

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

STB Docket No. EP 705

COMPETITION IN THE RAILROAD INDUSTRY

**REPLY COMMENTS OF
THE ASSOCIATION OF AMERICAN RAILROADS**

Of Counsel:

Paul A. Guthrie
J. Michael Hemmer
Paul R. Hitchcock
James A. Hixon
Theodore K. Kalick
Jill K. Mulligan
Roger P. Nober
John P. Patelli
David C. Reeves
Patrick Riley
Louise A. Rinn
John M. Scheib
Peter J. Shudtz
Greg E. Summy
Gayla L. Thal
Richard E. Weicher
W. James Wochner

Louis P. Warchot
Association of American Railroads
425 3rd Street, S.W.
Suite 1000
Washington, D.C. 20024
(202) 639-2502

Samuel M. Sipe, Jr.
Anthony J. LaRocca
Frederick J. Horne
Steptoe & Johnson LLP
1330 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 429-6486

Counsel for the Association of
American Railroads

May 27, 2011

TABLE OF CONTENTS

- I. INTRODUCTION2
- II. Complaining Shippers’ Purported Grounds for Changes in Access Policy Are Contrived and Unsupported by Any Persuasive Evidence6
 - A. The Argument that Increased Rail Prices and a Concentrated Rail Market Structure Call for Widespread Changes in the Board’s Access Policy Is Unfounded.....6
 - 1. Rail rate increases do not signify the existence or exercise of market power6
 - 2. There is no evidence that a concentrated market structure led to anticompetitive rail rate increases over the past decade9
 - B. There Is No Reason to Conclude that the Financial Performance of Class I Railroads Is a Basis for Changes in Access Policy.....13
 - 1. It would be contrary to the statute and public policy to alter access doctrines as a penalty for railroads’ improved financial performance13
 - 2. The complaining shippers’ assertions that railroads are earning supra-normal profits are wrong.....15
 - 3. Any consideration of railroads’ financial condition must focus on railroads’ long-term financial viability17
 - C. Current Board Access Policies Appropriately Support the Role of Freight Railroads in Promoting the Competitiveness of U.S. Industries in the Global Economy19
 - 1. The complaining shippers’ argument that freight railroads do not effectively promote U.S. industries in the global economy is unsound.....20
 - 2. To support continued growth and enhanced competitiveness of U.S. industry, railroads must be able to invest confidently in rail infrastructure23
 - D. The Existence of Other Economic Regulatory Regimes with Broader Access Provisions Does Not Support Involuntary Access in the U.S. Railroad Industry24
- III. The Statute Does Not Permit the Board to Grant Shippers’ Request for Access on Demand.....27
 - A. Complaining Shipper Proposals Would Not “Increase Competition”28
 - B. Reciprocal Switching and Terminal Access31
 - C. Through Routes.....36
 - D. Bottleneck Rules38

IV.	The Complaining Shippers’ Alternative Access Proposals Could Not Be Implemented under the Current Statute	40
A.	Concerned Captive Coal Shippers	40
B.	Arkansas Electric Cooperative Corporation and Westlake Chemical Corporation	41
C.	United States Department of Agriculture	42
D.	Mississippi Lime Company	43
E.	Others	43
V.	Access Pricing.....	44
VI.	Complaining Shippers Ignore the Widespread Adverse Impacts of Their Access Proposals	49
A.	The Adverse Impact of the Hoped for Revenue Transfer.....	49
B.	The Adverse Impact on Rail Operations and Service.....	52
C.	Adverse Impact on Current Administration Transportation Policy	54
	CONCLUSION.....	57

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

STB Docket No. EP 705

COMPETITION IN THE RAILROAD INDUSTRY

**REPLY COMMENTS OF
THE ASSOCIATION OF AMERICAN RAILROADS**

Pursuant to the Board's Notices dated January 11, 2011 ("STB Notice"), and February 4, 2011, the Association of American Railroads ("AAR") respectfully submits its Reply Comments in the captioned proceeding. AAR's Reply Comments are supported by the verified statements of Professor Robert Hamada and Mr. Rajiv Gokhale, Drs. Kelly Eakin and Mark Meitzen, Mr. William Rennie and Professor Robert Willig.¹

More than 180 parties filed comments during the initial stage of this proceeding. A large number of these commenters are shippers, local government entities and others who urge the Board to avoid taking any action in this proceeding that would jeopardize the viability of today's strong freight rail transportation network or that would imperil future investments in the rail infrastructure that will be required to meet the needs of our nation's economy going forward.²

¹ These statements are referred to below, respectively, as "Hamada/Gokhale V.S.," "Eakin/Meitzen V.S.," "Rennie Reply V.S.," and "Willig Reply V.S." The verified statements of Mr. Rennie and Professor Willig filed with AAR's Initial Comments are referred to as "Rennie Initial V.S." and "Willig Initial V.S." AAR's Initial Comments were also supported by the Verified Statement of Edward A. Burkhardt ("Burkhardt V.S.").

² As of April 30, 2011, 54 shippers or other non-railroad industry participants had filed comments supporting a strong freight rail industry and the continuation of balanced regulation. State or local governments and business organizations had filed 56 such comments, as had 15 Members of the House of Representatives and 4 Senators.

While many parties express strong support for continuation of the existing regulatory policies that have contributed to today's current sound rail network, a highly vocal subset of shippers and shipper organizations dominated by chemical and coal interests expresses strong dissatisfaction with the level of rail rates and tries to link this dissatisfaction with rates to the subject of possible revision of the Board's competitive access policies.³ AAR's Reply Comments are directed primarily to the initial comments of this latter set of shipper commenters, who will be referred to collectively herein as the "complaining shippers."

I. INTRODUCTION

The Board established this proceeding to inquire into the public interest dimensions of its competitive access policy. However, the complaining shippers ignore the public interest. On the face of it, their preoccupation with the rates they pay is narrow, self-interested and focused on the near term. The complaining shippers are overwhelmingly concerned with how they might exploit changed Board access policies to achieve a revenue transfer from the freight railroads to themselves. They implicitly assume that they can take today's strong rail freight network for granted in the future but reconfigure it to yield lower rates. This narrow perspective overlooks the broader, longer term public interest which calls for (1) continued investment in maintaining

³ See, e.g., Joint Comments of Alliance for Rail Competition, the American Chemistry Council, *et al.* ("Interested Parties"); Initial Comments of Arkansas Electric Cooperative Corporation ("AECC Comments"); Comments of Concerned Captive Coal Shippers ("CCCS Comments"); Initial Comments of Consumers United for Rail Equity ("CURE Comments"); Comments of E.I. du Pont de Nemours and Company ("DuPont Comments"); Comments of The Fertilizer Institute ("TFI Comments"); Initial Comments of the National Coal Transportation Association ("NCTA Comments"); Comments of the National Industrial Transportation League ("NIT League Comments"); Comments Submitted by Olin Corporation ("Olin Comments"); Joint Initial Comments of Omaha Public Power District, *et al.* ("OPPD Comments"); Comments of PPG Industries, Inc.; Submission of Written Testimony Total Petrochemicals USA, Inc. ("Total Comments"); Comments of the Western Coal Traffic League ("WCTL Comments"); Initial Comments of Westlake Chemical Corporation ("Westlake Comments").

and expanding today's efficient and cost effective rail freight network and (2) maintaining high quality rail service into the future.

As described in AAR's Initial Comments, the Board and its predecessor adopted regulatory policies in the post-Staggers era designed to preserve a careful balance between reliance on market forces to establish reasonable rates and protecting shippers from abuse of market power. The complaining shippers' opening comments often read like an attack on existing Board rate regulation, with assertions that rate case procedures are too cumbersome and that that rate relief is uncertain and insufficient. Grants of involuntary access are viewed not as remedies for competitive problems in particular markets but as an alternative form of rate relief. Whereas conventional Board rate relief sets a cap on railroad differential pricing, access remedies are viewed by the complaining shippers as a device to levelize rates and defeat differential pricing.

Apart from the fact that most of them are focused on rate relief rather than competitive access, the complaining shippers' initial comments are marred by two serious flaws. First, the shippers have failed to present evidence of changed circumstances that would warrant adoption of new access policies. Complaining shippers claim that relatively higher rail rates in recent years signify a pervasive lack of market based competition and argue that widespread involuntary access is needed to force rates down. But there is no evidence that higher rates – after over 20 years of declining rail rates – reflect anything other than the working of market forces. Indeed, the objective evidence, provided by the Christensen Associates analysis

commissioned by the Board, is that increases in rail rates in recent years are not a result of the exercise of increased market power.⁴

Complaining shippers contend that railroads are doing so well financially that the Board should revoke their “license to monopolize”⁵ and should ignore the effects of the railroad revenue drain that they hope would follow from a change in access policies. No objective, fair-minded observer could conclude that railroads are earning supra-normal profits. The railroads’ current improved financial condition was a key objective of the Staggers Act⁶ and is not something that they should be punished for. Their current financial performance is in the normal range for American industries.

Complaining shippers make unsubstantiated allegations that high rail rates are driving U.S. business off shore and impairing the ability of U.S. industry to compete in the global economy. In fact, U.S. railroads, which constitute the lowest cost, most efficient freight rail system in the world, provide a critical element of the strong infrastructure that enables U.S. industries to compete effectively. And while some shippers complain that railroads are favoring intermodal shippers who handle substantial volumes of imports at the expense of exporters, the reality is that all rail shippers and American consumers benefit from the existence of a strong intermodal rail network as well as a highly efficient carload network.

The second glaring flaw in the complaining shippers’ presentation is that they fail to make a serious effort to address the impacts of their proposed changes in access policies, despite the Board’s request for “comments from all interested parties on the positive and negative impact

⁴ LAURITS R. CHRISTENSEN ASSOC., INC., A STUDY OF COMPETITION IN THE U.S. FREIGHT RAILROAD INDUS. & ANALYSIS OF PROPOSALS THAT MIGHT ENHANCE COMPETITION: REVISED FINAL REPORT ES-5 (2009) (“Christensen Study”).

⁵ Interested Parties Comments at 5.

⁶ Staggers Rail Act of 1980, Pub. L. 96-448, 94 Stat. 1895 (1980) (“Staggers Act”).

any proposed change would have on the railroad industry, the shipper community, and the economy as a whole.” STB Notice at 7.

While acknowledging that they seek a revenue transfer from railroads to themselves, the complaining shippers ignore the effect such a revenue transfer would have. They completely overlook the need for continuing investment in rail infrastructure and the need for railroads to have the opportunity to generate revenues that will support that investment.

Complaining shippers also completely overlook the likely impact of their access proposals on rail operations and service. They blithely assume that forced interchange will have no operational consequences and that a rail network characterized by shipper directed routing would function as efficiently as today’s rail networks. These assumptions are naïve and unsupportable.

Complaining shippers also fail to recognize the adverse effect that their access proposals would have on other significant contributions made by the rail industry to the U.S. economy in the form of reduced fuel consumption, reduced highway congestion and reduced pollution.

In light of these flaws and numerous other shortcomings in the complaining shippers’ initial comments, the Board should conclude that proponents of change to the Board’s access policy have failed to show that any change or any further Board action is appropriate at this time. Moreover, changes in the Board’s access policies to provide for more extensive involuntary access would be contrary to national rail policy goals as set forth by the Administration regarding passenger rail, the need for additional capacity to meet future transportation demands, and the need to provide a strong infrastructure to support exports of U.S. products. The Board should decline to pursue any changes to its access policies and discontinue this proceeding.

II. Complaining Shippers' Purported Grounds for Changes in Access Policy Are Contrived and Unsupported by Any Persuasive Evidence

In this section of its Reply Comments, AAR addresses the principal grounds asserted by the complaining shippers as bases for change in the Board's access policies and explains why the shippers have failed to show that any change is called for.

A. The Argument that Increased Rail Prices and a Concentrated Rail Market Structure Call for Widespread Changes in the Board's Access Policy Is Unfounded

Complaining shippers argue that high rail rates beginning in the 2003-2004 time period have caused shippers to pay more than they should have paid for rail transportation and thereby demonstrate the need for broad, involuntary access, which can be expected to drive rates down by promoting more head-to-head rail competition.⁷ As noted above, this is essentially an argument for involuntary access as an alternative form of rate relief. The complaining shippers also contend that a concentrated rail industry market structure has fostered parallel pricing among rail carriers, which has tended to produce higher rate levels than would exist in markets with more robust rail-to-rail competition. These arguments have no logical or factual underpinning.

1. Rail rate increases do not signify the existence or exercise of market power

For over 20 years following the Staggers Act rail rates declined in real terms and shippers benefited from the ensuing cost savings.⁸ The economic factors that led to these rate reductions are well understood. Rail carriers were given the freedom to price to the various markets in

⁷ See, e.g., Interested Parties Comments at 13; CURE Comments at 6; DuPont Comments at 8; TFI Comments at 3-4; NIT League Comments at 4-5.

⁸ See, e.g., SECTION OF ECONOMICS, OFFICE OF ECONOMICS, ENVIRONMENTAL ANALYSIS & ADMINISTRATION, SURFACE TRANSPORTATION BOARD, STUDY OF RAILROAD RATES 1985-2007 2 (2009).

which they participated. The rail industry suffered from over-capacity in the aftermath of Staggers. Excess supply put downward pressure on market-based rail rates. Increased productivity and lower unit costs gave railroads some flexibility to reduce prices without falling further behind in their cost recovery efforts. The imbalance between the supply of and demand for rail service was gradually corrected as leaner, more efficient rail networks emerged.

Rail carriers continued to price to the market in the early 2000s, but market forces had realigned from the previous decades. While noteworthy in light of the long trend of declining rates in the 1980s and 1990s, the increase in rail rates in the mid-2000's is entirely unexceptional, as changes in price levels, both upward and downward, are the fundamental signal of market forces at work. As Professor Willig explains, “[p]rices in competitive markets properly move down *and up* with the interaction of supply and demand, and can readily rise under competitive market conditions.” Willig Reply V.S. at 8.

Complaining shippers try to inject significance into the common phenomenon of price increases by darkly suggesting that increasing rail rates must reflect the exercise of market power by railroads, perhaps fostered by consciously parallel pricing or even collusion.⁹ But this speculation is entirely unfounded. What the record shows is that beginning in the 2003-2004 time period, various economic factors converged to put strong upward pressure on rail rates, including: (1) Rail input prices increased, particularly the price of fuel, which rose dramatically.¹⁰ (2) After 20 plus years of extraordinary productivity gains, rail productivity growth began to slow. (3) The cost structure of trucks – railroads’ principal competitors in many

⁹ See, e.g., Interested Parties Comments at 8; TFI Comments at 9; WCTL Comments, Verified Statement of Frederick R. Warren-Boulton and Kenneth C. Baseman at 6.

¹⁰ LAURITS R. CHRISTENSEN ASSOC., INC., AN UPDATE TO THE STUDY OF COMPETITION IN THE U.S. FREIGHT RAILROAD INDUSTRY: FINAL REPORT at 3-24 (2010) (“Christensen Update”), (“Between 2003 and 2008, the average real price of fuel increased by over 200 percent”).

surface transportation markets – increased markedly due to rising fuel costs, driver shortages, and hour of service regulations, among other factors, resulting in higher competitive ceilings than had previously existed for rail movements in many truck competitive markets.¹¹ (4)

Demand for rail transportation service increased significantly, resulting in capacity constraints at various choke points across the national rail transportation network.¹²

Economics teaches that each of the foregoing factors would be expected to contribute to rail price increases. In contrast to complaining shippers' speculation about the existence and effects of consciously parallel pricing, these widely documented market forces provide a concrete factual explanation for the upward trend in rail rates during the mid- to late 2000s. And Christensen Associates, which looked closely at the trend in rail prices during the period in question concluded that “[t]he increase in railroad rates experienced in recent years is the result of declining productivity growth and increased costs rather than the increased exercise of market power.”¹³ Moreover, as Professor Willig observes, “the most compelling piece of evidence refuting claims of abusive conduct is that the upticks we see in rail rates starting in 2003-04 occurred during a period of rapidly *growing* overall rail traffic volumes.” Willig Reply V.S. at 9-10.

Rail price increases resulting from market forces do not suggest that the Board should seek to interfere with the price trend by promoting involuntary access. On the contrary, rising

¹¹ Willig Initial V.S. at 12; *see also* TFI Comments at 5.

¹² *See, e.g.*, FED. R.R. ADMIN., QUALITY OF SERVICE PROVIDED TO RAIL SHIPPERS, REPORT NO. CR-2011-045, 10-11 (2011).

¹³ Christensen Study at ES-5. The railroad industry experienced dramatic productivity growth during the two decades immediately following passage of the Staggers Act as networks were rationalized and improved finances permitted efficiency-enhancing investments. Willig Initial V.S. at 10-11. Productivity growth began to decline in the early 2000s as the readily available sources of productivity (*e.g.*, network rationalization) were largely exhausted.

prices – particularly in the face of increased demand and tightening capacity – suggest that railroads should be investing in additional capacity. The rising prices are both a signal that railroads should expand their output and a source of funds that will assist them to do so.¹⁴

2. There is no evidence that a concentrated market structure led to anticompetitive rail rate increases over the past decade

In addition to focusing on the level of rail rates, the complaining shippers suggest that the concentrated structure of the railroad industry somehow converts benign pricing actions into anticompetitive conduct that should be addressed through changes to STB access policy.¹⁵ This argument does not withstand scrutiny.

The complaining shippers’ argument regarding concentrated market structure assumes – either explicitly or implicitly – that there is a unitary rail transportation market, or two such markets, one in the East and one in the West. But for purposes of economic analysis it makes no sense to talk about a single rail freight market or two such markets. Surface transportation markets are numerous and highly fragmented, both on a geographic basis and in terms of the identity of the entities that compete in those markets. Depending on the market, the competitors can include multiple railroads and trucks, a single railroad and trucks, multiple railroads and barges, and many other variations including markets with a single railroad that has no intramodal or intermodal competitors. The extent and effectiveness of competition in a particular surface transportation market that one or more railroad participates in can only be ascertained through an assessment of the market forces in that market.

¹⁴ In his initial verified statement, Mr. Rennie explained that “[s]ince US railroads do not receive government funds . . . they must meet their substantial capital investment requirements now and in future years largely by reinvesting cash flows.” Rennie Initial V.S. at 10.

¹⁵ See, e.g., DuPont Comments at 3-6; TFI Comments at 2-3; Interested Parties Comments at 6-7; NCTA Comments at 3-4.

The various forms of market analysis that the Board undertakes for regulatory purposes confirm that it is inappropriate to think about a single market for rail services or about one rail market in the East and another in the West. The statutorily-defined market dominance analysis that the Board undertakes to determine whether it has rate reasonableness jurisdiction focuses on markets in terms of traffic moving between a rail origin and rail destination. 49 U.S.C. § 10707(a) (market dominance inquiry addresses the existence of “effective competition from other rail carriers or modes of transportation for the transportation to which a rate applies”). The market impact analyses called for in rail merger cases identify a variety of relevant markets for purposes of competitive analysis, including traffic moving over specified corridors and traffic moving between BEA pairs.¹⁶ Generalizations about the number of carriers present at the national level or East/West of the Mississippi say virtually nothing about the extent of competition faced by particular shippers on particular movements.

In their eagerness to conjure up a concentrated market dominated by Class I railroads, the complaining shippers overlook the full array of market participants – Class I railroads, shortline railroads, trucks, and barges – as well as various forms of indirect competition (*e.g.*, product and geographic competition). In particular, the complaining shippers almost completely ignore the critical role played by trucks in many surface transportation markets. It is true that the chemical and coal shippers who complain most vociferously about rail rates are more reliant on rail than many other rail shippers, but the fact that the complaining shippers ignore the interests of shippers with non-rail options underscores the fact that their arguments are geared to self-interest rather than the broad public interest.

¹⁶ See 49 C.F.R. § 1180.7(a).

The complaining shippers' generalized assertions about a concentrated rail industry market structure add no substance in terms of market analysis. Moreover, even if the complaining shippers had addressed the subject of market structure at an appropriate level of specificity and had established that relevant surface transportation markets are highly concentrated, they would be incorrect in suggesting that the existence of concentrated markets signifies the existence of anti-competitive pricing. As Professor Willig explains, a concentrated market structure with comparable prices set independently by competing carriers is not inherently anticompetitive and certainly not a cause for regulatory intervention. Willig Reply V.S. at 9. When it comes to railroads, efficient market outcomes are not dictated by having any particular number of railroads, and it is widely understood that many markets can support only one railroad. *Id.* at 5-6.

Where the existence of rail-to-rail competition is the relevant consideration, as it has been in the case of many horizontal rail mergers, the Board and its predecessor have repeatedly recognized that maintaining rail competitive options is sufficient to preserve competitive market outcomes.¹⁷ Indeed, complaining shipper requests that the Board adopt liberalized competitive access policies are premised on the notion that the presence of an additional competing carrier will result in reduced rail rates. If these parties actually believe that parallel pricing has resulted in supra-competitive prices in markets where two railroads compete head-to-head, why do they contend that the creation of additional competitive access would lead to reduced rail rates?

¹⁷ *Union Pac. Corp., Union Pac. R.R. Co., and Mo. Pac. R.R. Co.—Control and Merger—S. Pac. Rail Corp.*, 1 S.T.B. 233, 476 (1996) (“[W]e note that a shipper with access to two railroads is not captive to either, and that many shippers served by UP/SP or BNSF exclusively are adequately protected by intermodal or geographic competition”); *Coal Trading Corp. v. The Baltimore & Ohio R.R. Co.*, 6 I.C.C. 2d 361, 384 (1990) (“The Commission has typically considered the presence of two railroads from which shippers can choose as strong evidence for the existence of effective competition”).

Interestingly, some complaining shippers such as WCTL acknowledge the tension between their claims of structural effects on pricing and requests for expanded access and suggest that enhanced rate regulation is the real solution to the perceived problem of high rail rates.¹⁸ Indeed, as noted above, many complaining shippers devote considerable attention to supposed shortcomings in the Board's rate reasonableness standards and procedures.

AAR does not believe that changes in the Board's rate reasonableness standards and procedures are called for in the context of this proceeding.¹⁹ This proceeding is about possible changes in access remedies, not about enhanced or refined rate regulation. Yet many shippers clearly believe that involuntary access would bring about rate reductions that the shippers have not obtained through the Board's existing rate reasonableness procedures, either because the shippers have chosen not to pursue rate relief or because the existing standards would not support rate reductions. The fact that many shippers view the issues not as access issues but as rate reasonableness issues casts doubt on the legitimacy of their access arguments.

The Board and its predecessor have made clear over the years that access remedies are not intended as an alternative means of obtaining rate relief. The existing rate reasonableness standards were expressly designed to permit the railroads to use differential pricing, which is necessary to the railroads' long-term survival, while ensuring that sole-served shippers will not be forced to cross-subsidize portions of the railroad network from which they obtain no benefit. Through expanded access relief, shippers seek to circumvent this balance reflected in the Board's rate reasonableness standards by curtailing the railroads' ability to engage in differential pricing. As AAR explained in its Initial Comments, the Board's SAC, Simplified SAC, and Three

¹⁸ WCTL Comments at 19-20, 23-26.

¹⁹ If shippers wish to address rate-reasonableness standards and procedures, the proper vehicle for doing so would be to seek to reopen *Simplified Standards for Rail Rate Cases*, STB Ex Parte No. 646, and/or *Major Issues in Rail Rate Cases*, STB Ex Parte No. 657.

Benchmark methodologies already provide shippers with the appropriate tools to address complaints about rate-levels. This proceeding is not the appropriate forum in which to pursue further modifications to the Board's rate reasonableness methodologies.

B. There Is No Reason to Conclude that the Financial Performance of Class I Railroads Is a Basis for Changes in Access Policy

AAR explained on opening why the improved financial health of the railroad industry should not have any bearing on the Board's approach to access regulation. The availability of an access remedy should be based on the circumstances of particular shippers at particular locations, not on the current overall financial condition of a railroad or the freight rail industry.

Several complaining shippers argue that the improved financial condition of the railroad industry justifies a new, more intrusive approach to involuntary access. However, they identify no rational basis for linking railroads' improved financial condition to the Board's policy toward access regulation, and there is none. If the easing of regulatory burdens after Staggers allowed the railroads to approach a measure of financial stability, there is no reason for the Board to undermine that outcome by imposing new access regulations that will adversely affect efficient rail operations, siphon off railroad revenue and jeopardize the railroads' financial condition. The shippers' demagoguery on this issue cannot substitute for a rational examination of whether there is a basis for imposing access remedies and the consequences of intrusive access regulation.

1. It would be contrary to the statute and public policy to alter access doctrines as a penalty for railroads' improved financial performance

Some complaining shippers take issue with the Board's annual revenue adequacy determinations and argue that notwithstanding the Board's annual findings, the railroads have in fact become revenue adequate in recent years. For example, AECC's consultant Mr. Nelson claims that "the Christensen study concedes outright that the rail industry beginning no later than 2006 has achieved revenues that satisfy the economic criteria for revenue sufficiency that

Christensen itself identified.” AECC Comments, Verified Statement of Michael A. Nelson at 9 (“Nelson V.S.”); *see also* Westlake Comments at 16 (“the railroad industry as a whole is quite healthy, and has been ‘revenue-adequate’ for some time”).²⁰ If the complaining shippers’ argument is that railroads have finally achieved a measure of revenue sufficiency, but they are earning only just enough revenue in some years to make them revenue sufficient (as Christensen suggests), the shippers cannot logically rely on the railroads’ financial condition as a basis for seeking new access remedies. Access remedies that transfer revenue away from railroads that are working to achieve a sufficient level of revenues would return them to a state of revenue inadequacy, which by definition means that they would not be earning enough revenue to sustain themselves over the long term.

It would make no sense to adopt expanded access remedies as the price that railroads have to pay for approaching revenue adequacy. As discussed elsewhere, expanded access would interfere with efficient rail operations and impose incremental costs across the rail network. It would also undermine the congressional policy “to promote a safe and efficient rail transportation system by allowing rail carriers to earn adequate revenues.” 49 U.S.C. §10101(3). Congress intended that the agency promote the achievement of revenue adequacy and it also intended that the agency allow railroads to maintain adequate revenue levels once they become revenue adequate. Applying regulatory measures that transfer revenues from railroads to their shippers once “adequate” revenue levels are achieved would conflict directly with the statutory requirement that the Board “shall make an adequate and continuing effort to assist those carriers

²⁰ The validity of the Board’s annual revenue adequacy methodology is outside the scope of this proceeding, and for this reason AAR does not address the specific critique of the Board’s methodology in the Westlake comments. Moreover, Westlake’s comments about the relationship between the Board’s annual revenue adequacy determinations and the application of its rate reasonableness standards are obviously unrelated to the issues raised by the Board in its Notice initiating this proceeding and AAR does not address them here.

in attaining [adequate] revenue levels.” 49 U.S.C. §10704(a)(2). Under the governing statute, the Board should not take actions in the form of adopting new access remedies that would be expected to cause railroads that are approaching revenue adequacy to be condemned to perpetual revenue inadequacy.

2. The complaining shippers’ assertions that railroads are earning supra-normal profits are wrong

Several complaining shippers appear to realize that it would make no sense to grant expanded access merely because of the improved financial health of railroads given that the resulting revenue transfer from railroads to shippers would reverse that financial progress. Thus, these complaining shippers overstate the financial well-being of the railroads. According to several shippers, the railroads are not just in better financial shape, they have become super-profitable.²¹ The position of these shippers appears to be that since railroads have become so highly profitable, a revenue transfer away from the railroads resulting from an aggressive use of involuntary access remedies would just bring the railroads back into line with other industries.

These complaining shippers rely to a large extent on what they characterize as the railroads’ extraordinary financial performance on Wall Street. But their rhetoric regarding railroad financial performance is not supported by realistic analyses of railroads’ stock market performance. Railroads have not consistently out-performed the market. There is nothing extraordinary about railroad stock performance.

²¹ WCTL calls railroads the “the financial titans of Wall Street.” WCTL Comments at 3. The Interested Parties claim that the railroads are “a booming financial machine that has used its considerable market power to raise prices and become one of the healthiest industries in the United States.” Interested Parties Comments at 16. NRG Energy claims that “Today, the railroad industry is considered to be one of the most profitable in America.” NRG Comments at 1. Olin says that railroads “are in the lead of S&P 500 stocks with current profit margins.” Olin Comments at 8.

These complaining shippers rely heavily on a 2010 Report from the Senate Committee on Commerce, Science, and Transportation, which asserted that Class I railroads “are achieving returns on revenue and operating ratios that rank them among the most profitable businesses in the U.S. economy.”²² Messrs. Hamada and Gokhale explain that the Report’s reliance on accounting measures like profit margins and operating ratios to portray railroads as earning supra-normal profits is not economically meaningful and is contrary to elementary principles of finance. As a general matter, accounting-based measures of profitability do not adequately reflect economic profitability. The profitability measures used in the Rockefeller Report fail to account for the high capital intensity of the railroad industry. As Messrs. Hamada and Gokhale explain, “comparing profit margins across industries with different capital intensities is meaningless.” Hamada/Gokhale V.S. at 4. Moreover, the short-term accounting measures of profitability used in the Rockefeller Report are not indicative of returns realized by investments in industries like the railroad industry where investments are long-lived.

In his Reply Verified Statement, Mr. Rennie looks at railroad profitability based on return on equity, return on capital, and dividend yield, and finds that “railroads are realizing returns within the same range as both their customers and the broader base of American industries that use rail.” Rennie Reply V.S. at 6. As Mr. Rennie concludes, “the railroads are clearly not earning short-term profits in excess of what is typical for American industry – and for their own customers.” *Id.* at 9.

The Christensen Study commissioned by the Board also determined, based on an examination of financial indicators, that there was no evidence that railroads were earning supra-

²² OFFICE OF OVERSIGHT AND INVESTIGATIONS MAJORITY STAFF OF S. COMM. ON COMMERCE, SCIENCE, AND TRANSPORTATION, 111TH CONG., THE CURRENT FINANCIAL STATE OF THE CLASS I FREIGHT RAIL INDUSTRY 1 (2010) (“Rockefeller Report”).

normal profits. The Christensen Study concluded that “[a]lthough the railroad industry’s earnings have increased in recent years, they do not appear to be excessive from a financial market perspective.” Christensen Study at ES-26. The Study found that based on earnings per share, railroad earnings were generally consistent with those of electric utilities and the S&P 500 composite. *Id.* at ES-26 to ES-27.

3. Any consideration of railroads’ financial condition must focus on railroads’ long-term financial viability

As explained by Messrs. Hamada and Gokhale, short-term accounting ratios and stock market performance do not provide any meaningful information about a firm’s long-term financial viability. The question in this proceeding should be whether expanded use of involuntary access would affect the long term viability of the railroad industry or undermine the long term goals of ensuring adequate rail capacity and efficient operations. The short-term accounting measures cited by the Rockefeller Report and by several complaining shippers say nothing about whether railroads can be expected to earn enough to ensure the replacement of long-lived rail assets as they wear out and to expand capacity to meet growing demand in the future. As Mr. Rennie explains, “a focus solely on short-term financials misses the bigger picture: Railroads must generate sufficient returns and meet revenue adequacy criteria to guarantee their access to capital and to make the long-term investments in infrastructure that will be needed over the next 25-30 years to support large increases in traffic.” Rennie Reply V.S. at 9-10.

Since rail assets are particularly long-lived, investment decisions must be made based on assumptions about earnings over the long term, not in the short term. If railroads are profitable now, but face the prospect of reduced earnings in the future (due, for example, to a revenue transfer to shippers from more aggressive access policies), they would not invest in long-lived

assets that would yield an inadequate return over a long period of time. If railroads cannot expect to earn their cost of capital over the long term, they would return any profits they earn to shareholders and invest in other lines of business.

The Board has recognized that railroads' financial health cannot be assessed based on short-term accounting measures.²³ The Board's revenue adequacy methodology properly asks whether a railroad has been able to generate a return on its investments equal to its cost of capital and further acknowledges that a railroad must be able to earn its cost of capital consistently over a long period of time before it can be considered revenue adequate. AAR does not agree with all aspects of the Board's current revenue adequacy methodology. AAR believes that an accurate assessment of revenue adequacy requires the use of the replacement cost of railroad assets rather than book value, and AAR continues to believe that the Board should modify its revenue adequacy methodology to reflect the use of replacement costs. However, the Board has properly recognized that revenue adequacy must be assessed over the long-term even though, by statute, the Board must make annual determinations. The Board therefore rejects the use of short-term accounting measures that say nothing about the ability of the railroad industry to sustain itself over the long term.

Neither the complaining shippers' short-term focus on railroad financial performance nor the substance of their observations about that performance provides any basis for concluding that a change in the Board's access policies is appropriate.

²³ See *Standards for Railroad Revenue Adequacy*, 364 I.C.C. 803, 808 (1981) (rejecting use of "indicators only of the short-term viability of railroads" as "inappropriate as indicators of long-term revenue adequacy").

C. Current Board Access Policies Appropriately Support the Role of Freight Railroads in Promoting the Competitiveness of U.S. Industries in the Global Economy

In their initial comments, both the complaining shippers and railroad interests took the position that the Board should consider the effectiveness of the freight railroads in promoting U.S. interests in the global economy as one criterion for assessing whether any change in access policy is warranted.²⁴ While the parties agree on the importance of this issue, their perspectives on it are very different.

Complaining shippers link the issue of global competitiveness to what they perceive to be unduly high rates and maintain that those high rates are driving U.S. businesses offshore.²⁵ Some of the shippers also maintain that by investing in intermodal infrastructure, America's freight railroads are somehow advantaging imports into the U.S. at the expense of exports.²⁶ Railroads base their claim that they effectively support the competitiveness of U.S. business in the global economy upon the existence of a financially sound and efficiently functioning rail network that provides the best quality rail transportation in the world at the lowest per unit cost.²⁷ U.S. freight railroads currently handle high levels of both export and import traffic to the benefit of U.S. shippers and consumers alike, and they will continue to expand their role in U.S. export and import markets through increased infrastructure investment absent any change that undermines their ability to do so.

²⁴ *See, e.g.*, AAR Initial Comments at 7-8; Interested Parties Comments at 46; NIT League Comments at 2.

²⁵ *See, e.g.*, DuPont Comments at 14; Total Comments at 3.

²⁶ *See, e.g.*, CURE Comments at 7-8; Total Comments at 2.

²⁷ Rennie Initial V.S. at 3-5; Burkhardt V.S. at 5, 7-9 (examining European rail system).

1. The complaining shippers' argument that freight railroads do not effectively promote U.S. industries in the global economy is unsound

There are multiple flaws in the complaining shippers' argument that U.S. freight railroads are undermining the competitiveness of American industry. First, the argument is unsound because it is predicated on the assertion that rail rates are set at supra-competitive levels. As explained in section II.A, the complaining shippers have made no such showing, and absent such a foundation, the argument is a house of cards. Presumably not even the complaining shippers would argue that freight railroads should subsidize domestic industries in the short term by charging rates below competitive market levels that will not sustain the railroads going forward.

Second, the argument is unsound because it is vague and devoid of detail or supporting evidence. Complaining shippers do not quantify the alleged effect of U.S. industry being driven offshore. With very limited exceptions, they do not identify the businesses or facilities that have supposedly been driven offshore, nor do they assert how widespread the alleged phenomenon is. Similarly, the complaining shippers have made no attempt to identify the impact of rail rates on any particular shipper's cost structure for purposes of determining that rail rates were the causal factor in driving any business or facility offshore. Other cost components such as labor costs and costs of raw materials (*e.g.*, natural gas, which is a major feedstock of many chemical products) would have to be taken into account before one could assert that transportation costs had an adverse effect on the competitiveness of U.S. manufacturers. Moreover, as Mr. Rennie explains, "many other factors . . . such as monetary policy, tax policy, wage and benefit costs, deteriorating industrial infrastructure, health care costs, and regulatory burdens, are cited alone or in combination as reasons why US goods may be less competitive." Rennie Reply V.S. at 4.

Third, the complaining shippers' argument regarding global competitiveness is unsound to the extent that it proposes a policy change based on a purported conflict between the economic interests of different groups of U.S. rail shippers. U.S. manufacturers such as chemical producers claim that they are disadvantaged vis-à-vis imports as a result of rail investments in intermodal facilities that favor imports.²⁸ Shippers also argue that the greater densities achieved on intermodal networks versus carload networks allow railroads to offer lower rates on intermodal traffic than on carload traffic.²⁹ However, the facts suggest that both import and export traffic benefit from a strong intermodal network. Mr. Rennie explains that "the US logistics system actually ranks higher on a global basis in handling exports than imports, and the transportation component of the cost to export a container is lower than to import a container." Rennie Reply V.S. at 3. In addition,

many of the imports which the railroads are alleged to be favoring are just as critical to the US domestic economy as exports. For example, legacy and transplant automobile assembly plants in the United States operated both by domestic and foreign car and component manufacturers are a core component of the US industrial economy. These US operations employ American citizens, purchase material and services, and pay taxes in our national and local economies. The viability and competitiveness of these plants depend on the efficient delivery of foreign components, as foreign parts content in cars manufactured in the United States and Canada ranges from 10 to 55 percent. Without efficient rail transport for imported parts and essential material, many of these automobiles and light trucks would be entirely manufactured abroad.

Id. at 4 (note omitted).

AAR's member railroads view their role as promoting the interests of all segments of the shipping community, whether they be importers or exporters, intermodal shippers or carload

²⁸ See, e.g., CURE Comments at 7-8; Total Comments at 2-3.

²⁹ See, e.g., CURE Comments at 7-8.

shippers. Railroads that transport imported goods do so at the request of shippers or receivers based in the U.S. and provide a benefit to U.S. based companies that have made the decision to import those goods. American businesses and consumers benefit from a strong intermodal network that accommodates both imports and exports and benefit from sharing the costs of intermodal facilities. Similarly, intermodal and carload traffic share common line-haul facilities on today's Class I rail networks and both categories of traffic as well as ultimate consumers benefit from sharing the costs of those facilities. The Board should exercise its regulatory role in support of the broader public interest in an efficient rail network for all customers and refrain from making policy decisions that are intended to improve the position of one category of shippers at the expense of another.

Finally, the shippers' argument that rates should be driven down through involuntary access to protect the interests of U.S. manufacturers is unsound, and ultimately self-contradictory, in that it ignores the impact that such access would have on the quality of service that railroads would be able to provide to U.S. manufacturers. The competitiveness of U.S. firms in domestic and foreign markets alike turns on their ability to respond nimbly to market conditions. As AAR and its members explained in their opening comments, a regime of involuntary access would substantially erode the efficiency of existing rail operations and the quality of service that railroads now provide, thereby driving up the costs of shipping by rail. Any degradation in service and resulting cost increases flowing from involuntary access would have a negative impact on the ability of U.S. firms to compete effectively in global markets. Thus, ironically, expanded involuntary access would exacerbate the very problem of high costs that shippers invoke to argue for expanded access.

2. To support continued growth and enhanced competitiveness of U.S. industry, railroads must be able to invest confidently in rail infrastructure

As Mr. Rennie explained in his Verified Statement in support of AAR's initial comments, the U.S. freight rail system is the most efficient, least cost system in the world. Rennie Initial V.S. at 3. Mr. Rennie's reply verified statement sets forth additional examples of the competitiveness of U.S. freight rates vis-à-vis those of other countries. Rennie Reply V.S. at 1-3. By definition, the existence of a comparatively low cost and reliable U.S. rail network benefits the interests of U.S. rail shippers in the global economy vis-à-vis producers in other countries who rely on rail transportation, even though those transportation costs and efficiency benefits will not always outweigh other benefits – e.g., lower wages – enjoyed by foreign producers.

The overall trend of both export and import rail traffic is upward, with significant volume growth projected over the next 20 years.³⁰ To maintain a superior rail freight network, U.S. railroads will need to make ongoing investments in an expanded U.S. rail freight infrastructure.³¹ As explained in AAR and individual carrier opening comments, railroads are prepared to make substantial investments in the future to support the transportation of goods that begin or end their

³⁰ See, e.g., FED. R.R. ADMIN., DEP'T OF TRANSP., NATIONAL RAIL PLAN: MOVING FORWARD 4, 18 (2010) (forecasting substantial increases in freight shipments due to population growth alone and noting need to expand rail connections to ports); AAR, GREAT EXPECTATIONS 2011: FREIGHT RAIL'S ROLE IN THE U.S. ECONOMIC RECOVERY 11 (2011) (coal exports were up 46.8 percent through the third quarter of 2010, and U.S. wheat exports are projected to hit their highest level since 1992).

³¹ See, e.g., EXPORT PROMOTION CABINET, REPORT TO THE PRESIDENT ON THE NATIONAL EXPORT INITIATIVE: THE EXPORT PROMOTION CABINET'S PLAN FOR DOUBLING U.S. EXPORTS IN FIVE YEARS 19 (2010) ("Improvements in the U.S. transportation and supply chain infrastructure are critical to enabling exporters from all 50 states to get their goods to ports quickly and inexpensively").

journey in a foreign country. It would be entirely counterproductive for the Board to adopt policy changes that would reduce railroad revenues and imperil this investment.

And, of course, future rail investment will be needed to serve the interests of purely domestic U.S. freight rail shippers and consumers of domestic products. As noted in AAR's Initial Comments, the rail infrastructure must grow to meet the needs of a growing U.S. population. Pursuing lower freight rates so that some shippers can compete more effectively in export markets would jeopardize the ability of the railroads to satisfy domestic needs and would be unwise.

D. The Existence of Other Economic Regulatory Regimes with Broader Access Provisions Does Not Support Involuntary Access in the U.S. Railroad Industry

Several complaining shippers offer a half-hearted argument that widespread involuntary access should be adopted in the rail industry because it has been successfully adopted in the telecommunications and natural gas industries and in Canada. These assertions are not accompanied by careful analysis of the access provisions in the other industries or the reasons for their adoption. More important, the complaining shippers entirely fail to identify the differences in technology and cost structure between railroads on the one hand and telecommunications and natural gas on the other that make these supposed models entirely inapposite. In addition, these shippers ignore the major differences between the U.S. and Canadian rail industries and regulatory structures.

As explained by Professor Willig, Willig Reply V.S. at 19-23, the circumstances justifying adoption of access regimes in the telecommunications and natural gas industries do not exist in the rail industry. In the telecommunications industry, it was determined that demand-based pricing was not necessary to cover the full costs of discrete elements of the network. Therefore, forced access at cost-based prices could be used to address widespread cross-

subsidies in the pricing of telecommunications services without jeopardizing the long-term viability of the network. In the rail industry, it is beyond dispute that cost-based pricing cannot generate sufficient revenues to sustain the rail network. Moreover, the ICC and the Board carefully developed standards for rate regulation that address issues of cross-subsidy and monopoly pricing without the need for cost-based access regulation that would undermine the financial health of the railroad industry.

In addition, the complaining shippers that point to the telecommunications and natural gas industries as models for the railroad industry ignore the costs associated with access regulation, including regulatory costs, that are highlighted by the experience in the telecommunications and natural gas industries. Adoption of access regulation in those industries led to years of contentious litigation before the relevant agencies and in the courts over the appropriate terms of access. (As discussed below, the complaining shippers virtually ignore the complex economic and policy issues that would be raised in implementing an expanded access regime, particularly those related to access pricing.) In the telecommunications industry, it has taken years for the legal challenges over appropriate cost-based access pricing standards to work their way through the agency and the courts, and serious implementation challenges remain.

In addition to the increased regulatory costs and burdens, expanded access regulation in the railroad industry would add substantial operating costs that were not an issue in the other industries. Natural gas molecules are fungible and are delivered through pipelines in which they have been comingled with other natural gas molecules. The end user does not care which particular molecules it receives. This is in stark contrast to the shipment of railroad carload traffic where a receiver expects to receive a specific carload. Since it is unnecessary to keep track of the ownership of individual natural gas molecules as they traverse the pipeline network,

imposing access to the pipeline facilities did not create significant new costs in managing operation of the pipelines. In the telecommunications industry, while each message must be properly routed, advanced technology allows automated routing of messages without the need for extensive scheduling and coordination. In contrast, efficient rail service requires extensive physical classification of carloads and centralized control over operations within a railroad and careful management by the railroad of its infrastructure. The fragmentation of that centralized management of the rail network that would result from involuntary access would impair the efficiency of rail operations and add costs that would have to be borne by all shippers.

A number of shippers suggest that the Board consider adopting some version of the inter-switching requirement currently in effect in Canada which requires rail carriers to switch traffic moving to a point within 30 kilometers of an interchange point between two railroads. The U.S. statute in its current form would not permit the imposition of inter-switching.³² A mandatory switching regime would ignore the existing statutory requirement that reciprocal switching must be “practicable,” 49 U.S.C. § 11102(c), and would also effectively read out of the statute the requirement that the Board find a particular switching arrangement to be in the public interest.

Moreover, there are multiple reasons why Canadian inter-switching is not an appropriate model to apply to U.S. freight railroads. As described in the joint reply comments of Canadian National Railway and Canadian Pacific Railway, the Canadian model arose in a very different context. Inter-switching was adopted in Canada in the early 1900s as the result of a legislative determination, not by regulators acting without a statutory mandate. Inter-switching was not adopted as a mechanism to reduce rates – the relief sought by complaining shippers here – but to

³² Indeed, the NIT League Comments, at 13, acknowledge that “the Canadian switching model could not be adopted wholesale in the United States, based on our current statutory structure.”

prevent overbuilding of the Canadian rail system and to address service issues in a regulatory system where price competition was prohibited. Indeed, although inter-switching remained in place when Canada moved to a more deregulated structure in the 1980s, it was viewed in a subsequent report by a Canadian review panel as an artifact of the earlier era that is inconsistent with current policies, and proposals by Canadian shippers to expand its availability were rejected. Canadian inter-switching also functions in a rail environment that is quite different from that in the United States. Canadian railroads have many fewer interchange locations at which inter-switching could occur than do U.S. railroads, and Canadian railroads carry only a fraction of the traffic volume that could be affected by inter-switching requirements in the U.S. Investments in Canadian facilities where inter-switching occurs were also made with the knowledge of the switching requirement whereas investments have been made in the U.S. based on the absence of a mandatory switching requirement.

Thus, the experience of other industries in which access regulation has been adopted and the Canadian experience do not provide a model for expanded access in the railroad industry, but rather highlight the risks and potential costs that would result from an expansion of access remedies in the U.S. freight rail industry.

III. The Statute Does Not Permit the Board to Grant Shippers' Request for Access on Demand

The complaining shippers argue generally that the Board has very broad discretion in interpreting the statute, that the current rules concerning involuntary access and bottlenecks applied by the Board are (at best) possible constructions of the statute, and that for a variety of policy reasons the Board ought to discard these rules in favor of a new regime that would favor involuntary access and through routes upon demand. The undisguised goal of these shippers is

to encourage regulatory intervention in rail markets that they expect will result in lower rates. Their arguments, however, lack both substance and rigor.

The complaining shippers either misunderstand or ignore the constraints imposed on the Board's discretion by the historical context within which Staggers and ICCTA³³ were enacted, by the statutory language and framework, by the court decisions affirming the ICC and Board rules, and by decades of consistent agency practice. It is clear that Congress did not intend for the Board to use involuntary access to restructure the railroad industry or as a back-door means of providing rate reductions without using existing rate reasonableness standards and procedures. Congress intended access remedies to address conduct-based abuses of market power that cannot be addressed through regulation of unreasonable rates. The current rules properly implement Congress' intent. By contrast, the open-access approach advocated by complaining shippers could not be adopted under the existing statute.

A. Complaining Shipper Proposals Would Not “Increase Competition”

A number of complaining shippers make generic arguments that the purpose of Staggers and ICCTA was to create competition between railroads. Under this theory, the Board has failed to implement Congressional policy because it has not used involuntary access as a means to increase the number of railroads serving points on the various rail networks. What these shippers regard as “competition,” however, appears remarkably similar to the open routing regime that prevailed before Staggers: the complaining shippers want to have multiple choices of railroad to provide service between any two points. Indeed, some shippers would go further by creating the right to determine the interchange points used by railroads through some form of

³³ ICC Termination Act of 1995, Pub. L. No. 104-88, 109 Stat. 803 (1995).

bottleneck relief. The ICC dismissed this view of the Staggers Act more than two decades ago.

As the ICC explained:

[W]e think it correct to view the Staggers changes as directed to situations where some competitive failure occurs. There is a vast difference between using the Commission's regulatory power to correct abuses that result from insufficient intramodal competition and using that power to initiate an open-ended restructuring of service to and within terminal areas solely to introduce additional carrier service.

Midtec Paper Corp. v. Chicago & North Western Transportation Co., 3 I.C.C. 2d 171, 174 (1986).

Any interpretation of the statute that would permit the outcome advocated by complaining shippers was also squarely rejected by the courts in both *Baltimore Gas & Electric v. United States*, 817 F.2d 108 (D.C. Cir. 1987) ("*Baltimore Gas & Electric*") and *Midtec Paper Corp. v. United States*, 857 F.2d 1487 (D.C. Cir. 1988) ("*Midtec*"). AAR's Initial Comments, at 26-30, addressed *Baltimore Gas & Electric* and *Midtec* in detail and that discussion need not be repeated here. Rather, for present purposes, it is sufficient to reiterate that *Baltimore Gas & Electric* categorically rejected the shippers' argument in favor of open access that "[c]ompetition would most efficiently influence rates . . . if all railroads could, by way of through routes, benefit from all of each other's tracks and facilities." 817 F.2d at 114-15. The Court declined shippers' invitation to "direct the ICC to return essentially to its old regulatory regime," *id.* at 114, stating that it saw "not the slightest indication that Congress intended to mandate a radical restructuring of the railroad regulatory scheme so as to parallel [the open access regime of] telecommunications regulation." *Id.* at 115. Similarly, *Midtec* rejected the argument that terminal access and reciprocal switching "were intended by the Congress to increase interrail competition in order 'to offset the very substantial rate advantages given the railroads' under other provisions of the Staggers Act." 857 F.2d at 1505. The Court rejected the notion that

competitive access was “intended to be an alternative means of obtaining rate relief” because that would be “inconsistent with Congress’s intent to deregulate railroad ratemaking in the absence of a market dominant carrier.” *Id.* at 1505-06. Moreover, it concluded that the statute did not permit prescription of “reciprocal switching or terminal trackage whenever such an order could enhance competition between rail carriers,” because doing so “could radically restructure the railroad industry,” a power the Court clearly believed the statute did not grant. *Id.* at 1507.

Shippers often focus on elements of the National Rail Transportation Policy, particularly 49 U.S.C. § 10101(1), to support their assertion that the Board is supposed to manufacture competition between railroads using involuntary access. That provision, however, clearly directs the Board to permit market forces (“competition and the demand for services”) to guide decisions in the rail industry and does not envision a massive restructuring by the regulator that would ignore or thwart those market forces. Moreover, introducing more railroads at a given location is not the same as allowing market forces to govern rates. At a location where there is no competitive abuse, rates are already being governed by “competition and the demand for services.” Regulatory intervention to introduce additional railroads at such a location distorts the operation of market forces by artificially expanding supply. Regulatory distortion of the market is contrary to the goals established by Congress. *See MidAmerican Energy Co. v. STB*, 169 F.3d 1099, 1105 (8th Cir. 1999) (“*MidAmerican*”) (“Underlying these reform efforts was the notion that market forces would operate in the rail industry as they do in other spheres”).

Other provisions of the National Rail Transportation Policy reinforce the points that regulatory intervention is to be kept to a minimum so as to ensure a strong, financially viable rail industry, and that regulation is permitted only where there is a lack of “effective competition.” For example, 49 U.S.C. § 10101(2) makes it national policy “to minimize the need for Federal

regulatory control over the rail transportation system.” Rail rates are to be regulated “where there is an absence of effective competition and where rail rates provide revenues which exceed the amount necessary to maintain the rail system and to attract capital.” 49 U.S.C. § 10101(6). And the Board is directed to “promote a safe and efficient rail transportation system by allowing rail carriers to earn adequate revenues.” 49 U.S.C. § 10101(3). *See also* 49 U.S.C. §§ 10101(4), (5) (directing the Board “to ensure the development and continuation of a sound rail transportation system with effective competition” and “to foster sound economic conditions in transportation and to ensure effective competition”).

Some shippers assert that widespread imposition of involuntary access would be consistent with the goal of reducing the need for regulation, apparently because they believe that doing so would reduce rates by such an extent that rate challenges would be either unnecessary or would be barred by the jurisdictional threshold. This argument is nonsense. Any Board imposition of involuntary access would be a regulatory intervention in the market, substituting the regulator’s judgment for that of the market participants concerning when efficiency gains can be achieved by voluntary access agreements. Replacing one form of regulation with another does not “minimize the need for Federal regulatory control.” Moreover, the Board would potentially need to regulate the access fee in each instance where involuntary access was imposed. This would substantially increase the degree of regulation, not decrease it.

B. Reciprocal Switching and Terminal Access

The Interested Parties Comments contain the most extensive discussion advocating a broad departure from the Board’s current rules concerning reciprocal switching and terminal access, although the primary focus of their argument concerns reciprocal switching. *See* Interested Parties Comments at 20-34. The basic thrust of the Interested Parties’ argument is that the Board has extremely broad discretion to interpret the statute, and therefore can adopt new

rules that would effectively allow shippers to obtain reciprocal switching whenever they want access to a second railroad. According to the Interested Parties, “the Board is free to change its current policy and practice, since the statutory wording, legislative history and precedent regarding § 11102(c) all indicate that the Board has very substantial discretion to determine the conditions under which reciprocal switching may be established.” Interested Parties Comments at 22.

In fact, the Board does not have discretion to make the sweeping changes advocated by the Interested Parties and others. AAR’s Initial Comments, at 27, described the “open routing” regime that existed prior to Staggers, its many defects, and the “overall financial crisis in the railroad industry” that misguided regulation had produced. *See Baltimore Gas & Electric*, 817 F.2d at 110-12. It was against this backdrop that Congress determined to deregulate the industry in the 4R and Staggers Acts. *Id.* at 111-12. AAR’s Initial Comments, at 41-42, also discuss the importance of differential pricing to achieving Congress’s goals in enacting Staggers.

Preventing railroads from engaging in differential pricing would “impede the industry’s efforts to achieve revenue adequacy, which is necessary for long-term capital investment, and ultimately, for a safe and efficient rail system” *MidAmerican*, 169 F.3d at 1109. Further, Congress explicitly stated its intent to “minimize the need for Federal regulatory control over the rail transportation system.” 49 U.S.C. § 10101(3).

The Board simply cannot ignore these fundamental policy objectives embodied in the statute. It would not be possible to reconcile a new “access on demand” regime with these principles or the statutory history. The Board would have to disregard both the repudiation of the prior regulatory regime that the statute represents and Congress’s deregulatory intent. Moreover, as the complaining shippers make no effort to disguise that the expected effect of their

proposals would be to drive down rates, the Board would also have to be willing to substantially curtail or eliminate the instances in which railroads have the opportunity to engage in differential pricing.

In effect, through open access, the Interested Parties would have the Board return the industry to a structure with many of the worst features that were present pre-Staggers. Both *Baltimore Gas & Electric* and *Midtec* make abundantly clear that a return to the old days, as the Interested Parties and some other complaining shippers apparently desire, is not a path that is available to the Board. *See, e.g., Baltimore Gas & Electric*, 817 F.2d at 114 (refusing to direct a “return essentially to [the] old regulatory regime”); *Midtec*, 857 F.2d at 1514 (rejecting proposition that “any shipper served by only one railroad would automatically be entitled to an order requiring reciprocal switching or terminal trackage rights”). Furthermore, as discussed above, both courts also firmly denied that the Board has discretion under the statute to “radically restructure” the industry. *Baltimore Gas & Electric*, 817 F.2d at 115; *Midtec*, 857 F.2d at 1507.

As part of their argument that the Board has broad discretion to abandon its current rules concerning reciprocal switching, the Interested Parties contend that Congress intended that reciprocal switching would be freely ordered to manufacture competition between railroads. Again, the courts have rejected this interpretation of the statute. *Baltimore Gas & Electric* clearly states that the reciprocal switching provisions were included in the Staggers Act because “[t]he Commission’s authority to order such switching arrangements had previously been unclear.” 817 F.2d at 113; *see also Midtec*, 857 F.2d at 1500 (dismissing argument that clarification of ICC powers implied that reciprocal switching “should be granted more liberally” than other forms of competitive access). Moreover, as noted above, *Midtec* expressly rejected the claim that Board could order reciprocal switching “whenever such an order could enhance

competition between rail carriers.” 857 F.2d at 1507. As the agencies and the courts have recognized, and as Congress directed, rail regulators are not supposed to be manufacturing competition where market forces (unhindered by competitive abuse) would not themselves result in such competition. Regulatory intervention to insert an additional carrier into a market is not a market force and is inconsistent with both the directive that market forces should replace regulation to the “maximum extent possible,” 49 U.S.C. § 10101(1) and the directive to “minimize” the need for regulation. 49 U.S.C. § 10101(2).

The Interested Parties also seek to bolster their argument concerning the Board’s discretion through misplaced reliance on *Delaware & Hudson Railway Co. v. Consolidated Rail Corp.*, 367 I.C.C. 718 (1983) (“*Delaware & Hudson*”). Interested Parties Comments at 26-29. They make a two-pronged argument intended to demonstrate that “an extremely broad test – one that would permit reciprocal switching to be established in *every* case where a shipper was served by a single rail carrier – was consistent with the words and purpose of the statute.” *Id.* at 28-29 (emphasis in original). First, the Interested parties contend that the public interest standard applied in *Delaware & Hudson*, based on *Jamestown, N.Y. Chamber of Commerce v. Jamestown, Westfield & N.W. R.R. Co.*, 195 I.C.C. 289 (1933) (“*Jamestown*”), is a “broad standard” that allows permissive grants of access. In fact, as AAR pointed out in its Initial Comments, at 32, *Jamestown* required “some actual necessity or some compelling reason” for granting access. 195 I.C.C. at 292. *Jamestown* specifically held that the public interest required “more than a mere desire on the part of shippers or other interested parties for something that would be convenient.” *Id.*

Second, the Interested Parties apparently maintain that the ICC’s determination in *Delaware & Hudson* that it could ignore other forms of competition and make reciprocal

switching determinations based only on an evaluation of intramodal competition is a valid construction of the statute. *Delaware & Hudson*, they assert, supports the notion that reciprocal switching should be granted when necessary to add an additional rail carrier for service to a given location. This aspect of the *Delaware & Hudson* decision was never a valid interpretation of the statute. The ICC overturned *Delaware & Hudson* in this regard in the first *Midtec* decision. *Midtec Paper Corp. v. Chicago & N.W. Transportation Co.*, 1 I.C.C. 2d 362, 367 (1985). Furthermore, the reviewing court in *Midtec* expressly addressed and rejected the argument, based on *Delaware & Hudson*, that the ICC was “required to look exclusively at intramodal . . . competition” in evaluating claims for reciprocal switching. *Midtec*, 857 F.2d at 1513. According to the Court, “[t]hat would be a pretty silly exercise from an economic or a common sense perspective. Not surprisingly, Congress required no such foolishness.” *Id.* The Court noted with approval the ICC’s reversal of *Delaware & Hudson*, stating that “[t]o the extent that the Commission previously interpreted the intent of [the reciprocal switching section] to focus exclusively on intramodal competition, it is clear to us that it erred.” *Id.* at 1514. To make sure the message was clear, the Court continued: “The practice of considering *only* intramodal competition, to the exclusion of other market forces that effectively constrain a railroad’s market power, is inherently illogical and was congressionally disapproved.” *Id.* In light of the subsequent treatment of *Delaware & Hudson* by both the ICC and the courts, that case cannot be viewed as a valid source of support for the complaining shippers’ proposal to create a new open-access regime.

In sum, nothing in the Interested Parties’ arguments concerning the Board’s discretion demonstrates that the Board has the authority to undertake the radical revision of its rules covering reciprocal switching that the Interested Parties advocate.

As noted above, the shipper comments devote little attention to terminal trackage rights. It is well-recognized that terminal trackage rights are a particularly intrusive form of regulatory intervention. *See, e.g., Midtec*, 857 F.2 at 1502. Nowhere do the comments by complaining shippers seriously challenge that fact or otherwise make the legal case that the Board has discretion to materially expand grants of terminal access.

C. Through Routes

The most extensive shipper discussion of the Board's authority to prescribe through routes under 49 U.S.C. § 10705 appears in the CCCS Comments, at 17-64. Most of that discussion is a lengthy review of the history of the ICC's interpretation of predecessors to § 10705. That discussion highlights the historical tension between the ICC, which continuously sought to expand its authority to prescribe through routes (which, along with other misguided regulatory practices, led to the near demise of the railroad industry by the 1970s), and the courts and Congress, which repeatedly sought to rein in the ICC's desire to maintain an open-routing regime. It has little if any bearing, however, on the questions posed by the Board in its Notice, at 6, concerning § 10705.³⁴

Rather than address the specific questions posed by the Board, the CCCS Comments present a convoluted argument that "the competitive access rules should be seen as an improper limitation on the Board's affirmative duty to prescribe through routes when desirable in the public interest" and that "it should not be necessary for a shipper seeking relief to demonstrate anti-competitive conduct." CCCS Comments at 61. The CCCS Comments purport to find support for these assertions in *Midtec*, but the analysis is deeply flawed for a number of reasons.

³⁴ AAR addressed the Board's specific questions concerning the interpretation of § 10705 in its Initial Comments, at 33-37.

First, the CCCS Comments assert that the *Midtec* decision was based on “the explicitly permissive nature of the terminal trackage rights and reciprocal switching statutes, which use the word ‘may,’” CCCS Comments at 58. The CCCS Comments contrast this “permissive” language with the supposedly mandatory language of § 10705, and draw the conclusion that the Board may not apply the same public interest standard to prescription of through routes, on the one hand, and prescription of terminal access and reciprocal switching on the other. As described in detail in AAR’s Initial Comments, at 29, *Midtec* was decided based on the Court’s multi-faceted analysis of the statutory structure and Congress’s intent, including the explicit recognition that Congress had decided to move from the prior open-routing regime to a deregulatory regime based on preserving the operation of market forces. The Court addressed the mandatory/permissive nature of prescribed reciprocal switching only to refute *Midtec*’s argument that the ICC was required to order reciprocal switching and therefore could not limit the circumstances in which it would do so to those involving competitive abuse. The Court found that because prescription was not mandatory, *Midtec*’s argument failed. More to the point, *Midtec* rejected the key contention of the CCCS Comments that prescription of through routes must be addressed under a separate standard. Instead, the Court held that the Commission appropriately addressed all three forms of access – through routes, reciprocal switching, and terminal access – under a single public interest standard. *Midtec*, 857 F.2d at 1501-02.

Second, the CCCS Comments ignore the holding of *Baltimore Gas & Electric*, which explicitly rejected the argument they now tender. *Baltimore Gas & Electric* affirmed “the Commission’s decision to prescribe through routes and joint rates . . . *only* to remedy or prevent ‘anticompetitive’ acts.” 817 F.2d at 114.

Third, the contention of the CCCS Comments that through routes should be widely prescribed without any requirement for a finding of competitive abuse is flatly contrary to the statutory structure and purpose described above. It is not consistent with the goals of maximizing the influence of market forces and minimizing the need for regulation to prescribe through routes in this manner. Nor is it consistent with the Staggers Act repudiation of the open-routing regime or the principle that railroads must be permitted to engage in differential pricing. Nor can it be reconciled with the repeated admonishment of the courts that the Board does not have the statutory authority to radically restructure the industry.

Fourth, the CCCS Comments ignore the actual statutory language and present an inherently circular argument. The through route provisions of the statute are no more mandatory than the reciprocal switching and terminal access provisions. Section 10705(a)(1), like section 11102, actually uses the word “may”: “The Board may, and shall when it considers it desirable in the public interest, prescribe through routes.” Nevertheless, the CCCS Comments draw the circular conclusion that the Board is obliged to prescribe through routes as “desirable and in the public interest” because prescribing routes is in the public interest. Congress did not define prescribing through routes as “in the public interest.” Rather, Congress granted the Board authority to prescribe through routes when the Board determined that doing so would be in the public interest.

D. Bottleneck Rules

AAR pointed out in its opening comments that there are many statutory factors, including the common carrier obligation and carriers’ rate- and route-setting prerogatives, that form the foundation of the Bottleneck Rules.³⁵ AAR Initial Comments at 38-42. Any proposal to

³⁵ See *Central Power & Light Co. v. S. Pac. Transp. Co.*, 1 S.T.B. 1059 (1996) (“*Bottleneck I*”), clarified, *Central Power & Light Co. v. S. Pac. Transp. Co.*, 2 S.T.B. 235

materially alter the Bottleneck Rules would have to address these statutory predicates. The complaining shippers do not address the importance of these statutory provisions, but instead narrowly focus on *Great Northern Railway Co. v. Sullivan*, 294 U.S. 458 (1935) (“*Great Northern*”).

Shippers assert for a variety of reasons that *Great Northern* no longer binds the Board. The Interested Party Comments, at 45, are illustrative. They make three arguments. First, the Interested Parties argue that *Great Northern* was decided long before passage of the Staggers Act and is inconsistent with the “pro-competition” policies of the Act. Nothing in the Staggers Act affects the key premise of *Great Northern* that “[t]he shipper’ only interest is that the charge shall be reasonable as a whole.” 294 U.S. at 463. This is a basic economic principle. The shipper’s demand for service is for the through transportation, not for segments of through transportation. The Staggers Act and ICCTA direct that regulation of railroads is supposed to be consistent with principles of economics, so it is entirely appropriate that regulation of bottleneck rates should embrace the economic principle established in *Great Northern*. Indeed, if the Board were to ignore this principle, it would be acting contrary to the statutory directive that rates are to be established by “competition *and the demand for services.*” 49 U.S.C. § 10101(1) (emphasis added).

The Interested Parties also argue that *Great Northern* is irrelevant because it supposedly addressed a question of “divisions” rather than a “bottleneck rate.” Interested Parties Comments at 45. The Interested Parties do not explain why this distinction would matter even if it were true. The principle stated in *Great Northern* applies with equal force in either setting. If the rate

(1997) (“*Bottleneck II*”), *aff’d sub nom. MidAmerican Energy Co. v. STB*, 169 F.3d 1099 (8th Cir. 1999).

for transportation is “reasonable as a whole,” it does not matter what the constituent parts of the rate are.

Finally, the Interested Parties argue that the Eighth Circuit “implied” in *MidAmerican* that it would have accepted an interpretation of the statute that “requires railroads to quote ‘bottleneck rates.’” Interested Parties Comments at 45. The Eighth Circuit did not say it would have accepted that interpretation of the statute and it did not accept that interpretation. The Eighth Circuit simply explained the limited role it plays as an appellate court: the question is not how the court would decide a question but whether the Board’s decision was based on a proper interpretation of the statute. *MidAmerican*, 169 F.3d at 1106-07.

IV. The Complaining Shippers’ Alternative Access Proposals Could Not Be Implemented under the Current Statute

Few shipper comments present concrete proposals for the Board to consider as alternatives to the existing access rules. In general, the proposals that were submitted suffer from the common defect that they ignore, to a greater or lesser extent, the statutory framework and the statutory objective of rail regulation based on sound principles of economics. Instead, they harken back to the era of intrusive regulation where routing and access decisions were imposed without regard to market forces or the ability of railroads to earn adequate revenues. AAR briefly addresses the primary proposals below and identifies defects in each.

A. Concerned Captive Coal Shippers

The CCCS present an elaborate set of proposed rules that would govern the prescription of through routes. On their face, the CCCS proposals are not intended as modified approaches to granting involuntary access. Instead, they represent a naked attempt to achieve an alternative form of rate relief by imposing rate-caps based on R/VC ratios. In each case, the “triggers”

proposed by CCCS for obtaining a through route prescription depend on the level of rates charged by the incumbent.

As a result, there is no need to address or consider the CCCS proposals in detail. *Midtec* squarely rejected shipper claims that competitive access remedies could be used as “an alternative means of obtaining rate relief.” 857 F.2d at 1505. If a shipper believes that its rates are unreasonable, the Board has in place adequate procedures (SAC, Simplified SAC, and the Three Benchmark methodology) under which the shipper may seek rate relief. Involuntary access remedies must be limited to those circumstance where the alleged competitive harm cannot be addressed by a rate prescription resulting from a rate-reasonableness proceedings.

B. Arkansas Electric Cooperative Corporation and Westlake Chemical Corporation

AECC and Westlake Chemical propose variants on a rule that would favor involuntary access prescriptions and shift to the railroads the burden of demonstrating why involuntary access should not be permitted. AECC proposes a rebuttable presumption that a shipper who does not currently have “competitive rail service” – which presumably would include any sole-served shipper – could obtain an order prescribing a through route, reciprocal switching, or terminal access. AECC Initial Comments at 9. The railroad would be able to rebut the presumption, but only on limited feasibility grounds. Westlake makes a similar proposal that “the shipper should be allowed to choose any route that is part of one or more railroads’ route map” with the burden on the railroad to show that “the alternative is not reasonable or practical.” Westlake Comments at 29-30.

There are at least two fundamental problems with AECC’s proposal and the Westlake variant. First, both proposals assume that shippers are free to usurp the railroads’ route- and rate-setting prerogatives. That is directly contrary to the statute. *See, e.g., Bottleneck I*, 1 S.T.B. at

1065 (“Giving the shippers the routing control that they seek here would defeat the statutory provisions protecting each railroad’s right to determine, at the outset, which reasonable through routes it will use to respond to requests for service”). Second, both proposals assume that Congress intended to permit access remedies to be used to restructure the industry to provide multi-carrier service wherever a shipper seeks alternative service. The Courts have definitively concluded that the statute does not authorize the Board to engage in such wholesale restructuring of the industry. *Baltimore Gas & Electric*, 817 F.2d at 115; *Midtec*, 857 F.2d at 1507.

C. United States Department of Agriculture

USDA proposes that the Board impose mandatory reciprocal switching “for a distance up to about 30 miles and for a fee of up to 180 percent of the Uniform Rail Costing System variable cost.” Comments of the U.S. Department of Agriculture at 6. Although the USDA proposal is lacking in detail, USDA appears to be proposing that mandatory switching be imposed wherever there is a physical interchange between two railroads.

The USDA proposal appears to be based on the Canadian inter-switching model. As NIT League acknowledges, a proposal like USDA’s “could not be adopted wholesale in the United States, based on our current statutory structure.” NIT League Comments at 13. Moreover, the USDA proposal would involve a radical restructuring of the railroad industry along the lines of the “open routing” regime that existed prior to the Staggers Act. The clear objective of the USDA proposal is to give shippers control over the routing of traffic. As pre-Staggers Act experience proved, open routing as proposed by USDA would have ruinous consequences for railroads and for the vast majority of shippers. In any event, the courts have made clear that Congress did not authorize the Board to use access provisions to restructure the industry in this manner.

D. Mississippi Lime Company

Mississippi Lime Company proposes that 49 C.F.R. § 1144.2 be amended to eliminate the requirement that a showing of anticompetitive conduct must be made in order to obtain competitive access. Initial Comments of Mississippi Lime Company at 8. AAR has detailed throughout its Initial Comments and these Reply Comments the numerous reasons why the Board should not modify the competitive abuse standard. Requiring competitive abuse before granting competitive access is the proper implementation of the statute and the National Rail Transportation policy. It strikes the appropriate balance between permitting market forces rather than regulation to guide decisions to provide service in the rail industry and protecting shippers from abuse of market power. Abandoning the competitive abuse standard would also have a significant negative impact on the ability of railroads to earn adequate revenues and attract necessary investment.

E. Others

A number of commenters propose generally that the Board's Bottleneck Rules should be overturned. These proposals are not accompanied by any meaningful analysis of the law on which the Bottleneck Rules are based but instead seek reversal of the *Bottleneck* cases simply because the complaining shippers would prefer a different outcome. AAR explained in its opening comments that the Bottleneck Rules are based on a number of statutory predicates, including the railroads' common carrier obligation, 49 U.S.C. § 1101(a), the duties to interchange and provide facilities for interchange, 49 U.S.C. §§ 10703, 10742, the carrier's rate-setting prerogative, 49 U.S.C. § 10701(c), and the carrier's route-setting prerogative and the long-standing right to protect its long-hauls, 49 U.S.C. § 10705(a)(1), (2). AAR Initial Comments at 39-42. These statutory provisions constrain the Board's ability to modify the rules

established in the *Bottleneck* cases. Moreover, the policy considerations underlying the Bottleneck Rules reinforce the appropriateness of the current rules.

V. Access Pricing

As the Christensen Study explained, the soundness of any particular access policy cannot be divorced from the issue of access prices. In reviewing proposed changes to the Board's access policy, the Christensen Study concluded that

Based on the experiences of the railroad industry and other industries with legislated access policies, the most challenging and time-consuming aspects of implementing policy changes is working out the details of access terms and pricing, and doing so in a way that enhances, not diminishes, economic efficiency. Not only can the terms of access have an effect on the degree to which open access occurs, but it can have important effects on incumbents' investment behaviors. None of the current policy proposals address these details and, therefore, the risks entailed in implementing these policies as written carry the very real possibility of unintended and economically harmful outcomes.

Christensen Study at ES-42. Messrs. Eakin and Meitzen explain further in their accompanying Statement that "it is clear that the determination of access rates is a critical component of any open access policy." Eakin/Meitzen V.S. at 13.

The issues of involuntary access and access pricing go hand in glove. No serious consideration of changes to the Board's existing access policies could be undertaken without examining the details of implementing those changes, particularly access pricing, and the consequences of any changes in policy. Therefore, it is surprising how little attention the issue of access pricing received from the same shippers who are vigorously urging the Board to adopt a more aggressive regulation of involuntary access. The Interested Parties ignore the issue altogether. A few complaining shippers acknowledge generally that access pricing is a serious issue that would eventually need to be addressed. For example, NIT League concedes that "[e]ven if reciprocal switching arrangements can be established more broadly, the level of the

switching rate remains a serious issue.” NIT League Comments at 14. Others recognize that the issue of access pricing would raise complex and difficult issues. *See* AECC Comments, Nelson V.S. at 23 (“the circumstances under which competitive access may be implemented vary so much that it may be impossible in advance to specify hard-and-fast rules”).

But none of the shippers proposing expanded access even attempts to grapple with the complex economic and policy issues that would have to be addressed in any expanded access regime. As discussed previously, the issue of access pricing in other industries has been a long, drawn-out process that has not produced satisfactory results. Nevertheless, the shippers advocating aggressive access regulation fail to engage in any meaningful way on the important issues that would have to be dealt with in connection with any changes in the Board’s existing access policies. CURE suggests simplistically that “[t]his is an issue that has been confronted by other federal regulatory agencies that oversee partially deregulated industries. We encourage the Board to look to the solutions adopted by the other federal regulatory agencies.” CURE Comments at 13. NIT League provides the unhelpful suggestion that “[a] more simplistic and straightforward approach to addressing switching rate levels would be consistent with the public interest.” NIT League Comments at 14.

Where specific access pricing proposals are made, they fall generally into two categories. The first category includes various general suggestions that a railroad subject to involuntary access should be compensated for its costs, including the costs of the incumbent’s facilities used to provide access. AECC, while recognizing that a set of prescribed rules may not be possible, suggests that “[t]he focus of access pricing should be on the costs of the facilities used, and associated operations, and not on the value to the incumbent associated with the contribution provided by the subject traffic.” AECC Comments, Nelson V.S. at 23. CCCS and WCTL dust

off cost-based access pricing proposals made by shippers 10 years ago in connection with *Review of Rail Access and Competition Issues*, STB Ex Parte No. 575. See CCCS Comments at 93, 95; WCTL Comments at 29, note 10.³⁶ TFI states without further explanation that “[b]ecause reciprocal switching is for relatively short distances, a switch fee set at 180% R/VC offers a simple and fair measurement of a reasonable charge.” TFI Comments at 10. Olin states that “one possible mechanism would be to set access pricing based on the contribution to fixed costs common with other traffic that the incumbent now earns on the traffic in question, and the incremental cost to the incumbent of allowing the entrant to operate over the bottleneck segment.” Olin Comments at 16.

It is unnecessary to address the sparse details of the various cost-based proposals put forward by certain shippers. As Professor Willig explains, all of these proposals suffer from the same fatal flaw. They ignore the principle of demand-based pricing that is critical to the long-term survival of the rail industry. Willig Reply V.S. at 24-25. Messrs. Eakin and Meitzen agree that “one of the fundamental drawbacks of cost-based methods (such as TELRIC) for setting railroad rates is that such methods are inconsistent with differential (i.e., Ramsey) pricing.” Eakin/Meitzen V.S. at 16. The Board and the ICC before it have acknowledged that rail costs

³⁶ CCCS includes the specific proposal in the text of its comments. For terminal access, if an access price is needed, the Board “should establish compensation on a usage basis, based on a sharing of roadway maintenance expenses, dispatching expenses, ad valorem taxes (if applicable) and return of and on net book investment in road property.” CCCS Comments at 93-94. For reciprocal switching, the Board “should establish compensation to equal the operating and maintenance expenses attributable to the switching, plus a share of the return of and on net book investment in road property and equipment used by the railroad in providing the switching, allocated on a usage basis.” *Id.* at 95. CCCS also proposes a form of cost-based pricing in the context of prescribed through routes by suggesting that the Board should establish a new rule that if the railroads are unable to agree on a division of through revenues, the through revenues on the prescribed through route would be divided based on the relative miles on each railroad. Since there is a strong relationship between a railroad’s variable costs and the length of haul, a mileage prorate of revenues tends to allocate revenues based directly on relative variable costs.

cannot be evenly spread among shippers.³⁷ Differential pricing is necessary to ensure full cost recovery. Arbitrary allocation of costs for the use of rail facilities will drive some shippers from the rail network while increasing the fixed costs of the rail network that must be recovered from the remaining shippers. In addition, cost-based pricing of access would lead to inefficient use of rail facilities by divorcing the price of access from the value of the service provided. Use of rail facilities would be determined by arbitrary cost-based allocations rather than the demand for the underlying service.

The second category of access pricing proposals involves setting access prices based on terms that have been voluntarily agreed to by railroads in other settings, including merger proceedings. DuPont suggests that the “Board should review the switching rates that the rail carriers charge each other when they establish interchange agreements and fees at terminals already existing today.” DuPont Comments at 12. TFI argues that “switch fees should not be any greater than what the railroads themselves charge each [*sic*] under their various voluntary arrangements for handling another railroad’s cars.” TFI Comments at 11. Olin suggests that the Board consider basing access prices on the model of the trackage rights pricing mechanism imposed as a condition to the BN/Santa Fe merger. Olin Comments at 16. Westlake refers to the trackage rights fee established in the Conrail merger proceeding as an example of a model for setting access prices in involuntary access cases. Westlake Comments at 39.

These proposals do not provide a meaningful basis for addressing access pricing. The access terms reached voluntarily by railroads are generally based on the circumstances specific to the particular arrangement and they reflect specific objectives and conditions that would not be relevant in the context of involuntary access. For example, prices in voluntary trackage rights

³⁷ See, e.g., *Coal Rate Guidelines, Nationwide*, 1 I.C.C. 2d 520, 526 (1985).

arrangements may reflect the expectation that both railroads will obtain reciprocal benefits. As the Board explained in a recent rate reasonableness case, “[c]arriers with ongoing commercial relationships enter into a variety of arrangements at different places, and a low-cost trackage rights fee by one carrier for a particular line segment may be offset by a low-cost trackage rights fee by the other carrier at another location.” *Arizona Electric Power Cooperative v. Burlington Northern & Santa Fe Railway Co.*, STB Docket No. 42058, slip op. at 13 (served March 15, 2005) (“*AEPCO*”). Access prices voluntarily agreed to in circumstances where both carriers obtain a reciprocal benefit would be very different from prices in situations where only one railroad obtained a benefit from the arrangement. It would therefore be arbitrary to establish access pricing in involuntary access cases based on pricing models developed under completely different circumstances.

Similarly, access prices established in merger proceedings are based on objectives and conditions that would be irrelevant in the context of involuntary access. The proponents of a rail merger may agree to a particular trackage rights arrangement to address particular circumstances created by the merger or as a *quid pro quo* for obtaining the potentially large benefits from the proposed consolidation. As the Board recognized in the *AEPCO* decision cited above, these arrangements often do not “reflect the full cost of ownership” of the facilities at issue. *AEPCO*, slip op. at 11. Pricing arrangements agreed to by parties seeking merger approval would have no relevance to the proper price for involuntary access.

Finally, none of the complaining shippers considers the revenue impact of their proposed pricing regimes on the railroads or the effect of such pricing standards on the ability and incentive of railroads to continue making investments in rail infrastructure. The obvious objective of the complaining shippers is to obtain lower rates by setting limits on the amount that

an incumbent railroad can charge for the use of facilities needed to serve particular shippers. But the complaining shippers ignore altogether the impact of the reduced revenues that would result from such an approach on railroad investment and the ability and incentive of railroads to meet the growing demand for freight transportation service. The failure of the complaining shippers to address this critical issue means that their proposals for aggressive new access regulation are not worthy of serious consideration.

In short, the complaining shippers have failed to show that enhanced access relief is appropriate or workable.

VI. Complaining Shippers Ignore the Widespread Adverse Impacts of Their Access Proposals

Although the Board specifically requested commenting parties to address the “positive and negative impact” of “any proposed change” in access policies, the complaining shippers essentially ignore this request, particularly as it applies to the negative impacts of changes in access policy on the railroad industry, the shipper community, and the U.S. economy as a whole. An omission of this magnitude can hardly be viewed as an inadvertent oversight. The fact is that the complaining shippers do not want to address the adverse impacts of their access proposals because they are very substantial and the complaining shippers have no way of explaining them away.

A. The Adverse Impact of the Hoped for Revenue Transfer

As noted in section II.A, the complaining shippers candidly acknowledge that their goal is to reduce rail rates through involuntary access, and they do not deny that the inevitable consequence of such rate reductions would be to siphon revenues away from the railroads. No one knows with precision how much revenue would be transferred from railroads to shippers, but

the uncertainty does not mitigate the fact of harm to railroads, shippers and the economy. In his Verified Statement supporting AAR's initial comments, William Rennie stated

To provide one estimate of the size of the problem [forced access] could create, if the rates for all traffic currently moving under rates subject to regulation (rates with an R/VC ratio of > 180) were reduced by forced access to rates with an R/VC ratio equal to 180, the railroad industry would lose \$5.2 billion annually in revenue. Since traffic and variable costs would remain constant, reductions in revenue would fall straight to the bottom line, reducing contribution by approximately 30 percent

Rennie Initial V.S. at 19 (footnote omitted). The consequence of this revenue shortfall is that

the railroads would face the prospect of having to meet incremental demand for capacity with less cash flow available for capital investments. It would quickly become clear to investors and lenders that the regulatory system would permanently prevent the industry from earning its cost of capital. The result, inevitably, would be either deterioration of the US freight railroad network, as occurred during the last period of over-regulation, or a requirement that the government provide billions of dollars in funding for infrastructure, as is the case for most railroads overseas.

Id. at 21.

To the extent that they even allude to the impacts of reduced revenues, the complaining shippers' attitude is "don't worry about it." For example, the OPPD Comments argue that the Board need not worry about the impact of new access regulation on railroad investment in infrastructure because the railroads are financially healthy and have enough revenues to support reinvestment. *See* OPPD Comments pages 28-31. The OPPD Comments do not even attempt to address what would happen as a consequence of reduced railroad revenues if the Board were to adopt more aggressive access regulation that drove railroad rates down. AECC has a slightly different version of the "don't worry about it" argument. AECC claims that experience with investments in intermodal infrastructure and in PRB facilities shows that railroads continue investing in infrastructure even where there is competition. AECC Comments, Nelson V.S. at

24. But that argument does not address the shippers' hope and expectation that reduced rates will translate into fewer dollars to invest.

The complaining shippers also fail to grapple with the fact that railroads confronted with involuntary access will not only have reduced resources to make new infrastructure investments but also less incentive to invest in new facilities. Railroads invest in facilities based on the expected returns on their investment in those facilities. Where the railroad might be required to make the facility available to a competitor at an unknown price in the future, the return could become too uncertain and speculative to justify the investment. The reduced incentive to invest is just one of the many unintended consequences that could flow from a regime of involuntary access.

The prospect of reduced private capital to invest in the nation's freight rail infrastructure is particularly ominous at the present time when discussions of future transportation infrastructure needs are dominated by warnings of impending crisis.³⁸ The privately funded rail infrastructure is not crumbling, but it requires a steady infusion of funds to maintain and will require still more funds to expand. Given the vast demands for highway funding, it is not realistic to expect that the federal government would take over the role of rail infrastructure funding in the future if the railroads themselves fall short. The railroads hold out the prospect of

³⁸ *See, e.g.*, URBAN LAND INSTITUTE & ERNST & YOUNG, INFRASTRUCTURE 2011: A STRATEGIC PRIORITY (2011) (discussing massive unmet funding requirements for transportation infrastructure investment); MILLER CENTER OF PUBLIC AFFAIRS, UNIVERSITY OF VIRGINIA, WELL WITHIN REACH: AMERICA'S NEW TRANSPORTATION AGENDA 20 (2010) ("estimates of the average annual gap between current sources of funding for transportation infrastructure and funding needs to maintain and improve the system range from our \$134 billion to \$262 billion per year for roughly the next quarter century (specifically, 2008–2035). And chronic underfunding, especially to maintain existing infrastructure, exposes the system over time to 'elegant degradation' – an engineering term that refers to the slow deterioration of machines when they are subjected to constant, repetitive stress").

paying their way in the future. The Board should not entertain any potential change in access policy that jeopardizes that prospect.

The Board should also give weight to the Congressional Research Service's observation that "[r]ailroads' inherent advantage in hauling large volumes of heavy freight long distances is especially beneficial during periods of high fuel prices, rising trade volumes and growing demand for raw material transport."³⁹ Any regulatory actions that adversely affect investment in rail infrastructure would reduce the public benefits flowing from the inherent advantages of rail.

B. The Adverse Impact on Rail Operations and Service

Railroad witnesses explained in verified statements supporting the initial comments of AAR members that a regime of forced interchange and forced access would have widespread adverse impacts on rail operations and on the quality of service received by shippers.⁴⁰ As with the adverse effects on investment, complaining shippers overwhelmingly ignore the issue of impacts on service and operations.

One rare exception is the Interested Parties Comments, which assert that "Capacity constraints in the rail industry particularly justify a reexamination of the Board's rules on reciprocal switching." *See* Interested Parties Comments at 36. According to the Interested Parties, "[t]o the extent the rail system is experiencing or will soon experience certain capacity constraints, particularly those constraints resulting from operations at specific choke points in the rail system, the increased use of reciprocal switching could provide additional efficiencies." *Id.* at 37. This unsubstantiated speculation is flatly contradicted by the detailed testimony of Messrs.

³⁹ JOHN FRITTELLI, CONGRESSIONAL RESEARCH SERVICE, RAILROAD ACCESS AND COMPETITION ISSUES 12 (2011).

⁴⁰ *See* Opening Comments of Norfolk Southern Railway Company, Verified Statement of Mark D. Manion ("Manion Initial V.S."); Comments of Union Pacific Railroad Company, Verified Statement of Lance M. Fritz ("Fritz Initial V.S.").

Manion and Fritz, who explain why various forms of involuntary access, including involuntary reciprocal switching, would undermine existing operating efficiencies and drive up rail costs.⁴¹

In his Reply Verified Statement supporting AAR's Reply Comments, Mr. Rennie addresses in detail how involuntary access proposals would jeopardize the efficiency gains and costs savings railroads have achieved as a result of their ability to plan for and control the flow of traffic over their networks. As Mr. Rennie explains,

It is essential to understand that forced interchange and forced access run directly counter to efforts to operate efficient "scheduled railroads" and would likely force railroads to return to the inefficient operations that existed prior to 1980. Allowing shippers to shift traffic frequently between carriers and to specify varying interchanges would make network planning much more difficult. Proper network planning and management is required to build efficient, repetitive blocks of traffic and to move that traffic either through single-line service or, where that is not possible because the shipper and receiver are located on separate railroads, through a limited number of major interchange points. . .

It is also important to understand that interchange is a complex and costly operation, and that inserting interchanges into what are now single-line routes would inevitably increase costs for all shippers and degrade service.

Rennie Reply V.S. at 12 (emphasis omitted).

The potential magnitude of inefficiencies and service problems resulting from a regime of involuntary access argues strongly against any change in access policy. The complaining shippers' unwillingness even to address these problems underscores the fact that their narrow focus on rate relief is not consistent with the broader public interest in a financially strong and efficient rail freight system.

⁴¹ See Fritz Initial V.S. at 20-26; Manion Initial V.S. at 10-14, 16-18.

C. Adverse Impact on Current Administration Transportation Policy

The Board should recognize that the adverse impacts on freight rail investment, operations and service resulting from involuntary access would also frustrate key aspects of current Administration transportation policy.

First, President Obama's Administration has emphasized the need for additional capacity to meet future demands for freight transportation. The September 2010 update to the Federal Railroad Administration's National Rail Plan identifies various factors "that demonstrate the importance of efficient and effective rail infrastructure to the Nation's economy":

These include a dramatic increase in population, particularly in high-growth areas, and the concomitant need for transporting more freight and improving safety. Such an infrastructure will also reduce fuel consumption, which, in turn, will enhance our national security by diminishing our reliance on foreign oil.⁴²

Building a rail infrastructure that will transport more freight and attract traffic from the highways will require an increased level of capital investment by freight railroads. As explained above, involuntary access threatens both the availability of capital dollars and railroads' willingness to invest them.

Second, the Obama Administration has made enhancing the nation's rail passenger system a priority.⁴³ The nation's intercity passenger network, as well as many commuter rail operations, depends on a sound rail freight network. Seventy-one percent of the miles travelled by Amtrak are on rail lines owned by freight railroads.⁴⁴ If freight railroads' ability to reinvest in

⁴² FED. R.R. ADMIN., DEP'T OF TRANSP., NATIONAL RAIL PLAN: MOVING FORWARD 3 (2010)

⁴³ See, e.g., FED. R.R. ADMIN., U.S. DEP'T OF TRANSP., VISION FOR HIGH SPEED RAIL IN AMERICA (2009).

⁴⁴ AAR, *Freight and Passenger Rail: Finding the Right Balance*, at 1 (March 2011).

rail infrastructure is compromised due to the revenue loss from involuntary access, passenger rail service on freight railroads will decline.

Enhanced passenger rail cannot be allowed to compromise the service of the freight railroads over which passenger rail operates. As AAR explained in a recent background paper, “expanding passenger rail will require a continuing partnership between freight and passenger railroads. Key factors will be ensuring that there is enough rail capacity and a regulatory and legal framework that protects the needs and responsibilities of both parties.”⁴⁵ Freight railroads will not be able to play an appropriate role if involuntary access requirements cause operational difficulties that reduce existing capacity, reduce funds available for maintaining existing capacity, and discourage future investment in needed capacity expansion.

Third, in addition to promoting increased rail capacity to serve a growing population over the longer term, the Administration has emphasized a near term need to have the infrastructure in place to support a doubling of exports of U.S. products within the next five years.⁴⁶ The Report to the President on the National Export Initiative recognizes that “[m]aintaining a globally competitive, user-focused U.S. supply chain infrastructure is critical to the success of the [National Export Initiative] and to sustained American economic growth.” *Id.* at 19. Accordingly, the “Departments of Commerce and Transportation have entered into a Memorandum of Understanding to work together and with stakeholders to develop and implement a comprehensive competitiveness focused national freight policy.” *Id.* The Export Promotion Cabinet will analyze the Nation’s freight transportation system “to ensure that investments are meeting the needs of the Nation’s exporters.” *Id.* at 20.

⁴⁵ *Id.* (emphasis omitted).

⁴⁶ EXPORT PROMOTION CABINET, REPORT TO THE PRESIDENT ON THE NATIONAL EXPORT INITIATIVE: THE EXPORT PROMOTION CABINET’S PLAN FOR DOUBLING U.S. EXPORTS IN FIVE YEARS 1 (2010).

Rail is a critical component of the export supply chain and, as previously noted, the investment in the rail component is made by the freight railroads themselves. Adopting involuntary access measures that siphon revenue away from freight railroads would undermine the goal of strengthening the rail component of the supply chain that is essential to meeting the goals of the National Export Initiative.

It would also be inconsistent with the Administration's general regulatory policy for the Board to implement new regulations that would benefit a handful of shippers at the expense of the broader public interest. The President recently directed federal agencies to "identify and use the best, most innovative, and least burdensome tools for achieving regulatory ends. It must take into account benefits and costs, both quantitative and qualitative."⁴⁷ Shippers' proposals for expanded access completely ignore the costs that would be imposed by their proposed change in regulation. As reflected in the Administration's transportation policy goals, America needs a regulatory system that recognizes the high capital costs of providing rail transportation, encourages investment in the rail network to promote the nation's economic growth and competitiveness, and promotes efficient rail transportation. Such a regulatory system cannot exist if a small number of shippers succeed in imposing regulatory, operational, and monetary burdens on the freight rail system as a whole.

It would not be sound regulatory policy for the Board to adopt changes in its approach to access that would not comport with Administration policy goals.

⁴⁷ Exec. Order No. 13563, "Improving Regulation and Regulatory Review," 76 Fed. Reg. 3,821, 3,821 (Jan. 21, 2011). The President's Executive Order reaffirmed the principle announced in a 1993 Executive Order that "regulatory policies that recognize that the private sector and private markets are the best engine for economic growth. . . ." See Exec. Order No. 12866, "Regulatory Planning and Review," 58 Fed. Reg. 51,735, 51,735 (Oct. 4, 1993).

CONCLUSION

The complaining shippers have approached this proceeding in the spirit of celebrants at a “whack the piñata” event. Maybe if they whack away hard enough, a treat will fall out. The flaw in this approach, as Professor Willig points out, is that “they are focused on advocating a position that is in the best interest of various individual shippers or shipper groups without consideration for economic efficiency and the performance and viability of the industry and rail shippers as a whole.” Willig Reply V.S. at 2-3. The Board must keep its focus on these broader goals.

In doing so, the Board should bear in mind that there is nothing about this proceeding that suggests it is appropriate for railroads and shippers to try to meet each other halfway or find a middle ground on matters of involuntary access. The reason is simple: Congress, the ICC and the Board itself have already found the middle ground on the issue of involuntary access, and it is the ground we stand on today. If competitive abuse arises, access remedies are available to address them. In the meantime, it should be a cause for relief if not modest celebration that: (1) there has not been a widespread need for access remedies; (2) railroads have made meaningful progress to financial stability; (3) railroads are committed to maintaining and expanding their networks if they have the resources to do so; and (4) the nation’s economy can expect to continue to benefit from a safe and efficient rail transportation network if railroads are allowed to run it in the manner that the Staggers Act contemplated.

Respectfully submitted,

Of Counsel:

Paul A. Guthrie
J. Michael Hemmer
Paul R. Hitchcock
James A. Hixon
Theodore K. Kalick
Jill K. Mulligan
Roger P. Nober
John P. Patelli
David C. Reeves
Patrick Riley
Louise A. Rinn
John M. Scheib
Peter J. Shutz
Greg E. Summy
Gayla L. Thal
Richard E. Weicher
W. James Wochner



Louis P. Warchot
Association of American Railroads
425 3rd Street, S.W.
Suite 1000
Washington, D.C. 20024
(202) 639-2502

Samuel M. Sipe, Jr.
Anthony J. LaRocca
Frederick J. Horne
Steptoe & Johnson LLP
1330 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 429-6486

*Counsel for the Association of
American Railroads*

May 27, 2011

EAKIN/MEITZEN VERIFIED STATEMENT

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

**STB EX PARTE NO. 705
COMPETITION IN THE RAILROAD INDUSTRY**

**JOINT VERIFIED REPLY STATEMENT
OF
B. KELLY EAKIN
AND
MARK E. MEITZEN**

CHRISTENSEN ASSOCIATES

May 27, 2011

I. Introduction

We are two of the principal authors of the Christensen Associates' railroad competition studies. With our colleagues, A. Thomas Bozzo, Douglas W. Caves, Laurits R. Christensen, Philip E. Schoech and Joseph A. Swanson, we produced *A Study of Competition in the U.S. Freight Railroad Industry and Analysis of Proposals that Might Enhance Competition* in November 2008 (revised November 2009) for the Surface Transportation Board.¹ We produced two other studies for the STB, the *Supplemental Report on Capacity and Infrastructure* in March 2009, and *An Update to the Study of Competition in the U.S. Freight Railroad Industry* in January 2010. More recently, our article, "Railroad Performance Under the Staggers Act," was published in the Winter 2010-2011 volume of *Regulation*. Our biographies appear in the Appendix.

STB Studies and Subsequent Research

Our assignment in the STB competition studies was to conduct a rigorous investigation into the state of competition in the U. S. railroad industry; determine whether the recent increases in rail rates reflected the appropriate responses to changing market conditions or an increase in the exercise of market power by the railroads; and to provide analysis of the possible competitive impacts of policy reforms. Our assignment in the capacity and infrastructure study was to compare Freight Analysis Framework (FAF) commodity flow forecasts against other macroeconomic forecasts and also against a number of commodity-specific forecasts to develop alternative forecast scenarios of future freight rail volumes.

¹ Drs. Bozzo and Schoech also contributed to these comments.

In period since we submitted our studies, we have undertaken an assessment of the performance of the freight railroad industry in the post-Staggers era.² Our assessment shows a very solid performance by the railroad industry in the post-Staggers era, with both shippers and the railroads benefiting. Furthermore, we are of the opinion that continued oversight (the regulatory backstop established by the Staggers Act) is still important.

Assignment in the Current Proceeding

In the current proceeding, various parties have submitted interpretations and critiques of our reports. In March 2011, we were retained by the Association of American Railroads (AAR) to review the initial comments filed in this proceeding. In this reply statement, we clarify our results and conclusions as they have been referred to and relied on in this proceeding. Also, where appropriate, we present some of our analysis subsequent to the release of our studies that is responsive to the comments in this proceeding.

We address comments by various parties that have referred to our studies on rate issues, market power, revenue sufficiency and open access. To summarize our reply:

- Rail rate increases in recent years are largely explained by markets reacting to slowed productivity growth and increased input prices.
- The exercise of market power does not appear to have increased in recent years.
- The financial condition of the railroads improved around 2006, and remained relatively stable between 2006 and 2008, but does not show excessive profits.
- Our conclusions on open access policies were premised on the assumption that the terms of access reflected the result of voluntary negotiations between railroads.
- Relative to policies such as the requirement to quote bottleneck rates, incremental policies such as reciprocal switching and terminal agreements are less costly in terms of loss of economic efficiency and have a lower potential of adverse changes to the industry.

² See for example, B. Kelly Eakin, A. Thomas Bozzo, Mark E. Meitzen, and Philip E. Schoech, "Railroad Performance under the Staggers Act, *Regulation*, Winter 2010-2011, pp. 32-38.

- However, any open access policy will require that the complex and contentious issues of access pricing and operational disruptions be addressed.³
- The questions of access pricing and operational issues add a significant degree of uncertainty to the outcomes of these policies.

II. Analysis of Rate Increases

A number of comments in this proceeding have noted the increase in rail rates that began in the early 2000s.⁴ Our investigations have confirmed that real rates have been increasing since 2004 (and nominal rates have been increasing since 2001).

Our analysis of the railroad industry indicates that the slowdown in productivity growth and increase in input prices explain, in large part, the rate increases. This finding is clearly reflected in the Railroad Cost Adjustment Factor adjusted for productivity (RCAF-A) and the Railroad Cost Recovery Index. The productivity slowdown is documented by the rail productivity adjustment factor, which is a component of RCAF-A.⁵ Our econometric analysis of railroad costs also indicates a productivity slowdown.⁶ Furthermore, this finding has been corroborated by additional analysis conducted since our reports. We have found that railroad productivity grew by more than 6 percent per year between 1986 and 1996, but has slowed dramatically to a pace of about 2.3 percent per year since 1996.⁷

³ Consideration of operational issues was not in the scope of our STB studies.

⁴ For example, see Consumers United for Rail Equity (CURE), p. 6; National Industrial Transportation League (NITL), p. 4.

⁵ Christensen 2010 Update, p. 2-8, Figures 2-4 and 2-5.

⁶ Christensen 2010 Update, pp. 3-11 to 3-13.

⁷ Philip E. Schoech and Joseph A. Swanson, "Patterns of Productivity Growth for US Class I Railroads: An Examination of Pre- and Post-Deregulation Determinants," Christensen Associates Working Paper, November 2010; and B. Kelly Eakin and Philip E. Schoech, "The Distribution of the Post-Staggers Act Railroad Productivity Gains," Christensen Associates Working Paper, December 2010 (both at http://www.lrca.com/topics/staggers_act.aspx).

The joint comments of the Alliance for Rail Competition, et. al., (ARC) state that our report “observes an unexplained but noticeable decline in the productivity beginning in 2003 and continuing through 2008.”⁸ However, in our subsequent research noted above, we have uncovered several factors underlying the productivity slowdown. The primary causes of the slowdown in productivity growth are: a slowed rate of technological change; fewer opportunities to weed out inefficiencies; few opportunities to increase traffic density; and the reduction in the economies of density means there is smaller impact on productivity for any given increase in traffic density.

The slowed rate of technological change and decreasing strength of economies of density is reflected in the econometric cost function we reported in our study. Railroad operating statistics provide direct corroborating evidence of slowing density in recent years.⁹ Revenue ton-miles which had grown at an annual rate of 4.5 percent between 1986 and 1995, slowed to a 2.7 percent rate between 1995 and 2004, and further slowed to 1.7 percent per year between 2004 and 2008. Likewise, length of haul grew by 2.7 percent per year between 1986 and 1995, by 0.8 percent between 1995 and 2004, and by only 0.5 percent between 2004 and 2008. The railroads were able to shed miles of road at a pace of 2.9 percent per year between 1986 and 1995, but that slowed to 1.2 percent per year between 1995 and 2004 and further slowed to only 0.9 percent between 2004 and 2008. The sum total is that, since 2004, railroad traffic density, as measured by revenue ton-miles per mile of road, has been increasing by only about a third of the rate (2.6 percent per year) that it was between 1986 and 1995 (7.4 percent per year).

⁸ ARC, p. 18, footnote 31.

⁹ *Ten Year Trends*, Volumes 7, 17 and 27, Association of American Railroads.

III. Conclusions on Market Power

A central issue our study addressed was whether railroads were exercising increased market power, particularly considering increases in revenue per ton-mile (RPTM) at the end of the study period. Market power is defined as the ability of a firm to price above marginal cost. Some parties contend that the observed rate increases constituted increased exercise of market power, in some cases based on data we presented.¹⁰ Our basic finding, however, was that the industry's exercise of market power was not increasing, since average annual increases in RPTM were no faster than increases in railroad industry marginal cost.

The Lerner index, a standard economic measure of market power, is nothing more than a representation of price to marginal cost and relates directly to the definition of market power. We noted theoretical and practical challenges to the use of the Lerner index raised in a Federal Trade Commission (FTC) discussion paper (also cited in the Arkansas Electric Cooperative Corporation's (AECC) submission by Michael A. Nelson) and we explained how our analysis addressed them.¹¹ Chief among the theoretical challenges is establishing a benchmark for markups, since the railroad industry's cost structure requires some exercise of market power—i.e., economies of density imply that marginal cost pricing will not recover total costs. We discuss the “revenue sufficiency” benchmark we employed below. The main practical consideration, the measurability of marginal cost, was addressed by our econometric modeling of industry costs.

¹⁰ For example, see Arkansas Electric Cooperative Corp. (Nelson Verified Statement, pp. 9-12); National Industrial Transportation League, p. 4.

¹¹ Christensen 2008, pp. 10-7 to 10-8.

The presence of significant input price increases does not invalidate the Lerner index measurement.¹² On the contrary, relating price and cost changes is especially important considering the railroad input price increases which occurred alongside the increases in RPTM. In a perfectly competitive market, we would expect input price increases to be passed through and cause increases in RPTM, other things equal. So the key question is not whether RPTM increased, but rather whether RPTM increased faster than the marginal cost of a ton-mile.

Here, we summarize how our findings on railroad costs lead to our market power conclusions.¹³ The marginal cost of a revenue ton-mile has been increasing in recent years. This reflects the combined effects of productivity growth slowdown and increases in input prices. Marginal cost has increased more rapidly than have average costs, indicating that economies of density are not as strong. An implication of weaker economies of density that occur at greater levels of density is that a lesser markup over marginal cost is needed to achieve sufficient revenues. This is consistent with the finding that the exercise of market power as indicated by the Lerner index has decreased.

The commodity-level price and cost data we presented in our 2010 update does not support claims that railroads increased market power from 2006 to 2008, as Mr. Nelson purports to show.¹⁴ Using coal as an example, Table 5-6 reported an increase in the median adjusted marginal cost of coal in constant 2000 dollars from 0.8 cent per ton-

¹² An appropriate interpretation of the FTC discussion document's statement that "exogenous economic factors... could result in dramatic and misleading changes" in the Lerner index, cited by Mr. Nelson (AECC Nelson Verified Statement, p. 10), is that failure to correctly account for shifts in exogenous factors is problematic, not the presence of shifts per se.

¹³ See Christensen 2010 Update, Chapter 4.

¹⁴ AECC Nelson Verified Statement, pp. 10-11.

mile for the 2004-2006 period to 0.9 cent per ton-mile for 2007-2008.¹⁵ The unrounded data underlying the table show that the actual percentage change in coal marginal cost was 18.7 percent between the two periods.¹⁶ The decline in the median Lerner index implies that the corresponding increase in RPTM was smaller. In addition, while not exactly comparable to the Table 5-6 costs, the annual percentage changes in “real” coal RPTM reported in Table 6-1¹⁷ also are consistent with declining markups between the 2004-2006 and 2007-2008 periods. The real RPTM growth rates imply that real RPTM for coal was on average 16 percent higher in 2007-2008 than in 2004-2006.¹⁸ Moreover, Table 6-1 shows major commodity groups (including coal) and overall industry RPTM all lagged industry marginal cost growth over the 2001-2008 period.

We note that the Lerner index is not the only market power measure we examined in the course of our study. We also examined the distribution of the revenue to variable cost ratio (R/VC) from the Carload Waybill Sample (CWS), since the URCS variable costs in R/VC do not depend on our econometrically estimated industry cost function. We found that URCS variable costs “generally increased faster than revenues between 2005-06 and 2008” and that the R/VC measure also did not “indicate increasing exercise of market power by the Class I railroads.”¹⁹

¹⁵ Christensen 2010 Update, p. 5-17.

¹⁶ The raw data for Table 5-6 show that the reported 2004-06 cost was rounded up from 0.77642 cent, and the 2007-08 cost was rounded down from 0.92168 cent.

¹⁷ Christensen 2010 Update, p. 6-2.

¹⁸ Using a base of 2003=1, the growth rates yield an average coal RPTM index of 0.9718 for 2004-06 and 1.1254 for 2007-08. Unlike Mr. Nelson’s calculations, this correctly accounts for both the 22.1 percent annual increase from 2007 to 08 and the much smaller 2.2 percent increase from 2006 to 2007.

¹⁹ Christensen 2010 Update, pp. 5-18 to 5-19.

Conscious Parallelism

As some commenters have noted, we indicated that the industry conditions, particularly the similarities of marginal cost, suggest conditions favorable for parallelism.²⁰ We noted the conditions and the possibility of conscious parallelism because of the potential implications for the competitiveness of the markets.²¹

It is difficult if not futile to attempt to prohibit the recognition of similarity of situations among market participants. Instead, the appropriate response to market situations conducive to parallelism is continued oversight. In fact, since our reports, we have advocated just that, within the current regulatory framework. In our *Regulation* article we wrote “the Class I railroad industry has become very concentrated, essentially resulting in a pair of duopolies with many shippers left captive to a single railroad. Thus it seems that the regulatory backstop established by the Staggers Act to protect captive customers is every bit as important today as it was in 1980.”²² That is, it is our conclusion that because market conditions are conducive to parallelism, regulatory oversight is needed.

However, the existence of favorable conditions, per se, does not imply anticompetitive behavior. For example, in our 2010 update, low markups for coal were driven largely by the western railroads, implying that “the joint BNSF-UP line serving Powder River Basin (PRB) mines is producing reasonably effective competition at origin for PRB coal shipments.”²³

²⁰ For example, see Olin, p. 20.

²¹ Christensen 2008, p. 9-29, footnote 45.

²² B. Kelly Eakin, A. Thomas Bozzo, Mark E. Meitzen, and Philip E. Schoech, “Railroad Performance under the Staggers Act, *Regulation*, Winter 2010-2011 p. 38.

²³ Christensen 2010 Update, p. 5-16.

IV. Revenue Sufficiency and the Exercise of Market Power

Commenters have noted our conclusion that railroads have become revenue sufficient in recent years.²⁴ In our reports we have presented a measure of “revenue sufficiency” for the railroad industry. We were motivated to develop the measure of revenue sufficiency in order to evaluate how the change in the exercise of market power compared to what was warranted by changing cost conditions.

We deliberately avoided the term “revenue adequacy” to avoid confusion or suggestion that our analysis replaced or otherwise reflected on the determination of revenue adequacy by the STB—i.e., our measure of revenue sufficiency is not a substitute for the STB’s revenue adequacy. In fact, in our original report we explicitly stated that the revenue sufficiency measure “is revealing, but should not be viewed as the definitive indicator of revenue adequacy.”²⁵

Our measure of revenue sufficiency is simply average revenue (i.e., RPTM) divided by a measure of average total cost. We used revenue data directly from the Rail Form 1 (Schedule 210 Line 3 Column D). For cost, we used our calculations for the variables defined for our econometric cost function plus costs associated with quasi-fixed capital.²⁶ When we updated the study, we discovered that some way and structure maintenance expenses had not been included in the cost calculations. We corrected the cost calculations in the updated report and provided explanation of the correction.²⁷ Including these costs reduced the ratio, by about 3 percentage points, but the same pattern over time resulted.

²⁴ For example, see AECC Nelson Verified Statement, p. 9; NITL, p. 7.

²⁵ Christensen 2008, p. 10-6, footnote 6.

²⁶ See Christensen 2008, p. 10-6, footnote 6.

²⁷ See Christensen 2010 Update, pp. 3-1, 3-3, 4-1, and 4-5, footnote 4.

As noted above, our revenue sufficiency measure is an important element in our evaluation of the exercise of market power. Given the existence of economies of density, revenue sufficiency requires the exercise of market power (i.e., price greater than marginal cost). That is, the question is not if railroads exercise market power, but instead how much market power is exercised relative to what is needed in order to generate enough revenues to cover cost. Related, in our analysis of the change in the exercise of market power, we wanted to understand these changes relative to the changes warranted by changes in cost conditions. To answer these questions, we established the market power necessary for revenue sufficiency as the relevant benchmark. The revenue sufficiency benchmark allowed us to separate changes in the exercise of market power into what was “warranted” and what was in “excess.” We also note that the establishment of this benchmark addressed one of the FTC concerns about the usefulness of the Lerner index.

A key finding of our revenue sufficiency analysis is that the needed markup has declined in recent years, but the actual markup observed has not declined by as much. As a result, the railroads financial condition improved in 2006 and has held steady in 2007 and 2008, but does not show excessive industry profits.

V. Open Access Issues

In Chapter 22 of our November 2008 report, we discussed various forms of “open access” including bottleneck rates, reciprocal switching, terminal agreements and trackage rights. A number of the initial comments in this proceeding made inaccurate or incomplete reference to our conclusions regarding open access, particularly reciprocal

switching and terminal agreements.²⁸ Many of these references to our work either did not report all of the conditions and assumptions on which we based our open access conclusions, or interpreted relative statements we made as absolute statements. For example, we concluded that:

[I]ncremental policies such as reciprocal switching and terminal agreements have a greater likelihood of resolving shipper concerns via competitive response, and have a lower risk of leading to adverse changes in industry structure, costs and operations.²⁹

This conclusion was made under specific assumptions and is relative to the other open access policies examined, such as the requirement to quote bottleneck rates. It is not an absolute statement. That is, we did not conclude that these incremental policies would be an unqualified success under any and all conditions. As noted above, consideration of operational issues was not in the scope of our STB studies. In this section, we go through our analysis of open access policies to clearly spell out our conclusions and the assumptions on which they are based.

Analysis of Open Access Proposals found in Chapter 22 of Christensen November 2008 Report

Perhaps, most importantly, our comparison of various types of open access (including Table 22-1) was performed under the assumption that the terms of access reflected voluntary negotiations between railroads subject to STB maximum rate oversight.³⁰ The terms of access include access rates and other factors, such as operational and coordination issues between railroads. The assumption that the terms of

²⁸ For example, see ARC, pp. 38-39; Olin, p. 11; NITL, p. 13.

²⁹ Christensen 2008, pp. ES 5-6.

³⁰ Christensen 2008, p. 22-12. As described below, this oversight properly applies to end-to-end rates.

access reflect the result of voluntary negotiations implies that such an outcome produces a net gain in economic efficiency. Consistent with this assumption, we concluded that for an open access policy to produce an overall economic welfare gain, it must generate a voluntary competitive response by railroads.³¹ Furthermore, we stated that the likelihood of such a voluntary competitive response is dependent on the economics of the situation (e.g., length of haul, vertical economies), coordination costs and access rates.³²

The construct of voluntary negotiations provides an economically-principled benchmark for establishing terms of access that produce gains in economic efficiency. In this regard, we noted that if access rates were set by some legislatively- or regulatory-determined formula that does not reflect the terms that would result from voluntary negotiations, the economic effects of various types of open access become less predictable.³³ Thus, an important implication of this is that the success or failure of open access policies greatly depends on how the terms of access are determined.

We concluded that relative to the other open access policies (e.g., trackage rights, bottleneck rates), incremental policies would be the least costly in terms of loss of economic efficiency and have a lower potential of adverse changes to the industry.³⁴

³¹ Christensen 2008, p. 22-8.

³² Christensen 2008, p. 22-8. Our econometric estimates indicate significant length of haul economies in 1987, but this source of cost savings was exhausted by about 1995. Between 1987 and 1995 the average length of haul increased from 688 miles to 843 miles, about 2.8 percent per year or 13 miles per year. However, since 1995 the opportunities and the economics for increasing length of haul have diminished substantially. Between 1995 and 2008 the average length of haul increased from 843 miles to 919 miles, about 0.7 percent per year or less than 6 miles per year. Mr. Nelson (AECC Nelson Verified Statement, p. 22) attempts to use our econometric finding that the length of haul economies have become exhausted to suggest cost efficiencies would result from establishing bottleneck rates. However, this is a misapplication of the findings. The econometric finding that, in 2008, a 1 percent reduction in length of haul (about 9 miles) might have some cost savings, does not mean that breaking a thousand-mile shipment into two parts would lead to cost savings. Instead, the evidence on the substantial growth of average length of haul in the early post-Staggers era and the corresponding efficiencies strongly suggest just the opposite.

³³ Christensen 2008, p. 22-12.

³⁴ Christensen 2008, p. 22-14.

However, this does not preclude that possibility that, in absolute terms, economic costs could result from such policies.

On a cautionary note, given that railroads are approximately revenue sufficient by our measure, the distributional effects among shipper groups and between shippers and railroads are important considerations. Given this condition, we concluded that relief to one group would imply negative consequences to other groups (either other shippers and/or railroads).³⁵

Finally, as we said in our original report, the details of policy proposals matter. For example, not only can the terms of access have an effect on the degree to which open access occurs, but the terms can have important effects on incumbents' investment behavior.³⁶ However, we observed that most open access proposals do not address these important details, creating the very real risks of unintended and economically harmful consequences.³⁷ Such consequences may include a significant increase in the burden of the regulatory process, including the possibility of litigation. Therefore, without knowing the specific details of a proposed open access policy such as the terms of access more specific predictions cannot be made.

Methods for Setting Access Rate

From the discussion above, it is clear that the determination of access rates is a critical component of any open access policy. For any type of open access, access rates have an important influence on the degree of efficient competition, rates and service to shippers, railroad financial performance and railroad investment incentives.

³⁵ Christensen 2008, p. 22-14.

³⁶ Christensen 2008, p. 22-14.

³⁷ Christensen 2008, p. 22-14.

We discuss two of the more common methods of setting access rates—ECPR and TELRIC—and the likely consequences of each. These methods illustrate the point that the determination of access rates is far from a settled issue in regulatory applications, and the method employed has significant implications for the end result.³⁸

The Efficient Component Pricing Rule (ECPR) sets a price for access to the incumbent’s “bottleneck” facilities (or of providing haulage over these facilities) that is generally equal to the incumbent’s lost contribution it was receiving for hauling end-to-end plus the incremental cost to the incumbent of allowing an entrant to operate over the bottleneck segment (or of providing haulage over the bottleneck). This rule can be applied to all forms of open access.

ECPR is designed to preserve the incumbent’s collection of contribution, which is viewed by some as a controversial and undesirable outcome. This is largely due to the fear that, if the incumbent is earning excess profits, the ECPR method of determining lost contribution will “enshrine” those excess profits. However, if the end-to-end rate is not excessive (e.g., $R/VC < 180$, or passes a stand-alone cost test if $R/VC > 180$), this possibility is avoided. Moreover, by preserving the incumbent’s contribution, ECPR will also preserve the incumbent’s investment incentives.

An important property of ECPR is its ability to encourage cost-reducing entry while screening out uneconomic entry. Only competitors who are more efficient on the non-bottleneck segment will be able to effectively compete against the incumbent. While

³⁸ At the request of the staff of the U.S. Senate Commerce Committee, we provided an analysis of ECPR to the staff in September 2009. We rely on that analysis as a guide to our discussion of ECPR here.

this will likely limit the number of entrants, this property is seen as a virtue of ECPR from an economic efficiency perspective.

In a report prepared for the Volpe National Transportation Systems Center, Eric Beshers notes that ECPR: (1) allows the more efficient operator to claim the traffic; (2) it is consistent with differential pricing; and (3) can be designed so that the incumbent's contribution does not contain an element of monopoly profits:

The virtue of ECPR lies in this fact. The more efficient operator can claim the traffic while leaving the incumbent's contribution intact. ... Using ECPR as a ceiling for the access price thus ensures the best outcome in terms of efficiency regarding rail operating cost.

We have accepted differential pricing as the best solution to the problem of recovering railroads' costs from railroads' customers. Therefore, preserving the incumbent's contribution is also good, provided the final price to the customers does not exceed the SAC ceiling.

In the discussions in the literature, the principal criticism of ECPR is that it does not prevent monopoly pricing. This is correct. That is why price in the final market, the price being paid by the rail customer in our case, must be appropriately restrained, as is done with a SAC ceiling.³⁹

Total Element Long Run Incremental Cost (TELRIC) is a cost-based approach adopted by the Federal Communications Commission (FCC) to determine the price of incumbent local exchange carriers' unbundled network elements (UNEs, the equivalent of railroad "bottleneck" segments) sold to competitors. In determining how TELRIC was

³⁹ Eric Beshers, "Efficient Access Pricing for Rail Bottlenecks," Prepared for Volpe National Transportation Systems Center, in support of the Federal Railroad Administration, U.S. Department of Transportation, June 1, 2000, p. ii.

to be computed, the FCC expressly prohibited the use of ECPR precisely because it is consistent with differential pricing principles and is not cost-based.⁴⁰

We discussed the drawbacks of cost-based pricing in our November 2008 report in the context of proposed cost standards contained in Senate Bill 953. The same analysis and criticisms apply to using cost-based methods for setting access rates. We noted that cost-based pricing methods (also known as fully distributed costing (FDC)) have been criticized in the economics literature for at least 25 years, and that one of the earliest economic criticisms of FDC methods came in a 1962 statement presenting the consensus of ten economists regarding railroad costs and pricing.⁴¹ Importantly, we noted that one of the fundamental drawbacks of cost-based methods (such as TELRIC) for setting railroad rates is that such methods are inconsistent with differential (i.e., Ramsey) pricing.⁴²

Beshers also states that cost-based methods, such as the FCC's TELRIC, are not appropriate for setting railroad access rates:

The FCC suggests that distribution of common fixed costs across the elements with a uniform percentage mark-up would be an appropriate method; the FCC also explicitly forbids pricing according to Ramsey principles. The FCC thus rejects the economically efficient method (Ramsey pricing) for recovering common fixed costs and embraces a

⁴⁰ For example, see *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; and Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, First Report and Order, FCC 96-325, August 8, 1996, p. 344, paras 709-710.

⁴¹ Christensen 2008, pp. 22-20 to 22-21, citing Alfred E. Kahn, "The Uneasy Marriage of Regulation and Competition," *Telematics*, Vol. 1, 1984, pp. 1-17; Alfred E. Kahn and William B. Shew, "Current Issues in Telecommunications Regulation: Pricing," *Yale Journal on Regulation*, 4, pp. 191-256; and William J. Baumol, Burton N. Behling, James C. Bonbright, Yale Brozen, Joel Dean, Ford K. Edwards, Calvin B. Hoover, Dudley F. Pegrum, Merrill J. Roberts, and Earnest W. Williams, Jr., "The Role of Cost in the Minimum Pricing of Railroad Services," *The Journal of Business*, 36(3), 1962, pp. 348-351.

⁴² Christensen 2008, pp. 22-20 to 22-21, citing Ronald R. Braeutigam, "An Analysis of Fully Distributed Cost Pricing in Regulated Industries," *Bell Journal of Economics*, Vol. 11, 1980, pp. 182-196.

method (fully distributed cost) that economists universally find to be inefficient.

TELRIC, as promulgated, is applied in a rate-setting process that would not fit in the regime of constrained-market pricing under which railroads currently operate. ... The TELRIC methodology much more nearly resembles traditional, cost-based rate-of-return, rate regulation than it does constrained-market pricing. TELRIC embodies inefficient pricing principles and could not work in the current framework of railroad regulation or anything close to it.⁴³

Based on our experience in the telecommunications industry, we agree with Beshers' assessment that cost-based approaches such as TELRIC are not appropriate for establishing railroad access rates. In fact, it is our opinion that the development of competition in the telecommunications industry was more the result of the "technological bypass" of traditional telecommunications networks (e.g., the development and growth of wireless and cable television-based telephony services) rather than the result of the FCC's network unbundling and UNE pricing policies.

Summary

The analysis of open access policies in our November 2008 report was premised on the assumption that the terms of access reflected the results that would be obtained under voluntary negotiations between railroads. We concluded that some open access policies, such as requirements to quote bottleneck rates, may not be workable or effective because the economics of particular situations (e.g., the loss of length-of-haul or vertical economies) will not produce the anticipated degree of competitive response. We also concluded that incremental policies would have a better chance of benefitting shippers at

⁴³ Beshers, p. iii.

a lower risk of adverse effects on railroads. However, even if the benefits and costs of these incremental policies appear to be favorable relative to other open access policies, the absolute level of benefits and costs is unknown. These policies might not actually produce a gain in economic welfare. In particular, the costs and benefits of the various open access policies are highly dependent on how access rates are determined and whether operational factors have been adequately accounted for. Unless details of a particular policy proposal are known, the impact on shippers and railroads is uncertain.

VI. Conclusion

A number of the comments in this proceeding have either relied on or taken issue with our various studies. In this reply statement, we have clarified our work and reiterated our conclusions. We stand by the analysis and conclusions of our studies.

Specifically:

- Rail rate increases in recent years are largely explained by markets reacting to slowed productivity growth and increased input prices.
- The exercise of market power does not appear to have increased in recent years.
- The financial condition of the railroads improved around 2006, and remained relatively stable between 2006 and 2008, but does not show excessive profits.
- Our conclusions on open access policies were premised on the assumption that the terms of access reflected the result of voluntary negotiations between railroads.
- Relative to policies such as the requirement to quote bottleneck rates, incremental policies such as reciprocal switching and terminal agreements are less costly in terms of loss of economic efficiency and have a lower potential of adverse changes to the industry.
- However, any open access policy will require that the complex and contentious issues of access pricing and operational disruptions be addressed.
- The questions of access pricing and operational issues add a significant degree of uncertainty to the outcomes of these policies.

Appendix

Biographies of B. Kelly Eakin and Mark E. Meitzen

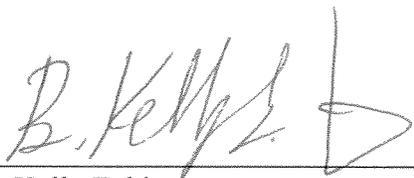
B. Kelly Eakin is Senior Vice President at Christensen Associates. Dr. Eakin is an expert in industrial organization, specializing in the economic analysis of competitive and regulated markets. He served as project manager and was a principal author of the November 2008 and the January 2010 Christensen Associates' studies of the U.S. freight railroad industry commissioned by the Surface Transportation Board. He has also provided written evidence in other proceedings before the Surface Transportation Board, and provided written and oral testimony in regulatory hearings before the Postal Rate Commission. In addition, Dr. Eakin manages the energy practice at Christensen Associates Energy Consulting, LLC, a wholly owned subsidiary of Christensen Associates. Prior to joining Christensen Associates in 1994, Dr. Eakin worked for the U.S. Department of Agriculture from 1992 to 1994. From 1985 to 1992, he was an assistant professor of economics at the University of Oregon where he taught graduate courses in cost and production theory, industrial organization, regulation, and productivity measurement. Dr. Eakin's scholarly work has been published in a number of prestigious journals including *The Review of Economics and Statistics*, *Journal of Human Resources*, *Regulation*, and *The Southern Economic Journal*. He has also co-edited two books, *Pricing in Competitive Electricity Markets* and *Electricity Pricing in Transition*. Dr. Eakin has a B.A. in history from the University of Texas at Austin and a Ph.D. in economics from the University of North Carolina at Chapel Hill.

Mark E. Meitzen is a Vice President at Christensen Associates, where he has been employed since 1990. Dr. Meitzen was a principal author of the November 2008 and the January 2010 Christensen Associates' studies of the U.S. freight railroad industry commissioned by the Surface Transportation Board. He was also the project manager and one of the principal authors of the supplemental report to the STB on railroad capacity and investment issues. Dr. Meitzen is currently serving as principal investigator on the Transportation Research Board project, *Preserving and Protecting Freight Infrastructure and Routes* (NCFRP 24). Dr. Meitzen has expertise in the economic analysis of network industries including telecommunications, railroad, electricity and postal. In addition to the recent STB study, his work in the railroad industry includes analysis of railroad mergers and application of the STB's Constrained Market Pricing standards, including its Stand Alone Cost methodology. Dr. Meitzen also serves as an economic expert in regulatory proceedings on incentive regulation, pricing and economic costing matters. He also has experience in civil litigation matters as an expert witness on antitrust, intellectual property and employment issues. Prior to joining Christensen Associates, Dr. Meitzen was a regulatory economist at Southwestern Bell Telephone Company, and was an assistant professor of economics at Eastern Michigan University and the University of Wisconsin-Milwaukee. Dr. Meitzen has a Ph.D. in economics from the University of Wisconsin-Madison.

VERIFICATION

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

Executed: May 24, 2011



B. Kelly Eakin

VERIFICATION

I, Mark E. Meitzen, declare under penalty of perjury, that the foregoing statement is true and correct and that I am qualified and authorized to file this statement.

Executed: May 24, 2011


Mark E. Meitzen

HAMADA/GOKHALE VERIFIED STATEMENT

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

**STB EX PARTE NO. 705
COMPETITION IN THE RAILROAD INDUSTRY**

**JOINT VERIFIED STATEMENT
OF
ROBERT S. HAMADA AND RAJIV B. GOKHALE**

MAY 27, 2011

I. Purpose of This Statement and Summary of Our Conclusions

1. My name is Robert S. Hamada. I am the Edward Eagle Brown Distinguished Service Professor Emeritus of Finance and former Dean at The University of Chicago Graduate School of Business ("GSB," now the University of Chicago Booth School of Business). I have served as an Instructor, Assistant Professor, Associate Professor, and Professor of Finance at the GSB since 1966. I also have served in other positions at the GSB, including Director of the Center for Research in Security Prices (1980 - 1985), Deputy Dean for the Faculty (1985 - 1990), and Dean (1993 - 2001). While at the GSB, I have taught extensively on the subjects of corporate finance and corporate strategy. I have served on 11 business Boards of Directors and numerous non-profit Boards.

2. My name is Rajiv B. Gokhale. I am a Senior Vice President of Compass Lexecon, a consulting firm that specializes in the application of economics to a variety of legal and regulatory issues. I have an MBA from the University of Chicago. I have specialized in the areas of financial economics and business valuation and my experience covers a wide array of industries.

3. We have been asked by Counsel for the Association of American Railroads ("AAR") to assess the validity of the analyses and conclusion of the Staff Report for Chairman Rockefeller dated September 15, 2010,¹ (the "Rockefeller Report") regarding the financial health of Class I railroads.

4. In the Rockefeller Report, it is stated that a "review of the class I railroads recent financial results shows that the Staggers Act's goal of restoring financial stability to the U.S. rail system has been achieved," and that the Class I railroads now rank "among the most profitable businesses in the U.S. economy." Likewise, the report finds that "another indication that the Class I railroads believe they are spending sufficient amounts of money on their long-term capital needs is that in recent years, they have used growing portions of their net income to increase their dividend payments and to repurchase their publicly-traded shares."^{2, 3}

1. *The Current Financial State of the Class I Freight Rail Industry*; Staff Report for Chairman Rockefeller; Office of Oversight and Investigations Majority Staff; September 15, 2010.
2. Rockefeller Report, Executive Summary at 1, Conclusion at 14, and page 12.
3. Note that there is no disagreement on the fact that railroads are expected to require heavy capital expenditures in the future.

5. In the Rockefeller Report, the conclusion is that because “the rail industry continues to operate profitably and to aggressively exercise its pricing power,” the industry’s claims that it is “not yet financially stable and not yet capable of meeting its capital needs without the differential pricing powers” the Staggers Act gave the railroads in 1980 “need to be more carefully scrutinized.” The report recommends evaluating whether “our country’s current rail policy needs to be changed to reflect this new reality.”⁴

6. The conclusions in the Rockefeller Report are reached by analyzing three pieces of financial information for the four largest Class I railroads from 2000 through 2009:

- Improvement in two accounting measures—the railroads’ profit margin and their operating ratio;
- Their stock price performance relative to the S&P 500; and
- Their dividend and stock repurchase decisions.

7. Based on the conclusion of the Rockefeller Report that the U.S. railroad industry now ranks “among the most profitable businesses in the U.S. economy,” it is recommended that there be changes to the regulatory system for the U.S. freight rail industry – an industry that is currently considered the “best in the world,” and the “envy of the world.”⁵ There are many unintended dangers to “fixing” something that is not broken. Based on our analyses and experience, we conclude that the conclusions and prescriptions for regulatory change in the Rockefeller Report are not correct. In particular, we conclude that:

- The Rockefeller Report’s two accounting ratios do not measure what they claim they do, i.e., they do not measure the current financial state of the railroad industry;
- Unfounded conclusions were drawn in the Rockefeller Report from recent increases in railroad stock prices; there are other plausible explanations for the railroads’ stock market performance than those identified in the Rockefeller Report; and

4. Rockefeller Report, Executive Summary at 1 and Conclusion at 14.

5. “High-speed railroading - America’s system of rail freight is the world’s best. High-speed passenger trains could ruin it,” *The Economist*, July 22, 2010; and “The Freight Railroad Renaissance - America’s freight railroad system is the envy of the world,” by John M. Samuels, *The Bridge*, National Academy of Engineering, September 2008, accessed on May 19, 2011 at <http://www.nae.edu/Publications/Bridge/TransportationInfrastructure/TheFreightRailroadRenaissance.aspx>.

- The evidence provided in the Rockefeller Report does not support the Rockefeller Report’s conclusion that the Staggers Act, or its implementation, should be changed.

II. Profitability Measures Used in the Rockefeller Report Do Not Measure the Current Financial State of the Class I Freight Rail Industry

8. Two measures of profitability were used in the Rockefeller Report. The first is the “Profit Margin,” defined as net income (i.e., after interest payments and after taxes) divided by revenue. The second is the “Operating Ratio,” defined as expenses divided by revenue. These ratios are essentially the same—in that one is approximately the inverse of the other.⁶ Both of these measures have at least two shortcomings.

9. First, both measures are based on accounting data. Shortcomings in the use of accounting measures to reflect economic profitability are widely recognized. One reason, as Ross, Westerfield, and Jaffe explain in their widely used finance textbook, is that “profit margins reflect the firm’s ability to produce a product or service at a low cost or a high price. Profit margins are not a direct measure of profitability because they are based on total operating revenue, not on the investment made in assets by the firm or the equity investors.”⁷

10. Second, as Ross, Westerfield, and Jaffe suggest, these profitability measures ignore the capital intensity of the rail industry. Even if it were true that Class I railroads’ profit margins have been relatively high compared to other industries (and operating ratios low) in recent years, one cannot conclude that they are the “most profitable businesses in the U.S. economy,” without accounting for the higher capital intensity of the railroad industry. Likewise, Bodie, Kane, and Marcus, in their textbook, note that “while it is common to use profitability to measure performance, profitability is really not enough. A firm should be viewed as successful only if the return on its projects is better than the rate investors could expect to earn for themselves in the capital markets.”⁸

11. It is a basic tenet of financial economics that investors expect a return on their investments (i.e., compensation for the time value of invested money and for bearing risk) and a

6. They acknowledge as much: “Operating ratio, which is inverse margin ...,” Rockefeller Report at 6, fn 21.

7. Ross, Stephen A., Randolph W. Westerfield, and Jeffrey F. Jaffe. 2005. *Corporate Finance* (7th ed.), McGraw-Hill Irwin at 38.

8. Bodie, Zvi, Alex Kane, and Alan J. Marcus. 2010. *Essentials of Investments*, (8th ed.), McGraw-Hill Irwin at 452.

return of their investment (i.e., returning the amount invested). The only acknowledgement of returns to invested capital in the profitability measures used in the Rockefeller Report is depreciation—i.e., a return of investment. This measure too is flawed because it is an accounting measure based on the historical cost of investments. But, there is no acknowledgment or consideration of the return “on” investment in these two accounting measures.

12. Capital intensive companies have to earn higher profit margins to earn an appropriate rate of return on their (higher levels of) invested capital. As a result, comparing profit margins across industries with different capital intensities is meaningless.⁹ Further, short-term profit margins are not indicative of the returns realized by investments in industries where the investments are long-lived.

III. The Stock Performance of the Four Largest Class I Railroads Do Not Necessarily Measure What the Rockefeller Report Claims

13. In the Rockefeller Report, the Class I railroads’ “stock values” are analyzed and from that, the conclusion is made that as the “railroad industry’s profit margins have risen and their operating ratios have dropped, investors have taken notice.” As a result, the Rockefeller Report concludes that the increase in the stock values of Class I railroads has “far exceeded” the increase in the S&P 500 over the last 10 years.¹⁰ This “cause and effect” conclusion misinterprets this data in several ways.

14. First, the choice of a starting point (approximately 10 years before the date of the report) is arbitrary. If railroad stock values were relatively low in that year because of circumstances in rail markets, then the relative increase of those stock values over the following 10 years could reflect a return to more normal conditions. Indeed, based on different time periods since the Staggers Act was passed, Class I railroads’ shares have not consistently outperformed the S&P 500. For example, between October 15, 1980 (immediately following the

9. Profit margins only measure profits relative to revenues, and not relative to the amount invested in order to generate those revenues. Assume two firms have the same level of revenues of \$100 and generate profits of \$10, implying both have a profit margin of 10 percent. Assume further that one firm needs to invest \$500 in order to generate those revenues and profits, while the other firm needs to invest \$1,000 to generate the same level of revenues and profits. In this example, the first firm generates \$10 profit on \$500 of investment (i.e., 2 percent rate of return on investment), whereas the second firm will have a lower rate of return on its investment of 1 percent (equal to \$10 divided by \$1,000). This concept of return on investment is discussed later in this statement.

10. Rockefeller Report, at 6.

passage of the Staggers Act) and December 31, 2004, Class I railroads' shares barely kept pace with the S&P 500. See Exhibit I. Similarly, as an illustration, from January 1, 1991 to December 31, 1997, and from August 29, 2008 to September 3, 2010 (the same end point as in the Rockefeller Report), returns to holding Class I railroads' shares were approximately equal to the returns on the S&P 500. See Exhibits II and III.

15. Second, the Rockefeller Report appears to contend that the entire increase in the equity values of the Class I railroads consistently reflects the purported increase in their profit margins. However, as demonstrated in our Exhibits I-III and in Figure III of the Rockefeller Report, railroad stocks have not always outperformed the S&P 500 during the period examined. For example, while the railroads outperformed the S&P 500 in 2006 and 2007, in the second half of 2008 (See Exhibit III), railroad stocks declined far more than the S&P 500. These patterns of outperforming and underperforming the S&P 500, especially in the last five years, can be explained by these companies' equity β s, the price of oil, and changes in economic conditions.

16. Equity β s are a measure of riskiness to investors.¹¹ In recent years, the four Class I railroads' equity β s are measured to be greater than one.¹² Therefore, in a period where the S&P 500 is increasing (or decreasing), sound financial economic theory predicts that the stocks with β s greater than one would increase (or decrease) more. This is exactly what is expected and what partly explains the observed outperformance and underperformance by the equity values of the four Class I railroads relative to the S&P 500.

17. Further, as acknowledged in the Rockefeller Report, demand for railroad services has increased partly because of "increases in highway congestion and fuel costs."¹³ Over the last decade, the superior fuel efficiency of railroads over trucks has driven freight towards railroads from trucks and made railroads a more attractive investment. As demand unexpectedly increased for railroad services in the mid to late years of the first decade of this century—partly because of the unexpected increase in fuel costs in this period—revenues, profits, and stocks returns also

11. Equity β s measure the riskiness of a particular firm's equity relative to the overall market. The S&P 500 is often used as the benchmark market index and by definition has an equity β of one. A firm with an equity β of 1.1 is "riskier" than the S&P 500; if the S&P 500 increases (decreases) by 1 percent, the firm's equity is expected to increase (decrease) by 1.1 percent. Similarly, a firm with an equity β of 0.9 is less risky than the S&P 500; an increase (decrease) of 1 percent in the S&P 500 is expected to result in an increase (decrease) in the firm's equity of 0.9 percent.

12. Per Bloomberg LLP and Capital IQ.

13. Rockefeller Report at 4.

increased accordingly. As demonstrated in Exhibit IV (which covers the same period as Rockefeller Report's Figure III and has an additional line for the spot prices of crude oil), increases in railroads' equity values have coincided with unexpected increases in oil prices, and decreases in equity values with decreases in oil prices. The latest increases in railroad equity values, since early 2009, have again coincided with rising oil prices and improving economic conditions. However, nothing says that fuel costs will be permanently higher in the future, or that economic conditions will not deteriorate. As witnessed in the second half of 2008 when oil prices unexpectedly dropped,¹⁴ and economic conditions worsened, railroad equity values also decreased significantly.

18. In essence, the conclusions reached in the Rockefeller Report are based on a retrospective analysis of the railroads' financial performance in the last few years, in other words, solely on *ex post* information. As discussed in this section, unexpected changes in economic conditions such as changes in demand and changes in oil prices can cause Class I railroads' profits and equity values to unexpectedly change significantly, both up and down. Recent and short term changes in accounting based financial measures or in stock prices should not guide regulatory policy. Changing the regulatory regime without any consideration of expected future capital requirements and performance could potentially be harmful to railroads and to the U.S. economy. For example, as noted in the Rockefeller Report, Mr. Warren Buffet expects that while BNSF would "deliver significantly increased earnings over time," such increases would only happen at the "cost of our investing many tens—yes, tens—of billions of dollars of incremental equity capital."¹⁵ Such investments would not be forthcoming if changes to the regulatory regime meant investors could no longer expect, or reasonably believe, that they would earn their cost of capital on their future investments in railroads.¹⁶ Maintaining the incentive to invest is critical to this industry.

14. See Exhibit V. As shown in the exhibit, both the increase and decrease in the spot price of the WTI Crude oil were unexpected. The futures prices as of January 2006, January 2007, and January 2008 (blue, red and green lines) indicate that oil prices were expected to stay relatively flat.

15. Rockefeller Report at 8.

16. For example, the Wall Street Journal reports that "forecasts for freight growth are substantial, prompting railroads to plan capacity additions," and that "capacity investment, in turn, will depend on perceived profitability of those investments," and that the biggest challenge for the railroads is "to build the needed capacity in a timely fashion and at a cost that the market prices can support." Future of Rail, by Daniel Machalaba, Wall Street Journal, May 23, 2011.

IV. Additional Statements and Conclusions in the Rockefeller Report

19. One of the conclusions in the Rockefeller Report is that the amount of dividend payouts and share repurchases by the Class I railroads is an indication that they have more than enough money for future investments.¹⁷ We disagree for the following reasons:

- Shareholders and other investors such as debt-holders expect returns on their investments in the Class I railroads. If they do not receive a return commensurate with the risk they are assuming, railroads will not be able to raise capital.
- Dividend payouts and share repurchases are one form of return to shareholders (capital gains or share price changes are the other). Both forms of returns are included in our Exhibits I, II, III, and IV.

20. Separately, in the Rockefeller Report, the impact of dividends and share repurchases on the return on equity (“ROE”) is incorrectly stated. While referred to in the Rockefeller Report, railroad profitability based on ROE is not discussed. However, the Report acknowledges that ROE is sometimes used to assess railroad financial performance. ROE analysis is dismissed in the Rockefeller Report based on the claim that ROE “measures not all net income, but only the income a company retains from year to year for future growth. Return on equity can be negatively affected by paying dividends or buying back stock.”¹⁸ (Underlining added.) This statement is simply incorrect. The numerator of the ROE ratio is profits after taxes, not profit after taxes minus dividends, as the Rockefeller Report seems to suggest. Dividends and/or share repurchases do not decrease profits after taxes (i.e., the numerator); yet both reduce the book value of equity, which is the denominator in the ROE ratio. Therefore dividends and/or share repurchases would tend to increase ROE in later periods, i.e., positively impact ROE. This is the opposite of what is stated in their footnote 19.

V. The Financial Health of a Capital Intensive Industry Should Be Measured Based on the Return on Investment

21. Return on investment measures the relationship between profits and the investment required to generate the profits. There are various ways to measure a firm’s return on investment, such as ROE, discussed above. ROE is an incomplete measure because it measures

17. “...spending sufficient amounts of money on their long-term capital needs.” See Rockefeller Report at 12.

18. The Rockefeller Report fn 19.

only the returns to one form of investment—equity investments—and not to other forms of investment such as debt or preferred shares.

22. Other return on investment measures include return on assets (“ROA”) and return on invested capital (“ROIC”). Ratios of return on investment are better measures of profitability than the measures used in the Rockefeller Report because they are designed to account for the amount of capital invested in a firm. As shown in Exhibit VI, ROA ratios of the railroads have been in line with those of other capital intensive industries from 1995 to 2010.

23. But, these three ratios are accounting measures and do not correctly capture economic values (e.g., for investment). For example in their widely used textbook, Bodie, Kane and Marcus explain that the value of assets on firms’ financial statements “are based on historical – not current– values. For example, the book value of an asset equals the *original* cost of acquisition less some adjustment for depreciation, even if the market price of that asset has changed over time. Moreover, depreciation allowances are used to allocate the original cost of the asset over several years, but do not reflect loss of actual value.”¹⁹

24. Therefore, these accounting ratios would not be sufficient to determine whether railroads are earning “reasonable and economic” rates of return on their capital investments.²⁰ More appropriate, economically sound measures of profitability are ignored in the Rockefeller Report. Returns are more appropriately measured using the current value of investments (i.e., replacement costs) or the market value of invested capital (i.e., from debt, preferred and equity). Such measures would be more consistent with the goals of the Staggers Act and the STB’s use of a Weighted Average Cost of Capital (“WACC”) in rate cases.²¹

19. Bodie, Zvi, Alex Kane, and Alan J. Marcus. 2010. *Essentials of Investments*, (8th ed.), McGraw-Hill Irwin, at 395.

Brealey, Myers and Allan also note that “rate of return and economic value added have some obvious attractions as measures of performance. Unlike market-value based measures, they show current performance and are not affected by the expectations about future events that are reflected in today’s stock market prices.... However, remember that both measures [ROA and ROE] are based on book (balance sheet) values for assets. Debt and equity are also book values. Accountants do not show every asset on the balance sheet, yet our calculations take accounting data at face value.” Brealey, Richard, Stewart C. Myers, and Franklin Allen. 2011. *Principles of Corporate Finance*, (10th ed.) at 712.

20. 49 USCS §§ 10101 et seq.

21. See U.S. Code 49 USCS § 10704 at (a).(2), underlining added: “The Board shall maintain and revise as necessary standards and procedures for establishing revenue levels for rail carriers providing transportation subject to its jurisdiction under this part [49 USCS §§ 10101 et seq.] that are adequate, under honest, economical, and efficient management, to cover total operating expenses, including depreciation and obsolescence, plus a reasonable and economic profit or return (or both) on capital employed in the business.”

25. As we have stated in prior submissions to the Board, returns to investment should be measured based on replacement cost of assets. The STB's current annual revenue adequacy methodology looks at return on book value of assets. While this approach is clearly a better way to measure a railroad's financial condition than the profit margin and operating ratio used in the Rockefeller Report, an even better approach would be to use the return on the replacement value of the assets.

VERIFICATION

I, Robert S. Hamada, declare under penalty of perjury, that the foregoing statement is true and correct and that I am qualified and authorized to file this statement.

Executed: May 26, 2011

A handwritten signature in cursive script that reads "Robert S. Hamada". The signature is written in black ink and is positioned above a horizontal line.

Robert S. Hamada

VERIFICATION

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

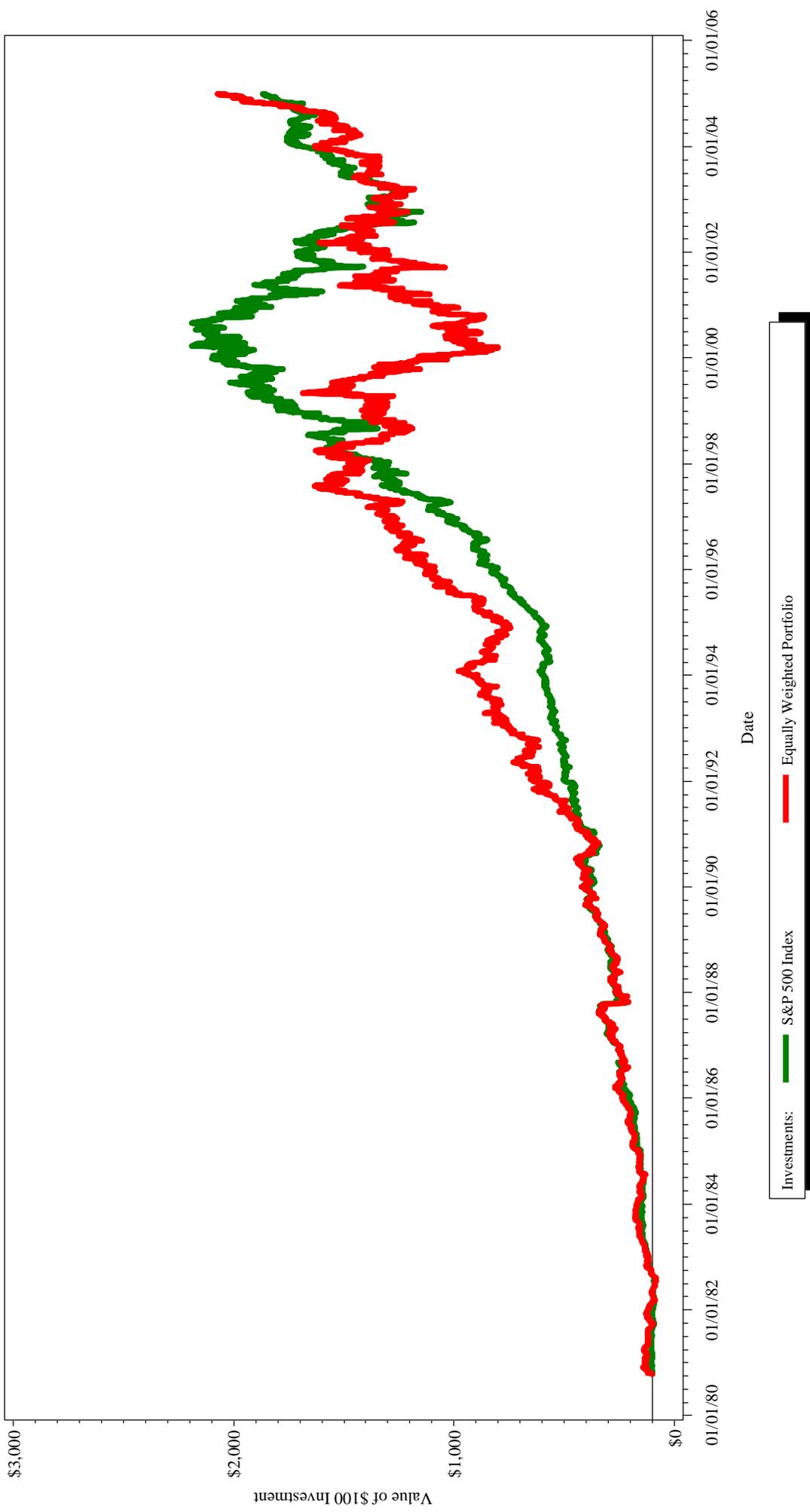
Executed: May 26, 2011

A handwritten signature in cursive script, appearing to read "Rajiv B. Gokhale", written in black ink on a white background.

Rajiv B. Gokhale

Exhibit I

Value of \$100 Invested in an Equally-Weighted Portfolio of Class I Railroad Companies, and the S&P 500 Index October 15, 1980 - December 31, 2004



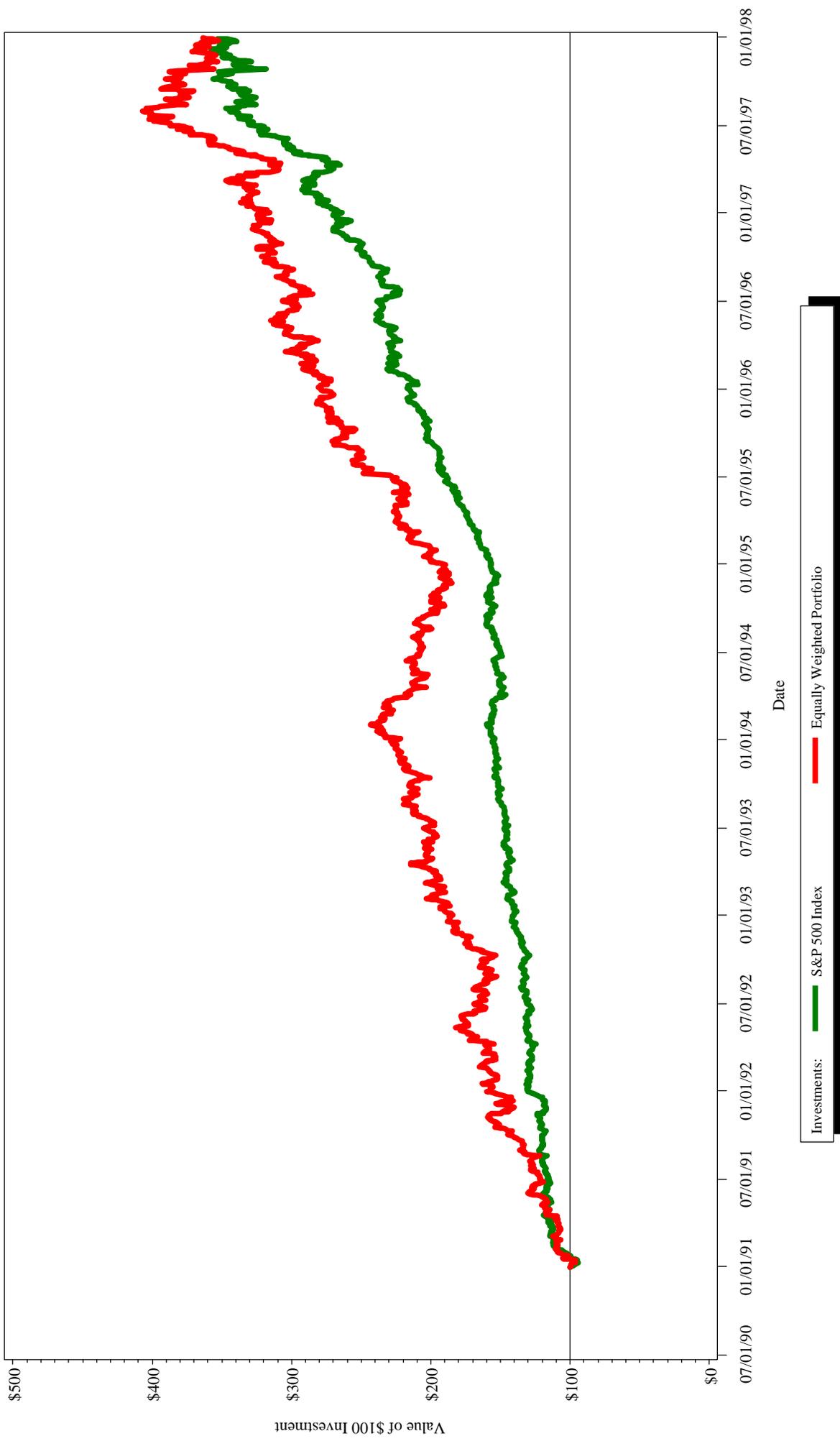
Sources: ©201103 CRSP®, Center for Research in Security Prices. Booth School of Business, The University of Chicago. Used with permission. All rights reserved. www.crsp.chicagobooth.edu; FT Interactive.

Notes:

- [1] Total returns are adjusted for dividend payouts, stock splits, and share repurchases.
- [2] The Staggers Rail Act of 1980 was approved on October 14, 1980.
- [3] The equally-weighted portfolio consists of Burlington Northern Santa Fe, CSX Corp., Norfolk Southern Corp., and Union Pacific Corp.
- [4] CSX Corp. data starts on November 13, 1980.
- [5] Norfolk Southern Corp. data starts on June 25, 1982.

Exhibit II

Value of \$100 Invested in an Equally-Weighted Portfolio of Class I Railroad Companies, and the S&P 500 Index January 1, 1991 - December 31, 1997



Sources: ©201103 CRSP®, Center for Research in Security Prices, Booth School of Business, The University of Chicago. Used with permission.
All rights reserved. www.crsp.chicagobooth.edu; FT Interactive.

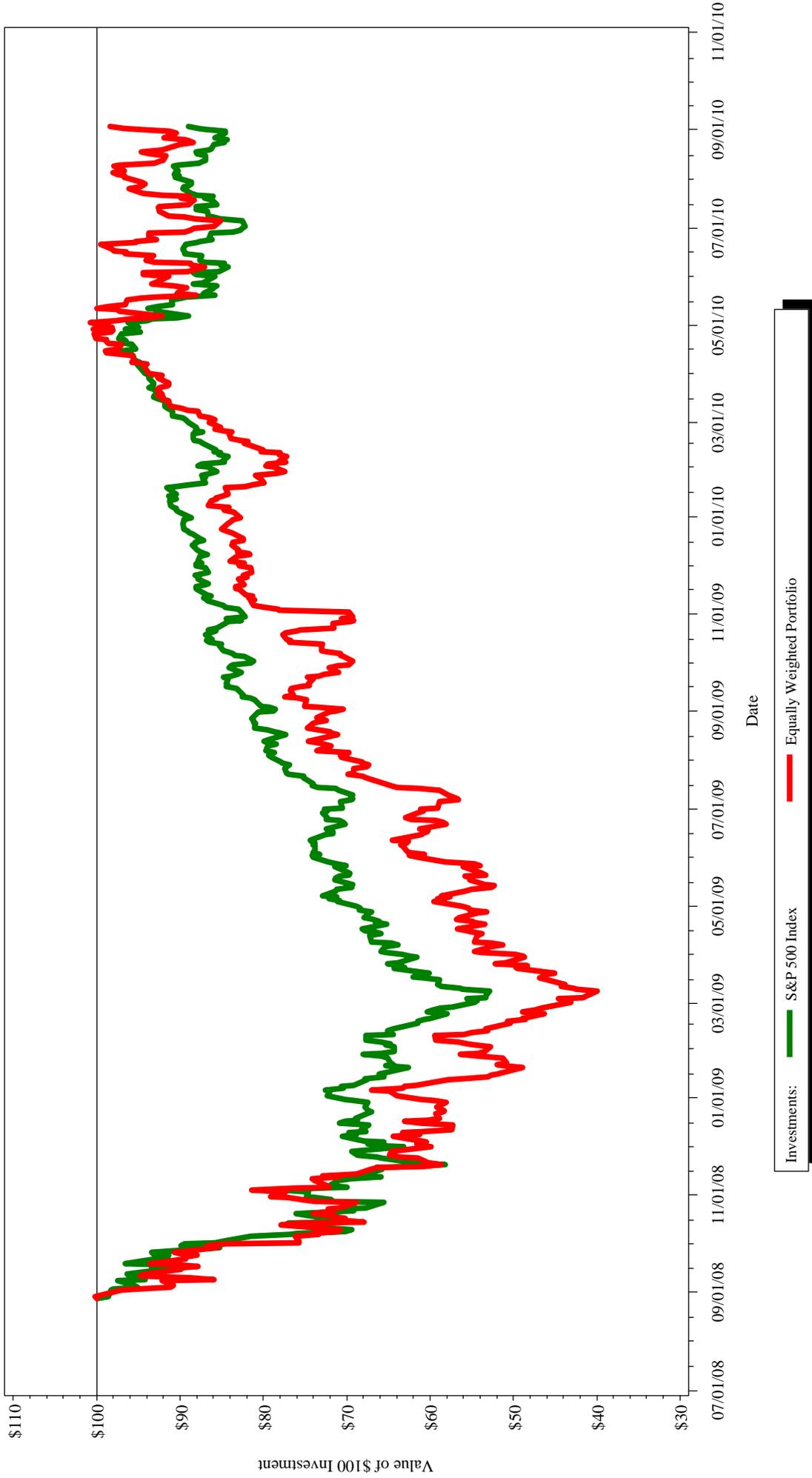
Notes:

[1] Total returns are adjusted for dividend payouts, stock splits, and share repurchases.

[2] The equally-weighted portfolio consists of Burlington Northern Santa Fe, CSX Corp., Norfolk Southern Corp., and Union Pacific Corp.

Exhibit III

Value of \$100 Invested in an Equally-Weighted Portfolio of Class I Railroad Companies, and the S&P 500 Index August 29, 2008 - September 3, 2010



Sources: ©201103 CRSP®, Center for Research in Security Prices. Booth School of Business, The University of Chicago. Used with permission. All rights reserved. www.crsp.chicagobooth.edu; FT Interactive.

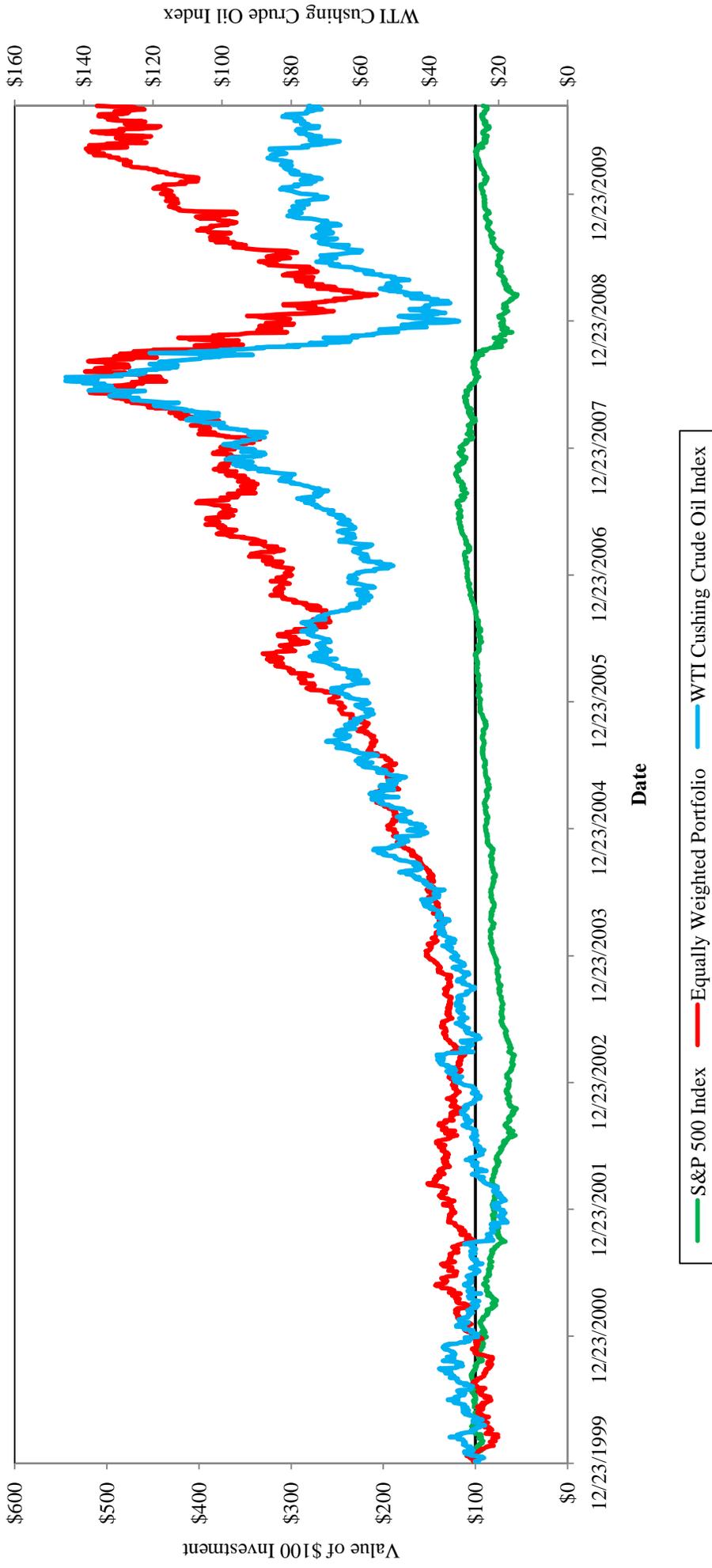
Notes:

- [1] Total returns are adjusted for dividend payouts, stock splits, and share repurchases.
- [2] September 3, 2010 is the end date in Figure III in the Rockefeller Report.
- [3] The equally-weighted portfolio consists of Burlington Northern Santa Fe, CSX Corp., Norfolk Southern Corp., and Union Pacific Corp.
- [4] Burlington Northern Santa Fe data ends on February 12, 2010 pursuant to the purchase by Berkshire Hathaway Inc. on February 16, 2010.

Exhibit IV

Value of \$100 Invested in an Equally-Weighted Portfolio of Class I Railroad Companies, and the S&P 500 Index vs. the WTI Cushing Crude Oil Price Index

December 24, 1999 - September 3, 2010

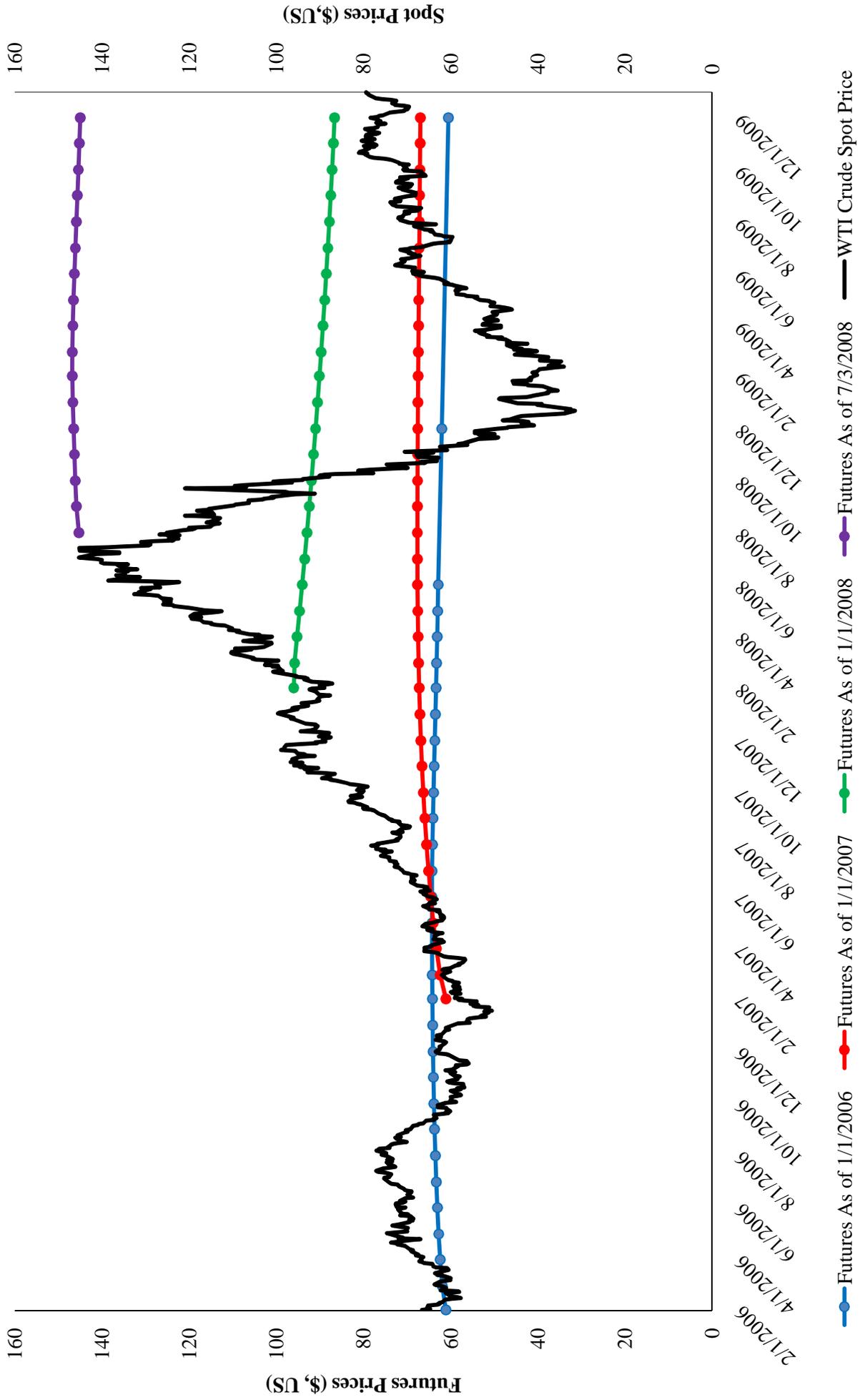


Sources: ©201103 CRSP®, Center for Research in Security Prices. Booth School of Business, The University of Chicago. Used with permission. All rights reserved. www.crsp.chicagobooth.edu; Bloomberg LLP; FT Interactive.

Notes:

- [1] Total returns are adjusted for dividend payouts, stock splits, and share repurchases.
- [2] The date range is the same as in Figure III of the Rockefeller Report.
- [3] The equally-weighted portfolio consists of Burlington Northern Santa Fe, CSX Corp., Norfolk Southern Corp., and Union Pacific Corp.
- [4] Burlington Northern Santa Fe data ends on February 12, 2010 pursuant to the purchase by Berkshire Hathaway Inc. on February 16, 2010.
- [5] WTI Cushing Crude Oil Index trades at parity to the front-month Nymex crude oil contract, with the exception of its three-day delivery scheduling period after the front-month contract expires. The Nymex Division light, sweet crude oil futures contract is the world's most liquid forum for crude oil trading, as well as the world's largest-volume futures contract trading on a physical commodity. The Index is not adjusted to inflation. (Source: Bloomberg LLP).

Exhibit V
WTI Crude Futures Prices Against Spot Prices
February 1, 2006 - December 31, 2009



Source: RC Research; www.price-data.com

Note: Trading in the current delivery month contract ends on the third business day prior to the twenty-fifth calendar day of the month preceding the delivery month.

Exhibit VI
Return On Assets (%)* for Railroads and Various Capital Intensive Industries

Industry	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1 Chemicals : Fertilizers and Agricultural Chemicals	7.28	5.04	5.79	7.40	4.71	5.59	6.61	5.52	7.62	7.15	6.36	7.98	8.70	14.16	8.11	6.43
2 Chemicals : Industrial Gases	7.84	6.80	6.67	6.74	5.60	6.21	5.99	5.95	5.63	6.07	6.85	7.84	8.49	8.42	6.19	7.23
3 Electric Utilities : Electric Utilities	5.11	5.14	5.04	4.92	4.57	4.65	4.58	4.38	3.77	3.52	3.61	3.55	3.90	3.61	3.13	3.70
4 Energy Equipment and Services : Oil and Gas Drilling	1.84	6.24	10.21	4.72	1.45	4.22	6.39	0.96	1.72	2.64	7.00	15.34	12.16	9.05	1.29	2.65
5 Energy Equipment and Services	5.47	6.65	8.62	6.84	1.59	3.49	6.50	3.64	3.66	4.10	6.87	9.80	9.74	9.52	4.11	3.82
6 Gas Utilities : Gas Utilities	5.53	6.07	4.96	4.41	5.11	5.29	4.93	4.66	4.68	4.64	4.52	4.35	4.76	4.73	4.34	4.43
7 Independent Power Producers and Energy Traders	4.94	4.42	1.89	2.90	2.90	3.89	3.34	2.14	1.68	3.35	2.21	2.64	1.92	2.81	2.38	1.52
8 Metals and Mining : Diversified Metals and Mining	5.60	6.95	8.87	5.25	1.59	2.02	0.43	-3.95	-0.37	2.53	3.38	6.13	9.13	7.70	-1.11	4.39
9 Metals and Mining : Gold	-1.25	-2.33	-5.18	-4.93	-10.06	-10.14	-0.81	-0.25	-4.52	-5.19	-7.34	-6.22	-4.89	-4.89	-0.15	-0.23
10 Metals and Mining : Precious Metals and Minerals	-0.89	-4.99	-2.51	-2.83	-5.33	-5.53	-4.13	-4.22	-3.15	-0.56	-3.71	-7.12	-1.70	-0.69	-3.70	-10.34
11 Multi-Utilities : Multi-Utilities	5.53	5.31	5.16	4.80	4.65	4.40	4.16	4.18	3.87	3.59	3.66	3.85	3.72	3.63	3.53	3.84
12 Oil, Gas and Consumable Fuels : Coal and Consumable Fuels	-6.60	2.50	-2.15	-1.54	-4.69	1.84	0.79	-0.10	-0.62	1.15	0.37	2.60	2.08	3.44	4.11	3.84
13 Oil, Gas and Consumable Fuels : Integrated Oil and Gas	4.26	6.73	5.77	2.46	4.83	10.76	9.27	4.09	6.77	9.60	12.43	12.37	10.21	12.96	5.06	7.20
14 Oil, Gas and Consumable Fuels : Exploration and Production	3.40	6.67	4.74	-5.48	2.96	9.53	6.52	3.51	6.28	8.14	8.94	7.21	4.97	4.87	-2.61	4.34
15 Oil, Gas and Consumable Fuels : Storage and Transportation	5.03	4.10	4.16	3.23	2.41	4.73	4.30	3.65	3.82	4.41	3.95	4.25	3.83	5.17	3.59	3.77
16 Forest Products	6.06	6.14	5.47	4.59	6.44	3.77	3.04	2.09	4.93	9.38	9.36	3.65	3.23	0.25	0.45	0.86
17 Road and Rail : Trucking	7.78	6.29	6.51	6.45	6.13	5.66	3.38	4.65	4.93	6.12	7.31	6.17	4.61	4.03	2.79	4.37
18 Water Utilities : Water Utilities	4.83	4.73	4.82	4.64	4.63	4.42	4.30	4.18	3.52	3.76	3.71	3.36	3.40	3.37	2.89	3.35
19 Road and Rail : Railroads	5.54	6.09	5.31	3.64	3.81	2.44	3.28	3.68	3.61	2.89	3.20	4.69	5.29	5.06	3.90	5.48
20 Number of Industries with Ratio > Railroads	5	8	8	11	9	14	13	8	11	13	14	8	6	7	6	3
21 Number of Industries with Ratio < Railroads	13	10	10	7	9	4	5	10	7	5	4	10	12	11	12	15

Notes:

[1] U.S. companies traded on major U.S. exchanges.

[2] Capital intensity determined using ratio of capital expenditures to revenues.

[3] Return on Assets is per Capital IQ and equals EBIT times 0.625 divided by Average Total Assets.

* Median Return On Assets (ROA) for companies in each industry.

Source: Capital IQ.

RENNICKE REPLY VERIFIED STATEMENT

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

**STB EX PARTE NO. 705
COMPETITION IN THE RAILROAD INDUSTRY**

**REPLY VERIFIED STATEMENT
OF
WILLIAM J. RENNICKE
PARTNER
OLIVER WYMAN, INC.**

May 27, 2011



MARSH GUY CARPENTER
MERCER OLIVER WYMAN

I. Introduction

I am William J. Rennie, a Partner with Oliver Wyman, Inc. On April 8, 2011, I provided an initial Verified Statement to the Surface Transportation Board in the matter of Docket No. EP 705, Competition in the Railroad Industry. My qualifications were provided as part of my original statement.

After reviewing the statements submitted by other interested parties in this matter, I have provided herein reply comments on several issues:

- Rail's role in supporting US industry competitiveness
- The level of profits generated by the railroads and the importance of a long-term investment focus
- The importance of density and established traffic patterns in ensuring rail efficiency

II. The freight railroad industry in the United States plays a critical role in supporting the nation's economic performance in a global economy.

As discussed in detail in my initial Verified Statement for this proceeding, railroads in the United States play a leading role in supporting the American economy. The US railroad industry carries more freight, and does so more efficiently, than any railroad system in the world.¹ In addition, railroad rates in the United States are among the lowest in the world.² The productivity and low rates offered by US railroads benefit domestic shippers and provide a competitive advantage to American export industries. For example, my analysis of South African and Australian coal hauling railroads (where significant investment has been made and continues to be made in infrastructure and operations) found that US rates are lower than either system on a ton-mile basis, despite the fact that Western US export coal must be hauled over the Rocky Mountains.³

In addition, a study by O'Neil Commodity Consulting for the Soy Transportation Coalition⁴ on transportation grain rates noted that:

"It is important to recognize that the U.S. transportation system is the most efficient in the world. The ability to move large volumes of commodities at relatively low cost is a great advantage to U.S. farmers. According to USDA third quarter 2009 data, a Brazilian farmer in Mato Grosso had to pay an average of \$100.41 per metric ton to ship

¹ See Exhibits II-1 and II-2, Verified Statement of William J. Rennie, STB Docket No. EP 705, April 8, 2011, p. 4.

² See Exhibit II-3, Verified Statement of William J. Rennie, op. cit.

³ "Competitiveness of Queensland Thermal Coals in the Export Market," Ultra-Systems Technology Pty Ltd, January 1998; Asciano Group February 2011 half-year report (Australia's largest coal operator); Oliver Wyman analysis.

⁴ "Transportation and the Farmer's Bottom Line," O'Neil Commodity Consulting, June 2010, p. 4. Jay O'Neil is a senior agricultural economist at the International Grain Project at Kansas State University.

his soybeans and corn to export markets. A Brazilian farmer in neighboring Groias state paid \$54.03 per metric ton to ship soybeans to the nearest port. By contrast, over the same time frame, it cost U.S. Midwestern farmers only \$ 16.57-\$18.88 per metric ton to ship to New Orleans by barge and \$45.35 per metric ton to ship from Iowa to the PNW. This is a substantial advantage for U.S. farmers.

“Whereas Brazilian soybean producers primarily move soybeans by truck, U.S. shippers enjoy the advantage of shipping in barge movements of 55,000 bushel (1,496 metric tons) and rail shuttle trains of 100-110 cars of 100 metric tons each or 10,000-11,000 metric tons per train.

“A well maintained and fluid river system of locks and dams as well as a well maintained and efficiently operated rail system should be a primary concern for all U.S. farmers.”⁵

The United States Department of Agriculture (USDA) echoes this view. In a report published in 2010, it found that:

“Rates for land transportation of agricultural commodities in the United States remain among the lowest in the world. Although rail rates for agricultural commodities have not fallen as much as rates for some other products (such as coal)... rail transportation cost during 2007, as a percentage of the price of a bushel of wheat, was at a 13-year low. Agricultural shippers have had some legitimate complaints about rail rates—and especially rail service quality—following some of the large rail mergers of the 1990s. However, service has improved in recent years; in fact, the rail share of agricultural exports has actually increased over the last two decades. This is probably the result of several factors:

- *Following the merger-related service disruptions of the 1990s, rail service quality recovered.*
- *Although rail rates have risen, truck rates have risen even faster over the last several years.*
- *The STB took action to restrain railroad fuel surcharges.*
- *Railroad grain car capacity and productivity increased.”⁶*

Low US rail rates contribute to low inland transport and logistics costs, to the benefit of both exporters and importers. Among the ten countries in the world with the largest rail systems (on a ton-km basis), despite the vastness of US geography, the US ranks third in having the lowest inland transport cost to export a container (behind China and India) and fourth in having the lowest cost to import a container (behind China, India, and Germany) on an absolute point-to-point cost basis.⁷ According to the World Bank, in 2010, inland transportation costs represented

⁵ “Transportation and the Farmer’s Bottom Line,” O’Neil Commodity Consulting, June 2010, p.4. Jay O’Neil is a senior agricultural economist at the International Grain Project at Kansas State University.

⁶ “Study of Rural Transportation Issues,” US Department of Agriculture, April 2010, p. 210.

⁷ “Trading Across Borders,” the World Bank, International Finance Corporation, <http://www.doingbusiness.org/data/exploretopics/trading-across-borders>. All of the fees associated with completing

38 percent of the cost to export a container from the United States and 46 percent of the cost to import a container into the United States. Railroads, which handle nearly a third of all inland export ton-miles, contribute to these low inland transport logistics costs.⁸ Low US rail rates play an important role in commercially “shrinking” the distance from growing and production points to end markets and export points. This commercial shrinkage of actual distance supports America’s competitive position when products are sold against offerings from countries where the product lies much nearer to the market. For example, most of Queensland’s coal is within several hundred miles of the export point.⁹ Large Argentine and Brazilian grain growing areas are also closer to points of export than in the United States.¹⁰

Low inland transport costs and low rail rates may also contribute to an industrial renaissance if, as predicted by some analysts, offshore production begins to return to the US and its NAFTA partners. As noted recently by the *Wall Street Journal*: “A combination of forces—rapidly rising labor rates abroad, loftier materials and shipping costs, deep-discount tax incentives from U.S. states—are changing some of the calculations by which companies decide to move production abroad, or even keep what’s there now.”¹¹

Given these facts, it is surprising to read in the initial statements filed by some proponents of “forced interchange” and/or “forced access”¹² complaints about the railroads’ performance in supporting domestic traffic and exports, and in particular export coal. Consumers United for Rail Equity (CURE) and some other proponents appear to argue that the railroad network favors import traffic over export traffic, and that this makes domestic products and exports less competitive.

This argument has no basis in fact. First, as discussed above, the US logistics system actually ranks higher on a global basis in handling exports than imports, and the transportation component of the cost to export a container is lower than to import a container. Virtually every major US port is served by at least two railroads, so both import and export shippers have access to a full range of ports no matter what railroad serves their inland locations.

Second, in my three decades of serving clients in both the transport and shipper communities, I have never heard it alleged that transport costs for imported goods in and of themselves make

the procedures to export or import goods are included. These include costs for documents, administrative fees for customs clearance and technical control, customs broker fees, terminal handling charges, and inland transport costs.⁸ Railroads handle and participate in handling an additional 15.1 percent of exports through intermodal services. Source: 2007 Commodity Flow Survey, US Bureau of Transportation Statistics. The CFS does not provide data on share of imports.

⁹ Coal Information 1994, International Energy Agency; Oliver Wyman analysis.

¹⁰ ERS/USDA Soybeans and Oil Crops Briefing Room: Trade, <http://www.ers.usda.gov/Briefing/Soybeansoilcrops/trade.htm>; Oliver Wyman analysis.

¹¹ “Analysis: Will Costs Drive Firms Home?” *Wall Street Journal Online*, May 5, 2011.

¹² As used in this Reply Verified Statement, “forced interchange” means allowing a shipper to require a railroad to interchange traffic currently handled in single-line service at an open interchange point of the shipper’s choosing outside of a terminal area and/or allowing a shipper to require a railroad to deliver traffic currently handled in single-line service to another railroad within a terminal area. “Forced access” means requiring a railroad to grant trackage rights to a competing railroad with the right to pick up traffic from or deliver traffic to shippers located on the lines covered by the trackage rights.

domestic products uncompetitive with products sourced outside the United States. From time to time, many other factors, however, such as monetary policy, tax policy, wage and benefit costs, deteriorating industrial infrastructure, health care costs, and regulatory burdens, are cited alone or in combination as reasons why US goods may be less competitive.

Third, many of the imports which the railroads are alleged to be favoring are just as critical to the US domestic economy as exports. For example, legacy and transplant automobile assembly plants in the United States operated both by domestic and foreign car and component manufacturers are a core component of the US industrial economy. These US operations employ American citizens, purchase material and services, and pay taxes in our national and local economies. The viability and competitiveness of these plants depend on the efficient delivery of foreign components, as foreign parts content in cars manufactured in the United States and Canada ranges from 10 to 55 percent.¹³ Without efficient rail transport for imported parts and essential material, many of these automobiles and light trucks would be entirely manufactured abroad. More broadly, Americans generally benefit from the efficient delivery of both domestic and foreign goods by rail and from the fact that rail rates in the United States are the lowest in the world on a unit cost basis.

Criticism of rail support for exports may originate in recent difficulties in obtaining containers for export. These difficulties, to the extent they occasionally exist, appear to be due to the ocean carriers that control the containers rather than the railroads, which only move what the steamship lines dictate. A recent article quoting Union Pacific vice president and general manager of intermodal John Kaiser noted that:

“Exporters in the U.S. interior were screaming for marine boxes that sometimes stopped at the water’s edge. And, when loaded ocean boxes did come inland, they usually didn’t stay long. ‘A high percentage of the time, now, the marine containers come inland with their loads from Asia, and they are not even waiting to make that available for a domestic move or an export in many cases,’ Kaiser said. “They just say, ‘I’ve got to get that empty back (to Asia) so I can get another load.’”¹⁴

Railroads have every incentive to encourage the loading of empty containers returning to ports, since they earn more handling even low-rated loads than carrying the containers empty.

In the case of coal specifically, complaints by shippers that the US railroad system harms the development of exports ignore several pertinent facts about the structure of the coal industry and its transport options. For instance, in the US coal industry, five companies control over half of coal production.¹⁵ These companies have mines that are served by two railroads, as well as mines served by a single railroad. Even in the latter case, the mining company has leverage in negotiating a rate. For example, presuming that the coal from two different mines has similar properties, or can be blended at the port to achieve similar properties, then the mining company

¹³ National Highway Traffic Safety Administration, [http://www.nhtsa.gov/Laws+&+Regulations/Part+583+American+Automobile+Labeling+Act+\(AALA\)+Reports](http://www.nhtsa.gov/Laws+&+Regulations/Part+583+American+Automobile+Labeling+Act+(AALA)+Reports).

¹⁴ “Preparing for the Next Crunch,” *Journal of Commerce*, November 5, 2010.

¹⁵ United States Energy Information Administration, <http://www.eia.doe.gov/cneaf/coal/page/acr/table10.html>.

can fill an export contract from either mine. In such circumstances, mining companies can – and regularly do – negotiate with the railroads serving single-service mines to achieve the lowest rate. They also can, and do, ship coal by water.

As Arch Coal, Inc., the second largest coal producer in the United States (and a member of the National Coal Transportation Association, which provided a Verified Statement in this proceeding), states on its website:

“Arch Coal has substantial production at mines served by each of the nation’s major railroads. In addition, many of Arch’s mines have cost-competitive access to the inland waterways system. Arch Coal Terminal is a company-owned dock on the Big Sandy River that enhances the company’s portfolio of transportation options.

“Arch Coal also can export coal from the East, West and Gulf coasts. Coal moving to the European marketplace also can be stored and transloaded cost-effectively through Dominion Terminal Associates (DTA) located in Newport News, VA.”¹⁶

In addition, shipper statements complain that railroads do not provide adequate coal export terminals, especially on the West Coast. But there are many factors that limit the development of new coal export facilities. For example, Cloud Peak Energy, the third largest producer, states as much:

“A portion of our coal sales in recent years have been into export markets in Asia, and we seek to make additional export sales in the future to Asia and potentially other international locations. Our ability to maintain and grow our export sales revenues and margins depends on a number of factors, including the existence of sufficient and cost-effective export terminal capacity for the shipment of thermal coal to foreign markets and demand by customers in Asia and in other potential export markets for PRB coal.

“Our access to existing and any future terminal capacity may be adversely affected by regulatory and permit requirements, environmental and other legal challenges, public perceptions and resulting political pressures, operational issues at terminals and competition among domestic coal producers for access to limited terminal capacity, among other factors. If we fail to maintain and grow terminal capacity for the export of our coal on commercially reasonable terms, or at all, our results from our export transactions will be materially adversely affected.

“Foreign customer demand for PRB coal, and the prices those customers may be willing to pay for PRB coal and related transportation costs, can be affected by a variety of matters, including supplier diversity and security considerations, economic conditions and demand for electricity in the relevant markets, international energy policies and regulatory requirements, and availability and pricing for thermal coal delivered from alternative international basins.”¹⁷

¹⁶ Arch Coal website, <http://www.archcoal.com>.

¹⁷ Cloud Peak Energy 2010 Form 10-K, p. 42.

To expand coal exports – including West Coast exports – railroads have demonstrated a willingness to work with their customers. For example, Union Pacific and Burlington Northern worked for two years with the Port of Tacoma to develop a 20 million ton coal terminal that would have cost between \$150 million and \$300 million and would have served Powder River Basin mines. The plan was abandoned by the Port due to potential environmental opposition.¹⁸

In sum, the United States benefits from an efficient railroad network offering customers the lowest rates in the world for both imports and exports. Railroads work with and offer benefits to all of their customers, whether they seek to import, export, or move goods domestically.

III. The US freight railroads are realizing returns in line with their customers and the rest of the US economy. Ultimately, the long-term ability of the railroads to reinvest in infrastructure is more important than short-term changes in profits.

Apparently, most supporters of changes to rail rates and access (primarily shippers and associations of shippers) who provided initial comments in this proceeding chose to focus on US railroads' financial performance in a vacuum, isolated from any cross-industry comparison, and then to highlight only short-term financials as indicative of the railroads' generating excess profits from higher than necessary rates. But in fact, the railroads are generating returns well within the range of American industries – particularly of the industries they serve. To illustrate this point, Oliver Wyman benchmarked the most recent financial returns of the five major US railroads (BNSF, CSX, KCS, NS, and UP) against those of a broad range of rail shippers who provided initial comments in the proceeding and for whom public data was readily obtainable. Additionally, benchmarks representing key industry sectors that provide large volumes of rail traffic were included in the comparisons.

As shown by Exhibits II-1 through II-4 below, on key measures of short-term profitability, such as return on equity, return on capital, and dividend yield, railroads are realizing returns within the same range as both their customers and the broader base of American industries that use rail. None of the railroads had either the lowest or highest level of profitability vis-à-vis these shippers and industries in 2010. By any commonly accepted measure, railroads are well within the norm of recent short-term profitability for American industry. Thus, any change in regulation that forces the reduction of the rates that railroads are able to charge for their services will essentially result in a transfer of wealth directly from one industry to a subset of another. The consequences of this transfer in wealth due to railroad revenue losses would likely move the railroads into the less desirable end of the financial performance spectrum, which would both increase the cost of capital and reduce the number of investors who would want to invest in railroads over other sectors.

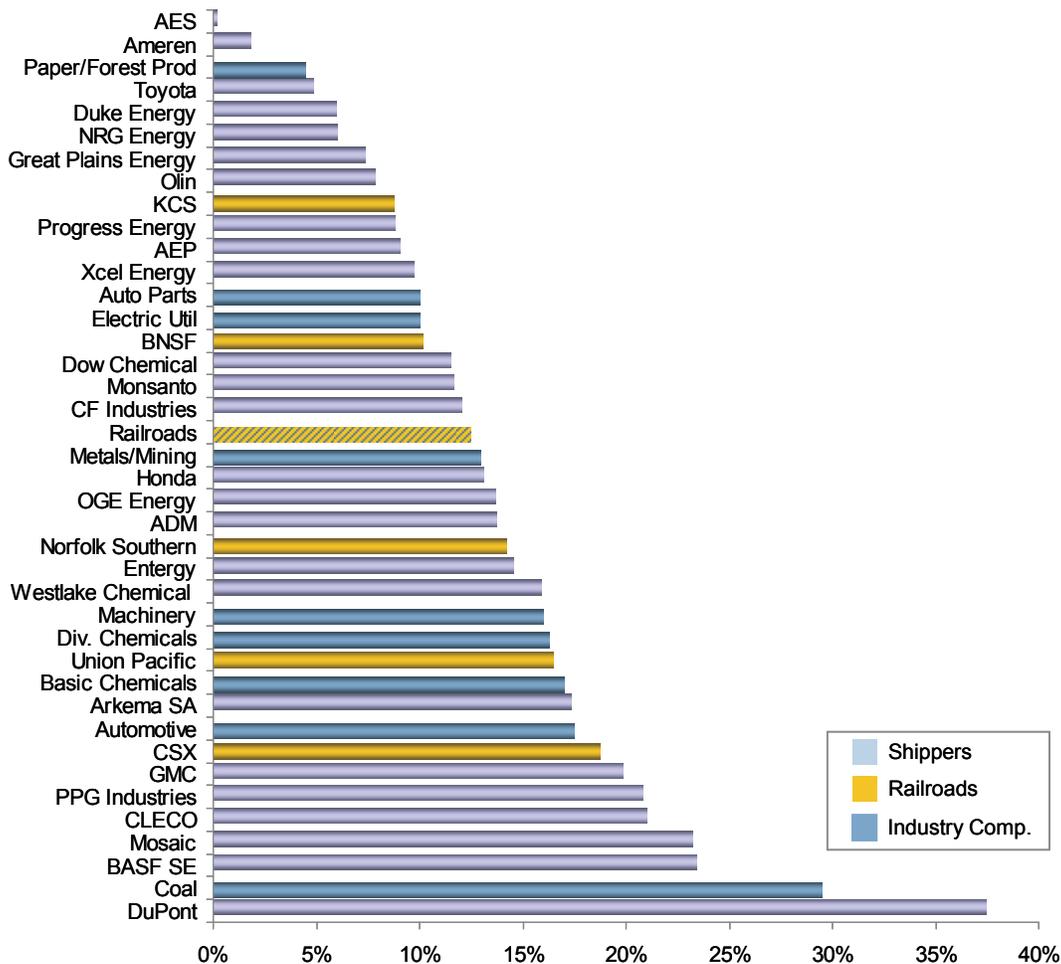
A. Return on Equity

Return on equity is the amount of net income a company generates as a percentage of shareholders' equity. It is a measure of the profit a company generates with the money its

¹⁸ "Port of Tacoma Torpedoes Coal Export Terminal Plan," *Platt's Trader*, November 22, 2010.

shareholders have invested. On an ROE basis, the five major US railroads are well within the range of the profitability of their customers. The railroads’ 2010 ROE ranged from 8.7 to 18.8 percent. Benchmarked customers had ROE levels ranging from 0.2 percent up to 37.5 percent for DuPont (Exhibit II-1).

Exhibit II-1: Return on Equity: Railroads, Shippers, and Industry Composites, 2010



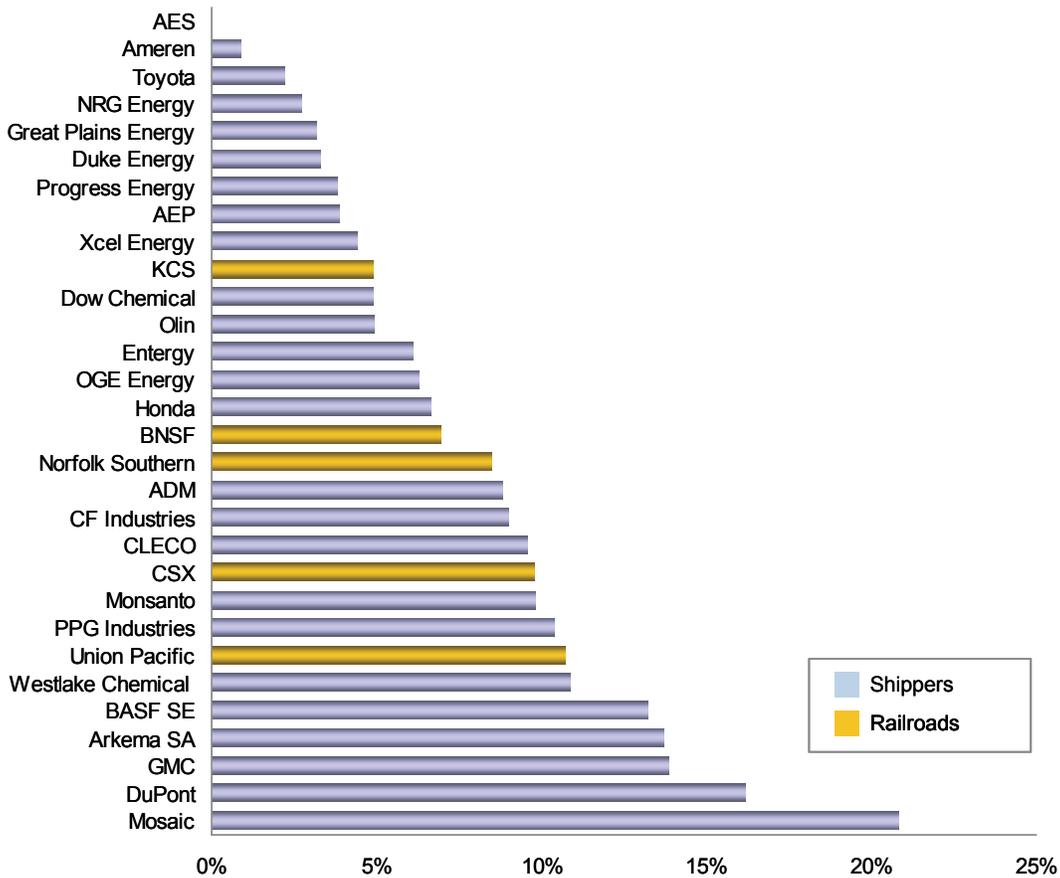
Source: Hoovers company reports for company data; Value Line for industry composite data. Note for industry composites, ROE is return on shareholder equity. Railroad industry composite data includes the following companies: CSX, CN, CP, GWR, KCS, NS, RA, and UP.

B. Return on Capital

Return on invested capital (ROIC) (shown in Exhibit II-2) is the percentage of net income minus dividends compared to the total capital invested in a company. Return on total capital (ROTC) (shown in Exhibit II-3) is a similar measure calculated by Value Line that shows the percentage of net profits plus half the current year’s long-term interest due to the sum of shareholders’ equity and long-term debt. Both ROIC and ROTC measure the efficiency with which a company allocates capital to generate profits. The five major US railroads had 2010 ROIC levels ranging from 4.9 to 10.7 percent. Benchmarked shippers had 2010 ROIC levels ranging from less than one percent to as high as 16.2 percent for DuPont. In addition, a comparison of return on total

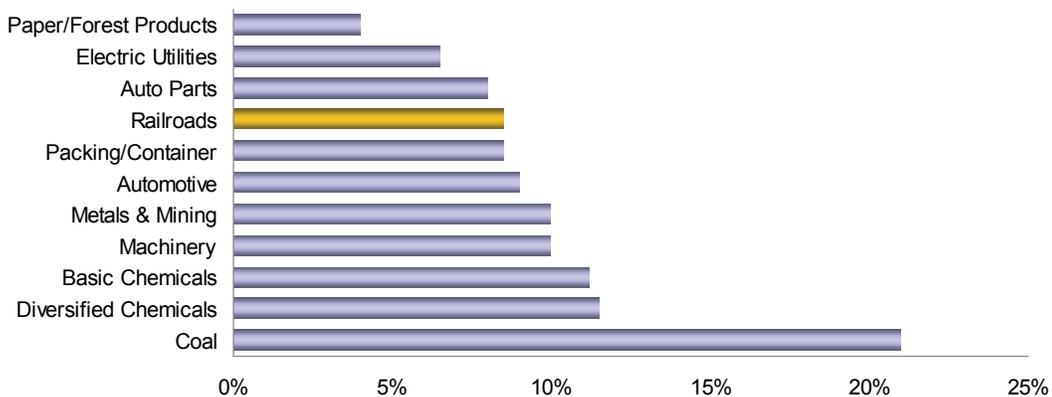
capital (ROTC) for composite industry groups shows that railroads in 2010 had an average ROTC of 8.5 percent, compared to ROTC levels ranging from 4.0 percent to 21.0 percent for a cross-section of rail-reliant industries.

Exhibit II-2: Return on Invested Capital: Railroads and Shippers, 2010



Source: Hoovers company reports.

Exhibit II-3: Return on Total Capital, Composite Industry Groups, 2010

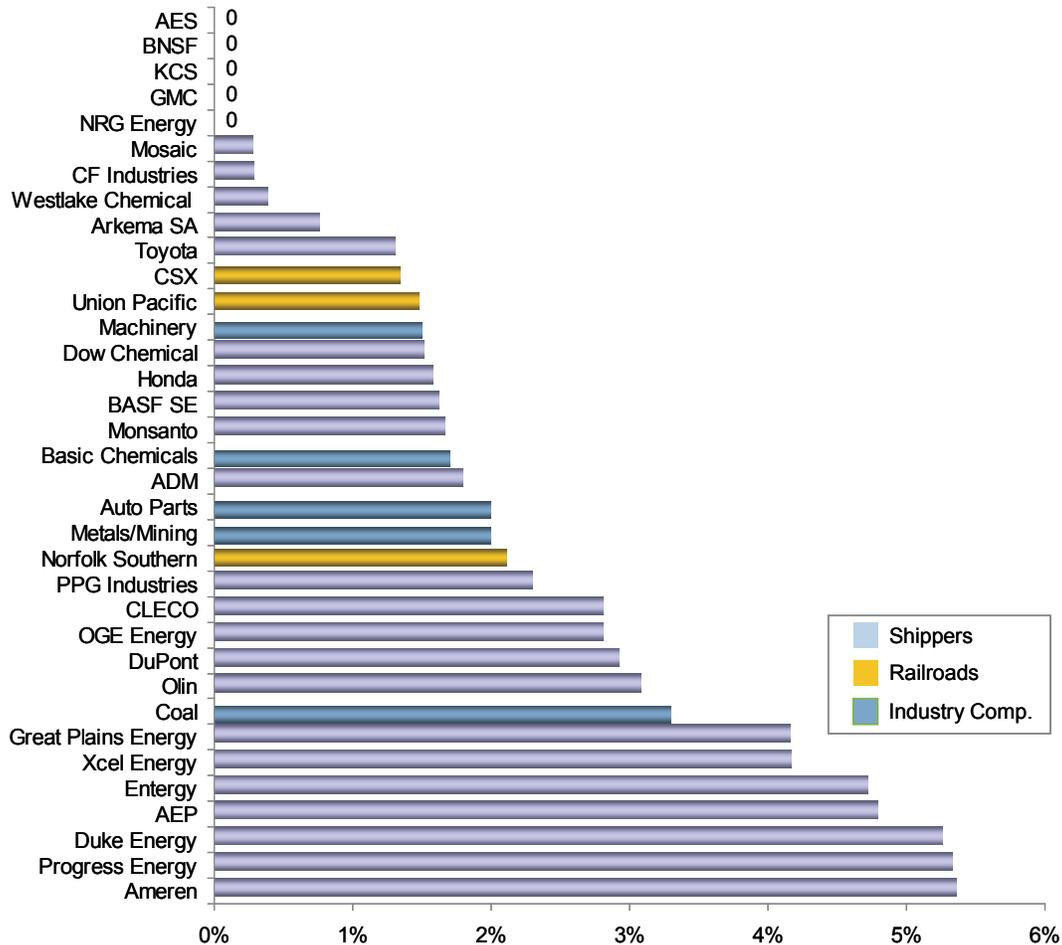


Source: Value Line industry data.

C. Dividend Yield

Dividend yield is the ratio of annual dividends paid to the share price of a company. On this measure, the railroads fall well within the range of dividend yields paid by rail shippers. The five major US railroads’ 2010 dividend yields ranged from zero to 2.1 percent. Benchmarked rail shipper dividends and industry composites ranged from zero to as high as 5.3 percent for Progress Energy and 5.4 percent for Ameren (Exhibit II-4).

Exhibit II-4: Dividend Yield: Railroads, Shippers, and Industry Groups, 2010



Source: Hoovers company reports and Value Line industry data.

D. Appropriate Focus: Long-Term Financial Performance

The assumptions of shippers and shipper associations who believe that the railroads are earning excess profits are flawed. Based on standard measures of profitability, the railroads are clearly not earning short-term profits in excess of what is typical for American industry – and for their own customers. In addition, a focus solely on short-term financials misses the bigger picture: Railroads must generate sufficient returns and meet revenue adequacy criteria to guarantee their access to capital and to make the long-term investments in infrastructure that will be needed over

the next 25-30 years to support large increases in traffic. It is evident that when railroad profitability improves, so too does the ability of the railroads to reinvest in infrastructure: For example, Union Pacific recently announced that thanks to higher first-quarter earnings and a positive outlook, it will increase its capital spending by \$100 million, to \$3.3 billion in total for 2011.¹⁹

As noted in my initial comments, the US railroads will need to invest \$148 billion in infrastructure to accommodate an increase in demand of 88 percent by 2035-2040 (depending on the duration of the current financial downturn). Absent this investment, the portion of the US railroad network at or near capacity will increase from 13 percent today to 55 percent by 2035, and *“The resulting level of congestion would affect nearly every region of the country and would likely shut down the national rail network.”*²⁰

IV. Rail service efficiencies are driven by density. Changes in flows that reduce density or introduce new patterns will lead to service inefficiencies.

Based on a review of the initial filings made in this proceeding, it is clear that most shippers and shipper associations have chosen to focus only on alleged inequities in rail rates and revenues, while ignoring the critical importance of rail service performance. In particular, proponents of “forced interchange” and/or “forced access” uniformly choose to ignore the adverse impacts on overall railroad network density, as well as on specific origin-destination densities, that would result if such policies were implemented. This is a critical issue, as increases in network density since the partial deregulation of the railroad industry²¹ have been an important source of the efficiencies that have allowed railroads to reduce rates and improve service transit time and reliability consistently over the past 30 years. At the core of many of these positive efficiency and service trends has been the concentration of traffic flows made possible by the sale or abandonment of redundant lines and the elimination of multiple traffic routes made possible by the closing of interchange points.²²

The now long-term integration of previously merged rail systems and the stabilization and concentration of traffic flows have reduced railroad costs through more efficient utilization of track, locomotives, and crews and have improved service to shippers through reduced delays and increased direct service between terminals. Michael Keaton, in *Logistics and Transportation Review*, analyzed the economics of increased railroad density in the United States and found that *“Increased density not only allows for longer trains, thus spreading train cost over a larger*

¹⁹ “Union Pacific Boosts Capital Spending, Dividend,” *Journal of Commerce*, May 6, 2011.

²⁰ “National Rail Freight Infrastructure and Capacity Study,” Cambridge Systematics, September 2007. pp. 5-6.

²¹ US rail traffic density, defined as revenue ton-miles per owned mile of road, has more than tripled since deregulation, increasing from 5.58 million in 1980 to 18.86 million in 2008 (16.29 million in 2009 during the downturn). Source: Railroad Facts 2010, Association of American Railroads.

²² For example, prior to partial deregulation, railroads were required to maintain interchanges that resulted in dozens of routes even for shorthaul traffic pairs such as Boston, MA and Buffalo NY, according to FRA studies completed during the 1970s. This in turn led to fragmented, inefficient traffic flows that increased costs and degraded service.

*output, but also makes it economical to provide direct train connections between an increasing number of terminals. This reduces transit time.*²³

Similarly, Curtis Grimm and Clifford Winston, in a study of competition post-deregulation, found that decreasing density through competition has the opposite effect:

*“Increased railroad competition actually reduces service....Average service time rises as the number of railroads serving the corridor increases and for receivers who could be served by alternative railroads from alternative origins. Apparently, the delays caused either by congestion enroute or by having to transfer cars to another railroad outweigh any competitive pressure to provide faster service.”*²⁴

Robert Gallamore and John Panzar, in a study of captive shippers, found that:

*“Mutual actions to concentrate interchange traffic have reduced costs and improved service, especially by reducing the number of separate interchange blocks that must be made in switching yards and transfer movements that must be conducted between railroads at interchange points. If shippers were able to dictate interchange points from their own parochial point of view, system-wide (or network) efficiencies may be lost.”*²⁵

The efficiencies made possible by increasing railroad density have been an important source of railroad cost savings. John Bitzan and Theodore Keeler quantified these savings in a study of the impacts on rail of increased density and deregulation:

*“A strong conclusion of our research is that regulatory reform in the railroad industry (the combined effects of the 4R Act of 1976 and the Staggers Rail Act of 1980) enabled railroads to substantially increase their route density[footnote omitted]....Furthermore, we estimate that the benefits (in enhanced operating efficiencies) from these increased densities were quite substantial, that is, an order of magnitude of \$7 billion to \$10 billion per year as of 2001, or 10-22 percent of total operating costs....Much of the savings from lower rail costs were likely to have been passed to shippers and consumers in the form of lower rates.”*²⁶

To understand how forced interchange or forced access would undermine railroad efficiency, increase railroad costs, and harm service, it is necessary to understand how modern railroads operate. Prior to 1980, railroads for the most part picked up cars and moved them from one classification yard to another until they reached their destinations. There was no comprehensive

²³ “Economies of Density and Service Levels on U.S. Railroads: An Experimental Analysis,” Michael Keaton, *Logistics and Transportation Review*, September, 1990, p. 211.

²⁴ “Competition in the Deregulated Railroad Industry: Sources, Effects and Policy Issues,” Curtis Grimm and Clifford Winston, in *Deregulation of Network Industries: What’s Next?* Sam Peltzman and Clifford Winston, editors, Washington, D.C.: AEI-Brookings Joint Center for Regulatory Studies, 2000, pp. 60-61.

²⁵ “When is Competition Not Good: The Case of Compelled Access and Maximum Rate Regulation for ‘Captive Shippers’,” Robert E. Gallamore and John C. Panzar, paper presented at the Second Conference on Railroad Industry Structure, Competition and Investment, Northwestern University Transportation Center, October 8-9, 2004.

²⁶ “Economies of Density and Regulatory Change in the U.S. Railroad Freight Industry,” John D. Bitzan, North Dakota State University and Theodore E. Keeler, University of California, Berkeley, University of Chicago, *Journal of Law and Economics*, February 2007.

plan for the movement of each car. The result was suboptimal utilization of railroad assets, high costs, and long and irregular transit times.

Modern railroads operate much differently. Most large railroads in North America today have established network plans for the operation of the railroad and generate a plan for each individual car prior to the time it is loaded. This method of operating is known generally as the “scheduled railroad.” The service plan for each car indicates the specific series of trains that will carry it from origin to destination. The result is much better utilization of assets and the avoidance of intermediate handlings, resulting in higher traffic densities, lower costs, and greatly improved service to shippers.

The key to the “scheduled railroad” network planning process is single-line or highly coordinated multi-railroad service and large, repetitive traffic flows of both single cars and groups of cars that can be forecasted and modeled. It is far more difficult for railroads to design and execute reliable car plans that involve interchange of the car between railroads, especially if the interchange occurs sporadically or involves a little-used interchange point that requires suboptimal trains. Converting single line traffic to interline traffic, as forced interchange and forced access would require, of necessity introduces extra handling, extra interchanges, and in some cases circuitous routing. All of these increase costs and degrade service. Moreover, they require operation of sub-optimal trains that make inefficient use of scarce line capacity, locomotives, and train crews.

It is essential to understand that forced interchange and forced access run directly counter to efforts to operate efficient “scheduled railroads” and would likely force railroads to return to the inefficient operations that existed prior to 1980. Allowing shippers to shift traffic frequently between carriers and to specify varying interchanges would make network planning much more difficult. Proper network planning and management is required to build efficient, repetitive blocks of traffic and to move that traffic either through single-line service or, where that is not possible because the shipper and receiver are located on separate railroads, through a limited number of major interchange points. As discussed below, forced interchange and forced access also would impel the railroads either to make speculative investments to increase capacity at interchanges, which would use scarce capital inefficiently, or to deal with periodic operating disruptions caused by shippers electing to route traffic to interchanges with insufficient capacity.

It is also important to understand that interchange is a complex and costly operation, and that inserting interchanges into what are now single-line routes would inevitably increase costs for all shippers and degrade service. This is true because:

- Interchange points are not uniform. Some interchanges, which have been developed cooperatively between railroads as high-density facilities, have adequate capacity and efficient train service on both connecting railroads. Many interchange points, however, are able to handle only a limited number of cars. Some of these interchanges have physical constraints that make expanding capacity impossible or expensive. In some cases, interchange points that are listed as “open” have no interchange track. They remain in the

inventory of open interchanges only to facilitate reinstating them should operating considerations require.

Thus forced interchange would most likely present the railroads with an unattractive choice: Leave interchanges as they are, knowing that sporadic use would create intermittent backlogs due to capacity constraints. (As with airports that close due to weather, rail traffic backlogs can take days or longer to resolve and can ripple quickly through the network.) Alternatively, the railroads could increase capacity at unused or rarely used interchanges and install facilities in anticipation of traffic that may or may not develop – which would certainly be a waste of scarce capital.

- At interchange, the receiving railroad becomes responsible for any damage to the interchanged car and its lading, as well as for damage caused if the car derails or discharges cargo (including hazardous materials) due to a mechanical defect. Therefore, railroads must inspect cars at interchange or negotiate a waiver. Inspection is an expensive and time-consuming process that adds cost and delay that would not be present in a single-line movement. If a car is carrying TIH (Toxic Inhalation Hazard) cargo (such as chlorine or anhydrous ammonia) then federal regulations require a rigorous inspection that cannot be waived.
- Interchange introduces delay. Beyond the delay caused by car inspections, interchange requires coordination of train schedules by the two connecting railroads. While this may be feasible at large, high-volume interchange points, it is unlikely to occur at smaller interchanges, especially if a shipper uses the interchange only sporadically. This lack of coordination results in car delays, which degrade service and car utilization. Interchange introduces delays in other ways as well, which can affect shippers with no interest in forced interchange. Railroads strive to concentrate traffic to build trains that can bypass intermediate classification yards and provide direct service between terminals. To optimize train efficiency, railroads must be able to forecast and plan on sufficient volume to operate each direct train. If a shipper can move traffic from single-line service to an interchange on a whim, the railroad cannot count on that traffic in its planning and the remaining repetitive traffic may not be sufficient to support direct, single-line service. The shippers who would have benefited from that service will then not have access to it.
- Interchange introduces needless transaction costs. These include the need to establish and administer joint rates that may or may not be utilized by a shipper. They also include the cost to establish and administer car inspection waiver agreements. The more interchanges that are involved, and the more sporadic the traffic, the more expensive and disruptive these transaction costs become.

Finally, it is important to understand that railroads operate large and complex networks. As with any network business, railroad networks operate most efficiently when they are stable. If parties that do not control the network have the ability to control routing within the network, as would be the case in forced interchange, and can exercise that ability sporadically, the network will become unstable. Railroads are no exception. Even when changes to a network are known well in advance and are subject to detailed planning, railroad networks – as with any complex

network – can fail in unexpected ways. The operational disruption caused by the merger of the Union Pacific and Southern Pacific and by the acquisition of Conrail by Norfolk Southern and CSX illustrate this point. In both cases, these disruptions took several years to fully correct.

In sum, since deregulation, railroads have consolidated their networks and traffic flows. This has resulted in improved service and in significant cost savings, most of which have been passed on to shippers. This combination of service and low costs confers important advantages on US railroad shippers.

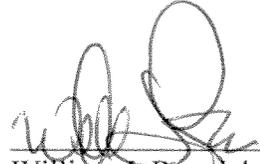
As I described in my initial Verified Statement for this proceeding, the privately funded railroads in the United States have greatly improved the efficiency of the railroad network, and have thus far earned sufficient returns²⁷ to provide additional capacity as shippers have required it. Forced interchange and forced access directly attack both the railroads' ability to operate efficiently and to earn sufficient returns to self-finance the substantial capacity investments that will be required to keep US shippers competitive in the global market.

²⁷ Railroad returns are below their cost of capital under the current regulatory structure. See "Railroad Revenue Adequacy – 2009 Determination," Surface Transportation Board, Docket No. EP 552 (Sub-No 14), November 10, 2010.

VERIFICATION

I, William J. Rennie, declare under penalty of perjury, that the foregoing statement is true and correct and that I am qualified and authorized to file this statement.

Executed: May 13, 2011



William J. Rennie

WILLIG REPLY VERIFIED STATEMENT

Before the
Surface Transportation Board

**Docket Number EP 705:
Competition in the Rail Industry**

Reply Statement of

**Robert Willig
Professor of Economics and Public Affairs
Princeton University**

May27, 2011

I. Witness Introduction and Summary of Conclusions

A. Qualifications and Assignment

My name is Robert Willig. I am Professor of Economics and Public Affairs in the Economics Department and the Woodrow Wilson School of Public and International Affairs of Princeton University. I also serve as a senior consultant to the economics consulting firm Compass Lexecon. I filed testimony on behalf of the Association of American Railroads in the Opening Round of this proceeding, where my qualifications are discussed in more detail.

I have been asked by the AAR to review and provide comments on various issues raised by parties in their Opening Comments. Many parties filed comments advocating significant changes in the Board's approach to access issues. There are several common themes running through the comments:

- a) The structure of the rail industry – with two Class I carriers in the East and two Class I carriers in the West – is said to have given rise to pricing that is inconsistent with competition, whether it be through explicit collusion, as alleged by some of the comments,¹ or through “consciously avoid[ing]” competition, as suggested by others.²
- b) Railroads are said to have taken advantage of the market structure to impose high prices, achieve unprecedented financial gains, and generally take advantage of shippers with limited transportation alternatives.³ The restored financial stability in the industry is said to be clear evidence of market power and a clear signal that the principles of competitive access regulation must be revisited.

¹ See, e.g., Verified Statement of Fredrick R. Warren-Boulton and Kenneth C Baseman on behalf of Western Coal Traffic League, before the Surface Transportation Board, Ex Parte 705: Competition in the Railroad Industry (hereafter “Warren-Boulton and Baseman”).

² See Comments of National Industrial Transportation League before the Surface Transportation Board, Ex Parte 705: Competition in the Railroad Industry (hereafter “NITL Comments”). See also, Comments of Western Coal Traffic League before the Surface Transportation Board, Ex Parte 705: Competition in the Railroad Industry (hereafter “WCTL Comments”).

³ See, e.g., Comments of Arkansas Electric Cooperative Corporation before the Surface Transportation Board, Ex Parte 705: Competition in the Railroad Industry (hereafter “AECC Comments”). See also, Comments of Concerned Captive Coal Shippers before the Surface Transportation Board, Ex Parte 705: Competition in the Railroad Industry (hereafter “Coal Shippers Comments”).

- c) The appropriate regulatory response to current conditions in the industry is asserted to be sweeping change to competitive access principles, including eliminating the need to demonstrate abuse of market power before access remedies are considered; mandating access based on superficial market attributes – such as the number of railroads serving a particular customer - rather than sound analysis of the degree of competitive discipline in the market; and abandoning economically reasonable access pricing principles in favor of individually self-serving but social-welfareharming proposals.

After a brief summary of conclusions, I address the concerns raised about market structure in Section II. In Section III, I turn to arguments related to the financial health of the rail industry, followed in Section IV by an analysis of the proposals for mandated access advanced by various parties. My testimony concludes with additional and summarized comments on the access pricing schemes that have been proposed.

B. Summary of Conclusions

In general, the calls for wholesale changes to regulatory policy are unsupported by any rigorous analysis: The justifications of mandated access based on arguments about market structure are inconsistent with basic economic principles applied to the rail freight industry. Data on the financial performance of railroads are misinterpreted and in fact contradict, rather than support, the conclusion that the rail industry suffers from widespread failures of competition. Calls to introduce mandated access in situations where there has been no abusive conduct are at odds with basic principles of economics and regulatory policy.

The comments advocating broad changes to current competitive access principles generally suffer from a common flaw: they are focused on advocating a position that is in the best interests of various individual shippers or shipper groups

without consideration for economic efficiency and the performance and viability of the industry and rail shippers as a whole. Regulating to satisfy the opportunistic demands of individual shippers rather than to encourage and maintain the efficient operation and viability of the industry is poor public policy and would be disastrous for its carriers' services and their shippers.

The current competitive access rules, and the STB's application of those rules, are sound. Proposals to move away from the current regulatory approach, including requests to relax the competitive abuse requirement and to require railroads to offer rates on bottleneck segments, and to open up the rail system to the widespread imposition of terminal trackage rights and reciprocal switching, would be a huge step backward for the industry. Such an approach would move railroads back towards degradations of service and insufficient investment necessitated by artificially stultified finances and stunted returns.

II. Access Should Not Be Mandated on the Basis of the Number of Rail Competitors, Nor Without the Prerequisite of a Finding of Competitive Abuse.

A. Summary of Comments

One of the common themes – and one of the most common errors – in discussions related to rail industry competition is conclusions drawn about the power of market forces based solely on a count of rail competitors rather than on a complete economic analysis. This theme is repeated by several parties in this proceeding. Some point to “duopoly carriers,” others report simply “a reduction” in the number of railroad options available to shippers, and still others allege “non-

existent” rail-to-rail competition and suggest such a structure has led to the exercise of abusive market power and should be of great concern to the Board.⁴

Parties generally begin their analyses with a count of the number of rail competitors in a given market, proceed to offer “examples” of abusive behavior to support their theory of limited competition⁵, and then point to the financial condition of the rail industry as “proof” that they were right about the competitive forces at play.⁶ The crucial assumptions on which these assertions are based – namely that a simple count of rail competitors is indicative of the principal competitive alternatives and is determinative of the strength of market forces, and that rising prices and strengthened financial performance can only be explained by a failure of competition – are deeply flawed

B. A simple count of the number of competitors does not provide information on the power of market forces.

Comments suggesting that the number of rail competitors available to a single shipper is dispositive of the strength of market forces make several key logical errors. First, many comments paint a cartoon-like picture of the competitive structure of the rail industry, implying that the industry can be characterized by two geographic markets (East of the Mississippi and West of the Mississippi), each with a “duopoly” structure. While a convenient caricature for those seeking expanded applications of competitive access remedies, this picture of the rail industry is

⁴ See, e.g., Coal Shippers Comments, NITL Comments, and WCTL Comments. See also, Comments of Interested Parties before the Surface Transportation Board, Ex Parte 705: Competition in the Railroad Industry (hereafter “Interested Parties Comments”). Comments of Alliance for Rail Competition, Montana Wheat & Barley Committee, et. al., before the Surface Transportation Board, Ex Parte 705: Competition in the Railroad Industry (hereafter “ARC/Montana Comments”).

⁵ Various parties alleged, for example, that railroads’ public pricing announcements, changes in negotiation strategies, and generally similar business decisions are indicative of abusive market power.

⁶ See Warren-Boulton and Baseman and NITL Comments.

erroneous and far too simplistic to serve as the justification for expanded regulatory intervention.

The specific conditions facing individual shippers are highly diverse – one shipper may have truck or barge options, one may have the ability to use an alternative source (with an entirely different set of transportation options) for its shipments; one may be able to use substitute products; and another may enjoy the presence of shortline or regional railroad alternatives, just to name a few. This diversity argues for exactly the policy foundation that is currently in place: a regulatory framework that is grounded in sound, widely applicable economic principles and that provides regulators with the nimbleness necessary to address the variety of competitive circumstances facing railroads, including the proper treatment of alternative sources of transportation and other forces of competitive discipline.

Second, it does not follow from economics that a duopoly market structure is inherently anticompetitive. Especially in industries, such as rail, where there are high fixed costs and significant economies of scale, scope, and density, a limited number of railroads can be the most efficient outcome in certain markets. Indeed, in certain markets where rail is present, a single railroad can be the most efficient outcome. This is true because duplication of service may unduly elevate costs and render rail service financially unsustainable, and because even in situations with few rail competitors, pricing can be effectively disciplined by alternative transportation options like trucks and barges or product or geographic alternatives available to shippers. The pertinent question for regulators is not how many railroads are present, but whether those railroads have engaged in anticompetitive abusive

conduct to gain or maintain their position.

A market where there is no evidence of abusive conduct and where there are also few competitive rail alternatives available to shippers may well indicate that the market cannot support additional rail participants. Indeed, it was noted by at least one commenter that distances and volumes can be impediments to drawing rail competitors to market.⁷ Therefore, rather than improving market efficiency, regulator-mandated access may impose arrangements for sharing facilities that are inefficient and an impediment to the efficient logistical arrangements that would have otherwise emerged if market forces had been allowed to work unimpeded.

Finally, requests by specific shippers to address purported market failures that relate to the specific details of their individual circumstance with a complete reevaluation of competitive access regulation should be viewed as dangerously misplaced. Current standards expressly address – and can remedy – harms from actual failures of competition arising from abusive conduct. Shippers here argue for a policy that removes their burden to demonstrate harm and instead would impose logistical arrangements that advance their own individual interests. It is understandable that shippers seek to promote their own business interests, but sound regulatory policy is about protecting the public's best interest, not promoting the interests of an individual shipper at the expense of the general welfare and other shippers.

It is essential that regulators distinguish and treat differently competitive failures stemming from abusive conduct as compared with applicants seeking individually beneficial but inefficient, welfare-harming outcomes that are not

⁷ See Arc/Montana Comments.

consistent with effective market forces. In making such distinctions, it is essential that regulators interpret information and data in the proper context, since, when considered in isolation, many data points can be misleadingly deemed consistent with a variety of economic conditions. For example, taken alone, a reduction in supply of widgets and an attendant increase in the price of widgets could be the result of an illegal cartel, or it could just be the result of an unanticipated demand for widgets. It might be tempting in these types of proceedings to look at data on rates, rates of return, stock performance, dividend payments, buy-backs, splits, and the like, and jump to the superficial conclusion that trends in the data are not consistent with competition and that the abusive exercise of market power must be the culprit. However, a thorough examination of the data in context leads to a decidedly different conclusion.

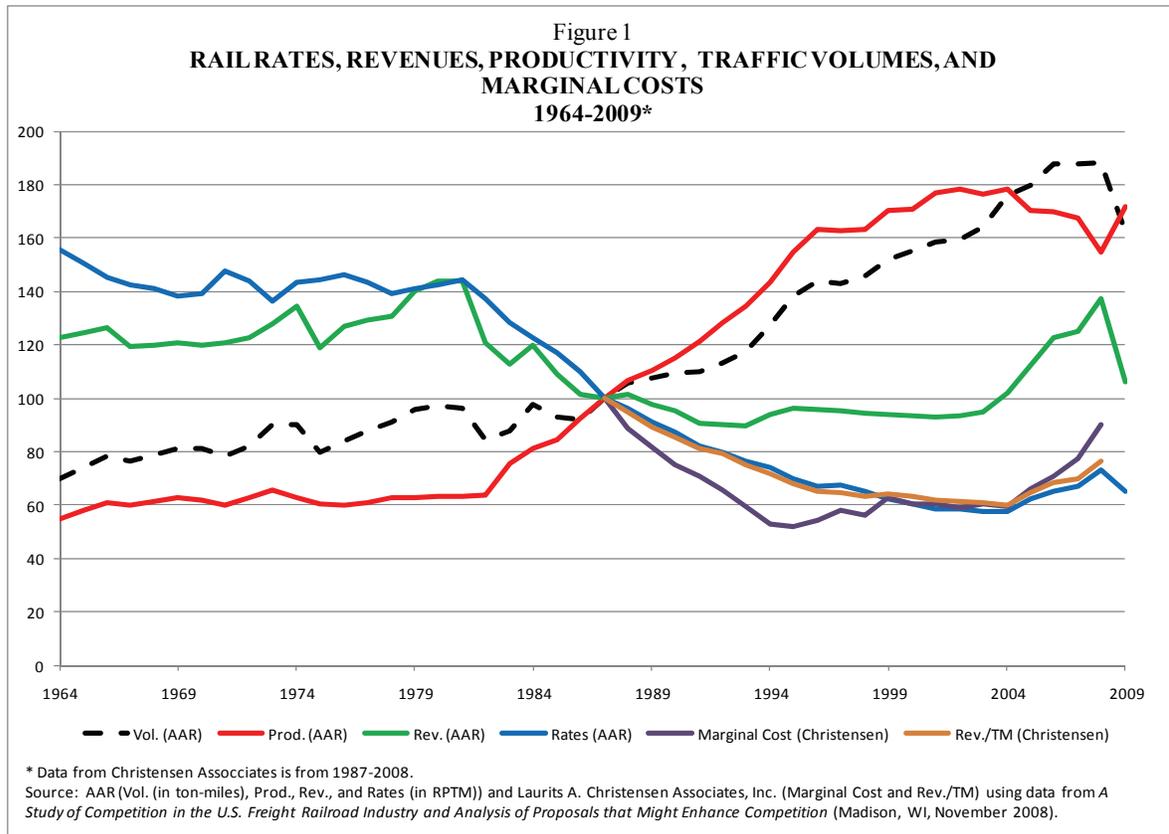
III. Rising Prices and Financial Stability Are Not Rationales for a Wholesale Overhaul of Competitive Access Principles.

The Opening Comments were peppered with citations to the overall financial health of the industry as evidence that railroads were exercising market power to inflate rates artificially. Parties point to, and misinterpret, a variety of data to support this contention, including a period of rising prices beginning in mid to late 2003, generally improved financial performance for the industry as a whole, and the improved perception and performance of railroads in financial markets.

The focus on financial performance in general and rising prices in particular as evidence of abusive market power seems based on the misapprehension that strong financial performance is inconsistent with competitive markets and that in

competitive markets prices must always move downward. Such a misapprehension is a fundamental misunderstanding of basic economic principles. There is nothing in the economics of competition that implies that prices in competitive markets should move only downward, or that rising prices are in and of themselves evidence of abuse of market power. Prices in competitive markets properly move down *and up* with the interaction of supply and demand, and can readily rise under competitive market conditions.

As I have discussed previously, the firming of rail rates beginning in 2003-2004 is completely consistent with a competitive market's response to the combination of increasing costs, increasing demand, and tight capacity. Figure 1, reprised from my previous statement in this proceeding, shows rates and costs along with several other key economic indicators. Beginning in late 2003, we see increasing costs and falling productivity - both of which place upward pressure on prices. Add to the mix a period of increasing demand (i.e., growing volumes) and rising prices are exactly the response expected from a competitive market.



Of course, increasing prices can, under certain circumstances, result from abusive, anticompetitive conduct. However, there is no evidence of a sudden outbreak of market power abuse in the rail industry beginning in late 2003. Various comments characterize as anticompetitive anecdotal evidence of such conduct as public pricing announcements, “avoiding” competition, and vaguely asserted parallel conduct, but these behaviors can be completely consistent with competitive markets. In industries where competitors face similar demand conditions and operate under similar cost structures it is not surprising to see them make similar decisions about how best to compete in the market. The conduct at the heart of market power abuse is withholding supply to drive up price. Therefore perhaps the most compelling piece of evidence refuting claims of abusive conduct is that the upticks we see in rail

rates starting in 2003-04 occurred during a period of rapidly *growing* overall rail traffic volumes.

A. Reliance on revenue adequacy and the overall financial health of the industry to justify regulatory intervention is misguided.

The Staggers Act was enacted to rescue the rail industry from the brink of financial ruin. In 1980, the rail industry was in complete disrepair. Regulatory rules dictated service offerings and operational standards, railroads were forced to maintain inefficient and unprofitable lines, rates were heavily regulated, and railroads lacked the revenue to invest in their crumbling infrastructure. Service quality deteriorated rapidly and shippers were leaving rail at alarming rates.

One of the primary goals of the Stagger's Act was to restore railroads' financial viability by allowing railroads to divest unprofitable lines, build rational rail networks, discontinue inefficient and unprofitable service, and price in accord with demand. Suggestions that the restoration of financial health of a particular railroad, or even of the railroad industry as a whole, should be taken to mean that the regulatory policy that ushered in these improvements must be modified are strikingly contrary to the public's interest in a well-functioning rail system and a healthy economy.

The proper test is not that if a railroad becomes financially healthy overall and over the long term then regulatory action is warranted, whether or not the rail carrier operates in competitive markets. In fact, businesses in competitive markets can be expected sometimes to be financially flush and sometimes to be financially stressed as competitive forces of supply and demand drive their prices and their

profits up and down over business cycles and through growth or stagnation periods for the products they sell. But whether the finances of a competitive business are flush or stressed, the public's interest lies in the pricing of the business' products that is driven by the market forces of supply and demand.

In fact, the overall patterns of the *relative* financial health of the rail industry over recent years have been wholly consistent with those expected under a well-functioning regulatory system that allows maximum scope to market forces where regulation is not needed to substitute for competition. Strong demand and rising volumes pushed against the effective limits of capacity and resulted in increases in average rail industry rates of return in the first half of the 2000s.⁸ Then, as would be expected, those rates of return deteriorated with the deep recession of recent years.

If nothing else, these patterns should tell us that rail industry financial health is at the mercy of overall supply and demand conditions in the economy. Certainly, there is no basis for asserting that improved financial health for individual railroads or for the industry as a whole is the product of abuses of market power or across-the-board diminutions in competition and, thus, warrant wholesale changes to long-established regulatory policy.

⁸ See Statement of Robert Willig before the Surface Transportation Board, Hearings Regarding Docket Number EP 704: Review of Commodity, Boxcar, and TOFC/COFC Exemptions, January 31, 2011 at Figure 3.

IV. Changes to Competitive Access Principles Must be Based on Sound Economic Analysis and Cannot Sacrifice Economic Efficiency for the Interests of Some Individual Market Participants.

A. Summary of Comments

All of the discussions of the strength of competition in transportation markets and the degree of pricing discipline exerted on the railroads are preludes to the main topic: requests for sweeping changes in competitive access policy. Proponents of mandated access argue that the solution to their litany of perceived problems – from poor service quality to higher prices – is mandated access. Various parties advocate for (1) relaxing the competitive abuse standard articulated in the Midtec decision; (2) introducing mandated reciprocal switching arrangements and requiring incumbents to provide competitors with access to their terminal facilities, (3) requiring railroads to offer rates on bottleneck segments; and (4) enhancing the Board's authority to prescribe alternative through routes.

B. Requiring a showing of abusive conduct inconsistent with effective competition – as opposed to showing just the absence of head-to-head rail competition – is essential for access-related regulation to serve the public interest.

Consider first the suggestion that it is appropriate and necessary to relax the competitive abuse standard articulated in the Midtec decision to allow access remedies even in situations where there has been no evidence of abusive conduct. Parties assert that granting the Board more expansive authority to impose competitive access remedies will lead to greater efficiencies, lower prices and

improved conditions for shippers.⁹ These assertions have it exactly backwards.

Where a single-seller has not attained or maintained its position through anticompetitive acts, regulatory intervention that would mandate access for a second seller invites complainants to request, and to be granted, relief that results in an outcome that is neither market-based nor otherwise in the public interest.

For example, one party complained that shippers in their state who were “captive” to a railroad noted that the rail carrier failed to compete for shipments that can also be trucked, offering “take-it-or-leave-it rates” (incidentally, an unnecessarily pejorative term applied to what might have been just the final offer of a complex negotiation).¹⁰ The commenter seemingly acknowledges the existence of a competitive alternative but seeks new mandated access regulation because they would *prefer* to ship by rail.

The current competitive access rules are not – nor should they be – concerned primarily with advancing the business interests of some individual market participants, but instead are focused on ensuring efficient market-based outcomes. It is these outcomes that best serve the industry overall, particularly the sustainability and quality of service that is vital to the entire body of shippers, not just those seeking more regulation to serve their individual interests whether consistent with market forces or not. Requiring a showing of abusive conduct is the only way to ensure that regulation intervenes only when markets have actually failed, and not

⁹ See, e.g., Comments of Consumers United for Rail Equity, Before the Surface Transportation Board, Ex Parte 705: Competition in the Railroad Industry (hereafter “CURE Comments”). Comments of Westlake Chemical, Before the Surface Transportation Board, Ex Parte 705: Competition in the Railroad Industry (hereafter “Westlake Chemical Comments”). See also, Coal Shipper Comments.

¹⁰ See Comments of Minnesota Consumers United for Rail Equity (Gopher CURE), Before the Surface Transportation Board, Ex Parte 705: Competition in the Railroad Industry (hereafter “Gopher CURE Comments”).

just where some competitors or customers would like additional options.

C. Suggested modifications to bottleneck pricing rules and proposals to expand the prescription of alternative through routes are unsound economics.

A bottleneck segment exists where a particular route is served at one end by multiple railroads but is served at the other end by only one railroad. The “bottleneck” is that portion of the route that is served by only one railroad. In this proceeding, as well as generally, shippers contend that the railroad serving the bottleneck segment (often referred to as the bottleneck carrier) is able to exploit its position over the bottleneck segment to inflate the price of the entire through move to levels that are above the rates that would prevail if shippers were able to receive separate rate quotes for both the bottleneck and non-bottleneck segments of the through move. Shippers complain that regulation allows the bottleneck carrier to exploit its market power because there is no requirement for bottleneck carriers to quote rates on only the bottleneck segment and there is no mechanism for shippers to challenge bottleneck rates.

Many of the comments requesting changes in bottleneck policy focused on methods of identifying discrete rates for bottleneck segments, establishing rules for challenging those rates, and proposing tests for identifying “excessive rates” that should be addressed through mandating alternative through routes. The proposals range from relatively straight-forward requests to overturn the “Bottleneck Decision,” and thus require railroads to quote rates on bottleneck segments and subject those rates to challenge, to a more complicated scheme focused on revamping the triggers for prescribing alternative through routes. The latter

proposal, presented by Concerned Captive Coal Shippers, involves calculating “imputed bottleneck rates” which would then be subject to review that could trigger regulatory intervention – in the form of prescribed alternative routes - under a variety of scenarios.

Regardless of the specific proposal, the general arguments supporting these requests are variations on the theme that under the current rules shippers are precluded from benefitting from competition that already exists and that the proposed modifications will simply “unlock” that competition and increase the efficiency of the industry.

There are two major flaws with proposals to mandate bottleneck rate quotes and expand the use of prescribed alternative routes. The first flaw has been discussed in detail above: introducing artificial competition in markets where there is no competitive abuse does not increase efficiency. Rather than improving long run performance and efficiency, imposing the sharing of key facilities and arrangements will inefficiently alter traffic flows. Where there is no abusive conduct and where such sharing has not been established by the market, mandated sharing arrangements will lead to the long-run deterioration of the rail network. The harm comes as regulators, who have much less insight into the daily operations of the market and who are not influenced in that same way by the incentives inherent in the market, introduce conditions that are less efficient than those established by the interplay of market forces. The introduction of additional competitors requires railroads to alter operations and schedules, imposes additional, unnecessary costs on the railroad, and will eventually lead to lower quality of service, revenues, and

investment.

Second, generally regulating components of rates in isolation from through movement rates is dangerous to economic efficiency and the sustainability of robust rail service. It is understandable that some individual shippers see great short-term benefits from this approach, but it is based on bad economics and would, in the long run, be disastrous for railroads and shippers.

To see why focusing on the prices of components of the final product rather than the price of the full O-D route is misguided and would preclude the financial viability of the railroad, consider the classic bottleneck route shown in Figure 2, below.

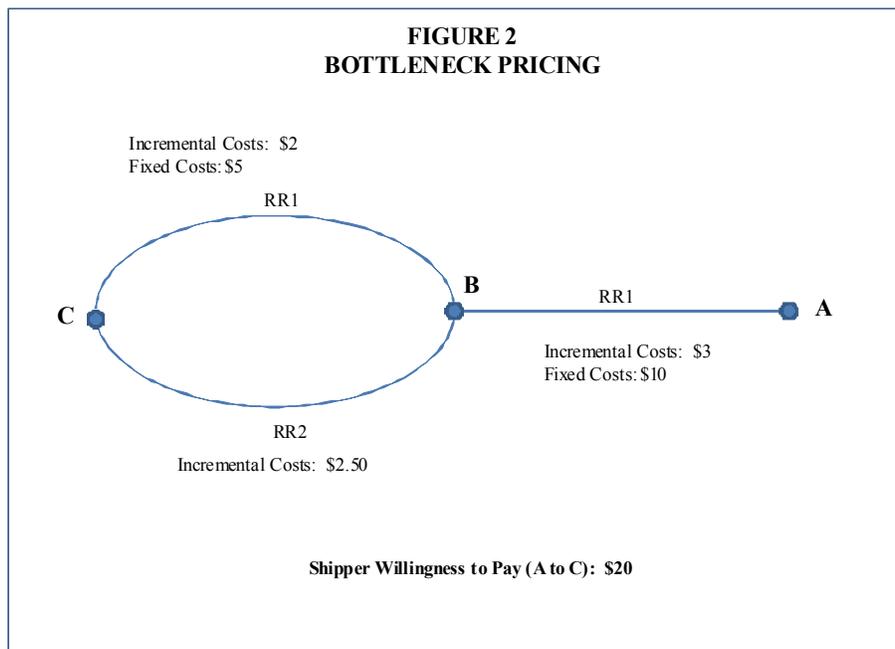


Figure 2 shows a through route originating at A, terminating at C, with a junction at B. The route is served from B to C by both RR1 and RR2, but is served

between A and B only by RR1. Shippers between A and C are willing to pay \$20 for rail service and that is what RR1 charges. Figure 2 also identifies the incremental and fixed costs associated with various pieces of the route. A simple arithmetic example illustrates the dangers of proposals intended to limit pricing on bottleneck segments absent any indication of abusive conduct.

Basic economics teaches that competition tends to drive prices toward incremental costs. As applied to our example, this tells us that the competition between points B and C will push RR1's rates on that segment toward \$2 – its incremental cost. Because there is competition for shipments between B and C, RR1 is impelled to charge shippers using the B-to-C route rates that cover its incremental costs of \$2.00 but do not exceed its competitor's incremental costs of \$2.50. This pricing pressure leaves little excess revenue to contribute to covering the fixed costs of the segment. This is why preserving carriers' ability to price in accord with demand is so central to the economic health of the industry. In order to maintain both the A-to-B and B-to-C segments of the network, RR1 must find sufficient revenue to cover these fixed costs. In this example that revenue comes from shippers moving over the full A to C route: RR1 charges A-to-C Shippers \$20, which covers both the incremental costs of the move and the fixed costs of the needed network infrastructure.

If, as some suggest, regulation limiting railroads' pricing freedom on bottleneck segments is introduced – either through mandated sharing of the infrastructure between A and B that would drive prices on A to B to incremental costs, or by imposing other pricing limits – railroads will be unable to recover the

full costs of their networks. Mandated, cost-based pricing on bottleneck segments – even fully allocated cost-based pricing – would be crippling for the rail industry. Whether they are the prices charged to shippers by the landlord railroad or whether they are the prices paid by a competitor railroad for access to the network, cost-based bottleneck pricing would completely undermine the landlord railroad’s ability to execute differential pricing on shipments from origin-to-destination. To see why this is so, return to Figure 2: under a cost-based pricing scenario similar to some of the proposals in this proceeding, the price of the bottleneck segment, A-to-B, would be capped at \$13 (RR1’s incremental plus fixed costs). With competition present on the B-to-C route, RR1 would be able to charge no more than \$2.50 for movements from B to C. Shippers on the full A-to-C route, therefore, would pay RR1 no more than \$15.50 for A-to-C service, well below the full costs of providing that service. If RR1 attempted to raise price on A-to-C to \$20 to cover the full cost of A-to-C service, shippers would move to RR2 for the A-to-B segment, at \$2.50, and switch to RR1 at B, paying the mandated, cost-based price of \$13. Under a cost-based bottleneck pricing scenario, RR1 would be completely unable to recover the full costs of origin-to-destination service, calling into question the long-term viability of that route.

The foregoing example also shows that the Board’s stand-alone cost test adequately protects shippers from paying unreasonable rates on the through movement in situations involving bottleneck service. The SAC test ensures that rates will generate only enough revenue to cover the costs that would be incurred by an efficient new entrant to provide service on the full through route. In the example,

RR1's costs are \$20 to provide the A-to-C service. Assuming that an efficient stand-alone railroad would incur the same costs as RR1, any rate for A-to-C service that exceeds \$20 would be reduced as a result of a SAC analysis to \$20. Changes in the Board's access rules are not necessary to ensure that shippers pay reasonable rates because the Board's SAC test already protects shippers from paying more than the full economic costs of the service they receive.

Applied to the industry as a whole, the implications of a regulatory policy that does not allow bottleneck services to generate enough revenue to cover a railroad's full costs of service are sobering. Without the ability to cover their full costs, railroads will not be able to attract capital and make long-term investments in infrastructure and equipment, leading to disinvestment, rising prices, and service quality deterioration.

D. Other industries' experiences with Open Access policies do not foretell socially successful open access policies in the rail industry.

At least two parties dismiss concerns about the impact of mandated access in the rail industry and point to the open access experiences in other industries – natural gas and telecommunications - as illustrative and predictive of successful application to the rail industry. While it is tempting to rely on these industries to offer insight into application to rail services, a closer examination reveals that neither industry provides a reasonable comparison for rail, nor a foundation for a prediction that rail industry open access policies would function well for the public interest.

Consider first the telecommunications comparison. Policy favored, for a limited stretch of time, mandated access to unbundled network elements at cost-

based prices in the local telecommunications network in the U.S. for two key reasons that do not fit the rail freight industry. First, analysis concluded that the full economic costs of the local telecommunications network could be recovered from rates based on the forward-looking economic costs of a set of identified discrete network elements. Second, it was concluded that pricing of regulated end services was so full of cross-subsidization that the only way to move rates towards economic efficiency was to impel cost-based pricing of access to those network elements.

In sharp contrast, railroad pricing has been avowedly separated from patterns of cross-subsidization since passage of the Staggers Act by the application of regulatory standards that explicitly protect shippers from cross-subsidizing others, to the promotion of economic efficiency and the performance of the industry. In further dramatic contrast, as discussed below, it has been concluded that for endemic reasons, the full economic costs of the rail network cannot be covered without differential pricing that is economically efficient and that is inconsistent with disaggregation into discrete network elements, as was attempted in telecommunications.

Further, there are significant operational differences between telecommunications and railroads that may have important implications for access policy. Notably, the switch technology at the core of the facilities to be shared under access policy in telecom was extremely sophisticated and automated, routing calls instantly and automatically. Therefore, open access seemed to have the potential of causing only minimal operational disruption and manageable costs of complexity and congestion. This is not the case in the rail industry. Switches and terminal

access must be coordinated across all participating railroads and executed manually. Mandated access in the rail industry introduces a new layer of operational complexity for rail operators, carries serious potential for degraded service quality, and raises serious questions about investment incentives that have yet to be considered by advocates for more aggressive application of access mandates, irrespective of prerequisite findings of competitive abuse.

Even in the telecommunications industry, with relatively less complicated pricing requirements and less daunting operational considerations, open access has been far from an easy fix. The Telecommunications Act of 1996 was the subject of intense debate, with aspects of the Act's competitive access and pricing provisions receiving intense scrutiny.¹¹ Numerous disputes over these issues, heard by various courts, took years to resolve, and in the end it is not clear whether the goals of the legislation were actually achieved.¹² On pricing issues, the Supreme Court issued a ruling endorsing the use of forward-looking economic costs in pricing components of local telephone networks six years after the act was passed.¹³ The Washington DC Appeals Court issued a final ruling striking down key provisions of the FCC's

¹¹ The Telecommunications Act of 1996 sought to introduce competition in the local exchanges by requiring incumbent carriers to provide open access to their network elements. The FCC proposed a cost-based pricing framework that was litigated for years. For a detailed discussion of the Act and the challenges of implementation, see: Economides, Nicholas, "Telecommunications Regulation: An Introduction," Revised August 2004. See also, Economides, Nicholas, "The Telecommunications Act of 1996 and Its Impact," September 1998; Beynon, Rebecca, "The FCC's Implementation of the 1996 Act: Agency Litigation Strategies and Delay," *Federal Communications Law Journal*, Vol. 53, No. 1, November 2000 at 28-29.

¹² Epstein, Richard A., "Takings, Commons, and Associations: Why the Telecommunications Act of 1996 Misfired," *Yale Journal on Regulation*, Vol.22:315, 2005.

¹³ Epstein, Richard A., "Takings, Commons, and Associations: Why the Telecommunications Act of 1996 Misfired," *Yale Journal on Regulation*, Vol.22:315, 2005. Rosston, Gregory L., and Roger Noll, "The Economics of the Supreme Court's Decision On Forward Looking Costs", *Review of Network Economics* Vol. 1, Issue 2 – September 2002.

framework for providing access eight years later.¹⁴ With key pricing principles unresolved for years, the implementation of the Act was essentially stalled. The litigation surrounding the implementation of the Act also brought with it serious economic harms to the industry, including “a rash of bankrupt telecommunications firms and huge losses of capitalized market value” with telecommunications firms and equipment manufacturers losing jobs and cutting investment significantly.¹⁵ By 2004, industry observers noted that the prospect for achieving competition in local exchanges was “very bleak.”¹⁶ By the time the initial legal questions were settled, technological advancements introduced significant changes in the telecommunications industry and the 1996 regulation seemed out of step with the competitive landscape. For example, broadband markets took on added importance and there was significant debate concerning a carrier’s obligation to provide unbundled access to broadband elements of their networks.¹⁷

Parties in this proceeding make superficial and misleading comparisons between rail and telecommunications, ignoring key structural differences and offering little insight into how competitive access in the rail industry will solve pricing and operational issues that are far more complex than the issues which were the subject of such intense debate in the telecommunications experience.

Comparisons offered by commentators here between rail freight and the natural gas industry are similarly superficial and misleading. The key economic

¹⁴Economides, Nicholas, “Telecommunications Regulation: An Introduction,” Revised August 2004. See also, Beynon at 28.

¹⁵ Epstein at 318 and footnote 9.

¹⁶See Economides, Nicholas, “Telecommunications Regulation: An Introduction,” Revised August 2004 at 39-40.

¹⁷Cambini, Carlo and Yanyan Jiang, “Broadband Investment and Regulation: A Literature Review”, Telecommunications Policy, Vol 33, 2009 at 561.

difference between natural gas and railroads is that railroads are dependent on differential pricing to recover their full costs, while natural gas pipelines are not. Railroads transport specific products from specific shippers to specific destinations. Neither the products nor the destinations are interchangeable. Further, many shippers can consider a relatively unique portfolio of alternative options that a railroad must take into account in making its pricing decisions. This is just not the case in the natural gas industry.

Unlike rail shipments, molecules of natural gas are completely fungible. It is not necessary to keep track of the ownership of each molecule as it enters the pipeline – customers do not require pipelines to deliver the specific molecules of gas that their service provider tendered to the pipeline. This fungibility gives natural gas pipelines considerable operational flexibility and pricing simplicity that is not characteristic of railroads. Natural gas pipelines recover their full economic costs with uniform pricing that spreads the fixed costs volumetrically among their customers.

Railroads must deliver specific shipments of specific commodities to specific customers that share the use of common rail facilities with dramatically different levels of value of service and transportation alternatives. This means railroads must be allowed to price differentially – to recover more of the fixed costs of their networks from those shippers willing and able to pay more for rail service. At the same time, railroads must be allowed to charge less to shippers who can benefit by being gainfully served, but who cannot pay as much as others due to their limited value of service. Affordable service to such shippers is important to the economy,

and is important to the financial health of the industry as well.

V. Any Form of Mandated Access Must Be Priced in a Manner That Preserves the Railroads' Ability to Price In Accord With Demand and Recover Their Full Costs.

A. Summary of Comments

Even if shippers had identified situations where mandated access is appropriate, it would be essential that access were priced in an economically reasonable manner, based on sound principles and guided by the outcomes that would be achieved by market forces. None of the access pricing schemes proposed in this proceeding satisfies this requirement.

While many parties call for new pricing policies, none have offered a proposal that sets forth a principled alternative framework for pricing. At least one shipper, AECC, goes so far as to indicate that the individual circumstances surrounding mandated access are so complex that establishing rules in advance may be “impossible.” Those that do address the question of pricing do so superficially, proposing only that railroads should not be allowed to realize the same contributions from “captive” shippers that they currently receive, or throwing out vague cost-based proposals that are at variance with current rate reasonableness standards and the industry's needs that motivated them.

All of these pricing proposals share the fundamental flaw that they ignore the important role demand-based, differential pricing plays in maintaining the viability of the nation's rail network. Costs cannot be spread evenly among customers on the rail network. Shippers who have alternative transportation options will leave the

network if the cost allocation drives rail rates above the prices of their alternatives. As shippers leave rail, the same amount of fixed costs are spread over a smaller customer base, increasing prices and starting a downward spiral of decreased revenues, deferred maintenance, and general deterioration of the rail infrastructure.

At the same time, all of these pricing proposals lead to pressures for inefficient use of rail facilities. Mandated access at artificial rates divorced from value of service and from applicable O to D pricing allows inefficient combinations of service logistics and routing to prevail in the marketplace, protected by the regulation needed to enforce artificial competition. In contrast, voluntary access and cooperative arrangements meet the market test that tends to assure efficiency of resource allocation. The overhang of the kind of regulation proposed in these hearings would stand in the way of efficient voluntary arrangements since the parties would be motivated to rely instead on the operation of regulation to secure them favorable better-than-competitive deals. While such deals might be more lucrative for those who benefit from the regulatory access mandates, the corresponding costs fall on the industry generally with powerful longer-term harms predictably afflicting investment, quality of service and the interests of shippers generally who rely on rail freight service.

VERIFICATION

I, Robert Willig, declare under penalty of perjury, that the foregoing statement is true and correct and that I am qualified and authorized to file this statement.

Executed: May 24, 2011


Robert Willig