



MONTANA
DEPARTMENT OF
REVENUE

**2025 Capitalization Rate Study
Telecommunications - Medium & Small**

Final

Completed: April 18, 2025

MONTANA DEPARTMENT OF REVENUE

Yield Capitalization Rate Conclusion

Industry: Telecommunications - Medium & Small

2025 Assessment Year

Capital Structure ^[1]

Equity	45.00%
Debt	55.00%

Equity Cost of Capital

		Weighting
Capital Asset Pricing Model - Ex Post ^[2]	12.54%	48%
Capital Asset Pricing Model - Ex Ante ^[2]	9.61%	12%
3 Stage Dividend Discount Model - Dividends ^[3]	6.64%	20%
3 Stage Dividend Discount Model - Earnings ^[3]	15.93%	<u>20%</u>
Weighted Average	<u>11.68%</u>	100%
Selected Cost of Equity	<u>11.68%</u>	

Debt Cost of Capital ^[4]

		Weighting
A - Mergent's - Avg. YTM of A Rated Corporate Bonds ^[4]	5.53%	0%
Baa - Mergent's - Avg. YTM of Baa Rated Corporate Bonds ^[4]	5.80%	0%
Ba - MTDOR Debt Study ^[5]	6.84%	20%
B - MTDOR Debt Study ^[5]	7.33%	60%
Caa - MTDOR Debt Study ^[5]	8.31%	<u>20%</u>
Weighted Average	<u>7.43%</u>	100%
Selected Cost of Debt	<u>7.43%</u>	

Weighted Average Cost of Capital (WACC)

Source of Capital	Capital Structure	Capital Cost of Capital	Marginal Tax Rate	After-tax Unweighted	Pre-tax Weighted	After-tax Weighted
Equity	45.00%	11.68%		11.68%	5.26%	5.26%
Debt	55.00%	7.43%	24.00%	5.65%	4.09%	3.10%
WACC	100.00%				9.34%	8.36%
WACC (Rounded)						8.40%

Notes

[1] From worksheet: Capital Structure

[2] From worksheet: Capital Asset Pricing Model Summary

[3] From worksheet: Yield Equity Summary

[4] January 2025, Mergent Bond Record

[5] Montana Department of Revenue High Yield Debt Study

MONTANA DEPARTMENT OF REVENUE

Direct Capitalization Rate Conclusion**Industry: Telecommunications - Medium & Small****2025 Assessment Year**

Capital Structure ^[1]

Equity	45.00%
Debt	55.00%

Equity Capitalization Rate ^[2]

NOI After-tax	3.67%
GCF	18.67%

Debt Capitalization Rate ^[3]

Calculated Current Yield	6.76%
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NOI After-tax Direct Capitalization Rate

Source of Capital	Capital Structure	Capitalization Rate	Marginal Tax Rate	After-tax Unweighted	Pre-tax Weighted	After-tax Weighted
Equity	45.00%	3.67%		3.67%	1.65%	1.65%
Debt	55.00%	6.76%	24.00%	5.13%	3.72%	2.82%
Total	100.00%				5.37%	4.47%
Total (Rounded)						4.50%

GCF Direct Capitalization Rate

Source of Capital	Capital Structure	Capitalization Rate	Marginal Tax Rate	After-tax Unweighted	Pre-tax Weighted	After-tax Weighted
Equity	45.00%	18.67%		18.67%	8.40%	8.40%
Debt	55.00%	6.76%	24.00%	5.13%	3.72%	2.82%
Total	100.00%				12.12%	11.23%
Total (Rounded)						11.25%

Notes:

[1] From worksheet: Capital Structure

[2] From worksheet: Direct Equity Summary

[3] From worksheet: Calculated Current Yield

MONTANA DEPARTMENT OF REVENUE

Selection of Guideline Companies

Industry: Telecommunications - Medium & Small

2025 Assessment Year

Screening Requirements:

The universe of companies is all companies listed in Value Line under the Cable TV and Telecom Services industries with a market capitalization under \$40B (excludes CHTR, CMCSA, T, TMUS, VZ, DTEGY, AMX).

Companies were then selected using the following screening criteria:

1. Headquartered and primarily operated in the United States.
2. Actively traded on an American exchange. All OTC and TO companies excluded.
3. Primarily provides two-way transmission of voice, image, data, or other information over wire, cable, fiber optics, microwave, or similar facilities.
4. Not engaged in material M&A activity.
5. Under \$40 Billion in market capitalization.

Ticker Symbol	Headquartered /Incorporated in the U.S.	Actively traded on American exchange	Under \$40 Billion in Market Capitalization	Primarily operates a two-way comm network	Consider as Potential Guideline Company	Not Engaged in Material M&A Activity	Use as Guideline Company	Note
AMX	No							
ASTS				No				
ATNI				No				
ATUS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
BAND				No				
BCE	No							
CABO	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
CCOI	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
CHTR			No					
CMCSA			No					
CXDO				No				
DTEGY	No							
FIVN				No				
FNGR				No				
FYBR	Yes	Yes	Yes	Yes	Yes	No		[2]
GOGO	Yes	Yes	Yes	Yes	Yes	No		[3]
GSAT				No				
HIS	No							
IDT				No				
IRDM				No				
KLTR				No				
LBTYA	No							
LILA	No							
LUMN	Yes	Yes	Yes	Yes	Yes	No	Yes	
NICE				No				
NN				No				
NUVR		No						
OOMA				No				
RCIB.TO	No							

MONTANA DEPARTMENT OF REVENUE

Selection of Guideline Companies

Industry: Telecommunications - Medium & Small

2025 Assessment Year

Screening Requirements:

The universe of companies is all companies listed in Value Line under the Cable TV and Telecom Services industries with a market capitalization under \$40B (excludes CHTR, CMCSA, T, TMUS, VZ, DTEGY, AMX).

Companies were then selected using the following screening criteria:

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2. Actively traded on an American exchange. All OTC and TO companies excluded.
3. Primarily provides two-way transmission of voice, image, data, or other information over wire, cable, fiber optics, microwave, or similar facilities.
4. Not engaged in material M&A activity.
5. Under \$40 Billion in market capitalization.

Ticker Symbol	Headquartered /Incorporated in the U.S.	Actively traded on American exchange	Under \$40 Billion in Market Capitalization	Primarily operates a two-way comm network	Consider as Potential Guideline Company	Not Engaged in Material M&A Activity	Use as Guideline Company	Note
RNG				No				
SATS				No				
SHEN	Yes	Yes	Yes	Yes	Yes	Yes	Yes	[4]
T			No					
T.TO	No							
TCX	No							
TDS	Yes	Yes	Yes	Yes	Yes	No	Yes	
TEF	No							
TIGO	No							
TMUS			No					
TWLO				No				
USM	Yes	Yes	Yes	Yes	Yes	No	Yes	
VOD	No							
VRNT				No				
VSAT				No				
VZ			No					
WEAV			No					
WOW	Yes	Yes	Yes	Yes	Yes	No	No	[1]
ZM			No					

[1] Pending private equity buyout

[2] Verizon acquisition announced 9/24

[3] Completed acquisition of Satcom Direct 12/24

[4] Acquisition of Horizon is not disqualifying

MONTANA DEPARTMENT OF REVENUE

Support for Capital Structure
Telecommunications - Medium & Small
2025 Assessment Year

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

A	B	C	D	E	F	G	H	I	J	K	L	M	N
Ticker	Company	Industry Group	Financial Strength	Shares Outstanding	End of Year Closing Stock Price	MV Common Stock	MV Preferred Stock	MV Long Term Debt	PV of Operating Leases	Total Common, Preferred, LT Debt, & Op Leases	% Common	% Preferred	% Debt & Op Leases
		<i>Value Line</i>	<i>Value Line</i>	<i>10-K</i>	<i>Yahoo</i>	<i>ExF</i>	<i>10-K</i>	<i>10-K</i>	<i>10-K</i>	<i>G+H+I+J</i>	<i>G/K</i>	<i>H/K</i>	<i>(I+J)/K</i>
							<i>Note [1]</i>	<i>Note [2]</i>					
ATUS	Altice USA	CABLETV	C+	463	2.41	1,116	0	20,726	300	22,143	5%	0%	95%
CABO	Cable One	CABLETV	B	6	362.12	2,035	0	3,351	8	5,393	38%	0%	62%
CCOI	Cogent Comms. Hldgs	TELESERV	B+	49	77.07	3,746	0	1,961	359	6,067	62%	0%	38%
LUMN	Lumen Technologies	TELESERV	C+	1,015	5.31	5,388	0	17,381	1,212	23,981	22%	0%	78%
SHEN	Shenandoah Telecom.	TELESERV	B+	55	12.61	689	0	417	14	1,119	62%	0%	38%
TDS	Telephone & Data	TELESERV	B+	115	34.11	3,907	1,074	4,015	1,020	10,016	39%	11%	50%
USM	U.S. Cellular	TELESERV	B+	85	62.72	5,337	0	2,785	963	9,085	59%	0%	41%
All Companies						22,218	1,074	50,636	3,876	77,805	29%	1%	70%
	Average										41%	2%	58%
	Median										39%	0%	50%
	Trimmed Average										44%	0%	54%
	High										62%	11%	95%
	Low										5%	0%	38%
	Selected										45%		55%

Notes:

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

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

2025 Changes to Guideline Companies

Removed FYBR, GOGO, & WOW for M&A activity

Added CCOI

		Median	
Current Year	39%	0%	50%
Prior Year	42%	0%	58%
2 Years Prior	46%	0%	54%
3 Year Average	43%	0%	54%

MONTANA DEPARTMENT OF REVENUE

Capital Asset Pricing Model (CAPM)

Telecommunications - Medium & Small

2025 Assessment Year

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

		<i>Ex Post</i>	<i>Ex Ante</i>
$k_e =$	Cost of Equity	12.54%	9.61%
$R_f =$	Risk Free Rate	4.86%	4.86%
$\beta =$	Beta	1.05	1.05
$ERP =$	Equity Risk Premium ($R_m - R_f$)	7.31%	4.52%
$R_m =$	Market Rate of Return	12.17%	9.38%

Risk Free Rate Measures (R_f):

The Value Line Investment Survey: Selection & Opinion^[1]

January 3, 2025 Page 218

Selected Yields on Taxable U.S. Treasury Securities as of 12/20/24

10-year	4.52%
30-year	4.72%

Federal Reserve Statistical Release^[2]

U.S. government securities, Treasury constant maturities, Nominal, December 31, 2024

10-year	4.58%
20-year	4.86%
30-year	4.78%

Risk Free Rate Selected

4.86%

Notes

[1] "Value Line Selection & Opinion", Value Line (January 3, 2025)

[2] <https://www.federalreserve.gov/releases/h15/>

Ex Post - Equity Risk Premium Measures ($ERP = R_m - R_f$)

Kroll, 2025 Cost of Capital Navigator

		<u>R_m</u>	<u>R_f</u>	<u>ERP</u>
ERP "Historical" - <i>Ex Post</i>	<i>Arithmetic Avg.</i>	12.17%	4.86%	7.31%
ERP "Supply-side" - <i>Ex Post</i>	<i>Arithmetic Avg.</i>	11.12%	4.86%	6.26%
Ex Post Equity Risk Premium Selected		<u>12.17%</u>	<u>4.86%</u>	<u>7.31%</u>

MONTANA DEPARTMENT OF REVENUE

Capital Asset Pricing Model (CAPM)
Telecommunications - Medium & Small
2025 Assessment Year

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

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

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

	<u>R_m</u>	<u>R_f</u>	<u>ERP</u>
ERP - <i>Ex Ante</i>	7.19%	4.86%	2.33%

Kroll, 2025 Cost of Capital Navigator

	<u>R_m</u>	<u>R_f</u>	<u>ERP</u>
ERP "Conditional" - <i>Ex Ante</i>	8.50%	3.50%	5.00%

Damodaran Implied ERP (Jan 5, 2025)

	<u>R_m</u>	<u>R_f</u>	<u>ERP</u>
Implied Premium - <i>Ex Ante</i> - Trailing 12 month, with adjusted payout	8.58%	4.58%	4.00%
Implied Premium - <i>Ex Ante</i> - Trailing 12 month cash yields	8.91%	4.58%	4.33%
Implied Premium - <i>Ex Ante</i> - Average CF yield last 10 years	10.73%	4.58%	6.15%
Implied Premium - <i>Ex Ante</i> - Net cash yield	8.73%	4.58%	4.15%
Implied Premium - <i>Ex Ante</i> - Normalized earnings and payout	<u>8.39%</u>	<u>4.58%</u>	<u>3.81%</u>
Damodaran Average	9.07%	4.58%	4.49%

	<u>R_m</u>	<u>R_f</u>	<u>ERP</u>
<u>Average</u>	8.72%		4.25%
<u>Median</u>	8.58%		4.15%
<u>High</u>	10.73%		6.15%
<u>Low</u>	7.19%		2.33%

Ex Ante Equity Risk Premium Selected

9.38%	4.86%	4.52%
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MONTANA DEPARTMENT OF REVENUE

**Support for Beta Selection in CAPM
Telecommunications - Medium & Small
2025 Assessment Year**

A	B	C	D	E
Ticker	Company	Industry Group	Financial Strength	Beta
		<i>Value Line</i>	<i>Value Line</i>	<i>Value Line</i>
ATUS	Altice USA	CABLETV	C+	1.35
CABO	Cable One	CABLETV	B	1.05
CCOI	Cogent Comms. Hldgs	TELESERV	B+	0.90
LUMN	Lumen Technologies	TELESERV	C+	1.20
SHEN	Shenandoah Telecom.	TELESERV	B+	0.90
TDS	Telephone & Data	TELESERV	B+	1.00
USM	U.S. Cellular	TELESERV	B+	0.75
	Average			1.02
	Median			1.00
	Trimmed Average			1.01
	High			1.35
	Low			0.75
	Selected			1.05

MONTANA DEPARTMENT OF REVENUE

**Inflation & Real Growth
Telecommunications - Medium & Small
2025 Assessment Year**

A	B	C	D	Nominal Growth	
				E	F
Source Description	Inflation (CPI)	Real Growth (GDP)	Nominal Growth	Low	High
Livingston Survey ^[1]	2.29%	2.11%	4.40%		
Survey of Professional Forecasters ^[2]	2.38%	2.10%	4.48%		
Congressional Budget Office ^[3]	2.30%	1.80%	4.10%		
Average	2.32%	2.00%	4.33%		
Median	2.30%	2.10%	4.40%		
High	2.38%	2.11%	4.49%		
Low	2.29%	1.80%	4.09%		
Selected	2.30%	2.10%	4.40%	4.09%	4.49%

Inflationary Trend Factors						
Year	Dec. CPI-U Index	Percent Change From Previous	Dec. to Dec. Conversion Factor	Annual Avg. CPI-U Index	Percent Change From Previous	Annual Conversion Factor
	<i>Note [5]</i>	<i>Note [6]</i>	<i>Note [7]</i>	<i>Note [5]</i>	<i>Note [6]</i>	<i>Note [7]</i>
2013	233.049	1.5%	1.3542	232.957	1.4%	1.3466
2014	234.812	0.8%	1.3441	236.736	1.6%	1.3251
2015	236.525	0.7%	1.3343	237.017	0.1%	1.3235
2016	241.432	2.0%	1.3072	240.007	1.2%	1.3070
2017	246.524	2.1%	1.2802	245.120	2.1%	1.2797
2018	251.233	1.9%	1.2562	251.107	2.4%	1.2492
2019	256.974	2.2%	1.2282	255.657	1.8%	1.2270
2020	260.474	1.3%	1.2117	258.811	1.2%	1.2120
2021	278.802	6.6%	1.1320	270.970	4.5%	1.1577
2022	296.797	6.1%	1.0634	292.655	7.4%	1.0719
2023	306.746	3.2%	1.0289	304.702	4.0%	1.0295
2024	315.605	2.8%	1.0000	313.689	2.9%	1.0000

Notes

[1] Federal Reserve Bank of Philadelphia The Livingston Survey December 20, 2024 Table 3 Inflation Rate and Real GDP mean

<https://www.philadelphiafed.org/research-and-data/real-time-center/livingston-survey>

[2] Federal Reserve Bank of Philadelphia Survey of Professional Forecasters February 14, 2025 Table 8 and Table 9 Average over next 10-Year mean

<https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/survey-of-professional-forecasters>

[3] The Budget and Economic Outlook: 2025 To 2035

<https://www.cbo.gov/data/budget-economic-data#4>

[5] Historical Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average, all items, index averages (1982-84=100, unless otherwise noted)

<https://www.bls.gov/cpi/tables/supplemental-files/>

[6] (Row year - Previous Year) / Row Year

[7] Most current year / Row year

MONTANA DEPARTMENT OF REVENUE

3 Stage Dividend Discount Model (DDM)

Telecommunications - Medium & Small

2025 Assessment Year

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

k_e = Cost of Equity

D_1 = Expected Dividend

P_0 = Current Price Per Share

g = Sustainable Long-Term Growth

A	B	C	D	E	F	G	H	I
Ticker	Company	2024 Year End Stock Price	2025 Est Div'ds Decl'd per sh	Expected Equity Payout Yield	Sustainable Long-Term Growth Rate ^[1]	Sustainable Long-Term Growth Rate ^[1]	Cost of Equity Dividend Growth	Cost of Equity Earnings Growth
		<i>Yahoo</i>	<i>Value Line</i>	<i>D/C</i>	<i>Dividends</i>	<i>Earnings</i>	<i>E+F</i>	<i>E+G</i>
		P_0	D_1	D_1/P_0	g	g	k_e	k_e
ATUS	Altice USA	2.41	0.00	0.00%	0.00%	0.00%		
CABO	Cable One	362.12	12.50	3.45%	3.21%	6.02%	6.66%	9.47%
CCOI	Cogent Comms. Hldgs	77.07	4.08	5.29%	3.79%	2.15%	9.08%	7.44%
LUMN	Lumen Technologies	5.31	0.00	0.00%	0.00%	0.00%		
SHEN	Shenandoah Telecom.	12.61	0.11	0.87%	5.75%	21.52%	6.62%	22.39%
TDS	Telephone & Data	34.11	0.78	2.29%	3.85%	50.82%	6.13%	53.11%
USM	U.S. Cellular	62.72	0.00	0.00%	0.00%	0.00%		
Average							7.12%	23.10%
Median							6.64%	15.93%
High							9.08%	53.11%
Low							6.13%	7.44%
Selected							6.64%	15.93%

Notes

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

Implied Sustainable LTG: 4.15% 20.13%

MONTANA DEPARTMENT OF REVENUE

Support for DDM - Short Term Growth Rate Calculations

Telecommunications - Medium & Small

2025 Assessment Year

A	B	C	D	E	F	G
Ticker	Company	End of Year Closing Stock Price	Div'ds Decl'd per sh 2025 Est	Expected Dividend Yield	Div'ds Decl'd per sh 2027-2029 Est	Short-Term Growth Rate
		<i>Yahoo</i>	<i>Value Line</i>	<i>D / C</i>	<i>Value Line</i>	<i>Note [1]</i>
ATUS	Altice USA	2.41	0.00	0.00%	0.00	0.00%
CABO	Cable One	362.12	12.50	3.45%	13.00	1.32%
CCOI	Cogent Comms. Hldgs	77.07	4.08	5.29%	4.50	3.32%
LUMN	Lumen Technologies	5.31	0.00	0.00%	0.00	0.00%
SHEN	Shenandoah Telecom.	12.61	0.11	0.87%	0.15	10.89%
TDS	Telephone & Data	34.11	0.78	2.29%	0.84	2.50%
USM	U.S. Cellular	62.72	0.00	0.00%	0.00	0.00%

A	B	C	D	E
Ticker	Company	Earnings per share 2025 Est	Earnings per share 2027-2029 Est	Short-Term Growth Rate
		<i>Value Line</i>	<i>Value Line</i>	<i>Note [1]</i>
ATUS	Altice USA	0.05	0.40	100.00%
CABO	Cable One	40.00	50.00	7.72%
CCOI	Cogent Comms. Hldgs	0.00	0.00	0.00%
LUMN	Lumen Technologies	0.40	0.45	4.00%
SHEN	Shenandoah Telecom.	0.20	0.55	40.10%
TDS	Telephone & Data	0.20	1.00	71.00%
USM	U.S. Cellular	0.90	2.00	30.50%

Notes

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

MONTANA DEPARTMENT OF REVENUE

Support for DDM - Sustainable Long Term Growth

Telecommunications - Medium & Small

2025 Assessment Year

Dividend Growth Rate									Stage 1				
Ticker	Company	Year End Stock Price	Expected Short-Term Dividend Growth Rate	Expected Long-Term Growth Rate	Expected Dividend Yield	Internal Rate of Return	Implied Sustainable Long-Term Growth Rate (g)	Initial Investment	D ₁	D ₂	D ₃	D ₄	D ₅
		<i>Yahoo</i>	<i>Note [1]</i>	<i>Note [2]</i>	D_1/P_0	$K_e = IRR \text{ of } D_1 : D_{500}$	$g = IRR - Div. \text{ Yield}$						
ATUS	Altice USA	2.41	0.00%	4.40%	0.00%			(2.41)	0.00	0.00	0.00	0.00	0.00
CABO	Cable One	362.12	1.32%	4.40%	3.45%	6.66%	3.21%	(362.12)	12.50	12.66	12.83	13.00	13.17
CCOI	Cogent Comms. Hldgs	77.07	3.32%	4.40%	5.29%	9.08%	3.79%	(77.07)	4.08	4.22	4.36	4.50	4.65
LUMN	Lumen Technologies	5.31	0.00%	4.40%	0.00%			(5.31)	0.00	0.00	0.00	0.00	0.00
SHEN	Shenandoah Telecom.	12.61	10.89%	4.40%	0.87%	6.62%	5.75%	(12.61)	0.11	0.12	0.14	0.15	0.17
TDS	Telephone & Data	34.11	2.50%	4.40%	2.29%	6.13%	3.85%	(34.11)	0.78	0.80	0.82	0.84	0.86
USM	U.S. Cellular	62.72	0.00%	4.40%	0.00%			(62.72)	0.00	0.00	0.00	0.00	0.00

Earnings Growth Rate									Stage 1				
Ticker	Company	Year End Stock Price	Expected Short-Term Earnings Growth Rate	Expected Long-Term Growth Rate	Expected Dividend Yield	Internal Rate of Return	Implied Sustainable Long-Term Growth Rate (g)	Initial Investment	D ₁	D ₂	D ₃	D ₄	D ₅
		<i>Yahoo</i>	<i>Note [1]</i>	<i>Note [2]</i>	D_1/P_0	$K_e = IRR \text{ of } D_1 : D_{500}$	$g = IRR - Div. \text{ Yield}$						
ATUS	Altice USA	2.41	100.00%	4.40%	0.00%			(2.41)	0.00	0.00	0.00	0.00	0.00
CABO	Cable One	362.12	7.72%	4.40%	3.45%	9.47%	6.02%	(362.12)	12.50	13.47	14.50	15.63	16.83
CCOI	Cogent Comms. Hldgs	77.07	0.00%	4.40%	5.29%	7.44%	2.15%	(77.07)	4.08	4.08	4.08	4.08	4.08
LUMN	Lumen Technologies	5.31	4.00%	4.40%	0.00%			(5.31)	0.00	0.00	0.00	0.00	0.00
SHEN	Shenandoah Telecom.	12.61	40.10%	4.40%	0.87%	22.39%	21.52%	(12.61)	0.11	0.15	0.22	0.30	0.42
TDS	Telephone & Data	34.11	71.00%	4.40%	2.29%	53.11%	50.82%	(34.11)	0.78	1.33	2.28	3.90	6.67
USM	U.S. Cellular	62.72	30.50%	4.40%	0.00%			(62.72)	0.00	0.00	0.00	0.00	0.00

Notes

[1] From worksheet: DDM Short Term Growth Rate Calculations

[2] From worksheet: Inflation & Real Growth

MONTANA DEPARTMENT OF REVENUE

Support for DDM - Sustainable Long Term Growth

Telecommunications - Medium & Small

2025 Assessment Year

Dividend	Stage 2															Stage 3		
Ticker	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁₁	D ₁₂	D ₁₃	D ₁₄	D ₁₅	D ₁₆	D ₁₇	D ₁₈	D ₁₉	D ₂₀	D ₂₁	D ₂₂	D ₅₀₀
ATUS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
CABO	13.37	13.57	13.78	13.99	14.20	14.42	14.64	14.86	15.09	15.32	15.55	15.79	16.03	16.27	16.52	17.25	18.01	15,639,891,178
CCOI	4.81	4.97	5.14	5.31	5.49	5.68	5.87	6.07	6.28	6.49	6.71	6.94	7.17	7.42	7.67	8.01	8.36	7,259,991,459
LUMN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
SHEN	0.18	0.20	0.22	0.25	0.27	0.30	0.33	0.37	0.41	0.45	0.50	0.55	0.61	0.67	0.74	0.77	0.81	700,243,079
TDS	0.88	0.91	0.93	0.96	0.98	1.01	1.03	1.06	1.09	1.12	1.15	1.18	1.21	1.24	1.27	1.33	1.38	1,202,849,299
USM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0

Earnings	Stage 2															Stage 3		
Ticker	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁₁	D ₁₂	D ₁₃	D ₁₄	D ₁₅	D ₁₆	D ₁₇	D ₁₈	D ₁₉	D ₂₀	D ₂₁	D ₂₂	D ₅₀₀
ATUS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
CABO	18.09	19.45	20.91	22.48	24.16	25.98	27.92	30.02	32.27	34.69	37.29	40.09	43.10	46.33	49.80	52.00	54.28	47,152,746,100
CCOI	4.09	4.10	4.12	4.13	4.14	4.15	4.16	4.18	4.19	4.20	4.21	4.23	4.24	4.25	4.26	4.45	4.65	4,036,272,773
LUMN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
SHEN	0.58	0.80	1.11	1.52	2.10	2.89	3.98	5.49	7.55	10.40	14.33	19.73	27.18	37.43	51.55	53.82	56.18	48,803,503,401
TDS	11.11	18.50	30.81	51.32	85.48	142.38	237.14	394.98	657.87	1,095.73	1,825.02	3,039.72	5,062.88	8,432.62	14,045.19	14,663.17	15,308.35	13,297,403,450,378
USM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0

MONTANA DEPARTMENT OF REVENUE

Support for Yield Capitalization Rate - Debt Rating

Telecommunications - Medium & Small

2025 Assessment Year

A	B	C	D	E	I
Ticker	Company	Industry Group	Financial Strength	Moody's Long Term Rating	Yield to Maturity
		<i>Value Line</i>	<i>Value Line</i>	<i>Moody's</i>	
ATUS	Altice USA	CABLETV	C+	Ba	6.84%
CABO	Cable One	CABLETV	B	Ba3	6.84%
CCOI	Cogent Comms. Hldgs	TELESERV	B+	B2	7.33%
LUMN	Lumen Technologies	TELESERV	C+	B3	7.33%
SHEN	Shenandoah Telecom.	TELESERV	B+	Caa	8.31%
TDS	Telephone & Data	TELESERV	B+	Ba1	6.84%
USM	U.S. Cellular	TELESERV	B+	Ba2	6.84%
Average					7.19%
Median					6.84%
Trimmed Average					7.04%
High					8.31%
Low					6.84%
Selected					7.19%

**Highlighted ratings are estimated based on financial strength and historical interest coverage ratios*

MONTANA DEPARTMENT OF REVENUE
Support for Direct Capitalization - Equity Capitalization Rates
Telecommunications - Medium & Small
2025 Assessment Year

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Ticker	Company	End of Year Closing Stock Price	VL Historic EPS	VL Est EPS	VL Historic P/E Ratio	VL Est P/E Ratio	Ke Estimate - Earnings (Hist. P/E)	Ke Estimate - Earnings (Est. P/E)	VL Historic Cash Flow Per Share	VL Est Cash Flow Per Share	VL Historic P/CF Ratio	VL Est P/CF Ratio	Ke Estimate - Cash Flow (Hist. P/CF)	Ke Estimate - Cash Flow (Est. P/CF)	Market Value of Equity	Book Value of Equity	MTBR
		Yahoo	Value Line	Value Line	C/D	C/E	1/F	1/G	Value Line	Value Line	C/J	C/K	1/L	1/M	Price x Shrs	Value Line	P/Q
ATUS	Altice USA	2.41	(0.23)	0.05		48.20		2.07%	3.72	3.45	0.65	0.70	154.36%	143.15%	1,116	(422)	(2.64)
CABO	Cable One	362.12	5.14	40.00	70.45	9.05	1.42%	11.05%	108.66	98.75	3.33	3.67	30.01%	27.27%	2,035	1,873	1.09
CCOI	Cogent Comms. Hldgs	77.07	(4.30)	0.00					1.92	2.00	40.14	38.54	2.49%	2.60%	3,746	223	16.81
LUMN	Lumen Technologies	5.31	(0.05)	0.40		13.28		7.53%	(7.25)	2.95		1.80		55.56%	417		12.92
SHEN	Shenandoah Telecom.	12.61	(0.56)	0.20		63.05		1.59%	1.22	1.35	10.34	9.34	9.67%	10.71%	689	919	0.75
TDS	Telephone & Data	34.11	(0.86)	0.20		170.55		0.59%	3.06	8.00	11.15	4.26	8.97%	23.45%	3,907	5,202	0.75
USM	U.S. Cellular	62.72	(0.47)	0.90		69.69		1.43%	8.35	7.35	7.51	8.53	13.31%	11.72%	5,337	4,626	1.15
Average						70.45	62.30	1.42%	4.04%			12.19	9.55	36.47%	39.21%		4.40
Median						70.45	55.63	1.42%	1.83%			8.92	4.26	11.49%	23.45%		1.09
Trimmed Average							48.55		3.16%			8.08	5.52	15.49%	25.74%		3.33
High						70.45	170.55	1.42%	11.05%			40.14	38.54	154.36%	143.15%		16.81
Low						70.45	9.05	1.42%	0.59%			0.65	0.70	2.49%	2.60%		(2.64)
Selected						27.26		3.67%				5.36		18.67%			4.40

MONTANA DEPARTMENT OF REVENUE
Support for Direct Capitalization - Debt Capitalization Rate
Telecommunications - Medium & Small
2025 Assessment Year

(\$ in Millions)

A	B	C	D	E	F	G	H	I	J
Ticker	Company	Current Year Interest Exp.	Previous Year MV LT Debt	Previous Year BV LT Debt	Current Year MV LT Debt	Current Year BV LT Debt	Average MV LT Debt	Current Yield	MTBR
		<i>10-K</i>	<i>10-K</i>	<i>10-K</i>	<i>10-K</i>	<i>10-K</i>	$(D+F)/2$	(C/H)	(F/G)
ATUS	Altice USA	1,763	21,444	25,075	20,726	25,057	21,085	8.36%	0.83
CABO	Cable One	138	3,354	3,646	3,351	3,590	3,353	4.12%	0.93
CCOI	Cogent Comms. Hldgs	123	1,349	1,366	1,961	1,957	1,655	7.45%	1.00
LUMN	Lumen Technologies	1,372	13,589	19,988	17,381	17,906	15,485	8.86%	0.97
SHEN	Shenandoah Telecom.	16	300	300	417	417	358	4.44%	1.00
TDS	Telephone & Data	279	3,651	4,139	4,015	4,119	3,833	7.28%	0.97
USM	U.S. Cellular	183	2,611	3,099	2,785	2,890	2,698	6.78%	0.96
All Companies		3,874	46,298	57,612	50,636	55,936	48,467	7.99%	0.91
Average								6.76%	0.95
Median								7.28%	0.97
Trimmed Average								6.86%	0.97
High								8.86%	1.00
Low								4.12%	0.83
Selected								6.76%	0.95

MONTANA DEPARTMENT OF REVENUE
Support of Stock Price - From YAHOO Finance
Telecommunications - Medium & Small
2025 Assessment Year

		End of Period Closing Stock Price											
1	2	3	4	5	6	7	8	9	10	11	12	13	14
A	B	C	D	E	F	G	H	I	J	K	L	M	N
Ticker	Company	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
ATUS	Altice USA	2.44	2.97	2.61	1.93	2.48	2.04	2.09	1.84	2.46	2.43	2.41	2.41
CABO	Cable One	548.93	456.00	423.13	393.85	385.91	354.00	413.38	352.72	349.79	341.56	420.22	362.12
CCOI	Cogent Comms. Hldgs	77.20	80.91	65.33	64.18	59.22	56.44	70.59	69.98	75.92	80.27	82.19	77.07
LUMN	Lumen Technologies	1.22	1.62	1.56	1.19	1.29	1.10	3.15	5.25	7.10	6.39	7.34	5.31
SHEN	Shenandoah Telecom.	20.49	18.66	17.37	12.82	18.81	16.33	21.29	15.12	14.11	13.84	13.33	12.61
TDS	Telephone & Data	19.21	15.30	16.02	15.65	19.89	20.73	21.20	23.62	23.25	29.75	34.18	34.11
USM	U.S. Cellular	44.40	34.89	36.50	36.36	55.46	55.82	53.75	55.62	54.65	61.70	63.46	62.72

