MONTANA Department of REVENUE

2021 Capitalization Rate Study Scheduled Airlines - Freight

FINAL

Completed: April 16, 2021

Yield Capitalization Rate Conclusion Industry: Scheduled Airlines - Freight 2021 Assessment Year

Capital Structure ^[1] Equity Debt	60.00% 40.00%	
Equity Cost of Capital		Weighting
Capital Asset Pricing Model - Ex Post [2]	7.98%	45%
Capital Asset Pricing Model - Ex Ante [2]	6.54%	45%
3 Stage Dividend Discount Model - Dividends [3]	7.10%	5%
3 Stage Dividend Discount Model - Earnings [3]	6.85%	<u>5%</u>
Weighted Average	7.23%	100%
Selected Cost of Equity	7.23%	=
Debt Cost of Capital		Weighting
A - Mergent's - Avg. YTM of A Rated Corporate Bonds ^[4]	2.72%	0%
Baa - Mergent's - Avg. YTM of Baa Rated Corporate Bonds ^[4]	3.16%	0%
Ba - MTDOR - Avg. YTM of Ba Rated Corporate Bonds [5]	6.54%	<u>100%</u>
Weighted Average	6.54%	100%
Selected Cost of Debt	6.54%	

Weighted Average Cost of Capital (WACC)

Source of Capital	Capital Structure	Cost of Capital	Marginal Tax Rate	After-tax Cost of Capital	Weighted Cost
Equity	60.00%	7.23%		7.23%	4.34%
Debt	40.00%	6.54%	24.00%	4.97%	1.99%
WACC	100.00%				6.33%
WACC (Round	ded)				6.35%

Notes

- [1] From worksheet: Capital Structure
- [2] From worksheet: Capital Asset Pricing Model Summary
- [3] From worksheet: Yield Equity Summary
- [4] January 2021, Mergent Bond Record
- [5] Montana Department of Revenue High Yield Debt Study

Direct Capitalization Rate Conclusion Industry: Scheduled Airlines - Freight 2021 Assessment Year

Capital Structure [1]

Equity	60.00%
Debt	40.00%

Equity Capitalization Rate [2]

NOI After-tax	5.80%
GCF	12.10%

Debt Capitalization Rate [3]

Calculated Current Yield 4.20%

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%	5.80%		5.80%	3.48%
Debt	40.00%	4.20%	24.00%	3.19%	1.28%
Total	100.00%				4.76%
Total (Rounded)					4.80%

GCF Direct Capitalization Rate

Source of Capital	Capital Structure	Capitalization Rate	Marginal Tax Rate	After-tax Capitalization Rate	Weighted Capitalization Rate
Equity	60.00%	12.10%		12.10%	7.26%
Debt	40.00%	4.20%	24.00%	3.19%	1.28%
WACC	100.00%				8.54%
Total (Rounded)	100.00%				8.54

Notes

- [1] From worksheet: Capital Structure
- [2] From worksheet: Direct Equity Summary
- [3] From worksheet: Calculated Current Yield

Selection of Guideline Companies Industry: Scheduled Airlines - Freight 2021 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		Actively traded on an American	Headquartered in		Not Engaged in Material	Use as Guideline	
Ticker	Air Cargo	exchange	the United States	Company	M&A Activity	Company	Note
AAL	No						
AAWW	Yes	Yes	Yes	Yes	No	Yes	
AIRT	Yes	Yes	Yes	Yes	No	Yes	
ALGT	No						
ALK	No						
ATSG	Yes	Yes	Yes	Yes	No	Yes	
СРА	No						
DAL	No						
FDX	Yes	Yes	Yes	Yes	No	Yes	
HA	No						
JBLU	No						
LUV	No						
MESA	No						
RLGT	No						
RYAAY	No						
SAVE	No						
SKYW	No						
UAL	No						
UPS	Yes	Yes	Yes	Yes	No	Yes	
VTOL	No						

Support for Capital Structure Industry: Scheduled Airlines - Freight 2021 Assessment Year

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

Α	В	С	D	E	F	G	Н		J	K	L	M	N
					End of Year					Total Common,			
					Closing				PV of	Preferred, LT			
		Industry	Financial	Shares	Stock	MV Common	MV Preferred	MV Long	Operating	Debt, & Op		%	% Debt &
Ticker	Company	Group	Strength	Outstanding	Price	Stock	Stock	Term Debt	Leases	Leases	% Common	Preferred	Op Leases
		Value Line	Value Line	10-K	Yahoo	ExF	10-K	10-K	10-K	G+H+I+J	G/K	H/K	(I+J)/K
							Note [1]	Note [2]					<u> </u>
AAWW	Atlas Air Worldwide	AIRTRANS	В	27.517	54.54	1,501	0	2,502	477	4,480	34%	0%	66%
AIRT	Air T Inc	AIRTRANS	С	2.882	24.90	72	0	86	9	167	43%	0%	57%
ATSG	Air Transport Services Grp.	AIRTRANS	В	59.560	31.34	1,867	0	1,550	69	3,485	54%	0%	46%
FDX	FedEx Corp.	AIRTRANS	A++	261.954	259.62	68,009	0	22,800	14,118	104,927	65%	0%	35%
UPS	United Parcel Serv.	AIRTRANS	A+	719.507	168.40	121,165	0	28,300	3,100	152,565	79%	0%	21%
All Comp	panies					192,613	0	55,238	17,773	265,624	73%	0%	27%
Averag	е										55%	0%	45%
Median	l										54%	0%	46%
High											79%	0%	66%
Low											34%	0%	21%
Selected											60%		40%

<u>Notes</u>

- [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:

2021 - No changes to guideline companies

	<u>Median</u>				
Current Year	54%	0%	46%		
Prior Year	48%	0%	52%		
2 Years Prior	48%	0%	52%		
3 Year Average	50%	0%	50%		

Capital Asset Pricing Model (CAPM) Industry: Scheduled Airlines - Freight 2021 Assessment Year

$k_e = R_f + \beta x ERP$

		EX Post	EX Ante
K _e =	Cost of Equity	7.98%	6.54%
$R_f =$	Risk Free Rate	1.45%	1.45%
β =	Beta	0.90	0.90
ERP =	Equity Risk Premium (R _m - R _f)	7.25%	5.65%
$R_m =$	Market Rate of Return	8.70%	7.10%

Risk Free Rate Measures (R_f):

The Value Line Investment Survey: Selection & Opinion [1]	
January 1, 2021 Page 701	
Selected Yields on Taxable U.S. Treasury Securities as of 12/21/20	
10-year	0.95%
30-year	1.68%
Federal Reserve Statistical Release ^[2] and U.S. Department of the Treasury, Daily Treasury Yield Curve Rates ^[3] U.S. government securities, Treasury constant maturities, Nominal, December 31, 2020	
10-year	0.93%
20-year	1.45%
30-year	1.65%
Risk Free Rate Selected	1.45%

Notes

- [1] "Value Line Selection & Opinion", Value Line (January 3, 2020)
- [2] https://www.federalreserve.gov/datadownload/Choose.aspx?rel=H.15
- [3] https://www.treasury.gov/resource-center/data-chart-center/interest-rates/

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

Duff & Phelps, 2021 Cost of Capital Navigator					
		$R_{m}^{[4]}$	R_{m}	$\underline{R_f}$	<u>ERP</u>
ERP "Historical" - Ex Post	Arithmetic Avg.	8.70%	8.70%	1.45%	7.25%
ERP "Supply-side" - Ex Post	Arithmetic Avg.	7.45%	7.45%	1.45%	6.00%
Ex Post Equity Risk Premium Selected	-	8.70%		1.45%	7.25%
	-				

Capital Asset Pricing Model (CAPM) Industry: Scheduled Airlines - Freight 2021 Assessment Year

$k_{\perp} = R_{\perp} + R_{\perp} \times FRP$

X ERP			
R _m ^[4]	<u>R</u> _m	<u>R</u> :	<u>ERP</u> 5.99%
7.4470	7.4470	1.4070	0.0070
R _m ^[4]	<u>R</u> ,	$\frac{R_{\rm f}}{}$	<u>ERP</u>
	8.00%	2.50%	5.50%
R _m ^[4]	R _m	R_f	ERP
6.17%	5.65%	0.93%	4.72%
6.39%	5.87%	0.93%	4.94%
R _m ^[4] 6.67% 6.39% 7.44% 6.17%	R _m 6.74% 6.66% 8.00% 5.65%	<u>R</u> f	ERP 5.29% 5.22% 5.99% 4.72%
	$\frac{R_{m}^{[4]}}{7.44\%}$ $\frac{R_{m}^{[4]}}{6.17\%}$ 6.39% $\frac{R_{m}^{[4]}}{6.67\%}$ 6.39% 7.44%	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

7.10%

1.45%

5.65%

 $\label{eq:notes} \frac{\text{Notes}}{\text{[4] R}_{\text{m}} \text{ estimated using selected Risk Free Rate (R}_{\text{f}})}$

Equity Risk Premium Selected

Support for Beta Selection in CAPM Industry: Scheduled Airlines - Freight 2021 Assessment Year

Α	В	С	D	Е
		Industry	Financial	
Ticker	Company	Group	Strength	Beta
		Value Line	Value Line	Value Line
AAWW	Atlas Air Worldwide	AIRTRANS	В	0.75
AIRT	Air T Inc	AIRTRANS	С	1.00
ATSG	Air Transport Services Grp.	AIRTRANS	В	0.75
FDX	FedEx Corp.	AIRTRANS	A++	1.10
UPS	United Parcel Serv.	AIRTRANS	A+	0.80
Average				0.88
Median				0.80
High				1.10
Low				0.75
Selected				0.90

Inflation & Real Growth Industry: Scheduled Airlines - Freight 2021 Assessment Year

				Nomina	l Growth
Α	В	С	D	E	F
Source Description	Inflation (CPI)	Real Growth (GDP)	Nominal Growth	Low	High
Livingston Survey ^[1]	2.19%	2.21%	4.40%		
Survey of Professional Forecasters ^[2]	2.24%	2.27%	4.51%		
Congressional Budget Office ^[3]	1.90%	3.70%	5.60%		
Average	2.11%	2.73%	4.84%		
Median	2.19%	2.27%	4.46%		
High	2.24%	3.70%	5.94%		
Low	1.90%	2.21%	4.11%		
Selected	2.00%	2.50%	4.50%	4.11%	5.94%

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
	Note [5]	Note [6]	Note [7]	Note [5]	Note [6]	Note [7]
2008	210.228	•	1.2390	215.303		1.2021
2009	215.949	2.6%	1.2062	214.537	-0.4%	1.2064
2010	219.179	1.5%	1.1884	218.056	1.6%	1.1869
2011	225.672	2.9%	1.1542	224.939	3.1%	1.1506
2012	229.601	1.7%	1.1345	229.594	2.0%	1.1273
2013	233.049	1.5%	1.1177	232.957	1.4%	1.1110
2014	234.812	0.8%	1.1093	236.736	1.6%	1.0932
2015	236.525	0.7%	1.1013	237.017	0.1%	1.0920
2016	241.432	2.0%	1.0789	240.007	1.2%	1.0783
2017	246.524	2.1%	1.0566	245.120	2.1%	1.0559
2018	251.233	1.9%	1.0368	251.107	2.4%	1.0307
2019	256.974	2.2%	1.0136	255.657	1.8%	1.0123
2020	260.474	1.3%	1.0000	258.811	1.2%	1.0000

Notes

[1] Federal Reserve Bank of Philadelphia The Livingston Survey December 18, 2020 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 12, 2021 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] Congressional Budget Office, The Budget and Economic Outlook: 2021 to 2031, Table 2-1 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

3 Stage Dividend Discount Model (DDM) Industry: Scheduled Airlines - Freight 2021 Assessment Year

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

k_e = Cost of Equity

D₁ = Expected Dividend

P₀ = Current Price Per Share

g = Sustainable Long-Term Growth

Α	В	С	D	E	F	G	Н	I
		2020	2021 Est		Sustainable	Sustainable	Cost of Equity	Cost of Equity
		Year End Stock	Div'ds Decl'd	Expected Equity	Long-Term	Long-Term	Dividend	Earnings
Ticker	Company	Price	per sh	Payout Yield	Growth Rate [1]	Growth Rate [1]	Growth	Growth
		Yahoo	Value Line	D/C	Dividends	Earnings	E+F	E+G
		P_0	D ₁	D ₁ /P ₀	g	g	k _e	k _e
AAWW	Atlas Air Worldwide	54.54	0.00	0.00%				
AIRT	Air T Inc	24.90	0.00	0.00%				
ATSG	Air Transport Services Grp.	31.34	0.00	0.00%				
FDX	FedEx Corp.	259.62	2.60	1.00%	4.78%	4.62%	5.79%	5.62%
UPS	United Parcel Serv.	168.40	4.24	2.52%	5.86%	5.56%	8.38%	8.08%
Average	9	-		-	-	•	7.08%	6.85%
Median							7.08%	6.85%
High							8.38%	8.08%
Low							5.79%	5.62%
Selected							7.10%	6.85%

Notes

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

Support for DDM - Short Term Growth Rate Calculations Industry: Scheduled Airlines - Freight 2021 Assessment Year

Α	В	С	D	E	F	G
		End of Year	Div'ds Decl'd	Expected	Div'ds Decl'd	
		Closing Stock	per sh	Dividend	per sh	Short-Term
Ticker	Company	Price	2021 Est	Yield	2024-2026 Est	Growth Rate
		Yahoo	Value Line	D/C	Value Line	Note [1]
AAWW	Atlas Air Worldwide	54.54	0.00	0.00%	0.00	
AIRT	Air T Inc	24.90	0.00	0.00%	0.00	
ATSG	Air Transport Services Grp.	31.34	0.00	0.00%	0.00	
FDX	FedEx Corp.	259.62	2.60	1.00%	3.30	6.14%
UPS	United Parcel Serv.	168.40	4.24	2.52%	5.75	7.91%

Α	В	C	D	E
		Earnings per	Earnings per	1
		share	share	Short-Term
Ticker	Company	2021 Est	2024-2026 Es	d Growth Rate
		Value Line	Value Line	Note [1]
AAWW	Atlas Air Worldwide	9.50	15.00	12.10%
AIRT	Air T Inc	0.00	0.00	
ATSG	Air Transport Services Grp.	1.73	0.00	
FDX	FedEx Corp.	17.80	21.85	5.26%
UPS	United Parcel Serv.	9.00	11.90	7.23%

Notes

[1] 5 year compound annual growth rate (CAGR) - 4 periods

DDM Sustainable Long Term Growth Industry: Scheduled Airlines - Freight 2021 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
							g = IRR - Div.						
		Yahoo	Note [1]	Note [2]	D_1/P_0	D ₁ :D ₅₀₀	Yield						
AAWW	Atlas Air Worldwide	54.54	0.00%	4.50%	0.00%			(54.54)	0.00	0.00	0.00	0.00	0.00
AIRT	Air T Inc	24.90	0.00%	4.50%	0.00%			(24.90)	0.00	0.00	0.00	0.00	0.00
ATSG	Air Transport Services Grp.	31.34	0.00%	4.50%	0.00%			(31.34)	0.00	0.00	0.00	0.00	0.00
FDX	FedEx Corp.	259.62	6.14%	4.50%	1.00%	5.79%	4.78%	(259.62)	2.60	2.76	2.93	3.11	3.30
UPS	United Parcel Serv.	168.40	7.91%	4.50%	2.52%	8.38%	5.86%	(168.40)	4.24	4.58	4.94	5.33	5.75

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
		Yahoo	Note [1]	Note [2]	D ₁ /P ₀	$Ke = IRR \text{ of}$ $D_1:D_{500}$	g = IRR - Div. Yield						
AAWW	Atlas Air Worldwide	54.54	12.10%	4.50%	0.00%			(54.54)	0.00	0.00	0.00	0.00	0.00
AIRT	Air T Inc	24.90	0.00%	4.50%	0.00%			(24.90)	0.00	0.00	0.00	0.00	0.00
ATSG	Air Transport Services Grp.	31.34	0.00%	4.50%	0.00%			(31.34)	0.00	0.00	0.00	0.00	0.00
FDX	FedEx Corp.	259.62	5.26%	4.50%	1.00%	5.62%	4.62%	(259.62)	2.60	2.74	2.88	3.03	3.19
UPS	United Parcel Serv.	168.40	7.23%	4.50%	2.52%	8.08%	5.56%	(168.40)	4.24	4.55	4.88	5.23	5.61

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

[2] From worksheet: Inflation & Real Growth

DDM Sustainable Long Term Growth Industry: Scheduled Airlines - Freight 2021 Assessment Year

Dividend	vidend 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
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	3.50	3.71	3.93	4.17	4.42	4.69	4.97	5.27	5.59	5.93	6.29	6.66	7.07	7.49	7.94	8.30	8.68	11,909,423,202
UPS	6.19	6.67	7.18	7.73	8.33	8.97	9.66	10.40	11.20	12.06	12.98	13.98	15.06	16.21	17.46	18.25	19.07	26,173,871,102

Earnings	sings Stage 2 Stage 2														Stage 3		I	
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
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	3.36	3.53	3.72	3.91	4.11	4.33	4.55	4.79	5.04	5.30	5.58	5.87	6.18	6.50	6.84	7.14	7.46	10,246,159,484
UPS	6.00	6.42	6.88	7.36	7.88	8.44	9.03	9.67	10.35	11.08	11.86	12.70	13.59	14.55	15.58	16.28	17.01	23,351,007,325

Support for Cost of Debt Component - Yield to Maturity Industry: Scheduled Airlines - Freight 2021 Assessment Year

Α	В	С	D	E	F
				Moody's	
		Industry	Financial	Long Term	Numeric
Ticker	Company	Group	Strength	Rating	Rating
		Value Line	Value Line	Moodys.com	
AAWW	Atlas Air Worldwide	AIRTRANS	В		
AIRT	Air T Inc	AIRTRANS	С		
ATSG	Air Transport Services Grp.	AIRTRANS	В	Ba2	12
FDX	FedEx Corp.	AIRTRANS	A++	Baa2	9
UPS	United Parcel Serv.	AIRTRANS	A+	A2	6
Averaç	ge				9
Media	n				9
High					12
Low					6
Selected	i			Ba1	11

Support for Direct Capitalization - Equity Capitalization Rate Industry: Scheduled Airlines - Freight 2021 Assessment Year

Α	В	С	D	Е	F	G	Н	ı	J	K	L	М	N	0	Р	Q	R
													Ke	Ke			
		End of											Estimate -	Estimate -			1
		Year					Ke	Ke					Cash	Cash			1
		Closing					Estimate -	Estimate -	VL Historic	VL Est		VL Est	Flow	Flow		Book	1
		Stock	VL Historic		VL Historic	VL Est P/E	Earnings	Earnings	Cash Flow	Cash Flow	VL Historic	P/CF	(Hist.	(Est.	Market Value	Value	
Ticker	Company	Price	EPS	VL Est EPS	P/E Ratio	Ratio	(Hist. P/E)	(Est. P/E)	Per Share	Per Share	P/CF Ratio	Ratio	P/CF)	P/CF)	of Equity	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	54.54	13.53	9.50	4.03	5.74	24.81%	17.42%	15.10	22.20	3.61	2.46	27.69%	40.70%	1,501	1,792.20	0.84
AIRT	Air T Inc	24.90	(0.37)	0.00					1.84	0.00	13.53		7.39%		72	24.00	2.99
ATSG	Air Transport Services Grp.	31.34	(1.01)	1.73		18.12		5.52%	5.94	0.00	5.28		18.95%		1,867	460.30	4.06
FDX	FedEx Corp.	259.62	13.64	17.80	19.03	14.59	5.25%	6.86%	23.32	31.95	11.13	8.13	8.98%	12.31%	68,009	18,295.00	3.72
UPS	United Parcel Serv.	168.40	8.22	9.00	20.49	18.71	4.88%	5.34%	10.39	11.35	16.21	14.84	6.17%	6.74%	121,165	3,267.00	37.09
Average					14.52	14.29	11.65%	8.78%	-		9.95	8.47	13.84%	19.92%			9.74
Median					19.03	16.35	5.25%	6.19%			11.13	8.13	8.98%	12.31%			3.72
High					20.49	18.71	24.81%	17.42%			16.21	14.84	27.69%	40.70%			37.09
Low					4.03	5.74	4.88%	5.34%			3.61	2.46	6.17%	6.74%			0.84
Selected			17.	24	5.8	0%			8.26	6	12.1	0%			3.60		

Support for Direct Capitalization - Debt Capitalization Rate Industry: Scheduled Airlines - Freight 2021 Assessment Year

(\$ in Millions)

Α	В	С	D	E	F	G	Н	1	J	
		Current Year	Previous Year	Previous Year	Current Year	Current Year	Average	Current Yield	MTBR	
Ticker	Company	Interest Exp.	MV LT Debt	BV LT Debt	MV LT Debt	BV LT Debt	MV LT Debt	Current field	III. DIX	
		10-K	10-K	10-K	10-K	10-K	(D+F)/2	(C/H)	(F/G)	
AAWW	Atlas Air Worldwide	115	2,464	2,381	2,502	2,319	2,483	4.62%	1.08	
AIRT	Air T Inc	5	58	58	86	86	72	6.54%	1.00	
ATSG	Air Transport Services Grp.	63	1,482	1,484	1,550	1,479	1,516	4.15%	1.05	
FDX	FedEx Corp.	672	17,800	17,581	22,800	22,003	20,300	3.31%	1.04	
UPS	United Parcel Serv.	701	26,900	25,238	28,300	24,654	27,600	2.54%	1.15	
All Companies		1,555			55,238	50,541	51,971	2.99%	1.09	
Average	•							4.23%	1.06	
Median	Median								1.05	
High							6.54%	1.15		
Low									1.00	
Selected	4.20%	1.05								

Support of Stock Price - From YAHOO Finance Industry: Scheduled Airlines - Freight 2021 Assessment Year

		End of Period Closing Stock Price												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	
Ticker	Company	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	
AAWW	Atlas Air Worldwide	22.35	26.72	25.67	32.85	39.06	43.03	52.08	56.39	60.90	59.16	55.81	54.54	
AIRT	Air T Inc	21.25	18.50	12.51	12.01	11.54	11.75	12.32	11.32	9.74	9.64	11.00	24.90	
ATSG	Air Transport Services Grp.	20.97	17.90	18.28	20.24	21.54	22.27	24.37	25.42	25.06	28.04	30.74	31.34	
FDX	FedEx Corp.	144.64	141.17	121.26	126.77	130.56	140.22	168.40	219.84	251.52	259.47	286.58	259.62	
UPS	United Parcel Serv.	103.52	90.49	93.42	94.66	99.71	111.18	142.76	163.62	166.63	157.11	171.07	168.40	



Maintenance Capital Expenditures Estimate Based on Guideline Companies Industry: Scheduled Airlines - Freight 2021 Assessment Year

(\$ In Millions)

1	∠		3	7	0	U	/	0	9	10	1.1
Α	В	С	D	E	F	G	Н		J	K	L
							Average				
			PP&E,	PP&E,	Average	Depreciation	Life of			Replacement	RC as % of
Ticker	Company	Inflation	Gross	Gross	PP&E	Expense	Assets			Cost (RC)	Depreciation
				Previous							
			Current Year	Year				Note [1]	Note [1]	Note [1]	
		MTDOR (CPI)	10-K, Notes	10-K, Notes	(D+E)/2	10-K (CF)	F/G	C*H	1/(1+C)^H	G*I/(1-J)	K/G
AAWW	Atlas Air Worldwide	2.00%	5,258	5,031	5,145	328	16	0.31	0.73	385	117.49%
AIRT	Air T Inc	2.00%	10	8	9	6	2	0.03	0.97	6	102.52%
ATSG	Air Transport Services Grp.	2.00%	3,190	2,912	3,051	310	10	0.20	0.82	345	111.15%
FDX	FedEx Corp.	2.00%	65,024	59,511	62,268	3,615	17	0.34	0.71	4,309	119.20%
UPS	United Parcel Serv.	2.00%	62,091	59,727	60,909	2,698	23	0.45	0.64	3,379	125.25%
Average											115.12%
Median											117.49%
High											125.25%
Low											102.52%
Selected	·										117.00%

<u>Notes</u>

[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.