Montana Department of
REVENUE

2013 Capitalization Rate Study

Railroads

MONTANA DEPARTMENT OF REVENUE

Direct Capitalization Rate Study
Industry: Class I Railroads
2013 Assessment Year

Equity Measures Calculated:

E/P estimates:

	ALL	Median	
	6.67%	6.75%	Yahoo
	6.44%	6.53%	Value Line
	6.56%	6.64%	Average of E/Ps
Inverse of P/E Ratios:			
	6.63%	6.63%	Yahoo
	6.42%	6.47%	Value Line
	6.53%	6.55%	Average of Inverse of the P/E
	6.38%	6.67%	Inverse of median P/E, Value Line
	6.54%	6.60%	Average of all above except median P/E
Mean =	6.51%	6.61%	
Median =	6.44%	6.63%	

Equity Measure NUOI = 6.40%

Debt Measure Calculated, Current Yield:

	Annual	4th Qtr	
	5.37%	5.27%	ALL
	5.29%	5.18%	BBB- & Above
	5.31%	5.20%	BB- & Above
Mean =	5.32%	5.22%	
Median =	5.31%	5.20%	

Debt Measure = 5.25%

Industry Market Capital Structure Net Utility Operating Income (NUOI) Rate						
Equity	81.00%	x	6.40%	=	5.18%	
Debt	19.00%	x	5.25%	=	1.00%	
	100%				6.18%	
			Direct Cap Rate NUOI		=	**6.25%**

Gross Cash Flow / Price:

Mean	Median	
10.26%	9.40%	Value Line

Equity Measure Gross = 10.20%

Industry Market Capital Structure Gross Cash Flow Rate (GCF)						
Equity	81.00%	x	10.20%	=	8.26%	
Debt	19.00%	x	5.25%	=	1.00%	
	100%				9.26%	
Direct Cap Rate GCF					=	**9.50%**

MONTANA DEPARTMENT OF REVENUE

Direct Capitalization Rate Study
Industry: Class III Railroads
2013 Assessment Year

Equity Measures Calculated:

E/P estimates:

	ALL	Median	
	2.33%	2.33%	Yahoo
	3.77%	3.77%	Value Line
	3.05%	3.05%	Average of E/Ps

Inverse of P/E Ratios:

	2.24%	2.24%	Yahoo
	3.88%	3.88%	Value Line
	3.06%	3.06%	Average of Inverse of the P/E
	5.56%	5.56%	Inverse of median P/E, Value Line
	3.06%	3.06%	Average of all above except median P/E
Mean =	3.56%	3.56%	
Median =	3.77%	3.77%	

Equity Measure NUOI = 3.80%

Debt Measure Calculated, Current Yield:

	Annual	4th Qtr	
	5.37%	5.27%	ALL
	5.29%	5.18%	BBB- & Above
	5.31%	5.20%	BB- & Above
Mean =	5.32%	5.22%	
Median =	5.31%	5.20%	

Debt Measure = 5.40%

Industry Market Capital Structure Net Utility Operating Income (NUOI) Rate						
Equity	84.00%	x	3.80%	=	3.19%	
Debt	16.00%	x	5.40%	=	0.86%	
	100%				4.06%	
			Direct Cap Rate NUOI		=	**4.25%**

Gross Cash Flow / Price:

Mean	Median	
6.14%	6.14%	Value Line

Equity Measure Gross = 6.20%

Industry Market Capital Structure Gross Cash Flow Rate (GCF)						
Equity	84.00%	x	6.20%	=	5.21%	
Debt	16.00%	x	5.40%	=	0.86%	
	100%				6.07%	
Direct Cap Rate GCF					=	**6.25%**

MONTANA DEPARTMENT OF REVENUE

Yield Capitalization Rate Study
Industry: Railroads
2013 Assessment Year

Equity Measures Calculated:		**Class I**	**Class III**
Dividend Growth Model		17.00%	
Capital Asset Pricing Model		10.74%	11.14%
	Mean =	13.87%	11.14%
	Equity Measure FCF =	**10.80%**	**11.15%**

Debt Measures Calculated, Yield to Maturity:

	ALL DEBT		**20 YEAR PLUS DEBT**	
	Annual	**4th Qtr**	**Annual**	**4th Qtr**
45794	3.49%	3.41%	4.71%	4.52%
47255	3.41%	3.33%	4.71%	4.52%
44696	3.46%	3.38%	---	---
Mean =	3.46%	3.37%	4.71%	4.52%
Median =	3.46%	3.38%	4.71%	4.52%

Debt Measure = 4.65%

CLASS I

Yield Cap Rate Free Cash Flow						
Equity	81.00%	x	10.80%	=	8.75%	
Debt	19.00%	x	4.65%	=	0.88%	
	100.00%				9.63%	
Weighted Average Cost of Capital (WACC) =						**9.75%**

CLASS III

Yield Cap Rate Free Cash Flow						
Equity	84.00%	x	11.15%	=	9.37%	
Debt	16.00%	x	4.65%	=	0.74%	
	100.00%				10.11%	
Weighted Average Cost of Capital (WACC) =						**10.25%**

Where Assumed Growth Rate = Inflation **Growth = 2.00%**

see appendix for calculation 2.47%

Inflationdata.com 1/16/2013 1.74%

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Railroads
2012 Assessment Year

A	B	C	D	E	F	G	H	I	J	K	L	M
Company	Ticker Symbol	(VL) Financial Strength	(VL) Shares (000)	(YAHOO) Avg. Price Common 4th Quarter	(VL) Book Value Per Share H/D	Mkt. Value Common DxE	(VL) Book Value Common (000)	(VL) Book Value Preferred (000)	Mkt. Value Preferred (000) IxL	(VL) Book Value Debt (000)	Mkt/Book Debt Ratio	Mkt. Value Debt (000) KxL
Can. National Railway	CNI	A	442,100	88.41	23.673	39,086,798	10,466,000	0	0	6,312,000	1.00	6,312,000
Union Pacific	UNP	A	479,900	123.05	38.712	59,049,296	18,578,000	0	0	8,697,000	1.00	8,697,000
CSX Corp.	CSX	B++	1,049,200	20.31	8.071	21,304,006	8,468,000	0	0	8,734,000	1.00	8,734,000
Norfolk Southern	NSC	A	330,400	61.64	29.997	20,364,204	9,911,000	0	0	7,390,000	1.00	7,390,000
Kansas City South'n	KSU	B+	109,900	78.67	25.099	8,646,199	2,758,400	6,100	6,100	1,602,800	1.00	1,602,800
Can. Pacific Railway	CP	B+	170,000	92.63	26.800	15,747,667	4,556,000	0	0	4,601,100	1.00	4,601,100
Genesee & Wyoming	GWR	B+	42,500	71.71	22.602	3,047,533	960,600	0	0	569,000	1.00	569,000
RailAmerica Inc.	RA											
SUMS & AVERAGES - ALL						167,245,703	55,698,000	6,100	6,100	37,905,900		37,905,900
CLASS I SUMS & AVERAGES - ALL						164,198,169	54,737,400	6,100	6,100	37,336,900		37,336,900
CLASS I MEDIAN VALUE												
CLASS III SUMS & AVERAGES - ALL						3,047,533	960,600	0	0	569,000		569,000
CLASS III MEDIAN VALUE												

** All **Negative** values left out of calculations*

INDUSTRY MARKET STRUCTURE						
	CLASS I RAILROADS		CLASS III RAILROADS		ALL RAILROADS	
COMMON	81.00%	164,198,169	84.00%	3,047,533	82.00%	167,245,703
DEBT	19.00%	37,343,000	16.00%	569,000	18.00%	37,912,000
TOTAL	100.00%	201,541,169	100.00%	3,616,533	100.00%	205,157,703

2013 Notes/Rational for Changes to Guideline Companies

Genesee & Wyoming acquiring Rail America data no longer in Value Line for Rail America announced July 23, 2012

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Railroads
2012 Assessment Year

A	B	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Company	Ticker Symbol	(YAHOO) EPS ltst 12mo	(YAHOO) E/P N/E	(VL) EPS	(VL) E/P P/E	(VL) CF/S	(VL) CF/P R/E	(YAHOO) P/E	(YAHOO) Inverse of P/E 1/T	(VL) P/E	(VL) Inverse of P/E 1/V	(VL) Median P/E	(VL) Inverse of Median P/E 1/X	(VL) Beta
Can. National Railway	CNI	6.15	6.96%	5.55	6.28%	7.85	8.88%	14.75	6.78%	15.89	6.29%	14.00	7.14%	1.10
Union Pacific	UNP	8.06	6.55%	8.35	6.79%	12.20	9.92%	15.43	6.48%	15.04	6.65%	15.00	6.67%	1.15
CSX Corp.	CSX	1.79	8.82%	1.75	8.62%	2.80	13.79%	11.08	9.02%	11.76	8.50%	15.00	6.67%	1.20
Norfolk Southern	NSC	5.49	8.91%	5.30	8.60%	9.10	14.76%	11.13	8.98%	12.30	8.13%	14.00	7.14%	1.10
Kansas City South'n	KSU	3.46	4.40%	3.15	4.00%	5.10	6.48%	23.14	4.32%	24.90	4.02%	25.00	4.00%	1.30
Can. Pacific Railway	CP	4.09	4.42%	4.05	4.37%	7.15	7.72%	23.73	4.21%	20.32	4.92%	15.00	6.67%	1.30
Genesee & Wyoming	GWR	1.67	2.33%	2.70	3.77%	4.40	6.14%	44.58	2.24%	25.75	3.88%	18.00	5.56%	1.25
RailAmerica Inc.	RA													
SUMS & AVERAGES - ALL			6.05%		6.06%		9.67%		6.01%		6.06%		6.26%	1.20
CLASS I SUMS & AVERAGES - ALL			6.67%		6.44%		10.26%		6.63%		6.42%		6.38%	1.19
CLASS I MEDIAN VALUE			6.75%		6.53%		9.40%		6.63%		6.47%		6.67%	1.18
CLASS III SUMS & AVERAGES - ALL			2.33%		3.77%		6.14%		2.24%		3.88%		5.56%	1.25
CLASS III MEDIAN VALUE			2.33%		3.77%		6.14%		2.24%		3.88%		5.56%	1.25

** All **Negative** values left out of calculations*

Class I Industry Beta = 1.19
Class III Industry Beta = 1.25

2013 Notes/Rational for Changes to Gui
Genesee & Wyoming acquiring Rail A

MONTANA DEPARTMENT OF REVENUE

Capital Asset Pricing Model
Industry: Railroads
2013 Assessment Year

$$K_E = R_F + \beta (R_M - R_F)$$

	Class I	Class III
K_E = Cost of Equity	**10.74%**	**11.14%**
R_F = Risk Free Rate	2.95%	2.95%
β= Beta	1.19	1.25
R_M = Market Rate of Return	9.50%	9.50%
R_P = Equity Risk Premium (RM - RF)	6.55%	6.55%

R_m = Investor's Market Rate of Return

Ibbotson, SBBI, Large Company, Average Annual Return, ***Arithmetic** Average, Ex-Post	R_M=	11.80%	11.80%
Ibbotson, SBBI, Large Company, Average Annual Return, ***Geometric** Average, Ex-Post	R_M=	9.80%	9.80%
3 Stage Dividend Growth Model, S & P 500, See Exhibit, Ex Ante	R_M=	9.00%	9.00%
	Mean =	10.20%	10.20%
	Median =	9.80%	9.80%
	R_M=	**9.50%**	**9.50%**

R_f = Risk Free Rate

Internal Revenue Service, Rev Rule 2012-31 Table 2 December 3, 2012
Rev Rule 2012-31 Table 2

Annual Rates	Short Term - AFR	R_f =	0.27%
	Mid Term - AFR	R_f =	0.95%
	Long Term - AFR	R_f =	2.83%

The ValueLine Investment Survey
U.S. Treasury Securities January 4, 2013

	3 Month	R_f =	0.08%
	6 Month	R_f =	0.13%
	1 Year	R_f =	0.15%

Federal Reserve Statistical Release
Treasury constant Maturities, December 31, 2012
Market yield on U.S. Treasury securities, Annual Averages

	3-month constant maturity, quoted on investment basis	R_f =	0.05%
	6-month constant maturity, quoted on investment basis	R_f =	0.11%
	1-year constant maturity, quoted on investment basis	R_f =	0.16%
		Mean =	0.53%
		Median =	0.15%
		Weighted Mean =	0.68%
		R_f =	**2.95%**

U.S. Treasury Securities Long-Term December 31, 2012

20 year constant maturity	R_f =	**2.54%**
30 year constant maturity	R_f =	**2.95%**

MONTANA DEPARTMENT OF REVENUE

Dividend Growth Model
Industry: Railroads
2013 Assessment Year

$$K_E = D1 / P_O + G_A$$

KE= Cost of Equity
D1= Expected Dividends
Po= Current Price Per Share
G= Sustainable Growth

CLASS I RAILROADS

Company Name	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/P0)	Dividend Growth (G_1)	Ke 1 Year
Can. National Railway	CNI	88.41	1.65	1.87%	14.50%	16.37%
Can. Pacific Railway	CP	92.63	1.40	1.51%	12.50%	14.01%
CSX Corp.	CSX	20.31	0.62	3.05%	19.50%	22.55%
Kansas City South'n	KSU	78.67	0.80	1.02%	NMF	
Norfolk Southern	NSC	61.64	2.00	3.24%	11.50%	14.74%
Union Pacific	**UNP**	**123.05**	**2.80**	**2.28%**	**17.50%**	**19.78%**

Weighted Mean= 17.09%
Median= 16.37%
Mean= 17.49%

Cost of Equity, (K_E) = 17.00%

CLASS III RAILROADS

Company Name	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/P0)	Dividend Growth (G_1)	Ke 1 Year
Genesee & Wyoming	GWR	71.71	Nil		Nil	
RailAmerica Inc.	RA					

Weighted Mean=
Median=
Mean=

Cost of Equity, (K_E) = N/A

MONTANA DEPARTMENT OF REVENUE

Historical Stock Price Analysis From YAHOO Finance
Industry: Railroads
2013 Assessment Year

Ticker	Company		Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	4th Qtr Average	Annual Average	Yahoo P-E	Yahoo EPS lst 12 mo
CNI	Can. National Railway	high	$ 80.50	$ 79.30	$ 81.30	$ 86.33	$ 87.10	$ 86.06	$ 89.19	$ 93.46	$ 94.83	$ 90.88	$ 90.14	$ 92.54	$88.41	$84.27	14.75	6.15
		low	$ 74.82	$ 76.03	$ 74.50	$ 75.47	$ 78.73	$ 78.27	$ 83.38	$ 85.23	$ 87.50	$ 84.19	$ 83.83	$ 88.89				
CP	Can. Pacific Railway	high	$ 73.06	$ 77.55	$ 79.91	$ 78.23	$ 79.00	$ 74.59	$ 83.20	$ 86.92	$ 88.23	$ 94.78	$ 94.83	$ 102.80	$92.63	$80.37	23.73	4.09
		low	$ 66.23	$ 71.39	$ 71.67	$ 72.17	$ 70.85	$ 68.69	$ 71.22	$ 80.07	$ 80.02	$ 82.75	$ 89.30	$ 91.34				
CSX	CSX Corp.	high	$ 23.71	$ 23.31	$ 22.54	$ 23.02	$ 23.00	$ 22.91	$ 23.20	$ 23.49	$ 23.29	$ 21.76	$ 21.08	$ 20.31	$20.31	$21.60	11.08	1.79
		low	$ 21.55	$ 21.00	$ 19.99	$ 20.97	$ 20.41	$ 19.88	$ 21.49	$ 22.12	$ 20.65	$ 20.44	$ 18.88	$ 19.36				
GBX	Greenbrier Cos Inc.	high	$ 26.66	$ 26.28	$ 26.04	$ 21.23	$ 18.08	$ 17.60	$ 17.58	$ 16.55	$ 19.47	$ 17.93	$ 19.19	$ 21.63	$17.03	$18.32	9.70	1.91
		low	$ 21.85	$ 22.10	$ 19.64	$ 16.40	$ 13.10	$ 13.15	$ 13.56	$ 14.32	$ 13.85	$ 14.75	$ 13.25	$ 15.41				
GWR	Genesee & Wyoming	high	$ 64.24	$ 66.83	$ 60.63	$ 56.21	$ 59.99	$ 54.27	$ 64.15	$ 65.70	$ 67.95	$ 72.75	$ 75.82	$ 77.04	$71.71	$61.80	44.58	1.67
		low	$ 59.62	$ 57.46	$ 53.60	$ 50.88	$ 49.24	$ 47.08	$ 52.08	$ 60.24	$ 62.84	$ 66.11	$ 66.66	$ 71.86				
KSU	Kansas City South'n	high	$ 74.77	$ 71.15	$ 74.98	$ 79.17	$ 79.50	$ 72.38	$ 75.26	$ 78.99	$ 83.95	$ 81.80	$ 83.98	$ 84.16	$78.67	$73.49	23.14	3.46
		low	$ 64.07	$ 65.93	$ 66.95	$ 68.71	$ 63.30	$ 61.36	$ 65.86	$ 70.50	$ 75.00	$ 73.30	$ 72.80	$ 76.00				
NSC	Norfolk Southern	high	$ 78.50	$ 74.00	$ 69.39	$ 73.76	$ 74.89	$ 72.17	$ 75.23	$ 75.56	$ 75.14	$ 68.01	$ 62.54	$ 62.99	$61.64	$68.36	11.13	5.49
		low	$ 71.90	$ 67.56	$ 64.10	$ 64.91	$ 64.66	$ 62.82	$ 70.77	$ 72.22	$ 63.25	$ 60.96	$ 56.05	$ 59.26				
UNP	Union Pacific	high	$ 115.81	$ 117.40	$ 114.87	$ 114.48	$ 116.14	$ 119.82	$ 123.78	$ 126.91	$ 129.27	$ 128.38	$126.92	$ 127.55	$123.05	$116.90	15.43	8.06
		low	$ 107.05	$ 108.32	$ 104.77	$ 104.08	$ 106.88	$ 105.14	$ 115.38	$ 120.31	$ 116.86	$ 118.12	$116.06	$ 121.24				
PRRR	Pioneer Railcorp	high	$ 4.00	$ 4.40	$ 5.00	$ 5.10	$ 5.00	$ 4.65	$ 5.00	$ 4.98	$ 4.90	$ 6.00	$ 6.15	$ 5.59	$5.40	$4.67	16.79	0.31
		low	$ 3.30	$ 3.70	$ 4.11	$ 4.10	$ 4.49	$ 4.48	$ 4.05	$ 4.10	$ 4.41	$ 4.70	$ 5.15	$ 4.82				
PWX	Providence & Worcester R F	high	$ 12.40	$ 14.71	$ 15.61	$ 16.49	$ 16.36	$ 15.05	$ 13.90	$ 13.28	$ 14.00	$ 14.67	$ 15.21	$ 15.00	$14.02	$13.78	28.60	0.49
		low	$ 11.50	$ 11.51	$ 14.05	$ 14.70	$ 14.05	$ 12.50	$ 12.50	$ 12.00	$ 12.09	$ 13.05	$ 13.14	$ 13.03				

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Railroads
2013 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Avg Full Year	Avg 4th QTR
Northern Pac.Ry	3	665585JP1	GenLn Mtg	01/01/2047	A	4.91	4.61	4.91	4.94	4.58	4.54	4.61	4.41	4.41	4.41	4.41	4.54	4.61%	4.45%
Northern Pac.Ry	3	665585KH7	Gen LnMtg-Stpd	01/01/2047	A	4.91	4.61	4.91	4.94	4.58	4.54	4.61	4.41	4.41	4.41	4.41	4.54	4.61%	4.45%
Canadian National Railway Company	7.62	136375AY8	Deb	5/15/2023	A-	5.59	5.66	5.78	5.65	5.58	5.55	5.51	5.51	5.53	5.43	5.44	5.47	5.56%	5.45%
Canadian National Railway Company	6.8	136375BA9	Nt	7/15/2018	A-	5.43	5.45	5.44	5.39	5.39	5.40	5.38	5.34	5.38	5.39	5.38	5.39	5.40%	5.39%
Canadian National Railway Company	6.9	136375BD3	Nt	7/15/2028	A-	5.19	5.17	5.22	5.11	5.00	4.95	4.85	4.91	4.94	4.87	4.94	4.97	5.01%	4.93%
Canadian National Railway Company	6.71	136375BE1	Puttable Reset Se	7/15/2036	A-	5.13	4.99	5.17	4.95	4.79	4.80	4.66	4.62	4.69	4.53	4.57	4.64	4.80%	4.58%
Union Pacific Corp.	7	907818AZ1	Deb	02/01/2016	A-	5.81	5.85	5.92	5.88	5.91	5.92	5.92	5.90	5.92	5.94	5.97	6.00	5.91%	5.97%
Union Pacific Corp.	7	907818AZ1	Deb	2/1/2016	A-	5.81	5.85	5.92	5.88	5.91	5.92	5.92	5.90	5.92	5.94	5.97	6.00	5.91%	5.97%
Union Pacific Corp.	7.12	907818BY3	Deb	02/01/2028	A-	5.60	5.46	5.59	5.40	5.37	5.34	5.25	5.28	5.19	5.12	5.16	5.22	5.33%	5.17%
Union Pacific Corp.	6.62	907818CF3	Deb	02/01/2029	A-	5.08	5.06	5.19	5.14	4.96	5.02	4.93	4.84	4.87	4.80	4.84	4.90	4.97%	4.85%
Union Pacific Corp.	6.5	907818CP1	Nts	04/15/2012	A-	6.38	6.38	6.38										6.38%	
Union Pacific Corp.	5.38	907818CT3	Nts	05/01/2014	A-	4.95	4.95	4.95	4.96	4.96	4.97	4.98	5.00	5.01	5.03	5.05	5.07	4.99%	5.05%
Union Pacific Corp.	6.25	907818CU0	Deb	05/01/2034	A-	5.00	4.90	5.08	5.01	4.89	4.94	4.82	4.81	4.95	4.66	4.74	4.77	4.88%	4.72%
Union Pacific Corp.	4.88	907818CV8	Sr Nt	1/15/2015	A-	4.40	4.43	4.45	4.44	4.46	4.47	4.47	4.45	4.46	4.47	4.49	4.50	4.46%	4.49%
Union Pacific Corp.	5.65	907818CW6	Nts	05/01/2017	A-	4.82	4.78	4.84	4.81	4.84	4.88	4.86	4.83	4.84	4.77	4.79	4.81	4.82%	4.79%
Union Pacific Corp.	6.15	907818CX4	Deb	05/01/2037	A-	4.92	4.87	5.02	5.00	4.86	4.78	4.68	4.71	4.86	4.62	4.67	4.71	4.81%	4.67%
Union Pacific Corp.	5.45	907818CY2	Nts	01/31/2013	A-	5.20	5.22	5.23	5.26	5.28	5.29	5.32	5.34	5.35	5.38	5.44		5.30%	5.41%
Burlington Northern	8.75	121897WQ1	Deb	02/25/2022	BBB+	6.14	6.15	6.31	6.21	6.20	6.19	6.13	6.12	6.09	6.05	6.06	6.10	6.15%	6.07%
Burlington NorthernR.R.	3.8	121899CC0	Con Mtg L	01/01/2020	BBB+	3.68	3.70	3.77	3.70	3.67	3.67	3.63	3.64	3.67	3.66	3.66	3.67	3.68%	3.66%
Burlington NorthernR.R.	6.55	121899CD8	Con Mtg K	01/01/2020	BBB+	5.55	5.58	5.68	5.60	5.56	5.57	5.52	5.53	5.59	5.54	5.55	5.58	5.57%	5.56%
Burlington NorthernR.R.	6.55	121899CE6	Con Mtg O	01/01/2020	BBB+	5.55	5.58	5.68	5.60	5.56	5.57	5.52	5.53	5.59	5.54	5.55	5.58	5.57%	5.56%
Burlington NorthernR.R.	8.15	121899CF3	Con Mtg N	01/01/2020	BBB+	6.32	6.36	6.48	6.38	6.34	6.36	6.32	6.33	6.40	6.39	6.40	6.44	6.38%	6.41%
Burlington NorthernR.R.	8.15	121899CG1	Con Mtg P	01/01/2020	BBB+	6.33	6.37	6.48	6.39	6.35	6.37	6.32	6.33	6.40	6.39	6.40	6.44	6.38%	6.41%
Burlington NorthernR.R.	3.2	121899CH9	Con Mtg M	01/01/2045	BBB+	5.61	5.06	4.75	4.61	4.43	4.43	4.30	4.32	4.49	4.63	4.62	4.70	4.66%	4.65%
Burlington Northern Santa Fe Corp.	7	12189TAA2	Deb	12/15/2025	BBB+	5.26	5.28	5.44	5.27	5.27	5.25	5.15	5.16	5.20	5.07	5.11	5.15	5.22%	5.11%
Burlington Northern Santa Fe Corp.	6.88	12189TAB0	Deb	02/15/2016	BBB+	5.90	5.91	5.98	5.94	5.86	5.88	5.81	5.83	5.84	5.88	5.91	5.93	5.89%	5.91%
Burlington Northern Santa Fe Corp.	7.29	12189TAD6	Deb	06/01/2036	BBB+	5.23	5.21	5.57	5.66	5.54	5.51	5.30	5.32	5.40	5.19	5.24	5.37	5.38%	5.27%
Burlington Northern Santa Fe Corp.	6.88	12189TAG9	Deb	12/01/2027	BBB+	5.43	5.42	5.63	5.55	5.50	5.48	5.34	5.36	5.31	5.26	5.31	5.35	5.41%	5.31%
Burlington Northern Santa Fe Corp.	6.7	12189TAJ3	Deb	08/01/2028	BBB+	5.35	5.34	5.56	5.47	5.42	5.40	5.26	5.28	5.40	5.33	5.38	5.44	5.39%	5.38%
Burlington Northern Santa Fe Corp.	7.08	12189TAK0	Deb	05/13/2029	BBB+	5.43	5.42	5.72	5.70	5.61	5.59	5.44	5.46	5.58	5.51	5.55	5.62	5.55%	5.56%
Burlington Northern Santa Fe Corp.	8.12	12189TAQ7	Deb	04/15/2020	BBB+	6.04	6.14	6.27	6.13	6.12	6.08	6.03	6.05	6.04	6.04	6.08	6.12	6.10%	6.08%
Burlington Northern Santa Fe Corp.	7.95	12189TAR5	Deb	08/15/2030	BBB+	5.65	5.64	5.81	5.76	5.69	5.67	5.51	5.54	5.65	5.58	5.62	5.65	5.65%	5.62%
Burlington Northern Santa Fe Corp.	5.9	12189TAU8	Nts	07/01/2012	BBB+	5.78	5.79	5.82	5.84	5.87								5.82%	
Burlington Northern Santa Fe Corp.	4.3	12189TAV6	Nts	07/01/2013	BBB+	4.11	4.13	4.13	4.14	4.16	4.16	4.15	4.17	4.17	4.19	4.20	4.22	4.16%	4.20%
Burlington Northern Santa Fe Corp.	6.2	12189TAX2	Deb	08/15/2036	BBB+	5.01	4.91	5.17	5.07	4.99	4.96	4.78	4.79	4.88	4.84	4.79	4.84	4.92%	4.82%
Burlington Northern Santa Fe Corp.	6.15	12189TAZ7	Deb	05/01/2037	BBB+	4.93	4.92	5.11	4.99	4.96	5.00	4.79	4.75	4.80	4.63	4.68	4.76	4.86%	4.69%
Norfolk Southern Corp.	7.7	655844AE8	Nts	05/15/2017	BBB+	6.04	6.09	6.12	6.04	6.07	6.09	6.08	6.07	6.11	6.06	6.10	6.10	6.08%	6.09%
Norfolk Southern Corp.	7.05	655844AF5	Nts	05/01/2037	BBB+	5.26	5.04	5.20	5.08	5.20	5.11	5.00	4.69	4.89	4.84	4.89	4.96	5.01%	4.90%
Norfolk Southern Corp.	7.8	655844AJ7	Nts	05/15/2027	BBB+	5.53	5.49	5.64	5.51	5.44	5.42	5.34	5.35	5.48	5.45	5.50	5.54	5.47%	5.50%
Norfolk Southern Corp.	7.9	655844AK4	Nt	5/15/2097	BBB+	5.06	5.22	5.45	5.30	5.13	5.09	4.93	4.96	5.26	4.86	4.93	5.05	5.10%	4.95%
Norfolk Southern Corp.	7.25	655844AQ1	Sr Nts	02/15/2031	BBB+	5.30	5.25	5.35	5.24	5.32	5.22	5.08	4.96	5.14	5.07	5.11	5.18	5.19%	5.12%
Norfolk Southern Corp.	6	655844AV0	Fixed Rt Sr Nt	3/15/2105	BBB+	5.02	5.14	5.36	5.18	5.04	5.05	4.80	4.85	5.07	4.79	4.86	4.93	5.01%	4.86%
Norfolk Southern Corp.	5.59	655844AW8	Nts	05/17/2025	BBB+	4.71	4.73	4.76	4.65	4.63	4.63	4.51	4.46	4.56	4.48	4.52	4.55	4.60%	4.52%
Norfolk Southern Corp.	5.64	655844AX6	Nts	05/17/2029	BBB+	4.70	4.79	4.89	4.81	4.63	4.69	4.61	4.47	4.53	4.48	4.52	4.57	4.64%	4.52%
CSX Corp.	8.62	126408AM5	Deb	05/15/2022	BBB	6.22	6.22	6.35	6.25	6.24	6.23	6.11	6.13	6.23	6.16	6.23	6.25	6.22%	6.21%
CSX Corp.	8.1	126408AQ6	Deb	09/15/2022	BBB	6.00	6.00	6.13	6.02	6.01	6.00	5.88	5.89	6.03	5.95	6.02	6.04	6.00%	6.00%
CSX Corp.	6.3	126408GB3	Nts	03/15/2012	BBB	6.25	6.29											6.27%	
CSX Corp.	5.3	126408GF4	Nts	02/15/2014	BBB	4.88	4.89	4.91	4.92	4.95	4.97	4.97	4.99	5.00	5.02	5.04	5.06	4.97%	5.04%
CSX Corp.	6	126408GH0	Nts	10/01/2036	BBB	5.10	5.04	5.15	5.13	5.10	5.07	4.84	4.76	4.88	4.70	4.80	4.84	4.95%	4.78%
CSX Corp.	5.6	126408GJ6	Nts	05/01/2017	BBB	4.85	4.84	4.87	4.82	4.86	4.88	4.84	4.79	4.76	4.74	4.77	4.79	4.82%	4.77%
CSX Corp.	6.15	126408GK3	Nts	05/01/2037	BBB	5.06	5.05	5.27	5.15	5.17	5.00	4.80	4.75	4.90	4.71	4.82	4.86	4.96%	4.80%
Csx Corp MTN BE	6.8	12641LBU6	MTN Ser C	12/1/2028	BBB	5.55	5.50	5.66	5.58	5.52	5.50	5.34	5.30	5.40	5.25	5.33	5.13	5.42%	5.24%
Kansas City Southern	7	485170AF1	Deb	12/15/2025	BB-	6.20	6.24	6.40	6.28	6.28	6.28	6.28	6.28	6.28	6.28	6.28	6.28	6.28%	6.28%
Consolidated Rail	9.75	209864AT4	Deb	06/15/2020	NR	7.15	7.20	7.33	7.29	7.25	7.27	7.21	7.24	7.31	7.30	7.32	7.36	7.27%	7.33%
Missouri Pacific RR.	4.75	606198LF4	GenIncA	01/01/2020	NR	4.63	4.62	4.67	4.87	4.79	4.75	4.73	4.72	4.75	4.75	4.67	4.67	4.72%	4.70%
Missouri Pacific RR.	4.75	606198LG2	GenIncB	01/01/2030	NR	5.00	5.00	5.27	5.19	5.16	5.13	5.05	4.87	4.89	5.00	4.89	4.89	5.03%	4.93%

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Railroads
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STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Avg Full Year	Avg 4th QTR
Missouri Pacific RR.	5	606198LH0	IncDeb	01/01/2045	NR	6.41	6.57	6.57	6.21	6.17	6.09	5.95	5.85	6.06	6.02	5.81	5.81	6.13%	5.88%
Norfolk Southern Corp.	9	655844AA6	Nts	03/01/2021	NR	6.56	6.60	6.73	6.63	6.61	6.61	6.55	6.57	6.68	6.66	6.71	6.75	6.64%	6.71%
			Counts of data			58	58	57	56	56	55	55	55	55	55	55	54	58	55

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

	Annual	4th Qtr
A's	5.16%	5.02%
BBB's	5.36%	5.26%
BB's	6.28%	6.28%
NR's	5.96%	5.91%
ALL	5.37%	5.27%
BBB & Above	5.29%	5.18%
BB- & Above	5.31%	5.20%

**'Investment Grade (BBB- & Above)*

MONTANA DEPARTMENT OF REVENUE

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STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Avg Full Year	Avg 4th QTR
Northern Pac.Ry	3	665585JP1	GenLn Mtg	01/01/2047	A	5.53	5.17	5.54	5.57	5.14	5.10	5.19	4.94	4.94	4.95	4.95	5.12	5.18%	5.01%
Northern Pac.Ry	3	665585KH7	Gen LnMtg-Stpd	01/01/2047	A	5.53	5.17	5.54	5.57	5.14	5.10	5.19	4.94	4.94	4.95	4.95	5.12	5.18%	5.01%
Canadian National Railway Compan	7.62	136375AY8	Deb	5/15/2023	A-	3.67	3.79	4.03	3.73	3.57	3.48	3.35	3.33	3.36	3.11	3.10	3.16	3.47%	3.12%
Canadian National Railway Compan	6.8	136375BA9	Nt	7/15/2018	A-	2.55	2.58	2.52	2.26	2.24	2.23	2.11	1.87	1.98	1.95	1.88	1.82	2.17%	1.88%
Canadian National Railway Compan	6.9	136375BD3	Nt	7/15/2028	A-	4.13	4.09	4.16	3.95	3.74	3.64	3.44	3.54	3.59	3.45	3.57	3.62	3.74%	3.55%
Union Pacific Corp.	7	907818AZ1	Deb	02/01/2016	A-	1.69	1.83	2.04	1.78	1.80	1.77	1.63	1.39	1.40	1.42	1.45	1.49	1.64%	1.45%
Union Pacific Corp.	7	907818AZ1	Deb	2/1/2016	A-	1.69	1.83	2.04	1.78	1.80	1.77	1.63	1.39	1.40	1.42	1.45	1.49	1.64%	1.45%
Union Pacific Corp.	7.12	907818BY3	Deb	02/01/2028	A-	4.68	4.44	4.66	4.31	4.26	4.18	4.02	4.05	3.88	3.73	3.80	3.90	4.16%	3.81%
Union Pacific Corp.	6.62	907818CF3	Deb	02/01/2029	A-	4.13	4.09	4.31	4.21	3.89	3.97	3.81	3.63	3.68	3.53	3.60	3.70	3.88%	3.61%
Union Pacific Corp.	5.38	907818CT3	Nts	05/01/2014	A-	1.52	1.41	1.25	1.18	0.99	0.97	0.87	0.88	0.87	0.88	0.83	0.83	1.04%	0.85%
Union Pacific Corp.	6.25	907818CU0	Deb	05/01/2034	A-	4.46	4.32	4.59	4.48	4.29	4.36	4.16	4.14	4.36	3.89	4.02	4.07	4.26%	3.99%
Union Pacific Corp.	4.88	907818CV8	Sr Nt	1/15/2015	A-	1.20	1.33	1.43	1.20	1.31	1.28	1.16	0.81	0.79	0.79	0.84	0.84	1.08%	0.82%
Union Pacific Corp.	5.65	907818CW6	Nts	05/01/2017	A-	2.19	1.97	2.18	2.00	2.08	2.23	2.08	1.84	1.86	1.42	1.46	1.50	1.90%	1.46%
Union Pacific Corp.	6.15	907818CX4	Deb	05/01/2037	A-	4.48	4.41	4.63	4.59	4.40	4.27	4.12	4.15	4.37	4.02	4.09	4.14	4.31%	4.08%
Union Pacific Corp.	5.45	907818CY2	Nts	01/31/2013	A-	0.66	0.71	0.64	0.73	0.76	0.64	0.61	0.74	0.51	0.55	4.45	0.00	0.92%	1.67%
Burlington Northern	8.75	121897WQ1	Deb	02/25/2022	BBB+	3.67	3.67	3.98	3.73	3.69	3.65	3.48	3.41	3.32	3.19	3.19	3.24	3.52%	3.21%
Burlington NorthernR.R.	3.8	121899CC0	Con Mtg L	01/01/2020	BBB+	3.33	3.42	3.68	3.41	3.27	3.29	3.12	3.13	3.27	3.20	3.21	3.26	3.30%	3.22%
Burlington NorthernR.R.	6.55	121899CD8	Con Mtg K	01/01/2020	BBB+	3.89	3.97	4.23	3.96	3.82	3.84	3.67	3.68	3.82	3.64	3.65	3.70	3.82%	3.66%
Burlington NorthernR.R.	6.55	121899CE6	Con Mtg O	01/01/2020	BBB+	3.89	3.97	4.23	3.96	3.82	3.84	3.67	3.68	3.82	3.64	3.65	3.70	3.82%	3.66%
Burlington NorthernR.R.	8.15	121899CF3	Con Mtg N	01/01/2020	BBB+	3.88	3.96	4.21	3.95	3.81	3.82	3.66	3.67	3.81	3.74	3.74	3.80	3.84%	3.76%
Burlington NorthernR.R.	8.15	121899CG1	Con Mtg P	01/01/2020	BBB+	3.89	3.97	4.23	3.96	3.82	3.84	3.66	3.67	3.81	3.74	3.74	3.80	3.84%	3.76%
Burlington NorthernR.R.	3.2	121899CH9	Con Mtg M	01/01/2045	BBB+	6.31	5.69	5.31	5.14	4.92	4.92	4.75	4.79	5.01	5.18	5.18	5.28	5.21%	5.21%
Burlington Northern Santa Fe Corp.	7	12189TAA2	Deb	12/15/2025	BBB+	3.89	3.92	4.23	3.88	3.86	3.82	3.60	3.61	3.67	3.38	3.47	3.52	3.74%	3.46%
Burlington Northern Santa Fe Corp.	6.88	12189TAB0	Deb	02/15/2016	BBB+	2.56	2.52	2.78	2.53	2.02	2.02	1.58	1.53	1.53	1.60	1.63	1.67	2.00%	1.63%

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
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STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Avg Full Year	Avg 4th QTR
Burlington Northern Santa Fe Corp.	7.29	12189TAD6	Deb	06/01/2036	BBB+	4.58	4.56	5.06	5.19	5.02	4.97	4.66	4.69	4.80	4.49	4.56	4.75	4.78%	4.60%
Burlington Northern Santa Fe Corp.	6.88	12189TAG9	Deb	12/01/2027	BBB+	4.51	4.49	4.85	4.71	4.61	4.56	4.30	4.33	4.22	4.13	4.22	4.27	4.43%	4.21%
Burlington Northern Santa Fe Corp.	6.7	12189TAJ3	Deb	08/01/2028	BBB+	4.52	4.50	4.86	4.72	4.62	4.57	4.31	4.34	4.55	4.43	4.50	4.60	4.54%	4.51%
Burlington Northern Santa Fe Corp.	8.12	12189TAQ7	Deb	04/15/2020	BBB+	3.29	3.52	3.83	3.43	3.37	3.22	3.05	3.06	3.00	2.94	3.02	3.07	3.23%	3.01%
Burlington Northern Santa Fe Corp.	7.95	12189TAR5	Deb	08/15/2030	BBB+	4.65	4.63	4.90	4.81	4.69	4.64	4.38	4.41	4.58	4.46	4.53	4.57	4.60%	4.52%
Burlington Northern Santa Fe Corp.	5.9	12189TAU8	Nts	07/01/2012	BBB+	1.26	0.79	0.55	0.93	0.85								0.88%	
Burlington Northern Santa Fe Corp.	4.3	12189TAV6	Nts	07/01/2013	BBB+	1.11	1.21	1.14	1.11	1.25	1.08	0.55	0.59	0.47	0.51	0.54	0.58	0.85%	0.54%
Burlington Northern Santa Fe Corp.	6.2	12189TAX2	Deb	08/15/2036	BBB+	4.58	4.44	4.81	4.66	4.54	4.49	4.23	4.23	4.37	4.30	4.22	4.30	4.43%	4.27%
Burlington Northern Santa Fe Corp.	6.15	12189TAZ7	Deb	05/01/2037	BBB+	4.50	4.49	4.76	4.58	4.54	4.59	4.28	4.21	4.28	4.03	4.10	4.22	4.38%	4.12%
Norfolk Southern Corp.	7.7	655844AE8	Nts	05/15/2017	BBB+	2.17	2.31	2.33	1.98	2.01	2.02	1.87	1.75	1.84	1.54	1.58	1.48	1.91%	1.53%
Norfolk Southern Corp.	7.05	655844AF5	Nts	05/01/2037	BBB+	4.73	4.42	4.64	4.47	4.64	4.50	4.34	3.86	4.16	4.08	4.15	4.25	4.35%	4.16%
Norfolk Southern Corp.	7.8	655844AJ7	Nts	05/15/2027	BBB+	4.16	4.07	4.33	4.08	3.94	3.90	3.73	3.74	3.96	3.89	3.98	4.03	3.98%	3.97%
Norfolk Southern Corp.	7.9	655844AK4	Nt	5/15/2097	BBB+	5.03	5.20	5.43	5.28	5.11	5.06	4.90	4.93	5.23	4.83	4.90	5.02	5.08%	4.92%
Norfolk Southern Corp.	7.25	655844AQ1	Sr Nts	02/15/2031	BBB+	4.38	4.29	4.46	4.26	4.39	4.22	3.98	3.76	4.06	3.93	4.00	4.10	4.15%	4.01%
Norfolk Southern Corp.	6	655844AV0	Fixed Rt Sr Nt	3/15/2105	BBB+	5.00	5.12	5.36	5.17	5.03	5.04	4.79	4.84	5.06	4.78	4.85	4.92	5.00%	4.85%
Norfolk Southern Corp.	5.59	655844AW8	Nts	05/17/2025	BBB+	3.79	3.82	3.88	3.63	3.59	3.57	3.28	3.16	3.38	3.18	3.27	3.32	3.49%	3.26%
Norfolk Southern Corp.	5.64	655844AX6	Nts	05/17/2029	BBB+	4.03	4.19	4.36	4.21	3.89	3.99	3.83	3.56	3.66	3.56	3.63	3.73	3.89%	3.64%
CSX Corp.	8.62	126408AM5	Deb	05/15/2022	BBB	4.01	3.99	4.25	4.00	3.94	3.90	3.60	3.61	3.82	3.63	3.77	3.77	3.86%	3.72%
CSX Corp.	8.1	126408AQ6	Deb	09/15/2022	BBB	4.02	4.00	4.26	4.01	3.95	3.91	3.61	3.62	3.90	3.71	3.85	3.85	3.89%	3.80%
CSX Corp.	6.3	126408GB3	Nts	03/15/2012	BBB	1.08												1.08%	
CSX Corp.	5.3	126408GF4	Nts	02/15/2014	BBB	1.06	1.01	1.05	1.00	1.19	1.25	1.07	1.08	1.02	1.04	1.06	1.07	1.08%	1.06%
CSX Corp.	6	126408GH0	Nts	10/01/2036	BBB	4.78	4.69	4.85	4.81	4.77	4.72	4.38	4.26	4.43	4.16	4.32	4.37	4.55%	4.28%
CSX Corp.	5.6	126408GJ6	Nts	05/01/2017	BBB	2.48	2.37	2.46	2.21	2.32	2.38	2.15	1.84	1.64	1.44	1.53	1.57	2.03%	1.51%
CSX Corp.	6.15	126408GK3	Nts	05/01/2037	BBB	4.68	4.67	4.98	4.81	4.84	4.59	4.30	4.21	4.43	4.16	4.32	4.37	4.53%	4.28%
Csx Corp MTN BE	6.8	12641LBU6	MTN Ser C	12/1/2028	BBB	4.83	4.74	5.01	4.86	4.77	4.72	4.43	4.36	4.53	4.26	4.38	4.02	4.58%	4.22%
Kansas City Southern	7	485170AF1	Deb	12/15/2025	BB-	5.64	5.72	5.98	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78%	5.78%
Consolidated Rail	9.75	209864AT4	Deb	06/15/2020	NR	4.49	4.57	4.83	4.71	4.57	4.59	4.42	4.43	4.57	4.51	4.51	4.56	4.56%	4.53%
Norfolk Southern Corp.	9	655844AA6	Nts	03/01/2021	NR	4.06	4.14	4.40	4.15	4.06	4.02	3.85	3.86	4.08	4.02	4.10	4.15	4.07%	4.09%
			Counts of data			52	51	51	51	51	50	50	50	50	50	50	50	52	50

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

	Annual	4th Qtr
A's	2.97%	2.78%
BBB's	3.61%	3.58%
BB's	5.78%	5.78%
NR's	4.32%	4.31%
ALL	3.49%	3.41%
BBB & Above	3.41%	3.33%
BB- & Above	3.46%	3.38%

**Investment Grade (BBB- & Above)*

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Railroads
2013 Assessment Year

STANDARD & POOR'S BOND GUIDE
20 YR PLUS - BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Avg Full Year	Avg 4th QTR
Northern Pac.Ry	3	665585JP1	GenLn Mtg	01/01/2047	A	5.53	5.17	5.54	5.57	5.14	5.10	5.19	4.94	4.94	4.95	4.95	5.12	5.18%	5.01%
Northern Pac.Ry	3	665585KH7	Gen LnMtg-Stpd	01/01/2047	A	5.53	5.17	5.54	5.57	5.14	5.10	5.19	4.94	4.94	4.95	4.95	5.12	5.18%	5.01%
Union Pacific Corp.	6.25	907818CU0	Deb	05/01/2034	A-	4.46	4.32	4.59	4.48	4.29	4.36	4.16	4.14	4.36	3.89	4.02	4.07	4.26%	3.99%
Union Pacific Corp.	6.15	907818CX4	Deb	05/01/2037	A-	4.48	4.41	4.63	4.59	4.40	4.27	4.12	4.15	4.37	4.02	4.09	4.14	4.31%	4.08%
Burlington NorthernR.R.	3.2	121899CH9	Con Mtg M	01/01/2045	BBB+	6.31	5.69	5.31	5.14	4.92	4.92	4.75	4.79	5.01	5.18	5.18	5.28	5.21%	5.21%
Burlington Northern Santa Fe Corp.	7.29	12189TAD6	Deb	06/01/2036	BBB+	4.58	4.56	5.06	5.19	5.02	4.97	4.66	4.69	4.80	4.49	4.56	4.75	4.78%	4.60%
Burlington Northern Santa Fe Corp.	6.2	12189TAX2	Deb	08/15/2036	BBB+	4.58	4.44	4.81	4.66	4.54	4.49	4.23	4.23	4.37	4.30	4.22	4.30	4.43%	4.27%
Burlington Northern Santa Fe Corp.	6.15	12189TAZ7	Deb	05/01/2037	BBB+	4.50	4.49	4.76	4.58	4.54	4.59	4.28	4.21	4.28	4.03	4.10	4.22	4.38%	4.12%
Norfolk Southern Corp.	7.05	655844AF5	Nts	05/01/2037	BBB+	4.73	4.42	4.64	4.47	4.64	4.50	4.34	3.86	4.16	4.08	4.15	4.25	4.35%	4.16%
Norfolk Southern Corp.	7.9	655844AK4	Nt	5/15/2097	BBB+	5.03	5.20	5.43	5.28	5.11	5.06	4.90	4.93	5.23	4.83	4.90	5.02	5.08%	4.92%
Norfolk Southern Corp.	6	655844AV0	Fixed Rt Sr Nt	3/15/2105	BBB+	5.00	5.12	5.36	5.17	5.03	5.04	4.79	4.84	5.06	4.78	4.85	4.92	5.00%	4.85%
CSX Corp.	6	126408GH0	Nts	10/01/2036	BBB	4.78	4.69	4.85	4.81	4.77	4.72	4.38	4.26	4.43	4.16	4.32	4.37	4.55%	4.28%
CSX Corp.	6.15	126408GK3	Nts	05/01/2037	BBB	4.68	4.67	4.98	4.81	4.84	4.59	4.30	4.21	4.43	4.16	4.32	4.37	4.53%	4.28%
			Counts of data			13	13	13	13	13	13	13	13	13	13	13	13	13	13

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

	Annual	4th Qtr
A's	4.73%	4.52%
BBB's	4.70%	4.52%
NR's	---	---
ALL	4.71%	4.52%
BBB & Above	4.71%	4.52%
BB- & Above	---	---

**'Investment Grade (BBB- & Above)*