BEFORE THE SURFACE TRANSPORTATION BOARD

)
Railroad Cost of Capital – 2009) Ex Parte No. 558 (Sub- No.13)
)

Reply Verified Statement

Of Thomas D. Crowley President

.

and

Daniel L. Fapp Vice President

L.E. Peabody & Associates, Inc. On Behalf Of Western Coal Traffic League

June 15, 2010

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TABLE OF CONTENTS

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I.	INTRODUCTION	.1
II.	CAPM COST OF EQUITY	4
III.	MS-DCF COST OF EQUITY	. 6
	A-NORMALIZED CASH FLOWS	7

	В.	CORRECT GROWTH RATES	10
		1. Growth Rates Should Reflect December 31 Values	11
		2. Unadjusted IBES Median Values Should Be Used	
		3. Corrected Growth Rates	
	C.	MS-DCF COST OF EQUITY	15
IV.	RA	ILROAD COST OF DEBT	17
v.	RA	ILROAD COST OF CAPITAL	19
	A.	COST OF EQUITY	19
	В.	COST OF DEBT	20
	C .	COST OF PREFERRED EOUITY	20
	D.	CAPITAL STRUCTURE	20
	E.	COST OF CAPITAL	21
VI.	IN	CLUSION OF THE BNSF IN THE 2009 COST OF CAPITAL	
	CA	LCULATION	23
VII.	EX	PANSION OF THE COST OF CAPITAL COMPOSITE GROUP	27
	Α.	IMPACT OF NON-U.S. OPERATIONS	
		1. Risks Faced By International Firms	
		2. Exchange Rate Risk Facing Railroads	
		3. Country Risk Faced By Railroads	
	В.	CN AND CP REPORT IN CANADIAN DOLLARS	34

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LIST OF EXHIBITS

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EXHIBIT NO. (1)	EXHIBIT DESCRIPTION (2)
1	Statement of Qualifications of Thomas D. Crowley
2	Statement of Qualifications of Daniel L. Fapp
3	Comparison of Historic Financial Statistics to Restated Financial Statistics BNSF and CSXT
4	2009 Average Cashflow And Average Income Before Extraordinary Items Without Deferred Tax Adjustments BNSF, CSXT, NS and UP
5	Comparison of Gray's ETC Market Value to Corrected ETC Market Value
6	Summary of U.S. and Foreign Financial Statistics - - KCS, CN and CP

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I. INTRODUCTION

We are Thomas D. Crowley and Daniel L. Fapp. We are economists and, respectively, the President and a Vice President of L. E. Peabody & Associates, Inc., an economic consulting firm that specializes in solving economic, transportation, marketing, financial, accounting and fuel supply problems. Mr. Crowley has spent most of his consulting career of over thirty-nine (39) years evaluating fuel supply issues and railroad operations, including railroad costs, prices, financing, capacity and equipment planning issues. His assignments in these matters were commissioned by railroads, producers, shippers of different commodities, and government departments and agencies. A copy of his credentials is included as Exhibit No. 1 to this Verified Statement ("VS").

Mr. Fapp has been with L. E. Peabody & Associates, Inc. since 1997. During this time, he has worked on numerous projects dealing with railroad revenue, operational, economic and financial issues. Prior to joining L. E. Peabody & Associates, Inc., Mr. Fapp was employed by BHP Copper Inc. in the role of Transportation Manager - Finance and Administration, where he also served as an officer and Treasurer of the three BHP Copper Inc. subsidiary railroads. Mr. Fapp has also served as a guest lecturer in graduate level finance and economics classes discussing corporate capital theory and costs of equity determination. A copy of his credentials is included as Exhibit No. 2 to this VS.

Our consulting assignments regularly involve working with and determining various facets of railroad financial issues, including cost of capital determinations. In these assignments, we have calculated railroad capital structures, market values, cost of railroad debt, cost of preferred railroad equity and common railroad equity. We are also well acquainted with and have used the commonly accepted models for determining a firm's cost of equity, including Single-Stage Discounted Cash Flow Models ("SS-DCF"), Multi-Stage Discounted Cash Flow Models ("MS-DCF"), the Capital Asset Pricing Model ("CAPM"), and the Fama-French Three Factor Model.

We have developed railroad industry average cost of capital and company specific cost of capital for use in litigation and for use in general business management. For several clients, we have both individually and together determined the Going Concern Value ("GCV") of privately held railroads. Developing the GCV under the Income Based Methodology requires developing company specific costs of debt and equity for use in discounting future company cash flows, as well as creating forecasts of expected cash flows to the firm and to holders of common equity from company financial statements. We have also developed cost of capital in order to capture the costs associated with shipper investment in railroad equipment and road property. Our findings regarding railroad cost of capital have been presented to U.S. District and State courts, the Interstate Commerce Commission, the Surface Transportation Board ("STB") and the Federal Railroad Administration.

We have previously submitted, either individually or jointly, verified statements in prior STB annual cost of capital proceedings, including Ex Parte No. 558 (Sub-No. 9), *Railroad Cost of Capital – 2005*, Ex Parte No. 558 (Sub-No. 10), *Railroad Cost of Capital – 2006* ("2006 Cost of Capital"), Ex Parte No. 558 (Sub-No. 11), Railroad Cost of Capital – 2007 ("2007 Cost of Capital") and Ex Parte No. 558 (Sub-No. 12), *Railroad Cost of Capital – 2008* ("2008 Cost of Capital"). We have also submitted evidence in Ex Parte No. 664, Methodology To Be Employed In Determining The Railroad Industry's Cost Of Capital ("Ex Parte 664"), and Ex Parte No. 664 (Sub-No. 1), Use Of A Multi-

Stage Discounted Cashflow Model In Determining The Railroad Industry's Cost Of

We have been requested by Counsel for the Western Coal Traffic League ("WCTL") to review the testimony submitted by Mr. John T. Gray ("Gray") included with the Association of American Railroads' ("AAR") Opening Evidence filed pursuant to the Surface Transportation Board's ("STB") Decision in Ex Parte No. 558 (Sub-No. 13), Railroad Cost Of Capital - 2009, served March 30, 2010 ("2009 Cost of Capital"), and the Comments of the Kansas City Southern Railway Company ("KCS") and BNSF Railway Company ("BNSF"). Counsel has specifically requested that we review and comment on Mr. Gray's calculation of the railroad industry's CAPM cost of equity, calculation of the railroad industry's MS-DCF cost of equity and overall railroad industry cost of capital, on Mr. Gray's and BNSF's comments regarding the inclusion of the

BNSF in the 2009 cost of capital composite group, and KCS' comments on expanding the composite group for the 2010 railroad cost of capital proceedings.

Our testimony is discussed further below under the following topical headings:

- II. CAPM Cost Of Equity
- III. MS-DCF Cost Of Equity
- IV. Railroad Cost Of Debt
- V. Railroad Cost Of Capital
- VI. Inclusion Of The BNSF In The 2009 Cost Of Capital Calculation

-3-

II. CAPM COST OF EQUITY

In its decision in *Ex Parte 664*, the STB modified the procedure used to estimate the railroad cost of equity by switching from the SS-DCF cost of equity approach to the widely accepted CAPM approach. The STB's *Ex Parte 664* procedures directed parties to calculate the CAPM cost of equity using three specific inputs:

- 1. The average annual yield-to-maturity on 20-Year Treasury Bonds ("T-Bonds");
- 2. A beta estimate developed by regressing over five (5) years excess returns on a market weighted portfolio of railroad stocks against excess returns on the S&P 500 Price Return Index over 3-Month Treasury Bill ("T-Bill"); and
- 3. An estimate of the market risk premium based on the historical average equity market risk premium from 1926 to the subject year.

Moreover, the STB's 2008 Cost of Capital decision clarified the identification of trading weeks and trading years to be used in the 5-year beta estimate regression.¹ Rather than assuming a trading year would consist of a static 52-trading week period, the STB clarified that the first trading week within a particular year would be the first week in a year that contains three (3) or more trading days. As such, a trading year within the beta estimation regression could consist of 53-trading weeks.

We have reviewed Mr. Gray's inputs and agree that the T-Bond yield-to-maturity of 4.11 percent and average market risk premium from 1926 to 2009 of 6.67 percent are consistent with the STB's CAPM cost of equity methodology. We also concur with his composite railroad industry equity beta estimate of 1.0915. The calculation of the 2009 CAPM cost of equity is shown in Table 1 below.

¹ See 2008 Cost of Capital at 7.

Table 1 2009 CAPM Cost Of Equity			
<u>Item</u> (1)	2009 CAPM <u>Cost Of Equity</u> (2)		
1. Risk Free Rate ^{1/} 2. Beta ^{2/} 3. Market Risk Premium ^{3/}	4.11% 1.0915 <u>6.67%</u>		
4. Cost of Equity 4'	11.39%		
^{1/} Gray VS at 28. ^{2/} Gray VS at 33. ^{3/} Gray VS at 29. ^{4/} Line 1 + (Line 2 x Line 3).			

As shown in Table 1 above, the 2009 CAPM cost of equity equals 11.39%.

Mr. Gray also discusses the STB's methodology for converting annual T-Bill yields to weekly yields by dividing the annual return by 52.² As Mr. Gray notes, in our 2007 Cost of Capital evidence, we, along with Mr. Gray, converted annual T-Bill yields to weekly yields using a geometric approach rather than an arithmetic approach. Based on our prior experiences in developing beta estimates, we have always used a geometric approach in converting annual risk-free rates of returns to daily, weekly or monthly returns, as required by the time period used in the analysis, as this accounts for the compounding nature of interest. The difference in using an arithmetic or geometric approach is so small in this proceeding that either approach produces virtually the same final result.

² See Gray VS at 32.

III. MS-DCF COST OF EQUITY

The STB ruled in its MS-DCF Cost of Equity decision that the railroad industry cost of equity after the 2007 determination would be calculated as the simple average of the railroad industry CAPM cost of equity and the railroad industry MS-DCF cost of equity as calculated using the Morningstar/Ibbotson MS-DCF model as modified to reflect only qualifying railroad holding companies, e.g., BNSF, CSX Corporation ("CSX"), Norfolk Southern Corporation ("NS"), and Union Pacific Corporation ("UP").³ A MS-DCF model calculates the cost of equity by determining the discount rate that equates a firm's market value to the present value of the stream of cash flows that could impact an investor. The Morningstar/Ibbotson model adopted by the STB defines cash flows, for the first two stages of the model, as income before extraordinary items, plus depreciation and deferred taxes, and minus capital expenditures.⁴ Cash flows are then normalized over a five (5) year period to mitigate the impact of potentially anomalous years. Total cash flows over the five (5) year period are then divided by total sales over the same period to develop an average cash flow-to-sales ratio, which is then multiplied by the analysis year's revenues to obtain the average cashflow estimate for the year. For the third and final model stage, the Morningstar/Ibbotson model utilizes normalized earnings before extraordinary items as a surrogate for perpetual cashflows under the assumption that over the long-term capital expenditures will equal depreciation and deferred taxes are zero.

We have reviewed the MS-DCF cost of equity estimates developed by Mr. Gray, and accept, for present purposes, his estimate of the long-term nominal growth rate in the

³ See MS-DCF Cost of Equity at 15.

⁴ See *MS-DCF Cost of Equity* at 5 to 6 for a summary of the Morningstar/Ibbotson MS-DCF model.

U.S. economy, the formulas he used in the iterative process to calculate each railroad's estimated cost of equity, his calculation of each railroad's equity market value, and the weighting methodology used to develop the industry average cost of equity. However, we disagree with Mr. Gray's calculation of each railroad's normalized cashflows, and his application of the Institutional Broker's Estimating System ("IBES") growth rates. We discuss each of these issues below.

A. NORMALIZED CASH FLOWS

The Morningstar/Ibbotson MS-DCF model defines cash flows, for the first two stages, as income before extraordinary items ("IBEI"), minus capital expenditures ("CAPEX"), plus depreciation and deferred taxes.⁵ While the *MS-DCF Cost of Equity* decision was silent on the source of the cash flow calculation data inputs, the STB accepted in its *2008 Cost of Capital* decision the data inputs retrieved from the railroads' annual Form 10-K filings with the Securities and Exchange Commission ("SEC").⁶

Mr. Gray states that his cash flow calculations were calculated using the same procedures used by the AAR for the 2008 cost of capital determination. Specifically, Mr. Gray states that 2009 railroad SEC Form 10-K were the sources for 2009 cash flow data statistics.⁷ For the 2005 to 2008 statistics used in the normalized cash flow calculations, Mr. Gray states he relied upon the same statistics for those years as used in the 2008 MS-DCF cost of equity determination. Mr. Gray notes "In any cases where a railroad has

⁵ See *MS-DCF Cost of Equity* at 5. Cash flow in the third stage of the model is based on two assumptions. First, that CAPEX will equal depreciation in the long run, and second, deferred taxes will be zero (0). Stated differently, cash flow in the third stage is based solely on IBEI.

⁶ See 2008 Cost of Capital at 9.

⁷ See Gray VS at 38. The railroad companies within the composite group all filed their Form 10-K Annual Reports for fiscal year 2009 in the first quarter 2010. When discussing the years for the Form 10-K, we are referencing the fiscal year the annual report covers and not the year it was filed with the SEC.

restated prior year's data, original data were used in the model instead of revised data, following the Ibbotson procedure that was used in Dr. Stangle's 2008 cash flow calculations."⁸

We disagree with Mr. Gray's use of original 2005 to 2008 financial data instead of restated and updated data presented in more recent financial reports. Finance theory holds that, at any particular time, a firm's stock price incorporates all historic price information, as well as all current publicly available information. In other words, under the theory of efficient markets, prices at any given point in time impound all available information about the value of the security.⁹

In his MS-DCF cost of equity calculation, Mr. Gray used 2009 stock price data and financial statement data from original (non-restated) 2005-2008 financial statements. If markets are efficient though, as the STB has repeatedly held them to be, this creates an inconsistency in the method of calculation. Using the current stock price data assumes that all publicly available and historical information is incorporated in the stock price. The 2005-2008 financial data, when it was released, was held as most correct and up to date. However, any restated or corrected financial information that was released after the original publication of these financial statements is now what is implicitly embedded in the current stock prices, and is what should be used in calculating the MS-DCF cost of equity.

-8-

⁸ See Gray VS at 38.

See, for example, Fama, E.F., "Efficient Capital Markets: A Review of Theory and Empirical Work," *The Journal of Finance*, Vol. 25, No. 2, May 1970, pages 383-417, and Fama, E.F., "Efficient Capital Markets: II," *The Journal of Finance*, Vol. 46, No. 5, December 1991, pages 1575-1617. Also see, Brealey, R. A., Myers, S. C., and Allen, F., "Principles of Corporate Finance, Eighth Edition," McGraw-Hill Irwin, 2006, pages 333-354 ("Brealey, Myers and Allen") and Brigham, E.F., & Ehrhardt, M. C. "Financial Management: Theory and Practice" (12th ed.), South-Western Cengage Learning., 2008, pages 301-302.

To include the most current publicly information available, we relied upon the most current audited financial statements for each year. For the 2007 to 2009 time period, this reflects the financial statistics shown in the railroads' fiscal year 2009 SEC Form 10-K. Each of the railroads' SEC Form 10-K included the current year's financial statements and any restatements for the prior two years. For example, the 2009 financials include any restated financial statements for 2008 and 2007. Because the railroads update their financial statements on a rolling basis, the most current 2006 financial information is found in each railroad's 2008 SEC Form 10-K. In a similar fashion, the railroads' 2007 SEC Form 10-K include the most current financial information for 2005.¹⁰

Comparing the railroads' most current and historic financial statements shows that both BNSF and CSX have restated several financial records between 2005 and 2008. BNSF's 2007 and 2008 10-K show the railroad restated 2005 and 2006 net income, depreciation and deferred taxes, while BNSF's 2009 10-K indicates BNSF restated its 2007 and 2008 CAPEX statistics.¹¹ Similarly, CSX's 2009 10-K reflect the railroad's restating charges related to discontinued operations that impact the calculation of JBEI.

Exhibit No. 3 to this VS compares BNSF's and CSX's original financial statistics as used by Mr. Gray and the restated statistics shown by the two railroads.

We can assume based on efficient market theory that the restated financial statements data has been impounded in the current stock price, as the restated data has been released to the public domain. Therefore, using the original financial statements and the current stock price creates an inconsistency in the method used to calculate the

¹⁰ A possibility exists that a railroad would want or need to restate results from some earlier year. In that event, it might expand the range of years included in a report.

¹¹ Mr. Gray's workpapers show he calculated BNSF's 2009 CAPEX by summing BNSF's reported "Capital expenditures excluding equipment" and "Acquisition of equipment" statistics from BNSF's 2009 Consolidated Statement of Cash Flows. Summing the 2007 and 2008 statistics from the BNSF's 2009 10-K produces different CAPEX figures than presented in the 2007 and 2008 10-K used by Mr. Gray.

cost of equity. Because the 2005-2008 data has been restated and is publicly available, it should be used when calculating the MS-DCF, which would eliminate the inconsistency in the calculation. Stated differently, a rational investor would not logically rely on dated information that the company has determined is sufficiently accurate that it needs to be restated.

B. CORRECT GROWTH RATES

As indicated by the STB in its 2008 Cost of Capital decision, the Morningstar/Ibbotson model adjusts earnings in three stages.¹² In the first stage (years 1 to 5), a firm's annual earnings growth is assumed to be the median value of the qualifying railroad's 3 to 5 year growth estimates as determined by railroad industry analysts and published by IBES. In the second stage (years 6 to 10), the growth rate is the average of all growth rates in stage 1. In stage 3 (years 11 and onwards), the growth is the long-run nominal growth rate of the U.S. economy, and is estimated by using historical growth in real GDP and the long-run expected inflation rate. The STB specified in its 2008 Cost of *Capital* decision that growth rates should be as of December 31 of the subject year.

Mr. Gray states that he obtained each railroad's long-term growth rates from Thomson Financial through its Thompson ONE Investment Management Service ("Thomson ONE").¹³ He also states that while Thomson ONE distributes medians of the IBES growth rates, he did not use the Thomson ONE values because they do not always reflect the full set of growth rates.¹⁴ Instead, Mr. Gray calculated his own median value

¹² See 2008 Cost of Capital at 9.
¹³ See Gray VS at 39.

¹⁴ See Gray VS at 39.

for each railroad's growth rate. For the long-term median growth rate in the economy, Mr. Gray used an estimate of 5.8 percent as published by Morningstar.¹⁵

While we accept, for present purposes, Mr. Gray's use of the unadjusted Morningstar calculation of the long-term median growth rate in the U.S. economy, we disagree with his calculation of the railroads' median long-term growth rates. First, Mr. Gray obtained growth estimates four days after the close of the year. Second, the median IBES growth rate values as reported by Thomson are independent estimates that have been scrutinized and verified for consistency by neutral third-party researchers, and require no adjustment. We discuss both issues below.

1. Growth Rates Should Reflect December 31 Values

As Mr. Gray noted at page 39 of his VS, "In Ex Parte No. 558 (Sub No 12), the STB clarified their [*sic*] interpretation of the Morningstar/Ibbotson MSDCF model by specifying December 31 dates for growth rates, stock prices, and stock shares outstanding." Appendix L of his VS shows, however, that Mr. Gray obtained his estimates on January 4, 2010, four days after the close of 2009.

While seemingly trivial, the date and timing of the availability of the information is critical when dealing with stock price information. As we indicate above, stock price information incorporates all publicly known information, including information on longterm growth estimates. Publication of an earnings estimate after the close of the issue year would not be reflected in the year-end stock price.

¹⁵ See Gray VS at 40 and 41.

2. Unadjusted IBES Median Values Should Be Used

Mr. Gray states that he independently calculated the median value of each railroad's growth estimates because the Thomson One banker service does not always reflect the full set of growth rate estimates. We have two issues with Mr. Gray's approach. First, it deviates from the STB's desire of the use of a commercially accepted, neutral model that is not made for litigation or regulation. Second, it circumvents the quality control standards IBES includes in its estimates.

In selecting the Morningstar/Ibbotson model as the MS-DCF model used to calculate the railroad industry cost of equity, the STB stated that it choose the model in large part due to its wide use in other industries and neutral approach.

Finally, the Morningstar/Ibbotson model is a commercially accepted multi-stage DCF model. It was developed by disinterested, respected third parties and created for use by the financial community in evaluating publicly traded equities and in making real-world investment decisions. It was not developed as a tool for litigation or advocacy, and the same model is used by Morningstar to estimate the cost of equity for hundreds of different industries.¹⁶

The STB clearly desired an approach that relied as much as possible on neutral, third party inputs, and not a methodology that could be manipulated towards any single party. The use of the unadjusted IBES median values meets this goal. The IBES median value calculations are developed by a disinterested respected third party without a stake in the cost of capital proceeding. Moreover, the IBES median estimates were not developed as a tool for litigation or advocacy, but instead provided in the normal course

¹⁶ See *MS-DCF Cost of Equity*, Notice of Proposed Rule Making at 5 and 6.

of business by Thomson as part of its standard IBES report. Simply stated, it is a neutral input that has not been manipulated for use in this proceeding.

In addition, adjusting the calculated IBES median value circumvents the quality control standards Thomson uses to ensure quality financial statistics. In describing why organizations choose to use IBES data and calculations, Thomson states it is in large part due to the extensive quality control measures in place to ensure the highest quality data:

Why Choose I/B/E/S?

- <u>Proactive Enhancements</u>: Thomson Reuters works closely with our contributors and clients to stay ahead of new content offerings and changes in regional accounting requirements, such as FAS 123(R) in the US and IFRS in Europe and Asia.
- <u>Quality Control</u>: Thomson Reuters reviews all estimates according to rigorous quality control measures, both preand post-product quality reviews. Quality checks incorporate automated algorithms such as standard deviation, percentage difference from the previous, and number of revisions in a short time period. Monthly audits show accuracy levels greater than 99.9%.
- <u>Comparability</u>: Mean estimates only include estimates on the same accounting basis for apples-to-apples comparisons.¹⁷

Using anything other than the median values prepared by Thomson and reported in its IBES database would circumvent the quality control standards imputed into the median value calculations developed by Thomson. The above information from the Thomson website indicates Thomson goes to great efforts to evaluate and validate the

¹⁷ See Thomson Reuters I/B/E/S website at http://thomsonreuters.com/products_services/financial/financial_products/products_az/ibes.

data it reports. If Thomson excludes an estimate from its calculations, it is clear it has a valid reason to do so.

3. Corrected Growth Rates

In place of the median long-term growth estimates developed for this proceeding by Mr. Gray, we have utilized the median IBES consensus growth rates as reported by Thomson on December 31, 2009.¹⁸ The use of this data corrects for the two primary shortcomings of Mr. Gray's approach. First, it reports the median consensus forecasts for each company at the end of the issue year and not four days into the next year. Second, it is extracted directly from Thomson's dataset without manipulation or circumvention of Thomson's quality controls.

Table 2 below compares the median values as reported directly by Thomson from its IBES database and the median values calculated by Mr. Gray.

¹⁸ Copies of the downloaded data are contained in our workpapers. The data was downloaded directly from Thomson via a proprietary reporting platform at the investment-banking firm of Goldman Sachs.

Table 2 Comparison of I/B/E/S Long-Term Earnings Growth Rates			
<u>Railroad</u>	December 31, 2009 I/B/E/S Median <u>Growth Rates</u> ^{1/}	January 4, 2010 Gray Median <u>Growth Rates</u> ^{2⁄}	
(1)	(2)	(3)	
1. BNSF	9.55%	12.00%	
2. CSX	11.55%	11.60%	
3. NS	12.00%	12.00%	
4. UP	<u>13.10%</u>	<u>13.10%</u>	
5. Average	11.55%	12.18%	
^{1/} Source: Thomso ^{2/} Source: Gray VS	n IBES. 5 at 40.		

As shown in Table 2 above, the railroad median growth rates developed by Mr. Gray are the same as the median IBES growth rates reported by Thomson for only two railroads, the NS and the UP, while the unadjusted IBES growth rates developed by Thomson for BNSF and CSX are lower than those calculated by Mr. Gray. In addition, the simple average of the four median growth rates, which is used in the second stage of the Morningstar/Ibbotson model, is lower by 63 basis points.

C. MS-DCF COST OF EQUITY

Based on the corrections to the cashflow calculations and growth rates discussed above, we have restated the MS-DCF cost of equity. We show the restated MS-DCF models in Exhibit No. 4 to this VS and summarize the results in Table 3 below.

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Table 3 2009 MS-DCF Cost of Equity				
<u>Railroad</u> (1)	2009 Cost <u>of Equity</u> ^{1/} (2)	2009 Equity <u>Weight</u> (3)	2009 Weighted <u>Cost of Equity</u> (4)	
1. BNSF 2. CSX 3. NS 4. UP 5. Total ^{3/}	11.96% 13.49% 14.69% <u>12.90%</u>	32.24% 18.28% 18.52% <u>30.96%</u> 100.0%	3.86% 2.47% 2.72% <u>3.99%</u> 13.04%	
^{1/} Source: Exhibit No. 4. ^{2/} Column (2) x Column (3). ^{3/} Sums of Lines 1 to 4.				

As shown in Table 3 above, the 2009 MS-DCF cost of equity is 13.04%.

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IV. RAILROAD COST OF DEBT

We have reviewed Mr. Gray's calculation of the railroad industry cost of debt, and concur that he calculated the cost of debt in a manner consistent with prior railroad cost of capital proceedings in all matters, except for his calculation of the market value of equipment trust certificates ("ETC").

Table 6 of Mr. Gray's VS indicates the market value of BNSF's ETC equals \$236.7 million.¹⁹ Mr. Gray includes this figure as part of his estimation of the market value of all railroad industry debt shown in Table 8 of his VS, and his calculation of the railroad industry's total modeled debt used to estimate the railroad industry composite cost of debt shown in Table 11 of his VS.²⁰ However, page 1 of Appendix C to Mr. Gray's VS shows that he estimated the market value of BNSF's ETC to equal \$243.0 million. Correcting for this technical error does not materially impact the composite cost of debt calculated by Mr. Gray due to the STB's practice of rounding the cost of debt to two decimal places.

Table 4 below contains the corrected market values of market industry debt.

¹⁹ See Gray VS at 14.
²⁰ See Gray VS at 18 and 23.

Table 4 <u>2009 Debt Market Value</u>			
<u>Түре of Debt</u> (1)	Gray's Calculations (thousands) ^{1'} (2)	Corrected Calculations (thousands) ^{2/} (3)	
 Bonds, Notes and Debentures Equipment Trust Certificates Conditional Sales Agreements All Other Debt 	\$29,547,506 708,061 43,349 <u>3,919,014</u>	\$29,547,506 714,381 43,349 <u>3,919,014</u>	
4. Total ^{3/2} ^{1/2} Source: Gray VS at 18 ^{2/2} Exhibit No. 5. ^{3/2} Sum of Lines 1 to 4.	\$34,217,930	\$34,224,250	

As shown in Table 4 above, correcting the value in BNSF's ETC increases the total market value of railroad debt by \$6.32 million. As indicated above, it has no material impact on the composite cost of debt.

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V. RAILROAD COST OF CAPITAL

Based on the corrections to the MS-DCF cost of equity and the market value of railroad industry debt, we have restated the 2009 cost of capital developed by Mr. Gray. We discuss our restatement below.

A. COST OF EQUITY

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As we discussed above, we made corrections to Mr. Gray's MS-DCF cost of equity. Table 5 below shows the development of the 2009 average cost of equity based on our corrections.

Table 5 2009 Average Cost of Equity		
<u>Item</u> (1)	2009 Average <u>Cost Of Equity</u> (2)	
 CAPM Cost of Equity ^{1/} MS-DCF Cost of Equity ^{2/} Average Cost of Equity ^{3/} 	11.39% <u>13.04%</u> 12.22%	
^{1/2} Gray VS at 35. ^{2/2} Exhibit No. 4. ^{3/2} Simple Average of Lines 1 and 2.		

As shown in Table 5 above, the 2009 average cost of railroad equity equals 12.22%.

B. COST OF <u>DEBT</u>

As discussed above, we have corrected the market value of BNSF's ETC to reflect the value shown in Mr. Gray's workpapers. Making this correction increases the total market value of railroad industry debt, but has no material impact on the composite cost of railroad debt. We therefore use Mr. Gray's estimate of 5.72 percent for the railroad industry cost of debt.

C. COST OF <u>PREFERRED EQUITY</u>

As noted by Mr. Gray, the railroads included in the 2009 composite group had no preferred equity outstanding at the end of the year.²¹ Therefore, we have included no cost for preferred equity in our restated cost of capital, and assigned preferred equity a market value of zero (\$0).

D. CAPITAL STRUCTURE

In developing his calculation of the 2009 market value of common equity, Mr. Gray used the stock price and common shares outstanding data for the 52-week period beginning the week of January 5, 2009 and ending the week of December 28, 2009.²² We have reviewed Mr. Gray's calculations and agree with his equity market value.

As discussed above, we found a technical error in Mr. Gray's calculation of the market value of railroad industry debt, which leads to a slight understatement. Table 6 below shows our restated 2009 railroad industry capital structure.

²¹ See Gray VS at 47 and 48.

²² See Gray VS at Appendix H, Page 5 of 5.

<u>Railroad</u> (1)	Market Value <u>(thousands)</u> (2)	Capital Structure <u>Weight</u> ^{1/} (3)
 Common Equity ^{2/} Debt ^{3/} Preferred Equity 	\$83,349,876 \$34,224,250 \$0	70.89% 29.11% 0%
4. Total ⁴	\$117,574,126	100.0%

As shown in Table 6 above, the 2009 railroad industry capital structure is 70.89%

common equity capital, 29.11% debt capital, and 0.0% preferred equity capital.

E. COST OF CAPITAL

Rased on the restated cost of equity assumed cost of debt and restated canital

structure discussed above, we have restated the 2009 railroad industry cost of capital as shown in Table 7 below.

Table 7 2009 Cost of Capital			
Item	<u>2009</u>		
(1)	(2)		
1. Weighted Cost of Equity			
a. Railroad Industry Cost of Equity ¹	12.22%		
b. Common Equity Portion of Capital Structure ⁴	<u>70.89%</u>		
c. Weighted Cost of Railroad Industry Common Equity 2	8.66%		
2 Weighted Cost of Debt			
a. Railroad Industry Cost of Debt $\frac{4}{2}$	5.72%		
b. Debt Portion of Canital Structure $\frac{2}{2}$	29.11%		
c. Weighted Cost of Railroad Industry Debt ^{5/}	1.67%		
 Weighted Cost of Preferred Equity 	0.0%		
b. Debt Portion of Capital Structure	<u>0.0%</u>		
c. Weighted Cost of Railroad Industry Debt	0.0%		
4. Railroad Industry Weighted Cost of Capital ¹ /	10.33%		
$\frac{V}{V}$ Table 5.			
Table 6.			
²⁷ Line la x Line lb.			
[≠] Gray VS at 23.			
\sim Line 2a x Line 20. \sim The sufficient is the surface back of the surface of			
= 1 ne rairroads included in this analysis had no preferred equity issued in 2009.			
= Line IC + Line ZC + Line SC.			

As shown in Table 7 above, the 2009 railroad industry cost of capital equals

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10.33%.

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VI. INCLUSION OF THE BNSF IN THE 2009 COST OF CAPITAL CALCUALTION

On November 3, 2009, Berkshire Hathaway Inc. ("Berkshire") and BNSF announced an agreement to merge BNSF with an indirect, wholly owned subsidiary of Berkshire, with the Berkshire subsidiary being the surviving company. The merger agreement called for Berkshire to acquire the outstanding BNSF shares it already did not own at a price of \$100 per share, payable in cash or Berkshire Class A common stock.²³ Berkshire's offer price represented an approximate 30 percent premium over the previous trading day's BNSF closing price. While announced in November 2009, the transaction did not close until February 2010. In the interceding three months between the announcement of the merger and the merger closing date, BNSF's common stock continued to trade on the New York Stock Exchange ("NYSE") in a very narrow range in the high \$90s per share.

The STB sought comments as part of this 2009 Cost of Capital determination on how the change in BNSF share prices from the November 2009 through December 2009 should be considered in calculating the 2009 cost of common equity capital.²⁴ We believe that no adjustments should be made to the 2009 cost of capital determination to account for Berkshire's acquisition of BNSF.

First, from a practical standpoint, there is no effective way to remove the premium from the actual BNSF stock price data after the announcement date. In the three months prior to the announcement, BNSF traded between approximately \$74 and \$84 per share. Subsequent to the merger plans being announced, BNSF's stock price traded in a very narrow band between \$96 and \$98 between the November announcement

²³ See Berkshire Form S-4 Registration Statement as filed with the SEC on November 25, 2009.

²⁴ See 2009 Cost of Capital.

date and the end of the year. There is no objective way to suggest what BNSF's stock price would have been had Berkshire not made its acquisition offer.

Moreover, Berkshire's announcement not only impacted BNSF's share price, but the share price of the other railroads within the industry. On the day of the Berkshire announcement, CSX, NS and UP each experienced significant jumps in their stock prices.²⁵ Many analysts attribute the jump in railroad stock prices on November 11 to the Berkshire acquisition announcement. If the STB wanted to adjust BNSF's stock price, it would also have to find a way to remove the impact of the Berkshire announcement from all other railroad stock prices.

Second, BNSF stock was still actively trading between the announcement date and the end of 2009. The fact that BNSF's stock price traded in a narrow band only slightly below the announced acquisition price reflects market sentiment that it expected Berkshire to close the deal at the announced price of \$100 per share. There are numerous examples of acquisitions being announced and the stock price moving higher than the acquisition price due to the expectation of a higher competing bid coming from other parties. Similarly, there are numerous examples of the market not expecting the deal to be completed, and the announcement having only a slight impact on the stock price.

Because there is no practical way to adjust the railroad's stock prices, the other potential alternative is to eliminate BNSF from the composite group altogether for the 2009 cost of equity determination. While there is precedent for removing certain railroad companies from the railroad industry cost of equity determination,²⁶ we would propose

²⁵ CSX saw a 7.3 percent increase, NS a 5.4 percent increase and UP a 7.9 percent increase, while the S&P 500 index closed down 1 percent on that day.

²⁶ See for example ICC Ex Parte No. 353, Adequacy of Railroad Revenue (1978 Determination), 361 ICC at 79. In that proceeding, the ICC accepted the removal of the Missouri Pacific from part of the cost of equity determination due to a recapitalization in 1973 that impacted the 1978 determination.

such an action not be made here. Simply stated, Berkshire's announcement of its acquisition of the BNSF did not impact BNSF meeting all the criteria used to identify which railroads should be included in the composite group of railroads. BNSF continued to be a Class I railroad, its debt continued to be rated investment grade by the ratings agencies, its stock was continuously traded on the New York Stock Exchange and it paid dividends throughout the year. We can foresee no reason to exclude BNSF from the composite group.

While we agree with Mr. Gray that no adjustment is warranted for Berkshire's announced acquisition, we disagree with his disclaiming that BNSF was not acquired at a premium. Standard financial nomenclature states that the difference between the market price of a target company and the acquisition price is the "acquisition premium."²⁷ For want of the announced acquisition, there is no basis to say that the stock price of the target firm would have reached the acquisition price level.

Professor Stewart C. Meyers, an expert witness for the AAR in prior cost of capital proceedings, explains how premiums come about due to an announced acquisition.

> In most takeovers, the acquiring firm is willing to pay a large premium over the current market price of the acquired firm; therefore, when a firm becomes the target of a takeover attempt, its stock price increases in anticipation of the takeover premium....Thus within the day [of the takeover announcement], the new stock prices apparently reflect (at least on average) the magnitude of the takeover premium.²⁸

²⁷ See for example, Damodaran, A., "Investment Valuation: Tools and Techniques for Determining the Value of Any Asset," Second Edition, 2002 at 692. A copy of the relevant page is included in our workpapers.

²⁸ See Brealey, Myers and Allen at 339.

Mr. Gray infers that there was no premium offered by Berkshire because the proposed acquisition price was less than prior BNSF stock prices, and the relative change in BNSF stock over the year was less than the relative change in stock prices for other railroad companies in 2009.²⁹ These points are irrelevant and have no bearing on whether Berkshire paid a premium for BNSF. Berkshire offered, and eventually paid, approximately 30 percent more for BNSF's common equity shares than what they were trading prior to Berkshire's offer and BNSF's agreement to the acquisition. While it should have no impact on this cost of capital proceeding, this fact does not negate the fact that Berkshire paid a premium to acquire BNSF.

²⁹ See Gray VS at 46.

VII. EXPANSION OF THE COST OF CAPITAL COMPOSITE GROUP

In a separate filing from that submitted by the AAR in this proceeding, the KSC suggests that the STB conduct a separate proceeding, before the 2010 cost of capital determination is made, to consider whether to expand the cohort of railroads included in the railroad cost of capital determination. KSC believes that with the removal of the BNSF from the cost of capital calculation beginning with the 2010 determination, the industry cost of capital will be based on only three railroads, CSX, NS and UP, under the existing selection criteria.³⁰ KCS also claims that including only three companies could lead to an understated cost of capital.³¹

KCS believes that a way to solve this issue is to expand the composite railroad group to include three additional railroads in the 2010 cost of capital proceeding, i.e., KCS, the Canadian National Railway ("CN") and the Canadian Pacific Railway ("CP"). KCS believes that expanding the group to include itself would provide a more accurate representation of the true cost of capital for the railroad industry because the existing methodology tends to understate the cost of capital for smaller railroads. KCS also believes that the corporate structures of the two Canadian railroads have changed dramatically in recent years, with each expanding its U.S. presence through the acquisition of U.S. based railroads, including the Illinois Central, Wisconsin Central and the Dakota, Minnesota and Eastern.³² Therefore, KCS believes that the STB should

³⁰ Under the existing inclusion criteria, BNSF would be excluded because its parent company Berkshire does not pay dividends on common stock, and has less than 50 percent of its assets devoted to railroad operations.

³¹ See KCS Statement at 4.

³² See KCS Statement at 4.

reflect CP and CN's larger presence in the U.S. by their inclusion in the railroad cost of capital.

We believe that expansion of the composite group to include the KCS, CN and CP is unwarranted. While each of these three railroads have U.S. operations, the vast majority of CN and CP's revenues and assets come from outside the U.S., and a near majority of KCS' revenues and assets come from Mexico. In each case, the railroads cost of acquiring debt and equity are impacted by factors outside the U.S., and not representative of the risks faced by the U.S. railroad industry. In addition, CN and CP publish their financial statements in Canadian and not U.S. dollars, which could prove extremely problematic when attempting to develop debt and equity costs using the STB's current methodologies. We discuss each of these issues below.

A. IMPACT OF NON-U.S. OPERATIONS

1. Risks Faced By International Firms

A basic financial principle holds that a safe dollar is worth more than a risky dollar. As such, investments with greater risk, holding all else constant, will require a higher rate of return to induce investors to invest in the project or asset. Financial economists have long recognized the differing types of risk that investors implicitly and explicitly take into consideration when evaluating investments. These include, but are not limited to, market risk, stand-alone risk, business risk and financial risk.³³

³³ For a further exploration of risk see Brigham, E.F., & Ehrhardt, M. C. "Financial Management: Theory and Practice" (12th ed.), South-Western Cengage Learning., 2008, pages 567 and 568.

While all companies face these general types of risk, companies with large foreign operations face additional risks not customarily faced by domestic firms. International operations, especially those operating at the retail or local wholesale level, may receive payment in a currency different than that of the company's home country. and a second ٠

> happens with exchange rates. This is known as exchange rate risk, and, depending upon how the local currency trades against the currency of the home country, can either increase or decrease the value of the operation, and impact the rate of return on the foreign investment.

> In addition to the exchange rate risk, companies operating outside their home country also face country risk. This risk depends upon the foreign country's economic, political and social environment. Countries with stable economic, social, political and

In its cost of capital determinations, the STB is attempting to estimate the cost of capital for the U.S. railroad industry and not worldwide railroad industry in general. In simple terms, including companies with extensive non-U.S. operations would distort the cost of capital for the U.S. railroad industry.

2. Exchange Rate <u>Risk Facing Railroads</u>

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The three additional railroads KCS states suggests should be in the cost of capital determination (itself, CN and CP) have extensive non-U.S. operations and generate either a majority or near majority of the revenues outside the U.S. Table 8 below displays the percentage of revenues each company generates from non-U.S. operations based on each railroad's 2009 annual report to shareholders.

From Non-U.S. Operations – 2007 to 2009					
<u>Railroad</u> (1)	Percentage Of Revenue From U.S. <u>Operations</u> (2)	Percentage Of Revenue From Non-U.S. <u>Operations</u> (3)			
<u>KCS</u>					
1.2007	53.3%	46.7%			
2. 2008	55.8%	44.2%			
3. 2009	58.4%	41.6%			
<u>CN</u>					
4. 2007	33.3%	66.7%			
5. 2008	33.6%	66.4%			
6. 2009	32.5%	67.5%			
<u>CP</u>					
7. 2007	21.1%	78.9%			
8. 2008	22.6%	77.4%			
9. 2009	28.5%	71.5%			

As shown in Table 8 above, the vast majority of CN and CP's revenues come from their Canadian operations. The KCS on the other hand receives over 40 percent of its revenues from its Mexican subsidiaries.³⁴ Each company's extensive foreign operations means that it faces exchange rate risks that will ultimately find its way into its security prices. The railroads are well aware of this risk and communicate this fact to the their shareholders. For example, in its 2009 SEC Form 10-K, KCS states, "KCSM's financial condition, results of operations and prospects may be impacted by currency fluctuations..."³⁵ Because these three railroads face currency exchange risk that the other Class I railroads do not, it would be inappropriate to include this risk in the U.S. railroad industry's cost of capital.

3. Country Risk <u>Faced by Railroads</u>

In addition to the exchange rate risk, all three railroads face country risk that impacts their cost of capital. Country risk will customarily impacts the assets that the company will have in a particular country. Examples would include new regulatory, safety or environmental standards that would impact a railroad's infrastructure or locomotives. As such, knowing the value of the assets within a country can provide a rough estimate of exposure of country risk faced by the companies.

Table 9 below compares the percentage of assets each railroad has in the U.S. and in either Canada (CN and CP) or Mexico (KCS).

³⁴ This excludes between \$8 and \$18 million per year that KCS receives from unconsolidated subsidiary companies that operate in Mexico and Panama.

³⁵ See KCS 2009 SEC Form 10-K at 19.

Railroad	Percentage Of Long-Term Assets In U.S.	Percentage Of Long-Term Assets Outside U.			
(1)	(2)	(3)			
<u>KCS</u>					
1.2007	49.5%	50.5%			
2.2008	50.9%	49.1%			
3. 2009	52.7%	47.3%			
CN					
4. 2007	42.3%	57.7%			
5. 2008	45.4%	54.6%			
6. 2009	43.5%	56.5%			
CP					
7.2007	16.8%	83.2%			
8. 2008	35.8%	64.2%			
9. 2009	32.5%	67.5%			

As shown in Table 9 above, both the majority of the CN and CP's assets are located outside the U.S. In 2007, the value of KCS' Mexican assets exceeded the value of its U.S. assets, but has recently shifted back to a U.S. majority.³⁶

All three companies face certain levels of country risk. However, KCS most likely faces greater risks given the current social, economic and political issues within Mexico as compared to Canada and the U.S. KCS clearly understands these risks, and has listed them in its SEC filings and annual reports. According to KCS' 2009 SEC Form

³⁶ How long KCS maintains more U.S. assets than Mexican assets is uncertain. In March 2010 KSC acquired an intermodal facility for \$25 million. Depending upon the value assigned to the intermodal facility assets and other new assets placed in service by KCS in 2010, the percent of U.S. to non-U.S. assets could swing back to the majority being within Mexico.

10-K, KCS states if faces risks from the following factors due to its extensive operations within Mexico:

• KCS's Mexican concession is subject to revocation or termination in

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railroad.

- KCS faces economic and political risk in Mexico stemming from the Mexican government's extensive influence over the economy.
- KSC believes that the Mexican government may in certain circumstances invoke foreign exchange controls, thus limiting KCS's ability to repatriate cash from Mexico, and hampering KSC liquidity.
- KSC states that Mexican national politicians are currently focused on certain regional, political and social tensions, and reforms regarding fiscal and labor policies. These issues could impact the Mexican economy, which in turn could have material adverse impact on KCS.
- KCS believes Mexico could experience high levels of inflation in the future that could adversely impact the results of KCS's operations, and its cost of doing business in the country.

KCS, along with CP and CN, face unique country risks that ultimately impact the KCS, CN and CP's stock and debt values. It would not be reasonable for U.S. shippers to pay for risks associated with these companies non-U.S. operations.

B. CN AND CP REPORT IN CANADAIN DOLLARS

Both CN and CP develop financial statements according to U.S. Generally

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financial statistics to develop a MS-DCF cost of equity for each firm.³⁸ However, each company presents its financials in Canadian dollars and not U.S. dollars as all other railroad companies being considered for the cost of capital composite group. Adding currency conversion issues to the cost of capital process would add significant

VERIFICATION

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COMMONWEALTH OF VIRGINIA CITY OF ALEXANDRIA

I, THOMAS D. CROWLEY, verify under penalty of perjury that I have read the foregoing Verified Statement of Thomas D. Crowley, that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

Thomas D. Crowley

Sworn to and subscribed before me this 15th day of June, 2010

Diane R. Kavounis Notary Public for the State of Virginia

My Commission Expires: November 30, 2012 Registration Number: 7160645

VERIFICATION

COMMONWEALTH OF VIRGINIA)) CITY OF ALEXANDRIA)

I, DANIEL L. FAPP, verify under penalty of perjury that I have read the foregoing Verified Statement of Daniel L. Fapp, that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.

Daniel L. Fapr

Sworn to and subscribed before me this <u>15</u> day of June, 2010

B. Kann

Diane R. Kavounis Notary Public for the State of Virginia

My Commission expires: November 30, 2012

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My name is Thomas D. Crowley. I am an economist and President of the economic consulting firm of L. E. Peabody & Associates, Inc. The firm's offices are located at 1501 Duke Street, Suite 200, Alexandria, Virginia 22314, 760 E. Pusch View Lane, Suite 150, Tucson, Arizona 85737, and 21 Founders Way, Queensbury, New York 12804.

I am a graduate of the University of Maine from which I obtained a Bachelor of Science degree in Economics. I have also taken graduate courses in transportation at George Washington University in Washington, D.C. I spent three years in the United States Army and since February 1971 have been employed by L. E. Peabody & Associates, Inc.

I am a member of the American Economic Association, the Transportation Research Forum, and the American Railway Engineering and Maintenance-of-Way Association.

The firm of L. E. Peabody & Associates, Inc. specializes in analyzing matters related to the rail transportation of coal. As a result of my extensive economic consulting practice since 1971 and my participating in maximum-rate, rail merger, service disputes and rule-making proceedings before various government and private governing bodies, I have become thoroughly familiar with the rail carriers that move coal over the major coal routes in the United States. This familiarity extends to subjects of railroad service, costs and profitability, railroad capacity, railroad traffic prioritization and the structure and operation of the various contracts and tariffs that historically have governed the movement of coal by rail.

As an economic consultant, I have organized and directed economic studies and prepared reports for railroads, freight forwarders and other carriers, for shippers, for associations and for state governments and other public bodies dealing with transportation and related economic problems. Examples of studies I have participated in include organizing and directing traffic, operational and cost analyses in connection with multiple car movements, unit train operations for coal and other commodities, freight forwarder facilities, TOFC/COFC rail facilities, divisions of through rail rates, operating commuter passenger service, and other studies dealing with markets and the transportation by different modes of various commodities from both eastern and western origins to various destinations in the United States. The nature of these studies enabled me to become familiar with the operating practices and accounting procedures utilized by railroads in the normal course of business.

Additionally, I have inspected and studied both railroad terminal and line-haul facilities used in handling various commodities, and in particular unit train coal movements from coal mine origins in the Powder River Basin and in Colorado to various utility destinations in the eastern, mid-western and western portions of the United States and from the Eastern coal fields to various destinations in the Mid-Atlantic, northeastern, southeastern and mid-western portions of the United States. These operational reviews and studies were used as a basis for the determination of the traffic and operating characteristics for specific movements of coal and numerous other commodities handled by rail.

I have frequently been called upon to develop and coordinate economic and operational studies relative to the acquisition of coal and the rail transportation of coal on behalf of electric utility companies. My responsibilities in these undertakings included the analyses of rail routes, rail operations and an assessment of the relative efficiency and costs of railroad operations over those routes. I have also analyzed and made recommendations regarding the acquisition of railcars according to the specific needs of various coal shippers. The results of these analyses have been employed in order to assist shippers in the development and negotiation of rail transportation contracts which optimize operational efficiency and cost effectiveness.

I have developed property and business valuations of privately held freight and passenger railroads for use in regulatory, litigation and commercial settings. These valuation assignments required me to develop company and/or industry specific costs of debt, preferred equity and common equity, as well as target and actual capital structures. I am also well acquainted with and have used the commonly accepted models for determining a company's cost of common equity, including the Discounted Cash Flow Model ("DCF"), Capital Asset Pricing Model ("CAPM"), and the Farma-French Three Factor Model.

Moreover, I have developed numerous variable cost calculations utilizing the various formulas employed by the Interstate Commerce Commission ("ICC") and the Surface Transportation Board ("STB") for the development of variable costs for common carriers,

with particular emphasis on the basis and use of the Uniform Railroad Costing System ("URCS") and its predecessor, Rail Form A. I have utilized URCS/Rail form A costing principles since the beginning of my career with L. E. Peabody & Associates Inc. in 1971.

I have frequently presented both oral and written testimony before the ICC, STB, Federal Energy Regulatory Commission, Railroad Accounting Principles Board, Postal Rate Commission and numerous state regulatory commissions, federal courts and state courts. This testimony was generally related to the development of variable cost of service calculations, rail traffic and operating patterns, fuel supply economics, contract interpretations, economic principles concerning the maximum level of rates, implementation of maximum rate principles, and calculation of reparations or damages, including interest. I presented testimony before the Congress of the United States, Committee on Transportation and Infrastructure on the status of rail competition in the western United States. I have also presented expert testimony in a number of court and arbitration proceedings concerning the level of rates, rate adjustment procedures, service, capacity, costing, rail operating procedures and other economic components of specific contracts.

Since the implementation of the <u>Staggers Rail Act of 1980</u>, which clarified that rail carriers could enter into transportation contracts with shippers, I have been actively

involved in negotiating transportation contracts on behalf of coal shippers. Specifically, I have advised utilities concerning coal transportation rates based on market conditions and carrier competition, movement specific service commitments, specific cost-based rate adjustment provisions, contract reopeners that recognize changes in productivity and cost-based ancillary charges.

I have been actively engaged in negotiating coal supply contracts for various users throughout the United States. In addition, I have analyzed the economic impact of buying out, brokering, and modifying existing coal supply agreements. My coal supply assignments have encompassed analyzing alternative coals to determine the impact on the delivered price of operating and maintenance costs, unloading costs, shrinkage factor and by-product savings.

I have developed different economic analyses regarding rail transportation matters for over sixty (60) electric utility companies located in all parts of the United States, and for major associations, including American Paper Institute, American Petroleum Institute, Chemical Manufacturers Association, Coal Exporters Association, Edison Electric Institute, Mail Order Association of America, National Coal Association, National Industrial Transportation League, North America Freight Car Association, the Fertilizer Institute and Western Coal Traffic League. In addition, I have assisted numerous government agencies, major industries and major railroad companies in solving various transportation-related problems.

In the two Western rail mergers that resulted in the creation of the present BNSF Railway Company and Union Pacific Railroad Company and in the acquisition of Conrail by Norfolk Southern Railway Company and CSX Transportation, Inc., I reviewed the railroads' applications including their supporting traffic, cost and operating data and provided detailed evidence supporting requests for conditions designed to maintain the competitive rail environment that existed before the proposed mergers and acquisition. In these proceedings, I represented shipper interests, including plastic, chemical, coal, paper and steel shippers.

I have participated in various proceedings involved with the division of through rail rates. For example, I participated in ICC Docket No. 35585, <u>Akron, Canton &</u> <u>Youngstown Railroad Company, et al. v. Aberdeen and Rockfish Railroad Company, et al.</u> which was a complaint filed by the northern and mid-western rail lines to change the primary north-south divisions. I was personally involved in all traffic, operating and cost aspects of this proceeding on behalf of the northern and mid-western rail lines. I was the lead witness on behalf of the Long Island Rail Road in ICC Docket No. 36874, <u>Notice of Intent to File Division Complaint by the Long Island Rail Road Company</u>.

My name is Daniel L. Fapp. I am Vice President of the economic consulting firm of L. E. Peabody & Associates, Inc. The firm's offices are located at 1501 Duke Street, Suite 200, Alexandria, VA 22314; 760 E. Pusch View Lane, Suite 150, Tucson, Arizona 85737; and 21 Founders Way, Queensbury, New York 85737.

I received a Bachelor of Science degree in Business Administration with an option in Marketing (cum laude) from the California State University, Northridge in 1987, and a Master of Business Administration degree from the University of Arizona's Eller College of Management in 1993, specializing in finance and operations management. I am also a member of Beta Gamma Sigma, the national honor society for collegiate schools of business.

I have been employed by L. E. Peabody & Associates, Inc. since December 1997. Prior to joining L. E. Peabody & Associates, Inc., I was employed by BHP Copper Inc. in the role of Transportation Manager - Finance and Administration, and where I also served as an officer and treasurer of the three BHP Copper Inc. subsidiary railroads, The San Manual Arizona Railroad, the Magma Arizona Railroad (also known as the BHP Arizona Railroad) and the BHP Nevada Railroad. I have also held operations management positions with Arizona Lithographers in Tucson, AZ and MCA-Universal Studios in Universal City, CA.

While at BHP Copper Inc., I was responsible for all financial and administrative functions of the company's transportation group. I also directed the BHP Copper Inc. subsidiary railroads' cost and revenue accounting staff, and managed the San Manuel Arizona Railroad's and BHP Arizona Railroad's dispatchers and the railroad dispatching functions. I served on the company's Commercial and Transportation Management Team and the company's Railroad Acquisition Team where I was responsible for evaluating the acquisition of new railroads,

including developing financial and economic assessment models. While with MCA-Universal Studios, I held several operations management positions, including Tour Operations Manager, where my duties included vehicle routing and scheduling, personnel scheduling, forecasting facilities utilization, and designing and performing queuing analyses.

As part of my work for L. E. Peabody & Associates, Inc., I have performed and directed numerous projects and analyses undertaken on behalf of utility companies, short line railroads, bulk shippers, and industry and trade associations. Examples of studies which I have participated in organizing and directing include, traffic, operational and cost analyses in connection with the rail movement of coal, metallic ores, pulp and paper products, and other commodities. I have also analyzed multiple car movements, unit train operations, divisions of through rail rates and switching operations throughout the United States. The nature of these studies enabled me to become familiar with the operating procedures utilized by railroads in the normal course of business.

Since 1997, I have participated in the development of cost of service analyses for the movement of coal over the major eastern and western coal-hauling railroads. I have conducted on-site studies of switching, detention and line-haul activities relating to the handling of coal. I have also participated in and managed several projects assisting short-line railroads. In these engagements, I assisted short-line railroads in their negotiations with connecting Class I carriers, performed railroad property and business evaluations, and worked on rail line abandonment projects.

I have been frequently called upon to perform financial analyses and assessments of Class I, Class II and Class III railroad companies. I have determined the Going Concern Value

of privately held freight and passenger railroads, including developing company specific costs of debt and equity for use in discounting future company cash flows. My consulting assignments regularly involve working with and determining various facets of railroad financial issues, including cost of capital determinations. In these assignments, I have calculated railroad capital structures, market values, cost of railroad debt, cost of preferred railroad equity and common railroad equity. I am also well acquainted with and have used financial industry accepted models for determining a firm's cost of equity, including Discounted Cash Flow Model ("DCF") models, Capital Asset Pricing Model ("CAPM"), Farma-French Three Factor Model and Arbitrage Pricing Models. Based on these assignments, I have frequently spoken and provided guest lectures on developing divisional, corporate and industry costs of equity to undergraduate and graduate level classes.

In my tenure with L. E. Peabody & Associates, Inc., I have presented stand-alone cost evidence, including discounted cash-flow models and cost of capital determinations, in numerous proceedings before the STB. I have also presented evidence before the STB in Ex Parte No. 661, *Rail Fuel Surcharges*, Ex Parte No. 558 (Sub-No. 10), *Railroad Cost of Capital – 2006*, Ex Parte No. 558 (Sub-No. 11), *Railroad Cost of Capital – 2007*, Ex Parte No. 558 (Sub-No. 12), *Railroad Cost of Capital – 2008*, Ex Parte No. 664, *Methodology To Be Employed In Determining The Railroad Industry Cost Of Capital*, and Ex Parte No. 664 (Sub-No.1), *Use Of A Multi-Stage Discounted Cash Flow Model In Determining The Railroad Industry's Cost Of Capital*. In addition, my reports on railroad valuations have been used as evidence before the Nevada State Tax Commission.

Comparison of BNSF Historic <u>Financial Statistics to Restated Financial Statistics</u> (All Values in Millions)

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	<u>Item</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
	(1)	(2)	(3)	(4)	(5)	(0)
Hi	storic ^{1/}					
1.	Net Income	\$1.531	\$1,887	\$1.829	\$2,115	\$1.721
2.	Extraordinary Items	•-,	• .,	• 110-27	+_,	. .,
	a. Cumulative Effect of Accounting Change. Net of Tax	\$0	\$ 0	\$0	\$0	\$0
	b. Discontinued Operations, Net of Tax	\$0	\$0	\$0	\$0	\$0
	c. Extraordinary gains or losses	\$0	\$0	\$0	\$0	\$0
3.	Capital Expenditures	\$1,750	\$2,014	\$2,248	\$2,175	\$2,724
4.	Depreciation	\$1,075	\$1,130	\$1,293	\$1,397	\$1,537
5.	Deferred Taxes	\$2 17	\$314	\$280	\$417	\$612
6.	Revenues	\$12,987	\$14,985	\$15,802	\$18,018	\$14,016
Da	statad ²					
7	Net Income	\$1.534	¢1 990	¢1 970	\$2 115	\$1 7 7 1
2. 2	Extraordinary Items	+CC,1¢	Φ1,00 <i>9</i>	Φ1,029	Φ2,113	JI,/21
0.	a Cumulative Effect of Accounting Change Net of Tax	\$0	\$0	\$0	\$0	\$0
	h Discontinued Operations Net of Tax	\$0 \$0	\$0	\$0	\$0	\$0
	c. Extraordinary gains or losses	\$0 \$0	\$0	\$0	\$0	\$0
9	Capital Expenditures	\$1,750	\$2 014	\$2 993	\$3 116	\$2 724
10	Depreciation	\$1,750	\$1 176	\$1,203	\$1,110 \$1,307	\$1 537
11	Deferred Taxes	\$219	\$316	\$280	\$417	\$612
12.	Revenues	\$12,987	\$14,985	\$15,802	\$18,018	\$14,016
	∽ 3/					
12	<u>ierence</u>	\$ 2	6 0	6 0	**	¢0.
13.	Net income	-33	-92	20	20	20
14.	Extraordinary items	6 0	¢0.	¢0.	¢0	¢۵
	a. Cumulative Effect of Accounting Change, Net of Tax	5 0	\$0 \$0	20 20	20	20 20
	b. Discontinued Operations, Net of Tax	\$ 0	3 0	2 0	20	20
	c. Extraordinary gains or losses	\$0	\$0	\$0	\$0	\$U
15.	Capital Expenditures	\$0	\$0	-\$745	-\$941	\$0
16.	Depreciation	-\$36	-\$46	\$0	\$U	50
17.	Deterred Taxes	-\$2	-\$2	\$0	\$0	\$0
18.	Revenues	\$0	\$ 0	\$0	\$0	\$0

1/ BNSF 2005 to 2009 SEC Form 10-K, respectively.

2/ For years 2007 to 2009 the 2009 BNSF SEC Form 10-K was used. For the year 2006, the 2008 BNSF SEC Form 10-K was used. For the year 2005, the 2007 BNSF SEC Form 10-K was used.

3/ Line 1-6 minus line 7-12, respectively by year.

Comparison of CSXT Historic <u>Financial Statistics to Restated Financial Statistics</u> (All Values in Millions)

	<u>Item</u> (1)	<u>2005</u> (2)	<u>2006</u> (3)	<u>2007</u> (4)	<u>2008</u> (5)	<u>2009</u> (6)
His	storic ^{1/}					
1.	Net Income	\$1,145	\$1.310	\$1,336	\$1.365	\$1.152
2.	Extraordinary Items	• • • • •	• - •	•-•	·-,-	• • • • • • • • •
	a. Cumulative Effect of Accounting Change, Net of Tax	\$0	\$0	\$0	\$0	\$0
	b. Discontinued Operations, Net of Tax	\$425	\$0	\$110	\$0	\$15
	c. Extraordinary gains or losses	\$0	\$0	\$0	\$0	\$0
3.	Capital Expenditures	\$1,136	\$1,639	\$1,773	\$1,740	\$1,447
4.	Depreciation	\$833	\$867	\$890	\$918	\$908
5.	Deferred Taxes	-\$46	\$42	\$272	\$435	\$436
5. Deferred Taxes -\$46 \$42 \$272 \$435 6. Revenues \$8,618 \$9,566 \$10,030 \$11,255					\$11,255	\$9,04 1
Re	stated ^{2/}					
7.	Net Income	\$1,145	\$1.310	\$1.336	\$1.365	\$1,152
8.	Extraordinary Items	•-,	•-•	.,		·-,
	a. Cumulative Effect of Accounting Change, Net of Tax	\$0	\$ 0	\$ 0	\$0	\$0
	b. Discontinued Operations, Net of Tax	\$425	\$0	\$100	-\$130	\$15
	c. Extraordinary gains or losses	\$0	\$0	\$0	\$0	\$0
9.	Capital Expenditures	\$1,136	\$1,639	\$1,773	\$1,740	\$1,447
10.	Depreciation	\$833	\$867	\$890	\$918	\$908
11.	Deferred Taxes	-\$46	\$42	\$272	\$435	\$436
12.	Revenues	\$8,618	\$9,566	\$10,030	\$11,255	\$9,041
Dif	ference ^{3/}					
13.	Net Income	\$0	\$0	\$0	\$0	\$0
14.	Extraordinary Items			-		
	a. Cumulative Effect of Accounting Change, Net of Tax	\$0	\$0	\$0	\$0	\$0
	b. Discontinued Operations, Net of Tax	\$0	\$0	\$10	\$130	\$0
	c. Extraordinary gains or losses	\$0	\$0	\$0	\$0	\$0
15.	Capital Expenditures	\$0	\$0	\$0	\$0	\$0
16.	Depreciation	\$0	\$0	\$0	\$0	\$0
17.	Deferred Taxes	\$0	\$0	\$0	\$0	\$0
18.	Revenues	\$0	\$0	\$0	\$0	\$0

1/ CSXT 2005 to 2009 SEC Form 10-K, respectively.

2/ For years 2007 to 2009 the 2009 CSXT SEC Form 10-K was used. For the year 2006, the 2008 CSXT SEC Form 10-K was used. For the year 2005, the 2007 CSXT SEC Form 10-K was used.

3/ Line 1-6 minus line 7-12, respectively by year.

Exhibit No. 4 Page 1 of 6

2009 Average BNSF Cashflow And Average Income Before Extraordinary Items Without Deferred Tax Adjustments

	<u>Item</u> (1)	<u>Source</u> (2)	<u>2005</u> (3)	<u>2006</u> (4)	<u>2007</u> (5)	<u>2008</u> (6)	<u>2009</u> (7)
~	Net Income Extraordinary Items	Annual Report 10-K <u>1</u> /	\$1,534	\$1,889	\$1,829	\$2,115	\$1,721
i	a. Cumulative Effect of Accounting Change, Net of Tax	Annual Report 10-K <u>1</u> /	\$ 0	\$ 0	\$0	\$ 0	\$ 0
	b. Discontinued Operations, Net of Tax	Annual Report 10-K <u>1</u> /	\$ 0	\$ 0	\$ 0	\$0	\$ 0
	c. Extraordinary gains or losses	Annual Report 10-K 1/	\$ 0	\$ 0	\$ 0	\$0	\$ 0
ы.	Income Before Extraordinary Items	L1 - (L2a + L2b + L2c)	\$1,534	\$1,889	\$1,829	\$2,115	\$1,721
4	Capital Expenditures	Annual Report 10-K <u>1</u> /	\$1,750	\$2,014	\$2,993	\$3,116	\$2,724
S.	Depreciation	Annual Report 10-K <u>1</u> /	\$1,111	\$1,176	\$1,293	\$1,397	\$1,537
6.	Deferred Taxes	Annual Report 10-K 1/	\$219	\$316	\$280	\$417	\$612
7.	Cashflow	L3 - L4 + L5 + L6	\$1,114	\$1,367	\$409	\$813	\$1,146
ೲ	Revenues	Annual Report 10-K <u>1</u> /	\$12,987	\$14,985	\$15,802	\$18,018	\$14,016
6	Average Cashflow as a Percentage of Revenues	Sum L7 ÷ Sum L8	6.40%				
10.	2009 Average Cashflow	L8,C7 x L9	\$896.52				
Ξ	Average Income Before Extraordinary Items as Percentage of Sales	Sum L3 - Sum L8	%66.11				
12.	2009 Average Income Before Extraordinary Items	L8,C7 x L11	\$1,680.26				

<u>1</u>/ Column (3) based on 2007 Form 10-K. 2006. Column (4) based on 2008 Form 10-K. Columns (5) to (7) based on 2009 Form 10-K. Exhibit No. 4 Page 2 of 6

2009 Average CSXT Cashflow And Average Income Before Extraordinary Items Without Deferred Tax Adjustments

	<u>Item</u> (1)	<u>Source</u> (2)	<u>2005</u> (3)	<u>2006</u> (4)	<u>2007</u> (5)	<u>2008</u> (6)	<u>2009</u> (7)
	Net Income Extraordinary Items	Annual Report 10-K <u>1</u> /	\$1,145	\$1,310	\$1,336	\$1,365	\$1,152
i	a. Cumulative Effect of Accounting Change, Net of Tax	Annual Report 10-K 1/	\$ 0	\$ 0	2 0	\$0	\$ 0
	b. Discontinued Operations, Net of Tax	Annual Report 10-K 1/	\$425	\$0	\$100	-\$130	\$15
	c. Extraordinary gains or losses	Annual Report 10-K <u>1</u> /	\$0	\$ 0	\$ 0	\$0	\$ 0
ы.	Income Before Extraordinary Items	L1 - (L2a + L2b + L2c)	\$720	\$1,310	\$1,236	\$1,495	\$1,137
4.	Capital Expenditures	Annual Report 10-K <u>1</u> /	\$1,136	\$1,639	\$ 1,773	\$1,740	\$1,447
S.	Depreciation	Annual Report 10-K 1/	\$833	\$867	\$890	\$918	\$908
6.	Deferred Taxes	Annual Report 10-K 1/	-\$46	\$ 42	\$272	\$435	\$436
7.	Cashflow	L3 - L4 + L5 + L6	\$371	\$580	\$625	\$1,108	\$1,034
છં	Revenues	Annual Report 10-K <u>1</u> /	\$8,618	\$ 9,566	\$10,030	\$11,255	\$9,041
.6	Average Cashilow as a Percentage of Revenues	Sum $L7 + Sum L8$	7.66%				
10.	2009 Average Cashflow	L8,C7 x L9	\$692.94				
Ξ.	Average Income Before Extraordinary Items as Percentage of Sales	Sum L3 + Sum L8	12.16%				
12.	2009 Average Income Before Extraordinary Items	L8,C7 x L11	\$1,099.23				

~

<u>1</u>/ Column (3) based on 2007 Form 10-K. 2006. Column (4) based on 2008 Form 10-K. Columns (5) to (7) based on 2009 Form 10-K.

Exhibit No. 4 Page 3 of 6

2009 Average NS Cashflow And Average Income Before Extraordinary Items Without Deferred Tax Adjustments

	<u>Item</u> (1)	<u>Source</u> (2)	<u>2005</u> (3)	<u>2006</u> (4)	<u>2007</u> (5)	<u>2008</u> (6)	<u>2009</u> (7)
~	Net Income Extraordinary Items	Annual Report 10-K <u>1</u> /	\$1,281	\$1,481	\$1,464	\$1,716	\$1,034
i	a. Cumulative Effect of Accounting Change, Net of Tax	Annual Report 10-K <u>1</u> /	\$ 0				
	b. Discontinued Operations, Net of Tax	Annual Report 10-K <u>1</u> /	\$0	\$ 0	\$ 0	\$ 0	\$ 0
	c. Extraordinary gains or losses	Annual Report 10-K <u>1</u> /	\$0	\$ 0	\$ 0	\$ 0	2 0
<u>.</u>	Income Before Extraordinary Items	L1 - (L2a + L2b + L2c)	\$1,281	\$1,481	\$1,464	\$1,716	\$1,034
4	Capital Expenditures	Annual Report 10-K <u>1</u> /	\$1,025	\$1,178	\$1,341	\$1,558	\$1,299
ν.	Depreciation	Annual Report 10-K <u>1</u> /	787	750	786	815	\$845
و.	Deferred Taxes	Annual Report 10-K 1/	80	Ŷ	125	290	338
2.	Cashflow	L3 - L4 + L5 + L6	\$1,123	\$1,045	\$1,034	\$1,263	\$918
ø	Revenues	Annual Report 10-K <u>1</u> /	\$8,527	\$9,407	\$9,432	\$10,661	\$7,969
6	Average Cashflow as a Percentage of Revenues	Sum L7 \div Sum L8	11.70%				
10.	2008 Average Cashflow	L8,C7 x L9	\$932.63				
Ξ.	Average Income Before Extraordinary Items as Percentage of Sales	Sum L3 + Sum L8	15.17%				
12.	2008 Average Income Before Extraordinary Items	L8,C7 x L11	\$1,208.62				

<u>1</u>/ Column (3) based on 2007 Form 10-K. 2006. Column (4) based on 2008 Form 10-K. Columns (5) to (7) based on 2009 Form 10-K.

Exhibit No. 4 Page 4 of 6

2009 Average UP Cashflow And Average Income Before Extraordinary Items Without Deferred Tax Adjustments

	<u>Item</u> (1)	<u>Source</u> (2)	<u>2005</u> (3)	<u>2006</u> (4)	<u>2007</u> (5)	<u>2008</u> (6)	<u>2009</u> (7)
c	Net Income External instructions	Annual Report 10-K <u>1</u> /	\$1,026	\$1,606	\$1,855	\$2,338	\$1,898
i	a Cumulative Effect of Accounting Change, Net of Tax	Annual Report 10-K <u>1</u> /	\$ 0	\$0	\$ 0	\$ 0	\$ 0
	b. Discontinued Operations, Net of Tax	Annual Report 10-K 1/	\$0	\$ 0	\$ 0	\$0	\$0
	c. Extraordinary gains or losses	Annual Report 10-K <u>1</u> /	\$ 0	\$ 0	\$ 0	\$0	\$ 0
ц.	Income Before Extraordinary Items	L1 - (L2a + L2b + L2c)	\$1,026	\$1,606	\$1,855	\$2,338	\$1,898
4	Capital Expenditures	Annual Report 10-K <u>1</u> /	\$2,169	\$2,242	\$2,496	\$2,780	\$2,384
S.	Depreciation	Annual Report 10-K <u>1</u> /	\$1,175	\$1,237	\$1,321	\$1,387	\$1,444
é.	Deferred Taxes	Annual Report 10-K 1/	\$320	\$235	\$332	\$547	723
~	Cashflow	L3 - L4 + L5 + L6	\$352	\$836	\$1,012	\$1,492	\$1,681
ø	Revenues	Annual Report 10-K <u>1</u> /	\$13,578	\$15,578	\$16,283	\$17,970	\$ 14,143
6	Average Cashflow as a Percentage of Revenues	Sum L7 + Sum L8	6.93%				
10.	2009 Average Cashflow	L8,C7 x L9	\$979.86				
11.	Average Income Before Extraordinary Items as Percentage of Sales	Sum L3 ~ Sum L8	11.25%				
12.	2009 Average Income Before Extraordinary Items	L8,C7 x L11	\$1,590.80				

<u>1</u>/ Column (3) based on 2007 Form 10-K. 2006. Column (4) based on 2008 Form 10-K. Columns (5) to (7) based on 2009 Form 10-K.

	2009	MS-DCF Rai	ilroad Cost o	<u>f Equity Wit</u> l	<u>nout Deferre</u>	<u>i Tax Adjustm</u>	ents		
		BNSF		CSX		SN		UP	
	<u>ltem</u> (1)	Nominal/ <u>Year-End</u> (2)	Present <u>Value</u> (3)	Nominal/ <u>Year-End</u> (4)	Present <u>Value</u> (5)	NominaV <u>Year-End</u> (6)	Present <u>Value</u> (7)	Nominal/ <u>Year-End</u> (8)	Present <u>Value</u> (9)
' r	Normalized Cashflow <u>1</u> / Normalized Earnings	\$897		\$693		\$933		\$980	
i	Before Extraordinary Items <u>2</u> /	\$1,680		\$1,099		\$1,209		\$1,591	
÷.	Stage One Growth <u>3</u> /	9.55%		11.55%		12.00%		13.10%	
4.	Stage Two Growth 4/	11.55%		11.55%		11.55%		11.55%	
5.	Stage Three Growth <u>5</u> /	5.80%		5.80%		5.80%		5.80%	
	Year	Year-End <u>6</u> /	PV <u>7</u> /	Year-End 6/	JL √	Year-End <u>6</u> /	PV <u>7</u> /	Year-End <u>6</u> /	PV <u>7</u> ∕
6.	1	\$982	\$877	\$773	\$681	\$1,045	116\$	\$1,108	\$982
7.	2	\$1,076	\$858	\$862	\$669	\$1,170	\$889	\$1,253	\$983
œ	ξ	\$1.179	\$ 840	\$962	\$658	\$1,310	\$869	\$1,418	\$985
<u>.</u>	4	\$1,291	\$822	\$1,073	\$647	\$1,468	\$848	\$1,603	\$987
10.	Ŷ	\$1,415	\$804	\$1,197	\$636	\$1,644	\$828	\$1,813	\$989
Ξ.	6	\$1,578	\$801	\$1,335	\$625	\$1,833	\$806	\$2,023	£477
12.	7	\$1,760	\$798	\$1,489	\$ 614	\$2,045	\$784	\$2,256	\$965
13.	œ	\$1,964	\$795	\$1,661	\$604	\$2,281	\$762	\$2,517	\$954
14.	6	\$2,190	\$792	\$1,853	\$593	\$2,545	\$741	\$2,808	\$942
15.	10	\$ 2,443	\$789	\$2,067	\$583	\$2,839	\$721	\$3,132	\$ 931
16.	Terminal	<u>\$78,616</u>	<u>\$25,397</u>	<u>\$45,111</u>	<u>\$12.725</u>	<u>\$43,798</u>	<u>\$11,125</u>	\$75,822	<u>\$22,545</u>
17.	Sum of Present Valucs <u>8</u> /		\$33,574		\$19,035		\$19,285		\$32,241
18.	Equity Market Cap <u>9</u> /	\$33,574		\$19.035		\$19,285		\$32,241	
19.	Difference in Equity Market Cap								
	and Present Value of Cash flows 10/	\$ 0		\$ 0		\$ 0		\$ 0	
20.	Implicit Cost of Equity <u>11</u> /	11.96%		13.49%		14.69%		12.90%	
21.	Equity Weights <u>12</u> /	32.24%		18.28%		18.52%		30.96%	
22.	Weighted Cost of Equity 13/	13.04%							

Exhibit No. 4 Page 5 of 6

2009 MS-DCF Railroad Cost of Equity Without Deferred Tax Adjustments

- Individual railroad cash flow and earnings before extraordinary items calculations Line 10.
 - individual railroad cash flow and earnings before extraordinary items calculations Line 12.
 - Mcdian December 31, 2009 I/B/E/S long-term earnings per share growth forccast.
- Simple average of line 3. -i ~i ~i ~i ~i ~i
 - Grey VS at 40 to 41.
- line $6 = \text{Line } 1 \times (1 + \text{Linc } 3)$.
- Lines 11 to 15 = Prior Year-End Cashflow x (1 + Line 4). Lincs 7 to 10 = Prior Year-End Cashflow x (1 + Linc 3).
- Line $16 = \{Line 2 \times [(1 + Line 3)^{5}] \times [(1 + Line 4)^{5}] \times (1 + Line 5)\} (Line 20 Line 5)$. Lines 6 to 15 = Current Year Column (2) $+ [(1 + \text{Line 20})^{\circ}\text{Current Year Column (1)}]$. 1
 - Line16 = Current Year Column (2) + [(1 + Line 20)/Line 15, Column (1)].
 - Sum of Lines 6 to 16.
 - Grey VS at 41. ⁸⁰ 외 히 ᅴ ᅴ ᅴ ᅴ
- ine 17 Line 18.
- The implicit discount rate that sets Line 19 equal to zero (0).
 - Line 18, Column (2), (4), (6) and (8) Sum of Line 18.
 - Sum product of Line 10 and Line 21.

Comparison of Gray's ETC <u>Market Value to Corrected ETC Market Value</u> (All Values in Thousands)

	<u>Railroad</u> (1)	Gray's Current <u>Market Value</u> <u>1</u> / (2)	Corrected Current <u>Market Value</u> <u>2</u> / (3)	<u>Difference</u> <u>3</u> / (4)
1.	BNSF	\$236,658	\$242,978	\$6,320
2.	CSX	\$158,148	\$158,148	\$0
3.	NS	\$97,756	\$97,756	\$0
4.	UP	<u>\$215,499</u>	<u>\$215,499</u>	<u>\$0</u>
5.	Total <u>4</u> /	\$708,061	\$714,381	\$6,320

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1/ Source: Gray VS at 14.

2/ Source: Gray VS at Appendix C.

<u>3</u>/ Column (3) - Column (2).

 $\underline{4}$ Sum of Lines 1 to 4.

Summary of KCS U.S. <u>and Foreign Financial Statistics</u> (All Values in U.S. Millions)					
<u>ltem</u> (1)	<u>2009</u> (2)	<u>2008</u> (3)	<u>2007</u> (4)		
<u>Revenues</u>					
1. United States	\$864	\$1,034	\$930		
2. Mexico <u>1</u> /	<u>\$616</u>	<u>\$819</u>	<u>\$813</u>		
3. Total <u>2</u> /	\$1,480	\$1,852	\$1,743		
<u>% of Revenues</u>					
4. United States 3/	58.4%	55.8%	53.3%		
5. Mexico <u>4</u> /	<u>41.6%</u>	<u>44.2%</u>	<u>46.7%</u>		
6. Total <u>5</u> /	100.0%	100.0%	100.0%		
Assets					
7. United States	\$2,501	\$2,342	\$2,045		
8. Mexico	<u>\$2,246</u>	<u>\$2,256</u>	<u>\$2,088</u>		
9. Total <u>6</u> /	\$4,747	\$4,598	\$4,133		
% of Assets					
10. United States 7/	52.7%	50.9%	49.5%		
11. Mexico <u>8</u> /	<u>47.3%</u>	<u>49.1%</u>	<u>50.5%</u>		
12. Total <u>9</u> /	100.0%	100.0%	100.0%		
A contraction of the second se					

and Panamanian subsidiaries of \$12.8 million

- in 2008 and \$4.2 million in 2009.
- <u>2</u>/ Sum of Lines 1 and 2.
- $\underline{3}$ / Line 1 ÷ Line 3.

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- $\underline{4}/ \quad \text{Line } 2 \div \text{Line } 3.$
- 5/ Sum of Lines 4 and 5.
- $\underline{6}$ Sum of Lines 7 and 8.
- <u>7</u>/ Line 7 ÷ Line 9.
- **8**/ Line 8 ÷ Line 9.
- **<u>9</u>**/ Sum of Lines 10 and 11.
- 10/ Not Available.

Source: KSC 2008 and 2009 SEC Form 10-K.

Summary of CN U.S. and Foreign Financial Statistics (All Values in Canadian Millions)

Item	<u>2009</u>	<u>2008</u>	<u>2007</u>
(1)	(2)	(3)	(4)
Revenues			
1. United States	\$2,396	\$2,850	\$2,632
2. Canada	<u>\$4,971</u>	<u>\$5,632</u>	<u>\$5,265</u>
3. Total <u>1</u> /	\$7,367	\$8,482	\$7,897
<u>% of Revenues</u>			
4. United States 2/	32.5%	33.6%	33.3%
5. Canada <u>3</u> /	<u>67.5%</u>	<u>66.4%</u>	<u>66.7%</u>
6. Total <u>4</u> /	100.0%	100.0%	100.0%
<u>Assets</u>			
7. United States	\$9,852	\$10,286	\$8,636
8. Canada	<u>\$12,778</u>	<u>\$12,377</u>	<u>\$11,777</u>
9. Total <u>5</u> /	\$22,630	\$22,663	\$20,413
<u>% of Assets</u>			
10. United States 6/	43.5%	45.4%	42.3%
11. Canada <u>7</u> /	<u>56.5%</u>	<u>54.6%</u>	<u>57.7%</u>
12. Total <u>8</u> /	100.0%	100.0%	100.0%

1/ Sum of Lines 1 and 2.

2/ Line 1 ÷ Line 3.

 $\underline{3}$ / Line 2 ÷ Line 3.

 $\underline{4}$ Sum of Lines 4 and 5.

5/ Sum of Lines 7 and 8.

<u>6</u>/ Line 7 – Line 9.

<u>7</u>/ Line 8 ÷ Line 9.

8/ Sum of Lines 10 and 11.

<u>9</u>/ Not Available.

Source: CN 2008 and 2009 Annual Report.

Summary of CP U.S. and Foreign Financial Statistics (All Values in Canadian Millions)

<u>ltem</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
(1)	(2)	(3)	(4)
Revenues			
1. United States	\$1,227	\$1,117	\$991
2. Canada	\$3,076	<u>\$3,815</u>	<u>\$3,716</u>
3. Total <u>1</u> /	\$4,303	\$4,932	\$4,708
<u>% of Revenues</u>			
4. United States 2/	28.5%	22.6%	21.1%
5. Canada <u>3</u> /	<u>71.5%</u>	<u>77.4%</u>	<u>78.9%</u>
6. Total <u>4</u> /	100.0%	100.0%	100.0%
Assets			
7. United States	\$3,887	\$4,430	\$1,536
8. Canada	<u>\$8,081</u>	<u>\$7,954</u>	<u>\$7,582</u>
9. Total <u>5</u> /	\$11,968	\$12,385	\$9, 118
% of Assets			
10. United States 6/	32.5%	35.8%	16.8%
11. Canada <u>7</u> /	<u>67.5%</u>	<u>64.2%</u>	<u>83.2%</u>
12. Total <u>8</u> /	100.0%	100.0%	100.0%

1/ Sum of Lines 1 and 2.

<u>2</u>/ Line 1 ÷ Line 3.

 $\underline{3}$ / Line 2 ÷ Line 3.

4/ Sum of Lines 4 and 5.

5/ Sum of Lines 7 and 8.

<u>6</u>/ Line 7 ÷ Line 9.

<u>7</u>/ Line 8 ÷ Line 9.

8/ Sum of Lines 10 and 11.

Source: CP 2009 Annual Report.