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Louis P. Warchot
Senior Vice President-Law
and General Counsel

April 20, 2012

Honorable Cynthia T. Brown
Chief, Section of Administration
Surface Transportation Board
395 E St., S.W.
Washington, DC 20423

Re: STB Docket No. EP 558 (Sub-No.15), Railroad Cost of Capital—2011

Dear Ms. Brown:

Pursuant to the Decision served by the Board on February 22, 2011, attached please find the Comments of the Association of American Railroads (AAR) in the above proceeding. Also attached are the AAR's underlying workpapers which will be made available upon request to other participants in the proceeding.

A copy of the same on a disk, in MS Word and PDF format, will be hand-delivered for the Board's convenience. The disk will also include workpapers and spreadsheets.

Respectfully submitted,

Louis P. Warchot
Counsel for the Association of
American Railroads

Enclosures

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BEFORE THE
SURFACE TRANSPORTATION BOARD

RAILROAD COST OF CAPITAL — 2011	)	EX PARTE NO. 558 (Sub- No. 15)

COMMENTS OF THE ASSOCIATION OF AMERICAN RAILROADS AND ITS MEMBER RAILROADS

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April 20, 2012

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1	John T. Gray	The railroads' market value capital structure, overall cost of capital, cost of common and preferred equity, and cost of all types of debt.

*Verified statements are referenced in these comments by witness name – viz., V.S. Gray at _____

SURFACE TRANSPORTATION BOARD

RAILROAD COST OF CAPITAL — 2011	)	STB Docket No. EP 558 (Sub-No. 15)

COMMENTS OF THE ASSOCIATION OF AMERICAN RAILROADS AND ITS MEMBER RAILROADS

By order served February 3, 2011, the Board instituted this proceeding to determine the railroad industry's cost of capital for the year 2011. That determination, as the Board noted, will enable it to make the statutorily required (49 U.S.C. 10701 (d)(2), 10704(a)(2)) annual individual railroad revenue adequacy determination for 2011. The Board noted further that the cost of capital determination may also be used in various other STB railroad proceedings. *See Railroad Cost of Capital – 2011*, EP 558 (Sub-No. 15) (STB served February 3, 2012).

The railroads, through the Association of American Railroads (AAR), are submitting their calculation of: (1) the railroads' 2011 cost of common equity capital; (2) the railroads' 2011 current cost of preferred equity capital; (3) the railroads' current 2011 cost of debt capital; and (4) the 2011 capital structure mix of the railroad industry on a market value basis.

The AAR's calculations are discussed in the attached verified statement of John T. Gray, Senior Vice President, Policy and Economics of the Association of American Railroads. Mr. Gray's statement establishes the following:

1. The 2011 cost of debt capital is 3.97 percent (V.S. Gray at pp. 2, 25).

2. There is no preferred equity capital for 2011 (V.S. Gray at pp. 2, 44).

3. The 2011 cost of common equity capital is 13.57 percent (V.S. Gray at pp. 2, 44).

4. The capital structure of the railroad industry is 20.83 percent debt, 0.00 percent preferred equity, and 79.17 percent common equity. (V.S. Gray at pp. 2, 45).

From these data Mr. Gray concludes that the overall railroad industry cost of capital for 2011 is 11.57 percent (V. S. Gray at pp. 2, 46).

I. Introduction

The sole purpose of this proceeding is to determine the railroad industry's cost of capital for 2011. The cost of capital will be computed using the current cost of debt and equity and market value weights. *See Standards for Railroad Revenue Adequacy*, 3 I.C.C.2d 261 (1986), *aff'd sub. nom., Consolidated Rail Corporation v. United States*, 855 F.2d 78 (3rd Cir. 1988).

II. The Cost of Common Equity Capital

In its February 3, 2012 order instituting this proceeding, the Board directed that the cost of capital components be calculated "using the methodology followed in Railroad Cost of Capital –2010." *See Railroad Cost of Capital – 2011*, EP(Sub-No. 15) (STB served February 3, 2012) (Slip Op. at 2). In *Railroad Cost of Capital –2010*, the Board calculated the cost of equity component in its annual cost of capital proceeding using a simple average of the estimates produced by the Capital Asset Pricing Model (CAPM) adopted in *Methodology to be Employed in Determining the Railroad Industry's Cost of Capital*, EP (STB served January 17, 2008) and the Morningstar/Ibbotson Multi-Stage Discounted Cash Flow Model (MSDCF) adopted in *Use of a Multi-Stage Discounted Cash Flow Model in Determining the Railroad Industry's Cost of*

Capital, EP 664 (Sub-No. 1) (STB served January 28, 2009).[1] *See Railroad Cost of Capital – 2010,* EP 558 (Sub-No. 14) (STB served October 3, 2011) (slip op. at 6-11).[2] Mr. Gray used a simple average of the CAPM and Morningstar/Ibbotson MSDCF models adopted by the Board in his calculation of the cost of common equity in this proceeding.

A. The CAPM Methodology

Under the CAPM methodology as applicable to the annual cost of capital proceeding, the cost of common equity is calculated by determining the return an investor would receive on a risk-free investment and by adding to the risk-free return a premium associated with the risk of railroad stocks. The premium is calculated by multiplying the market risk premium of the stock market as a whole by a factor, known as Beta, that represents the non-diversifiable risk of holding railroad stocks. In formulaic terms, the CAPM can be expressed as:

K = RF + (MRP x Beta)

Where K = the firm's cost of equity,
RF = the risk-free rate,
MRP = the market's risk premium, and
Beta = coefficient of systematic, non-diversifiable risk of the stock.

[1] The Morningstar/Ibbotson MSDCF model adopted by the Board is a modified version that includes only the railroads that pass the screening criteria set forth in *Railroad Cost of Capital—1984*, 1 I.C.C. 2d 989 (1985), for inclusion in the sample of railroads used for the annual cost of capital determination. *See Use of a Multi-Stage Discounted Cash Flow Model in Determining the Railroad Industry's Cost of Capital*, EP 664 (Sub-No. 1)(STB served January 28, 2009) (Slip. Op. at 4).

[2] The Board determined that using a simple average of CAPM and the commercially accepted Morningstar/Ibbotson multi-stage DCF model to calculate the cost of equity will yield a more precise determination than relying on CAPM alone. As noted by the Board, "[T]here is no single simple or correct way to estimate the cost of equity for the railroad industry, and countless reasonable options are available. Both the CAPM and the multi-stage DCF models we propose to use have their own strengths and weaknesses, and both take different paths to estimate the same illusory figure. By using an average of the results produced by both models, we harness the strengths of both models while minimizing their respective weaknesses. The result should be a stable yet precise estimate of the cost of equity that we can use in future regulatory proceedings and to gauge the financial health of the railroad industry." *Use of a Multi-Stage Discounted Cash Flow Model in Determining the Railroad Industry's Cost of Capital*, EP 664 (Sub-No. 1)(STB served January 28, 2009) (Slip Op. at 15).

Mr. Gray's attached Verified Statement explains how the AAR calculated the cost of equity using the CAPM methodology. The risk-free rate and the market risk premium were retrieved directly from the Federal Reserve Board and Ibbotson Equity Risk Premium sources approved by the Board in the 2010 cost of capital proceeding. *Railroad Cost of Capital – 2010*, EP 558 (Sub-No. 14) (Slip Op. at 7). The calculation for Beta was made using the S&P 500 Price Return Index and the same methodology approved by the Board in the 2010 cost of capital proceeding. *See id.* at 7; V.S. Gray at pp. 29-31.[3]

The values determined by Mr. Gray for the elements of the CAPM methodology were 3.62 percent for the risk-free rate, 6.62 percent for the market risk premium, and 1.1623 for the coefficient of systematic, non-diversifiable risk of the railroad stocks ("Beta").

Based on a three-railroad composite (determined using the Board's procedures established in *Railroad Cost of Capital – 1984*, 1 I.C.C.2d 989 (1985)) and the procedures used by the STB in the last cost of capital proceeding, Mr. Gray estimates that under the CAPM methodology the cost of common equity capital for 2011 is 11.31 percent. V.S. Gray at p. 35.

B. The Morningstar/Ibbotson MSDCF Methodology

The Morningstar/ Ibbotson MSDCF methodology, as adopted by the Board, calculates the cost of common equity capital as follows:

> The cost of equity in a DCF model is the discount rate that equates a firm's market value to the present value of the stream of cash flows that could affect investors. These cash flows are not presumed to be paid out to investors; instead, it is assumed investors will ultimately benefit from these cash flows through higher regular dividends, special dividends, stock buybacks, or stock price appreciation. The incorporation of these cash flows and the expected growth of earnings are the essential aspects of the multi-stage DCF we are adopting here.

[3] In *Railroad Cost of Capital – 2010*, EP 558 (Sub-No. 14) (Slip Op. at 7), the Board clarified that for purposes of determining number of shares outstanding (for the beta calculation), new shares outstanding will be assigned "to the first Friday on, or after, the effective date" found in the company's 10-Q or 10-K statements.

> The Morningstar/Ibbotson model defines cash flows (CF), for the first two stages, as income before extraordinary items (IBEI) minus capital expenditures (CAPEX) plus depreciation (DEP) and deferred taxes (DT), or
>
> $$CF = IBEI – CAPEX + DEP + DT.$$
>
> An average cash flow figure is used as the starting point of the analysis under the Morningstar/Ibbotson model. To find the average cash flow, the model uses the 5-year period leading up to the year being analyzed, and the total cash flows for that time period are divided by total sales, which determine the 5-year cash-flow-to-sales ratio. The ratio is then multiplied by the total sales for the year being analyzed to obtain the average cash flow estimate for that year. For the third (and final) stage of the Morningstar/Ibbotson multistage DCF model stage, Morningstar/Ibbotson uses two additional assumptions: that there is no depreciation or deferred taxes. Therefore, in the third stage, cash flows are based solely on income before extraordinary items.
>
> Growth of earnings is also calculated in three stages. In the first stage (years 1-5), the firm's annual earnings growth rate 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 Institutional Brokers Estimate System (IBES). In the second stage (years 6-10), the growth rate is the simple average of all growth rates in stage 1. In stage three (years 11 and onwards), the growth rate is the average long-run nominal growth rate of the U.S. economy. This long-run nominal growth rate is estimated by using the historical growth in real GDP and the long-run expected inflation rate.

Use of a Multi-Stage Discounted Cash Flow Model in Determining the Railroad Industry's Cost of Capital, EP 664 (Sub-No. 1)(STB served January 28, 2009) (Slip. Op. at 5-6).

The cost of common equity capital using the Morningstar/Ibbotson MSDCF model adopted by the Board is also calculated and explained in the attached Verified Statement of Mr. Gray. Consistent with the methodology approved by the Board in *Railroad Cost of Capital – 2008*, EP 558 (Sub-No. 12) (served September 25, 2009) (Slip Op. at 9-10), Mr. Gray's calculations used only IBES growth estimates available as of December 31, 2010, and stock market values were based on shares outstanding and stock prices as of December 30, 2011.[4] V.S. Gray at pp. 41-43.[5]

[4] December 30, 2011 was the last trading day in 2011. December 31 was a Saturday.
[5] Consistent with the methodology approved by the Board in *Railroad Cost of Capital – 2010*, EP 558 (Sub-No. 14)

Mr. Gray calculates the cost of common equity capital for 2011 using the Morningstar/Ibbotson MSDCF model as 15.83 percent. V.S. Gray at p. 43.

C. Conclusion as to the Cost of Common Equity Capital

Under the Board's methodology, the cost of common equity capital is the simple average of the results using the CAPM and Morningstar/Ibbotson MSDCF models. The simple average produces a cost of common equity capital of 13.57 percent. V.S. Gray at p. 44.

III. The Cost of Preferred Equity Capital

Preferred stock is a hybrid security which has some characteristics of debt and some characteristics of equity. Its cost depends on its specific features. The methodology used by the Board in the last sixteen proceedings applies the following criteria:

(a) Where the preferred is not convertible into common stock, and where the corporation is not required to redeem the preferred at specific times, the cost of preferred equity is equal to its current dividend yield.

(b) Where the preferred is not convertible but is subject to mandatory redemption providing holders of the instrument with a premium, the cost is equal to the current dividend yield, plus the present value of the premium.

(c) Where the preferred is convertible at the option of the holder, and the market values of the preferred and common indicate that conversion is likely to occur or that the conversion right controls the price of the preferred, the preferred has the same cost as common equity.

(Slip Op. at 8-9), Mr. Gray's calculations used data inputs in the cash flow formula as retrieved from the railroads' 2007 - 2011 10-K filings with the SEC (and used restated data where set forth in any subsequently filed 10-K filings with the SEC). *See* V.S. Gray at p. 38.

Because the three-railroad composite had no preferred stock outstanding at the end of 2011, there is no 2011 cost of preferred equity capital. V.S. Gray at p. 44.

IV. The Cost of Debt

The cost of debt can include costs for three categories (bonds, equipment trust certificates, conditional sales agreements) of debt instruments, plus flotation costs. To determine the cost of debt for bonds, Mr. Gray has computed the average current bond yield for 65 instruments of the sample railroads for which data were available during 2011. This methodology is identical to that used in the last 21 cost of capital proceedings. *Railroad Cost of Capital – 2010*, EP 558 (Sub-No. 14) (Slip Op. at 3). Under this approach, the bond yield is based on a sample representing 97 percent of the total market value of the bonds issued by the railroads in the sample.[6] As the Board has recognized, equipment trust certificates (ETCs) and conditional sales agreements (CSAs) are not actively traded in secondary markets. Their costs were therefore estimated by comparing them to the yields on Treasury securities that are actively traded.[7] This is the same methodology used by the Board in the last 24 proceedings. The composite current cost of debt is the market-weighted average cost of bonds, ETCs, and CSAs, plus a small floatation cost.[8] Using the Board's established methodology, the railroads' 2011 cost of new debt is 3.97 percent. V.S. Gray at p. 25.

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[6] Bond data were derived from a source (Bloomberg) different than in previous years because it allowed for more information, enabling data to be retrieved for 65 bonds. The previous source (Standard & Poor's Xpress Feed) had data for only 30 bonds. V.S. Gray at p. 8.

[7] V.S. Gray at pp. 11, 16. No CSAs were modeled because only one is not current, and it cannot be modeled because it uses a floating interest rate. Like previous years, that CSA is included in "Other Debt", and impacts only capital structure.

[8] In this proceeding, the AAR calculated bond flotation costs by using data reported by the sample railroads to the Securities and Exchange Commission (SEC) regarding four new debt offerings in 2011. This is the same methodology approved by the Board in *Railroad Cost of Capital –2010*, EP 558 (Sub-No. 14), (Slip Op. at 5). V.S. Gray at pp. 21-25.

V. The 2011 Capital Structure of the Railroad Industry and the Overall Cost of Capital

Pursuant to the Board's February 3, 2012 decision, the market values of debt, preferred equity, and common equity were compiled to compute the 2011 capital structure of the railroad industry. The railroads' market value capital structure on a market value basis is 20.83 percent debt, 79.17 percent common equity capital, and 0.00 percent preferred equity capital. V.S. Gray at p. 45. Based upon this capital structure, the overall 2011 cost of capital is 11.57 percent. V.S. Gray at p. 46.

Conclusion

The Board should determine that the railroads' cost of capital for 2011 is 11.57 percent.

Respectfully submitted,

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April 20, 2012

BEFORE THE

SURFACE TRANSPORTATION BOARD

EX PARTE NO. 558 (Sub-No. 15)

RAILROAD COST OF CAPITAL — 2011

VERIFIED STATEMENT

OF

JOHN T. GRAY

SENIOR VICE PRESIDENT — POLICY AND ECONOMICS

ASSOCIATION OF AMERICAN RAILROADS

April 20, 2012

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Verified Statement
of
John T. Gray

I. Introduction

My name is John T. Gray. I am Senior Vice President – Policy and Economics of the Association of American Railroads (AAR), with offices at 425 Third Street, SW, Suite 1000, Washington, DC 20024. The AAR is the trade association of the Nation's major railroads, as well as the railroads of Canada and Mexico. The AAR's United States railroad members, which include all of the Class I railroads, account for almost 97 percent of our Nation's total railroad freight operating revenue.

When appropriate, the AAR represents the railroad industry before government bodies, including economic regulatory proceedings before the Surface Transportation Board ("STB" or "Board"). In particular, the AAR has participated in all of the STB proceedings addressing revenue adequacy standards and the annual cost of capital determinations.

Aside from other responsibilities, I have conducted or directed a wide range of analyses and projects addressing regulatory, legislative and internal issues relevant to railroads. Furthermore, I have testified before federal regulatory agencies, and have been an expert witness for a railroad. A summary of my qualifications and experience appears at the end of this statement.

In this submission, I am responding to the Board's decision of February 2, 2012 (served February 3), instituting a proceeding to determine the railroad industry's 2011 cost of capital — Ex Parte No. 558 (Sub-No. 15), *Railroad Cost of Capital — 2011* ("Ex Parte 558 Decision"). In my statement, I calculate the cost of debt for the railroad industry using the

procedures accepted in previous STB proceedings. I also calculate the cost of common equity using a simple average of the estimates produced using the following methods: (1) the Capital Asset Pricing Model used by the Board in Ex Parte No. 558 (Sub-No. 14); and (2) the STB's version of the Morningstar/Ibbotson Multi-Stage Discounted Cash Flow Model as used by the Board in Ex Parte No. 558 (Sub-No. 14). Finally, I calculate the market value capital structure and the overall cost of capital using the procedures accepted in previous Cost of Capital proceedings. This statement presents the details for calculating the necessary components for the overall cost of capital calculation: the market value capital structure, the cost of debt, the cost of common equity capital using the Capital Asset Pricing Model and the Multi-Stage Discounted Cash Flow Model, and the cost of preferred equity capital.

I conclude that the 2011 cost of capital for the railroad industry is 11.57 percent. This estimate is based on a current cost of debt of 3.97 percent, a cost of common equity capital of 13.57 percent; and market value weights for debt and common equity of 20.83 percent and 79.17 percent, respectively. Because there were no preferred stock issues outstanding in 2011, the cost of preferred equity capital has not been calculated, and the market value weight for preferred equity capital is zero.

II. Determining the Cost of Capital

A. Defining the Cost of Capital

The cost of capital for a firm is the minimum rate of return on investment that the providers of capital require as a condition for making an investment in the firm. In essence, it is the threshold rate of return on investment that makes investment in the firm attractive.

The cost of capital necessarily incorporates long-term investor expectations for a company's performance. Investment funds flow to companies where the expected returns, over the investors' investment horizons, are thought to at least equal the expected returns available from other investment opportunities, giving consideration to the relative (or commensurate) risk of investment. Similarly within a company, limited capital resources flow to projects where the expected returns are expected to be highest, giving consideration to the relative (or commensurate) risk of investment. Methods used to estimate the cost of capital therefore attempt to measure investor expectations. For some types of capital, such as traded bonds, investor expectations can be readily observed. For other types of capital, such as common equity, modeling is necessary.

B. The Composite Railroad Approach

The STB has adopted a composite railroad approach to computing an industry-wide cost of capital. This approach relies upon data from a sample of railroads meeting criteria established by the Board in Ex Parte No. 458, *Railroad Cost of Capital — 1984*, 1 I.C.C. 2d 989, 1003–1004 (1985).

C. Selection of Railroads for Analysis

Under the criteria established by the Board for individual firm inclusion in the composite railroad sample, a company must meet certain criteria. (Ex Parte 558 Sub-No. 15 Decision) Those criteria are:

- The company is a Class I line-haul railroad.
- If the Class I railroad is controlled by another company, the controlling company is primarily a railroad company (at least 50 percent of its total assets are devoted to railroad operations), and it is not already included in the study frame.
- The company's bonds are rated at least BBB by Standard & Poor's and Baa by Moody's.

- The company's stock is listed on either the New York or the American Stock Exchange.
- The company has paid dividends throughout the year (2011).

Table 1 (below) lists the AAR's evaluation of railroad companies that may meet the STB's criteria.

Table No. 1
Evaluation of Class I Railroads
Under Surface Transportation Board Selection Criteria
2011

Class I Railroad	Parent	Stock Symbol	Listed NYSE/ASE	Dividends Throughout 2011	Rail Assets Account For At Least 50% of Parent	Adequate Debt Rating
BNSF	Berkshire Hathaway	BRK.A	Yes	No	No	Yes
CSX	CSX Corporation	CSX	Yes	Yes	Yes	Yes
CNGT*	Canadian National Railway Co.	CNI	Yes	---	Non-U.S. company	---
KCS	Kansas City Southern	KSU	Yes	No	Yes	No
NS	Norfolk Southern Corporation	NSC	Yes	Yes	Yes	Yes
SOO*	Canadian Pacific Railway Ltd.	CP	Yes	---	Non-U.S. company	---
UP	Union Pacific Corporation	UNP	Yes	Yes	Yes	Yes

* CNGT is Grand Trunk Corporation, and consists of almost all of the U.S. railroad operations of Canadian National Railway (a.k.a. CN). SOO is Soo Line Corporation, and consists of the U.S. operations of Canadian Pacific (CP). Following STB precedent, CN and Canadian Pacific were not included in the sample because both CN and Canadian Pacific are Canadian corporations – and the cost of capital proceeding is concerned with determining costs for U.S. railroads under STB jurisdiction.

This year there are three railroad corporations or holding companies in the sample meeting the Board's criteria: CSX Corporation, Norfolk Southern Corporation, and Union Pacific Corporation. These railroad companies are the same three companies included in the 2010 sample. Consistent with past proceedings, the two Canadian-owned railroads have been excluded from the sample.[1] Berkshire Hathaway, owner of BNSF Railway Company,

[1] See STB Ex Parte No. 558, decided July 2, 1997, page 2, and verified statement of Craig F. Rockey on behalf of the Association of American Railroads in Ex Parte No. 558, submitted March 19, 1997, Table 1 on page 6. Accounting methods, differences in the treatment of taxes, and currency conversion could also be issues if foreign companies were added to the composite railroad. The railroad parents (CN and Canadian Pacific) are

did not pay dividends throughout 2011, and the railroad is less than 50% of the company's assets. Kansas City Southern did not meet the Board's criteria because of its lack of dividends on common stock, and its debt rating.

Table 2 contains revenue and asset figures from two fourth quarter 2011 reports submitted by each Class I railroad to the STB during February 2012.[2] This table shows that, based on data for 2011, the three-firm composite accounts for 62.9 percent of the operating revenues and 54.6 percent of the assets of all Class I railroads. These percentages are similar to the percentages for the previous year, 2010.

Table No. 2
Relative Size of the Railroad Composite Sample
Year 2011

	Revenue	Assets	Pct of Total Class I RR	
Railroad	($000)	($000)	Revenue	Assets
CSX	$11,676,083	$27,537,039	17.3 %	14.2 %
NS	11,171,773	36,060,749	16.6	18.5
UP	19,529,149	42,702,829	29.0	21.9
Total	$42,377,005	$106,300,617	62.9	54.6
Total Class I	$67,366,882	$194,605,273	100.0 %	100.0 %

D. Types of Railroad Capital

The total capital of a firm may include various forms of debt and two types of equity; common stock and preferred stock. Each of these three sources of capital has different expected rates of return (reflecting different levels of perceived risk), and the overall cost of

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still more Canadian than USA. Comparing operating revenues for 2010 as reported in the AAR's *Railroad Facts* book, 2011 edition: CNGT was 31 percent of CN, and SOO was 27 percent of CP.

[2] The reports are: *Quarterly Report of Revenues, Expenses and Income-Railroads*; and *Quarterly Condensed Balance Sheet-Railroads*.

capital is calculated as the weighted average of the costs of common equity, preferred equity, and debt based on their market values. Different approaches are used to estimate the costs of each of the types of capital. In this statement, 98.7 percent of the cost of debt is calculated using bonds and similar instruments (including notes and debentures). The remaining 1.3 percent – in the form of Equipment Trust Certificates – is calculated with a long-used model that utilizes market-determined yields for government debt, and the historical relationship between government debt and the type of railroad debt modeled.[3] The estimate of the cost of common equity is a simple average of the results from two estimation methods. One method is calculated using the Capital Asset Pricing Model (CAPM) following the methodology prescribed by the Board in the 2010 Cost of Capital decision. The other method is calculated using the Multi-Stage Discounted Cash Flow model methodology prescribed by the Board in the 2010 Cost of Capital Decision. The cost of preferred equity capital has not been calculated, since none of the representative companies had preferred stock outstanding at the end of 2011. Calculations for all three types of capital are based on data through 2011.[4] The industry's overall cost of capital is computed as a weighted average of the two costs — debt and common equity — based upon the market value for each type of capital.

[3] No Conditional Sales Agreements were used to calculate the 2011 cost of debt because they were either current or had properties (such as floating interest rates) that made them not suitable for the model.

[4] The growth rates and market values used in the Multi-Stage Discounted Cash Flow model are as of December 30, 2011 – the last trading day of the year. December 31 was a Saturday.

III. Debt Capital in 2011

The current cost of debt is determined from the current market-determined yields on all debt outstanding. This approach is necessary, and in past Board Cost of Capital decisions has been accepted as appropriate, because of the reasons listed below.[5]

(1) There is a lack of sufficient new issues from which to develop a representative current cost.

(2) The stated rate of interest/dividend payment to the investor is not always the same as the cost to the railroad. For example, when securities are issued, the exact total amount paid by investors is seldom received by the firm. Administrative fees, such as compensation paid to investment bankers, reduce the proceeds to the firm. The effect of this is to increase the cost of the securities to the firm.

(3) The maturity mix and the type of security (equipment trust certificates, conditional sales agreements, long-term debt) of new security issues may be different from the average of existing securities. Because of the effect that length of maturity and type of security has on its current cost, the use of only new issues would not accurately measure the current cost.

(4) The quantity and quality of existing debt has an impact on the yield of new issues.

A. Bonds, Notes and Debentures

As in previous Cost of Capital determinations, calculations relating to the bond market value use market data for the composite railroad whenever possible, and calculations

[5] See Ex Parte Nos. 415, 436, 452, 458, 464, 466, 473, 478, 486, 491, 506, 513, 518, 523, 523 (Sub-No. 1), 588, and 588 (Sub-No. 1) through (Sub-No. 14).

for the cost of bond debt rely entirely on market data. Multiple sources for market data are available, and each source has its own criteria for including a financial instrument in its database. However, no market data will be available in any database for privately *held* bonds and bonds that do not trade.[6] (Bonds can be privately *placed*, but then trade.) For 2011, yields and bond prices of the sample railroads' bonds, notes and debentures were obtained from Bloomberg.[7] This source is a departure from previous Cost of Capital determinations, where Standard & Poor's was the source for bond data. Using Standard & Poor's as a source, data for 30 bonds were available, and those bonds represent 38 percent of the book value of all of the composite railroad bonds. With Bloomberg as a source, we were able to find data for 65 bonds representing 97 percent of the book value of all railroad bonds belonging to the composite railroad.[8] Because of the better data availability, I have switched to Bloomberg as my source for bond trading data. Appendix O contains a summary of the impact of using Bloomberg instead of Standard & Poor's as a source for bond data.[9]

1. Market Value of Bonds, Notes, and Debentures

The average market value for traded bonds, notes, and debentures is calculated using the methodology employed in previous Cost of Capital proceedings. For each of 65 traded bonds in 2011, an average price is calculated based on the simple average of monthly prices.

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[6] In some cases, a comparable bond method could be used, where yields for traded bonds could be used for non-traded bonds with similar qualities (maturity date and type of instrument), enabling the calculation of a probable market price. Another approach would be to construct a yield curve for a railroad. These approaches have not been used because they require some judgments that could be debated, and because the supply of bonds with market data is adequate.

[7] Bloomberg's product is called Bloomberg Professional, and it is available as a subscription service. http://www.bloomberg.com/professional/

[8] The bonds not included are those that are either not in Bloomberg's database, or were in the database but did not trade.

[9] If the Board decides against using Bloomberg as a source, Appendix O contains the cost of debt for bonds, and the market value for bonds, using Standard & Poor's as the data source.

The prices represent what the investor is willing to pay for the bond given its coupon rate and maturity date. The market value is the average market price (stated as a price per hundred dollars of principal) times the amount of debt outstanding as of December 31, 2011.[10] Where market prices are not available (i.e., for instruments that did not trade or were not found in the Bloomberg database), the "face value" of the bond is assumed to be the price investors would pay. This assumption may slightly overstate the market value of some issues and understate the value of others, depending upon the relationship of the instruments' coupon rate and the current market rate. However, this possible variation is not likely to significantly affect the overall estimate of the cost of debt capital, since the differences are likely to be both small and offsetting, and since 97 percent of the book value of bonds is priced at market. Table 3 summarizes the results of the market value calculations for 2011. The market value for bonds, notes, and debentures that traded is $22.6 billion, a huge increase of 98 percent from 2010. Most of this increase is caused simply by using Bloomberg as a source for data instead of Standard & Poor's. The corresponding market value for non-traded debt is down 92 percent, making the total market value for debt up by over 7 percent.[11]

[10] Securities that were newly issued during the year were prorated by the ratio of the number of months outstanding (rounded to the nearest half month) to the twelve-month year, as done in past proceedings.

[11] Non-Traded debt in this case is debt that did not trade, or debt for which no trading data are available in the Bloomberg database.

Table No. 3
Bonds, Notes and Debentures
Average Market Value

Railroad Co.	Traded Value ($000)	Non-Traded Value ($000)	Total Value ($000)	Weight Based on Traded
CSX	$8,520,900	$471,571	$8,992,472	37.74 %
NSC	$7,589,026	$112,102	7,701,128	33.61
UNP	$6,469,220	$203,666	6,672,886	28.65
Total	$22,579,146	$787,339	$23,366,485	100.00 %
Prior Year	$11,416,734	$10,403,089	$21,819,823	
Change	97.8%	-92.4%	7.1%	

Appendix A lists details for each of the 65 bonds, notes, and debentures belonging to the composite railroad for which trading data are available for 2011 in the Bloomberg database – and those instruments are summarized for each sample railroad in the front of the Appendix.[12] Book values for non-traded debt are also listed.

2. Current Cost of Bonds, Notes, and Debentures

Table 4 summarizes the yield or cost of each railroad's debt (bonds, notes, and debentures), which, when weighted by the market value of the traded debt (as shown in Table 3), determines the sample composite cost of bonds, notes and debentures. The weighted average is 3.913 percent, which is 0.652 percentage points below last year's figure of 4.565 percent.

[12] There are 65 bonds with distinct 9-character alphanumeric identification (CUSIP) codes, as determined by the Committee on Uniform Security Identification Procedures. Two bonds were issued in multiple pieces at differing times. These bonds have been divided into pieces to enable the proper handling of the Board's policy of prorating new bonds. Thus, Appendix A shows 68 items that represent 65 distinct bonds.

Table No. 4
Bonds, Notes and Debentures
Weighted Current Cost

Railroad Co.	Weight	Current Cost
CSX	37.74 %	3.957 %
NSC	33.61	4.127
UNP	28.65	3.605
Total	100.00 %	3.913 %

As noted earlier, the current cost for bonds, notes, and debentures is based on traded instruments issued by the sample railroads. Appendix A contains the average yield for each of the 65 traded securities as found in Bloomberg's database. The average yield for each security is a simple average of the twelve month-end yields. The traded portion of Appendix A summarizes the yield or cost of each railroad's debt, which, when weighted by the market value of the traded debt, determines the sample composite cost of bonds, notes and debentures of 3.913 percent. The weights used in Table 4, as derived from the calculations in Table 3, are also based on the traded portion of bonds, notes and debentures listed in Appendix A.

B. Equipment Trust Certificates

Equipment Trust Certificates (ETCs) are debt obligations that are secured by the particular equipment which is acquired with the instrument's proceeds. In the event of default, creditors may repossess and resell or lease the equipment to pay off the debt obligations. Because entire ETCs are not actively traded in secondary markets, it is necessary to determine their cost by examining the return on other debt securities that are actively traded.

An ETC is generally serially issued. As such, each year during its life an equal amount (typically 1/15th) of the original amount must be retired. Consequently, an ETC may be thought of as a series of individual, annually-retiring bonds. In fact, when ETCs are issued, each of the maturities is sold independently from the others. A serially issued debt instrument provides an investor with the ability to purchase only the maturities that interest him. To correctly compute the composite yield on a serially issued bond, the internal rate of return on the bond's principal and interest payments must be calculated.

To compare ETCs to other debt instruments, the yields to maturity (as detailed in Appendix B) for government bills, notes, and bonds having the same range of maturities as current ETCs were obtained from Federal Reserve data. The yield curve for these government securities (also in Appendix B) shows the relationship between the current costs, or yields to maturity, and maturity dates for government bonds (which, unlike ETCs, are actively traded in secondary markets).

These yield data have been adjusted by the Federal Reserve Board to reflect constant maturities, such that the data accurately reflect the 2011 relationships between yields and maturities. After determining the yields to maturity for government bonds of maturities similar to those of an ETC, those yields are adjusted to reflect the risk associated with the ETCs as compared to government bonds. In Cost of Capital filings prior to Ex Parte No. 486, *Railroad Cost of Capital — 1989*, yield spreads between government bonds and ETCs were based on the publication *Analytical Record of Yields and Yield Spreads* prepared by the Bond Market Research Department of Salomon Brothers, Inc. However, Salomon Brothers has not compiled yields and yield spreads for ETCs since 1988. Accordingly, identical to the methodology approved by the Board for application in Ex Parte No. 486 and subsequent

proceedings, yields and yield spreads used in this proceeding are based on new issues of ETCs by the sample railroads as compiled by the AAR.[13] (Identical to the methodology used in Ex Parte 486 and prior proceedings, the Salomon Brothers compilation of yields and yield spreads on comparable industrial instruments were used as a proxy for ETCs of the same rating where there were no new ETC issues of a particular rating.[14])

In recent years prior to 2007, no new ETCs were issued by the sample railroads. An alternative method of estimating yield spreads between government bonds and ETCs was therefore necessary for Cost of Capital determinations for the years 2001 through 2006. For this period, the AAR relied on historical yield spreads to determine the current cost of ETCs. Consequently, the yield spread between ETCs and government bonds was an average of the spreads (government vs. BBB ETCs) used in the 1998 through 2000 Cost of Capital proceedings. That spread was 114 basis points. In 2007, however, a new ETC was issued, and its interest rate spread above government bonds was 125 basis points. There were no new ETCs issued in 2008, so the 2007 premium was used. However, in 2009, a new ETC was issued, and its interest rate spread above government bonds was 80 basis points. Because the 2009 ETC is the most current measure of the relationship between ETCs and government securities, its 80 basis point spread is used herein as the interest rate spread

[13] The only difference between the two methodologies is the specificity of the data base regarding the new issues. Salomon Brothers, Inc. included all new issues of ETCs (i.e., airlines, railroads, etc.) in computing yield spreads between government bonds and ETCs, while the AAR had included only new issues of ETCs by the sample railroads in computing yield spreads between government bonds and ETCs. Use of new issues of ETCs by the sample railroads is necessarily representative of the cost of ETCs because it is all-inclusive and reflects the actual cost of new ETC issuance. In today's economic environment, ETCs for non-railroads could distort the spread.

[14] ETCs are rated by Standard & Poor's, a firm which specializes in analyzing and evaluating securities, according to the likelihood of a default by the railroad responsible to pay interest and to redeem the face value. The highest available rating, AAA, indicates the least risk of default. All other things being equal, investors will pay a higher price (or accept a lower yield) for a higher rated security than for a lower rated security.

above government bonds. Table 5 lists fourteen years of interest rate spreads. The 2009-11 spread is closest to the spreads from 1998 and 1999.

Table No. 5
History of Premiums for
Equipment Trust Certificates (ETC)

Data Year	Proceeding	Basis Points
1998	Ex Parte No. 558 (Sub-No. 2)	84
1999	Ex Parte No. 558 (Sub-No. 3)	87
2000	Ex Parte No. 558 (Sub-No. 4)	171
2001	Ex Parte No. 558 (Sub-No. 5)	114
2002	Ex Parte No. 558 (Sub-No. 6)	114
2003	Ex Parte No. 558 (Sub-No. 7)	114
2004	Ex Parte No. 558 (Sub-No. 8)	114
2005	Ex Parte No. 558 (Sub-No. 9)	114
2006	Ex Parte No. 558 (Sub-No. 10)	114
2007	Ex Parte No. 558 (Sub-No. 11)	125
2008	Ex Parte No. 558 (Sub-No. 12)	125
2009	Ex Parte No. 558 (Sub-No. 13)	80
2010	Ex Parte No. 558 (Sub-No. 14)	80
2011	Proposed for EP 558 (Sub-No. 15)	80

The methodology used to determine the cost of ETC debt is the same as the method employed and approved in previous proceedings. Risk-adjusted yields provide the basis to value each ETC. Using formulae suggested by *Standard Security Calculation Methods,* the market value of each maturity comprising an ETC is determined. In effect, these formulae make it possible to determine the price investors would pay in 2011 for the contractual interest payments and price appreciation for holding the instrument. It is the most accurate way to compute the current cost of ETCs to the firm for the defined period. Computing the internal rate of return of the ETC prices and their associated cash flow streams establish the current cost for ETCs. The weighted-average cost for all modeled Equipment Trust

Certificates is shown in Table 6. [15]

Table No. 6
Summary of Equipment Trust Certificates Modeled for 2011
($000)

Railroad	Amount Outstanding Beg.	Ending	Average	Yield	Current Market Value	Current Interest Amount	No. ETC
CSX	$97,300	$75,300	$86,300	1.906%	$98,058	$1,869	5
NS	62,800	46,050	54,425	1.698%	60,551	1,028	3
UP	136,682	128,313	132,498	3.757%	154,435	5,803	2
Total	$296,782	$249,663	$273,223	2.779%	$313,043	$8,700	10

Weighing each railroad's yield, by its current market value for modeled ETCs, results in a current cost of 2.779 percent. The average rate is lower than the 3.227 percent found for 2010. This is not surprising because the yield curve for government securities is lower in

[15] The formulae used to value these bonds are standards of the security industry. They are:

For bonds with less than six months to maturity:

$$DP = \left[\frac{100 + C/2}{1 + DY/360}\right] - \left[C/2\ \frac{(180 - D)}{180}\right]$$

For bonds with six months or longer to maturity:

$$DP = \left[\frac{100}{(1 + Y/2)_{EXP}(N - 1 + D/180)}\right] + \left[\sum_{k=1}^{N} \frac{C/2}{(1 + Y/2)_{EXP}(K - 1 + D/180)}\right] - \left[C/2\frac{(180 - D)}{180}\right]$$

Where: DP = Dollar price of the bond
C = Coupon rate as a percent per year
D = Number of days from settlement date to coupon date
Y = Yield to maturity as a decimal per year
EXP = Raise the term on the left to the power indicated by the term on the right
N = Whole number of coupons payable plus 13
K = Compute for K, values 1 to N and sum the results

2011 than 2010 (see Appendix B), and all instruments are one year closer to maturity – meaning they have moved "lower" (to the left) on the yield curve. Both years were calculated using the same interest rate spread in the model. A summary of each railroad's modeled ETCs can be found in Appendix C, which includes a market value and a current yield. Upon initial examination of Table 6, the yield for Union Pacific's ETCs appears doubtful because of its difference from the two other railroads. However, Appendix C reveals that UP's ETCs have maturity dates much later than the other two railroads – meaning the UP ETCs are much "higher" on the yield curve, justifying their higher yield. Appendix C also lists ETCs that were not modeled. ETCs can fail to be modeled for two reasons: (1) the ETC instrument does not have all of the characteristics typical of an ETC; or (2) the ETC has a floating rate (instead of fixed) making its rate for a particular future year uncertain. The market value of all modeled ETCs is $313.0 million. Based on the assumption that the market value of non-modeled ETCs is the same as its book value, the market value of non-modeled ETCs is $10.0 million. The non-modeled ETC "market value" is listed in the Miscellaneous Debt category to comply with the Board's previous decisions.

C. Conditional Sales Agreements

Conditional Sales Agreements (CSAs) are another form of railroad financing that is treated by investors as debt securities, because their interest obligations are essentially the same as interest obligations on ETCs. Like ETCs, CSAs are not generally traded in secondary markets. Accordingly, as in prior proceedings, their current cost can be determined from current yields on government bonds in a similar manner to ETCs, using a 1997 relationship between CSAs and ETCs to determine the yield spread over government bonds.

Table No. 7
Summary of Conditional Sales Agreements Modeled for 2011
($000)

Railroad	Amount Outstanding Beg.	Ending	Average	Yield	Current Market Value	Current Interest Amount	No. CSA
CSX	$0	$0	$0	--	0	0	0
NS	0	0	0	--	0	0	0
UP	0	0	0	--	0	0	0
Total	$0	$0	$0		$0	$0	0

No CSAs were modeled this year. A summary of each railroad's (only one railroad still has this type of debt instrument) CSAs can be found in Appendix D. Only three CSAs were outstanding in 2011. Two CSAs were not modeled because they are current, and the third CSA cannot be modeled. Like an ETC, CSAs can fail to be modeled for two reasons: (1) the CSA instrument does not have all of the characteristics typical of a CSA; or (2) the CSA has a floating rate (instead of fixed), making its rate for a particular future year uncertain. In the case of the CSA listed herein as not modeled, the instrument uses a floating interest rate tied to the London Interbank Offered Rate (a.k.a. LIBOR). Since no CSA's were modeled, the 2011 market value for modeled CSAs is zero. Based on the assumption that the market value of the non-modeled CSA is the same as its book value, the market value of non-modeled CSAs is $18.0 million. The non-modeled CSA market value has been listed with the Miscellaneous Debt category to comply with the Board's earlier decisions.

D. All Other Debt

Capital leases and miscellaneous debt such as commercial paper, demand deposits, and other instruments with relatively small amounts outstanding are listed as All Other Debt. To comply with past decisions of the Board, non-modeled Equipment Trust Certificates and

Conditional Sales Agreements have been listed in this category. Capital leases account for most of the All Other Debt category.

Capital leases are contracts between two parties and as such take many forms.[16] Since capital leases are not traded in the marketplace, their current cost is not directly observable. The lack of complete information with respect to leases necessitates that many assumptions be made to estimate their current cost and their values. For market value purposes, capital leases are included at book value. Given the large number of these leases and the significant differences among their terms, this is the only practical option available. Because the cost of capital calculation assigns this debt a cost based on traded or modeled securities (bonds, notes, debentures, ETCs and CSAs) that typically have a lower cost, the cost used for capital leases will be somewhat understated.

Miscellaneous debt, such as commercial paper, demand deposits, and various instruments with extremely small amounts outstanding are also excluded from the current cost computations. Non-modeled Equipment Trust Certificates and non-modeled Conditional Sales Agreements are also included in the Miscellaneous Debt category. The book value (assumed market value) of capital leases, miscellaneous debt, non-modeled ETCs, and non-modeled CSAs is $1,844.8 million; as a percent of the total market value of debt of the composite railroad, it is 7.2 percent. (More detail on Miscellaneous Debt can be found in the Debt Reconciliation portion of my work papers.) This treatment of All Other Debt is the same approach used in the previous cost of capital proceeding.

[16] See generally 49 C.F.R. 1201, 2–20 for definitions.

E. Market Value of Debt

Table 8 summarizes the total market value for each debt category. The total market value for traded and non-traded debt is $25,524.3 million. Bonds, Notes, and Debentures (Bonds) account for about 92 percent of the total market value. Almost 97 percent of the Bonds' market value is determined by the results of trading throughout the year, while the remaining portion is based upon the book value of non-traded bonds.

Table No. 8
Market Value of Debt ($000)

Type of Debt	Market Value	Percent of Total	Percent of Subtotal
Bonds, Notes & Debentures	$23,366,485	91.55 %	98.68 %
Equipment Trust Certificates	313,043	1.23	1.32
Conditional Sales Agreements	0	0.00	0.00
Subtotal	23,679,528	92.77	100.00 %
All Other Debt*	1,844,774	7.23	
Total	$25,524,302	100.00 %	

* Non-modeled ETCs and non-modeled CSAs are included in All Other Debt.

Current costs can be determined for three of the four debt categories — Bonds, Equipment Trust Certificates, and Conditional Sales Agreements. Therefore, the weighted average cost of debt is based upon these three (of the four) debt categories (see subtotal column). The total market value of debt, used to determine the weight for debt in the overall cost of capital calculation, includes all four categories. The market value of debt, including traded and non-traded debt, is described in more detail in Appendix E.

F. Flotation Costs for Debt Capital

The cost of issuing new debt generally has two portions. First, when new debt is issued by a negotiated offering or a competitive bid, the issuing firm pays a fee to the

investment banking firm or firms handling the offer. These fees cover the banker's administrative costs in handling the sale and profits. Second, the issuer incurs expenses such as legal, accounting, and printing. Those types of expenses are quantified in the Securities and Exchange Commission's Form 424(b)(5) or 424(b)(2), as are the investment banker's fee and other details of new debt offerings. Flotation costs generally vary by type of security. For ETCs and CSAs, the fees are extremely small, but costs increase as the administrative burden and underwriting risk increase (i.e., in order of increasing cost — ETCs and CSAs, bonds and notes, convertible bonds, and preferred stock and common stock). As discussed below, flotation costs directly reduce the gross proceeds available to the issuing firm.

An example helps to illustrate how flotation costs permanently increase the cost of debt capital to the railroad. If a railroad sells a 10-year bond with an annual coupon of 15 percent and investors are willing to pay $98 for each $100 in face value, the effective yield on the bond is 15.40 percent. Because the investment banker requires compensation (flotation costs) for his work, the railroad does not receive the full $98 from the investors. In addition, the railroad will have its own internal costs such as legal and accounting. If flotation costs reduce the net proceeds to say $96, the effective cost to the railroad over the life of the bond is 15.82 percent. Therefore, flotation costs have increased the cost of debt from 15.40 to 15.82, or by 42 basis points. Proper accounting treatment requires the $4 per $100 ($100 - $96) to be amortized on a straight line basis over the life of the bond. In addition, the Uniform System of Accounts requires the annual amortization to be charged directly to Account No. 548, Amortization of Discount on Funded Debt, a fixed charge item. This results in fixed charges for the year totaling $15.40 ($15.00 coupon payment +

amortization of $0.20 discount + $0.20 flotation costs). It is important to note that these flotation costs are not recovered through operating costs but are fixed charges each year during the life of the bond. Also, it is evident that in order to reflect the total current cost of debt, flotation costs must be included.

Any firm requires the opportunity to cover flotation costs before it will have an incentive to make future capital expenditures. Before creditors will lend their funds, they must be assured that the railroad will have the opportunity to earn returns sufficient to cover all costs.

Using the same methodology used since 2008, I calculated 2011 flotation costs for bonds using publicly available data from electronic filings with the Securities and Exchange Commission (SEC).[17] The filing types are "Prospectus Rule 424(b)(2)" and "Prospectus Rule 424(b)(5)". In addition to standard bond information such as coupon and maturity date, these filings also provide the price to investors, underwriter's fee, and railroad expenses excluding the underwriter's fee. I have calculated a yield based on the price to investors and a yield that also included flotation costs. The difference between the two yields is the flotation cost expressed in percentage points. For 2011, seven new issues were reported in five (two filings reported two issues) filings.[18] A simple average of the seven flotation costs is 0.067 points, slightly lower than the 0.072 percentage points calculated for 2010. Page 1 of Appendix F contains a table with input data and calculations. Pages 2 and 3 of the same appendix contain, as an example, the pages from the SEC filing that were used as a source for one of the bonds. The source filings for all of the new bond issues have been included in

[17] The SEC's EDGAR (Electronic Data Gathering, Analysis, and Retrieval) system is available on the internet at the following address: http://www.sec.gov/edgar.shtml .

[18] Debt exchanges and a private placement were not used.

my work papers. I believe the seven new railroad debt issues provide the best information to determine flotation costs for 2011, and I have therefore used 0.067 percentage points for the flotation costs for bonds.

The Securities and Exchange Commission (SEC) conducted a study of flotation costs using railroad ETC data for the years 1951, 1952 and 1955.[19] In that study, the SEC determined that ETC flotation costs averaged 0.89 percent of gross proceeds.

I have calculated flotation costs for ETCs using the same methodology used in the previous Cost of Capital decision. Table 9 below calculates flotation costs for ETCs using the flotation percent of gross proceeds discussed above. No flotation costs have been calculated for CSAs, as none have been modeled. Current average yields on railroad ETCs are assumed to be equal to the yield resulting from the price to investors for a new issue. Coupons are assumed to be paid twice per year. The duration for new ETCs is assumed to be 15 years. Given the input data, effective yields can be calculated, and the difference between the yields excluding flotation costs and the yields including flotation costs are the flotation costs measured in percentage points. The results are flotation costs for ETCs of 0.073 percentage points.

The 0.073 percentage points calculated using last year's methodology understates the flotation costs for ETCs, since the weighted average maturity for the 10 modeled ETCs (listed in Appendix C) is 8.4 years – not 15 years, like the methodology assumes. The government yield curve in Appendix B clearly illustrates that interest rates for debt instruments maturing in 8.4 years are well below those maturing in 15 years.

[19] *Cost of Flotation of Corporate Securities 1951-1955*, Securities and Exchange Commission, June 1957.

Table No. 9
Flotation Costs for
Equipment Trust Certificates

Given	**ETC**	**ETC***
Flotation Costs as Pct of Gross Proceeds	0.890%	0.890%
Avg. Railroad Yields (Table 6 & Table 6 adj.)	2.779%	3.630%
Assumed Duration of New Instrument (Yrs)	15	15
Calculated		
Price After Flotation Costs	$99.11	$99.11
Effective Yield Including Flotation Costs	2.852%	3.708%
Difference Between Yields With and Without Floatation Costs =		
Flotation Cost as Percentage Points	**0.073%**	**0.078%**

After adjusting the average railroad yield to its place along the ETC yield curve for 15 years instead of 8.4 years, the flotation costs for ETCs becomes 0.078 percentage points. More detail on this adjusted market yield is provided in my work papers. Table 9 shows the calculation for ETCs using both versions of current yields. The 0.078 percentage points figure for flotation costs is more accurate than a calculation that assumes a yield for an ETC maturing in 8.4 years would be the same as the yield for an ETC that matures in 15 years. In order for 0.073 percentage points to be correct, the yield curve in Appendix B would need to be "flat" for the years between 8 and 15 – and it clearly is moving upward instead.

Arguing over 0.073 or 0.078 percentage points for ETC flotation costs is an inefficient use of resources, since the difference has no impact on overall flotation costs shown below in Table 10. The table shows the understated ETC flotation costs only because that methodology was used previously, and a better estimate makes no difference.

To compute the overall effect of flotation cost on debt, the market value weight of the debt outstanding is multiplied by the respective flotation cost. The weights for each type of

debt are based on market values for debt (excluding All Other Debt), as found in the Percent of Subtotal column in Table 8. All Other Debt is excluded from the weight calculation, since a current cost of debt for that category has not been determined. As shown in Table 10, flotation costs increase the cost of debt by 0.067 percentage points. This result is lower lower than the Board's 0.072 percent points calculated in its 2010 Cost of Capital decision.

Table No. 10
Flotation Costs For Debt

Type of Debt	Market Weight	Floatation Cost
Bonds, Notes & Debentures	98.68%	0.067%
Equipment Trust Certificates	1.32%	0.073%
Conditional Sales Agreements	0.00%	not calculated
Total	100.00%	0.067%

G. Conclusion as to the Cost of Debt Capital

To determine the overall composite current cost of debt, the current cost of each of three categories of debt (Bonds, ETCs and CSAs) is multiplied by its market value proportion. Market values are properly used in this connection, because they represent the amounts on which the current cost must be paid. Table 11 shows the results of this calculation.

Table No. 11
Composite Current Cost Of Debt

Type of Debt	Market Weight	Current Cost
Bonds, Notes & Debentures	98.68%	3.913%
Equipment Trust Certificates	1.32%	2.779%
Conditional Sales Agreements	0.00%	0.000%
Subtotal	100.00%	3.898%
Flotation Costs		0.067%
Weighted Cost of Debt		3.965%
Weighted Cost of Debt (Rounded)		**3.97%**

The current weighted cost of debt before flotation costs is 3.898 percent. The addition of flotation costs results in a rounded cost of debt of 3.97 percent. This cost of debt is the lowest cost of debt ever – much lower than last year's record of 4.61 percent.[20] Additional details for the 2011 calculation of the overall cost of debt are provided in Appendix G.

IV. Common Equity Capital In 2011

A. The Market Value of Common Equity Capital

The market value of common equity is based on stock prices and shares outstanding for 2011. Table 12 below summarizes the market value calculation. The Weight column, which is not used directly in our calculation, is provided as additional information.

Table No. 12
Average Market Value
For Common Equity in 2011

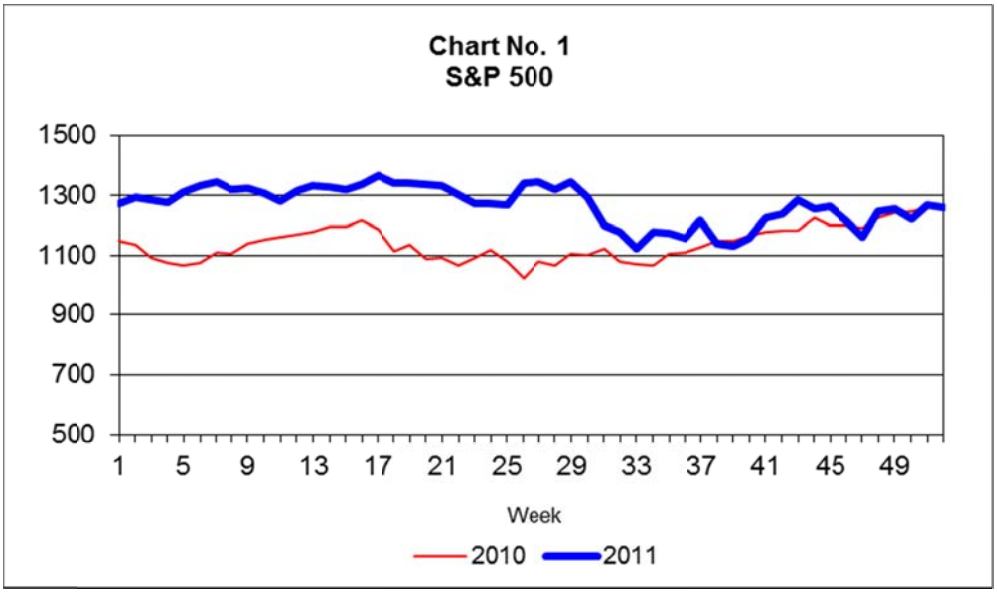
Railroad Co.	Value ($000)	Weight %
CSX	25,457,455.1	26.24
NSC	24,096,087.4	24.83
UNP	47,480,771.2	48.93
Total	$97,034,313.7	100.00 %
Prior Year	$79,890,592.0	
Change	21.5%	

Details of the calculation are presented in Appendix H. Calculations for 2011 included 52 weeks. Week 1 began on Monday January 3, and is the first week after 2010's week 52 (which began Monday December 27) used in last year's calculation. Weekly

[20] The AAR's *Railroad Facts* book conveniently lists all cost of debt decided by the Board, and its predecessor, since 1978, on page 19 of the 2011 edition.

market values were calculated for each railroad using shares outstanding data from railroad 10-Q and 10-K reports multiplied by stock prices at the close of each week in 2011.[21]

The 52-week average market capitalization of the composite railroad (the three railroads that comprise the composite sample), listed on page 4 of Appendix H, is $97.0 billion. Weekly numbers for 50 of the 52 weeks of 2011 were above similar figures (using the same three railroads) for 2010 – usually by double-digit percentages during the first three quarters. The stock market in general, as represented by the Standard & Poor's 500, also followed a similar pattern, with a significant increase over 2010 for the first three quarters of the year (see Chart 1).



[21] The 10-Q and 10-K reports are filed with the U.S. Securities and Exchange Commission (SEC), and are available from railroad web sites or the SEC web site.

B. The Capital Asset Pricing Model (CAPM)

The cost of equity is a measure of investor expectations, including the opportunity cost of investing in a share of a firm's stock; i.e., the expected rate of return that investors require on the market value (purchase price) of the stock in light of alternative investment opportunities of comparable risk. Because investor expectations are not directly observable, analysts have developed methods of inferring the cost of equity from available financial data. There are several methods available to estimate the cost of equity. Two of these methods, the Capital Asset Pricing Model (CAPM) and a Multi-Stage Discounted Cash Flow Model (MSDCF) are used in this statement to compute an estimate for the cost of equity — in accordance with STB Ex Parte No. 558 (Sub No. 14). The CAPM is discussed herein, and the MSDCF is discussed in the next section.

The theory underlying the CAPM is that an investor seeks a risk-free return plus a premium that is dependent upon risk. In formulaic terms, the cost of equity as estimated by the CAPM may be expressed as:

K = RF + Beta (MRP)

Where K = the firm's cost of equity,
RF = the risk-free rate,
MRP = the market's risk premium, and
Beta = the coefficient of systematic, non-diversifiable risk of the stock.

Therefore, each firm's cost of equity depends on the non-diversifiable risk of its common stock, represented in the model as beta. The risk-free rate (RF) is typically represented by the rate of a U.S. Government (Treasury) instrument. The market risk

premium (MRP) is the expected future difference between returns for the overall stock market and risk-free returns. That expected difference is typically estimated using historical differences. Beta is the coefficient of systematic, non-diversifiable risk of the stock, which depends on its volatility and its correlation with the overall stock market. The beta for the overall stock market is 1.0. Firms with higher risk will have a beta above 1.0, while firms with lower risk will have a beta below 1.0. As with the market risk premium, betas are also typically estimated using historical relationships. The methodology used for the CAPM calculation — including details for using certain inputs — follows the methodology prescribed and clarified by the STB in the 2010 Cost of Capital decision.[22]

1. Risk-Free Rate (RF)

In all three decisions regarding the CAPM, the Board has specified a risk-free rate based on an average yield to maturity for a 20-year U.S. Treasury Bond. The average yield-to-maturities for U.S. Treasury Bonds are available from the Federal Reserve web site, and I have again utilized this resource to retrieve data for 2011.[23] A copy of the "download" from the Federal Reserve web site is included in my work papers. Table 13 (below) lists a 15-year history of this bond.

[22] Ex Parte No. 558 (Sub-No. 14), Railroad Cost of Capital – 2010, served October 3, 2011.

[23] Federal Reserve's web site is http://www.federalreserve.gov/releases/H15/data.htm. Select Treasury Constant Maturities, Nominal, 20-year, Annual.

Table No. 13
20-Year U.S. Treasury Bonds 1997 - 2011

Year	Average Annual Rate
1997	6.69 %
1998	5.72
1999	6.20
2000	6.23
2001	5.63
2002	5.43
2003	4.96
2004	5.04
2005	4.64
2006	5.00
2007	4.91
2008	4.36
2009	4.11
2010	4.03
2011	3.62

Source: Federal Reserve

As can be seen in Table 13, 2011's 3.62 percent average rate for 20-Year U.S. Treasury Bonds is the lowest figure in the fifteen-year period. Furthermore, based on the observation of interest rates listed in the Economic Report of the President, many long-term interest rates are near their lowest level since the 1960s.[24]

Using the average yield to maturity in 2011 for a 20-year U.S. Treasury Bond, as directed in STB Ex Parte No. 558 (Sub No. 15), the CAPM's risk-free rate is 3.62 percent.

[24] *Economic Report of the President 2012*, TABLE B–73.—*Bond yields and interest rates, 1933–2011*.

2. Market Risk Premium (MRP)

In previous decisions, the STB has required that the market risk premium (a.k.a. equity risk premium) calculation begin with year 1926, which is a standard approach. The Standard & Poor's 500 Index is to be used as the representative of the market — also a standard approach. The STB's decision also stated that the "data are also available from a variety of commercial vendors, including Ibbotson."

Since the Ibbotson Equity Risk Premium is well regarded and widely accepted, the 2011 market risk premium from the *Ibbotson SBBI 2012 Valuation Yearbook* published by Morningstar is used.[25] This is the same source used in the 2006 through 2010 decisions. Table 5-1 on page 54 of the 2012 *Ibbotson SBBI* lists the Long-Horizon Equity Risk Premium that is based on the Standard & Poor's 500. The number is 6.62 percent, which I will use as the rate for the CAPM's market risk premium.

3. Beta

The STB Ex Parte No. 664 decision requires parties to calculate the CAPM's beta using a portfolio of weekly, merger-adjusted stock returns for the prior five years in the following equation:

$$R - SRRF = Alpha + Beta\ (RM - SRRF) + E$$

Where:

R	=	merger-adjusted stock returns for the portfolio of railroads;[26]
SSRF	=	short-run risk-free rate represented by 3-mo. U.S. Treasury Bills;
Alpha	=	constant term;
Beta	=	coefficient of systematic, non-diversifiable risk;

[25] Ibbotson Associates is a wholly-owned subsidiary of Morningstar, Inc. "SBBI" stands for "Stocks, Bonds, Bills, and Inflation.

[26] Railroads must meet the screening criteria set forth in *Railroad Cost of Capital – 1984.*

RM = return for the market, represented by the S&P 500; and

E = random error term.

In its Railroad Cost of Capital – 2006 decision, the STB clarified its beta calculation methodology. The STB noted that "[t]he proper way to arrive at the weekly portfolio change is to calculate the weekly stock percentage change for each firm, weighted by that firm's share of the industry as a whole." The STB also determined that the Standard & Poor's 500 Price Index, which is publicly available, should be used as a proxy for the Standard & Poor's 500 Total Return Index, unless the Total Return Index is made available to the public.

Using the STB instructions, the value for beta can be solved for using a linear regression. The railroad portfolio return less the short-term risk free rate is the dependent variable, while the market return less the risk free rate is the independent variable. The regression's random error term is unknown, the intercept is the Alpha, and the coefficient for the explanatory variable is the beta.

The raw regression data set used in the AAR calculation is derived from publicly available data from web sites on the internet (for further information, see the work papers). As instructed, I have used weekly stock price data for the prior five years. The raw data consists of weekly observations from the last week of 2006 (Week 0) through the last week of 2011 (Week 261). The data set label variables identify the first day of trading during the week (typically Monday), but the close prices were for the last day of trading during the week (typically Friday). Week 1 in the regression data set is the week beginning Wednesday, January 3, 2007.[27] The last week of 2011, Week 261, began on Tuesday,

[27] U.S. stock exchanges closed on January 2, 2007 (Tuesday), in observance of a national day of mourning for former President Gerald Ford.

December 27. Week 0 began in 2006 on Tuesday December 26, and it is *not* directly used in our regression for beta. The purpose of having a Week 0 is to be able to calculate the return for Week 1. This enables a Week 1 return to be included in the regression data set as clarified by the Board on page 7 of its 2008 cost of capital decision.[28]

Three categories of data are necessary for the raw regression data set. First, weekly stock prices for CSX, NSC, and UNP are downloaded from a web site.[29, 30] The price data were downloaded during the first week of 2012, and are included in my work papers. Stock prices adjusted for dividends and splits are used as the regression's dependent variable, while prices that are only adjusted for splits are used for weighting.[31] (I have adjusted shares outstanding and stock prices for splits for easier comparison to the dividend-adjusted prices. However, original shares outstanding used with original prices will achieve the same results when used for weighting purposes.) The price index values for Standard & Poor's 500 Price Index were also downloaded from the same web site. The second category of data is shares outstanding. Stock shares outstanding, and an effective date, were gathered from each railroad's 10-Q and 10-K reports. The shares outstanding data were adjusted for stock splits, if necessary. For each railroad, a shares outstanding value is assigned to each week based upon the latest available 10-Q or 10-K submissions by that railroad to the Securities

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[28] Ex Parte No. 558 (Sub-No. 12), served September 25, 2009.

[29] CSX Corporation has a stock symbol of CSX, Norfolk Southern Corporation is NSC, and Union Pacific Corporation is UNP.

[30] The Yahoo! Finance web site was used. Go to http://finance.yahoo.com/q/hp?s=CSX to start with the first railroad (CSX). Select weekly data and a date range.

[31] The dividend-adjusted values may differ for a given week if the data are downloaded at different times during the year, especially if dividends have been paid during the interim time. For example using the week beginning December 27, 2011: CSX close price is $21.06 A January 4 download had an adjusted price of $21.06, while the adjusted price is $20.94 for a March 20 download. The difference appears to affect the fourth digit after the decimal for beta calculations.

and Exchange Commission.[32] The final category of raw data is the rate for 3-Month U.S. Treasury Bills. These securities are also known as 13-Week Treasury Bills or 90-Day Treasury Bills. The Treasury Bill rates are acquired from the Federal Reserve web site, and the "download" is included in my work papers.

SAS statistical software is used to run the regression analysis to calculate beta, and to prepare the regression data set from the raw data.[33] Prior to running the regression, the weekly stock percentage change for each railroad is calculated and weighted by that railroad's share of the industry as a whole to create a composite railroad return.[34] Weekly returns are also calculated for the Standard & Poor's 500 Price Index (the proxy for the market as a whole). Each week's three-month Treasury Bill rate, which is the measure employed for the short-run risk-free rate, is restated from an annual to a weekly rate to make it comparable to the weekly returns. The method used to convert to a weekly rate accounts for compounding. The weekly Treasury Bill rates are then deducted from the composite railroad portfolio returns and market returns as was done in the four previous cost of capital submissions. The resulting regression data set has 261 observations (weeks 1 through 261), since week 0 of the raw data set was used only to calculate a return for week 1.

The SAS General Linear Model procedure is used to calculate the regressions, with composite railroad returns less the short-run risk-free rate as the dependent variable and the market returns less the short-run risk-free rate as the independent variable. As a check against our beta calculations, a spreadsheet has also been utilized to calculate the beta, and

[32] Shares outstanding are updated using the first Friday on, or after, the effective date listed in the 10-Q and 10-K reports – since Friday's stock price is used.

[33] SAS Institute Inc., Cary, NC.

[34] Since the weight needs to be the weight at the beginning of the week instead of the end of the week, data from the end of the previous period are used to represent the beginning of the current period.

the results matched the SAS calculations. As specified by the STB decisions, the regression includes an intercept. Appendix I contains a summary of the regression using SAS. The spreadsheet version is included in my work papers. The regression resulted in a beta estimate of 1.1623. The 2011 beta is very close to the 2010 estimate, which was 1.1619.

We have evaluated our beta calculation by (1) comparing it to previous years and expectations, and (2) comparing the results of two independent calculations using data sets created independently. The resulting value of 1.1623 for beta, as calculated in our regression, is used as an input to the Capital Asset Pricing Model.

4. Cost of Equity Using the CAPM

A review of the Capital Asset Pricing Model (CAPM) is as follows:

K = RF + Beta (MRP)

Where K = the cost of equity for the portfolio of railroads,
RF = the risk-free rate,
MRP = the market's risk premium, and
Beta = coefficient of systematic, non-diversifiable risk.

Our CAPM used the methodology clarified by the STB in Ex Parte No. 558 (Sub-No. 14). Table 14 is a summary of our CAPM cost of common equity calculation, which resulted in an average 2011 cost of equity estimate for the composite railroad of 11.31 percent.

Table No. 14
Cost of of Common Equity
Using STB's Capital Asset Pricing Model

Inputs to Model		
Risk-Free Rate	3.62 %	From Table No. 13
Market Risk Premium	6.62 %	From SBBI, Table 5-1
Beta	1.1623	From Appendix I
Calculation		
Risk-Free Rate	3.62 %	Given
Plus: Beta Adjusted Risk Premium	7.69 %	Beta x Mkt. Risk Prem.
CAPM Cost of Equity	11.31 %	Risk-Free Rate + Prem.

C. The Multi-Stage Discounted Cash Flow Model

As stated earlier, there are several methods available to estimate the cost of equity. The Multi-Stage Discounted Cash Flow Model (MSDCF) is another model available. Using this model, the cost of equity is the discount rate that equates a firm's market value to the present value of the expected stream of free cash flow that is potentially available for distribution to equity investors. The multiple stage portion of the model accounts for the assumption that the firm will not experience a constant growth rate throughout its life. The STB, in Ex Parte No. 664 (Sub No. 1), adopted the Morningstar/Ibbotson MSDCF model to use for estimating the cost of common equity capital.[35] This model assumes that not all investor cash flows have to be in the form of dividends. Instead, investors benefit from regular dividends, special dividends, stock buybacks, or stock price appreciation. Major inputs to the model include cash flows, expected growth rates, and market values. An

[35] The Morningstar/Ibbotson MSDCF model adopted by the Board in Ex Parte No. 664 (Sub-No.1) is a modified version that includes only the railroads that pass the screening criteria set forth in Railroad Cost of Capital – 1984, 1 I.C.C. 2d 989 (1985), for inclusion in the sample of railroads used for the annual cost of capital determination. See 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,* served January 28, 2009.

equation for this model can be found in Appendix J. A firm's present value as determined by the market is therefore equal to the sum of the present value of three sets of cash flows. This is the same formula that appeared in the Appendix to the Board's decision in Ex Parte No. 664 (Sub-No.1) served August 11, 2008, and it is the same formula found in the AAR's submissions for the 2008 through 2010 cost of capital.

1. Cash Flows

The Morningstar/Ibbotson MSDCF model uses an initial cash flow and a terminal cash flow as inputs. The initial cash flow is defined as income before extraordinary items minus capital expenditures plus depreciation plus deferred taxes. Income before extraordinary items (IBEI) is derived by deducting extraordinary items from net income. Thus, the model's formula for cash flows is as follows:

$$CF = (NI - EI) - CAPEX + DEP + DT$$

Where CF = cash flow,
NI = net income,
EI = extraordinary items,
CAPEX = capital expenditures,
DEP = depreciation, and
DT = deferred taxes.

The Morningstar/Ibbotson MSDCF model utilizes five-year moving averages for each railroad. The years used in this case are 2007 through 2011. Data are copied from the Consolidated Cash Flow and Income Statement of each railroad's annual 10-K report, and any changes to prior years have been incorporated. The 10-K reports, which are filed with the Securities and Exchange Commission, are usually available each year around February. In addition to the data points listed above, sales (a.k.a. revenue) is used as part of a

smoothing (or averaging) process. Table 15 illustrates the Morningstar/Ibbotson process to calculate an average cash flow. Revenue, Net Income, and Extraordinary Items are sourced from the Income Statement. Depreciation, Deferred Taxes, and Capital Expenditures are sourced from the Statement of Cash Flows.

Table No. 15
Example Cash Flow Calculations for UNP in 2011
($ in millions)

	2007	2008	2009	2010	2011	Total
Net Income	$1,855	$2,335	$1,890	$2,780	$3,292	$12,152
Less Extraord. Items	0	0	0	0	0	0
Inc. Bef. Extraord. Items (+)	$1,855	$2,335	$1,890	$2,780	$3,292	$12,152
Capital Expenditures (-)	$2,496	$2,754	$2,354	$2,482	$3,176	$13,262
Depreciation (+)	1,321	1,366	1,427	1,487	1,617	7,218
Deferred Taxes (+)	332	545	718	672	986	3,253
Cash Flow	$1,012	$1,492	$1,681	$2,457	$2,719	$9,361
Revenue (a.k.a. "Sales")	$16,283	$17,970	$14,143	$16,965	$19,557	$84,918

Ratio of Cash Flow to Sales (Smoothed Ibbotson-style) = ($9,361 / $84,918) =	0.11024
Initial Cash Flow in 2011 (Smoothed Ibbotson-style) = (0.11024 x $19,557) =	**$2,155.88**
Ratio of IBEI to Sales (Smoothed Ibbotson-style) = ($12,152 / $84,918) =	0.14310
Terminal Cash Flow input (Smoothed Ibbotson-style) = (0.14310 x $19,557) =	**$2,798.66**

After the financial data are collected, they are combined (Total column in the example) into a five-year cash flow for the purpose of averaging or smoothing. The average cash flow for 2011, which is the initial cash flow in the model, is calculated by multiplying revenue for 2011 times the five-year average ratio of cash flow to revenue. In our example here, the model's input for the initial cash flow is $2,155.88 million. The ratio of cash flow to sales is calculated by dividing the five year total cash flow by the five year total revenue.

The model's terminal cash flow value is based on the assumptions that in the third stage of the model, depreciation equals capital expenditures, and deferred taxes are zero. Therefore, the depreciation and capital expenditures from the initial cash flow formula

cancel each other, and deferred taxes are eliminated because they are zero. The remaining part of the equation for the model's terminal cash flow is income before extraordinary items (IBEI), which we calculate by subtracting extraordinary items from new income. In our Table 15 example, the model's input for the terminal cash flow is $2,798.66 million. The model's terminal cash flow input is calculated by multiplying revenue for 2011 times the five-year average ratio of income before extraordinary items to revenue. The ratio of income before extraordinary items to sales is calculated by dividing the five year income before extraordinary items by the five year total revenue.

All cash flow calculations herein have been calculated using the same procedure used by the AAR for the previous cost of capital determination. Appendix K contains the three railroad cash flow calculations for 2011. The pages from the 2011 10-K reports that were used as data sources for cash flows are included in my work papers. Data for prior years (2007-2010) used in this year's calculation are unchanged from last year's submission – unless revised data were found in the 2011 10-K statements.

2. Growth Rates

The first stage of the Morningstar/Ibbotson MSDCF model applies to a period that is one to five years in the future. The current year (2011) is considered to be year 0. In each year of the first stage, a firm's annual earnings growth rate is assumed to be the median value of the firm's three- to five-year growth estimates that are made by railroad industry analysts after the release of the year-end financial statements. However, in Ex Parte No. 558 (Sub No. 12), the STB clarified their interpretation of the Morningstar/Ibbotson MSDCF model by specifying use of data in effect on December 31 of the current year as the date for growth

rates, stock prices, and stock shares outstanding.[36] Clearly, the Board's interpretation does not anticipate the use of growth estimates based on the release of year-end financial statements. Therefore, we have utilized growth rate projections that were in effect at the end of 2011. Each growth rate projection was reviewed by the brokerage firm's analyst during that year.

For many years, analyst growth rate estimates were collected, and distributed, by the Institutional Brokers Estimate System (a.k.a. IBES or I/B/E/S). In recent years, the IBES growth rates have been distributed by Thomson Financial through its Thomson ONE Investment Management service. Although the term "IBES" is rarely used by Thomson, many users of the data still refer to these growth rates as "IBES" growth rates. Thomson Financial also distributes medians of the IBES growth rate estimates on a historical basis through its Thomson ONE Banker service. The median estimates provided through the Thomson ONE Banker service do not always reflect the full set of growth rate estimates. Therefore, I have utilized all estimates available from the Thomson ONE Investment Management service, and determined medians based on that data. These growth rates are described in the Thomson Financial Glossary as the expected annual increase in operating earnings over a company's next full business cycle. A worktable and the source data are included in Appendix L. Table 16 below lists the median growth rate estimates.

[36] STB Ex Parte No. 558 (Sub-No. 12), Railroad Cost of Capital – 2008, served September 25, 2009.

Table No. 16
2011 Thomson Median Growth Rate Estimates

Company	Stock Symbol	Growth Rate
CSX Corporation	CSX	14.25 %
Norfolk Southern Corporation	NSC	14.50
Union Pacific Corporation	UNP	15.10
Average		14.62

Thus, the median growth rate estimates have been retrieved using the same procedure and source used by the AAR last year. Each individual railroad's median growth rate is used in the first stage of the Morningstar/Ibbotson MSDCF model.

The second stage of the Morningstar/Ibbotson MSDCF model applies to a period six to ten years in the future. In this stage, the cash flows at the end of year five are assumed to grow at the simple (not weighted) average of the individual firm medians used in the first stage. In Table 16, the average of the median growth rates is 14.62 percent. This is the growth rate used for all railroads in the second stage of the Morningstar/Ibbotson MSDCF model.

The third stage of the MSDCF model begins 11 years in the future and continues in perpetuity. Starting in year 11, the firm's growth rate is assumed to be the long-run nominal growth rate of the aggregate U.S. economy. For 2011, the long-run nominal growth rate used by Morningstar/Ibbotson is 5.19 percent, which is the sum of the long-run expected growth in real output (3.24 percent) and long-run expected inflation (1.95 percent).[37] The

[37] *Ibbotson SBBI, 2012 Valuation Yearbook, Market Results for Stocks, Bonds, Bills, and Inflation 1926-2011* Morningstar Inc., on page 51 at the end of chapter 4. Ibbotson appears to have added a second digit after the decimal to eliminate issues with rounding.

Morningstar/Ibbotson long-run growth rate was used and accepted in last year's filing, and I am using it here. Last year's long-run nominal growth rate was 5.8 percent.

3. Market Values

The final inputs to the Morningstar/Ibbotson MSDCF model are the stock market values for the equity of each railroad. The market values serve two purposes. First, a firm's market value is a necessary part of the MSDCF model. As stated earlier, each railroad's cost of equity in the MSDCF model is determined by solving for the discount rate that equates a firm's *market value* to the present value of the expected stream of free cash flow that is potentially available for distribution to equity investors. The second need for market values is to determine weights for combining the model's cost of equity for each individual railroad into the composite railroad mandated by the Board. Thus, Table 17 below calculates the market value for each railroad, and it uses the market values to calculate weights.

Table No. 17
Equity Market Value on December 30, 2011

Company	Stock Price	Shares Outstanding	Market Value ($mil)	Weight
CSX	$21.06	1,049,953,020	22,112.0	22.615 %
NSC	$72.86	336,106,217	24,488.7	25.045
UNP	$105.94	483,076,978	51,177.2	52.340
Total		1,869,136,215	$97,777.9	100.000 %

As directed by the Board, I have used stock prices (from Yahoo Finance) for December 30, 2011, and shares outstanding from the 2011 Q3 10-Q reports (the latest information available prior to December 30) filed with the Securities and Exchange Commission.[38] Market value is simply each firm's stock price multiplied by its shares

[38] Stocks did not trade on December 31 (a Saturday), so December 30 is the last trading day for 2011.

outstanding, and weights are based on the market values. Appendix M contains the stock price pages as retrieved from Yahoo Finance, and it also contains the 10-Q pages used for shares outstanding.

4. Cost of Equity Using the MSDCF Model

The equation found in Appendix J provides the mathematical formula that is used to generate the three-stage DCF cost of equity estimates for each railroad. The left side of this equation is the market value of the firm in year 0. The right side of the equation is the discounted value of the cash flows from the three stages of the firm's expected future growth. Essentially, this equation is solved for each firm by simply testing discount rates (cost of equity) in an effort to find one that causes the sum of the present values of the cash flows for the three stages to be equal to the market value at year 0. An iterative process can be used to narrow down the possible solutions to the ultimate answer, or Microsoft Excel's Solver function can be used to automate the process.[39]

Applying the methods described above, I have calculated a cost of equity for each of the three railroads specified using a spreadsheet like the one utilized in the 2010 filing. Using an initial cash flow, an input for calculating the terminal cash flow, growth rates for each of the three stages, and a market value effective December 31, I have solved for the discount rate (cost of equity) that causes the sum of the present values of cash flows for each stage to equal the firm's market value. My spreadsheet is displayed in Appendix N. Table 18 below shows the MSDCF estimate for each of the three railroads. In the same table, I have also calculated an MSDCF cost of common equity (using weights from Table 17 and

[39] A commonly used Excel user's manual describes the Solver function as follows: "Solver is an Excel add-in that goes several steps further than goal seeking. It uses the same basic trial-and-error approach (known to scientific types as an iterative approach), but it's dramatically more intelligent than goal seeking." See Matthew McDonald, Excel: The Missing Manual, O'Reilly Media, 2005, p. 519.

the individual railroad cost of equities) for the composite railroad, which is the current cost of equity for this model. Thus, the MSDCF produces a cost of equity of 15.83 percent for 2011, which is above the 14.13 percent found by the Board for this model in the 2010 determination, and slightly below the 15.95 percent decided for 2008.

Table No. 18
Cost of Equity Using STB's Ibbotson MSDCF

Company	Weight	Cost of Equity	Weighted Calculation
CSX	22.61%	16.71 %	3.78
NSC	25.05%	16.78	4.20
UNP	52.34%	15.00	7.85
Total	100.00%		
Weighted Current Cost of Equity			**15.83 %**

D. Conclusion as to the Cost of Common Equity Capital

In the STB's Ex Parte No. 558 (Sub-No. 15) decision served February 3, 2012, the Board specified that comments "should focus … using the methodology followed in *Railroad Cost of Capital – 2010",* which means that a simple average of the estimates produced by the CAPM adopted in STB Ex Parte No. 664 and the Morningstar/Ibbotson Multi-Stage DCF Model specified in STB Ex Parte 664 (Sub No. 1) should be used. Table 19 contains the cost of equity estimated by each model, and a simple average of the estimates. The cost of common equity for 2011 is 13.57 percent, which is above the 12.99 percent decided for 2010.

Table No. 19
Cost of of Common Equity Capital

Model		
Capital Asset Pricing Model	11.31 %	From Table No. 14
Multi-Stage Discounted Cash Flow	15.83	From Table No. 18
Cost of Common Equity	13.57 %	Average

V. Preferred Equity Capital in 2011

Like 2003 through 2010, no preferred stock issues were outstanding at the end of 2011 for the railroad companies comprising the railroad composite sample. Therefore, no cost for preferred equity capital has been calculated, and the market value for preferred equity capital is zero.

VI. The Overall Cost of Capital In 2011

A. Determination of Market Value Weights

As shown in Tables 8 and 12, the average market value of debt and common equity are $25,487.3 million and $97,066.4 million, respectively. More market value detail is provided in Appendix E and Appendix H. As mentioned in Section V, Preferred Equity Capital in 2011, the sample railroad companies had no preferred stock issues outstanding at the end of 2011. Therefore, preferred equity capital is given no weight in the overall cost of capital, and no cost is calculated. The figure for the market value of debt includes market values of bonds, notes, debentures, equipment trust certificates, and conditional sales agreements. Other debt and capitalized leases are included at their book value, because market values are difficult to determine (in some instances book values correspond to market values) and because these other instruments are a minimal portion of all railroad debt. Based

on these calculations, the 2011 market value weights for debt and common equity are 20.82 percent and 79.18 percent, respectively. Table 20 contains the weights computation and a comparison to the previous year.

Table No. 20
Capital Structure and Weights

		2011		2010	
	Source Table	Market Value (mil)	Capital Structure Weight	Market Value (mil)	Capital Structure Weight
Debt	8	$25,524.3	20.83 %	$24,371.3	23.38 %
Common Equity	12	97,034.3	79.17	79,890.6	76.62
Preferred Equity	(Text)	0.0	0.00	0.0	0.00
Total		$122,558.6	100.00 %	$104,261.9	100.00 %

These figures show a decrease in the weight for debt, caused in large part by a recovery in railroad stocks (and stock prices in general). The 2011 capital structure is close to the structure found by the Surface Transportation Board for 2007.

B. The Overall Cost of Capital

Multiplying the cost of debt, the cost of common equity capital, and the cost of preferred equity capital, by their respective market value proportions, results in a 2011 overall cost of capital of 11.57 percent, as shown in Table 21. This is higher than the 11.03 percent cost of capital decided for 2010, but lower than the cost of capital of 11.75 percent found for 2008.

Table No. 21
Weighted Current Cost of Capital for 2011

	Source Table	Capital Structure Weight	Current Cost
Debt	11	20.83 %	3.97 %
Common Equity	19	79.17	13.57
Preferred Equity	(Text)	0.00	n/a
Total		100.00 %	
Weighted Current Cost of Capital			**11.57 %**

VII. Qualifications of John T. Gray

My name is John T. Gray. I am Senior Vice President — Policy and Economics for the Association of American Railroads (AAR), with offices located at 425 Third Street SW, Suite 1000, Washington, D.C. 20024. Among other responsibilities, my duties include the collection, analysis, and presentation of economic data related to railroads and their economic environment. One of my principal duties is conducting and supervising economic, financial, statistical and cost studies dealing with various aspects of the rail industry.

Prior to joining the AAR, I worked for Union Pacific Railroad where my most recent position was as Executive Director, responsible for the commercial relationship with other transportation carriers and ports, and for strategic policy analysis on issues involving regulatory proposals, legislation and potential litigation. I have also held marketing, planning, and operating positions with other railroads including the Southern Pacific, the Burlington Northern and the Alaska Railroad. I began my railroad career at Atchison, Topeka, and Santa Fe in their cost analysis organization. Additionally, I have also worked for ARCO Alaska.

At Southern Pacific, I was responsible for network planning, analysis, and management, as well as the company's cost analysis organization. I provided testimony on behalf of Southern Pacific regarding the economic impact to the company of the proposed combination of the Chicago and North Western Transportation Company with Union Pacific Railroad. Later, I provided extensive testimony on the economic position of Southern Pacific during the STB's review of the merger application for Union Pacific and Southern Pacific.

I hold both a Bachelors and Masters degree in Civil Engineering from Tulane University and did post-graduate work in mathematical modeling of transportation networks and rail cost systems at Northwestern University. I have also served on the faculty at the University of Alaska, where my work included network modeling and research concerning the interrelationship of transportation and economic development.

VERIFICATION

WASHINGTON, D.C.)
) SS.

I, John T. Gray, being duly sworn, state that I have read the foregoing statement, that I know its contents, and that those contents are true as stated.

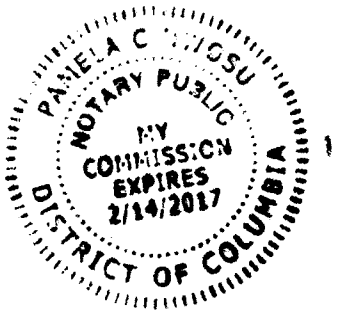
JOHN T. GRAY

Subscribed and sworn to before me this 20th day of April 2012.

Notary Public

My Commission expires:

Pamela C Nwosu
Notary Public, District of Columbia
My Commission Expires 2/14/2017



Appendix A
Bonds, Notes and Debentures

CSX Corporation
12/31/2011

	Type	Description	No.	CUSIP	Coupon Rate	Maturity Date	Amt. Outstanding ($000) Year-End	Amt. Outstanding ($000) Used	Average Price	Market Value ($ 000)	Average Yield	Interest Cost ($ 000)
						Traded						
1	Notes	CSX Corp.	1	126408GD9	5.500%	8/1/2013	$300,000	$300,000	107.497	$322,490	1.710%	$5,515
2	Notes	CSX Corp.	2	126408GL1	5.750%	3/15/2013	$400,000	$400,000	107.260	$429,040	1.270%	$5,449
3	Notes	CSX Corp.	3	126408GF4	5.300%	2/15/2014	$200,000	$200,000	108.962	$217,924	1.800%	$3,923
4	Notes	CSX Corp.	4	126408GN7	6.250%	4/1/2015	$600,000	$600,000	114.545	$687,267	2.120%	$14,570
5	Debentures	CSX Corp.	5	126408BL6	7.900%	5/1/2017	$312,596	$312,596	123.982	$387,562	3.300%	$12,790
6	Notes	CSX Corp.	6	126408GJ6	5.600%	5/1/2017	$300,000	$300,000	112.266	$336,799	3.250%	$10,946
7	Notes	CSX Corp.	7	126408GM9	6.250%	3/15/2018	$600,000	$600,000	116.461	$698,766	3.450%	$24,107
8	Notes	CSX Corp.	8	126408GQ0	7.375%	2/1/2019	$500,000	$500,000	123.429	$617,145	3.760%	$23,205
9	Notes	CSX Corp.	9	126408GT4	3.700%	10/30/2020	$500,000	$500,000	98.984	$494,919	3.830%	$18,955
10	Notes	CSX Corp. (new)	10	126408GV9	4.250%	6/1/2021	$350,000	**$204,167**	104.262	$212,869	3.720%	$7,919
11	Debentures	CSX Corp.	11	126408AQ6	8.100%	9/15/2022	$69,081	$69,081	133.089	$91,939	4.330%	$3,981
12	Debentures	CSX Corp.	12	126408AM5	8.625%	5/15/2022	$81,517	$81,517	137.344	$111,958	4.280%	$4,792
13	Debentures	CSX Corp.	13	126408BP7	7.250%	5/1/2027	$83,312	$83,312	117.595	$97,970	5.570%	$5,457
14	Debentures	CSX Corp.	14	126408BM4	7.950%	5/1/2027	$64,266	$64,266	131.823	$84,717	5.010%	$4,244
15	Notes	CSX Corp.	15	12641LBU6	6.800%	12/1/2028	$200,000	$200,000	118.428	$236,857	5.180%	$12,269
16	Notes	CSX Corp.	16	126408GH0	6.000%	10/1/2036	$400,000	$400,000	109.933	$439,733	5.290%	$23,262
17	Notes	CSX Corp.	17	126408GK3	6.150%	5/1/2037	$700,000	$700,000	112.163	$785,138	5.290%	$41,534
18	Notes	CSX Corp.	18	126408GP2	7.450%	4/1/2038	$79,226	$79,226	128.641	$101,917	5.430%	$5,534
19	Notes	CSX Corp.	19	126408GS6	6.220%	4/30/2040	$660,000	$660,000	114.088	$752,980	5.280%	$39,757
20	Notes	CSX Corp.	20a	126408GU1	5.500%	4/15/2041	$300,000	$300,000	103.990	$311,969	5.250%	$16,378
21	Notes - 2nd	CSX Corp. (new)	20b	126408GU1	5.500%	4/15/2041	$250,000	**$177,083**	106.439	$188,485	5.090%	$9,594
22	Notes	CSX Corp. (new)	21	126408GW7	4.750%	5/30/2042	$600,000	**$100,000**	102.892	$102,892	4.580%	$4,712
23	Notes	CSXT - Conrail	22	126410LK3	9.750%	6/15/2020	$227,171	$227,171	140.112	$318,293	4.290%	$13,655
24	Notes	CSXT - Conrail	23	126410LL1	7.875%	5/15/2043	$99,989	$99,989	125.314	$125,300	6.090%	$7,631
25	Sec'd Eq Notes	CSXT	24	126410LM9	6.251%	1/15/2023	$320,787	$320,787	114.086	$365,972	4.650%	$17,018
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Total							**$8,197,945**	**$7,479,195**		**$8,520,900**	**3.957%**	**$337,196**

CSX Corporation
12/31/2011

	Type	Description	No.	CUSIP	Coupon Rate	Maturity Date	Amt. Outstanding ($000) Year-End	Amt. Outstanding ($000) Used	Average Price	Market Value ($ 000)	Average Yield	Interest Cost ($ 000)
					Trading Data Not Available							
1	Notes	CSX Corp.			9.870%	2/12/2021	10,000	10,000	100.000	$10,000		
2	Notes	CSX Corp.			4.400%	10/25/2035	73,304	73,304	100.000	$73,304		
3	Convertible	CSX Corp.			Changes	10/30/2021	3,763	3,763	100.000	$3,763		
4	Conrail Tax Note	CSXT			4.520%	3/31/2035	23,100	23,100	100.000	$23,100		
5	Secu Equip Note	CSXT		126410LN7	8.375%	10/15/2014	308,615	308,615	100.000	$308,615		
6	Midland Term	Other			Variable	5/26/2013	22,000	22,000	100.000	$22,000		
7	TORCO	Other			6.450%	12/15/2021	29,700	29,700	100.000	$29,700		
8	NCT Note	Other			0.000%	N/A	1,089	1,089	100.000	$1,089		
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Total							**$471,571**	**$471,571**		**$471,571**		

CSX Corporation
12/31/2011

	Type	Description	No.	CUSIP	Coupon Rate	Maturity Date	Amt. Outstanding ($000) Year-End	Amt. Outstanding ($000) Used	Average Price	Market Value ($ 000)	Average Yield	Interest Cost ($ 000)
						Matures in 2012						
1	Notes	CSX Corp.		126408GB3	6.300%	03/15/12	400,000					
2	Pen Port	CSXT			6.000%	12/15/12	17,100					
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Total							**$417,100**					

Grand Totals			
Total Traded and Trading Data Not Available	**$8,669,516**	**$7,950,766**	**$8,992,472**
Grand Total (for reconciliation to carrier data only)	**$9,086,616**		

From CSX:

Corporate Notes	$8,033,302
Convertible Debt	3,763
CSXT Notes	367,360
Secured Equipment Notes	629,402
Other Notes	52,789
Total	**$9,086,616**

Norfolk Southern Corporation
12/31/2011

	Type	Description	No.	CUSIP	Coupon Rate	Maturity Date	Amt. Outstanding ($000) Year-End	Amt. Outstanding ($000) Used	Average Price	Market Value ($ 000)	Average Yield	Interest Cost ($ 000)
						Traded						
1	Debenture	Conrail	25	209864AT4	9.750%	6/15/2020	$313,741	$313,741	142.517	$447,134	4.020%	$17,975
2	Debenture	Conrail	26	209864AU1	7.875%	5/15/2043	$138,085	$138,085	138.151	$190,765	5.380%	$10,263
3	Notes	Series A NSC	27	655844AA6	9.000%	3/1/2021	$83,372	$83,372	120.128	$100,153	6.160%	$6,169
4	Notes	Senior	28	655844AQ1	7.250%	2/15/2031	$472,701	$472,701	128.898	$609,300	4.950%	$30,160
5	Notes	Senior	29	655844AZ1	5.750%	4/1/2018	$600,000	$600,000	114.811	$688,865	3.260%	$22,457
6	Notes	Senior	30	655844BB3	5.750%	1/15/2016	$500,000	$500,000	114.240	$571,201	2.370%	$13,537
7	Notes	Senior	31	655844BC1	5.900%	6/15/2019	$500,000	$500,000	116.593	$582,963	3.470%	$20,229
8	Notes	Senior (new)	32	655844BG2	3.250%	12/1/2021	$500,000	**$62,500**	100.074	$62,546	3.250%	$2,033
9	Notes 1 of 3	Senior 3 Sets (new)	33a	655844BD9	6.000%	5/23/2111	$400,000	**$233,333**	109.276	$254,976	5.510%	$14,049
10	Notes 2 of 3	Senior 3 Sets (new)	33b	655844BD9	6.000%	5/23/2111	$4,492	**$1,310**	115.364	$1,511	5.200%	$79
11	Notes 3 of 3	Senior 3 Sets (new)	33c	655844BD9	6.000%	5/23/2111	$100,000	**$12,500**	117.519	$14,690	5.100%	$749
12	Notes	Senior 2105 2 sets	34	655844AV0	6.000%	3/15/2105	$550,000	$550,000	104.770	$576,232	5.760%	$33,191
13	Notes	Senior	35	655844AX6	5.640%	5/17/2029	$350,000	$350,000	110.444	$386,555	4.780%	$18,477
14	Notes	Senior	36	655844AW8	5.590%	5/17/2025	$366,620	$366,620	112.705	$413,198	4.360%	$18,015
15	Notes	Senior (new private)	37	655844BE7	4.837%	10/1/2041	$595,504	**$173,689**	105.880	$183,901	4.480%	$8,239
16	Conrail Notes	CR NSC 2014	38	655844AU2	5.257%	9/17/2014	$431,456	$431,456	110.757	$477,867	1.720%	$8,219
17	Conrail Notes	CR NSC 2017	39	655844AE8	7.700%	5/15/2017	$550,000	$550,000	125.216	$688,690	2.940%	$20,247
18	Conrail Notes	CR NSC 2027	40	655844AJ7	7.800%	5/15/2027	$440,000	$440,000	132.938	$584,928	4.820%	$28,194
19	Conrail Notes	CR NSC 2037	41	655844AF5	7.050%	5/1/2037	$294,817	$294,817	126.500	$372,942	5.190%	$19,356
20	Conrail Notes	CR NSC 2097	42	655844AK4	7.900%	5/15/2097	$273,317	$273,317	139.256	$380,609	5.670%	$21,581
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Total							**$7,464,105**	**$6,347,441**		**$7,589,026**	**4.127%**	**$313,220**

Norfolk Southern Corporation
12/31/2011

	Type	Description	No.	CUSIP	Coupon Rate	Maturity Date	Amt. Outstanding ($000) Year-End	Amt. Outstanding ($000) Used	Average Price	Market Value ($ 000)	Average Yield	Interest Cost ($ 000)
					Trading Data Not Available							
1	Other Bond	Marine Terminal Facility			5.300%	8/15/2013	27,200	27,200	100.000	$27,200		
2	Other Bond	NSC Poca Dev Timber Bond			8.250%	10/1/2019	75,734	75,734	100.000	$75,734		
3	Other Bond	NSC Poca Dev Timber Zero Coupon			0.000%	10/1/2019	9,168	9,168	100.000	$9,168		
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Total							**$112,102**	**$112,102**		**$112,102**		

Norfolk Southern Corporation
12/31/2011

	Type	Description	No.	CUSIP	Coupon Rate	Maturity Date	Amt. Outstanding ($000) Year-End	Amt. Outstanding ($000) Used	Average Price	Market Value ($ 000)	Average Yield	Interest Cost ($ 000)
						Matures in 2012						
1	Other Bond	Pan Am Southern LLC			0.000%	04/09/12	14,700					
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Total							**$14,700**					

	Grand Totals			
Total Traded and Trading Data Not Available	**$7,576,207**	**$6,459,543**		**$7,701,128**
Grand Total (for reconciliation to carrier data only)	**$7,590,907**			

From NSC:

Income Debentures	$451,826
Other Debt Less A/R Securitization	41,900
Medium Term Notes & Conrail Notes	7,012,279
Other Debt (Poca Dev)	84,902
Total	**$7,590,907**

Union Pacific Corporation
12/31/2011

	Type	Description	No.	CUSIP	Coupon Rate	Maturity Date	Amt. Outstanding ($000) Year-End	Amt. Outstanding ($000) Used	Average Price	Market Value ($ 000)	Average Yield	Interest Cost ($ 000)
						Traded						
1	Debentures	UP Corp.	43	907818CS5	5.375%	6/1/2033	$198,515	$198,515	104.339	$207,129	5.060%	$10,481
2	Debentures	UP Corp.	44	907818CX4	6.150%	5/1/2037	$248,972	$248,972	114.895	$286,056	5.120%	$14,646
3	Debentures	UP Corp.	45	907818CU0	6.250%	5/1/2034	$246,533	$246,533	113.944	$280,910	5.210%	$14,635
4	Debentures	UP Corp.	46	907818CF3	6.625%	2/1/2029	$594,768	$594,768	120.134	$714,518	4.910%	$35,083
5	Debentures	UP Corp.	47	907818AZ1	7.000%	2/1/2016	$211,436	$211,436	119.358	$252,366	2.450%	$6,183
6	Debentures	UP Corp.	48	907818BY3	7.125%	2/1/2028	$247,746	$247,746	127.374	$315,563	4.730%	$14,926
7	Notes	UP Corp.	49	907818DG0	4.000%	2/1/2021	$497,888	$497,888	102.488	$510,277	3.690%	$18,829
8	Notes	UP Corp. (new)	50	907818DK1	4.163%	7/15/2022	$594,381	**$99,064**	107.748	$106,739	3.290%	$3,512
9	Notes	UP Corp. (new)	51	907818DJ4	4.750%	9/15/2041	$490,212	**$183,830**	103.946	$191,084	4.510%	$8,618
10	Notes	UP Corp.	52	907818CV8	4.875%	1/15/2015	$249,820	$249,820	109.199	$272,801	2.100%	$5,729
11	Notes	UP Corp.	53	907818DC9	5.125%	2/15/2014	$305,431	$305,431	108.467	$331,292	1.740%	$5,764
12	Notes	UP Corp.	54	907818CT3	5.375%	5/1/2014	$194,382	$194,382	109.558	$212,961	1.840%	$3,918
13	Notes	UP Corp.	55	907818CY2	5.450%	1/31/2013	$449,844	$449,844	106.764	$480,273	0.960%	$4,611
14	Notes	UP Corp.	56	907818CW6	5.650%	5/1/2017	$231,598	$231,598	114.623	$265,465	2.880%	$7,645
15	Notes	UP Corp.	57	907818DA3	5.700%	8/15/2018	$471,584	$471,584	114.690	$540,859	3.340%	$18,065
16	Notes	UP Corp.	58	907818CZ9	5.750%	11/15/2017	$321,434	$321,434	115.696	$371,885	2.990%	$11,119
17	Notes	UP Corp.	59	907818DD7	6.125%	2/15/2020	$398,742	$398,742	117.210	$467,365	3.750%	$17,526
18	Notes	UP Corp.	60	907818DB1	7.875%	1/15/2019	$178,290	$178,290	127.605	$227,507	3.630%	$8,259
19	Notes	UP Corp.	61	907818DF2	5.780%	7/15/2040	$278,787	$278,787	110.232	$307,312	5.110%	$15,704
20	Mort. Bond	UPRR-MP	62	606198LF4	4.750%	1/1/2020	$29,905	$29,905	97.488	$29,154	5.120%	$1,493
21	Mort. Bond	UPRR-MP	63	606198LG2	4.750%	1/1/2030	$27,542	$27,542	91.793	$25,282	5.470%	$1,383
22	Debentures	UPRR-MP	64	606198LH0	5.000%	1/1/2045	$96,025	$96,025	73.936	$70,997	7.040%	$4,998
23	Debentures	MP C&EI UPRR	65	167123AP3	5.000%	1/1/2054	$1,641	$1,641	86.772	$1,424	5.860%	$83
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Total							**$6,565,476**	**$5,763,776**		**$6,469,220**	**3.605%**	**$233,210**

Union Pacific Corporation
12/31/2011

	Type	Description	No.	CUSIP	Coupon Rate	Maturity Date	Amt. Outstanding ($000) Year-End	Amt. Outstanding ($000) Used	Average Price	Market Value ($ 000)	Average Yield	Interest Cost ($ 000)
					Trading Data Not Available							
1	Tax Exempt	UP Corp.			Variable	2010 - 2026	139,890	139,890	100.000	$139,890		
2	RR Tax Exempt	Albany County UPRR			4.400%	12/1/2015	8,000	8,000	100.000	$8,000		
3	Med. Term Notes	Series B			9.2-9.3%	2005 - 2020	7,408	7,408	100.000	$7,408		
4	Med. Term Notes	Series C			9.5-10.0%	2005 - 2020	24,123	24,123	100.000	$24,123		
5	Debt Security	Illinois DOT SPCSL			3.000%	12/31/2019	12,031	12,031	100.000	$12,031		
6	Debt Security	Illinois DOT UPRR			3.000%	3/14/2018	1,044	1,044	100.000	$1,044		
7	Debt Security	ITCF 1999 UPRR			5.750%	11/1/2014	11,170	11,170	100.000	$11,170		
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Total							**$203,666**	**$203,666**		**$203,666**		

Union Pacific Corporation
12/31/2011

	Type	Description	No.	CUSIP	Coupon Rate	Maturity Date	Amt. Outstanding ($000) Year-End	Amt. Outstanding ($000) Used	Average Price	Market Value ($ 000)	Average Yield	Interest Cost ($ 000)
						Matures in 2012						
1	Notes	UP Corp.	28	907818CN6	6.125%	01/15/12	0					
2	Notes	UP Corp.	29	907818CP1	6.500%	04/15/12	0					
3	Debt Security	KFW Loan UPRR			7.310%	12/15/12	14,416					
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Total							**$14,416**					

	Grand Totals			
Total Traded and Trading Data Not Available	**$6,769,142**	**$5,967,442**		**$6,672,886**
Grand Total (for reconciliation to carrier data only)	**$6,783,558**			

From UNP:

Debentures, Notes, Tax exempt, Floating, and Commercial Paper	$6,681,784
Removal of Floating Rate Loan and Commercial Paper	-100,000
Misc Debt Securities (KFW, Albany County, MP, IL DOT….)	217,224
Removal of MP Debt Discount, Receivable Drawdown, and SP Purch. Acct. Debt Premium	-15,450
Total	**$6,783,558**

CSX Corporation

1	**Type:**	Notes
	Description:	CSX Corp.
	CUSIP:	126408GD9
	Coupon Rate:	5.500%
	Maturity Date:	8/1/2013
	Amount Outstanding ($ 000)	$300,000
	Months Outstanding	12.0

End of Month	Price	Yield
January	108.450	2.01 %
February	108.000	2.08
March	107.000	2.38
April	108.604	1.58
May	108.752	1.39
June	108.406	1.37
July	108.301	1.27
August	106.750	1.90
September	106.288	1.97
October	106.989	1.43
November	106.260	1.65
December	106.160	1.53
Average	107.497	1.71 %

Source: Bloomberg

CSX Corporation

2

Type:	Notes
Description:	CSX Corp.
CUSIP:	126408GL1
Coupon Rate:	5.750%
Maturity Date:	3/15/2013
Amount Outstanding ($ 000)	$400,000
Months Outstanding	12.0

End of Month	Price	Yield
January	108.914	1.46 %
February	108.125	1.67
March	107.962	1.58
April	108.281	1.24
May	108.031	1.18
June	107.600	1.20
July	106.942	1.40
August	106.972	1.13
September	106.537	1.17
October	106.340	1.06
November	105.711	1.23
December	105.706	0.93
Average	107.260	1.27 %

Source: Bloomberg

CSX Corporation

3

Type:	Notes
Description:	CSX Corp.
CUSIP:	126408GF4
Coupon Rate:	5.300%
Maturity Date:	2/15/2014
Amount Outstanding ($ 000)	$200,000
Months Outstanding	12.0

End of Month	Price	Yield
January	108.244	2.47 %
February	108.251	2.39
March	108.347	2.27
April	108.130	2.28
May	109.106	1.83
June	109.029	1.81
July	109.010	1.70
August	110.386	0.98
September	109.978	1.11
October	Not Traded	-
November	109.137	1.11
December	Not Traded	-
Average	108.962	1.80 %

Source: Bloomberg

CSX Corporation

4

Type:	Notes
Description:	CSX Corp.
CUSIP:	126408GN7
Coupon Rate:	6.250%
Maturity Date:	4/1/2015
Amount Outstanding ($ 000)	$600,000
Months Outstanding	12.0

End of Month	Price	Yield
January	114.034	2.66 %
February	113.763	2.67
March	113.395	2.69
April	114.395	2.37
May	115.387	2.05
June	114.419	2.21
July	116.070	1.70
August	115.578	1.73
September	114.850	1.84
October	114.100	1.96
November	114.003	1.88
December	114.540	1.64
Average	114.545	2.12 %

Source: Bloomberg

CSX Corporation

5

Type:	Debentures
Description:	CSX Corp.
CUSIP:	126408BL6
Coupon Rate:	7.900%
Maturity Date:	5/1/2017
Amount Outstanding ($ 000)	$312,596
Months Outstanding	12.0

End of Month	Price	Yield
January	122.639	3.79 %
February	124.213	3.50
March	121.603	3.87
April	123.930	3.45
May	124.237	3.36
June	123.254	3.45
July	123.259	3.41
August	124.000	3.23
September	126.000	2.82
October	124.370	3.05
November	125.200	2.84
December	125.077	2.80
Average	123.982	3.30 %

Source: Bloomberg

CSX Corporation

6

Type:	Notes
Description:	CSX Corp.
CUSIP:	126408GJ6
Coupon Rate:	5.600%
Maturity Date:	5/1/2017
Amount Outstanding ($ 000)	$300,000
Months Outstanding	12.0

End of Month	Price	Yield
January	110.871	3.64 %
February	110.411	3.70
March	109.873	3.77
April	111.404	3.48
May	111.901	3.36
June	111.979	3.32
July	113.036	3.11
August	114.794	2.76
September	114.739	2.75
October	111.550	3.29
November	113.277	2.93
December	113.361	2.88
Average	112.266	3.25 %

Source: Bloomberg

CSX Corporation

7	**Type:**	Notes
	Description:	CSX Corp.
	CUSIP:	126408GM9
	Coupon Rate:	6.250%
	Maturity Date:	3/15/2018
	Amount Outstanding ($ 000)	$600,000
	Months Outstanding	12.0

End of Month	Price	Yield
January	115.066	3.81 %
February	114.423	3.89
March	112.050	4.23
April	114.686	3.80
May	116.185	3.54
June	115.617	3.60
July	117.277	3.32
August	119.876	2.89
September	117.218	3.27
October	118.029	3.11
November	118.648	2.97
December	118.456	2.97
Average	116.461	3.45 %

Source: Bloomberg

CSX Corporation

8

Type:	Notes
Description:	CSX Corp.
CUSIP:	126408GQ0
Coupon Rate:	7.375%
Maturity Date:	2/1/2019
Amount Outstanding ($ 000)	$500,000
Months Outstanding	12.0

End of Month	Price	Yield
January	122.563	4.04 %
February	120.270	4.32
March	120.670	4.24
April	122.137	4.02
May	122.748	3.91
June	120.800	4.15
July	124.350	3.63
August	125.710	3.41
September	125.942	3.35
October	124.990	3.45
November	126.446	3.21
December	124.521	3.44
Average	123.429	3.76 %

Source: Bloomberg

CSX Corporation

9

Type:	Notes
Description:	CSX Corp.
CUSIP:	126408GT4
Coupon Rate:	3.700%
Maturity Date:	10/30/2020
Amount Outstanding ($ 000)	$500,000
Months Outstanding	12.0

End of Month	Price	Yield
January	94.782	4.36 %
February	95.271	4.30
March	94.301	4.44
April	95.869	4.23
May	97.271	4.05
June	96.893	4.10
July	100.547	3.63
August	101.641	3.49
September	102.811	3.34
October	102.621	3.36
November	102.684	3.35
December	103.114	3.29
Average	98.984	3.83 %

Source: Bloomberg

CSX Corporation

10

Type:	Notes
Description:	CSX Corp. (new)
CUSIP:	126408GV9
Coupon Rate:	4.250%
Maturity Date:	6/1/2021
Amount Outstanding ($ 000)	$350,000
Months Outstanding	7.0

End of Month	Price	Yield
January	Not Traded	- %
February	Not Traded	-
March	Not Traded	-
April	Not Traded	-
May	100.494	4.19
June	99.899	4.26
July	103.852	3.78
August	105.133	3.62
September	105.013	3.63
October	106.660	3.43
November	105.663	3.54
December	107.384	3.33
Average	104.262	3.72 %

Source: Bloomberg

CSX Corporation

11

Type:	Debentures
Description:	CSX Corp.
CUSIP:	126408AQ6
Coupon Rate:	8.100%
Maturity Date:	9/15/2022
Amount Outstanding ($ 000)	$69,081
Months Outstanding	12.0

End of Month	Price	Yield
January	128.985	4.81 %
February	129.836	4.72
March	128.857	4.79
April	129.839	4.68
May	131.329	4.52
June	129.696	4.66
July	133.536	4.28
August	136.315	4.00
September	138.249	3.80
October	137.044	3.89
November	135.802	3.98
December	137.574	3.79
Average	133.089	4.33 %

Source: Bloomberg

CSX Corporation

12

Type:	Debentures
Description:	CSX Corp.
CUSIP:	126408AM5
Coupon Rate:	8.625%
Maturity Date:	5/15/2022
Amount Outstanding ($ 000)	$81,517
Months Outstanding	12.0

End of Month	Price	Yield
January	133.559	4.75 %
February	134.416	4.65
March	133.542	4.71
April	134.181	4.63
May	135.626	4.47
June	133.920	4.62
July	137.875	4.22
August	140.515	3.94
September	142.230	3.76
October	141.082	3.85
November	139.706	3.95
December	141.470	3.76
Average	137.344	4.28 %

Source: Bloomberg

CSX Corporation

13	**Type:**	Debentures
	Description:	CSX Corp.
	CUSIP:	126408BP7
	Coupon Rate:	7.250%
	Maturity Date:	5/1/2027
	Amount Outstanding ($ 000)	$83,312
	Months Outstanding	12.0

End of Month	Price	Yield
January	115.700	5.75 %
February	Not Traded	-
March	Not Traded	-
April	Not Traded	-
May	114.840	5.81
June	120.538	5.32
July	Not Traded	-
August	Not Traded	-
September	119.300	5.41
October	Not Traded	-
November	Not Traded	-
December	Not Traded	-
Average	117.595	5.57 %

Source: Bloomberg

CSX Corporation

14

Type:	Debentures
Description:	CSX Corp.
CUSIP:	126408BM4
Coupon Rate:	7.950%
Maturity Date:	5/1/2027
Amount Outstanding ($ 000)	$64,266
Months Outstanding	12.0

End of Month	Price	Yield
January	Not Traded	- %
February	Not Traded	-
March	130.854	5.12
April	124.414	5.62
May	Not Traded	-
June	126.493	5.44
July	Not Traded	-
August	Not Traded	-
September	Not Traded	-
October	134.250	4.79
November	140.798	4.30
December	134.130	4.79
Average	131.823	5.01 %

Source: Bloomberg

CSX Corporation

15

Type:	Notes
Description:	CSX Corp.
CUSIP:	12641LBU6
Coupon Rate:	6.800%
Maturity Date:	12/1/2028
Amount Outstanding ($ 000)	$200,000
Months Outstanding	12.0

End of Month	Price	Yield
January	110.200	5.87 %
February	114.997	5.47
March	116.117	5.38
April	Not Traded	-
May	Not Traded	-
June	Not Traded	-
July	117.339	5.26
August	121.046	4.97
September	119.210	5.11
October	122.111	4.88
November	121.372	4.93
December	123.464	4.77
Average	118.428	5.18 %

Source: Bloomberg

CSX Corporation

16

Type:	Notes
Description:	CSX Corp.
CUSIP:	126408GH0
Coupon Rate:	6.000%
Maturity Date:	10/1/2036
Amount Outstanding ($ 000)	$400,000
Months Outstanding	12.0

End of Month	Price	Yield
January	103.968	5.70 %
February	103.473	5.74
March	105.565	5.59
April	105.158	5.62
May	107.188	5.47
June	105.067	5.62
July	110.086	5.27
August	113.592	5.04
September	116.393	4.86
October	116.250	4.87
November	119.042	4.69
December	113.416	5.05
Average	109.933	5.29 %

Source: Bloomberg

CSX Corporation

17	**Type:**	Notes
	Description:	CSX Corp.
	CUSIP:	126408GK3
	Coupon Rate:	6.150%
	Maturity Date:	5/1/2037
	Amount Outstanding ($ 000)	$700,000
	Months Outstanding	12.0

End of Month	Price	Yield
January	106.163	5.69 %
February	107.350	5.61
March	106.038	5.70
April	106.073	5.70
May	108.929	5.50
June	106.981	5.63
July	111.389	5.33
August	115.148	5.09
September	120.458	4.76
October	119.718	4.80
November	119.013	4.84
December	118.690	4.86
Average	112.163	5.29 %

Source: Bloomberg

CSX Corporation

18

Type:	Notes
Description:	CSX Corp.
CUSIP:	126408GP2
Coupon Rate:	7.450%
Maturity Date:	4/1/2038
Amount Outstanding ($ 000)	$79,226
Months Outstanding	12.0

End of Month	Price	Yield
January	118.607	6.05 %
February	119.607	5.98
March	119.455	5.99
April	121.378	5.86
May	124.708	5.65
June	122.564	5.78
July	128.295	5.43
August	132.270	5.20
September	142.407	4.65
October	138.897	4.83
November	137.099	4.92
December	138.409	4.85
Average	128.641	5.43 %

Source: Bloomberg

CSX Corporation

19	**Type:**	Notes
	Description:	CSX Corp.
	CUSIP:	126408GS6
	Coupon Rate:	6.220%
	Maturity Date:	4/30/2040
	Amount Outstanding ($ 000)	$660,000
	Months Outstanding	12.0

End of Month	Price	Yield
January	107.438	5.69 %
February	108.424	5.63
March	106.404	5.76
April	108.550	5.62
May	110.793	5.47
June	107.798	5.67
July	112.765	5.35
August	117.763	5.04
September	124.292	4.67
October	125.466	4.61
November	117.950	5.03
December	121.412	4.83
Average	114.088	5.28 %

Source: Bloomberg

CSX Corporation

20a

Type:	Notes
Description:	CSX Corp.
CUSIP:	126408GU1
Coupon Rate:	5.500%
Maturity Date:	4/15/2041
Amount Outstanding ($ 000)	$300,000
Months Outstanding	12.0

End of Month	Price	Yield
January	96.902	5.72 %
February	96.570	5.74
March	96.457	5.75
April	98.853	5.58
May	100.385	5.47
June	98.214	5.62
July	103.021	5.30
August	106.121	5.10
September	113.872	4.63
October	113.811	4.64
November	113.300	4.66
December	110.370	4.83
Average	103.990	5.25 %

Source: Bloomberg

This portion was issued in 2010. An additional issuance occurred in 2011, and is listed on the following page.

CSX Corporation

20b

Type:	This is a second portion of a series of Notes issued earlier.	Notes - 2nd
Description:		CSX Corp. (new)
CUSIP:		126408GU1
Coupon Rate:		5.500%
Maturity Date:		4/15/2041
Amount Outstanding ($ 000)		$250,000
Months Outstanding		8.5

End of Month	Price	Yield
January	This portion was not issued until April 15, 2011.	%
February		
March		
April	98.853	5.58
May	100.385	5.47
June	98.214	5.62
July	103.021	5.30
August	106.121	5.10
September	113.872	4.63
October	113.811	4.64
November	113.300	4.66
December	110.370	4.83
Average	106.439	5.09 %

Source: Bloomberg

This is an "additional issuance of $250,000,000 aggregate principal amount of our [CSX] 5.500% Notes due 2041, $300,000,000 aggregate principal amount of which have been issued previously (the “existing 2041 Notes”). The 2041 Notes offered by this prospectus supplement will become part of the same series as the existing 2041 Notes for all purposes...."

CSX Corporation

21

Type:	Notes
Description:	CSX Corp. (new)
CUSIP:	126408GW7
Coupon Rate:	4.750%
Maturity Date:	5/30/2042
Amount Outstanding ($ 000)	$600,000
Months Outstanding	2.0

End of Month	Price	Yield
January	Not Traded	- %
February	Not Traded	-
March	Not Traded	-
April	Not Traded	-
May	Not Traded	-
June	Not Traded	-
July	Not Traded	-
August	Not Traded	-
September	Not Traded	-
October	103.606	4.53
November	100.230	4.74
December	104.841	4.46
Average	102.892	4.58 %

Source: Bloomberg

CSX Corporation

22

Type:	Notes
Description:	CSXT - Conrail
CUSIP:	126410LK3
Coupon Rate:	9.750%
Maturity Date:	6/15/2020
Amount Outstanding ($ 000)	$227,171
Months Outstanding	12.0

End of Month	Price	Yield
January	134.250	5.11 %
February	135.500	4.94
March	Not Traded	-
April	137.375	4.67
May	141.477	4.19
June	138.240	4.51
July	140.169	4.27
August	147.815	3.42
September	144.577	3.72
October	141.714	3.99
November	Not Traded	-
December	140.000	4.10
Average	140.112	4.29 %

Source: Bloomberg

CSX Corporation

23

Type:	Notes
Description:	CSXT - Conrail
CUSIP:	126410LL1
Coupon Rate:	7.875%
Maturity Date:	5/15/2043
Amount Outstanding ($ 000)	$99,989
Months Outstanding	12.0

End of Month	Price	Yield
January	121.000	6.34 %
February	122.346	6.25
March	124.097	6.15
April	120.975	6.34
May	Not Traded	-
June	Not Traded	-
July	Not Traded	-
August	Not Traded	-
September	Not Traded	-
October	Not Traded	-
November	Not Traded	-
December	138.150	5.35
Average	125.314	6.09 %

Source: Bloomberg

CSX Corporation

24

Type:	Sec'd Eq Notes
Description:	CSXT
CUSIP:	126410LM9
Coupon Rate:	6.251%
Maturity Date:	1/15/2023
Amount Outstanding ($ 000)	$320,787
Months Outstanding	12.0

End of Month	Price	Yield
January	112.385	4.87 %
February	110.250	5.09
March	113.200	4.77
April	Not Traded	-
May	108.887	5.22
June	114.491	4.62
July	116.250	4.43
August	117.000	4.34
September	116.250	4.41
October	117.125	4.31
November	113.603	4.67
December	115.500	4.46
Average	114.086	4.65 %

Source: Bloomberg

Norfolk Southern Corp.

25

Type:	Debenture
Description:	Conrail
CUSIP:	209864AT4
Coupon Rate:	9.750%
Maturity Date:	6/15/2020
Amount Outstanding ($ 000)	$313,741
Months Outstanding	12.0

End of Month	Price	Yield
January	141.941	4.27 %
February	141.862	4.25
March	141.138	4.29
April	138.354	4.56
May	139.944	4.35
June	138.408	4.49
July	142.626	3.99
August	145.728	3.62
September	146.448	3.51
October	145.092	3.61
November	143.651	3.73
December	145.012	3.54
Average	142.517	4.02 %

Source: Bloomberg

Norfolk Southern Corp.

26

Type:	Debenture
Description:	Conrail
CUSIP:	209864AU1
Coupon Rate:	7.875%
Maturity Date:	5/15/2043
Amount Outstanding ($ 000)	$138,085
Months Outstanding	12.0

End of Month	Price	Yield
January	130.684	5.77 %
February	133.034	5.64
March	131.712	5.71
April	130.078	5.80
May	132.813	5.65
June	129.198	5.84
July	135.854	5.48
August	139.310	5.30
September	151.453	4.72
October	149.897	4.79
November	146.571	4.94
December	147.204	4.91
Average	138.151	5.38 %

Source: Bloomberg

Norfolk Southern Corp.

27

Type:	Notes
Description:	Series A NSC
CUSIP:	655844AA6
Coupon Rate:	9.000%
Maturity Date:	3/1/2021
Amount Outstanding ($ 000)	$83,372
Months Outstanding	12.0

End of Month	Price	Yield
January	Not Traded	- %
February	Not Traded	-
March	Not Traded	-
April	Not Traded	-
May	Not Traded	-
June	120.550	6.15
July	121.020	6.08
August	Not Traded	-
September	Not Traded	-
October	Not Traded	-
November	118.000	6.39
December	120.940	6.00
Average	120.128	6.16 %

Source: Bloomberg

Norfolk Southern Corp.

28

Type:	Notes
Description:	Senior
CUSIP:	655844AQ1
Coupon Rate:	7.250%
Maturity Date:	2/15/2031
Amount Outstanding ($ 000)	$472,701
Months Outstanding	12.0

End of Month	Price	Yield
January	120.857	5.52 %
February	122.844	5.37
March	122.312	5.40
April	123.865	5.29
May	126.297	5.12
June	122.463	5.38
July	126.552	5.09
August	132.647	4.68
September	138.086	4.33
October	134.807	4.53
November	139.273	4.24
December	136.767	4.39
Average	128.898	4.95 %

Source: Bloomberg

Norfolk Southern Corp.

29

Type:	Notes
Description:	Senior
CUSIP:	655844AZ1
Coupon Rate:	5.750%
Maturity Date:	4/1/2018
Amount Outstanding ($ 000)	$600,000
Months Outstanding	12.0

End of Month	Price	Yield
January	113.245	3.63 %
February	112.620	3.71
March	111.300	3.89
April	112.747	3.65
May	113.926	3.44
June	114.118	3.40
July	114.565	3.30
August	117.378	2.84
September	116.741	2.90
October	117.668	2.73
November	116.125	2.94
December	117.297	2.72
Average	114.811	3.26 %

Source: Bloomberg

Norfolk Southern Corp.

30

Type:	Notes
Description:	Senior
CUSIP:	655844BB3
Coupon Rate:	5.750%
Maturity Date:	1/15/2016
Amount Outstanding ($ 000)	$500,000
Months Outstanding	12.0

End of Month	Price	Yield
January	112.943	2.92 %
February	111.471	3.19
March	112.166	3.00
April	113.423	2.69
May	114.180	2.48
June	114.988	2.27
July	115.626	2.06
August	115.570	2.00
September	114.032	2.29
October	114.418	2.14
November	116.146	1.68
December	115.919	1.66
Average	114.240	2.37 %

Source: Bloomberg

Norfolk Southern Corp.

31

Type:	Notes
Description:	Senior
CUSIP:	655844BC1
Coupon Rate:	5.900%
Maturity Date:	6/15/2019
Amount Outstanding ($ 000)	$500,000
Months Outstanding	12.0

End of Month	Price	Yield
January	113.552	3.98 %
February	114.232	3.87
March	113.636	3.94
April	114.165	3.85
May	115.873	3.61
June	112.859	3.99
July	117.555	3.34
August	120.816	2.89
September	116.847	3.39
October	120.655	2.86
November	118.670	3.10
December	120.250	2.87
Average	116.593	3.47 %

Source: Bloomberg

Norfolk Southern Corp.

32

Type:	Notes
Description:	Senior (new)
CUSIP:	655844BG2
Coupon Rate:	3.250%
Maturity Date:	12/1/2021
Amount Outstanding ($ 000)	$500,000
Months Outstanding	1.5

End of Month	Price	Yield
January	Not Traded	- %
February	Not Traded	-
March	Not Traded	-
April	Not Traded	-
May	Not Traded	-
June	Not Traded	-
July	Not Traded	-
August	Not Traded	-
September	Not Traded	-
October	Not Traded	-
November	99.356	3.33
December	100.792	3.16
Average	100.074	3.25 %

Source: Bloomberg

Norfolk Southern Corp.

33a

Type:	Notes 1 of 3
Description:	Senior 3 Sets (new)
CUSIP:	655844BD9
Coupon Rate:	6.000%
Maturity Date:	5/23/2111
Amount Outstanding ($ 000)	$400,000
Months Outstanding	7.0

End of Month	Price	Yield
January	Not Traded	- %
February	Not Traded	-
March	Not Traded	-
April	Not Traded	-
May	101.636	5.90
June	99.070	6.06
July	103.356	5.80
August	108.687	5.52
September	114.586	5.23
October	111.832	5.36
November	115.664	5.18
December	119.374	5.02
Average	109.276	5.51 %

Source: Bloomberg

Note: Issued in three pieces on three separate dates.

5/23/2011	$400,000	Shown on this page.
9/14/2011	$4,492	
11/17/2011	$100,000	
	$504,492	

Norfolk Southern Corp.

33b

Type:	Notes 2 of 3
Description:	Senior 3 Sets (new)
CUSIP:	655844BD9
Coupon Rate:	6.000%
Maturity Date:	5/23/2111
Amount Outstanding ($ 000)	$4,492
Months Outstanding	3.5

End of Month	Price	Yield
January	Not Traded	- %
February	Not Traded	-
March	Not Traded	-
April	Not Traded	-
May	This portion was not issued until September 14, 2011.	
June		
July		
August		
September	114.586	5.23
October	111.832	5.36
November	115.664	5.18
December	119.374	5.02
Average	115.364	5.20 %

Source: Bloomberg

Note: Issued in three pieces on three separate dates.

5/23/2011	$400,000	
9/14/2011	$4,492	Shown on this page.
11/17/2011	$100,000	
	$504,492	

Norfolk Southern Corp.

33c

Type:	Notes 3 of 3
Description:	Senior 3 Sets (new)
CUSIP:	655844BD9
Coupon Rate:	6.000%
Maturity Date:	5/23/2111
Amount Outstanding ($ 000)	$100,000
Months Outstanding	1.5

End of Month	Price	Yield
January	Not Traded	- %
February	Not Traded	-
March	Not Traded	-
April	Not Traded	-
May	This portion was not issued until November 17, 2011.	
June		
July		
August		
September		
October		
November	115.664	5.18
December	119.374	5.02
Average	117.519	5.10 %

Source: Bloomberg

Note: Issued in three pieces on three separate dates.

5/23/2011	$400,000	
9/14/2011	$4,492	
11/17/2011	$100,000	Shown on this page.
	$504,492	

Norfolk Southern Corp.

34

Type:	Notes
Description:	Senior 2105 2 sets
CUSIP:	655844AV0
Coupon Rate:	6.000%
Maturity Date:	3/15/2105
Amount Outstanding ($ 000)	$550,000
Months Outstanding	12.0

End of Month	Price	Yield
January	95.200	6.30 %
February	96.100	6.24
March	96.329	6.23
April	98.524	6.09
May	101.626	5.90
June	99.565	6.03
July	98.627	6.08
August	109.071	5.50
September	117.696	5.09
October	112.445	5.33
November	113.970	5.26
December	118.081	5.07
Average	104.770	5.76 %

Source: Bloomberg

Note: Both pieces were issued in 2010.

Norfolk Southern Corp.

35

Type:	Notes
Description:	Senior
CUSIP:	655844AX6
Coupon Rate:	5.640%
Maturity Date:	5/17/2029
Amount Outstanding ($ 000)	$350,000
Months Outstanding	12.0

End of Month	Price	Yield
January	104.528	5.25 %
February	105.788	5.15
March	104.698	5.24
April	105.110	5.20
May	107.946	4.97
June	106.385	5.09
July	110.396	4.77
August	110.777	4.74
September	114.515	4.44
October	117.625	4.21
November	119.542	4.07
December	118.020	4.17
Average	110.444	4.78 %

Source: Bloomberg

Norfolk Southern Corp.

36

Type:	Notes
Description:	Senior
CUSIP:	655844AW8
Coupon Rate:	5.590%
Maturity Date:	5/17/2025
Amount Outstanding ($ 000)	$366,620
Months Outstanding	12.0

End of Month	Price	Yield
January	109.853	4.64 %
February	110.825	4.55
March	108.647	4.74
April	106.033	4.99
May	111.877	4.44
June	110.645	4.55
July	109.970	4.61
August	113.080	4.32
September	115.050	4.13
October	117.404	3.92
November	118.701	3.80
December	120.372	3.65
Average	112.705	4.36 %

Source: Bloomberg

Norfolk Southern Corp.

37

Type:	Notes
Description:	Senior (new private)
CUSIP:	655844BE7
Coupon Rate:	4.837%
Maturity Date:	10/1/2041
Amount Outstanding ($ 000)	$595,504
Months Outstanding	3.5

End of Month	Price	Yield
January	Not Traded	- %
February	Not Traded	-
March	Not Traded	-
April	Not Traded	-
May	Not Traded	-
June	Not Traded	-
July	Not Traded	-
August	Not Traded	-
September	106.262	4.46
October	106.176	4.46
November	103.023	4.65
December	108.057	4.35
Average	105.880	4.48 %

Source: Bloomberg

Note: Private placement, but trades, no 424(b).
Interest starts acruing 9/14/2011.

Norfolk Southern Corp.

38

Type:	Conrail Notes
Description:	CR NSC 2014
CUSIP:	655844AU2
Coupon Rate:	5.257%
Maturity Date:	9/17/2014
Amount Outstanding ($ 000)	$431,456
Months Outstanding	12.0

End of Month	Price	Yield
January	110.238	2.31 %
February	110.523	2.16
March	109.920	2.25
April	110.625	1.98
May	111.349	1.69
June	111.295	1.62
July	112.493	1.17
August	111.386	1.41
September	109.841	1.82
October	111.043	1.33
November	110.328	1.46
December	110.040	1.47
Average	110.757	1.72 %

Source: Bloomberg

Norfolk Southern Corp.

39

Type:	Conrail Notes
Description:	CR NSC 2017
CUSIP:	655844AE8
Coupon Rate:	7.700%
Maturity Date:	5/15/2017
Amount Outstanding ($ 000)	$550,000
Months Outstanding	12.0

End of Month	Price	Yield
January	123.113	3.57 %
February	122.792	3.57
March	122.780	3.53
April	124.472	3.21
May	125.559	2.98
June	124.609	3.08
July	126.020	2.81
August	126.621	2.63
September	126.219	2.64
October	126.385	2.56
November	125.779	2.59
December	128.247	2.12
Average	125.216	2.94 %

Source: Bloomberg

Norfolk Southern Corp.

40

Type:	Conrail Notes
Description:	CR NSC 2027
CUSIP:	655844AJ7
Coupon Rate:	7.800%
Maturity Date:	5/15/2027
Amount Outstanding ($ 000)	$440,000
Months Outstanding	12.0

End of Month	Price	Yield
January	127.117	5.30 %
February	127.932	5.22
March	125.428	5.41
April	127.931	5.21
May	128.885	5.13
June	127.010	5.27
July	129.483	5.06
August	141.023	4.21
September	137.004	4.48
October	140.401	4.23
November	140.358	4.22
December	142.686	4.04
Average	132.938	4.82 %

Source: Bloomberg

Norfolk Southern Corp.

41

Type:	Conrail Notes
Description:	CR NSC 2037
CUSIP:	655844AF5
Coupon Rate:	7.050%
Maturity Date:	5/1/2037
Amount Outstanding ($ 000)	$294,817
Months Outstanding	12.0

End of Month	Price	Yield
January	120.055	5.58 %
February	122.832	5.41
March	120.174	5.57
April	121.627	5.48
May	124.911	5.28
June	123.057	5.39
July	126.800	5.16
August	131.674	4.87
September	134.390	4.72
October	130.404	4.94
November	135.571	4.65
December	Not Traded	-
Average	126.500	5.19 %

Source: Bloomberg

Norfolk Southern Corp.

42

Type:	Conrail Notes
Description:	CR NSC 2097
CUSIP:	655844AK4
Coupon Rate:	7.900%
Maturity Date:	5/15/2097
Amount Outstanding ($ 000)	$273,317
Months Outstanding	12.0

End of Month	Price	Yield
January	132.743	5.94 %
February	135.486	5.82
March	134.719	5.85
April	138.840	5.68
May	140.344	5.62
June	137.068	5.75
July	145.244	5.42
August	147.398	5.34
September	141.458	5.57
October	Not Traded	-
November	Not Traded	-
December	Not Traded	-
Average	139.256	5.67 %

Source: Bloomberg

Union Pacific Corp.

43

Type:	Debentures
Description:	UP Corp.
CUSIP:	907818CS5
Coupon Rate:	5.375%
Maturity Date:	6/1/2033
Amount Outstanding ($ 000)	$198,515
Months Outstanding	12.0

End of Month	Price	Yield
January	Not Traded	- %
February	98.777	5.47
March	96.880	5.62
April	98.000	5.53
May	101.855	5.23
June	102.328	5.20
July	100.996	5.30
August	106.123	4.91
September	115.420	4.28
October	108.500	4.74
November	112.088	4.49
December	106.762	4.86
Average	104.339	5.06 %

Source: Bloomberg

Union Pacific Corp.

44

Type:	Debentures
Description:	UP Corp.
CUSIP:	907818CX4
Coupon Rate:	6.150%
Maturity Date:	5/1/2037
Amount Outstanding ($ 000)	$248,972
Months Outstanding	12.0

End of Month	Price	Yield
January	107.219	5.62 %
February	110.001	5.43
March	106.875	5.64
April	113.055	5.23
May	113.207	5.22
June	109.925	5.43
July	111.633	5.32
August	118.986	4.85
September	122.028	4.67
October	119.887	4.79
November	122.655	4.63
December	123.269	4.59
Average	114.895	5.12 %

Source: Bloomberg

Union Pacific Corp.

45

Type:	Debentures
Description:	UP Corp.
CUSIP:	907818CU0
Coupon Rate:	6.250%
Maturity Date:	5/1/2034
Amount Outstanding ($ 000)	$246,533
Months Outstanding	12.0

End of Month	Price	Yield
January	108.294	5.61 %
February	112.865	5.28
March	109.929	5.49
April	108.433	5.59
May	113.233	5.25
June	110.729	5.42
July	108.500	5.59
August	117.519	4.96
September	112.857	5.27
October	123.793	4.55
November	122.692	4.62
December	118.487	4.88
Average	113.944	5.21 %

Source: Bloomberg

Union Pacific Corp.

46

Type:	Debentures
Description:	UP Corp.
CUSIP:	907818CF3
Coupon Rate:	6.625%
Maturity Date:	2/1/2029
Amount Outstanding ($ 000)	$594,768
Months Outstanding	12.0

End of Month	Price	Yield
January	113.312	5.46 %
February	114.526	5.35
March	115.076	5.31
April	113.201	5.46
May	116.157	5.21
June	114.960	5.31
July	116.107	5.21
August	126.542	4.42
September	127.849	4.32
October	124.987	4.52
November	127.534	4.33
December	131.356	4.06
Average	120.134	4.91 %

Source: Bloomberg

Union Pacific Corp.

47

Type:	Debentures
Description:	UP Corp.
CUSIP:	907818AZ1
Coupon Rate:	7.000%
Maturity Date:	2/1/2016
Amount Outstanding ($ 000)	$211,436
Months Outstanding	12.0

End of Month	Price	Yield
January	118.597	2.97 %
February	117.377	3.17
March	117.802	3.01
April	118.728	2.76
May	119.791	2.48
June	118.957	2.58
July	119.552	2.40
August	121.789	1.83
September	120.499	2.04
October	121.650	1.70
November	120.400	1.88
December	117.154	2.54
Average	119.358	2.45 %

Source: Bloomberg

Union Pacific Corp.

48

Type:	Debentures
Description:	UP Corp.
CUSIP:	907818BY3
Coupon Rate:	7.125%
Maturity Date:	2/1/2028
Amount Outstanding ($ 000)	$247,746
Months Outstanding	12.0

End of Month	Price	Yield
January	Not Traded	- %
February	121.997	5.16
March	121.439	5.20
April	120.000	5.31
May	123.029	5.06
June	123.862	4.99
July	125.931	4.83
August	126.779	4.76
September	132.466	4.33
October	129.027	4.57
November	139.798	3.81
December	136.781	4.01
Average	127.374	4.73 %

Source: Bloomberg

Union Pacific Corp.

49

Type:	Notes
Description:	UP Corp.
CUSIP:	907818DG0
Coupon Rate:	4.000%
Maturity Date:	2/1/2021
Amount Outstanding ($ 000)	$497,888
Months Outstanding	12.0

End of Month	Price	Yield
January	99.040	4.12 %
February	100.351	3.96
March	98.099	4.24
April	100.324	3.96
May	101.171	3.85
June	100.361	3.95
July	101.673	3.79
August	104.652	3.42
September	105.502	3.31
October	105.054	3.36
November	105.916	3.25
December	107.716	3.02
Average	102.488	3.69 %

Source: Bloomberg

Union Pacific Corp.

50

Type:	Notes
Description:	UP Corp. (new)
CUSIP:	907818DK1
Coupon Rate:	4.163%
Maturity Date:	7/15/2022
Amount Outstanding ($ 000)	$594,381
Months Outstanding	2.0

End of Month	Price	Yield
January	Not Traded	- %
February	Not Traded	-
March	Not Traded	-
April	Not Traded	-
May	Not Traded	-
June	Not Traded	-
July	Not Traded	-
August	Not Traded	-
September	Not Traded	-
October	Not Traded	-
November	Not Traded	-
December	107.748	3.29
Average	107.748	3.29 %

Source: Bloomberg

Union Pacific Corp.

51

Type:	Notes
Description:	UP Corp. (new)
CUSIP:	907818DJ4
Coupon Rate:	4.750%
Maturity Date:	9/15/2041
Amount Outstanding ($ 000)	$490,212
Months Outstanding	4.5

End of Month	Price	Yield
January	Not Traded	- %
February	Not Traded	-
March	Not Traded	-
April	Not Traded	-
May	Not Traded	-
June	Not Traded	-
July	Not Traded	-
August	99.293	4.79
September	101.693	4.64
October	105.568	4.41
November	103.053	4.56
December	110.124	4.15
Average	103.946	4.51 %

Source: Bloomberg

Union Pacific Corp.

52

Type:	Notes
Description:	UP Corp.
CUSIP:	907818CV8
Coupon Rate:	4.875%
Maturity Date:	1/15/2015
Amount Outstanding ($ 000)	$249,820
Months Outstanding	12.0

End of Month	Price	Yield
January	108.659	2.56 %
February	107.844	2.72
March	108.424	2.52
April	108.560	2.44
May	108.704	2.35
June	109.384	2.10
July	110.732	1.66
August	110.626	1.62
September	108.693	2.12
October	108.750	2.04
November	109.934	1.61
December	110.080	1.46
Average	109.199	2.10 %

Source: Bloomberg

Union Pacific Corp.

53

Type:	Notes
Description:	UP Corp.
CUSIP:	907818DC9
Coupon Rate:	5.125%
Maturity Date:	2/15/2014
Amount Outstanding ($ 000)	$305,431
Months Outstanding	12.0

End of Month	Price	Yield
January	108.927	2.07 %
February	108.750	2.05
March	108.759	1.96
April	109.081	1.76
May	109.820	1.41
June	109.314	1.49
July	109.649	1.24
August	108.200	1.68
September	106.317	2.36
October	109.283	1.00
November	105.736	2.42
December	107.769	1.40
Average	108.467	1.74 %

Source: Bloomberg

Union Pacific Corp.

54

Type:	Notes
Description:	UP Corp.
CUSIP:	907818CT3
Coupon Rate:	5.375%
Maturity Date:	5/1/2014
Amount Outstanding ($ 000)	$194,382
Months Outstanding	12.0

End of Month	Price	Yield
January	110.647	1.97 %
February	109.482	2.25
March	109.540	2.15
April	110.688	1.70
May	110.354	1.72
June	110.201	1.66
July	110.538	1.44
August	110.430	1.36
September	108.134	2.11
October	109.659	1.42
November	108.890	1.61
December	106.132	2.66
Average	109.558	1.84 %

Source: Bloomberg

Union Pacific Corp.

55

Type:	Notes
Description:	UP Corp.
CUSIP:	907818CY2
Coupon Rate:	5.450%
Maturity Date:	1/31/2013
Amount Outstanding ($ 000)	$449,844
Months Outstanding	12.0

End of Month	Price	Yield
January	108.346	1.20 %
February	108.130	1.14
March	107.602	1.21
April	107.537	1.06
May	107.403	0.94
June	107.039	0.91
July	106.824	0.84
August	106.460	0.84
September	105.699	1.10
October	105.604	0.90
November	105.229	0.88
December	105.300	0.48
Average	106.764	0.96 %

Source: Bloomberg

Union Pacific Corp.

56

Type:	Notes
Description:	UP Corp.
CUSIP:	907818CW6
Coupon Rate:	5.650%
Maturity Date:	5/1/2017
Amount Outstanding ($ 000)	$231,598
Months Outstanding	12.0

End of Month	Price	Yield
January	113.375	3.26 %
February	112.354	3.42
March	111.814	3.48
April	113.227	3.21
May	113.447	3.14
June	114.107	2.99
July	115.492	2.72
August	117.057	2.43
September	117.520	2.29
October	116.216	2.48
November	113.264	2.98
December	117.603	2.14
Average	114.623	2.88 %

Source: Bloomberg

Union Pacific Corp.

57

Type:	Notes
Description:	UP Corp.
CUSIP:	907818DA3
Coupon Rate:	5.700%
Maturity Date:	8/15/2018
Amount Outstanding ($ 000)	$471,584
Months Outstanding	12.0

End of Month	Price	Yield
January	112.856	3.73 %
February	112.868	3.71
March	111.681	3.86
April	112.729	3.69
May	114.094	3.47
June	113.037	3.60
July	116.131	3.13
August	116.877	2.99
September	117.419	2.88
October	114.996	3.22
November	115.985	3.04
December	117.606	2.77
Average	114.690	3.34 %

Source: Bloomberg

Union Pacific Corp.

58

Type:	Notes
Description:	UP Corp.
CUSIP:	907818CZ9
Coupon Rate:	5.750%
Maturity Date:	11/15/2017
Amount Outstanding ($ 000)	$321,434
Months Outstanding	12.0

End of Month	Price	Yield
January	112.600	3.64 %
February	112.727	3.60
March	110.950	3.86
April	114.539	3.26
May	115.826	3.03
June	114.703	3.18
July	116.417	2.88
August	117.427	2.68
September	115.400	2.98
October	118.785	2.39
November	118.625	2.37
December	120.350	2.05
Average	115.696	2.99 %

Source: Bloomberg

Union Pacific Corp.

59

Type:	Notes
Description:	UP Corp.
CUSIP:	907818DD7
Coupon Rate:	6.125%
Maturity Date:	2/15/2020
Amount Outstanding ($ 000)	$398,742
Months Outstanding	12.0

End of Month	Price	Yield
January	111.899	4.51 %
February	114.703	4.14
March	114.804	4.12
April	115.681	3.99
May	116.333	3.89
June	116.949	3.80
July	117.500	3.72
August	117.000	3.76
September	121.105	3.22
October	117.992	3.60
November	120.282	3.28
December	122.272	3.01
Average	117.210	3.75 %

Source: Bloomberg

Union Pacific Corp.

60

Type:	Notes
Description:	UP Corp.
CUSIP:	907818DB1
Coupon Rate:	7.875%
Maturity Date:	1/15/2019
Amount Outstanding ($ 000)	$178,290
Months Outstanding	12.0

End of Month	Price	Yield
January	127.685	3.81 %
February	125.074	4.11
March	123.263	4.32
April	126.461	3.87
May	126.341	3.85
June	127.422	3.67
July	128.213	3.54
August	129.942	3.27
September	126.756	3.65
October	129.828	3.21
November	131.901	2.89
December	128.375	3.33
Average	127.605	3.63 %

Source: Bloomberg

Union Pacific Corp.

61

Type:	Notes
Description:	UP Corp.
CUSIP:	907818DF2
Coupon Rate:	5.780%
Maturity Date:	7/15/2040
Amount Outstanding ($ 000)	$278,787
Months Outstanding	12.0

End of Month	Price	Yield
January	103.551	5.53 %
February	104.393	5.48
March	102.552	5.60
April	104.531	5.47
May	108.186	5.23
June	105.022	5.43
July	109.295	5.16
August	111.351	5.03
September	118.648	4.60
October	116.407	4.73
November	117.545	4.66
December	121.301	4.45
Average	110.232	5.11 %

Source: Bloomberg

Union Pacific Corp.

62

Type:	Mort. Bond
Description:	UPRR-MP
CUSIP:	606198LF4
Coupon Rate:	4.750%
Maturity Date:	1/1/2020
Amount Outstanding ($ 000)	$29,905
Months Outstanding	12.0

End of Month	Price	Yield
January	99.380	4.84 %
February	100.000	4.75
March	Not Traded	-
April	90.000	6.26
May	95.000	5.49
June	98.000	5.04
July	98.000	5.04
August	97.000	5.20
September	98.250	5.01
October	Not Traded	-
November	99.000	4.90
December	100.250	4.71
Average	97.488	5.12 %

Source: Bloomberg

Union Pacific Corp.

63

Type:	Mort. Bond
Description:	UPRR-MP
CUSIP:	606198LG2
Coupon Rate:	4.750%
Maturity Date:	1/1/2030
Amount Outstanding ($ 000)	$27,542
Months Outstanding	12.0

End of Month	Price	Yield
January	95.000	5.17 %
February	93.000	5.34
March	95.500	5.13
April	90.000	5.62
May	90.000	5.62
June	91.975	5.44
July	91.000	5.54
August	93.750	5.29
September	93.155	5.34
October	91.000	5.54
November	90.131	5.63
December	87.000	5.94
Average	91.793	5.47 %

Source: Bloomberg

Union Pacific Corp.

64

Type:	Debentures
Description:	UPRR-MP
CUSIP:	606198LH0
Coupon Rate:	5.000%
Maturity Date:	1/1/2045
Amount Outstanding ($ 000)	$96,025
Months Outstanding	12.0

End of Month	Price	Yield
January	71.400	7.28 %
February	73.400	7.08
March	71.000	7.33
April	74.220	7.00
May	75.250	6.90
June	70.350	7.41
July	78.750	6.58
August	75.000	6.93
September	72.292	7.21
October	75.250	6.91
November	72.625	7.17
December	77.700	6.68
Average	73.936	7.04 %

Source: Bloomberg

Union Pacific Corp.

65

Type:	Debentures
Description:	MP C&EI UPRR
CUSIP:	167123AP3
Coupon Rate:	5.000%
Maturity Date:	1/1/2054
Amount Outstanding ($ 000)	$1,641
Months Outstanding	12.0

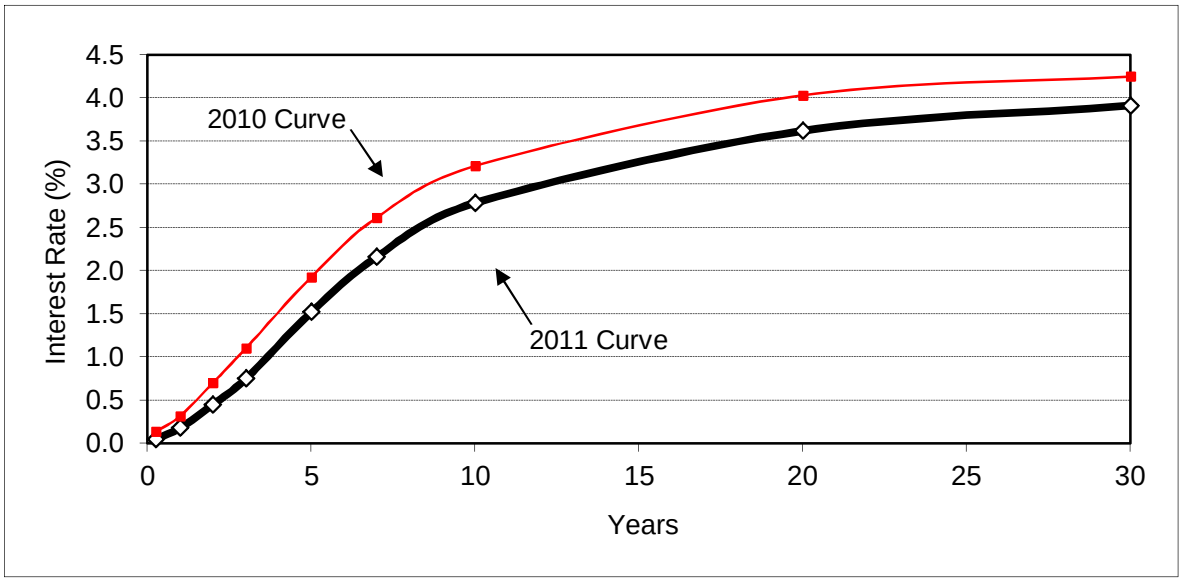
End of Month	Price	Yield
January	81.328	6.26 %
February	82.747	6.15
March	81.485	6.25
April	84.205	6.04
May	84.891	5.98
June	83.557	6.09
July	87.035	5.83
August	89.543	5.65
September	91.490	5.52
October	91.935	5.49
November	90.785	5.57
December	92.267	5.47
Average	86.772	5.86 %

Source: Bloomberg

Interest Rates on Selected Government Instruments

Yield in Percent Per Annum, Constant Maturity Rates for 2011

	3 Mo.	1 Yr	2 Yr	3 Yr	5 Yr	7 Yr	10 Yr	20 Yr	30 Yr
January	0.15	0.27	0.61	1.03	1.99	2.72	3.39	4.28	4.52
February	0.13	0.29	0.77	1.28	2.26	2.96	3.58	4.42	4.65
March	0.10	0.26	0.70	1.17	2.11	2.80	3.41	4.27	4.51
April	0.06	0.25	0.73	1.21	2.17	2.84	3.46	4.28	4.50
May	0.04	0.19	0.56	0.94	1.84	2.51	3.17	4.01	4.29
June	0.04	0.18	0.41	0.71	1.58	2.29	3.00	3.91	4.23
July	0.04	0.19	0.41	0.68	1.54	2.28	3.00	3.95	4.27
August	0.02	0.11	0.23	0.38	1.02	1.63	2.30	3.24	3.65
September	0.01	0.10	0.21	0.35	0.90	1.42	1.98	2.83	3.18
October	0.02	0.11	0.28	0.47	1.06	1.62	2.15	2.87	3.13
November	0.01	0.11	0.25	0.39	0.91	1.45	2.01	2.72	3.02
December	0.01	0.12	0.26	0.39	0.89	1.43	1.98	2.67	2.98
Average	**0.05**	**0.18**	**0.45**	**0.75**	**1.52**	**2.16**	**2.79**	**3.62**	**3.91**



Source: Federal Reserve statistical release H.15, Treasury Constant Maturities, Nominal

Equipment Trust Certificates for CSX

Modeled ETCs

	ETC ID	Maturity	Balance For 2011 ($000) Beg.	Ending	Avg O/S	Current Valuation Interest Rate	Valuation Factor	Current Market Value	Interest
1.	ETC CSX Series B 236	2/15/14	$20,000	$15,000	$17,500	1.756%	1.09948	$19,241	$338
2.	ETC CSX Series B 237	4/15/14	16,000	12,000	14,000	1.755%	1.11429	15,600	274
3.	ETC CSX Series B 238	6/15/14	14,800	11,100	12,950	1.754%	1.13226	14,663	257
4.	ETC CSX Series B 239	4/1/15	25,500	20,400	22,950	2.059%	1.17079	26,870	553
5.	ETC CSX Series B 240	5/15/15	21,000	16,800	18,900	2.061%	1.14733	21,684	447
6.					--			--	--
7.					--			--	--
8.					--			--	--
9.					--			--	--
10.					--			--	--
11.					--			--	--
12.					--			--	--
13.					--			--	--
14.					--			--	--
15.					--			--	--
	Total		$97,300	$75,300	$86,300	**1.906%**		**$98,058**	$1,869

Note:
This list contains ETCs that can be used in the AAR's model to determine market value. Some debt instruments labeled as ETCs do not have all of the characteristics typical of an ETC, and therefore cannot be modeled. For example, ETCs with variable rates cannot be modeled.

Non-Modeled ETCs

	ETC ID	Maturity	Balance For 2011 ($000) Beg.	Ending
1.	ETC CSX Series A 235	06/15/13	15,000	10,000
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
	Total		$15,000	$10,000

Equipment Trust Certificates for CSX (continued)

Entire ETC Current – Not Used for Cost or Market Value

	ETC ID	Maturity	Balance 2011 ($000) Beg.	Ending
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
	Total		$0	$0

Grand Totals (for reconciliation to carrier data)

	Balance For 2011 ($000) Beg.	Ending
Total Modeled	$97,300	$75,300
Total Non-Modeled	15,000	10,000
Sub Total	112,300	85,300
Total All Current	0	0
Grand Total	$112,300	$85,300
From CSX:		
Total ETCs		$85,300
Difference		$0

Equipment Trust Certificates for NS

Modeled ETCs

	ETC ID	Maturity	Balance For 2011 ($000) Beg.	Ending	Avg O/S	Current Valuation Interest Rate	Valuation Factor	Current Market Value	Interest
1.	NSR Series H	7/15/13	$12,600	$8,400	$10,500	1.453%	1.08006	$11,341	$165
2.	NSR Series I	4/1/14	25,200	18,900	22,050	1.755%	1.10606	24,389	428
3.	NSR Series J	6/15/14	25,000	18,750	21,875	1.754%	1.13469	24,821	435
4.					--			--	--
5.					--			--	--
6.					--			--	--
7.					--			--	--
8.					--			--	--
9.					--			--	--
10.					--			--	--
11.					--			--	--
12.					--			--	--
13.					--			--	--
14.					--			--	--
15.					--			--	--
	Total		$62,800	$46,050	$54,425	**1.698%**		**$60,551**	$1,028

Note:
This list contains ETCs that can be used in the AAR's model to determine market value. Some debt instruments labeled as ETCs do not have all of the characteristics typical of an ETC, and therefore cannot be modeled. For example, ETCs with variable rates cannot be modeled.

Non-Modeled ETCs

	ETC ID	Maturity	Balance For 2011 ($000) Beg.	Ending
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
	Total		$0	$0

Equipment Trust Certificates for NS (continued)

Entire ETC Current – Not Used for Cost or Market Value

	ETC ID	Maturity	Balance 2011 ($000) Beg.	Balance 2011 ($000) Ending
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
	Total		$0	$0

Grand Totals (for reconciliation to carrier data)

	Balance For 2011 ($000) Beg.	Balance For 2011 ($000) Ending
Total Modeled	$62,800	$46,050
Total Non-Modeled	0	0
Sub Total	62,800	46,050
Total All Current	0	0
Grand Total	$62,800	$46,050
From NS:		
Total ETCs		$46,050
Difference		$0

Equipment Trust Certificates for UP

Modeled ETCs

	ETC ID	Maturity	Balance For 2011 ($000) Beg.	Ending	Avg O/S	Current Valuation Interest Rate	Valuation Factor	Current Market Value	Interest
1.	ETC UPC Series I	2/23/19	53,857	49,485	51,671	3.016%	1.16781	60,342	1,820
2.	ETC UPC Series J	1/2/2031	82,825	78,828	80,827	4.233%	1.16413	94,093	3,983
3.					--			--	--
4.					--			--	--
5.					--			--	--
6.					--			--	--
7.					--			--	--
8.					--			--	--
9.					--			--	--
10.					--			--	--
11.					--			--	--
12.					--			--	--
13.					--			--	--
14.					--			--	--
15.					--			--	--
	Total		$136,682	$128,313	$132,498	**3.757%**		**$154,435**	$5,803

Note:
This list contains ETCs that can be used in the AAR's model to determine market value. Some debt instruments labeled as ETCs do not have all of the characteristics typical of an ETC, and therefore cannot be modeled. For example, ETCs with variable rates cannot be modeled.

Non-Modeled ETCs

	ETC ID	Maturity	Balance For 2011 ($000) Beg.	Ending
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
	Total		$0	$0

Equipment Trust Certificates for UP (continued)

Entire ETC Current – Not Used for Cost or Market Value

	ETC ID	Maturity	Balance 2011 ($000) Beg.	Ending
1.	ETC UPC Series C	2/1/12	$8,300	$4,150
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
	Total		$8,300	$4,150

Grand Totals (for reconciliation to carrier data)

	Balance For 2011 ($000) Beg.	Ending
Total Modeled	$136,682	$128,313
Total Non-Modeled	0	0
Sub Total	136,682	128,313
Total All Current	8,300	4,150
Grand Total	$144,982	$132,463
From UP:		
Total ETCs		$132,463
Difference		$0

Conditional Sales Agreements for CSX

Modeled CSAs

	CSA ID	Maturity	Balance For 2011 ($000) Beg.	Ending	Avg O/S	Current Valuation Interest Rate	Valuation Factor	Current Market Value	Interest
1.					--			--	--
2.					--			--	--
3.	None.				--			--	--
4.					--			--	--
5.					--			--	--
6.					--			--	--
7.					--			--	--
8.					--			--	--
9.					--			--	--
10.					--			--	--
	Total		$0	$0	$0	--		**$0**	$0

Note:
This list contains CSAs that can be used in the AAR's model to determine market value. Some debt instruments labeled as CSAs do not have all of the characteristics typical of a CSA, and therefore cannot be modeled. For example, CSAs with variable rates cannot be modeled.

Non-Modeled CSAs

	ETC ID	Maturity	Balance For 2011 ($000) Beg.	Ending	
1.	CSA 424	09/15/14	$23,966	$17,974	(uses a floating interest rate)
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
	Total		$23,966	$17,974	

Current CSAs Not Used		Balance For 2011 ($000) Beg.	Ending
CSX 422	10/22/2012	10,236	5,118
CSX 423	4/16/2012	12,504	6,252
Grand Total All CSAs		$46,706	$29,344

From CSX:

Total CSAs	$29,344
Difference from Grand Total	$0

Conditional Sales Agreements for NS

Modeled CSAs

	CSA ID	Maturity	Balance For 2011 ($000) Beg.	Ending	Avg O/S	Current Valuation Interest Rate	Valuation Factor	Current Market Value	Interest
1.					--			--	--
2.					--			--	--
3.		None.			--			--	--
4.					--			--	--
5.					--			--	--
6.					--			--	--
7.					--			--	--
8.					--			--	--
9.					--			--	--
10.					--			--	--
	Total		$0	$0	$0	--		**$0**	$0

Note:
This list contains CSAs that can be used in the AAR's model to determine market value. Some debt instruments labeled as CSAs do not have all of the characteristics typical of a CSA, and therefore cannot be modeled. For example, CSAs with variable rates cannot be modeled.

Non-Modeled CSAs

	ETC ID	Maturity	Balance For 2011 ($000) Beg.	Ending
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
	Total		$0	$0

	Balance For 2011 ($000) Beg.	Ending
Current CSAs Not Used	0	0
Grand Total All CSAs	$0	$0

Conditional Sales Agreements for UP

Modeled CSAs

	CSA ID	Maturity	Balance For 2011 ($000) Beg.	Ending	Avg O/S	Current Valuation Interest Rate	Valuation Factor	Current Market Value	Interest
1.					--			--	--
2.					--			--	--
3.		None.			--			--	--
4.					--			--	--
5.					--			--	--
6.					--			--	--
7.					--			--	--
8.					--			--	--
9.					--			--	--
10.					--			--	--
	Total		$0	$0	$0	--		**$0**	$0

Note:
This list contains CSAs that can be used in the AAR's model to determine market value. Some debt instruments labeled as CSAs do not have all of the characteristics typical of a CSA, and therefore cannot be modeled. For example, CSAs with variable rates cannot be modeled.

Non-Modeled CSAs

	ETC ID	Maturity	Balance For 2011 ($000) Beg.	Ending
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
	Total		$0	$0

	Balance For 2011 ($000) Beg.	Ending
Current CSAs Not Used	0	0
Grand Total All CSAs	$0	$0

2011 Market Value of Debt ($000)

Type of Debt	Market Value: Traded or Modeled	Market Value: Non-Traded or Non-Modeled	Market Value: Total	Percent of: Subtotal	Percent of: Total
Bonds, Notes & Debentures	$22,579,146	$787,339	$23,366,485	98.68%	91.55%
Equipment Trust Certificates	313,043		313,043	1.32%	1.23%
Conditional Sales Agreements	0		0	0.00%	0.00%
Sub Total	$22,892,189	$787,339	$23,679,528	100.00%	92.77%
All Other — Capital Leases		$1,884,648	$1,884,648	102.16%	7.38%
All Other — Misc. Debt		-67,848	-67,848	-3.68%	-0.27%
All Other — Non-Modeled ETC		10,000	10,000	0.54%	0.04%
All Other — Non-Modeled CSA		17,974	17,974	0.97%	0.07%
Sub Total			$1,844,774	100.00%	7.23%
Total Market Value			**$25,524,302**		100.00%

General Notes:

Bonds, Notes, and Debentures from Appendix A. Securities that did not trade were assigned a market value equal to their book value. The traded portion accounts for 96.63 percent of the total market value for this category.

Equipment Trust Certificates from Appendix C.

Conditional Sales Agreements from Appendix D.

Some ETCs and CSAs could not be modeled because they did not have all of the typical characteristics necessary for the model. Those that could not be modeled were assigned a market value equal to their book value, and moved to the All Other category.

Capital Leases and Miscellaneous Debt listed in work papers.

The capital leases and miscellaneous debt portion of the All Other debt category was assigned a market value equal to its book value, and totals to $1,816,800 thousand. The non-modeled ETCs and CSAs were also assigned a market value equal to their book value, and totaled to $27,974 thousand. The All Other category totals to $1,844,774 thousand, or 7.2 percent of total debt.

Negative numbers in the Miscellaneous Debt generally are related to debt premiums and discounts.

2011 Flotation Costs for Bonds

	CSX Sr Notes	CSX Sr Notes	CSX Sr Notes	NSC Sr Notes	NSC Sr Notes	NSC Sr Notes	UNP Notes
From 424(b)	**5/25/2011**	**5/25/2011**	**11/1/2011**	**5/23/2011**	**11/17/2011**	**11/17/2011**	**8/9/2011**
Face Amount	$350,000,000	$250,000,000	$600,000,000	$400,000,000	$500,000,000	$100,000,000	$500,000,000
Coupon Rate	4.250%	5.500%	4.750%	6.000%	3.250%	6.000%	4.750%
Maturity Date	6/1/2021	4/15/2041	5/30/2042	5/23/2111	12/1/2021	5/23/2111	9/15/2041
Frequency of Coupon Payment	2	2	2	2	2	2	2
Interest Accrual Date	5/25/2011	4/15/2011	11/1/2011	5/23/2011	11/17/2011	5/23/2011	8/9/2011
Price To Investors	99.499	99.326	99.436	100.000	99.422	111.815	98.031
Proceeds from Sale (before expenses)	$348,246,500	$248,315,000	$596,616,000	$400,000,000	$497,110,000	$111,815,000	$490,155,000
Underwriter Fee as Pct of Gross Proceeds	0.650%	0.875%	0.875%	1.000%	0.650%	1.000%	0.875%
Underwriter's Fee	$2,275,000	$2,187,500	$5,250,000	$4,000,000	$3,250,000	$1,000,000	$4,375,000
Railroad Expenses Excluding Fee	$204,167	$145,833	$300,000	$200,000	$166,666.67	$33,333.33	$100,000
Page in 424(b)(5) for Expenses	S-22	S-22	S-21	S-19	S-32	S-32	S-7
Calculated							
Yield Based on Price to Investors	4.312%	5.546%	4.785%	6.000%	3.318%	5.363%	4.875%
Issue Price Per $100 Less Flotation	$98.79	$98.39	$98.51	$98.95	$98.74	$110.78	$97.14
Yield on New Issue Including Flotation	4.400%	5.611%	4.844%	6.064%	3.399%	5.414%	4.933%
Flotation Costs (Difference in Pct Pts)	**0.088%**	**0.065%**	**0.059%**	**0.064%**	**0.081%**	**0.050%**	**0.058%**
Average Flotation Cost (Pct. Points)	**0.067%**						

Source: SEC 424(b)(5) or 424(b)(2) filings.

Note: The CSX Notes maturing 4/15/2041 are an additional issuance to $300 million issued earlier.

Note: The NSC Notes maturing 5/23/2111 are an additional issuance to $400 million and $4,492 issued earlier.

Example of Source for Bond Flotation Costs

424B2 1 c65739_424b2.htm

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee (1)
6% Notes due May23, 2111	$400,000,000	100.00%	$400,000,000	$46,440.40

(1) Calculated in accordance with Rule 457(r) of the Securities Act of 1933, as amended.

Filed Pursuant to Rule 424(b)(2)
Registration Statement No. 333-158240

PROSPECTUS SUPPLEMENT
(To Prospectus Dated March 27, 2009)

$400,000,000

NORFOLK SOUTHERN®

6.000% Senior Notes due 2111

We are offering $400 million aggregate principal amount of our 6.000% senior notes due 2111 (the "Notes"). The Notes will bear interest at a rate of 6.000% per year. We will pay interest on the Notes on May 23 and November 23 of each year, beginning November 23, 2011. The Notes will mature on May 23, 2111. We may redeem the Notes prior to maturity, in whole or in part, as described in this prospectus supplement.

The Notes will be unsecured obligations and rank equally with our other unsecured senior indebtedness. The Notes will be issued only in registered form in denominations of $2,000 and integral multiples of $1,000 in excess thereof.

The Notes will not be listed on any securities exchange.

	Price to Public (1)	Underwriting Discount	Proceeds to us (before expenses) (1)
Per Note	100.00%	1.00%	99.00%
Total	$400,000,000	$ 4,000,000	$ 396,000,000

(1) Plus accrued interest, if any, from May 23, 2011.

The Securities and Exchange Commission and state securities regulators have not approved or

Example of Source for Bond Flotation Costs

UNDERWRITING

Under the terms and subject to the conditions contained in the underwriting agreement dated the date of this prospectus supplement, Morgan Stanley & Co. Incorporated has agreed to purchase the Notes, and we have agreed to sell the Notes to it.

The underwriting agreement provides that the obligations of the underwriter to pay for and accept delivery of the Notes offered hereby is subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriter is obligated to take and pay for all of the Notes if any Notes are taken. The offering of the Notes by the underwriter is subject to receipt and acceptance and subject to the underwriter's right to reject any order in whole or in part.

The underwriter has advised us that it proposes initially to offer the Notes to the public at the public offering price on the cover page of this prospectus supplement, and to dealers at that price less a concession not in excess of 0.60% of the principal amount of the Notes. The underwriter may allow, and the dealers may reallow, a discount not in excess of 0.30% of the principal amount of the Notes to other dealers. After the Notes are released to the public, the offering price and other selling terms may from time to time be varied by the underwriter.

In compliance with the guidelines of the Financial Industry Regulatory Authority, Inc. ("FINRA"), the maximum discount or commission to be received by any FINRA member or independent broker-dealer may not exceed 8% of the aggregate offering price of the securities offered hereby.

The expenses of the offering, not including the underwriting discount, are estimated to be $200,000 and are payable by us.

We have agreed to indemnify the underwriter against certain liabilities, including liabilities under the Securities Act of 1933, or to contribute to payments that the underwriter may be required to make in respect of those liabilities.

In order to facilitate the offering of these securities, the underwriter may engage in transactions that stabilize, maintain or otherwise affect the price of the Notes or any other notes the prices of which may be used to determine payments on the Notes. Specifically, the underwriter may sell more Notes than it is obligated to purchase in connection with the offering, creating a short position for its own accounts. A short sale is covered by purchasing the Notes in the open market. A short position is more likely to be created if the underwriter is concerned that there may be downward pressure on the price of the Notes in the open market after pricing that could adversely affect investors who purchase in the offering. As an additional means of facilitating the offering, the underwriter may bid for, and purchase, the Notes or any other notes in the open market to stabilize the price of the Notes or of any other notes. Finally, in any offering of the Notes through a syndicate of underwriters or dealer group, the underwriter acting on behalf of the underwriting syndicate or for itself may also reclaim selling concessions allowed to an underwriter or a dealer for distributing the Notes in the offering, if the underwriter repurchases previously distributed Notes to cover syndicate short positions or to stabilize the price of the Notes. Any of these activities may raise or maintain the market price of the Notes above independent market levels or prevent or retard a decline in the market price of the Notes. The underwriter is not required to engage in these activities, and may end any of these activities at any time without notice.

In general, purchases of a Note for the purpose of stabilizing or reducing a syndicate short position could cause the price of the Note to be higher than it might otherwise be in the absence of such purchases without notice.

Neither we nor the underwriter make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the Notes.

2011 Current Cost of Debt

Type of Debt	Reference	Appendix E Weight	Current Cost	Weighted Cost
Type of Instrument				
Bonds, Notes & Debentures	App. A & Table 4	98.68%	3.913%	3.862%
Equipment Trust Certificates	App. C & Table 6	1.32%	2.779%	0.037%
Conditional Sales Agreements	App. D & Table 7	0.00%	0.000%	0.000%
Total Without Floatation Costs		100.00%		3.898%
Floatation Costs				
Bonds, Notes & Debentures	App. F & Table 10	98.68%	0.067%	0.066%
Equipment Trust Certificates	Tables 9 and 10	1.32%	0.073%	0.001%
Conditional Sales Agreements	Tables 9 and 10	0.00%	not calculated	0.000%
Total Floatation Costs		100.00%		0.067%
Weighted Cost of Debt				3.965%
Weighted Cost of Debt (rounded)				**3.97%**

Market Value for Common Equity

CSX Stock Data from Yahoo Finance 1-5-2012
http://finance.yahoo.com/q/hp?s=CSX&a=11&b=20&c=2006&d=00&e=4&f=2012&g=w

Beg. of Wk. Date	Open	High	Low	End of Wk Close	Volume	Shares Outstanding	Capitalization ($000)
1/3/2011	65.11	68.03	64.75	67.79	11736700	374,184,621	25,365,975
1/10/2011	67.13	69.58	67.06	69.21	10617500	374,184,621	25,897,318
1/18/2011	69.21	69.46	66.76	67.64	12859300	374,184,621	25,309,848
1/24/2011	67.65	71.47	67.36	69.28	14877200	370,373,995	25,659,510
1/31/2011	69.68	72.04	69.07	69.70	10401100	370,373,995	25,815,067
2/7/2011	69.73	73.46	69.73	73.24	7754700	370,373,995	27,126,191
2/14/2011	73.24	75.00	72.83	74.76	8957500	370,373,995	27,689,160
2/22/2011	73.96	74.40	70.41	73.32	9474100	370,373,995	27,155,821
2/28/2011	73.81	75.94	72.33	74.96	9475800	370,373,995	27,763,235
3/7/2011	75.26	76.28	72.92	74.89	9645400	370,373,995	27,737,308
3/14/2011	74.55	77.24	71.92	76.22	12569100	370,373,995	28,229,906
3/21/2011	77.25	79.58	76.82	79.16	10818100	370,373,995	29,318,805
3/28/2011	79.52	80.42	77.50	79.39	12171500	367,588,231	29,182,830
4/4/2011	78.99	79.30	76.35	76.92	9128900	367,588,231	28,274,887
4/11/2011	76.97	77.25	74.71	76.66	11448900	367,588,231	28,179,314
4/18/2011	75.75	77.07	72.10	74.65	18855800	367,588,231	27,440,461
4/25/2011	74.83	79.00	74.35	78.69	9322800	367,588,231	28,925,518
5/2/2011	79.41	79.49	76.00	78.60	9238000	367,588,231	28,892,435
5/9/2011	79.00	79.22	74.40	74.75	9223400	367,588,231	27,477,220
5/16/2011	74.60	77.73	73.43	77.40	10954300	367,588,231	28,451,329
5/23/2011	76.05	78.37	75.01	77.93	7295000	367,588,231	28,646,151
5/31/2011	78.65	79.35	75.39	75.74	9282600	367,588,231	27,841,133
6/6/2011	75.46	76.26	73.18	73.48	8310100	367,588,231	27,010,383
6/13/2011	73.30	74.96	24.08	24.81	14972600	1,102,764,693	27,359,592
6/20/2011	24.83	26.32	24.72	24.99	11228300	1,102,764,693	27,558,090
6/27/2011	25.06	26.89	24.78	26.81	6732000	1,095,281,506	29,364,497
7/5/2011	26.62	27.06	26.28	26.62	6422500	1,095,281,506	29,156,394
7/11/2011	26.24	26.30	24.89	25.32	6753600	1,095,281,506	27,732,528
7/18/2011	25.22	26.10	24.75	25.38	9510700	1,095,281,506	27,798,245
7/25/2011	25.04	25.69	23.75	24.57	7760700	1,095,281,506	26,911,067
8/1/2011	24.83	24.96	21.35	21.97	14669300	1,095,281,506	24,063,335
8/8/2011	20.42	23.10	20.00	22.60	18789500	1,095,281,506	24,753,362
8/15/2011	22.86	23.25	20.36	20.40	12683400	1,095,281,506	22,343,743
8/22/2011	21.01	21.57	19.94	21.45	12937900	1,095,281,506	23,493,788
8/29/2011	21.74	22.30	20.49	20.56	7207300	1,095,281,506	22,518,988
9/6/2011	19.98	20.95	19.33	19.58	10882600	1,095,281,506	21,445,612
9/12/2011	19.25	21.45	18.95	21.43	11070600	1,095,281,506	23,471,883
9/19/2011	20.94	21.00	17.69	19.25	17935600	1,095,281,506	21,084,169
9/26/2011	19.53	20.00	18.66	18.67	12013400	1,049,953,020	19,602,623
10/3/2011	18.57	20.48	17.83	20.09	12168800	1,049,953,020	21,093,556
10/10/2011	20.49	21.56	20.37	21.13	7570400	1,049,953,020	22,185,507
10/17/2011	21.15	21.86	20.24	21.86	10446900	1,049,953,020	22,951,973
10/24/2011	22.00	23.14	21.03	23.11	10829500	1,049,953,020	24,264,414
10/31/2011	22.74	22.94	21.02	21.76	11631500	1,049,953,020	22,846,978
11/7/2011	21.72	22.52	21.13	22.49	7783000	1,049,953,020	23,613,443
11/14/2011	22.59	22.60	21.27	21.64	6619600	1,049,953,020	22,720,983
11/21/2011	21.14	21.30	19.99	20.00	7094500	1,049,953,020	20,999,060
11/28/2011	20.60	22.23	20.41	21.65	7828700	1,049,953,020	22,731,483
12/5/2011	22.01	22.29	20.97	21.32	7648200	1,049,953,020	22,384,998
12/12/2011	21.13	21.16	19.87	20.41	11542100	1,049,953,020	21,429,541
12/19/2011	20.58	21.47	20.16	21.34	7923700	1,049,953,020	22,405,997
12/27/2011	21.33	21.55	20.77	21.06	3881900	1,049,953,020	22,112,011

Note: Capitalization calulated using close of week price multiplied by the number of shares outstanding.

Market Value for Common Equity

NSC Stock Data from Yahoo Finance 1-5-2012
http://finance.yahoo.com/q/hp?s=NSC&a=11&b=20&c=2006&d=00&e=4&f=2012&g=w

Beg. of Wk. Date	Open	High	Low	End of Wk Close	Volume	Shares Outstanding	Capitalization ($000)
1/3/2011	63.25	65.32	62.84	65.04	3104700	363,372,120	23,633,723
1/10/2011	64.81	66.00	64.55	65.40	2323400	363,372,120	23,764,537
1/18/2011	65.64	65.86	63.45	63.77	2957900	363,372,120	23,172,240
1/24/2011	63.64	64.53	60.22	60.38	5106500	363,372,120	21,940,409
1/31/2011	60.56	62.22	60.44	61.07	3408400	356,109,351	21,747,598
2/7/2011	61.42	64.34	61.10	64.10	2620300	356,109,351	22,826,609
2/14/2011	63.90	65.50	63.69	65.00	2709200	356,109,351	23,147,108
2/22/2011	64.28	65.10	62.79	64.66	4077700	356,109,351	23,026,031
2/28/2011	65.08	66.01	64.64	65.30	2933200	356,109,351	23,253,941
3/7/2011	65.65	66.92	64.00	66.53	3165200	356,109,351	23,691,955
3/14/2011	65.84	67.11	63.90	66.28	3575800	356,109,351	23,602,928
3/21/2011	67.00	69.00	66.50	68.68	2108900	356,109,351	24,457,590
3/28/2011	68.73	70.00	68.43	69.32	2029000	353,216,661	24,484,979
4/4/2011	69.63	69.90	67.10	67.69	1611000	353,216,661	23,909,236
4/11/2011	67.81	68.27	66.32	67.74	1942800	353,216,661	23,926,897
4/18/2011	67.12	68.12	65.94	66.27	2741500	353,216,661	23,407,668
4/25/2011	66.47	74.96	66.32	74.68	3431600	353,216,661	26,378,220
5/2/2011	74.60	75.00	71.32	72.95	2822600	353,216,661	25,767,155
5/9/2011	72.82	74.47	71.25	71.57	2040400	353,216,661	25,279,716
5/16/2011	71.39	73.29	70.32	72.26	1985000	353,216,661	25,523,436
5/23/2011	71.34	73.00	70.57	72.57	1972300	353,216,661	25,632,933
5/31/2011	73.12	73.50	70.32	70.72	2399200	353,216,661	24,979,482
6/6/2011	70.50	71.86	70.23	70.37	2264200	353,216,661	24,855,856
6/13/2011	70.59	72.60	69.67	70.97	2419900	353,216,661	25,067,786
6/20/2011	70.24	73.98	70.24	71.67	2370400	353,216,661	25,315,038
6/27/2011	71.40	77.08	71.38	76.93	2192600	347,773,580	26,754,222
7/5/2011	76.73	77.20	75.21	75.68	1945800	347,773,580	26,319,505
7/11/2011	74.75	75.49	73.07	73.91	1760800	347,773,580	25,703,945
7/18/2011	73.80	77.10	72.71	76.21	1768200	347,773,580	26,503,825
7/25/2011	75.47	78.40	74.29	75.70	2928600	347,773,580	26,326,460
8/1/2011	76.60	76.66	67.20	69.19	4017200	347,773,580	24,062,454
8/8/2011	66.07	69.47	63.95	68.17	5468800	347,773,580	23,707,725
8/15/2011	68.65	69.40	62.84	63.06	3167900	347,773,580	21,930,602
8/22/2011	64.28	66.31	61.86	65.18	3388600	347,773,580	22,667,882
8/29/2011	66.21	68.69	64.71	65.12	2810700	347,773,580	22,647,016
9/6/2011	63.13	67.09	62.45	64.83	4369900	347,773,580	22,546,161
9/12/2011	63.79	70.79	63.14	70.42	3736800	347,773,580	24,490,216
9/19/2011	69.13	69.51	59.28	61.53	4936400	347,773,580	21,398,508
9/26/2011	62.12	64.58	60.72	61.02	2969400	336,106,217	20,509,201
10/3/2011	60.51	66.04	57.57	64.87	3351900	336,106,217	21,803,210
10/10/2011	66.06	68.49	65.77	68.17	2340400	336,106,217	22,912,361
10/17/2011	68.06	70.98	66.18	70.90	2389800	336,106,217	23,829,931
10/24/2011	71.00	75.86	68.30	74.98	3630600	336,106,217	25,201,244
10/31/2011	74.26	75.07	70.20	73.54	3352200	336,106,217	24,717,251
11/7/2011	73.55	76.20	71.67	75.69	2510400	336,106,217	25,439,880
11/14/2011	75.14	75.87	71.78	73.29	2300300	336,106,217	24,633,225
11/21/2011	72.35	72.74	70.00	70.44	2592600	336,106,217	23,675,322
11/28/2011	72.75	76.00	72.37	75.01	2938700	336,106,217	25,211,327
12/5/2011	75.82	76.49	72.84	73.79	2205100	336,106,217	24,801,278
12/12/2011	73.31	73.79	69.08	69.82	3282400	336,106,217	23,466,936
12/19/2011	70.19	72.97	69.04	72.76	2092800	336,106,217	24,455,088
12/27/2011	72.77	73.36	71.53	72.86	1054900	336,106,217	24,488,699

Note: Capitalization calulated using close of week price multiplied by the number of shares outstanding.

Market Value for Common Equity

UNP Stock Data from Yahoo Finance 1-5-2012
http://finance.yahoo.com/q/hp?s=UNP&a=11&b=20&c=2006&d=00&e=4&f=2012&g=w

Beg. of Wk. Date	Open	High	Low	End of Wk Close	Volume	Shares Outstanding	Capitalization ($000)
1/3/2011	93.82	95.37	91.98	95.18	2821300	493,148,723	46,937,895
1/10/2011	95.82	99.49	95.31	98.66	2934400	493,148,723	48,654,053
1/18/2011	98.90	99.23	93.12	94.51	4728600	493,148,723	46,607,486
1/24/2011	94.27	95.59	92.45	93.54	4438100	491,001,416	45,928,272
1/31/2011	93.66	96.00	93.19	94.25	2624300	491,001,416	46,276,883
2/7/2011	94.50	99.50	94.12	99.02	2460000	491,001,416	48,618,960
2/14/2011	99.14	99.25	96.33	97.14	2411000	491,001,416	47,695,878
2/22/2011	96.12	96.61	91.51	94.03	2645800	491,001,416	46,168,863
2/28/2011	94.28	95.95	92.41	95.36	3485200	491,001,416	46,821,895
3/7/2011	95.86	96.62	92.79	94.77	2125900	491,001,416	46,532,204
3/14/2011	94.17	96.00	90.66	95.02	3392200	491,001,416	46,654,955
3/21/2011	95.80	98.00	93.85	97.59	2732900	491,001,416	47,916,828
3/28/2011	97.77	99.43	97.12	98.27	2388500	491,001,416	48,250,709
4/4/2011	98.39	98.79	94.58	95.66	1888300	491,001,416	46,969,195
4/11/2011	95.87	98.90	94.38	98.27	2801400	490,521,191	48,203,517
4/18/2011	96.96	99.18	92.80	96.06	3637300	490,521,191	47,119,466
4/25/2011	95.97	103.81	95.74	103.47	3706300	490,521,191	50,754,228
5/2/2011	103.83	104.14	99.42	102.34	3505200	490,521,191	50,199,939
5/9/2011	102.19	104.77	99.98	100.46	2458100	490,521,191	49,277,759
5/16/2011	100.22	104.34	98.96	101.99	2825500	490,521,191	50,028,256
5/23/2011	100.50	104.16	99.66	103.53	2480000	490,521,191	50,783,659
5/31/2011	104.26	105.18	99.90	101.14	2824700	490,521,191	49,611,313
6/6/2011	100.90	101.72	99.42	99.60	2285600	490,521,191	48,855,911
6/13/2011	100.64	102.09	98.33	100.01	2916200	490,521,191	49,057,024
6/20/2011	99.86	103.69	99.59	100.04	2559900	490,521,191	49,071,740
6/27/2011	100.33	107.04	99.40	106.76	2443200	490,521,191	52,368,042
7/5/2011	106.61	107.89	103.46	104.30	2700700	490,521,191	51,161,360
7/11/2011	103.27	103.57	99.07	100.74	2649200	488,088,696	49,170,055
7/18/2011	100.50	104.99	98.84	103.80	3513800	488,088,696	50,663,607
7/25/2011	102.68	106.00	100.59	102.48	2903500	488,088,696	50,019,330
8/1/2011	103.47	103.62	89.77	92.47	5205400	488,088,696	45,133,562
8/8/2011	89.32	94.10	85.75	92.72	5261800	488,088,696	45,255,584
8/15/2011	93.61	94.87	84.33	85.69	4325900	488,088,696	41,824,320
8/22/2011	87.33	89.95	84.82	89.55	3650600	488,088,696	43,708,343
8/29/2011	90.22	94.46	87.92	88.27	2894900	488,088,696	43,083,589
9/6/2011	85.47	90.00	84.54	85.09	3433900	488,088,696	41,531,467
9/12/2011	83.94	92.26	82.15	91.64	3653900	488,088,696	44,728,448
9/19/2011	90.38	90.56	79.58	83.11	4171900	488,088,696	40,565,052
9/26/2011	83.88	87.31	81.66	81.67	3084300	488,088,696	39,862,204
10/3/2011	81.52	90.32	77.73	88.80	4338100	488,088,696	43,342,276
10/10/2011	90.08	94.42	89.35	91.97	2790300	483,076,978	44,428,590
10/17/2011	91.57	97.00	88.83	96.96	3534900	483,076,978	46,839,144
10/24/2011	96.91	103.80	94.24	102.02	3938800	483,076,978	49,283,513
10/31/2011	101.18	101.82	95.04	101.24	2858600	483,076,978	48,906,713
11/7/2011	100.80	103.17	97.74	102.88	2403900	483,076,978	49,698,959
11/14/2011	102.19	104.16	99.64	102.04	2492500	483,076,978	49,293,175
11/21/2011	100.69	101.07	95.15	95.16	2477100	483,076,978	45,969,605
11/28/2011	97.79	104.78	97.46	102.69	2667900	483,076,978	49,607,175
12/5/2011	104.49	105.99	99.91	101.75	2766200	483,076,978	49,153,083
12/12/2011	100.78	103.00	97.82	99.88	3382700	483,076,978	48,249,729
12/19/2011	100.14	106.02	98.28	105.53	2700100	483,076,978	50,979,113
12/27/2011	105.71	106.60	104.12	105.94	1273400	483,076,978	51,177,175

Note: Capitalization calulated using close of week price multiplied by the number of shares outstanding.

Market Value for Common Equity

Total Market Value for CSX, NSC, and UNP combined

Based on close price on last trading day of week and shares outstanding from 10-K and 10-Q.

	Trading Days For Week		Capitalization
	Beginning	**End**	**($000)**
1.	Monday, January 03, 2011	Friday, January 07, 2011	$95,937,594
2.	Monday, January 10, 2011	Friday, January 14, 2011	$98,315,907
3.	Tuesday, January 18, 2011	Friday, January 21, 2011	$95,089,574
4.	Monday, January 24, 2011	Friday, January 28, 2011	$93,528,191
5.	Monday, January 31, 2011	Friday, February 04, 2011	$93,839,549
6.	Monday, February 07, 2011	Friday, February 11, 2011	$98,571,761
7.	Monday, February 14, 2011	Friday, February 18, 2011	$98,532,145
8.	Tuesday, February 22, 2011	Friday, February 25, 2011	$96,350,715
9.	Monday, February 28, 2011	Friday, March 04, 2011	$97,839,070
10.	Monday, March 07, 2011	Friday, March 11, 2011	$97,961,468
11.	Monday, March 14, 2011	Friday, March 18, 2011	$98,487,788
12.	Monday, March 21, 2011	Friday, March 25, 2011	$101,693,224
13.	Monday, March 28, 2011	Friday, April 01, 2011	$101,918,518
14.	Monday, April 04, 2011	Friday, April 08, 2011	$99,153,318
15.	Monday, April 11, 2011	Friday, April 15, 2011	$100,309,728
16.	Monday, April 18, 2011	Thursday, April 21, 2011	$97,967,595
17.	Monday, April 25, 2011	Friday, April 29, 2011	$106,057,966
18.	Monday, May 02, 2011	Friday, May 06, 2011	$104,859,529
19.	Monday, May 09, 2011	Friday, May 13, 2011	$102,034,696
20.	Monday, May 16, 2011	Friday, May 20, 2011	$104,003,021
21.	Monday, May 23, 2011	Friday, May 27, 2011	$105,062,743
22.	Tuesday, May 31, 2011	Friday, June 03, 2011	$102,431,928
23.	Monday, June 06, 2011	Friday, June 10, 2011	$100,722,150
24.	Monday, June 13, 2011	Friday, June 17, 2011	$101,484,403
25.	Monday, June 20, 2011	Friday, June 24, 2011	$101,944,868
26.	Monday, June 27, 2011	Friday, July 01, 2011	$108,486,761
27.	Tuesday, July 05, 2011	Friday, July 08, 2011	$106,637,258
28.	Monday, July 11, 2011	Friday, July 15, 2011	$102,606,528
29.	Monday, July 18, 2011	Friday, July 22, 2011	$104,965,676
30.	Monday, July 25, 2011	Friday, July 29, 2011	$103,256,856
31.	Monday, August 01, 2011	Friday, August 05, 2011	$93,259,350
32.	Monday, August 08, 2011	Friday, August 12, 2011	$93,716,671
33.	Monday, August 15, 2011	Friday, August 19, 2011	$86,098,665
34.	Monday, August 22, 2011	Friday, August 26, 2011	$89,870,013
35.	Monday, August 29, 2011	Friday, September 02, 2011	$88,249,592
36.	Tuesday, September 06, 2011	Friday, September 09, 2011	$85,523,240
37.	Monday, September 12, 2011	Friday, September 16, 2011	$92,690,546
38.	Monday, September 19, 2011	Friday, September 23, 2011	$83,047,729
39.	Monday, September 26, 2011	Friday, September 30, 2011	$79,974,028
40.	Monday, October 03, 2011	Friday, October 07, 2011	$86,239,043
41.	Monday, October 10, 2011	Friday, October 14, 2011	$89,526,458
42.	Monday, October 17, 2011	Friday, October 21, 2011	$93,621,048
43.	Monday, October 24, 2011	Friday, October 28, 2011	$98,749,172
44.	Monday, October 31, 2011	Friday, November 04, 2011	$96,470,942
45.	Monday, November 07, 2011	Friday, November 11, 2011	$98,752,282
46.	Monday, November 14, 2011	Friday, November 18, 2011	$96,647,383
47.	Monday, November 21, 2011	Friday, November 25, 2011	$90,643,988
48.	Monday, November 28, 2011	Friday, December 02, 2011	$97,549,985
49.	Monday, December 05, 2011	Friday, December 09, 2011	$96,339,359
50.	Monday, December 12, 2011	Friday, December 16, 2011	$93,146,206
51.	Monday, December 19, 2011	Friday, December 23, 2011	$97,840,199
52.	Tuesday, December 27, 2011	Friday, December 30, 2011	$97,777,885
	Average		**$97,034,314**

STB-Style 5-Year Beta using SP 500 Price Index, Weighted RR Returns, 90-Day T-Bill as RF
Compounded T-Bill Rate

The GLM Procedure

Dependent Variable: ZRR

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	0.37296290	0.37296290	404.73	<.0001
Error	259	0.23867187	0.00092151		
Corrected Total	260	0.61163477			

R-Square	Coeff Var	Root MSE	ZRR Mean
0.609780	799.7241	0.030356	0.003796

Source	DF	Type I SS	Mean Square	F Value	Pr > F
ZSP5	1	0.37296290	0.37296290	404.73	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ZSP5	1	0.37296290	0.37296290	404.73	<.0001

STB-Style 5-Year Beta using SP 500 Price Index, Weighted RR Returns, 90-Day T-Bill as RF
Compounded T-Bill Rate

The GLM Procedure

Dependent Variable: ZRR

Parameter	Estimate	Standard Error	t Value	Pr > |t|
Intercept	0.003981627	0.00187904	2.12	0.0350
ZSP5	1.162320236	0.05777550	20.12	<.0001

Cost of Common Equity using the Multi-Stage Discounted Cash Flow Model

The cost of equity for each firm (r_i) in the Surface Transportation Board's interpretation of the Morningstar/Ibbotson three-stage DCF model is the solution to the following equation:[1]

$$\mathrm{MV}_{i0} = \sum_{t=1}^{5} \frac{\mathrm{CF}_{i0}(1+g_{i1})^t}{(1+r_i)^t} + \sum_{t=6}^{10} \frac{\mathrm{CF}_{i5}(1+g_{i2})}{(1+r_i)^t} + \frac{\dfrac{\mathrm{IBEI}_{i10}(1+g_{i3})}{r_i - g_{i3}}}{(1+r_i)^{10}} ,$$

where

MV_{i0} = market value of equity for firm *i* in year 0 (i.e., the year for which the cost of equity is being estimated);

CF_{it} = average cash flow for firm *i* at the end of year *t*;

g_{ij} = earnings growth rate for firm *i* in stage *j* (*j* = 1, 2, or 3);

r_i = the cost of equity for firm *i*; and

$\mathrm{IBEI}_{10} = \mathrm{IBEI}_0(1+g_1)^5(1+g_2)^5$.

Note that IBEI_0 is determined by the same process as CF_0 (See Table 15 in text).

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[1] *Cost of Capital Yearbook*, 2008, Morningstar, Inc., p. 24.

Cash Flow Calculation

CSX, Corp.	1	2	3	4	5	Total
	2007	2008	2009	2010	2011	
($ in millions)						
Revenue	10,030	11,255	9,041	10,636	11,743	52,705
Net Income	1,336	1,355	1,143	1,563	1,822	7,219
Extraordinary Items	100	-130	15	0	0	-15
Depreciation	890	914	903	947	976	4,630
Deferred Taxes	272	428	430	474	609	2,213
Capital Expenditures	1,773	1,719	1,426	1,840	2,297	9,055
Cash Flow	625	1,108	1,035	1,144	1,110	5,022
Cash Flow / Revenue	0.06231	0.09845	0.11448	0.10756	0.09452	0.09529
NIBEI / Revenue	0.12323	0.13194	0.12476	0.14695	0.15516	0.13725

Ibbotson Smoothed Cash Flow = $11,743 x 0.09529 = $1,118.93
Ibbotson Smoothed Net Income BEI = $11,743 x 0.13725 = $1,611.78

Cash Flow Calculation

Norfolk Southern	1	2	3	4	5	Total
	2007	2008	2009	2010	2011	
($ in millions)						
Revenue	9,432	10,661	7,969	9,516	11,172	48,750
Net Income	1,464	1,716	1,034	1,496	1,916	7,626
Extraordinary Items	0	0	0	0	0	0
Depreciation	786	815	845	826	869	4,141
Deferred Taxes	125	290	338	312	527	1,592
Capital Expenditures	1,341	1,558	1,299	1,470	2,160	7,828
Cash Flow	1,034	1,263	918	1,164	1,152	5,531
Cash Flow / Revenue	0.10963	0.11847	0.11520	0.12232	0.10311	0.11346
NIBEI / Revenue	0.15522	0.16096	0.12975	0.15721	0.17150	0.15643

Ibbotson Smoothed Cash Flow = $11,172 x 0.11346 = $1,267.54
Ibbotson Smoothed Net Income BEI = $11,172 x 0.15643 = $1,747.64

Cash Flow Calculation

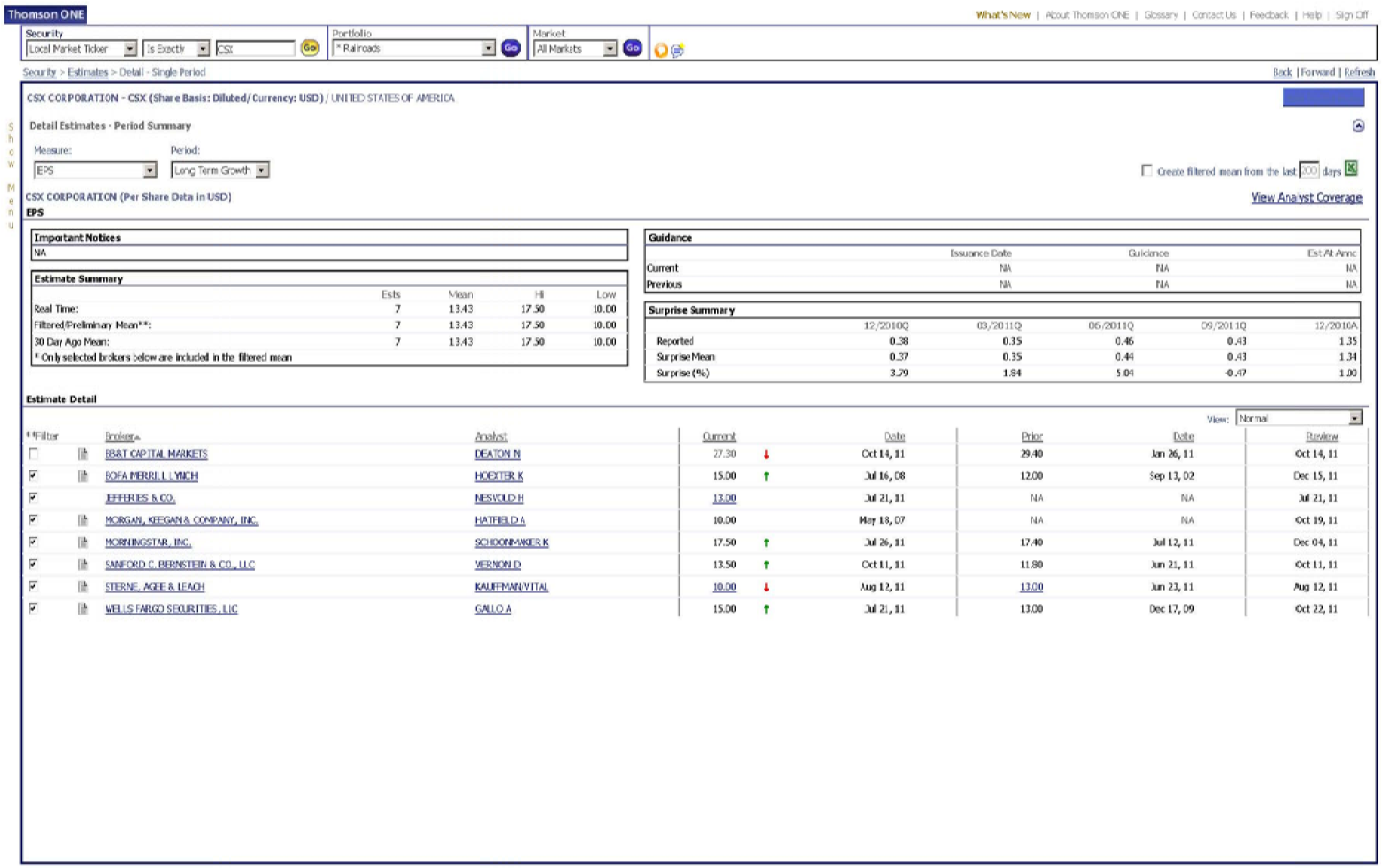
Union Pacific Corp.	1	2	3	4	5	Total
	2007	2008	2009	2010	2011	
($ in millions)						
Revenue	16,283	17,970	14,143	16,965	19,557	84,918
Net Income	1,855	2,335	1,890	2,780	3,292	12,152
Extraordinary Items	0	0	0	0	0	0
Depreciation	1,321	1,366	1,427	1,487	1,617	7,218
Deferred Taxes	332	545	718	672	986	3,253
Capital Expenditures	2,496	2,754	2,354	2,482	3,176	13,262
Cash Flow	1,012	1,492	1,681	2,457	2,719	9,361
Cash Flow / Revenue	0.06215	0.08303	0.11886	0.14483	0.13903	0.11024
NIBEI / Revenue	0.11392	0.12994	0.13364	0.16387	0.16833	0.14310

Ibbotson Smoothed Cash Flow = $19,557 x 0.11024 = $2,155.88
Ibbotson Smoothed Net Income BEI = $19,557 x 0.14310 = $2,798.66

2011 Median Growth Rates for MSDCF

	Analyst Growth Rates from IBES December 31								
Company	**Rate 1**	**Rate 2**	**Rate 3**	**Rate 4**	**Rate 5**	**Rate 6**	**Rate 7**	**Rate 8**	**Median**
CSX	27.3	15.0	13.0	10.0	17.5	13.5	10.0	15.0	**14.25**
NSC	27.4	15.0	14.0	12.0	15.9	5.6	13.5	15.0	**14.50**
UNP	18.1	11.0	17.0	15.0	15.4	15.2	15.0	15.0	**15.10**

Simple Average of Medians = 14.62 percent.



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Security: Local Market Ticker | Is Exactly | CSX — Portfolio: * Railroads — Market: All Markets

Security > Estimates > Detail - Single Period — Back | Forward | Refresh

CSX CORPORATION - CSX (Share Basis: Diluted/ Currency: USD) / UNITED STATES OF AMERICA

Show Menu

Detail Estimates - Period Summary

Measure: EPS — Period: Long Term Growth

Create filtered mean from the last 200 days

CSX CORPORATION (Per Share Data in USD) — View Analyst Coverage

EPS

Important Notices

NA

Estimate Summary

	Ests	Mean	Hi	Low
Real Time:	7	13.43	17.50	10.00
Filtered/Preliminary Mean**:	7	13.43	17.50	10.00
30 Day Ago Mean:	7	13.43	17.50	10.00

* Only selected brokers below are included in the filtered mean

Guidance

	Issuance Date	Guidance	Est/Ai Annc
Current	NA	NA	NA
Previous	NA	NA	NA

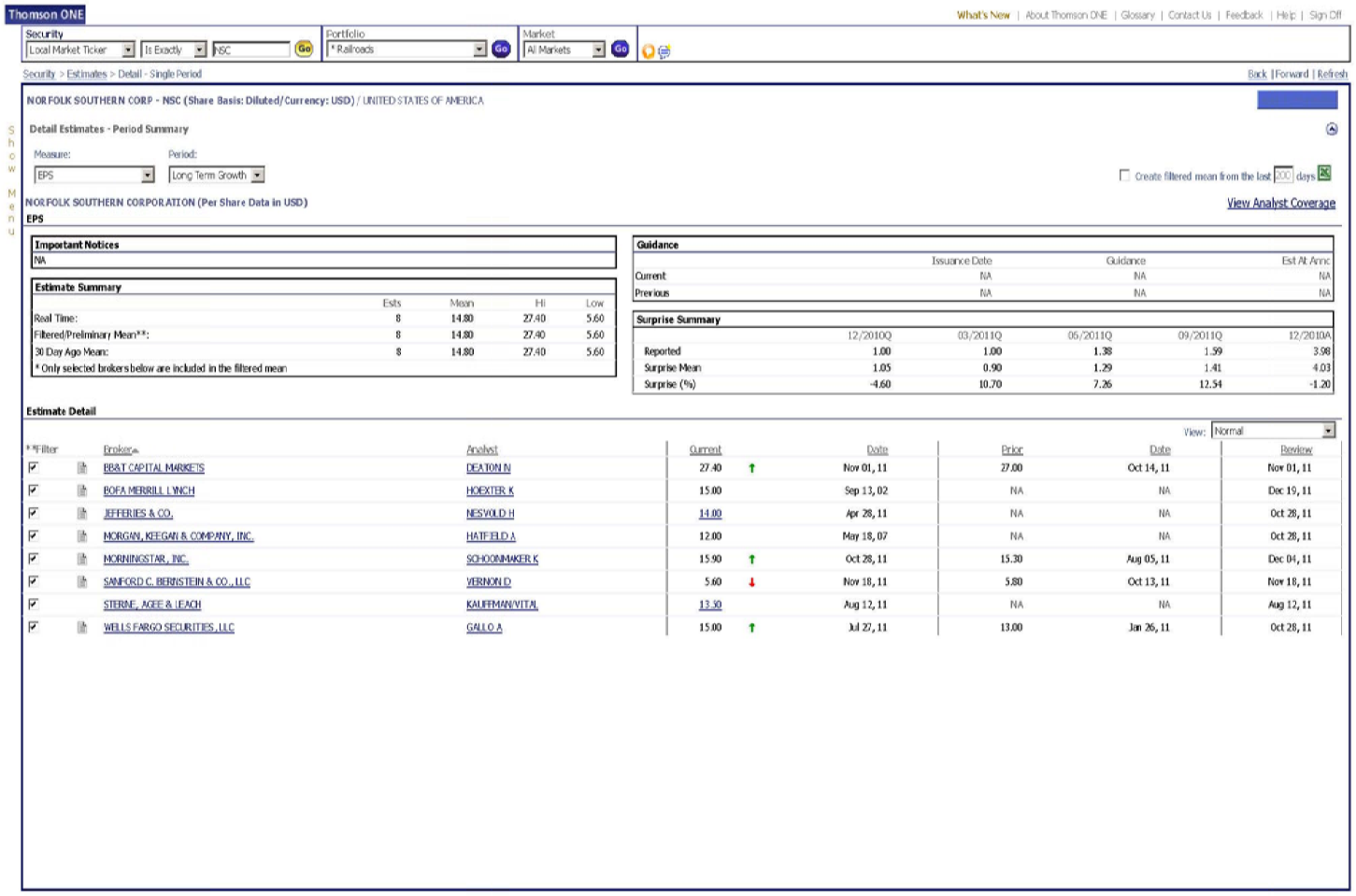
Surprise Summary

	12/2010Q	03/2011Q	06/2011Q	09/2011Q	12/2010A
Reported	0.38	0.35	0.46	0.43	1.35
Surprise Mean	0.37	0.35	0.44	0.43	1.34
Surprise (%)	3.29	1.84	5.04	-0.47	1.00

Estimate Detail

View: Normal

*Filter	Broker	Analyst	Current		Date	Prior	Date	Review
☐	BB&T CAPITAL MARKETS	DEATON N	27.30	↓	Oct 14, 11	29.40	Jan 26, 11	Oct 14, 11
☑	BOFA MERRILL LYNCH	HOEXTER K	15.00	↑	Jul 16, 08	12.00	Sep 13, 02	Dec 15, 11
☑	JEFFERIES & CO.	NEISWOLD H	13.00		Jul 21, 11	NA	NA	Jul 21, 11
☑	MORGAN, KEEGAN & COMPANY, INC.	HATFIELD A	10.00		May 18, 07	NA	NA	Oct 19, 11
☑	MORNINGSTAR, INC.	SCHOONMAKER K	17.50	↑	Jul 26, 11	17.40	Jul 12, 11	Dec 04, 11
☑	SANFORD C. BERNSTEIN & CO., LLC	VERNON D	13.50	↑	Oct 11, 11	11.80	Jun 21, 11	Oct 11, 11
☑	STERNE, AGEE & LEACH	KAUFFMAN/VITAL	10.00	↓	Aug 12, 11	13.00	Jun 23, 11	Aug 12, 11
☑	WELLS FARGO SECURITIES, LLC	GALLO A	15.00	↑	Jul 21, 11	13.00	Dec 17, 09	Oct 22, 11



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Security: Local Market Ticker | Is Exactly | NSC | Go — Portfolio: * Railroads | Go — Market: All Markets | Go

Security > Estimates > Detail - Single Period — Back | Forward | Refresh

NORFOLK SOUTHERN CORP - NSC (Share Basis: Diluted/Currency: USD) / UNITED STATES OF AMERICA

Show Menu

Detail Estimates - Period Summary

Measure: EPS — Period: Long Term Growth

Create filtered mean from the last 200 days

NORFOLK SOUTHERN CORPORATION (Per Share Data in USD)

View Analyst Coverage

EPS

Important Notices

NA

Estimate Summary

	Ests	Mean	Hi	Low
Real Time:	8	14.80	27.40	5.60
Filtered/Preliminary Mean**:	8	14.80	27.40	5.60
30 Day Ago Mean:	8	14.80	27.40	5.60

* Only selected brokers below are included in the filtered mean

Guidance

	Issuance Date	Guidance	Est At Annc
Current	NA	NA	NA
Previous	NA	NA	NA

Surprise Summary

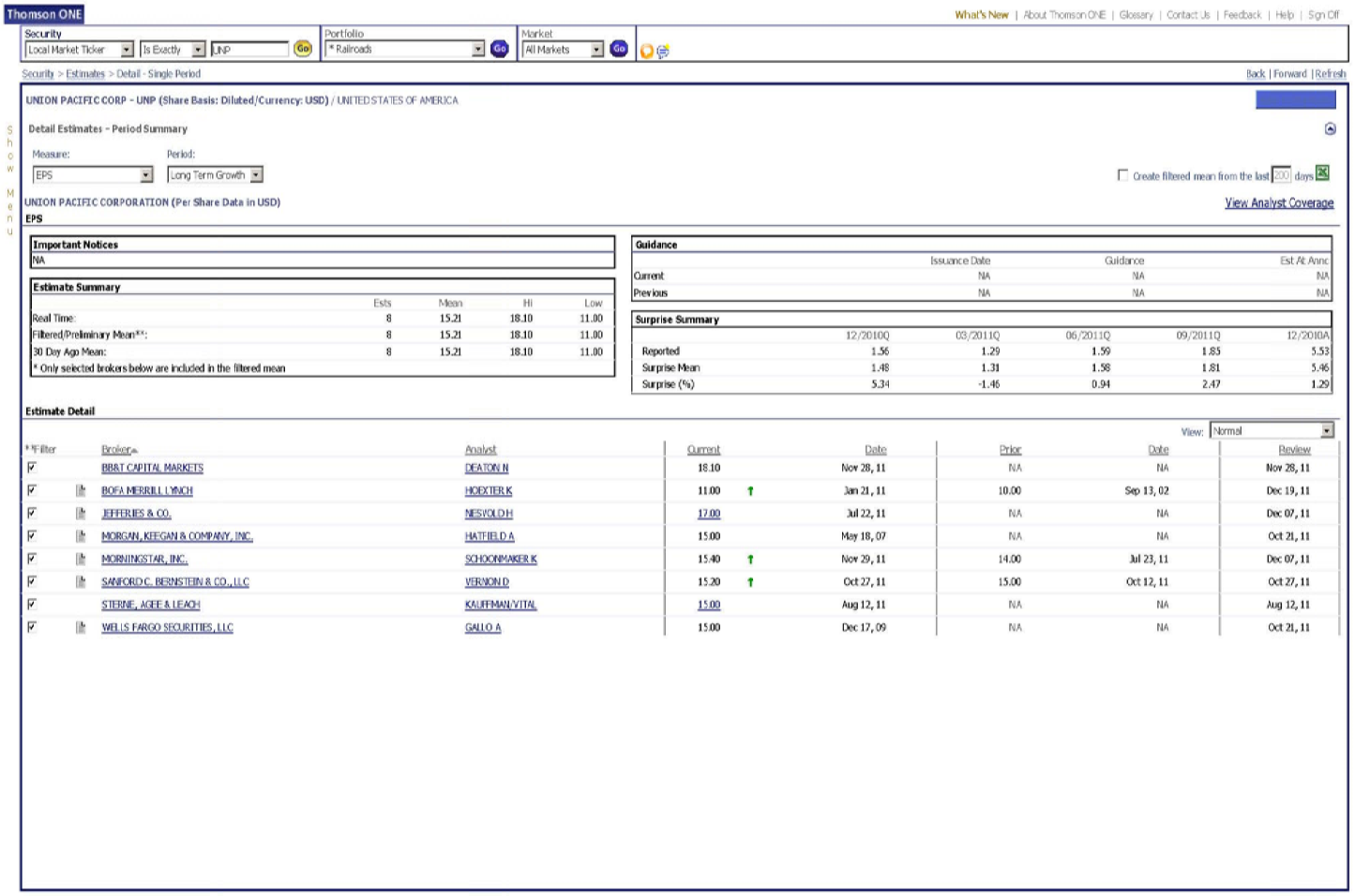
	12/2010Q	03/2011Q	06/2011Q	09/2011Q	12/2010A
Reported	1.00	1.00	1.38	1.59	3.98
Surprise Mean	1.05	0.90	1.29	1.41	4.03
Surprise (%)	-4.60	10.70	7.26	12.54	-1.20

Estimate Detail

View: Normal

*Filter	Broker	Analyst	Current		Date	Prior	Date	Review
☑	BB&T CAPITAL MARKETS	DEATON N	27.40	↑	Nov 01, 11	27.00	Oct 14, 11	Nov 01, 11
☑	BOFA MERRILL LYNCH	HOEXTER K	15.00		Sep 13, 02	NA	NA	Dec 19, 11
☑	JEFFERIES & CO.	NESVOLD H	14.00		Apr 28, 11	NA	NA	Oct 28, 11
☑	MORGAN, KEEGAN & COMPANY, INC.	HATFIELD A	12.00		May 18, 07	NA	NA	Oct 28, 11
☑	MORNINGSTAR, INC.	SCHOONMAKER K	15.90	↑	Oct 28, 11	15.30	Aug 05, 11	Dec 04, 11
☑	SANFORD C. BERNSTEIN & CO., LLC	VERNON D	5.60	↓	Nov 18, 11	5.80	Oct 13, 11	Nov 18, 11
☑	STERNE, AGEE & LEACH	KAUFFMAN/VITAL	13.30		Aug 12, 11	NA	NA	Aug 12, 11
☑	WELLS FARGO SECURITIES, LLC	GALLO A	15.00	↑	Jul 27, 11	13.00	Jan 26, 11	Oct 28, 11

2011 Median Growth Rates for MSDCF
NSC



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Security: Local Market Ticker | Is Exactly | UNP | Go — Portfolio: * Railroads | Go — Market: All Markets | Go

Security > Estimates > Detail - Single Period — Back | Forward | Refresh

Show Menu

UNION PACIFIC CORP - UNP (Share Basis: Diluted/Currency: USD) / UNITED STATES OF AMERICA

Detail Estimates - Period Summary

Measure: EPS — Period: Long Term Growth

Create filtered mean from the last 200 days

UNION PACIFIC CORPORATION (Per Share Data in USD)

View Analyst Coverage

EPS

Important Notices

NA

Estimate Summary

	Ests	Mean	Hi	Low
Real Time:	8	15.21	18.10	11.00
Filtered/Preliminary Mean**:	8	15.21	18.10	11.00
30 Day Ago Mean:	8	15.21	18.10	11.00

* Only selected brokers below are included in the filtered mean

Guidance

	Issuance Date	Guidance	Est At Annc
Current	NA	NA	NA
Previous	NA	NA	NA

Surprise Summary

	12/2010Q	03/2011Q	06/2011Q	09/2011Q	12/2010A
Reported	1.56	1.29	1.59	1.85	5.53
Surprise Mean	1.48	1.31	1.58	1.81	5.46
Surprise (%)	5.34	-1.46	0.94	2.47	1.29

Estimate Detail

View: Normal

* Filter	Broker	Analyst	Current		Date	Prior	Date	Review
☑	BB&T CAPITAL MARKETS	DEATON N	18.10		Nov 28, 11	NA	NA	Nov 28, 11
☑	BOFA MERRILL LYNCH	HOEXTER K	11.00	↑	Jan 21, 11	10.00	Sep 13, 02	Dec 19, 11
☑	JEFFERIES & CO.	NIESVOLD H	17.00		Jul 22, 11	NA	NA	Dec 07, 11
☑	MORGAN, KEEGAN & COMPANY, INC.	HATFIELD A	15.00		May 18, 07	NA	NA	Oct 21, 11
☑	MORNINGSTAR, INC.	SCHOONMAKER K	15.40	↑	Nov 29, 11	14.00	Jul 23, 11	Dec 07, 11
☑	SANFORD C. BERNSTEIN & CO., LLC	VERNON D	15.20	↑	Oct 27, 11	15.00	Oct 12, 11	Oct 27, 11
☑	STERNE, AGEE & LEACH	KAUFFMAN/VITAL	15.00		Aug 12, 11	NA	NA	Aug 12, 11
☑	WELLS FARGO SECURITIES, LLC	GALLO A	15.00		Dec 17, 09	NA	NA	Oct 21, 11

Market Value Data for MSDCF
Stock Price for CSX - December 30, 2011

CSX Historical Prices | CSX Corporation Common Stock Stock - Yahoo! Finance

Set Date Range

Start Date: Dec 20 2006 Eg. Jan 1, 2010
End Date: Jan 4 2012

- (•) Daily
- ( ) Weekly
- ( ) Monthly
- ( ) Dividends Only

Get Prices

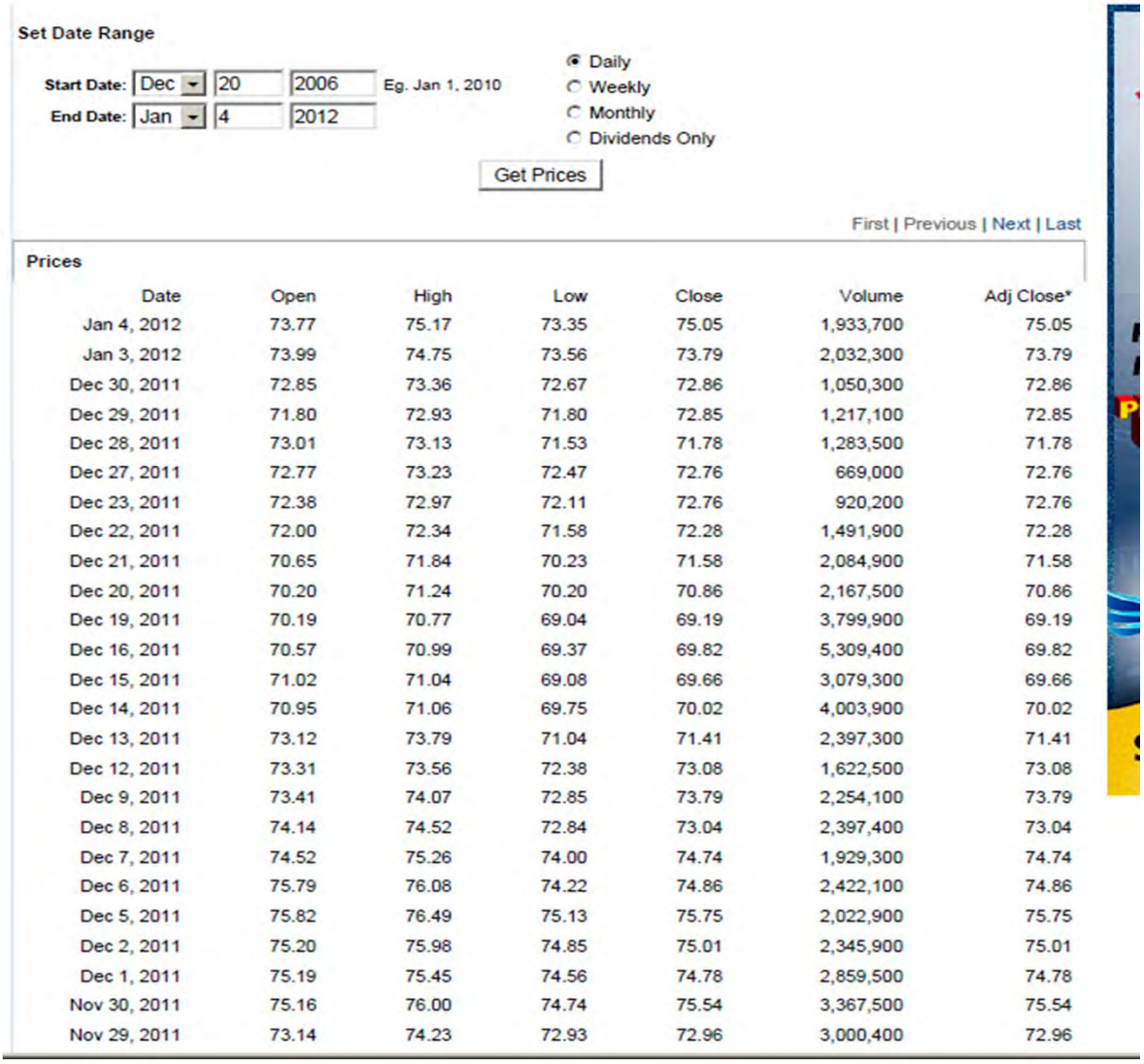
First | Previous | Next | Last

Prices

Date	Open	High	Low	Close	Volume	Adj Close*
Jan 4, 2012	21.98	22.76	21.90	22.66	11,617,200	22.66
Jan 3, 2012	21.61	22.22	21.55	22.04	11,040,200	22.04
Dec 30, 2011	20.99	21.18	20.96	21.06	3,788,800	21.06
Dec 29, 2011	20.93	21.09	20.77	21.02	4,027,800	21.02
Dec 28, 2011	21.31	21.34	20.84	20.86	4,300,700	20.86
Dec 27, 2011	21.33	21.55	21.24	21.25	3,410,400	21.25
Dec 23, 2011	21.13	21.47	21.10	21.34	4,308,600	21.34
Dec 22, 2011	21.05	21.16	20.94	21.09	9,577,000	21.09
Dec 21, 2011	20.96	21.09	20.60	21.02	9,090,600	21.02
Dec 20, 2011	20.56	20.99	20.51	20.94	7,267,700	20.94
Dec 19, 2011	20.58	20.66	20.16	20.24	9,374,800	20.24
Dec 16, 2011	20.20	20.52	20.13	20.41	17,666,100	20.41
Dec 15, 2011	20.43	20.49	19.87	19.98	11,052,800	19.98
Dec 14, 2011	20.25	20.35	19.96	20.04	11,890,300	20.04
Dec 13, 2011	21.09	21.16	20.26	20.43	12,273,400	20.43
Dec 12, 2011	21.13	21.16	20.68	20.90	4,827,900	20.90
Dec 9, 2011	21.18	21.42	21.00	21.32	7,147,200	21.32
Dec 8, 2011	21.37	21.46	20.97	21.04	9,006,500	21.04
Dec 7, 2011	21.69	21.79	21.28	21.52	7,690,300	21.52
Dec 6, 2011	22.09	22.18	21.57	21.83	6,387,300	21.83
Dec 5, 2011	22.01	22.29	21.84	22.03	8,009,700	22.03
Dec 2, 2011	22.04	22.23	21.58	21.65	9,773,400	21.65
Dec 1, 2011	21.64	21.92	21.46	21.73	7,572,800	21.73
Nov 30, 2011	21.43	21.74	21.26	21.71	8,975,000	21.71
Nov 29, 2011	20.77	21.05	20.65	20.68	5,970,700	20.68

Market Value Data for MSDCF
Stock Price for NSC - December 30, 2011

NSC Historical Prices | Norfolk Southern Corporation Co Stock - Yahoo! Finance



Set Date Range

Start Date: Dec 20 2006 Eg. Jan 1, 2010
End Date: Jan 4 2012

- (•) Daily
- ( ) Weekly
- ( ) Monthly
- ( ) Dividends Only

Get Prices

First | Previous | Next | Last

Prices

Date	Open	High	Low	Close	Volume	Adj Close*
Jan 4, 2012	73.77	75.17	73.35	75.05	1,933,700	75.05
Jan 3, 2012	73.99	74.75	73.56	73.79	2,032,300	73.79
Dec 30, 2011	72.85	73.36	72.67	72.86	1,050,300	72.86
Dec 29, 2011	71.80	72.93	71.80	72.85	1,217,100	72.85
Dec 28, 2011	73.01	73.13	71.53	71.78	1,283,500	71.78
Dec 27, 2011	72.77	73.23	72.47	72.76	669,000	72.76
Dec 23, 2011	72.38	72.97	72.11	72.76	920,200	72.76
Dec 22, 2011	72.00	72.34	71.58	72.28	1,491,900	72.28
Dec 21, 2011	70.65	71.84	70.23	71.58	2,084,900	71.58
Dec 20, 2011	70.20	71.24	70.20	70.86	2,167,500	70.86
Dec 19, 2011	70.19	70.77	69.04	69.19	3,799,900	69.19
Dec 16, 2011	70.57	70.99	69.37	69.82	5,309,400	69.82
Dec 15, 2011	71.02	71.04	69.08	69.66	3,079,300	69.66
Dec 14, 2011	70.95	71.06	69.75	70.02	4,003,900	70.02
Dec 13, 2011	73.12	73.79	71.04	71.41	2,397,300	71.41
Dec 12, 2011	73.31	73.56	72.38	73.08	1,622,500	73.08
Dec 9, 2011	73.41	74.07	72.85	73.79	2,254,100	73.79
Dec 8, 2011	74.14	74.52	72.84	73.04	2,397,400	73.04
Dec 7, 2011	74.52	75.26	74.00	74.74	1,929,300	74.74
Dec 6, 2011	75.79	76.08	74.22	74.86	2,422,100	74.86
Dec 5, 2011	75.82	76.49	75.13	75.75	2,022,900	75.75
Dec 2, 2011	75.20	75.98	74.85	75.01	2,345,900	75.01
Dec 1, 2011	75.19	75.45	74.56	74.78	2,859,500	74.78
Nov 30, 2011	75.16	76.00	74.74	75.54	3,367,500	75.54
Nov 29, 2011	73.14	74.23	72.93	72.96	3,000,400	72.96

Market Value Data for MSDCF
Stock Price for UNP - December 30, 2011

UNP Historical Prices | Union Pacific Corporation Commo Stock - Yahoo! Finance

Set Date Range

Start Date: Dec 20 2006 Eg. Jan 1, 2010
End Date: Jan 4 2012

- (•) Daily
- ( ) Weekly
- ( ) Monthly
- ( ) Dividends Only

Get Prices

First | Previous | Next | Last

Prices

Date	Open	High	Low	Close	Volume	Adj Close*
Jan 4, 2012	107.33	109.19	107.28	108.78	1,972,200	108.78
Jan 3, 2012	108.08	109.10	107.88	108.00	2,651,400	108.00
Dec 30, 2011	105.76	106.60	105.41	105.94	1,693,000	105.94
Dec 29, 2011	105.00	105.55	104.45	105.35	1,207,100	105.35
Dec 28, 2011	105.69	105.99	104.12	104.47	1,224,000	104.47
Dec 27, 2011	105.71	106.27	105.20	105.69	969,500	105.69
Dec 23, 2011	104.58	106.02	104.50	105.53	1,554,400	105.53
Dec 22, 2011	103.08	105.03	102.85	104.22	2,790,900	104.22
Dec 21, 2011	101.46	103.13	99.93	103.02	3,598,400	103.02
Dec 20, 2011	100.35	101.66	100.04	101.20	2,762,400	101.20
Dec 19, 2011	100.14	100.91	98.28	98.49	2,794,500	98.49
Dec 16, 2011	99.79	101.05	99.23	99.88	4,932,400	99.88
Dec 15, 2011	100.00	100.41	97.82	98.79	3,172,800	98.79
Dec 14, 2011	98.94	99.84	98.29	98.62	3,991,500	98.62
Dec 13, 2011	101.83	103.00	99.56	100.19	3,034,900	100.19
Dec 12, 2011	100.78	101.54	99.79	100.60	1,782,300	100.60
Dec 9, 2011	100.55	102.10	99.91	101.75	2,576,300	101.75
Dec 8, 2011	102.22	102.22	100.01	100.37	3,148,800	100.37
Dec 7, 2011	102.54	103.10	100.98	102.52	2,288,100	102.52
Dec 6, 2011	105.08	105.16	101.39	102.84	3,376,400	102.84
Dec 5, 2011	104.49	105.99	103.69	104.59	2,441,600	104.59
Dec 2, 2011	104.00	104.78	102.39	102.69	2,754,000	102.69
Dec 1, 2011	102.76	103.65	101.94	102.93	2,975,700	102.93
Nov 30, 2011	102.43	103.56	101.69	103.41	3,100,000	103.41
Nov 29, 2011	98.59	100.70	98.39	99.23	2,223,300	99.23

Market Value Data for MSDCF
Shares Outstanding for CSX - December 30, 2011

10-Q 1 csx0930201110-q.htm Q3 2011 FORM 10-Q

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

(X) QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2011

OR

( ) TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number 1-8022

CSX CORPORATION

(Exact name of registrant as specified in its charter)

Virginia		62-1051971
(State or other jurisdiction of incorporation or organization)		*(I.R.S. Employer Identification No.)*
500 Water Street, 15th Floor, Jacksonville, FL	**32202**	**(904) 359-3200**
(Address of principal executive offices)	*(Zip Code)*	*(Telephone number, including area code)*

No Change
(Former name, former address and former fiscal year, if changed since last report.)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes (X) No ( )

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
Yes (X) No ( )

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (check one)

Large Accelerated Filer (X) Accelerated Filer ( )
Non-accelerated Filer ( ) Smaller Reporting Company ( )

Indicate by a check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
Yes ( ) No (X)

There were 1,049,953,020 shares of common stock outstanding on September 30, 2011 (the latest practicable date that is closest to the filing date).

1

Market Value Data for MSDCF
Shares Outstanding for NSC - December 30, 2011

10-Q 1 nsc20110930.htm

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549
FORM 10-Q

(X) QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 for the quarterly period ended **SEPTEMBER 30, 2011**

( ) TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 for the transition period from _____ to_____

Commission file number 1-8339

NORFOLK SOUTHERN CORPORATION
(Exact name of registrant as specified in its charter)

Virginia	**52-1188014**
(State or other jurisdiction of incorporation)	(IRS Employer Identification No.)
Three Commercial Place **Norfolk, Virginia**	**23510-2191**
(Address of principal executive offices)	(Zip Code)

(757) 629-2680
(Registrant's telephone number, including area code)

No Change
(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes [X] No [ ]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
Yes [X] No [ ]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act.
Large accelerated filer [X] Accelerated filer [ ] Non-accelerated filer [ ] Smaller reporting company [ ]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
Yes [ ] No [X]

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at September 30, 2011
Common Stock ($1.00 par value per share)	336,106,217 (excluding 20,320,777 shares held by the registrant's consolidated subsidiaries)

Market Value Data for MSDCF
Shares Outstanding for UNP - December 30, 2011

(Mark One)

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2011

OR

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number 1-6075

UNION PACIFIC CORPORATION

(Exact name of registrant as specified in its charter)

UTAH	13-2626465
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

1400 DOUGLAS STREET, OMAHA, NEBRASKA
(Address of principal executive offices)

68179
(Zip Code)

(402) 544-5000
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

☑ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

☑ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☑ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

☐ Yes ☑ No

As of October 14, 2011, there were 483,076,978 shares of the Registrant's Common Stock outstanding.

2011 Cost of Equity Using STB's MSDCF

Company	**CSX**		**NSC**		**UNP**	
Year	2011		2011		2011	
Inputs						
Initial Cash Flow	$1,118.93		$1,267.54		$2,155.88	
Input for Terminal C.F.	$1,611.78		$1,747.64		$2,798.66	
Stage One Growth	14.25%		14.50%		15.10%	
Stage Two Growth	14.62%		14.62%		14.62%	
Stage Three Growth	5.19%		5.19%		5.19%	
Year	**Val. 12/31**	**Pres Val.**	**Val. 12/31**	**Pres Val.**	**Val. 12/31**	**Pres Val.**
1	$1,278	$1,095	$1,451	$1,243	$2,481	$2,158
2	1,461	1,072	1,662	1,218	2,856	2,160
3	1,669	1,050	1,903	1,195	3,287	2,162
4	1,906	1,028	2,179	1,171	3,784	2,164
5	2,178	1,006	2,495	1,148	4,355	2,165
6	2,497	988	2,859	1,127	4,992	2,158
7	2,861	970	3,277	1,106	5,721	2,151
8	3,280	953	3,756	1,086	6,558	2,144
9	3,759	936	4,305	1,066	7,516	2,137
10	4,308	919	4,934	1,046	8,615	2,130
Terminal	56,690	12,094	61,731	13,083	119,933	29,649
Sum of Pres. Values		$22,112.01		$24,488.70		$51,177.18
Market Value (input)		$22,112.01		$24,488.70		$51,177.18
Cost of Equity	**16.71%**		**16.78%**		**15.00%**	
Prev. Yr. Cost of Equity	13.97%		15.05%		13.76%	

Comparison of Bond Data Sources

Comparison of Available Data	**Standard & Poor's**	**Bloomberg**
Number of bonds with trading data available	30	65
Book value of traded bonds. (millions)	$8,701	$22,228
Traded bonds' book value as percent of total	38%	97%
Bond cost of debt (without flotation costs)	4.305%	3.913%
Market value for all bonds. (millions)	$21,973	$23,366

Comparison of Same Data	**Standard & Poors**	**Bloomberg**
Number of bonds	30	30
Bond cost of debt (without flotation costs)	4.305%	4.299%
Market value for all bonds. (millions)	$21,973	$21,982

CERTIFICATE OF SERVICE

I hereby certify that on this 20th day of April, 2012, I served by first class mail, postage prepaid, a copy of the forgoing on the following:

Robert D. Rosenberg
Slover & Loftus
1224 Seventeenth St, NW
Washington, DC 20036-3003

Kim N. Hillenbrand
Snavely King Majoros O'Connor, Inc.
8100 Professional Place, Suite 306
Landover, MD 20785

Rosita N'Dikwe