

# Learjet 75 vs. Phenom 300E Prepared for Wayne Goshkarian



BOMBARDIER LEARJET 75

**EMBRAER PHENOM 300E** 

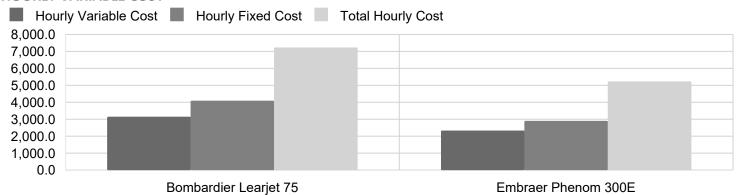
Based on \$5.00 per gallon and 150 hours per year annual utilization.

# BRIEF AIRCRAFT DETAILS, UTILIZATION LEVELS AND HOURLY VARIABLE COST



DETAILS	BOMBARDIER LEARJET 75	EMBRAER PHENOM 300E	
TYPICAL PASSENGER CAPACITY	2/8	2/7	
NORMAL CRUISE (KTS/MPH)	435/501	435/501	
COST PER NM	\$ 7.23	\$ 5.35	
SEATS FULL RANGE (NM/SM)	1,800/2,071	1,800/2,071	
AVG.PRE-OWNED PRICE	\$ 7,123,870	\$ 12,223,500	
ANNUAL UTILIZATION			
ANNUAL OWNER HRS	150	150	
FUEL COST PER GALLON	\$ 5	\$ 5	
TOTAL HRS	150	150	
MILEAGE FOR OWNER HOURS (NM)	63,450	60,750	
OWNER HOURLY COST ANALYSIS			
FUEL USAGE (GALLONS PER HOUR)	189	173	
FUEL COST PER HRS	\$ 945	\$ 865	
FUEL COST PER HRS FUEL COST PER GALLON	\$ 945 \$ 5	\$ 865 \$ 5	
FUEL COST PER GALLON		•	
FUEL COST PER GALLON AIRFRAME MAINTENANCE	\$ 5	\$ 5	
FUEL COST PER GALLON AIRFRAME MAINTENANCE ENGINE / APU MAINTENANCE	\$ 5 \$ 915	\$ 5 \$ 437	
	\$ 5 \$ 915 \$ 1,028	\$ 5 \$ 437 \$ 700	
FUEL COST PER GALLON AIRFRAME MAINTENANCE ENGINE / APU MAINTENANCE TOTAL MAINTENANCE	\$ 5 \$ 915 \$ 1,028 \$ 1,943	\$ 5 \$ 437 \$ 700 \$ 1,137	
FUEL COST PER GALLON AIRFRAME MAINTENANCE ENGINE / APU MAINTENANCE TOTAL MAINTENANCE CREW MISC.	\$ 5 \$ 915 \$ 1,028 \$ 1,943 \$ 255	\$ 5 \$ 437 \$ 700 \$ 1,137 \$ 325	

#### **HOURLY VARIABLE COST**



# **TOTAL ANNUAL VARIABLE COST(S)**



VARIABLES	BOMBARDIER LEARJET 75	EMBRAER PHENOM 300E
OWNER HOURS PER YEAR	150	150
TOTAL HOURS PER YEAR	150	150
FUEL COST PER GALLON	\$ 5.00	\$ 5.00
TOTAL FUEL GALLONS	28,350	25,950
ANNUAL VARIABLE COSTS		
FUEL COST	\$ 141,750	\$ 129,750
AIRFRAME MAINTENANCE	\$ 137,250	\$ 65,550
ENGINE AND APU MAINTENANCE	\$ 154,200	\$ 105,000
CREW MISC.	\$ 38,250	\$ 48,750
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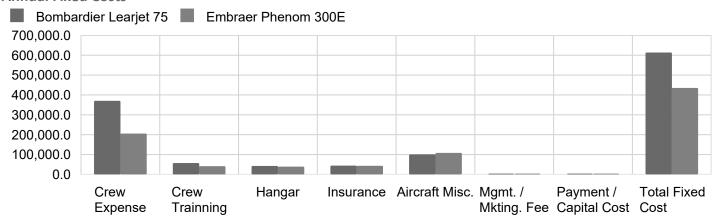
# Annual Variable Costs Bombardier Learjet 75 Embraer Phenom 300E 200,000.0 150,000.0 50,000.0 Fuel Cost Airframe Maintenance Engine / APU Maintenance Crew Misc.

# **TOTAL ANNUAL FIXED COST(S)**



ANNUAL FIXED COSTS	BOMBARDIER LEARJET 75	EMBRAER PHENOM 300E
CAPTAIN SALARY	\$ 205,000	\$ 205,000
CO-PILOT SALARY	\$ 165,000	\$ 0
CREW TRAINING	\$ 56,700	\$ 40,800
HANGAR	\$ 42,400	\$ 38,500
INSURANCE	\$ 43,600	\$ 42,800
AIRCRAFT MISC.	\$ 100,500	\$ 108,000
TOTAL FIXED COST	\$ 613,200	\$ 435,100

#### **Annual Fixed Costs**

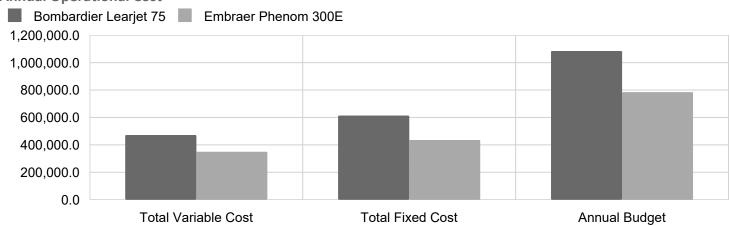


#### **ANNUAL OPERATIONAL COST**



ANNUAL COST COMPARISION	BOMBARDIER LEARJET 75	EMBRAER PHENOM 300E
OWNER HOURS PER YEAR	150	150
TOTAL HOURS PER YEAR	150	150
FUEL COST PER GALLON	\$ 5	\$ 5
TOTAL FUEL GALLONS	28,350	25,950
ANNUAL VARIABLE COSTS		
FUEL COST	\$ 141,750	\$ 129,750
AIRFRAME MAINTENANCE	\$ 137,250	\$ 65,550
ENGINE APU MAINTENANCE	\$ 154,200	\$ 105,000
CREW MISC.	\$ 38,250	\$ 48,750
TOTAL VARIABLE COST	\$ 471,450	\$ 349,050
ANNUAL FIXED COSTS		
CAPTAIN SALARY	\$ 205,000	\$ 205,000
CO-PILOT SALARY	\$ 165,000	\$ 0
CREW TRAINING	\$ 56,700	\$ 40,800
HANGAR	\$ 42,400	\$ 38,500
INSURANCE	\$ 43,600	\$ 42,800
AIRCRAFT MISCELLANEOUS	\$ 100,500	\$ 108,000
TOTAL FIXED COST	\$ 613,200	\$ 435,100
ANNUAL BUDGET		
ANNUAL BUDGET	\$ 1,084,650	\$ 784,150
MONTHLY BUDGET		
MONTHLY BUDGET	\$ 90,387	\$ 65,345
HOURLY COST		
TOTAL HOURLY COST	\$ 7,231	\$ 5,227

#### **Annual Operational Cost**



# **SPECIFICATION SHEET**

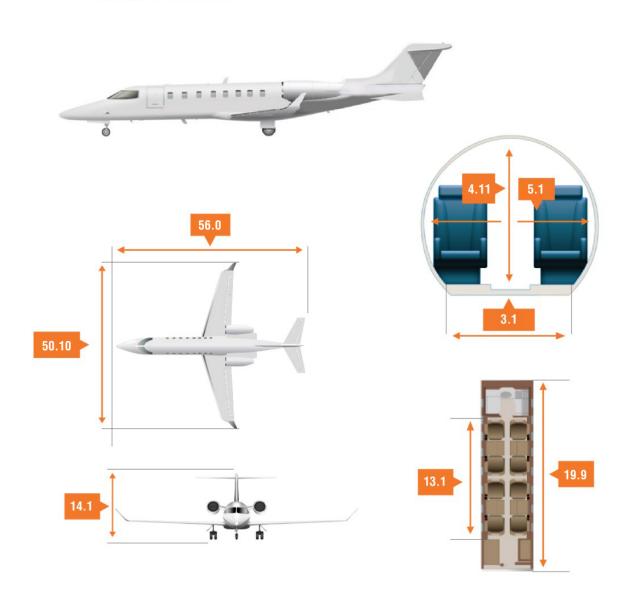


	BOMBARDIER LEARJET 75	EMBRAER PHENOM 300E	
BASIC VARIABLE COST DATA			
AIRFRAME MAINTENANCE PER HOUR	\$ 915	\$ 437	
ENGINE / APU MAINTENANCE PER HOUR	\$ 1,028	\$ 700	
FUEL COST BASED ON GALLONS PER HOUR	\$ 945	\$ 865	
OTHER VARIABLE COSTS	\$ 255	\$ 325	
TOTAL VARIABLE COST PER HOUR	\$ 3,143	\$ 2,327	
COST PER NM	\$ 7.23	\$ 5.35	
ADDITIONAL AIRCRAFT INFORMATION			
BAGAGE CAPACITY EXT/INT FT^3	50 / 15	66 / 19	
CABIN HEIGHT FEET	4'11"	4'11"	
CABIN WIDTH FEET	5'1"	5'0"	
CABIN LENGTH FEET	19'9"	17'2"	
CABIN VOLUME FT^3	498	429	
YEARS IN PRODUCTION	2013-2023	2017-Present	
AVERAGE PRE-OWNED PRICE	\$ 7,123,870	\$ 12,223,500	
AVIONICS	Garmin G5000	Garmin Prodigy	
BASIC AIRCRAFT PERFORMANCE DATA			
SEATS FULL RANGE(NM / SM)	1,800 / 2,071	1,800 / 2,071	
FERRY RANGE(NO PAYLOAD)(NM / SM)	2,000/2,302	2,000/2,302	
BALANCE FIELD LENGTH * (TAKE - OFF DISTANCE IN FEET)	4,500	3,700	
LANDING DISTANCE FEET	2,700	2,500	
AVERAGE BLOCK SPEED (KTS / MPH)	423/487	405/466	
NORMAL CRUISE (KTS/MPH)	435 / 501	435 / 501	
LONG RANGE CRUISE SPEED (KTS / MPH)	430/495	395/455	
MAXIMUM CRUISE SPEED (KTS / MPH)	465/535	460/529	
FUEL USAGE (GPH)	189	173	
SERVICE CEILING FEET	51,000	45,000	
USEFUL PAYLOAD WITH FULL FUEL LBS	1,800	940	
MAX RAMP WEIGHT LBS	21,750	18,497	
MAXIMUM TAKE OFF WEIGHT LBS	21,500	18,387	
MAXIMUM LANDING WEIGHT LBS	19,200	17,042	
BASIC OPERATING WEIGHT LBS	13,790	11,780	
TOTAL USABLE FUEL WEIGHT LBS	6,100	5,300	
WINGSPAN FEET	50'10"	52'2"	
FUSELAGE FEET	56'0"	51'3"	
POWERPLANT MODEL	Honeywell Engines TFE 731- 40BR-1B	Pratt & Whitney Canada PW535E	
QUANTITY/THRUST (LBS)	2/3850	2/3360	



# **BOMBARDIER LEARJET 75**

- ✓ Interior Floorplan
- **✓ Exterior**
- **✓** Cross Section



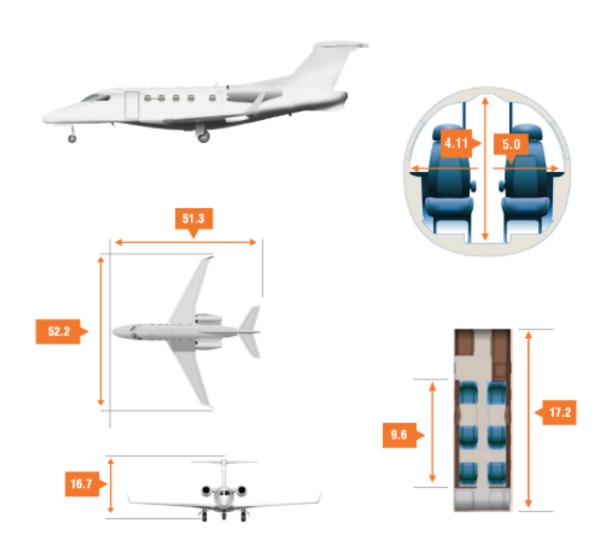


# **EMBRAER PHENOM 300E**

✓ Interior Floorplan

**✓ Exterior** 

**✓** Cross Section



# **DEPRECIATION ANALYSIS**



<b>Bombardier</b>	Learjet 75
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Full Price of Aircraft \$	7,123,870							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Rate (%)	20.00	32.00	19.20	11.52	11.52	5.76	0.00	0.00
Depreciation \$	1,424,774	2,279,638	1,367,783	820,670	820,670	410,335	0	0
Depreciation Value \$	5,699,096	3,419,458	2,051,675	1,231,005	410,335	0	0	0
Cumulative Depreciation \$	1,424,774	3,704,412	5,072,195	5,892,865	6,713,535	7,123,870	7,123,870	7,123,870
Adjusted Cost Per Hrs \$	3,799	6,079	3,647	2,188	2,188	1,094	0	0
Total Adjusted Cost Per Hrs	\$ 3,432	1,152	3,584	5,043	5,043	6,137	7,231	7,231

#### Embraer Phenom 300E

Full Price of Aircraft \$	12,223,500							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Rate (%)	20.00	32.00	19.20	11.52	11.52	5.76	0.00	0.00
Depreciation \$	2,444,700	3,911,520	2,346,912	1,408,147	1,408,147	704,074	0	0
Depreciation Value \$	9,778,800	5,867,280	3,520,368	2,112,221	704,074	0	0	0
Cumulative Depreciation \$	2,444,700	6,356,220	8,703,132	10,111,279	11,519,426	12,223,500	12,223,500	12,223,500
Adjusted Cost Per Hrs \$	6,519	10,431	6,258	3,755	3,755	1,878	0	0
Total Adjusted Cost Per Hrs	\$ (1,292)	(5,203)	(1,031)	1,473	1,473	3,350	5,228	5,228

### **RANGE MAP**



Model	Category	Radius
Bombardier Learjet 75	Light Jet	1800 Nm / 2071 Sm
Embraer Phenom 300E	Midsize Jet	1800 Nm / 2071 Sm

