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BEFORE THE SURFACE TRANSPORTATION BOARD
Docket No. NOR 42175

COMPLAINT AND PETITION OF THE NATIONAL RAILROAD PASSENGER
CORP. UNDER 49 U.S.C. § 24308(f)—FOR SUBSTANDARD PERFORMANCE OF
AMTRAK’S SUNSET LIMITED TRAINS 1 AND 2

BRIEF OF THE ASSOCIATION OF AMERICAN RAILROADS

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The Association of American Railroads (“AAR”), on behalf of its freight railroad members, respectfully submits this brief in response to the Board’s August 19, 2024 decision inviting responses to three questions.

AAR is an incorporated, nonprofit trade association representing the nation’s major freight railroads, Amtrak, and some smaller freight railroads and commuter authorities. AAR’s members account for the vast majority of the rail industry’s line haul mileage, freight revenues, and employment. This brief is submitted on behalf of AAR’s member freight railroads and is not joined by Amtrak.

INTRODUCTION

This brief addresses the three questions presented by the Board in its August 19, 2024 decision.

First, what constitutes a “failure to provide preference to Amtrak” under 49 U.S.C. § 24308(f)? Preference is not an absolute and the preference obligation simply requires that dispatching decisions be weighted in Amtrak’s favor. This is clear from the text and history of § 24308 and gives “preference” its ordinary meaning. Adopting Amtrak’s view of absolute preference, akin to a presidential motorcade, would be devastating to the nation’s freight rail network and would lead to cascading delays and systemwide gridlock. The Board should instead adopt an interpretation of “preference” that is consistent with the word’s ordinary meaning and with a fluid and robust national rail network for freight and passenger service alike.

Second, what is a “host rail carrier” under 49 U.S.C. § 24308(f)? The Board should adopt a definition of “host railroad” that is consistent with 49 C.F.R. § 273.3 and hold that

“host rail carrier” means a railroad that has an operating agreement with Amtrak for both the train or service *and* the specific route segment in question.

Third, what is the extent of the Board’s legal authority to award damages? Any award of damages by the Board should be limited to actual compensatory damages for failures to provide preference that causes Amtrak to fall below 80% for two consecutive calendar quarters.

This case concerns the performance of a single service—Amtrak’s *Sunset Limited*. But the Board’s resolution of the questions presented will have significant impact on the national rail network as a whole. In the event the Board were to adopt Amtrak’s view of preference, it would have ruinous systemwide consequences—a cascade of delays leading to gridlock. Attached to this brief are the verified statements of three railroad-industry experts—Paul Duncan, John Friedmann, and C. Tyler Dick—who examine what adopting Amtrak’s “absolute preference” approach would mean for real-world rail operations.

BACKGROUND

Section 24308(c) provides that “[e]xcept in an emergency, intercity and commuter rail passenger transportation provided by or for Amtrak has preference over freight transportation in using a rail line, junction, or crossing” 49 U.S.C. § 24308(c). Congress qualified the preference requirement by specifically providing that the Board should not enforce preference in a way that “materially will lessen the quality of freight transportation provided to shippers.” *Id.*

The preference requirement was not enacted as part of the legislation that created Amtrak—the Rail Passenger Service Act of 1970, Pub. L. No. 91-518, 84 Stat. 1327, in

which the freight railroads were relieved of their common carrier obligation to provide passenger service. Rather, the preference requirement was passed three years later, as part of the Amtrak Improvement Act of 1973, Pub. L. No. 93-146, 87 Stat. 552.

In 2008, Congress enacted the Passenger Rail Investment and Improvement Act (PRIIA), Pub. L. No. 110-432, 122 Stat. 4907. Congress delegated authority to Amtrak and the Federal Railroad Administration (FRA) to jointly draft and promulgate metrics and standards “for measuring the performance and service quality of intercity passenger train operations, including . . . on-time performance and minutes of delay” *See* PRIIA § 207(a) (codified at 49 U.S.C. § 24101 note). Congress gave the Board the authority to conduct investigations in situations where “the on-time performance of any intercity passenger train averages less than 80 percent for any 2 consecutive calendar quarters.” 49 U.S.C. § 24308(f)(1).

The purpose of such an investigation is “to determine whether and to what extent delays or failure to achieve minimum standards are due to causes that could reasonably be addressed by a rail carrier over whose tracks the intercity passenger train operates or reasonably addressed by Amtrak or other intercity passenger rail operators.” 49 U.S.C. § 24308(f)(1). Congress directed the Board to “obtain information from all parties involved” when conducting an investigation, and specifically granted the Board authority “to review the accuracy of the train performance data and the extent to which scheduling and congestion contribute to delays.” *Id.*

Congress authorized the Board to do two things at the end of its investigation. First, in every case, the Board is to “identify reasonable measures and make recommendations

to improve the service, quality, and on-time performance of the train.” 49 U.S.C. § 24308(f)(1). Second, “[i]f the Board determines that delays or failures to achieve minimum standards investigated . . . are attributable to a rail carrier’s failure to provide preference to Amtrak over freight transportation . . ., the Board may award damages against the host rail carrier, including prescribing such other relief to Amtrak as it determines to be reasonable and appropriate” in light of the specified statutory considerations. 49 U.S.C. § 24308(f)(2).

In 2015, the Board issued a Proposed Statement of Board Policy “to provide guidance to the public regarding complaint proceedings under 49 U.S.C. § 24308(f) and related issues under 49 U.S.C. § 24308(c).” See EP 728, *Implementing Intercity Passenger Train On-Time Performance and Preference Provisions of 49 U.S.C. § 24308(c) and (f)*, 80 Fed. Reg. 80878 (Dec. 28, 2015) (“Policy Statement”). Although the Board ultimately declined to adopt the proposed Policy Statement, it set forth a detailed consideration of the preference requirement based on the statutory text and history. The Board recognized that the preference requirement is not “absolute,” and that “a host rail carrier need not resolve every individual dispatching decision between freight and passenger movements in favor of the passenger train.” Policy Statement at 3.

The Board is now considering the meaning of preference and related questions in the context of the *Sunset Limited* proceeding. In its August 19, 2024 decision, the Board directed each of the railroad parties to “include in its reply either a proposed interpretation of ‘preference’ and ‘host rail carriers,’ including a description of how, if at all, its interpretations of those terms differ from Amtrak’s, or indicate that it takes no position on

the definition of any of these terms.” *Id.* at 4. The Board also directed the parties to “address the Board’s legal authority to award damages.” *Id.* The Board concluded: “Given that the interpretation of these statutory terms is an issue of first impression and a matter of broad public interest, the Board will also allow non-parties to the investigation to submit replies to Amtrak’s opening statement.” *Id.*

ARGUMENT

I. The Board Should Give “Preference” Its Plain Meaning And Avoid The Ruinous Consequences Of Amtrak’s Proposed Approach.

The concept of “preference,” as Congress used it in 49 U.S.C. § 24308(f), is not an absolute. It does not mean that every dispatching decision must be made to allow the Amtrak train to move first at the expense of all other trains on the network. Rather, “preference” should be given an interpretation that accords with the word’s plain meaning, historical practice, and common sense—a *weighting* in Amtrak’s favor, rather than an absolute mandate that Amtrak always prevails. Amtrak’s contrary interpretation is unanchored in the statutory text, conflicts with the statutory structure and history, and would be ruinous for the nation’s rail network.

A. “Preference” Means A Weighting In Amtrak’s Favor, Not An Absolute Right To Go First.

Congress provided that Amtrak “has preference over freight transportation in using a rail line, junction, or crossing.” 49 U.S.C. § 24308(c). Preference is not absolute. It simply means a weighting in favor of Amtrak.

The traditional sources of statutory meaning—text, structure, and legislative history—all support giving the word “preference” its plain language meaning. Preference

is not an absolute, in which A *always* prevails over B. Rather, preference means a *weighting* in favor of A as compared to B. No one would understand the statements “I have a preference to eat fish instead of meat,” or “I have a preference to go to bed early,” as meaning that the person *never* eats meat or *never* stays up late. All it means is that the scales are not in perfect equipoise: They tilt in favor of the preferred option, but the balance can shift depending on the facts and circumstances arising in an individual case.

When the Eighth Circuit invalidated the Board’s attempt to issue an on-time performance rule, it emphasized that “[i]n the absence of a statutory definition, we will give a term its ordinary dictionary meaning.” *Union Pac. R.R. Co. v. Surface Transp. Bd.*, 863 F.3d 816, 825 (8th Cir. 2017). The ordinary meaning of preference—based on dictionary definitions from the time the preference obligation was enacted—is that it means a *greater liking* for one thing over another. It does not mean that the thing preferred always prevails. *See, e.g., Webster’s New World Dictionary of the American Language* 1122 (2d College ed. 1970) (preference means a “greater liking”); *Scholastic Dictionary of American English* 555 (1971) (defining preference as “the liking or favoring of one thing over another”); *Webster’s Third New International Dictionary of the English Language* 1787 (1971) (defining preference as “higher valuation or desirability”).¹

¹ “[G]eneral dictionary definition[s] [are] not used for terms of art,” and courts “therefore look to context for guidance.” *Union Pac. R.R. Co.*, 863 F.3d at 825 (citing *FAA v. Cooper*, 566 U.S. 284, 291-92 (2012) and *Davis v. Mich. Dep’t of Treasury*, 489 U.S. 803, 809 (1989)). Here, the Board need not decide whether “preference” as used in § 24308(c) is a term of art because it results in the same outcome—“preference” means a favoring or weighting, rather than an ironclad rule of decision, regardless of whether it is given its “ordinary dictionary meaning” or understood in “context” as a term of art.

This plain-language reading is strongly supported by the text of § 24308(c). It provides “[i]f the Board . . . decides that preference for intercity and commuter rail passenger transportation materially will lessen the quality of freight transportation provided to shippers, the Board shall establish the rights of the carrier and Amtrak on reasonable terms.” This shows that Congress did not want preference to be applied in a way that substantially harms freight transportation.

That the Board’s preference analysis must consider the impact on freight traffic accords with the Rail Transportation “[P]olicy of the United States Government” established by Congress in 49 U.S.C. § 10101. *See* Policy Statement at 3 (citing Rail Transportation Policy and suggesting that the Board must consider efficiency of freight service). That statute defines the rail policy of the United States to include minimizing regulation, promoting efficient freight service, and ensuring the development and continuation of a fluid rail transportation system. According absolute preference to Amtrak—providing Amtrak always must go first, regardless of the impact on the network as a whole—would frustrate these goals. A requirement of absolute preference would not even promote efficient *passenger* service in the long run. That is because an individual dispatching decision involving two trains may have efficiency consequences for the network. A dispatching decision that may appear, in isolation, to favor freight over passenger efficiency may ultimately promote efficiency and on-time service for passenger trains on the network generally. It is common sense that there will be situations where allowing a freight train to move before an Amtrak train will clear the route and allow *all*

traffic to move more quickly. Giving Amtrak absolute preference over freight traffic would ultimately undermine the performance of both.

B. The Board Should Reject Amtrak’s Proposed Definition Of Preference.

Adopting Amtrak’s version of absolute preference would ruin the national rail network. In Amtrak’s view, preference means that all individual dispatching decisions must be made in its favor. Amtrak argues that “under Section 24308(c), a host railroad must resolve individual dispatching decisions at a rail line, junction, or crossing in favor of Amtrak.” Amtrak Br. 64. And “[i]f a host railroad does not resolve an individual dispatching decision at a rail line, junction, or crossing in favor of Amtrak, then the host has failed to provide preference.” *Id.* at 69.

Amtrak’s interpretation is not supported by the text or structure of the preference statute, and would cause gridlock on many routes. Amtrak offers no reason for why Congress—particularly after declaring efficient freight service a policy goal of the United States, *see* 49 U.S.C. § 10101—would possibly have intended the harmful and irrational results from a law requiring the absolute subordination of all freight traffic to Amtrak at all times and in all non-emergency situations. Congress did not mandate that Amtrak be treated as the equivalent of a presidential motorcade, in which all traffic is pulled to the side so the Amtrak train can move along the rails unimpeded.

Amtrak’s arguments in favor of its “absolute preference” theory are not persuasive and should be rejected.

1. Amtrak begins with a misstatement of the law. It asserts that “Congress imposed an unequivocal obligation” on railroads to provide preference to Amtrak. Amtrak

Br. 61. Congress did no such thing. The preference obligation is tempered in many ways. Among other things, it is subject to the Board's determination that giving Amtrak preference will not "materially . . . lessen the quality of freight transportation provided to shippers." 49 U.S.C. § 24308(c). And it is subject to the exception in cases of "emergency." *Id.*

Amtrak also asserts that Congress gave Amtrak "priority" over freight transportation. Amtrak Br. 61. But as Professor Dick explains, *see* Ex. C, the word "priority" has long had a well-understood meaning in railroading—dispatch priority is a term of art—and it does not mean *absolute* priority, as Amtrak suggests. Rather, "priority" in the railroad industry simply means that dispatching decisions are weighted in favor of the priority train. The priority train does not always go first.

In any event, Section 24308(c) uses the word "preference," not "priority." The word "priority" does not appear in § 24308(c). It appears in a Senate committee report issued decades after the preference statute was enacted. *See* S. Rep. No. 110-67, at 11 (2007). Words plucked from the legislative history of a different statute cannot override the text of § 24308(c), which says "preference," not "priority." Amtrak cites *Webster's New World Dictionary* as defining "preference" to mean "priority." *See* Amtrak Br. 63. But "priority" is the *fourth* definition of preference in the dictionary Amtrak cites. The one AAR relies on above—defining preference as a "greater liking" for one thing over another—is the *first* definition. Amtrak skips over the primary definition, the secondary definition, the tertiary definition, and alights on the very last definition—which it then announces reflects the

“ordinary meaning” of preference. Dictionaries can be valuable guides to ordinary meaning, so long as they are not used in such a misleading way.

Regardless, Amtrak also acknowledges that “preference” means an “advantage” given to one over others. *See* Amtrak Br. 62-63. Of course, an advantage can be large or small—and nothing in the text of § 24308(c) suggests that Congress intended to give Amtrak an *insurmountable* advantage over freight transportation. Rather, the common-sense meaning of advantage is a weighing on one side of the scale that in some cases *can* be overcome. In short, even Amtrak’s own dictionary definitions support AAR’s interpretation of preference and undermine Amtrak’s absolutist interpretation. Just like courts, federal agencies “must enforce plain and unambiguous statutory language according to its terms.” *Hardt v. Reliance Standard Life Ins. Co.*, 560 U.S. 242, 251 (2010). For that reason, the Board should reject Amtrak’s effort to define the word “preference” in a way directly at odds with its plain meaning.

2. Amtrak contends that “[h]istorical context” supports its understanding of preference as an absolute. Amtrak Br. 65. It does not. Rather, the history that Amtrak traces shows only that Congress enacted the preference requirement in 1973 and gave the Board authority to conduct preference-related investigations in 2008. *See* Amtrak Br. 65-68. Nothing Amtrak cites suggests that Congress, the ICC, the freight railroads, or Amtrak itself ever understood the preference obligation as an absolute, “Amtrak always wins” mandate.

To the contrary, the historical evidence shows precisely the opposite. Before and around the time Amtrak was created, passenger trains were not generally given the type of

absolute priority Amtrak demands here. *See, e.g., Penn Cent. Transp. Co. Discontinuance of 34 Passenger Trains*, 338 ICC 380, 464 (1970) (“Complaints were made that the passenger trains are delayed to permit prompt movement of freight trains. In the day-to-day operation of any railroad discretion must b[e] given to the dispatcher to assure safe movement of all trains and there are bound to be meets and passes requiring such actions. There were delays of passenger trains because of the carrier’s freight traffic. But the instances shown of record do not establish that such delays were the result of carrier policy to give freight traffic preference over passenger trains.”); *S. Pac. Co. Discontinuance of Trains Nos. 39 and 40 Between Tucumcari, N. Mex., and Los Angeles, Cal.*, 330 ICC 685, 693 (1967) (“Operating conditions may dictate that passenger trains be sidetracked for long freight trains which will not fit the length of sidetracks, or for trains which are fleet operated, as where two to four trains, often including a passenger train, are operated in tandem.”).

Amtrak itself has conceded that preference does not mean absolute preference. In 1973, in congressional testimony concerning the preference requirement (enacted that year), the President of Amtrak stated that absolute preference “just is not a real-world approach.” *Financial Assistance to Amtrak: Hearings Before the Subcomm. on Transp. and Aeronautics of the H. Comm. on Interstate and Foreign Commerce*, 93d Cong. 32 (1973) (testimony of Amtrak president Roger Lewis). In fact, Amtrak’s President discussed situations in which it would make sense to put the Amtrak train on the siding to allow the freight train to proceed. He testified:

Well, this question of freight train interference is complicated. There are cases in railroad operations, a number of them, where freight train

interference might be justified. For example, maybe in an operation in an area where you had a siding that would take five cars, which would be enough to accommodate that particular passenger train, but would not accommodate a 100-car freight train, it would be sensible to put the passenger train aside and get the freight train out of the way, not only for that segment, but for all of the operations that that train might later interfere with. The difficulty on freight train interference, from our point of view, is that somebody must dispatch the trains that go on that track, both freight or passenger. These decisions are made in the field on a local basis. I feel, and I have felt, that to try to legislate that and say, “You will always give preference to the passenger train, or never let a freight train interfere,” just is not a real-world approach.

Id. The Amtrak President’s testimony underscores that implicit in the concept of “preference” is the notion that it is not absolute. Preference does not mean that Amtrak trains never yield to freight traffic.

In sum, preference has never been understood as an absolute. Individual dispatching decisions involving freight and passenger movements are not now, and never have been, resolved in favor of Amtrak in all situations. Were the Board to adopt Amtrak’s view, it would amount to a radical change upending the operating practices that have existed since Amtrak’s creation and that are in place today.

3. Amtrak wrongly claims that preference extends well beyond dispatching decisions. In Amtrak’s view, a host railroad “fail[s] to provide preference by not conforming its operating practices, procedures, and policies to reflect that Amtrak has priority over freight transportation.” Amtrak Br. 61; *see also id.* at 64-65 (contending that

“a host railroad also must have internal procedures, practices, and personnel that facilitate rather than frustrate Amtrak’s priority of access to the enumerated infrastructure”).

The statutory text negates this argument. Section 24308(c) gives Amtrak preference at “a rail line, junction, or crossing.” It does not give Amtrak a preference right in any other context. By “provid[ing] that Amtrak’s preference right applies to its use of ‘a rail line, junction, or crossing,’” Amtrak Br. 64, Congress made clear that the preference right extends no further. It does not extend, as Amtrak would have it, to hiring decisions, policy decisions, and the many other contexts Amtrak urges. “[I]f Congress makes an explicit provision for apples, oranges and bananas, it is most unlikely to have meant grapefruit.” *Am. Petroleum Inst. v. EPA*, 198 F.3d 275, 278 (D.C. Cir. 2000). Here, Congress made an explicit provision for apples (preference at rail lines), oranges (preference at junctions), and bananas (preference at crossings). It did not make a provision for grapefruit (preference in “internal procedures, practices, and personnel”). Whether a carrier abides by preference must be judged by the actual decisions its dispatchers make, not by the carrier’s hiring or training practices. It is unlikely, to say the least, that Congress intended the Board to supervise railroads’ hiring practices to ensure all railroad “personnel” are committed to “facilitat[ing]” Amtrak’s rights. Amtrak Br. 65.

It is untenable for Amtrak to claim that with a single phrase—“Amtrak has preference over freight transportation in using a rail line, junction, or crossing,” 49 U.S.C. § 24308(c)—Congress intended to require all privately-owned freight railroads to operate their businesses for the benefit of Amtrak above all other interests. “Congress usually does not hide elephants in mouseholes.” *Nat’l Fed’n of Indep. Bus. v. Occupational Safety &*

Health Admin., 142 S. Ct. 661, 669 (2022) (quotation marks omitted). Here, it is not remotely plausible that just three years after relieving freight railroads of their obligation to provide passenger service, Congress meant to commandeer the freight railroads by extending the preference obligation to every aspect of the railroads' business by using the seemingly innocuous phrase "preference over freight transportation in using a rail line, junction, or crossing." And it is utterly implausible that even though Congress enacted the preference requirement in 1973, no one realized its true breathtaking scope until 2024 when Amtrak filed its opening brief.

The reality of course is that the preference requirement is far more modest than Amtrak contends. It means what it has always meant from the moment it was enacted. *See Wisconsin Central Ltd. v. United States*, 585 U.S. 274, 284 (2018) ("[E]very statute's meaning is fixed at the time of enactment."). Amtrak has preference in dispatching decisions but nothing more.

4. Amtrak misapprehends the "emergency" exception. *See* 49 U.S.C. § 24308(f) (preference arises "[e]xcept in an emergency"). Amtrak correctly notes that the ordinary meaning of emergency is "a sudden condition or state of affairs calling for immediate action." Amtrak Br. 71 (quoting *Britannica World Language Dictionary* 413 (Funk & Wagnalls 1960)). But Amtrak errs in then announcing that "the 'emergency' exception to the preference obligation is inapplicable here" because there are no "emergencies" that "would justify the number and magnitude of delays at issue." Amtrak Br. 71.

The main problem with Amtrak's argument is that, to avail itself of the emergency exception, the host railroad need not prove that *every* challenged dispatching decision,

much less every challenged delay, was justified by an emergency. Rather, if particular dispatching decisions were made in response to an emergency, then those dispatching decisions cannot amount to a preference violation. In such cases, the question of preference does not even arise. The Board does not apply the emergency exception in the aggregate across thousands of dispatching decisions, as Amtrak would have it, but instead applies it to the individual dispatching decisions that are challenged by Amtrak.

Another problem with Amtrak's argument is that it construes "emergency" as limited to natural disasters of biblical scope, such as earthquakes and tidal waves, or man-made disasters of apocalyptic scope such as a nuclear war. Amtrak Br. 71. There is no reason to interpret "emergency," as used in § 24308(c), so narrowly. Indeed, Amtrak concedes that because "Congress did not define 'emergency' within Section 24308," the Board "must look to the plain meaning of the term"—i.e., as set forth in the dictionary definitions Amtrak provides. *See* Amtrak Br. 71. Those definitions confirm that "emergency" is naturally understood to encompass *any* unforeseen circumstance demanding immediate action.

5. Finally, Amtrak would render virtually meaningless the final sentence of § 24308(c): "If the Board, after an opportunity for a hearing under section 553 of title 5, decides that preference for intercity and commuter rail passenger transportation materially will lessen the quality of freight transportation provided to shippers, the Board shall establish the rights of the carrier and Amtrak on reasonable terms." In Amtrak's view, this provision is inapplicable here because a host carrier "cannot claim for the first time as a

defense in a Section 24308(f) investigation that it should be relieved of its [preference] obligation.” Amtrak Br. 74.

Amtrak is doubly mistaken. First, the circumstances in which a host carrier would need to be “relieved” of its preference obligation are far narrower than Amtrak suggests, given that preference does not require that dispatchers give Amtrak an uninterrupted string of green signals. Second, even if preference is allegedly not provided, there is no requirement for a carrier to request relief from the Board in advance. The statute allows a host carrier to “apply” to the Board for relief from the preference requirement and authorizes the Board (after affording “opportunity for a hearing”) to grant such relief, if it finds that preference “materially will lessen the quality of freight transportation.” 49 U.S.C. § 24308(c). Nothing in the statutory text precludes a host carrier from applying for such relief in the context of a § 24308(f) investigation. Amtrak says if a railroad could seek this relief as a defense to a § 24308(f) investigation, “there would be no reason for a host railroad to ever comply with Section 24308(c)’s explicit and specific preference relief procedure.” Amtrak Br. 73. This does not make sense: A railroad seeking this relief in a § 24308(f) investigation *is* complying with § 24308(c)’s explicit and specific preference relief procedure, which simply provides that “[a] rail carrier affected by this subsection may apply to the Board for relief.” Equally misplaced is Amtrak’s argument that the phrase “under this subsection” prevents the Board from granting this relief in a § 24308(f) investigation. Amtrak Br. 73; *see* 49 U.S.C. § 24308(c) (“Amtrak has preference . . . unless the Board orders otherwise under this subsection.”). All “under this subsection” refers to is the Board’s power to grant relief from the preference obligation—a power that is

authorized in subsection (c). There is nothing that prevents the Board from exercising this power in an on-time performance investigation.

The Board recognized this exact point in its proposed policy statement. The Board said that railroads could raise as a defense in a § 24308(f) proceeding the argument that granting Amtrak preference would have materially reduced the quality of freight transportation. The Board stated that in a § 24308(f) proceeding:

Parties could also submit evidence regarding other factors that may have prevented the host carrier from providing preference in certain circumstances. Such factors could include ‘emergencies’ or circumstances in which providing Amtrak preference would ‘materially . . . lessen the quality of freight transportation provided to shippers.’ *See* 49 U.S.C. § 24308(c). The Board would then consider whether any of the claimed circumstances constitute an appropriate mitigating factor within individual § 24308(f) proceedings.

Policy Statement at 7. The Board should adopt the same approach here.

C. The Practical Consequences Of Adopting Amtrak’s “Absolute Preference” Approach Would Be Disastrous.

Adopting Amtrak’s approach of absolute preference would have dramatic and harmful consequences. It would upend current operating practices and work a radical transformation in the law. It would cause gridlock on many routes, bringing rail traffic to a standstill and triggering a cascading effect that would radiate throughout the national network. In fact, Amtrak has *agreed* that granting it absolute preference would lead to gridlock, although it disputes how often this would occur. As the Department of Transportation’s Inspector General explained in a 2008 report:

AAR strongly believes that adhering strictly to Amtrak's definition of preference would quickly shut down the rail network. Amtrak agrees that this could happen in some circumstances but takes issue with how frequently these circumstances would arise.

Office of Inspector General, *Root Causes of Amtrak Train Delays* iv (Sept. 8, 2008) (emphasis added). Presumably the Board would not wish to adopt a legal rule that even Amtrak acknowledges “would quickly shut down the rail network” in the United States, regardless of the precise scope or frequency of the shutdowns. Even if the shutdowns occurred only in, say, Houston on Tuesday afternoons, they would still be deeply disruptive.

Attached to this brief are three verified statements from industry experts discussing the practical consequences of giving Amtrak a right to absolute preference. These statements make clear that granting Amtrak absolute preference would have consequences extending far beyond any specific Amtrak route. If the Board were to grant Amtrak a right to absolute preference—something Amtrak has never enjoyed—it would be ruinous to the national rail network.

1. **Paul Duncan** (statement attached as Ex. A) has held senior operations-centric leadership roles in his 22-year career in the railroad industry. Mr. Duncan explains that the Board needs to ensure preference remains as originally interpreted, and since practiced in the industry, in order to “maintain the competitiveness, consistency, and viability of the nation’s rail network.” He describes how Amtrak’s absolute view of preference would remove the flexibility dispatchers need in order to give Amtrak preference while still being able to make the best decisions for the rail network as a whole

in the context of circumstance-specific dispatching decisions. He also explains how adopting Amtrak's approach would disrupt the freight and commuter services that operate on the same track, and shows how giving absolute preference to Amtrak trains would degrade single-track and double-track territory capacities and velocities, causing greater inconsistency in the nation's rail network.

2. **John Friedmann** (statement attached as Ex. B) is a 30-year veteran of the railroad industry, specializing in operations planning, freight-passenger projects, and strategy. Mr. Friedmann discusses how "Amtrak's proposed 'absolute preference' would damage the functioning and effectiveness of the United States railroad network." He explains how, even in a best-case scenario, absolute preference would reduce line capacity, reduce service levels, and reduce average train speeds. Moreover, he shows how the harms of absolute preference grow exponentially when multiple passenger trains operate on a line and would lead to gridlock, crippling freight operations and making it impossible for passenger trains to be given preference until the congestion is cleared. He concludes that Amtrak's approach would not only degrade the quality of freight service but would also stifle the future expansion of intercity passenger trains.

3. **C. Tyler Dick** (statement attached as Ex. C) is an Assistant Professor in the Department of Civil, Architectural and Environmental Engineering at the University of Texas at Austin, with 25 years of experience in the planning and design of railway capital and capacity expansion projects. Professor Dick begins by explaining how, in the nineteenth century, railroads were saddled with a system of absolute preference that decreased capacity and diminished the fluidity of the entire network. He then explains how

railway operations modeling software makes dispatching decisions, and analyzes the literature addressing train performance in a preference-based system to illustrate important points regarding the consequences of implementing “absolute preference.” Using a hypothetical example, he concludes that giving Amtrak absolute preference would not only lead to worse Amtrak performance, but also negatively impact freight trains, reduce rail network capacity and fluidity, and effectively undo 175 years of evolution in train control systems.

D. The Board Should Not Assume That Poor On-Time Performance Of An Amtrak Train Must Arise From A Preference Violation.

Amtrak is wrong to suggest that an Amtrak train’s poor on-time performance must be attributed to a violation of its purported right to absolute preference. *See* Amtrak Br. 64 (rejecting focus on “impacts on network fluidity,” or any attempt to “balanc[e]” the needs of passenger and freight rail, as an unlawful “narrow[ing] [of] the preference right”). There are many considerations the Board must examine *before* it can find a preference violation. Amtrak cannot take in isolation the preference-granting sentence in § 24308(c) and ignore the rest of that subsection, the rest of Title 49, and the rest of the United States Code.

1. A § 24308(f) proceeding focuses on the reasons for the inadequate on-time performance of an Amtrak train. It is first and foremost a performance investigation, not a preference investigation. Although a preference violation may be one possible cause of poor on-time performance, it is far from the only possible cause. Poor on-time performance may also be attributable to schedules that have become unrealistic, Amtrak performance failures, host performance failures unrelated to preference, third-party failures (such as

obstructions of the line or poor operation of interlockings), uncontrollable events (such as blizzards or flooding), or a variety of other factors. This point is illustrated by Amtrak’s own performance on the Amtrak-controlled Northeast Corridor, which varies significantly over time despite the inapplicability of preference issues. *See* Federal Railroad Administration, *Rail Service Metrics and Performance Reports* (available at www.fra.dot.gov).

In a § 24308(f) proceeding, the Board must examine *all* possible root causes of each delay. The statute itself calls for comprehensive consideration of the factors affecting performance—hence the need for an “investigation.” *See* 49 U.S.C. § 24308(f) (“the Board shall initiate . . . an investigation [] to determine whether and to what extent delays or failure to achieve minimum standards are due to causes that could reasonably be addressed” by Amtrak or a rail carrier Amtrak operates over). In making the required evaluation, the Board “shall obtain information from all parties involved,” and may “review the accuracy of the train performance data and the extent to which scheduling and congestion may contribute to delays.” *Id.* As a result of its analysis, “the Board shall . . . identify reasonable measures and make recommendations to improve the service, quality, and on-time performance of the train.” *Id.* As the Board recognized in its proposed policy statement, unsatisfactory on-time performance may sometimes be attributable to “Amtrak’s own behavior,” which is all the more reason for the Board to undertake “a comprehensive and impartial on-time performance investigation, in which the Board considers Amtrak’s role in delays as well as the host carrier’s role.” Policy Statement at 5, 6. A narrow focus on the preference requirement would be inconsistent with the

statutory language, and would increase the risk that the Board does not identify the true root cause of the on-time performance problem. Only by examining *all* possible causes of poor on-time performance can the Board ensure that its recommendations are likely “to improve the service, quality, and on-time performance of the train.” 49 U.S.C. § 24308(f)(1).

2. In addition, before it can even consider finding that preference violations contributed to poor on-time performance, the Board must ensure that the schedule of the Amtrak train at issue was reasonably achievable in the first place, even when the schedule has been certified. This is consistent with § 24308(f)(1), which authorizes the Board to investigate “the extent to which scheduling and congestion contribute to delays.” It is also consistent with FRA and Amtrak’s Metrics and Minimum Standards for Intercity Passenger Train Operations, which recognize that “conditions [may] change[]” in ways “that impact a certified schedule.” 85 Fed. Reg. at 72971, 72988 (Nov. 16, 2020).

Because some of Amtrak’s published schedules may not have been certified, nor updated to reflect current conditions, the Board should not accept Amtrak’s schedules at face value. A host railroad should not be penalized when the true cause of the poor on-time performance is an outdated or unrealistic schedule. The Board should examine the Amtrak schedule at issue without any presumption that the schedule is reasonably achievable, especially if the schedule is not certified. The Board should ask whether the schedule is realistic, and consistently achievable as a practical matter, in light of (among other things) the distance of the route and the speed at which Amtrak trains are capable of traveling on that route, the quantity and nature of both freight and commuter traffic on that

route (including fluctuations in traffic), ongoing maintenance or capital improvement projects, and the complexities inherent in operating different kinds of rail service over the same track.

In any case in which the schedule contributes to poor on-time performance, the Board's recommended remedy should include a schedule adjustment under 49 U.S.C. § 24308(f)(1), which requires the Board to "identify reasonable measures and make recommendations to improve the service, quality, and on-time performance of the train." An unrealistic or outdated schedule is plainly a "cause" of substandard performance that could be "reasonably addressed" by the parties. *Id.*

3. Preference determinations must also be informed by the operating agreement between the host rail carrier and Amtrak. If the parties have agreed on standards of acceptable performance or particular operating parameters, the Board should impose no penalties for a supposed preference violation in cases where a host is meeting those performance standards or following those parameters.

A contrary approach would risk punishing the host railroad for a level of performance that Amtrak itself has deemed satisfactory. If the host railroad is achieving the performance levels to which Amtrak agreed, Amtrak should not be permitted to turn around and claim that those performance levels violate its rights and should result in damages. Indeed, under those circumstances, Amtrak should not be awarded any relief. Similarly, if an operating agreement provides that a particular freight train may operate in a way that delays an Amtrak train, or that a particular delay to an Amtrak train is not

attributable to the host railroad, those operations should not be treated as evidence of a preference violation.

4. Finally, there is no basis for finding host liability absent a *pattern* of preference violations. A host railroad cannot be held liable for a handful of dispatching decisions that the Board later determines should have been made in Amtrak's favor. Railroads make thousands of dispatching decisions every day, some under extreme time pressure or without full information. Given the large number of individual decisions, occasional mistakes or suboptimal decisions by dispatchers are to be expected. But that is different than a carrier purposefully or knowingly failing to abide by its obligation to provide Amtrak with preference. The Board should not find that a carrier is violating preference unless it finds a pattern of violations. Amtrak must show a sufficiently large number of preference violations such that there can be no mistake that the failure to give preference was a deliberate decision rather than a handful of individual misjudgments made in good faith.

Imposing liability for individual errors—for anything less than a perfect record over the course of thousands of dispatching calls—would go well beyond what Congress intended when it enacted the preference requirement. There must be a showing of a sufficiently large number of preference violations to establish a pattern, i.e., a deliberate course of action to violate the preference right, not a series of unconnected mistakes in the heat of the moment. In short, absent a demonstrable pattern of a host carrier failing to accord preference to Amtrak trains, there is no basis for finding host liability.

II. In Defining “Host Rail Carrier,” The Board Should Follow FRA’s Definition Of “Host Railroad.”

In 49 C.F.R. § 273.3, FRA and Amtrak defined “host railroad” as “a railroad that is directly accountable to Amtrak by agreement for Amtrak operations over a railroad line segment.” The Board should adopt a definition of “host rail carrier,” for purposes of 49 U.S.C. § 24308(f) that is consistent with FRA’s definition. The Board should reject Amtrak’s effort to expand the scope of “host rail carrier” beyond that meaning.

A. A “Host Rail Carrier” Is A Railroad That Has An Operating Agreement With Amtrak.

Section 24308(f) authorizes the Board in certain circumstances to “award damages against the host rail carrier,” but it does not define “host rail carrier.” However, in issuing the Metrics and Minimum Standards for Intercity Passenger Train Operations, FRA and Amtrak defined the virtually identical term “host railroad” as a railroad that has an operating agreement with Amtrak—i.e., “a railroad that is directly accountable to Amtrak by agreement for Amtrak operations over a railroad line segment.” 49 C.F.R. § 273.3.

The Board should not adopt or enforce a different definition of “host railroad.” In § 207 of the Passenger Rail Investment and Improvement Act, Congress gave FRA and Amtrak the power to issue regulations establishing the metrics and standards governing host railroads’ role in ensuring satisfactory on-time performance by Amtrak. These rules establish the framework and sole standard for a Board investigation under Section 213—when an Amtrak train’s COTP falls below 80% COTP for two consecutive quarters. Both sections use synonymous terms for a host and both were adopted in the same legislation. To implement this interdependent scheme, the meaning of an Amtrak “host” must be

consistent. As the Eighth Circuit explained when examining this statutory scheme, Congress likely did not intend for the Board to develop “potentially conflicting definitions” of terms under Section 213 from those adopted by FRA and Amtrak under Section 207. *See Union Pac. R.R. Co.*, 863 F.3d at 822 (holding that Board lacked authority to define “on-time performance” because Congress had given FRA and Amtrak the power to do so).

There is no reason for the Board to sow confusion by adopting a different definition. But whether or not the Board is writing on a blank slate, the structure of § 24308 makes clear that “host rail carrier” should be understood to mean a railroad that has an operating agreement with Amtrak. The first sentence of the section states that “Amtrak may make an agreement with a rail carrier or regional transportation authority to use facilities of, and have services provided by, the carrier or authority under terms on which the parties agree.” 49 U.S.C. § 24308(a)(1). That sentence, appearing under the heading “General authority,” underscores that the Board’s “authority” in a § 24308 proceeding extends only to the parties to the operating agreement—Amtrak and the “rail carrier” (or transportation authority) with which Amtrak enters the contract. Similarly, § 24308(f)(1), which gives the Board authority to investigate substandard Amtrak performance, refers to “a host freight railroad over which Amtrak operates,” again linking the concept of a “host” railroad to operations pursuant to an agreement under § 24308(a) (i.e., an operating agreement).

Even if the Board had the power to adopt its own conflicting definition of “host railroad,” it would be unfair and make no sense to award damages or issue orders to railroads that are not in a contractual relationship with Amtrak. Railroads assume the status of “host rail carrier” by choice—they enter into a contractual relationship with Amtrak

knowing that doing so will give rise to rights and obligations that can be enforced by a court or an agency. It is the existence of an operating agreement that gives rise to “host railroad” status. A railroad that has not chosen to contract with Amtrak or had reasonable contractual terms imposed by the Board should not be deemed a “host” and forced to assume the obligations and face the liability (without any of the contractual benefits) of a true “host” carrier.

B. Amtrak’s Attempt To Expand The Definition Of “Host Rail Carrier” Should Be Rejected.

Amtrak states that the definition of “host rail carrier” in the Metrics and Standards “is the definition the Board should employ for purposes of this investigation under Section 24308(f).” Amtrak Br. 16. But Amtrak quickly pivots, contending that “joint dispatching or joint facility agreements” could also give rise to “host rail carrier” status, subjecting railroads that fall outside the Metrics and Standards definition to liability. Amtrak Br. 17-19. Accordingly, Amtrak is forced to argue that there can be more than one “host rail carrier” on a line segment. The Board should reject this argument.

An “agreement” other than an operating agreement is not sufficient to give rise to “host rail carrier” status. *See* Amtrak Br. 17-19. Adopting Amtrak’s view would abandon the bright-line approach that only an operating agreement gives rise to “host rail carrier” status and would create confusion about which “agreements” could transform a railroad into a “host rail carrier.” It would also subject to potential liability railroads that had no idea (let alone the intention) that they would be assuming the mantle of a host railroad.

The Board should reject these arguments and adhere to the plain meaning of “host rail carrier” as reflected in FRA’s definition.

III. The Board’s Power To Award Damages Is Limited.

Section 24308(f)(2) provides that “[i]f the Board determines that delays or failures to achieve minimum standards investigated under paragraph (1) are attributable to a rail carrier’s failure to provide preference to Amtrak over freight transportation as required under subsection (c), the Board may award damages against the host rail carrier, including prescribing such other relief to Amtrak as it determines to be reasonable and appropriate pursuant to paragraph (3) of this subsection.” The plain text of this provision confirms that the Board’s authority is limited to awarding damages for failure to provide preference that causes Amtrak to fall below 80 percent for two consecutive calendar quarters. Moreover, in determining whether the failure to provide preference caused the delays, the Board must examine the extent to which Amtrak contributed to the substandard on-time performance. *See* 49 U.S.C. § 24308(f)(1) (Board must “determine whether and to what extent delays or failure to achieve minimum standards are due to causes that could reasonably be addressed by . . . Amtrak”). If Amtrak contributed to the delays, there is no basis for awarding damages against the host railroad.

Amtrak’s arguments are meritless. First, Amtrak says that because § 24308(f)(2) allows the Board to award damages “[i]f the Board determines that delays *or* failures to achieve minimum standards investigated . . . are attributable to a rail carrier’s failure to provide preference,” *any* delay may provide a basis for damages. Amtrak Br. 99 (emphasis added). Amtrak has misread the statute. The language Amtrak omits with an ellipsis—

“under paragraph (1)”—makes clear that Congress limited the Board’s ability to award damages to delays that are sufficient to give the Board jurisdiction to begin an investigation in the first place. *See* § 24308(f)(1) (“If the on-time performance of any intercity passenger train averages less than 80 percent for any 2 consecutive calendar quarters, or the service quality of intercity passenger train operations for which minimum standards are established under section 207 of the Passenger Rail Investment and Improvement Act of 2008 fails to meet those standards for 2 consecutive calendar quarters, the [Board] may initiate an investigation.”). Amtrak argues that reading the statute this way “would render Congress’s repeated inclusion of ‘delays or’ superfluous” because delays causing a failure to achieve 80 percent on-time performance would already be captured by the “failure to achieve minimum standards” provision. Amtrak Br. 99. That is wrong: As the text of § 24308(f)(1) demonstrates, Congress’s use of “minimum standards” refers to “minimum standards” for “the service quality of intercity passenger train operations.” Congress treated “delay” as a separate category—and specified that not *any* delay would give the Board jurisdiction, but only those delays that are the potential cause of Amtrak’s “on-time performance . . . averag[ing] less than 80 percent for any 2 consecutive calendar quarters.” *Id.*

Second, Amtrak acknowledges the textual limitation in § 24308(f)(1) but brushes it aside as “just . . . a trigger for the Board’s investigation.” Amtrak Br. 99. This argument is misplaced: Amtrak never explains why Congress would possibly have wanted the Board to award money damages for minor preference violations that did not cause the poor on-time performance giving rise to the investigation. In Amtrak’s view, if the Board’s

investigation revealed that Amtrak itself was responsible for its poor on-time performance, the Board could still award Amtrak money damages if it found a minor preference violation during the two consecutive calendar quarters. Congress plainly did not enact such an odd scheme.

Third, Amtrak's legislative history argument relies on a Senate report concerning the PRIIA statute. Amtrak cites a sentence saying the Board "may take appropriate action" if it finds railroads at fault for "delays." Amtrak Br. 100. That snippet of legislative history casts no light on *which* "delays" could provide a basis for a damages award.

Fourth, Amtrak concedes that the Board has discretion to determine that damages are "not appropriate in certain circumstances." Amtrak Br. 100. That is absolutely right—but it does not follow that the Board has discretion to award damages in circumstances where Congress has not allowed it. Only when a host railroad has failed to provide preference that causes Amtrak to fall below 80 percent for two consecutive calendar quarters could the Board even *consider* an award of damages.

Finally, the Board's authority to impose damages for a preference violation is limited to damages for actual, economic loss to Amtrak directly linked to a preference violation. Section 24308(f) distinguishes between "damages," which are expressly linked to "financial loss as a result of" a preference violation, and other "reasonable measures." It did nothing to alter the Board's longstanding recognition that it has "no authority to award punitive or exemplary damages." *F.W. Bolgiano & Co. v. Balt. & Ohio R.R. Co.*, 291 I.C.C. 659, 661 (1954) ("we have no authority to award punitive or exemplary damages"); *Pozzolanic Int'l v. Union Pac. R.R.*, No. 39912, 1989 WL 246868, at *13

(I.C.C. Nov. 7, 1989) (“The Commission has long held that it has no power to award exemplary or punitive damages.”); *see also Arbitration of Certain Disputes Subject to the Statutory Jurisdiction of the Surface Transportation Board*, 2 S.T.B. 564, 567 (1997) (“AAR asks that we clarify that monetary damages are limited to those that are available under the Interstate Commerce Act, thus precluding punitive or consequential damages. Such a restriction is consistent with the jurisdictional limitation of this arbitration alternative, and we are modifying section 1108.4(a)(1) accordingly.”). Any damages to be awarded for a preference violation must be limited to actual economic damages that Amtrak can prove it sustained as a direct result of the violation.

CONCLUSION

Amtrak’s view of preference is not supported by the statutory text or structure, and would lead to devastating consequences. It would represent a radical change from current and historic operating practices. The Board should hold that the preference requirement is not absolute, does not extend beyond the dispatching context, and simply requires that dispatching decisions be weighted in Amtrak’s favor. In addition, the Board should give “host rail carrier” a meaning consistent with FRA’s definition—a railroad that has an operating agreement with Amtrak. And the Board should hold that its authority to award damages is limited to awarding actual, compensatory damages for failures to provide preference that cause Amtrak to fall below 80 percent for two consecutive calendar quarters.

/s/ J. Frederick Miller Jr.
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January 22, 2025

CERTIFICATE OF SERVICE

I hereby certify that on this 22nd day of January, 2025, I caused a copy of the foregoing to be served by email on all parties of record in Docket No. NOR 42175.

/s/ J. Frederick Miller Jr.

EXHIBIT A

BEFORE THE SURFACE TRANSPORTATION BOARD

Docket No. NOR 42175

**COMPLAINT AND PETITION OF THE NATIONAL RAILROAD PASSENGER CORP.
UNDER 49 U.S.C. § 24308(f)—FOR SUBSTANDARD PERFORMANCE OF AMTRAK’S
SUNSET LIMITED TRAINS 1 AND 2**

Verified Statement of Paul B. Duncan

Introduction

My name is Paul Duncan. I am President of Duncan and Rio Grande LLC, a consulting firm in the transportation industry. I have held this position since May 2024. Previously, I served as Executive Vice President and Chief Operating Officer for Norfolk Southern Corporation, the holding company for the Norfolk Southern Railway. Ahead of this role, I have served in Operations-centric leadership roles in Transportation, Intermodal, Network Operations, Capacity Planning, and Service Design over my 22-year career in the railroad industry. I have a bachelor’s degree from Iowa State University in Transportation Logistics.

The Surface Transportation Board (STB), in its August 19, 2024, filing, posed several questions for railroads and outside parties to address, including what constitutes a “failure to provide preference to Amtrak,” 49 U.S.C 24308 (c). My experience in several key leadership roles makes me uniquely qualified to respond to that question. Specifically, I was General Superintendent Transportation for BNSF Railway in 2014 and 2015 overseeing dispatching and network operations of BNSF’s South Region from its Network Operations Center Fort Worth, TX that included Amtrak’s Sunset Limited, Southwest Chief, California Zephyr, Heartland Flyer, Texas Eagle, and various corridor services in Illinois and California operated by Amtrak. In June 2015, I became Assistant Vice President Capacity Planning for BNSF which included oversight, evaluation, and planning of mainline and terminal capacity across BNSF Railway’s network. These

duties included extensive modelling of both freight and passenger operations utilizing the industry tool, Rail Traffic Controller (RTC), which is used to mimic and model railroad operations, train schedules, and dispatching operations. In 2018, I became Vice President of Service Design for BNSF which included leadership of BNSF's Passenger Operations and Joint Facilities teams that directly worked with Amtrak on contractual performance adherence of existing services, and evaluation of service modifications. In 2022, I transitioned to Norfolk Southern as Vice President Network Planning and Operations leading NS' dispatching and network operations from its Network Operations Center in Atlanta, GA which included all long distance and corridor trains operated by Amtrak across the Norfolk Southern system. As Executive Vice President and Chief Operating Officer for Norfolk Southern beginning in 2023, I oversaw all Operations broadly across this Class 1 network.

This statement will provide perspective on the question posed by the Surface Transportation Board in its August 19, 2024 filing. Specifically, I will address the question of what constitutes "failure to provide preference to Amtrak". "Preference" is not "absolute" and should continue to be given an interpretation that reflects the statute's common sense and plain meaning reflecting the nuances and variability inherent in railroad operations. Amtrak's stricter interpretation, known as "absolute preference", would be detrimental to the nation's rail network.

What constitutes a "failure to provide preference to Amtrak" under 49 USC 24308 (c)?

49 USC 24308 (c) states "Except in an emergency, intercity and commuter rail passenger transportation provided by or for Amtrak has preference over freight transportation in using a rail line, junction, or crossing..."

In my experience leading dispatching operations at two Class 1 railroads, preference, under 49 USC 24308 (c), has been interpreted to mean that dispatchers should give greater weight to

Amtrak when resolving conflicts with freight trains and when making broader dispatching decisions across a network. It has not been interpreted or practiced, nor should it be interpreted to mean, that dispatchers must resolve all conflicts, and make all decisions, in favor of Amtrak. Amtrak's recent filing suggests that 49 USC 24308 (c) should be expanded, beyond its wording to mandate that dispatchers resolve all dispatching decisions in favor of Amtrak, in other words, that Amtrak can be accorded absolute preference. Redefining the industry understanding of 49 USC 24308 (c), and mandating dispatchers to make all decisions and resolve all conflicts in favor of Amtrak, would be, based on my experience, devastating to service, efficiency, and fluidity of the nation's rail network.

The interpretation of 49 USC 24308 (c) in my dispatching, network operations, and contractual experience with Amtrak has been to provide greater weight to Amtrak trains in dispatching decision making and execution; not to operate Amtrak with absolute priority above all other trains, movements, and dispatching decisions. The word "preference" was used, and should continue to be interpreted, as allowing dispatching professionals to take a holistic, network-focused approach rather than a binary one that exclusively favors Amtrak in every instance in which an Amtrak train movement is involved. Dispatching professionals make hundreds of daily decisions, considering and weighing multiple factors across a broad territory, to provide Amtrak with preference while also making efficient decisions maintaining fluidity for their respective territories. In my many years of experience leading dispatching teams, preference was given to Amtrak's trains, but that preference was appropriately balanced against the needs of broader network operations.

Amtrak schedules have historically been agreed to between Amtrak and the host carrier to provide dispatchers flexibility to dispatch Amtrak to receive preference and remain on schedules

while also providing flexibility to maintain efficient operations for their territory. Amtrak schedules generally have recovery time between stations or waypoints to account for some of the daily variations in railroad operations that take place, while providing dispatchers the flexibility they need. Given the inherent variability of railroad operations, it should never be an expectation that Amtrak would be insulated from all delays, even if 49 U.S.C 24308 (c) was given a more restrictive interpretation, and Amtrak was given absolute preference.

Just like Amtrak, freight railroads build schedules for their trains, specifically including intermodal and merchandise trains, as well as local trains that service the myriad single-car customer sidings and spurs across the nation's rail network. In my experience, freight railroads consider Amtrak schedules when building and calibrating freight train schedules to minimize scheduled conflicts. If an Amtrak train arrives at a host railroad out of slot, additional meet/pass conflicts can occur, just as the daily variations of freight trains not operating to their schedules can impact both passenger and other freight trains. As such, dispatchers are necessarily empowered to make on the spot decisions for their respective territories daily, reacting in real time to these variations as they occur. It is imperative that dispatchers retain the flexibility to make efficient decisions for trains operating to, from, and within their territories, while still providing preference to Amtrak trains. Limiting the decision-making flexibility of dispatchers, through absolute preference, would constrain dispatcher's ability to make the optimal decisions for their territories, particularly as they make decisions based on the nuances of daily operational variations.

Let's walk through some examples across the different types of territories in which Amtrak operates to demonstrate how preference is currently interpreted and executed, and what the implications would be if absolute preference was implemented.

In some instances, especially when Amtrak is otherwise running on time and has available recovery time in its schedule, dispatchers not bound to “absolute preference” can make dispatching decisions that may cause delays to Amtrak. These decisions will foster greater fluidity of operations that benefits all trains across a line segment, including Amtrak, while in many cases not impeding Amtrak’s schedule-keeping at all.

In single track territory, for example, a dispatcher may have two eastbound freight trains approaching a westbound Amtrak train on a single main track mainline equipped with sidings, let’s refer to them as Siding A, Siding B, and Siding C oriented east to west on our example territory. Let’s assume the westbound Amtrak train has just entered the territory east of Siding A, and the two eastbound freight trains are already on the territory approaching Amtrak from the west. Pushing the first eastbound freight train into Siding A to meet the westbound Amtrak train may delay Amtrak for approximately five minutes in its approach to Siding A. But, by making this move, the dispatcher is now able to utilize Siding B for the next opposing eastbound freight train to meet Amtrak, thus minimizing the overall delay to Amtrak across the route in meeting these two trains, as well as minimizing the delays incurred to the two eastbound freight trains. Amtrak was delayed in this scenario five minutes, but both freight trains were minimally delayed because the dispatcher had the flexibility to advance them to the most optimal meet/pass siding locations to minimize delays, and the move also maximized throughput, of the respective territory, enabling Amtrak to incur fewer delays on its route west of Siding A and even beyond Siding C. Furthermore, if this segment had approximately eight minutes of recovery time built into it, Amtrak would still make its schedule. This is the best outcome in that Amtrak preference and schedule expectations were met, delays to the freight trains were minimized, and thus the overall capacity and velocity of the territory was maximized.

Let's now consider the impact that operating to Amtrak's proposed absolute preference would mean using our same example. If in this scenario, the dispatcher was held to absolute preference, as Amtrak is suggesting, the dispatcher would have lined the first eastbound freight train in the above example in to Siding B, rather than Siding A. This would also mean that the second freight train had to meet Amtrak at Siding C versus Siding B. Amtrak would arrive eight minutes ahead of time off the territory, having not been delayed but still beating its recovery time for the territory in this example. When Amtrak arrives at a station, it cannot leave early, it must wait for its scheduled departure time. In effect, it burns its recovery time idling. In this scenario, the dispatcher was unnecessarily limited in their optimal decision making for the territory by absolute preference. The delays to both freight trains were much greater, because both eastbound trains were not allowed to advance as far as they could have across the territory, when compared to the previous example, and thus had to sit in sidings dwelling for much longer than the previous example and incurred longer run times to traverse the territory. Passengers on Amtrak did not ultimately do any better than the earlier scenario because the Amtrak train, having arrived ahead of schedule because it did not consume all recovery time allotted to the segment, will still need to hold at its next station to depart to the timetable. This was not the best outcome for the territory. The mainline capacity of single-track territories is a direct function of running times between sidings and across territories and time dwelling in sidings, which ultimately determines a territory's capacity. In this example in which the dispatcher was limited in their decision making to absolute preference for Amtrak, territory capacity was significantly reduced because these trains were not allowed to advance to their most efficient meet/pass sidings. This is one of the many ways dispatching Amtrak with absolute preference could degrade the capacity, velocity, and service of the nation's rail network.

Let's also consider the follow-on impacts of the above example. The binary decision to displace the train meets in our example from Sidings A and B to Sidings B and C, respectively, could have a cascading impact across this specific territory, and adjacent territories, as further meets/passes unfold. For example, because the second eastbound train had to take Siding C versus Siding B (the less optimal move), that freight train will now need to take Siding A for another meet that it would have potentially avoided had the most efficient meet taken place previously (taking Siding B versus Siding C). Again, single track railroad capacity is based on run times between sidings and siding dwell. As a result of the train dispatcher being limited to absolute preference, the overall capacity and velocity of this territory was degraded.

Broadly speaking, it is these types of examples, when viewed through the larger lens of a network approach in which hundreds of meets are taking place daily on host railroads with Amtrak trains, that illustrate absolute preference will ultimately degrade capacity, velocity, and service on the nation's rail network. These degradations will not only impact freight trains but will also delay passenger trains operating across these territories given the impact that one train meet now has on a territory several hours from now. These types of follow-on impacts, which would flow from requiring dispatchers to provide "absolute preference," would cause significantly greater delay and harm to the rail network and other users than the current, more flexible interpretation of preference.

Beyond single main track line segments with sidings, there are other operating schemas that have been brought up in previously filed statements. One of the arguments made by Amtrak is that it should not be beholden to UP's directional running, specifically between Beaumont and Houston. Following the merger of Southern Pacific into UP, it was evident that in certain geographies in which SP and UP had parallel routes, capacity, resiliency, and service consistency could all be enhanced through some directional running. Taking two single track line segments,

that had previously been operated as two single track bi-directional railroads and repurposing them to operate instead as two single track directional railroads, allows a host carrier to significantly reduce opposing train meets. By doing this, line capacity in this segment is not only increased, but delays Amtrak would otherwise incur have been avoided or reduced. This is not something Amtrak should dissuade host carriers from doing.

Furthermore, UP outlined in its statement that it has made significant investment in double-tracking portions of the Sunset Limited's route, namely, formerly single-track segments west of El Paso, TX to southern California and portions in Texas. Amtrak asserts that this should provide Amtrak the ability to overtake UP freight trains, something that would again be considered absolute preference versus the current industry interpretation of preference under 49 USC 24308 (c). Double track investment, on previously single-track mainline segments, is meant to increase capacity, velocity, and consistency for all trains across a line segment. Single track line segments ultimately have a capacity ceiling. Double-track investment in these constraints increases capacity in these line segments. In some cases, adding a second main track at a location may reduce delays caused by industry switching taking place off the mainline in that segment. In other situations, that additional main track may be needed to serve new single-car customers, or other customer facilities that have opened along the line segment. Freight and Amtrak trains both benefit from single track to double track investments generally because of a net reduction in overall meet/pass conflicts from the previous single-track setups.

But double tracking mainlines, from previous single-track segments, comes with a new set of challenges, specifically for Amtrak trains. As the single-track examples above allude to, in a preference environment on single-track, freight trains are generally taking sidings for Amtrak's passage to honor preference. Once a single-track railroad is converted to double-track, those

opposing freight trains are now generally running on the opposing main track, reducing the number of opposing meets Amtrak incurs. A different phenomenon now emerges, though. Instead of Amtrak running across a single-track railroad, generally with opposing trains in sidings, it is now moving in the flow with freight trains in a like direction (westbound Amtrak train running in flow of westbound freight trains). Amtrak trains have several inherent advantages to freight trains that allow them to catch up to freight trains in these flows, namely their much lighter weight, higher horsepower/ton ratios, and commensurate higher maximum authorized speeds across mainlines (generally 79 MPH for passenger versus 70 MPH for freight) and through curves. As a result, Amtrak conflicts with freight trains and resulting delays are not completely mitigated with single-track to double-track investments but instead transition from opposing meet/pass delays to those now caused from catching up to slower moving freight trains and having to run at reduced speeds following those freight trains.

Amtrak argues that the host carriers should thus allow Amtrak to overtake these slower freight trains by utilizing the other mainline in double-track territory to run around these freight trains. The challenge that railroads have in allowing Amtrak to overtake freight trains, moving in the like direction, on double-track emerges when there are simply too many trains moving on the opposite track, in the opposite direction, to allow Amtrak to crossover to the opposing track to run around a train. Another challenge with overtakes is the sheer distance and time it takes for an Amtrak train to overtake a freight train. The best analogy for this is to think of a two-lane highway in which nearly all the traffic is semi-trucks with Amtrak represented as a sports car, given its lighter weight and greater speed capabilities. In this scenario, the sports car (Amtrak) will inevitably catch up to a semi-truck (freight train) moving in the same direction. The limiting factor in getting around the semi-truck becomes the volume of truck traffic coming the other way in the

opposing lane. Just as on two-lane highways, there are only certain locations in which these overtakes can take place. On the railroad, crossover switches are typically placed many miles apart. Crossovers in double-track territories are primarily used for scheduled events, such as maintenance of way work and local single-car industry service, and unscheduled instances, including working around service interruptions (such as mechanical failures). The opportunity for an Amtrak train to overtake a freight train will be limited by the number of crossovers installed on that segment, the availability of the other track, and the runtime between the crossovers for Amtrak to crossover, run on the opposing main to the next crossover, and then return to its original mainline. It should be noted that even when overtakes are able to occur on double-track territory, Amtrak trains will generally have to slow down in order to pass through the first set of crossovers, and then slow down again for the next set of crossovers, in order to return to their directional flow mainline (mainline crossovers generally have a maximum speed less than the mainline segments themselves). This also means that even when host carriers attempt an overtake, Amtrak will likely still see a delay, incidentally, that it attributes to the railroad.

Overtakes eat up a tremendous amount of line capacity and velocity because the opposing train flow must be shut off during these overtake scenarios, negating the capacity benefit from having double-track which is meant to allow the free-flowing of trains in opposing directions. Stopping these flows to facilitate overtakes reduces line capacity on double-track mainlines considerably and creates greater inconsistency on the line segment as a whole and is detrimental to the velocity and consistency of the nation's rail network. Just as our examples illustrated above on single main track segments, an overtake can have significant ripple effects on a territory, particularly one that is a mix of single and double-track. Amtrak schedules on double-track, or mixed double- and single-track territories, should be built, and the expectations set, so that a

minimal amount of overtakes can be expected. As mentioned earlier, schedules should be constructed in such a way that recovery time accounts for some level of Amtrak following other freight trains between stations. This allows velocity and throughput on the territory to be reasonably balanced against Amtrak preference in double-track territories given the significant impact that facilitating an overtake by Amtrak has on the opposing mainline train flow. If freight carriers were not allowed to reasonably benefit from their investments in double-track, crossovers, and other rail infrastructure, then investment in these valuable capacity-expanding options would dry up.

Beyond single and double-track territories in which Amtrak is operating, there exist several dense, multi-track corridors across the nation's rail network in which Amtrak and freight railroads are joined with other passenger agencies, namely commuter rail entities. Amtrak is generally operating greater frequencies of trains in these corridors, intermixed with elevated train flows by commuter agencies that are particularly dense for morning and evening rush hours, as well as the needs of the freight railroads. Just as described on single and double-track segments, the impact that adjusting Amtrak preference to an absolute preference standard would greatly impact flows in these dense multi-track corridors.

For example, let's say that Amtrak operates multiple trains per day across a 3-main track mainline, originating in a large metropolitan area on the east end of the territory with multiple stations shared by a commuter agency and freight railroad that are located west for approximately 40 miles. In our example, during the evening rush hour, the commuter agency has scheduled "all-stop" local service westbound on main track 1 to serve smaller commuter station volumes; it is utilizing main track 2 for westbound "express" service to communities farther down the line with dense, one or two stop destinations for commuters; and it is utilizing main track 3 to "flip"

commuter train sets back in to the metropolitan area to handle rush hour demands. During these timeframes, commuter trains, Amtrak trains, and freight trains are scheduled to ensure that the demand of all carriers can be met by facilitating the operation of increased train counts for the commuter rush. That may be done in this example, by generally running westbound Amtrak and freight trains on main track 2 and eastbound Amtrak and freights running on main track 3, all built around the tight needs of the commuter agency. If in our example, an Amtrak train departs late from the metropolitan station, dispatchers will do their best to run Amtrak to schedule, but just as in our double-track example above, despite being accorded preference, Amtrak may have to run behind another train because its running “out of slot” against the plan that otherwise would have allowed it to run at track speed “in its slot” to plan.

If a dispatcher in this example operates in a densely traveled corridor and is required to provide Amtrak with its vision of absolute preference, serious downstream effects are likely. By giving Amtrak, the benefit of each previous dispatching decision, for example, freight trains are likely to be unable to clear the mainline in time within their maximum hours of service, and they now must stop on the mainline during rush hour period. Trains expiring on their hours of service, because of delays across line of road, have a tremendous impact on capacity. Even when relief crews are available, those crews must still get to the train. Sidings and mainlines holding trains with expired service limit the ability of dispatchers. In this and other ways, absolute preference would negatively impact the velocity and fluidity of line segments. Absolute preference will have cascading impacts in dense corridors that can not only delay commuter and freight trains, but also other Amtrak trains. Increased passenger train interference delays (i.e. delays in which an Amtrak train is the cause of another Amtrak train delay), as well as commuter train and freight train

interference will likely occur because dispatchers were denied the flexibility they need to avoid and minimize cascading delays.

Furthermore, host railroads should maintain flexibility to adjust to conditions if Amtrak trains arrive late to the territory of a host railroad. If a host railroad has built an operating plan to deliver preference, partially through the mutual agreement on a specific schedule to Amtrak, and Amtrak trains arrive out of the slots they need to achieve the plan, the host carriers should have the flexibility to deliver preference while calibrating the tactical plan across its territory given the exception of this late arrival, rather than being handcuffed by an untenable requirement to give Amtrak absolute preference.

These scenarios and examples on single track, directional, double track, and multiple-main track territories demonstrate broadly for the nation's rail network why it is imperative that preference remain as it has consistently been interpreted by the rail industry. It is critical that the interpretation of preference not become absolute as Amtrak advocates. Given the variability in daily railroad operations, delays to Amtrak trains will never be eliminated, even under "absolute preference". Dispatchers must retain the flexibility to manage territories, making the balanced, efficient decisions for moving passengers and freight, while honoring Amtrak preference. Railroads are network businesses and must be managed as such to maintain the competitiveness, consistency, and viability of the nation's rail network.

These examples above are simplified to outline the inherent differences between allowing dispatchers the flexibility to make the best decisions for their territories, while still being able to provide Amtrak preference; versus being limited in their decision making to an absolute interpretation of preference. The complexities of the nation's rail network are far greater in scale than the above examples. If dispatchers were limited to a stricter interpretation of preference,

multiple line segments across the nation's rail network would suffer degradations in velocity and capacity as delays, such as the above, cascade across the line segments in which Amtrak trains are operating. It is imperative that dispatchers retain the flexibility to weigh all variables when making decisions across their respective territories.

Operating practices and schedules for passenger trains have allowed flexibility in shared networks because of the interpretation of preference.

Next, let's consider how railroads have operated passenger trains, and sought to calibrate passenger train schedules, in accordance with 49 USC 24308 (a) and (c).

In my experience, railroads try to calibrate both passenger and freight schedules to account for the variability of railroad operations so that resulting schedules are consistently achievable. It has always behooved host railroads to work with Amtrak in building passenger train schedules that are consistently achievable and appropriately account for the variability of daily rail operations. Schedules built with inadequate recovery time fail to provide sufficient flexibility, to account for the variability in railroad operations, while schedules built with poorly allocated recovery time can result in assets sitting, or even worse, trains taking up valuable mainline capacity. In many cases, Amtrak stations are located on mainlines meaning extra recovery time is consuming mainline capacity. It remains an imperative that host railroads and Amtrak agree on passenger train schedules, and that every segment Amtrak is operating across be under the umbrella of an operating agreement reflecting those expectations.

What should constitute a failure to provide preference?

Under the ordinary understanding and meaning of "preference" under 49 USC 24308 (c), Amtrak trains must be given greater weight in dispatching decisions. This does not require that all dispatching decisions be made in Amtrak's favor. Thus, a failure to provide "preference" correctly is something that must be determined under the circumstances of the situation. Non-compliance

with preference should only be found if a pattern is demonstrated of dispatchers failing to accord greater weight to Amtrak in dispatching.

Train dispatchers are making decisions across their territories, giving Amtrak trains the preference they are due in the context of the many freight trains serving the needs of the host railroads' freight customers. Putting unnecessary, and greater restrictions, on dispatchers as some are suggesting will put train dispatchers in an untenable position of being limited to narrow, sub-optimal decisions, rather than making the best decisions for our nation's rail network. As outlined in prior examples, absolute preference for Amtrak trains would degrade territory capacities and velocities driving greater inconsistency in the nation's rail network. Decisions made, in accordance with Amtrak's extreme view of "absolute preference" as Amtrak suggests, would have cascading impacts well after Amtrak passes through a territory.

In this statement, I have outlined the definition, my interpretation, and dispatching considerations for "preference" for Amtrak operations across host railroads. It is imperative that 49 USC 24308 (c) continue to be interpreted as providing the nation's train dispatchers and host railroads flexibility in delivering preference, rather than adopting an absolute interpretation of preference. Mandating absolute preference would have tremendous negative consequences on the capacity, velocity, and consistency of operations on the nation's rail network.

VERIFICATION

I, Paul B. Duncan, declare under penalty of perjury that the foregoing is true and correct and that I am qualified and authorized to file this verified statement.

Executed on January 22, 2025

A handwritten signature in black ink that reads "Paul Duncan". The signature is written in a cursive, flowing style.

Paul B. Duncan
Duncan and Rio Grande LLC
5473 Blair Rd Ste 100 PMB 492955
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EXHIBIT B

BEFORE THE SURFACE TRANSPORTATION BOARD
Docket No. NOR 42175

**COMPLAINT AND PETITION OF THE NATIONAL RAILROAD PASSENGER CORP.
UNDER 49 U.S.C. § 24308(f)—FOR SUBSTANDARD PERFORMANCE OF AMTRAK’S
SUNSET LIMITED TRAINS 1 AND 2**

Verified Statement of John H. Friedmann

My name is John H. Friedmann. I am a 30-year leader in the railroad industry specializing in operations planning, freight-passenger projects and strategy. I am an advisor to the rail industry and serve on the board of directors at an independent regional railroad.

I spent 28 years at Norfolk Southern from 1994 to my retirement in 2022, serving as Vice President of Strategic Planning, Vice President of Network Operations and Vice President of Network Planning and Operations.

As Vice President of Network Operations, I established Norfolk Southern's first consolidated Network Operations Center, overseeing systemwide dispatching and operations support functions. I created Norfolk Southern’s operating plan while Vice President of Network Planning and Optimization, managing the scheduled interactions between freight and passenger (Amtrak and commuter) operations. I also supervised Norfolk Southern’s operating relationship with Amtrak from 2018 to 2022. During my tenure as Vice President Strategic Planning, I worked with Amtrak's state partners to launch three successful new passenger routes over Norfolk Southern lines and to invest in rail infrastructure to minimize freight-passenger conflicts in three other states. I also supervised internal and external Rail Traffic Controller (RTC) simulations and other infrastructure planning to accommodate the proposed expansion of freight and passenger service.

In addition to my roles at Norfolk Southern, I served two terms as a representative of the railroad industry on the Surface Transportation's Railroad-Shipper Transportation Advisory Council (RSTAC), providing advice on policy and strategic matters to Board members and staff.

I am submitting this statement on behalf of the Association of American Railroads (AAR) to explain and give examples from my experience of how railroads manage the operation of shared passenger and freight rail networks; how dispatchers use preference as an important (but not the sole) factor in making operational decisions; and the likely operational degradation that would result from implementation of Amtrak's proposed "absolute preference" proposal.

1. Host railroads use a variety of tools to efficiently and expedite passenger trains

Railroads use many tools to plan for passenger trains operating across the network, even before preference comes into play.

The service design process is a critical tool for planning passenger train operations. In my opinion, passenger train and freight train schedules must be harmonized to minimize schedule conflicts and train delay. This arrangement of schedules in the service design process is critical because Amtrak schedules are linked to the on-time performance metrics in the Amtrak-host railroad contract. Realistic and achievable Amtrak schedules are essential for measuring and enforcing train performance standards. These schedules must account for infrastructure limitations, rail volume variation, and real-world operating conditions.

In my experience, one way that host railroad service design groups plan for passenger movements is by scheduling freight trains to depart from yards after a passenger train has passed. Planners also strive to avoid conflicts between local trains serving on-line customers and passenger trains, because locals can occupy the main track for extended periods and often take considerable effort to "clear up" out of the way of a passenger train. But the timing of local trains can be dictated

by the hours in which customers are capable of accepting rail service, so the elimination of all conflicts as called for in Amtrak's absolute preference proposal is not feasible. The timing of local service is often imprecise because daily customer volumes vary, increasing additional potential conflict directly with passenger service and indirectly with through freight trains that could affect passenger trains regardless of preference.

Infrastructure characteristics must also be taken into consideration in service planning. For example, some locations have separate pocket or "station" tracks at passenger stations for trains to load or unload passengers, which enables freight trains to pass while passenger trains are stopped. Designing realistic schedules in light of infrastructure and other operational constraints is often just as important as dispatching preference to operate passenger trains in accordance with host-Amtrak contracts.

2. Dispatching decisions take many factors into account, including passenger-train preference

Amtrak's proposed absolute preference would significantly limit the dispatcher's decision-making ability and reduce the overall quality of rail service, including even Amtrak's own service. Daily tactical dispatching decisions are influenced by many factors, including but not limited to preference. These factors may include track availability, territory characteristics, maintenance schedules, and coordination with freight interchange partners. Effective dispatching balances these considerations to optimize overall network efficiency while providing preference to Amtrak. The practical realities of rail operations require a more nuanced approach to dispatching.

Railroad dispatching is, at its heart, a decision-making process. Many railroads (including Amtrak) have invested in new sophisticated dispatching systems, network control centers built with dispatchers at their core, and decision-support tools to help dispatcher decision-making. These tools are necessary because the nature of railroading requires adapting to unplanned events

and circumstances to restore conformance to the operating plan while moving trains as expeditiously as possible.

Just a small external event, such as a truck damaging a crossing gate, can significantly affect rail operations. Instead of trains moving through the crossing at authorized speed, the damaged gate means trains must approach at restricted speed (usually less than 20 mph) prepared to stop, and trains may need to stop and “flag through” the unprotected crossing. Even if the crossing gate is repaired before a passenger train passes through, the freight trains ahead of the passenger train have been delayed and may now not clear into a siding or yard before the passenger train catches up to them. The dispatcher has to decide how to best clear the congestion, not only for the passenger train involved but for the overall operation of the network segment. The dispatcher may decide the best course of action would have the passenger train follow a delayed freight train for 25 minutes before it can pass. This causes a minor delay to the passenger train and may appear to be a lack of preference for the passenger train to an unsophisticated observer. The dispatcher could avoid this appearance by holding the freight train and allowing the passenger train to get around with less delay, but the additional delay to the freight train crew would cause the freight train crew to run out of legal hours of service to operate the train. Even with relief crews available, this renders the freight train immobile in the siding while a new crew is called and transported to the train, causing additional follow-on congestion and delays that affect the return of the passenger train over the same line later that day. In this case, the dispatcher gives Amtrak preference – the dispatcher gives more weight to Amtrak’s interest than the freight train’s interest – but in light of all of the facts and circumstances – that is, the downsides of the freight crew running out of legal hours of service before reaching its crew change point – the balance still swings toward requiring Amtrak to follow the freight train.

In my experience, dispatchers afford passenger trains preference across the rail network, but that preference is relative to the other trains operating on the network and the operating situation at the time. If Amtrak is one of only a few trains operating on a line segment with few unexpected disruptions, the dispatcher may be able to easily run Amtrak trains without significant effect on the broader network. When the network has a large number of trains or is facing disruptions, the dispatcher necessarily considers network conditions and traffic while still affording Amtrak preference. Because it is necessary to take operating conditions into account, giving Amtrak preference should not be understood to mean that Amtrak will never experience delay.

For instance, when Amtrak train is proceeding across a busy territory it could be run through a siding to meet a waiting freight train. Using the slower siding may not appear to afford Amtrak preference and would be reported as a host-responsible delay under Amtrak's conductor-based delay reporting system. But the dispatching decision may actually make for a faster meet by allowing the freight train to hold the main line instead of moving slowly into the siding while Amtrak waits. Far from being an example of failing to provide preference, this is an example of a dispatcher acting in Amtrak's best interest. Dispatchers make these types of critical tactical decisions many times during a shift, considering a variety of unique factors that defy the simplistic absolute preference rules proposed by Amtrak.

Amtrak's proposed absolute preference not only would hamper effective network management, but seems at odds with technological advances in train dispatching. Railroads continue to advance the use of computer-aided systems to assist human dispatchers. Some of these systems calculate the follow-on impact of dispatch decisions even beyond the dispatcher's immediate territory. Recommendations from computer-aided dispatching aids often seem counter-intuitive because these tools can assess far-reaching impacts. Dispatchers may choose to delay a

train now to avoid significantly more delay later based on the information provided by a computer-aided system. But Amtrak seeks to disregard this improved data through a set of rules that force decisions based solely on local circumstances, to serve only Amtrak's specific short-term benefit.

For example, the computer-aided dispatching tool may support holding a freight train in a position that blocks access to an Amtrak passenger platform, which Amtrak would claim is a violation of their proposed absolute preference. But the dispatcher could be planning for efficient Amtrak movements by positioning the freight train to allow opposing trains to pass and clear off the district ahead in preparation of Amtrak's run over the territory. This could optimize overall network performance while also minimizing delay to Amtrak trains.

3. Amtrak's proposed absolute preference threatens the functioning and effectiveness of the United States railroad network

Even in a best-case scenario, I anticipate that affording absolute preference to Amtrak would reduce line capacity, service levels and average train speeds. For example, dispatchers would have freight trains use sidings further away from approaching passenger trains, increasing delays to the freight trains and reducing the number of sidings available for other trains, thus reducing dispatcher's options for efficiently resolving other train meets. The greater line capacity required for passenger trains – de-facto passenger “windows” – would reduce the overall capacity of the line, and force freight to be rerouted (to other lines, railroads or modes) or absorb unlimited delays. Commuter passenger service, not covered by Amtrak's assertion of preference, could suffer similar consequences. Local freight service would pay an exceptionally heavy price since it can consume large amounts of track capacity and generally has lower priority than through freight and passenger trains.

For example, Amtrak operates an average of seven trains every day on Norfolk Southern's Lynchburg – Manassas, Virginia route, an important part of Norfolk Southern's north-south

corridor through the Commonwealth of Virginia. Despite the presence of priority Norfolk Southern intermodal trains on this single-and double-track line, Norfolk Southern has accommodated new Amtrak trains because of improved infrastructure funded in part by the Commonwealth of Virginia and schedules cooperatively created between Norfolk Southern and the Commonwealth. According to Amtrak, “Virginia has seen the fastest growth in frequencies and ridership thanks to consistent and substantial investment in intercity passenger rail with the Commonwealth.”¹ But Amtrak’s absolute preference proposal would reduce overall service and line capacity on this important corridor, especially since several of the passenger trains are scheduled to meet each other on the segment (which would greatly limit any freight movement near the passenger meet points). Based on my experience, absolute preference would also reduce Norfolk Southern’s ability to schedule through freight trains, and limit its ability to service customers on this segment.

I expect that the consequences of absolute preference would be far worse on heavily-used lines. On busier main lines such as Union Pacific’s *Sunset Limited* route, the dispatcher must actively manage the operations of numerous trains across the territory to accommodate competing objectives: on-time train performance (including recovery for already-late trains); track time for local trains to service on-line customers; maintenance of way inspection and repairs; monitoring crew on-duty time; and compliance with mandatory instructions such as slow orders. Dispatchers must also manage the response to and consequences of unplanned events such as locomotive failures, severe weather or grade-crossing incidents.

¹ Amtrak, *Amtrak Fact Sheet, Fiscal Year 2023, Commonwealth of Virginia*, p. 4 (Mar. 2024), available at: <https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/statefactsheets/VIRGINIA23.pdf>.

To implement Amtrak's proposed absolute preference, dispatchers would need to focus on passenger trains almost exclusively to the detriment of freight operations, customer service, and necessary maintenance. For example, while dispatchers try and minimize the disruption from track maintenance by enforcing agreed-upon time windows, an off-schedule Amtrak train could disrupt or even cause cancellation of a day's maintenance work simply to provide absolute preference.

While Amtrak's principles of absolute preference are couched in terms of a single passenger train, the consequences of absolute preference grow exponentially with the number of Amtrak trains on a single line. Not only do freight trains have to meet or be passed by multiple Amtrak trains, but those Amtrak trains have to meet each other: one pair of Amtrak trains produces one potential passenger-passenger meet, while three pairs create nine potential meets. This multiplier effect dramatically reduces freight capacity (and capacity for commuter trains if present on the line) under an absolute preference regime. The margin of comfort required to produce absolute preference on a line with multiple daily frequencies would seriously impair the movement of non-Amtrak trains and the performance of the overall network. Rail "gridlock" -- where the volume of stopped trains overcomes the capacity of the line segment to hold them -- would develop, crippling freight operations and paradoxically making it impossible for passenger trains to be provided preference until the congestion is cleared.

Amtrak's future plans are heavily focused on expanding service on freight-railroad corridors.² Three corridors cited by Amtrak for future expansion: San Antonio – Houston, Tucson – Phoenix, and Phoenix – Los Angeles would use portions of the Sunset Limited Route, adding multiple daily passenger train frequencies.

² See Amtrak, *Amtrak Connects US*, available at: <https://media.amtrak.com/amtrak-connects-us/>.

In addition to harming existing Amtrak service, in my experience instituting absolute preference would make it much harder and more expensive to expand Amtrak service on freight railroads' routes. Passenger service expansions are usually funded by states, often with federal support, who then contract with Amtrak to operate the service. As part of expanding service, states agree with freight railroads on the additional infrastructure necessary to accommodate new passenger service based on agreed-upon schedules and while protecting freight and other passenger service. If absolute preference was the standard – essentially a near-zero standard for delay to Amtrak trains – the amount of infrastructure required to avoid Amtrak delays and protect other service would be substantially larger. As an experienced planner for rail capacity improvements, I would expect the infrastructure required for new service -- and the resulting cost -- to be multiples of that required based on the current preference standard.

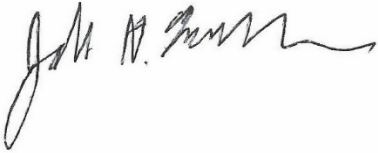
For example, I negotiated agreements on behalf of Norfolk Southern with the Commonwealth of Virginia that allow the reintroduction of passenger service to Roanoke, Virginia in 2017, service that was doubled in 2022. Compensation for the transaction reflected the freight capacity that would have otherwise been available that Norfolk Southern committed to passenger service in the region. Norfolk Southern and Virginia have agreed to extend this service further westward, despite the trains having to negotiate Norfolk Southern's busy Roanoke terminal complex. This innovative and cooperative process would have been much more difficult, time consuming and expensive for the Commonwealth if Norfolk Southern were required to meet Amtrak's proposed absolute preference requirement.

In short, I believe Amtrak's absolute preference proposal would harm the efficient operation and service provided on the nation's rail network and would stifle the future expansion of intercity passenger trains.

VERIFICATION

I, John H. Friedmann, declare under penalty of perjury that the foregoing is true and correct and that I am qualified and authorized to file this verified statement.

Executed on January 22, 2025

A handwritten signature in black ink, appearing to read "John H. Friedmann", with a stylized, flowing script.

John H. Friedmann
1065 Peachtree St.
Atlanta, GA 30309

EXHIBIT C

BEFORE THE SURFACE TRANSPORTATION BOARD

Docket No. NOR 42175

**COMPLAINT AND PETITION OF THE NATIONAL RAILROAD PASSENGER CORP.
UNDER 49 U.S.C. § 24308(f)—FOR SUBSTANDARD PERFORMANCE OF AMTRAK’S
SUNSET LIMITED TRAINS 1 AND 2**

Verified Statement of C. Tyler Dick, Ph.D., P.E.

My name is C. Tyler Dick, and I am an Assistant Professor in the Department of Civil, Architectural and Environmental Engineering at the University of Texas at Austin. I have 25 years of experience in the planning and design of railway capital and capacity expansion projects, conducting academic research on railway systems, and lecturing on railway design and operations topics. Prior to joining UT Austin in 2022, I spent ten years as Research Associate Professor, Lecturer and Principal Research Engineer with the Rail Transportation and Engineering Center (RailTEC) at the University of Illinois Urbana-Champaign (UIUC). I hold a B.Sc. in Civil Engineering from the University of Manitoba, and a M.S. and Ph.D. in Civil Engineering with a focus on railway transportation from UIUC. My Doctoral dissertation work specifically investigated the impact of operational variability on the delay performance and capacity of railway mainlines, terminals and networks. In addition to being a licensed Professional Engineer in the State of Texas, I am currently Chair of AREMA Committee 16 (Economics of Railway Engineering & Operations), outgoing Chair of the TRB Joint Subcommittee on Railway Capacity and Performance, Chair of the ASCE Rail Transportation Committee, and am on the board of the International Association of Railway Operations Research.

For the past 13 years, starting at UIUC and now at UT Austin, I have supervised a team of graduate students engaged in research on railway operations, capacity and alternative energy topics for a range of Class 1 railroad, agency and rail industry supplier sponsors. Many of these students

have gone on to careers in railway operations planning and management with freight and passenger rail operators, agencies and consultants. Together with my students, I have published peer-reviewed academic research on the interactions and train delay impacts of passenger trains operating on freight rail corridors. This published academic research was conducted with industry-standard tools, such as Rail Traffic Controller (RTC), to document and quantify the operational impacts of assigning higher priority and preference to different train types, including increases in train delay and variability that negatively impact both passenger and freight train performance, and overall rail network fluidity and reliability.

Given this academic background, I am submitting this statement to offer an Expert Opinion on the high-level impacts of granting “absolute preference” for intercity passenger rail (i.e., “Amtrak trains”) on the operations of the freight rail network.

To be consistent with the published academic railway operations research literature, this statement uses the term “priority train” to describe a train whose delays are more heavily weighted when developing a train operating or dispatching plan that minimizes overall weighted train delays. This weighting can be done conceptually through the real-time actions of a train dispatcher, or more explicitly by the algorithms that emulate human dispatching decisions within rail corridor simulation and timetable optimization software. In these tools, a “higher-priority train” is assigned a “higher priority” by weighting its delays with a larger coefficient than a “lower-priority train” that is assigned a “lower priority” by weighting its delays with a smaller coefficient. In this manner, assigning a priority to a specific train (i.e., determining the relative weighting of its train delay) is distinct from showing a specific train routing preference at each conflict point with other trains. Assigning a train higher priority is a relative concept that increases the likelihood

it will be favored in any given dispatching decision, but does not guarantee that it will always be favored at every conflict with other trains along the route.

Historical Perspective on Absolute Train Preference

As noted in the seminal railway operating text “Rights of Trains”, since railroads in the United States first began operation of more than one train on a given stretch of track in the late 1820’s, provisions had to be made to prevent opposing movements from colliding.¹ In resolving these conflicts between train paths, the operating rules also had to determine which train had routing preference at junctions, crossings and passing sidings. In the early decades of railroading, with limited ability to communicate with a moving train and before the advent of electronic (telegraph) communication between stations along a rail line, the printed timetable was the only tool available to ensure the safe meeting or passing of trains. Under these early timetable-only operations, a train was required to wait at a station where a meet with another train was shown by a time listed in the schedule of the timetable. To determine routing preference, the timetable created a strict hierarchical class system, with first-class trains having “rights” (to the main track) over second-class trains, and second-class trains having rights over third-class and lower-class trains, etc. Where opposing trains of equal class were scheduled to meet, the timetable granted “rights” by designating that all trains moving in one operating direction were superior to trains of equal class moving in the opposite direction. Out of necessity, through this early timetable-only system, first-class trains in the superior direction were effectively granted “absolute preference” over all opposing trains and all lower-class trains moving in the same direction.

While this timetable-based hierarchical system of “absolute train preference” was effective when only a handful of trains were operated on a given line, its inflexibility soon became

¹ Josserand, P. 1957. *Rights of Trains*, Fifth Edition. Simmons-Boardman Publishing, New York, NY.

problematic as traffic density increased. By the timetable rules, inferior trains waited at the indicated meeting point until expected superior trains arrived, even if they were behind schedule. If a superior train had a mechanical failure, was held for livestock crossing the tracks, or experienced other substantial delay, many inferior trains could be waiting hours for it at scheduled meeting or passing stations. Inferior trains could only proceed past the designated meeting point at walking speed with advance flag protection against the overdue superior train. These delayed trains then failed to reach their own assigned meeting points at scheduled times, creating a series of cascading train delays and rendering the timetable useless.

The development of the electronic telegraphic communication between wayside train stations in the 1840s brought an end to operations with the delay-prone timetable-only system of absolute preference. In 1851, Charles Minot, a superintendent of the Erie Railroad, was on a westbound train stopped at Turner, NY to wait for a much-delayed superior eastbound train. Under the timetable-only system of absolute preference, the westbound train faced a minimum one-hour delay before being allowed to proceed at walking speed under flag protection. Impatient, Minot telegraphed to the next station, 14 miles ahead in Goshen, NY, to see if the superior train had departed. Upon confirming that the superior train had yet to arrive, Minot ordered the agent at the next station to hold the superior train at Goshen, and then ordered the conductor of his own train to depart Turner and proceed to meet the superior train at Goshen. In issuing these “train orders” to manually move the meeting point between the trains to a different station from that specified in the timetable, Minot took away the absolute preference of the superior train to minimize delay to his own inferior train. The resulting system of “timetable and train order” operations was soon codified in the operating rules and adopted by railroads across the US.

The ability of a train dispatcher to use a train order to override the superiority of a train conferred by the timetable was considered revolutionary enough to commemorate with a trackside monument along the Erie Railroad because of its impacts on railroad safety, reliability, capacity and economics. Eliminating the timetable-only system of absolute preference improved safety and reliability because inferior trains were no longer faced with the task of carefully timing their departures to meet superior trains as planned. Train crews were often presented with the dilemma of embarking on a risky race to meet a superior train at the appointed location and time, or stopping to wait at an earlier passing siding and incurring additional train delay. Dispatchers now had the ability to arrange the meet in such a manner to minimize the delay to both trains. Capacity was increased because, unlike the rigid timetable-only operations, by issuing train orders, “extra” trains could now be more flexibly operated to handle increases in traffic without issuing a new timetable. Finally, to help mitigate the effects of operating with the delay-prone timetable-only system of absolute preference, railroads resorted to installing double track and redundant passing sidings, greatly increasing the capital cost of railroad construction. Providing the train dispatcher with tools to mitigate these delays and dynamically arrange train meets made it much more feasible to operate a single-track railroad with a minimum of passing sidings, reducing the cost of subsequent railroad construction and facilitating the development of a more widespread network of rail lines to serve corridors with lower traffic volumes.

These benefits of eliminating the timetable-only system of absolute preference and granting dispatchers freedom are raised here not as mere historical anecdotes, but because they give insight into the potential implications of giving specific trains “absolute preference” over other trains. Similar to the historical experience, as will be demonstrated later in this statement through references to published railway operations research literature, imposing “absolute preference” to

favor certain trains at every train meet and overtake conflict will negatively impact reliability as measured by train delay, decrease capacity, and correspondingly require additional investment in mainline track infrastructure.

Train Priority and Dispatching Preference Decisions

With the widespread adoption of train orders in the 1850's, the concept of "absolute preference" between trains by rule ceased to exist nearly 175 years ago when train dispatchers gained the ability to more flexibly and efficiently plan train meets and overtakes according to train priority and the dynamic conditions on a rail corridor. While train classes and times in the timetable still provided a default operating plan in the ensuing decades, the "right" or "movement authority" conferred by the train dispatcher was now superior to that granted by class or direction via the timetable, giving the dispatcher the ultimate freedom and authority to regulate the movement of trains in an optimal manner. This ability of the dispatcher to make decisions independent of train class or priority has been a consistent foundation as train order operations gave way to modern operating rules and train control systems such as Track Warrant Control, Direct Traffic Control and Centralized Traffic Control.

The elimination of "absolute preference" by rule and adoption of train control systems that afford increasing levels of flexibility does not mean that train dispatchers were no longer compelled to prioritize certain trains to meet the needs of freight shippers and the traveling public. However, under increasing traffic density, the need for dispatchers to balance overall fluidity with the objective of prioritizing or showing preference to certain types of trains inevitably results in some delay impacts to priority trains, regardless if they are passenger trains or expedited freight trains.

Maintaining a fluid rail network, particularly on single-track corridors with passing sidings, requires train dispatchers to make complex, real-time decisions regarding how to resolve conflicts

between opposing trains. The priority assigned to different types of freight and passenger trains is just one factor that must be considered in making these decisions. In resolving a particular train conflict, combinations of train routing and sequence decisions can have cascading “knock-on effects” that alter the number and type of train conflicts experienced by both trains between their meeting point and respective destinations. Because of these effects, the dispatching decision that minimizes the overall delays to passenger and freight trains across an entire corridor may not always be to favor a higher-priority train at every meet/pass location. Thus, dispatching decisions are not a simple matter of always giving one type of train absolute preference over another. In fact, such an approach may have unintended consequences that, under certain scenarios, increase the delay experienced by the trains that are shown absolute preference.

To further this point, the published literature on train delays supports the concept that trains can be shown preference while still experiencing train delay (i.e., be shown preference as indicated by higher average train speeds, but not “absolute preference” at every dispatching decision point). In a 2008 study of train delay and network reliability, Martland notes that the need to hold trains for meets and passes is one of the most common sources of train delays reported in the data provided by Class 1 railroads.² The analyzed data indicated that the highest priority trains achieved higher average speeds by not being delayed as often, or for as long, as lower priority trains, but still experienced some level of train delay.

Quantifying Operational Impacts of “Absolute Preference” with Operational Modeling

While dispatchers are expected to show preference by giving extra weight to the interests of passenger trains relative to freight trains, the question remains regarding the potential train

² Martland, C.D. 2008. *Railroad Train Delay and Network Reliability*. AAR Research Report R-991. Transportation Technology Center, Inc., Association of American Railroads, Washington DC.

operations and rail network fluidity impacts of granting “absolute preference” to passenger trains at every train conflict and dispatching decision point.

It is challenging to answer this question directly because standard North American railway operational modeling software, such as Rail Traffic Controller (RTC) and General Train Movement Simulator (GTMS or now marketed as RailEval), are not currently designed to grant certain trains “absolute priority”. These simulation software tools operate on priority-based dispatching logic that uses algorithms to attempt to minimize the sum of overall train delay weighted by the priority value assigned to each train accruing a particular delay. As such, while the resulting simulations heavily favor higher-priority trains when making dispatching decisions, there is no guarantee that priority trains do not experience any delays due to meets or overtakes with lower-priority trains. Enforcing “absolute priority” requires a manual dispatch, or imposing various extreme constraints, such as extremely slow passenger train speeds on sidings and through crossovers, to “trick” the simulation software dispatching logic into always allowing passenger trains the best route and movement order at every train routing conflict.

Similarly, European-style timetable optimization software packages, such as those applied to the operational planning of North American commuter rail corridors that also host freight trains, formulate a line-specific timetable optimization problem and attempt to minimize an objective function calculated on the basis of train priority and delay. These models typically do not impose an “absolute preference” constraint, instead relying on the objective function to effectively give preference to higher-priority trains by minimizing their running times and delays. While the resulting timetable optimization problem can be formulated and solved exactly to an optimal solution over a short time horizon with a small number of trains, the optimization model quickly becomes intractable over longer time horizons and greater numbers of trains. To produce high-

quality timetable and train routing solutions, various heuristic algorithms have been implemented to find a global optimum across all trains, and avoid falling into a local optimum that produces low-delay paths for certain trains but excessive delays for others.

In this manner, both the simulation and optimization approaches to railway operational modeling rely on algorithmic logic to resolve train conflicts and minimize delays to achieve higher average train speeds. As will be illustrated by a hypothetical example appearing later in this statement, implementing a heuristic algorithm based on rules of “absolute priority” to resolve every train path conflict is likely to fall into the aforementioned trap of finding a local optimum that introduces unnecessary train delays that impact network fluidity. Starting from empty and idle conditions with no trains present on a rail corridor, solving the timetable problem (or executing a simulation) using an absolute preference heuristic will likely lead to a zero (or near-zero) delay for the first passenger train. However, this this solution only represents a local optimum for the first train; it says little or nothing about whether that the ensuing pattern of train meets (including meets between passenger trains) dictated by the resulting pattern of freight trains along the network will be anywhere near the global optimum for all subsequent passenger (and freight) trains. Even worse, there is no guarantee that the pattern of train movements created by a heuristic algorithm based on rules of “absolute priority” will have a feasible solution and not lead to a “deadlock” of irreconcilable train conflicts. Approaches with the flexibility to impose slight delays on passenger trains are more likely to avoid these infeasible deadlock situations and achieve a solution closer to the global optimal sum of delay weighted across all trains and yield the most fluid conditions on the network.

Because of the limitations on RTC and other operational modeling tools described above, I am not aware of published academic literature that uses a controlled simulation experiment to

directly quantify the impacts of “absolute preference” relative to a baseline of priority-weighted train delay in the context of North American freight and passenger rail operations. The academic research that has been published on the topic of train delay and line capacity impacts of assigning certain trains priority addresses a slightly different research question. In these published works, RTC is used to quantify the delay and capacity impacts (and resulting track infrastructure requirements) of assigning one train type a higher priority than others in comparison to a baseline with all trains assigned equal priority. While a comparison of an “equal priority” scenario to a scenario with priority-weighted dispatching offers insights into the ensuing interactions between trains and resulting train delays, it does not directly address the operational impacts of granting certain trains “absolute preference.”

As a further limitation on interpreting the results of RTC simulation research cited in this statement, it should be noted that these simulation experiments are conducted in the context of academic research designed to identify general trends in the relationships between performance metrics (train delay, average train speed, etc.) and a small number of experimental factors. In such experiments, the trends and relative magnitudes of the observed train delay (and average train speed) are more important than their absolute values. Although the representative corridors used in these RTC experiments exhibit features common to high-density Class 1 railroad mainlines that host passenger service, they are not intended to exactly replicate any specific corridor on the US rail network. Thus, the results should not be used to conclude the exact magnitude of delays on specific corridors with their unique track topology and topography, but instead infer that the same general trends and relationships between delay and the experimental factors will be observed relative to the actual magnitude of baseline trains delays on a specific corridor. Further, while the academic RTC research experiments use randomness in departure times and replication to reduce

the potential bias of particularly good or bad train schedules, to focus on the effects of the experimental factors, the simulations necessarily exclude many other sources of variability present on actual mainline corridors such as local service, track maintenance and equipment failures. These sources of variability have been shown to negatively impact train delay and average train speeds. Thus, an actual corridor subject to these types of variability will exhibit a higher baseline train delay, and exhibit a stronger response to the experimental factors, than indicated by the RTC simulation results presented here.

Although I am not aware of academic literature comparing “absolute preference” relative to a baseline of priority-weighted train delay, I am aware of three published papers that illustrate important points regarding “absolute preference.” First, implementing “absolute preference” suggests always allowing overtakes on double track. In a 2013 paper comparing the capacity of single and double track on the basis of RTC simulation experiments, Sogin et al. note that on the simulated double-track corridor, passenger train delay is primarily accrued when trailing behind freight trains, and overtaking introduces large variability in train run times.³ In attempting to minimize overall weighted train delay across all trains of all priority levels and maintain a consistent fluid rail corridor, RTC often decides that the disruptions to multiple freight and passenger trains created by an overtake outweigh the potential benefits to a single passenger train, even if it is assigned the highest priority. This experimental observation underscores the potential challenge of accommodating “absolute preference” by always having faster passenger trains overtake slower freight trains on double-track segments. To have a 79-mph passenger train overtake a 50-mph freight train on double track without stopping the freight train requires the passenger train to cross over to the second track. Since most mainline crossovers carry a diverging

³ Sogin, S.L., Y-C Lai, C.T. Dick and C.P.L. Barkan. 2013. Comparison of capacity of single- and double-track rail lines. *Transportation Research Record: Journal of the Transportation Research Board*. 2374: 111-118.

speed lower than the maximum authorized speed of the main track, the act of crossing over requires the passenger train to reduce speed and, by the strictest definition, accumulate train delay. Once crossed over, based on relative train speeds and typical intermediate block signal spacings, to overtake the freight train requires the passenger train to travel against the predominant direction of traffic at maximum speed for over 45 miles without making any intermediate station stops. Occupying the second track for 45 miles without delaying any opposing freight (or passenger) trains requires the overtake to take place in a nearly two-hour gap between opposing trains (freight or passenger). Creating such a gap by slowing or stopping opposing trains is likely to either directly delay an opposing passenger train along with multiple freight trains, or create a fleet of closely spaced freight trains that then becomes a much more difficult obstacle for opposing passenger trains to overtake. In this manner, in addition to delaying multiple freight trains, imposing “absolute preference” to force one overtake may make it more difficult, if not impossible, to avoid delays to subsequent passenger trains.

Second, implementing “absolute preference” would essentially require a return to the historical approach of creating rigid timetable “slots” for passenger trains to operate within the regular pattern of freight train departures from terminals. Although operating passenger trains in pre-planned slots can effectively reduce delay to these trains, it re-introduces the same challenge encountered 175 years ago under timetable-only operations: how should railroads handle situations when a passenger train arrives to a territory behind schedule, or otherwise is delayed for reasons unrelated to freight train operations such as passenger boarding delays or mechanical failure? Can “absolute preference” be imposed for delayed passenger trains (meaning a slot is held open regardless of how many minutes the passenger train is late) without causing excessive disruptions to other trains?

Two papers illustrate how quickly this approach can break down. In 2016, Dick and Mussanov used RTC simulations to quantify the train delay and capacity impacts of trains that arrive to a rail corridor outside their planned operating slot.⁴ In studying a representative 240-mile single-track mainline, Dick and Mussanov created a structured pattern of regular train departures that maximized train throughput capacity. The plan was then disturbed by introducing variability in train departure times, and corresponding increases in average train delay were observed. The structured operating plan was found to be most sensitive to small delays as even minor deviations from the train plan resulted in substantial increases in train delay, while larger deviations still caused more delay, but less additional delay in proportion to the amount of deviation. In a follow-on RTC study published in 2019, Dick et al. quantified the amount of double-track infrastructure required to accommodate different levels of departure time variability while maintaining the same train delay and capacity as the baseline structured (slotted) train operation.⁵ For a traffic volume of 42 trains per day, 96 miles of double track needed to be installed along a 240-mile corridor to afford departure time flexibility to the majority of trains. This tremendous infrastructure investment is indicative of the magnitude of infrastructure potentially required, and capacity potentially consumed, should “absolute preference” still be imposed for passenger trains that arrive outside their planned operating slot.

Hypothetical Example of the Operational Impacts of Granting “Absolute Preference”

Because of the limitations on RTC and other rail operations planning tools accepted by the North American railroad industry, it is not possible to conduct a simulation experiment that directly

⁴ Dick, C.T. and Mussanov. 2016. Operational schedule flexibility and infrastructure investment: capacity trade-off on single-track railways. *Transportation Research Record: Journal of the Transportation Research Board*. 2546: 1-8

⁵ Dick, C.T., D. Mussanov and N. Nishio. 2019. Transitioning from flexible to structured heavy haul operations to expand the capacity of single-track shared corridors in North America. *Journal of Rail and Rapid Transit*. 233 (6): 629-639.

contrasts rail corridor operations under a rule of “absolute preference” at every train conflict with a baseline representing the approach of showing preference through dispatching decisions that attempt to minimize priority-weighted train delay. Given this constraint, I instead created a hypothetical example to illustrate the potential operational impacts of granting certain trains “absolute preference” on a representative freight rail corridor with passenger traffic.

Consider the hypothetical segment of a larger rail network illustrated in Figure 1. The corridor extending to the west of control point A and to the east of control point E consists of long sections of double track. The 45-mile segment between A and E includes three passing sidings (B, C and D), with distances to the center of each siding in miles, and the clear length of each siding in feet, as shown in Figure 1a. At time $t=0$, four trains are present on the corridor at the positions indicated on the top track diagram in Figure 1:

- An eastbound passenger train and a westbound passenger train, both shown in red, and both short enough to fit in all three sidings
- Two westbound freight trains, each 9,000 feet in length, one shown in brown and one in purple

The maximum authorized speed for passenger trains is 70 mph, and 60 mph for freight. In progressing the trains across the network to demonstrate the operational result and train delay accumulated by different dispatching decisions, to simplify the example, trains are assumed to travel at their respective maximum authorized speed, with one minute of delay added to account for deceleration for a meet or train stop, and another minute of delay for acceleration after a meet or train stop.

is able to make an important decision; to avoid blocking two consecutive sidings with freight trains, the eastbound passenger train is moved into siding B (accumulating 8 minutes of delay) and held for a meet with the brown westbound freight train. This move is needed to free siding C for a subsequent efficient meet between the two passenger trains at time $t=26$ minutes (Figure 1c). At this time, while the brown freight train continues to progress, the purple train remains at D, accumulating an additional 13 minutes of delay for a total of 14 minutes, and the eastbound passenger train moves from siding B to C, accruing an additional two minutes of delay. After the meet between the passenger trains, the eastbound passenger train is able to leave siding C (accruing one additional minute of delay) and meet the purple westbound freight train at $t=39$ minutes (Figure 1d). After this meet, the purple freight train, which has experienced 27 minutes of delay, will accumulate one additional minute of delay departing siding D, for a total of 28 minutes. Overall, the pattern of train movements in this baseline scenario results in 28 minutes of freight train delay and 11 minutes of passenger train delay.

In contrast with the baseline scenario, Figure 2a-e illustrates how the trains progress and delay is accumulated on the same corridor when dispatching decisions are constrained by granting the *eastbound passenger train* “absolute preference” at each conflict point. The initial positions of the trains (Figure 2a) are the same as in the previous scenario (Figure 1a). However, by imposing “absolute preference”, the eastbound passenger train (marked by an exclamation point) must continue to progress on the main track without delay. In granting absolute preference by rule, the dispatcher is forced to hold the freight trains at sidings C and D, and the westbound passenger train must be held at point E, with all three of these trains accumulating delay (Figure 2b). After 26 minutes have elapsed (Figure 2c), the eastbound passenger train has met both freight trains, but the westbound passenger train must continue to wait at E and accumulate delay. After

another 13 minutes (Figure 2d), the eastbound passenger train has made it past point E, allowing the westbound train to begin progressing, but only after it has accumulated 30 minutes of delay. Finally, after 58 minutes, the westbound passenger train overtakes the purple freight train at siding C. Overall, this pattern of train movements, driven by the “absolute preference” granted to the eastbound passenger train, results in 48 minutes of freight train delay and 30 minutes of passenger train delay. Compared to the first dispatching scenario, introducing “absolute preference” for the passenger trains at each conflict point has increased freight train delay by 71 percent, and also increased passenger train delay by 172 percent to a level nearly triple that obtained through more balanced dispatching decisions.

<see next page>

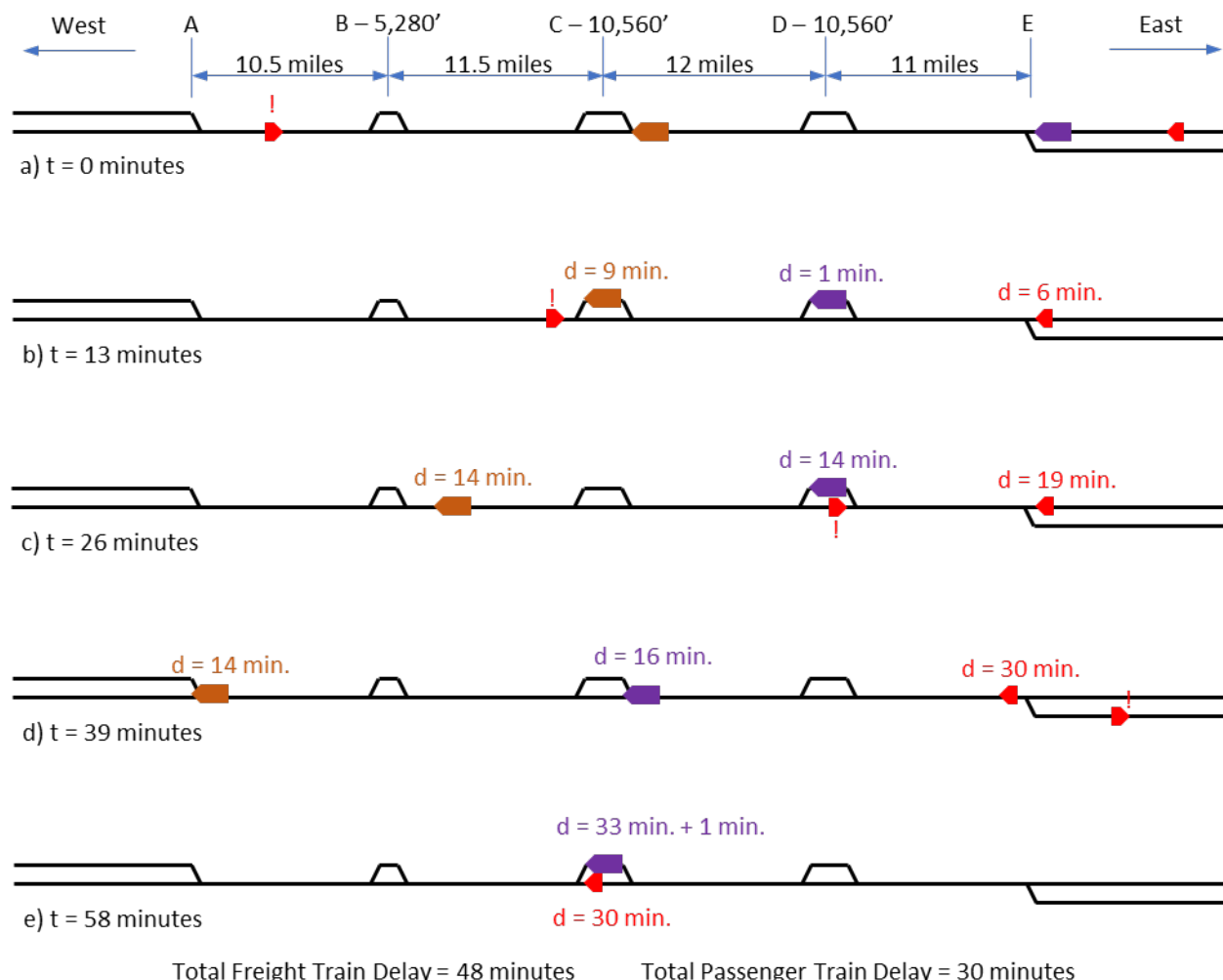


Figure 2: Hypothetical passenger (red) and freight (brown and purple) train operations on corridor with dispatching governed by “absolute preference” for eastbound passenger train

As a third scenario, Figure 3a-e illustrates the progression of the same corridor and same initial train positions when dispatching decisions are constrained by granting the *westbound passenger train* “absolute preference” at each conflict point. To avoid delays to the westbound passenger train (marked by an exclamation point), the freight trains are moved into sidings C and D, while the eastbound passenger train is held in siding B. Because the two freight trains prevent the eastbound passenger train from advancing any further, it must wait at B to meet the westbound passenger train and accumulate 31 minutes of delay. The freight trains must both be held at C and

D for extended periods until both the westbound and eastbound passenger trains pass. Ultimately, this pattern of train movements, driven by the “absolute preference” granted to the westbound passenger train, results in 92 minutes of freight train delay and 31 minutes of passenger train delay.

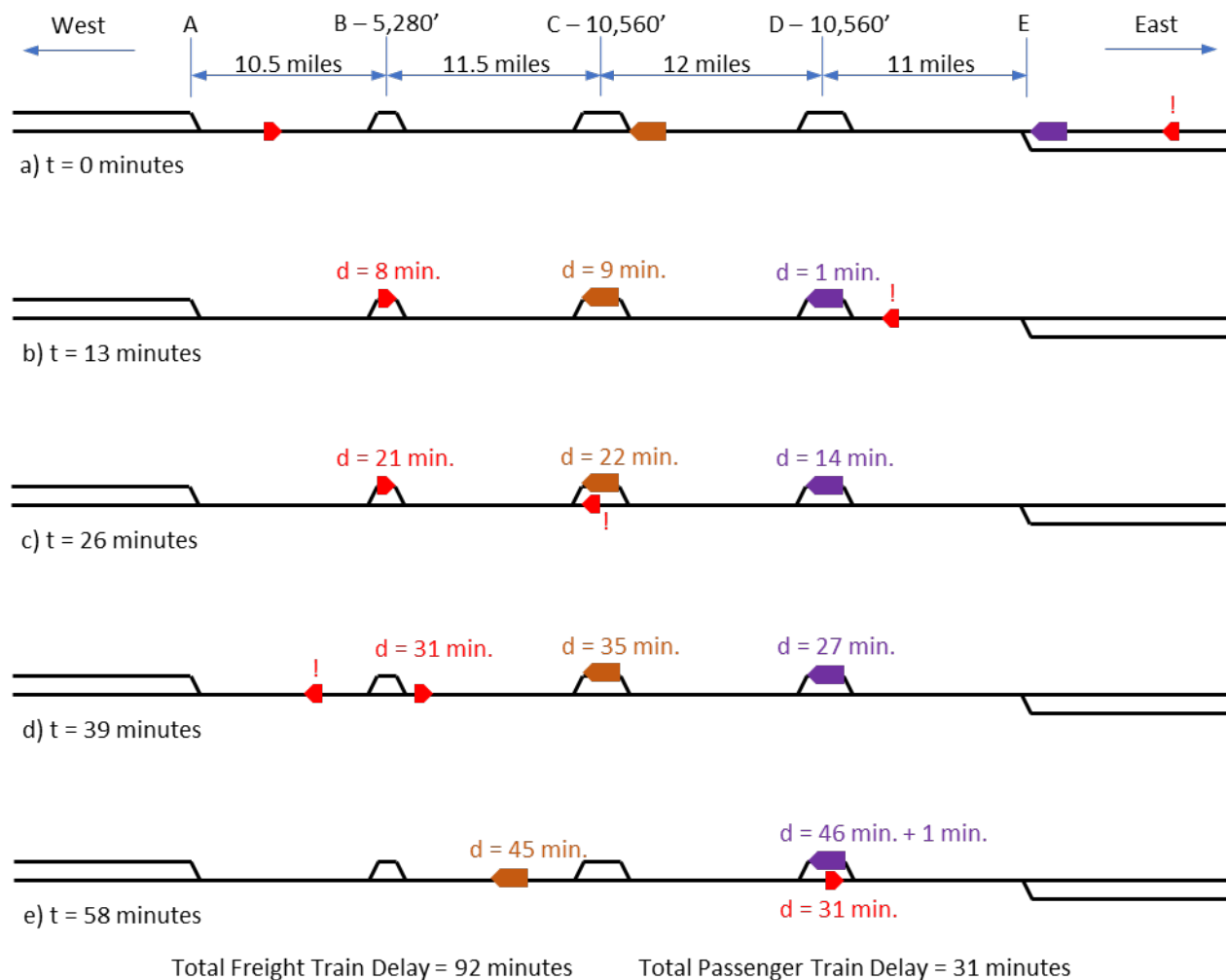


Figure 3: Hypothetical passenger (red) and freight (brown and purple) train operations on corridor with dispatching governed by “absolute preference” for westbound passenger train

Collectively, the three scenarios in this hypothetical example illustrate how granting “absolute preference” to always favor passenger trains at every meet/pass location can not only

increase freight train delay, but also have the unintended consequence of increasing passenger train delay (Table 1).

Table 1: Comparison of Hypothetical Dispatching Scenarios

Scenario	Total Freight Train Delay (minutes)	Total Passenger Train Delay (minutes)
Without “absolute preference” (baseline)	28	11
Eastbound passenger “absolute preference”	48	30
Westbound passenger “absolute preference”	92	31

Conclusion

In summary, imposing an “absolute preference” requirement for every train conflict would effectively undo 175 years of evolution in train control systems designed to provide the dispatcher with the tools required to manage trains for overall fluidity and not according to a strict hierarchy of train classes at each decision point. Because it does not effectively achieve a global optimum that shows preference while balancing priority-weighted train delay across all types of passenger and freight trains, an “absolute preference” rule is not used in railway operations planning tools involving simulation or optimization. Implementing “absolute preference” to resolve every conflict between freight and passenger trains suggests dictating train routing and sequencing decisions in a manner that, as demonstrated by published academic research and further illustrated by the hypothetical example, will have the unintended consequences of increasing delay to both passenger and freight trains. These increased delays introduced by implementing “absolute preference” will have negative effects on both passenger and freight shipment transit times, and correspondingly reduce overall rail network throughput capacity and reliability.

VERIFICATION

I, C. Tyler Dick, declare under penalty of perjury that the foregoing is true and correct and that I am qualified and authorized to file this verified statement.

Executed on January 22, 2025



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