



Embraer Legacy 600




RANGE

3,091 nm



SPEED

455 kts



PASSENGERS

13 people



Cost

ACQUISITION COST	ANNUAL COST	VARIABLE COST	FIXED COST
\$13,300,000	\$2,467,829	\$3,692/hr	\$991,117
MAX PAYLOAD	4,855 lb	ENGINES	2 Rolls Royce AE 3007A1E
TOTAL CABIN AREA	1,656 cu ft	AVIONICS	Honeywell Primus Elite
WINGSPAN	65.7 ft	APU	Standard

Assumptions

⊛ This report uses custom assumptions that differ from Conklin & de Decker default values for Annual Utilization (Hours), Fuel Price (Jet A).

ANNUAL UTILIZATION (DISTANCE)	160,400 nm	FUEL PRICE (JET A)	\$4.45/gal
ANNUAL UTILIZATION (HOURS)	400 hrs	LABOR COST	\$136/hr
AVERAGE SPEED (STANDARD TRIP)	401 kts	ACQUISITION COST	\$13,300,000

Embraer Aircraft

The Brazilian government tried several times over three decades to launch a domestic aircraft manufacturer. It finally succeeded in 1969, when Empresa Brasileira de Aeronautica (Embraer) was created as a government-owned corporation. The Brazilian Government played a large part in Embraer's early growth by providing license production contracts. Military contracts made up the majority of Embraer's production in the 1970s. The EMB 120 Brasilia was introduced to the civilian regional airline market in 1985 and was the first in the line of Embraer's successful smaller airliners. While Embraer started life as a government-owned company, it finally privatized after many difficulties in 1994. It was sold in December 1994, with the Brazilian Government retaining interest with golden shares allowing it veto power. A golden share is a nominal share that can outvote all other shares in a shareholder meeting in certain specified circumstances. Initial public offerings on the New York Stock Exchange occurred in 2000. Embraer experienced a sharp rise in growth after privatization and is now prominent in the airline and business aviation

markets.

Legacy 600

Legacy Executive/Corporate Shuttle

The Legacy is Embraer's mid-size corporate and executive jet derived from the ERJ-135 and ERJ-145 commercial regional jetliners. The Legacy Executive is configured with 15 seats, the Corporate Shuttle with 19 seats.

Although the Legacy is derived from the regional jet family, the airframe underwent a number of changes. Changes include the addition of winglets (Executive only) to provide increased lift and improve efficiency with reduced drag of the tip vortex. Other additions include fuselage strakes, underbelly and cargo compartment tanks, and the Honeywell Primus 1000 avionics suite. The Legacy is powered by two Rolls-Royce AE3007-A1E engines.

1. Cost

ACQUISITION COST

\$13,300,000

ANNUAL COST

\$2,467,829

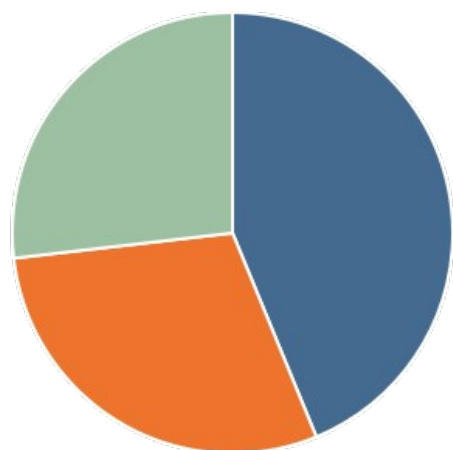
VARIABLE COST

\$3,692/hr

FIXED COST

\$991,117

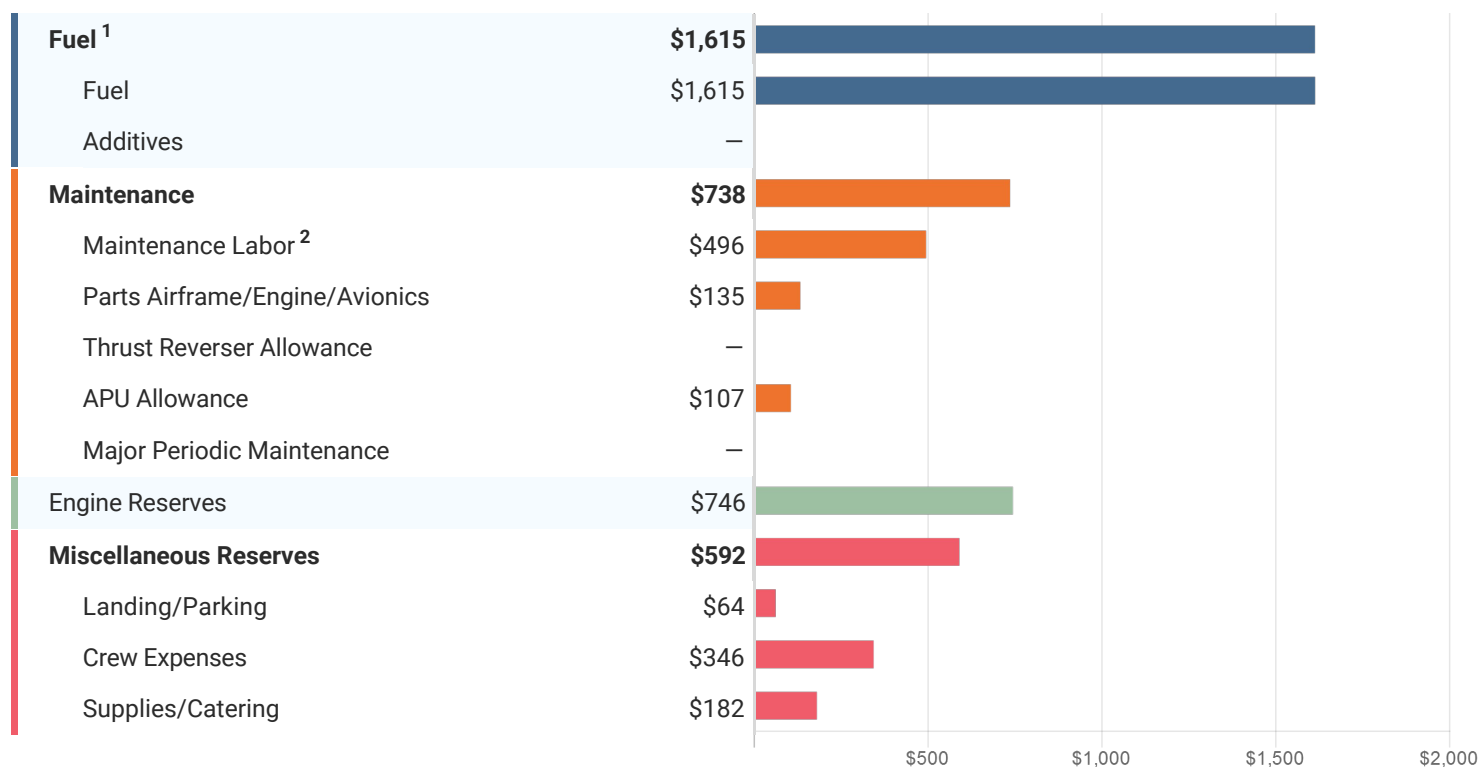
Total Annual Cost With Market Depreciation

**\$3,372,229**

- 44% - Variable Cost - \$1,476,712
- 29% - Fixed Cost - \$991,117
- 27% - Market Depreciation - \$904,400

Hourly Variable Cost

PER FLIGHT HOUR

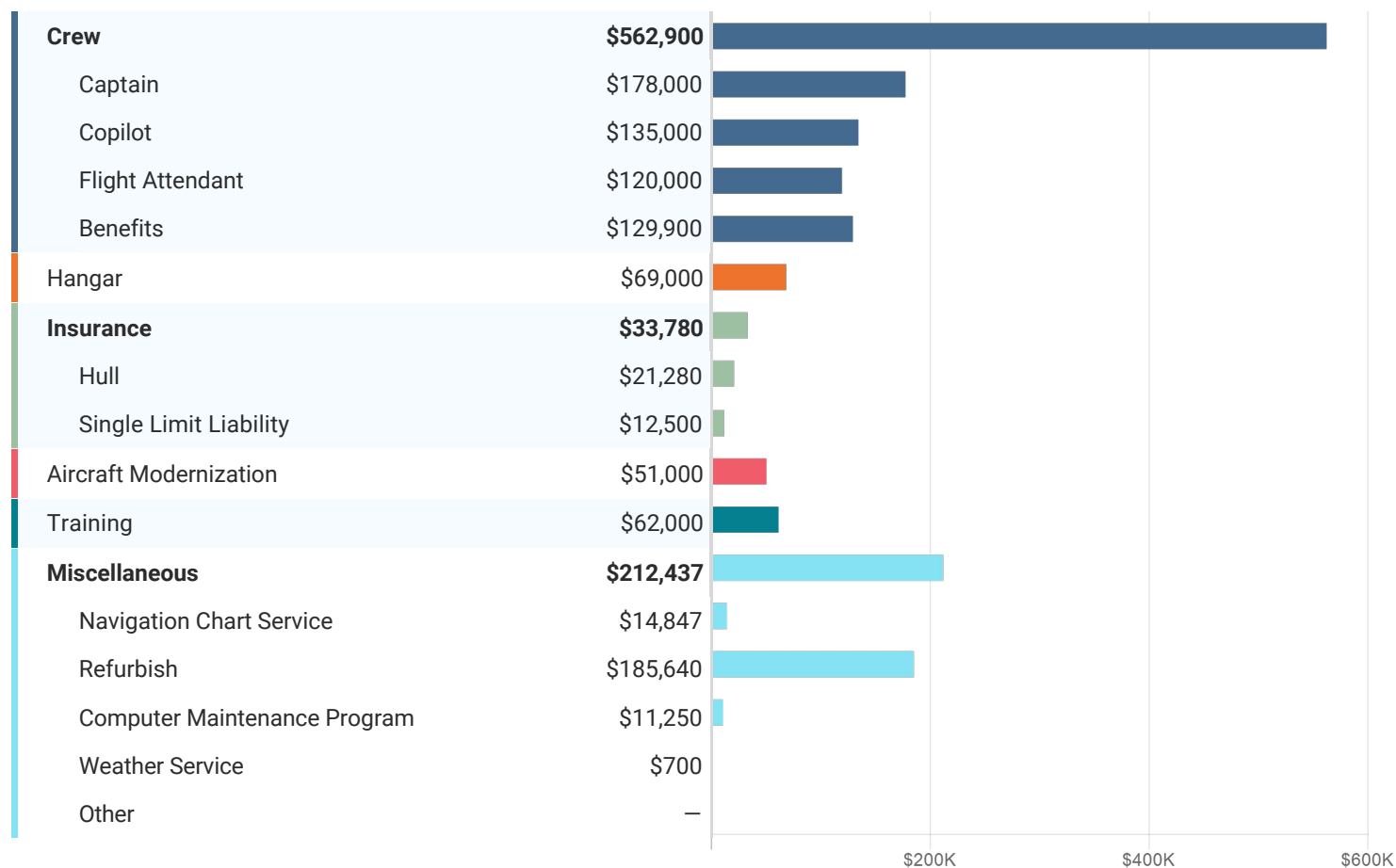
\$3,692/hr

1. Fuel is calculated using Fuel Cost x Fuel Burn + 15% - 363 gal/hr

2. Maintenance Labor Cost is calculated using the ratio of Maintenance Labor Hours per Flight Hour and the Labor Rate: 3.65 labor-hr/Fhr @ \$136/hr

Annual Fixed Cost

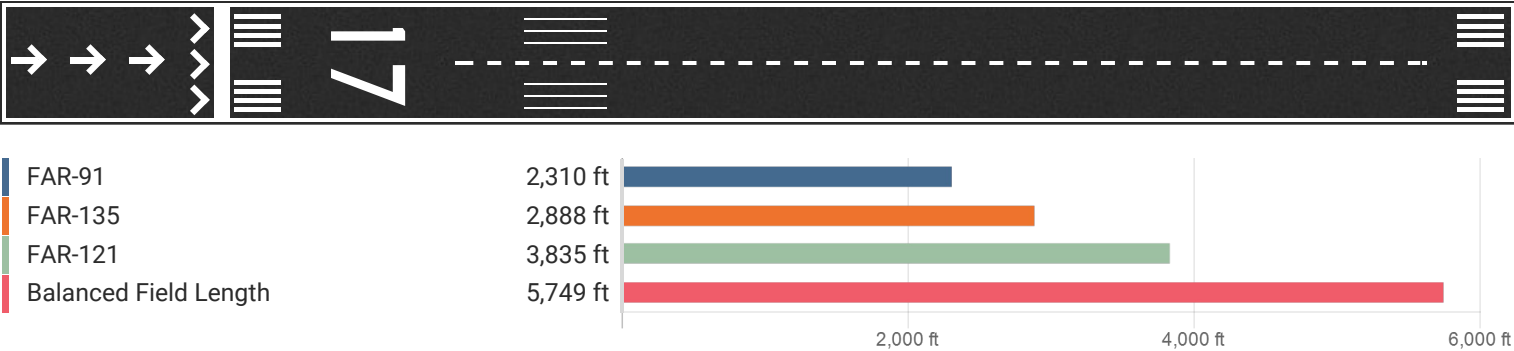
ANNUAL COST

\$991,117

2. Performance

NORMAL CRUISE		LONG-RANGE CRUISE		MAXIMUM CRUISE	
447 kts		424 kts		455 kts	
RATE OF CLIMB		MAX CERT. ALTITUDE		INITIAL CRUISE ALTITUDE	
2,639 ft/min		41,000 ft		39,000 ft	
				TIME TO CRUISE ALTITUDE	
				26 min	
ENGINE OUT RATE OF CLIMB		ENGINE OUT CEILING			
761 ft/min		23,276 ft			

Field Length



3. Weight/Payload

Weight Breakdown



With Max Payload

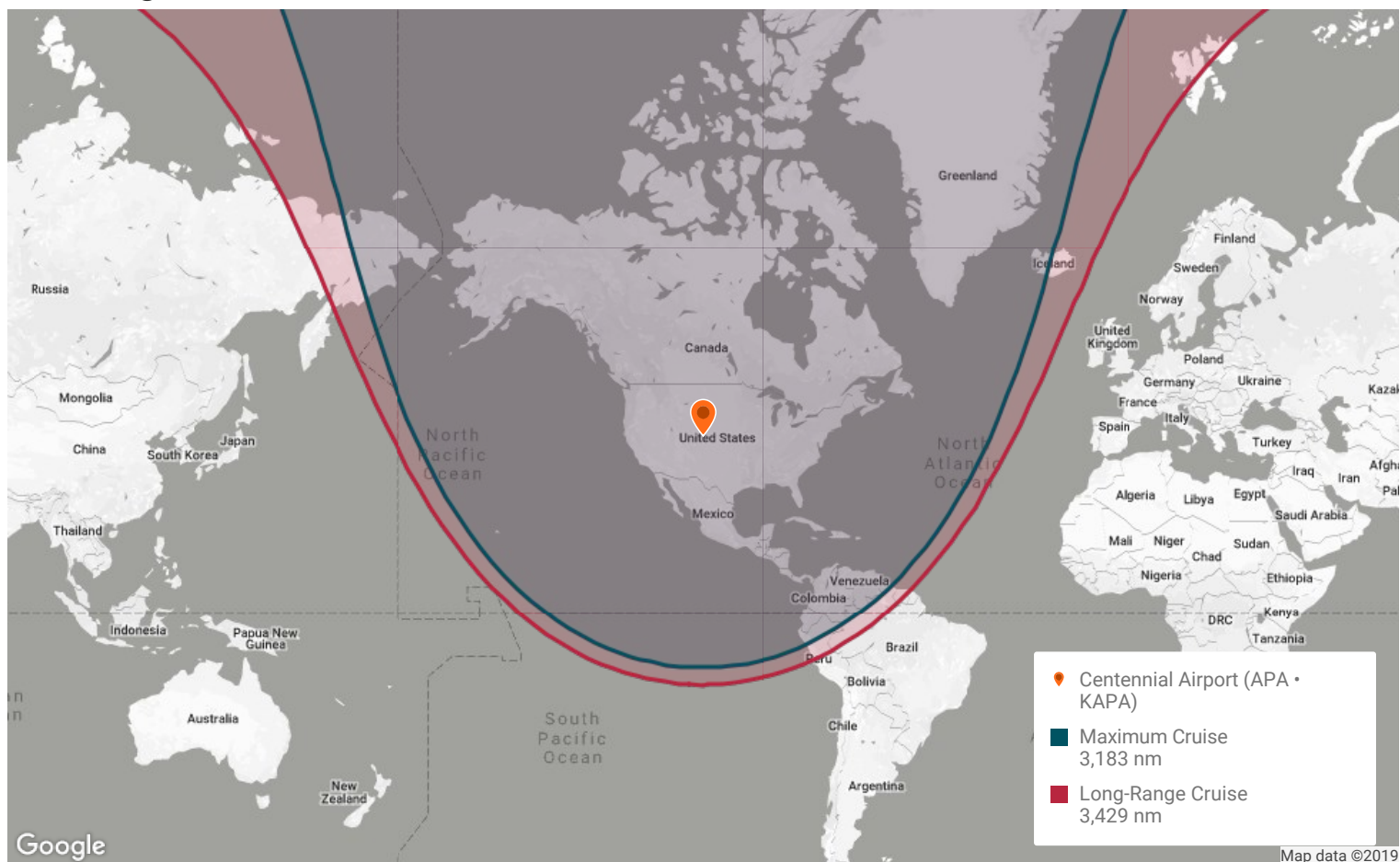
MAXIMUM PAYLOAD	RANGE AT MAX PAYLOAD
4,855 lb	2,705 nm

With Max Fuel

AVAILABLE PAYLOAD	PASSENGER CAPACITY
1,169 lb	5.8 people

RAMP	49,758 lb	MAX TAKEOFF	49,604 lb
MAX LANDING	40,785 lb	ZERO FUEL	35,274 lb
BASIC OPERATING	30,419 lb	USABLE FUEL	18,170 lb
USEFUL LOAD	19,339 lb		

4. Range



Long-Range Cruise

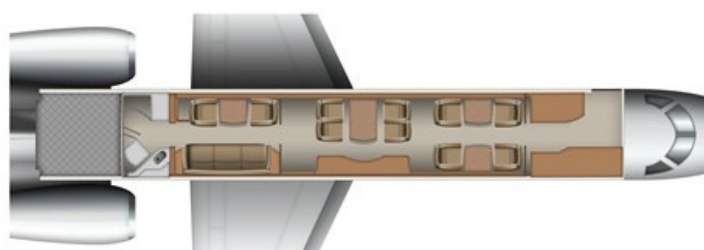
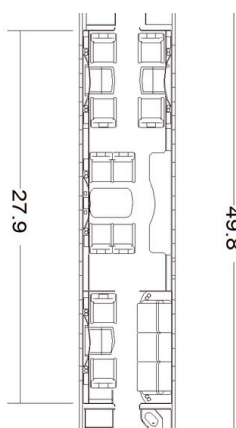
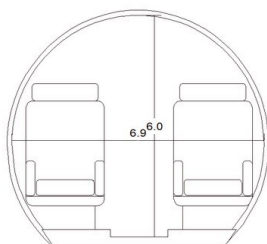
RANGE	AVERAGE SPEED
3,429 nm	406 kts
ENDURANCE	PASSENGERS
8.45 hrs	4 people

Maximum Cruise

RANGE	AVERAGE SPEED
3,183 nm	429 kts
ENDURANCE	PASSENGERS
7.42 hrs	4 people

SEATS FULL RANGE	3,091 nm
FERRY RANGE	3,485 nm

5. Interior



PASSENGERS

13 people

CREW

2 people

AREA PER PASSENGER

76.2 cu ft/person

CABIN VOLUME BREAKDOWN

1,656 cu ft

991 cu ft

665 cu ft

200 cu ft 400 cu ft 600 cu ft 800 cu ft 1,000 cu ft 1,200 cu ft 1,400 cu ft 1,600 cu ft 1,800 cu ft

■ Passenger ■ Misc Space

TOTAL CABIN AREA

1,656 cu ft

PASSENGER AREA

991 cu ft

MISC SPACE (GALLEY, LAV, ETC.)

665 cu ft

CABIN WIDTH

6.92 ft

CABIN LENGTH

49.8 ft

CABIN HEIGHT

6 ft

TOTAL BAGGAGE AREA

286 cu ft

INTERNAL

286 cu ft

EXTERNAL

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DOOR

14 sq ft

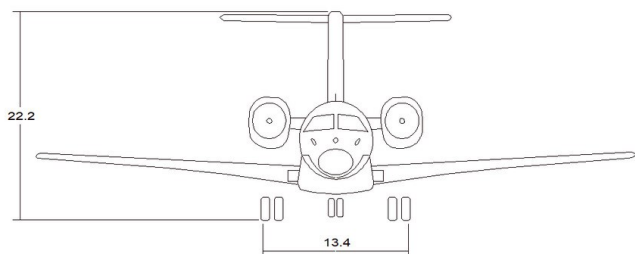
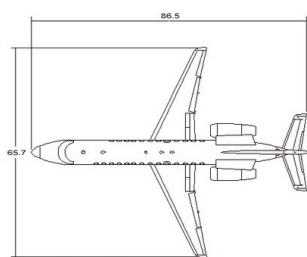
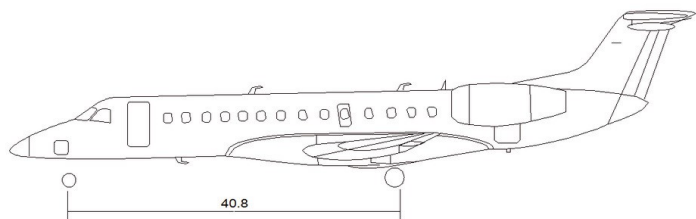
WIDTH (DOOR)

2.5 ft

LENGTH (DOOR)

5.6 ft

6. Exterior



WINGSPAN

65.7 ft

FUSELAGE

86.5 ft

POWERPLANT

2 Rolls Royce AE 3007A1E

THRUST

7,953 lb

THRUST REVERSER

Standard

7. Equipment

AVIONICS

Honeywell Primus Elite

COCKPIT VOICE RECORDER	Standard
FLIGHT DATA RECORDER	Standard
EICAS	Standard
GROUND WARNING SYSTEM	EGPWS
TRAFFIC WARNING SYSTEM	TCAS 2000
MAINT DIAG SYS	Standard
VHF 8KHZ SPACING	Standard

AUXILIARY POWER UNIT

Standard

MEETS STAGE 3 NOISE LEVELS	Yes
REGULATORY CERTIFICATION	2002 (STC) Original type certificate in 1996 for EMB 145
IFR CERTIFIED	Yes
PRODUCTION	2002 - 2015
SINGLE POINT REFUEL	Standard
EXTERNAL LAV. SERVICE	Standard