



**2022 Capitalization Rate Study  
Scheduled Airlines - Freight**

*FINAL*

*Completed: April 21, 2022*

**MONTANA DEPARTMENT OF REVENUE**

**Yield Capitalization Rate Conclusion  
Industry: Scheduled Airlines - Freight  
2022 Assessment Year**

**Capital Structure <sup>[1]</sup>**

Equity	<b>60.00%</b>
Debt	<b>40.00%</b>

**Equity Cost of Capital**

		<b>Weighting</b>
Capital Asset Pricing Model - Ex Post <sup>[2]</sup>	8.65%	45%
Capital Asset Pricing Model - Ex Ante <sup>[2]</sup>	7.26%	45%
3 Stage Dividend Discount Model - Dividends <sup>[3]</sup>	8.75%	5%
3 Stage Dividend Discount Model - Earnings <sup>[3]</sup>	7.30%	<u>5%</u>
Weighted Average	<u>7.96%</u>	100%
Selected Cost of Equity	<b><u>7.96%</u></b>	

**Debt Cost of Capital**

		<b>Weighting</b>
A - Mergent's - Avg. YTM of A Rated Corporate Bonds <sup>[4]</sup>	3.04%	20%
Baa - Mergent's - Avg. YTM of Baa Rated Corporate Bonds <sup>[4]</sup>	3.37%	20%
Ba - Avg of MTDOR Study, Bloomberg and Capital IQ <sup>[5]</sup>	5.31%	40%
B - Avg of MTDOR Study, Bloomberg and Capital IQ <sup>[5]</sup>	7.81%	<u>20%</u>
Weighted Average	<u>4.97%</u>	100%
Selected Cost of Debt	<b><u>4.97%</u></b>	

**Weighted Average Cost of Capital (WACC)**

<b>Source of Capital</b>	<b>Capital Structure</b>	<b>Capital Cost of Capital</b>	<b>Marginal Tax Rate</b>	<b>After-tax Cost of Capital</b>	<b>Weighted Cost</b>
Equity	60.00%	7.96%		7.96%	4.78%
Debt	40.00%	4.97%	24.00%	3.78%	1.51%
<b>WACC</b>	<b>100.00%</b>				<b>6.29%</b>
<b>WACC (Rounded)</b>					<b>6.30%</b>

Notes

[1] From worksheet: Capital Structure

[2] From worksheet: Capital Asset Pricing Model Summary

[3] From worksheet: Yield Equity Summary

[4] January 2022, Mergent Bond Record

[5] Average corporate bond yields from: Montana Department of Revenue High Yield Debt Study and Kroll Capitalization Rate Study.

**MONTANA DEPARTMENT OF REVENUE**

**Direct Capitalization Rate Conclusion  
Industry: Scheduled Airlines - Freight  
2022 Assessment Year**

**Capital Structure <sup>[1]</sup>**

Equity	<b>60.00%</b>
Debt	<b>40.00%</b>

**Equity Capitalization Rate <sup>[2]</sup>**

NOI After-tax	<b>7.40%</b>
GCF	<b>14.95%</b>

**Debt Capitalization Rate <sup>[3]</sup>**

Calculated Current Yield	<b>4.00%</b>
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**NOI After-tax Direct Capitalization Rate**

Source of Capital	Capital Structure	Capitalization Rate	Marginal Tax Rate	After-tax Capitalization Rate	Weighted Capitalization Rate
Equity	60.00%	7.40%		7.40%	4.44%
Debt	40.00%	4.00%	24.00%	3.04%	1.22%
<b>Total</b>	<b>100.00%</b>				<b>5.66%</b>
<b>Total (Rounded)</b>					<b>5.70%</b>

**GCF Direct Capitalization Rate**

Source of Capital	Capital Structure	Capitalization Rate	Marginal Tax Rate	After-tax Capitalization Rate	Weighted Capitalization Rate
Equity	60.00%	14.95%		14.95%	8.97%
Debt	40.00%	4.00%	24.00%	3.04%	1.22%
<b>WACC</b>	<b>100.00%</b>				<b>10.19%</b>
<b>Total (Rounded)</b>					<b>10.20%</b>

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: Scheduled Airlines - Freight**

**2022 Assessment Year**

**Screening Requirements:**

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

Companies were then selected using the following screening criteria:

1. Operates primarily as a freight carrier / air cargo service.
2. Actively traded on an American exchange.
3. Headquartered / incorporated in the United States
4. No significant merger & acquisition activity during the year.

Company Ticker	Air Cargo	Actively traded on an American exchange	Headquartered in the United States	Consider as Potential Guideline Company	Not Engaged in Material M&A Activity	Use as Guideline Company	Note
AAL	No						
AAWW	Yes	Yes	Yes	Yes	Yes	Yes	
AIRT	Yes	Yes	Yes	Yes	Yes	Yes	
ALGT	No						
ALK	No						
ATSG	Yes	Yes	Yes	Yes	Yes	Yes	
CPA	No						
DAL	No						
FDX	Yes	Yes	Yes	Yes	Yes	Yes	
HA	No						
JBLU	No						
LUV	No						
MESA	No						
RLGT	No						
RYAAY	No						
SAVE	No						
SKYW	No						
SNCY	No						
UAL	No						
UPS	Yes	Yes	Yes	Yes	Yes	Yes	[1]
VTOL	No						

[1]M&A activity was examined and determined to be immaterial for purposes of determining the cost of capital

**MONTANA DEPARTMENT OF REVENUE**

Support for Capital Structure  
Industry: Scheduled Airlines - Freight  
2022 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>					
AAWW	Atlas Air Worldwide	AIRTRANS	B	29.216	94.12	2,750	0	2,295	221	5,266	52%	0%	48%
AIRT	Air T Inc	AIRTRANS	C+	2.882	25.15	72	0	87	8	168	43%	0%	57%
ATSG	Air Transport Services Grp.	AIRTRANS	B	74.142	29.38	2,178	0	1,299	63	3,541	62%	0%	38%
FDX	FedEx Corp.	AIRTRANS	A++	267.348	258.64	69,147	0	20,879	15,583	105,609	65%	0%	35%
UPS	United Parcel Serv.	AIRTRANS	A+	732.554	214.34	157,016	0	21,915	3,613	182,544	86%	0%	14%
<b>All Companies</b>						231,163	0	46,476	19,489	297,128	<b>78%</b>	<b>0%</b>	<b>22%</b>
<b>Average</b>											<b>62%</b>	<b>0%</b>	<b>38%</b>
<b>Median</b>											<b>62%</b>	<b>0%</b>	<b>38%</b>
<b>Trimmed Average</b>											<b>60%</b>	<b>0%</b>	<b>40%</b>
High											86%	0%	57%
Low											43%	0%	14%
<b>Selected</b>											<b>60%</b>		<b>40%</b>

Notes

- [1] Market value of preferred stock assumed to equal book value
- [2] Market value of debt is fair value of long term debt from 10-K notes

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

2022 - No changes to guideline companies

		<b>Median</b>	
Current Year	62%	0%	38%
Prior Year	54%	0%	46%
2 Years Prior	48%	0%	52%
3 Year Average	<u>54%</u>	<u>0%</u>	<u>46%</u>

**MONTANA DEPARTMENT OF REVENUE**

Capital Asset Pricing Model (CAPM)  
Industry: Scheduled Airlines - Freight  
2022 Assessment Year

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

		<i>Ex Post</i>	<i>Ex Ante</i>
$k_e =$	Cost of Equity	<b>8.65%</b>	<b>7.26%</b>
$R_f =$	Risk Free Rate	1.94%	1.94%
$\beta =$	Beta	0.90	0.90
$ERP =$	Equity Risk Premium ( $R_m - R_f$ )	7.46%	5.91%
$R_m =$	Market Rate of Return	9.40%	7.85%

**Risk Free Rate Measures ( $R_f$ ):**

The Value Line Investment Survey: Selection & Opinion<sup>[1]</sup>

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Selected Yields on Taxable U.S. Treasury Securities as of 12/27/21

10-year	1.48%
30-year	1.88%

Federal Reserve Statistical Release<sup>[2]</sup>

U.S. government securities, Treasury constant maturities, Nominal, December 31, 2021

10-year	1.52%
20-year	1.94%
30-year	1.90%

**Risk Free Rate Selected**

**1.94%**

Notes

[1] "Value Line Selection & Opinion", Value Line (January 7, 2022)

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

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

Duff & Phelps, 2022 Cost of Capital Navigator

		<u><math>R_m</math></u>	<u><math>R_f</math></u>	<u>ERP</u>
ERP "Historical" - <i>Ex Post</i>	<i>Arithmetic Avg.</i>	9.40%	1.94%	7.46%
ERP "Supply-side" - <i>Ex Post</i>	<i>Arithmetic Avg.</i>	8.16%	1.94%	6.22%
<b>Ex Post Equity Risk Premium Selected</b>		<b>9.40%</b>	<b>1.94%</b>	<b>7.46%</b>

**MONTANA DEPARTMENT OF REVENUE**

Capital Asset Pricing Model (CAPM)

Industry: Scheduled Airlines - Freight

2022 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<sub>m</sub></u>	<u>R<sub>f</sub></u>	<u>ERP</u>
ERP - <i>Ex Ante</i>	8.05%	1.94%	6.11%

Duff & Phelps, 2022 Cost of Capital Navigator

	<u>R<sub>m</sub></u>	<u>R<sub>f</sub></u>	<u>ERP</u>
ERP "Conditional" - <i>Ex Ante</i>	8.00%	2.50%	5.50%

Damodaran Implied ERP (Jan 5, 2022)

	<u>R<sub>m</sub></u>	<u>R<sub>f</sub></u>	<u>ERP</u>
Implied Premium (FCFE) - <i>Ex Ante</i>	5.76%	1.52%	4.24%
Implied Premium (FCFE with sustainable payout) - <i>Ex Ante</i>	6.42%	1.52%	4.90%

	<u>R<sub>m</sub></u>	<u>R<sub>f</sub></u>	<u>ERP</u>
<u>Average</u>	7.06%		5.19%
<u>Median</u>	7.21%		5.20%
<u>High</u>	8.05%		6.11%
<u>Low</u>	5.76%		4.24%

**Equity Risk Premium Selected**

<b>7.85%</b>	<b>1.94%</b>	<b>5.91%</b>
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**MONTANA DEPARTMENT OF REVENUE**

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Support for Beta Selection in CAPM  
Industry: Scheduled Airlines - Freight  
2022 Assessment Year

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A	B	C	D	E
Ticker	Company	Industry Group	Financial Strength	Beta
		<i>Value Line</i>	<i>Value Line</i>	<i>Value Line</i>
AAWW	Atlas Air Worldwide	AIRTRANS	B	0.75
AIRT	Air T Inc	AIRTRANS	C+	1.05
ATSG	Air Transport Services Grp.	AIRTRANS	B	0.70
FDX	FedEx Corp.	AIRTRANS	A++	1.05
UPS	United Parcel Serv.	AIRTRANS	A+	0.80
<b>Average</b>				<b>0.87</b>
<b>Median</b>				<b>0.80</b>
<b>Trimmed Average</b>				<b>0.87</b>
High				1.05
Low				0.70
<b>Selected</b>				<b>0.90</b>



**MONTANA DEPARTMENT OF REVENUE**

Inflation & Real Growth

Industry: Scheduled Airlines - Freight

2022 Assessment Year

A	B	C	D	Nominal Growth	
				E	F
Source Description	Inflation (CPI)	Real Growth (GDP)	Nominal Growth	Low	High
Livingston Survey <sup>[1]</sup>	2.44%	2.21%	4.65%		
Survey of Professional Forecasters <sup>[2]</sup>	2.49%	2.25%	4.74%		
Congressional Budget Office <sup>[3]</sup>					
<b>Average</b>	<b>2.47%</b>	<b>2.23%</b>	<b>4.70%</b>		
<b>Median</b>	<b>2.47%</b>	<b>2.23%</b>	<b>4.70%</b>		
High	2.49%	2.25%	4.74%		
Low	2.44%	2.21%	4.65%		
<b>Selected</b>	<b>2.45%</b>	<b>2.25%</b>	<b>4.70%</b>	<b>4.65%</b>	<b>4.74%</b>

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>
2011	225.672	2.9%	1.2354	224.939	3.1%	1.2046
2012	229.601	1.7%	1.2143	229.594	2.0%	1.1802
2013	233.049	1.5%	1.1963	232.957	1.4%	1.1632
2014	234.812	0.8%	1.1873	236.736	1.6%	1.1446
2015	236.525	0.7%	1.1787	237.017	0.1%	1.1433
2016	241.432	2.0%	1.1548	240.007	1.2%	1.1290
2017	246.524	2.1%	1.1309	245.120	2.1%	1.1055
2018	251.233	1.9%	1.1097	251.107	2.4%	1.0791
2019	256.974	2.2%	1.0849	255.657	1.8%	1.0599
2020	260.474	1.3%	1.0704	258.811	1.2%	1.0470
2021	278.802	6.6%	1.0000	270.970	4.5%	1.0000

Notes

[1] Federal Reserve Bank of Philadelphia The Livingston Survey December 17, 2021 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 11, 2022 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] Not available at study date

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

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

<https://www.bls.gov/cpi/tables/supplemental-files/historical-cpi-u-202001.pdf>

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

[7] Most current year / Row year

**MONTANA DEPARTMENT OF REVENUE**

**3 Stage Dividend Discount Model (DDM)**

**Industry: Scheduled Airlines - Freight**

**2022 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	2021 Year End Stock Price	2022 Est Div'ds Decl'd per sh	Expected Equity Payout Yield	Sustainable Long-Term Growth Rate <sup>[1]</sup>	Sustainable Long-Term Growth Rate <sup>[1]</sup>	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>
		$P_0$	$D_1$	$D_1/P_0$	$g$	$g$	$k_e$	$k_e$
AAWW	Atlas Air Worldwide	94.12	0.00	0.00%	0.00%	0.00%		
AIRT	Air T Inc	25.15	0.00	0.00%	0.00%	0.00%		
ATSG	Air Transport Services Grp.	29.38	0.00	0.00%	0.00%	0.00%		
FDX	FedEx Corp.	258.64	3.00	1.16%	7.65%	6.30%	8.81%	7.46%
UPS	United Parcel Serv.	214.34	4.32	2.02%	6.64%	5.10%	8.66%	7.12%
<b>Average</b>							<b>8.73%</b>	<b>7.29%</b>
<b>Median</b>							<b>8.73%</b>	<b>7.29%</b>
<b>Trimmed Average</b>								
High							8.81%	7.46%
Low							8.66%	7.12%
<b>Selected</b>							<b>8.75%</b>	<b>7.30%</b>

Notes

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

**MONTANA DEPARTMENT OF REVENUE**

**Support for DDM - Short Term Growth Rate Calculations**

**Industry: Scheduled Airlines - Freight**

**2022 Assessment Year**

A	B	C	D	E	F	G
Ticker	Company	End of Year Closing Stock Price	Div'ds Decl'd per sh 2022 Est	Expected Dividend Yield	Div'ds Decl'd per sh 2024-2026 Est	Short-Term Growth Rate
		<i>Yahoo</i>	<i>Value Line</i>	<i>D / C</i>	<i>Value Line</i>	<i>Note [1]</i>
AAWW	Atlas Air Worldwide	94.12	0.00	0.00%	0.00	0.00%
AIRT	Air T Inc	25.15	0.00	0.00%	0.00	0.00%
ATSG	Air Transport Services Grp.	29.38	0.00	0.00%	0.00	0.00%
FDX	FedEx Corp.	258.64	3.00	1.16%	4.50	14.47%
UPS	United Parcel Serv.	214.34	4.32	2.02%	5.75	10.00%

A	B	C	D	E
Ticker	Company	Earnings per share 2022 Est	Earnings per share 2024-2026 Est	Short-Term Growth Rate
		<i>Value Line</i>	<i>Value Line</i>	<i>Note [1]</i>
AAWW	Atlas Air Worldwide	13.50	16.50	6.92%
AIRT	Air T Inc	0.00	0.00	0.00%
ATSG	Air Transport Services Grp.	0.00	0.00	0.00%
FDX	FedEx Corp.	19.40	26.50	10.96%
UPS	United Parcel Serv.	12.30	14.65	6.00%

Notes

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

**MONTANA DEPARTMENT OF REVENUE**

**DDM Sustainable Long Term Growth  
Industry: Scheduled Airlines - Freight  
2022 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 <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	D <sub>4</sub>	D <sub>5</sub>
		Yahoo	Note [1]	Note [2]	$D_1/P_0$	$K_e = IRR \text{ of } D_1:D_{500}$	$g = IRR - Div. \text{ Yield}$						
AAWW	Atlas Air Worldwide	94.12	0.00%	4.70%	0.00%			(94.12)	0.00	0.00	0.00	0.00	0.00
AIRT	Air T Inc	25.15	0.00%	4.70%	0.00%			(25.15)	0.00	0.00	0.00	0.00	0.00
ATSG	Air Transport Services Grp.	29.38	0.00%	4.70%	0.00%			(29.38)	0.00	0.00	0.00	0.00	0.00
FDX	FedEx Corp.	258.64	14.47%	4.70%	1.16%	8.81%	7.65%	(258.64)	3.00	3.43	3.93	4.50	5.15
UPS	United Parcel Serv.	214.34	10.00%	4.70%	2.02%	8.66%	6.64%	(214.34)	4.32	4.75	5.23	5.75	6.33

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 <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	D <sub>4</sub>	D <sub>5</sub>
		Yahoo	Note [1]	Note [2]	$D_1/P_0$	$K_e = IRR \text{ of } D_1:D_{500}$	$g = IRR - Div. \text{ Yield}$						
AAWW	Atlas Air Worldwide	94.12	6.92%	4.70%	0.00%			(94.12)	0.00	0.00	0.00	0.00	0.00
AIRT	Air T Inc	25.15	0.00%	4.70%	0.00%			(25.15)	0.00	0.00	0.00	0.00	0.00
ATSG	Air Transport Services Grp.	29.38	0.00%	4.70%	0.00%			(29.38)	0.00	0.00	0.00	0.00	0.00
FDX	FedEx Corp.	258.64	10.96%	4.70%	1.16%	7.46%	6.30%	(258.64)	3.00	3.33	3.69	4.10	4.55
UPS	United Parcel Serv.	214.34	6.00%	4.70%	2.02%	7.12%	5.10%	(214.34)	4.32	4.58	4.85	5.15	5.45

Notes

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

[2] From worksheet: Inflation & Real Growth

**MONTANA DEPARTMENT OF REVENUE**

**DDM Sustainable Long Term Growth  
Industry: Scheduled Airlines - Freight  
2022 Assessment Year**

Dividend	Stage 2															Stage 3		
Ticker	D <sub>6</sub>	D <sub>7</sub>	D <sub>8</sub>	D <sub>9</sub>	D <sub>10</sub>	D <sub>11</sub>	D <sub>12</sub>	D <sub>13</sub>	D <sub>14</sub>	D <sub>15</sub>	D <sub>16</sub>	D <sub>17</sub>	D <sub>18</sub>	D <sub>19</sub>	D <sub>20</sub>	D <sub>21</sub>	D <sub>22</sub>	D <sub>500</sub>
AAWW	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
AIRT	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
ATSG	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
FDX	5.86	6.67	7.60	8.65	9.84	11.20	12.75	14.51	16.51	18.80	21.40	24.35	27.72	31.55	35.91	37.60	39.36	134,770,641,161
UPS	6.94	7.60	8.34	9.14	10.02	10.99	12.05	13.21	14.49	15.89	17.42	19.10	20.94	22.96	25.18	26.36	27.60	94,499,506,175

Earnings	Stage 2															Stage 3		
Ticker	D <sub>6</sub>	D <sub>7</sub>	D <sub>8</sub>	D <sub>9</sub>	D <sub>10</sub>	D <sub>11</sub>	D <sub>12</sub>	D <sub>13</sub>	D <sub>14</sub>	D <sub>15</sub>	D <sub>16</sub>	D <sub>17</sub>	D <sub>18</sub>	D <sub>19</sub>	D <sub>20</sub>	D <sub>21</sub>	D <sub>22</sub>	D <sub>500</sub>
AAWW	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
AIRT	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
ATSG	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
FDX	5.03	5.56	6.14	6.79	7.50	8.29	9.17	10.13	11.20	12.38	13.69	15.13	16.73	18.49	20.44	21.40	22.40	76,702,785,364
UPS	5.78	6.12	6.48	6.86	7.27	7.70	8.15	8.64	9.15	9.69	10.26	10.87	11.51	12.19	12.91	13.52	14.16	48,468,940,093

**MONTANA DEPARTMENT OF REVENUE**

**Support for Cost of Debt Component - Yield to Maturity**

**Industry: Scheduled Airlines - Freight**

**2022 Assessment Year**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
<b>Ticker</b>	<b>Company</b>	<b>Industry Group</b>	<b>Financial Strength</b>	<b>Moody's Long Term Rating</b>	<b>Yield to Maturity</b>
		<i>Value Line</i>	<i>Value Line</i>	<i>Moodys.com</i>	
AAWW	Atlas Air Worldwide	AIRTRANS	B	Ba	5.31%
AIRT	Air T Inc	AIRTRANS	C+	B	7.81%
ATSG	Air Transport Services Grp.	AIRTRANS	B	Ba2	5.31%
FDX	FedEx Corp.	AIRTRANS	A++	Baa2	3.37%
UPS	United Parcel Serv.	AIRTRANS	A+	A2	3.04%
<b>Average</b>					<b>4.97%</b>
<b>Median</b>					<b>5.31%</b>
<b>Trimmed Average</b>					<b>4.66%</b>
High					7.81%
Low					3.04%
<b>Selected</b>					<b>4.97%</b>

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

**MONTANA DEPARTMENT OF REVENUE**

Support for Direct Capitalization - Equity Capitalization Rate

Industry: Scheduled Airlines - Freight

2022 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
AAWW	Atlas Air Worldwide	94.12	18.48	13.75	5.09	6.85	19.63%	14.61%	23.14	27.15	4.07	3.47	24.59%	28.85%	2,750	2,261.54	1.22
AIRT	Air T Inc	25.15	0.30	0.00	83.83		1.19%		(1.45)	0.00					72	13.73	5.28
ATSG	Air Transport Services Grp.	29.38	2.07	0.00	14.19		7.05%		5.76	0.00	5.10		19.61%		2,178	855.50	2.55
FDX	FedEx Corp.	258.64	17.68	20.65	14.63	12.52	6.84%	7.98%	32.46	36.65	7.97	7.06	12.55%	14.17%	69,147	24,168.00	2.86
UPS	United Parcel Serv.	214.34	12.13	12.80	17.67	16.75	5.66%	5.97%	11.41	15.55	18.79	13.78	5.32%	7.25%	157,016	657.00	238.99
<b>Average</b>					<b>27.08</b>	<b>12.04</b>	<b>8.07%</b>	<b>9.52%</b>			<b>8.98</b>	<b>8.10</b>	<b>15.52%</b>	<b>16.76%</b>			<b>50.18</b>
<b>Median</b>					<b>14.63</b>	<b>12.52</b>	<b>6.84%</b>	<b>7.98%</b>			<b>6.53</b>	<b>7.06</b>	<b>16.08%</b>	<b>14.17%</b>			<b>2.86</b>
<b>Trimmed Average</b>					<b>15.50</b>	<b>12.52</b>	<b>6.51%</b>	<b>7.98%</b>			<b>6.53</b>	<b>7.06</b>	<b>16.08%</b>	<b>14.17%</b>			<b>3.56</b>
High					83.83	16.75	19.63%	14.61%			18.79	13.78	24.59%	28.85%			238.99
Low					5.09	6.85	1.19%	5.97%			4.07	3.47	5.32%	7.25%			1.22
<b>Selected</b>					13.51		<b>7.40%</b>				6.69		<b>14.95%</b>				<b>3.56</b>

**MONTANA DEPARTMENT OF REVENUE**

Support for Direct Capitalization - Debt Capitalization Rate

Industry: Scheduled Airlines - Freight

2022 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>	<i>(D+F)/2</i>	<i>(C/H)</i>	<i>(F/G)</i>
AAWW	Atlas Air Worldwide	107	2,522	2,319	2,626	2,295	2,574	4.18%	1.14
AIRT	Air T Inc	5	86	86	87	87	87	5.34%	1.00
ATSG	Air Transport Services Grp.	59	1,408	1,479	1,336	1,299	1,372	4.28%	1.03
FDX	FedEx Corp.	793	23,285	22,003	23,625	20,879	23,455	3.38%	1.13
UPS	United Parcel Serv.	694	28,300	24,654	25,100	21,915	26,700	2.60%	1.15
<b>All Companies</b>		1,658			52,775	46,476	54,188	<b>3.06%</b>	<b>1.14</b>
<b>Average</b>								<b>3.96%</b>	<b>1.09</b>
<b>Median</b>								<b>4.18%</b>	<b>1.13</b>
<b>Trimmed Average</b>								<b>3.95%</b>	<b>1.10</b>
High								5.34%	1.15
Low								2.60%	1.00
<b>Selected</b>								<b>4.00%</b>	<b>1.10</b>



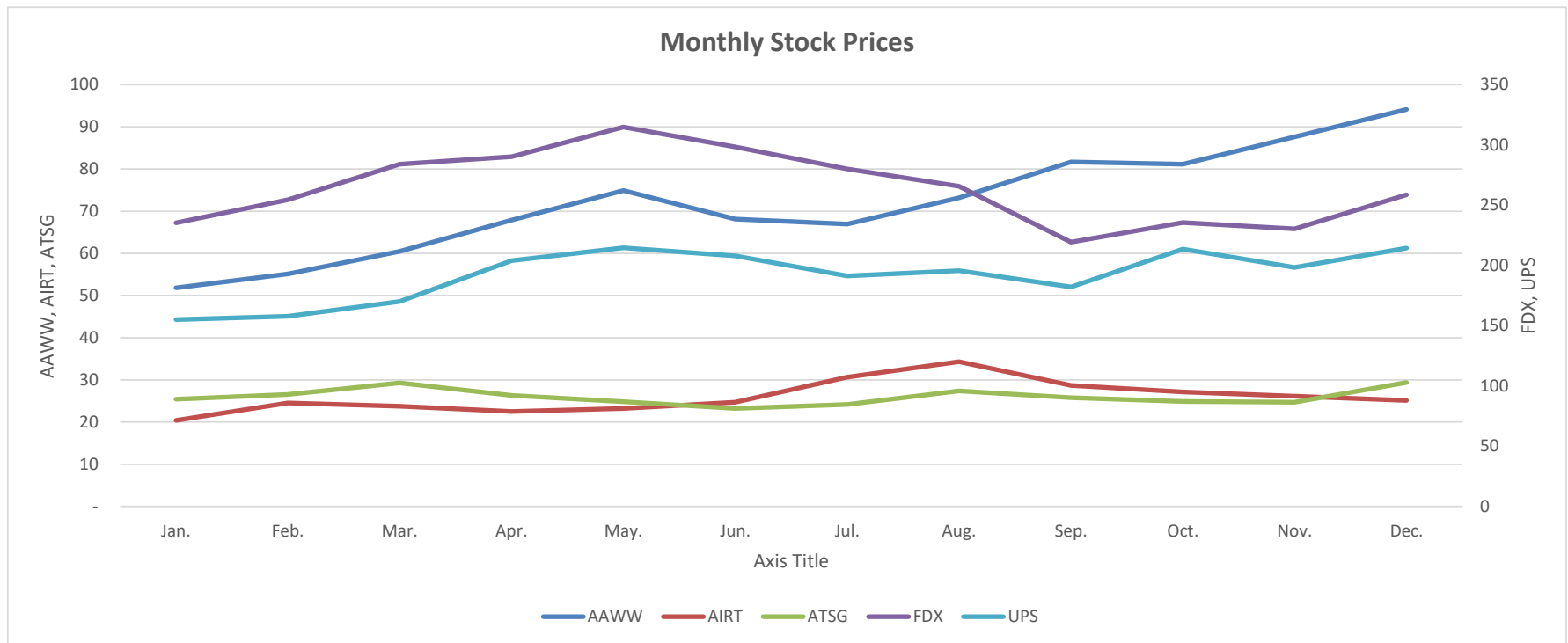
**MONTANA DEPARTMENT OF REVENUE**

Support of Stock Price - From YAHOO Finance

Industry: Scheduled Airlines - Freight

2022 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.
AAWW	Atlas Air Worldwide	51.82	55.13	60.44	67.91	74.93	68.11	66.97	73.17	81.68	81.12	87.61	94.12
AIRT	Air T Inc	20.4	24.56	23.77	22.54	23.24	24.71	30.63	34.31	28.68	27.13	26.13	25.15
ATSG	Air Transport Services Grp.	25.41	26.54	29.26	26.32	24.84	23.23	24.2	27.39	25.81	24.89	24.69	29.38
FDX	FedEx Corp.	235.34	254.5	284.04	290.31	314.81	298.33	279.95	265.69	219.29	235.53	230.37	258.64
UPS	United Parcel Serv.	155	157.83	169.99	203.86	214.6	207.97	191.36	195.63	182.1	213.47	198.37	214.34



**MONTANA DEPARTMENT OF REVENUE**

**Maintenance Capital Expenditures Estimate Based on Guideline Companies**

**Industry: Scheduled Airlines - Freight**

**2022 Assessment Year**

(\$ In Millions)

1	2		3	4	5	6	7	8	9	10	11
A	B	C	D	E	F	G	H	I	J	K	L
Ticker	Company	Inflation	PP&E, Gross	PP&E, Gross	Average PP&E	Depreciation Expense	Average Life of Assets			Replacement Cost (RC)	RC as % of Depreciation
			Current Year	Previous Year		Current Year		Note [1]	Note [1]	Note [1]	
		MTDOR (CPI)	10-K, Notes	10-K, Notes	(D+E)/2	10-K	F/G	C*H	1/(1+C)^H	G*I/(1-J)	K/G
AAWW	Atlas Air Worldwide	2.45%	4,801	4,316	4,558	281	16	0.40	0.68	344	122.37%
AIRT	Air T Inc	2.45%	13	10	11	3	4	0.09	0.92	3	105.74%
ATSG	Air Transport Services Grp.	2.45%	3,611	3,190	3,401	308	11	0.27	0.77	356	115.33%
FDX	FedEx Corp.	2.45%	70,077	65,024	67,551	3,793	18	0.44	0.65	4,726	124.60%
UPS	United Parcel Serv.	2.45%	64,809	62,091	63,450	2,953	21	0.53	0.59	3,833	129.81%
<b>Average</b>											<b>119.57%</b>
<b>Median</b>											<b>122.37%</b>
<b>Trimmed Average</b>											<b>120.77%</b>
High											129.81%
Low											105.74%
<b>Selected</b>											<b>120.80%</b>

Notes

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