment around cultural priorities. Each session incorporated action planning around identified cultural issues that affect employee productivity and retention. Our Transportation leaders have met with our senior executives to outline next steps for driving cultural change and inclusive leadership across their teams and are touching base regularly to brief them on progress.

Norfolk Southern has also initiated fun, family-friendly, catered events and social gatherings to show appreciation for our workforce, in addition to employee appreciation gifts. We have also offered leadership training and workshops similar to those discussed above at the management level. Most importantly, Norfolk Southern has been listening and responding with solutions for our T&E workers.

Norfolk Southern has heard repeatedly that its T&E workers want more options for improved work-life balance, particularly options to stay closer to home and work predictable day-time schedules. As a result, Norfolk Southern has proposed conductor redeployment that would allow conductors to work on-the-

ground positions with consistent schedules that would allow conductors to return home every night to their families and friends. These positions must be bargained for, but they are supported by Norfolk Southern. Norfolk Southern sees this proposal as a win-win, and is hopeful that this program is one of several that will incentivize our valued T&E employees to stay with Norfolk Southern for the long-term. In particular, conductor redeployment would improve employee lifestyle while contributing to long-term service resiliency, thereby offering benefits not only to our employees, but to the railroad and our customers as well.

In its supplemental order, the Board directed the Carriers to explain how crew shortages “are causing service problems.” June 31 Order at 7. As the Board acknowledged in the Order itself, there is broad agreement that “the principal underlying causes of the network congestion are shortages of labor.” *Id.* at 6. This is certainly true at Norfolk Southern, as we have explained. The steps outlined above will increase our labor force, which in turn would result in fewer operational difficulties. More available crews will allow Norfolk Southern to launch more trains on time, which will reduce congestion and in turn increase train speed. More crews will enable us to reduce terminal dwell by keeping to plan and having train meets occur on schedule, thereby not stranding loads at intermediate terminals. In turn, on time delivery and first-mile, last-mile service will improve. This will not be an overnight fix, as the Board itself has acknowledged, but increasing Norfolk Southern’s T&E headcount is the primary action that will improve service.

2. Avoiding Future Labor Shortages

In its supplemental order, the STB demanded that carriers explain both how they intend to remedy their current labor shortage and avoid future labor shortages. The agency explained that “this means identifying the labor force level needed to meet demand and the labor force level needed to successfully mitigate service disruptions caused by future events.” *Id.* at 7. Service disruptions flow from a range of events, from weather events to unexpected surges in demand, to tight labor markets, to a historical global pandemic.

The thrust of the STB’s inquiry is reasonably apparent from the questioning at the public hearing. At the hearing, certain members suggested that the railroads should hire more employees than needed to meet current demand to create a “buffer” or “excess” labor force to meet future unanticipated developments. Norfolk Southern and other carriers explained that the ordinary practice within the industry is to utilize employee boards to create flexibility and a buffer of potential employees that can be immediately called to meet increases in demand (within parameters permitted by labor agreements). And the entire concept of furloughing employees is yet another historic industry practice designed to adjust employment levels to the demand for rail service, but keep those employees available for a quick recall should demand require more resources. These are standard employment practices used by the rail industry for over one hundred years to balance the need to

operate with an efficiently sized workforce against the cyclical fluctuation of rail demand.

A suggestion that carriers operate deliberately inefficiently with an excess workforce is not in the interest of customers, employees, investors or the general public. The general public will suffer as the railroad industry would become less competitive with the trucking industry, with the litany of known environmental, social, and economic harms that would follow. Employees will also be harmed, as spreading the same amount of hourly work amongst more hourly employees will mean lower productivity, lower total compensation per employee, and ultimately a more dissatisfied workforce. While our conductors do receive a fixed base-level salary, Hearing Tr. at 277, most of our employees rely upon completing trips to achieve compensation levels they are accustomed to. Having excess employees would lower that trip-specific compensation per employee. Investors witnessing inefficient employment practices will either pressure the companies to change course or divert capital investment to other industries.

Norfolk Southern respects the concerns behind this line of inquiry. But the targets provided above and below are, in the company's opinion, sufficient to meet the current high demand for railroad services at an improved level of service witnessed in 2019. To improve our estimates, we have even offered retirement announcement incentives, which pay employees for giving advanced notice of their intent to retire (at least six months). This program is aimed at improving our attrition forecasting.

Yet there are important lessons to learn from the last two years that will factor into Norfolk Southern's decision making to lessen the likelihood of a future labor shortage. In hindsight, the railroad industry (and many others) was hit with two unusual changes in the marketplace that combined to cause the current service issues: a pandemic-induced, sharp reduction in demand followed by a dramatic surge in demand just a few months later, and a labor market, influenced by the great resignation, coupled with additional savings in people's pockets and increased unemployment benefits, that made hiring and retention far more challenging than anticipated. While the boomeranging demand witnessed in 2020 seems unlikely to reoccur, Norfolk Southern believes that the shock to the labor market may well endure.

If this change in the labor market is a fundamental shift rather than a temporary, pandemic-induced occurrence, then Norfolk Southern—like all industries in America—will need to adjust its employment practices to ensure that it has a robust labor force sufficient to meet current and future rail transportation demand. What does this mean more specifically? First, it means that Norfolk Southern is looking for ways to add resiliency to its network. Second, it means that if Norfolk Southern witnesses another sharp drop in demand for service, it will need to factor the current labor conditions into its decision on how many employees to

furlough, as the company must expect fewer of those employees will return to work when called in the current labor market. Third, it means that Norfolk Southern will need to continue the efforts described above to streamline its hiring process so it can more quickly adjust its workforce, and work with its unions to have greater flexibility to deploy existing employees through its network. Fourth, while Norfolk Southern has not experienced a material change in overall retention levels amongst existing employees, as it brings on new employees it must be vigilant to make sure it has sufficient employees on hand and in training if the labor participation rate impacts Norfolk Southern. Fifth, we must harness technological advancement to ensure that the railroad can operate competitively and efficiently.

In sum, the hard lessons of the past two years will guide Norfolk Southern's future employment decisions for years to come, until the tight labor markets return to historic norms.

B. Operating Plan

In its supplemental order, the STB expressed concerns that none of the railroads discussed their recovery plans from an overarching service design perspective—"in other words, whether and how expectations or limitations built into their current operating plans may be affecting their recovery efforts." June 13 Order at 8. The Board directed all carriers to supplement and discuss their recovery plans taking into account their service designs. And although Norfolk Southern previously advised the STB that its new operating plan will, among other things, improve service for customers, the STB indicated it must do more than represent that it has a plan; "it must explain and provide the contents of that plan to the Board for the benefit of its rail customers and the broader public." June 13 Order at 13. In this section, Norfolk Southern offers more details on TOP|SPG, and how it will contribute to the recovery plan. These changes to service design are not intended to be a substitute or replacement for the critical need to hire more employees, as detailed above. Rather, Norfolk Southern believes that measured modifications to the network service design will further the immediate, primary goal to restore service to establish network stability. As Norfolk Southern begins to stabilize the network, it has focused on leadership, resources, and our new operating plan, TOP|SPG.

1. Leadership

Within the last three months, Norfolk Southern has made changes to senior management in the Transportation and Network Planning & Operations divisions of the company. Our new leaders are authorized to promote and hire within their organizations, and are reorganizing their structures to promote alignment around service recovery. This reorganization has enhanced the clarity of individual roles, has better aligned the Transportation and Network Planning & Operations organizations, and has ensured that the people best suited to an individual role are

in those positions. Most importantly, our leadership team is focused on a data driven approach, prioritizing and focusing on the more challenging areas of the network, with the goal of putting together a daily operation plan that can be successfully executed for that day, accounting for the internal and external variables that affect rail operations.

2. Resources

As Norfolk Southern described at the April hearings and in its reports to date, the primary focus of Norfolk Southern’s service recovery is on its resources, the most important of which is our people. We continue to hire conductor trainees at an aggressive pace and are focused on employing the right number of people at the right locations across our network. In Section III.A. above, Norfolk Southern provided additional details regarding hiring requested by the Board.

In addition, Norfolk Southern has focused on stability at terminals and over its lines of road. At its terminals, Norfolk Southern has resourced major yards to increase production, has right-sized volume to reduce staging of traffic (which contributes to congestion), and has focused all employees on “running the plan,” which seeks to address the resource constraints identified in Section II, above, in particular, launching trains on time, meeting those connections, and first-mile, last-mile performance.

Norfolk Southern believes it has the right number of physical resources available—such as locomotives—to run to plan. As discussed below in section III.D., locomotive power has not been shown to be a cause of our service challenges.

3. Plan

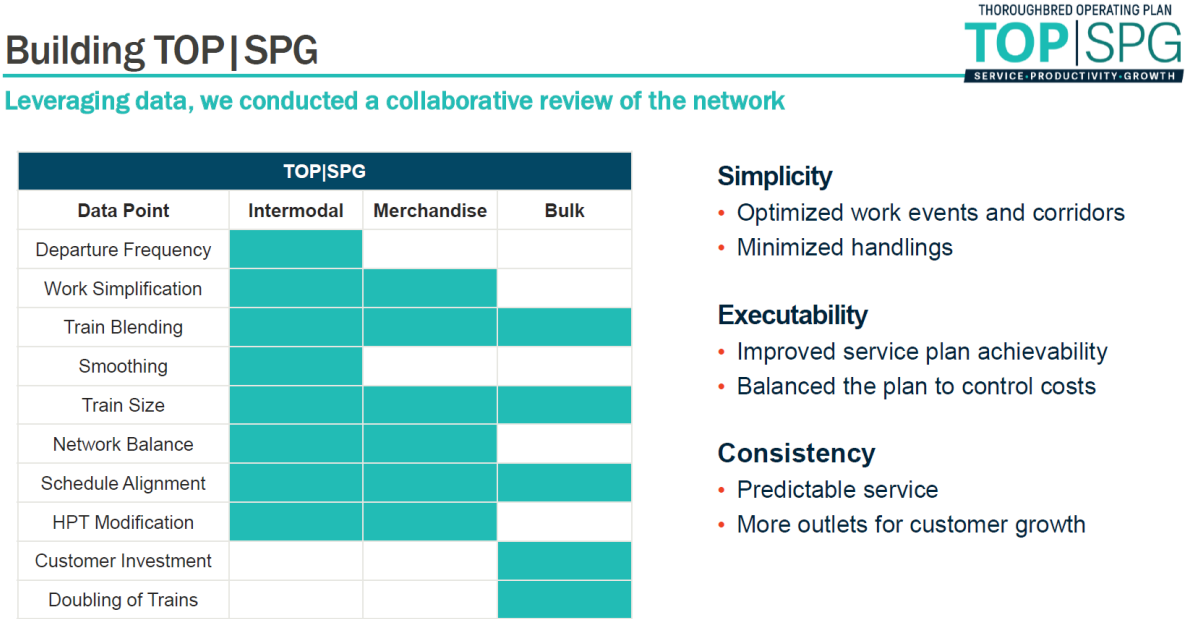
As Norfolk Southern has explained, we completed the development of our next-generation operating plan: TOP|SPG. TOP|SPG is an evolution of our previous operating plan, TOP21, to better serve the changing needs of our customers. The new plan will launch on June 27, 2022, and is centered around Service, Productivity and Growth. The implementation of a new service plan at this time is important given the imperative to improve service as quickly as possible and given the many changes in demand for freight rail transportation as compared to just a few years ago when TOP21 was launched.

Moreover, it allows Norfolk Southern to adjust to the changing economic climate, building on lessons learned over the last several years, with the goal of building resiliency into the network. As a result, Norfolk Southern has built TOP|SPG as an evolutionary plan—enabling the network to adopt to the ever-changing dynamics of the freight transportation industry. A key focus of the plan is to strengthen the Norfolk Southern intermodal franchise, which has rapidly developed into the leading mode of freight railroad transportation. This enhanced

demand for intermodal service products requires Norfolk Southern to re-evaluate and recalibrate its network operating plan.

TOP | SPG was developed by leveraging data to conduct a review of Norfolk Southern’s entire network. The TOP | SPG team evaluated numerous datapoints across the various commodity groups to ensure that all aspects of the network were taken into account, as illustrated in Figure 3:

Figure 3: TOP | SPG Development



TOP | SPG is an essential part of Norfolk Southern’s customer-centric culture. This is an operating plan we can execute daily, effectively, and consistently.

a. Operating Plan Design Changes to Address Service Challenges

TOP | SPG focuses on three primary modifications to Norfolk Southern’s operating plan to achieve service reliability: Executability, Balance and Capacity.

i. Executability

TOP | SPG works by making our operating plan simple, consistent, and executable every day. Service remains challenged, and our new operating plan better deploys our people and physical assets to address those challenges. Norfolk Southern believes that operational executability of the plan is core to offering sustained competitive service that our customers deserve and expect. More specifically, TOP | SPG will increase productivity by:

- reducing car handlings;

- reducing terminal dwell; and
- producing more productive car miles,

Each of these endeavors will simplify the network and produce a more executable plan. For example, reducing car handlings means that a car experiences a more direct, streamlined trip across the network while producing more productive car miles—e.g., directing a car toward its destination, rather than an intermediary yard. To that end, this operating plan adjusts run time for 56% of our train symbols, adjusts 39% of our yard blocks, and modifies 90% of our scheduled trains with the goal of streamlining the operations. A simplified operating plan means that there are fewer opportunities to deviate from the plan, meaning a more consistent and reliable service product.

Further, Norfolk Southern has evaluated and determined that we have the right number of locomotives and physical assets to execute TOP|SPG. TOP|SPG will ensure our people, engines, rolling stock, and terminals are deployed effectively.

ii. Balance

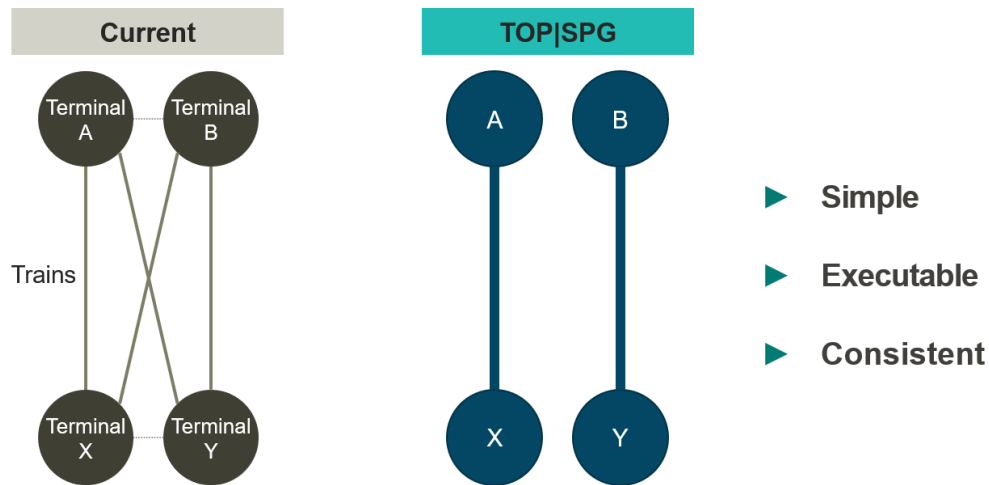
By providing a consistent service product and enhancing productivity, TOP|SPG offers the opportunity for growth. The plan provides a platform for absorbing increased volume as service improves and giving our customers the opportunity to grow.

In particular, TOP|SPG will:

- reduce imbalance in the network;
- simplify routes, terminals and traffic lanes;
- increase direct shipments, from one terminal origin to one-market destination for our intermodal customers, as illustrated below:

Figure 4: Intermodal Balance

Simplifying our approach to Intermodal



As part of TOP|SPG, Norfolk Southern will re-work its intermodal service to enhance its service and improve network fluidity, as illustrated graphically in Figure 4, above. To illustrate how this will work, take, for example, local intermodal service between Chicago and Harrisburg, Pennsylvania. Currently, Norfolk Southern has one scheduled intermodal train operating between 47th Street Yard in Chicago and Harrisburg Yard. There are two scheduled trains between 63rd Street Yard (also in Chicago) and Rutherford Yard (which is also in Harrisburg). Because there is only one train per day operating between 47th Street and Harrisburg, a customer whose container misses the launching of a train at 47th Street needs to wait 24 hours before the next train from that terminal to Harrisburg. This also means that containers in 47th Street will tend to dwell for up to 24 hours between trains.

Once TOP|SPG is launched, local intermodal service between Chicago and Harrisburg will be consolidated. Norfolk Southern will have four scheduled trains operating between 47th Street and Harrisburg Yard. No local trains will operate between 63rd Street and Rutherford. This means that a customer whose container misses the launching of a train from 47th Street will only need to wait about 6 hours on average before that container will leave on the next train. This arrangement has two primary benefits over the current operation. First, because there would be four trains from the Chicago market instead of three, and because traffic will be consolidated at a single origin terminal with more frequent train launches, containers will dwell less often at origin and customers will benefit from faster service. Second, the network will benefit from greater fluidity because the reduced

container dwell at origin will mean less terminal congestion, improving traffic flows in and out of terminals.

The plan balances the flow of shipments through terminals, intermediate yards and the overall network. This eliminates choke points and makes better use of Norfolk Southern's facilities. TOP|SPG is a realignment of train schedules to improve network velocity and a reset of 87% of the terminal clocks to better balance the flow of inbound and outbound trains. Each of these adjustments is intended to balance the network, creating a more direct routing for traffic. That will enable terminals to have the right mix of locomotive power and train crews to keep the terminals fluid and on time, spinning assets faster, and creating capacity for growth.

iii. Capacity

Norfolk Southern will enhance the capacity of its network by enhancing train size. This enhancement focuses on increasing the length of our smaller trains to absorb capacity, rather than making our longest trains longer.

Enhancing train size increases capacity without requiring additional crews. It can enable Norfolk Southern to transport more product for our customers without the use of scarce resources. This in turn provides our customers with an opportunity to grow their business with Norfolk Southern.

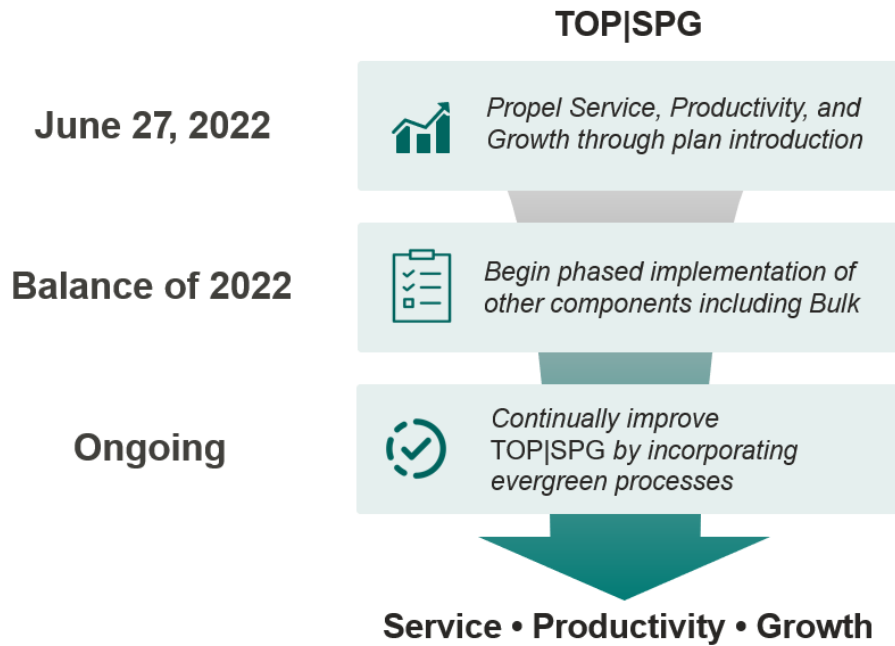
Importantly, TOP|SPG is designed to be agile, and to leave room for service restoration in the event of a weather event or unanticipated change to traffic patterns. For example, TOP|SPG takes into account the expectation that capacity will be reduced on the northern region of the network during the winter when weather events can be most severe, which will allow for more fluid service restoration after a winter storm event.

b. Customer Communication Efforts Relating to TOP|SPG

Implementation of TOP|SPG is designed to be a "no surprises" approach, similar to the approach Norfolk Southern took to TOP21. To that end, Norfolk Southern is conducting extensive outreach to our customers and other external stakeholders to explain the new plan and level set expectations. To date, customer feedback has been very positive. As TOP|SPG is implemented, most Norfolk Southern customers should not experience changes to their operations. To the extent any customers will experience changes to their service, our marketing and customer service teams will be discussing the plan to ensure they are prepared. Moving forward, Norfolk Southern will continue to analyze and review the plan to identify opportunities for improvement and growth.

Figure 5, below, provides a snapshot of the planned roll-out of TOP|SPG and highlights our plans to continuously evaluate the plan to ensure we are promotive service, productivity, and growth.

Figure 5: TOP|SPG Timeline



C. Customer Service

The June 13 Order directed the carriers to address the “steps they are taking to improve customer service, including the provision of timely responses to customer inquiries about delays in meeting expected ETAs, as well as the hiring of additional customer service representatives who are familiar with shipper needs and can resolve issues.” June 13 Order at 9; *see also id.* at 15.

Norfolk Southern is continuing to innovate and improve its customer service offerings, particularly by ensuring that our customer service segment is able to offer effective logistical support, which is a critical need of our customers and therefore a critical component of Norfolk Southern’s strategy to grow our business. To that end, Norfolk Southern has continued to invest in this vital area. As reported in the recent Service Hearing, in late 2019 (following implementation of its PSR operating plan), Norfolk Southern re-organized our Customer Service function to align this business group by line of business as opposed to a geographical alignment. *See* Hearing Tr. at 283-84. As a result, customers are able to speak with a representative who understands their business and what it takes to run their business. *See* Hearing Tr. 318-19; June 13 Order (asking about customer representatives “familiar with shipper needs”).

As part of this reorganization, Norfolk Southern made a significant investment in customer service personnel headcount, hiring more than twenty new

employees, reflecting Norfolk Southern's commitment to a customer-centric customer service product. Currently, the Intermodal Customer Logistics team is in the process of hiring 38 new managers (replacing contract positions), to be added to our Customer Logistics team. We expect that conversion to be completed by the end of September 2022. Beyond those changes to the intermodal team, Norfolk Southern does not currently plan to make significant changes to its customer service personnel levels, given the significant hiring that was done recently. However, Norfolk Southern will continue to evaluate its customer service staffing needs in light of shipment volume and overall service levels, which are the two primary drivers of customer service demand.

Additionally, and as reported at the hearing, in late 2021, Norfolk Southern further streamlined the organizational structure of its customer service department by positioning the customer service function within the Marketing Division to drive deeper alignment and understanding of our customer's needs. *See* Hearing Tr. at 284. Norfolk Southern also created a field sales marketing team—a “boots on the ground” approach which gives our operations team a go-to person to connect with the customer and provides a direct platform to better interact with our many small customers. *See* Hearing Tr. 284. Lastly, on June 1st, 2022, Norfolk Southern rebranded what was our Customer Service group to a new department title—Customer Logistics. We believe this better reflects the critical logistical role of this group, and, more importantly, better positions Norfolk Southern to compete for the best talent at some of the top Supply Chain Logistics programs in the country.

The Board's order asked about providing timely responses to customer inquiries about delays in meeting expected ETAs. Responding promptly to our customers (regarding any type of inquiry, including delays in meeting ETAs) is of the utmost importance to Norfolk Southern. In fact, the Customer Logistics team has a goal of providing a response to all inquiries within two hours of receipt. While we are currently and constantly striving for improvement in our rail service, our efforts at providing Best in Class logistical support remain strong. We know this anecdotally from our conversations with our customers who convey this is a strength of Norfolk Southern. We also know objectively that we are creating value for our customers from the data provided through our Voice of the Customer surveys. For the week ending Sunday, June 5th, 2022, 89% of our customers stated Norfolk Southern made it easy for them to resolve their issue. Importantly, 94% of our customers said the Customer Logistics representative met or exceeded their expectations.

Finally, and as explained at the hearing, Norfolk Southern also is using technology to improve the customer experience. Beginning with a complete redesign of our web interface, AccessNS, Norfolk Southern now offers a higher degree of visibility into the status of our local service as well as notifications on delayed shipments, which are customizable to provide the most value for our customers. We surveyed our customers who made it clear they needed proactive

notifications but did not want unnecessary “noise.” Upon receiving feedback, Norfolk Southern subsequently ensured the notifications were customizable to provide the most value to our customers by allowing, for example, customers to choose the specific delay threshold for a notification or specify their most critical commodities (STCC’s).

Norfolk Southern continues to invest in this digital space through a number of initiatives that are adding value to our customers’ operations. For example, Norfolk Southern has invested in technology that allows our customers to systematically tap directly into Norfolk Southern’s real-time shipment data, including completed and planned movements events. Customers can then integrate Norfolk Southern’s data within their own business applications. Norfolk Southern is delivering this through Application Program Interfaces (APIs). APIs help our customers by minimizing the need for data to be manually searched and viewed by a person. Instead, APIs enable a quick transfer of data in real time directly to our customers’ technology platforms. In the coming months, Norfolk Southern will deploy an API Catalog on our website at which point these API services will be available to all of our customers.

Another innovation Norfolk Southern is currently investing in is expanding data visualization for its customers. In particular, Norfolk Southern continues to enhance its AccessNS platform by incorporating new data visualizations that allow customers to more quickly and easily consume the data provided. Our online case management system has also been upgraded in the last year. Norfolk Southern has added the new ability for our customers to open inquiries directly from our AccessNS portal, which eliminates the need for the customer to manually email or call Customer Logistics. In addition, the new upgrades enable customers to see all recently opened inquiries along with the latest status and updates from Norfolk Southern.

Finally, Norfolk Southern has been a leader of the RailPulse initiative since 2019 and drove the creation of this transformative industry coalition. RailPulse is a cooperative venture to create a new technology platform that will facilitate and accelerate the adoption of GPS and telematics technology across the North American railcar fleet. Rail Pulse’s objectives are to enhance safety and to increase rail’s competitive position relative to other modes by improving visibility into the status, location, and condition of individual railcars, which will meaningfully contribute to rail industry growth, productivity and safety.

These significant and ongoing investments show Norfolk Southern’s commitment to providing Best in Class customer support that adds value to our customers’ operations and simplifies and enhances customer access to their shipments and to Norfolk Southern support.

D. Velocity and Locomotive Power

In its June 13 Order, the STB directed the carriers to explain “whether utilizing additional power on through trains would allow the railroad to maintain velocity when power at existing levels breaks down; and (2) whether removing velocity restrictions, or otherwise adding power, would improve service and reduce congestion, and, if not, why.” June 13 Order at 8. Although the Board “recognize[d] that turning off energy efficiency management systems or otherwise increasing power may not necessarily improve service,” Norfolk Southern was directed “to explain why adoption of measures to remove velocity restrictions and increase power would not enhance system fluidity, reduce reworks, and ultimately alleviate congestion and improve service.” June 13 Order at 14. The Order also directed Norfolk Southern to “provide a more detailed explanation with respect to its energy efficient management systems, including why it adopted such a practice in the first instance and why it believes the practice is not a contributing factor to [Norfolk Southern’s] ongoing problem of overall system velocity.” *Id.*

As Norfolk Southern explained in its service recovery plan, Norfolk Southern does not have a system-wide velocity restriction, which was consistent with its testimony at the hearing. *See* Hearing Tr. 345, 347 (Chairman Oberman to Norfolk Southern witness: “And I heard take the 40 mile an hour limit off. I don’t know if you have one, certainly BN has one because I saw it in writing,” to which Norfolk Southern responded that it did not have such a limit). Norfolk Southern also discussed, both at the hearing and in its service recovery plan, its use of the Energy Management (“EM”) systems that are designed to enhance network efficiency while also conserving energy and fuel consumption.

EM is an auto throttle control technology that regulates train speed and dynamic braking to achieve optimum fuel efficiency. From an operational standpoint, it was developed to reduce fuel consumption and provide consistent train handling practices using technology and data to ensure safe and efficient operations. The system is designed to reduce unplanned train stops—which are disruptive to both network fluidity and fuel efficiency—and keep freight moving, which enhances rather than restricts velocity. *See also id.* at 347-350.

While EM was adopted to improve safety and operating efficiencies, it has the added benefit of reducing fuel consumption. Norfolk Southern invested in and adopted these systems because these are laudable goals that are beneficial not only to Norfolk Southern, but also to customers and the general public more broadly. Indeed, adopting technologies and smart operating practices to improve the fuel efficiency of our locomotive fleet is critical because the locomotive fleet accounts for more than 90% of Norfolk Southern’s greenhouse gas emissions. EM is a critical part of Norfolk Southern’s many efforts to meet its science-based target to achieve a 42% reduction in scope 1 and 2 greenhouse gas emissions intensity by 2034.

Norfolk Southern does not believe that the EM systems are a contributing factor to the decrease in our system-wide velocity. Norfolk Southern has conducted statistical analyses on the impact of EM and has discovered no adverse impact to overall system velocity due to the use of EM. In fact, over a 15-month period, Norfolk Southern has found a positive correlation between train miles operated with EM and overall system velocity. In short, data shows that systems such as EM enhance, rather than restrict, overall system velocity. *See also id.* at 349-350 (Norfolk Southern witness explaining why she does not believe EM contributes to reductions in fluidity).

As we explained in our May report, Norfolk Southern did relax certain restrictions on locomotive power use in February 2022. Norfolk Southern has taken deliberate action to ensure that it is allocating horsepower to trains in a manner that will enhance service recovery. First, we have adjusted our formula for the amount of horsepower that is active on certain trains. Second, we have activated additional locomotives from our surge (or reserve) fleet and third, we have utilized targeted analytics to ensure system velocity challenges are not the result of an inability to run trains at track speed as a result of locomotive power. Norfolk Southern measures the deployment of locomotive power in terms of active horsepower per trailing ton (HPT). Year to date, Norfolk Southern's HPT plan for Intermodal and Merchandise trains have increased by 3% and 4% respectively.

Overall, Norfolk Southern's analysis continues to indicate that the root cause of decreases in system velocity are a result of crew staffing shortages and not due to energy management software or locomotive power.

IV. FORWARD-LOOKING SERVICE RECOVERY PROJECTIONS

A. Predictions of Service Recovery And Employment Levels Are Uncommonly Speculative In This Environment

In its initial service recovery plan, Norfolk Southern provided the STB with service goals, but cautioned the STB that the company could not assure the agency or the public of hitting those goals within six months due to the inherent volatility of those predictions. The STB responded by ordering Norfolk Southern to provide clear targets for the selected service metrics, regardless of the company's concerns about the accuracy or reliability of those forecasts.

As both a common carrier and publicly traded company, Norfolk Southern has an obligation to its customers, employees, and investors to only provide forward-looking projections our stakeholders can rely on with a reasonable degree of accuracy.² Forecasting is always inherently speculative—but forecasting train

² The NS Revised Service Recovery Plan contains forward-looking statements or forward-looking projections that may be identified by the use of words like “believe,” “expect,” “anticipate,” “plan,” “project,” and similar references to the future. Forward-looking statements or forward-looking projections reflect our good-faith evaluation of information currently available. These forward-

speed, dwell, on-time delivery, first-mile/last mile performance, and employment levels is unusually speculative in this marketplace. The ability of Norfolk Southern to recruit and retain sufficient employees to meet the future demand for transportation service is largely a function of the tightest labor market in decades. And the future demand for service is itself a function of our industrial economy that is entering a period of extraordinary uncertainty, influenced by factors like inflation, rising federal interest rates, rising fuel costs, and continuing logistic chain disruptions. Given the extraordinary degree of uncertainty and volatility in the transportation and labor markets, Norfolk Southern would not ordinarily provide such speculative forward-looking projections.

Notwithstanding its reservations, Norfolk Southern will comply with the STB's order. The STB—aware of the speculative nature of these targets—has clearly concluded that the value to the agency and the public outweighs the risks from providing aspirational targets and we trust that all stakeholders—customers, employees, and investors—will understand the inherently speculative nature of these forward-looking projections. With the understanding that these targets are subject to a host of macroeconomic factors outside of Norfolk Southern's control, it provides as requested specific targets for the service metrics selected, as well as for the company's overall employment level.

B. Norfolk Southern Service Metrics and Labor Force Projections

1. Labor Force Targets

The June 13 Order directed that the service recovery plans include “labor force targets for employees actually on the job [i.e., not furloughed] in six months and in one year (using the same timeframe starting point as their key service performance indicator targets), broken out by transportation (train and engine), maintenance of way and structures, maintenance of equipment and stores, customer service employees, and all remaining personnel.” The Order also specified that the plan separately specify “the total number of people that will be on the ‘extra-board’ of employees who are available to cover for regular employees.” The **Table 1** below reports Norfolk Southern's labor force targets for six month and one year, broken craft as required, and the current and projected extra-board employees.

looking statements or forward-looking projections are subject to a number of risks and uncertainties, and our actual results may differ materially from those projected. Please refer to our annual and quarterly reports filed with the SEC for a full discussion of those risks and uncertainties we view as most important.

Table 1: Labor Force Targets

Craft	Current	6 Month Target	1 Year Target
T&E	6966	7330	7543
MOW	4119	4206	4349
MOE	2368	2385	2438
Customer Service	304	338	349
Remaining	3779	3905	4139
Total	17536	18164	18818
	Current	6-Month Target	1 Year Target
Extra-Boards	1829	2023	2097

2. Service Metric Targets

The June 13 Order directed Norfolk Southern “to provide clear six-month targets it reasonably expects to achieve.” June 13 Order at 15. While the STB acknowledged that Norfolk Southern identified its metrics for measuring service improvement (including FMLM and TPC performance), defined those metrics, and explained what they indicate and why they were selected, the agency ordered Norfolk Southern “provide more network specific context for why it selected these metrics and link them to the specific actions it intends to take, as discussed above.” *Id.* at 14. Norfolk Southern was also directed to explain why it selected the targets and why restoration of service to 2019 levels as a desirable long-term target, including why it believes service provided at 2019 levels will reliably meet demand.

Table 2 below provides Norfolk Southern realistic targets³ for where the four key service metrics will be within 6 months, taking into consideration the volatile, ever-changing labor market and many factors identified above that could impact any of these projects. Norfolk Southern evaluated a myriad of data points to develop these forecasts, as explained below.

³ Norfolk Southern understands that the Board’s use of the word “Target” is a request for a projection of actual expected service levels, rather than an aspirational target, and has developed these numbers accordingly.

Table 2: Service Metric Targets

Metric	Current	6-Month Target⁴
System Velocity	17.9 MPH	19.4 MPH
Merchandise TPC	54%	61%
Intermodal TPC	90%	93%
LOPA	73%	75%
LOPA RR Caused	8.2%	5%
Terminal Dwell	26.6 Hours	23.7 Hours

a. System Velocity

For system velocity, Norfolk Southern was able to perform a regression analysis using historical data and current forecasted T&E hiring expectations to establish a six-month target.

b. Merchandise Trip Plan Compliance

To develop the Merchandise Trip Plan Compliance target, Norfolk Southern used the same methodology as developed for System Velocity and performed a regression analysis using historical data and current forecasted T&E hiring expectations to establish a six-month target.

c. Intermodal Trip Plan Compliance

Norfolk Southern did not originally offer a target for Intermodal Trip Plan Compliance, because that is not a metric used in the regular course of business. The Board however ordered that Norfolk Southern “provide a TPC performance target for intermodal service.” June 13 Order at 14-15. Norfolk Southern’s average Intermodal TPC as reported to the Board since reporting began in May is 93%. Norfolk Southern’s target is to maintain intermodal TPC at or above 93%. Because Norfolk Southern does not track intermodal TPC in the regular course, it was not possible to conduct a regression analysis or other formulaic calculation to develop a mathematical six-month target. The projected target of 93% of intermodal trains arriving at Destination within 24 hours of the Original ETA is, in Norfolk Southern’s opinion, a reasonable goal in the current service environment.

⁴ Six-months measured from the time of the Original May 20, 2022 report

d. Unit Train Trip Plan Compliance

The Board also directed Norfolk Southern to, *if possible*, include weekly reporting data and a performance target for unit train service. June 13 Order at 14-15. The Board noted that other carriers have “made an effort to respond to the Board’s data request with respect to this metric.” *Id.* at 14. While Norfolk Southern is aware that the other reporting carriers have provided information that purports to conform to the Board’s order, Norfolk Southern’s unit train operations are unique within our transportation system.

It is critical to understand that within the Norfolk Southern network, unit trains are unscheduled trains. That means that our unit trains are assembled and move based on three parties executing their respective responsibilities. Specifically, the shippers must load the train within the prescribed time, Norfolk Southern must then move the train to destination, and last but certainly not least, the receiver must be in position to accept and process the train. Any inability by the receiver to accept and process the train applies not just to the train in question but to the previous train as well. Given the dynamic nature of Unit Trains, neither Norfolk Southern nor our customers gauge our performance by adherence to the original ETA for unit trains. Norfolk Southern does not track unit train performance in this manner and therefore does not have this metric available. Rather, Norfolk Southern evaluates its unit train service in terms of cycle time and order fulfillment. For example, a unit train customer may order 7 trains in a month. If Norfolk Southern delivers those 7 trains, then order fulfillment is considered successful. Norfolk Southern also looks at cycle time, e.g., how long does it take the unit train to run from origin to destination and return. Norfolk Southern reports Coal Unit Train order fulfillment to the Board in the Ex Parte 724 docket.

Rather than using an adherence to Original ETA, our customers only request notification when a train reaches certain geographic points along its route. In that regard, customers have access to a current ETA which aids them in assessing when they can anticipate receiving the unit train traffic at destination. This information is conveyed to the customer through our AccessNS platform, which provides the best real time, customer-specific data on when a customer can expect delivery on their unit train.

In sum, given the unique nature of our unit train service, Norfolk Southern does not believe that a reliable performance target for unit train service is possible at this time.

e. Local Operating Plan Adherence/First-Mile, Last-Mile

Local Operating Plan Adherence (“LOPA”), Norfolk Southern’s First-Mile, Last-Mile metric, did not show a similar relationship to employment levels as did system velocity and Merchandise TPC. Thus, the same regression analysis was not possible to project a target for this metric. LOPA includes both railroad-caused service failures and customer-caused failures, such as a track full, gate blocked, or

blue flag left up. LOPA is also dependent upon the service offered by Norfolk Southern's interchange partners in certain circumstances. Currently, Railroad-caused service failures account for approximately 8% of LOPA failures. Norfolk Southern's target projects an improvement in railroad-caused LOPA failures, which is based on current service trends and a reasonable estimate of anticipated improvement over the next six months. On occasion, an improvement to rail service could result in additional customer-caused LOPA failures. For example, as more crews are available to place more trains at customer facilities, it is possible that there will be an uptick in "track full" LOPA failures. Accordingly, the anticipated 3% reduction in railroad-caused LOPA failures is accompanied by an estimated 1% increase in customer-caused LOPA failures, resulting in a projected 2% improvement in the overall, combined LOPA metric within six months.

f. Terminal Dwell

Like LOPA, Terminal Dwell similarly did not show a clear correlation to employment levels given the highly complex nature of the operational impacts on terminal dwell. Thus, a regression analysis like that conducted for Merchandise TPC and system velocity was not possible. To gauge a target for Terminal Dwell, Norfolk Southern evaluated current variance to scheduled trip plan dwell as well as current trends in terminal dwell as compared to past performance where the network experienced similar volatility and comparable carload levels.

g. Network Context for Metrics & 2019 Targets

The STB ordered that Norfolk Southern provide "more network specific context" for why it selected these four service metrics. Two of the metrics were selected by the STB—not Norfolk Southern. As for the other two metrics, network velocity and dwell, these are established network service metrics the STB itself has identified—with extensive public comment and feedback—as useful tools to measure system-wide rail service. Norfolk Southern selected those metrics because they are well known, easily understood and measurable, and are common metrics used by all stakeholders to gauge network service.

Finally, the STB asked Norfolk Southern to explain why restoration to pre-pandemic levels of service was the desirable long-term target and why that level of service will reliably meet demand. Norfolk Southern pointed to 2019 service levels as reasonable targets that support the goal of stabilizing network performance to acceptable levels. Norfolk Southern has no intention of treating 2019 service levels as a long-term target—as its workforce returns to pre-pandemic levels and it deploys its new operating plan, the company has every intention of improving service levels beyond those enjoyed in 2019 to provide a superior service product to its customers and to grow the business. Norfolk Southern knows these service metrics are achievable because it provided that level of service prior to the pandemic. In extensive, ongoing discussions with customers, a return to pre-

pandemic service levels is a mutually shared objective. As reported above, Norfolk Southern has provided more specific six-month targets based, where possible, upon mathematical regression analyses and overall evaluation of network conditions.