



JETNET iQ *Snap!* Report

Q4 2014 Summary Report

Prepared for:
JETNET iQ Global Business Aviation Survey Respondents

December 31, 2014

JETNET iQ Snap!: 4th Quarter 2014 - Private & Confidential

Thank You, Merci, Obrigado, Muchas Gracias, תודה, Danke, ありがとう, Grazie, شكرا, спасибо, 謝謝

Thank you for participating in our quarterly JETNET iQ Global Business Aviation Surveys. Your opinions and inputs are vital to the many people in the industry tasked with designing and developing aircraft, providing aviation services on the ground and in the air, financing / selling / and buying aircraft, and creating the operational framework for safe and efficient flight.

JETNET has been a trusted source of aviation market intelligence since 1988. From humble beginnings in Utica, NY, we have built one of the finest research teams and business aviation databases in the industry. Our people are professional and dedicated, and our data products and services are unique and innovative. We are committed to continuous improvement as

we provide our clients with unprecedented global coverage, data connectability, and market insights wherever they are.

We continue to focus on new products and services to keep our customers better informed. “Know More” – JETNET’s familiar tagline – is what we hope you will agree is amongst the primary benefits that we bring to the aviation community. Thank you again for participating in our quarterly survey - we hope this JETNET iQ *Snap!* Report is useful to you. Please plan to join us at ABACE 2015 (Apr. 14-16 in Shanghai), EBACE 2015 (May 19-21 in Geneva), and the 2015 JETNET iQ Summit (June 23-34 in New York City), on the eve of the New York-area NBAA Regional Forum (June 25 in Teterboro, NJ).

Navigating by JETNET iQ

JETNET iQ *Snap!* Reports are one of the ways we would like to say “thank you” for the time and opinions you provide us when participating in our quarterly JETNET iQ Global Business Aviation Surveys. With seemingly endless demands on your time, we appreciate your help and want to provide you useful information in return. In the attached pages you will find some of the latest market intelligence that we have collected and analyzed. Our goal is to be a resource to identify, analyze, and highlight issues that matter to the business aviation community. As an industry leader and aviation professional, you make a difference by participating in these surveys, providing us with objective and subjective perspectives into the state of the worldwide business aviation industry.

JETNET iQ *Snap!* Reports reflect the collaborative insights of you, our

respondents, and our JETNET iQ research team. Collectively, we have extensive experience in business aviation, from executive offices and boardrooms, to the cubicles, factory floors, design centers, situation rooms, cockpits, service hangars and flight lines of the industry. Much like a magnifying glass concentrates light and energy, JETNET iQ draws from a diverse set of intelligence sources to bring the power of this experience into sharp focus.

Since early 2011, our JETNET iQ research team has been reaching out to you – fixed-wing turbine aircraft owners and operators - with our quarterly JETNET iQ Global Business Aviation Surveys. As always, we hope that this latest issue of our JETNET iQ *Snap!* Report is insightful to you.

Rollie Vincent
JETNET iQ Creator / Director
rollie@jetnet.com

JETNET

- Founded in 1988
- Privately-owned family business
- Headquarters in Utica, NY
- 70+ employees (45+ in research)
- Daily contact with aircraft owners and operators globally



JETNET: Worldwide leader in aviation market intelligence

JETNET

- Solutions and services:
 - JETNET iQ
 - Evolution Marketplace
 - Evolution Aerodex
 - Marketplace Manager
 - Sales Price Index
 - Aviation Business Index
 - AvData Reports
 - Helidex
 - Rotodex
 - BigPlanes
- Data coverage:
 - 60,000 business aircraft (fixed and rotary wing)
 - 50,000 commercial aircraft



JETNET: Tracking more than 110,000 business and commercial aircraft worldwide

- about JETNET
- solutions & services
- contact
- testimonials
- alliances
- news
- blog
- videos



- Evolution Marketplace >
- Evolution Aerodex >
- BigPlanes >
- Marketplace Manager >
- Sales Price Index >
- JETNET Mobile >
- JETNET iQ >
- Aviation Business Index >
- AvData Reports >



Founding Member of



>> Know More.

JETNET iQ


- *Intelligence....quarterly*
- Focus: Business aviation research & forecasting
- Main features
 - Surveys – of aircraft owners and operators
 - Reports – of current and forecast market conditions
 - Summits – of industry thought leaders

JETNET iQ Surveys

- Turbine business aircraft owners and operators
- Quarterly
- Global
- On-line
- Multilingual
- Password-protected
- Password-linked

JETNET iQ GLOBAL BUSINESS AVIATION SURVEY - Q1 2015 English

WELCOME




Thank you for agreeing to participate in this survey sponsored by JETNET LLC, the world's leading provider of business aviation market intelligence. Your insights are critical to product and service development that will better meet your evolving needs.

Survey responses:

- 1) Will be strictly confidential
- 2) Will NOT be used in any way to directly market to you or your organization
- 3) Will take approximately 20-30 minutes to complete

PASSWORD:

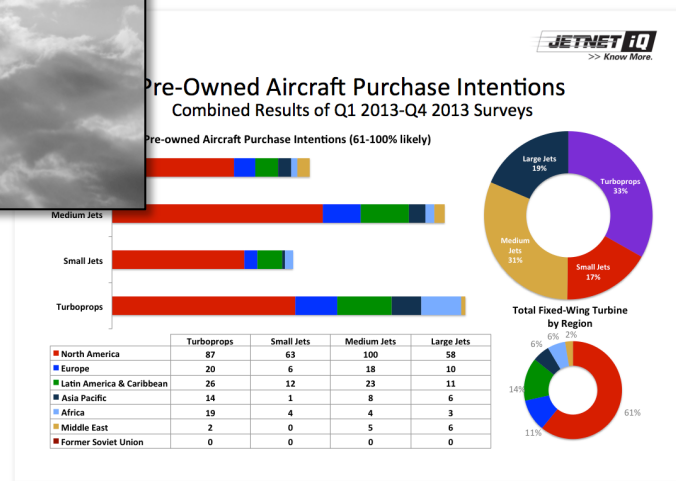
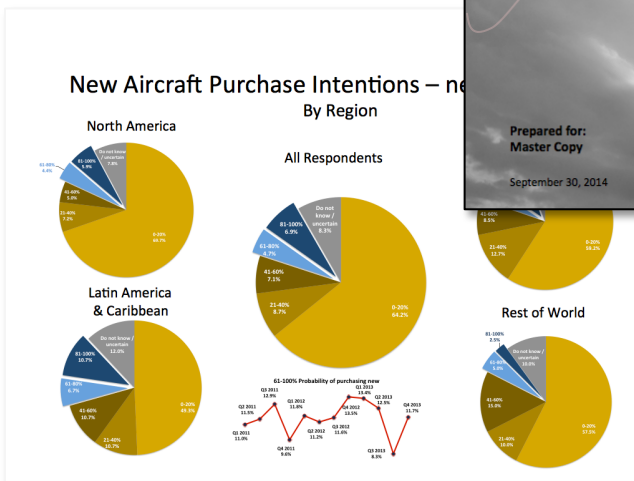
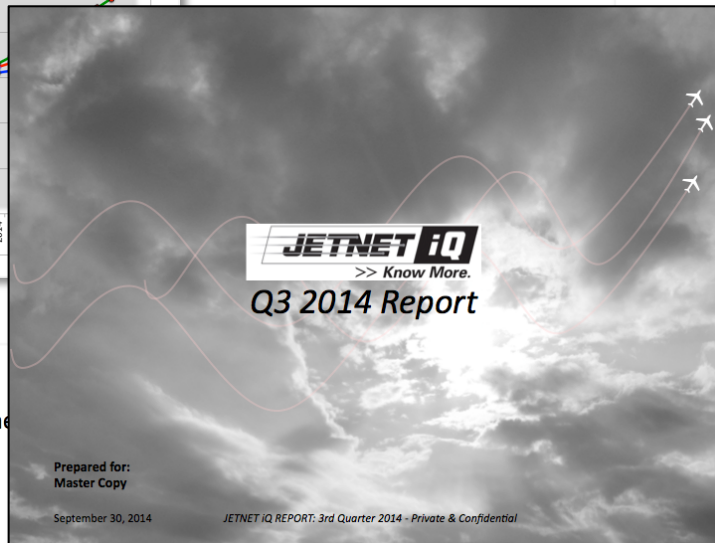
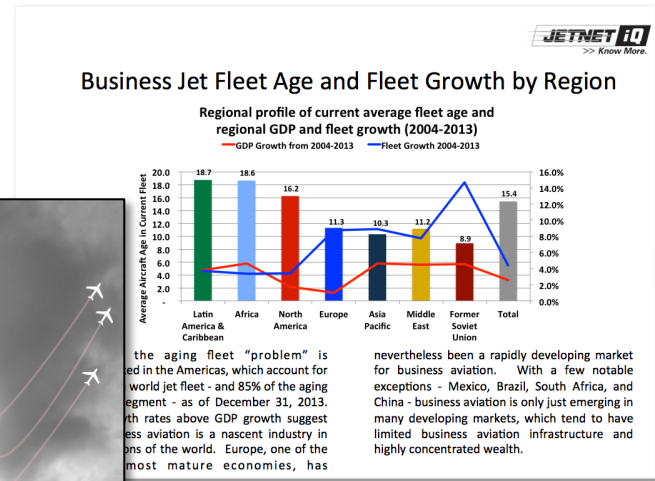
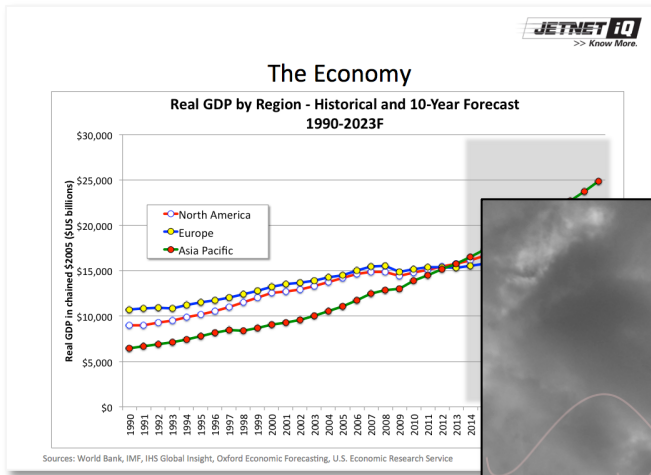
For questions about this survey, please contact:



Global Business Aviation Survey

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 Phone: 1-972-439-2069 (U.S. Central Time)
 Email: rollie@jetnet.com

JETNET iQ Reports



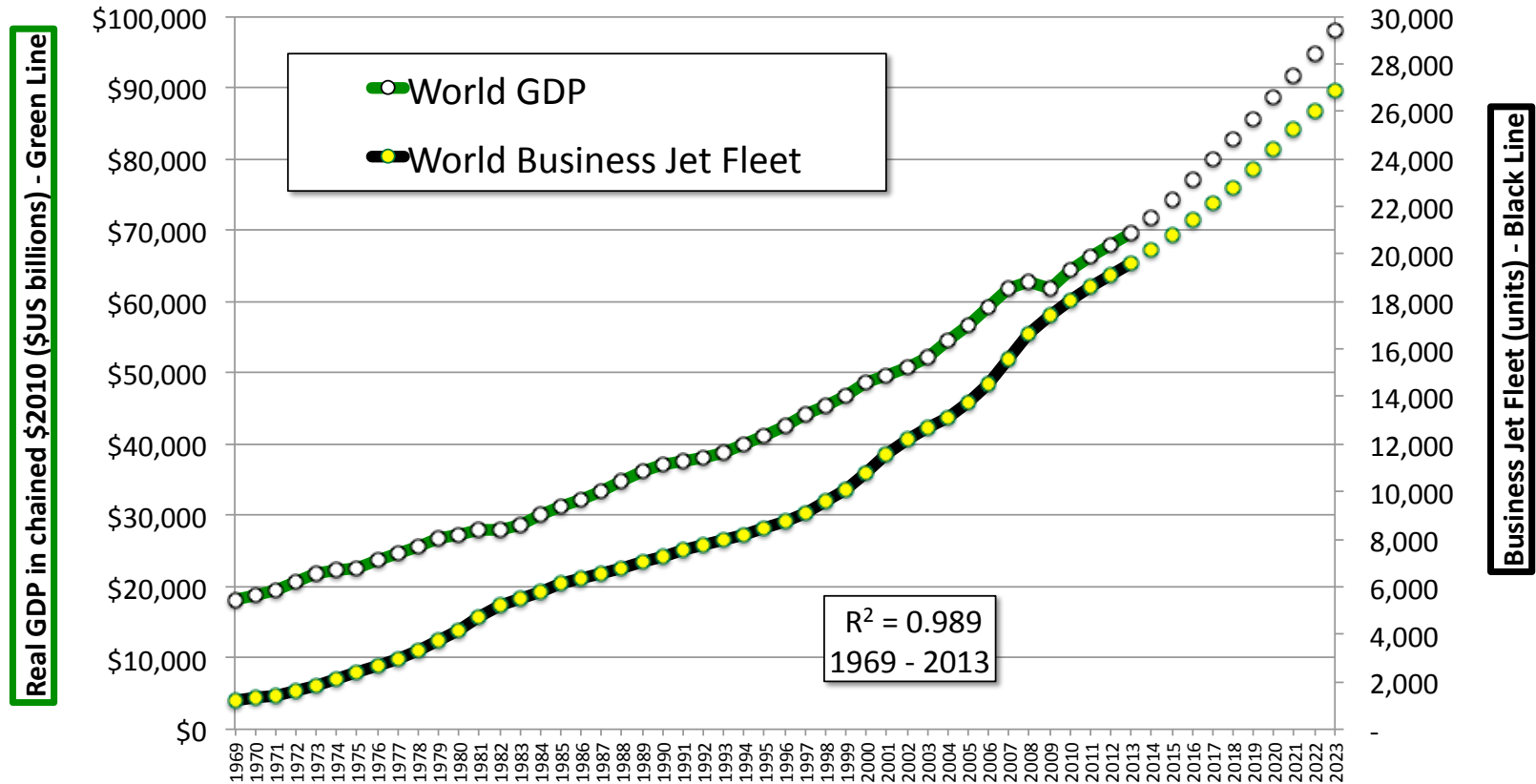
JETNET iQ Summits

- Thought leadership and networking conferences
- 5th Global Business Aviation Summit:
 - June 23-24, 2015 - New York City
 - <http://www.jetnetiq.com/summit.shtml>



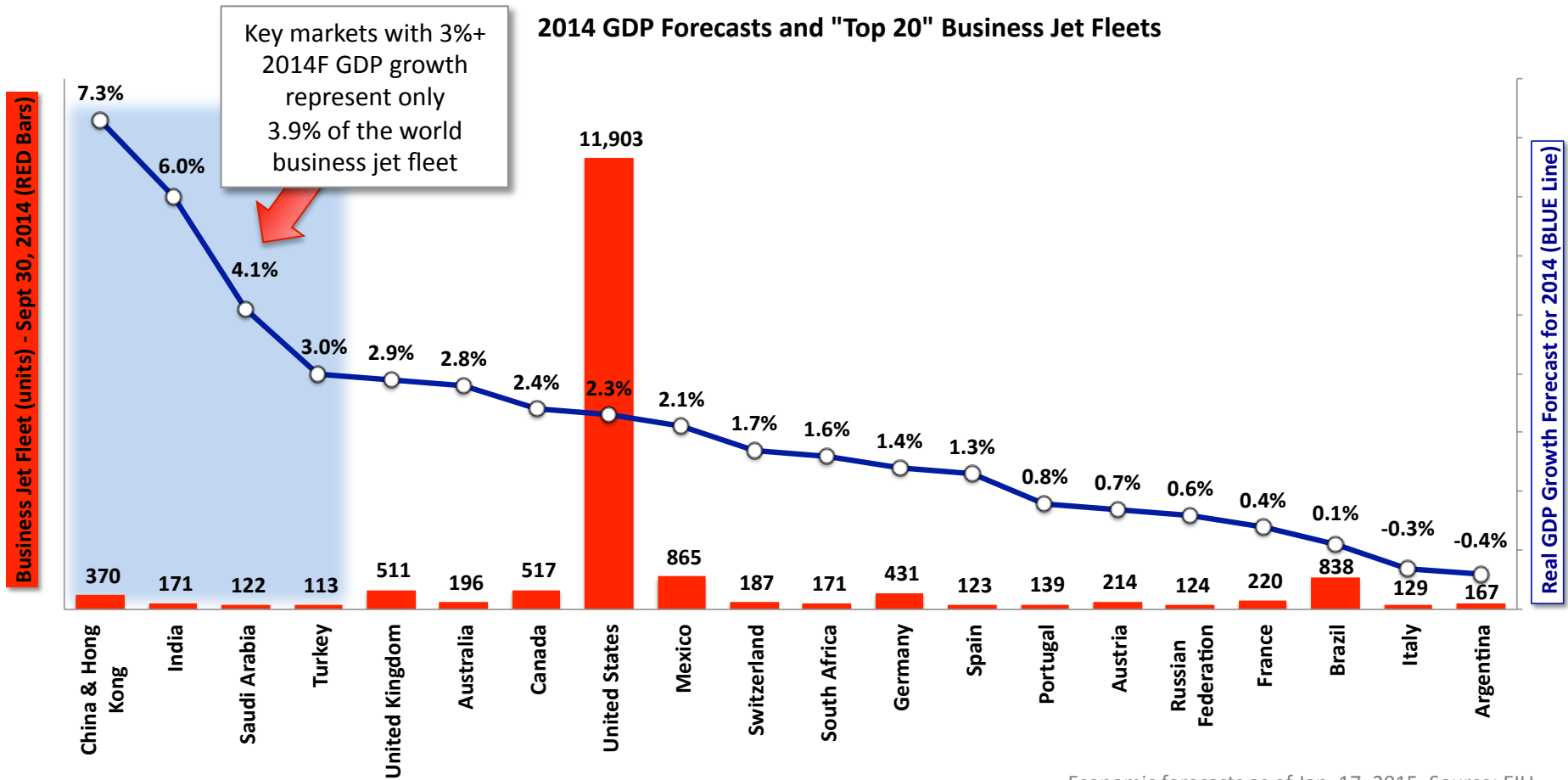
The Economy

World GDP and World Business Jet Fleet



Business jet fleet growth is tightly correlated with world GDP growth

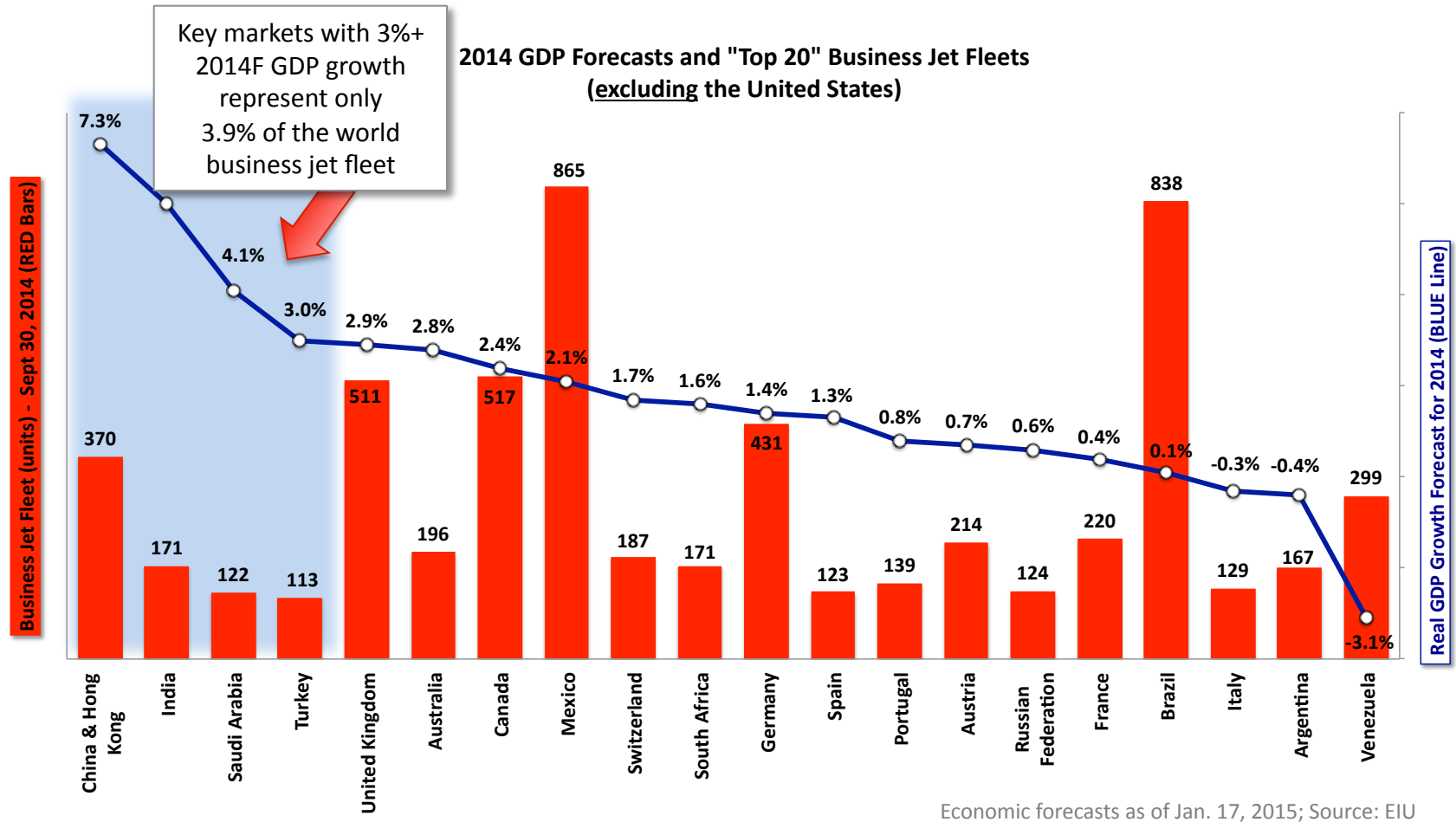
The Economy



Economic forecasts as of Jan. 17, 2015; Source: EIU

"Top 20" business aviation countries have widely divergent economic outlooks

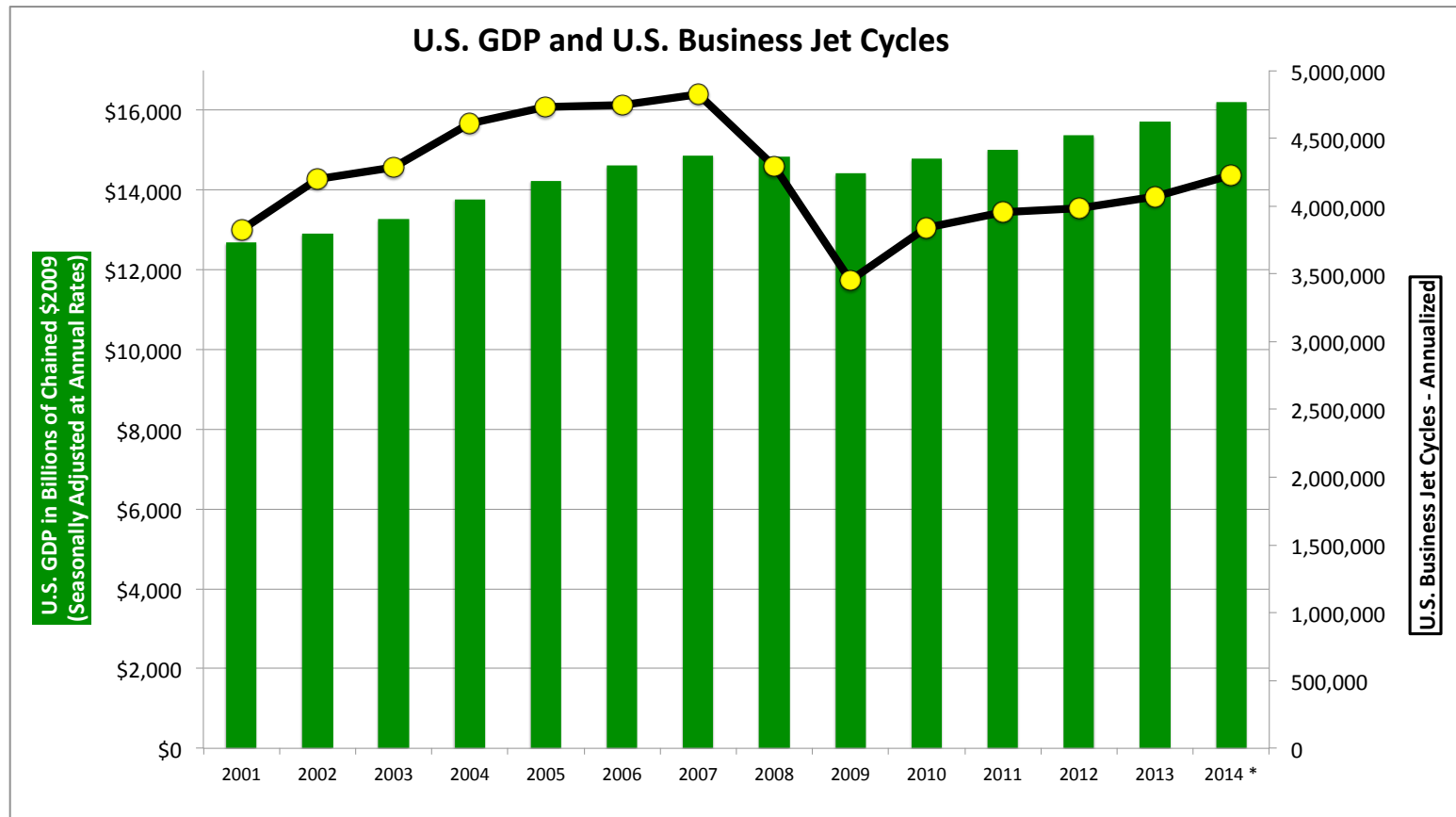
The Economy



Economic forecasts as of Jan. 17, 2015; Source: EIU

Mexico and Brazil have the next largest fleets after the USA; China is fastest growing

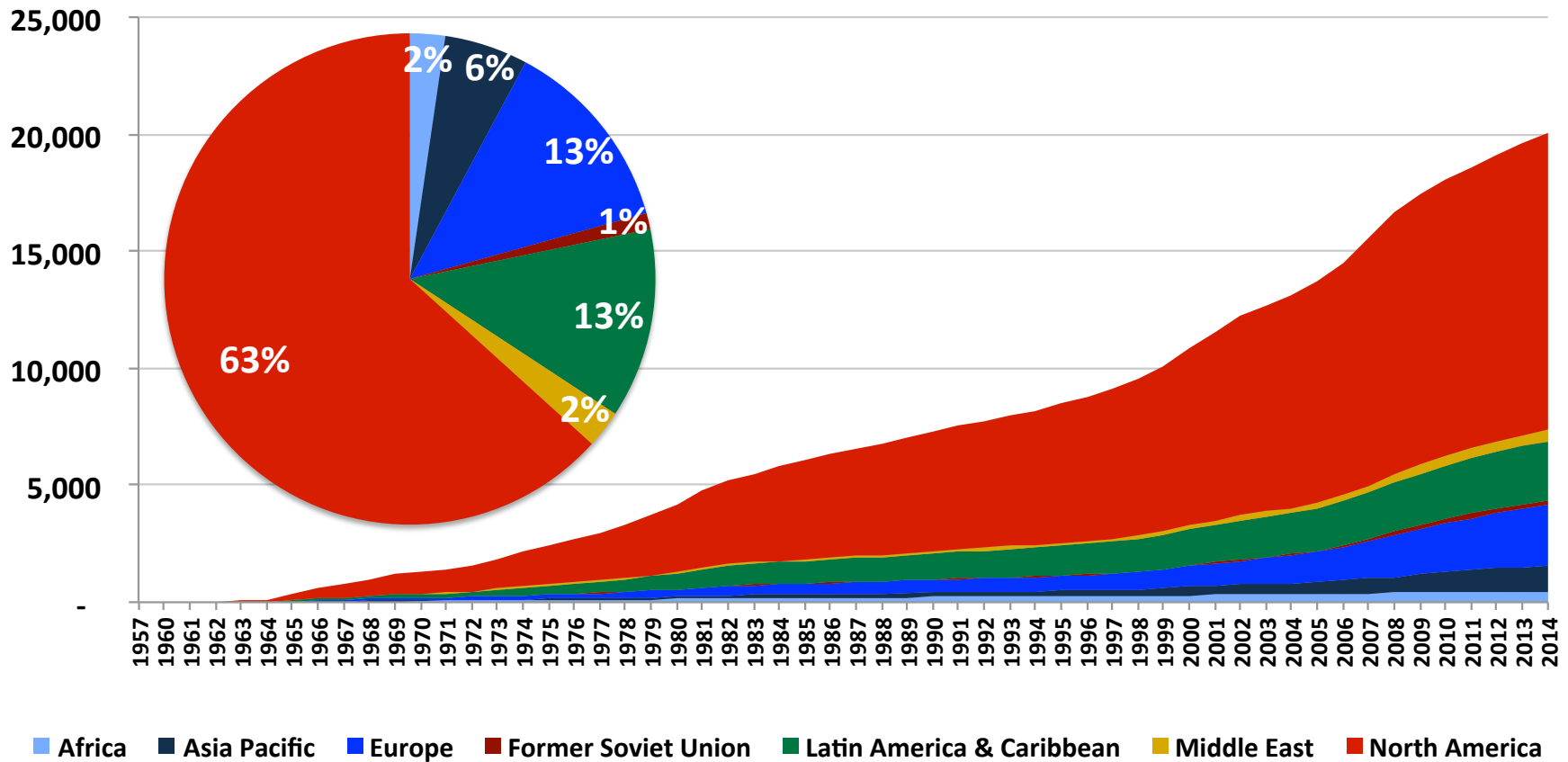
The Economy



Sources: U.S. BEA, FAA

U.S. business jet cycles are steadily recovering, but remain below 2003-2008 levels

Business Jet Fleet by Region



Business Jet Fleet by Manufacturer

NORTH AMERICA OEM	Fleet as of Dec 31 2014
Beechcraft	254
Bombardier	2,769
Cessna Citation	4,463
Dassault Falcon	1,267
Embraer	375
Gulfstream	1,678
Hawker	1,235
Other	667
Total	12,708

EUROPE OEM	Fleet as of Dec 31 2014
Beechcraft	19
Bombardier	588
Cessna Citation	886
Dassault Falcon	466
Embraer	120
Gulfstream	207
Hawker	202
Other	96
Total	2,584

FORMER SOVIET UNION OEM	Fleet as of Dec 31 2014
Beechcraft	-
Bombardier	69
Cessna Citation	19
Dassault Falcon	28
Embraer	23
Gulfstream	19
Hawker	40
Other	15
Total	213

MIDDLE EAST OEM	Fleet as of Dec 31 2014
Beechcraft	4
Bombardier	108
Cessna Citation	59
Dassault Falcon	60
Embraer	37
Gulfstream	93
Hawker	64
Other	72
Total	497

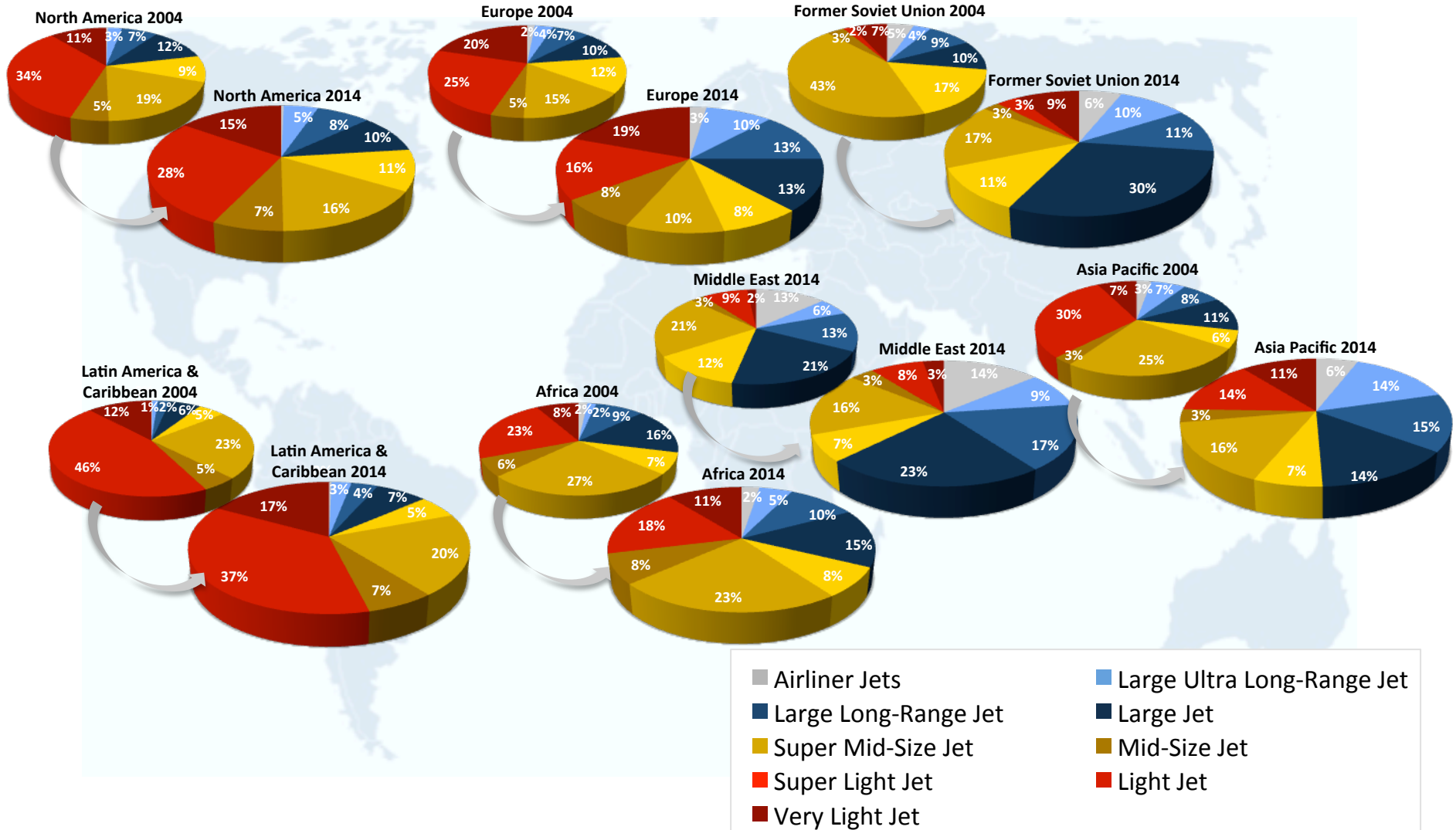
LATIN AMERICA & CARIBBEAN OEM	Fleet as of Dec 31 2014
Beechcraft	70
Bombardier	617
Cessna Citation	824
Dassault Falcon	157
Embraer	194
Gulfstream	184
Hawker	303
Other	161
Total	2,510

AFRICA OEM	Fleet as of Dec 31 2014
Beechcraft	5
Bombardier	88
Cessna Citation	106
Dassault Falcon	61
Embraer	18
Gulfstream	59
Hawker	107
Other	21
Total	465

ASIA PACIFIC OEM	Fleet as of Dec 31 2014
Beechcraft	10
Bombardier	253
Cessna Citation	216
Dassault Falcon	86
Embraer	67
Gulfstream	249
Hawker	148
Other	75
Total	1,104

World business jet fleet was 20,081 jets on December 31, 2014 (preliminary estimates)

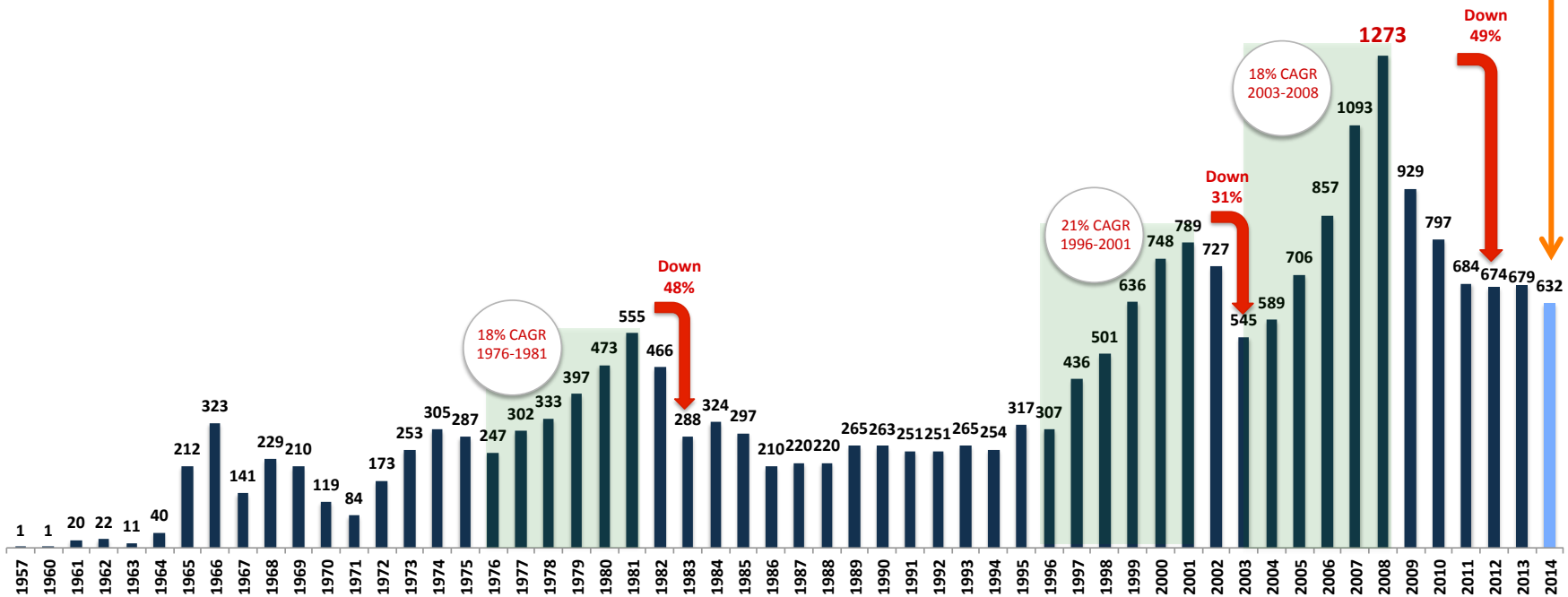
Business Jet Fleet by Size Category



Business Jet Deliveries (units)

Jet Deliveries

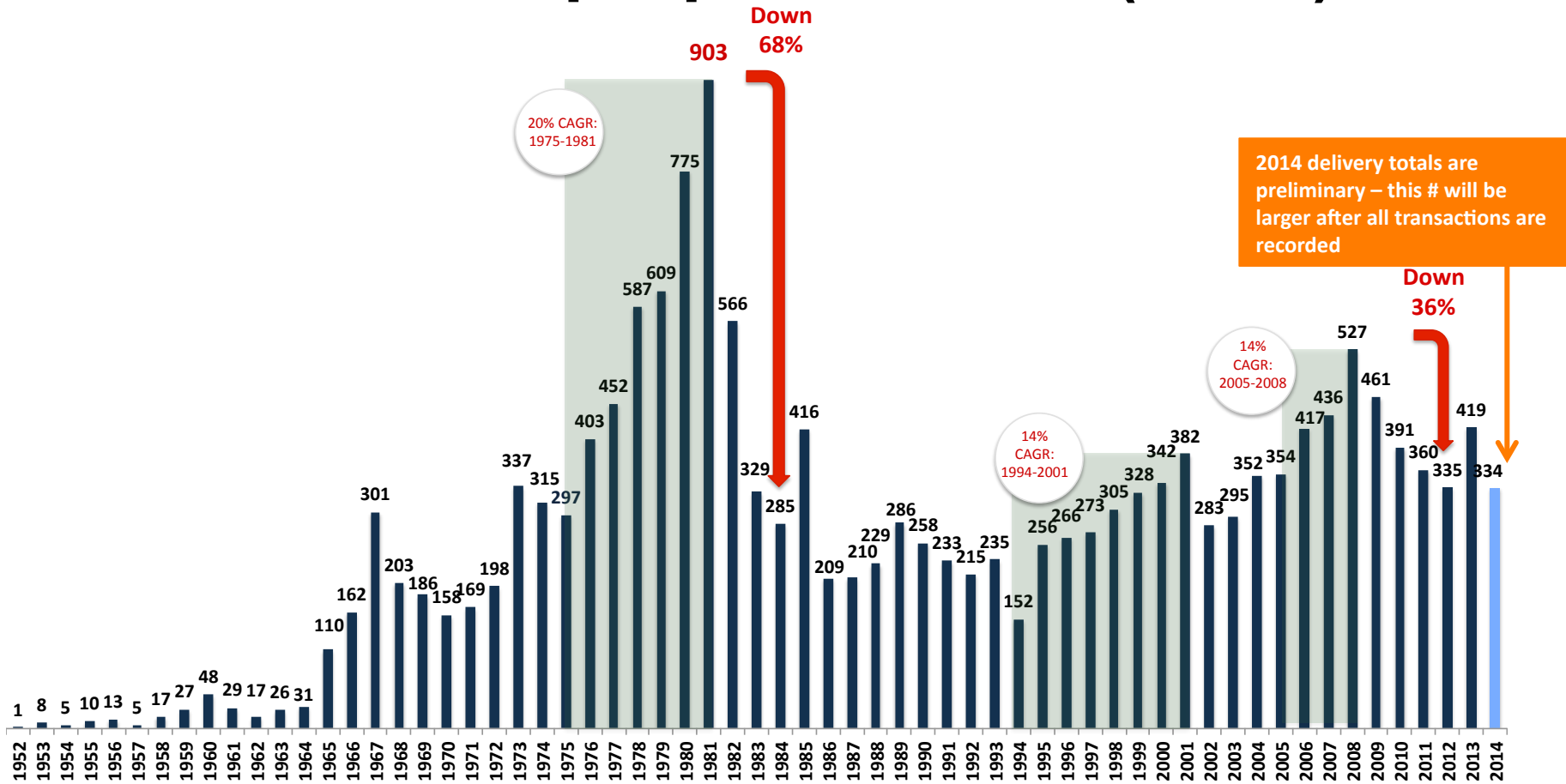
2014 delivery totals are preliminary – this # will be larger after all transactions are recorded



Note: 2014 deliveries total are preliminary.

**New business jet delivery units have remained relatively flat for 4 years;
New business jet delivery value in 2014 was about \$22B based on equipped list prices**

Business Turboprop Deliveries (units)



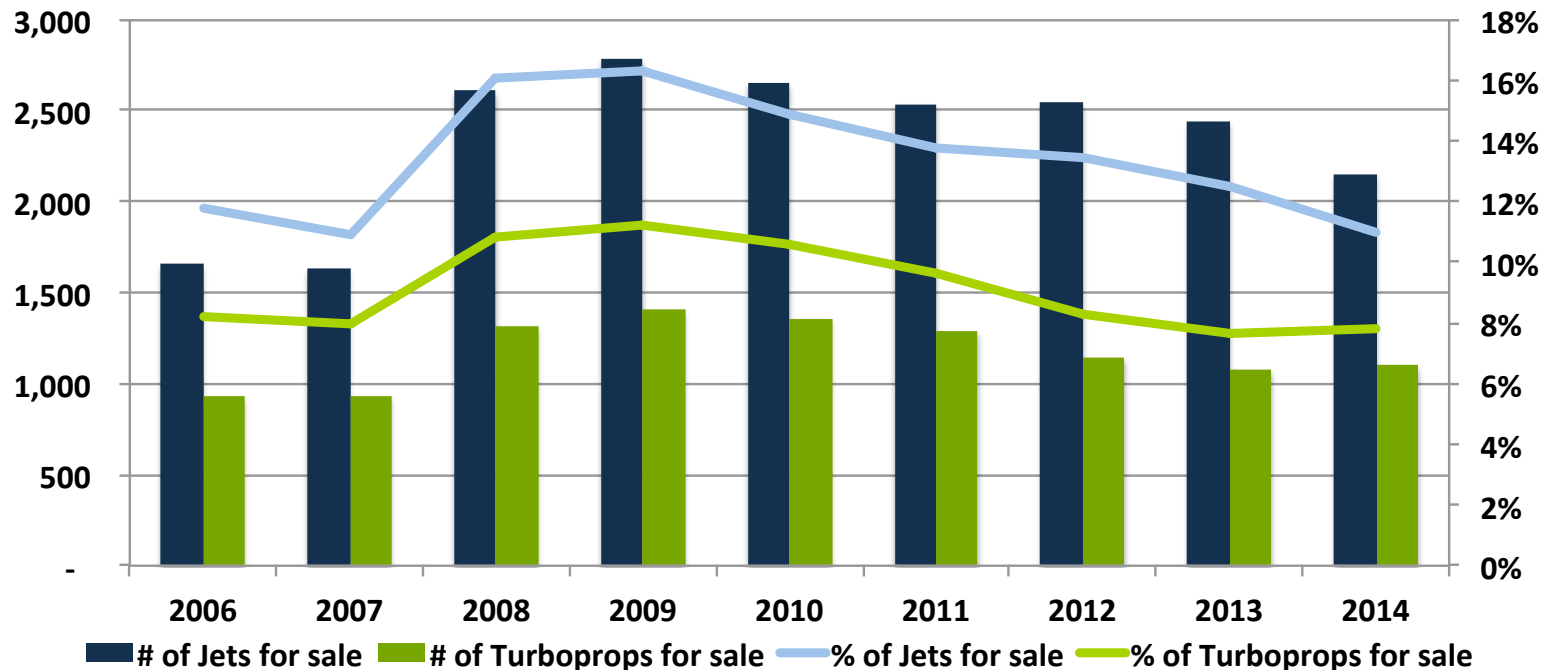
Note: 2014 deliveries total are preliminary.

New turboprop deliveries increased 25% from 2012 to 2013

Pre-Owned Business Aircraft Inventory

Business Jets and Turboprops for sale

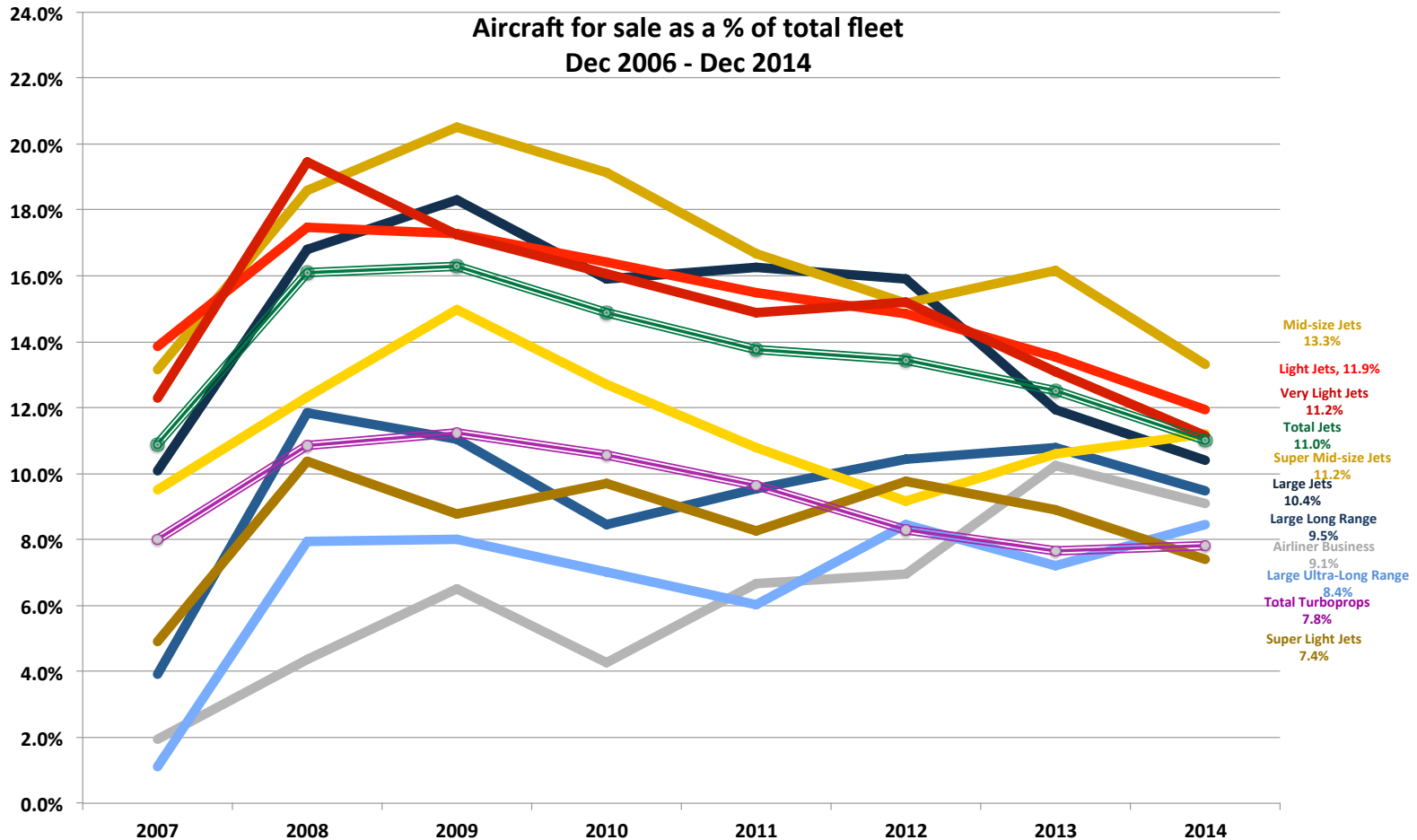
Dec 2006 - Dec 2014



Jets Available for Sale as % of World Fleet (as of January 1)									
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Business Jets	11.7%	10.9%	16.1%	16.3%	14.9%	13.8%	13.4%	12.5%	11.0%
Turboprop	8.2%	8.0%	10.9%	11.2%	10.6%	9.6%	8.3%	7.7%	7.8%

The percentage of pre-owned business aircraft for sale is at pre-recession levels

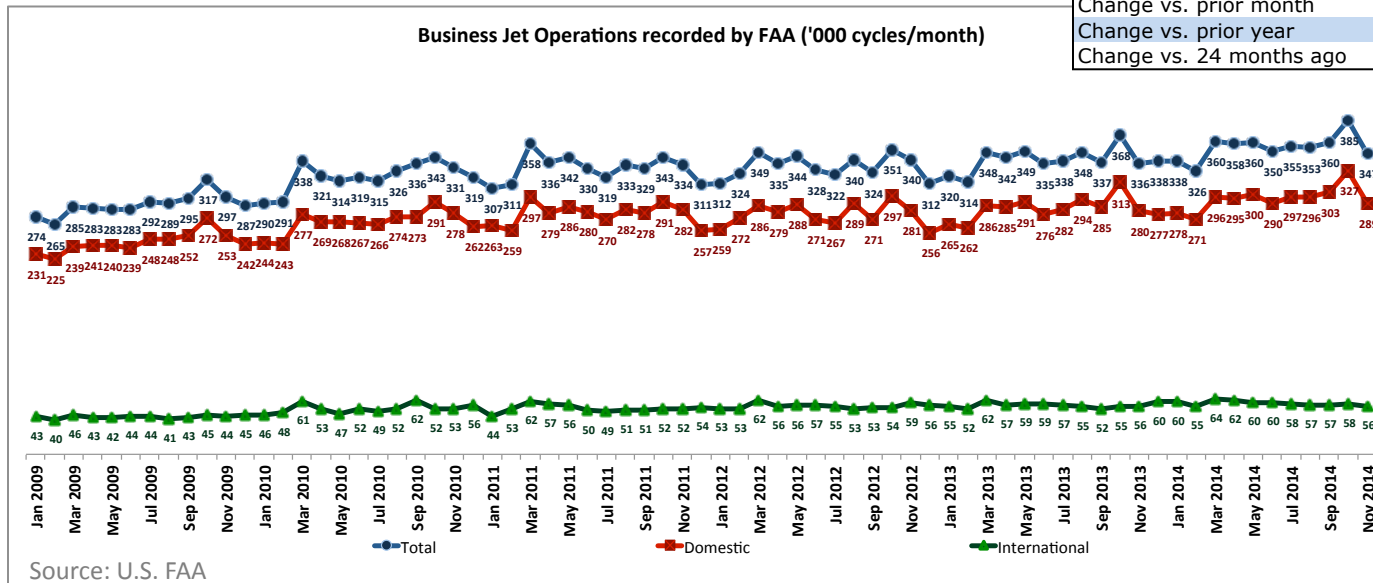
Pre-Owned Business Jet Inventory



Pre-owned jet inventory levels vary significantly by size category

U.S. Business Jet Utilization

FAA BUSINESS JET OPERATIONS - NOV 2014		Trailing 12 Months
TOTAL CYCLES		
Total Cycles	346,560	4,229,454
Change vs. prior month	-10.0%	0.3%
Change vs. prior year	3.2%	4.5%
Change vs. 24 months ago	1.9%	6.2%
DOMESTIC CYCLES		
Total Domestic Cycles	289,444	3,520,002
Change vs. prior month	-11.5%	0.3%
Change vs. prior year	3.3%	4.3%
Change vs. 24 months ago	2.9%	6.1%
INTERNATIONAL CYCLES		
Total International Cycles	55,628	708,064
Change vs. prior month	-4.4%	0.0%
Change vs. prior year	0.0%	5.1%
Change vs. 24 months ago	-5.5%	6.5%

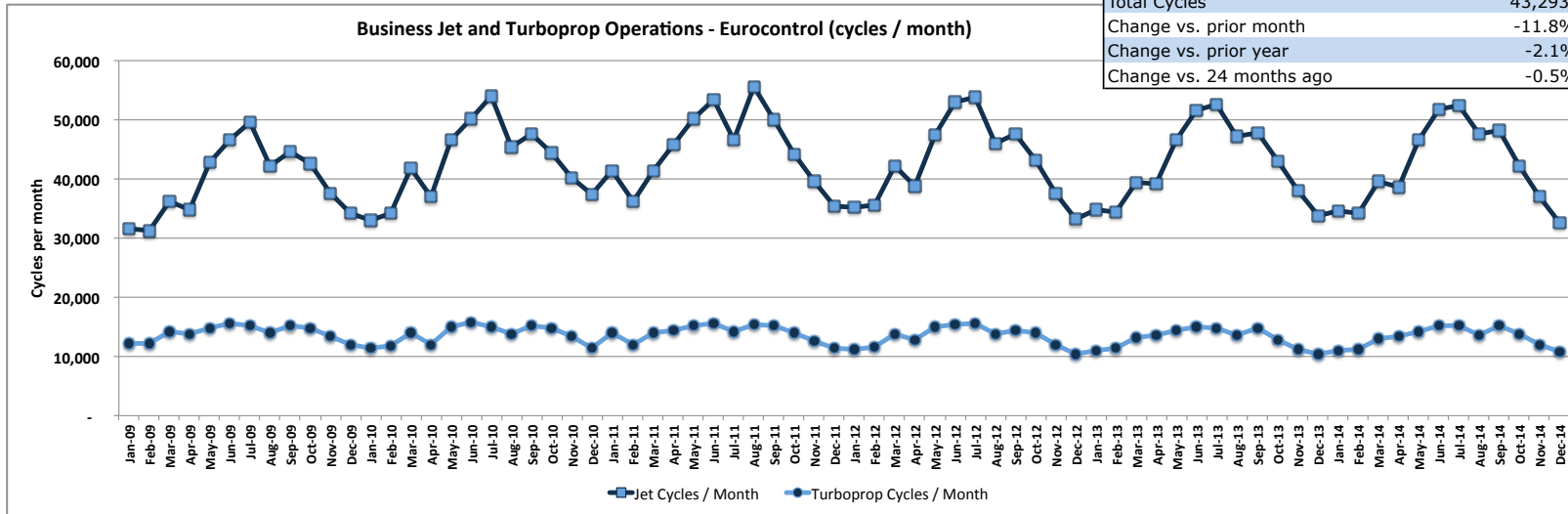


Annualized U.S. business jet cycles through Nov. 2014 are up 4.5% over the prior year

European Business Aircraft Utilization

EUROCONTROL BUSINESS JET & TURBOPROP OPERATIONS - DEC 2014		Trailing 12 Months
BUSINESS JETS (EXCLUDING AIRLINERS)		
Total Cycles	32,517	505,390
Change vs. prior month	-12.2%	-0.3%
Change vs. prior year	-3.8%	-0.6%
Change vs. 24 months ago	-2.0%	-1.6%
TURBOPROPS		
Total Cycles	10,776	158,612
Change vs. prior month	-10.6%	0.2%
Change vs. prior year	3.6%	1.6%
Change vs. 24 months ago	4.2%	-0.8%

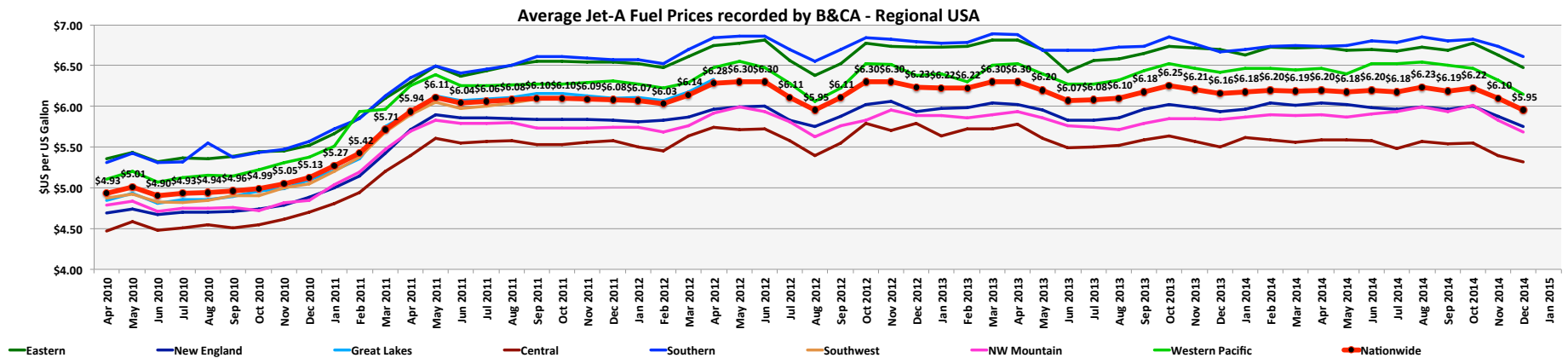
BUSINESS JETS & TURBOPROPS		Trailing 12 Months
Total Cycles	43,293	664,002
Change vs. prior month	-11.8%	-0.1%
Change vs. prior year	-2.1%	-0.1%
Change vs. 24 months ago	-0.5%	-1.4%



Source: Eurocontrol

Annualized European cycles are down 0.6% for business jets and up 1.6% for business turboprops over the prior year on a trailing 12 months (TTM) basis

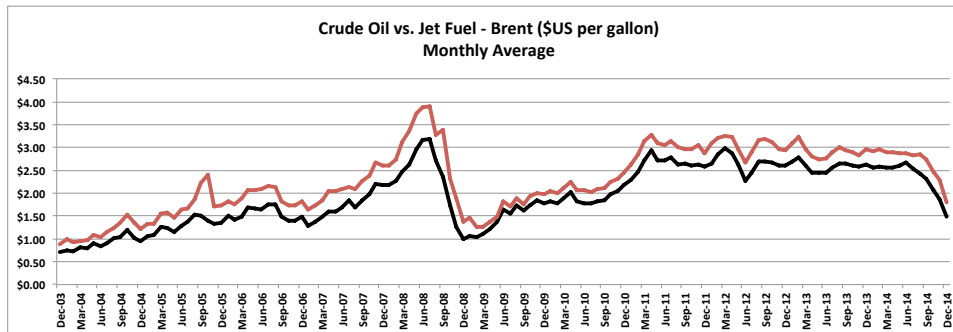
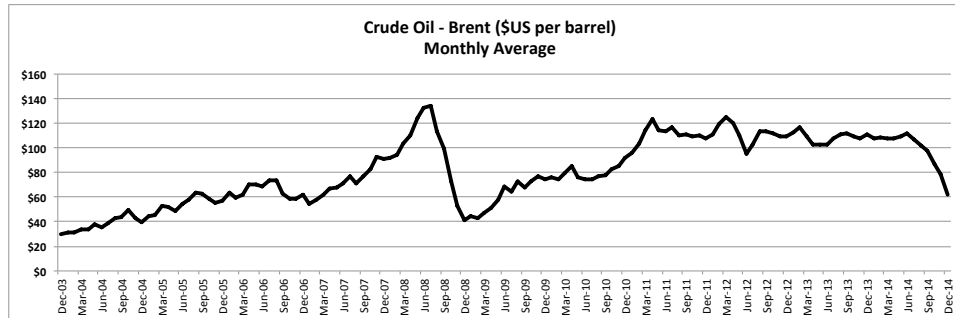
Jet-A Fuel Prices at U.S. FBOs



Source: [Business & Commercial Aviation](#)

Jet-A fuel prices at U.S. FBOs have begun to turn downwards with the rapid drop in crude oil prices from \$100+/bbl to less than \$60/bbl in December 2014

Crude Oil and Jet Fuel Prices



IATA Fuel Price Monitor Jan 2, 2015)	Share in World Index	\$/US gallon	\$/barrel	Index Value 2000= 100	vs. 1 week ago	vs. 1 month ago	vs.1 yr ago
Jet Fuel Price	100%	\$ 1.708	\$ 71.70	56.54	-4.3%	-18.1%	-43.2%
Asia & Oceania	22%	\$ 1.695	\$ 71.20	56.24	-6.6%	-18.6%	-43.8%
Europe & CIS	28%	\$ 1.728	\$ 72.60	57.18	-6.3%	-17.5%	-42.8%
Middle East & Africa	7%	\$ 1.628	\$ 68.40	53.94	-6.7%	-19.0%	-44.9%
North America	39%	\$ 1.715	\$ 72.00	56.82	-1.5%	-17.9%	-42.9%
Latin & Central America	4%	\$ 1.716	\$ 72.10	55.50	1.0%	-19.9%	-44.2%

Global average price paid at the refinery for aviation jet fuel - IATA


Source: IndexMundi; [IATA](#) from PLATTS

JETNET iQ Quarterly Surveys

- Multilingual owner / operator surveys
 - Utilization patterns and expectations
 - Brand perceptions
 - Purchase criteria / inhibitors
 - Purchase / selling intentions
 - New product preferences
 - Special topics of interest (examples)
 - New products
 - The environment
 - China, oil prices, Ukraine / Crimea, etc.

JETNET iQ GLOBAL BUSINESS AVIATION SURVEY - Q4 2014 English

WELCOME



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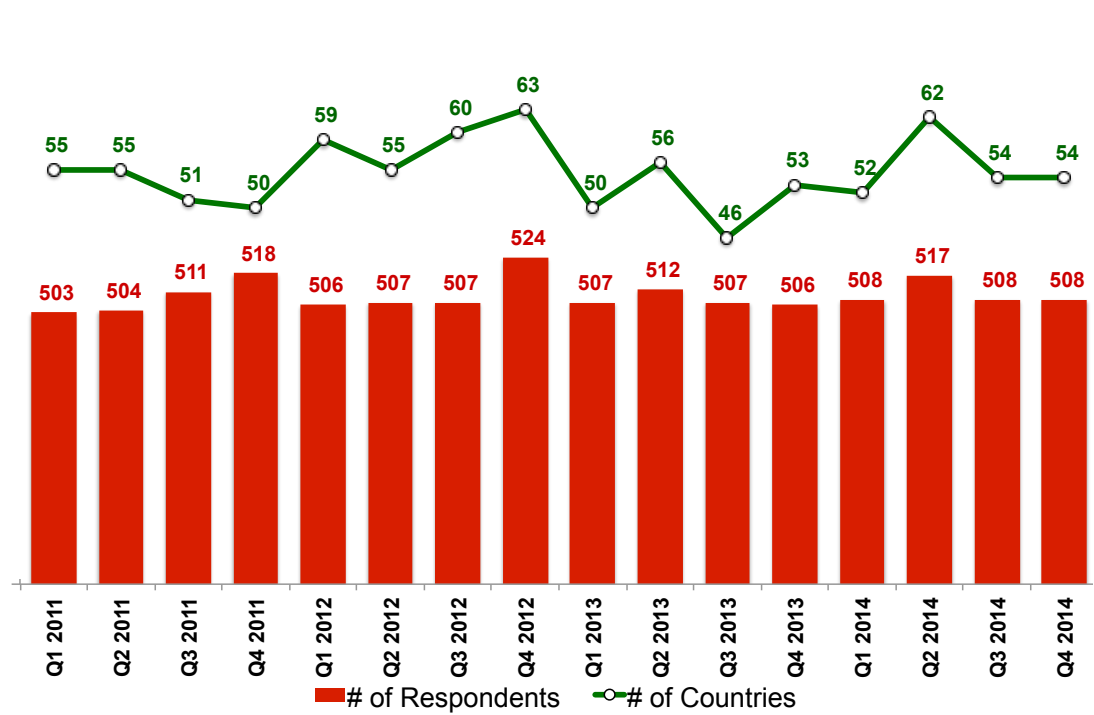
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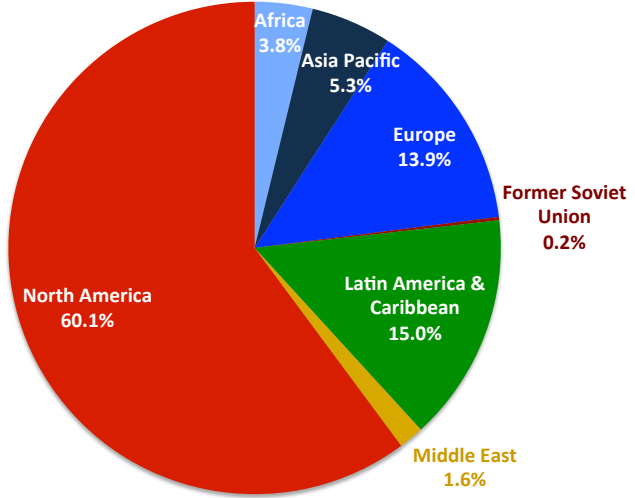
ROLAND VINCENT
JETNET iQ Creator / Director
Phone: 1-972-439-2069 (U.S. Central Time)
Email: rollie@jetnet.com

JETNET iQ Surveys: Quarterly, multilingual, worldwide

JETNET iQ Survey Respondents



Respondent Fleet Location Q1 2011 - Q4 2014



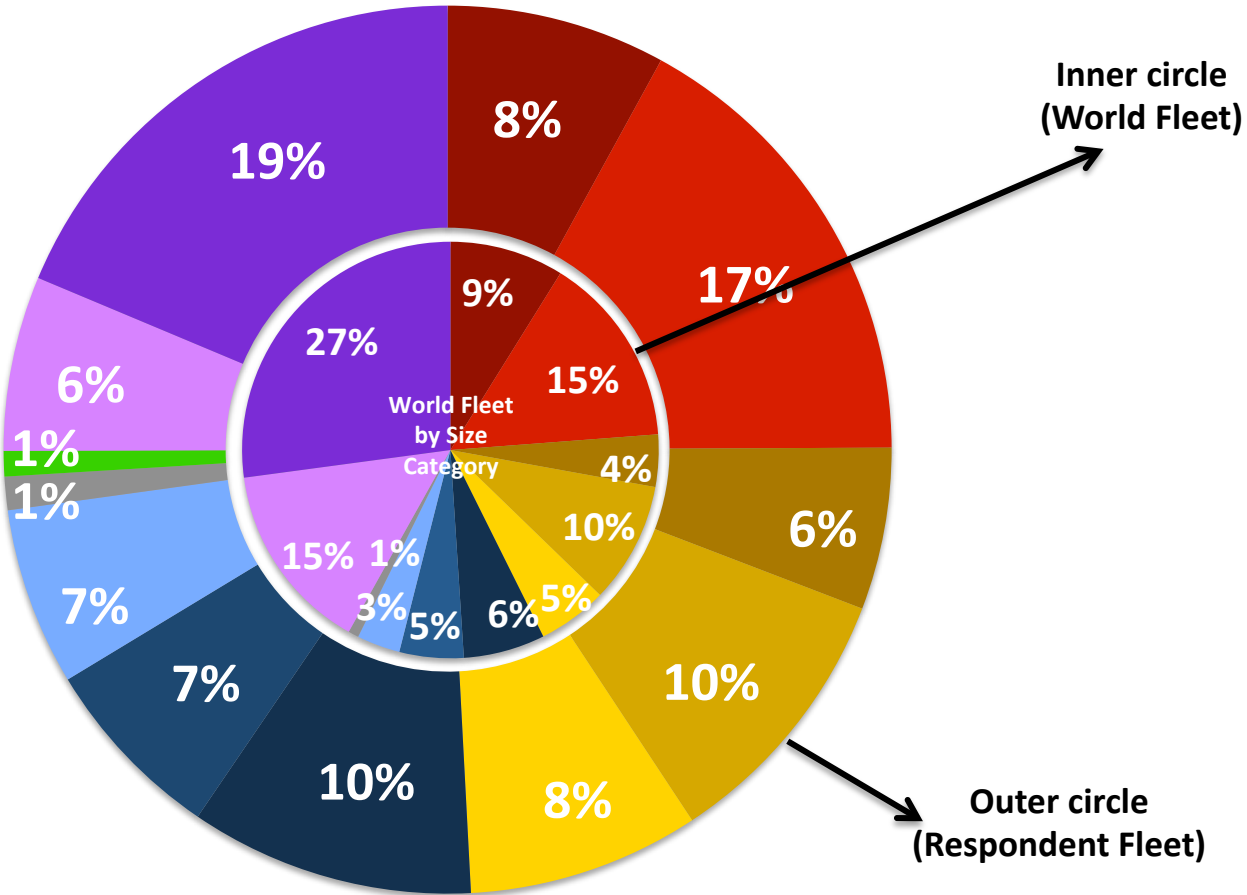
JETNET iQ Surveys: Since Q1 2011, >8,000 respondents from 125 countries

Survey Respondents' Fleet

By Aircraft Size Category

Q4 2014 Survey

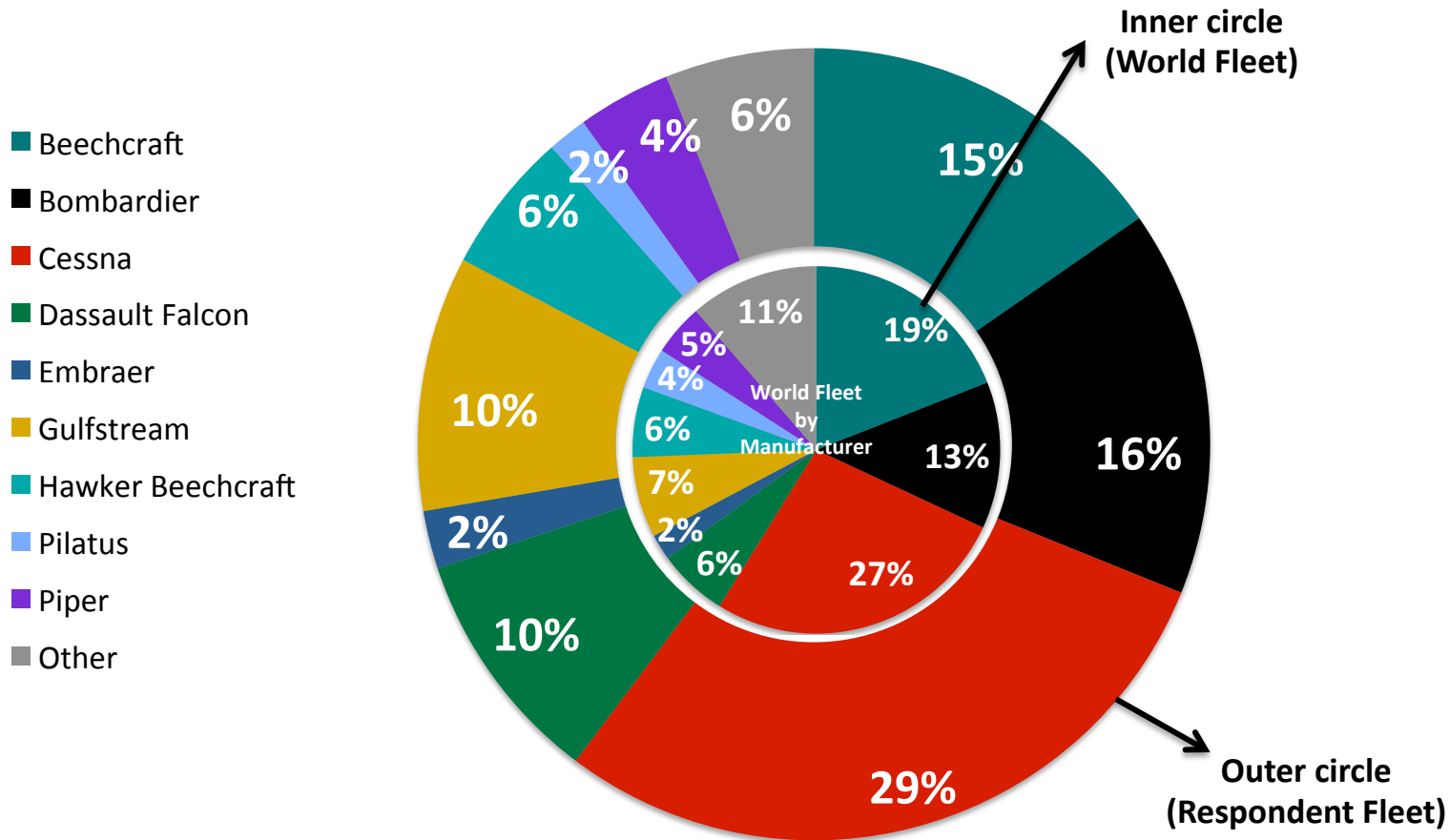
- Very Light Jet
- Light Jet
- Super Light Jet
- Mid-Size Jet
- Super Mid-Size Jet
- Large Jet
- Large Long-Range Jet
- Large Ultra Long-Range Jet
- Airline Business Jet
- Airliner Jet Converted
- Single-Engine Turbo-Prop
- Multi-Engine Turbo-Prop



Survey Respondents' Fleet

By Aircraft Manufacturer

Q4 2014 Survey



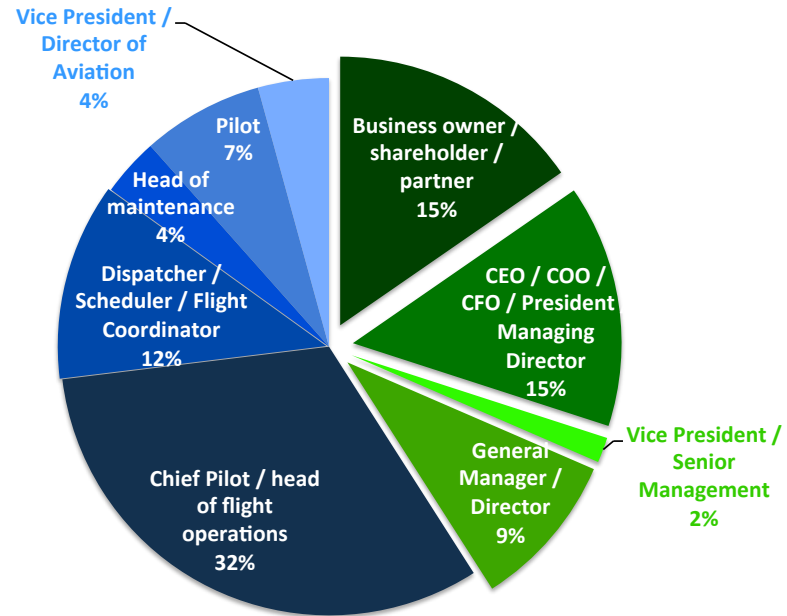
Survey Respondents' Roles

By Job Title

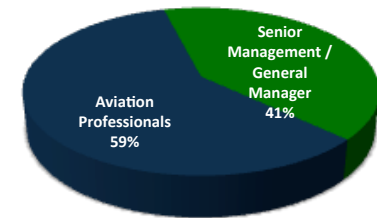
Q4 2014 Survey

Title of respondent	Completed
Business owner / shareholder / partner	101
CEO / COO / CFO / President / Managing Direct	96
Vice President / Senior Management	10
General Manager / Director	62
Chief Pilot / head of flight operations	211
Dispatcher / Scheduler / Flight Coordinator	78
Head of maintenance	23
Pilot	48
Vice President / Director of Aviation	28
Total	657

Note: Respondent was able to chose whichever applied



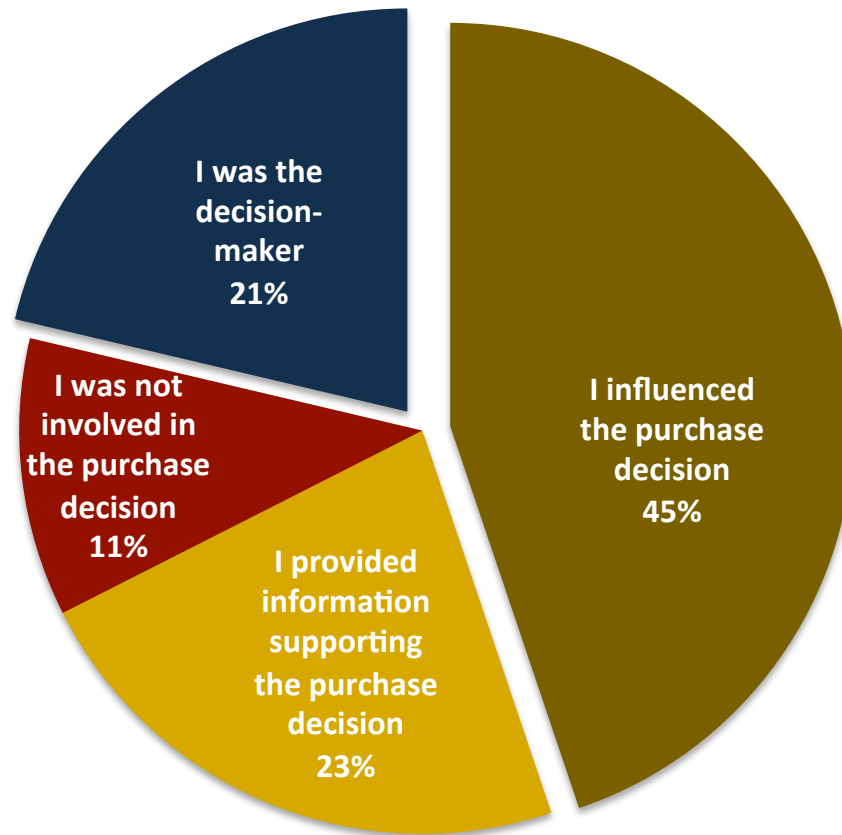
Aviation Professionals	388	59%
Senior Management / General Manager	269	41%



Survey Respondents' Roles

By Involvement in Last Fixed-Wing Turbine Aircraft Purchase

Q4 2014 Survey

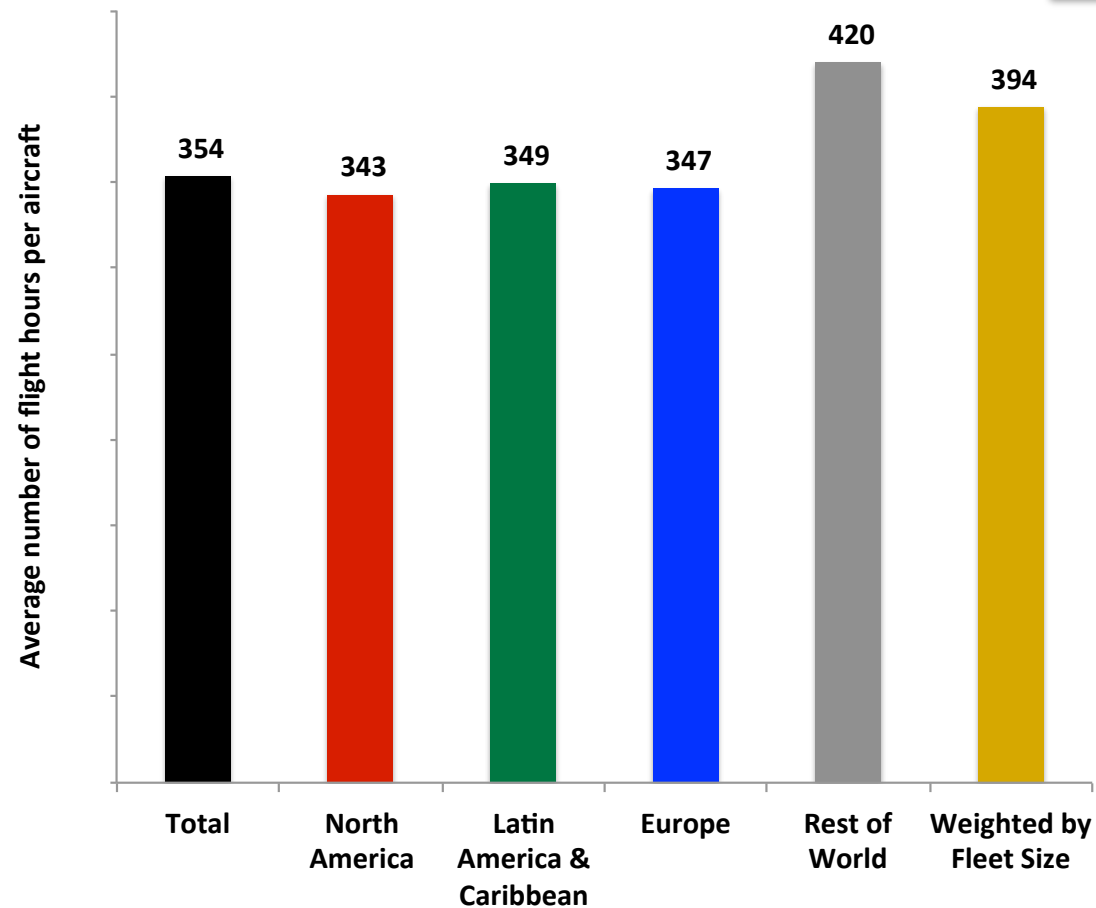


Survey Respondents' Flight Operations

Regional Average Utilization per Aircraft in Prior 12 Months

Average flight hours per year

Q4 2014 Survey

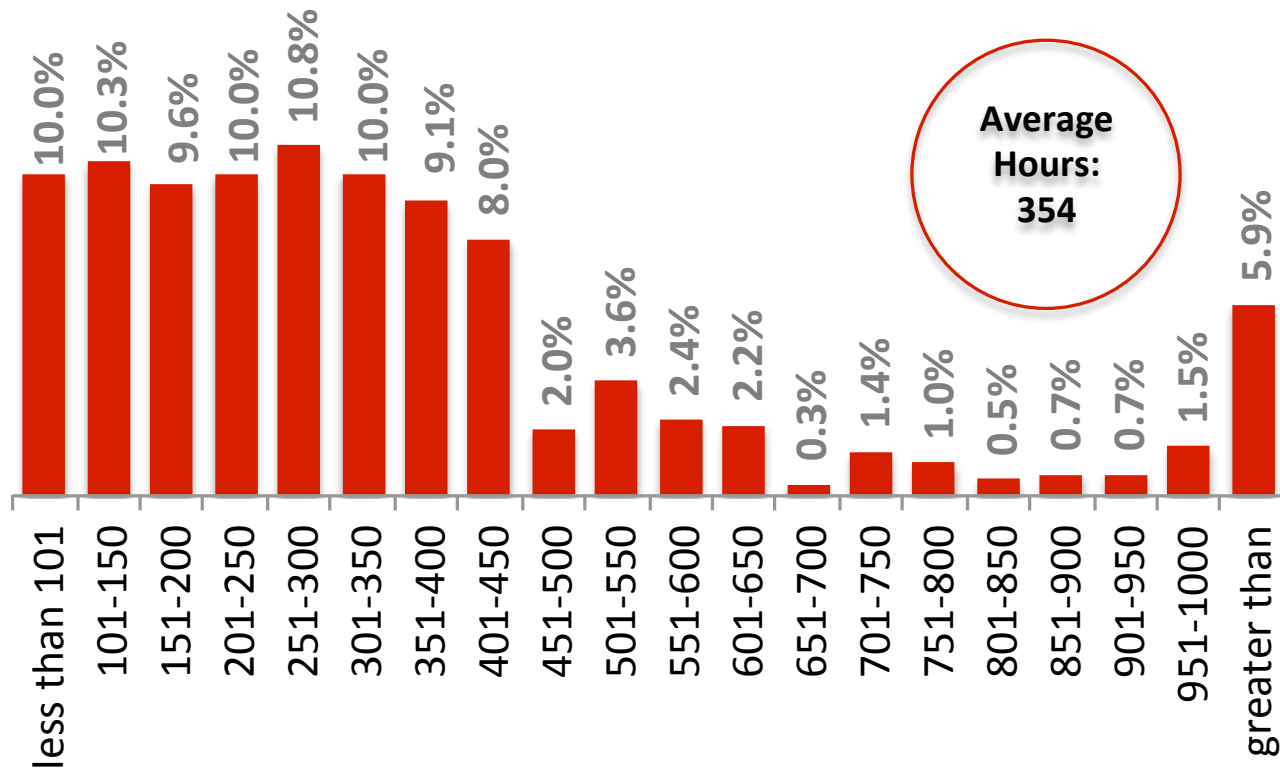


Survey Respondents' Flight Operations

Last 12 Months – Worldwide (Fixed-Wing Business Jets and Turboprops Only)

Q4 2014 Survey

Annual Flight Hours Per Aircraft

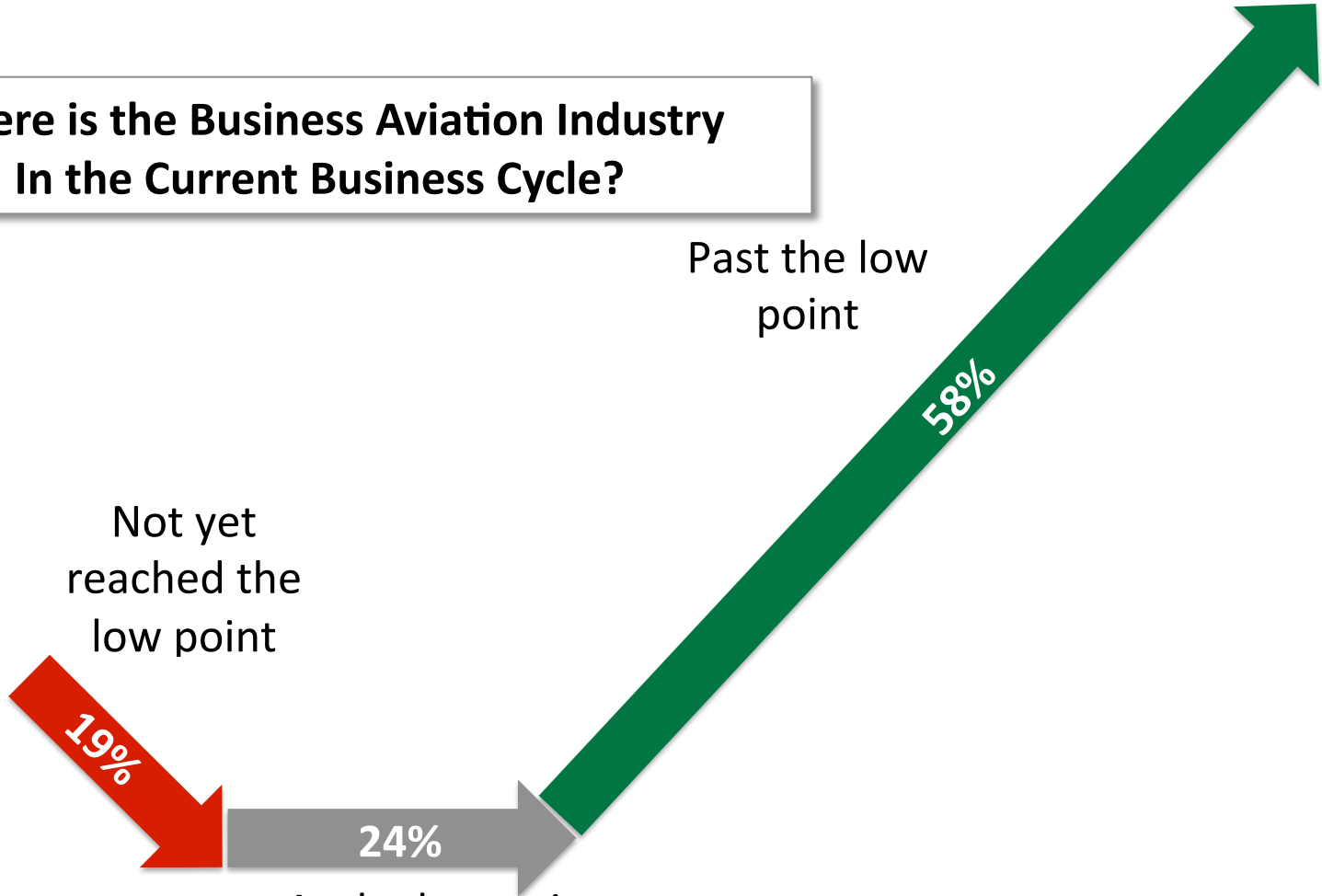


Survey Respondents' Sentiment

Current Market Sentiment

Q4 2014 Survey

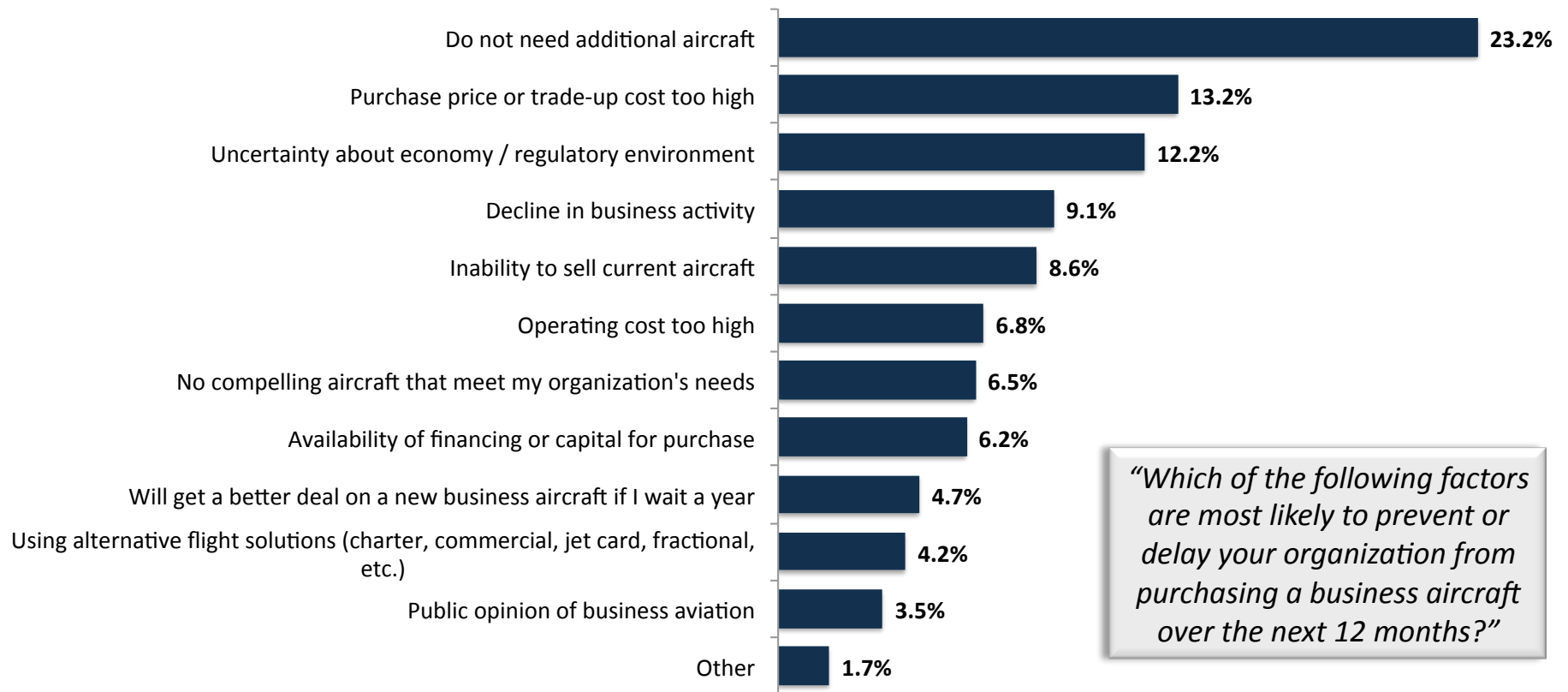
**Where is the Business Aviation Industry
In the Current Business Cycle?**



Aircraft Purchase Inhibitors

Top 3 Inhibitors – Weighted Average

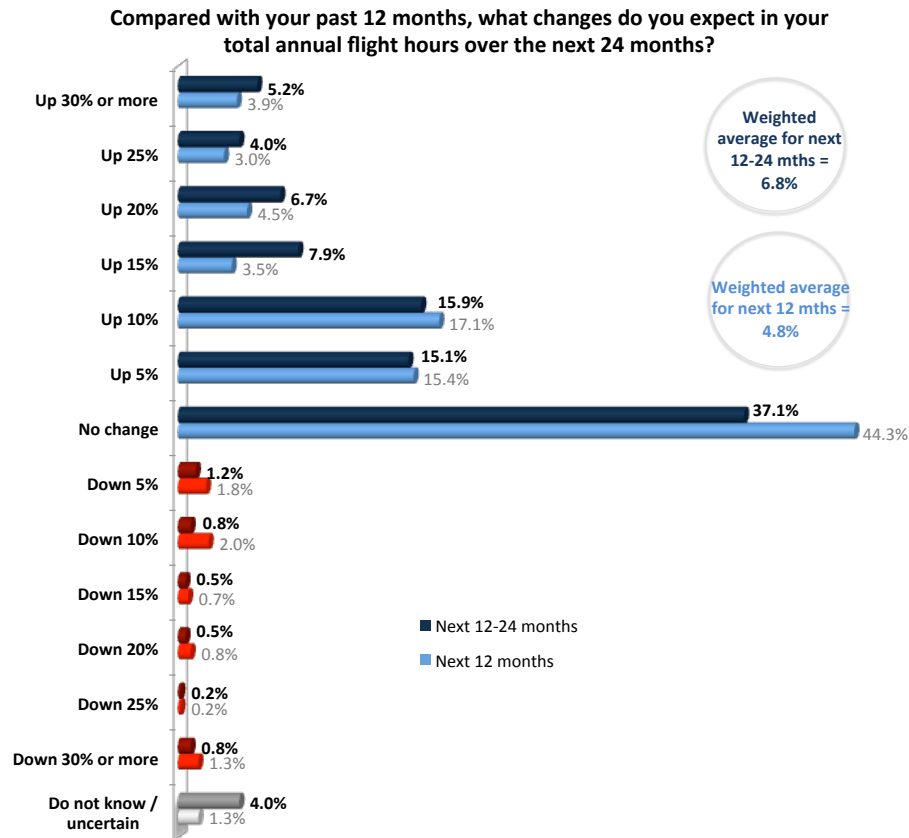
Q4 2014 Survey



“Which of the following factors are most likely to prevent or delay your organization from purchasing a business aircraft over the next 12 months?”

Aircraft Utilization

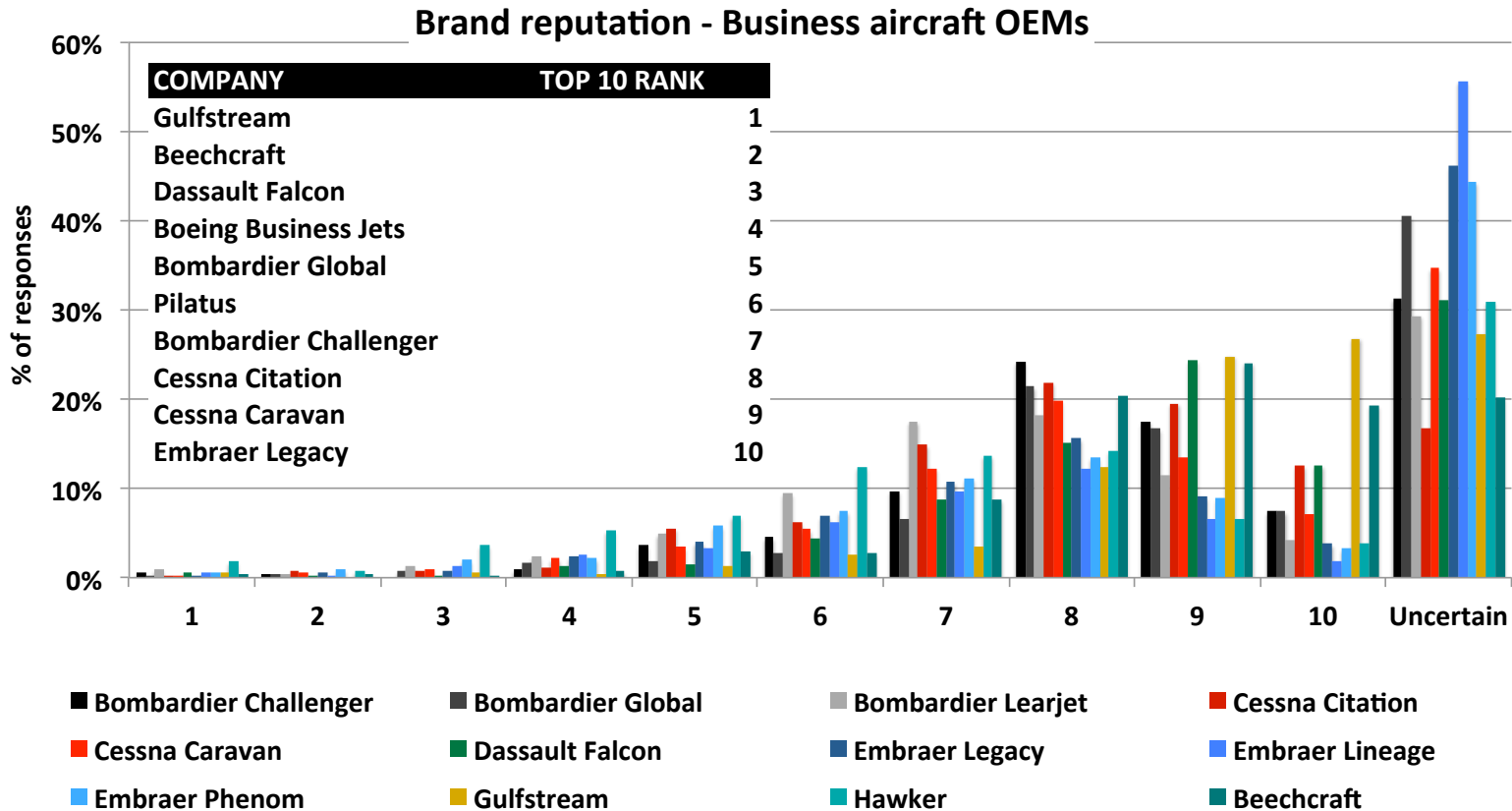
Next 12 and 12-24 Months versus Prior 12 Months



Respondents expect to fly 4.8% more hours in the next 12 months vs. prior 12 months

Brand Reputations

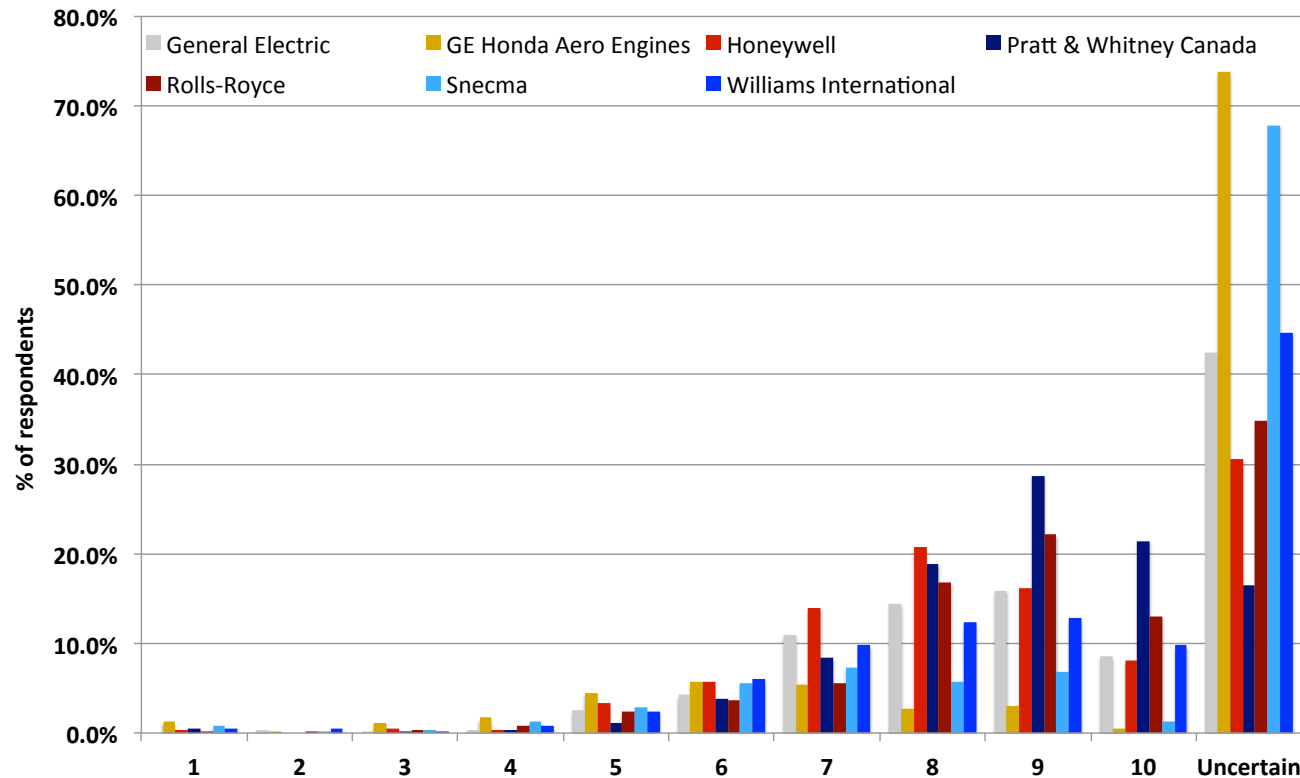
Aircraft Manufacturers on a 1-10 Scale, where “10” = Highest



Gulfstream, Beechcraft and Dassault Falcon are the top rated business aircraft brands

Brand Reputations

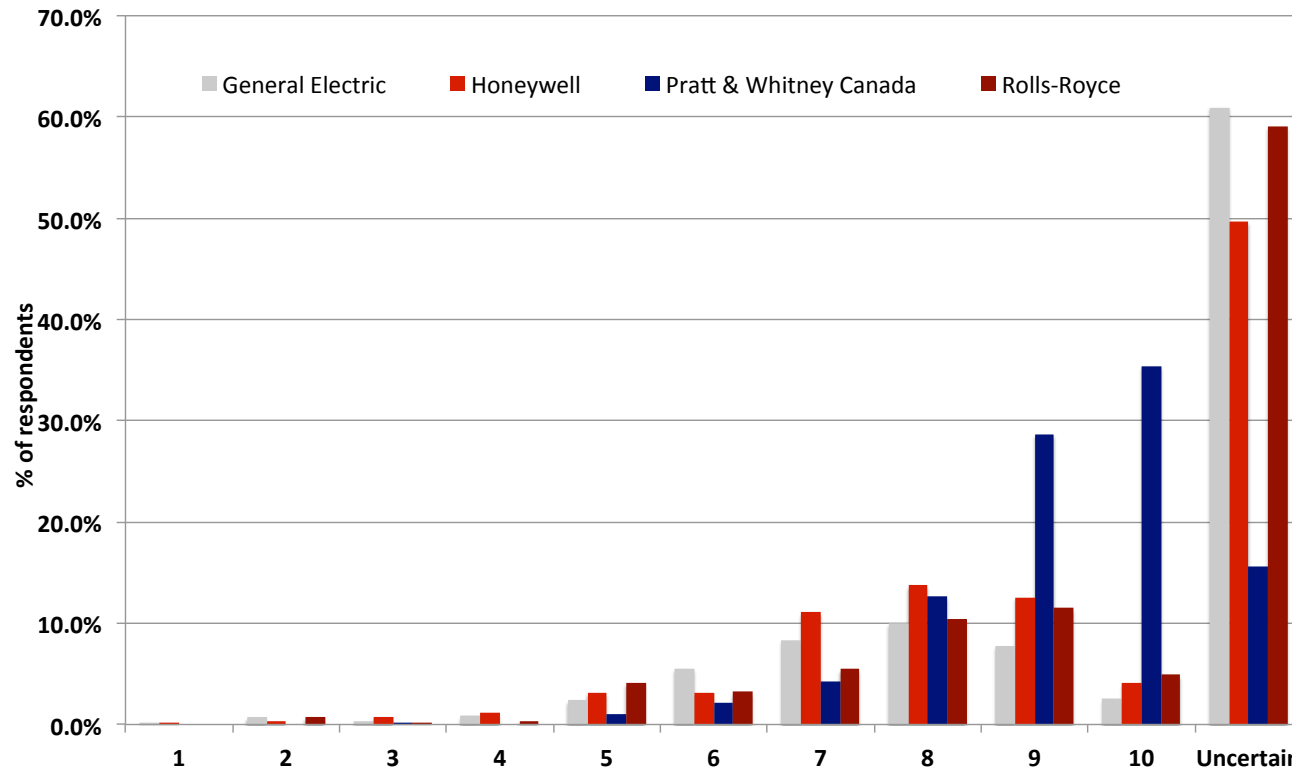
Jet Engine Manufacturers on a 1-10 Scale, where “10” = Highest



Respondents believe that Pratt & Whitney Canada, Rolls-Royce and General Electric are the top-rated jet engine manufacturer brands

Brand Reputations

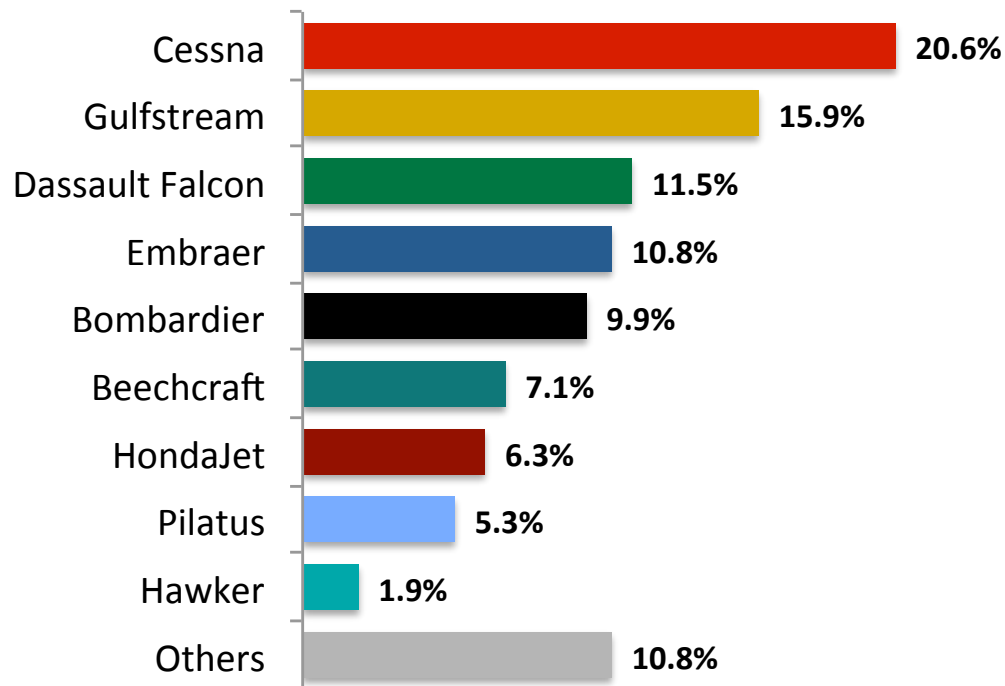
Turboprop Engine Manufacturers on a 1-10 Scale - "10" = Highest



Respondents believe that Pratt & Whitney Canada is the highest rated turboprop engine manufacturer brand, well ahead of Rolls-Royce and Honeywell

Aircraft Brands

Brand expected to show the most improvement over the next 5-10 years

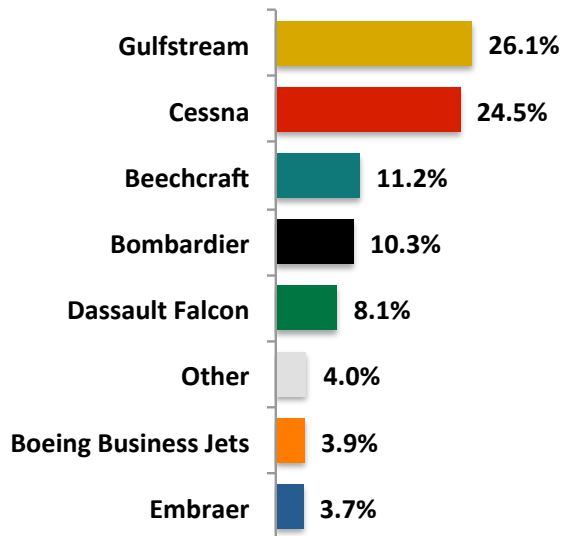


According to Q4 2014 survey respondents, Cessna, Gulfstream, and Dassault Falcon are expected to be the most improved brands over the next 5-10 years

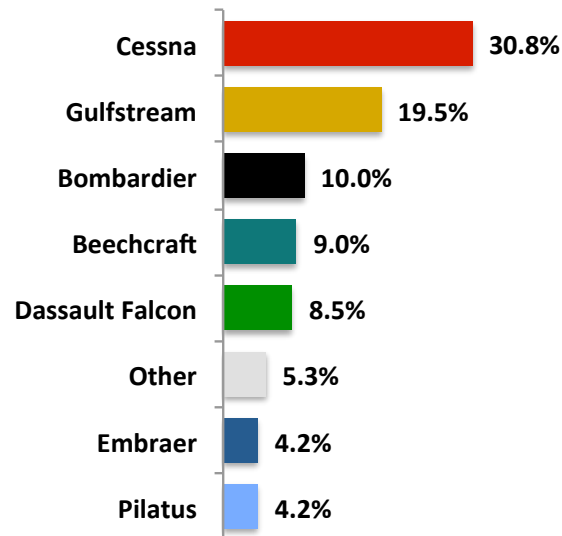
Aircraft Brands

Interior Finish Quality & Cabin Noise

Highest Quality Interior Finish
Top 8 brands - Q4 2014



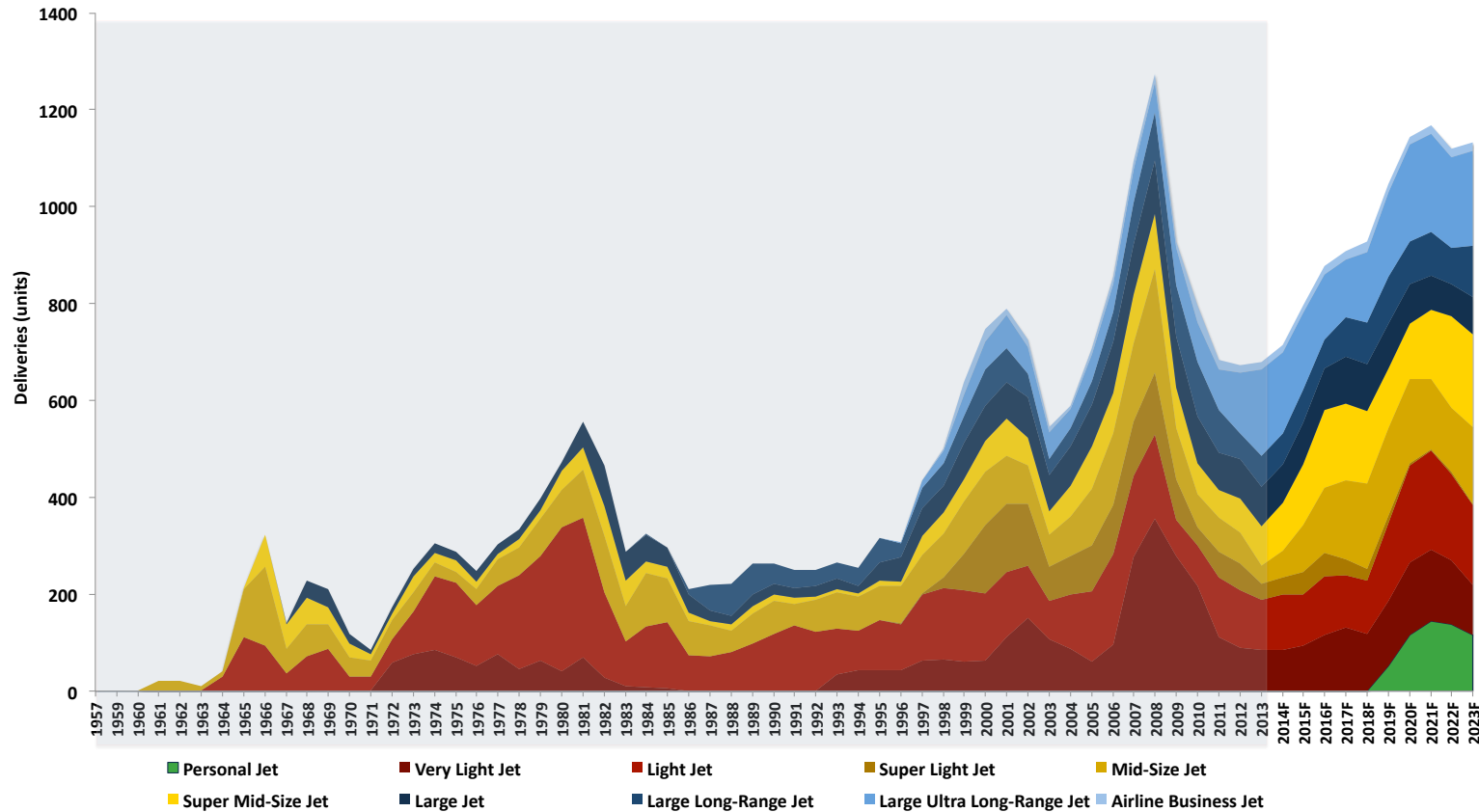
Quietest Cabin Interiors
Top 8 brands - Q4 2014



According to Q4 2014 survey respondents choosing Top-Of-Mind brand, the Citation has the quietest cabin interiors and Gulfstream has the highest quality interior finish

Business Jet Delivery History & Forecast

Business jet delivery forecast by size category: Historical - 2023



JETNET iQ latest 10-year forecast is for 9,800 new business jet deliveries valued at \$261 billion in \$2014 from 2014-2023

About JETNET iQ

Launched in January 2011, JETNET iQ is a forecasting and premium advisory service for the business aviation market, designed to help customers “Know More”. Available on an annual subscription basis, JETNET iQ has 3 main elements:

- 1) JETNET iQ REPORTS are the definitive analytical reference for the business aviation industry, incorporating state-of-the-industry analyses, proprietary aircraft owner/operator surveys, and detailed 10-year delivery and fleet forecasts, updated quarterly.
- 2) JETNET iQ SUMMITS provide fast-paced thought-provoking insights into the state of the industry, and unique networking opportunities.
- 3) JETNET iQ RESEARCH serves the needs of clients with customized research and analysis requirements on a project-by-project basis.

For more information on JETNET iQ, please log on to www.jetnetiq.com or contact Rolland Vincent, JETNET iQ Creator / Director at 1-972-439-2069 or rollie@jetnet.com.

About JETNET

Since 1988, JETNET has delivered the most comprehensive and reliable business aircraft research to its exclusive clientele of aviation professionals worldwide. JETNET is the ultimate source for information and intelligence on the worldwide business, commercial, and helicopter aircraft fleet and marketplace, comprised of more than 100,000 airframes. Headquartered in its state-of-the-art facility in Utica, NY, JETNET offers comprehensive user-friendly aircraft data via real-time internet access or regular updates.

For more information on JETNET LLC, please log on to jetnet.com or contact Paul Cardarelli, JETNET Vice President of Sales, at 800-553-8638 (USA) or paul@jetnet.com; for International inquiries, please contact Karim Derbala, JETNET Managing Director of Global Sales, at 41.0.43.243.7056 or karim@jetnet.com.