

**BEFORE THE SURFACE TRANSPORTATION BOARD**

305127

---

**FINANCE DOCKET NO. 36500**

---

ENTERED  
Office of Proceedings  
August 11, 2022  
Part of  
Public Record

**CANADIAN PACIFIC RAILWAY LIMITED, ET AL.  
- CONTROL –  
KANSAS CITY SOUTHERN, ET AL.**

---

**NORFOLK SOUTHERN RAILWAY COMPANY'S REBUTTAL IN SUPPORT OF ITS  
AMENDED RESPONSIVE APPLICATION**

---

Nabanita C. Nag  
Jason M. Morris  
Thomas E. Zoeller  
Hanna M. Chouest  
Norfolk Southern Corporation  
650 W Peachtree St NW  
Atlanta, GA 30308  
Tel: (470) 463-6314

Carrie Mahan  
John Scribner  
Brianne Kucerik  
Daniel Baquet  
Weil, Gotshal & Manges LLP  
2001 M Street NW  
Suite 600  
Washington, DC 20036  
Tel: (202) 682-7000

*Attorneys for Norfolk Southern Railway  
Company*

August 11, 2022

## **TABLE OF CONTENTS**

|                                                                                                                                                                             | <b><u>Page</u></b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| I. NS’s Amended Responsive Application and Proposed Contingent Trackage Rights Are Consistent With the Board’s Precedent for the Imposition of Conditions .....             | 4                  |
| II. CSXT’s Opposition Fails on Multiple Independent Grounds and Must Be Rejected by the Board .....                                                                         | 5                  |
| A. CSXT’s Requested Relief, Including CSXT’s Opposition to NS’s Amended Responsive Application, Does Not Meet the Standard Set by the Board for the CP-KCS Proceeding ..... | 8                  |
| 1. CSXT’s Response Has No Nexus to the CP-KCS Transaction or NS’s Amended Responsive Application.....                                                                       | 9                  |
| 2. Neither the CP-KCS Transaction Nor NS’s Amended Responsive Application Would Increase Any So-Called “Exclusive” NS Traffic .....                                         | 10                 |
| 3. The Contingent Trackage Rights Would Not Negatively Impact Access to the Shreveport and Meridian Gateways .....                                                          | 15                 |
| 4. The CP-KCS Transaction Would Not Undermine the Procompetitive Benefits of the MSLLC .....                                                                                | 16                 |
| B. The MSLLC is Exempt from Attack by CSXT .....                                                                                                                            | 17                 |
| C. CSXT’s Allegations of Competitive Harm Resulting from the MSLLC and NS’s Amended Responsive Application Are Improper and Unfounded .....                                 | 18                 |
| III. Applicants’ Opposition Must Fail Because Applicants Do Not Resolve the Potential Harm Underlying NS’s Request for Contingent Trackage Rights .....                     | 26                 |
| A. Applicants’ Reliance on Previous Contract Negotiations Is a Red Herring and Should Be Rejected .....                                                                     | 27                 |
| B. Applicants’ Operational Clarifications in Their Response Do Not Resolve the Risk to Service Levels on the Shreveport-Wylie Section .....                                 | 27                 |
| C. Only After NS Noted That Applicants’ Plan Would Exceed the Capacity at the Wylie Intermodal Terminal Did Applicants Provide Potential Solutions .....                    | 28                 |
| D. The Fact that a Major Service Standard Failure Has Not Occurred in the Past Does Not Mean It Will Not in the Future.....                                                 | 29                 |
| E. Applicants Object to the Proposed Contingent Trackage Rights Based on Operational Changes That Are Unrelated to the Proposed Contingent Trackage Rights .....            | 30                 |

## Introduction

In its Amended Responsive Application,<sup>1</sup> Norfolk Southern Railway Company (“NS”) identified changes in traffic in the Applicants’ Amended Operating Plan directly resulting from Canadian Pacific’s<sup>2</sup> proposed acquisition of Kansas City Southern<sup>3</sup> (jointly, “Applicants”) (the “CP-KCS Transaction”) if approved. These changes threaten to harm rail transportation options for shippers. To ameliorate this harm, NS seeks a narrow condition on the CP-KCS Transaction of contingent trackage rights that would allow NS to redress this harm only in the event the likely harm materializes. The contingent trackage rights are narrowly-tailored to move only a limited category of intermodal traffic on the KCS line between Shreveport, LA and the Wylie Intermodal Terminal in Wylie, TX (the “Shreveport-Wylie Section”).<sup>4</sup> These rights would be exercisable only in the event that NS purchases the Wylie Intermodal Terminal and CPKC<sup>5</sup> fails to provide the level of service they are already obligated to provide (the “Contingent Trackage Rights”).

The proposed Contingent Trackage Rights impose *no new service obligations* on the Applicants beyond what already is required of KCS (and would be required of CPKC) under the pre-existing agreements governing the Meridian Speedway, LLC joint venture (“MSLLC”) (the “Meridian Speedway Agreements”). Further, NS *receives no trackage rights* unless CPKC fails to meet these pre-set service obligations {{ [REDACTED] }}. Thus,

---

<sup>1</sup> Amended Responsive Application of Norfolk Southern Railway Company (“NS-13”), STB Docket No. FD 36500 (filed June 9, 2022).

<sup>2</sup> Canadian Pacific refers to Canadian Pacific Railway Limited, Canadian Pacific Railway Company, and their U.S. rail carrier subsidiaries Soo Line Railroad Company, Central Maine & Quebec Railway US Inc., Dakota, Minnesota & Eastern Railroad Corporation, and Delaware and Hudson Railway Company, Inc.

<sup>3</sup> Kansas City Southern refers to Kansas City Southern and its U.S. rail carrier subsidiaries The Kansas City Southern Railway Company, Gateway Eastern Railway Company, and The Texas Mexican Railway Company.

<sup>4</sup> See *Burlington Northern Inc., et al. – Control & Merger – Santa Fe Pacific Corp., et al.* (“BN/SF”), 10 I.C.C.2d 661 (1995) (“While showing that a condition addresses adverse effects of the transaction is necessary to gain our approval, it is by no means sufficient. The condition must also be narrowly tailored to remedy those effects.”).

<sup>5</sup> CPKC is used to refer to the combined entity that would be created if the CP-KCS Transaction is approved.

Applicants have total control over whether the proposed Contingent Trackage Rights are ever triggered. If the CP-KCS Transaction has no negative impact on service as the Applicants predict, then NS cannot exercise the Contingent Trackage Rights. However, if instead NS's concerns do come to pass and the CP-KCS Transaction negatively impacts service on the route between Meridian, MS and the Wylie Intermodal Terminal ("Meridian-Wylie Route"), the requested Contingent Trackage Rights will ensure that the CP-KCS Transaction does not reduce shipper options over the Meridian-Wylie Route.

Despite the narrowly tailored nature of the requested conditions, three parties oppose NS's Amended Responsive Application – CSX Transportation, Inc. ("CSXT"), the Applicants, and the New Orleans Public Belt Railroad ("NOPB").<sup>6</sup>

CSXT's opposition is fundamentally flawed in that it is procedurally improper and more importantly, simply wrong in fact and in law. In its July 12 Response ("CSXT's Response"), CSXT opposes the proposed Contingent Trackage Rights, incorrectly arguing that they would extend NS's purported exclusive control over the Meridian Speedway.<sup>7</sup> First and foremost, CSXT's arguments have utterly no nexus to the CP-KCS Transaction or NS's Amended Responsive Application and should be dismissed on that basis alone. None of the growth that Applicants plan at the Wylie Intermodal Terminal {{ [REDACTED] [REDACTED] }}.<sup>8</sup>

---

<sup>6</sup> NOPB opposes NS's Contingent Trackage Rights on the basis that they would add trains to the Shreveport-Wylie Section. New Orleans Public Belt Railroad's Response to Responsive Application of Norfolk Southern Railroad ("NOPB's Response"), STB Docket No. FD 36500 (filed July 12, 2022). NOPB's opposition coincides with an argument from Applicants and is addressed jointly below with NS's response to Applicants, in Section III.E.

<sup>7</sup> CSX Transportation, Inc.'s Response to Comments and Responsive Applications ("CSXT-13"), STB Docket No. FD 36500 (filed July 12, 2022), at 18.

<sup>8</sup> Norfolk Southern Railway Company's Response to Comments and Request for Conditions ("NS-14"), STB Docket No. FD 36500 (filed July 12, 2022), at 29.

Furthermore, CSXT has repeatedly misstated the facts regarding the Meridian Speedway in a blatant attempt to mislead the Board as to the underlying facts and the application of relevant STB precedent. Additionally, the MSLLC formation was properly exempted by the Board. Finally, CSXT's antitrust "analysis" cannot be sustained, and CSXT's experts do not present a credible empirical analysis of the competitive effects of the MSLLC.<sup>9</sup> For all of these reasons, CSXT's opposition should be rejected in its entirety.

The Applicants oppose NS's Responsive Application, arguing that the requested Contingent Trackage Rights would not solve the adverse effects NS identified. In their July 12, 2022 Response ("Applicants' Response"), Applicants argue that granting the requested Contingent Trackage Rights would, in fact, exacerbate service and operations issues on the Meridian-Wylie Route.<sup>10</sup> Applicants' arguments, however, are based on a mischaracterization of the conditions sought, and in particular, the events that must occur before NS could exercise the requested Contingent Trackage Rights. There are intermediate steps and operational changes governed by the Meridian Speedway Agreements that must occur before NS could exercise the requested Contingent Trackage Rights, which the Applicants ignore. As a result, Applicants use the wrong baseline to evaluate the requested conditions in their opposition. Using the correct baseline, it is clear that the parade of operational horrors the Applicants attribute to the requested Contingent Trackage Rights are, in fact, unrelated to the requested Contingent Trackage Rights. Applicants' opposition to NS's requested conditions merely is an attempt to avoid NS having the narrowly-tailored ability to ensure the same level of service that would exist absent the CP-KCS Transaction if KCS's obligations under the Meridian Speedway Agreements are not honored.

---

<sup>9</sup> Rebuttal Verified Statement of Professor John W. Mayo ("Mayo R.V.S.").

<sup>10</sup> Applicants' Response to Comments and Request for Conditions, Opposition to Responsive Applications, and Rebuttal in Support of the Application ("CP-53/KCS-39"), STB Docket No. FD 36500 (filed July 12, 2022).

NS respectfully requests that the Board approve NS’s Amended Responsive Application and grant NS the requested Contingent Trackage Rights to ensure that the CP-KCS Transaction does not harm shipper options on the Meridian-Wylie Route.

**I. NS’s Amended Responsive Application and Proposed Contingent Trackage Rights Are Consistent With the Board’s Precedent for the Imposition of Conditions**

Board precedent sets out three prerequisites for the imposition of conditions in a railroad consolidation proceeding. The conditions: (i) must be narrowly tailored to remedy harm caused by the transaction, (ii) must not upend pre-transaction relationships, (iii) and must not be used to remedy any pre-existing harm.<sup>11</sup> NS’s request for contingent trackage rights satisfies each of these elements.

In their Amended Operating Plan, Applicants predict an increase in traffic on the Shreveport-Wylie Section that would not occur absent the CP-KCS Transaction.<sup>12</sup> The potential harmful effects to the public interest resulting from this increase in traffic include the degradation in service between the Wylie Intermodal Terminal and locations throughout the southeast United States.<sup>13</sup> As it is, rail currently only handles roughly {{ [REDACTED] }}% of the intermodal traffic between these locations.<sup>14</sup> Intermodal customers who rely on the Meridian Speedway and the Shreveport-

---

<sup>11</sup> See *Canadian National Railway Co. & Grand Trunk Corp. – Control – EJ&E West Co.*, STB Docket No. FD 35087, 2008 STB LEXIS 220, at \*10 (STB served Apr. 25, 2008); *Union Pacific Corp, Union Pacific R.R., & Missouri Pacific R.R. – Control & Merger – Southern Pacific Rail Crop., Southern Pacific Trans. Co., St. Louis Southwestern Ry., SPCSL Corp., & The Denver & Rio Grande Western R.R.* (“UP/SP”), 1 S.T.B. 233, 418 (1996) (STB served Aug. 6, 1996).

<sup>12</sup> Applicants’ Amended Operating Plan (Exhibit 13), (“AOP”), STB Docket No. FD 36500 (filed May 13, 2022), Appendix T, at 11.

<sup>13</sup> This harm is fully explained in the Amended Comments of Norfolk Southern Railway Company and Request for Conditions (“NS-12”), STB Docket No. FD 36500 (filed June 9, 2022), Section II (“Applicants’ Plan for the CP-KCS Transaction Threatens The Pro-Growth, Pro-Competitive Intermodal Gains on the Meridian-Wylie Route”).

<sup>14</sup> Mayo R.V.S., Exhibit 3 (showing rail tonnage was roughly {{ [REDACTED] }} and total tonnage (including truck) was {{ [REDACTED] }} [{{ [REDACTED] }}]).

Wylie Section (“Meridian-Wylie Route”) are at risk of diversion to truck if the CP-KCS Transaction causes a deterioration of rail service on this route.

To address this transaction-specific harm, NS seeks Contingent Trackage Rights on the Shreveport-Wylie Section to move intermodal traffic to and from the Wylie Intermodal Terminal if NS exercises an option to purchase the Wylie Intermodal Terminal and existing service standards are not met. The request is narrowly tailored as to the type of traffic (covering only traffic for which NS would already have pre-existing haulage rights upon exercise of its option), geographic scope (only applying to a limited segment affected by the CP-KCS Transaction and not extending NS’s access to any new routes or origins or destinations), and the trigger for implementation of the condition (the rights are exercisable only in the event CPKC fail to meet a service standard commitment that already applies to KCS). Further, the request is consistent with NS’s existing relationship with KCS and is specific to a harm resulting from the CP-KCS Transaction, as opposed to a pre-existing harm. Importantly, if CPKC takes an operational and/or infrastructure improvement approach to ensure that the increase in traffic as a result of the CP-KCS Transaction does not result in a service degradation, in whatever combination and to whatever degree it deems necessary to do so, then the proposed Contingent Trackage Rights cannot be exercised and the traffic will continue to move as it does today. The purpose is to maintain the *status quo* and ensure shippers continue to have the same options going forward that they have today. This is precisely the type of condition the Board’s precedent indicates can and should be granted in a railroad consolidation proceeding.

## **II. CSXT’s Opposition Fails on Multiple Independent Grounds and Must Be Rejected by the Board**

In a blatant abuse of the CP-KCS Proceeding, CSXT has repeatedly and intentionally misstated the relevant facts regarding the MSLLC and the impact of the CP-KCS Transaction,

mischaracterized the conditions NS seeks in NS's Amended Comments and NS's Amended Responsive Application, and ignored relevant Board precedent.

CSXT continues these inappropriate, opportunistic tactics in CSXT's Response. The Response improperly includes over 300 pages of argument and "evidence" purporting to respond to NS's Amended Comments and Amended Responsive Application.<sup>15</sup> In reality, NS's Amended Comments and Amended Responsive Application was a mere afterthought in CSXT's Response. The majority of the Response is nothing more than further reiterations and elaborations of the arguments CSXT already included in its Comments and Amended Comments on the CP-KCS Application.<sup>16</sup> As Applicants argued in their August 1, 2022 motion to strike,<sup>17</sup> such advocacy is an attempt to have a second bite at the apple, without providing Applicants with an opportunity to respond, and a violation of the Board's procedural schedule in this Proceeding. As a result, CSXT's Response should be stricken in its entirety. In the event, however, that CSXT's Response remains, in the interest of providing the Board with a complete record, NS briefly addresses the primary assertions from CSXT's Response below.<sup>18</sup>

First, CSXT's attack on the MSLLC has no nexus to the CP-KCS Transaction or NS's Amended Responsive Application, nor has CSXT identified any harm that would be exacerbated by the CP-KCS Transaction or NS's Amended Responsive Application. CSXT has now had

---

<sup>15</sup> CSX Transportation, Inc.'s Response to Applicants Motion to Strike CSXT's Response to Comments and Responsive Applications, STB Docket No. FD 36500 (filed August 1, 2022), at 3.

<sup>16</sup> CSX Transportation, Inc.'s Comment, ("CSXT-8"), STB Docket No. FD 36500 (filed February 28, 2022); CSX Transportation, Inc.'s Amended Comment, ("CSXT-11"), STB Docket No. FD 36500 (filed June 9, 2022).

<sup>17</sup> On July 20, 2022 the Applicants filed a Motion to Strike CSXT's Response. Applicants' Motion to Strike Responses to Comments, STB Docket No. FD 36500 (filed July 20, 2022). NS agrees that CSXT's Response was improper and should be stricken. However, out of an abundance of caution and because the Board has not yet ruled on Applicants' Motion, NS is addressing CSXT's spurious arguments briefly to ensure a complete record. NS reserves the right to amend its Rebuttal in Support of its Responsive Application to be consistent with the Board's resolution of Applicants' Motion to Strike.

<sup>18</sup> CSXT's Response does not distinguish between its purported response to NS's Amended Comments and response to NS's Amended Responsive Application. Accordingly, NS is addressing CSXT's Response in its entirety here.

multiple opportunities to identify a legitimate link between its allegations and the effects of the CP-KCS Transaction or NS's Amended Responsive Application and has failed to do so in any of its filings. Instead, CSXT conflates and misstates the record in an attempt to justify its requested relief. But an examination of the record reveals that not only does CSXT's requested relief have no connection to the effects of the CP-KCS Transaction, but also that there is no evidence of any increase in any category of traffic on the Meridian Speedway with which CSXT takes issue in its Response – NS Traffic, Dallas Intermodal Terminal Traffic ("DITT"), or Mexico Traffic.<sup>19</sup> As a result, CSXT's requests for conditions relating to the MSLLC, including CSXT's opposition to NS's Amended Responsive Application, are inconsistent with the Board's standard for imposing relief in connection with the CP-KCS Transaction and should be rejected on this basis.<sup>20</sup>

Second, the MSLLC is a properly exempted transaction. Accordingly, NS and KCS are exempted "from the antitrust laws and from all other law [...] as necessary to let [them] carry out the transaction."<sup>21</sup> This is another independent basis to reject CSXT's requests.

Third, CSXT's renewed attack on the MSLLC in its Response must fail as it is unsupported by antitrust precedent and economic theory. CSXT flails between legal theories in its filings challenging the MSLLC – shifting between horizontal and vertical theories of harm. Ultimately, each of its theories fail. The MSLLC was, and remains, a pro-competitive joint venture for the reasons NS previously articulated in this Proceeding.<sup>22</sup> As a result, and as detailed in the Rebuttal Verified Statement of Professor John W. Mayo, despite CSXT's voluminous filing, CSXT and its

---

<sup>19</sup> NS-14, at 27-30.

<sup>20</sup> *Canadian Pacific Railway Limited, et al. – Control – Kansas City Southern, et al.*, STB Docket No. FD 36500 (served April 23, 2021).

<sup>21</sup> 49 U.S.C. § 11321(a). Section 11321(a) immunity applies to transactions exempted under Section 10502. *See UTU v. Burlington Northern Santa Fe R. Co.*, 528 F.3d 674, 679-80 (9th Circ. 2008).

<sup>22</sup> NS-14.

economic experts do not identify any anticompetitive harm resulting from the MSLLC. Further, CSXT’s new argument that the MSLLC benefits could have been achieved through a “less restrictive” alternative is both unnecessary and improper. CSXT’s failure to articulate anticompetitive harm provides yet another basis for rejecting CSXT’s requests.

**A. CSXT’s Requested Relief, Including CSXT’s Opposition to NS’s Amended Responsive Application, Does Not Meet the Standard Set by the Board for the CP-KCS Proceeding**

CSXT’s Response suffers from the same fundamental failings of previous CSXT filings in this Proceeding. CSXT asks the Board to (1) abrogate so-called the exclusivity provision in the NS-MSLLC Joint Use Agreement to “re-establish the competitive *status quo* before 2006” and (2) require Applicants and the MSLLC “to establish an efficient interchange”<sup>23</sup> with CSXT at Meridian and to “assure that the Shreveport and Meridian gateways are opened on reasonable terms” (“CSXT’s Gateway Request”).<sup>24</sup> However, CSXT’s Response does not – and could not – establish that these requests meet the Board’s standard for imposing conditions in this Proceeding.

In particular, (i) CSXT’s response does not address any effect of the CP-KCS Transaction or NS’s Amended Responsive Application, (ii) neither the CP-KCS Transaction nor NS’s Amended Responsive Application would increase any so-called “exclusive” NS traffic, (iii) NS’s proposed Contingent Trackage Rights would have no effect on the Shreveport or Meridian gateways, and (iv) the pro-competitive benefits of the MSLLC would not be undermined by the CP-KCS Transaction. For these reasons, CSXT’s requested relief must fail.

---

<sup>23</sup> CSXT-8, at 8.

<sup>24</sup> CSXT-11, at 2.

# **1. CSXT’s Response Has No Nexus to the CP-KCS Transaction or NS’s Amended Responsive Application**

First, CSXT identifies no connection between its requests and the CP-KCS Transaction or NS’s Amended Responsive Application. On its face, CSXT’s request to abrogate the so-called exclusivity provision in the Meridian Speedway Agreement fails. By its own admission, CSXT seeks to re-establish the *status quo* before 2006.<sup>25</sup> The *status quo* in 2006 is not the appropriate baseline for purposes of establishing an effect of the CP-KCS Transaction for which the imposition of any conditions could be justified. CSXT’s request goes beyond the Board’s standard of preserving competition<sup>26</sup> and is unrelated to any effect of the CP-KCS Transaction.

CSXT’s Gateway Request also fails. The request goes beyond preserving competition by requiring MSLLC to establish a new interchange for NS Traffic with CSXT,<sup>27</sup> which is the only interchange that CSXT cannot make at Meridian or Shreveport today.<sup>28</sup> In fact, this request goes beyond what CSXT committed to in its recent acquisition of Pan Am Systems, et al (“PAS”).<sup>29</sup> CSXT committed to keeping “all existing active gateways affected by [its acquisition of PAS]

---

<sup>25</sup> CSXT-8, at 20.

<sup>26</sup> *Canadian Pacific Railway Limited, et al. – Control – Kansas City Southern, et al.*, STB Docket No. FD 36500 (served April 23, 2021).

<sup>27</sup> CSXT does not have a direct physical connection with the Meridian Speedway at Meridian. Rather, CSXT’s access would be via the Meridian and Bigbee Railroad (“MNBR”) between Meridian and Montgomery, AL.

<sup>28</sup> The cases that Carey relied on to show the Board has exercised discretion to open new gateways are not applicable here. Carey relied on *Seaboard Air Line Railroad Company – Merger – Atlantic Coast Line Railroad Company* (FD 21215) (December 2, 1963) and *Great Northern Pacific & Burlington Line, Inc – Merger, Etc. – Great Northern Railway Company, et al.* (FD 21468) (November 30, 1967). These cases were decided prior to 1980 when the ICC operated under a different open routing regulatory regime where the ICC imposed rigid conditions on merged railroads (referred to as “DT&I conditions”). Recognizing that the DT&I conditions inhibited, rather than enhanced, competition, the ICC stopped the automatic imposition of DT&I conditions. *Burlington Northern, Inc. – Control and Merger – St. Louis—San Francisco Railway Company*, 366 I.C.C. 784, 950 (March 25, 1980) (recognizing that the automatic imposition of conditions could decrease or eliminate a merger’s expected benefits); *St. Louis Southwestern Railway – Purchase – Rock Island (Tucumcari)*, 363 I.C.C. 320 (June 6, 1980) (dispensing with the DT&I conditions).

<sup>29</sup> CSXT-13, at 7, n. 14.

open on commercially reasonable terms.”<sup>30</sup> CSXT’s request for Applicants to establish or open gateways at Meridian and Shreveport would clearly not be covered by the CSXT’s commitment in its acquisition of PAS because the Meridian and Shreveport gateways are not existing active gateways for traffic between KCS or MSLLC and CSXT.

Finally, CSXT has failed to demonstrate that its hypothetical route over the Meridian Speedway for transcontinental intermodal traffic would be more efficient than any of its existing routes. CSXT’s proposed route would include movement on the MNBR line between Meridian and Montgomery, AL. CSXT {{ [REDACTED] }}. <sup>31</sup> CSXT touts the “natural advantages” of the Meridian Speedway but does not use the Meridian Speedway for any traffic that CSXT could interchange with MSLLC today. As detailed in the Rebuttal Verified Statement of John W. Mayo, for “NS-Traffic” specifically, CSXT had tremendous growth using its alternate route with BNSF.<sup>32</sup> CSXT has identified no benefit to shippers that would arise from its requests.

## **2. Neither the CP-KCS Transaction Nor NS’s Amended Responsive Application Would Increase Any So-Called “Exclusive” NS Traffic**

CSXT has repeatedly mischaracterized the scope of the alleged “exclusivity” in the Meridian Speedway Agreements. CSXT’s filings would have the Board believe that nearly all traffic on the Meridian Speedway is exclusive to NS.<sup>33</sup> This simply is not true. For “NS Traffic” (as defined in the Meridian Speedway Agreements) only, MSLLC may not perform haulage

---

<sup>30</sup> *CSX Corporation, et al. – Control and Merger – Pan Am Systems, Inc., et al.*, Amended and Supplemented Application, Exhibit 22 (Verified Statement of Mr. Sean Pelkey), STB Docket No. FD 36472 (filed April 26, 2021), at 15. CSXT’s representatives further clarified at the hearing that the commitment was to not take away an option “that exists today.” CSX-Pan Am Hr’g Tr. 168:19-22 (Jan. 13, 2022).

<sup>31</sup> CSX\_HC\_0000819.

<sup>32</sup> Mayo R.V.S., at 30.

<sup>33</sup> *See, e.g.*, CSXT-11, at 6.

services for any carrier other than NS or grant trackage rights to any other carrier for movement on the Meridian Speedway without NS’s consent (“NS Traffic Provision”).<sup>34</sup> The NS Traffic Provision does not apply to Dallas Intermodal Terminal Traffic (“DITT”) or traffic to and from Mexico (“Mexico Traffic”).<sup>35</sup> Regardless, even if using CSXT’s inaccurate, expansive definition of “exclusive” traffic, CSXT cannot demonstrate any increase resulting from the CP-KCS Transaction or NS’s Amended Responsive Application.

CSXT’s claim about the growth in “NS Traffic” is incorrect and unsupported by the Applicants’ Amended Operating Plan. CSXT purports to rely on the Amended Operating Plan to say that the CP-KCS Transaction would lead to a significant increase in traffic covered by the NS Traffic Provision.<sup>36</sup> However, as NS explained in NS’s Response, the Amended Operating Plan excludes the traffic that is exclusive to NS on the Meridian Speedway.<sup>37</sup> Any increase in traffic on the Meridian Speedway in the Amended Operating Plan *cannot be exclusive to NS*.

Next, CSXT argues that “exclusive” Dallas Intermodal Terminal Traffic (“DITT”) would increase as a result of the CP-KCS Transaction and the requested Contingent Trackage Rights.<sup>38</sup> In evaluating this complaint, it is critical to understand that NS’s Amended Responsive Application seeks contingent trackage rights *only* on KCS’s line between Shreveport, LA and the

---

<sup>34</sup> NS-MSLLC Joint Use Agreement, Section 4(b)(ii).

<sup>35</sup> Documents produced by CSXT in this Proceeding make clear that leading up the CP-KCS Transaction, CSXT {{ [REDACTED] }}. In January 2006, prior to the closing of the Meridian Speedway transaction, {{ [REDACTED] }}. CSX HC 0000825. {{ [REDACTED] }} On February 28, 2022 (the deadline for filing Comments and Requests for Conditions in this Proceeding), {{ [REDACTED] }}. CSX\_HC\_0003397.

<sup>36</sup> CSXT-13, at 79.

<sup>37</sup> AOP, Appendix T, at 14 (“KCS moves NS trains in Haulage service as part of the Meridian Speedway between Shreveport, LA and Meridian, MS. NS traffic is not included in the Master Segment Table.”).

<sup>38</sup> CSXT-11, at 7-8.

Wylie Intermodal Terminal in Wylie, TX (“Shreveport-Wylie Section”) for a narrow category of intermodal traffic.<sup>39</sup> Despite repeated misstatements by CSXT,<sup>40</sup> the Shreveport-Wylie Section is simply not part of the MSLLC.<sup>41</sup> Neither the MSLLC directly, nor NS indirectly, has any ownership interest in the Shreveport-Wylie Section. CSXT has repeatedly described the Meridian Speedway as the line between Dallas, TX and Meridian, MS, perhaps in an attempt to find a nexus between NS’s Responsive Application and CSXT’s unsupported allegations about the MSLLC. But this fictional definition is simply wrong and CSXT’s continuous repetition of incorrect facts do not make them true.

The traffic that would move under the requested Contingent Trackage Rights is DITT, defined as:

domestic intermodal containers or trailers with an origin and destination in the United States, with a lift or drop at the [Wylie Terminal], that moves over the [Meridian Speedway] and over KCSR’s tracks between Shreveport and the [Wylie Terminal], and that originates or terminates at or east of Meridian, and that originates or terminates at or west of the Dallas / Ft. Worth, TX. [sic] Standard Metropolitan Statistical Area (SMSA) as published by the Office of Management and Budget (OMB).<sup>42</sup>

---

<sup>39</sup> As described in NS-13, NS is seeking “contingent trackage rights for intermodal traffic, the rail movement of which originates or terminates at the Wylie Intermodal Terminal, over the Shreveport-Wylie Section, exercisable in the event that NS elects to purchase the Wylie Intermodal Terminal and CPKC fails to meet established service standards for haulage service for NS intermodal shippers.”

<sup>40</sup> “KCSR and NSR cooperate to transport traffic over the line between Meridian, MS, and Dallas, TX, known as the Meridian Speedway (the “Speedway”).” CSXT-8, at 7; “The Meridian Speedway runs between Meridian, MS, and Dallas, TX, through KCS’ “hub” at Shreveport, LA.” CSXT-8, at 8; “The KCS corridor between Meridian, MS and Dallas, TX (the “Meridian Speedway”)...” CSXT-11, at 3; “Meridian Speedway” refers to the line from Dallas, TX to Meridian, MS.” CSXT-13, at 86.

<sup>41</sup> *Canadian Pacific Railway Limited, et al. – Control – Kansas City Southern, et al.* STB Docket No. FD 36500, (served June 30, 2022) at 4, n. 7 (“Meridian Speedway is a line owned by Meridian Speedway, LLC (MSLLC), connecting Meridian, Miss., and Shreveport, La.”).

<sup>42</sup> *Kansas City Southern, The Kansas City Southern Railway Company, and Meridian Speedway, LLC – Exemption for Transaction Within a Corporate Family (“KCS-MSLLC Exemption”)*, STB Docket No. FD 34822 (filed Jan. 17, 2006), Exhibit J (“Dallas Terminal Marketing Agreement”), Section 1.

DITT is not exclusive to NS today. KCS develops a rate quote for the potential movement of DITT.<sup>43</sup> NS has a right of first refusal to participate in the movement of DITT based on the KCS rate quote.<sup>44</sup> The right of first refusal does not make DITT exclusive to NS.

If NS ultimately exercises its option to purchase the Wylie Intermodal Terminal, however, then NS's right of first refusal for DITT is eliminated. Instead, KCS would provide haulage on the Shreveport-Wylie Section for NS's DITT. Even if (and only if) a Major Service Standard Failure subsequently occurred, and NS exercised the requested Contingent Trackage Rights, the only effect would be to change from movement in haulage to trackage rights.<sup>45</sup> Simply put, the traffic that would move under the requested Contingent Trackage Rights is not exclusive today, nor would it be exclusive if the requested Contingent Trackage Rights were granted and ultimately exercised.

Additionally, CSXT's "competition" arguments related to NS's share of intermodal traffic moving between Dallas and the Southeast also have no nexus to the NS's Amended Responsive Application, and are factually incorrect.<sup>46</sup> In fact, CSXT's purported "market share" analysis *excludes* the largest category of intermodal traffic between Dallas and the Southeast, which moves by truck.<sup>47</sup> Once truck traffic is included, NS's share of intermodal traffic between Dallas and the Southeast is only {{ [REDACTED] }}%.<sup>48</sup> But perhaps more importantly, NS's share of intermodal traffic between Dallas and the Southeast ***will not change*** even if NS's Amended Responsive Application

---

<sup>43</sup> KCS-MSLLC Exemption, Exhibit J ("Dallas Terminal Marketing Agreement"), Section 2(d).

<sup>44</sup> *Id.*

<sup>45</sup> NS-13, at 6.

<sup>46</sup> Mayo R.V.S. at 17-20.

<sup>47</sup> *Id.*

<sup>48</sup> *Id.*, Exhibit 3.

is approved and the Contingent Trackage Rights are granted. The trackage rights sought are for traffic that NS already could move in haulage.

And in any event, CSXT's argument that the growth at the Wylie Intermodal Terminal would increase the amount of DITT moving over the Meridian Speedway is incorrect. As NS explained in NS's Response, the workpapers underlying the growth show that {{ [REDACTED] [REDACTED] }}.<sup>49</sup> Accordingly, for each of these reasons, CSXT's argument that NS's Amended Responsive Application would extend "exclusive rights" for DITT is contradicted by the actual facts and also must be rejected.

Finally, in CSXT's Response, CSXT for the first time raises concern about traffic moving to or from Mexico ("Mexico Traffic").<sup>50</sup> CSXT suggests that shippers moving Mexico Traffic do not have access to the most efficient route between Laredo, TX and the Southeast using Shreveport and Meridian gateways. Once again, CSXT misrepresents the facts. Mexico Traffic under CSXT's own definition is not exclusive to NS today.<sup>51</sup> The NS Traffic Provision is limited to intermodal traffic that, among other things, does not originate or terminate on the KCS system as it existed at the time of the Meridian Speedway formation. The KCS system included the Texas Mexican Railway Company at the time of formation. Accordingly, all of the Mexico Traffic with which CSXT takes issue is not in fact exclusive to NS.<sup>52</sup> CSXT is free to compete with NS for the movement of Mexico Traffic over the Meridian Speedway.

---

<sup>49</sup> NS-12, at 27-30.

<sup>50</sup> CSXT-13, at 8-11.

<sup>51</sup> CSXT defines Mexico Traffic as "traffic to and from Mexico on the proposed CPKC rail system." CSXT-13, at 86.

<sup>52</sup> The NS Traffic Provision is also limited to traffic with an origin and destination within the United States, which is an additional and independent reason why Mexico Traffic is not exclusive to NS.

After correcting CSXT's various misstatements of fact, CSXT has not identified a single change as a result of the CP-KCS Transaction or NS's Amended Responsive Application that expands the scope of any alleged "exclusive" traffic for NS.

**3. The Contingent Trackage Rights Would Not Negatively Impact Access to the Shreveport and Meridian Gateways**

CSXT makes the unsupported conclusory allegation that, "Shreveport and Meridian will be affected by [...] NSR's responsive application."<sup>53</sup> This simply is not accurate. The Contingent Trackage Rights NS seeks would result in no operational or commercial changes for shippers' intermodal traffic interchanged at either the Meridian or the Shreveport gateways. First, the requested Contingent Trackage Rights only cover the Shreveport-Wylie Section, which does not even include the Meridian gateway. Further, there would be no impact on the existing Shreveport gateway because, if the Board approves NS's Amended Responsive Application and grants the requested Contingent Trackage Rights, there would be no immediate change to the operations at it or any gateway, or on the Shreveport-Wylie Section. The requested trackage rights are *contingent*; they will not be exercisable unless or until at least two contingencies are met. Specifically, NS would obtain the requested Contingent Trackage Rights *only if* NS first exercises its option to purchase the Wylie Intermodal Terminal and even then *only if* CPKC fails to provide service consistent at the same levels that KCS is already contractually obligated to provide. And even if both of these contingencies are met, the only change would be to permit NS to exercise the requested Contingent Trackage Rights to move traffic on the Shreveport-Wylie Section under trackage rights rather than in haulage. This change from haulage rights to trackage rights would not impact CPKC's ability to contract with other rail carriers including CSXT, at the Shreveport

---

<sup>53</sup> CSXT-13, at 10.

gateway.<sup>54</sup> CSXT claims that NS’s Amended Responsive Application would negatively affect the Shreveport or Meridian gateways, but fails to address these undisputed facts or supports its conclusory assertions. These arguments must be rejected.

#### **4. The CP-KCS Transaction Would Not Undermine the Procompetitive Benefits of the MSLLC**

CSXT also now argues that the CP-KCS Transaction will harm the quality of service over the Meridian Speedway, and that – somehow – this possible effect of the CP-KCS Transaction should be justification for the elimination of the NS Traffic Provision from an independent transaction presented to the Board more than 15 years ago.<sup>55</sup> This argument also should be rejected. First, CSXT’s arguments fail as a factual matter because the proposed Contingent Trackage Rights only cover DITT, which is not exclusive to NS. Second, NS’s concern about service on the Meridian-Wylie Route is focused on the Shreveport-Wylie Section, which is not a part of the MSLLC.<sup>56</sup> Third, to the extent there is harm to traffic on the Meridian-Wylie Route, that harm would be suffered by NS shippers. CSXT’s attempt to connect its requests, which in its hypothetical world of service degradation, would add trains and complexity to a line that would already be experiencing service issues, to the CP-KCS Transaction cannot be sustained.

CSXT has identified no connection between its requested relief and a change resulting from the CP-KCS Transaction or NS’s Amended Responsive Application, nor has CSXT demonstrated

---

<sup>54</sup> As discussed below in Section IV.E, the haulage trains would already contain exclusively intermodal traffic in NS’s revenue waybill, so exercising the requested Contingent Trackage Rights and converting to trackage rights would not alter the train composition.

<sup>55</sup> CSXT-13, at 81-84.

<sup>56</sup> Compare Comments of Norfolk Southern Railway Company and Request for Conditions (“NS-9”), STB Docket No. FD 36500, (filed February 28, 2022) (discussing traffic changes on the Meridian Speedway) with Amended Comments of Norfolk Southern Railway Company and Request for Conditions (“NS-12”) (discussing the traffic changes on the Shreveport-Wylie Section).

that its alleged pre-existing “harm” is exacerbated by the CP-KCS Transaction or NS’s Amended Responsive Application.

**B. The MSLLC is Exempt from Attack by CSXT**

Through repeated and in some cases procedurally improper filings, CSXT attempts to hijack the Board’s review of the CP-KCS Transaction to instead revisit the formation of the MSLLC, asserting that a restriction on operations on the Meridian Speedway was never approved by the Board and now should be considered in this proceeding. The Board, however, not only exempted the MSLLC with all of its terms in 2006, but it also ratified its decision in subsequent proceedings.<sup>57</sup> The notices of exemption were complete and the Board considered and approved of the narrow restriction on MSLLC operations to protect NS’s significant investment in the MSLLC.<sup>58</sup> The Board’s exemption of the Meridian Speedway Agreements also exempted KCS and NS, as participants in the exempted transaction, “from the antitrust laws and from all other law, including State and municipal law, as necessary to let [them] carry out the transaction.”<sup>59</sup> CSXT’s improper and unsupported attack on the MSLLC in the guise of responding to NS’s Amended Comments and Amended Responsive Application should be rejected on this basis alone.

---

<sup>57</sup> The Board reaffirmed the use of the exemption proceeding for the Meridian Speedway formation in subsequent decisions. See *Michigan Central Railway, LLC – Acquisition and Operation Exemption – Lines of Norfolk Southern Railway Company*, STB Docket No. FD 35064 (served Dec. 10, 2007), (discussing the Meridian Speedway formation exemptions, the board said “the notices were unopposed and became effective in due course”).

<sup>58</sup> *CSX Transportation, Inc. – Joint Use – Louisville & Indiana Railroad Company, Inc.* STB Docket No. FD 35523, (served August 1, 2013) (describing the Meridian Speedway exemption within a corporate family, the Board said it “[authorized] a transaction that involved a significant investment by Norfolk Southern Railway Company (NSR) in capital improvements to a line of the Kansas City Southern Railroad, but imposed certain restrictions on other railroads from operating over it”).

<sup>59</sup> 49 U.S.C. § 11321(a). Section 11321(a) immunity applies to transactions exempted under Section 10502. See *UTU v. Burlington Northern Santa Fe R. Co.*, 528 F.3d 674, 679-80 (9th Circ. 2008).

**C. CSXT's Allegations of Competitive Harm Resulting from the MSLLC and NS's Amended Responsive Application Are Improper and Unfounded**

CSXT argues that it has suffered competitive harm as a result of the MSLLC, and that the pro-competitive benefits of the MSLLC could have been achieved through a “less restrictive” alternative. Neither argument is supported. The MSLLC is a pro-competitive joint venture that enhanced competition in the southeast United States. Because the MSLLC did not restrict competition, CSXT’s search for a “less restrictive” alternative is unnecessary and improper.

First, contrary to the allegations in CSXT's Response, the MSLLC was, and remains, a pro-competitive joint venture between NS and KCS that facilitated much-needed investment in the Meridian Speedway route, unlocking capacity necessary to handle the additional rail traffic serving the growing population centers in the southeast United States and the western United States.<sup>60</sup> NS invested \$300 million in the MSLLC, of which \$260 million went directly to infrastructure and track improvements.<sup>61</sup> The MSLLC continues to support the efficient movement of rail traffic into and out of the southeast United States through ongoing investment and maintenance.<sup>62</sup>

As a result of NS's investment in the MSLLC, the track condition was improved and traffic moving on the Meridian Speedway grew dramatically.<sup>63</sup> The MSLLC increased competition for the movement of intermodal traffic into and out of the southeast United States. In fact, the MSLLC spurred CSXT and BNSF to form their own partnership for movement of intermodal traffic between the west coast and the southeast United States.<sup>64</sup>

<sup>60</sup> For additional discussion of the pro-competitive benefits of the MSLLC, see NS-14, at 9-21.

<sup>61</sup> KCS-MSLLC Exemption, STB Docket No. FD 34822 (filed Jan. 17, 2006), at 5.

<sup>62</sup> NS-14, at 18.

<sup>63</sup> Mayo R.V.S, at 20-24.

64 { }

}} CSX HC 0002646, at 49, 51. {{

As discussed in more detail in NS’s Response and Professor John W. Mayo’s July 12th Verified Statement, as part of the MSLLC formation, NS received exclusive rights to move a narrow category of intermodal traffic.<sup>65</sup> At the time of the formation of the MSLLC in 2006, KCS was not providing haulage service to any other carrier for this category of transcontinental intermodal traffic, which was defined as NS Traffic in the Meridian Speedway Agreements.<sup>66</sup> The NS Traffic Provision was included in the Meridian Speedway exemption filings<sup>67</sup> and was recognized by the Board to be a limited restraint that was necessary to protect NS’s substantial investment.<sup>68</sup> Antitrust precedent also supports the use of an ancillary restraint in situations like the MSLLC.<sup>69</sup> The NS Traffic Provision was narrowly tailored to protect NS’s significant initial and ongoing investment in the MSLLC.

As also discussed in NS’s Response and Professor John W. Mayo’s July 12th Verified Statement, CSXT’s initial claim that the MSLLC is an unlawful market allocation scheme is unsupported by antitrust precedent. There can be no market allocation scheme unless the parties

---

[REDACTED] } }.

<sup>65</sup> See KCS-MSLLC Exemption, supra n. 42.

<sup>66</sup> “NS Traffic” is defined as “transcontinental intermodal container traffic moving on the [Meridian Speedway] that does not originate or terminate on KCS’s current system and that both (a) originates or terminates in the United States at or east of Meridian and enters or exits the Line at Meridian and (b) originates or terminates in the United States west of Fort Worth, Texas, and enters or exits the [Meridian Speedway] Line at Shreveport.”

<sup>67</sup> KCS-MSLLC Exemption, at 6 (“NSR will be the sole provider of service for transcontinental intermodal traffic over the Line.”). In his verified statement, Mr. Robert Girardot claims that he “did not grasp” the restrictions in the Meridian Speedway Agreements. CSXT-13, Verified Statement of Robert Girardot, at 7. Regardless of what Mr. Girardot now remembers, CSXT’s contemporaneous documents make clear that CSXT { [REDACTED] } }. See CSX\_HC\_0002646. CSXT’s informed decision not to participate in the Meridian Speedway exemption proceedings does not simply allow CSXT to plead ignorance now.

<sup>68</sup> *CSX Transportation, Inc. – Joint Use – Louisville & Indiana Railroad Company, Inc.* STB Docket No. FD 35523, (served August 1, 2013) (“[T]he Board has permitted certain restrictions similarly aimed at protecting that investment. See *Kansas City S. Ry. and Meridian Speedway LLC-Exemption for Transactions Within a Corporate Family*, FD 34822 (STB served Feb. 16, 2006) (authorizing a transaction that involved a significant investment by Norfolk Southern Railway Company (NSR) in capital improvements to a line of the Kansas City Southern Railroad, but imposed certain restrictions on other railroads from operating over it).”

<sup>69</sup> *Polk Bros., Inc. v. Forest City Enterprises, Inc.*, 776 F.2d 185, 54 USLW 2281 (7th Cir. 1985).

were competitors prior to entering into an agreement.<sup>70</sup> NS and KCS did not compete for traffic on the Meridian Speedway prior to the formation of the MSLLC. In 2000, NS and KCS entered into a haulage agreement to offer service for intermodal customers on the KCS line between Meridian and Dallas, TX.<sup>71</sup> KCS and NS replaced their interline relationship with a haulage relationship for movement on this line. At the time of the MSLLC formation, KCS was not hauling traffic for, or performing interline service jointly with, any carrier other than NS on the Meridian Speedway.<sup>72</sup> NS and KCS did not compete for the traffic covered by the NS Traffic Provision – they worked jointly in the movement thereof – so CSXT’s argument that the MSLLC was a market allocation scheme fails.

Seemingly in recognition of this failure, in CSXT’s Response, CSXT’s economists, Dr. Ramsey Shehadeh and Professor Julie M. Carey (“Shehadeh” and “Carey”) shift gears and argue (for the first time) that the MSLLC resulted in vertical foreclosure. CSXT’s Response suggests that CSXT has suffered harm because it has been foreclosed from accessing the Meridian Speedway for transcontinental intermodal traffic.<sup>73</sup> This theory of harm is not supported by the economic evidence, for the reasons described in Professor Mayo’s Rebuttal Verified Statement. NS had no ability to adversely affect CSXT’s ability to move transcontinental traffic, nor did NS have any ability to raise CSXT’s costs on its routes for transcontinental traffic.<sup>74</sup> Further, Professor

---

<sup>70</sup> *United States v. Topco Associates, Inc.*, 405 U.S. 596, 92 S.Ct. 1126, 1133-34 (1972)(“One of the classic examples of a per se violation of §1 is an **agreement between competitors** at the same level of the market structure to allocate territories in order to minimize competition....This Court has reiterated time and time again that ‘[h]orizontal territorial limitations ...are naked restraints of trade with no purpose except stifling of competition.’ Such limitations are per se violations of the Sherman Act.”)(emphasis added).

<sup>71</sup> KCS-MSLLC Exemption, at 4.

<sup>72</sup> KCS-MSLLC Exemption, at 4 (“KCSR does not provide haulage service for intermodal traffic over the Speedway to any other railroad and NS is the sole provider of such transcontinental container traffic over the Line.”).

<sup>73</sup> CSXT-13, at 39.

<sup>74</sup> Mayo R.V.S., at 6-12.

Mayo addresses each of the empirical analyses provided by Carey and Shehadeh purporting to provide indicia of competitive harm resulting from the MSLLC – alleged “high” market shares, alleged output reductions caused by the MSLLC, and price premiums for MSLLC traffic – and demonstrates why each is irrelevant and incorrect.<sup>75</sup> Moreover, CSXT’s claim is contradicted by its internal documents,<sup>76</sup> its own witness, Mr. Girardot,<sup>77</sup> its {{ [REDACTED] }},<sup>78</sup> and the data demonstrating CSXT’s considerable growth in transcontinental intermodal volumes.<sup>79</sup> As a result, CSXT’s new vertical theory of harm also fails.

Despite failing to show any anticompetitive harm, Carey and Shehadeh, attempt to demonstrate that the investment in the MSLLC could have been achieved through less restrictive arrangements. This exercise is unnecessary and improper when the arrangement at issue has not produced any anticompetitive effects. However, to ensure a complete record, NS will briefly respond to the failings of CSXT’s analysis.

Carey highlights certain haulage agreements as examples of alternative arrangements NS and KCS could have pursued.<sup>80</sup> In particular, Carey details eight so-called “non-exclusive” haulage agreements and contrasts these with one invalid “exclusive” agreement.<sup>81</sup> For a number

---

<sup>75</sup> *Id.*

<sup>76</sup> *See, e.g.*, CSX\_HC\_0005745, at 48 ({{ [REDACTED] }}); CSX\_HC\_0004393, at 93 ({{ [REDACTED] }}).

<sup>77</sup> CSXT Response, Verified Statement of Robert Girardot, at 7 (“BNSF and CSXT have attracted a considerable volume of Transcon traffic moving to and from Atlanta by designing a serve [sic] that would over come the speed and directness of the UP-NSR route over Shreveport.”).

<sup>78</sup> *Supra*, n. 35 ( {{ [REDACTED] }}).

<sup>79</sup> Mayo R.V.S., at 28-29.

<sup>80</sup> “The MSLLC perpetuity and market division create considerably different competitive circumstances from a standard haulage agreement.” CSXT’s Response, Verified Statement of Professor Julie M. Carey (“Carey R.V.S.”), Appendix D, at 4.

<sup>81</sup> Carey R.V.S., Appendix D, Figure 2, at 4.

of reasons, each agreement cited offers a poor comparison to the Meridian Speedway Agreements and Carey’s conclusions are either speculative or misguided. None of the agreements Carey cites offer a less restrictive alternative that NS and KCS could have realistically pursued and still facilitated the roughly \$800,000 investment (in 2006 dollars) per route-mile that transformed the Meridian Speedway into an efficient and competitive route.

To be a legitimate “less restrictive alternative,” the alternative must be capable of being “reasonably achieved.”<sup>82</sup> It must be “virtually as effective in serving the procompetitive purposes” of the transaction *and* must not impose “significantly increased costs.”<sup>83</sup> In reviewing whether a less restrictive alternative is reasonable, the antitrust Agencies look to whether the alternative is “practical.”<sup>84</sup> They “do not search for a theoretically less restrictive alternative that was not practical given the business realities.”<sup>85</sup> While “some less restrictive alternative can always be imagined,” courts instead look to whether the restriction is “unreasonably restrictive in the context of a particular case.”<sup>86</sup> Furthermore, a “reasonable restriction does not become illegal merely because a less restrictive alternative exists.”<sup>87</sup> To be a realistic less restrictive alternative, then, the alternative must be reasonable and practical in light of the particular business context.

---

<sup>82</sup> *Ohio v. Am. Express Co.*, 138 S. Ct. 2274 (2018); *See also* “A finding of less restrictive alternative should be based on alternatives ‘that are either quite obvious or a proven success.’” *Impax Labs., Inc. v. FTC*, 994 F.3d 484, 500 (5th Cir. 2021) (quoting 11 PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* 1914c, at 410 (4th ed. 2019)).

<sup>83</sup> *Alston v. NCAA*, (*In re NCAA Ath. Grant-In-Aid Cap Antitrust Litig.*), 958 F.3d 1239, 1260 (9th Cir. 2020), *aff’d* 141 S. Ct. at 2161.

<sup>84</sup> Antitrust Guidelines for Collaborations Among Competitors. Federal Trade Commission and the U.S. Dep’t of Justice, 2000, at 9.

<sup>85</sup> *Id.*; *See also* C. Scott Hemphill, Less Restrictive Alternatives In Antitrust Law, 116 COLUM. L. REV. 927, 931 (2016)(“The [less restrictive alternative] must be practical and ‘standard,’ not speculative.”); Am. Bar Ass’n Section of Antitrust Law, Model Jury Instructions in Civil Antitrust Cases, Instruction 3C (2016)(“If you find that the challenged restraint does result in competitive benefits, then you must consider whether the restraint was reasonably necessary to achieve the benefits. If the plaintiff proves that the same benefits could have been readily achieved by other, reasonably available means that create substantially less harm to competition, then they cannot be used to justify the restraint.”).

<sup>86</sup> *Smith v. Pro Football*, 593 F.2d 1173, 1215 (D.C. Cir. 1978)(MacKinnon, J., dissenting).

<sup>87</sup> *Id.*

Carey offers misguided statements regarding the existence of exclusivity clauses by relying on traffic data and an overly narrow definition of “exclusivity.” With the exception of {{ [REDACTED] }} there are no citations directly to any haulage agreements. Yet, Carey makes conclusory statements about whether exclusivity provisions exist.<sup>88</sup> In identifying “non-exclusive” haulage arrangements, Carey states that “haulage agreements are deemed non-exclusive if the line owner provides access to multiple carriers to move traffic over, to or from points on the relevant haulage line.”<sup>89</sup> This definition conveniently omits restrictive provisions that could exist in agreements and not appear in the traffic data Carey uses to reach her conclusions.<sup>90</sup> While traffic data may provide some indicator of what carriers have access to a particular route, it is not a perfect signal of exclusivity.<sup>91</sup> By defining exclusivity narrowly and relying heavily on traffic data, Carey’s conclusions are too speculative to be reliable.<sup>92</sup>

By employing a narrow definition of exclusivity, Carey inaccurately classifies at least two of these agreements as “non-exclusive.” For instance, Carey cites a haulage agreement

---

<sup>88</sup> Without referencing any agreements, Carey assumes the existence of non-exclusive haulage relationships between {{ [REDACTED] }} For each she concludes, based on traffic tapes and the CWS, that they are non-exclusive agreements without citing any actual agreements, which may contain exclusive terms not appearing in traffic data. For both {{ [REDACTED] }} agreements, Carey cites only screenshots of a {{ [REDACTED] }} rail route map. For the {{ [REDACTED] }} With only this information, Carey concludes that each lacks any exclusivity clauses. *See* Carey R.V.S. Appendix D, Figure 2, at 4, 14-15; Finance Docket 36500, “Amended Operating Plan (Exhibit 13),” May 13, 2022, page 27 at Exhibit T.

<sup>89</sup> Carey R.V.S., Appendix D, at 3.

<sup>90</sup> For instance, provisions restricting certain overhead traffic may provide certain parties with exclusive access; yet such a restriction may not appear in traffic tapes or waybill data. Such provisions could then exist in the agreements Carey cites as “non-exclusive.”

<sup>91</sup> For example, an agreement may limit a third-party from using a line. This should show up as non-exclusive in the Waybill data but clearly has exclusivity.

<sup>92</sup> *Id.* (Carey states that she arrives at her conclusions regarding the existence of exclusivity clauses and investments through analysis of the 2019 CWS, 2019 CSX Traffic Tapes, and 2019 CP Traffic Tapes, in addition to the public sources cited as support.).

between {{ [REDACTED] }}  
 [REDACTED] }}<sup>93</sup> In contrast to the Meridian Speedway  
 Agreements in which only a narrow category of traffic is exclusive,<sup>94</sup> the {{ [REDACTED] }}  
 [REDACTED] }} {{ [REDACTED] }}  
 [REDACTED]  
 [REDACTED]  
 [REDACTED]  
 [REDACTED] }}<sup>96</sup> Such an {{ [REDACTED] }} may not appear in traffic tape data and would  
 not be captured under Carey’s narrow definition. Likewise, Carey classifies another {{ [REDACTED] }}  
 agreement with {{ [REDACTED] }}, between {{ [REDACTED] }}, as “non-  
 exclusive” when it also has restrictive elements. {{ [REDACTED] }}  
 [REDACTED] .}}<sup>97</sup> This  
 clause clearly places a restriction on the flow of traffic.

Appendix D also includes speculative claims regarding investments supposedly  
 associated with certain agreements. Even where clear investment data exists, Carey makes  
 comparisons to agreements so disproportionate in investment value to the MSLLC as to render

<sup>93</sup> CSX\_HC\_00000083 {{ [REDACTED] }}.

<sup>94</sup> “NS Traffic” is narrowly defined as “transcontinental intermodal container traffic moving on the Line that does not originate or terminate on KCS’s current system and that both (a) originates or terminates in the United States at or east of Meridian and enters or exits the Line at Meridian and (b) originates or terminates in the United States west of Fort Worth, Texas, and enters or exits the [Meridian Speedway] Line at Shreveport.” KCS-MSLLC Notice of Exemption, at 5-6.

<sup>95</sup> CSX\_HC\_00000083, {{ [REDACTED] }}.

<sup>96</sup> *Id.*

<sup>97</sup> {{ [REDACTED] }}  
 [REDACTED] }}; *See also* Mayo V.S.  
 (July 12, 2022) at 26.

any comparison meaningless.<sup>98</sup> Carey cites the {{ [REDACTED] }}  
 [REDACTED]  
 [REDACTED] }}<sup>99</sup> {{ [REDACTED] }}  
 [REDACTED]  
 [REDACTED] }}<sup>100</sup> For  
 instance, {{ [REDACTED] }}  
 [REDACTED] }}<sup>101</sup> Even considering  
 the cited investments combined,<sup>102</sup> NS's Speedway investments still total roughly double, with  
 NS averaging an investment of \$800,000 per route mile and BNSF investing roughly {{ [REDACTED] }}  
 [REDACTED] }}per route mile.<sup>103</sup> Accordingly, such examples do not offer any realistic comparison  
 to the business realities involved in creating and maintaining the MSLLC.

None of the agreements Carey cites offer realistic examples of less restrictive haulage  
 arrangements that NS and KCS could have reasonably pursued to protect NS's substantial and  
 continuing investment in the MSLLC while still ensuring that the Speedway developed into an

---

<sup>98</sup> Carey cites the agreement between {{ [REDACTED] }}  
 [REDACTED]  
 [REDACTED] }} See {{ [REDACTED] }}  
 [REDACTED] }}.

<sup>99</sup> Carey R.V.S., Appendix D, at 4.

<sup>100</sup> *Id.*, at 7.

<sup>101</sup> *Id.*

<sup>102</sup> Some "investments" detailed arguably amount to ordinary expenses and do not reflect actual capital investment.  
 {{ [REDACTED] }}  
 [REDACTED] }} See Carey V.S., Appendix D, at  
 7.

<sup>103</sup> {{ [REDACTED] }}.

efficient and reliable line. Moreover, the Board’s Decision rejecting the MCR Notice of Exemption explicitly reaffirmed the legitimacy of the control mechanisms established by the MSLLC Agreements.<sup>104</sup> Carey’s conclusions regarding the existence of exclusivity fail to consider the nuances of provisions that may not appear in traffic data but still restrain traffic, exemplified by the two {{ [REDACTED] }} which include interchange restrictions. Furthermore, Carey’s attempt to link certain investments to specific agreements is misleading as she lacks the support to make such claims. Regardless, each “investment” cited pales in comparison to NS’s investment in the MSLLC. Accordingly, Carey’s examples fail to offer “practical” alternatives that NS and KCS could have reasonably pursued. This is especially true when considering the exceptional commitment NS made to transform the Speedway from an inefficient and ill-equipped line into an efficient and reliable pro-competitive route that NS continues to support today.

For each of these reasons, CSXT’s opposition to the MSLLC and NS’s Amended Responsive Application cannot be sustained.

### **III. Applicants’ Opposition Must Fail Because Applicants Do Not Resolve the Potential Harm Underlying NS’s Request for Contingent Trackage Rights**

In Applicants’ Response, Applicants raise a number of objections to NS’s Amended Responsive Application. Applicants attempt to downplay the changes to KCS’s operations on the Shreveport-Wylie Section resulting from the CP-KCS Transaction and present a list of operational issues they allege would result if the Board grants the proposed Contingent Trackage Rights.<sup>105</sup> These arguments are flawed. The operational changes on the Shreveport-Wylie Section resulting

---

<sup>104</sup> *Michigan Central Railway, LLC – Acquisition and Operation Exemption – Lines of Norfolk Southern Railway Company*, STB Docket No. FD 35064 (served Dec. 10, 2007), at 10.

<sup>105</sup> CP-53/KCS-39, at 246.

from the CP-KCS Transaction are significant, and the purported operational issues that Applicants claim would arise from the proposed Contingent Trackage Rights are unfounded.

**A. Applicants’ Reliance on Previous Contract Negotiations Is a Red Herring and Should Be Rejected**

The Applicants make much ado about the fact that NS did not negotiate the requested Contingent Trackage Rights as part of the original negotiations with KCS for the formation of the MSLLC in 2006.<sup>106</sup> This argument is a red herring and should be rejected. What was negotiated independently sixteen years ago in forming the MSLLC has nothing to do with the fact that the proposed Contingent Trackage Rights are sought today to address new concerns about operational changes that CP plans to implement after its proposed acquisition of KCS. These stated operational changes were not on the table sixteen years ago, nor was CP’s ownership of KCS. All that is relevant here is what the Applicants intend as part of the CP-KCS Transaction. And NS has identified concerns specific to the CP-KCS Transaction based on Applicants’ Amended Operating Plan and seeks appropriate and narrow conditions to address those concerns.

**B. Applicants’ Operational Clarifications in Their Response Do Not Resolve the Risk to Service Levels on the Shreveport-Wylie Section**

Applicants’ Response “clarified” the operational changes that they plan to implement if the CP-KCS Transaction is approved. These clarifications, however, do not resolve NS’s concerns about the service on the Shreveport-Wylie Section.

Applicants attempt to downplay the traffic increases on the Shreveport-Wylie Section resulting from the CP-KCS Transaction by presenting a traffic “growth” figure that has no temporal aspect. In their Response, Applicants simply report the percentage of traffic in 2027 that

---

<sup>106</sup> CP-53/KCS-39, at 247.

would not exist absent the CP-KCS Transaction.<sup>107</sup> In doing so, Applicants’ “growth” metric understates the impact of the CP-KCS Transaction by using the expected traffic in 2027 as the base rather than the traffic in 2019. NS’s Amended Responsive Application and Amended Comments presented the increase in merger-specific traffic as a percentage of the base traffic (i.e., the **growth** in traffic directly caused by the CP-KCS Transaction) using the 2019 baseline.

**Table 1: Growth on the Shreveport-Wylie Section**

| Segment                         | Base  | Organic Growth (% increase from Base) | Merger-Related Growth (% increase from Base) | 2027 Total With Merger (% increase from Base) |
|---------------------------------|-------|---------------------------------------|----------------------------------------------|-----------------------------------------------|
| Wylie, TX – Greenville, TX      | 13.88 | 2.52 (18.2%)                          | 8.19 (59.0%)                                 | 24.58 (77.1%)                                 |
| Greenville, TX – Shreveport, LA | 12.94 | 2.48 (19.2%)                          | 5.97 (46.1%)                                 | 21.39 (65.3%)                                 |

In any event, whether the increase on the Shreveport-Wylie Section is 53% (representing the average merger-related growth) or 44% (the percentage of traffic in 2027 created by the CP-KCS Transaction)<sup>108</sup> the concern is the same. Applicants plan a significant increase in traffic on the Shreveport-Wylie Section.

**C. Only After NS Noted That Applicants’ Plan Would Exceed the Capacity at the Wylie Intermodal Terminal Did Applicants Provide Potential Solutions**

The Applicants’ Amended Operating Plan shows transaction-specific growth at the Wylie Intermodal Terminal exceeding the terminal’s capacity.<sup>109</sup> Applicants state that NS ignored “the ease with which intermodal terminal capacity can be expanded.”<sup>110</sup> This is not the case. NS relied on the growth and investment projections that Applicants provided, which showed that Applicants

<sup>107</sup> CP-53/KCS-39, Vol. II, Reply Verified Statement of Raymond A. Elphick and John F. Orr (“Elphick/Orr R.V.S”), at 80.

<sup>108</sup> *Id.*

<sup>109</sup> NS-12, at 25-27.

<sup>110</sup> CP-53/KCS-39, at 254.

planned to exceed the Wylie Intermodal Terminal’s capacity but included no contingency planning on how to accommodate this additional transaction-specific traffic.<sup>111</sup> Only after NS objected to Applicants’ plan<sup>112</sup> did Applicants offer potential solutions to avoid foreclosure at the Wylie Intermodal Terminal.<sup>113</sup> The Applicants state that some of these potential solutions are in the planning stages in their Response,<sup>114</sup> but do not commit to actually implementing any of them. Accordingly, NS’s concerns about the capacity impacts at the Wylie Intermodal Terminal resulting from the CP-KCS Transaction remain.<sup>115</sup>

**D. The Fact that a Major Service Standard Failure Has Not Occurred in the Past Does Not Mean It Will Not in the Future**

Applicants state that KCS service on the Meridian-Wylie Route has never come close to triggering a Major Service Standard Failure.<sup>116</sup> However, prior railroad mergers have shown that the integration of two systems is a significant undertaking that can lead to a deterioration in service.<sup>117</sup> Applicants outlined the steps that they would take to try to avoid service disruptions,

---

<sup>111</sup> AOP, at 126.

<sup>112</sup> NS-12, at 25-27.

<sup>113</sup> The AOP included the possibility of shifting traffic to KCS’s Kendleton Intermodal Facility, but it had no plan to do so.

<sup>114</sup> CP-53/KCS-39, at 255.

<sup>115</sup> This is not to say that Applicants’ late-developing thoughts on how to address service concerns through an appropriate operational and/or infrastructure approach is without benefit. The expansion of traffic is directly related to the transaction proposed by CPKC. As explained in the next section, if Applicants through careful and thoughtful planning and implementation address the adverse impact of that expansion, no Major Service Standard failure would occur and the Contingent Trackage Rights will not be triggered.

<sup>116</sup> CP-53/KCS-39, Vol. II, Reply Verified Statement of Stephen D. Simmons (“Simmons R.V.S.”), at 30. A Major Service Standard Failure occurs when {{ [REDACTED] }}.

<sup>117</sup> General Accounting Office, *Railroad Regulation: Changes in Freight Railroad Rates from 1997 through 2000*. GAO-02-524 (June 2002), at 5-6 (“From 1997 through 2000, there were two periods during which major portions of the rail industry experienced serious service problems. The first began in July 1997, during implementation of the Union Pacific Railroad and Southern Pacific Transportation Company merger. As a result of aging infrastructure in the Houston, Texas, area that was inadequate to cope with a surge in demand, congestion on this system began affecting rail service throughout the western United States. Rail service disruptions and lengthy shipment delays continued through the rest of 1997 and into 1998.”).

but there is no guarantee that the transition of operations would be smooth or proceed as planned. The fact that KCS has never triggered a Major Service Standard Failure is not predictive of the levels of service CPKC could or would provide, if the CP-KCS Transaction is approved.

Further, as clearly delineated in NS's Amended Responsive Application, the requested Contingent Trackage Rights could only be exercised *if there is* a Major Service Standard Failure.<sup>118</sup> If Applicants are convinced that the service on the Meridian-Wylie Route would remain above the level required to avoid a Major Service Standard Failure, then the proposed Contingent Trackage Rights request should be a non-issue. If service deteriorates, then NS would have the ability to continue offering the same level of service that would have existed absent the CP-KCS Transaction and shippers will not lose an option as a result of the CP-KCS Transaction.

**E. Applicants Object to the Proposed Contingent Trackage Rights Based on Operational Changes That Are Unrelated to the Proposed Contingent Trackage Rights**

Applicants also argue that the proposed Contingent Trackage Rights would complicate operations on the Meridian-Wylie Route. They suggest that exercising the proposed Contingent Trackage Rights would add trains to the line,<sup>119</sup> would require NS to establish crew pools,<sup>120</sup> and would alter the economics of the move to Applicants' detriment.<sup>121</sup> These potential operational changes do not flow from requested Contingent Trackage Rights. Applicants ignore the intermediate steps and operational changes that would have to occur before the requested Contingent Trackage Rights would even become exercisable. The correct way to analyze the effect of the proposed Contingent Trackage Rights is to compare how traffic would move after the

---

<sup>118</sup> NS-13, at 4-5.

<sup>119</sup> CP-53/KCS-39, at 256.

<sup>120</sup> Elphick/Orr R.V.S., at 84.

<sup>121</sup> CP-53/KCS-39, at 260-64.

Contingent Trackage Rights are exercised with how traffic moved immediately prior to that moment. The existing contractual obligations in the Meridian Speedway Agreements, which would govern leading up to the exercise of the proposed Contingent Trackage Rights, outline a series of steps and operational changes that must occur before the proposed Contingent Trackage Rights could be exercised. Walking through each step shows that the proposed Contingent Trackage Rights would have no negative impact on operations, and in fact, would likely make operations on the line more efficient.

Currently, DITT moves between the Wylie Intermodal Terminal and Meridian as interline traffic between NS and KCS. Trains carrying DITT move with KCS crews between Wylie and Meridian, and with NS crews east of Meridian. There are crew changes and, when run-through power agreements are not in place, power changes, at Meridian. Trains carrying DITT are allowed to include cars in the revenue waybill of another party.

If NS exercises its option to purchase the Wylie Intermodal Terminal and there is a Major Service Standard Failure but the requested Contingent Trackage Rights are not granted by the Board, KCS would provide haulage between Shreveport and Wylie for NS's DITT<sup>122</sup> and NS would have trackage rights between Shreveport and Meridian.<sup>123</sup> The haulage would be provided on terms "substantially in conformance with that of the Western Haulage Agreement,"<sup>124</sup> which includes a prohibition on KCS filling out any NS trains containing DITT with rail cars or equipment in the revenue waybill of any party other than NS.<sup>125</sup> For purposes of analyzing the effect of NS's request, the proper baseline is the situation described above – where KCS provides

---

<sup>122</sup> Dallas Terminal Marketing Agreement, Section 5(a)(i).

<sup>123</sup> NS-MSLLC Joint Use Agreement, Section 2(d)(i).

<sup>124</sup> Dallas Terminal Marketing Agreement, Section 5(a)(i).

<sup>125</sup> KCS-MSLLC Exemption, Exhibit E ("Western Haulage Agreement"), Section 2(b)(vi).

haulage on the Shreveport-Wylie Section, NS has trackage rights over the Meridian Speedway, and NS trains moving DITT must be dedicated trains.

After unpacking the intermediate steps and operational changes that must occur before NS could exercise the Contingent Trackage Rights, it is clear that each of Applicants' objections are unfounded. Switching from mixed trains to dedicated trains, which is the sole basis of Applicants' concern about adding trains to the Shreveport-Wylie Section,<sup>126</sup> would occur even if the Board does not grant the requested Contingent Trackage Rights. Applicants' concern that the Contingent Trackage Rights would add a train to the Shreveport-Wylie Section should be rejected.<sup>127</sup> No additional trains would be added in the event NS exercises the requested Contingent Trackage Rights.

Applicants object to the Contingent Trackage Rights on the basis that they would require NS to establish a crew pool at Shreveport.<sup>128</sup> Using the proper baseline outlined above, it is clear that Applicants' concerns are incorrect. In the baseline scenario, the movement in haulage between Wylie and Shreveport and in trackage between Shreveport and Meridian would already require a crew change in Shreveport. Absent a separate run-through locomotive contractual arrangement, this movement would also require a locomotive swap in Shreveport.<sup>129</sup>

Compared to this baseline, the only effect of NS exercising the Contingent Trackage Rights would be to change the movement on the Shreveport-Wylie Section from haulage to trackage. If NS exercises the Contingent Trackage Rights, NS's DITT trains would have NS crew

---

<sup>126</sup> CP-53/KCS-39, at 256.

<sup>127</sup> The NOPB opposes the requested Contingent Trackage Rights on the basis that they would add trains to the Shreveport-Wylie Section. NOPB's Response, at 2. For the same reasons as described herein, NOPB's opposition should be rejected.

<sup>128</sup> Elphick/Orr R.V.S, at 84.

<sup>129</sup> Carriers sometimes execute a "Locomotive Run-through Agreement" which can avoid swapping the locomotive in a situation like this. NS and KCS currently have a locomotive run-through agreement in place.

for the entire move, which would actually *eliminate* the requirement of a crew change in Shreveport. In fact, if NS exercises the Contingent Trackage Rights, NS could improve operations on the Meridian-Wylie Route by choosing a more optimal crew change location (which may not be Shreveport). Applicants' objection based on crew pool locations must be rejected.

Finally, the Applicants argue that the proposed Contingent Trackage Rights would alter the economic relationship between NS and KCS, which would result in a windfall for NS.<sup>130</sup> This also is wrong. Upon purchase of the Wylie Intermodal Terminal, DITT would move in haulage at a price that does not fundamentally alter the existing economics of the traffic moving under the Dallas Terminal Marketing Agreement.<sup>131</sup> In Applicants' Response, Applicants use the current revenue per container that KCS earns on the Wylie to Meridian move as a proxy for the haulage fees that would be paid if NS purchases the Wylie Intermodal terminal.<sup>132</sup> This is misleading and inaccurate as it once again ignores the necessary intermediate steps.

The Dallas Terminal Marketing Agreement provides that the haulage fee applicable prior to NS's exercise of the Contingent Trackage Rights should preserve the "economics" from the interline relationship, not KCS's revenue from the interline relationship. The conversion from an interline move to a haulage move, and from a haulage move to a movement under trackage, come with cost savings to KCS. In converting from interline movement to movement under haulage, NS would provide the locomotives and fuel. By paying these costs directly, the haulage fee that NS would pay KCS would decrease to maintain the economics of the move. Under trackage rights, NS would continue to provide the locomotives and fuel and would additionally provide the crews and directly cover the associated crew costs. Those costs would further reduce the trackage fee

---

<sup>130</sup> CP-53/KCS-39, at 260.

<sup>131</sup> Dallas Terminal Marketing Agreement, Section 5(a)(1).

<sup>132</sup> CP-53/KCS-39, at 260-61.

NS would pay KCS in order to maintain the economics of the move. Applicants completely ignore these cost savings, and their argument that the requested Contingent Trackage Rights would result in a windfall to NS must fail.

At the end of the day, none of the alleged operational issues in Applicants' laundry list are realistic or related to the proposed Contingent Trackage Rights sought in NS's Responsive Application. Applicants have identified no legitimate concern about the conversion from the movement of intermodal traffic in haulage to movement in trackage, which is the only right NS's Amended Responsive Application seeks. For these reasons, Applicants' opposition to NS's Amended Responsive Application must fail.

\* \* \*

**CERTIFICATE OF SERVICE**

I hereby certify that on this 11th day of August 2022 the above Rebuttal in Support of Norfolk Southern Railway Company's Amended Responsive Application has been e-filed via the STB's e-filing system and served via email or regular postage pre-paid mail on all parties of record in this proceeding.

/s/ Daniel Baquet

Daniel Baquet

August 11, 2022

PUBLIC VERSION

**BEFORE THE SURFACE TRANSPORTATION BOARD**

**FINANCE DOCKET No. 36500**

**CANADIAN PACIFIC RAILWAY LIMITED, *ET AL.* – CONTROL – KANSAS CITY  
SOUTHERN, *ET AL.***

**VERIFIED STATEMENT OF JOHN W. MAYO – REBUTTAL TO CSXT’S RESPONSE**

**AUGUST 11, 2022**

**HIGHLY CONFIDENTIAL MATERIAL: CONTAINS WAYBILL DATA**

## TABLE OF CONTENTS

|       |                                                                                                                        |    |
|-------|------------------------------------------------------------------------------------------------------------------------|----|
| I.    | Introduction.....                                                                                                      | 1  |
| A.    | Qualifications.....                                                                                                    | 1  |
| B.    | Assignment .....                                                                                                       | 1  |
| C.    | Summary of Findings.....                                                                                               | 3  |
| D.    | Materials Considered .....                                                                                             | 3  |
| II.   | The Foundational Test—and Failure—of CSXT’s Economic Analysis .....                                                    | 3  |
| III.  | The New Theory of Harm, Unpacked .....                                                                                 | 7  |
| IV.   | Analysis of the Economic Rationale for the MSLLC Indicates that its<br>Business Justification was Pro-Competitive..... | 13 |
| V.    | Analysis of the Impact of the MSLLC Indicates that Claims of “Competitive<br>Harm” are Illusory .....                  | 17 |
| A.    | Alleged Competitive Harm from “High” Market Shares .....                                                               | 17 |
| B.    | Alleged Output Reductions Caused by the MSLLC.....                                                                     | 20 |
| C.    | Alleged Competitive Harm from Price Premiums for MSLLC Traffic.....                                                    | 25 |
| D.    | The Actual Economic Effects .....                                                                                      | 28 |
| VI.   | Policy Considerations .....                                                                                            | 30 |
| VII.  | Conclusion .....                                                                                                       | 31 |
| VIII. | Appendix - Robustness of Shehadeh’s Transcontinental Intermodal Output<br>Analysis .....                               | 33 |

## I. INTRODUCTION

### A. Qualifications

1. My name is John Mayo. I am the Elsa Carlson McDonough Chair of Business Administration and Professor of Economics, Business and Public Policy in Georgetown University's McDonough School of Business. I provided a Verified Statement in Finance Docket No. 36500 on February 28<sup>th</sup>, 2022, amended on June 9<sup>th</sup>, 2022,<sup>1</sup> and a second statement on July 12<sup>th</sup>, 2022.<sup>2</sup> A description of my qualifications and experience is provided in my June 9<sup>th</sup> statement.<sup>3</sup>

2. A copy of my CV is attached as **Exhibit 1**.

### B. Assignment

3. On July 12<sup>th</sup>, CSX Transportation ("CSXT") provided a "Response to Comments and Responsive Applications" in Finance Docket No. 36500.<sup>4</sup> As part of its filing, CSXT sponsored verified statements by Professor Julie Carey and Dr. Ramsey Shehadeh (collectively,

---

<sup>1</sup> Verified Statement of John W. Mayo, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern Railroad *et al.*, Finance Docket No. 36500, February 28, 2022; *see also*, Amended Verified Statement of John W. Mayo, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern, *et al.*, Finance Docket No. 36500, June 9, 2022 (collectively, "Mayo June 9 Statement").

<sup>2</sup> Verified Statement of John W. Mayo – Response to CSXT's Comments, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern, *et al.*, Finance Docket No. 36500, July 12, 2022 ("Mayo July 12 Statement").

<sup>3</sup> Mayo June 9 Statement, at pp. 2-3.

<sup>4</sup> CSX Transportation, Inc.'s Response to Comments and Responsive Applications, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern, *et al.*, Finance Docket No. 36500, July 12, 2022 ("CSXT Response to Comments and Responsive Application").

“Carey/Shehadeh”).<sup>5</sup> I have been asked by Norfolk Southern (“NS”) to provide an independent assessment of these statements.

4. As a general matter, both statements are intended to address the economic merits of the Meridian Speedway joint venture (“MSLLC”) that was established in 2006 between NS and Kansas City Southern (“KCS”).<sup>6</sup> Together, they claim that the structure of the MSLLC was ill-intentioned and has been economically harmful. As a consequence, CSXT’s Counsel and the statements recommend that the Surface Transportation Board (“STB”) abrogate the current structure of the MSLLC.<sup>7</sup>

5. Although Carey/Shehadeh collectively provide a wide-ranging set of claims and analyses in their verified statements, the thrust of their analyses fall into two categories that I will address.<sup>8</sup> First, Carey considers the economic rationale for the MSLLC. Second, both Carey and Shehadeh provide empirical analyses which they assert provide evidence of anticompetitive harm arising from the creation and ongoing operation of the MSLLC.

---

<sup>5</sup> See, Verified Statement of Professor Julie M. Carey, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern Railroad *et al.*, Finance Docket No. 36500, July 12, 2022 (“Carey Statement”), with Workpapers. See also, Verified Statement of Dr. Ramsey Shehadeh, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern Railroad *et al.*, Finance Docket No. 36500, July 12, 2022 (“Shehadeh Statement”), with Workpapers.

<sup>6</sup> For my initial assessment of the economic motivations for, and consequences of, the MSLLC, see, Mayo July 12 Statement, at pp. 11-20.

<sup>7</sup> CSXT Response to Comments and Responsive Application, at p. 13. See also, Carey Statement, at p. 5. See also, Shehadeh Statement, at p. 4.

<sup>8</sup> I eschew a detailed examination of every aspect of the analyses in their verified statements. The fact that I have not responded to each element of their statements, however, should not be taken as an endorsement of these elements. Rather, I have chosen to focus on the most salient and revealing dimensions of each statement.

**C. Summary of Findings**

6. My analysis indicates that neither Carey’s assessment of the initial economic rationale for the MSLLC nor Carey/Shehadeh’s analyses collectively provide credible empirical analyses of the competitive effects of the MSLLC; rather, my analysis indicates that both the motivation and effects have been pro-competitive. The allegations put forth by CSXT and supported by Carey/Shehadeh are irrelevant to the matter at hand—whether and under what conditions the STB should approve the proposed CP-KCS merger—and, as such, should be summarily dismissed. Irrelevance notwithstanding, Carey and Shehadeh’s analyses simply do not provide a sound foundation for clear-eyed economic policy in the freight rail industry.

**D. Materials Considered**

7. In forming my opinions, I have reviewed documents and other materials provided to me by counsel for NS or obtained from public sources. The sources on which I rely are identified in this report and the accompanying exhibits or listed in the attached **Exhibit 2**.

8. I understand that the Proceeding is ongoing. Should additional relevant information be made available to me, I may adjust or supplement my opinions as appropriate.

**II. THE FOUNDATIONAL TEST—AND FAILURE—OF CSXT’S ECONOMIC ANALYSIS**

9. Before turning to Carey/Shehadeh’s assessment of the economic rationale for, and economic consequences of, the MSLLC, it is important to provide a benchmark against which to judge the merits of their analyses. Specifically, the foundation of any sound economic policy analysis is a credible and consistent economic theory and corresponding analysis of relevant economic data that illuminate and validate the theory.

10. In the case at hand, CSXT’s economists have failed this test. Rather than provide a consistent theory of harm, Carey flails wildly from theory to theory. In her February 28<sup>th</sup> Verified Statement (coauthored with Albert Bremser), she offers a theory of harm in which she sees the MSLLC agreements as restraining *horizontal* competition and which she argues should be judged according to a *per se* standard of harm to competition.<sup>9</sup>

11. In that statement, she readily acknowledges that vertical agreements “may be considered to enhance efficiencies and have the effect of resolving free-rider problems and promoting intra-brand competition at the retail level by limiting competition among retailers or distributors in downstream markets.”<sup>10</sup>

12. She claims in her February 28<sup>th</sup> statement, however, that “such characteristics are not present in the circumstances of the Meridian Speedway as *the relevant agreements are horizontal in nature*.”<sup>11</sup>

13. By July 12<sup>th</sup>, Carey reverses the theory of harm she envisions arising from the MSLLC, instead suggesting that the competitive harm from the joint venture arises because the service provided by the MSLLC is *vertically related* to other rail segments.<sup>12</sup> Under this new theory of harm, CSXT and its economists offer the view that the MSLLC is a vehicle for

---

<sup>9</sup> Verified Statement of Professor Julie M. Carey and Dr. Albert W. Bremser, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern Railroad *et al.*, Finance Docket No. 36500, February 28, 2022 (“Carey and Bremser Statement”), at p. 48, footnote 200. CSXT filed amended comments on June 9<sup>th</sup>, 2022, but this filing did not include a new amended verified statement; *see*, CSX Transportation, Inc.’s Amended Comments and Request for Conditions, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern Railroad *et al.*, Finance Docket No. 36500, June 9, 2022.

<sup>10</sup> Carey and Bremser Statement, at p. 48, footnote 200.

<sup>11</sup> Carey and Bremser Statement, at p. 48, footnote 200, *emphasis added*.

<sup>12</sup> *See*, Carey Statement, at p. 18, indicating that, “[t]he extending nature of the integration of the two networks is a vertical integration.” *See also*, Carey Statement, at p. 3, claiming that the agreement “has vertical effects that reduce competition.” *See also*, CSXT Response to Comments and Responsive Application, at pp. 35-36.

harming competition either by denial of services previously offered to a competitor (vertical foreclosure) or through a tactic of raising rivals' costs. As seen below, this new theory is inconsistent with the empirically-observed evolution of the industry.<sup>13</sup> Here, the point is simply that CSXT and its economists—perhaps in recognition of their earlier awkward and inapt proffer of a horizontal theory of harm—have now, midstream, abandoned that approach in favor of a new (but as it turns out also inapt) theory. Bouncing from one theoretical construct to another is not the hallmark of sound economic analysis.<sup>14</sup>

14. Beyond the theoretical vacillations, CSXT's economists also thrash about wildly to offer empirical evidence of anticompetitive consequences arising from the MSLLC. These efforts neither illuminate nor validate any of their alternating theories of harm. For instance, in her February 28<sup>th</sup> verified statement, Carey's sole empirical "evidence" of anticompetitive harm is a flawed analysis of market shares enjoyed by NS over certain origin-destination ("O-D") BEA pairs.<sup>15</sup> I have addressed these failures previously and will not belabor them here.<sup>16</sup>

15. By July 12<sup>th</sup>, Carey had changed the empirical approach, suggesting that evidence of anticompetitive harm can be gleaned from new empirical observations including: (1) the observation that some of NS's services (those taking traffic over the MSLLC) enjoy higher

---

<sup>13</sup> See, Section III.

<sup>14</sup> Note too that the shift from a horizontal theory of harm to a vertical theory of harm necessarily causes CSXT and its economists to address a completely different standard of harm. That is, under its new vertical theory of harm, CSXT's economists must now scramble to offer empirical evidence that the efficiency benefits of the MSLLC JV are outweighed by actual economic harm arising from the MSLLC JV. I address the failures of this empirical analysis below. Here the point is that after offering a *per se* standard of harm arising from its horizontal theory, which essentially requires no empirical support, CSXT and its economists have now shifted to a theory of harm that requires considerable empirical support under a rule of reason standard.

<sup>15</sup> Carey and Bremser Statement, at pp. 50-51.

<sup>16</sup> See, Mayo July 12 Statement, at pp. 14-19, 32-41.

prices than other NS transportation services (those that do not traverse the MSLLC);<sup>17</sup> and (2) the suggestion that services offered by NS over the Meridian Speedway command a price premium relative to traffic offered by CSXT.<sup>18</sup>

16. I address the substantive problems with these new pieces of empirical “evidence” below.<sup>19</sup> Before turning to that step, however, it is important to note that these empirical analyses are completely untethered from *either* theory of harm offered by CSXT and its economists.

17. For instance, under a vertical theory of harm, NS would have foreclosed CSXT’s ability to grow its intermodal traffic or taken overt actions to raise CSXT’s cost of doing business. However, the JV did not foreclose the ability of CSXT to satisfy intermodal shippers’ demand. Instead, far from being foreclosed, CSXT expanded its intermodal sales by 50 percent since the formation of the MSLLC joint venture.<sup>20</sup> And, as readily acknowledged by one of CSXT’s witnesses in this proceeding, there is “an alternative route for a large volume of Transcon intermodal traffic moving to and from the Southeast over a BNSF route well north of the Speedway into Birmingham and over CSXT haulage to Atlanta.”<sup>21</sup> CSXT’s witness also candidly acknowledges that CSXT, through its partnership with BNSF, has “attracted a considerable volume of Transcon traffic moving to and from Atlanta.”<sup>22</sup> While these acknowledgements speak to the lack of vertical foreclosure, Carey’s empirical analysis, which focuses on price comparisons within and across companies, has no connection whatsoever to the

---

<sup>17</sup> Carey Statement, at pp. 3-4.

<sup>18</sup> Carey Statement, at pp. 64-65.

<sup>19</sup> *See*, Section V.

<sup>20</sup> *See*, Mayo July 12 Statement, at p. 25.

<sup>21</sup> Verified Statement of Robert Girardot, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern Railroad *et al.*, Finance Docket No. 36500, July 12, 2022, at p. 5 (“Girardot Statement”).

<sup>22</sup> Girardot Statement, at p. 5.

new “foreclosure” theory of harm. Similarly, Professor Carey’s price comparison analyses do not provide any relevant information on whether NS has been able to successfully enact a strategy of raising rivals costs, the newly proffered theory of harm.

18. In sum, CSXT and its economists have offered contradictory theories of harm and their empirical analyses provide completely untethered and meaningless observations regarding the presence of anticompetitive harm.

### **III. THE NEW THEORY OF HARM, UNPACKED**

19. Although the vacillating theories of harm offered by CSXT and its economists should be concerning for the STB, the question remains whether the “new shoe” fits. That is, does the as-structured MSLLC agreement between NS and KCS conceptually create a credible vertical theory of harm to competition? My evaluation indicates that it does not.

20. As I explained in my June 9<sup>th</sup> Verified Statement, changes in the relationships between vertically-related entities can be either pro-competitive (for example, through enhanced efficiencies) or anticompetitive.<sup>23</sup> As I previously explained, manifestations of anticompetitive harm among vertically-related firms arise either from foreclosure of a firm to an input it relies upon to provide service or from actions to raise rivals’ costs.<sup>24</sup>

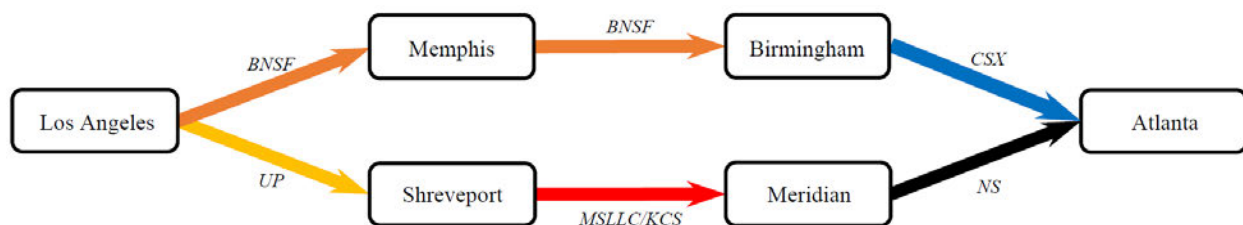
21. In the case of the proposed CP-KCS merger, I examined the potential for these anticompetitive actions and found that, absent protective conditions, the proposed merger raised both the incentive and ability of the post-merger firm to engage in these anticompetitive practices.

---

<sup>23</sup> Mayo June 9 Statement, at p. 22.

<sup>24</sup> Mayo June 9 Statement, at pp. 17-18.

22. A comparable examination of the industry structure and firms involved with the MSLLC, however, indicates that these vertical theories of anticompetitive harm are utterly divorced from the reality of the provision of rail services. To see this, consider Figure 1. This figure identifies two routes from Los Angeles to Atlanta for the provision of transcontinental intermodal rail service.<sup>25</sup> As represented, five carriers are engaged in the operational provision of these services, along two possible routes. Along one route, BNSF provides service from Los Angeles to Memphis, and from Memphis to Birmingham. The traffic is then carried by CSXT to Atlanta.<sup>26</sup> In the other route, UP provides rail service from Los Angeles to Shreveport, where it is handed off to KCS, which provides haulage services over the MSLLC to Meridian. The traffic is then handed off to NS for termination in Atlanta.



**Figure 1: Intermodal Service Between Los Angeles and Atlanta**

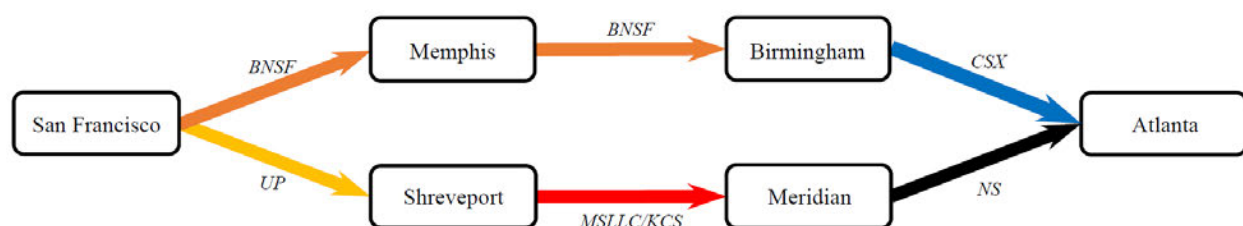
23. Now consider the options for NS to impose vertical harm on CSXT with respect to this traffic through either foreclosure or actions to raise rivals' costs. As readily seen from the

<sup>25</sup> While I have chosen the Los Angeles to Atlanta and San Francisco to Atlanta routes for illustration, a number of other routes exist that teach exactly the same lesson. To avoid unnecessary repetition, I do not repeat the analysis for other such routes (e.g., Los Angeles to Charlotte, San Francisco to Charlotte, Los Angeles and Jacksonville, and San Francisco to Jacksonville). The choice of these particular examples is, in part, motivated by the focus of CSXT and its economists on transcontinental intermodal traffic. Dr. Shehadeh indicates that a high proportion of west-to-east coast intermodal traffic originates in LA and SF; *see*, Shehadeh Statement at p. 20. Professor Carey, meanwhile, opines that “the Los Angeles area is the most important West Coast location”; *see*, Carey Statement, at p. 16.

<sup>26</sup> CSX\_HC\_00000022-082, at 033. *See also*, Mayo July 12 Statement, at pp. 25-26.

pattern of traffic flows, NS has *no* ability to foreclose CSXT from providing intermodal services along this route. That is, CSXT has the ability to provide Los Angeles-to-Atlanta intermodal services whether or not it is able to utilize the MSLLC line. Moreover, nothing about the formation of the MSLLC changed this reality. CSXT did not rely upon the Meridian Speedway trackage before the formation of the MSLLC, and it does not today.

24. Figure 2 illustrates the route options from San Francisco to Atlanta for the operational provision of transcontinental intermodal rail service. Again, this figure reveals no possible opportunity for NS to use its MSLLC traffic to foreclose CSXT from providing this transcontinental intermodal traffic.



**Figure 2: Intermodal Service Between San Francisco and Atlanta**

25. Not only is vertical foreclosure unavailable as a strategy for NS, but the evolution of intermodal traffic flows also confirms the reality that foreclosure has not occurred. For instance, according to the data (and assumptions) used in Shehadeh’s analysis, in 2003, prior to the formation of the MSLLC and the alleged “foreclosure,” combined, BNSF (via CSXT haulage rights, under a previous agreement)<sup>27</sup> and CSXT terminated {{[REDACTED]}} intermodal units in the

<sup>27</sup> CSX\_HC\_00000022-082, at 028-029, 062, 064. See also, <https://investors.csx.com/news-and-events/news/news-details/2006/BNSF-CSX-Create-High-Volume-Intermodal-Corridor/default.aspx> (viewed August 10, 2022); <https://www.bizjournals.com/dallas/stories/2001/08/20/daily19.html> (viewed August 10, 2022).

Atlanta area that originating from either Los Angeles or San Francisco.<sup>28</sup> By 2019, this figure was {{[REDACTED]}} units, a formidable increase.<sup>29</sup> Furthermore, {{[REDACTED]}}; in 2016, fully 10 years after the consummation of the MSLLC, combined BNSF (via CSXT haulage rights) and CSXT terminated {{[REDACTED]}} units in the Atlanta area originating from either Los Angeles or San Francisco.<sup>30</sup> The result of this growth, according to Carey’s July 12 market share analysis, is that CSXT participates in {{[REDACTED]}} percent of the Los Angeles-Atlanta traffic (bidirectionally) and {{[REDACTED]}} percent of the San Francisco-Atlanta traffic (bidirectionally) today.<sup>31</sup> Claims that the MSLLC joint venture has foreclosed competition are flatly inconsistent with the observed evolution of rail traffic flows. The evolution of actual traffic growth completely belies any foreclosure claim.

26. Similarly, the classic case of raising rivals’ costs requires that a vertically integrated firm take actions that affect the cost of a rival at the point when goods or services are exchanged between them. But, as seen in Figure 1, there is no point along the Los Angeles to Atlanta route where NS has the ability to adversely affect CSXT’s costs. That is, traffic from Los Angeles is carried by BNSF to a hand-off point in Birmingham, where it traverses CSXT’s line. NS simply has no ability whatsoever to raise the costs of CSXT to provide the intermodal service.

---

<sup>28</sup> See, Exhibit 9. See also, Shehadeh Workpapers, “03 Regression Data Build.py.”

<sup>29</sup> See, Exhibit 9. See also, Shehadeh Workpapers, “03 Regression Data Build.py.”

<sup>30</sup> See, Exhibit 9. See also, Shehadeh Workpapers, “03 Regression Data Build.py.”

<sup>31</sup> Carey Workpapers, “HC-WP MSLLC Line Share Lane Summary.xlsx”, at tab “Market Share Summary (4)”. Calculated as the sum of BNSF and CSXT intermodal units on routes between Los Angeles or San Francisco to and from Atlanta divided by the total intermodal units for that O-D pair: {{[REDACTED]}}.

27. While Figure 1 makes it abundantly clear that NS does not have the ability to either foreclose CSXT or raise its costs on these routes, CSXT nonetheless advances this idea. For example, Dr. Shehadeh opines that “[w]ithout access to the MSLLC Line to service transcontinental intermodal traffic, CSX is forced either to forgo offering service on the route or to move such traffic over longer and otherwise competitively disadvantaged routes, thereby raising CSX’s costs of servicing such shipments and degrading their quality of service.”<sup>32</sup> This claim suggests two alternative ways in which competition may be harmed by its inability to utilize the MSLLC line: (1) “CSX is forced to forego offering service on the route”<sup>33</sup> or (2) CSXT is required to “move such traffic over longer and otherwise competitively disadvantaged routes, thereby raising CSX’s costs of servicing such shipments and degrading their quality of service.”<sup>34</sup>

28. Consider these in turn. As shown in Figures 1 and 2 above, it is simply a fact that CSXT can and does provide transcontinental intermodal traffic without using the MSLLC. Consequently, the first argument fails.

29. Alternatively, consider the claim that NS’s MSLLC joint venture raised the cost of CSXT’s transcontinental shipments. Given that CSXT did not rely on the Meridian Speedway for providing these services before the formation of the MSLLC, the NS-KCS joint venture had *no impact whatsoever on the costs* for CSXT to provide transcontinental intermodal services. Instead, the formation of the MSLLC increased the efficiency (lowered the costs) of providing

---

<sup>32</sup> Shehadeh Statement, at p. 15.

<sup>33</sup> Shehadeh Statement, at p. 15.

<sup>34</sup> Shehadeh Statement, at p. 15.

intercontinental intermodal services for NS.<sup>35</sup> *But lowering your own costs, in contrast to raising the costs of rivals, is distinctly pro-competitive.*

30. Instead, such actions are a crucial element in the ongoing competitive process between firms. It is common in these situations that when one firm makes such a pro-competitive move, rival firms will respond in kind with their own strategic efforts to more efficiently organize their own businesses. In this manner, the initial efficiency-enhancing effort stimulates a virtuous cycle of ongoing procompetitive strategic moves among rivals. These strategic steps often lead to increased investments and output, along with corresponding price benefits and quality improvements. As seen in Section V, this is exactly what happened as the consequence of the formation of the MSLLC. Here, the important take-away is that an examination of the provision of transcontinental intermodal traffic provides no indication that *any* vertical harm to competition could have occurred as a consequence of the formation and ongoing operation of the MSLLC as it is structured. Neither foreclosure nor raising rivals' cost, was, or is, available to NS in its competition with CSXT as a strategy in the provision of transcontinental intermodal traffic.

31. In certain factual circumstances, vertical theories of competition provide both constructive framing of how harm to competition may arise and a springboard for relevant empirical analysis to test the applicability of the theory. Nothing about the soundness of these theories is relevant to the facts at hand surrounding the MSLLC. CSXT is able to provide transcontinental intermodal service without using the Meridian Speedway and NS can neither foreclose CSXT nor raise CSXT's costs. The "new shoe" does not fit.

---

<sup>35</sup> Mayo July 12 Statement, at pp. 14-15.

#### **IV. ANALYSIS OF THE ECONOMIC RATIONALE FOR THE MSLLC INDICATES THAT ITS BUSINESS JUSTIFICATION WAS PRO-COMPETITIVE**

32. In my July 12<sup>th</sup> verified statement, I explained that the standard analysis of the Department of Justice Antitrust Division and the Federal Trade Commission regarding the merits of exclusivity restrictions in joint ventures centers on two critical questions: (1) what was the business purpose of the agreement? and (2) has the agreement caused anticompetitive harm?<sup>36</sup> This framing provides a sound taxonomy for considering the merits of the MSLLC. In this section, I assess Professor Carey’s July 12<sup>th</sup> claims regarding the business purpose of the MSLLC. In Section V, I examine the empirical analyses of Carey/Shehadeh regarding the competitive impact of the MSLLC.

33. In my July 12<sup>th</sup> Verified Statement, I conducted a detailed examination of the business purpose for the MSLLC.<sup>37</sup> That examination indicates (based on numerous contemporaneous documents provided at the time of the MSLLC’s formation) that the impetus for the joint venture arose as a classic “gains from trade” scenario: KCS would receive critically needed investment funding to improve the Meridian Speedway, and NS would become positioned to expand its intermodal traffic traversing the Speedway.<sup>38</sup> In forming the joint venture, NS and KCS found a long-run exchange governance mechanism (a joint venture) that eliminated the need for costly and recurring renegotiations of what had been a series of short-run haulage agreements.<sup>39</sup> The joint venture eliminated these transaction costs and provided an

---

<sup>36</sup> Mayo July 12 Statement, at pp. 5, 9.

<sup>37</sup> See, Mayo July 12 Statement, at pp. 11-14.

<sup>38</sup> Mayo July 12 Statement, at pp. 12-13.

<sup>39</sup> Mayo July 12 Statement, at p. 11. See also, <https://www.bizjournals.com/kansascity/stories/2005/11/28/daily31.html> (viewed April 7, 2022); Kansas City

opportunity for KCS and NS to creatively solve an impediment to improved rail services.

Finally, as I detailed in my earlier verified statement, the ancillary agreement within the MSLLC that provides exclusivity for certain NS intermodal traffic acted to promote much needed capital investment and ensure against free riding.<sup>40</sup> Consequently, the MSLLC acted to promote enhanced rail output, thereby enhancing competition.

34. In her February 28<sup>th</sup> Verified Statement, Professor Carey did not examine the business purpose of the MSLLC, choosing instead to simply characterize the JV as a horizontal agreement that should be deemed *per se* illegal.<sup>41</sup> In her July 12<sup>th</sup> statement, she again avoids any detailed analysis of the critical issue of why the joint venture as structured was formed. Instead, she suggests that the haulage agreements that were in place prior to the formation of the MSLLC adequately captured the available operating efficiencies from the business relationship between NS and KCS, and that, consequently, the MSLLC and its exclusivity provision were unnecessary to capture these benefits.<sup>42</sup>

35. Undoubtedly, the haulage agreements that existed prior to the formation of the MSLLC produced benefits to both NS and KCS.<sup>43</sup> Professor Carey is certainly right about that. What Professor Carey ignores, however, are two key motivations for—and benefits of—the formation for the MSLLC. First, she ignores a number of contemporaneous documents indicating that prior to the formation of the MSLLC, the Meridian Speedway was increasingly capacity-

---

Southern, The Kansas City Southern Railway Company, and Meridian Speedway LLC – Exemption for Transactions Within a Corporate Family, Finance Docket No. 34822 (filed January 17, 2006), at p. 4.

<sup>40</sup> Mayo July 12 Statement, at pp. 13-14. *See also*, KCSR-HC-00013177-227, at 183.

<sup>41</sup> Carey and Bremser Statement, at pp. 48-49.

<sup>42</sup> Carey Statement, at pp. 4, 53.

<sup>43</sup> *See, e.g.*, Carey Statement, at p. 10.

constrained and in dire need of capital investment—capital investment that KCS was not in a financial position to provide.<sup>44</sup> The MSLLC provided for that capital investment and the commensurate increase in the quality and quantity of rail services that, but-for the capital investment, could not be provided over this line.

36. Second, Carey opines that there were no efficiencies created by the formation of the joint venture above those available through the haulage agreement.<sup>45</sup> As support, she creates a straw-man argument that simply does not fit the actual situation. Specifically, she suggests the absence of benefits from the MSLLC because consumers did not benefit from reductions in double-marginalization associated with the vertical combination of NS and KCS in the MSLLC.<sup>46</sup>

37. Price reductions that occur from the elimination of double marginalization are caused by vertical mergers.<sup>47</sup> But the MSLLC was not a vertical merger; it is a joint venture involving two railroads offering vertically-related services. Thus, it is completely unrealistic to expect that the MSLLC joint venture would have produced price reductions attributable to the elimination of double marginalization.

---

<sup>44</sup> Mayo July 12 Statement, at pp. 11-12.

<sup>45</sup> Carey Statement, at pp. 4, 53.

<sup>46</sup> Carey Statement, at p. 44.

<sup>47</sup> Mayo, John W., and Mark Whitener, “The Welfare Effects of Vertical Mergers and their Remedies,” *Review of Industrial Organization*, Vol. 59, No. 2 (2021): 409-441, at p. 418, footnote 23; Blair, Roger D., *et al.*, “Analyzing Vertical Mergers: Accounting for the Unilateral Effects Tradeoff and Thinking Holistically About Efficiencies,” *George Mason Law Review*, Vol. 27, No.3 (2020): 761-822, at pp. 768-769 [“A vertical merger incentivizes the combined firm to eliminate the double markup...After merging, the combined firm internalizes the effect of the upstream price on downstream profit and thus lowers the upstream price.”]; U.S. Department of Justice and the Federal Trade Commission, “Vertical Merger Guidelines,” June 30, 2020, available at <https://www.justice.gov/atr/page/file/1290686/download>.

38. At the same time that Carey concludes that benefits did not arise from the MSLLC because of the absence of the elimination of double marginalization (which were predictably neither expected nor realized), she ignores a very real efficiency motivation for the formation of the MSLLC. Specifically, as I explained in detail in my July 12<sup>th</sup> Verified Statement, the long-run and low transaction costs MSLLC joint venture replaced a high transaction costs business model that involved designing, negotiating and enforcing a series of detailed short-run haulage agreements between NS and KCS.<sup>48</sup> It is widely recognized in the economics literature that actions which enable firms to reorganize in a way to minimize transaction costs provide powerful incentives for restructuring businesses.<sup>49</sup>

39. In sum, Professor Carey's analysis of the economic motivations for the formation of the MSLLC ignores the driving need for (pro-competitive) capital investment prior to the formation of the MSLLC. Corollary to this, she ignores the important facilitating role of the ancillary agreement in enabling that capital investment. She also ignores the efficiency gains to both NS and KCS made possible by the formation of a long-term joint venture relative to maintaining the need to engage in ongoing renegotiations, design, and enforcement of short-run haulage agreements.

---

<sup>48</sup> Mayo July 12 Statement, at p. 14.

<sup>49</sup> See, Mayo July 12 Statement, at pp. 3-4, and the economics literature cited therein. See also, Kogut, Bruce, "Joint Ventures: Theoretical and Empirical Perspectives," *Strategic Management Journal*, Vol. 9, No. 4 (1988): 319-332, at p. 320. See also, Blair, Roger D., and D. Daniel Sokol (eds.), *The Oxford Handbook of International Antitrust Economics: Volume 1*, Oxford University Press, 2015, at p. 535.

**V. ANALYSIS OF THE IMPACT OF THE MSLLC INDICATES THAT CLAIMS OF “COMPETITIVE HARM” ARE ILLUSORY**

40. My earlier analysis indicates that there were pro-competitive motivations for, and consequences of, the formation and operation of the MSLLC joint venture. Nonetheless, in their July 12<sup>th</sup> submissions, CSXT’s economists present three specific “economic indicia of competitive harm” that they allege arise as a consequence of the formation of the MSLLC joint venture as presently structured.

**A. Alleged Competitive Harm from “High” Market Shares**

41. In her February 28<sup>th</sup> Verified Statement, Professor Carey infers the presence of “anticompetitive effects and [a] lessening of competition”<sup>50</sup> from an analysis of NS market shares for intermodal traffic between the West Coast and the Southeastern U.S. As I explained in my July 12<sup>th</sup> Verified Statement, Professor Carey’s analysis and her inference are both incorrect for multiple reasons, including: (1) the “shares” that she calculates are not shares of economically relevant markets; (2) the competitive presence of a major intermodal carrier is arbitrarily excluded from her analysis; (3) the competitive alternative of trucking is omitted; (4) higher market shares can result from, and are the logical outcome of, pro-competitive efforts involving attractive pricing and high-quality service offerings; and (5) she cherry-picks routes in which she believes NS has a high market share while omitting routes in which CSXT has a high market share.<sup>51</sup>

---

<sup>50</sup> Carey and Bremser Statement, at p. 51.

<sup>51</sup> For a complete discussion of these, *see*, Mayo July 12 Statement, at pp. 32-41.

42. In a redux of her previous, flawed market share analysis and conclusions, Professor Carey points again to data she purports are “market shares”<sup>52</sup> as “economic indicia of competitive harm.”<sup>53</sup> Virtually all of the problems with her earlier market share analysis, however, are brought forward.

43. Her new analysis of traffic shares is provided in her Figure 21, which like her earlier analysis examines transcontinental traffic, but now also includes “Dallas Intermodal Terminal Traffic,” referring to traffic moving between Dallas BEA and eastern U.S. locations.<sup>54</sup> Using essentially the same approach as her earlier analysis (albeit with alternative data sources, and seemingly adjusting for certain rebill movements), she again would have the STB take her calculations as an indication of competitive harm in the provision of intermodal rail services. She claims, for instance, that “NSR has near { [REDACTED] } share for intermodal moves to and from the Dallas area,” and that “NSR also has about [REDACTED] share for transcontinental intermodal market [ ] when one does not consider the competitive single line route on BNSF to Atlanta which is an unusual single line movement.”<sup>55</sup> For essentially all the reasons I have identified above, Professor Carey’s conclusions are unwarranted.<sup>56</sup>

44. To provide additional, fresh, perspective, consider Exhibits 3 and 4, in which I incorporate truck movements into Carey’s July 12<sup>th</sup> Dallas Area / transcontinental market share

---

<sup>52</sup> Carey Statement, at pp. 70-71, Figure 21.

<sup>53</sup> Carey Statement, at p. 69.

<sup>54</sup> Carey Statement, at pp. 13, 70-71.

<sup>55</sup> Carey Statement, at p. 70.

<sup>56</sup> In her new analysis, Carey acknowledges a major transcontinental intermodal service going to Atlanta, omitted in her previous analysis; however, for no good reason (other than the fact that it does not fit her narrative), she attempts to discount its importance by reporting subtotals that exclude it in her new market share analysis. *See*, Carey Statement, at p. 70, Figure 21.

analysis. The truck volume data come from the Freight Analysis Framework (“FAF”) data published by the Department of Transportation, which Carey uses in certain analyses.<sup>57</sup> Carey’s analysis reports rail traffic from SPLC-to-SPLC for CSXT and NS traffic.<sup>58</sup> For BNSF traffic, Carey uses FSAC codes and Carrier Standard Abbreviation codes to identify FSAC-to-FSAC shipments.<sup>59</sup> As an initial step, to better align with the geographic areas that the trucking data are reported in, I match Carey’s routes to their respective BEA-to-BEA O-Ds and add any additional intermodal traffic shipped along those BEA-to-BEA O-Ds to her rail-only market shares analysis (*see*, columns [B]-[G] in Exhibit 3 and columns [C]-[J] in Exhibit 4).<sup>60</sup> Because Carey’s analysis is measured in intermodal units and the FAF trucking volumes are measured in tonnages, I calculate traffic volumes based on tonnages instead of units, using the underlying CSXT, NS, and BNSF source tapes data, similar to Carey.<sup>61</sup> As demonstrated in Exhibit 3, columns [J] and [K], and in Exhibit 4, columns [M] and [N], once accounting for a more realistic competitive landscape, Carey’s analysis is shown to be severely distorted.

---

<sup>57</sup> *See*, Carey Statement Appendix E, Figure 5, “Domestic Truck Displacement Under Increased Interchange Competition on the Meridian Speedway by Lane (CWS 2019 and FAF)”, at p. 6; Figure 6 “Mexico Truck Displacement Under Increased Competition on the Meridian Speedway by Segment (CWS 2019 and FAF)”, at p. 7; Carey Statement Appendix E, at p. 11.

<sup>58</sup> *See*, Carey Workpapers, “Final NS Tape Adjustments for Analysis.Rmd”, “Final CSXT Tape Adjustments for Analysis.Rmd”.

<sup>59</sup> *See*, Carey Workpapers, “Subsetting Atlanta BNSF Routes.Rmd”.

<sup>60</sup> Note that a single BEA can contain multiple SPLCs/FSACs. In most instances, this step has a minimal effect on volume.

<sup>61</sup> *See*, Exhibit 3, columns [B]-[D], and Exhibit 4, columns [C]-[F]. I first calculated the total trucked tonnage for each O-D considered in the Carey analysis (transcontinental and Dallas area traffic). Next, I calculated the NS Meridian, NS Non-Meridian, CSXT, and BNSF railed tonnages and paired them with total trucked volumes along the same O-D pair. In column [I] of Exhibit 3 and column [L] of Exhibit 4, I sum the tonnages from all rail carriers with the total trucked volume, providing a more complete picture of market volumes for routes associated with each termination listed in Exhibit 3 and along each route in Exhibit 4. Finally, to provide an estimate of NS’s market share that incorporates alternative competitive freight options, I divided NS’s tonnage by the combined rail and truck total tonnage across each route.

45. For instance, whereas Carey claims that for traffic between the Dallas area and the Greensboro area, NS's market share is {{[REDACTED]}} percent, once trucked volumes are accounted for, NS's market share drops to {{[REDACTED]}} percent.<sup>62</sup> Similarly, Carey claims that NS has {{[REDACTED]}} percent market share on traffic between the Dallas area and the Miami area, yet once the competitive presence of truck traffic is included the market share of NS is a remarkably low {{[REDACTED]}} percent.<sup>63</sup> And, despite their longer distances, NS's market shares for transcontinental routes are reduced considerably once accounting for trucking volumes. For example, Carey argues that the transcontinental market share terminating in the Birmingham area is {{[REDACTED]}} percent, but when truck traffic is considered, it is only {{[REDACTED]}} percent.<sup>64</sup>

46. In sum, although Professor Carey would have the STB consider her share calculations to be an indication of anticompetitive harm, this analysis fails for many reasons. Among these, once existing truck traffic is included in the analysis, Professor Carey's ominous share calculations become completely inconsequential.

## **B. Alleged Output Reductions Caused by the MSLLC**

47. Dr. Ramsey Shehadeh provides a new and specific claim: he alleges that the MSLLC—and, moreover, the resulting exclusivity arrangement provided to NS—produced anti-competitive harm, allowing NS to restrict transcontinental output. To test this allegation, he uses a difference-in-differences analysis. Specifically, the difference-in-differences analysis employed by Dr. Shehadeh compares the relative change in the volume of traffic on routes that traverse the MSLLC line (the so-called “affected” routes) since the consummation of the MSLLC to the

---

<sup>62</sup> Carey Statement Figure 21, at p. 71. *See*, Exhibit 3.

<sup>63</sup> Carey Statement Figure 21, at p. 71. *See*, Exhibit 3.

<sup>64</sup> Carey Statement Figure 21, at p. 71. *See*, Exhibit 3, Exhibit 4.

relative change in volume of traffic on certain “unaffected” transcontinental routes (*i.e.*, those that do not involve traffic traversing the MSLLC) since the consummation of the MSLLC. The results, he claims, show that, compared to certain “unaffected” routes, transcontinental intermodal traffic on certain “affected” routes served by the Speedway is lower today *relative to* what it would have been in the absence of the MSLLC. Based on this apparent result, he concludes that the formation and operation of the MSLLC have been anticompetitive.

48. Although the difference-in-differences approach is an established and accepted methodological tool for economic analysis, Dr. Shehadeh’s application is, unfortunately, fatally flawed. In particular, recall that the ultimate test in the context of a difference-in-differences analysis of competitive effects in this case is focused on the key metric of “output.” Indeed, as correctly noted by Dr. Shehadeh himself, “economists regularly focus on output as the indicia of market performance in empirical evaluations of competitive effects: harm to a downstream competitor from a higher input price or foreclosure *that leads to a reduction in total output* downstream reduces economic welfare...”<sup>65</sup> That is, a central question for economists looking for competitive effects is: what happened to total output in the wake of the “event”; here, the introduction of the MSLLC.

49. In the case of the MSLLC, there are both simple (intuitive) and more complex (unintuitive) methods with which to address this question. Dr. Shehadeh jumps to the second, to which I will return in a moment. First, however, consider the simple answer to the key question of “output effects” provided by Exhibit 5. As readily seen, NS output traversing the Meridian Speedway has increased *dramatically* over the 2006-2021 period. In particular, NS carried nearly

---

<sup>65</sup> Shehadeh Statement, at p. 18, *emphasis added*.

{{ [REDACTED] }} intermodal units over the Meridian Speedway in 2006; this number increased to nearly {{ [REDACTED] }} units in 2014 and further to about {{ [REDACTED] }} units in 2021—a remarkable {{ [REDACTED] }} growth. Thus, the most intuitive and straightforward answer to the question of “what happened to output?” is that it grew robustly, providing no indication whatsoever that NS restricted output to harm competition.

50. The difference-in-differences methodology is more subtle and complex than the simple and intuitive approach that I have just described. In particular, it seeks to address the more difficult counterfactual question of what would have happened to total transcontinental output in a but-for world in which the MSLLC did not exist. The difference-in-differences methodology is more difficult to implement correctly and, when done incorrectly, can provide distorted and misleading conclusions. This is, unfortunately, the case with Dr. Shehadeh’s difference-in-differences analysis.

51. Because the analysis (and my detailed review of his analysis) is complex, I have relegated my more comprehensive discussion of Dr. Shehadeh’s application to the Appendix. That said, both the crux of the problem with his analysis and the implications of correcting his flaws can be explained quite simply. In particular, rather than examine, as a proper application of the test requires, the effect of the MSLLC on total output (traffic volumes) in “affected” and “unaffected” areas, Dr. Shehadeh transforms each route’s output to an index based on 2003 output levels. The consequence is that the evolution of traffic growth on very small volume routes is weighted equally with the evolution of traffic volumes on high volume routes.

52. The distortionary effects of this flaw are readily apparent both conceptually and in his application. As a conceptual matter, imagine two termination BEAs, X and Y, which had equal *but opposite percentage changes* in volume in a period (Period 2) relative to the previous

period (Period 1) (*e.g.*, BEA X's volume increased by 10 percent and BEA Y's volume decreased by 10 percent). Now, suppose that BEA X's initial (Period 1) volume was ten times greater than that of BEA Y's initial (Period 1) volume. Comparing Period 1 to Period 2, it is obvious that overall volume increased, because X's gains vastly outweigh Y's losses. However, indexing to each BEA's volume to its Period 1 volume and examining the *unweighted* change in indices, can lead to an incorrect inference that there is no change in the average volume. Dr. Shehadeh's indexing of outputs creates exactly this problem.

53. To see this, consider Exhibit 6, which replicates Dr. Shehadeh's Figure 5. There, based on an unweighted indexing of output on individual routes, Dr. Shehadeh shows the time-path of traffic growth on "affected" routes (those that traverse the MSLLC) and "unaffected" routes (those that do not traverse the MSLLC). In this figure, he observes that while the indexed output in "affected" and "unaffected" routes are similar up until the formation of the MSLLC, the indexed output for "unaffected" routes is "systematically higher" than in the group of "affected" routes. This is inferred because the blue line in the figure (representing the path of indexed output in "unaffected" routes) is higher than the red line (representing the path of indexed output in "affected" routes). Based on this observation, he concludes that "absent the JV, indexed output would have continued to be similar between the two groups ... and that the formation of the JV had the net effect of systematically restricting the level of output..."<sup>66</sup> Dr. Shehadeh's application would have the STB ignore the intuitive evidence of dramatic output growth for MSLLC traffic displayed in Exhibit 5 and instead counter-intuitively conclude that output restrictions have occurred for MSLLC traffic.

---

<sup>66</sup> Shehadeh Statement, at p. 23.

54. But now consider the consequences of replacing Dr. Shehadeh’s flawed unweighted indexed values with the more properly specified total output measures for “affected” and “unaffected” traffic. In Exhibit 7, I offer a corrected alternative calculation. Instead of indexing each termination BEA’s volume, I first calculate the annual sum total of all volume (output) terminating in “affected” BEAs and the annual sum total of all volume (output) terminating in “unaffected” BEAs. To compare the relative change in volume among “affected” BEAs to “unaffected” BEAs, I then index those (summed) volumes (total output) to their 2003 levels (following Shehadeh), effectively calculating the weighted average change in volume. These are plotted in dashed lines in Exhibit 7.

55. As readily seen in Exhibit 7, once the difference-in-differences methodology is properly focused on the effects of the MSLLC on total output, Dr. Shehadeh’s results (and corresponding policy implications) are reversed. Specifically, in the wake of the formation of the MSLLC, transcontinental traffic traversing the MSLLC (*i.e.*, the “affected” traffic, represented by the dashed red line) has consistently grown *more rapidly* than transcontinental traffic not traversing the MSLLC (*i.e.*, the “unaffected” traffic, represented by the dashed blue line). Thus, when properly conducted, both the simple analysis of output growth and the more complex difference-in-differences analysis provide the same conclusion; namely, that there is no marketplace evidence of anticompetitive harm from output restrictions in the wake of the formation of the MSLLC. Indeed, the visual difference-in-differences analysis indicates that total output growth has been more rapid for “affected” (MSLLC) traffic than for “unaffected” (non-MSLLC) traffic. Finally, I also note that my conclusions, based here on visual comparisons between Exhibits 6 and 7, are confirmed with more rigorous econometric estimation of output effects. These results are reported and discussed in the Appendix.

### C. Alleged Competitive Harm from Price Premiums for MSLLC Traffic

56. Professor Carey offers a third piece of “evidence” of competitive harm that has virtually no foundation in modern economic analysis. Specifically, Professor Carey observes that NS traffic that traverses the MSLLC commands a price premium relative to NS traffic that does not traverse the MSLLC.<sup>67</sup> From this observation she concludes that such higher rates provide economic indicia that the higher prices are “above a competitive level.”<sup>68</sup> This claim has no economic merit.

57. As a simple intuitive matter, Professor Carey has claimed that one can (indeed should), infer the presence of market power and supra-competitive pricing based simply on the fact that a firm charges higher prices for some of its services than for other of its services. But if that were the case, we should also implausibly be led to conclude that because UPS charges higher prices for a delivery via its “Next Day Air(R) Early” service than its “UPS(R) Ground” service, its prices for the “Next Day Air(R) Early” are supra-competitive and indicative of market power. The economic fact, however, is that firms both in and out of the rail industry often offer a variety of products and services that have different quality characteristics. Those with higher quality enjoy prices that are higher than those with relatively lower quality.

58. Contrary to Professor Carey’s claim, no meaningful inference regarding the market power nor the competitiveness of the pricing is possible from the fact that a given firm charges higher prices for some of its differentiated services relative to some of its other

---

<sup>67</sup> See, Carey Statement, at pp. 71-72.

<sup>68</sup> Carey Statement, at pp. 71-72.

services.<sup>69</sup> This conclusion is reinforced by the widely-agreed observation that, for some customers and for some commodities, the Meridian Speedway provides an attractive, high-quality routing option.<sup>70</sup> Given this high quality, higher prices are sometimes enjoyed by intermodal services provided by NS over the Meridian Speedway.<sup>71</sup> It is both logical and competitively innocuous that those services enjoy a price premium relative to other NS services. Hence, predictably, Carey’s own Workpapers provide evidence that NS offers an attractive intermodal service that customers value more than CSXT’s competing service. Consider the Atlanta to Los Angeles lane where CSXT (together with BNSF) dominates the eastern leg of the market (NS’s share of rail traffic is only 34.3 percent)<sup>72</sup> yet NS earns a higher rate per unit-mile

---

<sup>69</sup> Beyond proffering the economically fictitious story that price differentials across services within a firm’s portfolio of services is evidence of supra-competitive pricing, Professor Carey makes no connection between the presence of observed intra-firm price differences and the new vertical theory of harm (foreclosure or raising rivals’ cost) now offered by CSXT.

<sup>70</sup> See, e.g., Carey Statement, at pp. 27, 29, 32 [“Regarding the particular advantages of the MSLLC Line, I agree with NSR that the MSLLC Line is a uniquely positioned efficient railroad carrier for the Southeastern U.S. railroad movements (and Mid-Atlantic region)”; “Other gateways into the Southeastern/Mid-Atlantic U.S. are inferior to ... Meridian gateways”; “the MSLLC Line is the best route for a large volume of current and potential intermodal Mexico traffic.”]; see also, Shehadeh Statement, at p. 15 [“Without access to the MSLLC Line to service transcontinental intermodal traffic, CSX is forced either to forgo offering service on the route or to move such traffic over longer and otherwise competitively disadvantaged routes, thereby raising CSX’s costs of servicing such shipments and degrading their quality of service.”]; see also, Carey and Bremser Statement, at p. 49 [“The Meridian Speedway gateway has a direct route and shorter mileage between southwest originating and terminating traffic with certain customers in the southeastern U.S.”]; see also, CSXT July 12 Response, at p. 17 [“As Applicants and NSR have both recognized, in pleadings here and in public statements, the Meridian Speedway is an important route, especially for intermodal traffic.”]; see also, Amended Comments of Norfolk Southern Railway Company and Request for Conditions, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern, *et al.*, Finance Docket No. 36500, June 9, 2022, at p. 19 [“In addition to the efficiency of the route itself, NS invested heavily in its intermodal service to provide a high quality, premium service that benefits intermodal shippers moving traffic over that route. Thanks in large part to NS’s more than \$300 million investment in the MSLLC and the Meridian Speedway, if a shipper needs timely service between the Southeast and the Dallas Fort-Worth area, an intermodal move on the Meridian Speedway is a highly efficient alternative to moving that product over a highway.”]

<sup>71</sup> See, Carey Workpapers “HC-WP 2019 NS Self Rate Comparison.xlsx”, at tab “Directional Formatted”. As shown, certain NSR Meridian routings, such as Los Angeles to Atlanta have a higher rate per unit and rate per unit-mile than their NSR Non-Meridian routing along the same O-D; note that others, such as Atlanta to Stockton, CA do not exhibit this pattern.

<sup>72</sup> See, Exhibit 4, [27][I]. Furthermore, the NS Meridian share of rail traffic is only {{ [REDACTED] }} percent; see, Exhibit 4, [27][J].

for traffic routed over the Meridian.<sup>73</sup> Despite the fact that NS has a small share in this lane (and their existing a viable alternative), certain customers clearly value NS's service and deem it superior, for if they did not, they would forego using NS on these routes.

59. In addition to her mistaken claims of “economic indicia of competitive harm” Professor Carey offers the opinion that two other factors suggest that consumers would benefit from the STB's abrogation of the currently structured MSLLC. First, Professor Carey makes the blanket claim that because CSXT charges lower rates on (non-Meridian Speedway) traffic than NS charges for similar traffic that traverses the Meridian Speedway, consumers would benefit from a regulatorily-induced abrogation of the current MSLLC.<sup>74</sup>

60. This claim, however, fails for reasons that I explained in my July 12<sup>th</sup> verified statement.<sup>75</sup> Specifically, America's freight railroads do not use homogenous inputs, to provide homogeneous services, to homogeneous customers. In a competitive environment, in which firms differ in all these dimensions, it is inevitable that prices across firms will differ. These differences will reflect, *inter alia*, quality of service differences across firms. That is, especially likely for services, like intermodal rail transportation, which are “highly service-sensitive.”<sup>76</sup> In this environment, it is simply not possible to draw a blanket conclusion that consumers will benefit from an alternative supply arrangement (viz., one in which the STB has abrogated the as-

---

<sup>73</sup> Carey reports that NS earns {{ [REDACTED] }}. See, Carey Workpapers “HC-WP 2019 NS Self Rate Comparison.xlsx”, at tab “Directional Formatted” and “HC-WP 2019 Price Comparison and Savings Analysis.xlsx” at tab “Rate Comparison by Lane”.

<sup>74</sup> Carey Statement, at pp. 64-66.

<sup>75</sup> See, Mayo July 12 Statement, especially at pp. 21-32, where I describe Professor Carey's general misunderstanding of the essence of competition in the freight rail industry.

<sup>76</sup> Girardot Statement, at p. 5.

structured MSLLC) by pointing to price differentials across firms. The reason is that while some consumers may prefer the lowest priced services in the marketplace, others will place greater weight on the quality of the services they receive.

61. Professor Carey also claims that consumers will necessarily be made better off by the STB abrogating the current MSLLC because of “statistical analysis confirming that two competitors versus one will lower rates.”<sup>77</sup> Although economic analyses in a number of instances have confirmed the important role that the number of competitors can play in affecting prices, this reality is not matched by the proposed policy choice. Specifically, in contrast to Professor Carey’s hypothetical of an increase from one competitor to two from abrogating the as-structured MSLLC, the actual number of competitors is unchanged by such a policy decision. In particular, consider the routes about which CSXT and its economists most vociferously complain. As Figures 1 and 2 above reveal, transcontinental shippers from the Southeast to the West Coast can currently choose among two alternative configurations of rail providers. This is true today, and it would be true if the STB abrogated the as-structured MSLLC joint venture. In short, abrogating the as-structured MSLLC does not increase the number of competitors that provide transcontinental intermodal services. Instead, such a policy decision would simply eliminate an agreement that was pro-competitive in its intent and effect.

#### **D. The Actual Economic Effects**

62. In contrast to the presentation of irrelevant and incorrect empirical analyses that purport to provide indicia of competitive harm, a variety of straightforward and relevant observations indicate the absence of competitive harm (pro-competitive effects) arising from the

---

<sup>77</sup> Carey Statement, at p. 60.

MSLLC.<sup>78</sup> For instance, in contrast to claims that NS has restricted rail output and charged supra-competitive prices, Professor Carey's own analysis reveal the opposite to be true.

63. Consider Exhibit 8. There, drawing on data reported by Professor Carey, I graph NS's traffic volumes and prices for its MSLLC traffic. In this figure, it is easy to see that between 2006 and 2021, the output of traffic traversing the NS MSLLC *increased dramatically*, growing from {{[REDACTED]}} in 2006 to {{[REDACTED]}} in 2021. This substantial growth belies any claim of "restricted rail output across movements that use the MSLLC Line."<sup>79</sup> As correctly stated by Dr. Shehadeh, "Irrespective of the mechanisms of reduced competition, the effect of the mechanism ...will be a reduction in output.... As a result, economists regularly focus on output as the indicia of market performance in empirical evaluations of competitive effects."<sup>80</sup> But NS's output growth of over an order of magnitude makes claims of "restricted rail output" across the MSLLC comical.

64. Exhibit 8 also provides a depiction of the evolution of prices for MSLLC intermodal traffic over 2006-2021. As with the evolution of rail output growth, the graph of rail prices provides *absolutely no indication* of anticompetitive price increases. Over the history of the MSLLC, prices have vacillated between a high of around {{[REDACTED]}} in 2007 to a low of under {{[REDACTED]}} in 2016 and remain (even without adjusting for inflation) at rates below the initial 2006-2008 period. This evolution of prices is inconsistent with either the vertical foreclosure or raising rivals' costs theory that have most recently been proffered by CSXT and

---

<sup>78</sup> The following discussion should be viewed as accretive with the discussion I offered in my July 12<sup>th</sup> verified statement at pp. 11-20.

<sup>79</sup> Carey Statement, at p. 70.

<sup>80</sup> Shehadeh Statement, at p. 18.

its economists. In short, consumers have not suffered competitive harm by the formation or operation of the as-structured MSLLC.

65. Although policies to advance the public interest are properly focused on promoting competition rather than protecting the welfare of individual competitors, it is worth noting that the output data in this case actually reveal no harm to CSXT in the wake of the formation of the MSLLC. CSXT's own witness acknowledges that "BNSF and CSXT have attracted a considerable volume of Transcon traffic moving to and from Atlanta by designing a service that would overcome the speed and directness of the UP-NSR route over Shreveport."<sup>81</sup> Exhibit 9 shows the volume of BNSF and CSXT transcontinental traffic originating from Los Angeles and San Francisco and terminating in Atlanta from 2003 to 2019, as represented in Shehadeh's analysis. As shown, volume {{ [REDACTED] }} only recently falling from its peak {{ [REDACTED] }} years after the consummation of the MSLLC.

## **VI. POLICY CONSIDERATIONS**

66. My assessment is that the formation and operation of the MSLLC has produced no anticompetitive harm and at the same time the MSLLC enjoyed an efficiency-enhancing motivation and positive subsequent economic consequences. The policy implications in this instance are clear: the STB should allow the as-structured MSLLC to remain in effect.

67. Despite the clear absence of either a consistent theory of anticompetitive harm or credible empirical evidence of anticompetitive harm, CSXT's economists have persisted with

---

<sup>81</sup> Girardot Statement, at p. 5.

their claims. One element of CSXT’s policy advocacy is that the STB should consider whether the joint venture agreement could have been (could be) fashioned in a “less restrictive” manner.<sup>82</sup>

68. The merits of CSXT’s called-for exercise of conjuring “less restrictive agreements,” however, are predicated on the existence of competitive harm arising from an as-structured restrictive dimension of the joint venture. But as I have shown, neither the theory of harm proffered by CSXT nor the empirical analyses that were advanced have demonstrated *any* competitive harm from the as-structured MSLLC joint venture. Thus, the search for a less restrictive agreement that demonstrably improves competition in this instance is the economic equivalent of a snipe hunt. The prey simply does not exist.<sup>83</sup>

## VII. CONCLUSION

69. The proposed merger of CP and KCS raises substantive economic issues and has been shown, absent appropriate conditions, to give rise to both anticompetitive incentives and abilities by a merged CPKC. I addressed these concerns in detail in my February 28<sup>th</sup> verified statement, amended June 9<sup>th</sup>. Despite the centrality of the economic issues associated with the proposed CP-KCS merger, CSXT and its economists have sought to distract the STB by offering a set of wildly vacillating theories of harm, along with irrelevant empirical analyses, in an attempt to have the STB abrogate the current structure of the MSLLC joint venture. This effort is

---

<sup>82</sup> See, e.g., Shehadeh Statement, at pp. 3-4, 10.

<sup>83</sup> The merits of such a search are not bolstered by CSXT’s economists who alternatively claim that exclusivity features are common or uncommon in joint venture agreements. Contrast Shehadeh Statement, at p. 10, stating “it is *common* for restrictions to be imposed on the scope of the operations of the joint venture by the firms contributing the assets and operations,” and Carey Statement, at p. 49, stating that exclusivity such as in the MSLLC “are *not commonplace*” in the rail industry (*emphasis added*). As I detailed in my July 12<sup>th</sup> verified statement, CSXT and BNSF employ restrictive exclusivity features in their intermodal partnership not unlike those embedded in the MSLLC joint venture; see, Mayo July 12 Statement, at pp. 25-27. The economic merits of restrictions in joint venture arrangements cannot be judged by how routine they are in a particular industry, but rather must be judged on the considerations I have identified in Sections IV and V above.

not only irrelevant to the matter of whether and under what conditions the proposed CP-KCS merger should be approved, but also as a matter of economics fails on both theoretical and empirical grounds.

## VIII. APPENDIX - ROBUSTNESS OF SHEHADEH'S TRANSCONTINENTAL INTERMODAL OUTPUT ANALYSIS

70. As I previously noted in my July 12<sup>th</sup> statement, by their very nature, intermodal markets are not well-defined within a BEA-to-BEA paradigm.<sup>84</sup> The possibility of truck-to-rail and rail-to-truck *intermodal* transport thus increases the likelihood that markets spread beyond individual O-D pairs. Recognizing this fact negates a central premise that Shehadeh's analysis rests upon—in particular, the assumption that examining individual terminating BEAs provides any meaningful assessment of output levels within a “market.” Nevertheless, below and at times, I entertain the notion that Shehadeh's destination-specific effects framework is reasonable for purposes of bringing its questionable nature to light.

71. As I observed in Section V.B., Dr. Shehadeh estimates a difference-in-differences model comparing the relative change in the BEA-specific (thus, unweighted) indexed volumes of eastbound transcontinental intermodal traffic originating from Los Angeles and San Francisco to termination BEAs that receive traffic that traverses the Meridian Speedway (“affected” BEAs) versus termination BEAs that do not receive traffic that traverses the Meridian Speedway (“unaffected” BEAs). When properly designed, the difference-in-differences research methodology has the potential to provide insights into whether the formation and operation of the MSLLC line led to output reductions on “affected” traffic (*i.e.*, output) relative to “unaffected” traffic (*i.e.*, output).

72. As I explained in Section V.B., Dr. Shehadeh's use of unweighted index values for output creates a highly flawed research design. Based on this flawed design, Figure 5 of Dr. Shehadeh's verified statement purports to show that intermodal output growth for “affected”

---

<sup>84</sup> Mayo July 12 Statement, at pp. 32-35.

traffic is systematically lower in the wake of the MSLLC than “unaffected” traffic. Once corrected, as seen in my Exhibit 7, it is readily apparent that output growth for “affected” traffic actually exceeds the growth of “unaffected” traffic, precisely the opposite of Dr. Shehadeh’s figure.

73. Although my Exhibit 7 provides powerful visual evidence that output of “affected” traffic has not been restricted in the wake of the formation of the MSLLC, it is possible to use a corrected difference-in-differences estimation to more rigorously establish that NS has not restricted the output of “affected” traffic in the wake of the formation of the MSLLC. Consider Appendix Exhibit 1, which reports regression results of a difference-in-differences model. The design parallels that of Dr. Shehadeh’s except that I create a properly weighted index of output for “affected” and “unaffected” traffic to serve as the dependent variable.<sup>85</sup>

74. In column [B], I report the estimated parameters of the difference-in-differences regression using a simple post-MSLLC treatment effect, “Post MSLLC”. Shehadeh, by contrast, uses his so-called “Treatment Intensity” variable,<sup>86</sup> which makes little sense in the context of the hypothesis he purports to test, particularly since the exclusivity provisions that supposedly provide NS the ability to restrict transcontinental output have been in place since 2006. Subsequent investments served to increase, not decrease, traffic along the Meridian Speedway, and, moreover, do not relate to exclusivity or NS’s alleged ability to restrict traffic. As such, my standard post-MSLLC indicator appropriately captures the alleged effect of exclusivity, the

---

<sup>85</sup> In particular, the regression estimation reports coefficients associated with a sample of aggregated observations where the dependent variable represents the annual sum total volume associated with either “affected” or “unaffected” BEAs, for each year from 2003 to 2019, indexed to 2003 levels within each group. As such, the regression estimation accounts for the fact that constituent “affected” and “unaffected” BEAs are of different volume shipment sizes.

<sup>86</sup> “Treatment Intensity” is what Shehadeh uses as defines as the “annual cumulative share of capital being invested into the Meridian speedway.” *See*, Shehadeh Statement, at pp. 26, 37, Tables 1 and 2.

relevant treatment effect. In this estimation, the key parameter of interest is the “interaction term” which captures the effect of the treatment (here, the formation of the MSLLC) on output in “affected” BEAs. As presaged by my Exhibit 7, the interaction term parameter estimate is *positive*. The parameter is not statistically significantly different from zero, and as such, clearly indicates that the MSLLC has not restricted output. In column [C], I show that even taking Shehadeh’s treatment intensity measure at face value, this otherwise-corrected model provides no indication that the MSLLC restricted output.

75. Next, consider Appendix Exhibit 2. In this exhibit, I report the results of several additional difference-in-differences estimations in which, following Dr. Shehadeh, I measure output at the individual BEA level. That is, in each of these estimations, the observations represent annual eastbound transcontinental intermodal volume to individual terminating BEAs that are allegedly “affected” or “unaffected” by the MSLLC agreements. Based on this disaggregated level of analysis, I then test if the “affected” output has been restricted. I include indexed volume regressions to highlight that there is simply no aggregate treatment effect—even if I use Shehadeh’s indices methodology, which inappropriately conflates the relative importance of BEAs with different volumes. I also include the level and logged volume regressions as common and widely accepted alternatives that can account for the fact that BEAs are of different sizes.

76. Columns [B] (without fixed effects) and [C] (with fixed effects) report regression results using Shehadeh’s flawed dependent variable, where separate BEA-specific volumes are indexed to 2003 levels.<sup>87</sup> The estimated parameters, even taking the dependent variable at face

---

<sup>87</sup> *I.e.*, the same transformed outcome used in Shehadeh’s Table 1; *see*, Shehadeh Statement, at p. 26.

value, again offer no statistical support for the hypothesis that NS restricted “affected” traffic in the wake of the MSLLC.<sup>88</sup>

77. Rather than measuring output as an index, in columns [D] (without fixed effects) and [E] (with fixed effects), I estimate the model using actual output levels. In columns [F] (without fixed effects) and [G] (with fixed effects), I estimate the model using the natural logarithm of output. In each of these four regressions, I again find no statistical significance on the key variable of interest. Once again, no indication arises that transcontinental output has been restricted as alleged by Dr. Shehadeh.

78. Appendix Exhibit 3 reports regression results with BEA-specific treatment effects, where, straightforwardly, and correctly accounting for the differences in BEA-specific volumes, the level of output is used as the dependent variable. Even accepting the premise that there are relevant “affected” BEA-specific effects, which I do not, the ultimately germane

---

<sup>88</sup> In Appendix 2 and 3, I report results with clustered standard errors. I report results using (i) the standard error type used by Shehadeh, “HC2” standard errors, and (ii) conventional standard errors in my Workpapers. Note that the choice of standard errors makes no difference for the estimated model coefficients; it only impacts the statistical significance. As noted in one of the preeminent textbooks on empirical econometrics, Angrist and Pischke definitively comment, “[we] take empirical results where [HC2] standard errors fall below the conventional standard errors as a red flag. This is very likely due to bias or a chance occurrence that is better discounted”; the authors recommend instead taking the maximum of conventional standard errors and a [HC2] standard error when evaluating statistical significance and making inferences. See, Angrist, Joshua D., and Jörn-Steffen Pischke, *Mostly Harmless Econometrics: An Empiricist's Companion*, Princeton University Press, 2009 (“Mostly Harmless Econometrics”), at p. 308; see also, *Mostly Harmless Econometrics*, at pp. 294-320. Material available in my Workpapers show that when comparing the statistical significance of the alternative standard errors, it is readily clear that Shehadeh’s decision to use HC2 standard errors is groundless and make his results appear more statistically significant than they should correctly be interpreted. Following Angrist and Pischke’s advice, I defer to using the more conservative (larger) standard errors, shown in Appendix Exhibits 2 and 3. Though I report clustered standard errors rather than conventional standard errors, the point remains. Some practitioners may argue conventional standard errors are preferred in this instance due to the small number of clusters. As my Workpapers show, the conventional standard errors are also, generally speaking, larger than the HC2 standard errors. If preferred, conventional standard errors alter none of my stated conclusions. The Jacksonville interaction term that is shown as negative and weakly significant in Appendix Exhibit 3 is insignificant using conventional standard errors. No other interaction terms’ (in)significance changes. Furthermore, even favoring HC2 standard errors, which I do not endorse, my conclusions remain unchanged. HC2 standard errors incorrectly assign significance to the interaction term for the model reported in column [B], but as I explain above, the model’s “result” is meaningless irrespective of the standard errors because the dependent variable is flawed. See also, footnote 89.

question here is whether total transcontinental volume in “affected” BEAs decreased relative to “unaffected” BEAs. Importantly, the BEA-specific treatment interaction coefficients individually considered do not answer this question; rather, the sum of the effects associated with individual BEAs speaks to the total output effect. A simple statistical test assessing the total output effect associated with said coefficients summed reveals, again, that there is no impact on “affected” BEAs’ output.<sup>89</sup>

79. In sum, although a properly applied difference-in-differences methodology can establish whether the formation of the MSLLC has adversely affected output, Dr. Shehadeh’s analysis is fundamentally flawed. Once properly measuring output and treatment effects, and correctly specifying models, I have found no indication that the MSLLC has adversely led to output restrictions.

---

<sup>89</sup> See, Mayo Workpapers. This test sums the coefficients and calculates the statistical significance of the summed coefficients’ effect size. “Affected” BEAs are measured to have 64 fewer intermodal units per year, with a 95 percent confidence interval spanning the range: -1,576 to 1,448 intermodal units. The p-value associated with this estimate is 0.930, meaning the estimated effect is, statistically speaking, no different than zero. Furthermore, even according to conventional standard errors or HC2 standard errors, this test does not indicate a statistically significant result.

PUBLIC VERSION

**Verification**

I, John Mayo, Elsa Carlson McDonough Chair of Business Administration and Professor of Economics, Business and Public Policy in Georgetown University's McDonough School of Business, verify under penalty of perjury that I have read the foregoing document and know its contents, and that the same is true and correct to the best of my knowledge and belief.

Executed this 11th day of August, 2022.

A handwritten signature in black ink, appearing to read "John W. Mayo". The signature is fluid and cursive, with a large loop at the beginning and a long, sweeping underline.

---

John Mayo

## VITA

**JOHN W. MAYO**

**Georgetown University  
McDonough School of Business  
531 Hariri Building  
37th and O Streets, N.W.  
Washington, D.C. 20057**

Email: [mayoj@georgetown.edu](mailto:mayoj@georgetown.edu), Telephone: (202)-687-6972

### **ACADEMIC APPOINTMENTS:**

Georgetown University, McDonough School of Business

Elsa Carlson McDonough Chair in Business Administration, August 2018 - present

Professor of Economics, Business and Public Policy 1998 - present

Executive Director, Georgetown Center for Business and Public Policy, 2002 – present

Dean, 2002-2004

Senior Associate Dean, 1999-2001

Georgetown University, Department of Economics

Professor of Economics (by courtesy), 2011-present.

Stanford University

Visiting Scholar (February 2013, February 2015, February 2018)

Stanford Institute for Economic Policy Research

University of California, Berkeley

Visiting Scholar (January-May 2011)

Haas School of Business

University of Tennessee, Knoxville

Professor of Economics, 1994-1998

Research Associate Professor, Center for Business and Economic Research 1989-1994

Associate Professor of Economics, Department of Economics, 1989-1994

Research Assistant Professor, Center for Business and Economic Research, 1981-1989

Assistant Professor of Economics, Department of Economics, September 1981-1989.

Virginia Polytechnic and State University (Virginia Tech)

Visiting Assistant Professor, fall 1983

## **EDUCATION:**

Honorary Doctorate in Economics, 2007, University of Basel, Basel, Switzerland

Ph.D., Economics, 1982, Washington University in St. Louis

Dissertation: "Diversification and Performance in the U.S. Energy Industry"

A.M., Economics, 1979, Washington University in St. Louis

B.A., Economics, 1977, Hendrix College, Conway, Arkansas

## **FIELDS OF SPECIALIZATION:**

Industrial Organization

Regulatory and Antitrust Policy

Applied Microeconomics

Econometrics

## **NON-ACADEMIC APPOINTMENTS**

U.S. Senate, Small Business Committee

Chief Economist, Democratic Staff, June 1984 - June 1985

International Institute for Applied Systems Analysis (IIASA)

Energy Research Fellow, Laxenburg, Austria, summer 1979

Transportation and Public Utilities Group

President, 2005-2006; 2014-15.

National Safety Council,

Board of Directors, Vice President, October 2002- 2006.

## **HONORS, AWARDS, AND GRANTS:**

Undergraduate: Mosley Economics Prize (#1 graduating economics major), Alpha Chi (scholastic), Blue Key Honor Society, Senior Honors Seminar.

Graduate: University Fellowship, Washington University (1977-78); National Academy of Sciences Young Research Fellow, Laxenburg, Austria (1979); President, Washington University Economics Graduate Student Association (1979-81); Dissertation Fellowship, Center for the Study of American Business, Washington University (1980-81).

Post-Graduate: Public Utility Research Center Distinguished Service Award (2006); Zaeslin Fellow of Law and Economics, University of Basel, Basel, Switzerland (2000 - present); William B. Stokely Scholar, College of Business Administration, The University of Tennessee (1993-1995); South Central Bell Research Grant (1988); Research Affiliate, Center of Excellence for New Venture Analysis, The University of Tennessee (1985); Summer Faculty Research Fellowships, The University of Tennessee (1983-1985).

## **COURSES TAUGHT:**

Undergraduate: Washington, Business and the World, The Miracle of Markets?, Principles of Microeconomics, Economic Foundations of Commerce, Current Economic Problems, Government and Business, Intermediate Microeconomics, Energy Economics

Graduate: Managerial Economics (MBA), Firm Analysis and Strategy (MBA), The Miracle of Markets?, Managing in a Regulated Economy (MBA), Economics (Executive MBA), The Economics of Strategy (MBA), Business and Public Policy (MBA), Competition and Competition Policy (MBA), Regulation and Deregulation in the American Economy (MBA), Strategic Pricing: Theory, Practice and Policy (MBA), Understanding International Business (MBA), Washington, Business and the World (MBA), The Miracle of Markets? (MBA), Industrial Organization and Public Policy (Ph.D.), The Economics of Antitrust and Regulation (Ph.D.)

## **PUBLICATIONS:**

### **A. JOURNAL ARTICLES**

“The Welfare Effects of Vertical Mergers and Their Remedies,” Review of Industrial Organization, Vol. 59, September 2021, pp. 409-441.

“The Evolution of Merger Enforcement Intensity: What do the Data Show?” (with Jeffrey T. Macher) Journal of Competition Law and Economics, September 2021, pp. 708-727.

“Vertical Integration and the Evolution of Audiovisual Services: Economic Policy Implications for Brazil,” The Law, State and Telecommunications Review, Volume 12, May 2020, pp. 1-8.

“Will Ideology Block Opportunity? Regulatory Reform in the Infrastructure Industries,” Federal Communications Law Journal, Volume 70, May 2018, pp. 199-210.

“From Universal Service to Universal Connectivity,” (with Jeffrey T. Macher, Olga Ukhaneva and Glenn Woroch), Journal of Regulatory Economics, Volume 52, August 2017, pp. 77-104.

“The Evolution of ‘Competition’: Lessons for 21st Century Communications Policy,” (with Amanda B. Delp), Review of Industrial Organization, Vol. 50, June 2017, pp. 393-416.

“International Telecommunications Demand” (with Olga Ukhaneva), Information Economics and Policy, Vol. 39, June 2017, pp. 26-35.

“Regulation in a ‘Deregulated’ Industry: Railroads in the Post-Staggers Era” (with David E. M. Sappington), Review of Industrial Organization, Vol. 49, September 2016, pp. 203-227.

“Targeting Efforts to Raise Rivals’ Costs: Moving from ‘Whether’ to ‘Whom’” (with David M. Mandy and David E.M. Sappington), International Journal of Industrial Organization, Volume 46, May 2016, pp. 1-15.

“When Do Auctions Ensure the Welfare-Maximizing Allocation of Scarce Inputs?” (with David E.M. Sappington), RAND Journal of Economics, Vol. 47, Spring 2016, pp. 186-206.

“Can you Hear me Now: Exit, Voice and Loyalty Under Increasing Competition” (with T. Randolph Beard and Jeffrey T. Macher). Journal of Law and Economics, Vol. 58, August 2015, pp. 717-745.

“Influencing Public Policymaking: Firm-, Industry- and Country Institution-Level Determinants,” (with Jeffrey T. Macher) Strategic Management Journal, Vol. 36, December 2015, pp. 2021-2038.

“Revenue Adequacy: the Good, the Bad and the Ugly” (with Jeffrey T. Macher and Lee F. Pinkowitz), Transportation Law Journal, Volume 41, 2014, pp. 85-127.

“The Evolution of Innovation and the Evolution of Regulation: Emerging Tensions and Emerging Opportunities in Communications” (with Larry Downes) CommLaw Conspectus: Journal of Communications Law and Policy, Vol. 23, 2014, pp. 10-51.

“Moving Past the Ideological Debate: A Results-Based Regulation Approach to Net Neutrality,” Democracy: A Journal of Ideas, No. 34, fall 2014, pp. 21-27.

“The Evolution of Regulation: 20<sup>th</sup> Century Lessons and 21<sup>st</sup> Century Opportunities,” Federal Communications Law Journal, Vol. 65, April 2013, pp. 119-156.

“It’s Time to Unify Telecommunications Policy” (with Jeffrey T. Macher), The Economists’ Voice, Vol. 9, 2012, pp. 1-6.

“The World of Regulatory Influence” (with Jeffrey T. Macher), Journal of Regulatory Economics, Volume 41, February 2012, pp. 59-79.

“Regulator Heterogeneity and Endogenous Efforts to Close the Information Asymmetry Gap: Evidence from FDA Regulation,” (with Jeffrey T. Macher and Jackson A. Nickerson), Journal of Law and Economics, Vol. 54, February 2011, pp. 25-54.

“From Network Externalities to Broadband Growth Externalities: A Bridge Not Yet Built” (with Scott Wallsten), Review of Industrial Organization, Vol. 38, March 2011, pp. 173-190.

“The Influence of Firms on Government” (with Jeffrey T. Macher and Mirjam Schiffer), The B.E. Journal of Economic Analysis & Policy, Vol. 11, Issue 1, January 2011, pp. 1-25.

“Making a Market Out of a Molehill?: Geographic Market Definition in *Aspen Skiing*,” (with Jeffrey T. Macher), Journal of Competition Law and Economics, Vol. 6, December 2010, pp. 911-926.

“Enabling Efficient Wireless Communications: The Role of Secondary Spectrum Markets” (with Scott Wallsten), Information Economics and Policy, Vol. 22, March 2010, pp. 61-72.

“Wireless Technologies,” (with Glenn Woroch), Information Economics and Policy, Vol. 22, March 2010, pp. 1-3.

“Endogenous Regulatory Constraints and the Emergence of Hybrid Regulation” (with Larry Blank), Review of Industrial Organization, Vol. 35, November 2009, pp. 233-255.

“Warm Glow and Charitable Giving: Why the Wealthy Do Not Give More to Charity” (with Catherine H. Tinsley), Journal of Economic Psychology, Vol. 30, June 2009, pp. 490-499.

“Common Costs and Cross-Subsidies: Misestimation Versus Misallocation” (with Mark L. Burton and David L. Kaserman), Contemporary Economic Policy, April 2009, pp. 193-199.

“It’s No Time to Regulate Wireless Telephony,” The Economists’ Voice, Vol. 5 : Iss. 1, pp. 1-4, 2008.

“Understanding Participation in Social Programs: Why Don’t Households Pick up the Lifeline?” (with Mark Burton and Jeffrey T. Macher), The B.E. Journal of Economic Analysis & Policy, Volume 7, Issue 1 (Topics), 2007.

“A Graphical Approach to the Stiglerian Theory of Regulation,” (with T. Randolph Beard and David L. Kaserman), Journal of Economic Education, Vol. 38, Fall 2007, pp. 447-451.

“Antitrust Economics Meets Antitrust Psychology: A View From the Firms” (with Mirjam Schiffer), International Journal of the Economics of Business, Vol. 13, July 2006, pp.281-306.

“Regulatory Opportunism and Investment Behavior: Evidence from the U.S. Electric Utility Industry,” (with Thomas P. Lyon) RAND Journal of Economics, Vol. 36, Fall 2005, pp. 628-644.

Reprinted in The Political Economy of Regulation, Thomas P. Lyon, Edward Elgar, Northampton, MA, 2007.

“On the Impotence of Imputation” (with T. Randolph Beard and David L. Kaserman), Telecommunications Policy, Volume 27, Issues 8-9, September-October 2003, pp. 585-595.

“A Graphical Exposition of the Economic Theory of Regulation” (with T. Randolph Beard and David L. Kaserman), Economic Inquiry, Volume 41, October 2003, pp. 592-606.

“Regulation, Competition, and the Optimal Recovery of Stranded Costs,” (with T. Randolph Beard and David L. Kaserman) International Journal of Industrial Organization, Volume 21, June 2003, pp. 831-848.

“The Supreme Court Weighs in on Local Exchange Competition: The Meta-Message,” (with David L. Kaserman) Review of Network Economics Volume 1, September 2002, pp. 119 – 131.

“Regulation, Vertical Integration and Sabotage” (with T. Randolph Beard and David L. Kaserman), Journal of Industrial Economics, Volume 49, September 2001, pp. 319-334.

“Efficient Telecommunications Policies for the ‘New Economy’: The Compelling Case for Access Charge Reform” (with David L. Kaserman), International Journal of Development Planning Literature, (Special Issue edited by William J. Baumol and Victor A. Becker), Volume 1, April 2001.

"Regulatory Policies Toward Local Exchange Companies Under Emerging Competition: Guardrails or Speedbumps on the Information Highway," (with David L. Kaserman) Information Economics and Policy, Volume 11, December 1999, pp. 367-388.

“Open Entry and Local Telephone Rates: The Economics of IntraLATA Toll Competition,” (with David L. Kaserman, Larry R. Blank, and Simran Kahai) Review of Industrial Organization, Vol. 14, June 1999, pp. 303-319.

“Modeling Entry and Barriers to Entry: A Test of Alternative Specifications,” (with Mark L. Burton and David L. Kaserman), Antitrust Bulletin, Summer 1999, pp. 387-420.

"Targeted and Untargeted Subsidy Schemes: Evidence from Post-Divestiture Efforts to Promote Universal Telephone Service," (with Ross Eriksson and David L. Kaserman) Journal of Law and Economics, Vol. 41, October 1998, pp. 477-502.

“Dominant Firm Pricing with Competitive Entry and Regulation: The Case of IntraLATA Toll,” (with Larry Blank and David L. Kaserman) Journal of Regulatory Economics, Vol. 14, July 1998, pp. 35-54.

“The Role of Resale Entry in Promoting Local Exchange Competition,” (with David L. Kaserman) Telecommunications Policy, Vol. 22, No. 4/5, 1998.

“Telecommunications Policy and the Persistence of Local Exchange Monopoly,” (with David L. Kaserman), Business Economics, Vol. 33, April 1998, pp. 14-19.

“An Efficient Avoided Cost Pricing Rule for Resale of Local Exchange Telephone Service,” (with David L. Kaserman) Journal of Regulatory Economics, Volume 11, January 1997, pp. 91-107.

"A Dynamic Model of Advertising by the Regulated Firm," (with Francois Melese and David L. Kaserman) Journal of Economics (Zeitschrift für Nationalökonomie), Volume 64, 1996, pp. 85-106.

"Is the 'Dominant Firm' Dominant? An Empirical Analysis of AT&T's Market Power," (with Simran Kahai and David L. Kaserman), Journal of Law and Economics, Volume 39, October 1996, pp.499-517.

"Competition and Asymmetric Regulation in Long Distance Telecommunications: An Assessment of the Evidence," (with David L. Kaserman) CommLaw Conspectus: Journal of Communications Law and Policy, Volume 4, Winter 1996, pp. 1-26.

"Deregulation and Predation in Long-Distance Telecommunications: An Empirical Test," (with Simran Kahai and David L. Kaserman), Antitrust Bulletin, Vol. 40, Fall 1995, pp.645-666.

"Cross-Subsidies in Telecommunications: Roadblocks on the Road to More Intelligent Telephone Pricing" (with David L. Kaserman), Yale Journal on Regulation, Volume 11, Winter 1994, pp. 120-147.

Reprinted in Public Utilities Law Anthology, Allison P. Zabriskie, editor, Vol. 17, Part 2 (July-December, 1994), pp. 899-929.

"Demand and Pricing of Telephone Services: Evidence and Welfare Implications" (with Carlos Martins-Filho), RAND Journal of Economics, Volume 24, Autumn 1993, pp. 399-417.

"Two Views of Applied Welfare Analysis: The Case of Local Telephone Service Pricing -- A Comment and Extension" (with David L. Kaserman and David M. Mandy), Southern Economic Journal, Volume 59, April 1993, pp. 822-827.

"The Political Economy of Deregulation: The Case of Intrastate Long Distance" (with David L. Kaserman and Patricia L. Pacey), Journal of Regulatory Economics, Volume 5, March 1993, pp. 49-64.

Reprinted in The Foundations of Regulatory Economics, Robert E. Ekelund, Jr. (Ed.), Edward Elgar Publishing, Northampton, MA.

"Demand, Pricing and Regulation: Evidence from the Cable TV Industry" (with Yasuji Otsuka), RAND Journal of Economics, Volume 22, Number 3, Autumn 1991, pp. 396-410.

"The Measurement of Vertical Economies and the Efficient Structure of the Electric Utility Industry" (with David L. Kaserman), Journal of Industrial Economics, Volume 39, Number 5, September 1991, pp. 483-502.

"Regulation, Market Structure and Hospital Costs: Reply and Extension" (with Deborah A. McFarland), Southern Economic Journal, Volume 58, Number 2, October 1991, pp. 535-538.

"Firm Size, Employment Risk and Wages: Further Insights on a Persistent Puzzle" (with Matthew N. Murray), Applied Economics, Volume 23, Number 8, August 1991, pp. 1351-1360.

"Competition for 800 Service: An Economic Evaluation" (with David L. Kaserman), Telecommunications Policy, October 1991, pp. 395-408.

"Regulation, Advertising and Economic Welfare" (with David L. Kaserman), Journal of Business, Volume 64, Number 2, April 1991, pp. 255-267.

Reprinted in The Foundations of Regulatory Economics, Robert E. Ekelund, Jr., (Ed.), Edward Elgar Publishing, Northampton, MA.

"Cross-Subsidization in Telecommunications: Beyond the Universal Service Fairy Tale" (with David L. Kaserman and Joseph E. Flynn), Journal of Regulatory Economics, Volume 2, Number 3, September 1990, pp. 231-250.

"Barriers to Trade and the Import Vulnerability of U.S. Manufacturing Industries" (with Don P. Clark and David L. Kaserman), Journal of Industrial Economics, Volume 38, Number 4, June 1990, pp. 433-448.

"Firm Entry and Exit: Causality Tests and Economic Base Linkages" (with Joseph E. Flynn), Journal of Regional Science, Volume 29, Number 4, November 1989, pp. 645-662.

"Regulation, Market Structure and Hospital Costs" (with Deborah A. McFarland), Southern Economic Journal, Volume 55, Number 3, January 1989, pp. 559-569.

"Long Distance Telecommunications Policy: Rationality on Hold" (with David L. Kaserman), Public Utilities Fortnightly, Volume 122, Number 13, December 22, 1988, pp. 18-27.

"The Effects of Regulation on R&D: Theory and Evidence" (with Joseph E. Flynn), Journal of Business, Volume 61, Number 3, July 1988, pp. 321-336.

"The Effectiveness of Mandatory Fuel Efficiency Standards in Reducing the Demand for Gasoline" (with John E. Mathis), Applied Economics, Volume 20, Number 2, February 1988, pp. 211-220.

"Market Based Regulation of a Quasi-Monopolist: A Policy Proposal for Telecommunications" (with David L. Kaserman), Policy Studies Journal, Volume 15, Number 3, March 1987, pp. 395-414.

"The Ghosts of Deregulated Telecommunications: An Essay by Exorcists" (with David L. Kaserman), Journal of Policy Analysis and Management, Volume 6, Number 1, Fall 1986, pp. 84-92.

"Economies of Scale and Scope in the Electric-Gas Utilities: Further Evidence and Reply," Southern Economic Journal, Volume 52, Number 4, April 1986, pp. 1175-1178.

"Advertising and the Residential Demand for Electricity" (with David L. Kaserman), Journal of Business, Volume 58, Number 4, October 1985, pp. 399-408.

"Multiproduct Monopoly, Regulation and Firm Costs," Southern Economic Journal, Volume 51, Number 1, July 1984, pp. 208-218.

"The Technological Determinants of the U.S. Energy Industry Structure," The Review of Economics and Statistics, Volume 66, February 1984, pp. 51-58.

## **B. BOOKS, MONOGRAPHS, AND OTHER PUBLICATIONS**

"Five Myths: Antitrust Law," (with Mark Whitener) Washington Post, March 22, 2020. B3.

U.S. Freight Rail Economics and Policy: Are we on the Right Track? Routledge, New York and London, Jeffrey T. Macher and John W. Mayo, Editors, Routledge, New York and London, 2019.

"Economic Foundations for 21<sup>st</sup> Century Freight Rail Rate Regulation" (with Robert D. Willig) in U.S. Freight Rail Economics and Policy: Are we on the Right Track? Routledge, New York and London, Jeffrey T. Macher and John W. Mayo, Editors, Routledge, New York and London, 2019.

"The Law and Economics of Revenue Adequacy" (with Jeffrey T. Macher and Lee F. Pinkowitz) in U.S. Freight Rail Economics and Policy: Are we on the Right Track? Routledge, New York and London, Jeffrey T. Macher and John W. Mayo, Editors, Routledge, New York and London, 2019.

"Staying with Success? Not at the FCC," Forbes, February 26, 2015.

"Bringing Mobile Broadband to Rural Americans," (with Anna-Maria Kovacs) Roll Call, May 9, 2014.

"Modernized Telecom Policy Must Reflect That Change is the Only Constant," Roll Call, February 7, 2014.

"Conclusion" in The Information Technology Revolution and the Transformation of the Small Business Economy: A Collection of Essays, The American Consumer Institute, March 2012.

"How to Regulate the Internet Tap," (with Bruce Owen, Marius Schwartz, Robert Shapiro, Lawrence J. White and Glenn Woroch) New York Times, April 21, 2010, p. A25.

“Regulating Early Termination Fees: When ‘Pro-Consumer’ Legislation Isn’t,” Economic Policy Vignette, Georgetown Center for Business and Public Policy, January 2010, available at <http://cbpp.georgetown.edu/publications/>.

“Universal Service: Can We Do More with Less?” in New Directions in Communications Policy, Randolph J. May, Editor, Carolina Academic Press, 2009.

“The Economic Facts and FAQs of National Video Franchising: Reflections on the House of Representatives Debate,” Policy Matters 06-16, AEI-Brookings Joint Center, June 2006.

“We’re all for Competition, But...,” Policy Matters 06-03, AEI-Brooking Joint Center, February 2006.

“The Role of Antitrust in a Deregulating Telecommunication Industry: The Economic Fallacies of Trinko,” in The Future of Telecommunications Industries, Arnold Picot, Editor, Springer Verlag, 2006, pp. 129-146.

“Competition in the Long Distance Market,” (with David L. Kaserman) in Handbook of Telecommunications Economics, Martin E. Cave, Sumit K. Majumdar and Ingo Vogelsang, Editors, North Holland Elsevier, 2002.

“Shakeout or Shakedown? The Rise and Fall of the CLEC Industry,” (with Mark Burton and David L. Kaserman), in Michael A. Crew, Editor, Markets, Pricing, and Deregulation of Utilities, Kluwer Academic Publishers, 2002.

“Resale and the Growth of Competition in Wireless Telephony,” (with Mark L. Burton and David L. Kaserman), in Expanding Competition in Regulated Industries, Michael A. Crew, Editor, Kluwer Academic Publishers, 2000.

“Monopoly Leveraging, Path Dependency, and the Case for a Competition Threshold for RBOC Reentry into InterLATA Toll,” (with T.R. Beard and David L. Kaserman), in Regulation Under Increasing Competition, Michael A. Crew, Editor, Kluwer Academic Publishers, 1999.

"The Quest for Universal Service: The Misfortunes of a Misshapen Policy," (with David L. Kaserman) in Telecommunications Policy: Have Regulators Dialed the Wrong Number?, Donald L. Alexander, Editor, Praeger Publishing Group, Westport, CT, 1997, pp.131-144.

Government and Business: The Economics of Antitrust and Regulation (with David L. Kaserman), The Dryden Press, Harcourt Brace College Publishers, 1995.

"Long-Distance Telecommunications: Expectations and Realizations in the Post-Divestiture Period" (with David L. Kaserman), in Incentive Regulation for Public Utilities, Michael A. Crew, Editor, (Boston, MA.: Kluwer Academic Publications), 1994.

Monopoly Leveraging Theory: Implications for Post-Divestiture Telecommunications Policy (with David L. Kaserman), Center for Business and Economic Research: University of Tennessee, April 1993.

State-Level Telecommunications Policy in the Post-Divestiture Era: An Economic Perspective (with William F. Fox), Center for Business and Economic Research, University of Tennessee, March 1991.

A review of After Divestiture: The Political Economy of State Telecommunications Regulation, by Paul E. Teske. Albany: State University of New York Press, 1990. Publius, Winter 1991, pp. 164-166.

Deregulation and Market Power Criteria: An Evaluation of State Level Telecommunications Policy" (with David L. Kaserman) in Telecommunications Deregulation: Market Power and Cost Allocation Issues, J. Allison and D. Thomas (eds.), Quorum Books, 1990.

The Economics of Local Telephone Pricing Options (with J. E. Flynn), Center for Business and Economic Research, The University of Tennessee, October 1988.

Firm Entry and Exit: Economic Linkages in Tennessee (with J. E. Flynn), Center for Business and Economic Research, The University of Tennessee, Knoxville, July 1988.

"The Economics of Regulation: Theory and Policy in the Post-Divestiture Telecommunications Industry" (with David L. Kaserman) in Public Policy Toward Corporations, Arnold Heggstad, editor, University of Florida Presses, 1988.

"Entries and Exits of Firms in the Tennessee Economy: Foundations for Research," Survey of Business, The University of Tennessee, Vol. 23, Summer 1987, pp. 21-23.

"The Relationship of Manufacturing and Nonmanufacturing Firm Entry and Exit in Tennessee" (with Joseph E. Flynn), Survey of Business, The University of Tennessee, Volume 23, Number 2, Fall 1987, pp. 11-16.

A Review of Municipal Ownership in the Electric Utility Industry, by David Schap. New York: Praeger Publishing Company, 1986. Southern Economic Journal, Volume 54, July 1987.

Entries and Exits of Firms in the Tennessee Economy (with W. F. Fox, et al.), Center for Business and Economic Research, University of Tennessee, Knoxville, May 1987.

"The U.S. Economic Outlook," Survey of Business, The University of Tennessee, annual contributor, 1986-1994.

An Economic Report to the Governor of the State of Tennessee, Center for Business and Economic Research and the Tennessee State Planning Office, Annual Contributor, 1981-1994.

"An Economic Analysis of a Monitored Retrievable Storage Site for Tennessee" (with W. F. Fox, L. T. Hansen, and K. E. Quindry), Final Report and Appendices, December 17, 1985.

## **CONGRESSIONAL AND REGULATORY TESTIMONIES:**

U.S. Senate (Commerce, Science and Transportation Committee; Energy and Natural Resources Committee, Subcommittee on Water and Power); U.S. House of Representatives, Subcommittee on Railroads, Pipelines, and Hazardous Materials); Federal Communications Commission; U.S. International Trade Commission; Tennessee State Legislature (Senate Finance, Ways and Means Committee; Special Joint Legislative Committee on Business Taxation; and, Senate State and Local Government Committee); Maryland State Legislature (Environmental Works Committee); Pennsylvania Public Utility Commission; Michigan Public Service Commission; Missouri Public Service Commission; Illinois Commerce Commission; West Virginia Public Utility Commission; Wyoming Public Utility Commission; Washington Utilities and Transportation Commission; Utah Public Service Commission; Wisconsin Public Service Commission; California Public Utilities Commission; Florida Public Service Commission; Delaware Public Service Commission; Montana Public Service Commission; Maryland Public Service Commission; Massachusetts Department of Public Utilities; Georgia Public Service Commission; Colorado Public Utilities Commission; North Carolina Public Utilities Commission; Missouri Public Service Commission; Texas Public Utility Commission; Arkansas Public Service Commission; Connecticut Department of Public Utility Control; Kansas State Corporation Commission; and New Jersey Board of Public Utility Commissioners.

## **INVITED SEMINARS AND SELECTED CONFERENCE PRESENTATIONS:**

Columbia University, MIT, University of Chicago, London Business School, University of Paris (Dauphine IX), Vanderbilt University, INSEAD, Washington University in St. Louis, University of Michigan, Ohio State University, University of Minnesota, University of Florida, University of Arkansas, University of Texas, University of Missouri, Florida State University, Rutgers University, American University, University of Missouri, Kansas University, University of Utah, University of Colorado, University of Basel (Switzerland), ESMT, University of Freiburg (Germany), Hendrix College, University of Central Florida, American Enterprise Institute, Brookings Institution, Federal Communications Commission, Australian Competition and Consumer Commission (ACCC), COFECE (Mexican antitrust commission), Telecommunications Policy Research Conference (TPRC), National Conference of State Legislatures, U.S. Advisory Commission on Intergovernmental Relations

## **SELECTED CONSULTING:**

U.S. Department of Justice, Antitrust Division; U.S. Federal Trade Commission; AT&T; Sprint; MCI Telecommunications; Verizon; Optus Communications (Australia); Commonwealth of Virginia, Tennessee Valley Authority; Antitrust Division, Office of the Attorney General, State of Tennessee; U.S. Senator Howard Baker, Jr., U.S. Senate Majority Leader; Oak Ridge National Laboratory; AmerenUE; Arkansas Consumer Research; Division of Energy Conservation and Rate Advocacy, Office of the Arkansas Attorney General; U.S. Department of Energy

## **PROFESSIONAL PRESENTATIONS:**

American Economic Association Annual Conference, Western Economic Association Annual Conference, Southern Economic Association Annual Conference, European Association for Research in Industrial Economics Annual Conference, Center for Research in Regulated Industries Eastern Annual Conference, Center for Research in Regulated Industries Western Annual Conference, Southeastern Economic Analysis Conference

## **WORKING PAPERS:**

“Customer Switching, Firm Entry and Regulatory Policy: Evidence from the Electric Utility Industry (with Jeffrey T. Macher and Robert Press), February 2022.

“The Evolution of Judicial Standards: Evidence from Litigated Merger Trials,” (with Jeffrey T. Macher, David E.M. Sappington and Mark Whitener), April 2021.

“The Evolution of Contracting,” (with Jeffrey T. Macher and David E.M. Sappington), January 2021.

“Demand in a Portfolio Choice Environment: The Evolution of Telecommunications” (with Jeffrey T. Macher, Olga Ukhaneva and Glenn Woroch), April 2019.

“Does the Internet Alter Consumer Healthcare Behaviors?” (with Jeffrey T. Macher and Olga Ukhaneva), January 2018.

## **EDITORIAL REVIEWER:**

National Science Foundation, Brookings Institution, Federal Trade Commission, The MIT Press, American Economic Review, Quarterly Journal of Economics, Journal of Law and Economics, Economic Journal, Journal of Business, RAND Journal of Economics, Journal of Regulatory Economics, Review of Economics and Statistics, Economic Inquiry, Journal of Industrial Economics, Journal of Economics & Management Strategy, Journal of Law, Economics and Organization, Journal of Economic Behavior and Organization, Review of Industrial Organization, Scandinavian Journal of Economics, Eastern Economic Journal, Southern Economic Journal, Contemporary Economic Policy, Economic Development and Cultural Change, Industrial Relations, Growth and Change, Review of Regional Studies, Journal of Economics and Business, Quarterly Review of Economics and Business, Journal of Policy Analysis and Management, Quarterly Journal of Business and Economics, Regional Science and Urban Economics, Financial Review, Journal of Money, Credit, and Banking, Social Science Quarterly, Telecommunications Systems, Public Finance Quarterly, Japan and the World Economy, Energy Economics, Information Economics and Policy

## **EDITORIAL AND ACADEMIC OVERSIGHT BODIES**

Associate Editor, Information Economics and Policy, 2007-2011.

Editorial Board, Journal of Regulatory Economics, 1999-present.

Editorial Board, Review of Industrial Organization, 2002-2003; 2010-present.

Associate Editor, Economic Inquiry, 2013-present.

Board of Academic Advisors, The Free State Foundation, 2008 – 2009.

Research Advisory Committee, National Regulatory Research Institute (Ohio State University), 1993-1997.

## **PROFESSIONAL MEMBERSHIPS:**

American Economic Association

Western Economic Association

Southern Economic Association

American Law and Economics Association

International Telecommunications Society

European Association for Research in Industrial Economics

**EXHIBIT 2**

**DOCUMENTS RELIED UPON**

| Bates Ranges     |   |                  |
|------------------|---|------------------|
| CSX_HC_00000022  | — | CSX_HC_00000082  |
| KCSR-HC-00013177 | — | KCSR-HC-00013227 |

Case Filings:

Amended Comments of Norfolk Southern Railway Company and Request for Conditions, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern, *et al.*, Finance Docket No. 36500, June 9, 2022.

CSX Transportation, Inc.’s Amended Comments and Request for Conditions, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern Railroad, *et al.*, Finance Docket No. 36500, June 9, 2022.

CSX Transportation, Inc.’s Response to Comments and Responsive Applications, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern, *et al.*, Finance Docket No. 36500, July 12, 2022.

Case Law, Statutes, and STB Precedents:

Kansas City Southern, The Kansas City Southern Railway Company, and Meridian Speedway LLC – Exemption for Transactions Within a Corporate Family, Finance Docket No. 34822 (filed January 17, 2006).

Verified Statements:

Amended Verified Statement of John W. Mayo, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern, *et al.*, Finance Docket No. 36500, June 9, 2022.

Verified Statement of Dr. Ramsey Shehadeh, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern Railroad, *et al.*, Finance Docket No. 36500, July 12, 2022, with Workpapers.

Verified Statement of John W. Mayo – Response to CSXT’s Comments, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern, *et al.*, Finance Docket No. 36500, July 12, 2022.

Verified Statement of John W. Mayo, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern Railroad, *et al.*, Finance Docket No. 36500, February 28, 2022.

Verified Statement of Professor Julie M. Carey and Dr. Albert W. Bremser, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern Railroad, *et al.*, Finance Docket No. 36500, February 28, 2022.

Verified Statement of Professor Julie M. Carey, Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern Railroad, *et al.*, Finance Docket No. 36500, July 12, 2022, with Workpapers.

Verified Statement of Robert Girardot – Canadian Pacific Railway Limited, *et al.* – Control – Kansas City Southern Railroad, *et al.*, Finance Docket No. 36500, July 12, 2022.

Academic Articles, Books, and Publications:

Angrist, Joshua D., and Jörn-Steffen Pischke, *Mostly Harmless Econometrics: An Empiricist’s Companion*, Princeton University Press, 2009.

## EXHIBIT 2

### DOCUMENTS RELIED UPON

#### Academic Articles, Books, and Publications (Continued):

Blair, Roger D., and D. Daniel Sokol (eds.), *The Oxford Handbook of International Antitrust Economics: Volume 1*, Oxford University Press, 2015.

Blair, Roger D., *et al.*, “Analyzing Vertical Mergers: Accounting for the Unilateral Effects Tradeoff and Thinking Holistically About Efficiencies,” *George Mason Law Review*, Vol. 27, No. 3 (2020): 761-822.

Kogut, Bruce, “Joint Ventures: Theoretical and Empirical Perspectives,” *Strategic Management Journal*, Vol. 9, No. 4 (1988): 319-332.

Mayo, John W., and Mark Whitener, “The Welfare Effects of Vertical Mergers and their Remedies,” *Review of Industrial Organization*, Vol. 59, No. 2 (2021): 409-441.

U.S. Department of Justice and the Federal Trade Commission, “Vertical Merger Guidelines,” June 30, 2020, available at <https://www.justice.gov/atr/page/file/1290686/download>.

#### Websites:

<https://investors.csx.com/news-and-events/news/news-details/2006/BNSF-CSX-Create-High-Volume-Intermodal-Corridor/default.aspx> (viewed August 10, 2022).

<https://www.bizjournals.com/dallas/stories/2001/08/20/daily19.html> (viewed August 10, 2022).

<https://www.bizjournals.com/kansascity/stories/2005/11/28/daily31.html> (viewed April 7, 2022).

#### Data, Workpapers, and Produced Documents:

“01 CWS Databuild.py”.

“03 Regression Databuild.py”.

“05 BEA Output Chart.sas”.

“2019 Waybill Build.dta”.

“BEA Demand Controls Dataset.csv”.

“FAF5\_metadata w BEA Assignments.xlsx”.

“HC-WP 2019 KCS All Dallas IM Moves.R”.

“HC-WP 2019 NS Self Rate Comparison.xlsx”.

“HC-WP 2019 Price Comparison and Savings Analysis.xlsx”.

“HC-WP All Meridian Traffic (KCS and NS).R”.

“HC-WP Final CSXT Tape Adjustments for Analysis.Rmd”.

“HC-WP Final NS Tape Adjustments for Analysis.Rmd”.

“HC-WP Investment Chart.xlsx”.

“HC-WP MSLLC Line Share Summary.xlsx”.

“HC-WP Subsetting Atlanta BNSF Routes.Rmd”.

“NSR Contribution Margin..xlsx”.

“railinc\_centralized\_stations.dta”.

“Regression Dataset.csv”.

“SPLC Code Lookup.xlsx”.

2019 Confidential Waybill Sample.

FAF5.3 Regional Database for 2018 – 2019, available at <https://www.bts.gov/faf> (accessed August 4, 2022).

PUBLIC VERSION

**EXHIBIT 2**

**DOCUMENTS RELIED UPON**

**If not listed, all other documents cited in my statement, appendices, workpapers, and exhibits.**