Montana Department of
REVENUE

2015 Capitalization Rate Study

Telecommunications

MONTANA DEPARTMENT OF REVENUE

Direct Capitalization Rate Study

Industry: Telecommunications, Telephone Exchange Carriers

2015 Assessment Year

Equity Measures Calculated:

E/P estimates:

	All	B & Above	Local	
	4.76%	4.91%	4.03%	Yahoo
	4.62%	5.45%	3.23%	Value Line
	4.69%	5.18%	3.63%	Average of E/Ps
Inverse of P/E Ratios:				
	9.57%	7.02%	12.52%	Yahoo
	4.89%	5.57%	3.50%	Value Line
	7.23%	6.29%	8.01%	Average of Inverse of the P/E
	5.47%	6.58%	5.46%	Inverse of median P/E, Value Line
	5.96%	5.74%	5.82%	Average of all above except median P/E
Mean =	5.86%	5.91%	5.75%	
Median =	4.89%	5.57%	4.03%	

Equity Measure NUOI = 6.00%

Debt Measure Calculated, Current Yield:

	Annual	4th Qtr	
	6.17%	6.04%	ALL
	5.96%	5.82%	BBB- & Above
	6.10%	5.99%	BB- & Above
Mean =	6.08%	5.95%	
Median =	6.10%	5.99%	

Debt Measure = 6.00%

Industry Market Capital Structure Net Utility Operating Income (NUOI) Rate						
Equity	67.00%	x	6.00%	=	4.02%	
Debt	33.00%	x	6.00%	=	1.98%	
	100.00%				6.00%	
Direct Cap Rate NUIO =						**6.00%**

Gross Cash Flow / Price:

All	B & Above	Local	
23.54%	21.50%	24.28%	Value Line

Equity Measure Gross = 22.00%

Industry Market Capital Structure Gross Cash Flow Rate (GCF)						
Equity	67.00%	x	22.00%	=	14.74%	
Debt	33.00%	x	6.00%	=	1.98%	
	100.00%				16.72%	
Direct Cap Rate GCF =						**16.75%**

MONTANA DEPARTMENT OF REVENUE

Direct Capitalization Rate Study
Industry: Telecommunications - Wireless
2015 Assessment Year

Equity Measures Calculated:

E/P estimates:

	All	Wireless	Mixed	Median	
	7.29%	9.28%	5.96%	5.23%	Yahoo
	6.94%	-----	6.94%	7.81%	Value Line
	7.11%	4.64%	6.45%	6.52%	Average of E/Ps
Inverse of P/E Ratios:					
	5.30%	5.78%	4.64%	3.26%	Yahoo
	7.21%	-----	7.21%	7.69%	Value Line
	6.25%	2.89%	5.92%	5.47%	Average of Inverse of the P/E
	4.81%	3.79%	5.49%	4.00%	Inverse of median P/E, Value Line
	6.68%	3.77%	6.19%	6.00%	Average of all above except median P/E
Mean =	6.31%	6.28%	6.05%	5.60%	
Median =	6.94%	5.78%	5.96%	5.23%	

Equity Measure NUOI = 6.30%

Debt Measure Calculated, Current Yield:

	Annual	4th Qtr	
	6.17%	6.04%	ALL
	5.96%	5.82%	BBB- & Above
	6.10%	5.99%	BB- & Above
Mean =	6.08%	5.95%	
Median =	6.10%	5.99%	

Debt Measure = 6.00%

Industry Market Capital Structure			NUOI Rate		
Equity	70.00%	x	6.30%	=	4.41%
Debt	30.00%	x	6.00%	=	1.80%
	100.00%				6.21%
Direct Cap Rate NUIO =					**6.25%**

Gross Cash Flow / Price:

All	Wireless	Mixed	Median	
23.39%	24.18%	22.34%	20.48%	Value Line

Equity Measure Gross = 24.00%

Industry Market Capital Structure			Gross Cash Flow Rate (GCF)		
Equity	70.00%	x	24.00%	=	16.80%
Debt	30.00%	x	6.00%	=	1.80%
	100.00%				18.60%
Direct Cap Rate GCF =					**18.75%**

MONTANA DEPARTMENT OF REVENUE

Direct Capitalization Rate Study

Industry: Telecommunications with significant portion of Cable TV Service

2015 Assessment Year

Equity Measures Calculated:

E/P estimates:

	All	B & Above	
	4.53%	4.12%	Yahoo
	4.63%	4.20%	Value Line
	4.58%	4.16%	Average of E/Ps
Inverse of P/E Ratios:			
	9.14%	7.95%	Yahoo
	4.83%	5.33%	Value Line
	6.98%	6.64%	Average of Inverse of the P/E
	4.62%	5.53%	Inverse of median P/E, Value Line
	5.78%	5.40%	Average of all above except median P/E
Mean =	5.55%	5.43%	
Median =	4.63%	5.33%	

Equity Measure NUOI = 6.50%

Debt Measure Calculated, Current Yield:

	Annual	4th Qtr	
	6.00%	5.93%	ALL
	5.86%	5.80%	BBB- & Above
	6.09%	6.02%	BB- & Above
Mean =	5.98%	5.92%	
Median =	6.00%	5.93%	

Debt Measure = 6.00%

Industry Market Capital Structure Net Utility Operating Income (NUOI) Rate						
Equity	68.00%	x	6.50%	=	4.42%	
Debt	32.00%	x	6.00%	=	1.92%	
	100.00%				6.34%	
Direct Cap Rate NUIO =						**6.50%**

Gross Cash Flow / Price:

All	B & Above	
23.05%	16.48%	Value Line

Equity Measure Gross = 20.00%

Industry Market Capital Structure Gross Cash Flow Rate (GCF)						
Equity	68.00%	x	20.00%	=	13.60%	
Debt	32.00%	x	6.00%	=	1.92%	
	100.00%				15.52%	
Direct Cap Rate GCF =						**15.75%**

MONTANA DEPARTMENT OF REVENUE

Yield Capitalization Rate Study
Industry: Telecommunications
2015 Assessment Year

Equity Measures Calculated:	**Exchange Carriers**	**Wireless Carriers**
Dividend Growth Model - Dividends	7.50%	8.80%
Dividend Growth Model - Earnings	17.00%	9.00%
Dividend Growth Model - Plowback	8.50%	8.00%
Capital Asset Pricing Model	8.49%	9.50%
Mean =	7.99%	9.15%
Median =	7.99%	9.15%
Equity Measure FCF =	**8.50%**	**9.50%**

Debt Measures Calculated, Yield to Maturity:

	ALL DEBT		**20 YEAR PLUS DEBT**	
	Annual	**4th Qtr**	**Annual**	**4th Qtr**
ALL	3.69%	3.55%	5.55%	5.35%
BBB- & Above	4.39%	4.24%	5.35%	5.13%
BB- & Above	4.61%	4.49%	5.54%	5.32%
Mean =	4.23%	4.09%	5.48%	5.27%
Median =	4.39%	4.24%	5.54%	5.32%

Debt Measure = 5.35%

Yield Cap Rate Free Cash Flow - Telecommunications, Exchange Carriers						
Equity	67.00%	x	8.50%	=	5.70%	
Debt	33.00%	x	5.35%	* (1 - 0.35) =	1.15%	
	100.00%				6.84%	
Weighted Average Cost of Capital (WACC) =						**8.25%**

Yield Cap Rate Free Cash Flow - Telecommunications, Wireless Carriers						
Equity	70.00%	x	9.50%	=	6.65%	
Debt	30.00%	x	5.35%	* (1 - 0.35) =	1.04%	
	100.00%				7.69%	
Weighted Average Cost of Capital (WACC) =						**7.75%**

Where Assumed Growth Rate = Inflation **Growth = 1.60%**

see appendix for calculation 2.16%

US Inflation Calculator 12/31/2014 1.60%

MONTANA DEPARTMENT OF REVENUE

Yield Capitalization Rate Study
Industry: Telecommunications with significant portion of Cable TV Service
2015 Assessment Year

Equity Measures Calculated:	**Cable TV**
Dividend Growth Model - Dividends	7.00%
Dividend Growth Model - Earnings	15.00%
Dividend Growth Model - Plowback	10.00%
Capital Asset Pricing Model	9.16%
Mean =	10.29%
Median =	9.58%
Equity Measure FCF =	**9.25%**

Debt Measures Calculated, Yield to Maturity:

	ALL DEBT		**20 YEAR PLUS DEBT**	
	Annual	**4th Qtr**	**Annual**	**4th Qtr**
ALL	3.69%	3.55%	5.13%	4.88%
BBB- & Above	2.97%	2.89%	4.59%	4.36%
B- & Above	3.64%	3.53%	5.13%	4.88%
Median =	3.64%	3.53%	5.13%	4.88%

Debt Measure = 4.75%

Yield Cap Rate Free Cash Flow - Telecommunications, Cable TV						
Equity	68.00%	x	9.25%	=	6.29%	
Debt	32.00%	x	4.75%	* (1 - 0.35) =	0.99%	
	100.00%				7.28%	
Weighted Average Cost of Capital (WACC) =						**7.50%**

Where Assumed Growth Rate = Inflation **Growth = 1.60%**

see appendix for calculation 2.16%

US Inflation Calculator 12/31/2014 1.60%

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Telecommunications, Exchange Carriers
2015 Assessment Year

A	B	C	D	E	F	G	H	I	J	K	L
Company	Ticker Symbol	(VL) Financial Strength	(VL) Shares (000)	(YAHOO) Avg. Price Common	(VL) Book Value Per Share	Mkt. Value Common	(VL) Book Value Common (000)	(VL) Book Value Preferred (000)	(VL) Book Value Debt (000)	Mkt/Book Debt Ratio	Mkt. Value Pref. & Debt
	A					DxE	FxD				
AT&T Inc**	**T**	**A++**	**5,226,300**	**33.12**	**17.50**	**173,095,056**	**91,460,250**	**0**	**69,290,000**	**1.00**	**69,290,000**
Verizon Communications**	**VZ**	**A++**	**4,141,100**	**46.23**	**9.38**	**191,443,053**	**38,843,518**	**0**	**89,658,000**	**1.00**	**89,658,000**
CenturyLink Inc	**CTL**	**B++**	**583,600**	**39.58**	**29.45**	**23,098,888**	**17,187,020**	**0**	**20,181,000**	**1.00**	**20,181,000**
Frontier Communications	**FTR**	**B**	**999,500**	**6.67**	**4.06**	**6,666,665**	**4,057,970**	**0**	**7,873,700**	**1.00**	**7,873,700**
Windstream Hldgs.	WIN	**B**	**596,200**	8.24	**1.41**	4,912,688	840,642	**0**	**8,622,200**	1.00	8,622,200
Consol. Communic.	CNSL	**C++**	**40,100**	27.83	**3.69**	1,115,983	147,969	**0**	**1,212,100**	1.00	1,212,100
Gen'l Communic. 'A'	GNCMA	**C++**	**40,400**	13.75	**3.89**	555,500	157,156	**0**	**1,113,300**	1.00	1,113,300
Cincinnati Bell	CBB	**C+**	**208,700**	3.19	**(3.86)**	665,753	(805,582)	**129,400**	**2,252,600**	1.00	2,382,000

SUMS & AVERAGES						
Cos. with positive per share- price, book value, and cash flow.	All	401,553,586	152,694,525	129,400	200,202,900	200,332,300
Local Carriers - CTL, FTR, CNSL, WIN, and CBB	B and Above	399,216,350	152,389,400	0	195,624,900	195,624,900
Include only AT&T, Verizon and Gen'l Comm Inc.	Local Carriers	36,459,977	22,233,601	129,400	40,141,600	40,271,000
	Mixed Carriers	365,093,609	130,460,924	0	160,061,300	160,061,300

* All **Negative** values left out of calculations
** 2014 Wireless & Wireline contributions:
AT&T Corp., 54% Wireless, 46% Wireline
Verizon Com., 67% Wireless, 33% Wireline
Gen'l Comm. I, Grp., 24% Wireless, 76% Wireline

INDUSTRY MARKET STRUCTURES								
	ALL COMPANIES		**B & ABOVE**		**LOCAL ONLY**		**MIXED**	
COMMON	67.00%	401,553,586	67.00%	399,216,350	48.00%	36,459,977	70.00%	365,093,609
DEBT	33.00%	200,332,300	33.00%	195,624,900	52.00%	40,271,000	30.00%	160,061,300
TOTAL	100.00%	601,885,886	100.00%	594,841,250	100.00%	76,730,977	100.00%	525,154,909

Notes/Rational for Changes to Guideline Companies

Hickory Tech Corp became Enventis on May 6, 2014 now traded under which was acquired by Consolidated Communications - HTCO replaced with CNSL
GCI completed purchase of Alaska Communications wireless arm on 2/5/14 - ALSK replaced with GNCMA

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Telecommunications, Exchange Carriers
2015 Assessment Year

A	B	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Company	Ticker Symbol A	(YAHOO) EPS	(YAHOO) E/P M/E	(VL) EPS	(VL) E/P O/E	(VL) CF/S	(VL) CF/P Q/E	(YAHOO) P/E	(YAHOO) Inverse of P/E 1/S	(VL) P/E	(VL) Inverse of P/E 1/U	(VL) Median P/E	(VL) Inverse of Median P/E 1/X	(VL) Beta	(VL) Est. Tax Rate
AT&T Inc**	**T**	**3.27**	**9.87%**	**2.72**	**8.21%**	**6.25**	**18.87%**	**34.68**	**2.88%**	**12.66**	**7.90%**	**14.00**	**7.14%**	**0.75**	35.0%
Verizon Communications**	**VZ**	**2.42**	**5.23%**	**3.61**	**7.81%**	**5.40**	**11.68%**	**48.64**	**2.06%**	**13.01**	**7.69%**	**14.00**	**7.14%**	**0.70**	35.0%
CenturyLink Inc	**CTL**	**1.43**	**3.61%**	**2.66**	**6.72%**	**10.50**	**26.53%**	**36.58**	**2.73%**	**15.20**	**6.58%**	**13.00**	**7.69%**	**0.75**	35.0%
Frontier Communications	**FTR**	**0.18**	**2.70%**	**0.22**	**3.30%**	**1.50**	**22.49%**	**5.91**	**16.92%**	**27.08**	**3.69%**	**23.00**	**4.35%**	**0.90**	38.0%
Windstream Hldgs.	WIN	0.26	3.16%	**0.10**	1.21%	2.30	27.91%	9.53	10.50%	**50.69**	1.97%			**0.90**	35.0%
Consol. Communic.	CNSL	0.71	2.55%	**0.84**	3.02%	3.65	13.12%	22.43	4.46%	**33.48**	2.99%			**0.75**	36.0%
Gen'l Communic. 'A'	GNCMA	0.38	2.76%	**0.66**	4.80%	5.00	36.36%	11.12	8.99%	**16.58**	6.03%	**46.00**	**2.17%**	**1.10**	9.0%
Cincinnati Bell	CBB	0.26	8.15%	**0.06**	1.88%	1.00	31.35%	3.57	27.99%	**44.29**	2.26%	**23.00**	**4.35%**	**1.15**	40.0%
SUMS & AVERAGES		All	4.76%		4.62%		23.54%		9.57%		4.89%		5.47%	0.88	32.88%
Cos. with positive per share- price, book value, and cash flow.		B and Above	4.91%		5.45%		21.50%		7.02%		5.57%		6.58%	0.80	35.60%
Local Carriers - CTL, FTR, CNSL, WIN, and CBB		Local Carriers	4.03%		3.23%		24.28%		12.52%		3.50%		5.46%	0.89	36.80%
Include only AT&T, Verizon and Gen'l Comm Inc.		Mixed Carriers	5.96%		6.94%		22.31%		4.64%		7.21%		5.49%	0.85	26.33%

* All **Negative** values left out of calculations
** 2014 Wireless & Wireline contributions:
AT&T Corp., 54% Wireless, 46% Wireline
Verizon Com., 67% Wireless, 33% Wireline
Gen'l Comm. I, Grp., 24% Wireless, 76% Wireline

Beta of Exchange Carriers = 0.85

Notes/Rational for Changes to Guideline Companies

Hickory Tech Corp became Enventis on May 6, 2014 now tı
GCI completed purchase of Alaska Communications wirele

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Telecommunications, Wireless
2015 Assessment Year

A	B	C	D	E	F	G	H	I	J	K	L
Company	Ticker Symbol	(VL) Financial Strength	(VL) Shares (000)	(YAHOO) Avg. Price Common	(VL) Book Value Per Share	Mkt. Value Common (000) DxE	(VL) Book Value Common (000) FxD	(VL) Book Value Preferred (000)	(VL) Book Value Debt (000)	Mkt/Book Debt Ratio	Mkt. Value Pref. & Debt
AT&T Inc**	T	**A++**	5,226,300	33.12	17.50	173,095,056	91,460,250	0	69,290,000	1.00	69,290,000
Verizon Communications**	VZ	**A++**	4,141,100	46.23	9.38	191,443,053	38,843,518	0	89,658,000	1.00	89,658,000
Gen'l Communic. 'A'	GNCMA	**C++**	40,400	13.75	3.89	555,500	157,156	0	1,113,300	1.00	1,113,300
U.S. Cellular	USM	**B+**	84,200	39.83	40.49	3,353,686	3,409,258	0	878,000	1.00	878,000
Telephone & Data Sys	TDS	**B**	108,800	25.25	37.85	2,747,200	4,118,080	800	1,720,100	1.00	1,720,900
Sprint Nextel Corp	S	**C++**	3,934,000	4.15	6.50	16,326,100	25,571,000	0	32,017,000	1.00	32,017,000
T-Mobile US	TMUS	**B**	801,900	26.94	17.76	21,603,186	14,241,744	0	22,441,000	1.00	22,441,000

SUMS & AVERAGES						
Cos. with positive per share- price, book value, and cash flow.	All Comp	409,123,781	177,801,006	800	217,117,400	217,118,200
	All Wireless	44,030,172	47,340,082	800	57,056,100	57,056,900
	Mixed	365,093,609	130,460,924	-	160,061,300	160,061,300

All Wireless excludes AT&T, Verizon and Alaska

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

INDUSTRY MARKET STRUCTURE						
	All Companies		**All Wireless**		**Mixed**	
COMMON	65.00%	409,123,781	44.00%	44,030,172	70.00%	365,093,609
DEBT	35.00%	217,118,200	56.00%	57,056,900	30.00%	160,061,300
TOTAL	100.00%	626,241,981	100.00%	101,087,072	100.00%	525,154,909

Notes/Rational for Changes to Guideline Companies
Leap Wireless removed since it was acquired by AT&T in July 2013
T-Mobile was added
GCI completed purchase of Alaska Communications wireless arm on 2/5/14 - ALSK replaced with GNCMA

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Telecommunications, Wireless
2015 Assessment Year

A	B	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Company	Ticker Symbol	(YAHOO) EPS	(YAHOO) E/P M/E	(VL) EPS	(VL) E/P O/E	(VL) CF/S	(VL) CF/P Q/E	(YAHOO) P/E	(YAHOO) Inverse of P/E 1/S	(VL) P/E	(VL) Inverse of P/E 1/U	(VL) Median P/E	(VL) Inverse of Median P/E 1/X	(VL) Beta	(VL) Est. Tax Rate
AT&T Inc**	T	3.27	9.87%	2.72	8.21%	6.25	18.87%	34.68	2.88%	12.66	7.90%	14.00	7.14%	0.75	35.0%
Verizon Communications**	VZ	2.42	5.23%	3.61	7.81%	5.45	11.79%	48.64	2.06%	13.01	7.69%	14.00	7.14%	0.70	35.0%
Gen'l Communic. 'A'	GNCMA	0.38	2.76%	0.66	4.80%	5.00	36.36%	11.12	8.99%	16.58	6.03%	46.00	2.17%	1.10	9.0%
U.S. Cellular	USM	7.17	18.00%	(0.46)	(1.15%)	8.40	21.09%	39.09	2.56%			28.00	3.57%	1.00	
Telephone & Data Sys	TDS	(1.16)	(4.59%)	(1.36)	(5.39%)	9.00	35.64%	25.44	3.93%			25.00	4.00%	1.20	33.0%
Sprint Nextel Corp	S	(3.29)	(79.28%)	(0.54)	(13.01%)	0.85	20.48%	7.47	13.39%					1.15	
T-Mobile US	TMUS	0.15	0.56%	(0.42)	(1.56%)	5.25	19.49%	30.66	3.26%						

SUMS & AVERAGES	All Comp	7.29%	6.94%	23.39%	5.30%	7.21%	4.81%	0.98	28.00%
Cos. with positive per share- price, book value, and cash fl	All Wireless	9.28%	-----	24.18%	5.78%	-----	3.79%	1.12	33.00%
	Mixed	5.96%	6.94%	22.34%	4.64%	7.21%	5.49%	0.85	26.33%
All Wireless excludes AT&T, Verizon and Alaska	All Median	5.23%	7.81%	20.48%	3.26%	7.69%	4.00%	1.05	34.00%

Beta of Wireless Industry = **1.00**

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

Notes/Rational for Changes to Guideline Companies
Leap Wireless removed since it was acquired by AT&
T-Mobile was added
GCI completed purchase of Alaska Communications

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Telecommunications with significant portion of Cable TV Service
2015 Assessment Year

A	B	C	D	E	F	G	H	I	J	K	L
Company	Ticker Symbol A	(VL) Financial Strength	(VL) Shares (000)	(YAHOO) Avg. Price Common	(VL) Book Value Per Share	Mkt. Value Common DxE	(VL) Book Value Common (000) FxD	(VL) Book Value Preferred (000)	(VL) Book Value Debt (000)	Mkt/Book Debt Ratio	Mkt. Value Pref. & Debt
CenturyLink Inc	**CTL**	**B++**	**583,600**	**39.58**	**29.45**	**23,098,888**	**17,187,020**	**0**	**20,181,000**	**1.00**	**20,181,000**
Time Warner Cable	TWC	B++	277,900	152.06	24.98	42,257,474	6,941,942	0	23,285,000	1.00	23,285,000
Comcast Corp.	CMCSA	A	2,597,100	57.78	19.52	150,060,438	50,695,392	0	44,567,000	1.00	44,567,000
Charter Communications	**CHTR**	**B**	**106,100**	**166.62**	**1.42**	**17,678,382**	**150,662**	**0**	**14,181,000**	**1.00**	**14,181,000**
Frontier Communications	**FTR**	**B**	**999,500**	**6.67**	**4.06**	**6,666,665**	**4,057,970**	**0**	**7,873,700**	**1.00**	**7,873,700**
Crown Media Holdings Inc Cl A	CRWN	B	359,700	3.54	1.11	1,273,338	399,267	0	437,900	1.00	437,900
Hawaiian Telcom Holdco Inc	HCOM	**C++**	10,500	27.57	29.82	289,485	313,110	0	291,700	1.00	291,700
Consol. Communic.	CNSL	C++	40,100	27.83	3.69	1,115,983	147,969	0	1,212,100	1.00	1,212,100
General Communications	GNCMA	C++	40,400	8.80	3.89	355,520	157,156	0	1,113,300	1.00	1,113,300
Cablevision Sys. 'A'	CVC	C+	267,700	20.64	(19.74)	5,525,328	(5,284,398)	0	9,419,800	1.00	9,419,800
Cincinnati Bell	CBB	**C+**	**208,700**	3.19	**(3.86)**	665,753	(805,582)	**129,400**	**2,252,600**	1.00	2,382,000
FairPoint Communications Inc.	FRP	**C+**	26,500	14.21	(11.68)	376,565	(309,520)	0	912,200	1.00	912,200
MDU Communications Inc	MDTV		5,700	0.01	(2.23)	57	(12,711)	0	0	1.00	0

SUMS & AVERAGES	All	249,363,876	80,050,488	125,727,300	125,856,700
Cos. with positive per share- price, book value, and cash flow.	B and Above	239,761,847	79,745,363	110,817,300	110,817,300

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

INDUSTRY MARKET STRUCTURES				
	ALL COMPANIES		B & ABOVE	
COMMON	66.00%	249,363,876	68.00%	239,761,847
DEBT	34.00%	125,856,700	32.00%	110,817,300
TOTAL	100.00%	375,220,576	100.00%	350,579,147

Notes/Rational for Changes to Guideline Companies
No Changes for 2014

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Telecommunications with significant portion of Cable TV Service
2015 Assessment Year

M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
(YAHOO) EPS	(YAHOO) E/P M/E	(VL) EPS	(VL) E/P O/E	(VL) CF/S	(VL) CF/P Q/E	(YAHOO) P/E	(YAHOO) Inverse of P/E 1/S	(VL) P/E	(VL) Inverse of P/E 1/U	(VL) Median P/E	(VL) Inverse of Median P/E 1/X	(VL) Beta	(VL) Est. Tax Rate
1.43	**3.61%**	**2.66**	**6.72%**	**10.50**	**26.53%**	**36.58**	**2.73%**	**15.20**	**6.58%**	**13.00**	**7.69%**	**0.75**	35.00%
7.17	4.72%	7.17	4.72%	19.60	12.89%	142.11	0.70%	18.40	5.43%			0.90	40.00%
3.18	5.50%	2.94	5.09%	6.25	10.82%	53.16	1.88%	17.82	5.61%	**22.00**	4.55%	1.00	37.00%
(0.90)	**(0.54%)**	**(1.26)**	**(0.76%)**	**16.15**	**9.69%**	**145.94**	**0.69%**					**0.90**	
0.18	**2.70%**	**0.22**	**3.30%**	1.50	**22.49%**	**5.91**	**16.92%**	**27.08**	**3.69%**	**23.00**	**4.35%**	**0.90**	38.00%
0.19	5.37%	0.10	2.82%			3.44	29.08%					1.15	
0.78	2.83%	0.70	2.54%			27.54	3.63%					0.90	
0.71	2.55%	0.84	3.02%	3.65	13.12%	22.43	4.46%	33.48	2.99%			0.75	36.00%
0.38	4.32%	0.66	7.50%	5.00	56.82%	11.12	8.99%	16.58	6.03%	**46.00**	2.17%	1.10	9.00%
1.15	5.57%	1.24	6.01%	4.90	23.74%	17.99	5.56%	16.56	6.04%			1.30	40.00%
0.26	8.15%			1.00	31.35%	3.57	27.99%	**44.29**	2.26%	**23.00**	**4.35%**	**1.15**	40.00%
(3.29)	(23.15%)	(4.65)	(32.72%)			14.26	7.02%					1.40	
(0.65)	(6,500.00%)	(0.80)	(8,000.00%)			0.02						0.15	
All	4.53%		4.63%		23.05%		9.14%		4.83%		4.62%	0.95	34.38%
B and Above	4.12%		4.20%		16.48%		7.95%		5.33%		5.53%	0.93	37.50%

Beta of Exchange Carriers = 0.95

MONTANA DEPARTMENT OF REVENUE

Capital Asset Pricing Model
Industry: Telecommunications
2015 Assessment Year

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

	Exchange Carriers	Wireless Carriers	Telecom w/ Cable
K_E = Cost of Equity	**8.49%**	**9.50%**	**9.16%**
R_F = Risk Free Rate	2.75%	2.75%	2.75%
β= Beta	0.85	1.00	0.95
R_M = Market Rate of Return	9.50%	9.50%	9.50%
R_P = Equity Risk Premium (RM - RF)	6.75%	6.75%	6.75%

Equity Risk Premium other sources:

Dr. Aswath Damodaran	http://pages.stern.nyu.edu/~adamodar/	1/1/2014 implied premium	4.96%
Dr. Aswath Damodaran	http://pages.stern.nyu.edu/~adamodar/	1/1/2015 implied premium	5.78%
Duff & Phelps	February 6, 2015 Table Equity Risk Premium	2/28/13 until further notice	5.00%

R_m = Investor's Market Rate of Return

2014 Not updated for 2015

Ibbotson, SBBI, Large Company, Average Annual Return, ***Arithmetic** Average, Ex-Post	R_M=	12.10%
Ibbotson, SBBI, Large Company, Average Annual Return, ***Geometric** Average, Ex-Post	R_M=	10.10%
3 Stage Dividend Growth Model, S & P 500, See Exhibit, Ex Ante	R_M=	8.50%
	Mean =	10.23%
	Median =	10.10%
	R_M=	**9.50%**

R_f = Risk Free Rate

Internal Revenue Service, Rev Rule 2014-31 Table 2 December 8, 2014

Rev Rule 2014-31 Table 2

Annual Rates	Short Term - AFR	R_f =	0.34%
	Mid Term - AFR	R_f =	1.28%
	Long Term - AFR	R_f =	2.68%

The ValueLine Investment Survey January 9, 2015

U.S. Treasury Securities December 30, 2014

1 Year	R_f =	0.20%
10 Year	R_f =	2.19%
30 Year	R_f =	2.76%

Federal Reserve Statistical Release

Treasury constant Maturities, December 31, 2014

Market yield on U.S. Treasury securities, Annual Averages

1 year constant maturity, quoted on investment basis	R_f =	0.25%
10-year constant maturity, quoted on investment basis	R_f =	2.17%
20-year constant maturity, quoted on investment basis	R_f =	2.47%
30-year constant maturity, quoted on investment basis	R_f =	2.75%
	Mean =	1.71%
	Median =	2.18%
	Weighted Mean =	2.08%
	R_f=	**2.75%**

U.S. Treasury Securities Long-Term December 31, 2014

20 year constant maturity	R_f = **2.47%**
30 year constant maturity	R_f = **2.75%**

MONTANA DEPARTMENT OF REVENUE

Dividend Growth Model
Industry: Telecommunications
2015 Assessment Year

$$K_E = D1 / P_O + G_A$$

Based on Dividend Growth

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

Major Exchange Carriers:

Company Name	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/P0)	Dividend Growth (G_1)	Ke
AT&T Inc.	T	33.12	1.88	5.68%	4.00%	9.68%
Verizon Communications	VZ	46.23	2.24	4.85%	2.00%	6.85%
CenturyLink Inc.	CTL	39.58	2.16	5.46%	(3.50%)	5.46%
Gen'l Communic. 'A'	GNCMA	13.75				
Frontier Communications	FTR	6.67	0.40	6.00%	(4.00%)	6.00%
Consol. Communic.	CNSL	27.83	1.55	5.57%	Nil	5.57%
Windstream Corportation	WIN	8.24	1.00	12.14%	Nil	12.14%
Cincinnati Bell	CBB	3.19				

Weighted Mean= 9.89%
Mean = 7.61%
Median = 6.42%

Estimated Cost of Equity = 7.50%

Wireless Sector:

Company Name	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/P0)	Dividend Growth (G_1)	Ke
AT&T Inc.	T	33.12	1.88	5.68%	4.00%	9.68%
Gen'l Communic. 'A'	GNCMA	13.75				
T-Mobile US	TMUS	26.94				
Verizon Communications	VZ	46.23	2.24	4.85%	4.00%	8.85%
Sprint Nextel Corp	S	4.15				
Telephone & Data Sys	TDS	25.25	0.56	2.22%	4.00%	6.22%
U.S. Cellular	USM	39.83				

Weighted Mean= 9.77%
** AT&T Corp, Verizon Communications, and Alaska Communications
Mean = 8.25%
Median = 8.85%

NOTAdjusted for Wireline and Wireless Contributions

Estimated Cost of Equity = 8.80%

AT&T Corp., 46% Wireless, 54% Wireline
Verizon Communications, 58% Wireless, 42% Wireline
Alaska Communications SyS, Grp., 59% Wireless, 41% Wireline

MONTANA DEPARTMENT OF REVENUE

Dividend Growth Model
Industry: Telecommunications
2015 Assessment Year

$$K_E = D1 / P_O + G_A$$

Based on Earnings Growth

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

Major Exchange Carriers:

Company Name	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/P0)	Earnings Growth ** (G_1)	Ke
AT&T Inc.	T	33.12	1.88	5.68%	7.00%	12.68%
Verizon Communications	VZ	46.23	2.24	4.85%	8.00%	12.85%
CenturyLink Inc.	CTL	39.58	2.16	5.46%	8.00%	13.46%
Gen'l Communic. 'A'	GNCMA	13.75				
Frontier Communications	FTR	6.67	0.40	6.00%	21.00%	27.00%
Consol. Communic.	CNSL	27.83	1.55	5.57%	18.00%	23.57%
Windstream Corportation	WIN	8.24	1.00	12.14%	6.50%	18.64%
Cincinnati Bell	CBB	3.19			28.50%	

Weighted Mean= 20.75%
Mean = 18.03%
Median = 16.05%

Estimated Cost of Equity = 17.00%

Wireless Sector:

Company Name	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/P0)	Earnings Growth Growth (G_1)	Ke
AT&T Inc.	T	33.12	1.88	5.68%	7.00%	12.68%
Gen'l Communic. 'A'	GNCMA	13.75				
T-Mobile US	TMUS	26.94				
Verizon Communications	VZ	46.23	2.24	4.85%	4.00%	8.85%
Sprint Nextel Corp	S	4.15				
Telephone & Data Sys	TDS	25.25	0.56	2.22%	4.00%	6.22%
U.S. Cellular	USM	39.83				

Weighted Mean= 10.77%
Mean = 9.25%
Median = 8.85%

** AT&T Corp, Verizon Communications, and Alaska Communications

NOTAdjusted for Wireline and Wireless Contributions

Estimated Cost of Equity = 9.00%

MONTANA DEPARTMENT OF REVENUE

Dividend Growth Model
Industry: Telecommunications
2015 Assessment Year

$$K_E = D1 / P_O + G_A$$

Based on Return on Equity

KE = Cost of Equity
D1 = Expected Dividends
b = Retained Earnings (plowback)
Po = Current Price Per Share
G = Sustainable Growth
ROE = Return on Equity

Major Exchange Carriers:

Company Name	Ticker*	Stock Price (Po)	Expected Dividend 1 Year **	Dividend Yield (D1/P0)	b (1-payout ratio)	ROE	Growth (b*ROE) **	Ke 1 Year
AT&T Inc.	T	33.12	1.88	5.68%	32.00%	14.50%	4.64%	10.32%
Verizon Communications	VZ	46.23	2.24	4.85%	41.00%	13.00%	5.33%	10.18%
CenturyLink Inc.	CTL	39.58	2.16	5.46%	14.00%	8.50%	1.19%	6.65%
Gen'l Communic. 'A'	GNCMA	13.75				18.50%		
Frontier Communications	FTR	6.67	0.40	6.00%		6.00%		6.00%
Consol. Communic.	CNSL	27.83	1.55	5.57%		24.00%		5.57%
Windstream Corportation	WIN	8.24	1.00	12.14%		12.00%		12.14%
Cincinnati Bell	CBB	3.19						

All Companies In Survey

Weighted Mean=	10.61%
Mean=	8.47%
Median=	8.41%

Cost of Equity - All, (K_E) = 8.50%

Wireless Sector:

Company Name	Ticker*	Stock Price (Po)	Expected Dividend 1 Year **	Dividend Yield (D1/P0)	b (1-payout ratio)	ROE	Growth (b*ROE) **	Ke 1 Year
AT&T Inc.	T	33.12	2.16	6.52%	32.00%	14.50%	4.64%	11.16%
Gen'l Communic. 'A'	GNCMA	13.75				18.50%		
T-Mobile US	TMUS	26.94				1.50%		
Verizon Communications	VZ	46.23	2.24	4.85%	41.00%	13.00%	5.33%	10.18%
Sprint Nextel Corp	S	4.15						
Telephone & Data Sys	TDS	25.25	0.56				0.00%	2.22%
U.S. Cellular	USM	39.83						

All Companies In Survey

Weighted Mean=	9.44%
Mean=	7.85%
Median=	10.18%

Cost of Equity - All, (K_E) = 8.00%

MONTANA DEPARTMENT OF REVENUE

Dividend Growth Model
Industry: Telecommunications with significant portion of Cable TV Service
2015 Assessment Year

$$K_E = D1 / P_O + G_A$$

Based on Dividend Growth

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

Company Name	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/P0)	Dividend Growth (G_1)	Ke
Cablevision Sys. 'A'	CVC	20.64	0.60	2.91%	1.50%	4.41%
CenturyLink Inc.	CTL	39.58	2.16	5.46%	(3.50%)	5.46%
Frontier Communications	FTR	6.67	0.40	6.00%	(4.00%)	6.00%
Cincinnati Bell	CBB	3.19				
Consol. Communic.	CNSL	27.83	1.55	5.57%	Nil	5.57%
FairPoint Communications Inc.	FRP	14.21				
Hawaiian Telcom Holdco Inc	HCOM	27.57				
Gen'l Communic. 'A'	GNCMA	13.75				
Time Warner Cable	TWC	152.06	3.00	1.97%	7.00%	8.97%
Comcast Corp.	CMCSA	57.78	1.05	1.82%	13.00%	14.82%
Charter Communications	CHTR	166.62	Nil		Nil	
Crown Media Holdings Inc Cl A	CRWN	3.54				
MDU Communications Inc	MDTV	0.01				

Weighted Mean=	6.08%
Mean =	7.54%
Median =	5.78%
Estimated Cost of Equity =	**7.00%**

MONTANA DEPARTMENT OF REVENUE

Dividend Growth Model
Industry: Telecommunications with significant portion of Cable TV Service
2015 Assessment Year

$$K_E = D1 / P_O + G_A$$

Based on Earnings Growth

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

Company Name	Ticker*	Stock Price (Po)	Expected Dividend 1 Year **	Dividend Yield (D1/P0)	Earnings Growth **	Ke 1 Year
Cablevision Sys. 'A'	CVC	20.64	0.60	2.91%	22.00%	24.91%
CenturyLink Inc.	CTL	39.58	2.16	5.46%	19.50%	24.96%
Frontier Communications	FTR	6.67	0.40	6.00%	21.00%	27.00%
Cincinnati Bell	CBB	3.19				
Consol. Communic.	CNSL	27.83	1.55	5.57%		5.57%
FairPoint Communications Inc.	FRP	14.21				
Hawaiian Telcom Holdco Inc	HCOM	27.57				
Gen'l Communic. 'A'	GNCMA	13.75				
Time Warner Cable	TWC	152.06	3.00	1.97%	8.00%	9.97%
Comcast Corp.	CMCSA	57.78	1.05	1.82%	10.00%	11.82%
Charter Communications	CHTR	166.62	16.15			9.69%
Crown Media Holdings Inc Cl A	CRWN	3.54				
MDU Communications Inc	MDTV	0.01				

Weighted Mean= 24.11%
Mean = 16.27%
Median = 11.82%

Estimated Cost of Equity = 15.00%

MONTANA DEPARTMENT OF REVENUE

Dividend Growth Model
Industry: Telecommunications with significant portion of Cable TV Service
2015 Assessment Year

$$K_E = D1 / P_O + G_A$$

Based on Return on Equity

KE = Cost of Equity
D1 = Expected Dividends
b = Retained Earnings (plowback)
Po = Current Price Per Share
G = Sustainable Growth
ROE = Return on Equity

Company Name	Ticker*	Stock Price (Po)	Expected Dividend 1 Year **	Dividend Yield (D1/P0)	b (1-payout ratio)	ROE	Growth (b*ROE) **	Ke 1 Year
Cablevision Sys. 'A'	CVC	20.64	0.60	2.91%	59.00%	16.00%	9.44%	12.35%
CenturyLink Inc.	CTL	39.58	2.16	5.46%	14.00%	8.00%	1.12%	6.58%
Frontier Communications	FTR	6.67	0.40	6.00%		6.00%		6.00%
Cincinnati Bell	CBB	3.19						
Consol. Communic.	CNSL	27.83	1.55	5.57%		24.00%		5.57%
FairPoint Communications Inc.	FRP	14.21						
Hawaiian Telcom Holdco Inc	HCOM	27.57						
Gen'l Communic. 'A'	GNCMA	13.75				18.50%		
Time Warner Cable	TWC	152.06	3.00	1.97%	66.00%	20.00%	13.20%	15.17%
Comcast Corp.	CMCSA	57.78	1.05	1.82%	69.00%	15.00%	10.35%	12.17%
Charter Communications	CHTR	166.62	16.15	9.69%				9.69%
Crown Media Holdings Inc Cl A	CRWN	3.54						
MDU Communications Inc	MDTV	0.01						

All Companies In Survey

Weighted Mean=	17.20%
Mean=	9.65%
Median=	9.69%

Cost of Equity - All, (K_E) = All, (K_E) = 10.00%

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Telecommunications
2015 Assessment Year

Ticker	Company		Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	End of Year Closing	4th Qtr Average	Annual Average	Yahoo P-E	Yahoo EPS lst 12 mo
ALSK	Alaska Communic Sys Grp	high	$ 2.49	$ 2.25	$ 2.70	$ 2.03	$ 1.97	$ 1.82	$ 1.90	$ 1.86	$ 1.79	$ 1.57	$ 1.64	$ 2.05	$ 1.79	$ 1.49	$ 1.84	NA	(0.09)
		low	$ 2.12	$ 2.09	$ 1.84	$ 1.84	$ 1.75	$ 1.66	$ 1.69	$ 1.72	$ 1.57	$ 1.25	$ 1.27	$ 1.18					
AMT	American Tower Corp	high	$ 84.65	$ 84.90	$ 82.99	$ 84.27	$ 90.00	$ 90.73	$ 97.56	$ 99.90	$ 99.90	$ 100.36	$ 106.31	$105.09	$ 98.85	$ 98.88	$ 90.49	54.83	1.83
		low	$ 78.60	$ 78.38	$ 80.01	$ 80.10	$ 83.70	$ 87.05	$ 89.05	$ 93.88	$ 92.78	$ 90.20	$ 95.72	$ 95.58					
CBB	Cincinnati Bell	high	$ 3.87	$ 3.55	$ 3.75	$ 3.77	$ 3.98	$ 3.97	$ 4.13	$ 3.87	$ 3.90	$ 3.72	$ 3.74	$ 3.58	$ 3.19	$ 3.42	$ 3.57	12.54	0.26
		low	$ 3.44	$ 3.25	$ 3.18	$ 3.31	$ 3.17	$ 3.53	$ 3.78	$ 3.54	$ 3.26	$ 3.21	$ 3.30	$ 2.94					
CHTR	Charter Communications	high	$140.74	$ 140.24	$129.75	$142.70	$ 144.59	######	$ 167.30	$ 160.99	######	$ 159.15	$ 169.73	$169.85	$166.62	$ 156.10	$ 145.94	NA	(0.90)
		low	$130.58	$ 120.50	$120.75	$116.78	$ 134.14	######	$ 151.59	$ 149.66	######	$ 137.51	$ 142.37	$158.00					
CLWR	Clearwire Corp.	high		Purchased by Sprint/Nextel on July 9. 2013															
		low																	
CMCSA	Comcast Corp.	high	$ 54.70	$ 55.28	$ 52.37	$ 52.00	$ 52.48	$ 54.26	$ 56.49	$ 55.10	$ 57.49	$ 55.69	$ 57.28	$ 59.30	$ 57.78	$ 54.65	$ 53.16	17.93	3.18
		low	$ 50.67	$ 50.19	$ 49.00	$ 47.74	$ 49.16	$ 51.94	$ 53.25	$ 52.52	$ 53.41	$ 49.33	$ 51.56	$ 54.74					
CNSL	Consol. Communic.	high	$ 20.42	$ 19.73	$ 20.25	$ 20.45	$ 20.55	$ 22.50	$ 23.32	$ 24.41	$ 25.87	$ 28.81	$ 27.94	$ 28.65	$ 27.83	$ 26.67	$ 22.43	37.87	0.71
		low	$ 18.86	$ 18.31	$ 18.66	$ 18.71	$ 19.25	$ 19.77	$ 21.10	$ 22.19	$ 24.07	$ 24.06	$ 25.41	$ 25.12					
CRWN	Crown Media Holdings Inc Cl A	high	$ 3.55	$ 3.44	$ 3.94	$ 3.98	$ 3.84	$ 3.80	$ 3.82	$ 3.62	$ 3.45	$ 3.50	$ 3.56	$ 3.65	$ 3.54	$ 3.38	$ 3.44	18.47	0.19
		low	$ 2.92	$ 2.80	$ 3.29	$ 3.52	$ 3.29	$ 3.39	$ 3.31	$ 3.32	$ 2.96	$ 2.93	$ 3.28	$ 3.37					
CVC	Cablevision Sys. 'A'	high	$ 17.86	$ 17.95	$ 18.28	$ 17.79	$ 17.78	$ 17.77	$ 20.42	$ 19.53	$ 19.38	$ 19.14	$ 20.37	$ 21.97	$ 20.64	$ 19.25	$ 17.99	17.95	1.15
		low	$ 15.69	$ 15.78	$ 16.27	$ 15.92	$ 16.42	$ 16.87	$ 17.65	$ 17.54	$ 17.41	$ 16.94	$ 17.73	$ 19.32					
CTL	CenturyLink Inc	high	$ 31.82	$ 31.48	$ 32.98	$ 34.93	$ 38.21	$ 38.10	$ 45.67	$ 41.69	$ 41.50	$ 41.99	$ 41.97	$ 41.50	$ 39.58	$ 39.83	$ 36.58	27.64	1.43
		low	$ 28.31	$ 27.93	$ 30.34	$ 32.45	$ 34.42	$ 35.69	$ 35.70	$ 38.25	$ 39.45	$ 37.64	$ 38.33	$ 37.56					
DISH	Dish Network 'A'	high	$ 58.55	$ 59.95	$ 63.98	$ 64.52	$ 63.35	$ 65.75	$ 67.50	$ 66.63	$ 67.06	$ 65.54	$ 79.57	$ 79.28	$ 72.89	$ 68.25	$ 62.82	41.50	1.78
		low	$ 53.72	$ 54.31	$ 57.67	$ 55.45	$ 57.19	$ 57.86	$ 60.91	$ 61.00	$ 62.78	$ 56.17	$ 60.50	$ 68.45					
DTV	DIRECTV	high	$ 73.44	$ 78.05	$ 80.77	$ 79.46	$ 89.46	$ 85.53	$ 88.25	$ 86.51	$ 87.94	$ 88.00	$ 88.08	$ 87.98	$ 86.70	$ 85.80	$ 81.62	47.85	1.78
		low	$ 67.80	$ 67.81	$ 72.28	$ 73.54	$ 77.50	$ 82.14	$ 84.55	$ 83.14	$ 86.02	$ 82.04	$ 86.33	$ 82.36					
DY	Dycom Industries	high	$ 31.82	$ 31.48	$ 32.98	$ 34.93	$ 38.21	$ 38.10	$ 45.67	$ 41.69	$ 41.50	$ 41.99	$ 41.97	$ 41.50	$ 39.58	$ 39.83	$ 36.58	32.94	1.20
		low	$ 28.31	$ 27.93	$ 30.34	$ 32.45	$ 34.42	$ 35.69	$ 35.70	$ 38.25	$ 39.45	$ 37.64	$ 38.33	$ 37.56					
FRP	FairPoint Communications Inc	high	$ 13.79	$ 14.16	$ 14.20	$ 14.46	$ 15.83	$ 14.88	$ 15.44	$ 16.91	$ 16.78	$ 17.13	$ 16.94	$ 15.06	$ 14.21	$ 15.03	$ 14.26	NA	(3.29)
		low	$ 11.13	$ 11.86	$ 12.26	$ 13.01	$ 12.54	$ 13.37	$ 13.47	$ 13.05	$ 14.78	$ 13.81	$ 13.96	$ 13.30					
FTR	Frontier Communications	high	$ 4.97	$ 5.15	$ 5.74	$ 6.10	$ 6.09	$ 5.90	$ 7.24	$ 6.86	$ 6.85	$ 6.55	$ 7.15	$ 7.12	$ 6.67	$ 6.47	$ 5.91	36.89	0.18
		low	$ 4.62	$ 4.40	$ 4.67	$ 5.41	$ 5.44	$ 5.44	$ 5.62	$ 6.28	$ 6.24	$ 5.62	$ 6.20	$ 6.16					
GNCMA	Gen'l Communic. 'A'	high	$ 11.75	$ 10.51	$ 11.60	$ 11.51	$ 11.50	$ 11.43	$ 11.38	$ 11.41	$ 11.67	$ 11.80	$ 12.48	$ 13.91	$ 13.75	$ 12.00	$ 11.12	33.74	0.38
		low	$ 9.64	$ 9.24	$ 10.24	$ 10.20	$ 10.33	$ 10.45	$ 10.70	$ 10.50	$ 10.87	$ 10.61	$ 11.46	$ 11.73					
HCOM	Hawaiian Telcom Holdco Inc	high	$ 29.84	$ 28.84	$ 29.93	$ 28.93	$ 28.00	$ 29.90	$ 29.36	$ 31.50	$ 28.20	$ 27.69	$ 27.72	$ 27.89	$ 27.57	$ 26.30	$ 27.54	34.46	0.78
		low	$ 26.95	$ 26.26	$ 27.76	$ 25.65	$ 24.75	$ 26.99	$ 27.76	$ 27.06	$ 25.38	$ 22.85	$ 25.78	$ 25.86					
HTCO	Hickory Tech Corp	high		Changed name to Enventis then purchased by Concolidated Communications															
		low																	

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Telecommunications
2015 Assessment Year

Ticker	Company		Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	End of Year Closing	4th Qtr Average	Annual Average	Yahoo P-E	Yahoo EPS lst 12 mo
IDT	IDT Corp	high	$ 18.07	$ 18.03	$ 19.32	$ 17.08	$ 16.61	$ 18.14	$ 18.05	$ 16.09	$ 16.79	$ 16.93	$ 17.87	$ 20.43	$ 20.31	$ 17.08	$ 16.76	4.44	4.18
		low	$ 16.60	$ 16.00	$ 16.20	$ 15.51	$ 15.14	$ 15.98	$ 15.56	$ 15.20	$ 15.41	$ 14.00	$ 16.49	$ 16.73					
LEAP	Leap Wireless	high					Part of AT&T as of July 2013												
		low																	
LVLT	Level 3 Communications	high	$ 34.71	$ 39.13	$ 39.69	$ 43.50	$ 44.77	$ 45.97	$ 49.22	$ 44.98	$ 48.21	$ 47.05	$ 50.16	$ 50.10	$ 49.38	$ 46.00	$ 42.15	43.58	1.11
		low	$ 31.55	$ 30.67	$ 36.09	$ 36.00	$ 42.12	$ 41.28	$ 43.07	$ 40.91	$ 43.69	$ 37.61	$ 44.42	$ 46.65					
MDTV	MDU Communications Inc	high	$ 0.03	$ 0.03	$ 0.02	$ 0.01	$ 0.02	$ 0.02	$ 0.03	$ 0.02	$ 0.02	$ 0.02	$ 0.03	$ 0.01	$ 0.01	$ 0.02	$ 0.02	(0.02)	(0.65)
		low	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01					
PGI	Premiere Global Services	high	$ 11.75	$ 11.33	$ 12.36	$ 13.10	$ 13.62	$ 13.71	$ 14.05	$ 13.40	$ 13.56	$ 12.42	$ 10.94	$ 10.72	$ 10.62	$ 10.73	$ 11.96	40.06	0.26
		low	$ 10.16	$ 10.50	$ 11.18	$ 11.35	$ 12.44	$ 12.65	$ 12.60	$ 12.84	$ 11.95	$ 9.89	$ 10.30	$ 10.11					
S	Sprint Nextel Corp	high	$ 10.69	$ 8.77	$ 9.46	$ 9.60	$ 9.76	$ 9.75	$ 8.68	$ 7.60	$ 7.15	$ 6.45	$ 6.25	$ 5.09	$ 4.15	$ 5.32	$ 7.47	NA	(3.29)
		low	$ 8.16	$ 7.42	$ 8.40	$ 7.38	$ 8.39	$ 8.19	$ 7.07	$ 5.36	$ 5.50	$ 5.71	$ 4.64	$ 3.79					
T	AT&T Corp	high	$ 35.29	$ 33.50	$ 35.50	$ 36.41	$ 36.86	$ 35.75	$ 37.48	$ 35.82	$ 35.55	$ 36.16	$ 36.15	$ 35.37	$ 33.12	$ 34.51	$ 34.68	10.31	3.27
		low	$ 32.01	$ 31.74	$ 31.76	$ 34.32	$ 35.00	$ 34.62	$ 35.03	$ 34.17	$ 34.36	$ 33.10	$ 34.22	$ 32.07					
TDS	Telephone & Data Sys	high	$ 27.90	$ 27.09	$ 26.22	$ 27.24	$ 28.41	$ 27.78	$ 26.37	$ 26.42	$ 26.93	$ 26.11	$ 26.49	$ 26.37	$ 25.25	$ 24.76	$ 25.44	NA	(1.16)
		low	$ 25.35	$ 21.30	$ 23.08	$ 25.95	$ 26.19	$ 24.67	$ 24.29	$ 23.08	$ 23.76	$ 22.19	$ 24.62	$ 22.77					
TMUS	T-Mobile US	high	$ 33.92	$ 32.70	$ 33.23	$ 33.69	$ 35.50	$ 34.95	$ 33.88	$ 34.55	$ 32.03	$ 29.60	$ 29.55	$ 29.01	$ 26.94	$ 27.32	$ 30.66	177.57	0.15
		low	$ 29.90	$ 29.06	$ 30.01	$ 27.62	$ 31.04	$ 32.34	$ 30.73	$ 28.44	$ 28.25	$ 24.50	$ 27.01	$ 24.26					
TWC	Time Warner Cable	high	$137.20	$ 147.28	$142.34	$142.60	$ 142.84	######	$ 154.12	$ 149.14	######	$ 147.57	$ 150.00	$155.95	$152.06	$ 142.68	$ 142.11	20.83	7.17
		low	$130.53	$ 133.50	$133.67	$132.58	$ 133.44	######	$ 145.10	$ 142.90	######	$ 128.78	$ 131.00	$142.75					
USM	U.S. Cellular	high	$ 44.86	$ 44.43	$ 41.43	$ 42.92	$ 43.50	$ 43.08	$ 42.00	$ 39.72	$ 38.85	$ 36.98	$ 39.72	$ 40.92	$ 39.83	$ 36.76	$ 39.09	5.28	7.17
		low	$ 40.86	$ 35.93	$ 36.88	$ 39.55	$ 40.07	$ 38.33	$ 37.66	$ 33.17	$ 34.35	$ 31.79	$ 36.38	$ 34.76					
VOD	Vodafone Grp	high	$ 39.43	$ 42.14	$ 41.51	$ 37.96	$ 38.54	$ 35.17	$ 34.69	$ 34.55	$ 34.81	$ 33.29	$ 37.00	$ 36.08	$ 34.17	$ 33.42	$ 35.19	1.31	26.44
		low	$ 36.40	$ 35.13	$ 35.99	$ 35.01	$ 34.10	$ 31.87	$ 32.21	$ 32.03	$ 32.40	$ 28.63	$ 32.45	$ 33.09					
VG	Vonage Holdings Corp	high	$ 4.94	$ 4.96	$ 4.68	$ 4.42	$ 4.50	$ 3.85	$ 4.01	$ 3.53	$ 3.74	$ 3.55	$ 3.80	$ 3.96	$ 3.81	$ 3.49	$ 3.80	40.00	0.09
		low	$ 3.25	$ 4.09	$ 4.18	$ 3.63	$ 3.44	$ 3.33	$ 3.40	$ 3.17	$ 3.21	$ 3.10	$ 3.27	$ 3.24					
VZ	Verizon Communications	high	$ 49.40	$ 48.34	$ 48.39	$ 48.46	$ 50.01	$ 50.33	$ 53.66	$ 50.52	$ 50.38	$ 50.50	$ 51.73	$ 50.84	$ 46.23	$ 48.99	$ 48.64	19.82	2.42
		low	$ 46.58	$ 45.45	$ 45.83	$ 45.85	$ 46.60	$ 48.75	$ 48.54	$ 48.20	$ 48.26	$ 46.89	$ 48.86	$ 45.09					
WIN	Windstream Hldgs.	high	$ 8.08	$ 8.08	$ 8.45	$ 9.18	$ 9.73	$ 10.22	$ 13.30	$ 11.66	$ 11.37	$ 10.97	$ 10.63	$ 10.11	$ 8.24	$ 9.80	$ 9.53	35.25	0.26
		low	$ 7.31	$ 7.18	$ 7.93	$ 8.24	$ 8.52	$ 9.51	$ 9.83	$ 10.66	$ 10.54	$ 9.61	$ 9.28	$ 8.22					
ZAYO	Zayo Group Holdings Inc	high	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 23.92	$ 28.11	$ 32.18	$ 30.57	$ 25.64	$ 6.41	(1.16)	(1.16)
		low	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 21.21	$ 22.62	$ 25.82					

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Telecommunications
2015 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Avg Full Year	Avg 4th QTR
GTE Southwest	8.5	362338AQ8	1st	11/15/2031	A	6.79	6.61	6.40	6.36	6.18	6.20	6.20	6.06	6.24	6.05	5.96	5.87	6.24%	5.96%
ALLTEL Corp	6.8	020039AJ2	Deb	5/1/2029	A-	5.66	5.66	5.61	5.58	5.48	5.49	5.46	5.49	5.62	5.53	5.46	5.44	5.54%	5.48%
ALLTEL Corp	7.88	020039DC4	Sr Nt	7/1/2032	A-	5.89	5.92	5.83	5.76	5.67	5.68	5.59	5.45	5.62	5.54	5.46	5.35	5.65%	5.45%
America Movil, S.A.B. de C.V.	6.38	02364WAJ4	Sr Nt	3/1/2035	A-	5.75	5.69	5.54						5.32	5.18	5.15	5.22	5.41%	5.18%
AT&T Broadband	9.46	00209TAB1	Nts	11/15/2022	A-	6.74	6.70	6.66	6.59	6.50	6.50	6.54	6.50	6.61	6.61	6.57	6.58	6.59%	6.59%
AT&T Corp.	6.5	001957AW9	Nts	03/15/2029	A-	5.77	5.77	5.66	5.62	5.52	5.58	5.58	5.48	5.61	5.51	5.43	5.44	5.58%	5.46%
AT&T Corp.	8	001957BD0	Sr Nts	11/15/2031	A-	5.85	5.88	5.75	5.66	5.52	5.52	5.39	5.34	5.51	5.44	5.42	5.43	5.56%	5.43%
AT&T Inc.	6.8	00206RAB8	Nts	05/15/2036	A-	5.77	5.75	5.65	5.55	5.39	5.38	5.38	5.25	5.43	5.30	5.17	5.14	5.43%	5.20%
AT&T Inc.	6.5	00206RAD4	GlobalNts	09/01/2037	A-	5.72	5.65	5.55	5.46	5.25	5.26	5.26	5.12	5.37	5.32	5.23	5.26	5.37%	5.27%
AT&T Inc.	6.3	00206RAG7	GlobalNts	01/15/2038	A-	5.67	5.63	5.49	5.40	5.19	5.21	5.38	5.05	5.29	5.25	5.21	5.21	5.33%	5.22%
AT&T Inc.	5.5	00206RAJ1	GlobalNts	02/01/2018	A-	4.84	4.84	4.87	4.91	4.84	4.86	4.88	4.88	4.91	4.93	4.94	4.98	4.89%	4.95%
AT&T Inc.	5.6	00206RAM4	GlobalNts	05/15/2018	A-	4.89	4.88	4.93	4.85	4.89	4.91	4.93	4.93	4.96	4.98	4.98	5.02	4.93%	4.99%
AT&T Inc.	6.4	00206RAN2	GlobalNts	05/15/2038	A-	5.69	5.65	5.52	5.42	5.21	5.22	5.24	5.13	5.31	5.20	5.32	5.18	5.34%	5.23%
AT&T Wireless Services	8.75	00209AAF3	Sr Nts	03/01/2031	A-	6.10	6.06	6.01	5.93	5.85	5.67	5.89	5.77	5.83	5.81	5.69	5.65	5.86%	5.72%
BellSouth Capital Funding	6.04	079857AC2	Deb	11/15/2026	A-	6.01	6.01	5.99	5.66	5.67	5.60	5.59	5.50	5.62	5.51	5.45	5.43	5.67%	5.46%
BellSouth Capital Funding	7.88	079857AH1	Deb	02/15/2030	A-	6.42	6.44	6.35	6.25	5.99	5.90	5.89	5.78	5.91	5.90	5.90	5.87	6.05%	5.89%
BellSouth Corp	5.2	079860AL6	Nt	12/15/2016	A-	4.71	4.71	4.74	4.78	4.73	4.69	4.70	4.70	4.69	4.69	4.69	4.69	4.71%	4.69%
BellSouth Corp.	6.875	079860AD4	Nts	10/15/2031	A-	5.99	6.01	5.85	5.81	5.72	5.74	5.66	5.54	5.71	5.62	5.54	5.49	5.72%	5.55%
BellSouth Corp.	6.55	079860AE2	Nts	06/15/2034	A-	5.88	5.90	5.73	5.68	5.45	5.47	5.41	5.29	5.46	5.31	5.22	5.17	5.50%	5.23%
BellSouth Corp.	5.2	079860AG7	Nts	09/15/2014	A-	5.05	5.06	5.09	5.11	5.13	5.15							5.10%	
BellSouth Corp.	6	079860AK8	Nts	11/15/2034	A-	5.69	5.71	5.45	5.40	5.37	5.39	5.37	5.23	5.41	5.32	5.24	5.19	5.40%	5.25%
BellSouthTelecommunications	7	079867AM9	Deb	10/01/2025	A-	6.07	6.07	6.07	6.04	5.79	5.82	5.85	5.81	5.89	5.79	5.75	5.74	5.89%	5.76%
BellSouthTelecommunications	5.85	079867AN7	Deb	11/15/2045	A-	6.10	5.88	5.92	5.85	5.73	5.75	5.73	5.59	5.82	5.63	5.51	5.39	5.74%	5.51%
BellSouthTelecommunications	7	079867AP2	Deb	12/15/2095	A-	6.50	6.54	6.39	6.32	6.18	6.21	6.01	5.81	5.92	5.64	5.54	5.35	6.03%	5.51%
BellSouthTelecommunications	7	079867AP2	Deb	12/15/2095	A-	6.50	6.54	6.39	6.32	6.18	6.21	6.01	5.81	5.92	5.64	5.54	5.35	6.03%	5.51%
BellSouthTelecommunications	6.3	079867AQ0	AmortizingDeb	12/15/2015	A-	6.02	6.04	6.07	6.10	6.13	6.15	6.17	6.24	6.25	6.27	6.28	6.11	6.15%	6.22%
BellSouthTelecommunications	6.375	079867AW7	Deb	06/01/2028	A-	5.69	5.69	5.68	5.60	5.41	5.45	5.47	5.38	5.51	5.40	5.34	5.32	5.50%	5.35%
Cingular Wireless LLC	7.12	17248RAJ5	Sr Nt	12/15/2031	A-	5.61	5.66	5.58										5.62%	
Indiana Bell Telephone	7.3	454614AK4	Deb	08/15/2026	A-	6.34	6.22	6.22	5.90	5.81	5.85	5.83	5.82	5.94	5.85	5.79	5.78	5.95%	5.81%
Michigan Bell Telephone	7.85	594185AQ3	Deb	01/15/2022	A-	6.45	6.42	6.31	6.27	6.21	6.24	6.23	6.20	6.29	6.23	6.19	6.19	6.27%	6.20%
Pacific Bell	7.125	694032AT0	Deb	03/15/2026	A-	5.77	5.73	5.70	5.66	5.52	5.58	5.56	5.48	5.59	5.52	5.58	5.59	5.61%	5.56%
Pacific Bell	7.375	694032AV5	Deb	07/15/2043	A-	7.17	7.17	7.17	7.17	7.17	5.55	7.17	7.17	7.16	7.16	7.16	7.16	7.03%	7.16%
SBCCommunications	5.62	78387GAL7	GlobalNts	06/15/2016	A-	5.08	5.08	5.10	5.13	5.13	5.15							5.11%	
SBCCommunications	6.45	78387GAM5	GlobalNts	06/15/2034	A-	5.48	5.53	5.46	5.42	5.33	5.28	5.33	5.18	5.35	5.43	5.31	5.27	5.36%	5.34%
SBCCommunications	6.45	78387GAM5	Gbl Nt	6/15/2034	A-	5.48	5.53	5.46	5.42	5.33	5.28	5.33	5.18	5.35	5.43	5.31	5.27	5.36%	5.34%
SBCCommunications	6.15	78387GAQ6	Gbl Nt	9/15/2034	A-	5.46	5.52	5.44	5.40	5.29	5.15	5.17	5.03	5.24	5.24	5.11	5.18	5.27%	5.18%
Southwest'n Bell Tel	7	845335BQ0	Deb	07/01/2015	A-	6.45	6.47	6.52	6.55	6.56	6.59	6.62	6.65	6.67	6.72	6.74	6.81	6.61%	6.76%
TCI Communications	8.75	872287AC1	Sr Deb	08/01/2015	A-	7.82	7.84	7.89	7.95	7.98	8.03	8.07	8.13	8.18	8.26	8.29	8.36	8.07%	8.30%
TCI Communications	7.875	872287AF4	Sr Deb	02/15/2026	A-	5.98	5.95	5.93	5.92	5.64	5.63	5.61	5.64	5.77	5.70	5.64	5.65	5.76%	5.66%
TCI Communications	7.125	872287AL1	Sr Nts	02/15/2028	A-	5.68	5.62	5.63	5.52	5.37	5.36	5.34	5.33	5.46	5.36	5.29	5.30	5.44%	5.32%
Tele-Communications(Old)	10.125	879240AQ2	Sr Deb	04/15/2022	A-	7.38	7.36	7.27	7.27	7.21	7.25	7.25	7.22	7.32	7.26	7.21	7.23	7.27%	7.23%
Telefonos de Mexico, S.A.B. de C.	5.5	879403AS2	Sr Nt	1/27/2015	A-	5.30	5.31	5.32				5.38		5.41	5.44	5.46	5.48	5.39%	5.46%
Vodafone Group plc	6.25	92857WAB6	Deb	11/30/2032	A-	5.51	5.49	5.39						5.30	5.26	5.17	5.15	5.32%	5.19%
Vodafone Group plc	5.38	92857WAD2	Nt	1/30/2015	A-	5.12	5.14	5.16						5.16	5.16		0.00	4.29%	2.58%
Vodafone Group plc	4.62	92857WAE0	Gbl Nt	7/15/2018	A-	4.18	4.17	4.19						4.23	4.25	4.24	4.29	4.22%	4.26%
Vodafone Group plc	5	92857WAG5	Gbl Nt	9/15/2015	A-	4.68	4.69	4.69						4.69	4.69		0.00	3.91%	2.35%
Vodafone Group Plc	5.75	92857WAK6	Notes	03/15/2016	A-	5.24	5.23	5.22	5.23	5.23	5.23	5.23	5.23	5.22	5.22	5.23	5.23	5.23%	5.23%
Vodafone Group Plc	5.62	92857WAP5	Notes	02/27/2017	A-	5.01	4.98	5.01						5.12	5.14	5.15	5.19	5.09%	5.16%
Vodafone Group Plc	6.15	92857WAQ3	Notes	02/27/2037	A-	5.54	5.50	5.41						5.43	5.25	5.19	5.15	5.35%	5.20%
Wisconsin Bell Inc	6.35	976585AG4	Deb	12/01/2026	A-	6.28	6.28	6.27	6.24	6.14	6.17	6.14	6.09	6.22	6.10	6.04	6.01	6.17%	6.05%
ALLTEL Corp	7	020039AE3	Deb	3/15/2016	BBB+	6.21	6.24	6.24	6.27	6.29	6.33	6.37	6.39	6.41	6.45	6.47	6.47	6.35%	6.46%
Bell Atlantic-PA	6	07786DAA4	Deb	12/1/2028	BBB+	5.72	5.72	5.71	5.68	5.48	5.51	5.54	5.42	5.55	5.45	5.39	5.37	5.55%	5.40%
Bell Tel. of Penna	8.35	078167AZ6	Deb	12/15/2030	BBB+	6.83	6.85	6.61	6.48	6.39	6.41	6.41	8.27	6.45	6.29	6.18	6.08	6.60%	6.18%
Bell Tel. of Penna	8.75	078167BA0	Deb	8/15/2031	BBB+	6.88	6.91	6.72	6.60	6.51	6.53	6.53	6.39	6.39	6.22	6.12	6.01	6.48%	6.12%
Chesapeake Pot.Tel Md	8	165069AP0	Deb	10/15/2029	BBB+	6.68	6.68	6.46	6.29	5.44	6.22	6.25	6.13	6.27	6.17	6.08	6.07	6.23%	6.11%
Chesapeake Pot.Tel Md	8.3	165069AQ8	Deb	08/01/2031	BBB+	6.93	6.95	6.85	6.80	6.71	6.73	6.73	6.58	6.76	6.24	6.15	6.08	6.63%	6.16%
Chesapeake Pot.Tel Md	7.15	165069AS4	Deb	05/01/2023	BBB+	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15%	7.15%
Chesapeake&Pot.Tel VA	8.38	165087AL1	Forty Yr Deb	10/01/2029	BBB+	6.78	6.75	6.74	6.29	6.44	6.48	6.51	6.38	6.53	6.43	6.34	6.33	6.50%	6.37%

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Telecommunications
2015 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Avg Full Year	Avg 4th QTR
Chesapeake&Pot.Tel VA	7.88	165087AN7	Deb	1/15/2022	BBB+	6.64	6.65	6.65	6.64	6.58	6.61	6.64	6.56	6.66	6.59	6.54	6.54	6.61%	6.56%
GTE California	6.75	362311AG7	Deb 'F'	05/15/2027	BBB+	6.06	6.06	6.01	5.95	5.85	5.86	5.88	5.77	5.90	5.81	5.75	5.73	5.89%	5.76%
GTE Corp	8.75	362320AT0	Deb	11/01/2021	BBB+	6.81	6.72	6.73	6.72	6.67	6.60	6.66	6.59	6.55	6.74	6.70	6.71	6.68%	6.72%
GTE Corp	6.84	362320AZ6	Deb	04/15/2018	BBB+	5.84	5.85	5.75	5.77	5.76	5.80	5.85	5.84	5.88	5.89	5.89	5.93	5.84%	5.90%
GTE Corp	6.94	362320BA0	Deb	04/15/2028	BBB+	5.96	5.88	5.76	5.95	5.53	5.57	5.69	5.58	5.71	5.63	5.57	5.55	5.70%	5.58%
GTE Florida	6.86	362333AH9	Deb 'E'	02/01/2028	BBB+	6.28	6.08	6.07	5.93	5.85	6.91	5.91	5.79	5.84	5.75	5.67	5.69	5.98%	5.70%
New England Tel. & Tel.	7.88	644239AY1	Deb	11/15/2029	BBB+	6.57	6.58	6.40	6.26	6.14	6.18	6.21	6.08	6.23	6.12	6.04	6.02	6.24%	6.06%
New Jersey Bell Tel	7.85	645767AW4	Deb	11/15/2029	BBB+	6.63	6.57	6.56	6.53	6.14	6.12	6.15	6.03	6.17	6.07	6.00	5.98	6.25%	6.02%
New Jersey Bell Tel	8	645767AY0	Deb	06/01/2022	BBB+	6.52	6.53	6.48	6.44	6.37	6.41	6.44	6.36	6.46	6.36	6.32	6.32	6.42%	6.33%
New York Telephone Co	6.7	650094CA1	Deb	11/01/2023	BBB+	6.70	6.70	6.70	6.70	6.70	6.70							6.70%	
New York Telephone Co	7	650094CB9	Deb	12/01/2033	BBB+	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00%	7.00%
New York Telephone Co	6.5	650094CJ2	Deb	04/15/2028	BBB+	6.34	6.34	6.33	6.15	6.05	6.08	5.83	5.71	5.85	5.70	5.64	5.62	5.97%	5.65%
Verizon Communications Inc.	5.55	92343VAC8	Nts	02/15/2016	BBB+	5.08	5.08	5.08	5.12	5.13	5.15	5.18	5.19	5.20	5.24	5.23	5.23	5.16%	5.23%
Verizon Communications Inc.	6.25	92343VAF1	Nts	04/01/2037	BBB+	5.49	5.45	5.36	5.29	5.20	5.15	5.22	5.06	5.25	5.20	5.18	5.09	5.25%	5.16%
Verizon Communications Inc.	5.5	92343VAG9	Nts	04/01/2017	BBB+	4.89	4.89	4.88	4.89	4.90	4.92	4.95	4.96	4.99	5.01			4.93%	5.01%
Verizon Global Fndg	7.75	92344GAS5	Nts	06/15/2032	BBB+	5.93	5.96	5.88	5.77	5.67	5.70	5.48	5.41	5.56	5.42	5.32	5.56	5.64%	5.43%
Verizon Global Fndg	4.9	92344GAW6	Nts	09/15/2015	BBB+	4.59	4.59	4.62	4.63	4.64	4.66	4.68	4.69	4.70	4.72			4.65%	4.72%
Verizon Global Fndg	5.85	92344GAX4	Nts	09/15/2035	BBB+	5.30	5.29	5.27	5.18	5.03	5.01	5.10	4.93	5.11	5.05	5.01	4.98	5.11%	5.01%
Verizon Maryland	5.125	92344WAB7	Deb'B'	06/15/2033	BBB+	5.17	5.19	5.04	5.04	5.02	5.03	5.03	4.91	5.07	5.02	4.93	4.86	5.03%	4.94%
VerizonNY	7.38	92344XAB5	Sr Deb Ser B	4/1/2032	BBB+	6.31	6.36	6.16										6.28%	
Centel Capital	9	15133KAC7	Deb	10/15/2019	BBB-	7.54	7.46	7.54	7.55	7.61	7.40	7.46	7.43	7.49	7.47	7.45	7.51	7.49%	7.48%
Mountain States Tel&Tel	7.38	624284BD6	Deb	05/01/2030	BBB-	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.48	7.48	7.48	7.48	7.49%	7.48%
Northwestern Bell Tel	7.75	668027AT2	Deb	05/01/2030	BBB-	7.07	7.43	7.33	7.27	7.18	6.90	6.88	6.74	6.92	6.76	6.68	6.56	6.98%	6.67%
Qwest Corp	7.5	74913GAG0	Nts	10/01/2014	BBB-	7.19	7.22	7.26	7.31	7.35	7.38	7.42	7.46	7.48				7.34%	
Qwest Corp	7.62	74913GAK1	Nts	06/15/2015	BBB-	7.06	7.07	7.11	7.19	7.16	7.20	7.24	7.27	7.29	7.35	7.37	7.42	7.23%	7.38%
Qwest Corp	6.5	74913GAT2	Nts	06/01/2017	BBB-	5.73	5.75	5.75	5.75	5.76	5.72	5.77	5.79	5.81	5.87	5.89	5.94	5.79%	5.90%
TCA Cable TV	6.53	872241AB0	Deb	02/01/2028	BBB-	6.18	5.98	5.97	5.89	5.71	5.74	5.77	5.61	5.76	5.67	5.57	5.58	5.79%	5.61%
U S WESTCommunications	7.5	912920AB1	Deb	06/15/2023	BBB-	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47%	7.47%
U S WESTCommunications	6.875	912920AC9	Deb	09/15/2033	BBB-	7.13	7.00	6.95	6.86	6.82	5.83	6.82	6.81	6.82	6.82	6.82	6.85	6.79%	6.83%
U S WESTCommunications	7.125	912920AG0	Deb	11/15/2043	BBB-	7.39	7.22	7.12	7.15	7.04	7.10	7.23	7.03	7.23	7.03	6.95	6.94	7.12%	6.97%
U S WESTCommunications	7.25	912920AK1	Deb	09/15/2025	BBB-	6.66	6.53	6.47	6.33	6.26	6.16	8.24	6.13	6.25	6.16	6.10	6.09	6.45%	6.12%
U S WESTCommunications	7.2	912920AL9	Deb	11/10/2026	BBB-	7.14	7.14	7.14	7.15	7.14	7.15	7.15	7.15	7.16	7.17	7.17	7.17	7.15%	7.17%
U S WESTCommunications	7.25	912920AM7	Deb	10/15/2035	BBB-	7.23	7.21	7.13	7.18	7.07	7.00	7.03	7.02	7.04	7.04	7.03	7.03	7.08%	7.03%
United States Cellular Corp.	6.7	911684AD0	Sr Nts	12/15/2033	BBB-	6.79	6.80	6.59						6.84	6.69	6.69	6.81	6.74%	6.73%
United Tel Co(Florida)	8.375	913026AT7	1st HH	01/15/2025	BBB-	7.11	7.12	7.03	7.01	6.92	6.98	6.93	6.88	7.01	6.90	6.84	6.83	6.96%	6.86%
United Tel Co(Florida)	7.125	913026AU4	1st GG	07/15/2023	BBB-	6.43	6.43	6.42	6.32	6.24	6.27	6.21	6.17	6.28	6.19	6.14	6.13	6.27%	6.15%
Aliant Communications	6.75	016090AA0	Nts	04/01/2028	BB+	7.14	7.10	7.18	7.16	7.03	6.85	6.77	6.89	6.93	6.95	6.95	6.99	7.00%	6.96%
Century Tel Enterpr	7.2	156686AJ6	Sr Nts 'D'	12/01/2025	BB	7.38	7.27	7.09	6.97	6.89	6.91	6.89	6.86	6.85	6.76	6.82	6.90	6.97%	6.83%
Century Tel Enterpr	6.875	156686AM9	Deb 'G'	01/15/2028	BB	7.43	7.35	7.19	6.88	6.81	6.74	6.77	6.67	6.75	6.75	6.84	6.87	6.92%	6.82%
CenturyLink, Inc.	5	156700AJ5	ked Rt Sr Nt Ser	02/15/2015	BB	4.83	4.83	4.84	4.86	4.88	4.90	4.93	4.94	4.96	4.96	4.97	4.98	4.91%	4.97%
CenturyLink, Inc.	6	156700AL0	ed Rt Sr Nts Se	04/01/2017	BB	5.44	5.45	5.42	5.43	5.00	5.44	5.53	5.54	5.58	5.55	5.56	5.58	5.46%	5.56%
Embarq Corp.	8	29078EAA3	Nts	06/01/2036	BB	7.71	7.66	7.65						7.28	7.21	7.18	7.15	7.41%	7.18%
Embarq Corp.	7.08	29078EAB1	Nts	06/01/2016	BB	6.33	6.29	6.35						6.49	6.58	6.56	6.57	6.45%	6.57%
Qwest Cap Fdg Inc	7.62	74913EAQ3	Nts 144a	8/3/2021	BB	7.21	7.12	7.07	7.09	6.75	6.75	7.56	6.79	6.88	6.96	6.83	7.07	7.01%	6.95%
Qwest Cap Funding	7.75	74913EAJ9	Nts	02/15/2031	BB	8.03	7.94	7.84	7.67	7.49	7.49	7.56	7.58	7.57	7.59	7.59	7.63	7.67%	7.60%
Qwest Cap Funding	7.62	74913EAQ3	Nts	08/03/2021	BB	7.21	7.12	7.07	7.09	6.75	6.75	6.78	6.79	6.88	6.96	6.83	7.07	6.94%	6.95%
U S WEST Cap Fndg	6.88	912912AQ5	Deb	07/15/2028	BB	7.45	7.25	7.16	6.94	6.82	6.72	6.84	6.74	6.82	6.80	6.84	6.87	6.94%	6.84%
U S WEST Cap Fndg	6.5	912912AR3	Deb	11/15/2018	BB	6.00	5.89	5.89	5.83	5.82	5.83	5.83	5.88	5.90	5.86	5.86	5.91	5.88%	5.88%
Cin Bell Tel	7.25	171870AK4	Sec Nts	06/15/2023	BB-	8.98	8.98	8.98	8.98	8.98	8.98	8.98	7.09	7.09	8.97	7.14	7.18	8.36%	7.76%
Cincinnati Bell Tel	6.3	171875AD9	>(Tel)<EB>Gtd	12/01/2028	BB-	7.11	7.03	6.68	6.65	6.58	6.55	6.49	6.56	6.63	6.49	6.52	6.70	6.67%	6.57%
Citizens Communications Co.	9	17453BAJ0	Sr Nts	08/31/2031	BB-	8.95	8.86	8.82	8.70	8.47	8.35	8.45	8.33	8.56	8.29	8.35	8.51	8.55%	8.38%
GTE North Inc	6.73	362337AK3	Deb 'G'	02/15/2028	BB-	7.33	7.45	7.43	7.26	7.08	6.91	7.04	6.99	6.95	7.00	7.06	7.22	7.14%	7.09%
Sprint Nextel Corp.	9.25	852061AA8	Deb	04/15/2022	BB-	7.78	7.74	7.69	7.63	7.51	7.58	7.77	7.84	7.90	8.18	8.11	8.18	7.83%	8.16%
Sprint Nextel Corp.	6	852061AD2	Nt	12/1/2016	BB-	5.52	5.51	5.47	5.48	5.49	5.51	5.58	5.63	5.66	5.68	5.70	5.75	5.58%	5.71%
Sprint Nextel Corp.	6	852061AD2	Nt	12/1/2016	BB-	5.52	5.51	5.47	5.48	5.49	5.51	5.58	5.63	5.66	5.68	5.70	5.75	5.58%	5.71%
Sprint Capital	6.88	852060AD4	Nts	11/15/2028	B+	7.18	7.11	7.12						7.12	7.39	7.33	7.81	7.29%	7.51%
Sprint Capital	6.9	852060AG7	Nts	05/01/2019	B+	6.35	6.35	6.30	6.29	6.24	6.26	6.45	6.43	6.49	6.71	6.65	6.74	6.44%	6.70%
Sprint Capital	8.75	852060AT9	Nts	03/15/2032	B+	8.04	7.98	7.96	7.82	7.56	7.58	7.88	7.85	7.88	8.19	8.31	8.92	8.00%	8.47%

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Telecommunications
2015 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Avg Full Year	Avg 4th QTR
Cincinnati Bell Tel	7	171871AH9	Sr Nts	02/15/2015	B	6.93	6.94	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93%	6.93%
NII Holdings, Inc.	2.75	62913FAF9	Sr Nt Conv 144a	8/15/2025	B-									2.75	2.75			2.75%	2.75%
Centennial Com/Cell Op/PR	8.12	151352AB7	Sr Nts	02/01/2014	NR	7.81												7.81%	
Level 3 Finan	9.25	527298AM5	SrNts	11/01/2014	NR	9.04	9.04	9.04	9.04	9.04	9.04	9.04	9.04	9.04	9.04			9.04%	9.04%
NII Holdings, Inc.	2.88	62913FAC6	Nt Conv 144a	2/1/2034	NR									3.82	3.82	3.82	3.82	3.82%	3.82%
Pacific Bell	6.625	694032AX1	Deb	10/15/2034	NR	6.56	6.55	6.55	6.55	6.55	6.55	6.55	6.55	6.55	6.55	6.55	6.55	6.55%	6.55%
Qwest Communications Internatio	7.5	749121BR9	Sr Nts'B'	02/15/2014	NR	7.50												7.50%	
Qwest Communications Internatio	7.5	749121BV0	Sr Nts'B'	02/15/2014	NR	7.50												7.50%	
Southwest'n Bell Tel	7.375	845335BX5	Deb	07/15/2027	NR	6.46	7.18	7.18	7.18	7.18	7.18	7.18	7.18	7.17	7.17	7.17	7.17	7.12%	7.17%
Southwest'n Bell Tel	7	845335BZ0	Deb	11/15/2027	NR	6.84	6.84	6.84	6.84	6.84	6.84	6.84	6.84	6.84				6.84%	
Tele-Communications(Old)	9.88	879240AR0	Sr Deb	06/15/2022	NR	7.33	7.26	7.20	7.19	7.13	7.17	7.17	7.13	7.24	7.18	7.12	7.14	7.19%	7.15%
			Counts of data			125	122	122	108	108	108	106	105	119	117	111	113	127	117

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	5.62%	5.48%
BBB's	6.34%	6.21%
BB's	6.79%	6.75%
B's	6.28%	6.47%
NR's	7.04%	6.75%
ALL	6.17%	6.04%
BBB- & Above	5.96%	5.82%
BB- & Above	6.10%	5.99%

**Investment Grade (BBB- & Above)*

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Telecommunications with significant portion of Cable TV Service
2015 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Avg Full Year	Avg 4th QTR
Comcast Cable Commun	8.88	20029PAG4	Sr Nt - Exchange	5/1/2017	A-	7.22	7.20	7.27	7.27	7.29	7.30	7.36	7.40	7.44	7.51	7.51	7.58	7.36%	7.53%
Comcast Cable Commun	8.5	20029PAH2	Sr Nt - Exchange	5/1/2027	A-	6.21	6.08	6.09	6.07	5.98	6.02	6.00	5.96	6.08	5.98	5.92	5.93	6.03%	5.94%
Comcast Corp.	6.5	20030NAB7	Nt	1/15/2015	A-	6.15	6.17	6.21	6.24	6.27	8.30	6.32	6.36	6.37	6.43	6.45	6.49	6.48%	6.46%
Comcast Corp.	7.05	20030NAC5	Sr Nt	3/15/2033	A-	5.62	5.48	5.41	5.36	5.23	5.23	5.18	5.12	5.27	5.16	5.14	5.07	5.27%	5.12%
Comcast Corp.	5.65	20030NAF8	Gtd Fixed Rt Sr N	6/15/2035	A-	5.14	5.07	4.98	4.90	4.77	4.79	4.72	4.66	4.84	4.75	4.64	4.56	4.82%	4.65%
Comcast Corp.	4.95	20030NAG6	Gtd Fixed Rt Sr N	6/15/2016	A-	4.52	4.53	4.55	4.56	4.58	4.58	4.59	4.81	4.61	4.64	4.65	4.67	4.61%	4.65%
Comcast Corp.	5.9	20030NAL5	Gtd Nt	3/15/2016	A-	5.34	5.35	5.36	5.39	5.39	5.42	5.44	5.47	5.48	5.51	5.53	5.56	5.44%	5.53%
Comcast Corp.	6.45	20030NAM3	Gtd Nt	3/15/2037	A-	5.41	5.31	5.23	5.12	5.05	5.06	5.00	4.92	5.11	5.07	4.97	4.85	5.09%	4.96%
Comcast Corp.	6.5	20030NAP6	Nts	1/15/2017	A-	5.65	5.65	5.69	5.69	5.68	5.71	5.74	5.78	5.79	5.83	5.84	5.88	5.74%	5.85%
Comcast Corp.	5.88	20030NAR2	Nt	2/15/2018	A-	5.08	5.07	5.12	5.12	5.07	5.10	5.11	5.13	5.17	5.18	5.18	5.22	5.13%	5.19%
Comcast Corp.	6.3	20030NAU5	Sr Nts	11/15/2017	A-	5.39	5.36	5.42	5.41	5.40	5.42	5.45	5.76	5.51	5.52	5.53	5.56	5.48%	5.54%
Comcast Corp.	6.95	20030NAV3	Sr Nts	8/15/2037	A-	5.52	5.42	5.33	5.25	5.18	5.16	5.12	5.05	5.18	5.15	5.04	4.93	5.19%	5.04%
AOL Time Warner	7.62	00184AAC9	Deb	4/15/2031	BBB	5.89	5.86	5.72	5.60	5.49	5.55	5.60	5.51	5.68	5.61	5.56	5.51	5.63%	5.56%
Time Warner Cos Inc	9.15	887315AM1	Deb Dtd 02/04/19	2/1/2023	BBB	6.80	6.73	6.72	6.66	6.55	6.61	6.88	6.55	6.66	6.75	6.71	6.73	6.70%	6.73%
Time Warner Cos Inc	6.88	887315AY5	Deb	6/15/2018	BBB	5.77	5.75	5.79	5.79	5.77	5.77	5.79	5.83	5.87	5.88	5.91	5.95	5.82%	5.91%
Time Warner Cos Inc	8.05	887315BA6	Deb	1/15/2016	BBB	7.14	7.16	7.22	7.26	7.29	7.33	7.37	7.40	7.42	7.44	7.47	7.52	7.34%	7.48%
Time Warner Cos Inc	6.85	887315BB4	Deb	1/15/2026	BBB	6.12	6.11	6.10	6.07	5.98	6.01	6.04	5.83	6.05	5.96	5.92	5.93	6.01%	5.94%
Time Warner Cos Inc	7.57	887315BH1	Deb	2/1/2024	BBB	6.10	6.09	6.06	5.93	5.82	5.85	5.88	5.80	5.90	5.90	5.86	5.83	5.92%	5.86%
Time Warner Cos Inc	7.25	887315BJ7	Deb	10/15/2017	BBB	6.07	6.08	6.14	6.16	6.17	6.20	6.18	6.19	6.22	6.26	6.27	6.32	6.19%	6.28%
Time Warner Cos Inc	6.95	887315BM0	Gtd Deb	1/15/2028	BBB	5.70	5.69	5.55	5.47	5.36	5.39	5.43	5.41	5.51	5.47	5.39	5.43	5.48%	5.43%
Time Warner Cos Inc	6.62	887315BN8	Deb	5/15/2029	BBB	5.58	5.52	5.49	5.36	5.19	5.20	5.30	5.21	5.34	5.27	5.27	5.23	5.33%	5.26%
Time Warner Inc.	5.88	887317AC9	Nt	11/15/2016	BBB	5.22	5.22	5.25	5.25	5.26	5.28	5.31	5.32	5.34	5.37	5.39	5.41	5.30%	5.39%
Time Warner Inc.	6.5	887317AD7	Deb	11/15/2036	BBB	5.59	5.60	5.46	5.34	5.26	5.31	5.34	5.19	5.45	5.29	5.20	5.11	5.35%	5.20%
Time Warner Entertainment	8.38	88731EAF7	Sr Deb	3/15/2023	BBB	7.14	6.44	6.38	6.24	6.21	6.19	6.20	6.17	6.28	6.25	6.19	6.22	6.33%	6.22%
Qwest Corp	7.5	74913GAG0	Nts	10/01/2014	BBB-	7.19	7.22	7.26	7.31	7.35	7.38	7.42	7.46	7.48				7.34%	
Qwest Corp	7.62	74913GAK1	Nts	06/15/2015	BBB-	7.06	7.07	7.11	7.13	7.16	7.20	7.24	7.27	7.29	7.35	7.37	7.42	7.22%	7.38%
Qwest Corp	6.5	74913GAT2	Nts	06/01/2017	BBB-	5.73	5.75	5.75	5.75	5.76	5.72	5.77	5.79	5.81	5.87	5.89	5.94	5.79%	5.90%
TCA Cable TV	6.53	872241AB0	Deb	02/01/2028	BBB-	6.18	5.98	5.97	5.89	5.71	5.74	5.82	5.61	5.76	5.67	5.57	5.58	5.79%	5.61%
Century Tel Enterpr	7.2	156686AJ6	Sr Nts 'D'	12/01/2025	BB	7.38	7.27	7.09	6.97	6.89	6.91	6.89	6.86	6.85	6.76	6.82	6.90	6.97%	6.83%
Century Tel Enterpr	6.875	156686AM9	Deb 'G'	01/15/2028	BB	7.43	7.35	7.19	6.88	6.81	6.74	6.77	6.67	6.75	6.75	6.84	6.87	6.92%	6.82%
CenturyTel, Inc.	5	156700AJ5	Sr Nts'M'	02/15/2015	BB	4.83	4.83	4.84	4.86	4.88	4.90	4.93	4.94	4.96	4.96	4.97	4.98	4.91%	4.97%
CenturyLink, Inc.	6	156700AL0	Fixed Rt Sr Nts S	04/01/2017	BB	5.44	5.45	5.42	5.43	5.44	5.44	5.53	5.54	5.58	5.55	5.56	5.58	5.50%	5.56%
CenturyTel, Inc.	6	156700AL0	SrNts'N'	04/01/2017	BB	5.44	5.45	5.42	5.43	5.44	5.44	5.53	5.54	5.58	5.55	5.56	5.58	5.50%	5.56%
Embarq Corp.	8	29078EAA3	Nts	06/01/2036	BB	7.71	7.66	7.65						7.28	7.21	7.18	7.15	7.41%	7.18%
Embarq Corp.	7.08	29078EAB1	Nts	06/01/2016	BB	6.33	6.29	6.35						6.49	6.58	6.56	6.57	6.45%	6.57%
Cin Bell Tel	7.25	171870AK4	Sec Nts	06/15/2023	BB-	8.98	8.98	8.98	8.98	8.98	8.98	8.98	7.09	7.09	8.97	7.14	7.18	8.36%	7.76%
Cincinnati Bell Tel	6.3	171875AD9	<SB>(Tel)<EB>G	12/01/2028	BB-	7.11	7.03	6.68	6.65	6.56	6.55	6.49	6.56	6.63	6.49	6.52	6.70	6.66%	6.57%
Citizens Communications Co.	9	17453BAJ0	Sr Nts	08/31/2031	BB-	8.95	8.86	8.82	8.70	8.47	8.35	8.45	8.43	8.56	8.29	8.35	8.51	8.56%	8.38%
Cincinnati Bell Tel	7	171871AH9	Sr Nts	02/15/2015	B	6.93	6.94	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93%	6.93%
Time Warner Telecom	2.38	887319AC5	Sr Deb Conv	4/1/2026	NR									1.50	1.50			1.50%	1.50%
			Counts of data			39	39	39	37	37	37	37	37	40	39	38	38	40	39

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	5.55%	5.54%
BBB's	6.10%	6.01%
BB's	6.72%	6.62%
B's	6.93%	6.93%
ALL	6.00%	5.93%
BBB- & Above	5.86%	5.80%
BB- & Above	6.09%	6.02%

**Investment Grade (BBB- & Above)*

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Telecommunications
2015 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Avg Full Year	Avg 4th QTR
GTE Southwest	8.5	362338AQ8	1st	11/15/2031	A	6.15	5.88	5.56	5.49	5.23	5.17	5.17	4.95	5.24	4.95	4.81	4.64	5.27%	4.80%
AT&T Corp.	6.5	001957AW9	Nts	03/15/2029	A-	5.27	5.27	5.08	5.00	4.81	4.88	4.93	4.73	5.00	4.76	4.61	4.62	4.91%	4.66%
AT&T Corp.	8	001957BD0	Sr Nts	11/15/2031	A-	4.89	4.93	4.71	4.37	4.37	4.37	4.10	4.37	4.22	4.12	4.08	4.09	4.39%	4.10%
AT&T Inc.	6.8	00206RAB8	Nts	05/15/2036	A-	5.41	5.38	5.24	5.07	4.86	4.83	4.83	4.64	4.90	4.71	4.50	4.44	4.90%	4.55%
AT&T Inc.	6.5	00206RAD4	GlobalNts	09/01/2037	A-	5.46	5.36	5.22	5.07	4.76	4.78	4.78	4.56	4.95	4.88	4.74	4.79	4.95%	4.80%
AT&T Inc.	6.3	00206RAG7	GlobalNts	01/15/2038	A-	5.46	5.40	5.21	5.07	4.78	4.81	4.76	4.54	4.90	4.86	4.80	4.79	4.95%	4.82%
AT&T Inc.	5.5	00206RAJ1	GlobalNts	02/01/2018	A-	1.97	1.92	1.99	1.97	1.95	2.05	2.17	1.13	1.79	1.82	1.86	2.03	1.89%	1.90%
AT&T Inc.	5.6	00206RAM4	GlobalNts	05/15/2018	A-	2.06	1.98	2.17	1.97	1.78	1.95	2.05	2.00	2.21	1.97	1.90	2.09	2.01%	1.99%
AT&T Inc.	6.4	00206RAN2	GlobalNts	05/15/2038	A-	5.46	5.41	5.23	5.07	4.78	4.81	4.83	4.66	4.92	4.76	4.94	4.72	4.97%	4.81%
AT&T Wireless Services	8.75	00209AAF3	Sr Nts	03/01/2031	A-	4.95	4.87	4.78	4.66	4.51	4.55	4.56	4.36	4.36	4.38	4.17	4.08	4.52%	4.21%
AT&T Broadband	9.46	00209TAB1	Nts	11/15/2022	A-	3.99	3.87	3.73	3.70	3.49	3.00	3.07	2.98	3.26	3.30	3.19	3.15	3.39%	3.21%
ALLTEL Corp	6.8	020039AJ2	Deb	5/1/2029	A-	4.91	4.91	4.81	4.73	4.55	4.56	4.61	4.56	4.81	4.60	4.48	4.43	4.66%	4.50%
ALLTEL Corp	7.88	020039DC4	Sr Nt	7/1/2032	A-	5.05	5.08	4.93	4.78	4.65	4.66	4.46	4.29	4.58	4.41	4.27	4.08	4.60%	4.25%
America Movil, S.A.B. de C.V.	6.38	02364WAJ4	Sr Nt	3/1/2035	A-	5.50	5.41	5.18						4.80	4.58	4.57	4.67	4.96%	4.61%
BellSouth Capital Funding	6.04	079857AC2	Deb	11/15/2026	A-	5.98	5.98	5.96	5.32	5.12	5.15	5.14	4.95	5.19	4.97	4.85	4.80	5.28%	4.87%
BellSouth Capital Funding	7.88	079857AH1	Deb	02/15/2030	A-	5.70	5.73	5.58	5.39	4.98	4.83	4.81	4.64	4.75	4.77	4.76	4.70	5.05%	4.74%
BellSouth Corp.	6.875	079860AD4	Nts	10/15/2031	A-	5.55	5.58	5.33	5.27	5.07	5.10	4.98	4.78	5.07	4.92	4.78	4.69	5.09%	4.80%
BellSouth Corp.	6.55	079860AE2	Nts	06/15/2034	A-	5.60	5.63	5.38	5.29	4.95	4.98	4.88	4.68	4.97	4.72	4.57	4.48	5.01%	4.59%
BellSouth Corp.	5.2	079860AG7	Nts	09/15/2014	A-	0.49	0.39	0.53										0.47%	
BellSouth Corp.	6	079860AK8	Nts	11/15/2034	A-	5.55	5.58	5.20	5.12	5.07	5.07	5.05	4.68	5.12	4.98	4.87	4.78	5.09%	4.88%
BellSouth Corp	5.2	079860AL6	Nt	12/15/2016	A-	1.49	1.46	1.58	2.00	1.80	1.44	0.02	0.02	0.02	0.06	0.02		0.90%	0.04%
BellSouthTelecommunications	7	079867AM9	Deb	10/01/2025	A-	5.23	5.23	5.21	5.09	4.54	4.61	4.42	4.23	4.78	4.55	4.47	4.42	4.73%	4.48%
BellSouthTelecommunications	5.85	079867AN7	Deb	11/15/2045	A-	6.15	5.88	5.93	5.86	5.71	5.73	5.71	5.54	5.80	5.59	5.44	5.28	5.72%	5.44%
BellSouthTelecommunications	7	079867AP2	Deb	12/15/2095	A-	6.50	6.53	6.38	6.32	6.17	6.20	6.00	5.81	5.90	5.63	5.52	5.34	6.03%	5.50%
BellSouthTelecommunications	7	079867AP2	Deb	12/15/2095	A-	6.50	6.53	6.38	6.32	6.17	6.20	6.00	5.81	5.90	5.63	5.52	5.34	6.03%	5.50%
BellSouthTelecommunications	6.3	079867AQ0	AmortizingDeb	12/15/2015	A-	3.94	4.16	4.35	4.59	4.79	5.01	4.28	5.38	5.52	5.87	6.04	3.07	4.75%	4.99%
BellSouthTelecommunications	6.375	079867AW7	Deb	06/01/2028	A-	5.18	5.18	5.16	4.98	4.64	4.68	4.73	4.56	4.80	4.58	4.46	4.41	4.78%	4.48%
Cingular Wireless LLC	7.12	17248RAJ5	Sr Nt	12/15/2031	A-	4.85	4.92	4.78										4.85%	
Indiana Bell Telephone	7.3	454614AK4	Deb	08/15/2026	A-	5.61	5.38	5.36	4.68	4.49	4.56	4.55	4.51	4.75	4.55	4.43	4.38	4.77%	4.45%
Michigan Bell Telephone	7.85	594185AQ3	Deb	01/15/2022	A-	4.58	4.48	4.16	4.07	3.93	4.01	3.81	3.49	3.78	3.70	3.57	3.53	3.93%	3.60%
Pacific Bell	7.125	694032AT0	Deb	03/15/2026	A-	4.58	4.49	4.42	4.32	4.03	4.10	4.12	3.93	4.19	3.93	4.05	4.07	4.19%	4.02%
Pacific Bell	7.375	694032AV5	Deb	07/15/2043	A-	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.14	7.13	7.13	7.13	7.14%	7.13%
SBCCommunications	5.62	78387GAL7	GlobalNts	06/15/2016	A-	1.12	0.96	0.98	0.72	0.75	0.93							0.91%	
SBCCommunications	6.45	78387GAM5	GlobalNts	06/15/2034	A-	5.05	5.12	5.01	4.93	4.78	4.73	4.81	4.58	4.83	4.95	4.75	4.69	4.85%	4.80%
SBCCommunications	6.45	78387GAM5	Gbl Nt	6/15/2034	A-	5.05	5.12	5.01	4.93	4.78	4.73	4.81	4.58	4.83	4.95	4.75	4.69	4.85%	4.80%
SBCCommunications	6.15	78387GAQ6	Gbl Nt	9/15/2034	A-	5.15	5.23	5.11	5.03	4.86	4.64	4.68	4.44	4.78	4.78	4.58	4.69	4.83%	4.68%
Southwest'n Bell Tel	7	845335BQ0	Deb	07/01/2015	A-	0.95	0.95	1.11	0.19	0.18	0.69	1.15	1.57	2.01	0.60	0.59	1.58	0.96%	0.92%
TCI Communications	8.75	872287AC1	Sr Deb	08/01/2015	A-	0.79	0.62	0.62	0.02	0.02	0.02	0.33	1.10	1.66	0.54	0.61	0.75	0.59%	0.63%
TCI Communications	7.875	872287AF4	Sr Deb	02/15/2026	A-	4.45	4.38	4.33	4.29	3.73	3.68	3.58	3.73	3.78	3.71	3.56	3.56	3.90%	3.61%
TCI Communications	7.125	872287AL1	Sr Nts	02/15/2028	A-	4.65	4.52	4.53	4.32	4.03	4.00	3.93	3.95	4.07	3.91	3.78	3.78	4.12%	3.82%
Tele-Communications(Old)	10.125	879240AQ2	Sr Deb	04/15/2022	A-	4.64	4.55	4.31	4.24	4.10	4.20	4.07	4.11	4.36	3.96	3.80	3.78	4.18%	3.85%
Telefonos de Mexico, S.A.B. de C.	5.5	879403AS2	Sr Nt	1/27/2015	A-	1.73	1.70	1.39				1.33				1.41	1.28	1.47%	1.35%
Vodafone Group plc	6.25	92857WAB6	Deb	11/30/2032	A-	5.13	5.11	4.93						4.75	4.68	4.54	4.51	4.81%	4.58%
Vodafone Group plc	5.38	92857WAD2	Nt	1/30/2015	A-	0.63	0.46	0.45						0.47	0.47			0.50%	0.47%
Vodafone Group plc	4.62	92857WAE0	Gbl Nt	7/15/2018	A-	2.17	2.04	2.12						2.18	2.29	2.07	2.34	2.17%	2.23%
Vodafone Group plc	5	92857WAG5	Gbl Nt	9/15/2015	A-	0.86	0.79	0.52						0.53	0.53			0.65%	0.53%
Vodafone Group Plc	5.75	92857WAK6	Notes	03/15/2016	A-	1.17	0.91	0.61	0.63	0.63	0.63	0.63	0.63	0.62	0.62	0.63	0.63	0.70%	0.63%
Vodafone Group Plc	5.62	92857WAP5	Notes	02/27/2017	A-	1.55	1.27	1.37						0.66	0.90	1.46	1.73	1.28%	1.36%
Vodafone Group Plc	6.15	92857WAQ3	Notes	02/27/2037	A-	5.32	5.25	5.12						5.12	4.86	4.79	4.73	5.03%	4.79%
Wisconsin Bell Inc	6.35	976585AG4	Deb	12/01/2026	A-	6.23	6.23	6.21	6.15	5.95	6.00	5.96	5.98	6.12	5.87	5.75	5.70	6.01%	5.77%
ALLTEL Corp	7	020039AE3	Deb	3/15/2016	BBB+	0.95	1.06	0.74	1.11	1.27	1.57	1.88	2.06	2.25	0.73	0.65	0.19	1.21%	0.52%
Bell Atlantic-PA	6	07786DAA4	Deb	12/1/2028	BBB+	5.52	5.52	5.50	5.44	5.07	5.10	5.15	4.93	5.19	5.00	4.88	4.83	5.18%	4.90%
Bell Tel. of Penna	8.35	078167AZ6	Deb	12/15/2030	BBB+	6.20	6.23	5.86	5.66	5.51	5.56	5.47	5.25	5.53	5.30	5.12	4.94	5.55%	5.12%
Bell Tel. of Penna	8.75	078167BA0	Deb	8/15/2031	BBB+	6.19	6.22	5.93	5.71	5.56	5.60	5.59	5.37	5.39	5.11	4.94	4.76	5.53%	4.94%
Chesapeake Pot.Tel Md	8	165069AP0	Deb	10/15/2029	BBB+	6.03	6.03	5.67	5.59	5.15	5.21	5.26	5.05	5.29	5.13	4.98	4.94	5.36%	5.02%
Chesapeake Pot.Tel Md	8.3	165069AQ8	Deb	08/01/2031	BBB+	6.40	6.43	6.28	6.17	6.03	6.05	6.05	5.83	6.12	5.30	5.16	5.03	5.90%	5.16%
Chesapeake Pot.Tel Md	7.15	165069AS4	Deb	05/01/2023	BBB+	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.14	7.14	7.14	7.14	7.15%	7.14%
Chesapeake&Pot.Tel VA	8.38	165087AL1	Forty Yr Deb	10/01/2029	BBB+	6.03	5.98	5.96	5.59	6.03	5.47	5.51	5.29	5.56	5.39	5.24	5.22	5.61%	5.28%

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Telecommunications
2015 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Avg Full Year	Avg 4th QTR
Chesapeake&Pot.Tel VA	7.88	165087AN7	Deb	1/15/2022	BBB+	5.03	5.03	5.01	5.00	4.84	4.93	4.68	4.49	4.75	4.67	4.51	4.48	4.79%	4.55%
GTE California	6.75	362311AG7	Deb 'F'	05/15/2027	BBB+	5.53	5.53	5.43	5.29	5.10	5.12	5.17	4.95	5.19	4.99	4.87	4.82	5.17%	4.89%
GTE Corp	8.75	362320AT0	Deb	11/01/2021	BBB+	4.38	4.13	4.11	4.23	3.61	3.44	3.60	3.42	3.31	3.84	3.72	3.68	3.79%	3.75%
GTE Corp	6.84	362320AZ6	Deb	04/15/2018	BBB+	2.56	2.53	1.97	1.97	1.93	2.15	2.37	2.32	2.51	1.99	1.90	2.00	2.18%	1.96%
GTE Corp	6.94	362320BA0	Deb	04/15/2028	BBB+	5.28	5.13	4.91	4.68	4.48	4.51	4.76	4.55	4.80	4.60	4.48	4.43	4.72%	4.50%
GTE Florida	6.86	362333AH9	Deb 'E'	02/01/2028	BBB+	5.88	5.53	5.51	5.25	5.10	5.17	5.22	4.90	5.00	4.86	4.71	4.73	5.16%	4.77%
New England Tel. & Tel.	7.88	644239AY1	Deb	11/15/2029	BBB+	5.93	5.93	5.64	5.42	5.22	5.20	5.25	5.03	5.29	5.12	4.97	4.93	5.33%	5.01%
New Jersey Bell Tel	7.85	645767AW4	Deb	11/15/2029	BBB+	6.02	5.93	5.91	5.86	5.25	5.11	5.16	4.95	5.19	5.04	4.92	4.87	5.35%	4.94%
New Jersey Bell Tel	8	645767AY0	Deb	06/01/2022	BBB+	4.68	4.68	4.54	4.34	4.17	4.27	4.34	4.15	4.41	4.03	3.90	3.86	4.28%	3.93%
New York Telephone Co	6.7	650094CA1	Deb	11/01/2023	BBB+	6.71	6.71	6.71	6.71	6.71	6.71							6.71%	
New York Telephone Co	7	650094CB9	Deb	12/01/2033	BBB+	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	6.99	6.99	6.99	7.00%	6.99%
New York Telephone Co	6.5	650094CJ2	Deb	04/15/2028	BBB+	6.23	6.23	6.21	5.90	5.71	5.76	5.32	5.10	5.34	5.05	4.93	4.88	5.56%	4.95%
Verizon Communications Inc.	5.55	92343VAC8	Nts	02/15/2016	BBB+	0.98	0.87	0.69	1.25	1.35	1.58	1.83	1.99	0.02	0.87	0.58	0.19	1.02%	0.55%
Verizon Communications Inc.	6.25	92343VAF1	Nts	04/01/2037	BBB+	5.22	5.15	5.02	4.92	4.78	4.71	4.81	4.57	4.87	4.77	4.75	4.61	4.85%	4.71%
Verizon Communications Inc.	5.5	92343VAG9	Nts	04/01/2017	BBB+	1.48	1.43	1.22	1.27	1.29	1.44	1.65	1.73	1.97	1.35			1.48%	1.35%
Verizon Global Fndg	7.75	92344GAS5	Nts	06/15/2032	BBB+	5.15	5.18	5.06	4.86	4.68	4.73	4.38	4.24	4.51	4.25	4.08	4.48	4.63%	4.27%
Verizon Global Fndg	4.9	92344GAW6	Nts	09/15/2015	BBB+	0.81	0.65	0.73	0.02	0.02	0.02	0.13	0.39	0.66	0.56			0.40%	0.56%
Verizon Global Fndg	5.85	92344GAX4	Nts	09/15/2035	BBB+	5.05	5.04	5.00	4.86	4.61	4.59	4.73	4.46	4.75	4.66	4.60	4.54	4.74%	4.60%
Verizon Maryland	5.125	92344WAB7	Deb'B'	06/15/2033	BBB+	5.20	5.23	4.98	4.99	4.95	4.98	4.95	4.76	5.05	4.95	4.81	4.68	4.96%	4.81%
VerizonNY	7.38	92344XAB5	Sr Deb Ser B	4/1/2032	BBB+	5.85	5.92	5.62										5.80%	
Centel Capital	9	15133KAC7	Deb	10/15/2019	BBB-	5.06	4.79	4.98	5.20	4.49	4.12	4.32	4.22	4.44	4.34	4.26	4.36	4.55%	4.32%
Mountain States Tel&Tel	7.38	624284BD6	Deb	05/01/2030	BBB-	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.51	7.54	7.54	7.54	7.52%	7.54%
Northwestern Bell Tel	7.75	668027AT2	Deb	05/01/2030	BBB-	6.77	7.29	7.14	7.05	6.91	6.49	6.39	6.25	6.51	6.26	6.13	5.94	6.59%	6.11%
Qwest Corp	7.5	74913GAG0	Nts	10/01/2014	BBB-	1.06	1.06	1.04										1.05%	
Qwest Corp	7.62	74913GAK1	Nts	06/15/2015	BBB-	1.76	1.50	1.64	0.69	1.11	1.60	2.18	2.67	2.98	1.46	1.50	1.62	1.73%	1.53%
Qwest Corp	6.5	74913GAT2	Nts	06/01/2017	BBB-	2.34	2.34	2.22	1.97	2.07	1.78	2.11	2.22	2.38	2.18	2.24	2.51	2.20%	2.31%
TCA Cable TV	6.53	872241AB0	Deb	02/01/2028	BBB-	5.93	5.58	5.56	5.39	5.07	5.12	5.16	4.81	5.09	4.96	4.76	4.77	5.18%	4.83%
United States Cellular Corp.	6.7	911684AD0	Sr Nts	12/15/2033	BBB-	6.83	6.83	6.55						6.90	6.69	6.69	6.85	6.76%	6.74%
U S WESTCommunications	7.5	912920AB1	Deb	06/15/2023	BBB-	7.50	7.45	7.45	7.45	7.45	7.45	7.25	7.45	7.45	7.44	7.44	7.44	7.44%	7.44%
U S WESTCommunications	6.875	912920AC9	Deb	09/15/2033	BBB-	7.22	7.04	6.98	6.86	6.81	6.81	6.78	6.78	6.80	6.80	6.80	6.85	6.88%	6.82%
U S WESTCommunications	7.125	912920AG0	Deb	11/15/2043	BBB-	7.43	7.23	7.12	7.15	7.03	7.10	7.25	7.00	7.24	7.02	6.93	6.91	7.12%	6.95%
U S WESTCommunications	7.25	912920AK1	Deb	09/15/2025	BBB-	6.17	5.93	5.81	5.47	5.32	5.12	5.27	7.13	5.31	5.11	4.99	4.94	5.55%	5.01%
U S WESTCommunications	7.2	912920AL9	Deb	11/10/2026	BBB-	7.09	7.10	7.11	7.10	7.10	7.10	7.10	5.05	7.12	7.15	7.15	7.15	6.94%	7.15%
U S WESTCommunications	7.25	912920AM7	Deb	10/15/2035	BBB-	7.23	7.20	7.09	7.15	7.02	6.93	6.95	6.95	6.97	6.97	6.97	6.96	7.03%	6.97%
United Tel Co(Florida)	8.375	913026AT7	1st HH	01/15/2025	BBB-	6.13	6.13	5.96	5.93	5.75	5.81	5.71	5.49	5.75	5.59	5.47	5.42	5.76%	5.49%
United Tel Co(Florida)	7.125	913026AU4	1st GG	07/15/2023	BBB-	5.63	5.63	5.61	5.29	5.11	5.18	5.08	4.95	5.22	4.96	4.83	4.79	5.19%	4.86%
Aliant Communications	6.75	016090AA0	Nts	04/01/2028	BB+	7.38	7.32	7.44	7.42	7.22	6.93	6.78	6.98	7.05	7.09	7.10	7.16	7.16%	7.12%
Century Tel Enterpr	7.2	156686AJ6	Sr Nts 'D'	12/01/2025	BB	7.52	7.32	7.00	6.80	6.64	6.64	6.61	6.54	6.53	6.37	6.49	6.64	6.76%	6.50%
Century Tel Enterpr	6.875	156686AM9	Deb 'G'	01/15/2028	BB	7.76	7.64	7.39	6.88	6.76	6.66	6.70	6.52	6.66	6.67	6.81	6.87	6.94%	6.78%
CenturyLink, Inc.	5	156700AJ5	xed Rt Sr Nt Ser	02/15/2015	BB	1.59	1.34	1.41	2.06	2.44	2.82	3.45	3.70		2.55	2.61	1.88	2.35%	2.35%
CenturyLink, Inc.	6	156700AL0	xed Rt Sr Nts Ser	04/01/2017	BB	2.60	2.61	2.36	2.34	2.41	2.38	3.00	3.07	3.36	2.52	2.56	2.54	2.65%	2.54%
Embarq Corp.	8	29078EAA3	Nts	06/01/2036	BB	7.65	7.58	7.57						7.10	7.01	6.97	6.93	7.26%	6.97%
Embarq Corp.	7.08	29078EAB1	Nts	06/01/2016	BB	1.89	1.41	1.68						2.37	2.17	1.76	1.50	1.83%	1.81%
Qwest Cap Funding	7.75	74913EAJ9	Nts	02/15/2031	BB	8.13	8.02	7.88	7.64	7.38	7.38	7.49	7.52	7.50	7.53	7.53	7.58	7.63%	7.55%
Qwest Cap Fdg Inc	7.62	74913EAQ3	Nts 144a	8/3/2021	BB	6.63	6.42	6.28	6.10	5.34	5.34	5.44	5.47	5.70	5.89	5.53	6.17	5.86%	5.86%
Qwest Cap Funding	7.62	74913EAQ3	Nts	08/03/2021	BB	6.63	6.42	6.28	6.10	5.34	5.34	5.44	5.47	5.70	5.89	5.53	6.17	5.86%	5.86%
U S WEST Cap Fndg	6.88	912912AQ5	Deb	07/15/2028	BB	7.77	7.47	7.32	6.98	6.78	6.61	6.84	6.66	6.78	6.76	6.81	6.87	6.97%	6.81%
U S WEST Cap Fndg	6.5	912912AR3	Deb	11/15/2018	BB	4.56	4.08	4.04	3.93	3.88	3.38	3.38	3.83	3.75	3.59	3.56	3.75	3.81%	3.63%
Cin Bell Tel	7.25	171870AK4	Sec Nts	06/15/2023	BB-	9.84	9.84	9.84	9.84	9.34	9.84	9.84	9.84	6.90	10.73	7.02	7.09	9.16%	8.28%
Cincinnati Bell Tel	6.3	171875AD9	B>(Tel)<EB>GtdD	12/01/2028	BB-	7.60	7.48	6.92	6.98	6.73	6.72	6.64	6.76	6.85	6.63	6.68	6.97	6.91%	6.76%
Citizens Communications Co.	9	17453BAJ0	Sr Nts	08/31/2031	BB-	8.94	8.82	8.77	8.59	8.30	8.15	8.27	8.13	8.41	8.06	8.14	8.35	8.41%	8.18%
GTE North Inc	6.73	362337AK3	Deb 'G'	02/15/2028	BB-	7.70	7.88	7.86	7.60	7.31	7.03	7.25	6.99	7.11	7.18	7.29	7.55	7.40%	7.34%
Sprint Nextel Corp.	9.25	852061AA8	Deb	04/15/2022	BB-	6.28	6.16	6.03	5.86	5.56	5.73	6.17	6.32	6.46	6.97	6.80	6.94	6.27%	6.90%
Sprint Nextel Corp.	6	852061AD2	Nt	12/1/2016	BB-	2.85	2.64	2.31	2.66	2.71	1.46	1.89	2.58	2.95	3.15	3.27	3.68	2.68%	3.37%
Sprint Nextel Corp.	6	852061AD2	Nt	12/1/2016	BB-	2.85	2.64	2.31	2.66	2.71	1.46	1.89	2.58	2.95	3.15	3.27	3.68	2.68%	3.37%
Sprint Capital	6.88	852060AD4	Nts	11/15/2028	B+	7.34	7.25	7.26						7.29	7.70	7.60	8.35	7.54%	7.88%
Sprint Capital	6.9	852060AG7	Nts	05/01/2019	B+	5.03	4.98	4.77	4.66	4.51	4.56	5.27	5.20	5.44	6.18	5.92	6.29	5.23%	6.13%
Sprint Capital	8.75	852060AT9	Nts	03/15/2032	B+	7.83	7.74	7.72	7.52	7.17	7.20	7.61	7.58	7.61	8.02	8.17	8.97	7.76%	8.39%

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Telecommunications
2015 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Avg Full Year	Avg 4th QTR
Cincinnati Bell Tel	7	171871AH9	Sr Nts	02/15/2015	B	6.45	6.45	6.45	6.45	6.37	6.45	6.45	6.45	6.45	3.08	2.25		5.75%	2.67%
NII Holdings, Inc.	2.75	62913FAF9	Sr Nt Conv 144a	08/15/2025	B-									2.75	2.75			2.75%	2.75%
Centennial Com/Cell Op/PR	8.12	151352AB7	Sr Nts	02/01/2014	NR	6.95												6.95%	
Level 3 Finan	9.25	527298AM5	SrNts	11/01/2014	NR	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.34	8.35			8.35%	8.35%
NII Holdings, Inc.	2.88	62913FAC6	Nt Conv 144a	02/01/2034	NR									4.70	4.70	4.88	4.89	4.79%	4.82%
Pacific Bell	6.625	694032AX1	Deb	10/15/2034	NR	6.52	6.52	6.52	6.52	6.52	6.52	6.52	6.52	6.51	6.52	6.52	6.52	6.52%	6.52%
Qwest Communications Internatior	7.5	749121BR9	Sr Nts'B'	02/15/2014	NR	7.50												7.50%	
Qwest Communications Internatior	7.5	749121BV0	Sr Nts'B'	02/15/2014	NR	7.50												7.50%	
Southwest'n Bell Tel	7.375	845335BX5	Deb	07/15/2027	NR	7.09	7.09	7.09	7.09	7.09	7.09	7.09	7.09	7.09	7.03	7.03	7.03	7.08%	7.03%
Southwest'n Bell Tel	7	845335BZ0	Deb	11/15/2027	NR	6.77	6.77	6.77	6.77	6.77	6.77	6.77	6.77	6.77				6.77%	
Tele-Communications(Old)	9.88	879240AR0	Sr Deb	06/15/2022	NR	4.79	4.61	4.43	4.27	4.12	4.22	4.19	4.15	4.39	4.08	3.92	3.91	4.26%	3.97%
			Counts of data			125	122	122	106	106	106	105	104	116	116	111	109	127	117

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	3.92%	3.82%
BBB's	4.93%	4.71%
BB's	5.63%	5.60%
B's	5.81%	5.56%
NR's	6.63%	6.14%
ALL	4.80%	4.61%
BBB- & Above	4.39%	4.24%
BB- & Above	4.61%	4.49%

**Investment Grade (BBB- & Above)*

Industry: Telecommunications with significant portion of Cable TV Service

Support for Debt Rating
Industry: Telecommunications, Cable TV
2015 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Avg Full Year	Avg 4th QTR
Comcast Cable Commun	8.88	20029PAG4	Sr Nt - Exchange	5/1/2017	A-	1.64	1.41	1.58	1.32	1.41	1.46	1.87	1.97	2.18	1.40	1.28	1.44	1.58%	1.37%
Comcast Cable Commun	8.5	20029PAH2	Sr Nt - Exchange	5/1/2027	A-	4.72	4.47	4.48	4.39	4.22	4.29	4.24	4.17	4.44	4.14	4.01	4.01	4.30%	4.05%
Comcast Corp.	6.5	20030NAB7	Nt	1/15/2015	A-	0.60	0.48	0.68	2.26	2.70	3.16	0.38			0.73	1.01		1.33%	0.87%
Comcast Corp.	7.05	20030NAC5	Sr Nt	3/15/2033	A-	4.98	4.75	4.63	4.54	4.32	4.32	4.23	4.15	4.41	4.18	4.15	4.01	4.39%	4.11%
Comcast Corp.	5.65	20030NAF8	Gtd Fixed Rt Sr I	6/15/2035	A-	4.90	4.79	4.65	4.51	4.29	4.32	4.22	4.12	4.41	4.26	4.08	3.94	4.37%	4.09%
Comcast Corp.	4.95	20030NAG6	Gtd Fixed Rt Sr I	6/15/2016	A-	0.98	0.89	0.93	0.58	0.68	0.83	0.74	1.17	1.30	0.84	0.86	0.82	0.89%	0.84%
Comcast Corp.	5.9	20030NAL5	Gtd Nt	3/15/2016	A-	0.98	0.84	0.78	1.08	1.10	1.38	0.70	1.85	1.98	0.73	0.78	0.85	1.09%	0.79%
Comcast Corp.	6.45	20030NAM3	Gtd Nt	3/15/2037	A-	5.03	4.89	4.76	4.54	4.49	4.51	4.42	4.29	4.58	4.51	4.35	4.16	4.54%	4.34%
Comcast Corp.	6.5	20030NAP6	Nts	1/15/2017	A-	1.32	1.19	1.34	1.58	1.56	1.76	1.05	0.07	0.38	1.18	1.13	1.31	1.16%	1.21%
Comcast Corp.	5.88	20030NAR2	Nt	2/15/2018	A-	1.84	1.73	1.95	2.00	1.76	1.88	1.54	2.05	1.23	1.67	1.63	1.76	1.75%	1.69%
Comcast Corp.	6.3	20030NAU5	Sr Nts	11/15/2017	A-	1.72	1.44	1.70	1.97	1.91	0.79	1.45	1.07	1.38	1.54	1.48	1.57	1.50%	1.53%
Comcast Corp.	6.95	20030NAV3	Sr Nts	8/15/2037	A-	5.06	4.91	4.78	4.64	4.51	4.49	4.45	4.32	4.53	4.49	4.32	4.15	4.55%	4.32%
AOL Time Warner	7.62	00184AAC9	Deb	4/15/2031	BBB	5.05	4.99	4.75	4.54	4.34	4.44	4.54	4.37	4.68	4.50	4.42	4.32	4.58%	4.41%
Time Warner Cos Inc	9.15	887315AM1	Deb Dtd 02/04/1	2/1/2023	BBB	4.45	4.28	4.21	4.10	3.85	3.98	4.15	3.42	3.68	4.03	3.92	3.92	4.00%	3.96%
Time Warner Cos Inc	6.88	887315AY5	Deb	6/15/2018	BBB	2.26	2.12	2.22	1.93	1.85	1.84	1.86	2.15	2.36	2.41	2.11	2.18	2.11%	2.23%
Time Warner Cos Inc	8.05	887315BA6	Deb	1/15/2016	BBB	1.43	1.39	1.57	2.43	2.61	2.91	0.02	0.02	0.02	1.14	1.23	1.32	1.34%	1.23%
Time Warner Cos Inc	6.85	887315BB4	Deb	1/15/2026	BBB	5.48	5.46	5.44	5.37	5.20	5.25	5.17	4.99	5.24	5.09	4.99	5.00	5.22%	5.03%
Time Warner Cos Inc	7.57	887315BH1	Deb	2/1/2024	BBB	4.55	4.52	4.42	4.12	3.88	3.95	4.03	3.54	3.80	3.89	3.78	3.69	4.01%	3.79%
Time Warner Cos Inc	7.25	887315BJ7	Deb	10/15/2017	BBB	1.82	1.78	1.99	2.55	1.24	1.43	1.34	1.36	1.57	1.71	1.69	1.86	1.70%	1.75%
Time Warner Cos Inc	6.95	887315BM0	Gtd Deb	1/15/2028	BBB	4.78	4.76	4.49	4.34	4.11	4.17	4.20	4.07	4.29	4.25	4.09	4.16	4.31%	4.17%
Time Warner Cos Inc	6.62	887315BN8	Deb	5/15/2029	BBB	4.88	4.77	4.71	4.44	4.12	4.14	4.34	4.17	4.41	4.23	4.24	4.15	4.38%	4.21%
Time Warner Inc.	5.88	887317AC9	Nt	11/15/2016	BBB	1.32	1.19	1.26	1.78	1.83	0.18	0.53	0.66	0.85	1.16	1.23	1.30	1.11%	1.23%
Time Warner Inc.	6.5	887317AD7	Deb	11/15/2036	BBB	5.26	5.28	5.08	4.90	4.78	4.83	4.86	4.84	5.05	4.80	4.67	4.53	4.91%	4.67%
Time Warner Entertainment	8.38	88731EAF7	Sr Deb	3/15/2023	BBB	5.91	4.33	4.16	4.10	3.73	3.71	3.62	3.65	3.92	3.62	3.46	3.50	3.98%	3.53%
Qwest Corp	7.5	74913GAG0	Nts	10/01/2014	BBB-	1.06	1.06	1.04										1.05%	
Qwest Corp	7.62	74913GAK1	Nts	06/15/2015	BBB-	1.76	1.50	1.64	0.69	1.11	1.60	2.18	2.67	2.98	1.46	1.50	1.62	1.73%	1.53%
Qwest Corp	6.5	74913GAT2	Nts	06/01/2017	BBB-	2.34	2.34	2.22	1.23	2.07	1.78	2.19	2.22	2.38	2.18	2.24	2.51	2.14%	2.31%
TCA Cable TV	6.53	872241AB0	Deb	02/01/2028	BBB-	5.93	5.58	5.56	5.39	5.07	5.12	5.16	4.81	5.09	4.96	4.76	4.77	5.18%	4.83%
Century Tel Enterpr	7.2	156686AJ6	Sr Nts 'D'	12/01/2025	BB	7.52	7.32	7.00	6.80	6.64	6.64	6.61	6.54	6.53	6.37	6.49	6.64	6.76%	6.50%
Century Tel Enterpr	6.875	156686AM9	Deb 'G'	01/15/2028	BB	7.76	7.64	7.39	6.88	6.76	6.66	6.70	6.52	6.66	6.67	6.81	6.87	6.94%	6.78%
CenturyTel, Inc.	5	156700AJ5	Sr Nts'M'	02/15/2015	BB	1.59	1.34	1.41	2.06	2.44	2.82	3.45	3.70	3.32	2.55	2.61	1.88	2.43%	2.35%
CenturyLink, Inc.	6	156700AL0	Fixed Rt Sr Nts S	04/01/2017	BB	2.60	2.61	2.36	2.35	2.41	2.38	3.00	3.07	3.36	2.52	2.56	2.54	2.65%	2.54%
CenturyTel, Inc.	6	156700AL0	SrNts'N'	04/01/2017	BB	2.60	2.61	2.36	2.35	2.41	2.38	3.00	3.07	3.36	2.52	2.56	2.54	2.65%	2.54%
Embarq Corp.	8	29078EAA3	Nts	06/01/2036	BB	7.65	7.58	7.57						7.10	7.01	6.97	6.93	7.26%	6.97%
Embarq Corp.	7.08	29078EAB1	Nts	06/01/2016	BB	1.89	1.41	1.68						2.37	2.17	1.76	1.50	1.83%	1.81%
Cin Bell Tel	7.25	171870AK4	Sec Nts	06/15/2023	BB-	9.84	9.84	9.84	9.84	9.84	9.84	9.84	9.84	6.90	10.73	7.02	7.09	9.21%	8.28%
Cincinnati Bell Tel	6.3	171875AD9	<SB>(Tel)<EB>0	12/01/2028	BB-	7.60	7.48	6.92	6.88	6.73	6.72	6.64	6.76	6.85	6.63	6.68	6.97	6.91%	6.76%
Citizens Communications Co.	9	17453BAJ0	Sr Nts	08/31/2031	BB-	8.94	8.82	8.77	8.59	8.30	8.15	8.27	8.25	8.41	8.06	8.14	8.35	8.42%	8.18%
Cincinnati Bell Tel	7	171871AH9	Sr Nts	02/15/2015	B	6.45	6.45	6.45	6.45	6.45	6.45	6.45	6.45	6.45	3.08	2.25	6.45	5.82%	3.93%
			Counts of data			39	39	39	36	36	36	36	35	37	38	38	37	39	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

	Annual	4th Qtr
A's	2.62%	2.43%
BBB's	3.23%	3.26%
BB's	5.50%	5.27%
B's	5.82%	3.93%
ALL	3.69%	3.55%
BBB- & Above	2.97%	2.89%
BB- & Above	3.64%	3.53%

**Investment Grade (BBB- & Above)*

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Telecommunications
2015 Assessment Year

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

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Avg Full Year	Avg 4th QTR
AT&T Inc.	6.8	00206RAB8	Nts	05/15/2036	A-	5.41	5.38	5.24	5.07	4.86	4.83	4.83	4.64	4.90	4.71	4.50	4.44	4.90%	4.55%
AT&T Inc.	6.5	00206RAD4	GlobalNts	09/01/2037	A-	5.46	5.36	5.22	5.07	4.76	4.78	4.78	4.56	4.95	4.88	4.74	4.79	4.95%	4.80%
AT&T Inc.	6.3	00206RAG7	GlobalNts	01/15/2038	A-	5.46	5.40	5.21	5.07	4.78	4.81	4.76	4.54	4.90	4.86	4.80	4.79	4.95%	4.82%
AT&T Inc.	6.4	00206RAN2	GlobalNts	05/15/2038	A-	5.46	5.41	5.23	5.07	4.78	4.81	4.83	4.66	4.92	4.76	4.94	4.72	4.97%	4.81%
America Movil, S.A.B. de C.V.	6.38	02364WAJ4	Sr Nt	3/1/2035	A-	5.50	5.41	5.18						4.80	4.58	4.57	4.67	4.96%	4.61%
BellSouth Corp.	6.55	079860AE2	Nts	06/15/2034	A-	5.60	5.63	5.38	5.29	4.95	4.98	4.88	4.68	4.97	4.72	4.57	4.48	5.01%	4.59%
BellSouth Corp.	6	079860AK8	Nts	11/15/2034	A-	5.55	5.58	5.20	5.12	5.07	5.07	5.05	4.68	5.12	4.98	4.87	4.78	5.09%	4.88%
BellSouthTelecommunications	5.85	079867AN7	Deb	11/15/2045	A-	6.15	5.88	5.93	5.86	5.71	5.73	5.71	5.54	5.80	5.59	5.44	5.28	5.72%	5.44%
BellSouthTelecommunications	7	079867AP2	Deb	12/15/2095	A-	6.50	6.53	6.38	6.32	6.17	6.20	6.00	5.81	5.90	5.63	5.52	5.34	6.03%	5.50%
BellSouthTelecommunications	7	079867AP2	Deb	12/15/2095	A-	6.50	6.53	6.38	6.32	6.17	6.20	6.00	5.81	5.90	5.63	5.52	5.34	6.03%	5.50%
Pacific Bell	7.375	694032AV5	Deb	07/15/2043	A-	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.14	7.13	7.13	7.13	7.14%	7.13%
SBCCommunications	6.45	78387GAM5	GlobalNts	06/15/2034	A-	5.05	5.12	5.01	4.93	4.78	4.73	4.81	4.58	4.83	4.95	4.75	4.69	4.85%	4.80%
SBCCommunications	6.45	78387GAM5	Gbl Nt	6/15/2034	A-	5.05	5.12	5.01	4.93	4.78	4.73	4.81	4.58	4.83	4.95	4.75	4.69	4.85%	4.80%
SBCCommunications	6.15	78387GAQ6	Gbl Nt	9/15/2034	A-	5.15	5.23	5.11	5.03	4.86	4.64	4.68	4.44	4.78	4.78	4.58	4.69	4.83%	4.68%
U S WESTCommunications	7.25	912920AM7	Deb	10/15/2035	BBB-	7.23	7.20	7.09	7.15	7.02	6.93	6.95	6.95	6.97	6.97	6.97	6.96	7.03%	6.97%
Verizon Communications Inc.	6.25	92343VAF1	Nts	04/01/2037	BBB+	5.22	5.15	5.02	4.92	4.78	4.71	4.81	4.57	4.87	4.77	4.75	4.61	4.85%	4.71%
Verizon Global Fndg	5.85	92344GAX4	Nts	09/15/2035	BBB+	5.05	5.04	5.00	4.86	4.61	4.59	4.73	4.46	4.75	4.66	4.60	4.54	4.74%	4.60%
U S WESTCommunications	7.125	912920AG0	Deb	11/15/2043	BBB-	7.43	7.23	7.12	7.15	7.03	7.10	7.25	7.00	7.24	7.02	6.93	6.91	7.12%	6.95%
Embarq Corp.	8	29078EAA3	Nts	06/01/2036	BB	7.65	7.58	7.57						7.10	7.01	6.97	6.93	7.26%	6.97%
NII Holdings, Inc.	2.88	62913FAC6	Nt Conv 144a	02/01/2034	NR									4.70	4.70	4.88	4.89	4.79%	4.82%
Pacific Bell	6.625	694032AX1	Deb	10/15/2034	NR	6.52	6.52	6.52	6.52	6.52	6.52	6.52	6.52	6.51	6.52	6.52	6.52	6.52%	6.52%
			Counts of data			20	20	20	18	18	18	18	18	21	21	21	21	21	21

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	5.30%	5.06%
BBB's	5.93%	5.81%
BB's	7.26%	6.97%
NR's	5.66%	5.67%
ALL	5.55%	5.35%
BBB- & Above	5.35%	5.13%
BB- & Above	5.54%	5.32%

**Investment Grade (BBB- & Above)*

Industry: Telecommunications with significant portion of Cable TV Service

Support for Debt Rating
Industry: Telecommunications, Cable TV
2015 Assessment Year

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

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Avg Full Year	Avg 4th QTR
Comcast Corp.	5.65	20030NAF8	Gtd Fixed Rt Sr I	6/15/2035	A-	4.90	4.79	4.65	4.51	4.29	4.32	4.22	4.12	4.41	4.26	4.08	3.94	4.37%	4.09%
Comcast Corp.	6.45	20030NAM3	Gtd Nt	3/15/2037	A-	5.03	4.89	4.76	4.54	4.49	4.51	4.42	4.29	4.58	4.51	4.35	4.16	4.54%	4.34%
Comcast Corp.	6.95	20030NAV3	Sr Nts	8/15/2037	A-	5.06	4.91	4.78	4.64	4.51	4.49	4.45	4.32	4.53	4.49	4.32	4.15	4.55%	4.32%
Time Warner Inc.	6.5	887317AD7	Deb	11/15/2036	BBB	5.26	5.28	5.08	4.90	4.78	4.83	4.86	4.84	5.05	4.80	4.67	4.53	4.91%	4.67%
Embarq Corp.	8	29078EAA3	Nts	06/01/2036	BB	7.65	7.58	7.57						7.10	7.01	6.97	6.93	7.26%	6.97%
			Counts of data			4	4	4	4	4	4	4	4	4	4	4	4	4	4

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	4.49%	4.25%
BBB's	4.91%	4.67%
BB's	7.26%	6.97%
ALL	5.13%	4.88%
BBB- & Above	4.59%	4.36%
BB- & Above	5.13%	4.88%

**Investment Grade (BBB- & Above)*