BEFORE THE
SURFACE TRANSPORTATION BOARD

DOCKET NO. FD 36873

UNION PACIFIC CORPORATION AND UNION PACIFIC RAILROAD COMPANY
—CONTROL—
NORFOLK SOUTHERN CORPORATION AND NORFOLK SOUTHERN
RAILWAY COMPANY

OPERATING PLAN (EXHIBIT 13)

JOINT VERIFIED STATEMENT

OF

ERIC GEHRINGER AND JOHN F. ORR

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1. Introduction

1.1. Witness Qualifications

1. This Operating Plan is sponsored and verified by Eric Gehringer, Executive Vice President-Operations for Union Pacific Railroad Company ("UP") and John F. Orr, Executive Vice President and Chief Operating Officer for Norfolk Southern Railway Company ("NS"). We have been responsible for developing the Operating Plan (Exhibit 13 to the Application), which describes in detail how the merged UP/NS system will deliver faster, more reliable, more efficient service to customers and attract new business, providing increased competition to trucks and other rail carriers. We developed the Operating Plan with the assistance of numerous professionals from a variety of disciplines at both companies, each of whom contributed to the process of identifying opportunities to improve service and realize efficiencies by combining UP and NS routes, facilities, and strengths.

2. *Gehringer*: I have been employed by UP since 2006. I joined UP as a management trainee and have served in numerous positions during my tenure at the company, including Senior Vice President-Transportation and Chief Mechanical Officer and Chief Engineer in the Operating department. I was appointed to my present position in 2021. As Executive Vice President-Operations, I am responsible

for all aspects of UP's operations, including the Transportation, Engineering, Mechanical, Network Planning & Operations, Dispatching, Customer Care and Support, and Premium Operations functions. Before joining UP, I held positions at Northwest Airlines and DaimlerChrysler. I graduated St. Louis University with a Bachelors of Science in aerospace engineering, received an MBA from the University of Nebraska-Lincoln, and have completed the Advanced Management Program at Harvard University. I serve on the Board of Directors for the Children's Nebraska Foundation, and I am a member of the United States Strategic Command Council—a group of senior business and community leaders who advise the U.S. Strategic Command and support its initiatives.

3. *Orr*: I have been employed by NS since 2024. In my current position, I am responsible for leading NS's railway operations, including safety, transportation, network planning and operations, engineering, and equipment maintenance. Previously, I served as Executive Vice President and Chief Transformation Officer at Canadian Pacific Kansas City ("CPKC"), and before that, I was Executive Vice President of Operations at Kansas City Southern Railway. I began my career at Canadian National Railway, where I held various operating and network positions, including Chief Safety and Sustainability Officer and was ultimately promoted to Senior Vice President and Chief Transportation Officer. I received a Bachelor of Arts degree in environmental studies from the University of Waterloo and have completed the Advanced Management Program at Harvard University.

1.2. Purpose and Scope

4. This Operating Plan describes how a unified UP/NS system will operate to serve its customers and grow the amount of freight moving by rail. It encompasses three major functional areas: transportation, mechanical, and engineering. In each area, the Operating Plan shows how UP and NS will integrate activities, personnel, and facilities following consummation of the proposed transaction; the operational changes expected to result; and the gains in safety, service, operating efficiencies, and other benefits anticipated from the merger. The Operating Plan specifically addresses the effects of integration on patterns of service, yard activity, commuter and passenger services, equipment requirements and utilization, traffic density, and labor forces.

1.3. Overview

5. The merger of UP and NS will unite a western railroad with an eastern railroad to establish the first American transcontinental railroad. We know customers strongly prefer single line service because of the operating advantages it provides in terms of speed and reliability and the commercial advantages it provides in terms of ease of doing business. The end-to-end combination of UP and NS will establish new competitive rail services in lanes dominated by trucks and create significant opportunities to improve service and efficiency for traffic moving across the middle of the country.

6. By operating as one network, UP/NS will move traffic in seamless, single-line service that eliminates interchanges, reduces handlings, and optimizes traffic more efficiently and safely than is possible today. The merger will transform

thousand of lanes of traffic to single-line lanes. Applicants project implementation of their optimized plan will remove approximately 2,400 handlings of cars and containers per day and save approximately 60,000 car miles per day.[1] This translates into a savings of approximately 876,000 handlings per year and 21.9 million fewer car miles per year. In addition, UP/NS will combine UP and NS routes to create new, more efficient through routes and provide faster and more reliable service for customers from coast to coast—especially those in "watershed" markets where UP or NS would haul traffic less than 250 miles before or after interchange.

7. For example, UP/NS will combine UP's efficient route from Southern California to Kansas City with NS's efficient route from Kansas City to the Northeast to establish a new train pair carrying intermodal traffic between Southern California and the Northeast. The new route will eliminate the need to interchange in Chicago and will save approximately 17 hours of transit time on traffic moving eastbound from Southern California to the Ohio Valley, Pennsylvania, and New Jersey, and approximately 19 hours on traffic moving westbound between the same locations. As another example, by routing traffic via Shreveport and Meridian rather than via Memphis, UP/NS will save approximately 70 hours of transit time on traffic moving from Southern and Northern California to the Southeast, including Georgia, Florida, and North Carolina, and approximately 95 hours on traffic moving in the opposite direction.

[1] *See* Workpaper "C-251124 Operating Plan Metrics vF.xlsx," Tab "Growth Plan," Cells D17 and D25.

8. UP/NS will also implement new train and blocking plans that allow manifest traffic, including traffic moving to and from watershed areas, to move faster and more reliably with fewer handlings. For example, for traffic moving from the legacy UP's network west of Iowa to the Ohio Valley and Northeast, UP/NS will operate a new train through the Chicago terminal area without interchanging.

9. UP/NS will also introduce new trains to provide truck-competitive service in watershed areas. For example, UP/NS will operate a new train for traffic moving from Texas, Louisiana, and Arkansas to Michigan, Ohio, Pennsylvania, and New Jersey. UP/NS will also introduce new trains for traffic moving between Texas, Louisiana, Arkansas, and western points on the legacy UP system, and Kentucky, Alabama, Tennessee, and northeastern and southeastern points on legacy NS system.

10. Applicants' plan to improve service by combining UP's route to Kansas City with NS's route from Kansas City to Butler, Indiana, illustrates why the benefits of this transaction cannot be achieved without a merger. Although the possibility of avoiding interchanging traffic in Chicago could provide a motivation for voluntary cooperation, the economic incentives for two independent railroads to use their assets jointly are limited. As separate railroads, UP and NS naturally focus on maximizing their own revenues and minimizing their own costs, and each is understandably reluctant to invest substantial resources when realizing the returns depends on the future actions of the other. The same considerations create the "watershed" problem, in which railroads lack incentives to pursue interchange traffic originating or

terminating near gateways because they receive a low return on management and capital investment in short-hauls.

11. After merging, UP/NS will focus on outcomes for the combined company and its customers. A combined UP/NS will internalize all the costs and benefits of operating changes. It will not need to rely on a partner's continued motivation to perform and willingness to contribute resources to a joint activity. As a result, UP/NS not only will redesign transportation plans to combine UP and NS routes, but also plans to invest in two core mainline corridors that bridge the former UP and NS networks. Applicants expect to spend approximately $136.6 million to improve NS's line between Kansas City and Butler, and $172.3 million to improve NS's line between New Orleans and Atlanta.[2] Both of these planned mainline improvements will improve service for existing customers and provide additional capacity so customers can grow their businesses. In this Operating Plan, we describe the transportation plan changes and additional investments Applicants plan to make as they pursue a unified strategy to provide customers faster, more reliable, safer, and more competitive service.

12. In developing the Operating Plan, Applicants recognized that changes to their transportation plans will primarily affect traffic they currently interchange at gateways from Chicago to New Orleans. The Operating Plan describes those changes and shows how they will allow Applicants to improve existing services and

[2] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Capital Investment," Cells H32:H55.

establish new truck-competitive services while freeing capacity to accommodate growth at gateway locations. In addition, although most train operations on UP's routes in the West and NS's routes in the East will not change as a result of the merger, Applicants anticipate system-wide improvements in service reliability and efficiency and customer experience as the merged UP/NS adopts each company's best practices and takes advantage of the combined company's resources. The Operating Plan describes the merged company's plans to combine and coordinate services and facilities at current interchange points, integrate locomotive and car fleets, improve efficiency of mechanical and engineering services, and combine management and oversight of operations.

13. In Applicants' planning process, we carefully considered the capacity implications of planned operating changes for lines, yards and terminals, interchanges with other railroads, passenger and commuter operations, equipment supply, and the workforce. We identified infrastructure improvements necessary to achieve anticipated merger benefits and developed plans to complete the improvements. We took care to ensure the Operating Plan and anticipated traffic increases will not adversely affect existing interchanges with other railroads or Amtrak or other passenger service. We also took care to ensure UP/NS will have sufficient employees in the right locations to implement the plan and achieve the merger's service and efficiency benefits. Many of these issues are also addressed in the Application's Service Assurance Plan.

14. As described below, the Operating Plan is designed to improve operations and effectively accommodate growth at key points on the U.S. rail network. For example, UP/NS will improve operations in Chicago, the busiest gateway in the United States and the major point of interchange between UP and NS today. The Operating Plan will reduce the volume of trains that would otherwise move through Chicago and reduce drayage of intermodal containers between UP and NS facilities (called "rubber tire interchanges") in Chicago. Some trains that transit through Chicago will no longer require handlings or work events there, and operations at terminals and yards will be optimized to reduce complexity and improve fluidity. UP/NS will also improve operations in the St. Louis gateway, where today eastbound traffic interchanged between UP and NS moves first to the Alton & Southern Railway ("A&S") Gateway Yard, then is transferred to the Terminal Railroad Association of St. Louis ("TRRA"). Under the Operating Plan, eastbound cars will be blocked at Gateway Yard and launched from there into the legacy NS network, reducing handlings and transit time. The Kansas City gateway will also benefit from streamlined operations that will reduce the need for transfers between yards. And in New Orleans the Operating Plan will reduce congestion by reducing interchange activities on the NS Back Belt line. These optimizations will not only streamline UP/NS operations, they will also improve the overall U.S. rail network, improve service for customers, and ensure continued efficient operations for passenger and commuter providers hosted on UP/NS lines like Amtrak and Metra.

15. Developing the Operating Plan involved three steps, as further described below in Section 2. First, Applicants created a picture of the pre-transaction operations of UP and NS as independent companies, which we call the "Base Plan." Second, Applicants designed plans to optimize operations of UP and NS as a single, integrated network, but without the additional traffic an integrated UP/NS would attract. We call this the "Optimized Plan." Third, Applicants designed operations that would accommodate the traffic growth projected to be achieved by a fully integrated UP/NS three years after the transaction. We call this the "Growth Plan." As part of this three-step process, Applicants also calculated the operations-related costs and quantified some of the many operations-related public benefits of the merger.

16. The Operating Plan takes into account the phased realization of anticipated traffic growth over the first three years. Applicants assumed 40 percent of the traffic gains to UP/NS would be realized by the end of the first year of unified operations, 70 percent by the second year, and 100 percent by the third year. The Operating Plan also considers the impact of phased efficiency gains to account for the time required to complete planned infrastructure upgrades and other steps in the integration process. Applicants address the specific timing of capital expenditures for planned upgrades in their capital improvement plan and accompanying work papers, which are part of the accompanying Service Assurance Plan. But because we expect the traffic growth will be phased in, there is ample opportunity to phase in the necessary capital investment as well. This Operating Plan and the accompanying workpapers address the specific timing of expected efficiency improvements. In

computing savings and expenditures, revenues and costs were developed at 2023 levels.

17. The sections below show Applicants will safely provide faster, more reliable, more efficient services than UP and NS can offer today as independent companies and will provide new truck-competitive services where competitive rail options do not exist today. They also show Applicants will be able to generate significant operating efficiencies while accommodating the traffic growth anticipated from the merger and without adversely affecting customer service or the operations of other freight and passenger railroads.

2. Development of the Operating Plan

18. UP and NS today have well-designed operating plans that allow each railroad to provide safe, reliable, and efficient service. Today UP's operating plan is optimized for UP, and NS's operating plan is optimized for NS, accounting for traffic patterns resulting from commercial arrangements and the capital investments that each railroad has made in pursuing its individual interests. The combined UP/NS will have an optimized plan designed to serve the interest of the combined railroad, which will allow for efficiencies and public benefits even before the expected traffic growth from the proposed transaction.

19. While UP and NS each have internal planning systems that allow them to develop, deploy, and maintain operating plans for their separate systems, we had to create a new plan for the combined UP/NS. We also had to create metrics that could be used to quantify the impacts of the changes resulting from the merger for the Application. For this purpose, we and our teams used MultiRail, a well-established

software application used for rail service design planning. MultiRail simulates network plans against a designated set of traffic and allows service designers to adjust plan parameters (trains, blocks, main lines, yards) and compare outputs against the capacity of each to develop even more efficient plans. MultiRail has been used for more than 25 years to design operating plans in rail merger proceedings, including Canadian Pacific's recent acquisition of Kansas City Southern. Various railroads in the United States, Europe, and Asia use MultiRail for their day-to-day transportation planning. Both UP and NS have used MultiRail to design their own transportation plans. And both railroads have service design experts who are proficient in using service design tools, including the current version of MultiRail.

20. Developing the Operating Plan was a team effort that relied on both the expertise of experienced service design personnel from UP and NS and a team from Oliver Wyman, the firm that created and licenses MultiRail. The combined team validated the Base Plan and identified potential changes to train and yard operations for the Optimized Plan and Growth Plan. MultiRail was used to refine those changes and create metrics and comparisons that could be used to quantify the impacts of the changes.

21. The following sections describe in more detail how Applicants used MultiRail to develop the Base, Optimized, and Growth Plans. MultiRail also generated a series of system-wide and lane- and yard-specific outputs related to each plan, including train counts, gross ton-miles, running car-miles, handlings, crew changes, estimated lane transit times, and other operating statistics. The process

resulted in three feasible transportation plans for a UP/NS network, along with metrics that can be used to assess the operating impacts of the transaction.

2.1. The Base Plan

22. The first step in designing the Operating Plan for a combined UP/NS was to build the Base Plan, which serves as the baseline for comparison with post-merger operations.[3] Building the Base Plan required three basic components: (1) a MultiRail representation of the combined UP/NS network; (2) UP's and NS's July 2025 pre-merger operational designs—that is, their blocking and train plans; and (3) UP's and NS's 2023 pre-merger traffic.[4]

23. Applicants loaded MultiRail with detailed representations of each railroad's current physical networks and operating plans (blocks, trains, and train-to-train connections). We then flowed UP's and NS's traffic through MultiRail to simulate planned operations. We used traffic data from 2023 because it is consistent with the most recently available Confidential Waybill Sample Data, which is used to develop traffic diversion data used in the Growth Plan.[5] MultiRail traffic data has a

[3] *See generally* Workpaper "C Base Plan_vS.pdf."

[4] Dr. Elizabeth Bailey's team from Charles River Associates ("CRA") performed the work to create a combined 2023 traffic file. Appendix C to Dr. Bailey's Verified Statement describes CRA's methodology. Oliver Wyman used the combined traffic file to develop a compressed file for input into MultiRail. *See* Workpaper "Operating Plan Traffic Pipeline.pdf."

[5] We concluded that using 2023 UP and NS traffic, adjusted to account for new and idled facilities, with July 2025 UP and NS blocking and train plans, provided the most realistic and credible way to reflect current and projected operating conditions while using 2023 traffic that can be compared and validated against the most recent data from the Board's Confidential Waybill Sample.

"traffic category" assigned based on each railroad's existing classification, or the car type, commodity and, for hazmat, additional commodity data fields. This is derived from 2023 waybills. The traffic categories are intermodal, auto, bulk, hazmat, and manifest.

24. MultiRail initially generated separate network simulations for UP and NS. After each railroad validated its network simulation, the two networks and transportation plans were merged into the Base Plan. As shown in Table 1, which compares operating statistics reported in UP's Form R-1 and NS's Form R-1 with statistics from the stand-alone base scenarios and the Base Plan, MultiRail's Base Plan representation is an accurate representation of observed operations.

Table 1[6]
Actual Operating Statistics vs. MultiRail Base Plan

	UP+NS R-1	Base Plan	Variance %
Gross-Ton Miles (000s)	1,173,575,798	1,179,146,429	– %
Car-Miles (Loaded)	7,770,137	7,657,292	(1)%
Car-Miles (Empty)	5,293,491	5,068,753	(4)%

25. Statistics regarding Base Plan operations (segment-level train counts, traffic densities, yard activities) are reported in Electronic Appendices E and F and set forth in the workpapers accompanying this Operating Plan.[7]

[6] *See* Workpaper "Base_R1_Validation_Report 251125.xlsx," Tab "Updated Summary Sheet."

[7] *See* Workpaper "Line Segment Tables from Model vF.xlsx," Tab Line Segment Table_Base"; "Yard_Details_Report_T1_20251202_vF.xlsx," Tab "Yard_Output_T1."

2.2. The Optimized Plan

26. After ensuring the Base Plan accurately represents UP and NS pre-merger operations, the next phase in our planning process was to identify merger-related opportunities to improve service and efficiency.[8] Our service design experts developed new routing, train, and blocking plans based on how a single railroad would handle the 2023 UP and NS traffic. As part of that exercise, they adjusted certain traffic flows to reflect changes that included facility consolidations and reduced drayage of intermodal containers between UP and NS facilities (called "rubber tire interchanges"). The service designers constructed the new Optimized Plan in MultiRail, and flowed the traffic to simulate operations under the Optimized Plan. They then analyzed the model outputs to determine whether the plans were feasible given existing network constraints and to identify additional opportunities for improvement, iteratively revising the plans and rerunning the model until they were satisfied they had achieved the Optimized Plan.

27. The objective of the Optimized Plan was to identify operating changes Applicants could implement upon authorization of common control to improve service and efficiency on the combined network. We identified significant opportunities to route traffic more efficiently and change blocking plans so traffic could bypass intermediate handling in the traditional gateway cities. Reducing intermediate handlings improves service reliability for customers by eliminating events that introduce variability into the system and creates capacity in yards to accommodate

[8] *See generally* "C-Optimized Plan_vS.pdf."

traffic growth. In addition, reducing intermediate handlings improves operational safety for employees by limiting the exposure of personnel to the working environments in which most incidents occur. Finally, these routing changes and reductions in intermediate handlings allow locomotives and rail cars to cycle faster, which reduces the resources required to move traffic and generates savings for the railroads and private car fleet owners.

28. Changes to the blocking plan and train plans in the Optimized Plan relative to the Base Plan are shown in Electronic Appendices G and H and the workpapers accompanying this Operating Plan.[9]

29. The key metrics comparing the Optimized Plan with the Base Plan are shown below in Table 2.

Table 2[10]
Changes in Daily Operating Statistics Resulting from Optimized Plan

Description	Base Plan	Optimized Plan	Optimized vs Base Plan	Optimized vs. Base Plan
Gross ton-miles	3,239,413,267	3,233,425,065	(5,988,202)	(0.2)%
Car-miles	34,961,663	34,901,418	(60,245)	(0.2)%
Total Handlings	193,797	191,398	(2,400)	(1.2)%
Train miles (freight)	478,461	473,761	(4,700)	(1.0)%

[9] *See* Workpaper "T1_T2_T3_Block_Comparison.xlsx," Tab "New Blocks"; "T1_T2_T3_Train_Comparison.xlsx," Tab "T1 to T2 Train Changes."

[10] *See* Workpaper "C-251124 Operating Plan Metrics vF.xlsx," Tab "Growth Plan."

30. Statistics regarding Optimized Plan segment-level train counts, traffic densities, and yard activity are reported in Electronic Appendices I and J and set forth in the workpapers accompanying this Operating Plan.[11]

2.3. The Growth Plan

31. The Growth Plan reflects how the fully integrated UP/NS network would operate and accommodate the traffic Applicants expect to attract through the service improvements projected to result from merged operations and new services introduced.[12] The Growth Plan also incorporates Applicants' plans to invest in new capacity to serve the additional traffic, including track, terminal capacity, and modernized signal systems.[13]

32. Applicants used the Optimized Plan scenario in MultiRail to flow the pre-merger and growth traffic across the network. Service design experts from both railroads then modified the plan to accommodate the added traffic. Most of the additional traffic could be absorbed directly into the Optimized Plan's train and blocking plan without changes, except that trains and blocks become larger and more

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[11] *See* Workpaper "Line Segment Tables from Model vF.xlsx," Tab "Line Segment Table_Optimized"; "Yard_Details_Report_T2_20251202_vF.xlsx," Tab "Yard_Output_T2."

[12] *See generally* Workpaper "Growth Plan_vS.pdf."

Applicants' merger-related traffic growth expectations are described in the Joint Verified Statement of David T. Hunt and Matthew Schabas. The Growth Plan also includes major changes in traffic volume that are expected to continue (*e.g.*, large new and lost contracts) from the Base Plan traffic. *See* Workpaper "Major Traffic Wins and Losses Since 2023.pdf."

[13] In addition, in developing the Growth Plan, Applicants accounted for returning to full operations several intermodal facilities that are idle in 2025.

efficient. In other instances, the additional volume required new train starts on existing routes. In still other instances, the additional traffic allowed for changes that further improve service. For example, projected traffic from Mexico and Texas to the Ohio Valley, Southeast, and Northeast created a lane density opportunity to introduce a new train pair. As another example, Applicants project that increased demand for service will support a new intermodal train service between Northern California and the Northeastern United States.

33. In designing the Growth Plan, we recognized that transaction-related growth will not precisely follow the predicted pattern. Transportation markets are dynamic and highly competitive, and changes affecting the demand for rail transportation will occur between the filing of this Application and the full integration of UP/NS. Because UP/NS will compete aggressively for all available customer traffic and our competitor railroads and trucking providers will do so as well, it is impossible to predict the outcome of all the customer decisions made in the new competitive environment that the proposed transaction will unlock. But Applicants have made their best estimates of anticipated traffic growth, and the Growth Plan shows how UP/NS operations would be structured to handle those best estimates. The Growth Plan was designed to ensure that the proposed operations of the combined railroad are realistic and practical, and UP/NS will have the resources needed to adjust to a changing world as the transaction is implemented.

34. Changes made in the Growth Plan's blocking plan and train plans relative to the Optimized Plan are shown in Electronic Appendices K and L and set forth in the workpapers accompanying this Operating Plan.[14]

35. The following table summarizes the operational effects of incorporating merger-related traffic changes into the Growth Plan.

Table 3[15]
Changes in Daily Operating Statistics Incorporating the Growth Plan

Description	Base Plan	Optimized Plan	Optimized vs. Base Plan	Growth Plan	Growth vs. Optimized Plan
Gross ton-miles	3,239,413,267	3,233,425,065	(0.2)%	3,801,942,247	17.6%
Car-miles	34,961,663	34,901,418	(0.2)%	39,998,653	14.6%
Total Handlings	193,797	191,398	(1.2)%	214,610	12.1%
Train-miles (freight)	478,461	473,761	(1.0)%	512,606	8.2%

36. Details regarding Growth Plan segment-level train counts, traffic densities, and yard activity are reported in Electronic Appendices M and N and set forth in the workpapers accompanying this Operating Plan.[16]

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[14] *See* Workpaper "T1_T2_T3_Block_Comparison.xlsx," Tab "New Blocks"; "T1_T2_T3_Train_Comparison.xlsx," Tab "T2 to T3 Train Changes."

[15] *See* Workpaper"C-251124 Operating Plan Metrics vF.xlsx," Tab "Growth Plan."

[16] *See* Workpaper "Line Segment Tables from Model vF.xlsx," Tab "Line Segment Table_Growth;" "Yard_Details_Report_T3_20251202_vF.xlsx."

In reviewing the Operating Plan workpapers, Applicants noted that certain blocks and trains were shown in the MultiRail model as using track segments they would not actually use. The issue affected less than 0.04% of GTMs. The issue did not affect the planning process or comparisons of operating statistics because the service design team knew which segments the trains use, and trains were routed consistently across different versions of the Operating Plan. Applicants corrected the train counts and density data on affected corridors outside of the MultiRail model. *See* Workpaper "Line Segment Tables from Model vF.xlsx," Tab "Changes Log."

3. Patterns of Service

37. The maps submitted as Exhibit 1 to the Application and the density charts submitted as Exhibit 14 and as Electronic Appendices C and D show the principal rail lines and routes of UP and NS. The routes are also shown in the Geospatial Information System ("GIS") map files included in Applicants' workpapers.[17] Below, we describe these routes in more detail.

3.1. Principal Routes – UP

38. UP operates approximately 32,880 route miles in 23 states in the western two-thirds of the United States. Information regarding traffic density and numbers of trains on all main and secondary lines on UP's system is provided in the density charts submitted as Exhibit 14 and the workpapers relating to the Base Plan.[18]

39. UP operates across 13 units, organized into two regions. UP's Northern Region includes the following service units:

- Chicago—covers parts of Illinois and Wisconsin with connections to Iowa and includes the Chicago gateway;
- Great Lakes—connects Nebraska, Iowa, Minnesota, and Wisconsin;
- Heartland—spans New Mexico, Texas, Kansas, and Missouri with connections to Oklahoma, Illinois, Nebraska, and includes the Kansas City gateway;
- Great Plains—connects Northeastern Kansas, Nebraska, Eastern Wyoming, through Colorado and into central Utah;

[17] *See* Workpaper "GIS Shape Files."

[18] *See* Workpaper "Line Segment Tables from Model vF.xlsx," Tab "Line Segment Table_Base."

- Rocky Mountain—includes parts of Montana, East-Central Idaho, Utah, Southern Nevada, and Wyoming with connections into Southern California;

- Northern California—spans Central and Northern California through Northern Nevada; and

- Pacific Northwest—covers Washington, Oregon, and Western Idaho, and includes the international gateway at Eastport, Idaho.

The Southern Region includes the following service units:

- Mid-America—spans parts of Illinois, Missouri, Kentucky, and Tennessee through Arkansas and into East Texas and North Louisiana, and includes the gateways at Shreveport and Memphis;

- Gulf Coast—covers Louisiana with a connection to East Texas and includes the gateway at New Orleans;

- Houston—spans parts of Texas including the greater Houston area with connections towards Dallas and Longview, including the gateway at Brownsville;

- South Texas—includes parts of Texas with connections between Alpine, Taylor, and Hearne through San Antonio, including gateways at Eagle Pass and Laredo;

- Texoma—spans parts of Oklahoma and Texas from the greater Dallas/Fort Worth area through West Texas, including the gateway at El Paso; and

- Los Angeles—covers Southern California, Arizona and into New Mexico, including the gateways at Nogales and Calexico.

40. UP has eight principal routes. Three routes are anchored in Chicago and include UP's main line between Chicago and Granger, Wyoming, before branching to the ports and terminals of Seattle and Portland in the Pacific Northwest ("Chicago-Pacific Northwest"); Oakland in Northern California ("Chicago-Northern California"); and Los Angeles in Southern California ("Chicago-Salt Lake City/Southern California"). UP also has three routes anchored in Los Angeles that

include UP's main line between Los Angeles and El Paso, Texas, before branching to Chicago via Kansas City and St. Louis ("Southern California-Kansas City/St. Louis/Chicago"); Memphis via Central Texas and Shreveport ("Southern California-Central Texas/Shreveport/Memphis"); and New Orleans via South Texas ("Southern California-South Texas/New Orleans"). UP also has a route between border crossings in Mexico and Chicago via Memphis and St. Louis ("Mexico/Texas-Memphis/St. Louis/Chicago"), and a route between Seattle and Los Angeles ("Pacific Northwest-Southern California").

41. UP has 64 network, regional, and local yards with various capacities and functions. UP also has 31 intermodal facilities (27 of which UP owns and four of which are private or publicly owned), and serves 31 automotive ramps (26 of which UP owns and five of which are privately owned). UP serves approximately 60 ports, including ocean, river, and inland ports, and seven border crossings. UP also connects with more than 190 short lines.[19] UP also serves major gateways in Minneapolis-St. Paul, Chicago, St. Louis, Kansas City, Memphis, Shreveport, and New Orleans, where it interchanges with other Class I railroads and significant belt or terminal railroads, such as Belt Railway of Chicago ("BRC"), Indiana Harbor Belt Railway ("IHB"), and the TRRA. A list of locations at which UP interchanges more than 2000 cars annually is provided in Electronic Appendix O and in the workpapers accompanying this Operating Plan.[20]

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[19] *See* Workpaper "UP Locations_Auto-Port-Intermodal-Yards-Border-Mech-ShortLine.xlsx."

[20] *See* Workpaper "Consolidated Interchange Counts FY 2024.xlsx."

3.1.1. Chicago-Pacific Northwest Route

42. UP's Chicago-Pacific Northwest route extends between Chicago and Seattle via North Platte, Granger, and Portland. From Chicago to Granger, in Southwestern Wyoming, where the Central Corridor branches to the Northwest, Northern California, and Southern California, UP's route boasts a double-track high-capacity line with segments of triple-track along the Geneva Subdivision in Chicago and between Gibbon and O'Fallons in Central Nebraska. The route and other lines connecting with the route are shown below in Figure 1 and in the GIS map files provided in Applicants' workpapers.

Figure 1: Chicago-Pacific Northwest Route

3.1.1.1. Chicago-Pacific Northwest Route Products

43. General categories of traffic moving over UP's Chicago-Pacific Northwest route and lines connecting to the route primarily include bulk (coal, fertilizer, food products, and grain), industrial (soda ash, forest products, and metals), and premium (international and domestic intermodal, finished vehicles, auto parts).

3.1.1.2. Chicago-Pacific Northwest Route Connections to Short Lines, Ports, and Border Crossings

44. UP's Chicago-Pacific Northwest route and lines connecting to the route connect with several short lines, including two Chicago-area belt railroads (BRC and IHB), Nebraska Central Railroad ("NCRC"), and Eastern Idaho Railroad. Applicants' workpapers include a table showing UP-connecting short lines by state.[21] The GIS map files provided in Applicants' workpapers show UP's connections with short lines.

45. UP's Chicago-Pacific Northwest route and lines connecting to the route also provide access to ports in the Pacific Northwest, including the Port of Seattle and the Port of Tacoma. Applicants' workpapers include a table showing the ports served by UP.[22] The GIS map files provided in Applicants' workpapers also show the ports served by UP.

46. UP's Chicago-Pacific Northwest route does not connect directly to any international border crossing, but lines connecting to the route extend to the border crossings at Eastport, Idaho, where UP connects with CPKC. Applicants' workpapers

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[21] *See* Workpaper "UP Locations_Auto-Port-Intermodal-Yards-Border-Mech-ShortLine.xlsx," Tab "Short Lines."

[22] *See id.*, Tab "Port Locations."

include a table showing border crossings served by UP.[23] The GIS map files provided in Applicants' workpapers also show the border crossings served by UP.

3.1.1.3. Chicago-Pacific Northwest Route Yards and Major Repair Facilities

47. UP supports rail operations on its Chicago-Pacific Northwest route, and lines connecting to the route, with several manifest terminals and repair facilities, including Proviso in Illinois, Council Bluffs in Iowa, North Platte in Nebraska, Pocatello in Idaho, and Hinkle and Albina in Oregon. Applicants' workpapers include a table showing UP's network and regional yards,[24] as well as its major locomotive and car shops.[25] The GIS map files provided in Applicants' workpapers also show yard and shop locations on UP.

3.1.1.4. Chicago-Pacific Northwest Route Intermodal and Automotive Ramps

48. UP has several intermodal and automotive facilities on its Chicago-Pacific Northwest route and lines connecting to the route. Intermodal ramps include Global 2 and Global 4 in Chicago, Brooklyn in Portland, Tacsim in Tacoma, and Argo in Seattle. Auto facilities include West Chicago, Belvidere, Council Bluffs, Portland (Barnes), and Seattle (Kent). Applicants' workpapers include a table showing UP's intermodal and automotive ramps. The GIS map files provided in Applicants' workpapers also show intermodal and automotive ramps on UP.

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[23] *See id.*, Tab "Border Crossings."

[24] *See id.*, Tab "Yard Locations."

[25] *See id.*, Tab "Mechanical Facility Locations."

3.1.2. Chicago-Northern California Route

49. UP's Chicago-Northern California route extends between Chicago and Northern California via North Platte, Granger, and Sacramento. At Granger, the Chicago-Northern California route connects to UP's Central Corridor and continues as a double-track, high-capacity route to Ogden, Utah. From Ogden/Salt Lake City, the route includes parallel main lines to Sacramento acquired through prior mergers with Western Pacific Railroad and Southern Pacific Railroad. The dual routes between Ogden/Salt Lake City and Northern California enable UP's premium products to traverse the more direct route via Donner Pass, while loaded bulk shipments can leverage the former Western Pacific Feather River Canyon route to take advantage of more advantageous grades crossing the Sierra Nevada mountain range. The Chicago-Northern California route and other lines connecting with the route are shown below in Figure 2 and in the GIS map files provided in Applicants' workpapers.

Figure 2: Chicago-Northern California Route

3.1.2.1. Chicago-Northern California Route Products

50. General categories of traffic moving over UP's Chicago-Northern California route and lines connecting to the route include bulk (coal, food and beverage, grain products), industrial (construction products, metals, forest products), and premium (domestic intermodal, international intermodal, finished vehicles).

3.1.2.2. Chicago-Northern California Route Connections to Short Lines, Ports, and Border Crossings

51. UP's Chicago-Northern California route and lines connecting to the route connect with several short lines, including BRC, IHB, NCRC, Salt Lake Garfield and Western Railway ("SLGW"), and California Northern Railroad. Applicants' workpapers include a table showing UP connecting short lines by state.

The UP GIS map files provided in Applicants' workpapers show UP's connections with short lines.

52. UP's Chicago-Northern California route and lines connecting to the route also provide access to ports in Northern California, including the Port of Oakland, the Port of Stockton, and the Port of Benicia. The GIS map files provided in Applicants' workpapers show the ports served by UP.

53. UP's Chicago-Northern California route does not connect to any international border crossing.

3.1.2.3. Chicago-Northern California Route Yards and Major Repair Facilities

54. UP supports its rail operations on the Chicago-Northern California route and lines connecting to the route with several manifest terminals and repair facilities, including Proviso, Council Bluffs, North Platte, Ogden, Roper (Salt Lake) in Utah, and Roseville, California. The GIS map files provided in Applicants' workpapers show yard and shop locations on UP.

3.1.2.4. Chicago-Northern California Route Intermodal and Automotive Ramps

55. UP has several intermodal and automotive facilities on its Chicago-Northern California route and lines connecting to the route. Western intermodal locations along this route include Salt Lake ("SLCIT"), Sparks, Nevada, and Oakland, California. In addition, the route serves auto facilities in the west including Roper as well as Benicia and Milpitas (both in the greater San Francisco area). The GIS map files provided in Applicants' workpapers show intermodal and automotive ramps on UP.

3.1.3. Chicago-Southern California Route

56. UP's Chicago-Southern California route extends between Chicago and Southern California via North Platte, Granger, Ogden, Las Vegas, and Los Angeles. Connecting to UP's Central Corridor at Granger, the Chicago-Southern California route provides access to the Utah Valley and Las Vegas markets and is one of two ways in which UP connects Southern California to Chicago markets. The route and other lines connecting with the route are shown below in Figure 3 and in the GIS map provided in Applicants' workpapers.

Figure 3: Chicago-Southern California Route

3.1.3.1. Chicago-Southern California Route Products

57. General categories of traffic moving over UP's Chicago-Southern California route and lines connecting to the route include bulk (coal, food and

beverage), industrial (construction products, metals), and a large volume of premium traffic (international and domestic intermodal, auto parts, finished vehicles).

3.1.3.2. Chicago-Southern California Route Connections to Short Lines, Ports, and Border Crossings

58. UP's Chicago-Southern California route and lines connecting to the route connect with several short lines, including BRC, IHB, NCRC, SLGW, and Pacific Harbor Line ("PHL"). Applicants' workpapers include a table showing UP-connecting short lines by state. The GIS map files provided in Applicants' workpapers show UP's connections with short lines.

59. UP's Chicago-Southern California route and lines connecting to the route also provide access to several ports in Southern California, including the Port of Los Angeles and the Port of Long Beach. The GIS map files provided in Applicants' workpapers show the ports served by UP.

60. UP's Chicago-Southern California route does not connect to any international border crossing.

3.1.3.3. Chicago-Southern California Route Yards and Major Repair Facilities

61. UP supports its rail operations on the Chicago-Southern California route and lines connecting to the route with several manifest terminals and repair facilities, including Proviso, Council Bluffs, North Platte, Ogden, Roper, and West Colton, California. The GIS map files provided in Applicants' workpapers show yard and shop locations on UP.

3.1.3.4. Chicago-Southern California Route Intermodal and Automotive Ramps

62. UP has several intermodal and automotive facilities on its Chicago-Southern California route and lines connecting to the route, including the previously mentioned Chicago facilities, an intermodal ramp in Las Vegas, and five intermodal facilities in the greater Los Angeles area: City of Industry, East Los Angeles ("Commerce"), Inland Empire Intermodal Terminal ("IEIT"), Intermodal Container Transfer Facility ("ICTF"), and Los Angeles Transportation Center ("LATC"). A major auto destination on this route is Mira Loma, California. The GIS map files provided in Applicants' workpapers show intermodal and automotive ramps on UP.

3.1.4. Southern California-Kansas City/St. Louis/Chicago Route

63. UP's Southern California-Kansas City/St. Louis/Chicago route extends between Southern California and Chicago via El Paso and Kansas City. The portion from Southern California to El Paso, along the legacy Southern Pacific Sunset route, is a high-capacity line that enables efficient transit for premium freight to and from Southern California markets. At El Paso, the Sunset route runs East while the Kansas City/St. Louis/Chicago route continues along UP's Golden State route to Kansas City, a streamlined route connecting El Paso to Kansas City by cutting diagonally across New Mexico, the Texas and Oklahoma panhandles, and Kansas. A substantial portion of UP's route between Kansas City and Chicago includes trackage rights over BNSF Railway ("BNSF") lines between Hutchinson, Kansas, and Nerska, Illinois; however, UP can also access Chicago through St. Louis where two routing options to Chicago exist or via Council Bluffs and the Central Corridor towards

Chicago. The route and other lines connecting with the route are shown in Figure 4 below and the GIS map files provided in Applicants' workpapers.

Figure 4: Southern California-Kansas City/St. Louis/Chicago Route

3.1.4.1. Southern California-Kansas City/St. Louis/Chicago Route Products

64. General categories of traffic moving over UP's Southern California-Kansas City/St. Louis/Chicago route and lines connecting to the route include bulk (grain, grain products, beverages), industrial (construction, metals, government shipments), and large volumes of premium (international and domestic intermodal).

3.1.4.2. Southern California-Kansas City/St. Louis/Chicago Route Connections to Short Lines, Ports, and Border Crossings

65. UP's Southern California-Kansas City/St. Louis/Chicago route and lines connecting to the route connect with several short lines, including PHL, Kansas City Terminal Railway ("KCT"), the A&S and TRRA terminal railroads in the St. Louis area, and BRC and IHB in the Chicago area. The GIS map files provided in Applicants' workpapers show UP's connections with short lines.

66. UP's Southern California-Kansas City/St. Louis/Chicago route and lines connecting to the route provide access to several ports in Southern California, including the Port of Los Angeles and the Port of Long Beach. The GIS map files provided in Applicants' workpapers show the ports served by UP.

67. UP's Southern California-Kansas City/St. Louis/Chicago route and lines connecting to the route connect to international border crossings at Calexico, Nogales, and El Paso.

3.1.4.3. Southern California-Kansas City/St. Louis/Chicago Route Yards and Major Repair Facilities

68. UP supports its rail operations on the Southern California-Kansas City/St. Louis/Chicago route and lines connecting to the route with several manifest terminals and repair facilities, including West Colton, Tucson, Alfalfa (El Paso), and Kansas City 18th Street. The GIS map files provided in Applicants' workpapers show yard and shop locations on UP.

3.1.4.4. Southern California-Kansas City/St. Louis/Chicago Route Intermodal and Automotive Ramps

69. UP has several intermodal and automotive facilities on its Southern California-Kansas City/St. Louis/Chicago route and lines connecting to the route. While also serving Los Angeles-area facilities, this route includes intermodal facilities in Phoenix, Santa Teresa (west of El Paso), Kansas City, St. Louis (Dupo), and Chicago (Global 4 and Global 2), and automotive facilities in Mira Loma, Santa Rosa, New Mexico, Kansas City (Muncie and Fairfax), and Chicago (Chicago Heights, West Chicago, and Belvidere). The GIS map files provided in Applicants' workpapers show intermodal and automotive ramps on UP.

3.1.5. Southern California-Central Texas/Shreveport/Memphis Route

70. UP's Southern California-Central Texas/Shreveport/Memphis route extends between Southern California and Shreveport/Memphis via El Paso and Dallas/Fort Worth. From Southern California to El Paso, this route follows the legacy Southern Pacific Sunset route. From El Paso, the route continues in an easterly direction across the route of the former Texas and Pacific Railway ("T&P") to the Dallas/Fort Worth metroplex. Continuing along the legacy T&P track east of Dallas/Ft. Worth, the route then follows the north/south high capacity directional running routes of the former Southern Pacific and Missouri Pacific to/from North Little Rock and Pine Bluff, Arkansas. At Memphis, the route provides connections to BNSF, Canadian National Railway ("CN"), CSX Transportation ("CSXT"), and NS.

The route and other lines connecting with the route are shown below in Figure 5 and in the GIS map files provided in Applicants' workpapers.

Figure 5: Southern California-Central Texas/Shreveport/Memphis Route

3.1.5.1. Southern California-Central Texas/Shreveport/Memphis Route Products

71. General categories of traffic moving over UP's Southern California-Central Texas/Shreveport/Memphis route and lines connecting to the route include bulk (food and beverage), industrial (construction materials, plastics, industrial chemicals, paper products), and premium (international and domestic intermodal, auto parts, finished vehicles).

3.1.5.2. Southern California-Central Texas/Shreveport/Memphis Route Connections to Short Lines, Ports, and Border Crossings

72. UP's Southern California-Central Texas/Shreveport/Memphis route and lines connecting to the route connect with several short lines, including PHL, the Dallas, Garland & Northeastern Railroad, Fort Worth & Western Railroad, and Santa Teresa Southern ("STS"). The GIS map files provided in Applicants' workpapers show UP's connections with short lines.

73. UP's Southern California-Central Texas/Shreveport/Memphis route and lines connecting to the route provide access to several ports in Southern California, including the Port of Los Angeles and the Port of Long Beach, as well as the Port of Little Rock operated by Little Rock Port Railroad. The GIS map files provided in Applicants' workpapers show the ports served by UP.

74. UP's Southern California-Central Texas/Shreveport/Memphis route and lines connecting to the route connect to international border crossings at Calexico, Nogales, and El Paso.

3.1.5.3. Southern California-Central Texas/Shreveport/Memphis Route Yards and Major Repair Facilities

75. UP supports operations on its Southern California-Central Texas/Shreveport/Memphis route and lines connecting to the route with several manifest terminals and repair facilities, including West Colton, Tucson, Alfalfa, Fort Worth, North Little Rock, and Pine Bluff. The GIS map files provided in Applicants' workpapers show yard and shop locations on UP.

3.1.5.4. Southern California-Central Texas/Shreveport/Memphis Route Intermodal and Automotive Ramps

76. UP has several intermodal and automotive facilities on its Southern California-Central Texas/Shreveport/Memphis route and lines connecting to the route. In addition to serving Los Angeles-area facilities, this route serves major auto and intermodal markets in the Dallas area (Arlington and Mesquite) and Shreveport area (Reisor). The GIS map files provided in Applicants' workpapers show intermodal and automotive ramps on UP.

3.1.6. Southern California-South Texas/New Orleans Route

77. UP's Southern California-South Texas/New Orleans route extends between Southern California and New Orleans via El Paso, San Antonio, and Houston. At El Paso, the Sunset route runs to the southeast toward San Antonio and then directly east to Houston across the Glidden Subdivision. From Houston, paired routes continue through Beaumont and then diverge. The Southern California-South Texas/New Orleans routes continues to DeQuincy, Louisiana, on track owned by CPKC, then through Kinder and Livonia, Louisiana, to New Orleans on track owned by UP. The southerly route continues from Beaumont to Iowa Junction, Louisiana, where it splits to the northeast toward Kinder, and east towards New Orleans on a line UP jointly owns with BNSF. The route and other lines connecting with the route are shown in Figure 6 and the GIS map files provided in Applicants' workpapers.

Figure 6: Southern California-South Texas/New Orleans Route

3.1.6.1. Southern California-South Texas/New Orleans Route Products

78. General categories of traffic moving over UP's Southern California-South Texas/New Orleans route and lines connecting to the route include large quantities of industrial products (plastics, chemicals, petroleum products, metals, construction products) and premium (international and domestic intermodal).

3.1.6.2. Southern California-South Texas/New Orleans Connections to Short Lines, Ports, and Border Crossings

79. UP's Southern California-South Texas/New Orleans route and lines connecting to the route connect with several short lines, including PHL, STS, Port Terminal Railroad Association, and the New Orleans Public Belt Railroad ("NOPB").

The GIS map files provided in Applicants' workpapers show UP's connections with short lines.

80. UP's Southern California-South Texas/New Orleans route and lines connecting to the route provide access to several ports in Southern California, including the Port of Los Angeles and the Port of Long Beach, as well ports on the Gulf Coast, including the Port of Houston, and the Port of Beaumont. The GIS map files provided in Applicants' workpapers show the ports served by UP.

81. UP's Southern California-South Texas/New Orleans route and lines connecting to the route connect to international border crossings at Calexico, Nogales, El Paso, Eagle Pass, Laredo, and Brownsville.

3.1.6.3. Southern California-South Texas/New Orleans Route Yards and Major Repair Facilities

82. UP supports its rail operations on its Southern California-South Texas/New Orleans route and lines connecting to the route with several manifest terminals and repair facilities, including West Colton, Tucson, Alfalfa, San Antonio, Englewood and Settegast in Houston, and Livonia. The GIS map files provided in Applicants' workpapers show yard and shop locations on UP.

3.1.6.4. Southern California-South Texas/New Orleans Route Intermodal and Automotive Ramps

83. UP's Southern California-South Texas/New Orleans route and lines connecting to the route serve several intermodal and automotive facilities. In addition to facilities in the Los Angeles area, this route serves automotive and intermodal

facilities in San Antonio, Houston, and Southern Louisiana. The GIS map files provided in Applicants' workpapers show intermodal and automotive ramps on UP.

3.1.7. Mexico/Texas-Memphis/St. Louis/Chicago Route

84. UP's Mexico/Texas-Memphis/St. Louis/Chicago route extends between Eagle Pass/Laredo, Texas, and Chicago via San Antonio and Little Rock/Pine Bluff. This north/south route connects the Chicago and St. Louis markets and gateways with Mexico, Texas, and Arkansas via international connection points at Laredo (CPKC) and Eagle Pass (Ferromex). The route leverages UP's route network in Texas, bolstered by UP's bidirectional running capability from Texas through North Little Rock and Pine Bluff to Dexter, Missouri. At Gorham, Illinois, the Mt. Vernon and Salem Subdivisions provide a route that bypasses the St. Louis gateway and enables future connectivity to the NS system at Sidney, Illinois. The route and other lines connecting with the route are shown in Figure 7 and the GIS map files provided in Applicants' workpapers.

Figure 7: Mexico/Texas-Memphis/St. Louis/Chicago Route

3.1.7.1. Mexico/Texas-Memphis/St. Louis/Chicago Route Products

85. General categories of traffic moving over UP's Mexico/Texas-Memphis/St. Louis/Chicago route and lines connecting to the route include bulk (beverages, grain), industrial (metals, construction materials), and premium (auto parts, finished vehicles, domestic intermodal).

3.1.7.2. Mexico/Texas-Memphis/St. Louis/Chicago Route Connections to Short Lines, Ports, and Border Crossings

86. UP's Mexico/Texas-Memphis/St. Louis/Chicago route and lines connecting to the route connect with several short lines, including A&S and TRRA in St. Louis, BRC and IHB in Chicago, Arkansas Midland Railroad, and Missouri & Northern Arkansas Railroad. The GIS map files provided in Applicants' workpapers show UP's connections with short lines.

87. UP's Mexico/Texas-Memphis/St. Louis/Chicago route and lines connecting to the route also provide access to the Port of Little Rock, operated by the Little Rock Port Railroad.

88. UP's Mexico/Texas-Memphis/St. Louis/Chicago route and lines connecting to the route connect to international border crossings at Eagle Pass, Laredo, and Brownsville.

3.1.7.3. Mexico/Texas-Memphis/St. Louis/Chicago Route Yards and Major Repair Facilities

89. UP supports its rail operations on its Mexico/Texas-Memphis/St. Louis/Chicago route and lines connecting to the route with several manifest terminals and repair facilities including San Antonio, North Little Rock, Pine Bluff, and Chicago (Yard Center). The GIS map files provided in Applicants' workpapers show yard and shop locations on UP.

3.1.7.4. Mexico/Texas-Memphis/St. Louis/Chicago Route Intermodal and Automotive Ramps

90. There are several intermodal and automotive facilities on UP's Mexico/Texas-Memphis/St. Louis/Chicago route and lines connecting to the route.

Intermodal facilities are located in Laredo, San Antonio, St. Louis (Dupo), Marion, Arkansas, and Chicago. Automotive facilities are located in San Antonio, Taylor, Texas, Memphis (Gavin), St. Louis (Centerville), and Chicago. The GIS map files provided in Applicants' workpapers show intermodal and automotive ramps on UP.

3.1.8. Pacific Northwest-Southern California Route

91. UP's Pacific Northwest-Southern California route extends between Seattle and Los Angeles and is also called the "I-5" route. The I-5 route connects Pacific Northwest customers, ports, and markets, as well as markets accessible using UP's I-5 Agreement with BNSF and a connection with CPKC at Eastport, with Northern and Southern California markets. While Applicants' proposed merger does not directly impact this north-south route, the I-5 route is an important component of UP's franchise, connecting shippers in California, Oregon, Washington, Idaho and Canada. The route and other lines connecting with the route are shown in Figure 8 and the GIS map files provided in Applicants' workpapers.

Figure 8: Pacific Northwest-Southern California Route

3.1.8.1. Pacific Northwest-Southern California Route Products

92. General categories of traffic moving over UP's Pacific Northwest-Southern California route and lines connecting to the route include bulk (fertilizer, food products, grain products), industrial (construction products, forest products, metals) and premium (international and domestic intermodal).

3.1.8.2. Pacific Northwest-Southern California Route Connections to Short Lines, Ports, and Border Crossings

93. UP's Pacific Northwest-Southern California route and lines connecting to the route connect with several short lines, including Central Oregon & Pacific Railroad, Portland & Western Railroad, and San Joaquin Valley Railroad. The GIS map files provided in Applicants' workpapers show UP's connections with short lines.

94. UP's Pacific Northwest-Southern California route and lines connecting to the route also provide access to several ports in the Pacific Northwest (including the Port of Seattle and the Port of Tacoma), Northern California (including the Port of Stockton), and Southern California (including the Ports of Los Angeles and Long Beach). The GIS map files provided in Applicants' workpapers show the ports served by UP.

95. UP's Pacific Northwest-Southern California route and lines connecting to the route connect to the international border crossing at Calexico, California.

3.1.8.3. Pacific Northwest-Southern California Route Yards and Major Repair Facilities

96. UP supports operations on its Pacific Northwest-Southern California route and lines connecting to the route with several manifest terminals and repair facilities including Albina (Portland), Roseville, and West Colton. The GIS map files provided in Applicants' workpapers show yard and shop locations on UP.

3.1.8.4. Pacific Northwest-Southern California Route Intermodal and Automotive Ramps

97. There are many intermodal and automotive facilities on the Pacific Northwest-Southern California route and lines connecting to the route. The route

primarily serves intermodal markets in the major West Coast cities. The GIS map files provided in Applicants' workpapers show intermodal and automotive ramps on UP.

3.1.9. Secondary Routes and Feeder Lines

98. UP has secondary routes between Denver and Salt Lake City, Denver and Kansas City, and Minnesota/Iowa and Texas. UP also has a network of feeder lines in Northern Iowa, Minnesota, and Wisconsin, and feeder lines in Idaho and Montana, including a line to the Canadian border at Eastport. These routes and lines are shown in the GIS map files provided in Applicants' workpapers.

3.2. Principal Routes – NS

99. Norfolk Southern operates approximately 19,200 route miles in 22 eastern states and the District of Columbia. The density charts submitted as Exhibit 14 and the workpapers related to the Base Plan provide information about traffic density and numbers of trains on all main and secondary lines on NS's system.[26] NS operates across six divisions organized into two regions. The Northern Region includes the following divisions:

- Great Lakes—connects Northern Ohio, Michigan, Northern Indiana and Chicago and other parts of Northern Illinois;
- Keystone—runs through parts of Virginia, Maryland, and West Virginia, as well as Eastern Ohio and across Pennsylvania and into New Jersey and New York; and
- Midwest—stretches from Kentucky and Southern Ohio through Southern Indiana, Southern Illinois, Missouri, and Iowa.

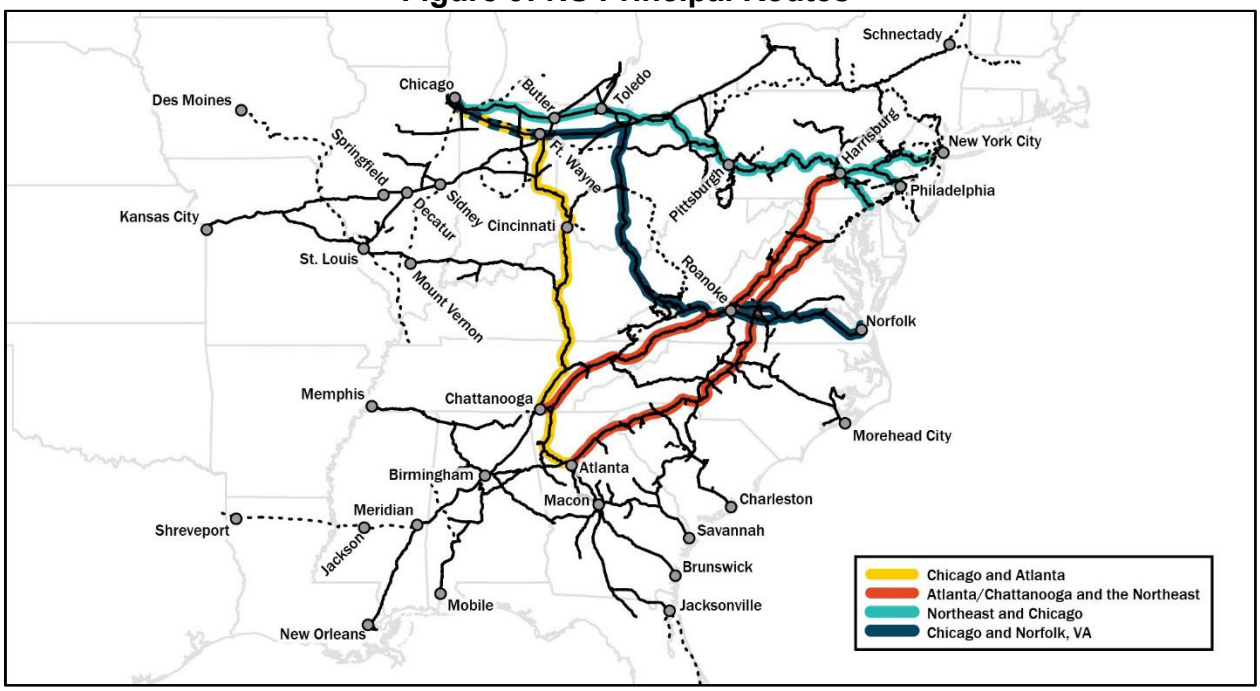
[26] *See* Workpaper "Line Segment Tables from Model vF.xlsx," Tab "Line Segment Table_Base."

NS's Southern Region includes these divisions:

- Blue Ridge—connects North Carolina, most of NS's Virginia lines, parts of West Virginia, and Southern Ohio;
- Gulf—includes Louisiana, Alabama, Mississippi, Tennessee, and small sections in North Carolina and Kentucky; and
- Coastal—covers the Carolinas, Georgia, and Florida.

100. Four principal routes comprise the core of NS's network, as displayed in Figure 9 below. The first three routes form a triangle covering the eastern United States. These three routes run between Chicago and Atlanta; Atlanta/Chattanooga and the Northeast; and the Northeast and Chicago. The fourth route runs from Chicago to Norfolk, Virginia. Most of the core network is double tracked, with all of it equipped for double stacking intermodal containers. Outside of these core routes, most of the network is single track with passing sidings. NS also serves several gateways that connect to these core routes, as well as feeder routes that serve significant origins or destinations.

Figure 9: NS Principal Routes



101. NS has 28 hump, system, and region flat manifest yards of various sizes across its network. Six are currently operated as hump yards.[27] NS has the most extensive intermodal network in the Eastern United States and provides service to 41 active intermodal facilities, 29 of which it owns and 12 of which are private or publicly owned port facilities.[28] NS also serves 40 auto terminals that unload and load finished vehicles to and from railcars.

102. NS interchanges traffic with over 250 short line railroads (some of which are indirectly connected). NS also interchanges in gateway cities and ports with several significant belt or terminal railroads such as Conrail, BRC, IHB, and TRRA.

[27] *See* Workpaper "NS Locations_Auto-Port-Intermodal-Yards-Mech-Shortline.xlsx."

[28] NS's expanded reach is 56 intermodal markets when including access via a short line partner and intermodal markets where NS currently has no active intermodal terminal.

A list of locations at which NS interchanges more than 2000 cars annually is provided in Electronic Appendix P.[29]

103. Chicago serves as the western anchor for three of the core NS routes and has the highest total density of trains on NS's network with well over 80 trains operating on these routes on any given day. In Chicago, NS owns six intermodal facilities to support the core routes. The largest by volume is Chicago 47th Street, which largely feeds the Chicago to Northeast route. Chicago 63rd Street supplements Chicago 47th Street and primarily handles domestic freight. Calumet is the primary terminal serving the Chicago to Southeast route. Landers is the primary terminal for NS's East Coast port services. Ashland Avenue Yard in Chicago and Colehour Yard in Hammond, Indiana, support most of NS's steel wheel intermodal interchanges with other railroads.

104. Chicago is also the primary interchange location for NS's non-intermodal traffic. Just about every commodity handled by NS moves through Chicago, including coal, grain, ethanol, oil, automobiles, steel, food and other general merchandise. Interchanges between NS and the other five Class I railroads, as well as many short lines, are accommodated through direct interchanges between the carriers or through one of two intermediate switching carriers in Chicago: BRC and IHB. In addition, the Gary Railway Company and South Chicago & Indiana Harbor Railroad ("SCIH") short lines play a major role in servicing key customers in the Chicago market. While Chicago is the primary terminus on NS's Great Lakes

[29] *See* Workpaper "Consolidated Interchange Counts FY 2024.xlsx."

Division, the railroad extends further west on the Kankakee and Streator Lines, with the furthest western point being Hennepin, Illinois.

3.2.1. Chicago to Southeast Route

105. The Chicago to Southeast route extends approximately 785 miles between Chicago and Atlanta. The route proceeds east out of Chicago on the former Nickel Plate line to Fort Wayne, Indiana. At that point, the route turns south and connects with the Cincinnati, New Orleans & Texas Pacific Railway ("CNO&TP") between Cincinnati and Chattanooga. This line had been owned by the City of Cincinnati—but operated by NS and its predecessors—for over 150 years until NS purchased the line in 2024. South of Chattanooga, the line continues past Austell, Georgia, and into Atlanta.

106. NS also has trackage rights between Gary, Indiana, and Bucyrus, Ohio, on the Chicago, Fort Wayne & Eastern Railroad. Although the route is not currently heavily used, it creates some flexibility and redundancy for NS operations.

107. The Chicago to Southeast route and other lines connecting with the route are shown in Figure 10 and the GIS map files provided in Applicants' workpapers.[30]

[30] *See* Workpaper "GIS Shape Files."

Figure 10: Chicago to Southeast Route

3.2.1.1. Chicago to Southeast Route Products

108. As discussed above, the Chicago to Southeast Route hosts a considerable amount of intermodal freight, with eight to ten intermodal trains per day moving on some or all of the route. While every commodity type NS ships can be found on the route, NS sees significant volumes of agricultural products moving from the Midwest to the Southeast, particularly feed and grains moving to the Southeast poultry

markets and some export traffic moving through Southeast and Gulf ports, as well as ethanol and fertilizer. There is also a considerable amount of steel products moving from the Midwest to processing centers in the Southeast to support the automotive and construction industries. Finally, NS has significant finished vehicle shipments on this line, both from manufacturers that are located on or near this route, as well as shipments from Midwest manufacturers to southeast markets.

3.2.1.2. Chicago to Southeast Route Connections to Short Lines, Ports, and Border Crossings

109. The Chicago to Southeast route serves numerous short lines, including Gary Railway Company and SCIH, and the two area belt railroads, BRC and IHB. Each of these is a significant participant on the route. While this route does not have any direct border crossings, it does handle Canadian freight interchanged to NS in Chicago. There are no significant port facilities on this route.

3.2.1.3. Chicago to Southeast Route Yards and Major Repair Facilities

110. Decatur, Illinois Yard, East Wayne Yard in Indiana, DeButts Yard in Chattanooga, and Inman Yard in Atlanta all support the Chicago to Southeast Route. There are significant locomotive shops in Atlanta (Inman), and Chattanooga, Tennessee. Small repairs can also be done at shops in Chicago and Fort Wayne, Indiana. Major terminals with car repair facilities include Atlanta (Inman) and Chattanooga.

3.2.1.4. Chicago to Southeast Route Intermodal and Automotive Ramps

111. Auto ramps served by this route include those in Chicago; Georgetown, Kentucky; Commerce, Georgia; and Atlanta (Hapeville at Poole Creek). Calumet is the primary Chicago area intermodal terminal serving this route with terminals from north to south in Sharonville, Ohio; Cincinnati; Georgetown; Austell, Georgia; and Atlanta (Inman).

3.2.2. Northeast to Southeast Route

112. The second portion of the core triangle of the NS network runs between the Northeast region—including the New York, New Jersey, and eastern Pennsylvania area—and two separate legs in the Southeast that respectively reach Atlanta, and Knoxville and Chattanooga, Tennessee. The route and other lines connecting with the route are shown in Figure 11 and the GIS map files provided in Applicants' workpapers.

Figure 11: Northeast to Southeast Route

113. From Atlanta, the route extends approximately 785 miles to Harrisburg, Pennsylvania. Starting in Atlanta on the former Southern Mainline the route runs northeast through Georgia, South Carolina, North Carolina, and to Northern Virginia. The route crosses from the Coastal Division to the Blue Ridge Division as it enters Virginia, and it crosses the Blue Ridge Mountains on the B-Line west of Manassas, Virginia.

114. From Chattanooga, the line runs approximately 705 miles to Harrisburg through Knoxville, via the A Line. From Knoxville, the route continues northeast through Bristol, Tennessee to Roanoke, Virginia, then up the Shenandoah Valley to Front Royal, Virginia, on the H Line where it connects to the B Line. This route connects the Gulf Division to the Blue Ridge Division.

115. These two branches meet at Front Royal and use the H-Line into Hagerstown, Maryland. North of Hagerstown, traffic traverses former Conrail lines to reach major terminal facilities at Harrisburg. Cars moving deeper into the Northeast use the routes detailed in the subsequent Chicago to Northeast section.

3.2.2.1. Northeast to Southeast Route Products

116. As discussed above, the Northeast to Southeast route also hosts a considerable amount of intermodal freight, with 10 to 12 intermodal trains per day moving on some or all of the route. While every commodity type NS ships touches this route, NS sees considerable shipments of waste move from the Northeast to landfills in Alabama and Virginia; Forest Products from the Southeast to Northeast markets; and Chemicals moving from the Gulf and Mid Atlantic to Southeast destination.

3.2.2.2. Northeast to Southeast Route Connections to Short Lines, Ports, and Border Crossings

117. This route includes short line interchanges such as Lancaster and Chester Railroad outside of Charlotte; Buckingham Branch Railroad connecting in Charlottesville, Virginia; and Palmetto Railways' connecting locations in South Carolina. The route does not have any border crossings.

3.2.2.3. Northeast to the Southeast Route Yards and Major Repair Facilities

118. Of NS's significant yards, only Inman Yard in Atlanta and DeButts Yard in Chattanooga directly serve the route. Major mechanical facilities include Chattanooga and Shaffers Crossing in Roanoke.

3.2.2.4. Northeast to Southeast Route Intermodal and Automotive Ramps

119. Significant intermodal terminals in Atlanta; Greer, South Carolina; Charlotte; Greensboro; Virginia Inland Port in Front Royal; and Rutherford, Pennsylvania support this route from South to North. Winston-Salem, North Carolina, has an automotive terminal that supports traffic moving over this route.

3.2.3. Chicago to Northeast Route

120. The third portion of the NS core triangle, sometimes referred to as the Premier Corridor, runs between the northeastern United States and Chicago. The route runs 900 miles between Chicago and Northern New Jersey, starting along the Chicago Line or old Nickel Plate Line, to Cleveland. From there, the former Pennsylvania Railroad Mainline brings this route through Pittsburgh into Harrisburg. NS reaches deeper into the Mid-Atlantic on former Conrail routes to reach Newark, Philadelphia, Wilmington, and Baltimore. This route also includes the former Nickel Plate, Conrail, and Delaware and Hudson Railway lines connecting Cleveland to Schenectady, New York. Finally, these lines provide connections to the Detroit industrial centers—including automotive traffic coming from Detroit to eastern locations such as Wilmington and Doremus, New Jersey—as well as the Monongahela coal mining region south of Pittsburgh. The Chicago to Northeast Route

includes the highest density line segments on NS's system. The route and other lines connecting with the route are shown in Figure 12 and the GIS map files provided in Applicants' workpapers.

Figure 12: Chicago to Northeast Route

3.2.3.1. Chicago to Northeast Route Products

121. The Chicago to Northeast route hosts the greatest intermodal volume on NS's network by far, with up to 30 intermodal trains per day touching a portion of

this corridor. Every commodity NS ships can be found on this route, with some of the most notable volumes including coal entering the NS network in Chicago and heading to Detroit Edison, as well as coal from the Monongahela region to export and utility facilities in the east. NS sees a considerable amount of fuel inputs on this line including agrifuels, crude oil and liquid gasses supporting the refineries in the east. Raw materials for steel as well as finished steel are prevalent on this route, as well as significant shipments of vehicles from Midwest plants to the Northeast market. Finally, NS carries considerable shipments of fracking sand for the Marcellus shale region along this route.

3.2.3.2. Chicago to Northeast Route Connections to Short Lines, Ports, and Border Crossings

122. The Chicago to Northeast Route includes the greatest concentration of short line connections on NS's network. In addition to the four Chicago area short lines, NS connects to Conrail in Detroit, Northern New Jersey, and the Philadelphia (South Jersey) area. Conrail is a large switching railroad that is owned by NS and CSXT, with Shared Asset Areas that were created to ensure that competitive shipping options are available to customers in these three key markets. While Conrail is NS's largest short line connection by volume, other major connecting carriers along different parts of the route include Pan Am Southern ("PAS," another joint venture owned by NS and CSXT and operated by the Berkshire & Eastern Railroad); Columbus & Ohio River Railroad; Wheeling & Lake Erie Railroad; Reading, Blue Mountain & Northern Railroad; and Delmarva Central Railroad Company.

123. This route represents NS's highest concentration of port facilities including the major east coast ports of New York/New Jersey, Philadelphia, Wilmington, and Baltimore, as well as Great Lake Ports in Indiana, Toledo, Cleveland, and Sandusky, Ohio.

124. Finally, this route supports three border crossings including interchanges on the US side of the border with CPKC at Detroit, Buffalo, and Rouses Point, New York, and on the Canadian side of the border with CN in Fort Erie, Ontario.

3.2.3.3. Chicago to Northeast Route Yards and Major Repair Facilities

125. There are several significant NS yards between Chicago and the Northeast. Moving west to east, these include Elkhart and Fort Wayne, Indiana, Conway, Pennsylvania (near Pittsburgh), and Enola Yard near Harrisburg. Moorman Yard in Bellevue, Ohio, also serves this route as well as the Chicago to Norfolk route. Other key yards include Oakwood outside of Detroit and Binghamton, New York.

126. The most significant mechanical facility along this route is Juniata, NS's largest locomotive mechanical facility, located in Altoona, Pennsylvania. There are smaller mechanical facilities in Fort Wayne, Elkhart, Bellevue, Harrisburg, and Enola.

3.2.3.4. Chicago to Northeast Route Intermodal and Automotive Ramps

127. NS has its highest concentration of intermodal assets on this route. Anchored by the Chicago 47th Street, Chicago 63rd Street, Ashland Avenue (Chicago), and Colehour (Hammond, Indiana) yards in the west, NS serves major

markets headed east including Toledo, Detroit, Cleveland (Maple Heights), Pittsburgh (Pitcairn), Harrisburg (through ramps at Harrisburg and Rutherford), Trenton, New Jersey (Morrisville, Pennsylvania), Bethlehem, Pennsylvania, Croxton, New Jersey, and finally Northern New Jersey. In Northern New Jersey, NS serves three major intermodal container terminals at the Port of New York and New Jersey. Moving east of Cleveland, NS also serves Buffalo, Scranton, Pennsylvania, Albany (Mechanicville, New York), and Boston (Ayer, Massachusetts).

128. There are auto ramps in Chicago, Elkhart, Fostoria, Ohio, and Jefferson Terminal in Detroit. Melvindale, Michigan, is the major automotive terminal serving Detroit to the north. Conrail's Doremus automotive terminal serves as NS's primary ramp in the Mid-Atlantic region. East of Cleveland, NS has vehicle unloading facilities in Buffalo, Mechanicville (Albany), and Ayer (Boston).

3.2.4. Chicago to Norfolk Route

129. The fourth and final core route of NS's network is Chicago to Norfolk, Virginia. This route extends over 1000 miles from Chicago through Fort Wayne and Bellevue on the former Nickel Plate then south through Columbus, Roanoke, Petersburg, Virginia, and Norfolk on the former Norfolk & Western line. This route is sometimes referred to as the "Heartland Corridor." In 2009, NS in conjunction with federal and state agencies, completed a double-stack clearance project on this route allowing for direct, double-stack access between Norfolk and the Midwest. As part of this project, NS also constructed a major new intermodal terminal at Rickenbacker Airport just south of Columbus, Ohio. The route and other lines connecting with the

route are shown in Figure 13 below and the GIS map files provided in Applicants' workpapers.

Figure 13: Chicago to Norfolk Route

3.2.4.1. Chicago to Norfolk Route Products

130. The Chicago to Norfolk route hosts considerable intermodal traffic, with up to 10 intermodal trains per day touching all or a portion of this corridor. The route has historically served to connect rich coal mining regions in Virginia, West Virginia,

and Kentucky to global markets through NS's Lamberts Point coal export facility in Norfolk. Other key commodities that travel on the Chicago to Norfolk route include feed and corn going to southeast feeders and processors, as well as occasional export moves through Chesapeake, Virginia. Finally, the route carries vehicle traffic going to large distribution centers in North Carolina and Virginia.

3.2.4.2. Chicago to Norfolk Route Connections to Short Lines, Ports, and Border Crossings

131. The Chicago to Norfolk route includes a connection to one of NS's largest short line partners, the Kanawha River Railroad connecting in Columbus, Ohio, and Deepwater Creek, West Virginia. Other connections include Columbus & Ohio River Rail Road near Columbus, Commonwealth Railway in Portsmouth, Virginia, and Norfolk & Portsmouth Belt Line Railroad ("NPBL") in Chesapeake.

132. NS's Lamberts Point facility currently handles 12 to 18 million tons of export coal per year, including almost 140,000 export carloads in 2024. In addition, NS services two major Virginia Port Authority container terminals: Virginia International Gateway in Portsmouth and Norfolk International Terminals in Norfolk. NS also serves the Purdue export facility via the NPBL in Chesapeake, VA, as well as a rail to barge riverport in Wheelersburg, Ohio.

133. This route does not directly support any border crossings.

3.2.4.3. Chicago to Norfolk Yards and Major Repair Facilities

134. There are several significant yards between Chicago and Norfolk, including Bellevue (Moorman Yard) and Portsmouth in Ohio; Bluefield, West Virginia; and Roanoke, Crewe, Portlock, and Lamberts Point in Virginia. Portsmouth,

Bluefield, and Lamberts Point primarily support coal while the other yards support a larger portfolio of shipments.

135. A string of mechanical facilities are also located along the route. The most significant is Shaffer's Crossing in Roanoke, with other shops in Bellevue and Portsmouth, Ohio.

3.2.4.4. Chicago to Norfolk Route Intermodal and Automotive Ramps

136. This route is anchored by the Landers Intermodal terminal in Chicago. Moving east, NS has intermodal terminals in Columbus, Ohio (Rickenbacker) and Norfolk, Virginia (Portlock). In addition, as noted above, NS serves Virginia Port Authority's Virginia International Gateway and Norfolk International Terminals.

137. NS's automotive footprint includes terminals in Petersburg, Virginia, and Winston Salem, North Carolina.

3.2.5. Gateway Routes

138. NS also has many key gateway routes that connect to its core routes.

139. *Kansas City/St. Louis*. Traffic that runs south of Chicago or west from Indiana via Decatur Yard to St. Louis and west from Louisville to St. Louis can then run west to Kansas City, all on NS's Midwest Division along the lines of the old Wabash Railroad. Traffic can also run east/west between St. Louis and Kentucky on the W Line.

140. St. Louis hosts its own lift facility and is also served by Class I rail carriers BNSF, CPKC, CSXT, and UP. NS and the other Class I carriers each own minority shares of TRRA. Currently, UP and NS engage in directional interchange.

UP traffic bound for NS is interchanged via A&S then TRRA, while NS traffic bound for UP is interchanged via A&S. There are also automotive ramps at Wentzville, Missouri, and Kansas City. On the W Line, in addition to Kansas City, there are significant automotive terminals in Princeton, Indiana, Shelbyville, Kentucky, and Georgetown, Kentucky.

141. Kansas City also has Class I railroad access to BNSF, CPKC, and UP. KCT serves the city and NS owns a minority share in the terminal railroad, the remaining shares of which are owned by other Class I railroads.

142. Just further north, NS has haulage rights on BNSF and the Iowa Interstate Railroad to access Des Moines, Iowa, where NS owns a small amount of track which it uses for local service.

143. *Memphis*. NS hosts interchanges with BNSF, CN, CSXT, and UP at Memphis. Traffic from the other Class I railroads is then forwarded to interior parts of NS's network. Yards at Sheffield, Alabama, and Chattanooga, Tennessee, support classification work for cars moving through the Memphis gateway. The intermodal facilities at Rossville, Tennessee, and Huntsville, Alabama, serve the Memphis and northern Alabama local markets, respectively.

144. *Meridian/New Orleans*. Meridian, Mississippi, is the eastern terminus of the Meridian Speedway, a joint venture between CPKC and NS from Meridian to Shreveport. NS has haulage rights on the Meridian Speedway for intermodal traffic to and from points in the West. NS and CPKC also use the Meridian Speedway to

support interline services between Dallas and Mexico in the West-Southeast markets on NS.

145. New Orleans is another significant gateway for NS, with both port traffic and Class I carriers serving points west. Among other products, there is significant chemical traffic along the Gulf of America. The New Orleans gateway receives service from Class I railroads BNSF, CN, CPKC, and UP.

146. Norris Yard in Birmingham, Alabama, handles most of the traffic in this area. Traffic from New Orleans and Meridian headed northeast is routed through DeButts Yard in Chattanooga. In addition, Oliver Yard in New Orleans handles a significant amount of interchange traffic in the gateway.

147. *Jacksonville*. NS's Coastal Division runs south from Atlanta to Jacksonville, Florida. From there, NS interchanges intermodal, automotive, and merchandise traffic to the Florida East Coast Railway for forwarding to central and southern Florida. In addition to several Florida east coast ports, there are auto terminals in Titusville and Jacksonville. Jacksonville also has one of the largest intermodal terminals and one of the most significant auto lifts (Westlake) in the NS system. The NS yard at Macon, Georgia, facilitates the sorting of merchandise traffic moving to and from Jacksonville and other Florida markets.

148. *New England*. NS enters upstate New York on the old Delaware & Hudson South Line. Now part of NS's Keystone Division, the line connects to the Albany area (Schenectady and Mechanicville, New York) and is NS's gateway to New England. The Albany area is the site of intermodal and automotive ramps. NS's New

England intermodal traffic funnels through an intermodal terminal in Ayer, Massachusetts, via PAS or alternatively via trackage rights on CSXT to Worcester, Massachusetts. The trackage rights route avoids height restrictions and allows for double stacked containers into Boston. New England automotive traffic goes over PAS to a ramp in Ayer.

3.2.6. Feeder Routes

149. As explained below, NS also has what it sometimes refers to as "feeder routes" in and out of the core network.

150. *Birmingham / Mobile*. NS connects to the Port of Mobile via Birmingham (Norris Yard). Terminal Railway Alabama State Docks is the terminal railroad for the Port of Mobile, and Mobile is also served by CN and CSXT. The route between Mobile and Birmingham serves myriad merchandise customers whose traffic enters the core network at Birmingham.

151. *Southeast to Charleston and Savannah*. NS also connects to ports in the Southeastern United States including Brunswick and Savannah, Georgia, and Charleston, South Carolina. Brunswick is served via the Brosnan Yard in Macon and has a significant auto lift. Golden Isles Terminal Railroad is the port's terminal railroad. Savannah is similarly served via the Brosnan Yard. Savannah Port Terminal Railroad is the local short line. NS has direct access to Savannah's main port facilities, including the Mason Mega Rail Terminal for international intermodal lifts. NS also interchanges with both Georgia Central Railway and Georgia Southern Railway in the area. Charleston is home to both a port and an intermodal terminal.

Charleston is served via Columbia, South Carolina, site of an NS Thoroughbred Bulk Transfer Terminal transload facility.

3.3. Current UP/NS Patterns of Service

152. UP and NS currently interchange traffic at the mid-continent gateways of Chicago, St. Louis, Kansas City, Memphis, Shreveport, and New Orleans. In 2023, the two railroads interchanged approximately 1,637 cars of manifest traffic, 1,648 containers of intermodal traffic, and 122 cars of bulk shipments per day.[31] In the following sections, Applicants describe current patterns of service for traffic UP and NS interchange using each gateway.

3.3.1. Chicago

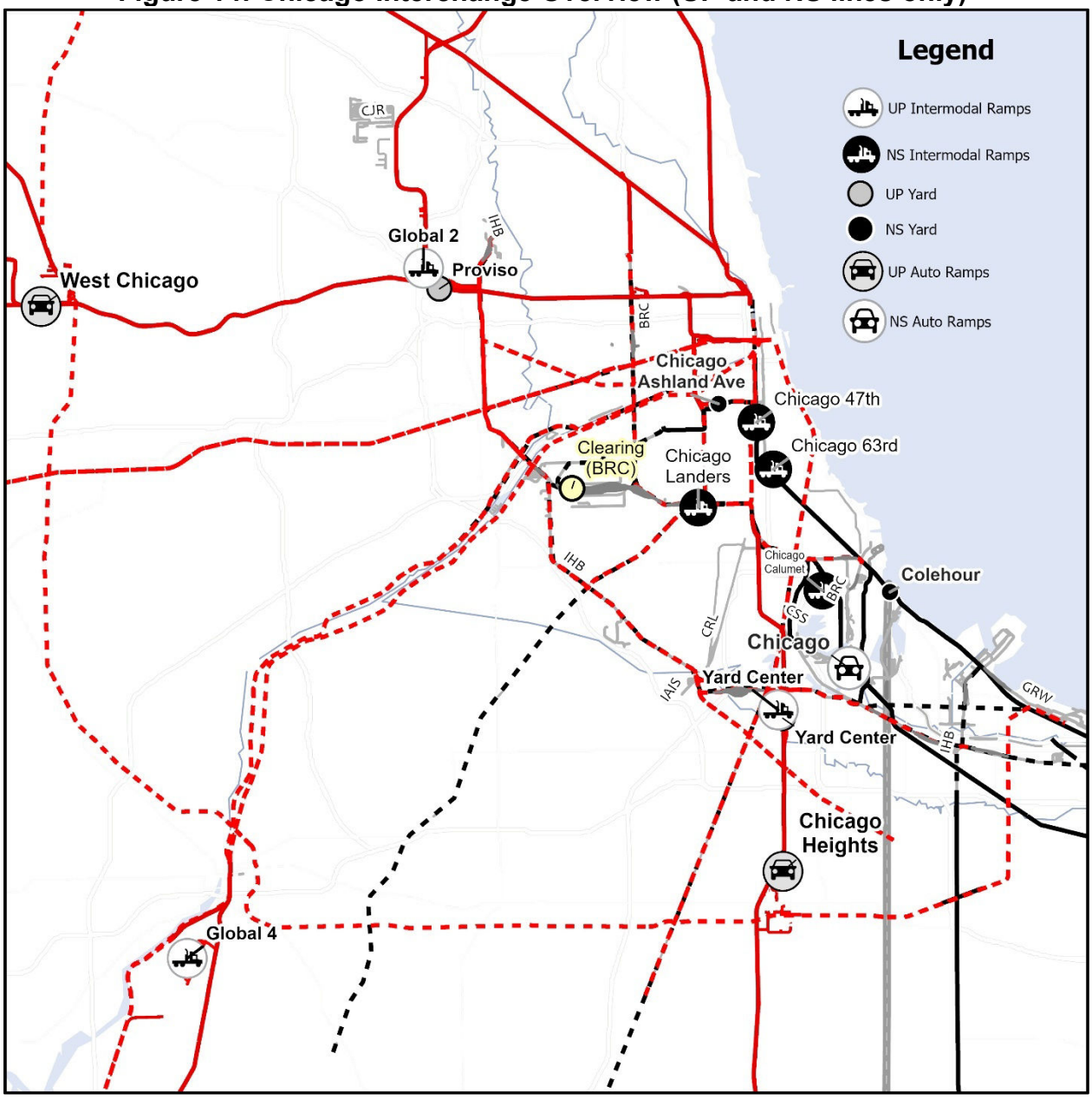
153. Chicago is the busiest gateway in the United States. It is the major point of interchange for traffic moving between UP and NS. In 2023, UP and NS interchanged approximately 454 cars of manifest traffic and 1,139 containers of intermodal traffic per day in Chicago.[32] They interchanged approximately 243 of the cars and all containers directly and via rubber tire interchange.[33] UP and NS interchanged the remaining railcars using BRC and IHB.

[31] *See* Workpaper "251120 NS-UP Interchange Summary by Gateway vShare.xlsx," Tab "Summary," Cells D31, D32, and D36.

[32] *See id.*, Cells D7, D8, and D9.

[33] *See id.*, Cell K7.

Figure 14: Chicago Interchange Overview (UP and NS lines only)



3.3.1.1. Chicago – Intermodal Operations

154. UP has intermodal ramps in three yards in Chicago: Global 2, Global 4, and Yard Center. UP uses Global 2 for domestic traffic, Global 4 for domestic and international traffic, and Yard Center primarily for traffic moving to and from Texas

and Mexico. UP also uses Global 3 to interchange intermodal traffic with CSX and NS.[34]

155. NS has intermodal ramps in four yards in Chicago: 47th Street, 63rd Street, Calumet Yard, and Landers Yard. NS uses 47th Street for domestic service to the Northeast, 63rd Street for domestic service to New England and the Northeast, Calumet for domestic service to the South, and Landers for domestic and international to Columbus and East Coast ports. NS also uses Ashland Avenue Yard in Chicago and Colehour Yard in Indiana to interchange intermodal traffic with UP and BNSF.

156. UP brings most NS-bound intermodal traffic into Global 3, routing trains from the Pacific Northwest, Northern California, and Southern California to that yard. At Global 3, UP builds two trains for NS: one with blocks for locations in the Ohio Valley and Northeast, and one with blocks for locations in Columbus, Cincinnati, and the South. UP delivers the Ohio Valley/Northeast blocks to Ashland Avenue and the Columbus/Cincinnati/South blocks to Calumet.

157. UP brings NS-bound domestic intermodal traffic from lower density lanes into Global 2, Global 4, and Yard Center. UP deramps this traffic, which is then drayed to NS terminals in Chicago in a "rubber tire interchange."

158. NS brings most UP-bound domestic intermodal traffic from the Northeast to Global 2. NS brings UP-bound domestic intermodal traffic from lower

[34] UP consolidated Global 1 operations into Global 2 in June 2023.

density lanes into 47th Street, 63rd Street, Calumet, and Landers. NS deramps this traffic, which is then drayed to UP terminals in Chicago.

159. NS brings UP-bound international traffic from the Northeast and the Ohio Valley to Colehour, where it builds a train for Global 4. A UP crew brings the train from Colehour to Global 4.

3.3.1.2. Chicago – Manifest Operations

160. UP uses three Chicago yards to support manifest operations: Proviso Yard, Yard Center, and West Chicago Yard. Most manifest traffic interchanged with NS flows through Proviso. UP also interchanges manifest traffic to NS via BRC's Clearing Yard.

161. NS primarily relies on its Elkhart Yard in Indiana and BRC's Clearing Yard to support its manifest operations in Chicago.

162. UP brings most NS-bound manifest traffic originating west of North Platte, Nebraska, into UP's North Platte Yard, where it builds an Elkhart block and launches it on a train to Proviso. At Proviso, UP builds a train that picks up additional Elkhart blocks with NS-bound traffic from Wisconsin and Minnesota and continues to Ashland Avenue. UP brings some NS-bound automotive traffic from Texas into Yard Center, and a local train operating from Yard Center sets out a Baltimore block for NS at Ashland Avenue. UP also uses intermediate carriers to interchange manifest traffic with NS in Chicago. UP routes traffic originating in the upper Midwest to Clearing Yard, where BRC builds trains for NS. UP also uses IHB to transfer automotive traffic to NS within Chicago.

163. NS routes traffic destined to UP locations west of North Platte to Elkhart, where it builds a North Platte block that it delivers to Proviso/Global 2. NS delivers all other UP-bound manifest traffic to Clearing, where BRC builds trains for UP. NS also delivers automotive traffic, excluding destinations west of North Platte, through IHB.

3.3.2. St. Louis

164. Although UP and NS do not interchange intermodal traffic over the St. Louis gateway, both railroads have intermodal ramps in St. Louis. UP provides intermodal service from its Dupo Intermodal Terminal. NS provides intermodal service from its St. Louis Intermodal Facility.

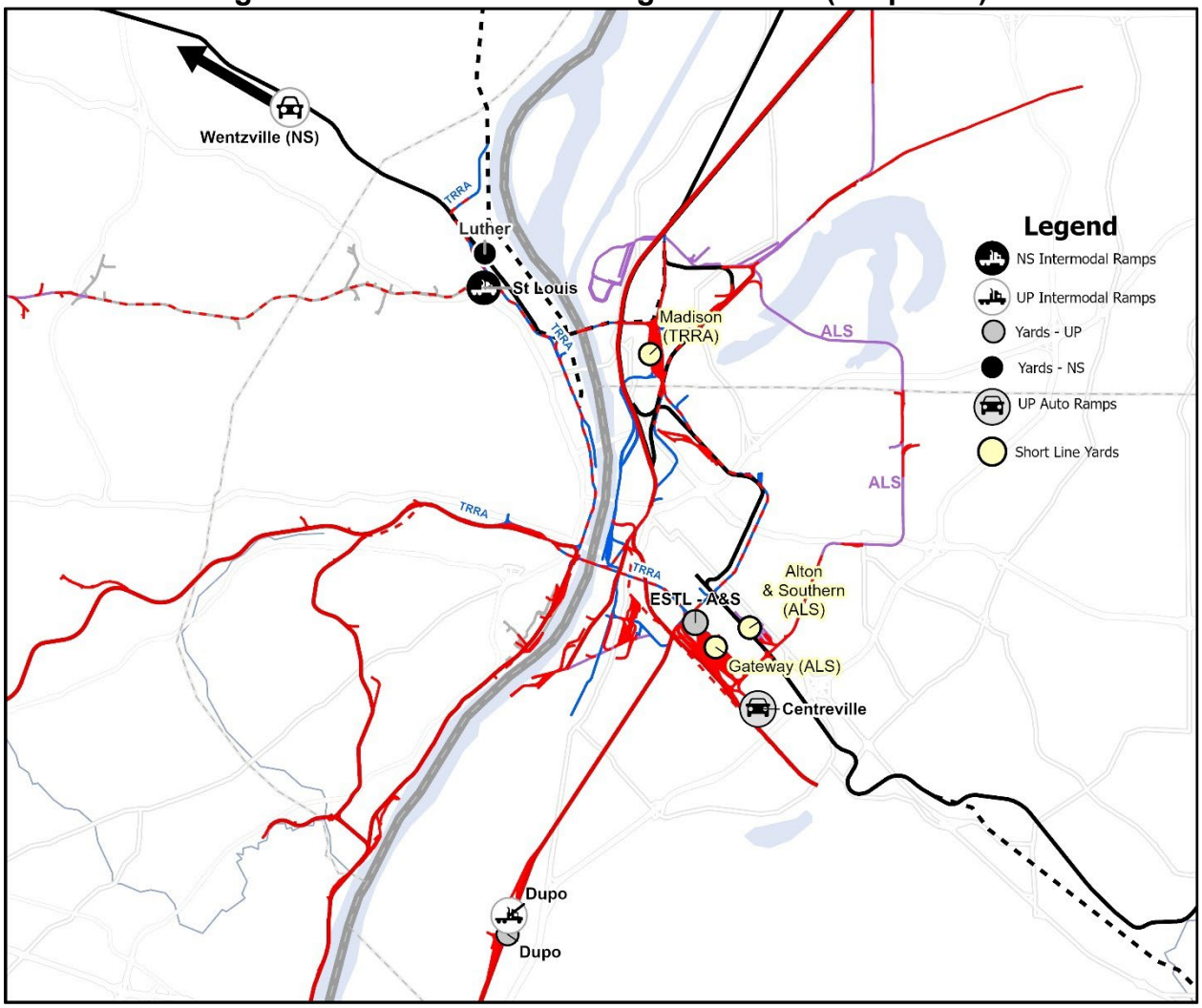
165. In 2023, UP and NS interchanged approximately 382 cars of manifest traffic per day in St. Louis.[35] UP routes NS-bound manifest traffic originating primarily in Texas, Louisiana, and Arkansas, as well as automotive traffic originating in Texas and Mexico and destined primarily to the Ohio Valley and Northeast, to NS via A&S. Three times a day, A&S transfers the NS-bound traffic to TRRA, which builds trains for NS. Therefore, all this UP-NS traffic is handled twice in St. Louis—once by A&S and once by TRRA. In 2023, UP and NS interchanged approximately 206 cars per day that were handled by both A&S and TRRA in St. Louis.[36]

[35] *See* Workpaper "251120 NS-UP Interchange Summary by Gateway vShare.xlsx," Tab "Summary," Cell D12.

[36] *See id.*, Cell B12.

166. NS routes UP-bound manifest traffic—originating primarily in the Ohio Valley and the Northeast and destined primarily to Texas and the Gulf Coast—via A&S, which builds trains for UP.

Figure 15: St. Louis Interchange Overview (simplified)



3.3.3. Kansas City

167. UP and NS both have intermodal ramps in Kansas City. UP recently relocated its intermodal operations from Neff Yard, a repurposed hump yard, to its new Kansas City Intermodal Terminal ("KCIT"). NS conducts intermodal operations out of Voltz Yard. The only intermodal traffic UP and NS interchange over the Kansas

City gateway is traffic moving from UP's West Coast ramps to Louisville, Kentucky, which is deramped in KCIT and drayed to Voltz.

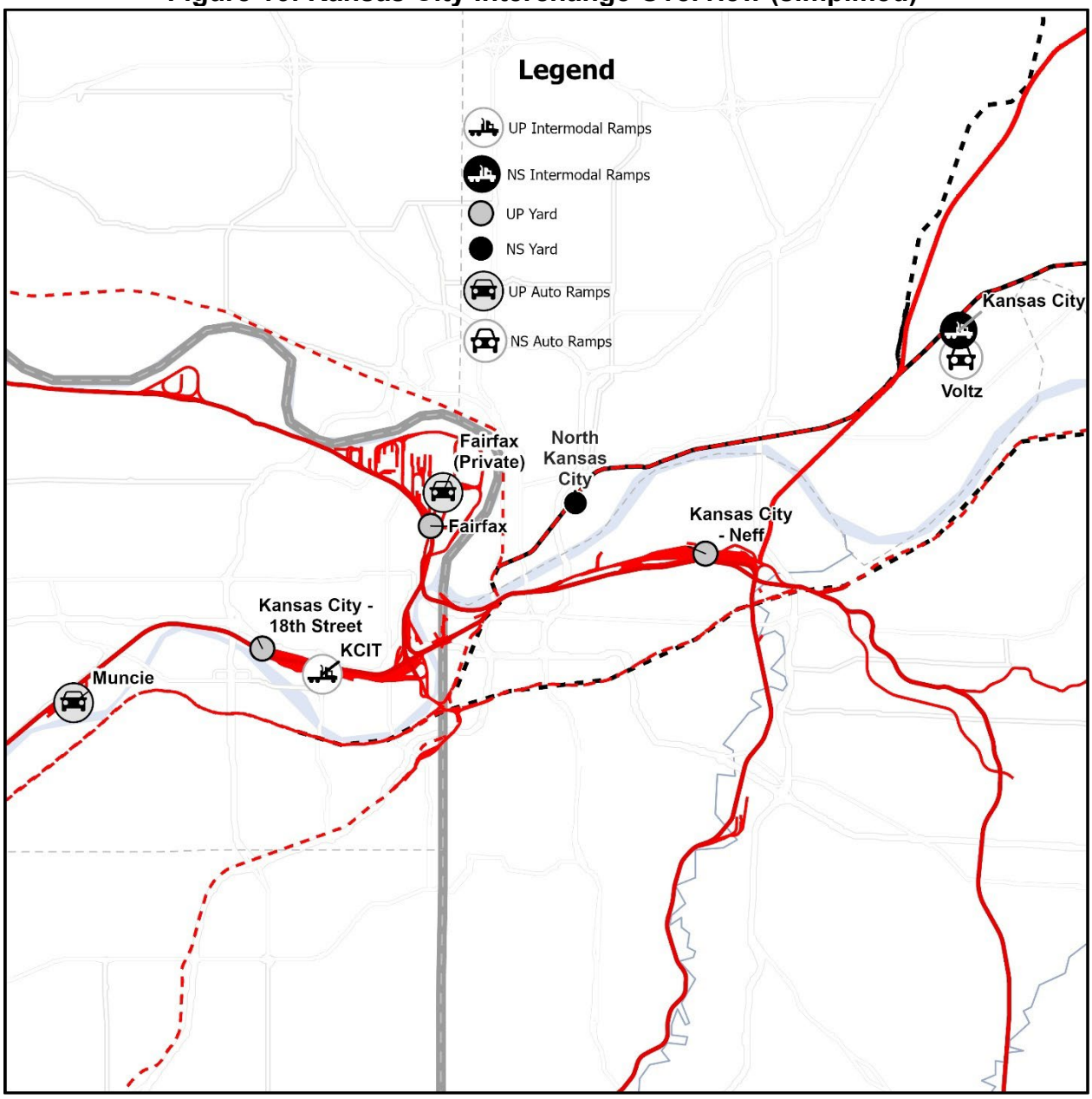
168. In 2023, UP and NS interchanged approximately 196 cars of manifest traffic per day over the Kansas City gateway.[37] UP and NS interchanged all this traffic directly. UP's primary manifest yard in Kansas City is its 18th Street Yard. NS's primary manifest yard is its North Kansas City Yard.

169. UP interchanges NS-bound traffic by building a train for NS in Topeka, Kansas. In North Platte, UP builds NS and Topeka blocks that consolidate traffic from the western portion of its network that is destined to Kansas City or interchange with NS in Kansas City. In Topeka, UP adds Kansas City-area cars that it first moved west for classification in Topeka, typically including automotive traffic from its Fairfax Automotive Facility, then launches the interchange train. The train sets out cars in UP's 18th Street Yard before terminating in NS's North Kansas City Yard.

170. NS interchanges UP-bound traffic using a train that originates in Cincinnati and picks up additional traffic as it passes through Kentucky, Indiana, and Missouri. The NS train carries a variety of traffic, including automobiles destined to UP's Mira Loma Automotive Facility in California. NS brings this traffic to UP's 18th Street Yard, where UP builds several blocks, including a Mira Loma block that rides an intermodal train toward California.

[37] *See* Workpaper "251120 NS-UP Interchange Summary by Gateway vShare.xlsx," Tab "Summary," Cell D16.

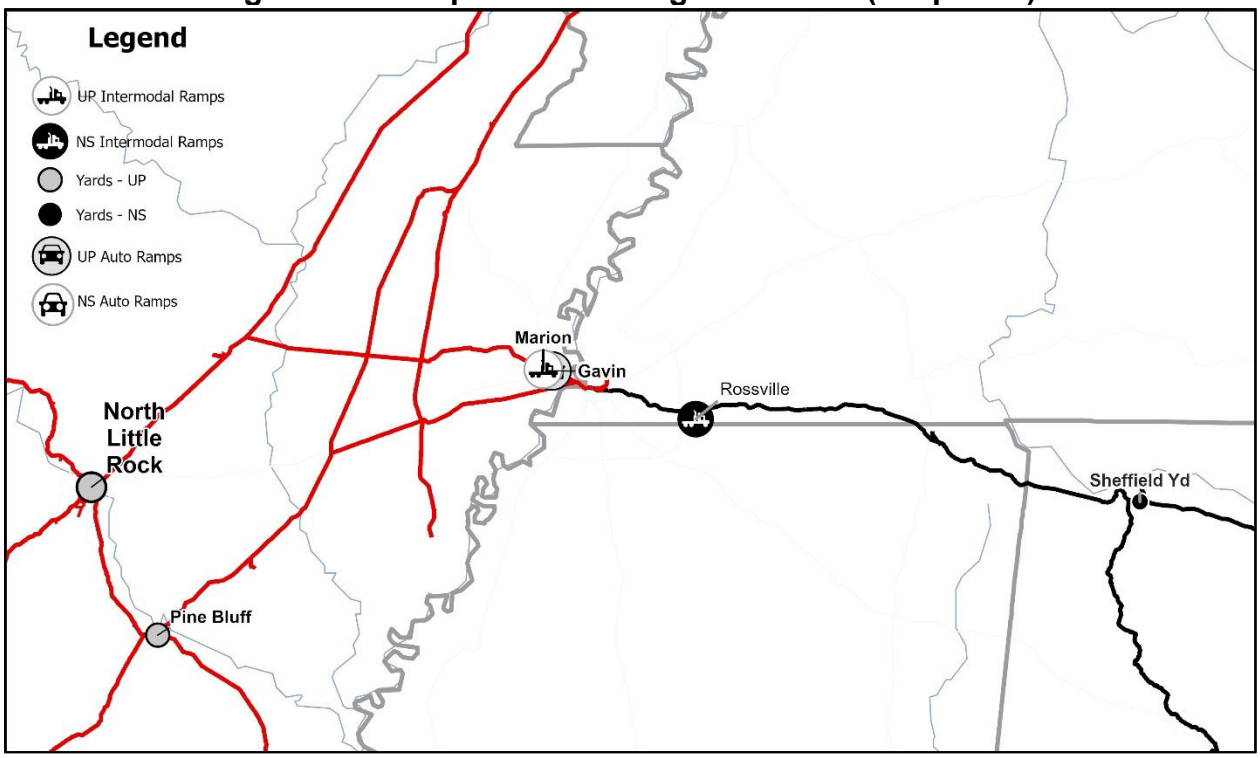
Figure 16: Kansas City Interchange Overview (simplified)



3.3.4. Memphis

171. In 2023, UP and NS interchanged approximately 275 cars of manifest traffic and 139 containers of intermodal traffic per day in Memphis.[38] They interchanged all of this traffic directly.

Figure 17: Memphis Interchange Overview (simplified)



3.3.4.1. Memphis – Intermodal Operations

172. UP and NS both have intermodal ramps in Memphis. UP's facility is the Marion Intermodal Terminal, located in Marion, Arkansas. NS's facility is in Rossville, Tennessee. UP and NS operate daily transfer trains between the two facilities. UP uses the Memphis gateway for traffic from Northern and Southern California and Laredo, Texas, moving to NS-served locations in the Southeast.

[38] *See* Workpaper "251120 NS-UP Interchange Summary by Gateway vShare.xlsx," Tab "Summary," Cells D20 and D21.

Conversely, NS uses the Memphis gateway for traffic moving between the Southeast and UP-served locations in Northern and Southern California.

3.3.4.2. Memphis – Manifest Operations

173. UP manifest traffic moving over the Memphis gateway to NS runs through UP's yard in North Little Rock. UP combines traffic moving from the western part of its network through North Platte and the southern part of its network through Fort Worth, and builds a train it launches to NS's yard in Sheffield, Alabama. At Sheffield, NS builds blocks for destinations deeper in the NS system, including a substantial block for Chattanooga. UP also has a small yard in Memphis called Sargent Yard, but it does not use the yard for interchange operations with NS.

174. NS manifest traffic moving over the Memphis gateway to UP flows in the reverse. NS builds a train at Sheffield by combining traffic from Sheffield, Chattanooga, and Birmingham, and launches the train to North Little Rock. At North Little Rock, UP reclassifies the traffic for movement deeper into its network. NS uses its Rossville facility to conduct local operations in Memphis.

3.3.5. Shreveport/Meridian

175. In 2023, UP and NS interchanged approximately 363 containers per day of intermodal traffic using the Shreveport/Meridian gateway.[39] Under a longstanding agreement with Kansas City Southern (now CPKC), NS has rights to use the Meridian Speedway, which connects with UP in Shreveport and NS in Meridian.

[39] *See* Workpaper "251120 NS-UP Interchange Summary by Gateway vShare.xlsx," Tab "Summary," Cell D25.

Under the agreement, UP and NS can commercially interchange intermodal traffic at Shreveport, with CPKC providing the transportation between Shreveport and Meridian. UP uses the Meridian gateway for intermodal traffic originating in Northern and Southern California and destined to NS-served locations in Atlanta, Charlotte, and Jacksonville. NS uses the Meridian gateway for intermodal traffic moving in the opposite direction to UP.

3.3.6. New Orleans

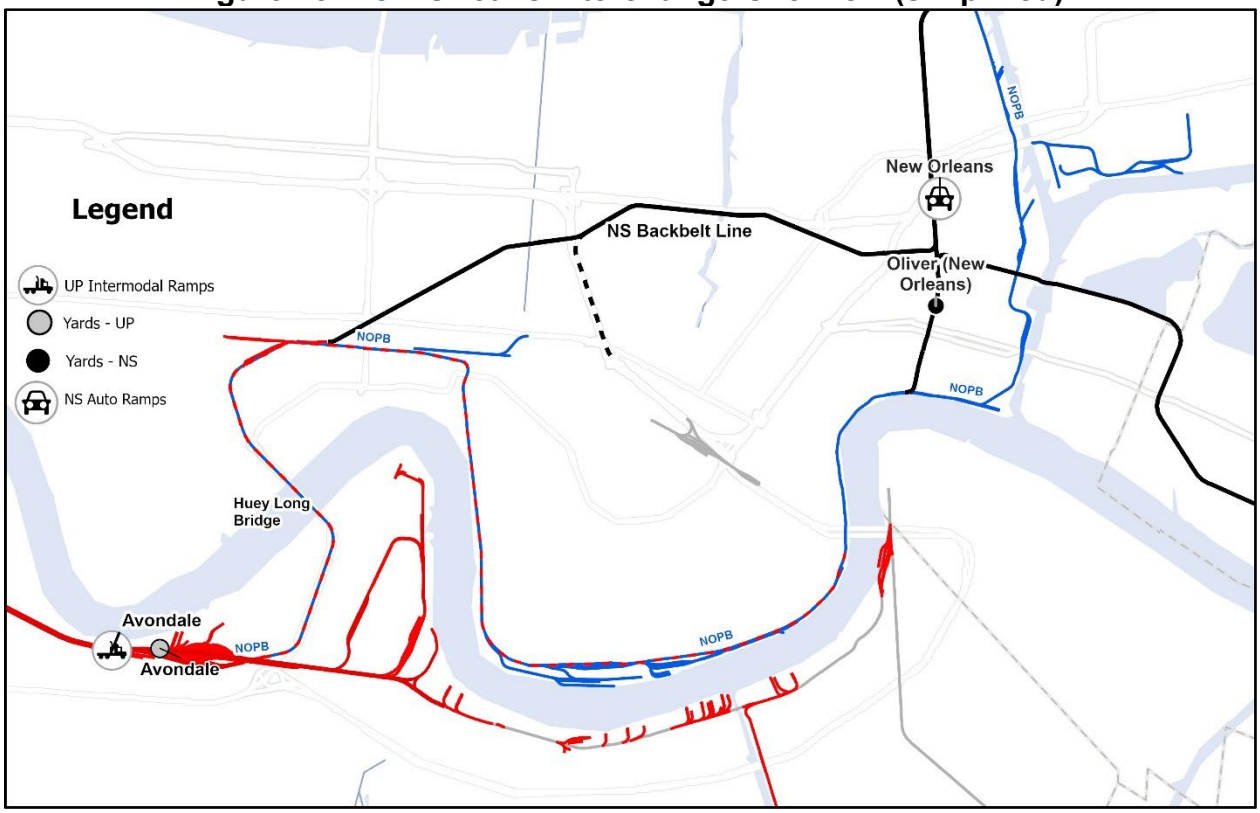
176. UP and NS do not interchange intermodal traffic over the New Orleans gateway. Although UP has a small intermodal ramp in New Orleans, NS does not have a New Orleans ramp.

177. In 2023, UP and NS interchanged approximately 330 cars of manifest traffic per day in New Orleans.[40] Manifest traffic moving over the New Orleans gateway from UP to NS primarily originates in Southern California, Texas, and Louisiana. UP uses two trains to move manifest traffic over the New Orleans gateway to NS: one is destined to Birmingham, while the other train is destined for Chattanooga, including a block for East Point, Georgia. UP launches both trains from its yard in Livonia, Louisiana. UP crews take the trains over the NOPB's Huey P. Long Bridge to NS's Back Belt Line and stage them for NS. NS crews board the trains and work them in NS's Oliver Yard before departing to Birmingham or Chattanooga.

[40] *See* Workpaper "251120 NS-UP Interchange Summary by Gateway vShare.xlsx," Tab "Summary," Cell D28.

178. NS uses the New Orleans gateway for manifest traffic moving to UP destinations in Texas, Louisiana, and the southern part of the UP network. NS moves the traffic in two trains: one destined to UP's Englewood yard in Houston, and the other destined to Livonia. NS launches one train from Chattanooga and one from Birmingham. NS moves the trains into New Orleans and stages them on its Back Belt Line for interchange with UP.

Figure 18: New Orleans Interchange Overview (simplified)



4. Description of Combined Network – Optimized Plan

4.1. Optimized Plan – Principal Routes

179. Because UP and NS meet end-to-end at mid-continent gateways, their merger will not fundamentally alter the principal routes currently operated by UP or NS. The combined system will continue using UP's and NS's principal routes to serve

customers on either side of the gateways and move traffic to and from the gateways. At the same time, the UP/NS merger offers major opportunities to improve service and efficiency by eliminating interchanges between the two railroads and safely implementing train and blocking plans that allow traffic to move faster and more reliably. Applicants will achieve these improvements by implementing a unified transportation plan designed to optimize outcomes for the merged UP/NS, rather than separate plans designed to maximize outcomes separately for UP and NS. Applicants project that implementation of their optimized plan will avoid approximately 2,400 handlings per day and save approximately 60,000 car miles per day.[41]

180. Optimizing UP/NS's transportation plan will begin producing significant public benefits almost immediately upon consummation of the merger. That is, benefits will begin to accrue even before UP/NS attract new traffic through the single-line service offerings and one-stop shopping that will make the merged railroad a stronger competitor to trucks and other railroads. Once new train and blocking plans are in place, customers of both railroads will experience faster, more reliable service on shipments across mid-continent gateways, which translates into lower customer inventory costs and savings in equipment ownership costs.

181. Applicants' plans to move traffic more efficiently involve changes to how and where traffic currently interchanged at mid-continent interchange locations will

[41] *See* Workpaper "C-251124 Operating Plan Metrics vF.xlsx," Tab "Growth Plan," Cells D17 and D25.

be handled in the future. At the same time, UP/NS will keep open all existing gateways, both commercially and operationally. In addition, Applicants expect that UP/NS will continue interchanging substantial volumes of traffic with other railroads at those gateways. Applicants have taken care in the planning process to ensure their operational changes will not degrade the operations of connecting freight and passenger railroads.

4.2. Optimized Plan – Consolidation of Main-Line Operations

182. Applicants are not planning to change UP's or NS's principal routes or to abandon or divest any lines as a result of the consolidation. Rather, the combined UP/NS will be positioned to improve service for traffic currently interchanged between UP and NS. Eliminating interchanges at mid-continent gateways will immediately improve transit times for this traffic.

183. In addition, Applicants will change the way traffic currently flows through current interchanges to implement more efficient train and blocking concepts they have developed in the planning process. Applicants' development of these more efficient plans helps show why the benefits of this merger could not be achieved through cooperative agreements. Railroads, including UP and NS, often cooperate to make their own operations more efficient. One common example is classifying blocks of cars for interchange: one railroad sorts cars destined to a common location on the receiving railroad's lines and moves them in one group. This type of arrangement allows the receiving railroad to move the cars further on its network before sorting the cars again. However, railroads require such efforts to be reciprocated: a railroad will not take on an unequal amount of extra blocking work,

even when doing so would be more efficient overall for shippers and the receiving railroad. With a merger, there is no "us" and "them"—no balance to maintain—the objective is to optimize outcomes for customers and the merged system.

184. The planned changes to current traffic flows centrally involve creating new trains with deeper network blocking while optimizing movements through mid-continent gateways. The new trains do not increase the total number of trains moving over the combined network, but instead follow more efficient routes and implement more efficient train and blocking plans for moving the same traffic between the same points. We discuss these planned new trains below, and Appendix A provides additional details regarding the Optimized Plan train changes.[42]

185. *Southern California-Northeast Intermodal* (ZLCCX/ZHBLC). Applicants intend to introduce a new intermodal train pair between Southern California and the Northeast via Kansas City, Springfield, and Sidney, Illinois, leveraging UP's efficient routing from Southern California to Kansas City and NS's efficient routing from Kansas City to the Northeast. The new routes will be as much as 252 miles shorter than the current interline routing[43] and will save approximately 17 hours of transit time eastbound and 19 hours westbound[44] for approximately 435 containers per day.[45] The new trains are shown in Figures 19 and 20.

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[42] *See* Workpaper "T2 T3 New Train Plans Final.xlsx."

[43] *See* Workpaper "Intermodal Route Mileage Comparisons.xlsx," Cell E9.

[44] *See* Workpaper "Transcon Lane Level Transit Time & Comps.xlsx," Tab "Transit Times," Cells N4 and N14.

[45] *See* Workpaper "Intermodal T1 vs T2 111925.xlsx," Tab "ZLCCX ZHBLC Detail.xlsx," Cell G26.

Figure 19: Southern California-Northeast Intermodal via Kansas City, Springfield, and Sidney (ZLCCX)

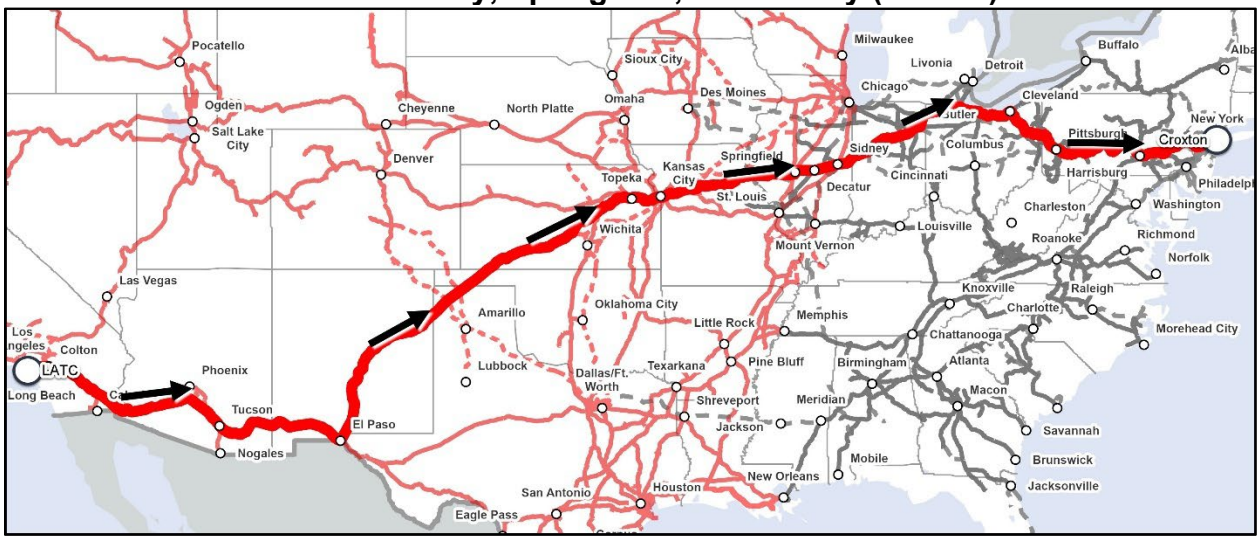
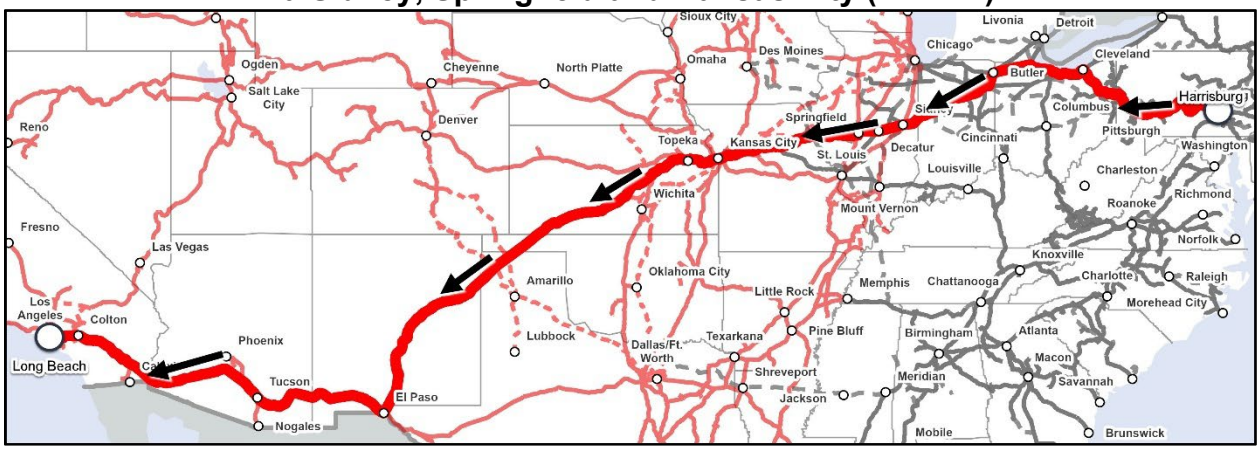
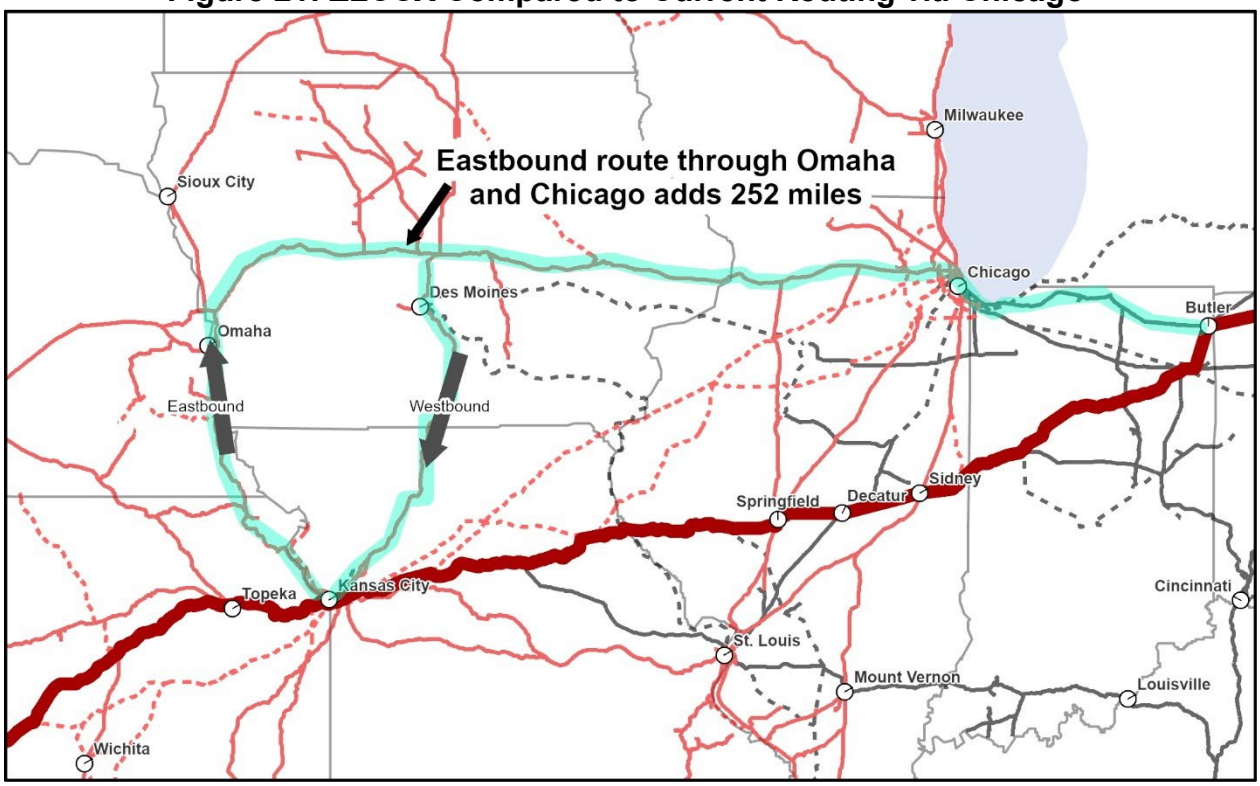


Figure 20: Northeast-Southern California via Sidney, Springfield and Kansas City (ZHBLC)



186. Figure 21 illustrates how, compared to current routing through Chicago, the new trains will make trips shorter and faster.

Figure 21: ZLCCX Compared to Current Routing via Chicago



187. By carrying traffic that UP and NS otherwise would interchange in Chicago, UP/NS's new Southern California-Northeast trains will bring broader benefits, too. These new trains should improve other railroads' Chicago-area operations by reducing train movements in the terminal. The new trains will also remove current traffic from Chicago area commuter routes and Amtrak routes between Chicago and Porter, Indiana, and Chicago and Butler, Indiana.

188. In addition, some traffic the new train will carry is traffic UP and NS currently interchange in Chicago by truck. Currently, UP and NS interchange approximately 532 containers per day by draying them between UP and NS

intermodal terminals in Chicago.[46] Applicants project approximately 92 of those containers will ride the new train, entirely avoiding Chicago and Chicago roadways, which will benefit roadway users in Chicago and the condition of the roads themselves.[47] Overall, this operating change and other operational improvements enabled by the merger will eliminate approximately 350 rubber tire interchanges per day in Chicago.[48]

189. *Southern California-Southeast Intermodal* (ZLBAT/ZCTLB). To improve a current route via Memphis, UP/NS will route a new intermodal train pair between Southern California and the Southeast via the Meridian Speedway. The new route will be 123 miles shorter than the current route[49] and will save 70 to 95 hours of transit time[50] for approximately 400 containers per day.[51] The new trains are shown in Figures 22 and 23.

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[46] *See* Workpaper "251120 NS-UP Interchange Summary by Gateway vShare.xlsx," Tab "Summary," Cell D9.

[47] *See* Workpaper "251120 NS-UP Interchange Summary by Gateway vShare.xlsx," Tab "RIC ZLCCX ZHBLC," Cell A5.

[48] *See* Workpaper "251120 NS-UP Interchange Summary by Gateway vShare.xlsx," Tab "Chicago v. Not Breakdown," Cell C24.

[49] *See* Workpaper "Intermodal Route Mileage Comparisons.xlsx," Cell E5.

[50] *See* Workpaper "Transcon Lane Level Transit Time & Comps.xlsx," Tab "Transit Times," Cells N5 and N15.

[51] *See* Workpaper "Intermodal T1 vs T2 111925.xlsx," Tab "ZCTLB ZLBAT Detail," Cell G14.

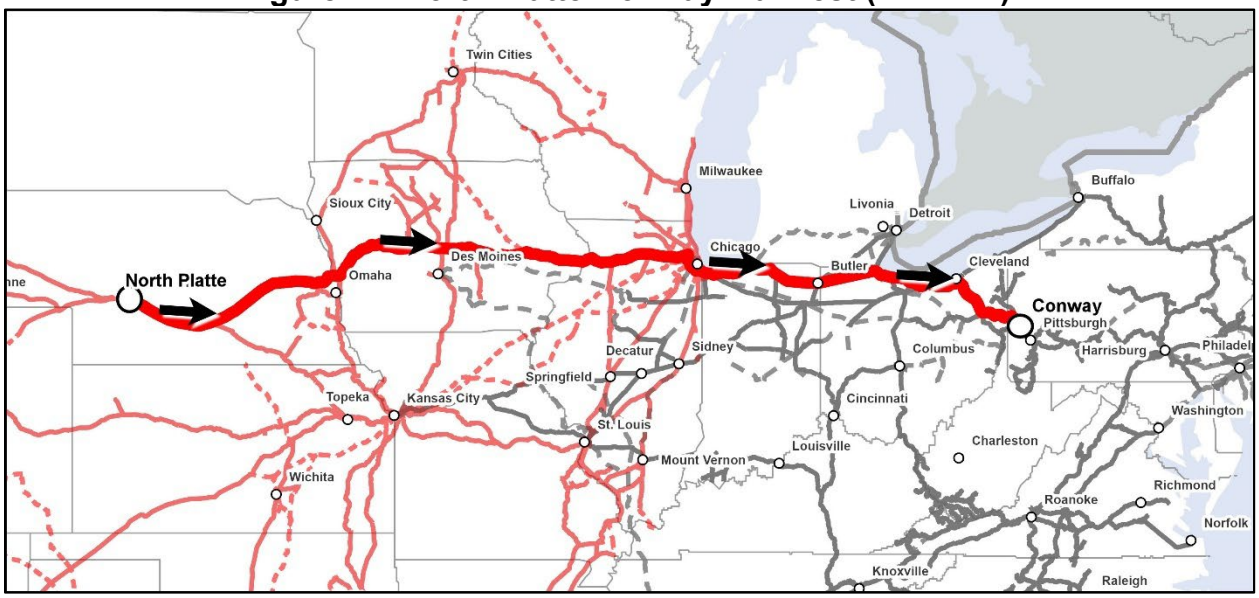
Figure 22: Southern California-Southeast Intermodal via Meridian (ZLBAT)

Figure 23: Southeast-Southern California Intermodal via Meridian (ZCTLB)

190. *North Platte-Conway Manifest* (MNPCW). UP/NS will operate a new manifest train from North Platte to Conway, Pennsylvania, with blocks for Elkhart, Indiana, Bellevue, Ohio, and Conway, Pennsylvania, that will remove car handlings in Chicago and at Elkhart Yard. The new train, which will carry traffic moving from UP's network west of North Platte and Iowa to the Ohio Valley and Northeast, will

eliminate 220 handlings per day.[52] The route of the new train is shown in Figure 24. The MNPCW will improve traffic flow compared to UP's and NS's current independent operations, and benefit Chicago's Metra commuter rail system and Amtrak.

Figure 24: North Platte-Conway Manifest (MNPCW)



191. *Altoona-Elkhart Manifest* (MALEK). UP/NS will operate a new manifest train from Altoona, Wisconsin, to Elkhart, with blocks for Elkhart, Conway, and Corning, New York. The new train—which will carry traffic moving from Wisconsin and Minnesota to Indiana, Ohio, Michigan, Virginia, Pennsylvania, and New York—will remove the need for 151 handlings per day, including a block swap and reduced switching in Elkhart.[53] The new train's route is shown in Figure 25.

[52] *See* Workpaper "Manifest T1 vs T2 111825.xlsx," Tab "MNPCW," Cell I10.

[53] *See* Workpaper "Manifest T1 vs T2 111825.xlsx," Tab "MALEK," Cell I21.

Figure 25: Altoona-Elkhart Manifest (MALEK)

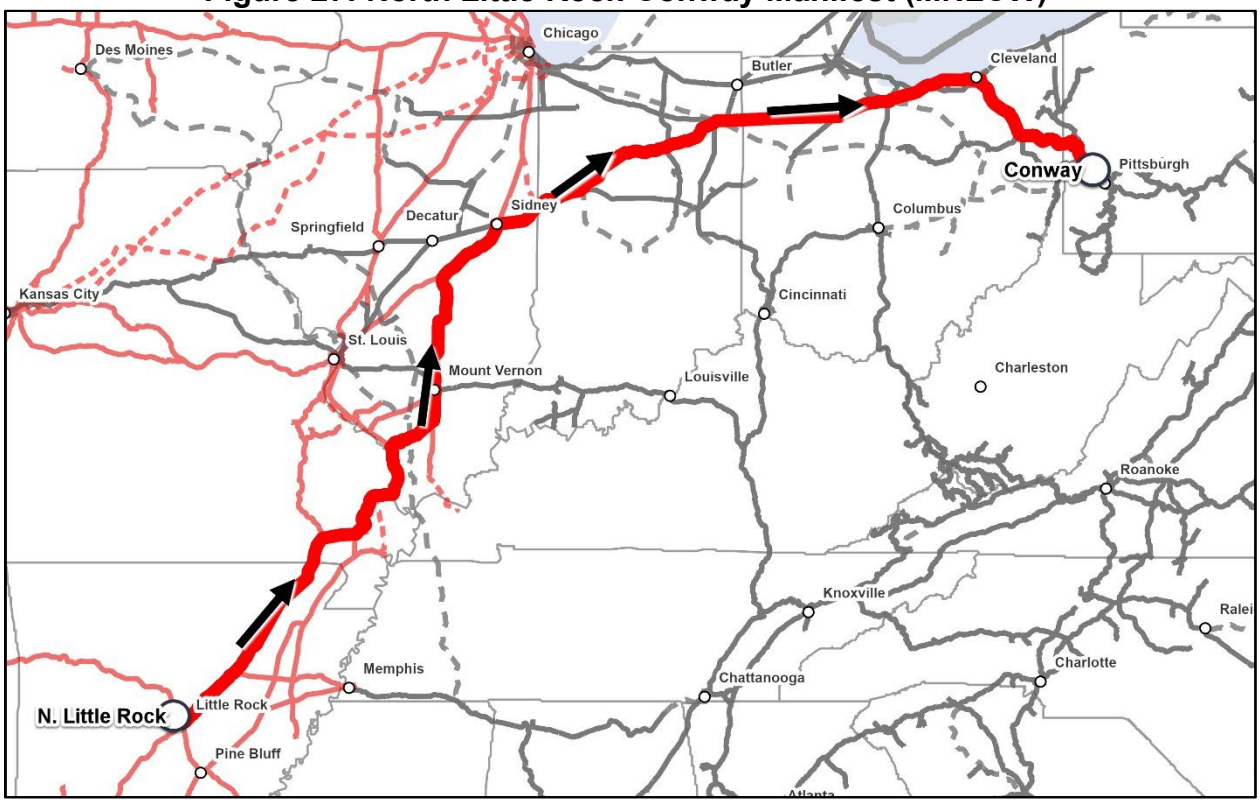
192. *Conway-Altoona Manifest* (MCWAL). UP/NS will operate a new manifest train from Conway to Altoona that will pick up blocks for Adams and Altoona, Wisconsin, at Bellevue and Elkhart. Building blocks at Corning, Conway, and Elkhart will enable traffic to go deeper across the Applicant's combined network. The new train will reduce switching demand at the BRC on approximately 110 cars daily for traffic moving from New York, Pennsylvania, Ohio, and Virginia to Illinois, Wisconsin, and Minnesota.[54] The new train is shown in Figure 26.

[54] *See* Workpaper "Manifest T1 vs T2 111825.xlsx," Tab "MCWAL," Cell H23.

Figure 26: Conway-Altoona Manifest (MCWAL)

193. *North Little Rock-Conway Manifest* (MNLCW). Using UP's line via Salem, Illinois, and NS's line via Sidney, Illinois, UP/NS will operate a new manifest train from North Little Rock to Conway, with blocks for Detroit, Bellevue, and Conway. The new train is shown in Figure 27.

Figure 27: North Little Rock-Conway Manifest (MNLCW)



194. The new route will be approximately 41 miles shorter than the current interline route from North Little Rock to Conway through East St. Louis and, each day, reduce one or two handlings on approximately 80 cars launched out of North Little Rock.[55] In addition, the new train will eliminate multiple car touches in the St. Louis gateway. In total, the North Little Rock-Conway train will help reduce approximately 144 daily handlings for traffic moving from Texas, Louisiana, and Arkansas to Michigan, Ohio, Pennsylvania, and New Jersey for traffic that UP and NS currently interchange in East St. Louis.[56] The new route also should benefit other railroads that rely on TRRA for intermediate switching in St. Louis, because it will

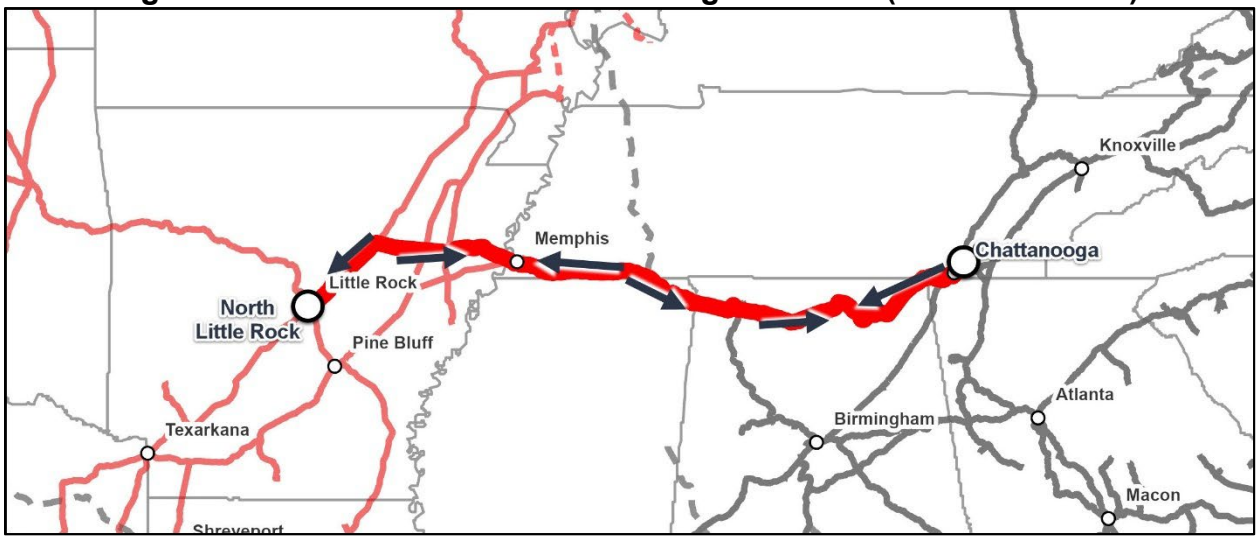
[55] *See* Workpaper "Manifest T1 vs T2 111825.xlsx," Tab "MNLCW," Cell F6.

[56] *See* Workpaper "Manifest T1 vs T2 111825.xlsx," Tab "MNLCW," Cell I6.

help reduce switching and transfer moves where northbound and eastbound traffic interchanged between UP and NS first moves through A&S and then TRRA.

195. *North Little Rock-Chattanooga Manifest* (MNLCT/MCTNL). UP/NS will operate a new manifest train pair between North Little Rock and Chattanooga, with blocks for Sheffield, Birmingham, and Chattanooga. The North Little Rock-Chattanooga train will carry traffic moving between Texas, Louisiana, Arkansas, and western points on UP, on the one hand, and Kentucky, Alabama, Tennessee, and northeastern and southeastern points on NS, on the other hand. The new train pair will eliminate car handlings at Sheffield for eastbound traffic moving to Birmingham and Chattanooga and a block swap at Sheffield for westbound traffic moving to North Little Rock, eliminating 124 handlings per day on traffic moving between North Little Rock and Chattanooga.[57] The new train pair is shown in Figure 28.

Figure 28: North Little Rock-Chattanooga Manifest (MNLCT/MCTNL)



[57] *See* Workpaper "Manifest T1 vs T2 111825.xlsx," Tab "MNLCT.MCTNL," Cell I15.

196. As discussed below in Section 7, Applicants' planning process has ensured affected lines will have capacity to accommodate the new trains. Most of these trains replace existing trains, using more efficient train and blocking plans. In net, the Optimized Plan will eliminate approximately 25 daily through freight crew starts and 4,700 daily train miles.[58] Applicants' planning process also ensured the changes would not have detrimental impacts on other freight or passenger railroads.

4.3. Yard and Terminal Activity Changes

197. Applicants' optimization of an integrated UP/NS system will affect the role of UP and NS manifest yards and intermodal terminals at gateways and locations deeper in the combined system. As discussed below, Applicants will consolidate some yard and terminal operations at gateways, making more efficient use of available capacity. Additionally, as traffic moves on new trains and new, longer-distance blocks, the number of cars per day going into yards will change, with some experiencing higher volumes while others experiencing reductions in workloads.

198. Tables 4 and 5 list key manifest yards and intermodal terminals expected to experience a change in workload of at least 25 cars or containers processed per day between the Base Plan and the Optimized Plan. The full list of

[58] *See* Workpaper "C-251124 Operating Plan Metrics vF.xlsx," Tab "Growth Plan," Cells D22 and D23.

anticipated processing changes at yards and terminals is provided in our workpapers.[59]

Table 4[60]
Anticipated Manifest Yard Workload (+/-25)
Base Plan to Optimized Plan

Manifest Yard	Base Plan Cars/Day	Optimized Plan Cars/Day	Difference
DeButts (Chattanooga), TN	1,671	1,825	154
18th St (Kansas City), KS	705	851	147
Toledo Airline, OH	183	268	86
North Little Rock, AR	2,264	2,346	81
Livonia, LA	1,813	1,892	79
Sevier (Knoxville), TN	288	331	43
Ashland Ave (Chicago), IL	151	176	25
Mitchell, IL	129	101	(28)
South San Antonio, TX	702	674	(28)
Granite City, IL	247	218	(28)
Global 3 (Rochelle), IL	211	181	(30)
North Platte West, NE	1,406	1,374	(32)
Danville, KY	306	272	(34)
Yard Center (Chicago), IL	486	449	(37)
Moorman (Bellevue), OH	1,811	1,774	(37)
Englewood (Houston), TX	2,040	2,000	(40)
Elkhart, IN	2,349	2,307	(42)
NKC (Kansas City), MO	322	275	(48)
Lafayette South, IN	166	110	(56)
Dallas Yard, TX	324	263	(62)
Birmingham, AL	1,651	1,589	(63)
Alfalfa (El Paso), TX	710	625	(85)
Topeka, KS	353	265	(87)
Spring (Houston), TX	448	360	(88)
Ft. Worth, TX	1,655	1,565	(90)
Calumet (Chicago), IL	476	383	(93)

[59] *See* Workpaper "Consolidated Terminal Data.xlsx," Tabs "C.1.d Man T1vT2 WP" and "C.1.d. Intm T1vT2 WP."

[60] *See* Workpaper "Consolidated Terminal Data.xlsx," Tab "C.1.d Man T1vT2."

Manifest Yard	Base Plan Cars/Day	Optimized Plan Cars/Day	Difference
Oakwood (Detroit), MI	719	623	(97)
West Colton (Los Angeles), CA	1,085	982	(103)
Oliver (New Orleans), LA	467	358	(109)
Sheffield, AL	671	536	(135)
Decatur (Incl. East Decatur), IL	1,164	1,003	(161)
Proviso (Chicago), IL	1,079	882	(197)
Luther (St Louis), MO	374	88	(287)

Table 5[61]
Anticipated Intermodal Terminal Workload (+/-25)
Base Plan to Optimized Plan

Intermodal Terminal	Base Plan Lifts/Day	Optimized Plan Lifts/Day	Difference
Marion (Memphis), AR	651	1,154	503
Global 2 (Chicago), IL	1,381	1,780	399
47th St (Chicago), IL	1,269	1,464	195
Toledo Airline, OH	137	295	158
Rutherford (Harrisburg), PA	770	813	43
Landers (Chicago), IL	876	844	(32)
Harrisburg, PA	953	910	(43)
Mesquite (Dallas), TX	821	737	(84)
Global 4 (Chicago), IL	1,945	1,779	(166)
Yard Center (Chicago), IL	376	0	(376)
Rossville (Memphis), TN	503	0	(503)
63rd St (Chicago), IL	707	0	(707)

199. The increases and decreases in cars and containers processed per day in manifest yards and intermodal terminals under the Optimized Plan result from the routing changes described above in Section 4.2 as well as the yard and terminal rationalizations and changes to blocking plans described in this Section 4.3. For

[61] *See* Workpaper "Consolidated Terminal Data.xlsx," Tab "C.1.d Intm T1vT2."

example, the increase in cars processed at Chattanooga is the result of originating and terminating more trains and blocks deeper in the merged network. The increases in cars processed at Gateway Yard and North Little Rock are primarily the result of routing cars to North Little Rock for block creation, driving cars deeper into the present day NS network and removing handlings from the St. Louis gateway. The increase in cars processed at 18th Street is largely the result of the consolidating operations at North Kansas City into 18th Street. The increase in cars processed at Livonia is driven by building deeper eastbound blocking (*i.e.*, Macon) and supporting the New Orleans gateway through interchange optimization.

200. On the intermodal side, the increase in lifts per day at 47th Street Yard is largely the result of consolidating Yard Center's intermodal operations into 47th Street. Similarly, the increases at Marion and Global 2 reflect the consolidation of 63rd Street Yard into Global 2 and the rebalancing of Rossville and Marion traffic.[62] Harrisburg's reduced lift counts are offset by an increase in lift counts at Rutherford, as in the combined UP/NS network North Texas to Northeast traffic will likely be routed via Atlanta to the Northeast, reducing steel wheel and rubber tire connections in Chicago.

201. In the following subsections, we first discuss how Applicants' optimization plans will change yard and terminal operations in locations where UP and NS currently interchange traffic. We then briefly explain why Applicants'

[62] Applicants are continuing to evaluate plans for rebalancing Rossville and Marion, but for purposes of developing the Operating Plan, Applicants have assumed Rossville would be consolidated into Marion.

optimization plans change yard and terminal workloads in certain other locations identified in Tables 4 and 5. Applicants have ensured affected yards and terminals have capacity to accommodate additional activity, as discussed below in Section 7.2. Applicants' planning also has protected against detrimental impacts on other freight railroads as explained throughout the following discussion, or passenger railroads as discussed in Section 8.

4.3.1. Chicago-Area Yards and Terminals

202. Applicants' integration of UP and NS will reduce the overall level of manifest yard and intermodal terminal activity in Chicago, before accounting for merger-related traffic growth.

203. For intermodal traffic, UP/NS will shift UP's intermodal operations at Yard Center to NS's 47th Street intermodal terminal. The operational change will reduce duplicative operating expenses, create additional capacity to accommodate manifest traffic growth at Yard Center, reduce train and vehicle congestion around Dolton Tower/Yard Center, and help create surge manifest capacity in the Chicago gateway. NS's 47th Street Yard has sufficient capacity to absorb Yard Center's intermodal operations without capital improvements. UP currently interchanges some of the intermodal traffic it brings to Yard Center with CN via Markham, Illinois, and UP/NS will continue this interchange. The operational change will slightly increase freight operations (by one train pair) on Metra's Southwest line between 74th Street and 59th Street (a portion of the line owned by NS but leased to Metra and operated using retained trackage rights), but the line is double track and has ample capacity to accommodate the additional train pair.

204. UP/NS also will shift NS's intermodal operations in 63rd Street Yard to UP's Global 2. The operational change will reduce duplicative operating expenses, and Global 2 has sufficient capacity to absorb the additional operations. As a result of the change, which involves an extension of service from 63rd Street Yard to Global 2 , two additional intermodal train pairs per day will move over a small portion of UP's Geneva Subdivision that is also used by Metra, but that recently-improved triple-track segment has provided a minimum of 25 trains per day of slack capacity which will enable the route to accommodate the additional traffic. The change will also eliminate approximately 130 rubber tire interchanges per day that currently occur in the Chicago complex, which will benefit Chicago-area motorists.[63]

205. In addition, as discussed in Section 4.1, UP/NS will reduce yard activity in Chicago by routing a Southern California-Northeast intermodal train via Kansas City, Springfield, and Sidney, which will reduce eastbound traffic moving between Global 3 and Ashland Avenue and westbound traffic moving between Colehour and Global 2 and Colehour and Global 4.

206. For manifest traffic, Applicants' yards will retain their same basic functions. However, UP/NS will change the UP and NS blocking plans to reduce car handlings and allow trains to move through gateways without interchanging. As discussed above in connection with UP/NS's new North Platte-Conway train, rather than create just an Elkhart block at North Platte that is block swapped at Proviso

[63] *See* Workpaper "251120 NS-UP Interchange Summary by Gateway vShare.xlsx," Tab "RIC 63rd into G2," Cell A5.

and then interchanged at Ashland Avenue, UP/NS will also build blocks for Bellevue and Conway, which will reduce the need for switching at Elkhart. As another example, rather than deliver certain trains for BRC to build blocks at Clearing Yard for other traffic moving through Chicago on the combined UP/NS network, UP/NS will build its own efficient blocks outside the Chicago area, namely in Iowa, Wisconsin, Elkhart, Corning, and Conway, that do not require classification in Chicago.

207. UP/NS also will reduce complexity and consolidate automotive shipment distribution by shifting operations from UP's Chicago Heights automotive facility into NS's Hegewisch automotive facility, eliminating intermediate handlings between the two facilities.

208. These changes to UP's and NS's Chicago-area operations will not affect interchanges with other carriers in Chicago. Applicants plan to continue to interchange with other carriers in Chicago just as UP and NS interchange with those carriers today.

209. In particular, BRC and IHB will continue to play important roles in the Chicago area, performing local operations and handling traffic interchanged in Chicago between UP/NS and other Class I railroads. Applicants anticipate reducing intermediate switching demand by approximately 200 cars daily at the BRC as a

result of the transaction.[64] By rationalizing handling of UP/NS traffic, the UP/NS merger will increase BRC's and IHB's capacity to serve other railroads in Chicago.

4.3.2. St. Louis-Area Yards and Terminals

210. Applicants' integration of UP and NS will reduce the overall level of yard classification activity in St. Louis, before accounting for merger-related traffic growth.

211. NS's Luther Yard will be maintained as an intermodal terminal and a local manifest serving yard to ensure continuance of high levels of local service to existing NS customers in the St. Louis complex. Intermediate manifest switching performed at Luther will be transferred to A&S's Gateway Yard, allowing the cars to be blocked deeper into the NS network.

212. For manifest traffic, UP/NS will reduce overall yard activity by building blocks for eastbound traffic using A&S, which has capacity to accommodate the additional activity, rather than having A&S transfer eastbound traffic to TRRA for blocking. In addition, UP/NS will offset some of the additional work being performed by A&S by building blocks in North Little Rock and Bellevue that travel deeper into the combined network, thus reducing classification demand at A&S.

213. Finally, UP/NS will leverage latent capacity at UP's Centreville automotive facility in St. Louis to unload traffic destined to NS's Wentzville automotive facility. Balancing automotive unloading capability in the St. Louis

[64] *See* Workpaper "251120 NS-UP Interchange Summary by Gateway vShare.xlsx," Tab "Summary," Cell K6.

complex will enable future automotive growth and improve cycle times for empty autoracks.

214. These changes to UP/NS's St. Louis-area operations will not affect interchanges with other carriers in St. Louis. Applicants plan to continue to interchange with other carriers in St. Louis just as UP and NS interchange with those carriers today.

215. TRRA also will not be significantly affected by changes in Applicant's St. Louis-area operations. TRRA will continue to play an important role in the St. Louis area in performing local operations and handling traffic interchanged in St. Louis between UP/NS and other carriers. By rationalizing the handling of UP/NS traffic, the UP/NS merger will increase TRRA's capacity to serve other railroads in St. Louis.

4.3.3. Kansas City-Area Yards and Terminals

216. Applicants' integration of UP and NS will streamline yard activity in Kansas City.

217. For intermodal traffic, UP/NS will use UP's Kansas City Intermodal Terminal and NS's Voltz Yard primarily for separating domestic and international shipments. Additionally, Voltz will be used as an entry and exit point for traffic connecting between Southern California/West Coast and Lower Ohio Valley terminals. This will facilitate UP/NS's creation of a new intermodal route between Southern California and the Ohio Valley via Kansas City.

218. For manifest traffic, UP/NS will consolidate NS's North Kansas City Yard into UP's 18th Street Yard. UP's 18th Street Yard has sufficient capacity to

accommodate the work being done at North Kansas City. As a result, eastbound and westbound trains will no longer need to stop at North Kansas City. However, UP/NS will continue operating local trains out of North Kansas City with traffic shuttled between 18th Street Yard and North Kansas City. UP/NS will also reduce switching that currently occurs after NS delivers westbound automotive traffic to 18th Street by pre-blocking rail cars destined for Mira Loma, California, and setting them out at Voltz, where they will be picked up by originating UP's current Kansas City-Long Beach intermodal train at Voltz with the Mira Loma block.

219. Finally, Applicants will consolidate UP's Muncie automotive facility into Voltz Yard, which also has an automotive facility. Removing the need to work the Muncie automotive facility will reduce congestion on the west side of the Kansas City complex. UP/NS interchanges with CPKC, BNSF, Missouri & Northern Arkansas Railroad, and KCT will be adjusted in accordance with the terminal consolidations described above. This will reduce interchange moves and congestion in the Kansas City gateway. Applicants will continue to serve all existing interchange partners. These changes will not affect Amtrak, which moves though the Kansas City terminal on triple track controlled by KCT.

4.3.4. Memphis-Area Yards and Terminals

220. Applicants' integration of UP and NS will streamline intermodal activities in Memphis. UP/NS plan to rebalance intermodal operations between NS's Rossville Yard and UP's Marion Intermodal Terminal, which has sufficient capacity to accommodate the additional activity. UP/NS will start a second local train from

UP's Sargent Yard or a new local train from NS's yard in Sheffield to serve customers previously served by an NS local operating out of Rossville.

221. These changes to Applicants' Memphis-area operations will not affect interchanges with other carriers. Applicants plan to continue to interchange with other carriers in Memphis just as UP and NS interchange with those carriers today.

222. The changes in operations will not impact Amtrak, which interacts with UP in Memphis only at a crossing directly south of Amtrak's station. The consolidation of UP and NS operations will maintain similar frequency of freight train density through the Memphis complex.

4.3.5. New Orleans-Area Yards and Terminals

223. Applicants' integration of UP and NS will streamline activity in New Orleans and free capacity currently consumed when UP and BNSF interchange trains with NS.

224. Currently, operations in the New Orleans area can become congested as a result of interchange activities between UP and NS and BNSF and NS. UP and NS interchange four trains each day on NS's Back Belt Line. UP moves eastbound trains across the Huey P. Long Bridge and interchanges them with NS on the Back Belt near Interstate 10. NS moves westbound trains to the Back Belt and interchanges them with UP near 17th Street. BNSF and NS interchange traffic in NS's Oliver Yard. BNSF moves eastbound trains across the Huey P. Long Bridge to Oliver Yard, and BNSF crews board westbound trains in Oliver Yard and return to BNSF's terminal at Avondale.

225. The merger will free capacity on the Back Belt by reducing the quantity of interchange moves between UP, NS, and other connecting carriers. This change will improve operational fluidity on the Back Belt and over the Huey P. Long Bridge. In addition, UP/NS will shift BNSF's interchange with NS from Oliver Yard to a UP/NS-BNSF interchange at UP's Avondale Yard. This change will further improve operational fluidity in New Orleans by reducing the need for NS-BNSF interchange traffic to move over the Huey P. Long Bridge and the Black Belt.

226. These changes to UP/NS's New Orleans-area operations will not negatively affect interchanges with other carriers in New Orleans. Applicants plan to continue using Oliver Yard to support interchange operations with CN, CPKC, and NOPB, but there will be additional opportunities to streamline New Orleans-area operations by shifting NS's current interchanges with CN and CPKC through Livonia to Baton Rouge, which will further reduce congestion in New Orleans.

227. Amtrak will benefit from these changes to Applicants' operations in New Orleans. In particular, increased operational fluidity on the Back Belt will benefit Amtrak's Crescent and Mardi Gras trains when they enter and depart the Union Passenger Terminal in New Orleans. Amtrak will also benefit from planned pre-merger capital improvements on the Back Belt.

4.3.6. Other Yards and Terminals with Notable Changes

228. In addition to the terminal changes described above, Applicants expect train routing in the Optimized Plan will result in increased activity of 50 cars or more per day at three additional terminals. Chattanooga and North Little Rock will experience increased traffic as Applicants route traffic into those large hump yards

to remove connections in smaller terminals and build deeper overhead blocks across the integrated network. Livonia will see more traffic to create greater density for deeper eastbound blocking and to help support terminal consolidations in the New Orleans gateway.

229. Finally, Applicants plan to consolidate NS's operations in Des Moines, Iowa, into UP's Short Line Yard in Des Moines. Currently, NS reaches Des Moines using haulage rights over BNSF. After the merger, traffic to Des Moines-area customers served by the legacy NS will instead move over UP's lines and through UP's Short Line Yard. Local customers will continue receiving the same service they receive today.

4.3.7. Blocking Plan Changes

230. As discussed above, significant improvements in service and efficiency from optimizing UP and NS operations are created by building new blocks that travel deeper into the network of the combined railroad. Two notable additions to the many examples provide above are:

- UP/NS will improve transit time for finished automobiles moving from Georgetown, Kentucky, to Mira Loma, California, by routing the traffic to Kansas City rather than via Chattanooga and Memphis, which removes handlings at Chattanooga. This strategy also allows Applicants to build a Mira Loma block from automotive traffic originating in Kentucky, Indiana, and Missouri, removing handlings at 18th Street Yard in Kansas City. This enhancement will save approximately one handling on each of 36 daily cars.[65]
- UP/NS will enhance blocking on a manifest train operating from Elkhart to North Platte (MEKNP/39E). At Elkhart, Applicants will build a new Green River block that will be set out at Global 3 and picked up by a

[65] *See* Workpaper "Mira Loma Kansas City 112025.xlsx," Tab "ML KC," Cell J8.

different train (IG4SE) for movement to Green River, eliminating handlings at North Platte, and also a new Boone block, eliminating handlings by BRC. These new blocking plans will eliminate a classification event for 22 cars moving to Green River and eliminate a handling for 34 cars moving to Iowa in the Boone block.[66]

231. Table 6 below lists UP/NS yards that will build more blocks under the Optimized Plan, as compared to the Base Plan. Complete details of changes to blocks can be found in Electronic Appendix G.

Table 6[67]
Additional Long Distance Blocks by Yard
Base Plan to Optimized Plan

Yard	Additional Blocks
Elkhart, IN	5
Gateway Yard (St Louis), IL	5
Moorman (Bellevue), OH	3
North Little Rock, AR	3
Bellevue, OH	2
Avondale, LA	2
18th Street (Kansas City), KS	2
Beverly, IA	1

4.4. Optimized Plan – Automotive Service

232. Applicants' integration of UP and NS will allow implementation of a streamlined service that optimizes routing of loaded automotive shipments from OEMs on the legacy NS system to UP's Mira Loma auto facility in Southern California.

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[66] *See* Workpaper "MEKNP 39E Blocks Elkhart 111925.xlsx," Tab "Summary," Cells C5 and C6.

[67] *See* Workpaper "T1_T2_T3_Block_Comparison.xlsx," Tab "Block Change by Terminal," Cells B3:B9.

233. Mira Loma auto traffic from Georgetown, Kentucky, Princeton, Indiana, Shelbyville, Kentucky, and other points on the NS system will be blocked before flowing into the Kansas City complex and connect directly to UP's current ZKCLB and IKCLB trains, which will now originate at Voltz terminal, eliminating 36 terminal handlings per day in Kansas City.[68]

234. Additionally, UP/NS will route some finished automobiles originating in Michigan and destined to Mira Loma through the IHB in Chicago to connect to UP's ZG2LC. This new routing will avoid connections in Decatur, Illinois, and Kansas City and eliminate 9 terminal handlings per day in Kansas City.

4.5. Optimized Plan – Local Train Service

235. Applicants' optimization of an integrated UP/NS system will result in changes to local train service. Applicants currently plan to continue operating local services from yards that are being consolidated into other yards, with the exception of NS's Rossville (Memphis) local that will be shifted to Sargent or operated out of Sheffield. In addition, a reduction of interchange transfer jobs between UP and NS (*e.g.*, elimination of IG3CL and MPRAH in Chicago) will reduce freight train activity at gateways, especially Chicago. Applicants will continue to look for opportunities to adjust local assignments to improve customer service as we integrate and refine our operating plans to provide transit times, service timing, and service frequency that meet customer needs and allow us to achieve the benefits of the merger.

[68] *See* Workpaper "Mira Loma Kansas City 112025.xlsx," Tab "ML KC," Cell J8.

5. Description of Combined Network – Growth Plan

5.1. Growth Plan – Principal Routes

236. Combining UP and NS into a unified network provides tremendous opportunities to offer existing and new customers single-line service products that deliver faster, more reliable, more efficient service than currently exists in the marketplace. As described in the Joint Verified Statement of Kenny Rocker and Ed Elkins and the Joint Verified Statement of David T. Hunt and Matthew Schabas, by offering improved service products, UP/NS is projected to attract substantial volumes of traffic currently moved by other railroads or in trucks.

237. In developing the Growth Plan, we began with the Optimized Plan and then considered additional operational changes that could drive and accommodate growth. In other words, marketing analyses identified opportunities that exist if we can provide the service, and we designed train services to realize those opportunities. In many cases, that meant adding volume to trains already in the Optimized Plan or adding train starts on existing routes. In other cases, additional growth allowed us to develop new trains that will further improve service, as we discuss below.

238. Accommodating projected growth will not fundamentally alter the principal routes currently operated by UP or NS. UP and NS will continue using their principal routes to serve customers shipping traffic within the east and the west and between eastern points and western points. However, the merged UP/NS will significantly improve the service offered over their east-west routes, which will attract traffic and thus build densities to support both new and improved services.

239. In developing the Growth Plan, we carefully considered whether UP and NS main lines, yards, and terminals have sufficient capacity to accommodate projected growth without negatively affecting service to existing customers, passenger railroads, or connections to other freight railroads. Where we determined additional capacity might be needed, we developed capital investment plans, as discussed in Part IV of the accompanying Service Assurance Plan. We reviewed these investment plans with Mr. Rocker and Mr. Elkins to ensure alignment between projected traffic growth and the ability to accommodate the growth and provide the level of service we offer the customer.

5.2. Growth Plan – Proposed Operations – Through Train Service

240. Applicants provide a full list of all trains added and removed between the Optimized Plan and the Growth Plan in Electronic Appendix L and the workpapers accompanying this Operating Plan.[69] Many of the additional trains in the Growth Plan accommodate incremental traffic volumes Applicants anticipate attracting by improving service on existing routes. Other Growth Plan trains respond to opportunities the merger creates to grow rail traffic by offering services on new routes. We briefly describe the new routes below in Sections 5.2.1 (intermodal trains) and 5.2.2 (manifest trains) and provide additional details in Appendix B.[70] Applicants anticipate implementation of additional interdivisional services in future years and

[69] *See* Workpaper "T1_T2_T3_Train_Comparison.xlsx," Tab "T2 to T3 Train Changes."

[70] *See* Workpaper "T2 T3 New Train Plans Final.xlsx."

will obtain agreements to implement those services through established collective bargaining processes.

5.2.1. New Intermodal Trains

241. The combined railroad's improved service offerings are expected to induce significant new demand for long-haul intermodal service across the integrated network. Based on projected traffic flows, Applicants have designed six new intermodal train pairs to attract and accommodate this demand. These train pairs will run seven days a week carrying domestic intermodal freight across the country.

242. *Northern California-Northeast* (ZLTCX/ZCXLT). Applicants plan to route a new intermodal train pair between Lathrop, California, and Croxton, New Jersey, via Chicago. This new train responds to projected demand for a direct route between Northern California and the Northeast.

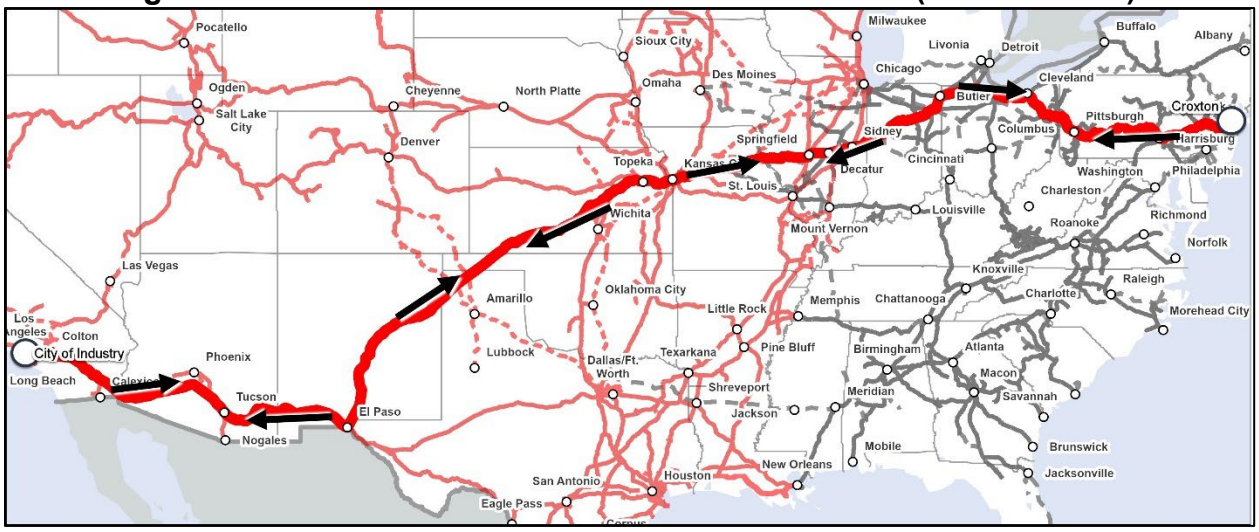
Figure 29: Northern California-Northeast Intermodal (ZLTCX/ZCXLT)

243. Eastbound, ZLTCX will depart from Lathrop and move via North Platte and Chicago to Croxton. ZLTCX has no planned work event in Chicago, only a crew change, which will help minimize congestion in the busiest freight rail hub in North America. From Chicago, the train will continue east towards Croxton, setting out

blocks at Toledo and Harrisburg. Westbound, ZCXLT will follow the same route in reverse, picking up blocks in Harrisburg, Toledo, and Colehour, and setting out blocks at Colehour and Sparks, Nevada before arriving at Lathrop.

244. *Southern California-Northeast* (ZCICX/ZCXCI). Applicants plan to route a new train pair between City of Industry (Los Angeles) and Croxton, via Kansas City, Springfield, and Sidney. This new train responds to projected increased demand for an additional efficient, direct route for traffic moving between Southern California and the Northeast.[71] This train pair replaces the ZLCCX/ZHBLC train pair introduced in the Optimized Plan as new growth opportunities from Southern California to the Northeast enable segregation of traffic moving to the Ohio Valley traffic, producing improved service levels for both groups of traffic. (See the discussion below of ZLCDT/ZDTLC.)

Figure 30: Southern California-Northeast Intermodal (ZCICX/ZCXCI)



[71] Applicants' Optimized Plan includes a train between LATC and the Northeast that also takes advantage of the same new route via Kansas City, Springfield, and Sidney.

245. Eastbound, ZCICX will depart from City of Industry and move via El Paso and Kansas City and then route via the legacy NS through Moberly, Decatur, Peru, Sandusky, and Conway. The train's first work event will be at Harrisburg, where it will set out Harrisburg, Bethlehem, and Morrisville traffic. After departing Harrisburg, the train will continue on to make a set-out at E-Rail before terminating at Croxton. Westbound, ZCXCI will follow the same route in reverse, departing Croxton and picking up blocks at E-Rail, Harrisburg, and Sandusky for Southern California destination terminals.

246. *Southern California-Ohio Valley/Detroit* (ZLCDT/ZDTLC). Applicants plan to route a new train pair between LATC and Livernois (Detroit) via Kansas City, Springfield, and Sidney. This new train will provide an efficient, direct route for traffic moving between Southern California and the Ohio Valley/Detroit markets.

Figure 31: Southern California-Ohio Valley/Detroit Intermodal (ZLCDT/ZDTLC)

247. Eastbound, ZLCDT will depart from LATC and move via El Paso (Santa Teresa) to Kansas City. At Santa Teresa, ZLCDT will pick up Detroit and Ohio Valley blocks and while at Voltz, ZLCDT will set out blocks for Kansas City, Norfolk, and destinations in the lower Ohio Valley, including Louisville, Cincinnati, and Columbus. ZLCDT will then continue to Detroit with blocks for Detroit and Cleveland. Westbound, ZDTLC will follow the same route in reverse, picking up LATC and Nogales blocks at Voltz then setting out the Nogales block in Tucson before terminating at LATC in Southern California.

248. *Southern California-Southeast* (ZIEJX/ZCTLB). Applicants plan to run a new train pair between Southern California and the Southeast via the Meridian Speedway. This new train pair responds to projected demand for an efficient route for traffic moving between California and Southeast markets.

Figure 32: Southern California-Southeast (ZIEJX)

Figure 33: Southeast-Southern California (ZCTLB)

249. Eastbound, ZIEJX will depart from Inland Empire and move via El Paso and Forth Worth to Shreveport. In Shreveport, the ZIEJX might be split into a second train (ZSHAT) as a result of a CPKC-imposed train-length restriction on the Meridian Speedway. The Growth Pan's ZIEJX replaces the ZLBAT introduced in the Optimized Plan. Both trains will follow identical routes via the Meridian Speedway to Birmingham and then Atlanta. At Atlanta, the trains will set out traffic bound for Greencastle, Greensboro, and Charlotte before continuing to Jacksonville. Westbound, ZCTLB will depart from Charlotte and move to Atlanta, where it will set out a block and may be split into a second train (ZATSH) also as a result of the Meridian Speedway length restriction. At Shreveport, the two trains would be recombined and continue to Southern California.

250. *Texas/Mexico-Northeast* (ZMXCX/ZCXMX). Applicants plan to route a new train pair between Port Laredo and Croxton via New Orleans. This new train responds to projected demand for an efficient route for traffic moving between Mexico and Texas and the Ohio Valley, Southeast, and Northeast.

Figure 34:Texas/Mexico-Northeast (ZMXCX/ZCXMX)

251. Eastbound, ZMXCX will depart from Port Laredo with blocks for Croxton, Atlanta, Charlotte, Columbus (Rickenbacker), and Cincinnati (Sharonville), enabling service from Mexico and Texas to the watershed markets of the Ohio Valley, the Southeast, and the Northeast. At San Antonio, the train will pick up blocks for Croxton, Atlanta, and Greencastle. At Houston, the train will pick up blocks for Greencastle, Morrisville, and Charlotte before continuing to Atlanta, where it will set out blocks destined to the Southeast and Ohio Valley and pick up blocks destined to the Northeast. From Atlanta, ZMXCX will continue north, setting out and picking up traffic at Greencastle and Rutherford before terminating at Croxton. Westbound, the

ZCXMX will follow the same route in reverse, picking up and setting out traffic along the way.

252. *Houston-Atlanta* (ZHOAT/ZATHO). Applicants plan to run a new train pair between Houston and Atlanta via New Orleans. This new train responds to projected demand for an efficient route between Houston, on the one hand, and the Southern Ohio Valley, the Southeast, and the Northeast, on the other hand. The ZHOAT/ZATHO train pair will also help to offset projected demand that would have operated on the ZCXMX/ZMXCX train pair.

Figure 35: Houston-Atlanta (ZHOAT/ZATHO)

253. Eastbound, ZHOAT will depart from Houston for Atlanta with blocks for destinations in the Southern Ohio Valley, Southeast, and Northeast. In Atlanta, the Northeast blocks will picked up by ZMXCX, while blocks to serve the watershed markets of the Southern Ohio Valley will leverage current Atlanta originating train capacity. Westbound, ZATHO will carry traffic from the Northeast to Houston that

arrives in Atlanta on the ZCXMX, as well as traffic from the Southern Ohio Valley and Southeast to Houston that arrives in Atlanta on other trains.

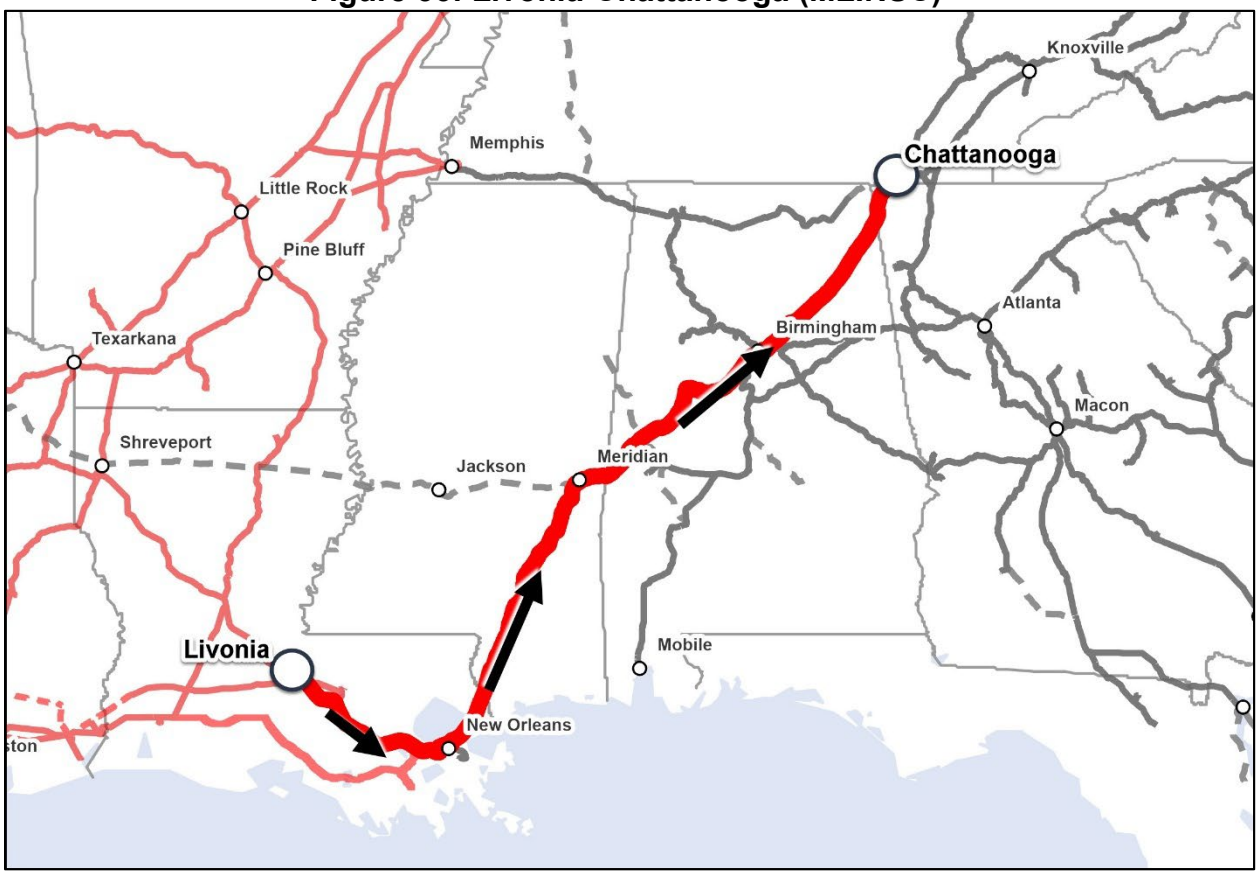
5.2.2. New Manifest Trains

254. Applicants project their service offerings will produce manifest traffic growth throughout their combined network. To adequately serve this growth while delivering high-quality service for existing customers, Applicants plan to add six new trains, including two train pairs, that will move traffic between locations on legacy UP and legacy NS, and twelve new trains that will operate within the current footprint of either UP or NS.[72] Below, we briefly describe the six new trains that combining UP and NS will directly enable.

255. *Livonia-Chattanooga* (MLINSC). To accommodate projected growth in manifest traffic moving from the Gulf Coast to the Ohio Valley and Northeast, Applicants plan to add an incremental train from Livonia to Chattanooga seven days a week. The train will pick up and set out traffic at New Orleans, set out traffic at Meridian, and terminate at Chattanooga, where the remaining traffic will be classified and dispersed on trains heading to the Ohio Valley, Northeast, and other locations on the NS network.

[72] Two of the 12 new trains operating inside the legacy UP or legacy NS system will replace existing trains, producing a net increase of 16 new manifest trains.

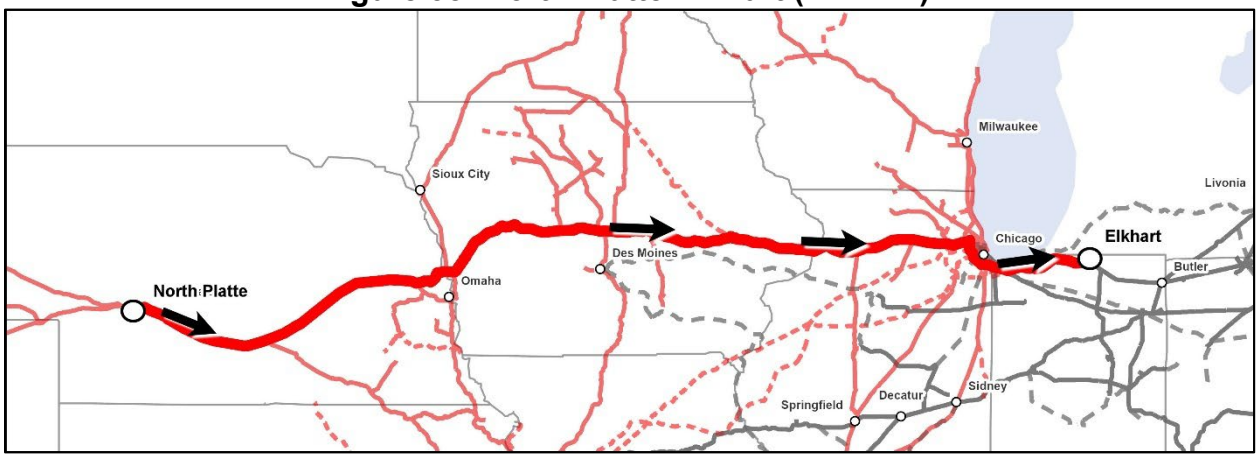
Figure 36: Livonia-Chattanooga (MLINSC)



256. *Elkhart-Boone* (MEKBO/MNPEK). In the Growth Plan, the current train running from Elkhart to North Platte will be oversubscribed. To improve the routing of traffic from the NS network destined for Iowa and traffic from Iowa heading east, and to reduce handlings in Chicago, Applicants plan to add a westbound train launching from Elkhart to Boone that will be paired with an incremental train running from North Platte to Elkhart. Traffic destined to points further east will continue to operate on a train from North Platte to Conway (MNPCW), while traffic destined to further points west will continue to be carried on the Elkhart to North Platte train.

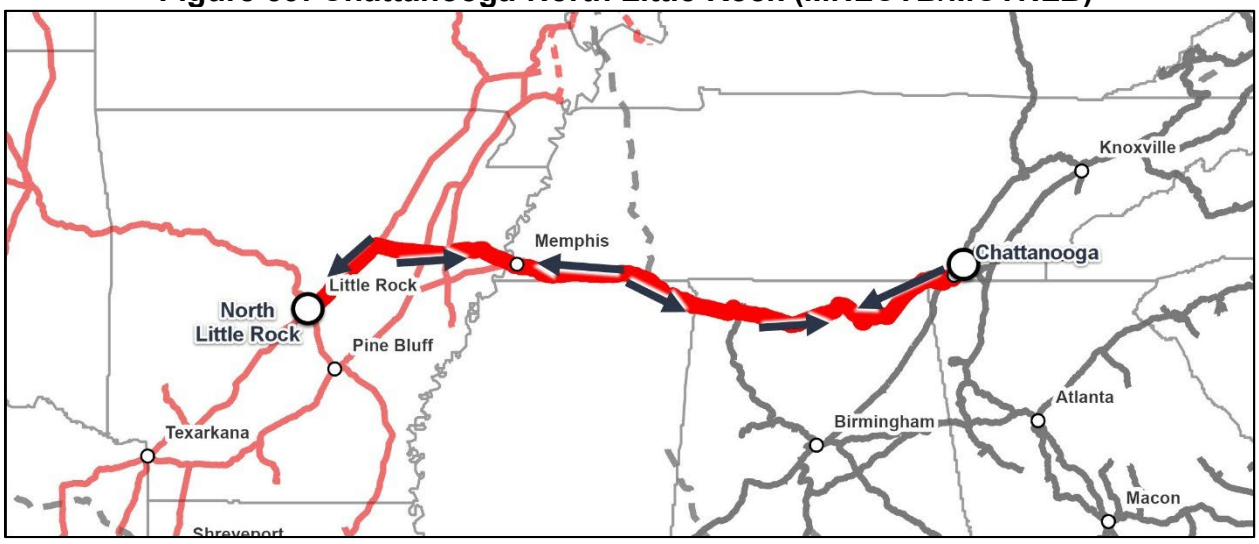
Figure 37: Elkhart-Boone (MEKBO)

Figure 38: North Platte-Elkhart (MNPEK)



257. *Chattanooga-North Little Rock* (MNLCTB/MCTNLB). To accommodate growth in traffic traveling across the southeast, Applicants plan to add a new manifest train pair running between Chattanooga and North Little Rock.

Figure 39: Chattanooga-North Little Rock (MNLCTB/MCTNLB)



258. *Birmingham-Englewood* (MBHEW). To accommodate increased demand for traffic originating in the East and destined to the Texas Gulf Coast via Houston, Applicants plan to add a train running between Birmingham and Englewood yard via the New Orleans gateway. All traffic on the train will be destined for points in Texas and the Gulf Coast.

Figure 40: Birmingham-Englewood (MBHEW)

5.3. Growth Plan – Proposed Operations – Local Train Service

259. Applicants have no specific plans to change local train services as part of their Growth Plan. However, Applicants will look for opportunities to adjust local assignments to achieve further improvements in service to customers and additional efficiencies in operations as the two railroads integrate and refine their plans in light of customer demand. The proposed transaction will remove barriers that currently limit local capacity and efficiency. This in turn will allow the combined UP/NS to capitalize on opportunities to capture watershed traffic by maintaining or improving existing service levels while handling expanded traffic volumes.

5.4. Growth Plan – Yard and Terminal Activity Changes

260. Applicants have no specific plans to fundamentally alter yard and terminal operations as part of their Growth Plan. However, Applicants will look for opportunities to rationalize yard functions to achieve further improvements in service to customers and additional efficiencies in operations as the two railroads integrate and refine their plans in light of customer demand.

261. In addition, as discussed in Section IV.B.2.a of the Service Assurance Plan, Applicants plan to expand the capacity of certain intermodal terminals to accommodate projected increases in demand. Tables 7 and 8 below show yards and terminals with more than 300 handlings per day that have an increase in activity greater than 20 percent between the Base Plan and the Growth Plan. All yards and terminals experiencing a projected increase in activity over 20 percent are reported in Electronic Appendices Q and R and in the workpapers accompanying this Operating Plan.[73]

[73] *See* Workpaper "Consolidated Terminal Data.xlsx," Tabs "Manifest Growth ALL" and "Intermodal Growth ALL."

Table 7[74]
Anticipated Manifest Yard Workload (+20%)
Base Plan to Growth Plan (>300 Cars/Day in Growth Plan)

Yard	Base Plan Cars/Day	Growth Plan Cars/Day	Difference	% Difference
DeButts (Chattanooga), TN	1,671	2,244	573	34%
Livonia, LA	1,813	2,311	499	28%
Birmingham, AL	1,651	2,030	378	23%
Decatur (Incl. East Decatur), IL	1,164	1,493	329	28%
18th St (Kansas City), KS	705	929	224	32%
Toledo Airline, OH	183	373	190	104%
Sevier (Knoxville), TN	288	475	187	65%
Clinton, IA	174	328	154	88%
Abrams (Philadelphia), PA	378	500	122	32%
Savannah, GA	349	447	98	28%
Boone, IA	378	468	90	24%
Louisville, KY	354	431	77	22%
Allentown, PA	331	401	69	21%
Marshalltown, IA	270	329	59	22%

[74] *See* Workpaper "Consolidated Terminal Data.xlsx," Tabs "C.1.e Man Growth."

Table 8[75]
Anticipated Intermodal Terminal Workload (+20%)
Base Plan to Growth Plan (>300 Lifts/Day in Growth Plan)

Yard	Base Plan Lifts/Day	Growth Plan Lifts/Day	Difference	% Difference
IEIT (Los Angeles), CA	209	1,043	835	400%
Settegast (Houston), TX	293	877	584	199%
Croxton (New York City), NJ	839	1,405	566	67%
Lathrop, CA	745	1,294	549	74%
Toledo Airline, OH	137	624	487	357%
Marion (Memphis), AR	651	1,131	480	74%
Charlotte, NC	538	947	409	76%
LATC (Los Angeles), CA	492	866	374	76%
Global 2 (Chicago), IL	1,381	1,752	371	27%
Sharonville (Cincinnati), OH	165	534	369	223%
Port Laredo, TX	299	638	340	114%
Livernois (Detroit), MI	268	601	333	125%
Ayer, MA	107	402	295	275%
Austell (Atlanta), GA	1,237	1,531	294	24%
Council Bluffs, IA	163	430	267	163%
Maple Heights (Cleveland), OH	301	526	224	74%
Rickenbacker (Columbus), OH	704	901	197	28%
Morrisville (Philadelphia), PA	327	514	187	57%
Appliance Park (Louisville), KY	227	398	171	75%
Inman (Atlanta), GA	729	886	158	22%
SAIT (San Antonio), TX	198	346	148	74%
City of Industry (Los Angeles), CA	683	825	142	21%
TACSIM (Tacoma), WA	271	390	119	44%

5.4.1. Impact on Other Railroads and Ports

262. Applicants' Growth Plan will not affect interchanges with other carriers beyond the changes described in connection with the Optimized Plan. As discussed in connection with the Optimized Plan, the combination of UP and NS will make

[75] *See* Workpaper "Consolidated Terminal Data.xlsx," Tabs "C.1.e Intm Growth."

interchanges with other carriers, including both Class I railroads and short lines, more efficient overall by optimizing operations at existing gateways, particularly Chicago, St. Louis, and New Orleans.

263. Applicants' plans do not include any operational changes to connections with UP's and NS's many current short line partners, other than the connections in Chicago and St. Louis discussed above in Section 4.3. UP and NS highly value their relationships with short line partners. A substantial share of UP and NS manifest traffic originates and terminates on short lines. The merged UP/NS will look for opportunities to develop even more efficient connections with short lines to take advantage of the many opportunities created by the merger to attract new business to rail.

264. Applicants' plans do not include any operational changes to connections with the many ports served by UP and NS. Applicants project that their combination will increase traffic moving to ports as businesses take advantage of single-line service improvements and efficiencies to become more competitive in international markets.

6. Impacts on Traffic Density and Mix

6.1. Impacts on Traffic Density

265. As discussed in connection with the Optimized Plan, the merger will allow UP/NS to handle the same traffic levels as the two railroads handled before using fewer, more efficient trains than UP and NS use today. As the combined carrier attracts new business, it will add new train services to support growth. The pro forma density charts contained in Electronic Appendices S and T and the workpapers

accompanying this Operating Plan show the projected change in traffic density on the network between the Base Plan, the Optimized Plan, and the Growth Plan.[76] In addition, Electronic Appendices U and V show the projected changes in train counts between Base Plan, Optimized Plan, and Growth Plan.[77]

6.2. Impact on Traffic Mix

266. The merger is not projected to significantly change the traffic mix carried by UP and NS when comparing the Base Plan to the Growth Plan.

6.2.1. Manifest

267. Manifest traffic is projected to comprise approximately 41 percent of carloads handled by the combined UP/NS, compared with 42 percent of total carloads for the pre-merger UP and NS.[78]

6.2.2. Intermodal

268. Intermodal traffic is projected to comprise approximately 37 percent of carloads handled by the combined UP/NS, compared with 34 percent of total carloads for the pre-merger UP and NS.[79]

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[76] *See* Workpaper "Line Segment Tables from Model vF.xlsx," Tabs "UP Tonnage Change" and "NS Tonnage Change."

[77] *See* Workpaper "Line Segment Tables from Model vF.xlsx," Tabs "UP Train Change" and "NS Train Change."

[78] *See* Workpaper "20251124_Market share calculations.xlsx," Tab "Summary of UPNS Traffic," Cells B50:E50.

[79] *See id.*, Cells B48:E48.

6.2.3. Bulk

269. Bulk traffic is projected to comprise approximately 22 percent of carloads handled by the combined UP/NS, compared with 24 percent of total carloads for the pre-merger UP and NS.[80]

7. Capacity Needs of the UP/NS System

270. Applicants anticipate that the combined railroad will invest in main line, yard, and terminal capacity to accommodate the substantial traffic growth projected to result from the merger and to deliver on the improved service levels described in this Operating Plan. Applicants evaluated existing capacity on the main lines and in the yards and terminals expected to experience significant merger-related increases in activity to (1) ensure sufficient capacity presently exists to implement operating changes that will optimize current traffic flows, and (2) develop a capital improvement plan for timely funding of capacity improvements to accommodate projected growth. Applicants provide a more detailed description of their identification of potential infrastructure impediments and the solutions they have formulated in the Service Assurance Plan.

271. Applicants provide an overview of the capacity planning process below because operating plan design and capacity planning go hand-in-hand: operating plans must account for capacity constraints and plans to increase capacity. In total, Applicants' plan includes investment of approximately $1,023 million to increase

[80] *See id.*, Cells B49:E49.

capacity and make other improvements on main lines and in yards and terminals to integrate UP and NS operations.[81]

272. Applicants have engaged in a careful, thorough, analytical process in developing the Operating Plan and the capital improvement plan within the Service Assurance Plan. They recognize, however, that the plans provided in this Application reflect results of modeling activities intended in substantial part to satisfy regulatory standards that require projecting future operations using data from the past. Applicants are fully aware that traffic patterns fluctuate and change over time, driven by changes in market supply and demand conditions that can be unpredictable. Traffic growth will not necessarily occur in the amounts or locations where it is now expected. Applicants recognize the combined railroad's actual investment needs may prove to be greater or less or otherwise different than the results of their modeling show. In everyday operations, Applicants face similar challenges in planning for an uncertain future. They must engage in long-term planning, so they do not set their capacity investment plans in stone, but rather

[81] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Capital Investment," Cells H80 and H81. Applicants' capital investment plans discussed here and in the "Infrastructure Improvements" section of their Service Assurance Plan reflect Applicants' current plans based on traffic levels and flows projected in their Application. The combined railroad's plans may change as circumstances change. UP/NS actual investments may be lower than planned if market conditions shift and overall traffic volumes decline, or if shifts in supply and demand patterns allow the combined railroad to route traffic using main lines, yards, and terminals that have excess capacity, or if productivity improvements or changes in technology allow UP/NS to accommodate more traffic with a lower level of investment or different investments. The combined railroad's actual investments may be higher than planned if market conditions or supply and demand conditions shift in the opposite direction.

develop plans that can be calibrated and adapted to meet demand. For example, UP engages in a robust, cross-functional business planning process at least twice each year to review and revise its forecasts and thus its plans for hiring, locomotive and freight car purchases, investment in terminal and line of road capacity, and more. Applicants' plans in this proceeding show how they would address the traffic they modeled, but Applicants expect that the combined railroad will invest the capital required to meet the demand created by the new single-line services created following the merger.

7.1. Main Line Capacity

273. Applicants systematically evaluated whether UP and NS main lines currently have sufficient capacity to accommodate projected traffic levels. They then developed plans as necessary to address capacity shortfalls.

274. Applicants' analyses show the Optimized Plan will not significantly change train counts on UP or NS main lines, and the main lines on which train counts would increase could readily accommodate the increase.[82]

275. To accommodate projected merger-related traffic growth reflected in the Growth Plan, Applicants anticipate that the combined railroad will invest approximately $507 million on main lines where train counts are projected to increase.[83]

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[82] *See* Workpaper "UP Line-Of-Road Volume-Capacity Summary.xlsx"; Workpaper "NS Line-Of-Road Volume-Capacity Summary.xlsx."

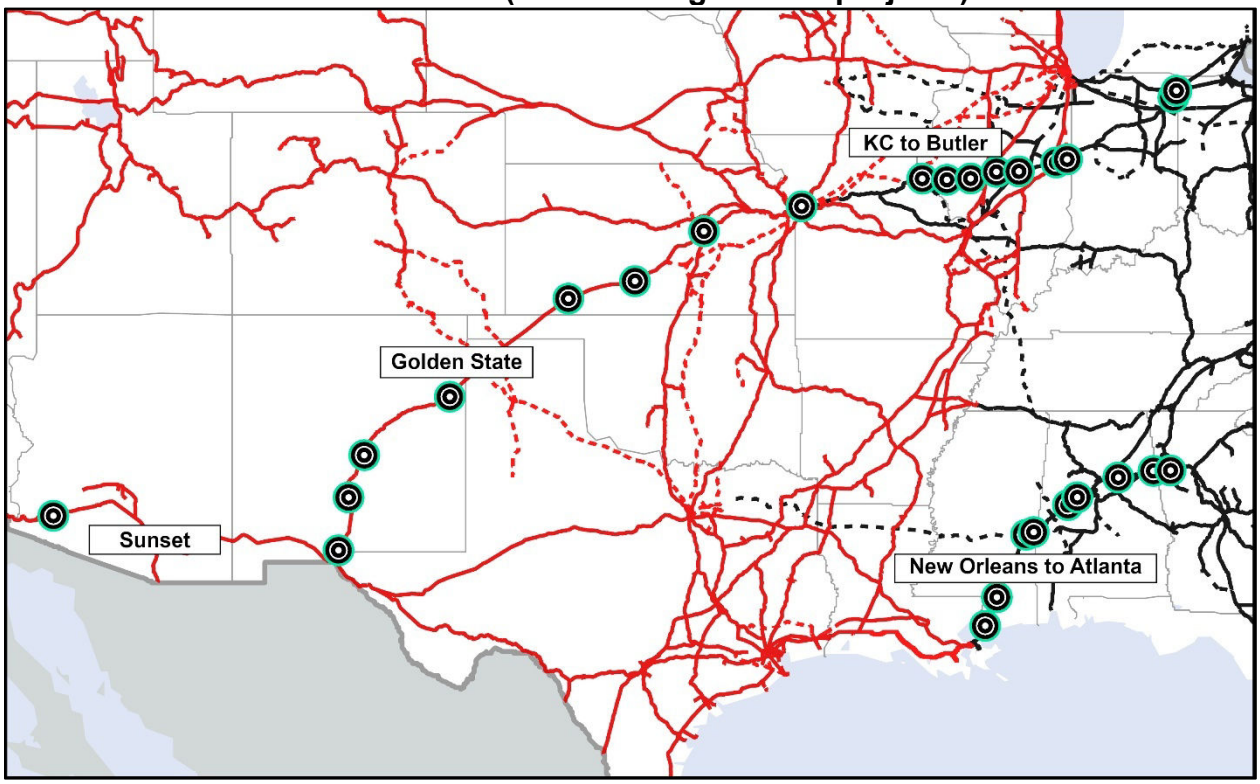
[83] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Capital Investment," Cell H83.

276. Where Applicants project merger-related traffic growth will produce train counts in excess of a line's current capacity, Applicants have plans in place for the combined railroad to increase capacity ahead of projected traffic growth. In some instances, Applicants recognized UP or NS had made pre-merger commitments to projects that would close or begin closing the capacity gap. Those investments are not included in the capital investment figure submitted in this Application. Where Applicants' operating plan anticipates increasing train lengths to make operations more efficient, Applicants developed investment plans for lines requiring additional capacity to accommodate the longer trains. These investments are included in the capital investment figure submitted with the Application. In all instances, Applicants identified the additional infrastructure required to ensure the lines will continue to operate fluidly.[84]

277. The locations of anticipated merger-related investments in main line capacity are shown below in Figure 41.

[84] *See* Workpaper "UP Capacity Investment Summary.xlsx"; Workpaper "NS Infrastructure Planned Table.xlsx," Tab "Line Capacity Projects."

Figure 41: Locations of Planned Investments on Main Lines (excludes signal/PTC projects)



278. Additional information regarding anticipated investments to increase main line capacity are provided below in Table 9.

Table 9[85]
Planned Investments on Main Lines (2023 dollars)

Location	Project	Investment ($000's)
Sunset: Mohawk – Stovall	Second mainline	34,102
Golden State: Otero	Siding extension	11,241
Golden State: Missler	Siding extension	18,870
Golden State: Herington yard bypass	Yard bypass	19,696
Golden State: Pratt	Siding extension	13,278
Golden State: Mater	Siding extension	10,142
Golden State: Newman	Siding extension	8,302
Golden State: Tecolote	Siding extension	11,177

[85] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Capital Investment," Cells H16:H23, H32:H55, and H63:H64.

Location	Project	Investment ($000's)
Kansas City to Butler: UP connection to West MC (Voltz)	Connection	6,766
Kansas City to Butler: PTC Installation WB to Bluffs	PTC	19,460
Kansas City to Butler: Hannibal bridge speed upgrade	Bridge, Track	2,420
Kansas City to Butler: Griggsville	Siding extension	11,626
Kansas City to Butler: Hannel	Siding extension	10,577
Kansas City to Butler: Dawson	Siding extension	10,103
Kansas City to Butler: Decatur	Second mainline	11,908
Kansas City to Butler: CP Brush Phase II	Track	16,889
Kansas City to Butler: Vance	Siding extension	15,770
Kansas City to Butler: Eldon to Ross Lane (Tilton yard)	CTC	4,195
Kansas City to Butler: Tilton	Crossover	6,020
Kansas City to Butler: Coburn	Siding extension	16,314
Kansas City to Butler: CP-358	Crossover	4,598
New Orleans to Atlanta: Pearl River	Siding extension	19,440
New Orleans to Atlanta: Lumberton	Siding extension	22,001
New Orleans to Atlanta: North End Meridian	Second mainline	28,616
New Orleans to Atlanta: Toomsuba	Siding extension	23,322
New Orleans to Atlanta: Moundville	Siding extension	20,711
New Orleans to Atlanta: Fleming	Siding extension	15,982
New Orleans to Atlanta: Holt	Siding extension	17,726
New Orleans to Atlanta: Foster	Siding extension	13,128
New Orleans to Atlanta: Taylor	Siding extension	11,414
Cleveland to Conway	Signal	34,283
Conway to Harrisburg	Signal	37,308
	Total	**$507,385**

279. Applicants discuss their specific plans for investing in main line capacity in more detail in the Infrastructure Improvements section of the Service Assurance Plan (Section IV.B.1).

7.2. Yard and Terminal Capacity

280. Applicants also systematically evaluated whether projected yard and terminal activity levels would increase beyond the current capacity of their yards and

terminals.[86] They then developed plans as necessary to address capacity shortfalls either by investment to increase capacity or modification of transportation plans as new traffic materializes.

281. The Optimized Plan will result in additional activity at 46 manifest yards, six of which will see activity increase by more than 25 cars per day: Chattanooga, 18th Street (Kansas City), Toledo Airline, Livonia, and Sevier (Knoxville).[87] Five intermodal terminals will see activity increases of more than 25 lifts per day: Marion, Global 2, 47th Street (Chicago), Toledo Airline, and Rutherford (Pennsylvania).[88] And there will be additional activity at three automotive terminals: Hegewisch (Chicago), Centreville (St. Louis), and Voltz (Kanas City).[89] No merger-related investments will be needed to accommodate the additional yard and terminal activity reflected in the Optimized Plan. NS's Shelbyville, Kentucky, automotive

[86] *See* Workpaper "UP Manifest-Intermodal-Automotive Terminal Capacity Inputs & Calculations.xlsx"; Workpaper "NS Manifest Yard Capacity Calculations.xlsx"; Workpaper "NS IM Auto Terminal Capacity Calculations.xlsx."

[87] *See* Workpaper "UP Manifest-Intermodal-Automotive Terminal Volume-Capacity Summary.xlsx," Tab "Manifest"; Workpaper "NS Terminal Volume Review.xlsx," Tab "Manifest."

[88] *See* Workpaper "UP Manifest-Intermodal-Automotive Terminal Volume-Capacity Summary.xlsx," Tab "Intermodal"; Workpaper "NS Terminal Volume Review.xlsx," Tab "Intermodal."

[89] *See* Workpaper "UP Manifest-Intermodal-Automotive Terminal Volume-Capacity Summary.xlsx," Tab "Auto"; Workpaper "NS Terminal Volume Review.xlsx," Tab "Auto."

facility is projected to experience activity levels above its current capacity, but NS has a pre-merger plan in place to expand capacity at Shelbyville.[90]

282. To accommodate projected merger-related growth reflected in the Growth Plan, Applicants anticipate that the combined railroad will invest approximately $516 million to expand yard and terminal capacity where the projected activity levels exceed existing capacity.[91]

283. Where Applicants project merger-related growth will create capacity demands in a yard or terminal that exceeds the facility's current capacity, Applicants have a plan in place for the combined railroad to address the issue ahead of projected traffic growth. In some instances, Applicants recognized UP or NS had made pre-merger commitments to investments that would close or narrow the capacity gap. Those investments are not included in the capital investment figure submitted in this Application. In other instances, Applicants recognized that projected capacity shortfalls could be addressed through changes to operating plans. In all instances, Applicants identified the additional infrastructure or plan changes required to ensure that yard and terminal facilities will continue operating fluidly.

284. Locations of anticipated merger-related investments in yard and terminal capacity are shown below in Figure 42.

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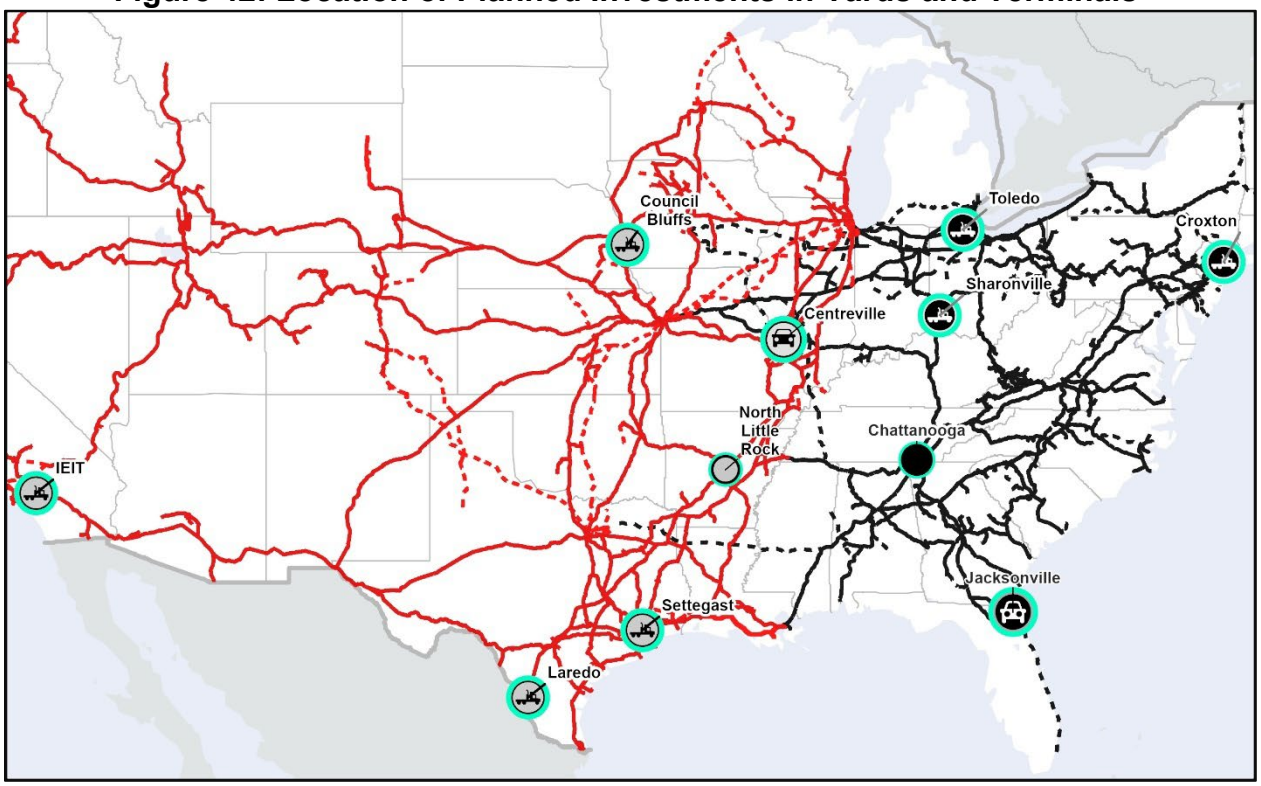
[90] *See* Workpaper "NS IM Auto Terminal Capacity Calculations.xlsx," Tab "Automotive Terminal Inputs," Row 24.

[91] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Capital Investment," Cells H87:H88.

Figure 42: Location of Planned Investments in Yards and Terminals



285. Additional details regarding anticipated merger-related investments in yard and terminal capacity are provided below in Table 10.

Table 10[92]
Planned Investment in Yards and Terminals (2023 dollars)

Project	Facility Type	Location	Investment ($000's)
North Little Rock Yard Expansion	Manifest	Little Rock, AR	30,441
Settegast Yard Expansion	Intermodal	Houston, TX	102,467
Council Bluffs Yard (Greenfield)	Intermodal	Council Bluffs, IA	75,419
Port Laredo Yard	Intermodal	Laredo, TX	63,691
Inland Empire Intermodal Terminal ("IEIT") Yard Expansion	Intermodal	Colton, CA	58,059
Lift Equipment (UP and NS yards)	Intermodal	Various	70,027
Ramp Equipment (UP and NS yards)	Autos	Various	2,521
Centreville Yard Expansion	Autos	Centreville, IL	2,116
Croxton Yard Expansion	Intermodal	Croxton, NJ	7,361
Sharonville Yard Expansion	Intermodal	Sharonville, PA	26,216
Toledo Parking Expansion	Intermodal	Toledo, OH	36,299
Jacksonville Yard Expansion	Auto	Jacksonville, FL	24,300
Chattanooga Yard Expansion	Manifest	Chattanooga, TN	17,141
		Total	**516,059**

286. Applicants discuss their specific plans for investing in yard and terminal capacity in more detail in the Infrastructure Improvements section of the Service Assurance Plan (Section D.1.d.).

287. Below, Applicants discuss the yards and terminals for which they anticipate that the projected demand for capacity reflected in the Growth Plan would be resolved through means other than additional investment in capacity.

7.2.1. Intermodal and automotive terminal capacity

288. In a handful of locations, Applicants' Growth Plan projects activity levels at intermodal and automotive terminals that are slightly above the calculated

[92] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Capital Investment," Cells H24:H31 and H56:H62.

capacities of those facilities. In those instances, Applicants have identified solutions that do not require additional infrastructure, though these plans could change as conditions change.

289. *Brooklyn (Portland, Oregon).* UP/NS would likely address the projected capacity shortfall (approximately 13 lifts per day) by reducing block swaps at Brooklyn. UP/NS could accomplish this by creating an overhead train with blocks of traffic destined to Chicago, Kansas City, and the Midwest.

290. *TCIT (Minneapolis, Minnesota).* UP/NS would likely address the projected capacity shortfall (approximately 20 lifts per day) by engaging with customers to minimize container dwell. UP/NS could also explore off-site parking solutions.

291. *Tacsim (Tacoma, Washington).* UP/NS would likely address the projected capacity shortfall (approximately 5 lifts per day) by engaging with the facility owner to increase terminal operating hours.

292. In addition, NS has several idled intermodal terminals that UP/NS will begin using for intermodal service, as follows.

293. *McCalla (Birmingham, Alabama).* McCalla currently supports only automotive distribution, having idled intermodal operations several years ago. To accommodate merger-related intermodal growth, Applicants anticipate that UP/NS will reintroduce intermodal service at McCalla. Applicants expect that UP/NS will collocate intermodal and automotive operations at the ramp without requiring

additional capital investment. Reintroducing intermodal operations at McCalla will provide 78,000 annual lifts of capacity, exceeding projected post-merger demand.

294. *E-Rail (Elizabeth, New Jersey).* E-Rail is a currently idle intermodal terminal. To support merger-related growth in the New York/New Jersey market, Applicants anticipate that the combined railroad will reintroduce intermodal service at E-Rail in the Growth Plan. While UP/NS will undertake necessary terminal maintenance and crane procurement to restart operations,[93] Applicants do not anticipate that the combined railroad will make additional capital investments in E-Rail. The terminal's existing infrastructure provides an annual capacity of 174,000 lifts, which is more than sufficient to meet projected post-merger demand.

295. *Greencastle (Pennsylvania).* The NS intermodal terminal in Greencastle, Pennsylvania, is currently idle. To support merger-related growth in the Eastern Pennsylvania market, Applicants anticipate that the combined railroad will reintroduce intermodal service at Greencastle in the Growth Plan. While UP/NS will undertake necessary terminal maintenance and crane procurement to restart operations, Applicants do not anticipate that the combined railroad will make additional capital investments in Greencastle.[94] The terminal's existing infrastructure provides an annual capacity of 133,000 lifts, which is more than sufficient to meet projected post-merger demand.

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[93] *See* Workpaper "NS Crane Capacity Calculations.xlsx," Tab" Intermodal Crane Inputs," Row 21.

[94] *See id.*, Row 19.

7.2.2. Manifest Yard Capacity

296. In a number of cases across the expansive networks of UP and NS, Applicants' Growth Plan projects activity levels at manifest terminals that are above the calculated capacities of those facilities, but where a solution would not involve additional infrastructure, though these plans could change as conditions change.

297. *Alfalfa (El Paso, Texas).* UP/NS would likely address the projected capacity shortfall (28 cars/day) by using excess capacity at Dallas Yard, where activity is projected to decrease below pre-merger levels. UP/NS could also use Davidson Yard to build blocks that overhead Alfalfa.

298. *Coady (Baytown, Texas).* UP/NS would likely have sufficient capacity to absorb the projected capacity shortfall (3 cars/day) without altering its operations, but it could also address the shortfall by using excess capacity created by a UP pre-merger project at Robinson Yard in Dayton, which is described in Section IV.B.2 of the Service Assurance Plan.

299. *Boone (Iowa).* UP/NS would likely have sufficient capacity to absorb the projected capacity shortfall (8 cars/day) without altering its operations, but it could also address the shortfall by running an intermodal train directly from Chicago to East Minneapolis to avoid a block swap that consumes capacity in Boone.

300. *Elkhart (Indiana).* UP/NS would likely address the projected capacity shortfall that remains after completion of a pre-merger investment project described in Section IV.B.2 of the Service Assurance Plan (127 cars/day) by developing Yard Center blocks at Bellevue and Conway Yards and operating a train from Bellevue directly to Yard Center.

301. *Gateway Yard (A&S) (E. St. Louis, Illinois).* UP/NS would likely address the projected capacity shortfall that remains after completion of a pre-merger investment project described in Section IV.B.2 of the Service Assurance Plan (20 cars/day) by setting out Chicago-bound and CSX interchange blocks at Dupo Yard before they reach Gateway Yard so they can overhead Gateway Yard.

302. *Lake Charles (Louisiana).* UP/NS would likely address the projected capacity shortfall (24 cars/day) by using excess capacity created by a UP pre-merger project at Frances Yard in Orange, Texas, as described in Section IV.B.2 of the Service Assurance Plan.

303. *Livonia (Louisiana).* UP/NS would likely address the projected capacity shortfall that remains after completion of a pre-merger investment project described in Section IV.B.2 of the Service Assurance Plan (271 cars/day) by using excess capacity at nearby yards in Alexandria and Addis. UP/NS could use Alexandria and Addis to build northbound blocks for North Little Rock, Conway, Bellevue, and other traffic so they can overhead Livonia.

304. *North Little Rock (Arkansas).* UP/NS would likely address the projected capacity shortfall that remains after completion of a merger-related investment project described in Section IV.B.2 of the Service Assurance Plan (322 cars/day) by using excess capacity at Pine Bluff Yard. Specifically, UP/NS would reintroduce southbound blocking operations at Pine Bluff for traffic heading to Texas, Mexico, and the Gulf Coast to alleviate pressure on North Little Rock. Pine Bluff and NS's yard in Sheffield, Alabama, would have sufficient capacity combined to absorb the

North Little Rock traffic without compromising existing capacity thresholds at either terminal.

305. *South St. Paul (Minnesota).* UP/NS would likely address the projected capacity shortfall (12 cars/day) by running a train directly from Chicago to East Minneapolis intermodal terminal to avoid a block swap that consumes capacity in South St. Paul.

306. *18th St. Yard (Kansas City, Kansas).* UP/NS would likely address the projected capacity shortfall (59 cars/day) by using idled capacity at the nearby Neff or North Kansas City facilities, each of which could independently absorb the additional traffic.

8. Impacts on Passenger Operations

307. The UP/NS merger will not result in any adverse impact to passenger operations. Where Applicants host passenger operations on lines expected to experience merger-related traffic growth, Applicants have ensured the lines will have sufficient capacity to abide by their contractual commitments and legal obligations to passenger carriers.

308. In the sections below, Applicants systematically review passenger operations they host and explain why the merger will not harm those operations. In the Service Assurance Plan, Applicants explain how they will continue to facilitate those operations so as to fulfill their existing performance agreements, and how their established operating protocols will ensure effective communications to minimize any potential transaction-related negative impacts.

8.1. Amtrak Operations

309. UP and NS host Amtrak trains under agreements entered pursuant to 49 U.S.C. § 24308(a) and statutes providing Amtrak preference over freight transportation in using a rail line, junction or crossing, *see* 49 U.S.C. § 24308(c).

8.1.1. Amtrak Operations on UP lines

8.1.1.1. California Zephyr

310. Amtrak's California Zephyr service operates a daily train in each direction between Chicago, and San Francisco. UP hosts these trains for 1,377 miles between Denver and Emeryville, California.

311. Merger Impact: UP/NS plan to add one train pair to the Zephyr's route between Sacramento, and Alazon, Nevada, as part of a new intermodal service between Northern California and the Northeast. UP's line between Sacramento and Alazon has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels.[95]

8.1.1.2. Capitol Corridor

312. Amtrak's Capitol Corridor service is a state-supported service sponsored by the California Department of Transportation ("CalTrans") and overseen by the Capitol Corridor Joint Powers Authority ("CCJPA") that operates 28 daily trains in each direction between San Jose, and Auburn, California. UP hosts these trains for 161 miles between Santa Clara and Auburn.

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[95] *See* Workpaper "UP Line-Of-Road Volume-Capacity Summary.xlsx," Tab "Summary," Segment 785-02.

313. Merger Impact: Applicants' plan to institute a new intermodal service between Northern California and the Northeast would add one train pair to the Capitol Corridor route between Sacramento and Auburn. UP's line between Sacramento and Auburn has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels.[96]

8.1.1.3. Cascade

314. Amtrak's Cascade service is a state-supported service sponsored by the Washington and Oregon Departments of Transportation that operates twice daily in each direction between Seattle and Eugene. UP hosts these trains for 123 miles between Portland and Eugene.

315. Merger Impact: Applicants do not expect that the merger will add trains to the Cascade route.

8.1.1.4. Coast Starlight

316. Amtrak's Coast Starlight service operates a daily train in each direction between Los Angeles and Seattle. UP hosts these trains for 1,147 miles between Moorpark, California, and Portland.

317. Merger Impact: Applicants do not expect that the merger will add trains to the Coast Starlight route.

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[96] *See* Workpaper "UP Line-Of-Road Volume-Capacity Summary.xlsx," Tab "Summary," Segment 845-02.

8.1.1.5. Gold Runner

318. Amtrak's Gold Runner[97] service is a CalTrans-funded service that operates seven times daily in each direction between Bakersfield and Stockton, California, with five trains connecting to Oakland and two to Sacramento. UP hosts the Oakland trains for 41 miles between Port Chicago, California, and Oakland, and the Sacramento trains for 50 miles between Stockton and Sacramento.

319. Merger Impact: Applicants plan to institute a new intermodal service between Northern California and the Northeast that would add one train pair to the Gold Runner route between Stockton and Sacramento. UP's line between Stockton and Sacramento has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels.[98]

8.1.1.6. Lincoln (Illinois)

320. Amtrak's Lincoln (Illinois) service operates three trains per day in each direction between Chicago and St. Louis. UP hosts these trains for 241.5 miles between Wann, Illinois, and Joliet.

321. Merger Impact: Applicants' plan to route a westbound train via Butler to Kansas City would remove one freight train per day from the Lincoln (Illinois) route.

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[97] The Gold Runner is a recently rebranded service previously known as San Joaquins.

[98] *See* Workpaper "UP Line-Of-Road Volume-Capacity Summary.xlsx," Tab "Summary," Segment 938-01.

8.1.1.7. Missouri River Runner and Lincoln/Missouri River Runner

322. Amtrak's Missouri River Runner operates one train daily in each direction between St. Louis and Rock Creek, Missouri. UP hosts these trains for 271 miles (out of the service's 283 total miles) between St. Louis and Rock Creek.

323. The full Lincoln/Missouri River Runner service runs the combined route of the Lincoln (Illinois) and Missouri River Runner (see below) services between Chicago and Kansas City once daily in each direction. It operates on Union Pacific lines for 512.5 out of 567 total miles.

324. Merger Impact: Applicants' plan to route a westbound train via Butler to Kansas City would remove one freight train per day from the Missouri River Runner and Lincoln/Missouri routes.

8.1.1.8. Pacific Surfliner

325. Amtrak's Pacific Surfliner service is a CalTrans-funded service, operated by the Los Angeles-San Diego-San Luis Obispo Rail Corridor Agency ("LOSSAN"), that operates ten times daily in each direction between San Luis Obispo and San Diego. UP hosts these trains for 174.4 miles between San Luis Obispo and Las Posas, California (out of the service's 350 total miles).

326. Merger Impact: Applicants do not expect that the merger will add trains to the Pacific Surfliner route.

8.1.1.9. Sunset Limited

327. Amtrak's Sunset Limited service operates three trains per week each way between Los Angeles and New Orleans. UP hosts these trains for 1,774.4 miles

between Iowa Junction, Louisiana, and El Monte, California (out of the service's 1,995 total miles).

328. Merger Impact: Applicants' plan to grow intermodal service to and from Southern California would add two trains per day between El Monte and City of Industry, California, four trains per day between City of Industry, California and West Colton, California, six trains per day between West Colton and El Paso, two trains per day between El Paso, and Sierra Blanca, Texas, two trains per day between San Antonio and Houston, two trains per day between Houston and Beaumont, Texas directionally traveling east on the Beaumont Subdivision and four trains per day between Houston and Beaumont directionally traveling west on the Houston Subdivision.[99] As discussed in Section 7.1 above and in Section IV.B.1 of the accompanying Service Assurance Plan, Applicants plan to invest approximately $34 million to increase capacity along the Sunset route to accommodate merger-related growth.[100] In addition, UP is currently investing to double-track portions of the route, which will expand capacity ahead of expected merger-related growth.[101] UP's lines between El Paso and Sierra Blanca and between San Antonio and Houston have sufficient capacity to accommodate the two additional trains per day projected to move across those segments.[102] In addition, as discussed in Section 4.3.5, Applicants'

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[99] *See* Workpaper "UP Line-Of-Road Volume-Capacity Summary.xlsx," Tab "Summary," Segment 675-02.

[100] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Capital Investment," Cell H16.

[101] *See* Workpaper "UP Sunset Corridor Capacity Projects.pdf."

[102] *See* Workpaper "Line capacity.xlsx."

rationalization of operations in New Orleans will reduce congestion associated with current interchanges between UP and BNSF and NS.

8.1.1.10. Texas Eagle

329. Amtrak's Texas Eagle service operates a daily train in each direction between Chicago and San Antonio. UP hosts these trains for 1,086 miles between Joliet and San Antonio, although the Union Pacific trackage is not contiguous.

330. Merger Impact: Applicants' plans would reduce one train per day between Joliet and Gorham, Illinois, and would add three trains per day between Bald Knob, Arkansas, and North Little Rock, Arkansas, add on average one to two trains per day between Marshall, Texas and Dallas, and add one train per day between Ajax, Texas and San Antonio. The route has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels.[103]

8.1.1.11. Winter Park (Ski Train)

331. Amtrak's Winter Park (Ski Train) service is a seasonal service that operates between three and five round trips per week between Denver and Fraser, Colorado. UP hosts these trains for almost their entire 62.2-mile route.

332. Merger impact. Applicants do not expect that the merger will add trains to the Ski Train route.

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[103] *See* Workpaper "UP Line-Of-Road Volume-Capacity Summary.xlsx," Tab "Summary," Segment 400-01.

8.1.2. Amtrak Operations on NS lines.

8.1.2.1. Blue Water

333. Amtrak's Blue Water service operates between Chicago and Port Huron, Michigan, a distance of 319 miles. The service is sponsored by the Michigan Department of Transportation ("MDOT") and runs daily in both directions. The service runs over NS lines, consisting of a combination of double and triple track mainline between Chicago (21st Street) and Porter, Indiana, covering a distance of 38.9 miles.

334. Merger Impact: Applicants' plan would increase the number of freight trains on the Blue Water route. Applicants expect the merger would add one to two trains per day between Chicago and Porter. The route has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels.[104]

8.1.2.2. Cardinal

335. The Cardinal is an Amtrak long distance route from Chicago to New York's Penn Station, via Washington, DC, a distance of 1,145 miles.[105] The service runs three times a week in each direction. On NS, the service runs on several separate segments. First, between Chicago (21st Street) and Chicago (CP 518), consisting of a combination of a double and triple track mainline, a distance of 2.6 miles. The Cardinal also operates on NS between Manassas, Virginia, and Orange, Virginia,

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[104] *See* Workpaper "NS Line-Of-Road Volume-Capacity Summary.xlsx," Tab "NS 251119-01," Segments 55 and 56.

[105] The Cardinal also operates on UP lines for a short distance, 6.7 miles, in Chicago.

consisting of a combination of single and double track mainline (depending on the segment), a distance of 52.1 miles. NS dispatches the Virginia Passenger Rail Authority ("VPRA") owned lines between Alexandria and Manassas, a distance of 23.5 miles, consisting of a double track mainline. NS partnered with the VPRA in 2022 to implement future infrastructure improvements, including the Nokesville to Calverton double track project, related to the Roanoke Passenger Service, which operates on the same corridor between Manassas and Orange.

336. Merger Impact: Applicants' plan would increase the number of freight trains on the Cardinal route. Applicants expect the merger would add two to three trains per day between Orange and Manassas. The route has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels. Cardinal trains will also benefit from the planned infrastructure improvements being undertaken to advance VPRA's passenger service objectives.[106]

8.1.2.3. Carolinian

337. The Carolinian is a daily roundtrip Amtrak operated and North Carolina Department of Transportation ("NCDOT") sponsored service between Charlotte and New York's Penn Station, a 497 mile distance. The NS portion of the route is 203.77 miles between Charlotte and Selma, North Carolina, consisting of a combination of a double track mainline and a single track mainline with passing sidings. NS partnered with the North Carolina Railroad ("NCRR") and NCDOT in

[106] *See* Workpaper "NS Line-Of-Road Volume-Capacity Summary.xlsx," Tab "NS 251119-01," Segment 147.

2024 to implement future infrastructure improvements between Greensboro and Raleigh, including the Clegg to Cary siding extension, Hillsborough Curve realignment, Cornwallis Drive grade separation and curve realignment, Elon siding, and Hillsborough siding projects, each related to the Carolinian and Piedmont passenger services.

338. Merger Impact: Applicants' plan would, on balance, increase the number of freight trains on a portion of the Carolinian route. Applicants expect the merger will add two to three trains per day between Charlotte and Greensboro, and will not add trains between Greensboro and Selma. The route has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels.[107]

8.1.2.4. Crescent

339. The long distance Amtrak Crescent train runs between New York's Penn Station and New Orleans on a daily basis, covering 1,367 miles. On NS, the Crescent runs for 1,116.2 miles between Manassas and East City Junction, Louisiana, consisting of a combination of single and double track mainline and a single track mainline with passing sidings. NS dispatches the entire route, although CPKC controls a key interlocking at Meridian, Mississippi and CSXT controls the interlocking at Howell in Atlanta. As noted in the discussion on the Cardinal Service, NS dispatches the VPRA owned line between Manassas and Alexandria, and

[107] *See* Workpaper "NS Line-Of-Road Volume-Capacity Summary.xlsx," Tab NS 251119-01, Segments 49, 142 and 191.

partnered with the VPRA in 2022 to implement future infrastructure improvements, including the Nokesville to Calverton double track project, related to the Roanoke Passenger Service, which operates on the same corridor between Manassas and Lynchburg, Virginia. In addition, NS is coordinating with Amtrak to implement future infrastructure improvements related to the Mardi Gras Service, which operates on the same corridor near New Orleans. Specifically, new crossovers on the Back Belt in the New Orleans terminal will allow Amtrak trains to enter and exit the terminal more efficiently and improve the overall fluidity of the Back Belt.[108]

340. Merger Impact: Applicants' plan would increase the number of freight trains on the Crescent route. Applicants expect the merger would add three to four trains per day on the Crescent's route between New Orleans and Meridian, as well as nine to ten trains per day between Meridian and Atlanta, and two to three trains per day between Atlanta and Manassas. To support the projected freight volumes, UP/NS will implement targeted infrastructure enhancements at key locations on the Crescent's route, primarily focused on the corridor between New Orleans and Atlanta, ensuring continued compliance with existing passenger service obligations. An anticipated infrastructure improvement investment planned near Meridian could also provide operational benefits for the Crescent route. Similarly, infrastructure improvements between Lumberton, Mississippi, and Taylor, Georgia, may also

[108] These investments, which NS will partially fund, are described in the FRA Consolidated Rail Infrastructure and Safety Improvements ("CRISI") grant application submitted by Amtrak. *See* Application for Federal Assistance, https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/foia/Submitted-Core-Application-Gulf-Coast.pdf.

provide operational benefits to the Crescent on that segment.[109] Additionally, all trains on the Crescent route will benefit from the above-mentioned Nokesville-Calverton double tracking project, as well as the Back Belt crossover projects, all of which will improve fluidity on this key passenger route. With the addition of the planned merger-related infrastructure improvements between New Orleans and Atlanta, the route has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels.

8.1.2.5. Floridian (Combination of Capitol Limited and Silver Star Services)

341. The Floridian is a temporary Amtrak long distance train that runs daily round trip from Chicago to Miami via Washington, DC while planned rehabilitation work of New York's East River Tunnels takes place. The Floridian is operating over the routes of two currently suspended Amtrak services: The Capitol Limited (Chicago to Washington, DC) and Silver Star (New York's Penn Station to Miami). The NS portion of the 2,065 mile Floridian route is in two segments: Chicago (21st Street) to Pittsburgh (489.9 miles), consisting of a combination of double and triple track mainline and Selma, North Carolina to Cary, North Carolina (37.6 miles), consisting of single track mainline with passing sidings.

342. Merger Impact: Applicants expect to add one to two trains per day on the Lake Shore Limited's route between Chicago and Toledo, Ohio, and two to three

[109] *See* Workpaper "NS Line-Of-Road Volume-Capacity Summary.xlsx," Tab "NS 251119-01," Segments 6, 14, 19, 23, 30–31, 36, 46, 49, 120–121, 141–142, 147, 162–164, 191, and 200.

trains per day between Toledo and Cleveland. The route has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels.[110]

8.1.2.6. Lake Shore Limited

343. The Lake Shore Limited is an Amtrak long distance train from Chicagoto Boston and New York, a 1,018 and 959 mile route, respectively, traveled round trip daily. The NS portion of the route is from Chicago (21st Street) to Cleveland, 339.6 miles, consisting of a combination of double and triple track mainline.

344. Merger Impact: Applicants' plan would increase the number of freight trains on the Lake Shore Limited Route. Applicants expect to add one to two trains per day on the Lake Shore Limited's route between Chicago and Toledo and two to three trains per day between Toledo and Cleveland. The route has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels.[111]

8.1.2.7. Mardi Gras

345. The Mardi Gras is a new—as of August 2025—state supported service funded by the Southern Rail Commission running two round-trip daily trains between Mobile, Alabama, and New Orleans. The NS portion of the 144-mile route is

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[110] *See* Workpaper "NS Line-Of-Road Volume-Capacity Summary.xlsx," Tab "NS 251119-01," Segments 8, 55–57, 80–82, 95, and 212.

[111] *See* Workpaper "NS Line-Of-Road Volume-Capacity Summary.xlsx," Tab "NS 251119-01," Segments 55–57, 95, and 212.

just 3.7 miles between East City Junction, Louisiana, and Elysian Fields, Louisiana, in New Orleans, consisting of double track mainline. NS is coordinating with Amtrak to implement future infrastructure improvements related to the Mardi Gras Service. As referenced in the discussion of the Crescent, anticipated improvements include three new crossovers that will improve the efficiency of Amtrak train movements.

346. Merger Impact: Applicants' plan would increase the number of freight trains on the Mardi Gras Route. Applicants expect the merger will add three to four trains per day on the Mardi Gras route between East City Junction and Elysian Fields, Louisiana, in New Orleans. The route has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels.[112]

8.1.2.8. Pennsylvanian

347. The Pennsylvanian is a state sponsored service funded by the Pennsylvania Department of Transportation ("PennDOT"). It runs a daily round trip for 444 miles between Pittsburgh and New York's Penn Station. The NS segment is 248.5 miles between Pittsburgh and Harrisburg, Pennsylvania, consisting of a combination of double and triple track mainline. NS partnered with the PennDOT in 2023 to implement future infrastructure improvements, including the Harrisburg third mainline, Enola 3rd mainline, Lemoyne connection, Camp Hill connection, Mifflin crossovers, Hawstone crossovers, Altoona 3rd main, control point 'C' reconfiguration, Johnstown crossovers, control point 'Home' connection, and the

[112] *See* Workpaper "NS Line-Of-Road Volume-Capacity Summary.xlsx," Tab "NS 251119-01," Segment 163.

Pittsburgh station additional main projects. Following completion of certain infrastructure projects, PennDOT will add an additional round trip for this service.

348. Merger Impact: Applicants' plan would increase the number of freight trains on the Pennsylvanian route. Applicants expect the merger will add four to five trains per day between Pittsburgh and Harrisburg. The route has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels (which can be increased once certain passenger-specific infrastructure projects are complete).[113]

8.1.2.9. Pere Marquette

349. Amtrak's Pere Marquette service operates between Chicago and Grand Rapids, Michigan, a distance of 174 miles. The service is sponsored by the Michigan Department of Transportation and runs daily in both directions. The service runs over NS lines, consisting of a combination of double and triple track mainline between Chicago, IL (21st Street) and Porter, Indiana, covering a distance of 38.9 miles.

350. Merger Impact: Applicants' plan would increase the number of freight trains on the Pere Marquette route. Applicants expect the merger would add one to two trains per day between Chicago and Porter. The route has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels.[114]

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[113] *See* Workpaper "NS Line-Of-Road Volume-Capacity Summary.xlsx," Tab "NS 251119-01," Segments 80 and 101.

[114] *See* Workpaper "NS Line-Of-Road Volume-Capacity Summary.xlsx," Tab "NS 251119-01," Segments 55–56.

8.1.2.10. Piedmont

351. The Piedmont is a state supported service sponsored by NCDOT and operated by Amtrak between Charlotte, NC, and Raleigh, NC for 173 miles. The four daily round trips operate entirely on NS's tracks, consisting of a combination of a double track mainline and a single track mainline with passing sidings. As noted in the discussion on the Carolinian, NS partnered with NCRR and NCDOT in 2024 to implement future infrastructure improvements, including the Clegg to Cary siding extension, Hillsborough Curve realignment, Cornwallis Drive grade separation and curve realignment, Elon siding, and Hillsborough siding projects, related to the Carolinian and Piedmont passenger services.

352. Merger Impact: Applicants' plan would, on balance, increase the number of trains on the Piedmont route. Applicants expect the merger will add two to three trains per day between Charlotte and Greensboro, North Carolina, and will not add trains between Greensboro and Raleigh. The route has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels.[115]

8.1.2.11. Richmond/Newport News/Norfolk

353. The Richmond/Newport News/Norfolk service is supported by the Commonwealth of Virginia through VPRA and operated by Amtrak. It operates a minimum of three daily round trips between Boston and Norfolk. NS hosts 81.2 of the

[115] *See* Workpaper "NS Line-Of-Road Volume-Capacity Summary.xlsx," Tab "NS 251119-01," Segments 49, 142 and 191.

689 total miles between Norfolk and the North Collier Yard near Petersburg, Virginia, consisting of a double track mainline.

354. Merger Impact: Applicants' plan would increase the number of trains on the Norfolk route. The Applicants expect the merger will add one train per day between Petersburg and Norfolk. The route has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels.[116]

8.1.2.12. Roanoke Service

355. The Roanoke service, another Virginia-supported service that is operated by Amtrak, runs twice daily between Roanoke, Virginia, and Boston, a distance of 735 miles. The NS portion of the route is 237.6 miles between Roanoke, and Manassas, consisting of a combination of single and double track mainline. As noted elsewhere, NS dispatches the VPRA-owned line between Manassas and Alexandria. NS also partnered with the VPRA in 2022 to implement future infrastructure improvements, including the Nokesville to Calverton double track project, related to the Roanoke Passenger Service. Further, NS and VPRA have agreed to a series of improvements that will allow VPRA to expand the service to Christiansburg, Virginia in the New River Valley in 2027.

356. Merger Impact: Applicants' plan would increase the number of freight trains on the Roanoke service's route. Applicants expect the merger will add one train per day between Roanoke and Lynchburg, Virginia, and two to three trains per day

[116] *See* Workpaper "NS Line-Of-Road Volume-Capacity Summary.xlsx," Tab "NS 251119-01," Segments 130, 176 and 207.

between Lynchburg and Manassas. The route has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels, which can increase with the future, passenger-specific infrastructure projects.[117]

8.1.2.13. Wolverine

357. Amtrak's Wolverine service operates between Chicago and Pontiac, Michigan, a distance of 299 miles. The service is sponsored by Michigan Department of Transportation and runs three daily round trips. The service runs over NS lines, consisting of a combination of double and triple track mainline between Chicago (21st Street) to Porter, Indiana, covering a distance of 38.9 miles.

358. Merger Impact: Applicants' plan would increase the number of freight trains on the Wolverine route. Applicants expect the merger would add one to two trains per day between Chicago and Porter. The route has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels.[118]

8.1.3. Other Existing Passenger Operations on UP Lines

8.1.3.1. ACE

359. Altamont Corridor Express ("ACE") commuter service operates eight daily trains in each direction on weekdays over its 87-mile route between El Pinal

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[117] *See* Workpaper "NS Line-Of-Road Volume-Capacity Summary.xlsx," Tab "NS 251119-01," Segments 6, 144, 174, 187, and 189.

[118] *See* Workpaper "NS Line-Of-Road Volume-Capacity Summary.xlsx," Tab "NS 251119-01," Segments 55–56.

ACE, in Stockton, California, and CP Coast in Santa Clara. These trains operate on UP from origin to destination.

360. Merger Impact: Applicants' plan to institute a new intermodal service between Northern California and the Northeast would add one daily train pair to the Altamont Corridor express route for the short distance between Lathrop Intermodal Ramp and Stockton. The corridor's existing configuration supports the projected freight increase while maintaining the current passenger service levels.[119]

8.1.3.2. CalTrain

361. CalTrain commuter service in California is hosted by UP between CP Lick and Gilroy. CalTrain runs 22 trains on weekdays over the UP segment.

362. Merger Impact: Applicants do not expect the merger will increase the number of trains operating over the lines used by CalTrain.

8.1.3.3. Metra

363. Metra commuter service operates over three UP-owned lines in and around Chicago. Metra currently operates 35 daily weekday trains and 15 daily weekend trains in each direction on the UP-North line over approximately 50 miles of UP line between Chicago to Kenosha, Wisconsin; 39 daily weekday trains, 17 Saturday trains, and 11 Sunday trains in each direction on the UP-Northwest line over approximately 63 miles of UP line between Chicago and Harvard, Illinois; and 39 daily trains, ten Saturday trains, and nine Sunday trains in each direction on the

[119] *See* Workpaper "UP Line-Of-Road Volume-Capacity Summary.xlsx," Tab "Summary," Segment 900-01.

UP-West line over approximately 44 miles of UP line between Chicago and Elburn, Illinois.

364. Merger Impact: Applicants expect the merger will add 12 trains per day to UP's line between Proviso and Kedzie on the UP-West line and 4 trains per day between Proviso and Elburn. UP's route has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels.[120]

8.1.3.4. Metrolink

365. Metrolink's commuter service in California provides service to multiple different origin-destination combinations. Metrolink is operated by the Southern California Regional Rail Authority ("SCRRA")—a joint powers authority representing various county transportation commissions—serving several counties in California and runs three round trips each weekday and two round trips per weekend on UP's line between Moorpark, California, and North Montalvo, California, a distance of 23.51 miles. Metrolink also has rights to run special trains an additional 5.6 miles from North Montalvo to the Ventura Fairgrounds. Metrolink also operates five round trips each weekday on UP's line between West Riverside, California, and Soto Street Junction, California, a distance of 54.77 miles.

366. Merger impact: Applicants expect the merger will add on average two trains per day only between City of Industry, California, and Soto St. Jct, California.

[120] *See* Workpaper "UP Line-Of-Road Volume-Capacity Summary.xlsx," Tab "Summary," Segment 001-03.

UP's route has sufficient capacity to support the projected freight increase while maintaining the current passenger service levels.[121]

8.1.3.5. Trinity Railway Express

367. Trinity Railway Express ("TRE") operates commuter rail service between Dallas and Fort Worth. TRE operates approximately 384 trains each week (Monday through Saturday)—not including special event trains—on an hourly or half-hourly schedule. The Dallas Area Rapid Transit Authority and Trinity Metro are the owners of the rail corridor, over which UP also operates via a trackage rights agreement. TRE also operates through CP T-217 (JFK Junction) on UP's Dallas Subdivision to reach EBJ Union Station.

368. Merger Impact: Applicants do not expect the merger will increase the number of trains operating over the lines used by TRE.

8.1.3.6. Rocky Mountaineer

369. The Rocky Mountaineer is a privately-owned seasonal train owned and operated by American Rocky Mountaineer that runs on UP lines. It operates approximately April through November from Denver, to Moab, Utah, as a leisure train for tourists. During its active season, the service makes 1-2 round trips per week (with each round trip taking place over three days). The entire route trip is 840 miles (Days 1 and 3 are 225 miles, Day 2 is 390 miles).

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[121] *See* Workpaper "UP Line-Of-Road Volume-Capacity Summary.xlsx," Tab "Summary," Segment 965-07.

370. Merger Impact: Applicants do not expect the merger will increase the number of trains operating over the lines used by the Rocky Mountaineer.

8.1.4. Other Existing Passenger Operations on NS lines

371. NS is host to two commuter rail operations subject to contractual agreements, discussed further below.

8.1.4.1. Metra

372. In the Chicago area, NS hosts Metra for a small segment of its SouthWest (SWS) service, consisting of a combination of double and triple track mainline, with 15 daily trips in both directions between Chicago (21st Street) and Chicago (CP 518). Metra's SWS service also runs on tracks leased from NS between Landers and Manhattan, Illinois (32.9 miles). NS maintains dispatching authority for the line. Fifteen trains run in each direction on weekdays and there is no weekend service.

373. Merger Impact: Applicants' plan does not anticipate addition of trains to the Metra route.[122]

8.1.4.2. Virginia Railway Express (VRE)

374. Virginia Railway Express' ("VRE") Manassas service operates between Washington, DC, and Broad Run, Virginia, a distance of 35 miles. The service runs eight round trips, Monday through Friday. The service runs over NS lines, consisting

[122] NS also has freight easement rights to operate on the Metra SouthWest Service line between 75th Street and 47th Street in Chicago, a distance of 3.7 miles. The easement includes operating restrictions to avoid conflicts with peak commuter service. An intermodal train pair (ZEGYC and ZYCEG) will be extended to reach NS's 47th Street intermodal terminal and will operate over the easement to do so.

of a double track mainline between Broad Run and Manassas, covering a distance of 3.48 miles. NS has worked cooperatively with VPRA to support additional VRE weekend services in future years as part of selling to VPRA a portion of the NS Manassas Line between Alexandria and Manassas, which NS continues to dispatch.

375. Merger Impact: Applicants' plans do not anticipate addition of trains to the VRE route.

9. Equipment Requirements and Utilization

9.1. Locomotives

9.1.1. Current Locomotive Fleets and Post-Merger Utilization

376. As shown below in Table 11, UP currently—as of October 9, 2025—owns or leases 6,985 locomotives, including 5,537 for road freight service and 1,448 for yard and local switching service. UP has significant excess locomotive capacity, with 1,524 of its locomotives in storage as of October 9, 2025.

377. Also as shown in Table 11, NS owns 3,255 locomotives, including 2,108 for road freight service and 1,147 for yard and local switching service. NS also has significant excess locomotive capacity with 867 of its locomotives in storage as of October 9, 2025.

Table 11[123]
UP and NS Locomotive Inventory

UP	Owned	Leased	Total
Freight	4,342	1,195	5,537
Switching	1,448	-	1,448
Total	5,790	1,195	6,985

NS	Owned	Leased	Total
Freight	2,108	-	2,108
Switching	1,147	-	1,147
Total	3,255	-	3,255

Combined UP & NS	Owned	Leased	Total
Freight	6,450	1,195	7,645
Switching	2,595	-	2,595
Total	9,045	1,195	10,240

378. The UP and NS fleets are largely compatible across model types and horsepower ratings, which will allow the combined railroad to seamlessly integrate its locomotive stock.

379. The combination of the UP and NS networks will enable improved locomotive utilization, creating excess locomotive capacity from the legacy fleets. The operating plan for the combined network optimizes train routing and reduces interchanges and yard touches. In addition, Applicants anticipate reduced locomotive dwell across the legacy UP and NS yards as homogenous treatment of the combined fleet eliminates inefficient return trip scheduling. From a switching perspective, bringing the legacy NS yard and local network to the higher UP efficiency levels

[123] *See* Workpaper "UP and NS Locomotive Rosters 10-9-25.xlsx," Tab "Locomotive Summary."

would reduce the switching locomotive demand in the Optimized Plan. Applicants identified the switching efficiency based on the ratio of daily people starts to car volume for production and industry jobs respectively. The change in daily people starts was translated to locomotives by adjusting for the historical NS people per job, planned locomotives per job, and planned power shares between one, two, or three jobs. Applicants expect that these synergies will reduce the locomotive needs of the combined railroad in the Optimized Plan by 58 freight locomotives and 159 switching locomotives.[124]

380. The combined railroad's ability to optimize locomotive assignments across a combined fleet will also create a sufficient buffer such that it will have an opportunity to remanufacture older locomotives to meet future demands. UP/NS will store the majority of excess locomotives, which will provide a low-cost solution to support future growth as well as defer future asset replacements. UP/NS may sell some older locomotive models based on market conditions.

9.1.2. Post-Merger Locomotive Needs

381. Applicants expect the existing locomotive stock of the two railroads will be sufficient to effectively handle the anticipated volume of traffic for the combined UP/NS network. They also expect that the merger of the two railroads and their fleets will improve efficiencies in equipment use.

[124] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "Loco Fleet Impact," Cells F12 and F18.

382. The combined UP/NS network will drive additional service growth as explained in the Growth Plan, increasing locomotive needs in the years following the merger. Applicants calculated Growth Plan locomotive needs based on the increased gross ton mile demand for freight and increased daily yard volume for switching locomotives, relative to the Optimized active fleet size. Under the Growth Plan, the combined railroad is expected to need 1,096 more locomotives in active service by Year 3.[125]

383. Specifically, Applicants expect that the merged railroad will need 890 more active freight locomotives and 206 more active switching locomotives in Year 3.[126] As shown in Table 12 below, Applicants expect that their combined current locomotive inventory is sufficient to address those needs.

Table 12[127]
UP/NS Locomotive Needs

Service Type	Current Active	Optimized Active	Growth Active	Total Fleet
Road Freight	5,121	5,063	5,953	7,645
Switching	1,858	1,699	1,905	2,595
Total Fleet	6,979	6,762	7,858	10,240

384. To satisfy projected demand, Applicants anticipate that the combined railroad will utilize the excess locomotive capacity created by the locomotive optimization discussed above, including repair of stored serviceable and stored

[125] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "ThruFreight Fleet Plan," Cell E35.

[126] *See id.*, Cell E8; *id.*, Tab "Switching Fleet Plan," Cell E7.

[127] *See id.*, Tab "ThruFreight Fleet Plan," Cells C16:E16 and C20; *id.*, Tab "Switching Fleet Plan," Cells C32:E32 and C35.

unserviceable units.[128] Even factoring in the expected merger-related and other growth reflected in the Growth Plan, Applicants expect that no locomotive acquisitions will be necessary for UP/NS to handle the volumes projected by the end of Year 3.

385. Applicants do not plan that the combined railroad will retire any locomotives.

9.1.3. Locomotive Maintenance

386. UP's Mechanical Department performs locomotive maintenance at shops and yards throughout its network. Thousands of UP employees focus on locomotive inspection, maintenance, and repair. The following Table 13 lists UP inspection, maintenance, and repair locations with more than 20 employees. For each location, the table lists total employees and specifies how many employees are locomotive craftsmen and rail car craftsmen performing the inspection, maintenance, and repair work, and the non-agreement employees who oversee that work.

[128] For an accounting of expected locomotive repair costs, *see* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Implementation Expense," Cells D4:G4.

Table 13[129]
UP Mechanical Locations With More Than 20 Employees

Location	Employees			
	Locomotive	Rail Car	Non-Agreement	Total
Albina (Portland, OR)	14	26	5	45
Council Bluffs, IA	19	22	5	46
Commerce, CA	42	43	5	90
De Soto, MO	-	179	15	194
Denver, CO	21	1	1	23
Dolores (Carson, CA)	41	-	5	46
Dupo, IL	6	17	2	25
Englewood (Houston, TX)	53	-	8	61
Fort Worth, TX	176	45	23	244
Hinkle (Stanfield, OR)	57	15	6	78
Houston, TX	1	77	7	85
Kansas City, MO	32	14	4	50
Laredo, TX	25	-	1	26
Livonia, LA	50	42	7	99
North Little Rock, AR	375	62	41	478
North Platte, NE	404	162	52	618
Ogden, UT	3	18	3	24
Pine Bluff, AR	39	13	2	54
Pocatello, Idaho	11	42	4	57
Proviso (Melrose Park, IL)	120	39	13	172
Roseville, CA	147	37	16	200
Salt Lake, UT	13	8	2	23
San Antonio, TX	50	28	6	84
Santa Teresa, NM	-	28	2	30
Settegast (Houston, TX)	112	-	9	121
Stockton, CA	8	12	2	22
Tucson, AZ	11	24	2	37
West Colton, CA	195	44	24	263
Total	**2,025**	**998**	**272**	**3,295**

[129] *See* Workpaper "Mechanical Locations Over 20 Employees.xlsx," Tab "UP Locations."

387. NS's Mechanical Department performs locomotive maintenance and equipment repair at shops and yards across its network. NS has over 1,300 craft employees focused on locomotive inspection, maintenance, and repair. Table 14 below summarizes NS's mechanical shops with more than 20 employees. For each location, the table lists total employees and specifies how many employees are locomotive craftsmen and rail car craftsmen performing the inspection, maintenance, and repair work, and the non-agreement employees who oversee that work.

Table 14[130]
NS Mechanical Locations With More Than 20 Employees

Location	Employees			
	Locomotive	Rail Car	Non-Agreement	Total
Bellevue, OH	55	59	15	129
Birmingham, AL	64	65	15	144
Bluefield, WV	7	11	3	21
Chattanooga, TN	129	51	20	200
Chicago, IL (Calumet)	37	32	11	80
Cincinnati, OH	4	14	4	22
Cleveland, OH	4	15	2	21
Conway, PA	101	48	17	166
Decatur, IL	43	38	12	93
Detroit, MI	7	26	2	35
Elkhart, IN	66	65	16	147
Enola, PA	89	23	14	126
Ft. Wayne, IN	9	21	3	33
Inman (Atlanta, GA)	53	26	11	90
Juniata (Altoona, PA)	435	9	23	467
Kansas City, MO	14	8	2	24
Lamberts Point (Norfolk, VA)	14	38	7	59
Linwood, NC	5	17	1	23
Louisville, KY	10	21	2	33
Macon, GA	23	47	7	77
Portsmouth, OH	2	33	3	38
Shaffers (Roanoke, VA)	92	18	14	124
Sheffield, AL (Muscle Shoals, AL)	14	21	3	38
St. Louis, MO	4	16	2	22
Total	**1,281**	**722**	**209**	**2,212**

[130] *See* Workpaper "Mechanical Locations Over 20 Employees.xlsx," Tab "NS Locations."

388. In addition to the mechanical work undertaken at NS's locomotive shops, NS has mechanical personnel at over 15 other locations available for servicing or running repairs to minimize locomotive down time.

389. Following the merger, UP/NS will evaluate the mechanical needs of the combined network, during which time the combined railroad will continue maintenance operations at most existing locations. The combined railroad's evaluation of mechanical needs will be based on operational flow, and could result in additional consolidation or rationalization of existing mechanical facilities to best support the combined railroad's traffic service.

390. The increased traffic flow on the combined network may result in the need for additional locomotive maintenance. If this occurs, existing facilities on the UP and NS networks are expected to have sufficient capacity to address these needs.

391. UP and NS also intend to reduce potential redundancies at existing interchange locations where UP and NS currently operate independent facilities, including in areas around Chicago, Kansas City, New Orleans, and St. Louis. By consolidating maintenance operations and eliminating redundancies, UP and NS anticipate they will improve fluidity and run-through at current interchange locations. This is expected to result in fewer locomotive stops for repair and inspection at interchange gateways.

392. UP and NS also anticipate that the redesign of the network will allow for other mechanical synergies. These and other anticipated mechanical synergies are discussed in greater detail in Section 10.3.2, below.

9.2. Rolling Stock

9.2.1. Current Rolling Stock Inventory

393. As provided in Table 15 below, as of September 3, 2025, UP had 144,830 total railcars of varying types and NS had 95,897 total railcars of varying types. This includes owned, leased, and allocated TTX railcars. Like other railroads, UP and NS also move significant private railcar traffic across their networks.

Table 15[131]
UP and NS Railcar Inventory

Car Type	UP	NS	Total Fleet
Automotive Racks	14,660	10,380	25,040
Boxcars	17,267	9,036	26,303
Refrigerated Boxcars	2,902	-	2,902
Covered Hoppers	23,498	5,312	28,810
Flatcars	9,565	3,359	12,924
Gondolas	11,251	12,427	23,678
Intermodal Double Stacks	57,383	36,397	93,780
Intermodal Conventional	3,489	3,289	6,778
Open Top Hoppers	4,815	15,697	20,512
Total	**144,830**	**95,897**	**240,727**

9.2.2. Post-Merger Rolling Stock Needs

394. The Optimized operating plan improves railcar utilization through more single-line service, decreased handlings and yard work, reduced dwell time, and optimized movements including increased train speeds.

395. The merger will improve the efficiency of freight car distribution and create new opportunities to triangulate railcar usage. For example, the merger should

[131] *See* Workpaper "Railcar Fleet Exhibits.xlsx," Tab "Railcar Fleet Plan," Columns E, H, and K.

result in reduced empty car miles as fewer cars will be reverse-routed to the origin carrier. The benefit of reduced empty car miles was calculated for gondola, covered hopper, flatcar, and open top hopper fleets. Applicants did not calculate incremental empty mileage savings for railcars that currently operate in national pools, such as intermodal wells, autoracks, and boxcars. Applicants also anticipate that the combined railroad will have improved ability to provide shippers with the empty railcars they require for loading.

396. These efficiencies will result in improved cycle times, allowing the combined system to handle the same volume of freight traffic (and provide improved service levels) with fewer railcars. The combined UP/NS system is estimated to need 198,722 railcars, a reduction of 468 from current stock levels.[132] Table 16 below shows the expected needs by car type and current stock.

Table 16[133]
Optimized Plan Rolling Stock

Car Type	Current Active	Optimized Active	Difference	Total Fleet
Automotive Racks	22,505	22,505	-	25,040
Boxcars	19,941	19,941	-	26,303
Refrigerated Boxcars	1,737	1,737	-	2,902
Covered Hoppers	20,394	20,294	(100)	28,810
Flatcars	9,186	9,146	(40)	12,924
Gondolas	17,289	17,069	(220)	23,678
Intermodal Double Stacks	89,375	89,278	(98)	93,780
Intermodal Conventional	4,230	4,230	-	6,778
Open Top Hoppers	14,533	14,523	(10)	20,512
Total Fleet	**199,190**	**198,722**	**(468)**	**240,727**

[132] *See* Workpaper "Railcar Fleet Exhibits.xlsx," Tab "Railcar Fleet Plan," Cells V13:W13.

[133] *See id.*, Columns I, K, and V:W.

397. The combined railroad will reduce the size of the UP/NS fleet following the merger. Applicants anticipate that UP/NS will retire the older, less efficient cars, which should improve the average quality of the fleet's cars across the network.

398. The anticipated traffic growth resulting from the merger will require an increased active fleet in certain types of railcars by Year 3. For example, intermodal traffic growth will increase the demand for intermodal stack cars across the combined network. As another example, finished vehicle traffic growth will increase the demand for autoracks.

399. Table 17 below shows the forecasted active fleet size by car type, along with the remaining stored counts, in the Growth Plan.

Table 17[134]
Growth Plan Rolling Stock

Car Type	Current Active	Growth Active	Difference	Total Fleet
Automotive Racks	22,505	23,855	1,350	25,040
Boxcars	19,941	20,102	161	26,303
Refrigerated Boxcars	1,737	2,727	990	2,902
Covered Hoppers	20,394	21,512	1,118	28,810
Flatcars	9,186	9,748	562	12,924
Gondolas	17,289	17,091	(198)	23,678
Intermodal Double Stacks	89,375	90,538	1,163	93,780
Intermodal Conventional	4,230	4,230	-	6,778
Open Top Hoppers	14,533	15,182	649	20,512
Total Fleet	**199,190**	**204,985**	**5,795**	**240,727**

[134] *See* Workpaper "Railcar Fleet Exhibits.xlsx," Tab "Railcar Fleet Plan," Columns I, K, and Z.

400. Based on the UP/NS growth plan and current rolling stock fleet of the two railroads, Applicants do not anticipate future acquisitions of rolling stock. Instead, the increased demand will be served by bringing inactive cars in the fleet into service. For example, the combined railroad will fill increased demand for refrigerated boxcars by investing $35 million in refrigerated unit replacements to return stored refrigerated boxcars back into the active fleet.[135]

9.2.3. Railcar Maintenance

401. UP's Mechanical Department has over 1,000 employees focused on railcar inspection and repair. UP conducts railcar maintenance at shops throughout its network, including its backshop in De Soto, Missouri, as shown above in Table 13. De Soto focuses on autorack rebuilds and heavy damage repair. In addition to the internal network of 23 car facilities, UP participates in eleven TTX-operated repair locations. UP also has mechanical personnel available at locations throughout its network for spot repairs to avoid time off the line.

402. NS's mechanical department has over 900 employees devoted to freight car inspection and repair. NS operates two system program shops in Norfolk, Virginia, and Portsmouth, Ohio. Norfolk handles cross brace repairs on coal cars while Portsmouth handles all other work. NS also has 10 car shops at major terminals. NS further participates in 15 TTX-operated intermodal repair shops and

[135] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Capital Investment," Cell H10.

has mechanical personnel available around the network for spot repairs to avoid time off the line.

403. Following the merger, the combined railroad will insource autorack rebuilds at its De Soto, Missouri, facility. This will require the addition of 19 craft employees by the end of Year 3.[136] Additionally, Applicants anticipate that UP/NS will rationalize the legacy NS car backshop at Portsmouth, Ohio, by leveraging capacity at other facilities across the combined network. By leveraging existing capacity, the combined railroad should be able to eliminate overhead and realize cost efficiencies. *See* Section 10.3.2.4 below for additional detail.[137]

404. UP and NS expect that integration of the two railroads will create additional synergies and unlock efficiencies related to certain equipment and policies. These and other anticipated mechanical synergies are discussed in greater detail in Section 10.3.2, below.

9.3. Maintenance of Way (MOW) Equipment and Practices

9.3.1. Current Inventory of MOW Equipment

405. Both NS and UP use a variety of owned and leased MOW equipment, each piece critical to ensuring safe and efficient rail operations. Applicants' MOW equipment inventories include:

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[136] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Autoracks Capital," Cell H37.

[137] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "Car Backshop," Cell E21.

406. *Track Geometry Vehicles*. Applicants use track geometry vehicles to collect detailed information about track infrastructure and analyze track conditions to maintain overall infrastructure reliability. NS uses locomotive-based automated systems, track geometry trucks and railcars, along with an in-house, proprietary process for collecting, reporting, and maintaining track data. Over the last five years, UP increased its fleet of manual and autonomous geometry testing equipment. The increase resulted in a nearly 10x increase in miles tested. In that time, UP has recorded an 85 percent drop in geometry-related defects—evidence the railroad's data-driven approach promotes lasting, quality repairs. UP continues to expand its geometry testing fleet each year, and is now operating 15 autonomous systems across its network.

407. *Rail Flaw Detection*. Applicants use the latest technology to identify internal rail flaws. This technology—referred to as non-stop rail flaw detection—allows UP and NS to operate at a higher speed while leveraging AI and analytics to detect defects. Today, UP's fleet of 13 trucks minimizes Engineering's on-track footprint while increasing safety and reducing overall variability. UP employees operate these trucks, while NS uses contractor-operated units.

408. *Automated Tie Unloaders*. UP uses these machines to autonomously distribute crossties throughout its network, reducing unloading time by 75 percent per tie car while nearly eliminating internal and external safety risks. NS does not currently have this technology.

409. *Automated Rail Unloader*. UP uses this machine to autonomously unload rail within existing traffic windows. The automated rail unloader, which debuted in May 2025, unloads rail 50 percent faster than traditional technologies. It offers 24/7 unloading capabilities and drastically reduces internal and external safety risks. The construction of three additional automated rail unloading units is underway. Two of the additional units are expected to be in operation in 2026, and the third additional unit in 2027.

410. *GPS Automated Ballast Unloading Train*. UP uses six Global Positioning System ("GPS") belly dump ballast-unloading trains, each equipped with 75 to 100 cars, to unload ballast at precisely identified locations via GPS, while moving at speeds of up to 15 miles per hour. This technology has the ability to operate 24/7 and entirely eliminates the need for Track Laborers to physically supervise the process, drastically reducing personal injury risk. NS utilizes three GPS belly dump trains.

411. *Tampers*. Applicants use surfacing equipment, including tampers, which are machines featuring hydraulic jacks to "tamp" the ballast. This levels the stone around and underneath the ties for proper support.

412. *Regulators*. Applicants use regulators, another type of surfacing equipment, to ensure ballast is evenly arranged across the right of way. These machines clear the stone from the ties and angle the ballast to restore proper drainage.

413. *Spike Driver*. Applicants use spike drivers, which are machines that utilize hydraulics to quickly drive spikes down, holding the tie plate and rail to the tie.

414. *Spike Puller*. Applicants use spike pullers, which are machines that utilize hydraulics to pull spikes from each side of the rail simultaneously.

415. *Rail Grinders*. Applicants use large production high speed rail grinders, which are machines that grind the rail surface to reduce friction and wear, prolonging track life and protecting rolling stock.

416. *Anchor Spreader and Squeezer*. Applicants use an anchor spreader and squeezer, which is a machine that seamlessly spreads anchors once a tie has been removed, allowing for installation of a new tie. Following tie installation, the squeezer effectively reinstalls the anchors to prevent longitudinal movement of the rail.

417. *Undercutter*. Applicants use undercutting equipment, which removes mud and fouled ballast from the right-of-way, renewing roadbed conditions.

418. *Automatic Conveyor Train*. UP leases automatic belt-fed conveyor trains, which allow UP to expeditiously unload bulk aggregate material, reducing track time and overall resource requirements. The four consists, each with 30 cars, are essential for quickly restoring infrastructure during weather-related outages (*i.e.*, washouts). NS also uses this technology.

419. *Water Car Fleet*. UP uses a fleet of 50 strategically staged water tank cars across its network ready to be deployed day or night. Each car is capable of holding between 7,000 and 23,000 gallons of water and is equipped with nozzles that

can spray up to 75 feet. UP deploys this fleet to protect railroad infrastructure and communities from the devastating effects of wildfires across primarily the western United States. During Northern California's Lava and Dixie Fires in 2021, for example, UP was able to douse spot fires and protect the infrastructure with water cannons. UP also assisted federal, state and local first responders on the ground by hauling water into remote sections of the National Forest to fill water tank trucks, saving firefighters valuable time.

9.3.2. Acquisition and Retirement of MOW Equipment

420. Both UP and NS base their acquisitions and retirements on the useful life of the MOW equipment and capital program requirements. NS categorizes over 3,800 pieces of MOW equipment across 145 categories, while UP's inventory exceeds 5,000.[138] Both railroads track manufacturer year and build date to ensure the fleet's optimal performance.

421. Applicants anticipate that the combined railroad's MOW inventory will be sufficient to satisfy the maintenance and renewal needs of the combined network in the immediate future.

422. UP/NS will operate a combined legacy fleet in the short-term, ensuring qualified operators and maintenance practices remain intact. Looking ahead, Applicants anticipate that the combined railroad will right-size the combined MOW equipment inventory through a combination of purchased, leased and rented equipment sized according to operational demand.

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[138] *See* Workpaper "UP_NS MOW Equipment Inventory.xslx."

9.3.3. Equipment Inventory Management

423. UP and NS meticulously track work equipment, minimizing downtime and maximizing production. UP's tracks equipment via GPS and measures productivity via gang production reporting. UP tracks downtime and spend through work orders submitted through SAP, which account for every maintenance event exceeding five minutes.

424. NS uses a centralized system for inventory management, in which decisions are made by the Director of Engineering Equipment, who reports up to the Chief Engineer Program Maintenance, who oversees the age, condition, and needs for the MOW fleet. NS tracks downtime and spend for each piece of NS MOW equipment through work orders submitted through SAP. The Engineering Department has a budget, and the Vice President-Engineering grants final approval.

425. Both UP and NS maintain centralized work equipment shops that leverage data to plan equipment maintenance, repair, and replacement: UP's shop in Adams City, Colorado, and NS's shop in Charlotte, North Carolina. While both railroads' MOW equipment is similar, some key components—such as operating systems—differ. Eventually, the combined railroad will transition to comparable equipment, with established training programs to support personnel systemwide.

426. Following the merger, the combined railroad will right-size MOW equipment counts according to operational need and equipment condition while optimizing each shop's capacity, geographic location, access to suppliers, technology, and manpower. Applicants continue to evaluate opportunities to consolidate operations among the existing shops at Adams City and Charlotte.

9.3.4. Track Evaluation

427. Both UP and NS collect track geometry and overall infrastructure assessment data via physical observation and autonomous technology to analyze potential track defects, prioritize repairs, plan maintenance activities, and build long-term capital investment strategies. As discussed above, both railroads harness technologically-advanced equipment that allows them to monitor track geometry, while adhering to Federal Railroad Administration rules regarding visual track inspection.

428. NS's autonomous fleet includes a combination of geometry trucks, ATGMS (Automated Track Geometry Measurement System)-equipped locomotives, and survey trucks, some of which are supported via contracted field services.

429. UP maintains its own geometry testing fleet, including ATGMS-equipped locomotives and boxcars, in addition to manned inspection cars.

430. UP/NS will adopt NS's industry leading in-house testing capabilities across the combined UP/NS network. This will enable more frequent and consistent infrastructure assessments, supporting improved safety, reliability, and strategic investment planning.

9.4. Deferred Maintenance or Delayed Capital Improvements

431. The full integration of the legacy UP and NS networks will not result in any routes being downgraded or made redundant. Applicants anticipate that the combined railroad will keep MOW activity consistent across the system, with no deferral of maintenance tasks or postponement of capital improvement projects due to the consolidation.

432. Bringing together the operational strengths of UP and NS presents a unique opportunity to unify and enhance maintenance practices. For example, Applicants anticipate they will be able to improve the execution of infrastructure work by leveraging the combined railroad's extensive fleet of company-owned MOW equipment, enabling Applicants to deploy maintenance equipment and complete maintenance tasks more quickly and more efficiently.

10. Consolidation of Other Facilities/Functions

10.1. Transportation

10.1.1. Transportation Operations

433. UP and NS each operate complex transportation systems. Every day UP and NS make countless decisions designed to maximize output from people and equipment while maintaining safe and effective performance. Following the merger, the combined UP/NS will leverage the diverse strengths of both systems to optimize transportation operations even further.

10.1.2. Post-Merger Coordination and Synergies

10.1.2.1. Thru Freight/Road Expense Reduction

434. Applicants plan that UP/NS will increase train lengths of legacy NS trains, which will reduce crew costs by reducing the number of first starts. A first start refers to the first train crew to begin work for a specific train's journey, as defined by its origin and destination.

435. Applicants project that the use of UP processes, technology, and asset utilization philosophy will result in the same percentage improvement in train length on the legacy NS network as when these processes, technology, and philosophy were

applied on the UP network. Applicants translated the resulting reduction in first starts into crew savings based on the ratio of aggregate train Car Miles to Thru Freight First Starts.[139] Using 2024 data, Applicants determined that closing the train length gap on the NS network would reduce annual first starts by approximately 7.6 percent, beyond the crew start savings associated with the Optimized Plan.[140]

436. Applicants plan that following integration the combined railroad will implement the UP deadhead/heldaway optimization program across the legacy NS network. Deadhead/heldaway expenses occur when crews must be compensated for time spent away from their home base, and when they are transported on trains they do not crew. UP currently manages these situations more efficiently, and the combined railroad will apply best practices to the legacy NS network.[141]

437. Applicants project total annual synergies from these steps of $41.6 million.[142]

10.1.2.2. Yard and Local Efficiency Gains

438. Applicants plan that the combined railroad will apply UP's Yard and Local Mapping processes to NS's legacy operations, which will optimize work assignments and scheduling. As a result of projected improved efficiencies, the

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[139] Applicants assessed several other metrics, but the one they have chosen showed the smallest change relative to the status quo. *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Train Length," Cells J40, J46, and J48.

[140] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Train Length Synergy," Cell M33.

[141] *See id.*, Cells G35:I35 and G38:I38.

[142] *See id.*, Cell K50.

combined railroad will have a reduced number of yard and local people starts within the legacy NS network, and bring productivity of these starts in line with UP's productivity levels. To quantify this expected improvement, UP compared its productivity to that of NS. Specifically, for each company UP compared workloads (*i.e.*, cars handled) to TE&Y people starts for production and local jobs. A "production" job was defined as a yard or terminal assignment that did not perform any transfer or local work. A "local" job was an assignment performing industry work and issuing a work order over 50 percent of the time. Workload for a production job was defined as cars switched, excluding block swaps. Workload for local jobs was defined as cars spotted or pulled from a customer facility.[143] Production workloads were based on the Base Plan MultiRail modeling. Local workloads were based on car counts from each respective roads local service measurement system.

439. Once these variables were defined, Applicants estimated savings of $35.4 million annually by multiplying the anticipated reduction in NS people starts by the NS cost per people start, reduced by a factor of 50 percent to create an appropriate estimate.[144] Savings to these metrics from institution of Remote Control Operations and SwitchPro eNtry eXit technology were excluded, and are discussed in the next section.

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[143] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tabs "Yard and Local," "Yard and Local Volumes," "Oliver Wyman T1 Detail," "UP and NS Job Support," and "UP Job Support."

[144] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Yard and Local," Cells B48 and B42.

10.1.2.3. Remote Control Locomotive Operations (RCO) and the SwitchPro eNtry eXit (NX) System

440. The combined railroad will expand the use of two technologies, Remote Control Operations ("RCO") and SwitchPro eNtry eXit ("NX") at select legacy NS terminals. Introduction of each technology will enhance safety and efficiency. RCO allows employees to operate a locomotive with a wireless remote control device. NX automates remote switching operations and car inventory updates and integrates field equipment, back-office systems, handheld devices, and digital displays. It eliminates the need for yard conductors to walk the line and manually operate switches, and allows a single operator to efficiently classify cars. Applicants estimate annual savings of $20.4 million from applying these two technologies to selected legacy NS terminals.[145]

10.1.2.4. Crew Transportation

441. Applicants expect that the combined railroad will generate $6.0 million in annual savings by implementing UP's crew transportation strategy on the NS legacy network.[146] UP and NS both currently use Uber as a supplemental supplier for crew transportation needs. In 2024, UP implemented an improved Uber transportation strategy in key service units. By working with Uber to expand pickup and dropoff opportunities at GPS-pinned UP locations outside of traditionally-

[145] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "RCO NX," Cell P47.

[146] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Crew Transportation Uber," Cell D25.

available addresses, UP saved 19 percent (inflation-adjusted) on crew transportation costs across its Houston and Chicago service units.[147] NS's existing Uber usage does not have UP's expanded functionality. Applicants estimate that the combined railroad will capture 50 percent of the annual crew transportation savings UP has realized since deployment of its Uber strategy.[148]

10.1.2.5. Crew Lodging

442. UP/NS will reduce crew lodging costs by implementing UP's primary lodging vendor and more efficient lodging processes across the legacy NS system. UP's processes identify opportunities to shift lodging locations to minimize base payments, tax spend, and guaranteed expenditures. In total, UP saved 6.4 percent on lodging following implementation of these strategies.[149] Applicants project a reduction of 2.5 percent on legacy NS lodging costs in the first year and 6.4 percent in normal year savings by leveraging these strategies.[150] Following full implementation, Applicants project ongoing annual savings of $2.2 million.[151]

10.1.2.6. Terminal Command Center

443. UP/NS will implement Terminal Command Center at all legacy NS manifest terminals as part of the broader suite of operating technology

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[147] *See id.*, Cell E53.

[148] *See id.*, Cells A12 and D22:D25.

[149] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Lodging Wave," Cell F17.

[150] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Lodging WAVE," Cells F26:F27.

[151] *See id.*, Cell E27.

improvements. Terminal Command Center is a digital platform that gives real-time visibility into terminal operations, including crew productivity and car movement information. Terminal Command Center will enable more efficient operations and create personnel efficiencies.

444. UP was able to reduce the number of yard controllers it utilized after implementing Terminal Command Center,[152] and the combined railroad should realize the same percentage reduction on the legacy NS network. Applicants estimate that additional use of Terminal Command Center will generate labor savings of $5.2 million annually.[153]

10.1.2.7. Train Dispatchers

445. As discussed in more detail in the IT section of the Service Assurance Plan, UP/NS will implement NetControl, its transportation management system, and CADx, its dispatching software, on the legacy NS network. Efficiencies from these technologies will reduce the number of positions needed to collectively cover a 24 hour a day, 7 day a week role—referred to as an employee "wheel"—and expand the territory that some dispatching groups can oversee. Overall, Applicants believe NS wheel and territory sizes can be brought in line with those of UP, in accordance with the applicable collective bargaining agreement. The combined railroad will realize

[152] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "NS YC Planning," Cell C8.

[153] *See id.*, Cell L8.

these reductions through attrition. Applicants estimate that the combined railroad will realize normal year savings totaling $5.8 million from the reductions.[154]

446. To maintain continuity in train dispatching, Applicants plan that the combined railroad will maintain separate dispatching centers for legacy UP and NS operations following approval of the proposed transition, until such time as UP/NS can transition dispatching safely and seamlessly to a unified dispatching system. When UP/NS decides to combine dispatching functions, it will serve the appropriate notice under Section 4 of the *New York Dock* conditions and obtain any necessary implementing agreements.

10.1.2.8. Crew Dispatchers

447. UP/NS will implement UP's crew calling system on the legacy NS network. This system offers efficiencies that are not available with NS's current process, reducing personnel needs. The combined railroad will realize the reductions through attrition. Applicants estimate annual savings of $1.6 million from these reductions.[155]

10.1.2.9. Precision Gate Technology

448. The combined railroad will also install Precision Gating Technology ("PGT") at 14 of 29 total legacy NS-operated yards and centralize the corresponding

[154] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "HDC Personnel," Cell S12.

[155] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "HDC Personnel," Cell S6.

legacy NS gate problem resolution function.[156] PGT uses high resolution cameras and an associated online application to improve truck fluidity and automatically track asset damage at UP gate locations. This will reduce maintenance and contractor costs associated with operating manual and automated gates. Centralized problem resolution operations are more efficient, also reducing costs. Applicants expect $6.6 million in annual savings, informed by UP's own savings after it began to implement PGT across its network in 2021.[157]

10.1.2.10. Leveraging UP Personal Safety Processes

449. UP's industry-leading safety processes have enabled it to substantially reduce its injury rate relative to its peers, including NS. UP/NS will adopt UP's processes across the legacy NS network. Applicants expect that in doing so UP/NS will reduce the gap between NS's and UP's injury rates. Applicants project that once the combined railroad completes systemwide adoption of UP's processes in Year 3, it will realize annual savings of $5.6 million.[158]

10.1.2.11. Leveraging NS Derailment Safety Processes

450. NS has invested heavily in developing an industry-leading derailment safety process. Post-merger, UP/NS will implement the NS derailment safety process across the legacy UP network. Applicants project that implementation of the NS

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[156] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "PGT," Cells C11, C20, and C28.

[157] *See id.*, Cell I37.

[158] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Personal Injury Derailment," Cell H16.

process will reduce the derailment rate gap between UP and NS. Applicants project annual savings of $10.0 million from this reduction in the derailment rate.[159]

10.1.2.12. Procurement Savings

451. UP/NS will implement UP's proprietary set of procurement principles and practices across NS's legacy procurement portfolio, resulting in reduced operating costs stemming from third party contracts. Applicants analyzed category spend based on the R1 Schedule 410 (operating expenses) and Schedule 330 (capital improvements) to identify the categories to exclude where they do not expect that the combined railroad will realize any synergies in that category or any potential synergy was quantified in a separate analysis. Applicants anticipate significant savings opportunities involving material contracts with locomotive parts suppliers, brush cutting contract management, and first call contracts. Applicants estimate the annual savings opportunity from extending the UP procurement practices to the legacy NS portfolio is $104.8 million.[160] Applicants expect to realize 85 percent of that opportunity, resulting in normal year savings of $89.8 million.[161]

10.1.2.13. Rubber Tire Interchange

452. The merger will result in more efficient routing, reducing the need to use trucks to transfer intermodal containers from legacy UP facilities to legacy NS facilities, a practice known as "rubber tire interchanges." Applicants estimated the

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[159] *See id.*, Cell Q15.

[160] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "WAVE Capital Summary," Cell G9.

[161] *See id.*, Cells G10:G11.

incremental cost of trucking containers from one ramp to another by applying the cost per move, by origin / destination pair, multiplied by the number of moves eliminated in each lane.[162] Applicants estimate annual savings from eliminating such interchanges to be $26.4 million annually.[163]

10.1.2.14. Terminal Switch Fee Reductions

453. Improved routing as a result of the merger will also reduce fees primarily paid by NS related to terminal activity, specifically terminal switch fees paid to intermediate carriers such as BRC and TRRA. To estimate savings, Applicants applied the 2023 actual NS unit costs to the change in activity, by terminal and type of handling. Applicants estimate annual savings of $6.7 million from reduction of these fees.[164]

10.1.2.15. Fuel

454. The merger will create fuel savings on the legacy NS network for several reasons. The combined UP/NS network will need fewer high horsepower locomotives to haul the same amount of freight, leading to a corresponding reduction in fuel usage. As a result of the more efficient yard and local operations discussed in 10.1.2.2, Applicants anticipate reduced usage of switch locomotives, which will likewise reduce

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[162] In their Verified Statement, Boyles and Mathur use URCS to quantify other savings from reduced rubber tire interchanges—for example, those stemming from related yard operations—not the cost of trucking to transport the intermodal boxes themselves. *See* Boyles/Mathur VS, ¶¶ 38, 39.

[163] *See* Workpaper "Synergies Transportation - Operating.xlsx," Tab "Rubber Tire Savings," Cell AB70.

[164] *See* Janke VS Workpaper, "Synergies Transportation - Operating.xlsx," Tab "Third Party Fees," Cell L38

fuel usage. UP/NS will also increase train length of legacy NS trains without increasing the number of locomotives per train, resulting in more efficient trips overall. Finally, UP/NS will implement processes at legacy NS facilities to reduce the duration of engine component load tests. Collectively, Applicants estimate these changes will result in $46.5 million of annual savings.[165]

10.2. Engineering

10.2.1. Engineering Operations

455. Both UP and NS employ safe, efficient, and effective practices for maintaining and replacing capital assets in a wide range of operating environments. As explained above, both have extensive maintenance-of-way departments and sizable fleets of equipment for testing, inspecting, and maintaining their tracks. Both have invested in refining their MOW procedures and developing innovative technologies to improve their practices.

456. As noted above, the UP Engineering Department employs more than 10,000 managers and craft professionals who design, maintain, inspect and replace critical infrastructure across the railroad's nearly 33,000-mile mainline network. Operating more than 5,000 pieces of MOW equipment, the team oversees 42,000 miles of track, over 113 million ties, over 15,000 rail bridges, 34,000 miles of fiber optic cable, and over 7,000 wayside detectors generating more than 72 million daily

[165] *See* Janke VS Workpaper, "Synergies Transportation - Operating.xlsx," Tab "Fuel Use Merger Initiatives," Cell C67.

"reads" that communicate overall network health.[166] Likewise, the NS Engineering Department's more than 5,000 managers and craft professionals design, maintain, inspect and replace critical infrastructure across the company's 19,200-mile mainline network. The workforce currently operates over 3,800 pieces of MOW equipment critical to overall infrastructure reliability and safety. The team oversees 28,000 miles of track, over 9,500 bridges, and over 2,700 wayside detectors generating over 10 million data points daily that communicate overall network health.[167] A combined UP/NS Engineering Department will assume the same number of track miles, bridges, signals and crossings, thus Applicants expect that the combined current MOW equipment inventory of UP and NS is sufficient to appropriately maintain and repair the combined network.

457. The merger provides significant opportunities to make more efficient use of each company's existing resources, and to more broadly deploy each company's best practices and most advanced technologies to make UP/NS the industry leader in safe, efficient, effective maintenance-of-way practices. These maintenance synergies will result in better and more reliable service and cost savings.

458. UP and NS continuously innovate their engineering procedures, practices, and technologies to increase the safety of the railroad and its workers. Applicants intend that the combined railroad will take the best of both legacy networks to further increase engineering safety on the integrated network. For

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[166] *See* Workpaper "Engineering Network Stats.xlsx," Tabs "Summary" and "Wayside Detectors."

[167] *See* Workpaper "Engineering Network Stats.xlsx," Tab "Summary."

example, Applicants continue to explore leveraging the following UP- or NS-specific programs across the integrated network: (1) UP's advanced welding strategy that minimizes the total number of mainline joints on the network; (2) NS's leading process for broken rail prevention; and (3) NS's in-house vision-based track assessment solution.

459. In addition to the quantified synergies described below, Applicants expect to identify further operational efficiencies during the integration of the UP and NS engineering departments. For example, Applicants continue to explore the following efficiency opportunities: (1) deploying UP's next-generation automated wood tie unloading process on the legacy NS network to reduce contractor spend for that network; (2) applying UP's concrete tie strategy to the legacy NS network to improve tie durability and reduce total cost of ownership; (3) leveraging UP's industry-standard bridge maintenance and replacement system on the legacy NS network; (4) consolidating preplated-panel turnout manufacturing facilities at Little Rock (UP) and Roanoke (NS); and (5) reorganizing or consolidating signal operations centers in Omaha (UP) and Atlanta (NS).

10.2.2. MOW Equipment Maintenance and Operation

460. As described in Section 9.3.3. above, both UP and NS follow a centralized approach for MOW equipment inventory management and leverage centralized work equipment shops or "hubs."

10.2.3. Post-Merger Coordination and Synergies

10.2.3.1. Yard Curtailment

461. In a merged environment, certain network switching yards at key interchange locations will become redundant. Applicants plan that the combined railroad will relocate non-local work from the following six yards into other yards with sufficient capacity to handle both operations: (1) New Orleans Oliver; (2) St. Louis Luther; (3) Chicago 63rd; (4) Des Moines; (5) North Kansas City; and (6) Wentzville. Based on costing data provided by NS, Applicants project total annual savings of $1.8 million per year as a result of these yard rationalizations.[168] Applicants project that the rationalizations will yield only 50 percent of the non-labor savings because these yards will continue to perform local work.[169] Of the total savings, $1.4 million comes from a reduction in labor and $373,000 comes from reduced material and overhead costs at idled facilities.[170]

10.2.3.2. Vegetation Management

462. UP has developed highly efficient proprietary on-track vegetation spray equipment which can spray a broad area with a small footprint. The equipment can be used 24 hours a day with back-to-back scheduling, but currently runs only one shift daily to cover UP territory. NS currently contracts for vegetation management equipment, paying contract fees that exceed the costs UP incurs for its internal

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[168] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "Yard Curtailment," Cell H34.

[169] *See id.*, Cell H30.

[170] *See id.*, Cells H32:H33.

vegetation management program. The combined railroad will add a seasonal shift to allow UP's vegetation management equipment to cover a portion of the legacy NS's seasonal vegetation needs, reducing associated contract spend. The operation will target core routes where timing and reduced track occupancy are critical to the service product. The combined railroad will add six more craft employees to enable the additional shifts needed to cover the legacy NS territory.[171] Applying UP's historical savings rate to the NS workload, Applicants project that deployment of UP spray equipment to the NS network will generate $833,000 in net annual operating savings.[172]

10.2.3.3. Wood Tie Pick Up

463. UP utilizes a scrap material recovery team (SMRT) consist to perform wood tie pickup. The SMRT consists have reduced UP's average tie pickup cost over the past three years and increased the speed of tie pickup. UP currently picks up approximately 2.5 million wood ties per year.[173] NS uses contractors to remove old ties from its right of way, which is more costly and less efficient. Post-merger, UP/NS plan to invest $66.8 million to construct additional SMRT consists for deployment across the legacy NS network.[174] This will allow the combined railroad to reduce reliance on contractors and insource up to 30 craft positions.[175] Applicants expect

[171] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "Spray," Cell E32.

[172] *See id.*, Cell E29.

[173] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "SMRT," Cell C25.

[174] *See id.,* Cell C46.

[175] *See id.*, Cell E61.

deployment of the SMRT system across the legacy NS network to generate annual operating savings of $12.9 million.[176]

10.2.3.4. Vehicle Rationalization

464. UP and NS each maintain a robust vehicle fleet to support Engineering operations. Applicants compared a ratio of Engineering employees to Engineering vehicles for UP and NS as a measure of overall fleet efficiency. UP's recent efforts to reduce its overall fleet size based on usage while maintaining steady operations resulted in a more efficient operation as compared to NS. UP/NS will implement the same type of fleet reduction initiative to the legacy NS vehicle fleet. Applicants expect that the combined railroad will save $40.3 million annually due to these vehicle reduction efforts.[177] That figure includes both recurring operating savings of $24.8 million and annual depreciation savings of $15.5 million associated with the vehicle fleet reductions.[178]

10.2.3.5. Track Geometry

465. UP and NS each maintain and operate separate systems to house track geometry and projected usage data. UP relies heavily on outside vendors to measure and process track geometry data. NS utilizes an in-house, proprietary process for collecting, reporting, and maintaining track data. Following integration, UP/NS will fully implement NS's in-house track geometry system on the UP network by Year 3.

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[176] *See id.*, Cell E51.

[177] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "Eng Vehicles," Cell I47.

[178] *See id.*, Cells I45:I46.

Applicants expect that using the NS system to collect, process, and store track data will allow the combined railroad to save $1.2 million per year on operating expenses by eliminating the need for contract services.[179]

10.3. Mechanical

10.3.1. Mechanical Operations

466. UP and NS both employ safe, efficient, and effective practices in maintaining, refurbishing, and repairing locomotives and rail cars. As Sections 9.1.3. and 9.2.3. above describe, both railroads have extensive mechanical departments with a broad network of shops to inspect and repair locomotives and rolling stock. Both have invested in refining their mechanical operations and developing innovative technologies to improve the reliability and performance of locomotives and rolling stock, thereby ensuring safe and efficient railroads.

467. Applicants expect the UP/NS merger to provide significant opportunities to make more efficient use of each company's existing resources, and to deploy each company's best practices and most advanced technologies across the combined network. Applicants expect that as a result the combined UP/NS will be the industry leader in safe, efficient, effective locomotive and rolling stock inspection and repair practices. These synergies will result in better and more reliable service and cost savings.

468. Beyond the quantified synergies below, the combined railroad will seek to identify additional efficiencies during the integration process.

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[179] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "Track Data," Cell I27.

10.3.2. Post-Merger Coordination and Synergies

10.3.2.1. Curtailment of Locomotive Facilities

469. Applicants anticipate that the redesign of the network will create mechanical operations efficiencies as work is relocated. In total, UP/NS will relocate positions from four locomotive shops where operations will be idled, consolidated, or reduced: (1) Decatur, Illinois; (2) Ft. Wayne, Indiana; (3) Inman (Atlanta, Georgia); and (4) Louisville, Kentucky. By curtailing these four facilities, the combined railroad can eliminate the associated overhead, partially offset by an increase in overhead at the facilities to which the employees are relocated. Applicants project that the operations reductions at the four locomotive shops will generate $4.6 million in annual operating savings.[180]

10.3.2.2. Shop Consolidation & Rationalization

470. As explained above, UP and NS each independently operate mechanical shops at key points throughout their networks, with UP operating 28 mechanical shops, and NS operating 24 mechanical shops. Nine of these shops are located at interchange points between the UP and NS networks. These nine shops currently employ 534 mechanical employees.

471. The combined network will improve fluidity and provide additional run-through traffic, which will yield benefits associated with fewer locomotives stopping and requiring repairs and inspections at interchange gateways. Savings associated

[180] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "Shop Curtailment," Cell N37.

with interchange areas around Chicago, Kansas City, St. Louis, and New Orleans include reduction in shop facility overhead.

472. Specifically, Applicants expect that following the merger, the combined railroad will consolidate mechanical facilities and operations in Chicago, Kansas City, New Orleans, and St. Louis, resulting in the need for fewer positions in these areas. As a result of this consolidation, Applicants expect that the combined railroad will save $27.2 million annually.[181] That figure includes annual savings of $6.2 million in reduced overhead expenses and $21.0 million from position reductions at interchange locations.[182]

10.3.2.3. Locomotive Fleet Impact

473. Applicants expect that the integration of UP and NS's networks will unlock new scale and routing efficiencies. In addition, there will be opportunities to reduce the size of the fleet for the legacy NS yard and local network to align with the yard and local crew start reductions described in Section 10.1.2.2. These efficiencies will enable UP/NS to maximize locomotive utilization and operate with fewer active locomotives. In addition to locomotive reductions addressed in the Boyles/Mathur Verified Statement, Applicants calculate that the locomotive synergies will result in an incremental fleet reduction of 152 locomotives.[183] Applicants project that this fleet

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[181] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "Mech Intchg," Cell T52.

[182] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "Mech Intchg," Cells P52 and R52.

[183] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "Loco Fleet Impact," Cell F22.

reduction will result in ongoing non-labor repair and material cost savings of $5.3 million annually.[184]

10.3.2.4. Rationalization of Portsmouth Car Backshop Operations

474. NS's car backshop in Portsmouth, Ohio, performs certain "heavy" repair work, employing 16 mechanical workers.[185] There will be sufficient capacity at other facilities on the combined network to absorb the work currently performed at Portsmouth. Post-merger, UP/NS plan to idle Portsmouth's car backshop operations and rationalize the backshop's work across the combined network. Following the consolidation, UP/NS will transfer the 16 positions at Portsmouth to realign the workforce to better fit the combined rail network. Idling operations at Portsmouth will eliminate the associated overhead, generating annual operating savings of $1.0 million.[186]

10.3.2.5. Vehicle Reduction

475. UP and NS each maintain a fleet of SUVs and wheel trucks to support maintenance management operations. UP's recent efforts to reduce its overall fleet size based on usage while maintaining steady operations resulted in a more efficient ratio of mechanical workers to vehicles as compared to NS. The combined railroad will apply these same efforts to the legacy NS vehicles. Applicants examined existing

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[184] *See id.*, Cell F28.

[185] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "Car Backshop," Cell E11.

[186] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "Car Backshop," Cell E26.

NS mechanical vehicle counts and identified opportunities for the combined railroad to right-size the fleet following the merger. Applicants expect that UP/NS will save $1.9 million annually due to these vehicle rationalizations.[187] That figure includes both recurring operating expenses and a reduction in annual depreciation resulting from the reduction in number of vehicles.

10.3.2.6. Optimizing Utilization of End of Train Devices

476. Both UP and NS rely on End of Train ("EOT") devices to perform essential monitoring functions. An EOT device is an electronic device mounted on the end of a freight train that flashes to mark the end of the train and collects and transmits data on the train's status. Railroads either utilize their own stock of EOT devices, or pay rent to use other railroads' units that are placed on interchange trains. EOT devices often go missing or get damaged with frequent handlings. Applicants anticipate that following the merger the optimized network will result in fewer interchanges, thereby reducing EOT handlings across the network. With fewer handlings, EOTs will have a longer useful life and the combined railroad will be able to reduce annual purchasing needs for replacement stock. Based on UP purchasing history from 2021 to 2024, Applicants anticipate that the combined railroad will reduce annual spend on EOT devices by approximately 25 percent.[188] The anticipated reduction in EOT device spend is expected to generate annual cost savings of

[187] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "Mech Veh," Cell F21.
[188] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "EOTs," Cell E19.

$339,000.[189] This is a estimate and does not account for anticipated annual savings from reduction of NS's EOT rental costs.

10.3.2.7. Reduction of Freight Car Lease Expense

477. UP currently leases certain cars to fulfill its network needs. NS currently has stored cars of the same type that UP leases. Following integration, UP/NS will leverage stored legacy NS freight car fleets to enable return of the legacy UP's leased cars upon lease termination. Applicants expect that UP/NS can meet 75 percent of the total lease reduction opportunity from utilizing stored legacy NS cars.[190] Applicants project annual savings of $5.5 million from reduction of freight car lease expense after full integration.[191]

10.3.2.8. Insource Wheel Set Assembly Expense

478. Both UP and NS currently contract with third parties for wheelset assembly services. UP, however, has premerger capital plans to increase capacity at its Jenks facility, which will enable insourcing of UP's contracted wheel set volume. With an additional $17.2 million capital investment,[192] UP/NS can create enough capacity at Jenks to also insource a portion of the legacy NS wheel set volume. The combined railroad will require additional positions to enable this synergy. After

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[189] *See id.*, Cell H25.

[190] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "Car Leases," Cells M28:P28.

[191] *See id.*, Cell P29.

[192] *See* Janke VS Workpaper "Synergies Transportation - Operating.xlsx," Tab "Capital Investment," Row 8; Workpaper "Mech_Eng Synergies.xlsx," Tab "Wheelset," Cell F32.

accounting for incremental labor and overhead costs, Applicants project net annual operating savings of $7.7 million due to insourcing legacy NS wheelset assembly at Jenks versus continuing to use a contractor.[193]

11. Projected Territory Changes Required for the Operating Plan

479. The Operating Plan shows how a combined UP/NS system will take advantage of the end-to-end connection of UP and NS to provide new and improved rail services and to make more efficient use of rail capacity and investments. In addition to the planned changes to the workforce as indicated in the Operating Plan and Employee Impact Exhibit, consolidation will also require changes to train crew districts and terminal limits to align the work performed with new and more efficient operating patterns. These changes will be necessary to integrate operations, maximize capacity, and realize both improved service and other intended benefits from this Operating Plan and the underlying transaction.

480. For example, it will be necessary to create a new 246-mile district between UP-Salem, Illinois and NS-Peru, Indiana for trains using the Sidney, Illinois, connection to support the additional train pairs between Southern California and the Northeast described in Section 4.2 of the Operating Plan. Applicants expect that during network integration UP/NS will develop additional district optimizations that further improve service and achieve other intended benefits from the operating plan and transaction. Further, the combined railroad will seek implementing

[193] *See* Janke VS Workpaper "Mech_Eng Synergies.xlsx," Tab "Wheelset," Cell H29.

agreements, as necessary, to permit the establishment of additional districts as the need arises during the network integration process.

481. The strategy reflected in the Operating Plan will also require certain changes in terminal switching to integrate legacy UP and NS operations, maximize terminal and yard capacity, and realize both improved service and other intended benefits from this Operating Plan and the underlying transaction. In particular, it will be necessary to change or expand certain terminal switching limits in Kansas City to include the legacy NS's Voltz facility and in Chicago to include the legacy UP's Global 4 facility. Applicants expect that during network integration, UP/NS could seek additional changes to terminal switching limits that further improve service and achieve other intended benefits from the Operating Plan and transaction. UP/NS will seek implementing agreements, as necessary, for additional changes that will be needed as network integration proceeds.

12. Conclusion

482. The Operating Plan set forth above describes how a unified UP/NS system will operate to serve its customers and grow the amount of freight moving by rail. It shows how UP and NS will integrate activities, personnel, and facilities following consummation of the proposed transaction; the operational changes expected to result; and the gains in safety, service, operating efficiencies, and other benefits anticipated from the merger. The combination of UP and NS will deliver faster, more reliable, more efficient service to customers and attract new business, providing increased competition to trucks and other rail carriers and benefiting American manufacturers and consumers.

VERIFICATION

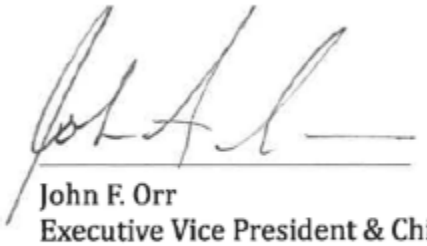
I, Eric J. Gehringer, declare under penalty of perjury that the foregoing is true and correct. Further, I certify that I am qualified and authorized to file this statement.

Executed this 17th day of December, 2025.

VERIFICATION

I, John F. Orr, declare under penalty of perjury that the foregoing is true and correct. Further, I certify that I am qualified and authorized to file this statement.

Executed this 17th day of December, 2025.



John F. Orr
Executive Vice President & Chief Operating Officer
Norfolk Southern Railway Company

APPENDIX A

OPTIMIZED PLAN TRAINS

Appendix A – Optimized Plan Trains

ZLCCX
Optimized Plan
Train Miles: 3,074
Avg Length: 6,384
Max Length: 8,260

Station	Activity	Blocks Picked-up	Blocks Set-Out
LATC, CA	Origin	Croxton, Harrisburg, Morrisville, Kearny	
City of Industry, CA	Work Event	Croxton, Harrisburg	
Yuma, CA	Crew Change		
Tucson, AZ	Crew Change		
Santa Teresa, NM	Crew Change, Work Event, Fuel & Inspect	Rickenbacker, Cleveland, Detroit, Cincinnati, Appliance Park, Georgetown	Kearny
Vaugh, NM	Crew Change		
Dalhart, TX	Crew Change, Fuel		
Pratt, KS	Crew Change		
Herington, KS	Crew Change		
Kansas City, MO	Crew Change, Fuel & Inspect		Cincinnati, Appliance Park, Georgetown
Moberly, MO	Crew Change		
Decatur, IL	Crew Change		
Peru, IN	Crew Change		
Toledo Airline, OH	Crew Change		
Sandusky, OH	Work Event, Fuel & Inspect		Rickenbacker, Cleveland, Detroit
Conway, PA	Crew Change		
Harrisburg, PA	Crew Change & Work Event		Harrisburg, Morrisville
Croxton, NJ	Termination		Croxton
Train Transit Time			**95 hrs**

ZHBLC
Optimized Plan
Train Miles: 2,899
Avg Length: 4,654
Max Length: 7,186

Station	Activity	Blocks Picked-up	Blocks Set-Out
Harrisburg, PA	Origin	LATC, City of Industry	
Conway, PA	Crew Change		
Sandusky, OH	Work Event, Fuel & Inspect	ICTF	
Toledo Airline	Crew Change		
Peru, IN	Crew Change		
Decatur, IL	Crew Change		
Moberly, MO	Crew Change		
Kansas City, MO	Crew Change, Work Event, Fuel & Inspect	City of Industry, ICTF	
Herington, KS	Crew Change		
Pratt, KS	Crew Change		
Dalhart, KS	Crew Change, Partial Fuel		
Vaughn, KS	Crew Change		
Santa Teresa, NM	Crew Change, Fuel & Inspect		ICTF
Tucson, AZ	Crew Change		
Yuma, AZ	Crew Change		
City of Industry, CA	Work Event		City of Industry
LATC, CA	Termination		LATC
Train Transit Time			**93 hrs**

ZLBAT			
Optimized Plan			
Train Miles:	2,279		
Avg Length:	8,157		
Max Length:	10,743		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
ICTF	Origin	Atlanta, Austell, Marion, Dupo	
Los Angeles, CA	Work Event	Jacksonville	
Yuma, AZ	Crew Change		
Tucson, AZ	Crew Change		
Santa Teresa, NM	Crew Change, Fuel & Inspect		
Pecos, TX	Crew Change		
Sweetwater, TX	Crew Change		
Mesquite, TX	Crew Change		
Greggton, TX	Work Event		Marion, Dupo
Shreveport, TX	Crew Change		
Meridian, MS	Crew Change, Fuel		
Norris, Jct, AL	Crew Change		
Atlanta, GA	Termination		Atlanta, Jacksonville, Austell
Train Transit Time			**74 hrs**

ZCTLB			
Optimized Plan			
Train Miles:	2,530		
Avg Length:	5,493		
Max Length:	5,909		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Charlotte, NC	Origin	ICTF, Tucson, Lathrop, Los Angeles, Bowden Yard, Atlanta, Garden City, Meridian	
Atlanta, GA	Work Event, Crew Change & Inspect	ICTF, Tucson, Los Angeles	Bowden Yard, Atlanta, Garden City, Meridian
Norris Jct, AL	Crew Change		
Meridian, MS	Crew Change		
Shreveport, LA	Crew Change & Fuel		
Scottdale, TX	Crew Change		
Sweetwater, TX	Crew Change		
Pecos, TX	Crew Change		
Santa Teresa, NM	Crew Change, Fuel & Inspect		
Tucson, AZ	Work Event & Crew Change		Tucson
Yuma, CA	Crew Change		
Los Angeles, CA	Work Event		Los Angeles, Lathrop
ICTF, CA	Termination		ICTF
Train Transit Time			**83 hrs**

MNPCW			
Optimized Plan			
Train Miles:	1,196		
Avg Length:	9,416		
Max Length:	14,444		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
North Platte East, NE	Origin	Conway, Bellevue, Elkhart, CN, Proviso, West Chicago	
Missouri Valley, IA	Crew Change		
Beverly, IA	Work Event	Bellevue	
Clinton, IA	Crew Change		
Global 3, IL	Work Event	Elkhart	
Proviso, IL	Crew Change & Work Event	Elkhart	CN, Proviso, West Chicago
Elkhart, IN	Crew Change, Work Event, Fuel & Inspect		Elkhart
Toledo Airline, OH	Crew Change & Work Event		Bellevue
Conway, PA	Termination		Conway

MALEK			
Optimized Plan			
Train Miles:	450		
Avg Length:	7,083		
Max Length:	8,132		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Altoona, WI	Origin	Proviso, Clearing, Adams, Elkhart	
Adams, WI	Crew Change & Work Event	Butler, Proviso, Conway	Adams
Butler, WI	Crew Change & Work Event	Proviso, Clearing, North Platte, Conway	Butler
Proviso, IL	Crew Change & Work Event	Elkhart	Proviso, Clearing, North Platte
Chicago Ashland Ave, IL	Work Event	Elkhart	
Elkhart, IN	Termination		Elkhart, Conway

MCWAL			
Optimized Plan			
Train Miles:	814		
Avg Length:	5,949		
Max Length:	9,627		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Conway, PA	Origin	Adams, Clearing	
Bellevue, OH	Crew Change & Work Event	Clearing	
Elkhart, IN	Crew Change & Work Event	Altoona, Adams	Clearing
Proviso, IL	Crew Change, Work Event & Inspection	Altoona, Adams, Butler	
Butler, WI	Crew Change & Work Event	Altoona, Adams	Butlter
North Lowell, WI	Work Event	Altoona	
Adams, WI	Crew Change & Work Event		Adams
Altoona, WI	Termination		Altoona

MNLCW			
Optimized Plan			
Train Miles:	984		
Avg Length:	4,840		
Max Length:	5,517		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
North Little Rock, AR	Origin	Conway, Bellevue, Detroit	
North Dexter, MO	Crew change		
Salem, IL	Crew change		
Peru, IN	Crew change		
Bellevue, OH	Crew change & Work Event		Bellevue, Detroit
Conway, PA	Termination		Conway

MNLCT			
Optimized Plan			
Train Miles:	463		
Avg Length:	12,816		
Max Length:	13,444		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
North Little Rock, AR	Origin	Chattanooga, Sheffield, Birmingham	
Memphis, TN	Crew change		
Sheffield, AL	Crew change & Work Event	Chattanooga	Sheffield, Birmingham
Chattanooga, TN	Termination		Chattanooga

MCTNL			
Optimized Plan			
Train Miles:	463		
Avg Length:	10,609		
Max Length:	11,537		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Chattanooga, TN	Origin	North Little Rock, Sheffield	
Sheffield, AL	Crew Change & Work Event	North Little Rock, Longview	Sheffield
Memphis, TN	Crew Change		
North Little Rock, AR	Termination		North Little Rock, Longview

APPENDIX B

GROWTH PLAN TRAINS

Appendix B – Growth Plan Trains

ZLTCX			
Growth Plan			
Train Miles:	3,123		
Avg Length:	10,932		
Max Length:	11,788		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Lathrop, CA	Origin	Croxton, Morrisville, Toledo Airline, Harrisburg, Bethlehem Imdl, Greencastle, Ayer*	
Sparks, NV	Crew Change		
Elko, NV	Crew Change, Partial Fuel		
Ogden, UT	Crew Change		
Green River, WY	Crew Change		
Cheyenne, WY	Crew Change		
North Platte East RT, NE	Crew Change, Fuel & Inspect		
Missouri Valley, IA	Crew Change		
Clinton, IA	Crew Change		
Global 2, IL	Crew Change		
Elkhart, IN	Fuel		
Toledo Airline, OH	Crew Change & Work Event		Toledo Airline
Conway, PA	Crew Change		
Harrisburg, PA	Crew Change, Work Event & Inspection		Harrisburg, Bethlehem Imdl, Greencastle, Morrisville
Croxton, NJ	Termination		Croxton
Train Transit Time			**83 hrs**

ZCXLT			
Growth Plan			
Train Miles:	3,114		
Avg Length:	9,302		
Max Length:	10,421		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Croxton, NJ	Origin	Lathrop, Chicago 47th St	
Harrisburg, PA	Crew Change, Work Event & Inspect	Lathrop, Sparks	
Conway, PA	Crew Change		
Toledo Airline, OH	Crew Change & Work Event	Lathrop	
Elkhart, IN	Fuel		
Colehour, IL	Work Event & Inspect	Lathrop	Chicago 47th St
Global 2, IL	Crew Change		
Clinton, IA	Crew Change		
Missouri Valley, IA	Crew Change		
North Platte Blend, NE	Crew Change, Fuel & Inspect		
Cheyenne, WY	Crew Change		
Green River, WY	Crew Change		
Ogden, UT	Crew Change		
Elko, NV	Crew Change, Fuel		
Sparks, NV	Crew Change		Sparks
Lathrop, CA	Termination		Lathrop
Train Transit Time			**85 hrs**

ZCICX			
Growth Plan			
Train Miles:	3,071		
Avg Length:	15,954		
Max Length:	16,371		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
City of Industry, CA	Origin	Harrisburg, Bethlehem Intermodal, Erail, Morrisville	
Yuma, CA	Crew Change		
Tucson, AZ	Crew Change		
Santa Teresa, NM	Crew Change, Fuel & Inspect		
Vaugh, NM	Crew Change		
Dalhart, TX	Crew Change, Fuel		
Pratt, KS	Crew Change		
Herington, KS	Crew Change		
Kansas City, MO	Crew Change, Fuel & Inspect		
Moberly, MO	Crew Change		
Decatur, IL	Crew Change		
Peru, IN	Crew Change		
Sandusky, OH	Crew Change, Work Event, Fuel & Inspect		
Conway, PA	Crew Change		
Harrisburg, PA	Crew Change & Work Event		Harrisburg, Bethlehem Intermodal, Morrisville
Erail, NJ	Work event	McCalla	Erail NJ
Croxton, NJ	Termination		Croxton, McCalla
Train Transit Time			**95 hrs**

ZCXCI			
Growth Plan			
Train Miles:	3,114		
Avg Length:	9,302		
Max Length:	10,421		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Croxton, NJ	Origin	IEIT	
Erail, NJ	Work Event	City of Industry, Atlanta, Austell	
Harrisburg, PA	Crew Change, Work Event, Fuel & Inspect	City of Industry, Maple Heights	Atlanta, Austell
Conway, PA	Crew Change		
Sandusky	Work Event	ICTF	Maple Heights
Toledo Airline, OH	Crew Change & Work Event		
Swanton, OH	Work Event	LATC	*LATC block from Norfolk will alternatively be routed on 279 to Voltz
Peru, IN	Crew Change		
Decatur, IL	Crew Change		
Moberly, MO	Crew Change		
Voltz, MO	Work Event		LATC
Kansas City, MO	Crew Change, Work Event, Fuel & Inspect	ICTF	
Herington, KS	Crew Change		
Pratt, KS	Crew Change		
Dalhart, KS	Crew Change		
Vaughn, NM	Crew Change		
Santa Teresa, NM	Crew Change, Work Event, Fuel & Inspect		ICTF
Tucson, AZ	Crew Change		
Yuma, AZ	Crew Change		
IEIT, CA	Work Event		IEIT
City of Industry, CA	Work Event		City of Industry
Train Transit Time			**99 hrs**

ZLCDT			
Growth Plan			
Train Miles:	2,455		
Avg Length:	13,920		
Max Length:	15,631		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
LATC, CA	Origin	Detroit, Voltz, Appliance Park, Rickenbacker, Sharonville, Norfolk	
Yuma, CA	Crew Change		
Tucson, AZ	Crew Change		
Santa Teresa, NM	Crew Change, Work Event, Fuel & Inspect	Appliance Park, Georgetown, Detroit, Cleveland	
Vaugh, NM	Crew Change		
Dalhart, TX	Crew Change, Partial Fuel		
Pratt, KS	Crew Change		
Herington, KS	Crew Change		
Voltz, MO	Crew Changk, Work Event, Fuel & Inspect	Detroit	Voltz, Appliance Park, Rickenbacker, Sharonville, Norfolk, Georgetown
Moberly, MO	Crew Change		
Decatur, IL	Crew Change		
Peru, IN	Crew Change		
Livernois, MI	Termination		Detroit, Cleveland
Train Transit Time			**73 hrs**

ZDTlC			
Growth Plan			
Train Miles:	2,899		
Avg Length:	10,201		
Max Length:	10,458		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Livernois, MI	Origin	LATC	
Peru, IN	Crew Change		
Decatur, IL	Crew Change		
Moberly, MO	Crew Change		
Voltz, MO	Crew Change, Work Event, Fuel & Inspect	LATC, Nogales	
Herrington, KS	Crew Change		
Pratt, KS	Crew Change		
Dalhart, KS	Crew Change		
Vaughn, KS	Crew Change		
Santa Teresa, NM	Crew Change, Work Event, Fuel & Inspect		
Tucson, AZ	Crew Change & Work Event		Nogales
Yuma, AZ	Crew Change		
LATC, CA	Termination		LATC
Train Transit Time			**80 hrs**

ZIEJX			
Growth Plan			
Train Miles:	2,565		
Avg Length:	10,898		
Max Length:	14,825		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
IEIT, CA	Origin	Jacksonville, Charlotte, Greencastle	
Yuma, AZ	Crew Change		
Tucson	Crew Change		
Santa Teresa, NM	Crew Change, Fuel & Inspect		
Pecos, TX	Crew Change		
Sweetwater, TX	Crew Change		
Mesquite, TX	Crew Change		
Shreveport, LA	Crew Change & Work Event		Charlotte Intermodal, Greencastle (Traffic in excess of length restriction to ride ZSHAT)
Meridian, MS	Crew Change, Fuel		
Norris Jct, AL	Crew Change		
Atlanta, GA	Crew Change, Work Event, Fuel & Inspect		Charlotte, Greencastle
Macon, GA	Crew Change		
Jacksonville, FL	Termination		Jacksonville
Train Transit Time			**83 hrs**

ZCTLB			
Growth Plan			
Train Miles:	2,530		
Avg Length:	11,079		
Max Length:	13,961		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Charlotte Inter, NC	Origin	ICTF, IEIT, Tucson, Lathrop, Los Angeles, Bowden Yard, Atlanta, Garden City, Meridian	
Atlanta, GA	Work Event, Crew Change & Inspect	McCalla	Bowden Yard, Atlanta, Garden City, Meridian
Norris Jct, AL	Crew Change		
McCalla	Work Event	Los Angeles	McCalla
Meridian, MS	Crew Change		
Shreveport, LA	Crew Change & Fuel		
Scottdale, TX	Crew Change		
Sweetwater, TX	Crew Change		
Pecos, TX	Crew Change		
Santa Teresa, NM	Crew Change, Fuel & Inspect		
Tucson, AZ	Work Event & Crew Change		Tucson
Yuma, CA	Crew Change		
IEIT, CA	Work Event		IEIT
Los Angeles, CA	Work Event		Los Angeles, Lathrop
ICTF, CA	Termination		ICTF
Train Transit Time			**83 hrs**

ZMXCX			
Growth Plan			
Train Miles:	2,223		
Avg Length:	9,582		
Max Length:	12,069		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Port Laredo, TX	Origin	Croxton, Atlanta, Charlotte, Rickenbacker, Sharonville	
SAIT, TX	Work Event & Inspect	Croxton, Atlanta, Greencastle	
Kriby, TX	Crew Change		
Houston, TX	Crew Change & Work Event	Greencastle, Morrisville, Charlotte	
Beaumont, TX	Crew Change		
Livonia, LA	Crew Change		
New Orlelans	Crew Change		
Meridian, MS	Crew Change & Fuel		
Norris Jct, AL	Crew Change		
Atlanta, GA	Crew Change, Work Event, Fuel & Inspect	Greencastle	Atlanta, Charlotte, Rickenbacker, Sharonville
Linwood, NC	Crew Change		
Lynchburg, VA	Crew Change		
Hagerstown, MD	Crew Change		
Greencastle, PA	Work Event	Lathrop	Greencastle
Rutherford, PA	Crew Change & Work Event		Morrisvile, Lathrop
Croxton, NJ	Termination		Croxton
Train Transit Time			**85 hrs**

ZCXMX			
Growth Plan			
Train Miles:	2,239		
Avg Length:	10,743		
Max Length:	14,852		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Croxton, NJ	Origin	Port Laredo, SAIT, Atlanta	
Rutherford, PA	Crew change & Work Event	Greencastle, Atlanta, Wylie	
Greencastle, PA	Work Event	SAIT, Houston	Greencastle
Hagerstown, MD	Crew Change		
Lynchburg, VA	Crew Change	Port Laredo	
Linwood, NC	Crew Change		
Atlanta, GA	Crew Change, Work Event, Fuel & Inspect	Port Laredo	Atlanta, Houston
Norris Jct, AL	Crew Change		
Meridian, MS	Crew Change, Work Event & Fuel		Wylie (*Alternatively set-out in Atlanta)
New Orleans, LA	Crew Change		
Livonia, LA	Crew Change		
Beaumont, TX	Crew Change		
Houston, TX	Crew Change		
Kirby, TX	Crew Change		
SAIT, TX	Work Event & Inspect		SAIT
Port Laredo, TX	Termination		Port Laredo
Train Transit Time			**83 hrs**

ZHOAT			
Growth Plan			
Train Miles:	867		
Avg Length:	7,565		
Max Length:	7,678		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Houston, TX	Origin	Atlanta, Bowden Yard, Sharonville, Croxton, McCalla	
Beaumont, TX	Crew Change		
Livonia, LA	Crew Change		
New Orlelans	Crew Change		
Meridian, MS	Crew Change		
McCalla, AL	Work Event		McCalla
Norris Jct, AL	Crew Change		
Atlanta, GA	Termination		Atlanta, Bowden Yard, Sharonville, Croxton
Train Transit Time			**39 hrs**

ZATHO			
Growth Plan			
Train Miles:	868		
Avg Length:	12,290		
Max Length:	12,382		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Atlanta, GA	Origin	Houston, Port Laredo	
Norris Jct, AL	Crew Change		
McCalla, AL	Crew Change & Work Event	Houston	
Meridian, MS	Crew Change		
New, Orleans, LA	Crew Change		
Livonia, LA	Crew Change		
Beaumont, LA	Crew Change		
Houston	Termination		Houston, Port Laredo
Train Transit Time			**36 hrs**

MLINSC			
Growth Plan			
Train Miles:	612		
Avg Length:	9,433		
Max Length:	12,278		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Livonia, LA	Origin	Chatanooga, Allentown, Birmingham, New Orleans	
New Orleans, LA	Crew Change & Work Event	Chatanooga,Meridian	Birmingham, New Orleans
Meridian, MS	Crew Change & Work Event	Chatanooga	Meridian
Norris Jct, AL	Crew Change		
Chatanooga, TN	Termination		Chatanooga, Allentown

MEKBO			
Growth Plan			
Train Miles:	438		
Avg Length:	8,692		
Max Length:	10,963		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Elkhart, IN	Origin	Boone, Marshalltown, Beverly, Clinton	
Global 2, IL	Crew Change		
Clinton, IA	Crew Change & Work Event		Clinton
Beverely, IA	Work Event		Beverly
Marshalltown, IA	Work Event		Marshalltown
Boone, IA	Termination		Boone

MNPEK			
Growth Plan			
Train Miles:	972		
Avg Length:	9,367		
Max Length:	14,498		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
North Platte East, NE	Origin	Elkhart, East Decatur	
Missouri Valley, IA	Crew Change		
Clinton, IA	Crew Change & Work Event	Elkhart	
Proviso, IL	Crew Change		
Elkhart, IN	Termination		Elkhart, East Decatur

MNLCTB			
Growth Plan			
Train Miles:	463		
Avg Length:	8,201		
Max Length:	8,916		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
North Little Rock, AR Memphis, TN	Origin Crew Change	Chattanooga, Sheffield, Birmingham	
Sheffield, AL Chattanooga, TN	Crew Change & Work Event Termination	Chattanooga	Sheffield, Birmingham Chattanooga

MCTNLB			
Growth Plan			
Train Miles:	463		
Avg Length:	7,570		
Max Length:	8,755		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Chattanooga, TN Sheffield, AL	Origin Crew Change & Work Event	North Little Rock, Sheffield	 Sheffield
Memphis, TN North Little Rock, AR	Crew Change Termination		 North Little Rock

MBHEW			
Growth Plan			
Train Miles:	706		
Avg Length:	8,424		
Max Length:	8,424		
Station	**Activity**	**Blocks Picked-up**	**Blocks Set-Out**
Birmingham, AL Meridian, MS	Origin Crew Change	Englewood	
New, Orleans, LA Avondale, LA Beaumont, LA Englewood, TX	Crew Change Crew Change Crew Change Termination		 Englewood