2024 Capitalization Rate Study
Railroads

Completed: April 26, 2024

MONTANA DEPARTMENT OF REVENUE

Yield Capitalization Rate Conclusion
Industry: Railroads
2024 Assessment Year

Capital Structure [1]

Equity	**80.00%**	
Debt	**20.00%**	

Equity Cost of Capital

		Weighting
Capital Asset Pricing Model - Ex Post [2]	11.73%	56%
Capital Asset Pricing Model - Ex Ante [2]	9.33%	14%
3 Stage Dividend Discount Model - Dividends [3]	7.09%	15%
3 Stage Dividend Discount Model - Earnings [3]	8.69%	15%
Weighted Average	10.24%	100%
Selected Cost of Equity	**10.24%**	

Debt Cost of Capital

		Weighting
Aa - Mergent's - Avg. YTM of Aa Rated Corporate Bonds [4]	5.05%	0%
A - Mergent's - Avg. YTM of A Rated Corporate Bonds [4]	5.25%	67%
Baa - Mergent's - Avg. YTM of Baa Rated Corporate Bonds [4]	5.64%	33%
Ba - Avg. of MTDOR Debt Study[5], Bloomberg and Capital IQ	6.70%	0%
B - Avg. of MTDOR Debt Study[5], Bloomberg and Capital IQ	7.67%	0%
Weighted Average	5.38%	100%
Selected Cost of Debt	**5.38%**	

Weighted Average Cost of Capital (WACC)

Source of Capital	Capital Structure	Cost of Capital	Marginal Tax Rate	Pre-tax Cost of Capital	After-tax Cost of Capital
Equity	80.00%	10.24%		8.19%	8.19%
Debt	20.00%	5.38%	24.00%	1.08%	0.82%
WACC	**100.00%**			**9.27%**	**9.01%**
WACC (Rounded)					**9.05%**

Notes
[1] From worksheet: Capital Structure
[2] From worksheet: Capital Asset Pricing Model Summary
[3] From worksheet: Yield Equity Summary
[4] January 2024, Mergent Bond Record
[5] Montana Department of Revenue High Yield Debt Study

MONTANA DEPARTMENT OF REVENUE
Direct Capitalization Rate Conclusion
Industry: Railroads
2024 Assessment Year

Capital Structure [1]
Equity	**80.00%**
Debt	**20.00%**

Equity Capitalization Rate [2]
NOI After-tax	**4.90%**
GCF	**6.90%**

Debt Capitalization Rate [3]
Calculated Current Yield	**4.76%**

NOI After-tax Direct Capitalization Rate

Source of Capital	Capital Structure	Capitalization Rate	Marginal Tax Rate	Pre-tax Capitalization Rate	After-tax Capitalization Rate
Equity	80.00%	4.90%		3.92%	3.92%
Debt	20.00%	4.76%	24.00%	0.95%	0.72%
Total	**100.00%**			**4.87%**	**4.64%**
Total (Rounded)					**4.65%**

GCF Direct Capitalization Rate

Source of Capital	Capital Structure	Capitalization Rate	Marginal Tax Rate	Pre-tax Capitalization Rate	After-tax Capitalization Rate
Equity	80.00%	6.90%		5.52%	5.52%
Debt	20.00%	4.76%	24.00%	0.95%	0.72%
Total	**100.00%**			**6.47%**	**6.24%**
Total (Rounded)					**6.25%**

Notes:
[1] From worksheet: Capital Structure
[2] From worksheet: Direct Equity Summary
[3] From worksheet: Calculated Current Yield

MONTANA DEPARTMENT OF REVENUE
Selection of Guideline Companies
Industry: Railroads
2024 Assessment Year

Screening Requirements:

The universe of companies is all companies listed in Value Line under the Railroad industry.

Companies were then selected using the following screening criteria:

   1. Primarily provides rail, intermodal transportation, and rail-to-truck transload services.

   2. Actively traded on an American exchange.

   3. Headquartered / incorporated in the United States

   4. No significant merger & acquisition activity during the year.

Company Ticker	Primarily provide rail services	Actively Traded on an American Exchange	Headquartered/ Incorporated in the U.S.	Consider as Potential Guideline Company	Not Engaged in Material M&A Activity	Use as Guideline Company	Note
CNI			No				
CP			No				
CSX	Yes	Yes	Yes	Yes	Yes	Yes	
GATX	No						
GBX	No						
NSC	Yes	Yes	Yes	Yes	Yes	Yes	
RAIL	No						
TRN	No						
UNP	Yes	Yes	Yes	Yes	Yes	Yes	
USDP	No						
WAB	No						

Support for Capital Structure
Industry: Railroads
2024 Assessment Year

($ and Shares Outstanding In Millions, Except Per Share Amounts)

A	B	C	D	E	F	G	H	I	J	K	L	M	N
Ticker	Company	Industry Group	Financial Strength	Shares Outstanding	End of Year Closing Stock Price	MV Common Stock	MV Preferred Stock	MV Long Term Debt	PV of Operating Leases	Total Common, Preferred, LT Debt, & Op Leases	% Common	% Preferred	% Debt & Op Leases
		Value Line	*Value Line*	*10-K*	*Yahoo*	*ExF*	*10-K*	*10-K*	*10-K*	*G+H+I+J*	*G/K*	*H/K*	*(I+J)/K*
							[Note 1]	*[Note 2]*					
CSX	CSX Corp.	RAILROAD	B++	1,959	34.67	67,910	0	17,528	559	85,997	79%	0%	21%
NSC	Norfolk Southern	RAILROAD	A+	226	236.38	53,347	0	16,631	392	70,370	76%	0%	24%
UNP	Union Pacific	RAILROAD	A+	610	245.62	149,755	0	28,479	1,600	179,834	83%	0%	17%
All Companies						271,012	0	62,638	2,551	336,201	**81%**	**0%**	**19%**
Average											**79%**	**0%**	**21%**
Median											**79%**	**0%**	**21%**
High											83%	0%	24%
Low											76%	0%	17%
Selected											**80%**		**20%**

Notes

[1] Market value of preferred stock assumed to equal book value

[2] Market value of debt is fair value of long term debt from 10-K notes

MCA 15-1-210, rationale for changes to guideline companies:

2024 - No changes to guideline companies.

	Median		
Current Year	79%	0%	21%
Prior Year	80%	0%	20%
2 Years Prior	81%	0%	19%
3 Year Average	80%	0%	20%

MONTANA DEPARTMENT OF REVENUE

Capital Asset Pricing Model (CAPM)
Industry: Railroads
2024 Assessment Year

$$k_e = R_f + \beta \times ERP$$

		Ex Post	Ex Ante
$k_{e=}$	Cost of Equity	**11.73%**	**9.33%**
$R_f =$	Risk Free Rate	4.20%	4.20%
$\beta =$	Beta	1.05	1.05
$ERP =$	Equity Risk Premium (R_m - R_f)	7.17%	4.88%
$R_m =$	Market Rate of Return	11.37%	9.08%

Risk Free Rate Measures (R_f):

The Value Line Investment Survey: Selection & Opinion[1]
January 5, 2024   Page 841
Selected Yields on Taxable U.S. Treasury Securities as of 12/22/23
- 10-year   3.90%
- 30-year   4.05%

Federal Reserve Statistical Release[2]
U.S. government securities, Treasury constant maturities, Nominal, December 29, 2023
- 10-year   3.88%
- 20-year   4.20%
- 30-year   4.03%
- **Risk Free Rate Selected**   **4.20%**

Notes
[1] "Value Line Selection & Opinion", Value Line (January 5, 2024)
[2] https://www.federalreserve.gov/releases/h15/

Ex Post - Equity Risk Premium Measures (ERP = Rm - Rf)

Kroll, 2024 Cost of Capital Navigator

		R_m	R_f	ERP
ERP "Historical" - *Ex Post*	Arithmetic Avg.	11.31%	4.14%	7.17%
ERP "Supply-side" - *Ex Post*	Arithmetic Avg.	10.36%	4.14%	6.22%
Ex Post Equity Risk Premium Selected		**11.37%**	**4.20%**	**7.17%**

Capital Asset Pricing Model (CAPM)
Industry: Railroads
2024 Assessment Year

$$k_e = R_f + \beta \times ERP$$

Ex Ante - Equity Risk Premium Measures (ERP = Rm - Rf)

DOR 3 Stage Dividend Growth Model, S & P 500, See Exhibit

	R_m	R_f	ERP
ERP - *Ex Ante*	7.22%	4.20%	3.02%

Kroll, 2024 Cost of Capital Navigator

	R_m	R_f	ERP
ERP "Conditional" - *Ex Ante*	9.00%	3.50%	5.50%

Damodaran Implied ERP (Jan 5, 2024)

	R_m	R_f	ERP
Implied Premium - *Ex Ante* - Trailing 12 month, with adjusted payout	8.45%	3.88%	4.57%
Implied Premium - *Ex Ante* - Trailing 12 month cash yields	8.48%	3.88%	4.60%
Implied Premium - *Ex Ante* - Average CF yield last 10 years	9.95%	3.88%	6.07%
Implied Premium - *Ex Ante* - Net cash yield	8.31%	3.88%	4.43%
Implied Premium - *Ex Ante* - Normalized earnings and payout	8.17%	3.88%	4.29%
Damodaran Average	8.67%	3.88%	4.79%

	R_m	R_f	ERP
Average	8.51%		4.64%
Median	8.45%		4.57%
High	9.95%		6.07%
Low	7.22%		3.02%
Ex Ante Equity Risk Premium Selected	**9.08%**	**4.20%**	**4.88%**

MONTANA DEPARTMENT OF REVENUE
Support for Beta Selection in CAPM
Industry: Railroads
2024 Assessment Year

A	B	C	D	E
		Industry Group	**Financial Strength**	
Ticker	**Company**			**Beta**
		Value Line	*Value Line*	*Value Line*
CSX	CSX Corp.	RAILROAD	B++	1.00
NSC	Norfolk Southern	RAILROAD	A+	1.05
UNP	Union Pacific	RAILROAD	A+	1.05
Average				**1.03**
Median				**1.05**
Low				1.05
High				1.00
Selected				**1.05**

MONTANA DEPARTMENT OF REVENUE
Inflation & Real Growth
Industry: Railroads
2024 Assessment Year

				Nominal Growth	
A	**B**	**C**	**D**	**E**	**F**
Source Description	**Inflation (CPI)**	**Real Growth (GDP)**	**Nominal Growth**	**Low**	**High**
Livingston Survey[1]	2.30%	2.00%	4.30%		
Survey of Professional Forecasters[2]	2.24%	2.00%	4.24%		
Congressional Budget Office[3]	2.20%	1.90%	4.10%		
Average	**2.25%**	**1.97%**	**4.21%**		
Median	**2.24%**	**2.00%**	**4.24%**		
High	2.30%	2.00%	4.30%		
Low	2.20%	1.90%	4.10%		
Selected	**2.25%**	**2.00%**	**4.25%**	**4.10%**	**4.30%**

Inflationary Trend Factors

Year	Dec. CPI-U Index	Percent Change From Previous	Dec. to Dec. Conversion Factor	Annual Avg. CPI-U Index	Percent Change From Previous	Annual Conversion Factor
	Note [5]	*Note [6]*	*Note [7]*	*Note [5]*	*Note [6]*	*Note [7]*
2012	229.601	1.7%	1.3360	229.594	2.0%	1.3271
2013	233.049	1.5%	1.3162	232.957	1.4%	1.3080
2014	234.812	0.8%	1.3063	236.736	1.6%	1.2871
2015	236.525	0.7%	1.2969	237.017	0.1%	1.2856
2016	241.432	2.0%	1.2705	240.007	1.2%	1.2696
2017	246.524	2.1%	1.2443	245.120	2.1%	1.2431
2018	251.233	1.9%	1.2210	251.107	2.4%	1.2134
2019	256.974	2.2%	1.1937	255.657	1.8%	1.1918
2020	260.474	1.3%	1.1776	258.811	1.2%	1.1773
2021	278.802	6.6%	1.1002	270.970	4.5%	1.1245
2022	296.797	6.1%	1.0335	292.655	7.4%	1.0412
2023	306.746	3.2%	1.0000	304.702	4.0%	1.0000

Notes

[1] Federal Reserve Bank of Philadelphia The Livingston Survey December 15, 2023 Table 3 Inflation Rate and Real GDP mean
https://www.philadelphiafed.org/research-and-data/real-time-center/livingston-survey
[2] Federal Reserve Bank of Philadelphia Survey of Professional Forecasters February 9, 2024 Table 8 and Table 9 Average over next 10-Year mean
https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/survey-of-professional-forecasters
[3] The Budget and Economic Outlook: 2024 To 2034, Table 2-1
https://www.cbo.gov/about/products/budget-economic-data#4
[5] Historical Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average, all items, index averages (1982-84=100, unless otherwise noted)
https://www.bls.gov/cpi/tables/supplemental-files/
[6] (Row year - Previous Year) / Row Year
[7] Most current year / Row year

3 Stage Dividend Discount Model (DDM)
Industry: Railroads
2024 Assessment Year

$$k_e = (D_1 / P_0) + g$$

k_e = Cost of Equity

D_1 = Expected Dividend

P_0 = Current Price Per Share

g = Sustainable Long-Term Growth

A	B	C	D	E	F	G	H	I
Ticker	Company	2023 Year End Stock Price	2024 Est Div'ds Decl'd per sh	Expected Equity Payout Yield	Sustainable Long-Term Growth Rate [1]	Sustainable Long-Term Growth Rate [1]	Cost of Equity Dividend Growth	Cost of Equity Earnings Growth
		Yahoo	Value Line	D/C	Dividends	Earnings	E+F	E+G
		P_0	D_1	D_1/P_0	g	g	k_e	k_e
CSX	CSX Corp.	34.67	0.48	1.38%	5.92%	5.75%	7.31%	7.13%
NSC	Norfolk Southern	236.38	5.60	2.37%	4.54%	7.79%	6.91%	10.16%
UNP	Union Pacific	245.62	6.00	2.44%	4.61%	6.32%	7.05%	8.77%
Average							**7.09%**	**8.69%**
Median							**7.05%**	**8.77%**
High							7.31%	10.16%
Low							6.91%	7.13%
Selected							**7.09%**	**8.69%**

Notes   *Implied Sustainable LTG:*   *5.02%*   *6.62%*

[1] From worksheet: DDM Sustainable Long-Term Growth

MONTANA DEPARTMENT OF REVENUE
Support for DDM - Short Term Growth Rate Calculations
Industry: Railroads
2024 Assessment Year

A	B	C	D	E	F	G
Ticker	Company	End of Year Closing Stock Price	Div'ds Decl'd per sh 2024 Est	Expected Dividend Yield	Div'ds Decl'd per sh 2026-2028 Est	Short-Term Growth Rate
		Yahoo	Value Line	D / C	Value Line	Note [1]
CSX	CSX Corp.	34.67	0.48	1.38%	0.64	10.06%
NSC	Norfolk Southern	236.38	5.60	2.37%	6.50	5.09%
UNP	Union Pacific	245.62	6.00	2.44%	7.00	5.27%

A	B		C		D	E
Ticker	Company		Earnings per share 2024 Est		Earnings per share 2026-2028 Est	Short-Term Growth Rate
			Value Line		Value Line	Note [1]
CSX	CSX Corp.		1.90		2.50	9.58%
NSC	Norfolk Southern		13.45		19.00	12.20%
UNP	Union Pacific		11.50		15.00	9.26%

Notes
[1] 4 year compound annual growth rate (CAGR) - 3 periods

Support for DDM - Sustainable Long Term Growth

Industry: Railroads

2024 Assessment Year

Dividend Growth Rate								Stage 1				
Ticker	Company	Year End Stock Price	Expected Short-Term Dividend Growth Rate	Expected Long-Term Growth Rate	Expected Dividend Yield	Internal Rate of Return	Implied Sustainable Long-Term Growth Rate (g)	Initial Investment	D_1	D_2	D_3	D_4	D_5
		Yahoo	Note [1]	Note [2]	D_1/P_0	Ke = IRR of D_1:D_{500}	g = IRR - Div. Yield						
CSX	CSX Corp.	34.67	10.06%	4.25%	1.38%	7.31%	5.92%	(34.67)	0.48	0.53	0.58	0.64	0.70
NSC	Norfolk Southern	236.38	5.09%	4.25%	2.37%	6.91%	4.54%	(236.38)	5.60	5.89	6.18	6.50	6.83
UNP	Union Pacific	245.62	5.27%	4.25%	2.44%	7.05%	4.61%	(245.62)	6.00	6.32	6.65	7.00	7.37

Earnings Growth Rate								Stage 1				
Ticker	Company	Year End Stock Price	Expected Short-Term Earnings Growth Rate	Expected Long-Term Growth Rate	Expected Dividend Yield	Internal Rate of Return	Implied Sustainable Long-Term Growth Rate (g)	Initial Investment	D_1	D_2	D_3	D_4	D_5
		Yahoo	Note [1]	Note [2]	D_1/P_0	Ke = IRR of D_1:D_{500}	g = IRR - Div. Yield						
CSX	CSX Corp.	34.67	9.58%	4.25%	1.38%	7.13%	5.75%	(34.67)	0.48	0.53	0.58	0.63	0.69
NSC	Norfolk Southern	236.38	12.20%	4.25%	2.37%	10.16%	7.79%	(236.38)	5.60	6.28	7.05	7.91	8.88
UNP	Union Pacific	245.62	9.26%	4.25%	2.44%	8.77%	6.32%	(245.62)	6.00	6.56	7.16	7.83	8.55

Notes
[1] From worksheet: DDM Short Term Growth Rate Calculations
[2] From worksheet: Inflation & Real Growth

Dividend	Stage 2															Stage 3		
Ticker	D_6	D_7	D_8	D_9	D_{10}	D_{11}	D_{12}	D_{13}	D_{14}	D_{15}	D_{16}	D_{17}	D_{18}	D_{19}	D_{20}	D_{21}	D_{22}	D_{500}
CSX	0.77	0.85	0.93	1.02	1.12	1.23	1.34	1.47	1.62	1.77	1.95	2.13	2.34	2.57	2.82	2.94	3.06	1,336,743,148
NSC	7.18	7.54	7.92	8.31	8.73	9.17	9.64	10.12	10.63	11.17	11.73	12.32	12.94	13.59	14.28	14.88	15.52	6,778,595,888
UNP	7.75	8.16	8.58	9.03	9.50	9.99	10.51	11.06	11.63	12.24	12.88	13.55	14.25	14.99	15.77	16.44	17.14	7,489,241,942

Earnings	Stage 2															Stage 3		
Ticker	D_6	D_7	D_8	D_9	D_{10}	D_{11}	D_{12}	D_{13}	D_{14}	D_{15}	D_{16}	D_{17}	D_{18}	D_{19}	D_{20}	D_{21}	D_{22}	D_{500}
CSX	0.76	0.83	0.90	0.98	1.08	1.18	1.28	1.40	1.53	1.67	1.83	2.00	2.18	2.38	2.60	2.71	2.83	1,234,362,998
NSC	9.91	11.07	12.36	13.81	15.42	17.22	19.23	21.47	23.98	26.78	29.90	33.39	37.29	41.65	46.51	48.48	50.54	22,081,846,695
UNP	9.31	10.15	11.05	12.04	13.11	14.28	15.56	16.95	18.46	20.11	21.90	23.86	25.99	28.31	30.83	32.14	33.51	14,639,931,411

MONTANA DEPARTMENT OF REVENUE

Support for Yield Capitalization Rate - Debt Rating
Industry: Railroads
2024 Assessment Year

A	B	C	D	E	F
Ticker	**Company**	**Industry Group**	**Financial Strength**	**Moody's Long Term Rating**	**Yield to Maturity**
		Value Line	*Value Line*	*Moodys.com*	
CSX	CSX Corp.	RAILROAD	B++	A3	5.25%
NSC	Norfolk Southern	RAILROAD	A+	Baa1	5.64%
UNP	Union Pacific	RAILROAD	A+	A3	5.25%
Average					**5.38%**
Median					**5.25%**
Low					5.64%
Low					5.25%
Selected					**5.38%**

MONTANA DEPARTMENT OF REVENUE
Support for Direct Capitalization - Equity Capitalization Rates
Industry: Railroads
2024 Assessment Year

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
	Ticker	Company	End of Year Closing Stock Price	VL Historic EPS	VL Est EPS	VL Historic P/E Ratio	VL Est P/E Ratio	Ke Estimate - Earnings (Hist. P/E)	Ke Estimate - Earnings (Est. P/E)	VL Historic Cash Flow Per Share	VL Est Cash Flow Per Share	VL Historic P/CF Ratio	VL Est P/CF Ratio	Ke Estimate - Cash Flow (Hist. P/CF)	Ke Estimate - Cash Flow (Est. P/CF)	Market Value of Equity	Book Value of Equity	MTBR
			Yahoo	Value Line	Value Line	C/D	C/E	1/F	1/G	Value Line	Value Line	C/J	C/K	1/L	1/M	Price x Shrs	Value Line	P/Q
	CSX	CSX Corp.	34.67	1.84	1.90	18.84	18.25	5.31%	5.48%	2.71	2.60	12.79	13.33	7.82%	7.50%	67,910	12,615	5.38
	NSC	Norfolk Southern	236.38	8.02	13.45	29.47	17.57	3.39%	5.69%	13.85	18.75	17.07	12.61	5.86%	7.93%	53,347	12,781	4.17
	UNP	Union Pacific	245.62	10.46	11.50	23.48	21.36	4.26%	4.68%	15.21	14.30	16.15	17.18	6.19%	5.82%	149,755	12,163	12.31
Average						23.93	19.06	4.32%	5.28%			15.34	14.37	6.62%	7.08%			7.29
Median						23.48	18.25	4.26%	5.48%			16.15	13.33	6.19%	7.50%			5.38
High						29.47	21.36	5.31%	5.69%			17.07	17.18	7.82%	7.93%			12.31
Low						18.84	17.57	3.39%	4.68%			12.79	12.61	5.86%	5.82%			4.17
Selected						20.42		4.90%				14.49		6.90%				7.29

MONTANA DEPARTMENT OF REVENUE

Support for Direct Capitalization - Debt Capitalization Rate
Industry: Railroads
2024 Assessment Year

($ in Millions)

| A	B	C	D	E	F	G	H	I	J
Ticker	Company	Current Year Interest Exp.	Previous Year MV LT Debt	Previous Year BV LT Debt	Current Year MV LT Debt	Current Year BV LT Debt	Average MV LT Debt	Current Yield	MTBR
	Source	*10-K*	*10-K*	*10-K*	*10-K*	*10-K*	*(D+F)/2*	*(C/H)*	*(F/G)*
CSX	CSX Corp.	809	16,135	18,047	17,528	18,533	16,832	4.81%	0.95
NSC	Norfolk Southern	722	13,846	15,082	16,631	17,179	15,239	4.74%	0.97
UNP	Union Pacific	1,340	28,126	33,326	28,479	32,579	28,303	4.73%	0.87
All Companies		2,871			62,638	68,291	60,373	**4.76%**	**0.92**
Average								**4.76%**	**0.93**
Median								**4.74%**	**0.95**
High								4.81%	0.97
Low								4.73%	0.87
Selected								**4.76%**	**0.93**

MONTANA DEPARTMENT OF REVENUE

Support of Stock Price - From YAHOO Finance
Industry: Railroads
2024 Assessment Year

		End of Period Closing Stock Price											
1	2	3	4	5	6	7	8	9	10	11	12	13	14
A	B	C	D	E	F	G	H	I	J	K	L	M	N
Ticker	Company	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
CSX	CSX Corp.	30.92	30.49	29.94	30.64	30.67	34.10	33.32	30.20	30.75	29.85	32.30	34.67
NSC	Norfolk Southern	245.81	224.82	212.00	203.03	208.18	226.76	233.59	205.01	196.93	190.79	218.16	236.38
UNP	Union Pacific	204.19	207.28	201.26	195.70	192.52	204.62	232.02	220.57	203.63	207.61	225.27	245.62

Monthly Stock Prices
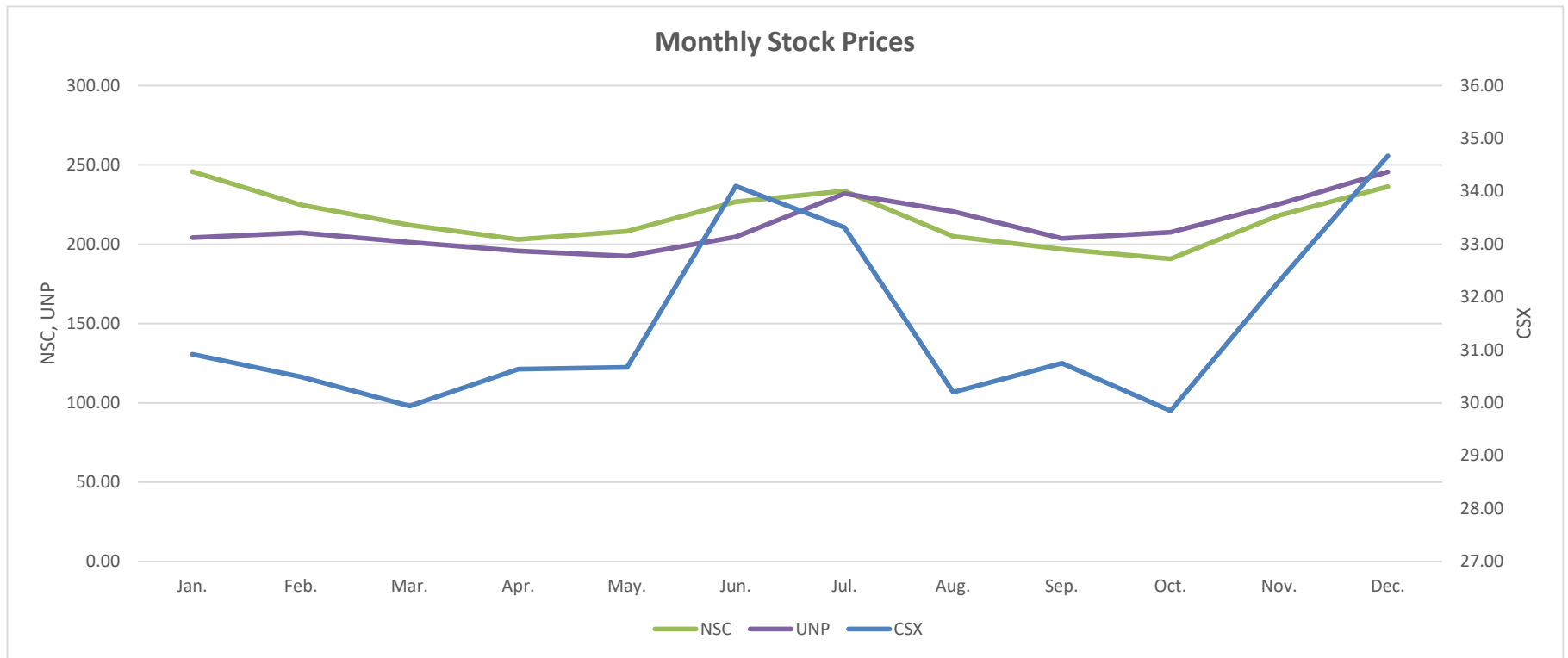
Maintenance Capital Expenditures Estimate Based on Guideline Companies
Industry: Railroads
2024 Assessment Year

($ In Millions)

	1		2		3	4	5	6	7	8	9	10	11
	A	**B**		**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**
							Average PP&E	**Depreciation Expense**	**Average Life of Assets**			**Replacement Cost (RC)**	**RC as % of Depreciation**
	Ticker	**Company**		**Inflation**	**PP&E, Gross**	**PP&E, Gross**							
					Current Year	*Previous Year*		*Current Year*		*Note [1]*	*Note [1]*	*Note [1]*	
				MTDOR (CPI)	*10-K, Notes*	*10-K, Notes*	*(D+E)/2*	*10-K*	*F/G*	*C*H*	*1/(1+C)^H*	*G*I/(1-J)*	*K/G*
	CSX	CSX Corp.		2.25%	50,320	48,105	49,213	1,611	31	0.69	0.51	2,245	139.35%
	NSC	Norfolk Southern		2.25%	46,591	44,748	45,670	1,298	35	0.79	0.46	1,893	145.82%
	UNP	Union Pacific		2.25%	81,733	79,255	80,494	2,318	35	0.78	0.46	3,365	145.17%
	Average												**143.45%**
	Median												**145.17%**
	High												145.82%
	Low												139.35%
	Selected												**143.45%**

Notes:

[1] Cornell, B. & Gerger, R. (2017). Estimating Terminal Values with Inflation: The Inputs Matter-It Is Not a Formulaic Exercise. *Business Valuation Review, Volume 36, Number 4,* 117-123.