



Challenger 604, Citation Sovereign, Falcon 50EX, and Learjet 40XR Comparison



**BOMBARDIER
CHALLENGER 604**



DASSAULT FALCON 50EX



**CESSNA CITATION
SOVEREIGN**



**BOMBARDIER LEARJET
40XR**

Prepared for Ryan Lepene

BRIEF AIRCRAFT DETAILS, UTILIZATION LEVELS AND HOURLY VARIABLE COST

DETAILS	BOMBARDIER CHALLENGER 604	DASSAULT FALCON 50EX	CESSNA CITATION SOVEREIGN	BOMBARDIER LEARJET 40XR
TYPICAL PASSENGER CAPACITY	2/10	2/9	2/9	2/6
NORMAL CRUISE (KTS/MPH)	460/529	460/529	459/528	435/501
COST PER NM	\$ 8.38	\$ 8.58	\$ 7.36	\$ 6.27
SEATS FULL RANGE (NM/SM)	3,800/4,373	3,200/3,682	2,600/2,992	1,800/2,071
AVG.PRE-OWNED PRICE	\$ 5,461,220	\$ 4,566,923	\$ 6,554,300	\$ 3,202,727
ANNUAL UTILIZATION				
ANNUAL OWNER HRS	200	200	200	200
FUEL COST PER GALLON	\$ 3.5	\$ 3.5	\$ 3.5	\$ 3.5
TOTAL HRS	200	200	200	200
MILEAGE FOR OWNER HOURS (NM)	83,000	82,000	83,400	84,000
OWNER HOURLY COST ANALYSIS				
FUEL USAGE (GALLONS PER HOUR)	340	305	266	212
FUEL COST PER HRS	\$ 1,190	\$ 1,067	\$ 931	\$ 742
FUEL COST PER GALLON	\$ 3.5	\$ 3.5	\$ 3.5	\$ 3.5
AIRFRAME MAINTENANCE	\$ 1,195	\$ 1,092	\$ 985	\$ 1,027
ENGINE / APU MAINTENANCE	\$ 947	\$ 1,360	\$ 1,036	\$ 703
TOTAL MAINTENANCE	\$ 2,142	\$ 2,452	\$ 2,021	\$ 1,730
CREW MISC.	\$ 525	\$ 425	\$ 425	\$ 255
TOTAL VARIABLE COST PER HRS	\$ 3,857	\$ 3,944.5	\$ 3,377	\$ 2,727
TOTAL FIXED COST	\$ 3,810	\$ 3,699	\$ 3,769.5	\$ 3,053
TOTAL HOURLY COST	\$ 7,667	\$ 7,643	\$ 7,146	\$ 5,780

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TOTAL ANNUAL VARIABLE COST(S)

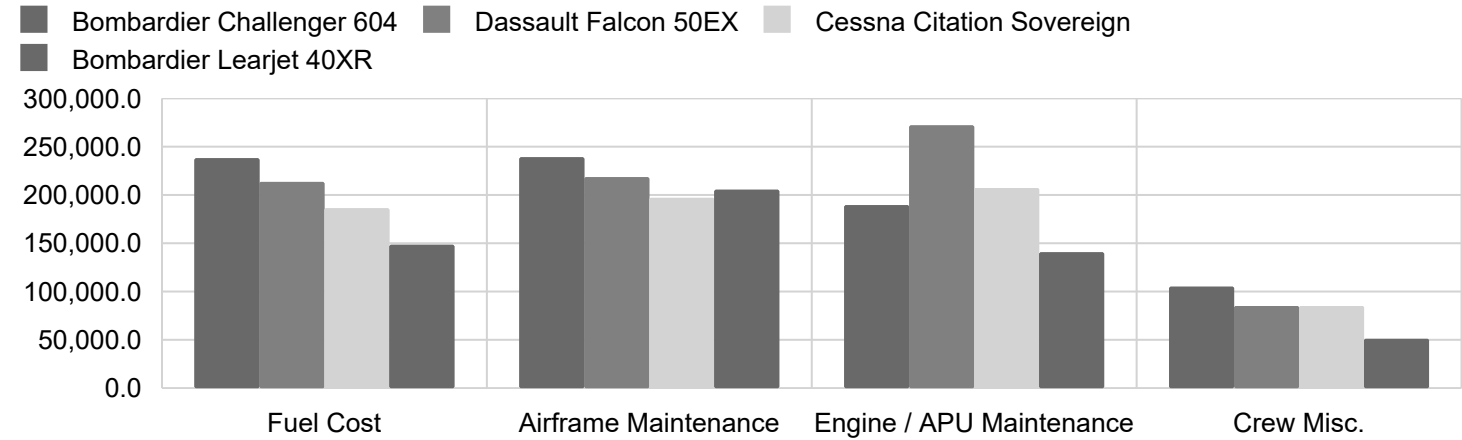


VARIABLES	BOMBARDIER CHALLENGER 604	DASSAULT FALCON 50EX	CESSNA CITATION SOVEREIGN	BOMBARDIER LEARJET 40XR
OWNER HOURS PER YEAR	200	200	200	200
TOTAL HOURS PER YEAR	200	200	200	200
FUEL COST PER GALLON	\$ 3.50	\$ 3.50	\$ 3.50	\$ 3.50
TOTAL FUEL GALLONS	68,000	61,000	53,200	42,400

ANNUAL VARIABLE COSTS

FUEL COST	\$ 238,000	\$ 213,500	\$ 186,200	\$ 148,400
AIRFRAME MAINTENANCE	\$ 239,000	\$ 218,400	\$ 197,000	\$ 205,400
ENGINE AND APU MAINTENANCE	\$ 189,400	\$ 272,000	\$ 207,200	\$ 140,600
CREW MISC.	\$ 105,000	\$ 85,000	\$ 85,000	\$ 51,000
TOTAL ANNUAL VARIABLE COSTS	\$ 771,400	\$ 788,900	\$ 675,400	\$ 545,400

Annual Variable Costs

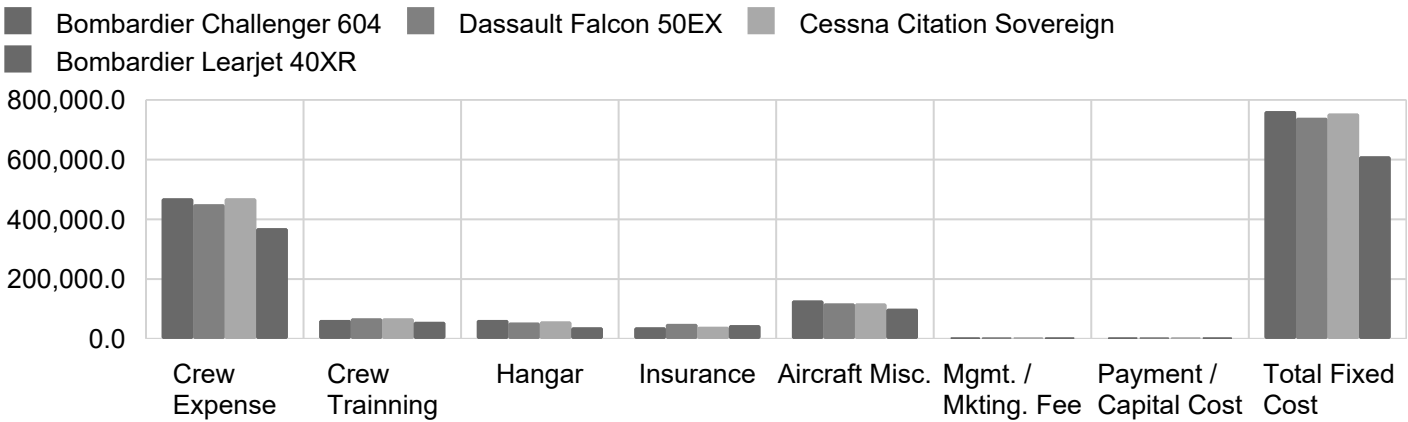


TOTAL ANNUAL FIXED COST(S)



ANNUAL FIXED COSTS	BOMBARDIER CHALLENGER 604	DASSAULT FALCON 50EX	CESSNA CITATION SOVEREIGN	BOMBARDIER LEARJET 40XR
CAPTAIN SALARY	\$ 250,000	\$ 250,000	\$ 250,000	\$ 205,000
CO-PILOT SALARY	\$ 220,000	\$ 200,000	\$ 220,000	\$ 165,000
CREW TRAINING	\$ 63,000	\$ 68,000	\$ 68,000	\$ 56,700
HANGAR	\$ 63,000	\$ 54,000	\$ 57,800	\$ 38,000
INSURANCE	\$ 38,000	\$ 49,800	\$ 40,100	\$ 45,400
AIRCRAFT MISC.	\$ 128,000	\$ 118,000	\$ 118,000	\$ 100,500
TOTAL FIXED COST	\$ 762,000	\$ 739,800	\$ 753,900	\$ 610,600

Annual Fixed Costs



ANNUAL OPERATIONAL COST



	BOMBARDIER CHALLENGER 604	DASSAULT FALCON 50EX	CESSNA CITATION SOVEREIGN	BOMBARDIER LEARJET 40XR
OWNER HOURS PER YEAR	200	200	200	200
TOTAL HOURS PER YEAR	200	200	200	200
FUEL COST PER GALLON	\$ 3.5	\$ 3.5	\$ 3.5	\$ 3.5
TOTAL FUEL GALLONS	68,000	61,000	53,200	42,400
ANNUAL VARIABLE COSTS				
FUEL COST	\$ 238,000	\$ 213,500	\$ 186,200	\$ 148,400
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CREW MISC.	\$ 105,000	\$ 85,000	\$ 85,000	\$ 51,000
TOTAL VARIABLE COST	\$ 771,400	\$ 788,900	\$ 675,400	\$ 545,400
ANNUAL FIXED COSTS				
CAPTAIN SALARY	\$ 250,000	\$ 250,000	\$ 250,000	\$ 205,000
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CREW TRAINING	\$ 63,000	\$ 68,000	\$ 68,000	\$ 56,700
HANGAR	\$ 63,000	\$ 54,000	\$ 57,800	\$ 38,000
INSURANCE	\$ 38,000	\$ 49,800	\$ 40,100	\$ 45,400
AIRCRAFT MISCELLANEOUS	\$ 128,000	\$ 118,000	\$ 118,000	\$ 100,500
TOTAL FIXED COST	\$ 762,000	\$ 739,800	\$ 753,900	\$ 610,600
ANNUAL BUDGET				
ANNUAL BUDGET	\$ 1,533,400	\$ 1,528,700	\$ 1,429,300	\$ 1,156,000
MONTHLY BUDGET				
MONTHLY BUDGET	\$ 127,783	\$ 127,391	\$ 119,108	\$ 96,333
HOURLY COST				
TOTAL HOURLY COST	\$ 7,667	\$ 7,643	\$ 7,146	\$ 5,780

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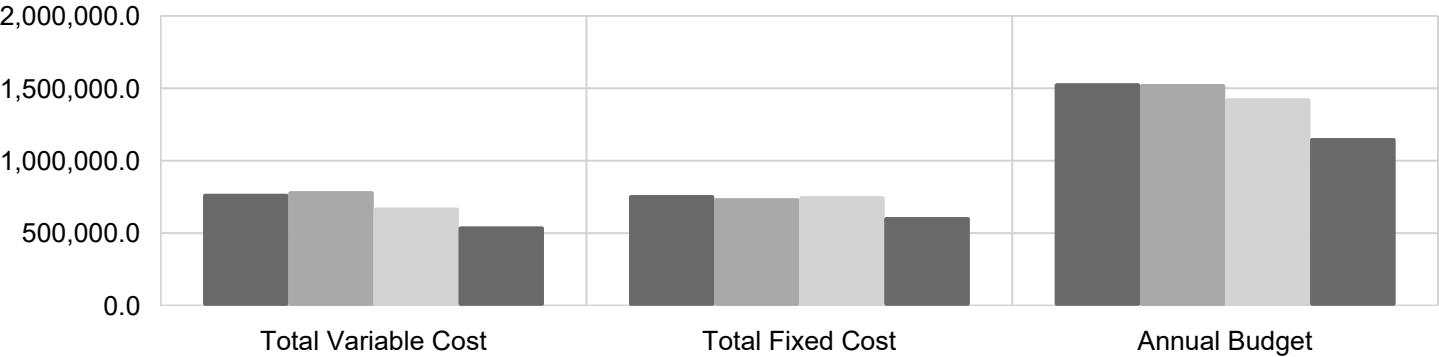
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ANNUAL OPERATIONAL COST



Annual Operational Cost

■ Bombardier Challenger 604 ■ Dassault Falcon 50EX ■ Cessna Citation Sovereign
■ Bombardier Learjet 40XR



SPECIFICATION SHEET



	BOMBARDIER CHALLENGER 604	DASSAULT FALCON 50EX	CESSNA CITATION SOVEREIGN	BOMBARDIER LEARJET 40XR
BASIC VARIABLE COST DATA				
AIRFRAME MAINTENANCE PER HOUR	\$ 1,195	\$ 1,092	\$ 985	\$ 1,027
ENGINE / APU MAINTENANCE PER HOUR	\$ 947	\$ 1,360	\$ 1,036	\$ 703
FUEL COST BASED ON GALLONS PER HOUR	\$ 1,190	\$ 1,068	\$ 931	\$ 742
OTHER VARIABLE COSTS	\$ 525	\$ 425	\$ 425	\$ 255
TOTAL VARIABLE COST PER HOUR	\$ 3,857	\$ 3,945	\$ 3,377	\$ 2,727
COST PER NM	\$ 8.38	\$ 8.58	\$ 7.36	\$ 6.27
ADDITIONAL AIRCRAFT INFORMATION				
BAGAGE CAPACITY EXT/INT FT^3	0 / 115	90 / 25	100 / 35	50 / 15
CABIN HEIGHT FEET	6'1"	5'9"	5'8"	4'10"
CABIN WIDTH FEET	8'2"	6'1"	5'6"	5'1"
CABIN LENGTH FEET	28'3"	23'6"	25'3"	17'8"
CABIN VOLUME FT^3	1,410	831	792	443
YEARS IN PRODUCTION	1996-2007	1997-2007	2004-2013	2005-2012
AVERAGE PRE-OWNED PRICE	\$ 5,461,220	\$ 4,566,923	\$ 6,554,300	\$ 3,202,727
AVIONICS	Collins Pro-Line 4	Collins Pro-Line 4	Honeywell Primus EPIC	Honeywell Primus 1000
BASIC AIRCRAFT PERFORMANCE DATA				
SEATS FULL RANGE(NM / SM)	3,800 / 4,373	3,200 / 3,682	2,600 / 2,992	1,800 / 2,071
FERRY RANGE(NO PAYLOAD)(NM / SM)	4,100/4,718	3,400/3,913	3,000/3,452	1,900/2,186
BALANCE FIELD LENGTH * (TAKE - OFF DISTANCE IN FEET)	6,000	5,000	3,700	4,200
LANDING DISTANCE FEET	2,600	2,400	2,600	2,800
AVERAGE BLOCK SPEED (KTS / MPH)	415/478	410/472	417/480	420/483
NORMAL CRUISE (KTS/MPH)	460 / 529	460 / 529	459 / 528	435 / 501
LONG RANGE CRUISE SPEED (KTS / MPH)	430/495	425/489	391/450	430/495
MAXIMUM CRUISE SPEED (KTS / MPH)	488/562	480/552	459/528	465/535
FUEL USAGE (GPH)	340	305	266	212
SERVICE CEILING FEET	41,000	49,000	47,000	51,000

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SPECIFICATION SHEET



USEFUL PAYLOAD WITH FULL FUEL LBS	1,300	2,100	1,177	1,200
MAX RAMP WEIGHT LBS	48,200	39,900	30,500	21,250
MAXIMUM TAKE OFF WEIGHT LBS	48,200	39,700	30,300	21,000
MAXIMUM LANDING WEIGHT LBS	38,000	35,715	27,100	19,200
BASIC OPERATING WEIGHT LBS	27,000	23,000	18,050	13,950
TOTAL USABLE FUEL WEIGHT LBS	19,850	15,500	11,223	6,100
WINGSPAN FEET	64'3"	61'9"	63'3"	47'9"
FUSELAGE FEET	68'6"	60'8"	63'7"	55'6"
POWERPLANT MODEL	General Electric CF34-3B	Honeywell Engines TFE 731-40	Pratt & Whitney Canada PW306C2	Honeywell Engines TFE 731-20BR-1B
QUANTITY/THRUST (LBS)	2/8,729	3/3,700	2/5,000	2/3,500

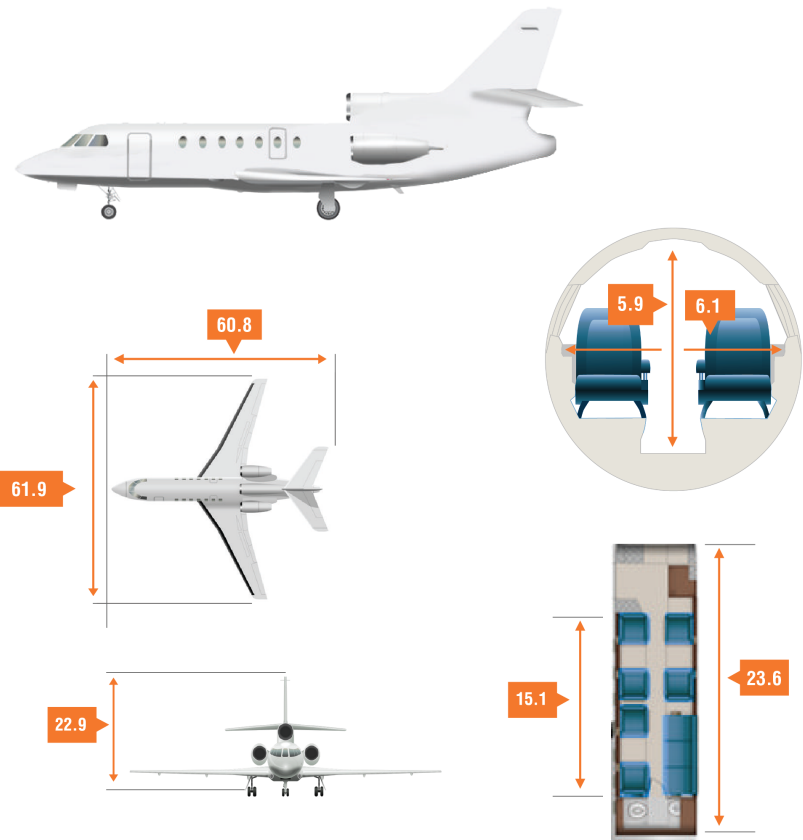
**BOMBARDIER CHALLENGER
604**

- ✓ Interior Floorplan
- ✓ Exterior
- ✓ Cross Section



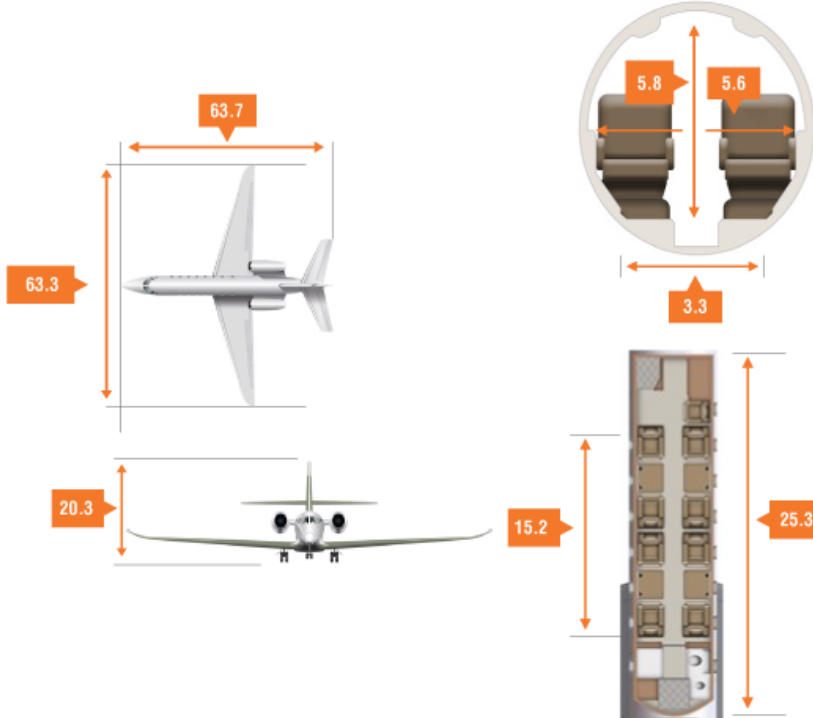
DASSAULT FALCON 50EX

- ✓ Interior Floorplan
- ✓ Exterior
- ✓ Cross Section



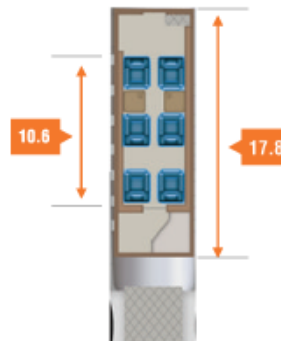
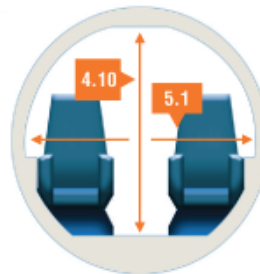
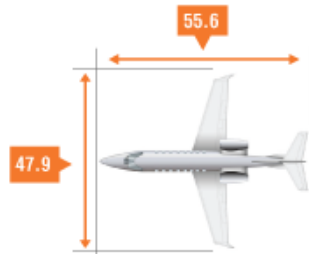
CESSNA CITATION SOVEREIGN

- ☒ Interior Floorplan
- ☒ Exterior
- ☒ Cross Section



BOMBARDIER LEARJET 40XR

- ✓ Interior Floorplan
- ✓ Exterior
- ✓ Cross Section



RANGE MAP



Model	Category	Radius
 Bombardier Challenger 604	Large Jet	3800 Nm / 4372 Sm
 Dassault Falcon 50EX	Super-Midsize Jet	3200 Nm / 3682 Sm
 Cessna Citation Sovereign	Super-Midsize Jet	2600 Nm / 2992 Sm
 Bombardier Learjet 40XR	Light Jet	1800 Nm / 2071 Sm

