

A Primer on the Business Aviation Industry

Overview

Whitepaper Series

► A Primer on the Business Aviation Industry

- *Understanding Business Aviation's Costs*
- *The True Cost of Commercial Air Travel*
- *Analyzing Your Air Travel Budget For Savings*

Corporate travel managers and business travelers are constantly searching for better travel alternatives, whether it is for their air travel, car service, or lodging. Business travelers are primarily motivated by efficiency, convenience, and value for their travel dollar. Corporate travel managers, while focused on these same travelers' goals, are also driven to improve their companies' bottom line – that is, maximizing employee productivity (increasing revenue) while optimizing travel budgets (lowering costs). Finding better “expense productivity”, or maximizing their company's incremental revenue to travel spend ratio, is a key goal of corporate travel managers who increasingly find themselves reporting up through procurement and/or finance department heads.

This four-whitepaper series explores business aviation and its ability to help companies achieve these travel goals. The first step, and the aim of this whitepaper, is to familiarize the reader with the business aviation industry from a corporate traveler manager's perspective. How big is the industry? How many people use business aviation? Who are the providers of business aviation services? A basic familiarization with the size and players in this industry is a good first step to exploring business aviation alternatives for your company. Subsequent whitepapers will go into more detail about the costs of business aviation, the true cost to businesses of commercial aviation, and an approach for determining whether business aviation can help improve your company's bottom line.

business aviation alternatives

First, we'll briefly review the alternatives available to travelers and businesses to travel by private jet. A more detailed discussion of each alternative's costs is

covered in the next whitepaper titled, “Understanding Business Aviation Costs”. The following are the most common forms of business aviation travel:

- ▶ **Ownership** – A business purchases an aircraft and employs a flight department to manage all aspects of aircraft operation. Unlimited use of the aircraft is available within constraints of the aircraft, operating budget and flight department personnel.
- ▶ **Managed/Shared Ownership** – One or more businesses contract with an aircraft management company to operate an aircraft that they have purchased. Management fees are charged for outsourced activities related to aircraft operation. Use of the aircraft is generally unlimited as in full ownership unless the aircraft is shared with other owners or chartered out by the management company.
- ▶ **Fractional Ownership** – A business makes an asset purchase of a fraction, typically in 1/16th share increments, of an aircraft that is managed and operated by the fractional management company. Management and flight hour fees are charged while annual use of the aircraft is determined by the ownership stake – typically a 1/4th share will provide 200 hours, 1/8th 100 hours, etc.
- ▶ **Jet Card/Bulk Charter** – A business purchases flight time in bulk directly from an operator or through a broker to be used within an annual timeframe. Jet cards typically start at 25 hours and can go up to 100 hours. The aircraft is managed and operated by an FAA certificated Part 135 air carrier (charter operator).
- ▶ **Charter** – A business contracts with a Part 135 air carrier (charter operator) to conduct a flight or series of flights. Costs are quoted by the charter operator specific to proposed flight.

There are also **Charter Brokers** through which charter flights can be arranged. Charter Brokers can provide a valuable service in helping businesses choose the most effective aircraft, charter operator, and

services for a desired flight. Ultimately, the designated charter operator through which a Charter Broker arranges a flight is responsible for operation of the flight.

operators and aircraft

The business aviation industry (the use of general aviation aircraft via charter, jet card, fractional share, aircraft ownership or managed aircraft ownership to conduct business) is entirely served by Part 91 Operators (including Fractional) who operate aircraft for owners; corporate owned flights departments (also classified as Part 91); and

Part 135 Operators which charter out aircraft on behalf of aircraft owners. Very few Operators actually own the aircraft they are contracted to fly but many can perform both Part 91 (managing/flying) and Part 135 (chartering/flying) activities. According to the FAA, of 10,064 U.S. Operators (Part 91 & Part 135) in the U.S. in

2009, 2,228 are Part 135 Operators and 25 are Fractional Operators (dominated by 4 companies - NetJets, FlexJet, Flight Options, and CitationAir). Approximately 400-500 Part 135 Operators actively promote and sell their charter services as well as are recognized by one of the major Safety Audit agencies – IS-BAO, ACSF, Wyvern, ARG/US.

As for aircraft used in providing business aviation services, turboprop aircraft and business jets comprise a vast majority of the business aviation fleet. Conversely, most of the overall U.S. turboprop aircraft and business jet fleet is used for business travel purposes as can be seen in these 2008 statistics from the General Aviation Manufacturer’s Association (GAMA):

	Turboprop		Business Jet	
	# of Aircraft	Hrs. Flown (000's)	# of Aircraft	Hrs. Flown (000's)
Business	1,562	238	835	194
Corporate/Executive	2,103	471	6,088	1211
Fractional	55	50	982	884
Charter/Air-Taxi	1,393	457	1,724	662
Business Aviation Fleet	5,113	1,215	9,629	2,951
Total U.S. Fleet	8,906	2,457	11,042	3,600
% Used in Bus. Aviation	57.4%	49.5%	87.2%	82.0%

Business – Individual or group use for business transportation *without* a paid, professional crew
Corporate/Executive – Individual or group business transportation *with* a paid, professional crew
Fractional - Transportation on Fractional company operated aircraft (assume: 900 hours/aircraft/year)
Charter/Air Taxi – FAR Part 135 *on-demand* passenger and all cargo operations

travelers and flights

With a better understanding of the providers and aircraft fleet supporting business aviation, let’s examine the business aviation traveler market. Before analyzing the passenger market, it’s worth considering a few general observations.

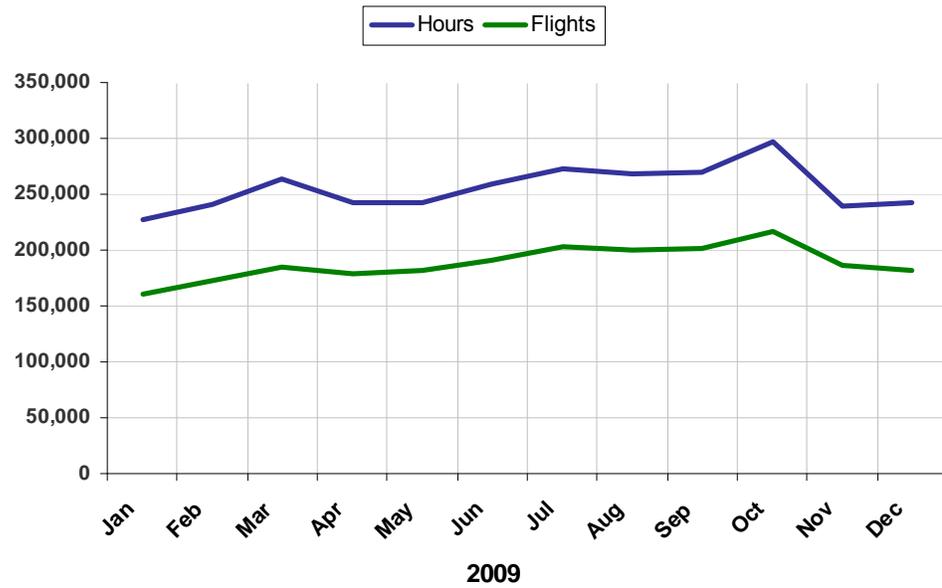
The National Business Travel Association (NBTA) last conducted a survey of its corporate members to determine business aviation usage and found that 56% of companies used business aviation in 2006. This compared with 33 percent in 2004 and

27 percent in 2002 so corporate adoption of business aviation has been trending upward. In further support of this trend, NEXA Advisors conducted a survey in 2009 of active S&P 500 companies from 2003-2009 and found that over 70% (323 of 423 companies) are using business aviation in one form or another.

So, how many people are traveling via business aviation alternatives? First let’s look at the last full year for which business aviation flight data is available, 2009. The

below data was collected by the Aviation Research Group/US (ARG/US) based on all business jet and turboprop FAA reported flight data for Part 91 and 135 Operators.

The below chart plots total hours flown and flights operated on the business aviation fleet in 2009:



Source: Aviation Research Group/US TraqPak Data

According to this ARG/US data, there were approximately 3 million Flown Hours and 2.26 million Flights, just under 200,000 flights per month on average, in 2009.

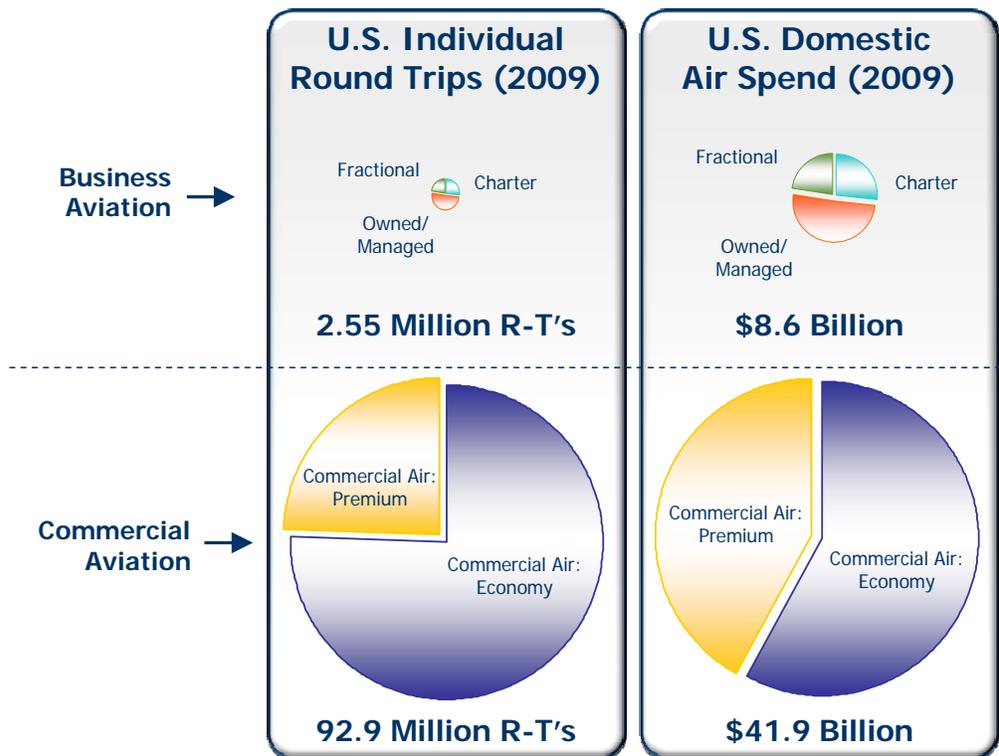
In order to take this analysis further and determine overall spending and person trips on business aviation travel, there are a few other data points needed. According to a NBAA and GAMA sponsored Harris Interactive poll conducted in 2009 (surveyed 350 pilots, flight department managers and directors of aviation business aircraft, plus 289 business aircraft passengers), the average passenger load per trip was 3.4 within an average aircraft seating capacity of 7.7. So, we'll assume this load factor on midsize jets and turbo props where seating capacity is typically 6-10 people and adjust

slightly higher for Heavy/Large jets (3.9) and lower of Light/Small jets (2.8).

We then consider the average % split of overall flight hours and flights across heavy, mid, light categories of business jets and turboprop aircraft. Finally, by assuming conservative market hourly rates/costs for each category of aircraft (these hourly rates are more reflective of costs vs. retail rates charged for jet time), we can draw conclusions about the total business aviation passenger market as follows. Note that 32% of total flights are assumed to be flown empty (Empty Leg %) so that passenger occupied flights account for 78% of all flights.

	Heavy/Large	Midsize	Light/Small	Turbo Prop	TOTAL
Hours/Flights % Split	16%	27%	27%	30%	100%
Hours (000's)	480	810	810	900	3,000
Hourly Rates/Costs	\$5,000	\$3,200	\$2,500	\$1,800	
\$ Spent (\$000's)	\$2,400	\$2,592	\$2,025	\$1,620	\$8,637
Empty Leg %	32%				TOTAL
# Flights (000's)	362	610	610	678	2,260
Average Pax Count	3.9	3.4	2.8	3.4	
# Person Flights (M)	0.96	1.41	1.16	1.57	5.10

Therefore, approximately \$8.6B was spent and approximately 5.10 million person flights, or 2.55 million round-trips, were taken by business aviation means in 2009. To put this in perspective, the charts below compare these numbers to commercial air business travel.



While business aviation represents a tiny portion of overall business travel trips (3-4%), spending on business aviation comprises 15-20% of commercial airline spending. This

represents a significant amount of spending in which there may be opportunities for savings, a subject area explored more fully in subsequent whitepapers.

conclusion

We hope this whitepaper has provided you with a decent snapshot of the business aviation industry – the types of service, number of providers, make-up of the fleet, and size of the passenger market. This vibrant industry helps companies to be more effective and its travelers to be more productive with their time. In fact, almost 2/3 of business aviation passengers indicate its unique ability to accommodate their business scheduling needs as their primary justification. Companies almost universally justify its relatively high costs by the

productive time gains it provides its high value employees.

However, corporate travel managers and finance officers are putting an increasing focus on return and value for each dollar of travel spending. The rest of this whitepaper series will explore the costs underlying business aviation, provide a true-cost comparison with commercial air travel and suggest an approach for analyzing potential savings available with business aviation alternatives.

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References

1. American Express Business Travel press release, November 2009.
2. Aviation Research Group / U.S., Inc. *TraqPak Business Aircraft Annual Summary* (www.traqpak.com), 2009.
3. Business Travel News. *2010 Business Travel Survey*. New York: Business Travel News, 2010.
4. CharterX press release, September 2009.
5. Federal Aviation Administration. *Business Jet Report*. Washington: Federal Aviation Administration, 2009.
6. Federal Aviation Administration. *General Aviation and Air Taxi Activity Survey CY2009*. Washington: Federal Aviation Administration, 2009.
7. General Aviation Manufacturer's Association. *General Aviation Statistical Databook & Industry Outlook, 2009*. Washington: General Aviation Manufacturer's Association, 2009.
8. IBISWorld Industry Report 48111b. *Domestic Airlines in the U.S.* Santa Monica, CA: IBIS World, February 2010.
9. IBISWorld Industry Report 48121. *Non-scheduled Air Transportation in the U.S.* Santa Monica, CA: IBIS World, May 2009.
10. National Air Transportation Association. *2009 General Aviation Businesses & Services*. Washington: National Air Transportation Association, 2009.
11. National Business Aviation Association and General Aviation Manufacturer's Association. *The Real World of Business Aviation: A Survey of Companies Using General Aviation Aircraft*. New York: Harris Interactive, 2009.
12. National Business Travel Association (NBTA) survey of corporate travel buyers, 2006.
13. National Business Travel Association. *General Aviation Options for Business*. Washington: National Business Travel Association and NBTA Aviation Committee, 2009.
14. NEXA Advisor's. *Business Aviation – An Enterprise Value Perspective*. Washington: NEXA Advisors, LLC, 2009.
15. PhoCusWright. *U.S. Corporate Travel Distribution Report, 4th Edition*. Connecticut: PhoCusWright, Inc., 2009.
16. TIA 2006 U.S. *Domestic Business and Convention Travel Report*. Washington, U.S. Travel Association, 2006.
17. U.S. Bureau of Transportation Statistics (www.bts.gov), 2009.