

**BEFORE THE UNITED STATES  
SURFACE TRANSPORTATION BOARD**

236611

ENTERED  
Office of Proceedings  
September 5, 2014  
Part of  
Public Record

---

STB Ex Parte No. 722

**RAILROAD REVENUE ADEQUACY**

---

**OPENING COMMENTS OF CSX TRANSPORTATION, INC.**

**Peter J. Shutz  
Paul R. Hitchcock  
John P. Patelli  
CSX Transportation, Inc.  
500 Water Street  
Jacksonville, FL 32202**

**Paul A. Hemmersbaugh  
Richard E. Young  
Sidley Austin LLP  
1501 K Street, N.W.  
Washington, D.C. 20005  
(202) 736-8000  
(202) 736-8711 (fax)**

*Counsel for CSX Transportation, Inc.*

**Dated: September 5, 2014**

**Table of Contents**

	<b>Page</b>
I. THE BOARD’S REVENUE ADEQUACY ANALYSIS AND FINDINGS ARE FUNDAMENTALLY FLAWED BECAUSE THEY ARE NOT PREMISED ON ASSET REPLACEMENT COSTS, BUT RATHER ON HISTORIC BOOK VALUES.....	1
A. It Is Well-Established That Meaningful Rail Carrier Revenue Adequacy Analysis Must Use the Replacement Costs of Rail Assets. ....	3
B. Expert Agencies—including the Board—Have Consistently Concluded That the Use of Replacement Costs Would Be the Best And Preferred Approach To Measure Revenue Adequacy.....	6
C. The Economic and Regulatory History of the Railroad Industry and the Importance of Allowing Rail Carriers to Earn Adequate Revenues Further Highlight the Need For an Accurate and Meaningful Measure of Revenue Adequacy. ....	11
II. THE STB SHOULD CONDUCT A RULEMAKING TO DEVELOP A METHODOLOGY THAT VALUES RAIL ASSETS BASED ON REPLACEMENT COSTS.....	13
A. The STB Should Not Consider The Use Of Annual Revenue Adequacy Findings For Any Additional Regulatory Purpose Until Such Findings Are Based On A Sound Methodology That Uses Replacement Costs.....	13
B. The Board Should Carefully Consider Whether it is Now Feasible to Develop a Method for Estimating Revenue Adequacy Founded on the Replacement Value of Assets Necessary to Meet Demand for Rail Transportation Services. ....	18
C. SAC Proceedings Demonstrate That Replacement Costs Can Be Reliably Estimated, and Should Be Used in Revenue Adequacy Proceedings.....	20
1. The Board’s Experience in Stand-Alone Cost Cases Over the Last Two Decades Demonstrates that Estimating the Replacement Cost of Rail Assets is Feasible. ....	20
2. Elimination of Excess Rail Capacity and Unnecessary Assets Has Eliminated the Practical Difficulty of Determining Whether a Carrier’s Assets Are Used and Useful. ....	22
III. EVEN IF THE BOARD SHIFTS ITS ANNUAL REVENUE-ADEQUACY FINDINGS TO A REPLACEMENT COST BASIS, IT SHOULD CONTINUE TO RELY ON SAC AS THE RIGHT APPROACH TO RATE REASONABLENESS ANALYSIS. ....	27

A. Today’s Competitive Transportation Markets, Augmented by the Board’s Multiple Rate Case Methodologies, Are More Than Sufficient to Ensure Reasonable Rail Rates.....28

B. SAC Case Costs Could be Reduced by Curbing Abuses.....29

C. Use of Revenue Adequacy Determinations to Cap or Reduce Rail Rates Would be Unwise and Unsound as a Matter of Economics and Policy, and Could Have Substantial Negative Consequences for Carriers, Shippers, and the National Transportation System. ....31

CONCLUSION.....33

CSX Transportation, Inc. (“CSXT”) respectfully submits these Opening Comments in response to the Board’s request for comments on its methodology for determining revenue adequacy. *See Railroad Revenue Adequacy*, STB Ex Parte No. 722 (STB served April 2, 2014). As explained below, CSXT believes that before the Board considers any other “revenue adequacy” issue or any potential further application of its annual revenue adequacy findings, it must first correct a fundamental flaw in its revenue adequacy calculations by developing a methodology that uses replacement costs to value rail carrier assets. Until the Board puts its revenue adequacy methodology on a sound footing that properly values rail assets, it should not even consider using its annual revenue adequacy determination for any additional purpose.

**I. THE BOARD’S REVENUE ADEQUACY ANALYSIS AND FINDINGS ARE FUNDAMENTALLY FLAWED BECAUSE THEY ARE NOT PREMISED ON ASSET REPLACEMENT COSTS, BUT RATHER ON HISTORIC BOOK VALUES.**

Before the Board considers use of its annual “revenue adequacy” findings for any further regulatory purpose, it must first revise the method it uses to value rail assets, in order to account for those assets’ current replacement value rather than their depreciated historical book value. Congress has directed the Board to “maintain and revise as necessary standards and procedures” for determining the level of revenue rail carriers need to earn (including a “reasonable and economic profit or return”) and to “make an adequate and continuing effort to assist those carriers in attaining revenue levels” sufficient to:

(A) provide a flow of net income plus depreciation adequate to support prudent capital outlays, assure the repayment of a reasonable level of debt, permit the raising of needed equity capital, and cover the effects of inflation; and

(B) attract and retain capital in amounts adequate to provide a sound transportation system in the United States.

49 U.S.C. § 10704(a)(2). Based on those standards and procedures, the Board is to make an annual determination of “which rail carriers are earning adequate revenues.” *Id.* § 10704(a)(3).

Currently, the Board’s annual “revenue adequacy” methodology uses the depreciated original (historical) cost of rail assets as the value of the “investment” base on which it calculates the carrier’s return. The Board compares a carrier’s current annual revenues with that historical investment base to compute an annual return on that historical investment (sometimes referred to as a carrier’s “return on investment” or “ROI”). *See, e.g., Railroad Revenue Adequacy – 2013 Determination*, STB Ex Parte No. 552 (Sub-No. 18) (STB served Sept. 2, 2014). To determine whether a carrier has earned “adequate” revenues in that year, the Board compares its measure of the carrier’s ROI with the industry cost of capital for the year. *See id.* at 1 (noting that current revenue adequacy procedures and standards are “essentially mechanical”); *Railroad Revenue Adequacy*, STB Ex Parte No. 722 at 2-3.

The Board’s use of historical depreciated cost to value a carrier’s assets renders the result a poor and inaccurate measure of whether a carrier is actually earning a level of return adequate to meet the goals and requirements of Section 10704(a)(2). Because the Board’s methodology is founded on depreciated historical values of assets—instead of current replacement value of rail assets—its annual findings do not accurately gauge either: (i) whether a given carrier has earned adequate revenues; or (ii) whether the Board is discharging its responsibility to allow carriers to earn adequate revenues over the long term. *See* Section 10704(a)(2).<sup>1</sup> It is imperative that the Board not consider any further application of its annual revenue adequacy findings until it develops and implements a sound, economically rational, and consistent basis for estimating the

---

<sup>1</sup> As discussed below, these annual findings may be useful for the limited purpose of monitoring carriers’ relative fiscal health and as a rough measure of a carrier’s directional progress toward earning adequate revenues over a period of time.

current value of railroad assets. *See* 49 U.S.C. § 10704(a)(2) (directing Board to “revise as necessary” its standards and procedures for evaluating revenue adequacy).

**A. It Is Well-Established That Meaningful Rail Carrier Revenue Adequacy Analysis Must Use the Replacement Costs of Rail Assets.**

It is beyond debate that rail asset replacement costs, rather than book values, are the proper foundation for a meaningful, economically sound assessment of rail carrier revenue adequacy. Thirty years ago, a Blue Ribbon panel of more than fifty leading economists—including several Nobel Prize winners—laid the issue to rest, stating:

The appropriate standard for determining the adequacy of railroad revenues is a rate of return equal to the current cost of capital on the replacement value of all rail assets that are required to meet the demands for railroad service, regardless of the source of funds used in investing in those assets.

Economists’ Statement in Support of the Staggers Act, dated February 25, 1985, at 2 (Attachment 1 hereto). This statement was presented in testimony to Congress and the Interstate Commerce Commission (“ICC”) on numerous occasions.<sup>2</sup>

The reason economists support the use of replacement costs is simple. Real asset values—and the rate of return that investors require in order to provide the capital that carriers need to maintain and replace assets—are based on replacement costs, not historic book value, of

---

<sup>2</sup> *See, e.g., Staggers Rail Act (Part 1) Hearings Before the Subcomm. on Commerce, Transportation, and Tourism of the H. Comm. on Energy and Commerce of the House of Representatives*, 90th Cong. 315, 327-330, 338-339, 401-407 (1986) (Testimony of William H. Dempsey, President, Association of American Railroads (“AAR”)); *Clean Coal Technologies – Part 2 Hearings Before the Subcomm. on Fossil and Synthetic Fuels of the H. Comm. on Energy and Commerce*, 90th Cong. 15-16, 32-33, 43-50, 90-91 (1986) (Testimony of William H. Dempsey, President, AAR); *Standards for Rail Revenue Adequacy*, Ex Parte No. 393 (Sub-No. 1), Verified Statement of William J. Baumol and Robert D. Willig at 8-10 & nn. 3, 6 (filed August 4, 1986) (excerpt included at Attachment 1 hereto); *Railroad Antimonopoly Act Hearings Before Subcomm. on Monopolies and Commercial Law of the H. Comm. on the Judiciary*, 99th Cong., 39, 59-60, 62-69, 71, 88, 94 (1985) (Testimony of William H. Dempsey, President, AAR).

those assets. Current investors are not interested in the original historic cost of rail assets. Nor are they interested in the depreciated original costs of those assets. Rather, they are interested in the cost at which they could purchase those assets in a competitive market.

For example, the current competitive rental rate for a house is not a function of its original, depreciated book value, but rather of the current rental rates for other houses in the market. That competitive rate, in turn, is driven in significant part by the cost of construction of new rental houses in that market. As a result, the competitive rental rate for an older house may have little relation to the depreciated historical book value of that house. Similarly, competitive transportation rates do not bear any particular relation to the depreciated book value of assets used to provide the transportation service. The revenues that a rail carrier must earn in order to attract investment sufficient to meet rail transportation demand, therefore, are the revenues necessary to replace rail assets required to provide that service.

The use of replacement costs is required in order to gauge reliably a railroad's financial condition. The replacement costs of assets generally are substantially greater than their depreciated historic book value. This discrepancy is dramatically illustrated by Berkshire Hathaway's purchase in 2010 of the Burlington Northern Santa Fe Railway ("BNSF"). Although the net book value of BNSF assets in 2010 was approximately \$13 billion, the purchase price paid by Berkshire Hathaway in 2010 was \$34.5 billion—a difference of over \$21 billion. *See Western Coal Traffic League – Petition For Declaratory Order*, STB Finance Docket No. 35506 at 3 (STB served July 25, 2013).

Under the ICC Termination Act ("ICCTA"), the Board has a statutory duty to analyze the adequacy of rail carriers' revenues and to exercise its regulatory authority in a manner that allows carriers to earn adequate revenues. *See* 49 U.S.C. §§ 10101(3), 10704(a)(2)-(3). That

duty necessarily requires the Board to use the current costs of replacing existing assets and of making new capital investments (including procuring new assets at current costs) required to maintain a sound, safe, and efficient rail transportation network. *Id.* The Board’s current approach to making annual revenue adequacy determinations—using backward-looking depreciated original costs of assets as the foundation for calculating rail carriers’ current, forward-looking revenue needs—results in a declining measure of the revenue necessary to replace rail assets required to meet demand for rail service.<sup>3</sup>

Such declining levels of investment would be “adequate” only where demand for rail services and capacity was shrinking, not in the present environment of growing demand for rail service. The use of depreciated historical asset values in revenue adequacy calculations, therefore, results in a systematic and substantial understatement of the level of revenues necessary to allow a carrier to make the investments required to meet current and future demand for rail transportation services. Thus, the Board’s current methodology does not estimate “adequate” carrier revenues but rather sets an *inadequate* revenue benchmark. And while consistent use of the same flawed metric allows the Board to monitor in a very rough, general way a carrier’s financial health and whether it is making progress toward earning adequate revenues, it does not allow an accurate determination of when a carrier actually has earned such adequate revenues, let alone when it has attained long term revenue adequacy. *See* 49 U.S.C. § 10704(a)(2).

---

<sup>3</sup> Even holding every other factor constant (*e.g.*, assuming, counter to experience, that general asset prices do not rise over time), depreciated assets by definition have lower values than the same assets new. Thus, the amount of carrier earnings or revenues necessary to attract capital sufficient to purchase old depreciated assets would not be sufficient to purchase the same amount of those assets new. Because a revenue adequacy measure based on historic depreciated values of assets purchased in one period would compute revenues sufficient to purchase fewer assets in a subsequent period, if all else is held equal the carrier would be able to meet only lower demand than it met in the first period.

**B. Expert Agencies—including the Board—Have Consistently Concluded That the Use of Replacement Costs Would Be the Best And Preferred Approach To Measure Revenue Adequacy.**

The Board and its predecessor, the Interstate Commerce Commission (“ICC”), have acknowledged for at least three decades that the preferred approach to measure revenue adequacy starts with the use of replacement costs to value railroad assets. The Board and the ICC have declined to use replacement costs in their annual revenue adequacy determinations only because of the difficulties they perceived in calculating such costs. Other federal agencies and bodies, such as the General Accounting Office (“GAO”) and the Railroad Accounting Principles Board (“RAPB”), also have consistently recognized that the use of replacement costs is the proper approach but have expressed concerns that there would be practical problems in their implementation. As discussed below, however, the Board’s experience in stand-alone cost cases shows that reliable calculations of replacement costs are feasible.

In two proceedings the ICC conducted during the 1980s regarding the standards for making its annual revenue adequacy determinations, the agency found that the use of replacement costs was conceptually superior to using historical costs. In the first proceeding, the ICC actively “consider[ed] using a replacement cost methodology in valuing assets in future revenue adequacy determinations.” *Standards For Railroad Revenue Adequacy*, 364 I.C.C. 803, 818 (1981) (“*Standards I*”). The ICC stated in its final decision in *Standards I* that it continued to regard replacement cost valuation as “conceptually the best method available,” and that it hoped to adopt that method in the future. *Id.* at 820. The ICC explained:

We continue to believe that replacement cost valuation can be preferable to original cost valuation. While the methods produce equal discounted cash flows, the regular and continuing calculation of depreciation charges and inflation adjustments under the replacement cost method may better reflect the true economic costs associated with an investment. Further, the replacement cost method is preferable because it comes closer to the competitive

result. That is, at any point in time, the revenue requirement implications of using replacement costs are closer to the return on investment that would be required by a competitive market. This occurs because the timing of inflation adjustments under the replacement cost method are more like those made by the market.

*Id.* at 818-819 (footnote omitted).

Despite endorsing the use of replacement costs, the ICC ultimately concluded in *Standards I* that shifting to a replacement-cost approach was impractical. The “major difficulty” that the ICC found with the approach was that it required the estimation of the actual value of individual investments—a task that could be difficult, given that the valuation generally would not be based on major transactions.<sup>4</sup> Based on the practical difficulties, the ICC “deferred the entire question of the replacement cost methodology.” *Id.*<sup>5</sup>

In a second proceeding five years later, the ICC proposed to use current cost accounting methodology (replacement costs) for determining trended original cost. In the agency’s final decision, however, the ICC again concluded that replacement cost methodology, although “theoretically preferable to original cost valuation, ... cannot be practically implemented in a manner that we can be confident would produce accurate and reliable results.” *Standards for Railroad Revenue Adequacy*, 3 I.C.C.2d 261, 277 (1986) (“*Standards II*”), *aff’d sub nom. Consolidated Rail Corp. v. United States*, 855 F.2d 78 (3d Cir. 1988).<sup>6</sup> The ICC stated that “A

---

<sup>4</sup> The ICC also expressed a concern that it had not determined the best method for estimating the real cost of capital to use in an analysis based on replacement costs. *Standards I*, 364 ICC at 819.

<sup>5</sup> The ICC also considered initiating a rulemaking that would require railroads to file replacement cost data with the Commission. *Id.* at 819.

<sup>6</sup> The methodology proposed by the ICC, Trended Original Cost, determines the current replacement costs of the net investment base by indexing the original costs of each of the 39 categories of railroad assets by applying selected economic indices which reflect changes in the current cost of each category of asset from the year the assets were originally acquired to the present. *Standards II*, 3 I.C.C.2d at 275 & n.17.

complete revaluation of the railroads' investment base is beyond our foreseeable resources and... [t]here is no practical and reliable current valuation methodology that is available to us.” *Standards II*, 3 I.C.C.2d at 282-283.

To date, the Board has taken the same position as the ICC, largely relying on the ICC's statements from 1981 and 1986. *See, e.g., Methodology To Be Employed in Determining the Railroad Industry's Cost of Capital*, STB Ex Parte No. 664 at 2 (STB served Aug. 20, 2007). Six years ago, in Ex Parte No. 679, the Board denied the AAR's petition to institute a rulemaking proceeding to explore the use of replacement cost methodology in its annual revenue adequacy determination. While the Board acknowledged that replacement costs are conceptually superior to historical costs, it cited the same “practical difficulties” in using replacement costs that the ICC identified more than three decades ago. First, the Board cited the difficulty of identifying and valuing, on a case-by-case basis, which rail assets the railroad will not replace in its current system. *See Assn. of American Railroads – Petition Regarding Methodology For Determining Railroad Revenue Adequacy*, STB Ex Parte No. 679 at 5-6 (STB served Oct. 24, 2008) (“*Ex Parte No. 679 Decision*”). Second, the Board opined that the AAR's proposed approach of providing a full return on the replacement cost of all rail assets—without any inquiry into whether all assets remain “used and useful”—could create an “incentive” for a railroad “to hold onto track, bridges, or other facilities that are no longer used or useful because the regulatory framework would allow it to earn a full return on the full replacement costs of those assets.” *Id.* at 6.

Last year, in describing its use of replacement costs in Simplified SAC (“SSAC”) cases, the Board reaffirmed that “‘replacement cost valuation can be preferable to original cost valuation,’ because ‘regular and continuing calculation of depreciation charges and inflation

adjustments under the replacement cost method may better reflect the true economic costs associated with an investment. Further, the investment cost method is preferable because it comes closer to the competitive result.” *Rate Regulation Reforms*, STB Ex Parte No. 715 at 15-16, n.24 (STB served July 18, 2013) (“*Rate Regulation Reforms*”) (quoting *Standards I*, 364 I.C.C. at 841)). Without further discussion, the Board stated that it did not use replacement costs in its annual revenue adequacy determination “because it is impractical to update the book value of railroad assets to replacement costs on an annual basis.” *Id.*

Like the ICC and the Board, other government agencies have recognized that the proper economic approach for measuring rail carrier revenue adequacy is replacement costs, while expressing concerns about perceived difficulties in implementation of that approach. In a 1986 report on alternative methods of measuring revenue adequacy, the GAO stated:

The purpose of current cost accounting is to lessen the distorting effects of price inflation on financial data. A railroad's asset base is made up of a wide variety of assets bought over many decades. In order to maintain the viability of its operations, a railroad needs to earn revenues sufficient to replace the assets necessary to its operations when they wear out. When original cost accounting is used during a period of price inflation, [historical cost-based] ROI may not accurately reflect the railroad's ability to earn the replacement cost of assets.

U.S. Gen. Accounting Office, GAO/RCED-87-15BR, *Railroad Revenues: Analysis of Alternative Methods to Measure Revenue Adequacy* at 97 (1986).

Similarly, the highly respected RAPB found that “current market valuation is preferable to historical valuation from a theoretical economic standpoint” for determining the revenue adequacy issue:

The argument for current market value valuation is that this methodology is consistent with economic principles which value assets in terms of opportunity cost. In most cases, opportunity cost is measured by the replacement cost of assets with similar remaining productive lives and capacity.

\* \* \*

The RAPB believes that current market valuation is preferable to historical valuation from a theoretical economic viewpoint. In revenue adequacy applications, current market value represents the value upon which competitive returns must be earned to attract and retain capital. Moreover, directly accounting for capital cost inflation in asset valuation reduces potentially significant variations between asset-specific inflation rates and economywide inflation rates encompassed in nominal cost-of-capital rates used in conjunction with historical asset valuation.

Railroad Accounting Principles Board, *Railroad Accounting Principles -- Final Report*, Vol. II at 60 (1987). The RAPB declined to recommend that federal regulators use replacement costs only because of “serious practical problems” that it thought might be encountered in applying that approach, including the need to value the asset base for the entire railroad entity and to identify and re-value existing railroad assets that would not be replaced. *Id.* at 60-61.

The uniform conclusion of the ICC, the Board, the GAO, the RAPB, economists and other experts—that replacement costs are superior to historical costs as a railroad asset valuation method—is manifestly correct. As the ICC and the Board have recognized, as a matter of economics, transportation policy, and law, railroads should have the opportunity to achieve adequate revenues so that their earnings are sufficient to yield a return on assets equal to the current cost of capital. That is because railroads can only obtain the funds for investment that they need to build and maintain the facilities on which their service depends if they offer to investors rates of return that are comparable to other investment opportunities. However, the Board’s current method of evaluating revenue adequacy has consistently understated the revenues required to achieve such a competitive rate of return, because that method is founded on depreciated historical asset costs (rather than replacement costs), of necessary assets. While historical costs may be easier to compute, their use yields an estimate of “adequate” revenues

that substantially understates revenues necessary to allow carriers to provide the demand for rail transportation services.

**C. The Economic and Regulatory History of the Railroad Industry and the Importance of Allowing Rail Carriers to Earn Adequate Revenues Further Highlight the Need For an Accurate and Meaningful Measure of Revenue Adequacy.**

The history of the American railroad industry demonstrates that it is imperative that the methodology used to determine whether a railroad is earning an adequate return on investment be consistent with sound economic principles. The precarious financial condition of the railroad industry in the 1960s and 1970s, which was due in large part to pervasive, misdirected regulation of railroad rates and operation by the ICC, is well-known. Even after the significant regulatory reforms enacted by Congress in the Railroad Revitalization and Regulatory Reform Act of 1976 and the Staggers Rail Act of 1980, the railroad industry continued to struggle to achieve rates of return on investment that are comparable to those of firms in other industries.

The Board's current methodology and resulting annual revenue adequacy findings for rail carriers are particularly misleading because the railroad industry is one of the most capital-intensive industries in the Nation. Railroads are required to make enormous capital expenditures each year simply to maintain their current systems, and even greater capital investments are necessary to improve or expand those systems. The method the Board uses to determine "revenue adequacy" cannot serve the intended purpose of accurately estimating the level of revenue a rail carrier must earn to attract investment sufficient to maintain and improve its system to meet demand for rail service as long as that method is predicated on asset valuations that systematically understate the value of necessary assets (*i.e.*, depreciated historical book

value) and thereby systematically overstate a rail carrier's return on the value of its investments. See 49 U.S.C. § 10704(a)(3).<sup>7</sup>

Consistent with the directive of Section 10704, federal agencies have recognized the critical need for railroads to earn adequate revenues in order to finance the infrastructure and other capital investments necessary to serve future—not historical—demand for rail service. As the Board summarized several years ago:

Railroads experienced a more than 50% increase in traffic from 1990 to 2003, and traffic is projected to continue to increase as the economy grows. Some forecasters predict that multimodal freight tonnage in the United States will rise by nearly 70% between 1998 and 2020. The convergence of increased demand with strained capacity has highlighted the need to address what further infrastructure investment will be required to meet these demands. While some railroads have announced significant infrastructure investment plans, some observers have questioned whether that investment alone will be sufficient to meet the rail transport needs of a growing economy.

*Rail Capacity and Infrastructure Requirements*, STB Ex Parte No. 671 at 1 (STB served March 6, 2007). Similarly, the Congressional Budget Office has found that “[a]s demand increases, the railroads’ ability to generate profits from which to finance new investments will be critical. Profits are key to increasing capacity because they provide both the incentives and the means to make new investments.”<sup>8</sup> The Federal Railroad Administration (“FRA”) concluded that “Freight rail infrastructure maintenance and capacity enhancements . . . can only occur with Federal legislation and policies that allow rail carriers to earn revenues that are sufficient to

---

<sup>7</sup> See *Competition in the Railroad Industry*, STB Ex Parte 705 (public hearing held June 22, 2011), Tr. at 490-491 (testimony of Scott Group (Wolfe, Trahan & Co.) (stating that ROI calculations of Board are based on historical book values that are materially understated); *id.* at 488-489 (describing the capital-intensive nature of the railroad industry).

<sup>8</sup> Congressional Budget Office, *Freight Rail Transportation: Long-Term Issues* at 11 (2006).

encourage their continued investment in the system. Their investment meets National needs by enhancing safety, reliability, and capacity.”<sup>9</sup>

Section 10704(a)(2) of ICCTA directs the Board to determine carrier revenue levels sufficient to “attract and retain capital amounts adequate to provide a sound transportation system in the United States.” 49 U.S. C. § 10704(a)(2)(B). Critically, the statute does *not* direct the Board to calculate revenue levels that would be adequate to obtain the lower capital investment sufficient to purchase the carriers’ existing assets at their original purchase price less depreciation. Yet this is what the Board’s current “revenue adequacy” methodology measures. Regardless of the perceived difficulties of making the estimate required by the statute, the Board’s current methodology measures something quite different, and therefore fails to satisfy the Board’s statutory mandate.

## **II. THE STB SHOULD CONDUCT A RULEMAKING TO DEVELOP A METHODOLOGY THAT VALUES RAIL ASSETS BASED ON REPLACEMENT COSTS.**

### **A. The STB Should Not Consider The Use Of Annual Revenue Adequacy Findings For Any Additional Regulatory Purpose Until Such Findings Are Based On A Sound Methodology That Uses Replacement Costs.**

The Board should not proceed any further in considering potential applications or effects of its annual revenue adequacy analysis (whether with respect to rate reasonableness or other areas of the Board’s jurisdiction) until it first develops a new methodology that uses replacement costs to value rail assets. As demonstrated above, any meaningful and accurate analysis of the adequacy of rail carrier revenues must be based on the replacement value of rail assets necessary to meet current and projected demands for rail service. Such replacement valuation is an indispensable foundation for sound revenue adequacy estimates that might be used for a purpose

---

<sup>9</sup> Federal Railroad Administration, *Preliminary National Rail Plan* at 4 (2009).

beyond the Board's existing annual finding and report. Without that foundation, the Board's "revenue adequacy" determinations cannot form the basis for economically sound and rational regulatory actions consistent with the Board's statutory responsibilities.

Moreover, the Board has already undermined the accuracy and reliability of its rate reasonableness regulation by relying on the "Revenue Shortfall Allocation Measure" ("RSAM"), a flawed metric derived from its historic book-value-based revenue adequacy determinations, for significant jurisdictional and rate reasonableness determinations. As discussed below, adoption of a methodology to evaluate annual revenue adequacy based upon rail asset replacement costs could mitigate the distorting effects of the Board's recent use of the RSAM in rate reasonableness cases.

In recent years, the Board has expanded the use of its annual revenue adequacy measures to individual rate reasonableness cases. Expanded use of RSAM for purposes for which it was not intended has increased the significance of the Board's revenue adequacy analysis and the importance of developing a more sound and rigorous method of assessing rail carrier's progress toward earning adequate revenues. For example, in *Simplified Standards*, the Board established a rough "Three Benchmark" rate comparison approach for determining rate reasonableness in smaller cases, and imported into that analysis the RSAM statistic generated in its annual revenue adequacy inquiry. See *Simplified Standards for Rail Rate Cases*, STB Ex Parte No. 646 (Sub-No. 1), at 16-22 (STB served Sept. 5, 2007) ("*Simplified Standards*"). That "crude" rate comparison approach largely was upheld on appeal as a permissible way for the Board to meet its mandate to provide a "simplified and expedited" method for determining rate reasonableness in smaller cases. See *CSXT v. STB*, 568 F.3d 236 (D.C. Cir. 2009), *overruled in part*, 578 F.3d 1076 (D.C. Cir. 2009).

The Board's rationale for even limited use of the Three Benchmark approach, and the RSAM benchmark in particular, is founded on its assumption that RSAM is a valid and meaningful measure of the revenue a carrier would need to earn in order to attain revenue adequacy. However, the Board derives its RSAM figure from historical depreciated "book values" of rail assets, *not* from asset replacement costs that are by consensus the superior and appropriate measure of asset values for purposes of assessing revenue adequacy. *See, e.g., Ex Parte No. 679 Decision* at 1-2 (carrier's ROI calculated using historical book value of railroad asset); *Simplified Standards* at 19-21 (RSAM calculated by comparing ROI to industry cost of capital and determining what R/VC a carrier would need to charge, on average, to its potentially captive traffic in order to earn that cost of capital). Because RSAM is derived from an erroneous ROI calculation based on book value rather than replacement value of assets, RSAM is not a valid measure of a rail carrier's revenue needs. This infirmity further undermines the already weak rationale supporting the Three Benchmark rate comparison approach. If, as CSXT maintains, RSAM does not accurately estimate the revenues a carrier would need to obtain to earn a return on its assets at least equal to its cost of capital, then the entire reason and foundation for two of three benchmarks (RSAM and  $RVC_{>180}$ ) evaporates, leaving only a "one-benchmark" approach that amounts to determining rate reasonableness based on nothing more than simplistic and long-discredited rate comparisons. *See, e.g., Burlington Northern R.R. Co. v. ICC*, 985 F.2d 589, 599 (D.C. Cir. 1993) (holding that ICC erred in using comparisons of R/VCs to calculate reasonableness of rates, and finding no "visible intellectual coherence in th[at] R/VC method.").<sup>10</sup>

---

<sup>10</sup> *See also Petitions For Issuance of Rate Reasonableness and Unreasonable Practices Policy Statement*, 8 I.C.C.2d 61, 75, n.22 (1991) ("[T]he Commission has rejected rate comparisons as a

The Board’s recent expansion of relief available in rate cases brought under the Three Benchmark approach can only exacerbate the problem of injecting fundamentally flawed revenue adequacy analysis and measures into rate reasonableness analysis. In *Rate Regulation Reforms*, the Board quadrupled the cap on relief in Three Benchmark cases, increasing the amount of reparations recoverable in those “small” cases from \$1 million to \$4 million. *Rate Regulation Reforms* at 22-25, remanded in part sub nom *CSXT et al. v. STB et al.*, No. 13-1230, Slip Op. (D.C. Cir. June 20, 2014). The majority of regulated rail traffic might rationally bring a rate reasonableness challenge under the simplistic and misguided Three Benchmark approach. *See id.*, D.C. Cir. No. 13-1230, Slip Op at 16 (citing estimate that Three Benchmark method is “applicable” to two-thirds of regulated rail traffic).<sup>11</sup> To mitigate the potential for irrational results in rate cases involving the substantial majority of regulated traffic, the Board should revise the method it uses to make revenue adequacy and RSAM determinations.

*Second*, the Board recently injected RSAM into another area of its rate regulation authority, the determination of whether it has jurisdiction to consider a challenge to a rate in the first instance. The Board’s new “Limit Price” rule for market dominance uses a carrier’s RSAM estimate as the primary determinant of whether a carrier has qualitative market dominance over transportation to which a rail rate applies. *See, e.g., Total Petrochemicals v. CSX Transportation*, STB Docket No. 42121 (STB served Dec. 19, 2013) (determining STB rate

---

rail ratemaking methodology.”); *Amstar Corp. v. ATSF*, 1995 WL 569701, at \*9 (S.T.B. 1995) (“rate comparison analysis has long been discredited.”).

<sup>11</sup> Any and all regulated traffic is technically eligible to bring a rate case under the Three Benchmark approach, subject to the applicable limits on rate relief. The rough two-thirds approximation in the text appears to be based on the estimated proportion of regulated rail traffic for which the maximum rate relief a shipper could obtain is less than the \$ 4 million limit on relief for a Three Benchmark case. *See, e.g., Simplified Standards* at 34-35.

reasonableness jurisdiction over challenged rates by applying new Limit Price test and rule).<sup>12</sup> If the Board's new jurisdictional rule were upheld on appeal, *all* of its qualitative market dominance jurisdictional determinations in rail rate cases would depend on the application of the Board's erroneous revenue adequacy methodology, through its RSAM estimate. Thus, with the exception of traffic that generates a revenue-to-variable-cost ratio below 180%, the Board's jurisdiction *vel non* over all regulated rail rates would be presumptively determined by application of a byproduct of its unsound revenue adequacy analysis, the RSAM.

The foregoing examples of the Board's expansion of its flawed revenue adequacy analyses to influence and determine distinct and unrelated regulatory issues highlights the importance of putting the revenue adequacy determinations on sound footing before using them for additional regulatory actions or decisions (*i.e.*, regulatory actions beyond the annual "revenue adequacy" determinations). Until the Board revises its asset valuation methodology to reflect current asset values and replacement costs, any additional regulatory action it might take based on its annual revenue adequacy findings would be premature, unsound, and ill-advised. The Board must take the vital first step of establishing a method for computing asset replacement values before it even considers any additional regulatory use of revenue adequacy determinations.<sup>13</sup> In sum, because the revenue adequacy evaluation the Board conducts each

---

<sup>12</sup> CSXT has appealed the Board's Limit Price Rule and its application. *See CSXT v. STB*, D.C. Cir. No. 13-1313. CSXT strongly maintains that the Limit Price Rule is erroneous and contrary to law, even without regard to the infirmity of the RSAM as a revenue-adequacy-related measure. The appeal has been fully briefed and is scheduled for argument in September 2014.

<sup>13</sup>The Board has published annual "revenue adequacy" findings for some time in fulfillment of its reporting responsibility. However, with limited recent exceptions described above, the Board has not issued significant substantive orders carriers based on those determinations. CSXT does not object to the Board's continued use of its existing methodology for the limited purpose of making and publishing its annual "revenue adequacy" findings. While comparisons of book-value-based ROI with cost of capital over a number of years may have some limited informational value in determining whether carriers are making directional progress toward

year is backward-looking and based upon historic book values of assets rather than current replacement values, it cannot form the basis for reasonable and economically sound policy and regulatory decisions or actions. The Board should refrain from using its annual revenue adequacy determinations for rate regulation or any other additional regulatory action until it has reformed its methodology to use replacement value of necessary rail assets in determining the rate of return necessary to earn rail carriers' cost of capital. *See, e.g.*, Economists' Statement in Support of Staggers Act (Feb. 25, 1985) (copy at Attachment 1). Only once the Board has implemented a sound and accurate method for estimating whether a rail carrier is earning adequate revenues (in the long term) that is consistent with settled principles of rail economics and the policies and mandates of federal law, may it even begin to consider what, if any, role such revenue adequacy findings might have with respect to other areas of its regulatory jurisdiction.

**B. The Board Should Carefully Consider Whether it is Now Feasible to Develop a Method for Estimating Revenue Adequacy Founded on the Replacement Value of Assets Necessary to Meet Demand for Rail Transportation Services.**

Despite the near-universal endorsement of the use of replacement value of assets as a superior foundation for evaluating railroad revenue adequacy, for nearly 40 years the Board and its predecessor have declined to adopt a methodology using replacement values, based largely on historical obstacles that either no longer apply or that now appear surmountable. Because of changed conditions and the acknowledged superiority of the use of replacement value of assets as the basis for a sound and accurate evaluation of the adequacy of revenues earned by rail carriers, it is incumbent on the Board to conduct a thorough and serious inquiry regarding the

---

earning adequate revenues, they do not provide a reliable basis for making other regulatory or policy decisions, whether related to rate reasonableness or to other matters within the Board's jurisdiction.

current feasibility of implementing such a methodology to better meet its responsibility to maintain standards and procedures for evaluating whether rail carriers are earning adequate revenues. *See* 49 U.S.C. § 10704(a)(2).

Six years ago, the Board summarily rejected an AAR proposal for incorporating rail asset replacement values to the Board's revenue adequacy analysis and findings. *See Ex Parte No. 679 Decision*. CSXT encourages the Board to reconsider that summary rejection and open a proceeding to evaluate more thoroughly the use of replacement costs in its revenue adequacy analyses.

Significantly, the Board's 2008 decision reaffirmed that use of replacement cost valuation of rail assets was superior and preferred to the depreciated original cost approach the Board now uses in its annual revenue adequacy findings. *See Ex Parte No. 679 Decision* at 2. Confirming the prior conclusions of nearly every expert to have reviewed the question (*see supra* Section I), the Board summarized reasons that the replacement cost method is preferable to historical cost valuation, including:

the replacement cost method may better reflect the true economic costs associated with an investment. Further, the replacement cost method is preferable because it comes closer to the competitive result.

*Id.* Despite this recognition, the Board refused to even open a proceeding to consider the use of replacement costs. *See id.* at 5 (declining to open proceeding, without even taking comments on the AAR's new proposal). Perhaps because of the longstanding historical view that calculating replacement costs is impractical, the agency gave short shrift to the AAR proposal, and did not appear to give close consideration to its substance. Conditions in the rail industry have changed dramatically since the ICC first rejected the use of replacement costs in 1981. As discussed below, the reasons given by the STB for summarily rejecting the AAR proposal did not warrant a

wholesale rejection of the AAR's proposal without further inquiry. The Board should open a proceeding to solicit and consider proposals for a new method for evaluating revenue adequacy founded on asset replacement values.

**C. SAC Proceedings Demonstrate That Replacement Costs Can Be Reliably Estimated, and Should Be Used in Revenue Adequacy Proceedings.**

The *Ex Parte No. 679 Decision* rejected the use of replacement costs by relying primarily on conclusions of the ICC and others in the 1980s, *without* conducting a meaningful analysis or inquiry to determine whether conditions that existed 30 years ago still form insuperable obstacles to the use of replacement costs today. However, examination of present industry conditions and the tools available to the Board suggests that the practical difficulties that concerned the ICC in 1981 are today more amenable to practical solutions.

**1. The Board's Experience in Stand-Alone Cost Cases Over the Last Two Decades Demonstrates that Estimating the Replacement Cost of Rail Assets is Feasible.**

The Board's primary reason for rejecting the use of replacement costs reiterated the concern expressed by the ICC in 1981 (before the adoption of CMP and the SAC analysis) that it would be too difficult to accurately "estimate the current replacement costs of rail assets, such as bridges, tunnels, land, track, and grading." *Ex Parte No. 679 Decision* at 5. As discussed below, however, the Board now routinely estimates the value of all rail assets on a forward-looking replacement cost basis, in SAC cases.

Previous concerns about the difficulty of calculating the replacement costs of railroad assets should be allayed by the agency's determination of replacement costs in SAC rate cases. In SAC cases, the Board routinely considers replacement cost evidence submitted by the parties and develops replacement costs for all assets of a least-cost, most efficient rail carrier.

Two recent SAC cases demonstrate that the Board can, and *does*, calculate full asset replacement costs, stand-alone costs for large hypothetical rail networks. For example, in *E.I. DuPont de Nemours Co. v. Norfolk Southern Ry. Co.*, Docket No. 42125 (STB served Mar. 4, 2014) (“*DuPont*”), the Board developed capital replacement costs for the assets of the “DuPont Railroad” (“DRR”) stand-alone railroad (“SARR”) that would operate in 20 states with over 7,200 constructed route miles and another 820 miles in trackage rights and joint facilities. *See DuPont* at 48. The DRR would be a Class I rail carrier that would handle all or some of the line haul for 92% of NS’s traffic and would claim 74% of NS’s overall revenues, hauling nearly 6.2 million carloads and earning \$6.6 billion in revenue in its first full calendar year of operations. *Id.* at 14. The 7,200 route miles of the DRR constitute more than one-third of the total route miles operated by Norfolk Southern in its entire network. *See <http://www.nscorp.com/content/nscorp/en/get-to-know-norfolk-southern/about-ns.html>* (describing Norfolk Southern system). Thus, the DRR replicated the core of the NS network and moved the overwhelming majority of NS traffic.

Similarly, in *Total Petrochemicals & Refining, Inc. v. CSX Transportation, Inc.*, Docket No. 42121 (“*TPI*”), the proposed SARR consists of approximately 7,350 route miles and operates in 17 States and the District of Columbia. The complainant posited that in its first year of operation, that SARR would handle approximately 5.67 million carloads/containers (or nearly 465 million tons) of a wide range of commodities. *See TPI*, Reply Evidence of CSXT, Vol. 1 at III-B-1 (filed July 21, 2014); *TPI*, Opening Evidence of Total Petrochemicals & Refining USA, Inc., Vol. I at I-6 (filed Feb. 18, 2014). As in *DuPont*, the SARR proposed by TPI constitutes more than one-third of the incumbent carrier’s (CSXT’s) network. *See <http://www.csx.com/index.cfm/about-csx/company-overview/network-and-operations/>* (stating

that CSXT operates over a 21,000-route mile rail network serving 22 States and the District of Columbia).

Both parties in the *TPI/CSXT* proceeding submitted evidence calculating the replacement cost of all assets necessary to provide rail transportation service to the customers of the extensive SARR network. Based on the evidence submitted by the parties, the Board will issue findings determining the replacement costs of all assets of that large least-cost, most efficient Class I railroad.

The foregoing are only two recent examples of the Board's demonstrated ability to determine the replacement costs of the assets of a large rail network. Since the year 2000, the Board has developed full forward-looking asset valuations for at least twelve (12) SARR networks. While this is a complex and detailed undertaking, replacement cost valuation is only one component of the SAC analysis the Board has completed in each of its full SAC rate case decisions. Plainly, the Board—using evidence developed by rail carriers and shippers—can and does estimate replacement costs for large rail networks. This experience demonstrates that today the Board is more than capable of calculating replacement costs for necessary assets of a Class I rail carrier.

Given the Board's demonstrated ability to calculate the replacement cost of a complex stand-alone rail networks consisting of thousands of route-miles, its principal justification for not using replacement costs in revenue adequacy proceedings—the difficulty of calculating replacement costs—is no longer valid.

**2. Elimination of Excess Rail Capacity and Unnecessary Assets Has Eliminated the Practical Difficulty of Determining Whether a Carrier's Assets Are Used and Useful.**

The other major reason the Board cited for declining to open a proceeding to consider the use of replacement costs in its revenue adequacy analysis was its concern that it would be

difficult to identify which assets a rail carrier would not replace in the future. *See Ex Parte No. 679 Decision* at 5-6. This inquiry is sometimes described as determining whether some of a rail carrier’s assets are “used and useful.” *See id.* As discussed below, while the concern about identifying which rail assets may no longer be used and useful may have been significant in the 1970s and 1980s, significantly changed conditions in the rail industry, rail networks and assets, and transportation markets have substantially mitigated, if not eliminated, that practical difficulty.

In the 35 years since the passage of the Staggers Act, American freight rail carriers have pruned and restructured their networks to such a large extent that there is now very little excess capacity. At the same time, current and projected demand for rail transportation services have grown substantially. As the Board knows, the combination of leaner rail networks and growing demand for rail service has resulted constrained capacity and the need for *increased* capital investment in rail networks and equipment. As result of these remarkable long term changes, the super-majority of rail assets are now “used and useful,” and will be replaced by carriers. The rail industry is no longer shrinking. Rather, it is growing to meet increasing demand. Indeed, the challenge rail carriers face today—the need to increase capacity and invest in additional assets necessary to meet demand for rail transportation service—is opposite that which confronted the industry in the late 20th century. As the Board summarized a few years ago,

rail capacity and traffic conditions have changed. Railroads no longer are burdened by substantial excess capacity; rather, the rail industry now faces the opposite situation. Rail capacity is strained, demand for transportation service is forecast to increase, and railroads must make capital investments to meet that demand

*Simplified Standards* at 14.<sup>14</sup>

---

<sup>14</sup> Even in the 1980s, when there were significant amounts of rail assets that eventually would be abandoned, the ICC stated that there was no reason to exclude from the investment base assets

Furthermore, the Board's calculation of forward-looking SARR asset valuations also mitigates the concern that the replacement cost approach could not determine whether the incumbent railroad's assets remain "used and useful." As the ICC and the Board have recognized, the use of stand-alone costs makes it unnecessary for the Board to make further determinations of what assets would or would not be replaced. For purposes of computing stand-alone costs, the hypothetical SARR is based on the most efficient configuration proposed by the Complainant, constructed in the most efficient and cost-effective manner, and represents "the least cost at which an efficient competitor could provide the service." *Coal Rate Guidelines*, 1 I.C.C.2d 520, 542 (1985).<sup>15</sup> As the Board noted in *Ex Parte No. 679*, "under the SAC procedure *only used and useful assets are included in the investment base at replacement cost.*" *Ex Parte No. 679 Decision* at 7 (emphasis added). As explained further below, the "practical difficulties" of using replacement costs in revenue adequacy proceedings that the ICC identified in 1981 no longer exist, and the Board should commence a rulemaking to develop procedures for making revenue adequacy findings based on asset replacement costs.

Moreover, as demonstrated above, SAC cases presented since the *Ex Parte No. 679 Decision* in 2008 have demonstrated that the Board is able to calculate replacement value of the necessary assets of very large rail carriers and systems. *See, e.g., DuPont v. NS; TPI v. CSXT.*

---

that were not used and useful. *See Notice, Coal Rate Guidelines, Nationwide*, *Ex Parte No. 347* (Sub-No. 1) (ICC decided Feb. 8, 1983).

<sup>15</sup> CSXT's purpose in these comments is not to propose a specific methodology for accurately valuing rail assets using replacement costs, but rather to note that the Board has the tools and the demonstrated capacity to develop and apply a methodology that would address the ICC's historic concerns. The specifics of such a methodology are beyond the scope of these opening comments. Whether the Board would use exactly the approaches and assumptions used in a SAC case to identify a "least-cost most efficient" rail system (including necessary assets) sufficient to meet rail transportation demand, or apply some variation on that approach (perhaps, for example, relying on simplifications and assumptions similar to those developed for Simplified SAC) should be determined in a separate and specific rulemaking in which all interested parties may submit proposals, ideas and comments.

Based on the Board's experience in SAC cases, there can be little doubt that it could use a similar asset-valuation process to estimate the replacement value of a Class I rail carrier's "used and useful" assets.

Thus, the ICC's 1980s concern about how to identify assets that would not be replaced has been overtaken by events and no longer poses a significant practical obstacle to the use of replacement costs for valuing rail assets in analyzing whether carriers are earning adequate revenues. The Board could address any material questions about whether certain assets will be replaced by a particular carrier in the context of a specific revenue adequacy proceeding. Because, in the present environment, the number of existing assets that are potentially not "useful" would be small, evaluating those limited specific instances should be manageable and not pose a significant practical obstacle to calculating the replacement value of a carrier's assets.

Further, it would not be necessary for the Board to re-value all of a carrier's assets every year. Instead, the Board could develop a full, specific asset valuation once every several years (*e.g.*, once per decade). For purposes of its annual revenue adequacy determination, the Board could update or index the asset values for inflation and other changes, using the most recent full valuation as the base year.<sup>16</sup> Using such an indexing approach to generate a reasonable estimate of asset replacement cost each year would reduce the burden on carriers and the Board to develop new replacement costs, thereby further addressing concerns about the burden, complexity, and expense of calculating replacement costs on an annual basis.

In sum, the practical difficulties of calculating replacement costs no longer constitute the significant obstacles presented when the ICC identified them 35 years ago. Specific proposals

---

<sup>16</sup> The Board might make such adjustments using a method similar to the "trended original cost" approach that the ICC used for a time, using as the base year the most recent full replacement cost valuation of the carrier's assets. *See generally, Standards II* at 275.

for computing replacement costs should be presented in a separate rulemaking proceeding that the Board should commence to address the matter.<sup>17</sup> The presentation of multiple proposed approaches and input of interested parties regarding each should allow the Board to develop rules and a methodology that are sound, accurate, and can form the basis of more meaningful revenue adequacy analysis and findings. The important point at this juncture is that perceived “practical difficulties” should not be used to justify the use of historical depreciated costs of assets in a long term revenue adequacy analysis. Estimation of replacement costs is feasible and important to an accurate assessment of whether rail carriers are earning revenues adequate to generate the capital investment necessary to meet the demand for rail transportation services. *See* 49 U.S.C. § 10704(a)(2), (3).

Unless the Board implements a methodology that uses replacement costs, revenue adequacy determinations will remain fundamentally flawed for any purpose beyond the annual finding the Board presently makes, and the very rough measure of carrier financial health that limited finding provides. Relying on historical-cost-based revenue adequacy findings the basis for any additional affirmative regulatory action would be arbitrary and capricious. If the Board wishes to make a more meaningful and accurate measure of whether or to what extent a carrier is earning adequate revenues, an essential first step would be to open a proceeding to develop a replacement-cost-based method for valuing rail carrier assets.

---

<sup>17</sup>Again, CSXT emphasizes that presentation of a specific and detailed proposal for the calculation of replacement costs and development of revenue adequacy findings based on those costs is beyond the scope of these comments. CSXT’s primary purpose in these comments is to demonstrate that development and use of sound, reliable estimates of replacement costs for rail assets is both feasible and important to the development of meaningful revenue adequacy findings; and to urge the Board to commence a rulemaking proceeding so all interested parties may submit specific proposals and comments on others proposals that will allow the Board to promulgate a new revenue adequacy methodology and rules, founded on replacement costs.

**III. EVEN IF THE BOARD SHIFTS ITS ANNUAL REVENUE-ADEQUACY FINDINGS TO A REPLACEMENT COST BASIS, IT SHOULD CONTINUE TO RELY ON SAC AS THE RIGHT APPROACH TO RATE REASONABLENESS ANALYSIS.**

As discussed above, the Board should not rely on its annual revenue adequacy findings for any purpose other than the current rough indication of a carrier's relative financial health and progress. Before the Board considers using revenue adequacy calculations for any additional purpose, it must first develop a more accurate method for making those findings, starting with the use of replacement values for rail assets. This applies with particular force to the Board's evaluation of rail carrier rates. The Board's SAC analysis is a sound, rigorous, reliable, and tested method for assessing the reasonableness of rail rates for transportation over which a rail carrier has market dominance. Any proposal for a new rate reasonableness methodology should bear a heavy burden of demonstrating its superiority to the Board's existing SAC and SSAC methodologies before such a new and untested methodology is tried. Certainly historical-cost-based revenue adequacy findings do not approach satisfaction of that heavy burden. And even properly calculated, accurate findings regarding the adequacy of a carrier's revenues generated by all of its operations over its entire network (which must be founded on assets valued at replacement cost) would provide no logical, principled basis for determining the reasonableness of specific individual rates.

Thus, the Board should not consider using revenue adequacy findings to determine rate reasonableness.<sup>18</sup> CSXT submits that SAC remains the best and most appropriate method for

---

<sup>18</sup> When it adopted the *Coal Rate Guidelines* in 1985, the Board indicated in very general terms that a "revenue adequacy" constraint might be applied in the future as an alternative way of evaluating rate reasonableness. The ICC did not further define that idea or how a system-wide measure might be applied to specific individual rates in a manner consistent with demand-based differential pricing and other fundamental principles and requirements established in that watershed proceeding. Certainly, the governing statute does not require the Board to provide a "revenue adequacy" constraint or method for rate reasonableness cases. Importantly, while

assessing rate reasonableness, and that it would not be reasonable as a matter of economics, policy, and the agency's statutory duties to determine rate reasonableness in individual cases based on the total revenues a carrier earns from all traffic over its entire system.

**A. Today's Competitive Transportation Markets, Augmented by the Board's Multiple Rate Case Methodologies, Are More Than Sufficient to Ensure Reasonable Rail Rates.**

The need for regulatory intervention in rail transportation markets today is substantially diminished by the presence of significant competition for nearly all rail transportation. That competition comes in many forms, including intra-modal competition; inter-modal competition with trucks, waterborne and other modes of transportation; product competition; geographic competition; and various combinations thereof. Such competition so effectively disciplines CSXT's pricing in most markets that rate regulation is unnecessary and would have little effect.

In those few instances in which competition for transportation provided by a rail carrier may be less effective, the Board's SAC constraint operates to restrain rail rates and ensure that shippers are not required to cross-subsidize parts of a rail carrier's network that they do not use.<sup>19</sup>

SAC is the acknowledged gold standard for rate reasonableness analysis. As a general matter,

---

Congress subsequently endorsed the SAC methodology and expressly addressed it in ICCTA, the statute does not provide for the use of a "revenue adequacy constraint" in rate reasonableness cases. In the intervening 30 years, the Board has never applied a "revenue adequacy constraint" to decide a rail rate case, and any attempt to do so would present complex economic, practical, and legal obstacles and difficulties. In any event, the primary point of CSXT's present comments is that until the Board develops and implements a rational and accurate measure of asset values, it cannot begin to address rail carrier revenue adequacy, let alone any implication of a longterm revenue adequacy finding on the Board's evaluation of the reasonableness of individual rail rates. *See, e.g.*, 49 U.S.C. § 10101(3); *id.* §§ 10701(d)(2), 10704(b).

<sup>19</sup> A SAC analysis also seeks to eliminate the effect of rail carrier inefficiencies on challenged rail rates. The SSAC methodology for analyzing rate reasonableness adopted by the Board several years ago forgoes the efficiency analysis in exchange for a more streamlined, less burdensome rate reasonableness adjudication. *See generally, Simplified Standards* at 13-16. The Board has now made the SSAC methodology available for all rate cases within its jurisdiction. *See Rate Regulation Reforms* at 13-19.

the Board’s SAC test is very sound, works well analytically, and appropriately implements the Board’s statutory rate reasonableness responsibilities. *See* 49 U.S.C. §§ 10701—10705. As the Board recently summarized, even in the event that

railroads enjoy increasing market power with rising demand for their services, the SAC test (in either its full or simplified form) would provide a critical restraint on their pricing of captive traffic, without deterring railroads from making the investments in their rail networks that are needed to meet rising demand

*Rate Regulation Reforms* at 9. The Board’s three existing rate reasonableness case methods (SAC, SSAC, and Three Benchmark) provide ample opportunity for shippers to challenge rates they believe are unreasonable. As discussed above, roughly two-thirds of all rail traffic within the Board’s jurisdiction is now subject to the very simple Three Benchmark test, and all regulated traffic is eligible for SSAC. Rail shippers who believe rail common carrier rates they are offered are not reasonable thus have multiple options to challenge them before the Board, each providing a different trade-off between complexity and accuracy. Particularly given that the Board has just recently opened the lower-cost SSAC method for all rate cases within its jurisdiction, there is no basis to find that the Board’s rate reasonableness methodologies are not working properly or provide insufficient remedies for any rail shipper who contends that market forces do not adequately constrain its rail transportation rates. There is no warrant at this juncture for the Board to attempt to develop yet another new rate case methodology.

**B. SAC Case Costs Could be Reduced by Curbing Abuses.**

The fact that the Board’s existing SAC-based rate case methodologies are substantively sound and appropriately accessible to shippers within the Board’s rate jurisdiction does not mean, however, that those methodologies could not use adjustments and improvements. CSXT shares concerns expressed by the Board and others about the escalating costs and complexity of certain SAC cases. And CSXT would be interested in working with the Board and interested

parties to reduce the cost and time necessary to litigate a SAC case. However, CSXT believes the problems with SAC cases and attendant cost increases are attributable not to the core SAC analysis and methodology, but rather to other factors.

For example, excessive and unbridled SAC discovery imposes huge costs on carriers, who must divert substantial resources to gathering and producing voluminous data and information, much of which shippers ultimately do not use in their SAC presentations. Limitations on ever-expanding shipper discovery regarding information and documents of dubious value could significantly reduce the burden of SAC cases on carriers and the costs to both carriers and complainants. In addition, the size and complexity of some SAC cases has increased substantially where complainants elect to challenge all or nearly all of their common carrier rates, rather than confining their case to those rates they genuinely believe to be unreasonable.<sup>20</sup>

Increased costs of SAC cases also are attributable to the tactics of complainants and their consultants who posit fantastic and infeasible SARRs and submit SAC presentations riddled with hidden flaws and deficiencies that defendant carriers are forced to identify and correct, expending months and millions of dollars in the process. Moreover, Complainants often do not present a full and adequate case on opening, wait for the defendant to reveal flaws in the opening evidence on reply, and then use their rebuttal filing to fill in missing elements of the complainant's case. This is not only fundamentally unfair, but also results in rebuttal filings substantially longer than a complainant's opening evidence. These and other abuses by complainants have contributed heavily to increasing costs of recent SAC proceedings.

---

<sup>20</sup> SAC analyses could also be streamlined and their costs further reduced by a more rigorous enforcement of the market dominance requirement. As competition has evolved and increased in recent years, the instances in which rail carriers have substantial market power have correspondingly diminished, particularly in cases involving merchandise and carload shipments.

Other procedural and evidentiary rules and changes could further reduce SAC rate case costs and increase the efficiency of the process without unduly compromising the rigor and accuracy of the analysis.

**C. Use of Revenue Adequacy Determinations to Cap or Reduce Rail Rates Would be Unwise and Unsound as a Matter of Economics and Policy, and Could Have Substantial Negative Consequences for Carriers, Shippers, and the National Transportation System.**

Despite some room for reform of SAC rate case discovery, procedures, and evidentiary rules, SAC analysis remains the most economically sound and analytically robust method ever devised for assessing the reasonableness of rail rates. It is difficult to envision a methodology that would better address the economics of rail transportation in the United States while balancing the multiple policy goals of the Interstate Commerce Act and ICCTA. The ICC and the Board developed the SAC framework through a long process of trial-and-error and after a number of false starts and failed attempts. In short, the SAC analysis that emerged was a hard-earned regulatory success. Any new rate reasonableness methodology that might be proposed likely would be substantively less sound and present its own set of at least equally vexing difficulties, costs, and problems. As the experience of the ICC in developing the SAC methodology illustrates, a major new rate case methodology would likely take years of regulatory proceedings, appeals, and remands, followed by further regulatory proceedings and revisions, without any guarantee that the result would be an improvement over the existing methods.

Attempting to adjudicate the reasonableness of individual rates based on a general system-wide revenue adequacy finding would be particularly unwise. As demonstrated above, the Board's present method of assessing revenue adequacy does not accurately measure whether a carrier is earning the level of revenues necessary to achieve the goals and mandates of the

Interstate Commerce Act. But even if the Board were to develop a new revenue adequacy methodology properly based on replacement costs, evaluating and prescribing individual rail rates based on a system-wide revenue adequacy finding would create a strong risk of generating internal cross-subsidies, resulting in regulatory (rather than market-based) selection of winners and losers, and distortions of markets and resource allocations. In addition to contravening rail law and policy established over the last four decades, such regulatory action could roll back much of the progress that has made the American freight rail industry the envy of the world.

Putting to one side the unfairness to carriers and pernicious economic disincentives that would result from redistributing to shippers rail revenues that would otherwise be available for rail system improvements and reinvestment, such an approach likely would also be unfair to shippers. Assume, for example, that the Board adopted rules providing that some portion of the revenues earned by a “revenue adequate” carrier should be refunded to shippers. Assume further that the Board were to determine that a carrier had earned adequate revenues for a sufficiently long period to be deemed “revenue adequate.” In such a scenario, shippers located on the revenue adequate carrier’s light density lines could file rate cases under a system-wide “revenue adequacy” approach, hoping that the Board would reduce their rates in order to distribute some of the carrier’s “excess” revenues to them. Such revenue redistribution could effectively force shippers on higher-density corridors to subsidize lighter-density operations, because (other factors being equal) freight moved on light density lines has higher costs per ton-mile than that on high-density lines. The effect of such regulatory intervention would contravene fundamental, well-established principles of railroad economics and rate regulation, including demand-based differential pricing; the prohibition of internal cross-subsidies; and minimizing regulatory intervention to allow markets to determine reasonable transportation rates to the maximum extent

possible. Each of these fundamental principles is implemented and buttressed by SAC rate reasonableness analysis. *See, e.g., Coal Rate Guidelines*, 1 I.C.C.2d 520 (1985); *PPL Montana v. BNSF Ry.*, 6 S.T.B. 286, 291 (SAC test prevents cross-subsidies by “ensur[ing] that a shipper does not bear the costs of any facilities from which it derives no benefit and that it does not otherwise cross-subsidize other traffic.”); *Otter Tail Power Co. v. BNSF Ry.*, STB Docket No. 42071 Decision at 23-25 (STB served Jan. 27, 2006). Each would be undermined by a rate regime that used a system-wide revenue adequacy constraint to determine rate reasonableness or prescribe rail rates.

### CONCLUSION

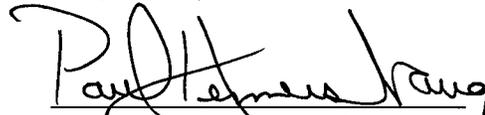
The Interstate Commerce Act directs the Board to determine whether carriers are earning adequate revenues to, *inter alia*, attract and retain in amounts adequate to maintain a sound transportation system. *See* 49 U.S.C. § 10704(a)(2). The Board’s current method for calculating such revenue adequacy does not fully serve that mandate because it is founded on the historical costs of rail assets. A reasonable and prudent course for the Board to follow in attempting to discharge all of its responsibilities under Section 10704(a)(2) (and not just its responsibility to issue annual revenue adequacy determinations) would be for it to follow the advice of every leading economist who has looked at the revenue adequacy issue and assess rail carriers’ revenue adequacy needs based on replacement cost valuations of their assets. Such an approach would improve the accuracy of the Board’s annual revenue adequacy findings, and render RSAM a more accurate measure of the average markup a carrier would need to charge to traffic with less elastic demand ( $R/VC >_{180}$ ) in order to earn and sustain adequate revenues.

The Board should continue to use the full SAC methodology to gauge the reasonableness of challenged rail rates. The targeted, rate-specific approach embodied in SAC is vastly superior to any undifferentiated approach based on the system-wide revenues earned by a rail carrier.

Finally, the Board should allow recent rate regulation reforms an opportunity to work. The Board recently promulgated significant regulatory reforms to make rate challenges less costly and more widely available, including the removal of any limit on relief in SSAC cases. Those rate regulation reforms were just recently affirmed on appeal. Before the agency proposes further changes, it should see how those reforms work and whether any additional changes may be warranted. A good doctor would never prescribe one new medicine or medical intervention after another without first determining whether the first one was working. In economic regulation as in medicine, multiple interventions without pause and evaluation is a recipe for a cascading disaster of unintended consequences.

Peter J. Shultz  
Paul R. Hitchcock  
John P. Patelli  
CSX Transportation, Inc.  
500 Water Street  
Jacksonville, FL 32202

Respectfully submitted,



Paul A. Hemmersbaugh  
Richard E. Young  
Sidley Austin LLP  
1501 K Street, N.W.  
Washington, D.C. 20005  
(202) 736-8000

*Counsel for CSX Transportation, Inc.*

**Dated: September 5, 2014**

# **ATTACHMENT 1**

**to**

**Opening Comments of CSX Transportation, Inc.**

---

**STB Ex Parte No. 722**  
**Railroad Revenue Adequacy**

**Dated: September 5, 2014**

VERIFIED STATEMENT NO. 1

BEFORE THE  
INTERSTATE COMMERCE COMMISSION

---

EX PARTE NO. 393 (SUB-NO. 1)  
STANDARDS FOR RAILROAD REVENUE ADEQUACY

---

VERIFIED STATEMENT  
OF  
WILLIAM J. BAUMOL  
and  
ROBERT D. WILLIG

August 4, 1986

\* \* \* \*

APPENDIX A

February 25, 1985

Economists' Statement in Support of  
the Staggers Act

We, the undersigned economists, understand that in the ninety-ninth Congress, amendments are likely to be proposed that would substantially alter major provisions of the Staggers Rail Act of 1980, with the general effect of reducing the freedom of individual railroads to set their rates in accordance with market forces and lessening railroads' opportunity to earn an adequate return on capital. Without commenting on the details of the Act or on the specifics of the Interstate Commerce Commission's implementation of it, we do express our judgement that, in its main thrust, the Staggers Act has brought about a regulatory regime much more attuned to the state of competition that now exists among the various modes of transportation.

The Staggers Rail Act of 1980 was part of a broad, long-term effort to eliminate inefficient economic regulation. That movement, with its enhanced reliance on market forces, has affected such diverse sectors of the economy as transportation, telecommunications and finance. It has its intellectual roots in economic analysis of recent decades which showed that economic regulation has often failed to serve the interest of the public at large; that effective competition serves as a better stimulant to economic efficiency than governmental intervention in the details of market activity and that many industries, including rail transportation, have faced greatly increased competition during the period since World War II.

Partly because of the failures of economic regulation, the railroads, during the years prior to the Staggers Act, deteriorated to a point where their ability efficiently to serve the transportation demands of the country had been severely impaired. Congress was unwilling to see further deterioration of the railroads so long as there was substantial demand for their services. Congress also rejected both railroad nationalization and major new direct rail subsidies, at taxpayers expense. Instead, it elected to provide the railroads greater opportunity to become self-sustaining, by increasing their freedom to price their services as warranted by conditions in the competitive markets they serve. At the same time, the Act provided for the identification of markets in which the railroads held excessive market power and provided for continuing regulation of prices in those markets.

In light of the fact that the Staggers Act stopped short of complete economic deregulation, a number of issues were raised and addressed in the Act and in its implementation, such as:

1. the level of revenues that railroads must be permitted to earn in order to build and maintain the capability to serve their markets.
2. the criteria on which to base a finding that competition is inadequate, i.e. that "market dominance" is present;
3. the criteria for setting rates, given market dominance.

We subscribe to the following principles in addressing these issues:

1. The appropriate standard for determining the adequacy of railroad revenues is a rate of return equal to the current cost of capital on the replacement value of all rail assets that are required to meet the demands for railroad service, regardless of the source of funds used in investing in those assets.

2. In determining whether a railroad faces adequate competition in a particular market, it is appropriate for the Interstate Commerce Commission to consider all sources of competition in that market, including: competition from other carriers moving a given product between the given points of origin and destination, competition arising from consignees' ability to obtain the same product from other sources and to obtain close substitute products from any source, and shippers' ability to sell in other markets.

3. In setting "reasonable rates", which we take to mean rates that encourage the efficient use of resources not only of the railroads and their customers but also of the entire economy, the following principles should apply:

- o Where marginal cost pricing produces total revenues that are less than total cost, some form of pricing that reflects the responsiveness of demand to price (Ramsey-like pricing) is economically efficient and, where returns are below the market cost of capital, is essential for railroad financial viability;

- o Rate prescriptions based on fully allocated cost or other ratios of rate to cost are, in such circumstances, arbitrary and inefficient;

o Defined as the cost a rail carrier would currently have to incur to furnish a particular service or group of services in isolation, "stand-alone" costs provide, in principle, an objective standard for setting the maximum price a railroad, whose revenues are inadequate, should be permitted to charge in markets where competition is not effective.

In summary, we believe that the Staggers Rail Act of 1980 to have been a substantial step toward rationalizing transportation policy and that continued pursuit of the principles stated above would serve the interests of the public at large.

---

(Signature, title, current affiliation for identification only)

---

(Prior positions)

---

(date)

ECONOMISTS' COMMITTEE ON PUBLIC POLICY

Kenneth J. Arrow  
Nancy Smith Barrett  
William J. Baumol

Robert W. Crandall  
Hendrick S. Houthakker  
Norman H. Jones Jr.

Isabel V. Sawhill  
Lester C. Thurow  
James Tobin

Executive Secretary  
Allen R. Ferguson

ECONOMISTS ENDORSING the ECPP STATEMENT  
in SUPPORT OF THE STAGGERS ACT

Members of the ECPP

Kenneth J. Arrow,  
Nobel Laureate; Joan Kenney Professor of Economics, Stanford  
University  
Former: President American Economic Association

William J. Baumol,  
Professor of Economics, Princeton University  
Former: President, American Economic Association; Senior  
Author: Contestable Markets and the Theory of Industrial  
Structure

Allen R. Ferguson,  
Economist, President A.F.E., Inc.  
Former: President, Public Interest Economics Foundation;  
Coordinator for International Aviation, U.S. Dept. of State

Hendrik S. Houthakker,  
Professor of Economics, Harvard University  
Former: Member, Council of Economic Advisors

Norman H. Jones Jr.,  
Economist, President N.H. Jones, Inc.  
Former: Dep. Asst. Sec. Commerce

Isabel V. Sawhill,  
Senior Fellow, The Urban Institute  
Editor: The Reagan Record and The Reagan Experiment

Lester Thurow,  
Professor of Economics, Sloan School of Management, MIT  
Author: Zero Sum Society

James Tobin,  
Nobel Laureate, Sterling Professor of Economics, Yale  
University  
Former: President, American Economic Association

Other Economists

Gardner Ackley,  
Professor Emeritus of Economics, University of Michigan  
Former: Chairman, Council of Economic Advisors; U.S. Ambassador  
to Italy

Bruce Allen,  
Professor of Economics, Michigan State University

Arman A. Alchian,  
Professor of Economics, UCLA

Elizabeth Bailey,  
Dean, Business School, Carnegie-Mellon University  
Former: Vice Chair, Civil Aeronautics Bd.; Head Ec. Res.  
Dept. Bell Lab.

Francis Bator,  
Professor of Political Economy, Harvard University  
Former: Deputy Special Assistant to the President for National  
Security Affairs

George Break,  
Professor of Economics, University of California, Berkeley

Harrison S. Campbell,  
Associate Professor, University of Lowell  
Former: Vice President, Charles River Associates; Vice Presi-  
dent, New York City Rand Institute

William M. Capron,  
Chairman and Professor, Dept. of Econ., Boston University  
Former: Asst. Dir. Bur. of Budget

Richard E. Caves,  
Professor of Economics, Harvard University

James A. Constantin,  
David Ross Boyd Professor of Business Administration,  
University of Oklahoma

J. Dewey Daane,  
Frank K. Houston Professor of Banking, Owen Graduate School  
of Management, Vanderbilt University  
Former: Member, Bd. of Govs. Fed. Res.

Harold Demsetz,  
Professor of Economics, UCLA

George C. Eads,  
Dean, School of Public Affairs, University of Maryland  
Former: Member, Council of Economic Advisors; Research Program  
Director, the Rand Corp.

Robert Eisner,  
William R. Vianan Professor of Economics, Northwestern  
University

Jose A. Gomez-Ibanez,  
Professor, Kennedy School of Government, Harvard University

Gottfried Haberler,  
Resident Scholar, American Enterprise Institute  
Former: Professor of Economics, Harvard University

Robert H. Haveman,  
John Bascom Professor of Economics, University of Wisconsin  
Former: Sr. Ecst., Jt. Econ. Comm. U.S. Congress

Arnold C. Harberger,  
Professor of Economics, University of Chicago and UCLA

Robert W. Harberson, McKinley Professor of Public Utility  
Economics, Emeritus, University of Illinois  
Former: Principal Economist, Bureau of Economics, ICC

Stanley J. Hille,  
College of Business and Public Administration, University of  
Missouri

George W. Hilton,  
Professor of Economics, UCLA

Jack Hirshleifer,  
Professor of Economics, UCLA

Charles C. Holt,  
Professor of Management, University of Texas at Austin

Richard H. Holton,  
Professor of Business Administration, University of California,  
Berkeley  
Former: Asst. Sec. of Commerce

Leland L. Johnson,  
Senior Economist, The Rand Corporation  
Former: Assoc. Administrator Nat'l Telecommunication &  
Information Admin.

Theodore E. Keeler,  
Professor of Economics, University of California  
Former: Sr. Fellow, Brookings Institution

Michael H. Lee,  
Economist, Montana Public Service Commission

Paul W. McCracken,  
Edmund Ezra Day Distinguished Professor of Business Administration,  
the University of Michigan  
Former: Chairman, Council of Economic Advisors

William H. Meckling,  
Dean Emeritus, Graduate School of Management, University of  
Rochester

Alan H. Meltzer,  
John M. Olin Professor of Political Economy and Public Policy,  
Carnegie-Mellon University

Leon Moses,  
Professor of Economics, Northwestern University

Willard F. Mueller,  
Professor of Economics, University of Wisconsin  
Former: Exec. Dir., Comm. on Price Stability, Exec. Off. of  
the Pres.; Chief Economist, F.T.C.

James C. Nelson  
Professor of Economics Emeritus, Washington State University

Richard R. Nelson,  
Professor of Economics, Yale University

Edmund A. Nightingale  
Professor of Economics and Transportation Emeritus, University  
of Minnesota

Wallace E. Oates,  
Professor of Economics, University of Maryland

Walter Y. Oi  
Elmer R. Milliman Professor of Economics, University of  
Rochester

Josephine E. Olson  
Professor, Graduate School of Business, University of Pitts-  
burgh

Theodore Otis  
Economist, Utilities Division, Montana Dept. of Public Service  
Regulation

Marc J. Roberts,  
Professor of Political Economy and Health Policy, Harvard  
School of Public Health

Thomas Romer,  
Professor of Economics and Political Economy, Carnegie-Mellon  
University

Thomas C. Schelling,  
Professor of Economics, Harvard University

Richard L. Schmalensee,  
Professor of Applied Economics, Sloan School of Management,  
MIT

Richard Sullivan,  
Professor of Economics, Carnegie-Mellon University

Robert Willig,  
Professor of Economics and Public Affairs, Princeton University  
Former: Supervisor of Economic Research Dept., Bell Labs.

Lee Wilson,  
Professor of Economics, University of Wisconsin

Anthony M. Yezer,  
Associate Professor of Economics, George Washington University

Richard Zeckhauser,  
Professor of Political Economy, Harvard University