



2017 Capitalization Rate Study
Final
Railroads

MONTANA DEPARTMENT OF REVENUE

**Yield Capitalization Rate Study
Industry: Railroads
2017 Assessment Year**

Capital Structure

Equity	73.00%	<i>Page RR-4</i>
Debt	27.00%	<i>Page RR-4</i>

Equity Cost of Capital

Capital Asset Pricing Model	9.99%	<i>Page RR-5</i>
Dividend Growth Model (g = Earnings Growth)	9.10%	<i>Page RR-9</i>
Dividend Growth Model (g = Dividends Growth)	9.60%	<i>Page RR-9</i>
Dividend Growth Model (g = b x ROE)	14.00%	<i>Page RR-9</i>
	9.80%	

Debt Cost of Capital

Standard and Poor's Yield to Maturity	3.50%	<i>Page RR-12</i>
Mergent's Corporate Bond Yields:		
A	3.96%	
Baa	4.72%	
	4.10%	

Railroads - Weighted Average Cost of Capital (WACC)

Source of Capital	Capital Structure	Cost of Capital	Marginal Tax Rate	After-tax Cost of Capital	Weighted Cost
Equity	73.00%	9.80%		9.80%	7.15%
Debt	27.00%	4.10%	38.00%	2.54%	0.69%
WACC	100.00%				7.84%
WACC (Rounded)					7.90%

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**Direct Capitalization Rate Study
Industry: Railroads
2017 Assessment Year**

Capital Structure

Equity	73.00%	<i>Page RR-4</i>
Debt	27.00%	<i>Page RR-4</i>

Equity Cost of Capital

NOI After-tax	5.50%	<i>Page RR-13</i>
GCF	9.00%	<i>Page RR-13</i>

Debt Cost of Capital

Standard and Poor's Current Yield	5.40%	<i>Page RR-14</i>
Calculated Current Yield	4.60%	<i>Page RR-15</i>
	5.00%	

Railroads - NOI After-tax Direct Capitalization Rate

Source of Capital	Capital Structure	Cost of Capital	Marginal Tax Rate	After-tax Cost of Capital	Weighted Cost
Equity	73.00%	5.50%		5.50%	4.02%
Debt	27.00%	5.00%	38.00%	3.10%	0.84%
Total	100.00%				4.85%
Total (Rounded)					4.90%

Railroads - GCF Direct Capitalization Rate

Source of Capital	Capital Structure	Cost of Capital	Marginal Tax Rate	After-tax Cost of Capital	Weighted Cost
Equity	73.00%	9.00%		9.00%	6.57%
Debt	27.00%	5.00%	38.00%	3.10%	0.84%
WACC	100.00%				7.41%
Total (Rounded)					7.50%

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Support for Capital Structure
Industry: Railroads
2017 Assessment Year

A	B	C	D	E	F	G	H	I	J	K	L	M	N
Company	Ticker Symbol	Industry Group	Financial Strength	Shares Outstanding	Avg. 4Q Stock Price	MV Common Stock	MV Preferred Stock*	MV Long Term Debt*	PV of Operating Leases	Total Common, Preferred, LT Debt, & OpLeases	% Common	% Preferred	% Debt & OpLeases
		Value Line	Value Line	10-K	Yahoo	ExF	Value Line	10-K	10-K	G+H+I+J	G/K	H/K	(I+J)/K
				(000)		(\$000)	(\$000)	(\$000)	(\$000)	(\$000)			
Can. Pacific Railway**	CP	RAILROAD	B++	146,300	148.32	21,699,947	0	7,433,849	201,525	29,335,321	74%	0%	26%
CSX Corp.	CSX	RAILROAD	B++	928,180	33.53	31,123,422	0	12,096,000	183,757	43,403,180	72%	0%	28%
Genesee & Wyoming	GWR	RAILROAD	B+	62,121	71.39	4,434,701	0	2,303,531	434,037	7,172,268	62%	0%	38%
Kansas City South'n	KSU	RAILROAD	A	106,607	88.33	9,416,207	6,100	2,303,800	254,080	11,980,187	79%	0%	21%
Norfolk Southern	NSC	RAILROAD	A	290,418	100.43	29,167,124	0	11,626,000	484,399	41,277,523	71%	0%	29%
Union Pacific	UNP	RAILROAD	A++	815,824	97.44	79,495,291	0	15,900,000	2,463,509	97,858,800	81%	0%	19%
All Companies						175,336,693	6,100	51,663,180	4,021,306	231,027,279	76%	0%	24%
Average											73%	0%	27%
Median											73%	0%	27%
High											81%	0%	38%
Low											62%	0%	19%
Say											73%		27%

*Market value is estimated fair value of debt from 10-K notes to financial statements

**CAD converted to USD 1CAD=.7448USD at 12/31/16 <http://www.bankofcanada.ca/rates/exchange/legacy-noon-and-closing-rates/usd-can-summary/>

Notes/Rational for Changes to Guideline Companies

2016 No Changes to Guideline Companies

2017 - CNI removed due to lack of data.

MONTANA DEPARTMENT OF REVENUE

**Capital Asset Pricing Model (CAPM)
Industry: Railroads
2017 Assessment Year**

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

		Railroads
$k_e =$	Cost of Equity	9.99%
$R_f =$	Risk Free Rate	2.79%
$\beta =$	Beta	1.20
$ERP =$	Equity Risk Premium ($R_m - R_f$)	6.00%
$R_m =$	Market Rate of Return	8.79%

Risk Free Rate Measures (R_f):

The Value Line Investment Survey: Selection & Opinion¹

January 6, 2017

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Selected Yields on Taxable U.S. Treasury Securities

10-year	2.51%
30-year	3.09%

Federal Reserve Statistical Release² and U.S. Department of the Treasury, Daily Treasury Yield Curve Rates³

U.S. government securities, Treasury constant maturities, Nominal, December 30, 2016

10-year	2.45%
20-year	2.79%
30-year	3.06%

Risk Free Rate Selected

2.79%

¹ "Value Line Selection & Opinion", Value Line (January 6, 2017)

² <https://www.federalreserve.gov/datadownload/Choose.aspx?rel=H.15>

³ <https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yieldYear&year=2016>

MONTANA DEPARTMENT OF REVENUE

**Capital Asset Pricing Model (CAPM)
Industry: Railroads
2017 Assessment Year**

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

Equity Risk Premium Measures (ERP = R_m - R_f)

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

	<u>R_m</u> ⁴	<u>R_m</u>	<u>R_f</u>	<u>ERP</u>
ERP - <i>Ex Ante</i>	8.00%	8.00%	2.79%	5.21%

Duff & Phelps, 2017 Valuation Handbook

		<u>R_m</u> ⁴	<u>R_m</u>	<u>R_f</u>	<u>ERP</u>
ERP "Historical" - <i>Ex Post</i>	<i>Arithmetic Avg.</i>	9.73%	9.66%	2.72%	6.94%
ERP "Supply-side" - <i>Ex Post</i>	<i>Arithmetic Avg.</i>	8.76%	8.69%	2.72%	5.97%
ERP "Adj. Supply-side" - <i>Ex Post</i>	<i>Arithmetic Avg.</i>	7.89%	7.82%	2.72%	5.10%
ERP "Conditional" - <i>Ex Ante</i>			9.50%	4.00%	5.50%

Damodaran Implied ERP (Jan 1, 2017)

	<u>R_m</u> ⁴	<u>R_m</u>	<u>R_f</u>	<u>ERP</u>
Implied Premium (FCFE) - <i>Ex Ante</i>	8.48%	8.14%	2.45%	5.69%
Implied Premium (FCFE with sustainable payout) - <i>Ex Ante</i>	7.29%	6.95%	2.45%	4.50%

	<u>R_m</u> ⁴	<u>R_m</u>	<u>R_f</u>	<u>ERP</u>
<u>Average</u>	8.36%	8.39%		5.56%
<u>Median</u>	8.24%	8.14%		5.50%
<u>High</u>	9.73%	9.66%		6.94%
<u>Low</u>	7.29%	6.95%		4.50%

Equity Risk Premium Selected

8.79%	2.79%	6.00%
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⁴ R_m estimated using selected Risk Free Rate (R_f)

MONTANA DEPARTMENT OF REVENUE

Capital Asset Pricing Model (CAPM)

Industry: Railroads

2017 Assessment Year

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

Inflation and Growth Estimates⁵

	<u>Inflation</u> (CPI)	<u>Real Growth</u> (GDP)	<u>Nominal</u> <u>Growth</u>	<u>Nominal Growth</u>	
				<u>Low</u>	<u>High</u>
Livingston Survey	2.30%	2.20%	4.50%		
Survey of Professional Forecasters	2.30%	2.45%	4.75%		
Congressional Budget Office	2.53%	2.17%	4.70%		
Office of Budget and Management	2.38%	2.07%	4.45%		
OASDI Trustee Report	2.70%	2.70%	5.40%		
Average	2.44%	2.32%	4.76%		
Median	2.38%	2.20%	4.58%		
High	2.70%	2.70%	5.40%		
Low	2.30%	2.07%	4.37%		
Say	2.40%	2.20%	4.60%	4.37%	5.40%
Rounded					6.00%

⁵ Real Growth Sources: "The Livingston Survey", Federal Reserve Bank of Philadelphia (December 9, 2016); "Survey of Professional Forecasters", Federal Reserve Bank of Philadelphia (February 10, 2017); "Congressional Budget Office", An Update to the Budget and Economic Outlook: 2016 to 2026 (August 2016); "Office of Budget and Management", FY 2017 Mid-Session Review (July 15, 2016); "OASDI Trustee Report", Board of Trustees of the Federal Old-Age Survivors Insurance and Federal Disability Insurance Trust Funds (June 22, 2016)

MONTANA DEPARTMENT OF REVENUE

Support for Beta Selection in CAPM

Industry: Railroads

2017 Assessment Year

A	B	C	D	E
Company	Ticker Symbol	Industry Group	Financial Strength	Beta
		<i>Value Line</i>	<i>Value Line</i>	<i>Value Line</i>
Can. Pacific Railway	CP	RAILROAD	B++	1.20
CSX Corp.	CSX	RAILROAD	B++	1.25
Genesee & Wyoming	GWR	RAILROAD	B+	1.45
Kansas City South'n	KSU	RAILROAD	A	1.15
Norfolk Southern	NSC	RAILROAD	A	1.15
Union Pacific	UNP	RAILROAD	A++	1.05
Average				1.21
Median				1.18
High				1.45
Low				1.05
Say				1.20

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**Support for Yield Capitalization Cost of Equity Component - Based on Dividend Growth Model
Industry: Railroads
2017 Assessment Year**

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

K_e = Cost of Equity

g = Sustainable Growth

D_1 = Expected Dividend

b = Retention Ratio (1 - Payout Ratio)

P_0 = Current Price Per Share

ROE = Return on Equity

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Company Name	Ticker	Avg. 4Q Stock Price	2017 Est Dividend	Dividend Yield	2017 Est Earnings Per Share	2017 Est Payout Ratio	Retention Ratio	2017 Est Return on Equity	Multistage Long Term Earnings Growth Estimate	Multistage Long Term Dividends Growth Estimate	Sustainable Growth*	Cost of Equity	Cost of Equity	Cost of Equity
		P_0	D_1	D_1/P_0	EPS	D_1/EPS	$b = 1 - \text{Payout Ratio}$	ROE	$g = \text{Earnings } g$	$g = \text{Dividends } g$	$g = b \times \text{ROE}$	K_e $g = \text{Earnings } g$	K_e $g = \text{Dividends } g$	K_e $g = b \times \text{ROE}$
		Yahoo	Value Line	D/C	Value Line	D/F	1-G	Value Line	Multi Stg g Wrksht	Multi Stg g Wrksht	H*I	E+J	E+K	E+L
Can. Pacific Railway	CP	148.32	1.50	1.01%	8.50	17.65%	82.35%	27.00%	9.57%	10.51%	22.24%	10.58%	11.52%	23.25%
CSX Corp.	CSX	33.53	0.78	2.33%	2.00	39.00%	61.00%	14.50%	6.74%	7.68%	8.85%	9.06%	10.01%	11.17%
Genesee & Wyoming	GWR	71.39	0.00		3.20			6.00%	5.80%	1.71%				
Kansas City South'n	KSU	88.33	1.36	1.54%	5.15	26.41%	73.59%	12.00%	7.37%	8.31%	8.83%	8.91%	9.85%	10.37%
Norfolk Southern	NSC	100.43	2.44	2.43%	6.20	39.35%	60.65%	13.50%	5.80%	4.22%	8.19%	8.22%	6.65%	10.62%
Union Pacific	UNP	97.44	2.40	2.46%	5.60	42.86%	57.14%	21.50%	6.11%	7.68%	12.29%	8.57%	10.15%	14.75%
Average				1.95%		33.05%	66.95%	15.75%	6.90%	6.69%	12.08%	9.07%	9.64%	14.03%
Median				2.33%		39.00%	61.00%	14.00%	6.42%	7.68%	8.85%	8.91%	10.01%	11.17%
High				2.46%		42.86%	82.35%	27.00%	9.57%	10.51%	22.24%	10.58%	11.52%	23.25%
Low				1.01%		17.65%	57.14%	6.00%	5.80%	1.71%	8.19%	8.22%	6.65%	10.37%
Say												9.10%	9.60%	14.00%

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Support for Yield Capitalization Cost of Equity Component - Multi-Stage Growth Model
 Industry: Railroads
 2017 Assessment Year

Company	Can. Pacific Rail	CP
Value Line 5 yr est. earnings growth		12.50%
LT nominal economic growth rate		4.60%
Year	Weight	Adj. Growth Rate
1	30	0.1250
2	29	0.1250
3	28	0.1250
4	27	0.1250
5	26	0.1250
6	25	0.1201
7	24	0.1151
8	23	0.1102
9	22	0.1053
10	21	0.1003
11	20	0.0954
12	19	0.0904
13	18	0.0855
14	17	0.0806
15	16	0.0756
16	15	0.0707
17	14	0.0658
18	13	0.0608
19	12	0.0559
20	11	0.0509
21	10	0.0460
22	9	0.0460
23	8	0.0460
24	7	0.0460
25	6	0.0460
26	5	0.0460
27	4	0.0460
28	3	0.0460
29	2	0.0460
30	1	0.0460
Weighted Average		9.57%
Value Line 5 yr est. div'd growth		14.00%
LT nominal economic growth rate		4.60%
Year	Weight	Adj. Growth Rate
1	30	0.1400
2	29	0.1400
3	28	0.1400
4	27	0.1400
5	26	0.1400
6	25	0.1341
7	24	0.1283
8	23	0.1224
9	22	0.1165
10	21	0.1106
11	20	0.1048
12	19	0.0989
13	18	0.0930
14	17	0.0871
15	16	0.0813
16	15	0.0754
17	14	0.0695
18	13	0.0636
19	12	0.0578
20	11	0.0519
21	10	0.0460
22	9	0.0460
23	8	0.0460
24	7	0.0460
25	6	0.0460
26	5	0.0460
27	4	0.0460
28	3	0.0460
29	2	0.0460
30	1	0.0460
Weighted Average		10.51%

Company	CSX Corp.	CSX
Value Line 5 yr est. earnings growth		8.00%
LT nominal economic growth rate		4.60%
Year	Weight	Adj. Growth Rate
1	30	0.0800
2	29	0.0800
3	28	0.0800
4	27	0.0800
5	26	0.0800
6	25	0.0779
7	24	0.0758
8	23	0.0736
9	22	0.0715
10	21	0.0694
11	20	0.0673
12	19	0.0651
13	18	0.0630
14	17	0.0609
15	16	0.0588
16	15	0.0566
17	14	0.0545
18	13	0.0524
19	12	0.0503
20	11	0.0481
21	10	0.0460
22	9	0.0460
23	8	0.0460
24	7	0.0460
25	6	0.0460
26	5	0.0460
27	4	0.0460
28	3	0.0460
29	2	0.0460
30	1	0.0460
Weighted Average		6.74%
Value Line 5 yr est. div'd growth		9.50%
LT nominal economic growth rate		4.60%
Year	Weight	Adj. Growth Rate
1	30	0.0950
2	29	0.0950
3	28	0.0950
4	27	0.0950
5	26	0.0950
6	25	0.0919
7	24	0.0889
8	23	0.0858
9	22	0.0828
10	21	0.0797
11	20	0.0766
12	19	0.0736
13	18	0.0705
14	17	0.0674
15	16	0.0644
16	15	0.0613
17	14	0.0583
18	13	0.0552
19	12	0.0521
20	11	0.0491
21	10	0.0460
22	9	0.0460
23	8	0.0460
24	7	0.0460
25	6	0.0460
26	5	0.0460
27	4	0.0460
28	3	0.0460
29	2	0.0460
30	1	0.0460
Weighted Average		7.68%

Company	Genesee & WY	GWR
Value Line 5 yr est. earnings growth		6.50%
LT nominal economic growth rate		4.60%
Year	Weight	Adj. Growth Rate
1	30	0.07
2	29	0.07
3	28	0.07
4	27	0.07
5	26	0.07
6	25	0.06
7	24	0.06
8	23	0.06
9	22	0.06
10	21	0.06
11	20	0.06
12	19	0.06
13	18	0.06
14	17	0.05
15	16	0.05
16	15	0.05
17	14	0.05
18	13	0.05
19	12	0.05
20	11	0.05
21	10	0.05
22	9	0.05
23	8	0.05
24	7	0.05
25	6	0.05
26	5	0.05
27	4	0.05
28	3	0.05
29	2	0.05
30	1	0.05
Weighted Average		5.80%
Value Line 5 yr est. div'd growth		0.00%
LT nominal economic growth rate		4.60%
Year	Weight	Adj. Growth Rate
1	30	0.00
2	29	0.00
3	28	0.00
4	27	0.00
5	26	0.00
6	25	0.00
7	24	0.01
8	23	0.01
9	22	0.01
10	21	0.01
11	20	0.02
12	19	0.02
13	18	0.02
14	17	0.03
15	16	0.03
16	15	0.03
17	14	0.03
18	13	0.04
19	12	0.04
20	11	0.04
21	10	0.05
22	9	0.05
23	8	0.05
24	7	0.05
25	6	0.05
26	5	0.05
27	4	0.05
28	3	0.05
29	2	0.05
30	1	0.05
Weighted Average		1.71%

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Support for Yield Capitalization Cost of Equity Component - Multi-Stage Growth Model
 Industry: Railroads
 2017 Assessment Year

Company	Kansas South'n	KSU
Value Line 5 yr est. earnings growth		9.00%
LT nominal economic growth rate		4.60%
Year	Weight	Adj. Growth Rate
1	30	0.0900
2	29	0.0900
3	28	0.0900
4	27	0.0900
5	26	0.0900
6	25	0.0873
7	24	0.0845
8	23	0.0818
9	22	0.0790
10	21	0.0763
11	20	0.0735
12	19	0.0708
13	18	0.0680
14	17	0.0653
15	16	0.0625
16	15	0.0598
17	14	0.0570
18	13	0.0543
19	12	0.0515
20	11	0.0488
21	10	0.0460
22	9	0.0460
23	8	0.0460
24	7	0.0460
25	6	0.0460
26	5	0.0460
27	4	0.0460
28	3	0.0460
29	2	0.0460
30	1	0.0460
Weighted Average		7.37%
Value Line 5 yr est. div'd growth		10.50%
LT nominal economic growth rate		4.60%
Year	Weight	Adj. Growth Rate
1	30	0.1050
2	29	0.1050
3	28	0.1050
4	27	0.1050
5	26	0.1050
6	25	0.1013
7	24	0.0976
8	23	0.0939
9	22	0.0903
10	21	0.0866
11	20	0.0829
12	19	0.0792
13	18	0.0755
14	17	0.0718
15	16	0.0681
16	15	0.0644
17	14	0.0608
18	13	0.0571
19	12	0.0534
20	11	0.0497
21	10	0.0460
22	9	0.0460
23	8	0.0460
24	7	0.0460
25	6	0.0460
26	5	0.0460
27	4	0.0460
28	3	0.0460
29	2	0.0460
30	1	0.0460
Weighted Average		8.31%

Company	Norfolk South'n	NSC
Value Line 5 yr est. earnings growth		6.50%
LT nominal economic growth rate		4.60%
Year	Weight	Adj. Growth Rate
1	30	0.0650
2	29	0.0650
3	28	0.0650
4	27	0.0650
5	26	0.0650
6	25	0.0638
7	24	0.0626
8	23	0.0614
9	22	0.0603
10	21	0.0591
11	20	0.0579
12	19	0.0567
13	18	0.0555
14	17	0.0543
15	16	0.0531
16	15	0.0519
17	14	0.0508
18	13	0.0496
19	12	0.0484
20	11	0.0472
21	10	0.0460
22	9	0.0460
23	8	0.0460
24	7	0.0460
25	6	0.0460
26	5	0.0460
27	4	0.0460
28	3	0.0460
29	2	0.0460
30	1	0.0460
Weighted Average		5.80%
Value Line 5 yr est. div'd growth		4.00%
LT nominal economic growth rate		4.60%
Year	Weight	Adj. Growth Rate
1	30	0.0400
2	29	0.0400
3	28	0.0400
4	27	0.0400
5	26	0.0400
6	25	0.0404
7	24	0.0408
8	23	0.0411
9	22	0.0415
10	21	0.0419
11	20	0.0423
12	19	0.0426
13	18	0.0430
14	17	0.0434
15	16	0.0438
16	15	0.0441
17	14	0.0445
18	13	0.0449
19	12	0.0453
20	11	0.0456
21	10	0.0460
22	9	0.0460
23	8	0.0460
24	7	0.0460
25	6	0.0460
26	5	0.0460
27	4	0.0460
28	3	0.0460
29	2	0.0460
30	1	0.0460
Weighted Average		4.22%

Company	Union Pacific	UNP
Value Line 5 yr est. earnings growth		7.00%
LT nominal economic growth rate		4.60%
Year	Weight	Adj. Growth Rate
1	30	0.07
2	29	0.07
3	28	0.07
4	27	0.07
5	26	0.07
6	25	0.07
7	24	0.07
8	23	0.07
9	22	0.06
10	21	0.06
11	20	0.06
12	19	0.06
13	18	0.06
14	17	0.06
15	16	0.06
16	15	0.05
17	14	0.05
18	13	0.05
19	12	0.05
20	11	0.05
21	10	0.05
22	9	0.05
23	8	0.05
24	7	0.05
25	6	0.05
26	5	0.05
27	4	0.05
28	3	0.05
29	2	0.05
30	1	0.05
Weighted Average		6.11%
Value Line 5 yr est. div'd growth		9.50%
LT nominal economic growth rate		4.60%
Year	Weight	Adj. Growth Rate
1	30	0.10
2	29	0.10
3	28	0.10
4	27	0.10
5	26	0.10
6	25	0.09
7	24	0.09
8	23	0.09
9	22	0.08
10	21	0.08
11	20	0.08
12	19	0.07
13	18	0.07
14	17	0.07
15	16	0.06
16	15	0.06
17	14	0.06
18	13	0.06
19	12	0.05
20	11	0.05
21	10	0.05
22	9	0.05
23	8	0.05
24	7	0.05
25	6	0.05
26	5	0.05
27	4	0.05
28	3	0.05
29	2	0.05
30	1	0.05
Weighted Average		7.68%

MONTANA DEPARTMENT OF REVENUE

**Support for Yield Capitalization Cost of Debt Component - Yield to Maturity From Standard & Poor's Bond Guide
Industry: Railroads
2017 Assessment Year**

Company Name	Coupon	CUSIP	Issue	Maturity Date	Years to Maturity	Old S&P Bond Rating	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Avg Full Year	Avg 4th QTR
							7.48	8.52	7.97	7.42	7.36	6.32	6.54	4.53	5.07	5.07	6.20	7.39	6.66%	6.22%
Canadian Pac Ry Co	4	136447AW9	Perpetual Cons Deb Stock	1/1/2022	6	AA-	7.48	8.52	7.97	7.42	7.36	6.32	6.54	4.53	5.07	5.07	6.20	7.39	6.66%	6.22%
Canadian National Railway Cor	7.62	136375AY8	Deb	5/15/2023	7	A	3.42	3.41	3.36	3.30	3.20	2.78	2.69	2.69	2.89	2.89	3.36	3.51	3.12%	3.25%
Canadian National Railway Cor	6.8	136375BA9	Nt	7/15/2018	2	A	1.96	1.98	2.02	2.06	1.93	1.73	1.47	1.28	1.48	1.48	1.74	1.85	1.75%	1.69%
Canadian National Railway Cor	6.9	136375BD3	Nt	7/15/2028	12	A	3.30	3.16	3.12	3.07	3.03	2.82	2.69	2.67	2.95	2.95	3.26	3.46	3.04%	3.22%
Canadian National Railway Cor	6.71	136375BE1	Puttable Reset Secs Purs	7/15/2036	20	A														
Northern Pac.Ry	3	665585JP1	GenLn Mtg	01/01/2047	31	A	5.40	5.41	5.44	5.31	5.31	5.12	4.33	4.82	4.75	4.75	4.68	4.58	4.99%	4.67%
Northern Pac.Ry	3	665585KH7	Gen LnMtg-Stpd	01/01/2047	31	A	5.47	5.48	4.35	4.56	4.58	5.11	4.33	4.82	4.75	4.75	4.68	4.58	4.79%	4.67%
Union Pacific Corp.	7.12	907818BY3	Deb	02/01/2028	12	A	3.83	3.59	3.48	3.37	3.37	2.95	3.06	3.13	3.33	3.33	3.81	3.91	3.43%	3.68%
Union Pacific Corp.	6.62	907818CF3	Deb	02/01/2029	13	A	3.63	3.43	3.28	3.13	3.24	2.81	2.97	3.01	3.21	3.21	3.66	3.58	3.26%	3.48%
Union Pacific Corp.	6.25	907818CU0	Deb	05/01/2034	18	A	4.31	4.14	4.08	4.01	3.99	3.69	3.73	3.63	3.88	3.88	4.19	4.15	3.97%	4.07%
Union Pacific Corp.	5.65	907818CW6	Nts	05/01/2017	1	A	1.56	1.58	1.31	1.03	1.10	0.87	1.07	1.16	1.18	1.18	1.33	1.05	1.20%	1.19%
Union Pacific Corp.	6.15	907818CX4	Deb	05/01/2037	21	BBB+	4.64	4.46	4.37	4.27	4.14	3.80	3.76	3.76	3.88	3.88	4.34	4.41	4.14%	4.21%
Burlington Northern	8.75	121897WQ1	Deb	02/25/2022	6	BBB+	3.58	2.89	2.65	2.40	2.43	2.02	2.20	2.31	2.19	2.19	2.75	2.96	2.55%	2.63%
Burlington NorthernR.R.	3.8	121899CC0	Con Mtg L	01/01/2020	4	BBB+	3.12	2.98	2.90	2.81	2.88	2.55	2.65	2.18	2.25	2.25	2.81	2.96	2.69%	2.67%
Burlington NorthernR.R.	6.55	121899CD8	Con Mtg K	01/01/2020	4	BBB+	3.18	2.82	2.80	2.78	2.86	2.02	2.20	2.31	2.22	2.22	2.78	2.93	2.59%	2.64%
Burlington NorthernR.R.	6.55	121899CE6	Con Mtg O	01/01/2020	4	BBB+	3.18	2.82	2.80	2.78	2.86	2.02	2.20	2.31	2.22	2.22	2.78	2.93	2.59%	2.64%
Burlington NorthernR.R.	8.15	121899CF3	Con Mtg N	01/01/2020	4	BBB+	3.47	2.14	2.37	2.59	2.66	3.37	3.50	3.54	2.18	2.18	2.73	2.78	2.79%	2.56%
Burlington NorthernR.R.	8.15	121899CG1	Con Mtg P	01/01/2020	4	BBB+	3.47	2.14	2.37	2.59	2.66	3.37	3.50	3.54	2.18	2.18	2.73	2.78	2.79%	2.56%
Burlington NorthernR.R.	3.2	121899CH9	Con Mtg M	01/01/2045	29	BBB+	5.52	5.03	4.82	4.61	4.71	4.40	4.40	3.94	4.12	4.12	4.56	4.72	4.58%	4.47%
CSX Corp.	8.62	126408AM5	Deb	05/15/2022	6	BBB+	3.74	3.60	3.35	3.10	3.22	3.00	2.76	2.85	2.90	2.90	3.49	3.45	3.20%	3.28%
CSX Corp.	8.1	126408AQ6	Deb	09/15/2022	6	BBB+	3.44	3.23	3.29	3.35	3.43	2.98	3.12	3.23	3.32	3.32	3.87	3.79	3.36%	3.66%
CSX Corp.	5.6	126408GJ6	Nts	05/01/2017	1	BBB+	1.78	1.62	1.54	1.46	1.17	0.97	1.05	1.16	0.69	0.69	0.00	0.00	1.01%	0.23%
CSX Corp.	6.15	126408GK3	Nts	05/01/2037	21	BBB+	4.92	4.81	4.56	4.31	4.24	3.96	3.89	3.89	4.16	4.16	4.55	4.46	4.33%	4.39%
Norfolk Southern Corp.	7.7	655844AE8	Nts	05/15/2017	1	BBB+	1.54	1.47	1.41	1.35	1.22	1.13	1.23	1.22	1.15	1.15	1.30	1.47	1.30%	1.31%
Norfolk Southern Corp.	7.05	655844AF5	Nts	05/01/2037	21	BBB+	5.10	4.81	4.62	4.43	4.29	4.14	4.10	4.04	4.31	4.31	4.59	4.42	4.43%	4.44%
Norfolk Southern Corp.	7.8	655844AJ7	Nts	05/15/2027	11	BBB+	4.04	3.78	3.67	3.56	3.56	3.19	3.25	3.17	3.28	3.28	3.81	3.88	3.54%	3.66%
Norfolk Southern Corp.	7.9	655844AK4	Nt	5/15/2097	81	BBB+	5.62	5.42	5.45	5.48	5.51	5.11	5.12	5.14	5.35	5.35	5.81	5.50	5.41%	5.55%
Norfolk Southern Corp.	7.25	655844AQ1	Sr Nts	02/15/2031	15	BBB+	4.58	4.38	4.10	3.82	3.81	3.39	3.41	3.48	3.49	3.49	4.07	4.10	3.84%	3.89%
Norfolk Southern Corp.	6	655844AV0	Fixed Rt Sr Nt	3/15/2105	89	BBB+	5.45	5.52	5.43	5.33	5.22	4.96	4.83	4.90	5.17	5.17	5.55	5.20	5.23%	5.31%
Norfolk Southern Corp.	5.59	655844AW8	Nts	05/17/2025	9	BBB+	3.77	3.55	3.28	3.01	3.15	2.72	2.80	2.95	3.10	3.10	3.59	3.65	3.22%	3.45%
Norfolk Southern Corp.	5.64	655844AX6	Nts	05/17/2029	13	BBB+	3.97	3.70	3.76	3.82	3.86	3.47	3.59	3.60	3.60	3.60	4.13	4.17	3.77%	3.97%
CSX Corp.	6	126408GH0	Nts	10/01/2036	20	BBB+	4.82	4.78	4.55	4.31	4.19	3.93	3.93	3.88	4.09	4.09	4.48	4.53	4.30%	4.37%
CSX Corp MTN BE	6.8	12641LBU6	MTN Ser C	12/1/2028	12	BBB+	4.63	4.45	4.14	3.83	3.82	3.52	3.49	3.41	3.54	3.54	4.15	4.23	3.90%	3.97%
Consolidated Rail	9.75	209864AT4	Deb	6/15/2020	4	BBB+	3.70	3.49	3.46	3.43	3.45	3.15	3.19	3.21	2.92	2.92	2.98	3.12	3.25%	3.01%
Missouri Pacific RR.	4.75	606198LF4	Gen Mtg Inc Ser A	1/1/2020	4	BBB														
Missouri Pacific RR.	4.75	606198LG2	Gen Mtg Ser B	1/1/2030	14	BBB														
Missouri Pacific RR.	5	606198LH0	Income Deb	1/1/2045	29	NR														
Norfolk Southern Corp.	9	655844AA6	Nts	03/01/2021	5	NR	3.64	3.43	3.44	3.44	3.51	3.08	3.25	3.36	3.43	3.43	3.99	4.13	3.51%	3.85%
							38	34	34	34	34	34	34	34	34	34	34	34		

NOTES:

Data downloaded from the S&P website and missing data supplemented from month end Bond Guides when available.
 means the data was not available in S&P Guide
 means issuance matured or called

All Bonds		Annual	4th Qtr
All Bonds	All Ratings	3.49%	3.50%
	Investment Grade (BBB- & Above)	3.49%	3.49%
Bonds With 20 or More Years to Maturity			
	All Ratings	4.69%	4.67%
	Investment Grade (BBB- & Above)	4.69%	4.67%
Say:		3.50%	

MONTANA DEPARTMENT OF REVENUE

Support for Direct Capitalization Cost of Equity (k_e)

Industry: Railroads
2017 Assessment Year

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Company	Ticker Symbol	Avg. 4Q 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)
		<i>Yahoo</i>	<i>Value Line</i>	<i>Value Line</i>	<i>C/D</i>	<i>C/E</i>	<i>1/F</i>	<i>1/G</i>	<i>Value Line</i>	<i>Value Line</i>	<i>C/J</i>	<i>C/K</i>	<i>1/L</i>	<i>1/M</i>
Can. Pacific Railway	CP	148.32	7.75	8.50	19.14	17.45	5.23%	5.73%	11.25	12.00	13.18	12.36	7.58%	8.09%
CSX Corp.	CSX	33.53	1.81	2.00	18.53	16.77	5.40%	5.96%	3.25	3.45	10.32	9.72	9.69%	10.29%
Genesee & Wyoming	GWR	71.39	3.64	3.20	19.61	22.31	5.10%	4.48%	6.95	7.15	10.27	9.98	9.74%	10.02%
Kansas City South'n	KSU	88.33	4.43	5.15	19.94	17.15	5.02%	5.83%	7.34	8.15	12.03	10.84	8.31%	9.23%
Norfolk Southern	NSC	100.43	5.62	6.20	17.87	16.20	5.60%	6.17%	8.76	9.25	11.46	10.86	8.72%	9.21%
Union Pacific	UNP	97.44	5.08	5.60	19.18	17.40	5.21%	5.75%	7.69	8.25	12.67	11.81	7.89%	8.47%
Average					19.04	17.88	5.26%	5.65%			11.66	10.93	8.66%	9.22%
Median					19.16	17.28	5.22%	5.79%			11.75	10.85	8.52%	9.22%
High					19.94	22.31	5.60%	6.17%			13.18	12.36	9.74%	10.29%
Low					17.87	16.20	5.02%	4.48%			10.27	9.72	7.58%	8.09%
Say							5.50%						9.00%	

MONTANA DEPARTMENT OF REVENUE

Support for Direct Capitalization Cost of Debt Component - Current Yield From Standard & Poor's Bond Guide
Industry: Railroads
2017 Assessment Year

Company Name	Coupon	CUSIP	Issue	Maturity Date	Years to Maturity	Old S&P Bond Rating	Current Yield																Avg Full Year	Avg 4th QTR
							Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16						
Canadian Pac Ry Co	4	136447AW9	Perpetual Cons Deb Stock	1/1/2022	6	AA-	4.78	5.03	4.89	4.74	4.71	4.47	4.51	4.10	4.20	4.20	4.42	4.65	4.56%	4.42%				
Canadian National Railway Cor	7.62	136375AY8	Deb	5/15/2023	7	A	6.00	6.01	6.01	6.00	5.98	5.85	5.84	5.86	5.95	5.95	6.11	6.18	5.98%	6.08%				
Canadian National Railway Cor	6.8	136375BA9	Nt	7/15/2018	2	A	6.09	6.11	6.14	6.16	6.17	6.17	6.16	6.16	6.24	6.24	6.28	6.32	6.19%	6.28%				
Canadian National Railway Cor	6.9	136375BD3	Nt	7/15/2028	12	A	5.05	4.99	4.98	4.97	4.96	4.88	4.83	4.83	4.96	4.96	5.11	5.20	4.98%	5.09%				
Canadian National Railway Cor	6.71	136375BE1	Puttable Reset Secs Purs	7/15/2036	20	A	5.02	4.96	4.89	4.82	4.83	4.72	4.61	4.63	4.76	4.76	4.98	4.99	4.83%	4.91%				
Northern Pac.Ry	3	665585JP1	GenLn Mtg	01/01/2047	31	A	4.68	4.68	4.71	4.60	4.60	4.44	3.86	4.22	4.16	4.16	4.10	4.04	4.35%	4.10%				
Northern Pac.Ry	3	665585KH7	Gen LnMtg-Stpd	01/01/2047	31	A	4.74	4.74	3.88	4.03	4.05	4.44	3.86	4.22	4.16	4.16	4.10	4.04	4.20%	4.10%				
Union Pacific Corp.	7.12	907818BY3	Deb	02/01/2028	12	A	5.41	5.31	5.27	5.23	5.24	5.06	5.12	5.16	5.26	5.26	5.48	5.53	5.28%	5.42%				
Union Pacific Corp.	6.62	907818CF3	Deb	02/01/2029	13	A	5.06	4.97	4.91	4.85	4.91	4.72	4.80	4.83	4.93	4.93	5.13	5.11	4.93%	5.06%				
Union Pacific Corp.	6.25	907818CU0	Deb	05/01/2034	18	A	5.03	4.93	4.90	4.86	4.85	4.69	4.71	4.66	4.81	4.81	4.99	4.97	4.85%	4.92%				
Union Pacific Corp.	5.65	907818CW6	Nts	05/01/2017	1	A	5.37	5.39	5.40	5.40	5.42	5.43	5.46	5.48	5.52	5.52	5.54	5.56	5.46%	5.54%				
Union Pacific Corp.	6.15	907818CX4	Deb	05/01/2037	21	BBB+	5.11	5.00	4.95	4.89	4.80	4.60	4.58	4.58	4.66	4.66	4.95	4.99	4.81%	4.87%				
Burlington Northern	8.75	121897WQ1	Deb	02/25/2022	6	BBB+	6.83	6.62	6.57	6.51	6.54	6.44	6.52	6.57	6.59	6.59	6.77	6.86	6.62%	6.74%				
Burlington NorthernR.R.	3.8	121899CC0	Con Mtg L	01/01/2020	4	BBB+	3.70	3.69	3.68	3.67	3.68	3.64	3.66	3.61	3.63	3.63	3.69	3.71	3.67%	3.68%				
Burlington NorthernR.R.	6.55	121899CD8	Con Mtg K	01/01/2020	4	BBB+	5.83	5.77	5.78	5.79	5.82	5.68	5.73	5.77	5.78	5.78	5.89	5.93	5.80%	5.87%				
Burlington NorthernR.R.	6.55	121899CE6	Con Mtg O	01/01/2020	4	BBB+	5.83	5.77	5.78	5.79	5.82	5.68	5.73	5.77	5.78	5.78	5.89	5.93	5.80%	5.87%				
Burlington NorthernR.R.	8.15	121899CF3	Con Mtg N	01/01/2020	4	BBB+	6.96	6.67	6.75	6.82	6.86	7.04	7.09	7.12	6.89	6.89	7.03	7.06	6.93%	6.99%				
Burlington NorthernR.R.	8.15	121899CG1	Con Mtg P	01/01/2020	4	BBB+	6.96	6.67	6.75	6.82	6.86	7.04	7.09	7.12	6.89	6.89	7.03	7.06	6.93%	6.99%				
Burlington NorthernR.R.	3.2	121899CH9	Con Mtg M	01/01/2045	29	BBB+	4.80	4.43	4.28	4.12	4.19	3.97	3.97	3.66	3.77	3.77	4.07	4.18	4.10%	4.01%				
CSX Corp.	8.62	126408AM5	Deb	05/15/2022	6	BBB+	6.78	6.75	6.69	6.62	6.68	6.63	6.57	6.62	6.68	6.68	6.88	6.89	6.71%	6.82%				
CSX Corp.	8.1	126408AQ6	Deb	09/15/2022	6	BBB+	6.36	6.30	6.34	6.37	6.41	6.28	6.34	6.40	6.46	6.46	6.65	6.64	6.42%	6.58%				
CSX Corp.	5.6	126408GJ6	Nts	05/01/2017	1	BBB+	5.34	5.35	5.36	5.37	5.38	5.39	5.41	5.43	5.46	5.46	0.00	0.00	4.50%	1.82%				
CSX Corp.	6.15	126408GK3	Nts	05/01/2037	21	BBB+	5.30	5.22	5.07	4.91	4.87	4.70	4.65	4.66	4.83	4.83	5.08	5.02	4.93%	4.98%				
Norfolk Southern Corp.	7.7	655844AE8	Nts	05/15/2017	1	BBB+	7.13	7.16	7.19	7.22	7.25	7.28	7.32	7.36	7.44	7.44	7.48	7.52	7.32%	7.48%				
Norfolk Southern Corp.	7.05	655844AF5	Nts	05/01/2037	21	BBB+	5.63	5.44	5.32	5.20	5.11	5.02	5.00	4.97	5.15	5.15	5.33	5.22	5.21%	5.23%				
Norfolk Southern Corp.	7.8	655844AJ7	Nts	05/15/2027	11	BBB+	5.83	5.71	5.67	5.63	5.64	5.49	5.52	5.50	5.57	5.57	5.81	5.85	5.65%	5.74%				
Norfolk Southern Corp.	7.9	655844AK4	Nt	5/15/2097	81	BBB+	5.64	5.44	5.47	5.50	5.53	5.14	5.15	5.17	5.38	5.38	5.83	5.52	5.43%	5.58%				
Norfolk Southern Corp.	7.25	655844AQ1	Sr Nts	02/15/2031	15	BBB+	5.63	5.52	5.38	5.23	5.23	5.02	5.04	5.08	5.10	5.10	5.40	5.43	5.26%	5.31%				
Norfolk Southern Corp.	6	655844AV0	Fixed Rt Sr Nt	3/15/2105	89	BBB+	5.45	5.53	5.44	5.34	5.23	4.97	4.85	4.91	5.18	5.18	5.55	5.21	5.24%	5.31%				
Norfolk Southern Corp.	5.59	655844AW8	Nts	05/17/2025	9	BBB+	4.89	4.82	4.73	4.64	4.70	4.56	4.59	4.65	4.71	4.71	4.88	4.91	4.73%	4.83%				
Norfolk Southern Corp.	5.64	655844AX6	Nts	05/17/2029	13	BBB+	4.81	4.69	4.73	4.76	4.78	4.61	4.66	4.67	4.68	4.68	4.92	4.94	4.74%	4.85%				
CSX Corp.	6	126408GH0	Nts	10/01/2036	20	BBB+	5.20	5.18	5.04	4.89	4.81	4.66	4.66	4.64	4.76	4.76	5.00	5.04	4.89%	4.93%				
CSX Corp MTN BE	6.8	12641LBU6	MTN Ser C	12/1/2028	12	BBB+	5.62	5.54	5.40	5.25	5.25	5.12	5.11	5.08	5.16	5.16	5.45	5.49	5.30%	5.37%				
Consolidated Rail	9.75	209864AT4	Deb	6/15/2020	4	BBB+	7.85	7.81	7.83	7.85	7.88	7.83	7.87	7.91	7.90	7.90	7.95	8.02	7.88%	7.96%				
Missouri Pacific RR.	4.75	606198LF4	Gen Mtg Inc Ser A	1/1/2020	4	BBB	4.75	4.74	4.74	4.73	4.77	4.76	4.76	4.78	4.76	4.76	4.83	4.86	4.77%	4.82%				
Missouri Pacific RR.	4.75	606198LG2	Gen Mtg Ser B	1/1/2030	14	BBB	4.91	4.86	4.87	4.87	4.88	4.81	4.79	4.91	4.84	4.84	4.92	4.99	4.87%	4.92%				
Missouri Pacific RR.	5	606198LH0	Income Deb	1/1/2045	29	NR	5.37	5.20	5.24	5.28	5.34	5.09	5.08	5.08	5.30	5.30	5.40	5.38	5.26%	5.36%				
Norfolk Southern Corp.	9	655844AA6	Nts	03/01/2021	5	NR	7.21	7.17	7.20	7.22	7.26	7.16	7.23	7.29	7.36	7.36	7.53	7.59	7.30%	7.49%				
							38	38	38	38	38	38	38	38	38	38	38	38						

NOTES:

Data downloaded from the S&P website and missing data supplemented from month end Bond Guides when available.
 means the data was not available in S&P Guide
 means issuance matured or called

All Bonds		Annual	4th Qtr
All Bonds All Ratings		5.44%	5.43%
Investment Grade (BBB- & Above)		5.39%	5.37%
Bonds With 20 or More Years to Maturity			
All Ratings		4.84%	4.85%
Investment Grade (BBB- & Above)		4.80%	4.80%
Say:		5.40%	

MONTANA DEPARTMENT OF REVENUE

**Support for Direct Capitalization Cost of Debt Component - Calculated Current Yield
Industry: Railroads
2017 Assessment Year**

A	B	C	D	E	F	G	H	I	J	K
	2016	YE 2016	YE 2015	YE 2015	YE 2016	YE 2016	2016 Avg	2016	2016 Avg	
Company	Ticker	Interest Exp.	MV LT Debt	BV LT Debt	MV LT Debt	BV LT Debt	MV LT Debt	Current Yield	BV LT Debt	MTBR
Source		10-K	10-K	10-K	10-K	10-K	(D+F)/2	(C/H)	(E+G)/2	(H/J)
		(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)		(\$000)	
Can. Pacific Railway	CP	471,000	9,750,000	8,957,000	9,981,000	8,684,000	9,865,500	4.77%	8,820,500	1.12
CSX Corp.	CSX	579,000	11,340,000	10,535,000	12,096,000	11,293,000	11,718,000	4.94%	10,914,000	1.07
Genesee & Wyoming	GWR	75,641	2,158,121	2,157,338	2,303,531	2,273,058	2,230,826	3.39%	2,215,198	1.01
Kansas City Southern	KSU	97,700	2,287,500	2,321,100	2,303,800	2,296,900	2,295,650	4.26%	2,309,000	0.99
Norfolk Southern	NSC	563,000	11,124,000	9,893,000	11,626,000	10,112,000	11,375,000	4.95%	10,002,500	1.14
Union Pacific	UNP	698,000	15,200,000	14,200,000	15,900,000	15,000,000	15,550,000	4.49%	14,600,000	1.07
Total		2,484,341					53,034,976	4.68%	48,861,198	1.09
Average								4.47%		1.07
Median								4.63%		1.07
High								4.95%		1.14
Low								3.39%		0.99
Say								4.60%		1.07

MONTANA DEPARTMENT OF REVENUE

Support of Stock Price - From YAHOO Finance
 Industry: Railroads
 2017 Assessment Year

Ticker	Name		Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	End of Year Closing	4th Qtr Average	Annual Average
CNI	Can. National Railway	high	\$ 54.89	\$ 59.06	\$ 63.41	\$ 66.22	\$ 61.74	\$ 61.40	\$ 64.73	\$ 65.80	\$ 65.81	\$ 67.66	\$ 67.60	\$ 70.00	\$ 67.40	\$ 66.07	\$ 61.21
		low	\$ 46.23	\$ 51.75	\$ 57.51	\$ 60.48	\$ 57.12	\$ 55.73	\$ 58.21	\$ 61.40	\$ 61.11	\$ 62.83	\$ 61.72	\$ 66.58			
CP	Can. Pacific Railway	high	\$ 127.19	\$ 130.57	\$ 135.77	\$ 151.38	\$ 146.03	\$ 138.73	\$ 153.00	\$ 155.68	\$ 157.34	\$ 155.04	\$ 154.15	\$ 156.71	\$ 142.77	\$ 148.32	\$ 137.58
		low	\$ 97.09	\$ 111.65	\$ 119.41	\$ 128.39	\$ 127.49	\$ 119.50	\$ 127.02	\$ 141.65	\$ 144.19	\$ 142.63	\$ 139.29	\$ 142.13			
CSX	CSX Corp.	high	\$ 25.99	\$ 25.71	\$ 27.27	\$ 27.97	\$ 27.54	\$ 27.41	\$ 29.41	\$ 28.88	\$ 30.60	\$ 31.73	\$ 36.09	\$ 37.42	\$ 35.93	\$ 33.53	\$ 28.07
		low	\$ 21.33	\$ 21.64	\$ 24.26	\$ 24.36	\$ 24.93	\$ 24.43	\$ 25.33	\$ 27.46	\$ 27.89	\$ 30.01	\$ 30.15	\$ 35.79			
GWR	Genesee & Wyoming	high	\$ 54.03	\$ 59.50	\$ 65.35	\$ 66.64	\$ 66.43	\$ 65.62	\$ 65.75	\$ 70.64	\$ 70.02	\$ 70.65	\$ 77.90	\$ 80.73	\$ 69.41	\$ 71.39	\$ 62.79
		low	\$ 41.56	\$ 47.53	\$ 56.58	\$ 56.77	\$ 55.53	\$ 52.21	\$ 57.62	\$ 61.99	\$ 64.88	\$ 65.70	\$ 64.36	\$ 68.99			
KSU	Kansas City South'n	high	\$ 74.58	\$ 85.27	\$ 88.84	\$ 98.99	\$ 95.77	\$ 93.45	\$ 99.20	\$ 100.69	\$ 97.55	\$ 96.83	\$ 93.09	\$ 89.76	\$ 84.85	\$ 88.33	\$ 87.51
		low	\$ 62.20	\$ 69.60	\$ 81.43	\$ 83.00	\$ 87.27	\$ 84.01	\$ 86.52	\$ 93.17	\$ 88.86	\$ 87.62	\$ 79.30	\$ 83.36			
NSC	Norfolk Southern	high	\$ 83.66	\$ 77.15	\$ 86.66	\$ 94.10	\$ 91.05	\$ 87.50	\$ 93.09	\$ 94.43	\$ 97.28	\$ 97.82	\$ 107.32	\$ 111.43	\$ 108.07	\$ 100.43	\$ 87.93
		low	\$ 66.51	\$ 64.51	\$ 73.31	\$ 78.15	\$ 81.48	\$ 78.73	\$ 83.23	\$ 86.88	\$ 89.92	\$ 89.95	\$ 90.98	\$ 105.09			
UNP	Union Pacific	high	\$ 79.34	\$ 82.26	\$ 85.30	\$ 89.91	\$ 88.50	\$ 90.14	\$ 96.00	\$ 96.28	\$ 98.00	\$ 98.84	\$ 102.73	\$ 106.62	\$ 103.68	\$ 97.44	\$ 88.06
		low	\$ 67.06	\$ 70.35	\$ 77.80	\$ 77.29	\$ 80.68	\$ 81.96	\$ 86.01	\$ 90.68	\$ 91.32	\$ 87.79	\$ 87.06	\$ 101.61			