



BRIFO
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Foley Forecast

Business Jet Outlook

Description

The Brian Foley Associates (BRiFO) Consultancy Practices Exclusively in General Aviation



Spot-On.

Background

- Consultancy founded in 2006 by Brian Foley
- Focus in general aviation with a specialty in business aviation
- Sample investment community engagements:
 - Market due diligence, market research and forecasting, transaction support, industry analysis and outlook, private placement memorandums, buy-side/sell-side assignments
- Sample corporate engagements:
 - Marketing plans, market research and forecasting, strategic planning, new product evaluation and positioning, executive search, online surveys, market evaluation and assessment, third-party opinion
- Speaker services at meetings and events
- Comprehensive industry contacts and in-house industry data bases



The Firm Is Led By Brian Foley

“OEM Operational and Consulting Experience”



Brian Foley, President

Background

- **Former Officer overseeing Worldwide Marketing at major business jet manufacturer for over 20 years**
- **Recognized thought leader in general aviation**
- **Cited in numerous worldwide media sources including the Wall Street Journal, Financial Times, BusinessWeek, USA TODAY, TIME Magazine, Reuters, The New York Times, Boston Globe**
- **Member of Transportation Research Board (TRB), Wings Club, Wichita Aero Club, New Jersey Aviation Association, National Business Aviation Association (NBAA), Airplane Owners and Pilots Association (AOPA)**
- **Frequent speaker at business aviation conferences and off-site meetings**
- **Instrument rated private pilot**
- **Began career at The Boeing Company in Flight Test and Marketing capacities**
- **MBA Marketing, Seattle University; BS Aerospace/Mechanical Engineering Syracuse University**
- **Wharton Executive Education – Corporate Governance**



Previous Project Involvements Cover A Broad GA Spectrum

Project	Involvement	Comments
Raytheon Aircraft Sale	Part of team representing one of 3 investors	Our conservative approach to forecasting led investor not to overbid. The other “winning” bidder has seen the value of their investment drop by two-thirds.
Aircraft Completions	Commissioned by investor to write market outlook for cabin window shades	General aviation overview used by investor as part of their Private Placement Memorandum (PPM) seeking other investors
General Aviation Aftermarket Parts Provider	Wrote marketing plan and currently provide follow-on marketing services	Fast-growing company matured to the point of needing a more formalized marketing plan
Cabin Components	Assisted in study regarding future use of air bag seat belts in cabin	Required becoming familiar with FAA certification requirements pertaining to business jet cabin interiors
Large FBO Services Chain	Participated in diligence of one of the largest FBO and completion center transactions to date	Developed first of its kind worldwide fuel consumption forecast by region and cabin class. Provided regional fleet statistics, growth, utilization, movements and charter demand forecast.

Summary

- Broad experience and resources in general aviation industry research
- Ability to quickly size up specialty markets in GA and offer quality third party perspective
- Customized to clients’ needs and concluded on time



The Foley Forecast Tends to be More Conservative Than Others In Good Times, More Optimistic in Bad



Spot-On.

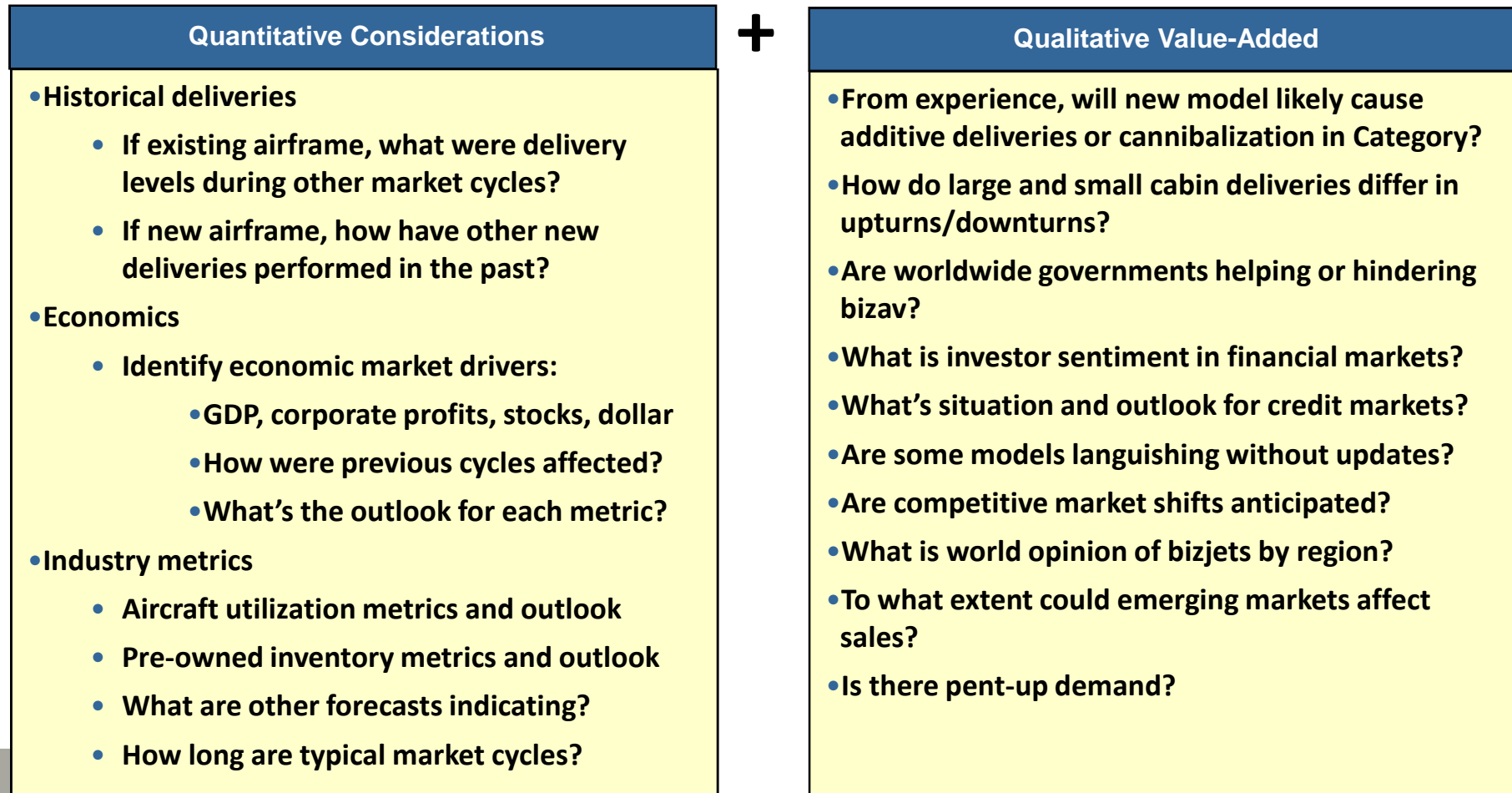
Background

- Being independent, not in position of having to placate shareholders, management and OEM customer supply chain
- In September, 2008 first to publicly warn of severity of impending bizjet downturn. This outlook widely criticized at the time.
- Some other forecasts never show a normal cyclical down cycle in next 10 years



The Forecast Uses a Qualitative, Holistic Approach Based On Quantitative Evidence and Industry Experience

Cross-Impact Method Combines Multiple Inputs To Estimate Collective Effect



Example: Gulfstream 500/550 Forecast Thought Process

(Figures for Illustrative Purposes Only)

Aircraft Category	New Worldwide Deliveries											
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Category 6												
Gulfstream 500/550	41	43	29	28	24	20	12	12	11	13	12	12
Gulfstream 650	0	0	0	0	15	22	28	32	36	36	33	32
Dassault Falcon 7X	21	32	27	26	25	24	23	24	24	24	23	23
Bombardier Global Express XRS	26	28	18	16	17	17	18	18	16	17	16	16
Total Category 6	88	103	74	70	81	83	81	86	87	90	84	83

Sample Delivery Estimate Considerations

- **Historical deliveries**
 - **GV series: 1996 (3), 1997 (29), 1998 (29), 1999 (31), 2000 (34), 2001 (35), 2002 (32), 2003 (27), 2004 (30), 2005 (38), 2006 (), 2007 (40), 2008 (41) 2009 (43)**
 - **Takeaway: In “normal times” GV deliveries in the high 20’s/low 30’s and high 2008/2009 levels are an anomaly of a market peak**
- **Economics and industry metrics**
 - **Going forward, most outlooks portray improving GDP, corporate profits, and stock indices. Pre-owned inventory is decreasing and utilization increasing. Low dollar.**
 - **Takeaway: Slow growth in deliveries until next cycle downturn**
 - **Sales which pick up in late 2010/early 2011 won’t show as deliveries until 2012.**
- **New Entrants**
 - **Gulfstream G650 delivers 2012**
 - **Takeaway: Being from the same manufacturer and cabin class, experience says the G650 will cannibalize the G500/550 thus reducing out-year deliveries**



Case Study: Cross-Impact vs. Econometric Forecast Methodology

Date	Foley (Cross-Impact)	Honeywell (Econometric)
May, 2008		13,000 jets 10-year forecast
September, 2008	Publicly warns downturn to be severe/longer than expected	
October, 2008		17,000 jets 10-year forecast
October, 2008	Publicly denounces other forecasts as overly-optimistic	
October, 2009		11,000 jets 10-year forecast

Observations

- In September, 2008, cross-impact allows Foley to integrate Wall Street decline, international equities downturn and credit freeze into outlook
 - First to call severity and length of downturn
- Honeywell forecast relied on grossly inaccurate GDP forecasts from Global Insight
 - Caused them to miss the turn and reduce their forecast by 35%
- Cross-impact method allows flexibility to incorporate pertinent non-econometric developments and observations



Other Sample Cross-Impact Forecasting Successes

Date	Foley Outlook	Result
January, 2009	Publicly warned of shaky business jet backlogs	\$1.5B Bombardier fleet cancelled 9/09 Textron class-action suit soft backlogs 8/09 Hawker backlog \$7.6B end '08 to \$4.9B end '09 Cessna backlog \$14.5B end '08 to \$3.7B 2Q '10
March, 2009	Publicly advised pre-owned inventory to peak mid-year	Peaked July, 2009
July, 2009	Publicly predicted net-negative industry orders	Major manufacturers indicated negative order year, while others can be inferred
January, 2010	Advised industry was quietly recovering	Still TBD, but indicators trending positively: GDP up, takeoff/landings up, GDP up...

Summary

- Method allows the combining of quantitative indicators with qualitative observations and experience to produce a cause and effect outlook scenario
- These events overlooked when using pure econometric modelling
- While other analysts discuss what's happened in the past, we put regularly put our consultancy's reputation on the line by publicly making predictions that others are unable/unwilling to.



Contents of Full Report

- **Worldwide business jet distribution map by continent**
- **Model universe by manufacturer and size matrix**
- **Gross historical delivery trends**
- **2010 OEM market share by units and value**
- **10-year delivery forecast by units and value with CAGR**
- **Market drivers of business jet sales**
- **Non-North American demand trends and forecast**
- **10-year unit forecast by cabin size category and model**
- **10-year unit and value forecast by manufacturer**

