



# JETNET iQ *Snap!* Report

## *Q1 2015 Summary Report*

Prepared for:  
JETNET iQ Global Business Aviation Survey Respondents

March 31, 2015

*JETNET iQ Snap!: 1st Quarter 2015 - 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 EBACE 2015 (May 19-21 in Geneva), and at the 2015 JETNET iQ Summit (June 23-24 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**



**WELCOME!**

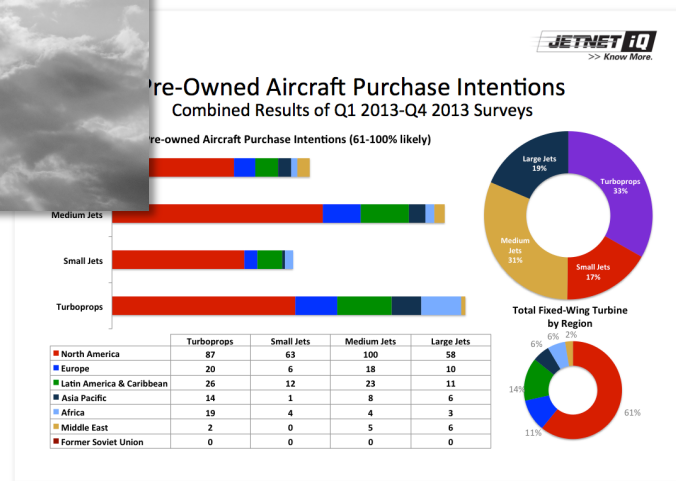
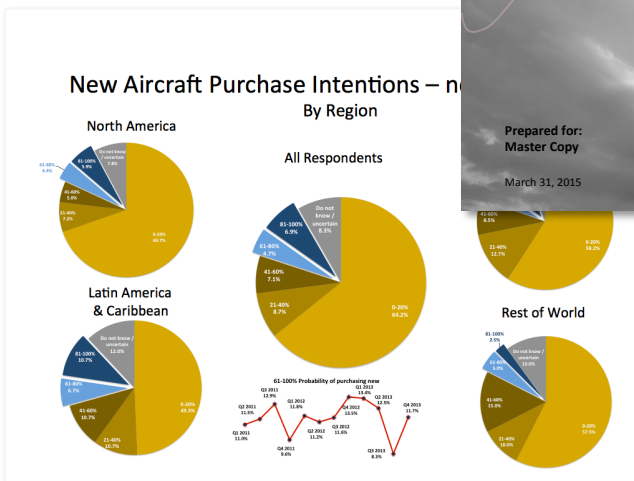
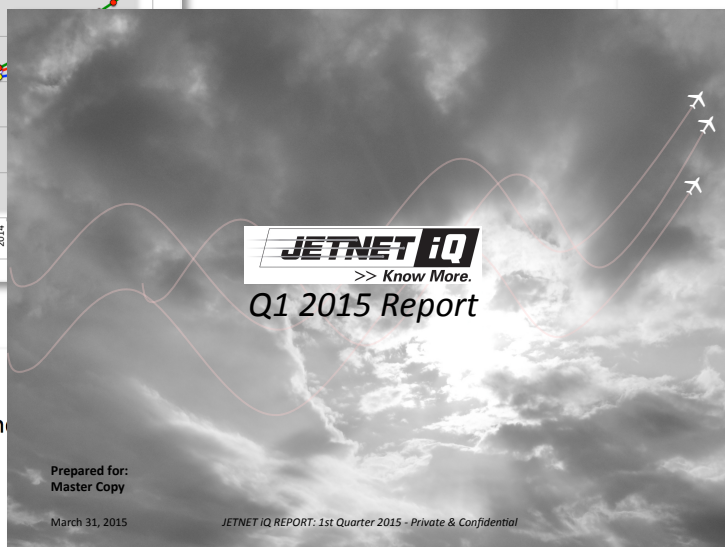
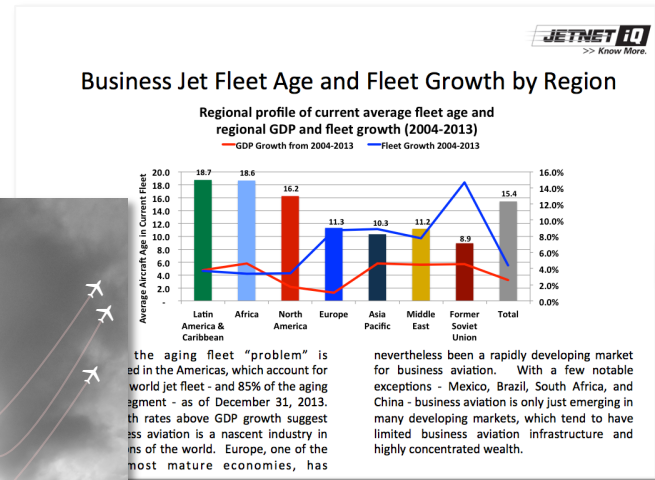
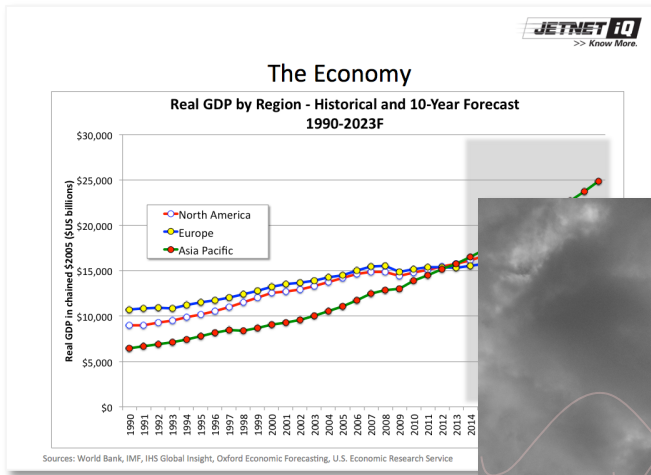
Thank you for agreeing to participate in this survey sponsored by JETNET LLC, the world's leading provider of business aviation market intelligence. Your insights are critical to product and service development that will better meet your evolving needs.

**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:**

# JETNET iQ Reports



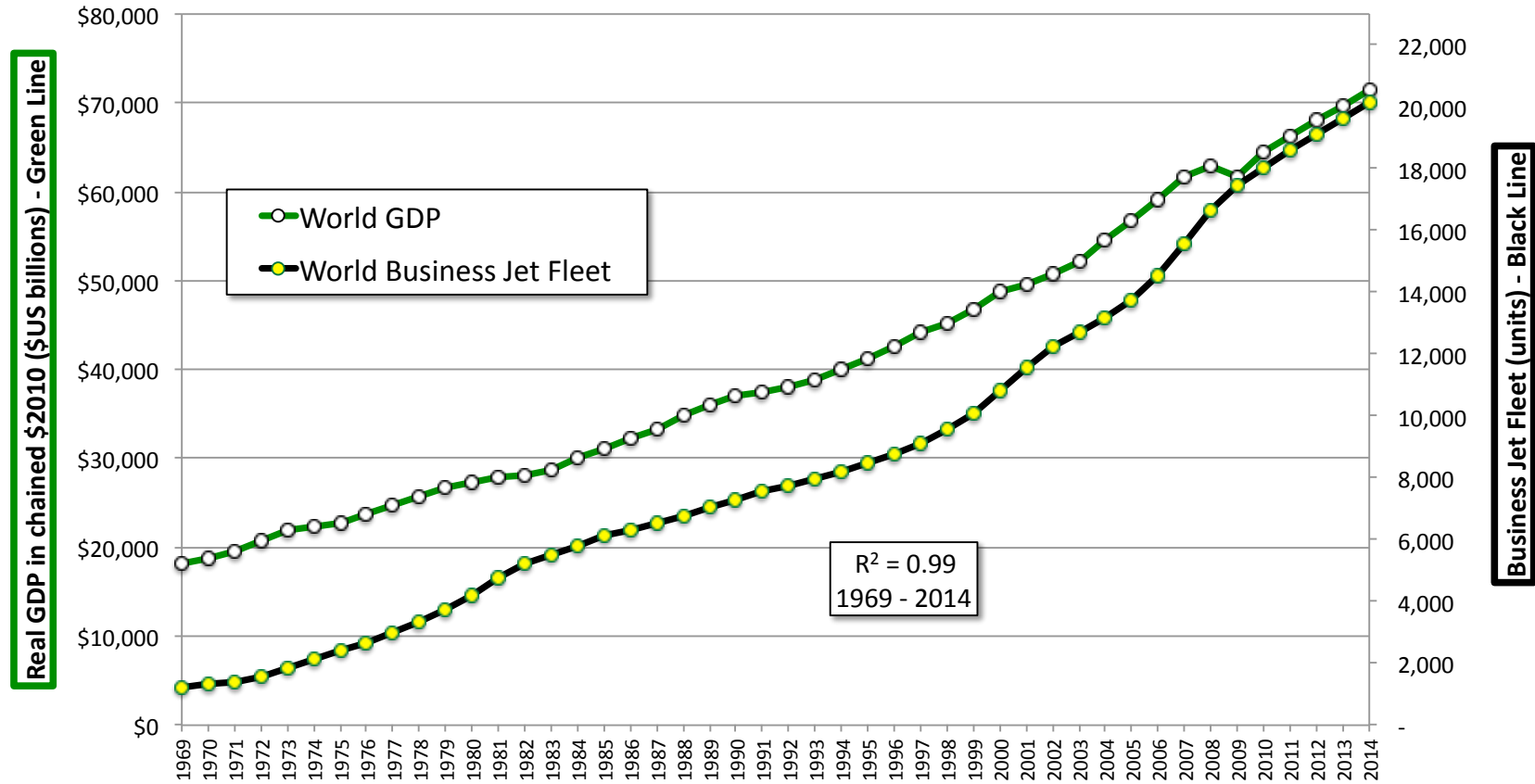
# JETNET iQ Summits

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



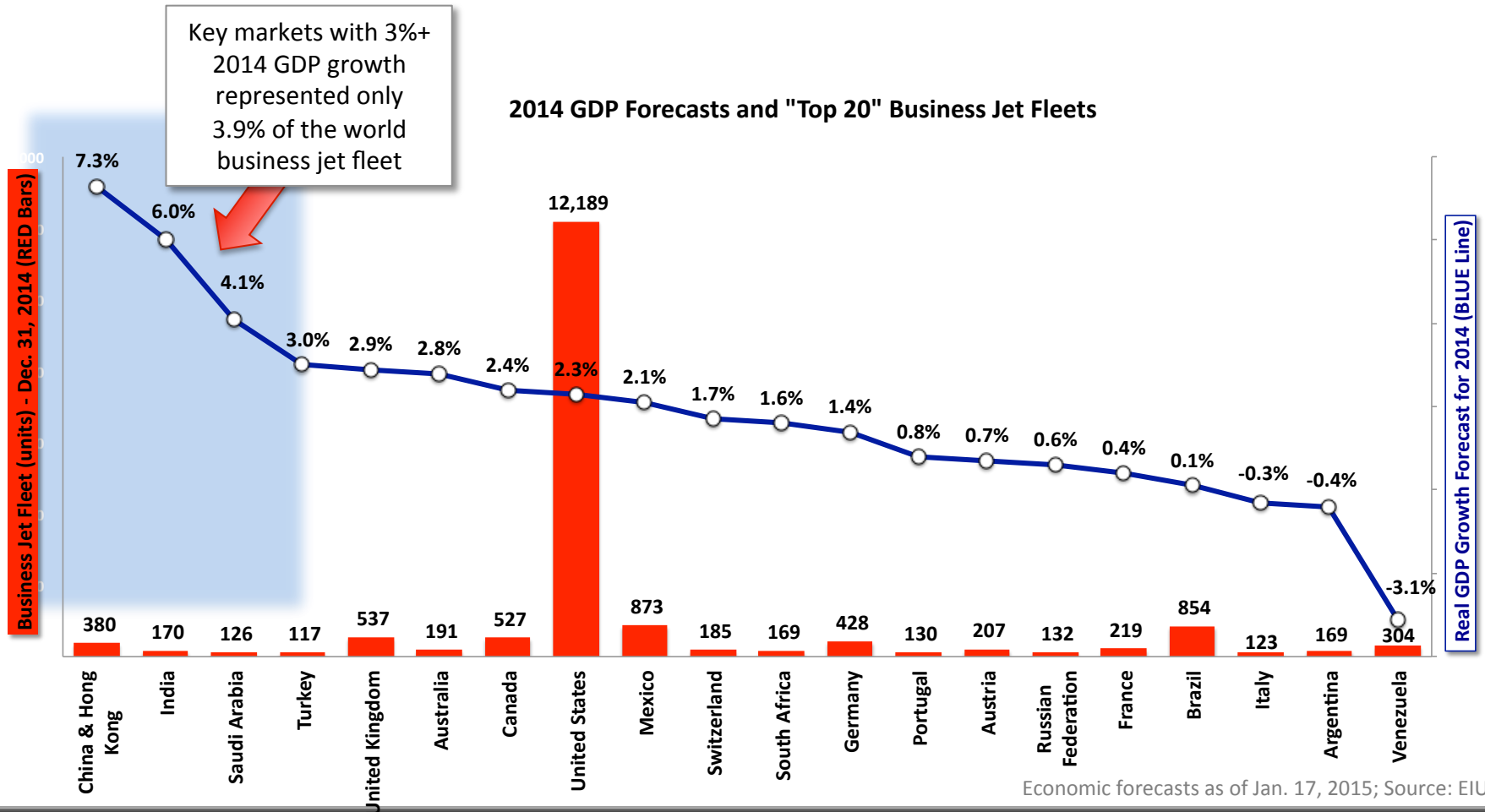
# The Economy

Evolution of World GDP and World Business Jet Fleet



Business jet fleet growth is tightly correlated with world GDP growth

# The Economy

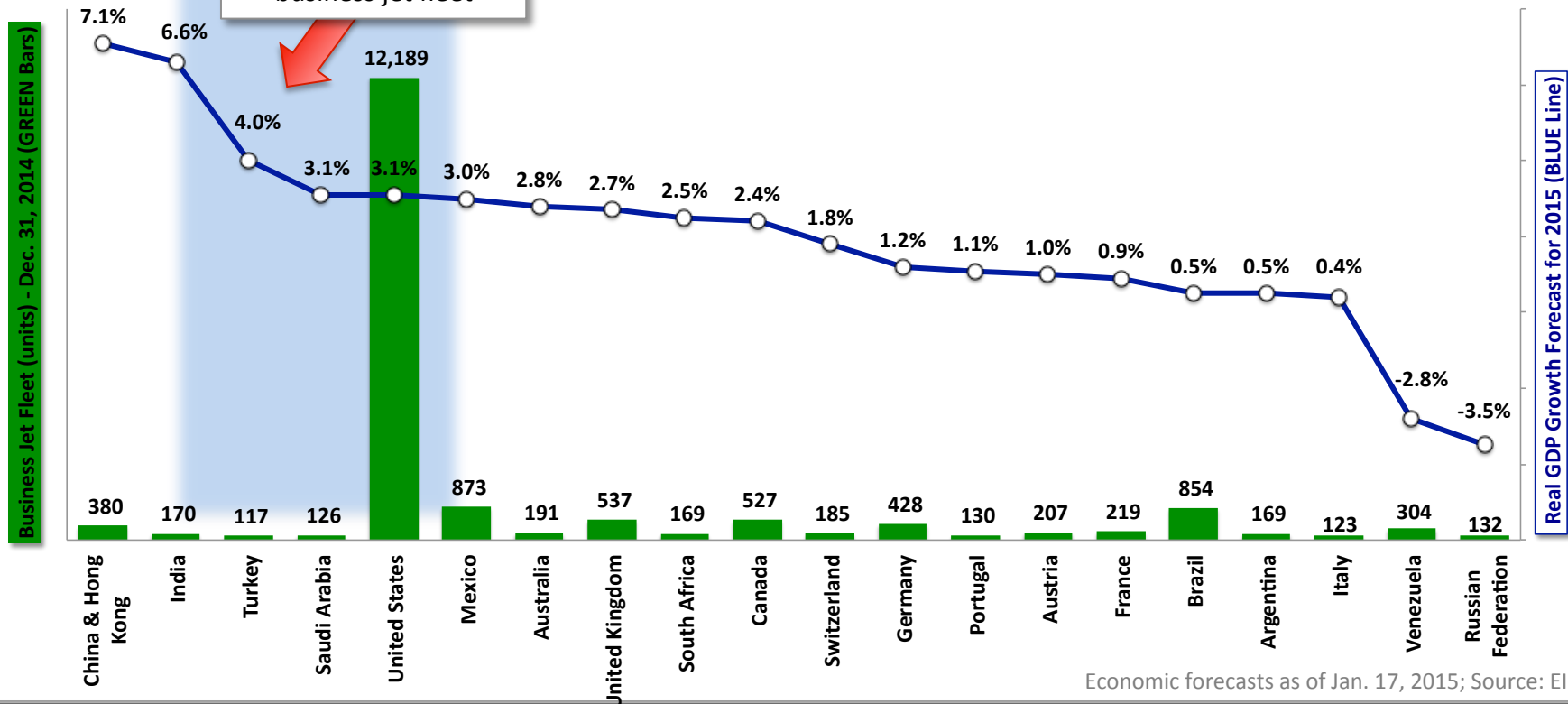


**“Top 20” business aviation countries have widely divergent economic outlooks**

## The Economy

Key markets with 3%+ 2015F GDP growth represent 69% of the world business jet fleet

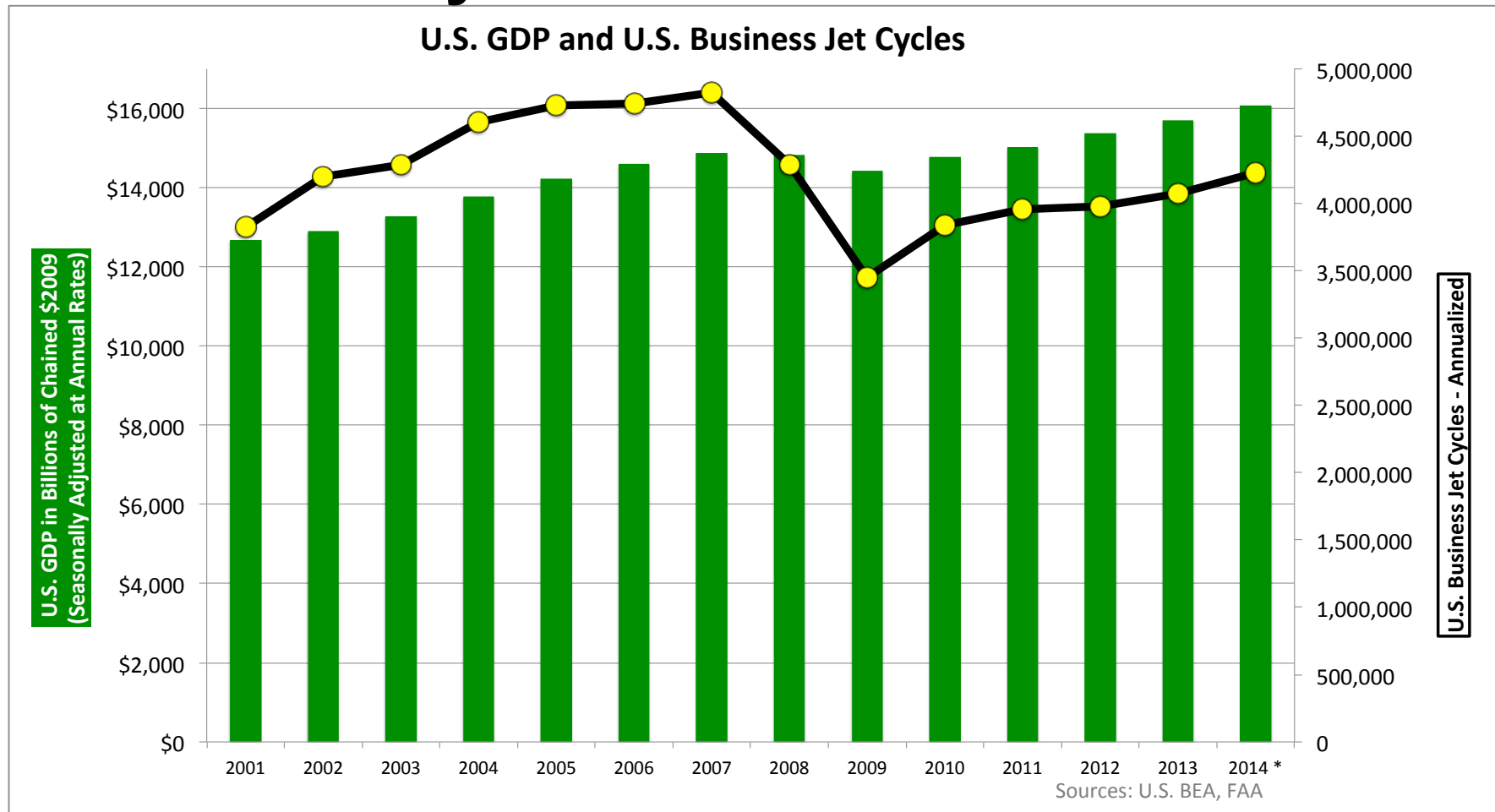
2015 GDP Forecasts and "Top 20" Business Jet Fleets



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

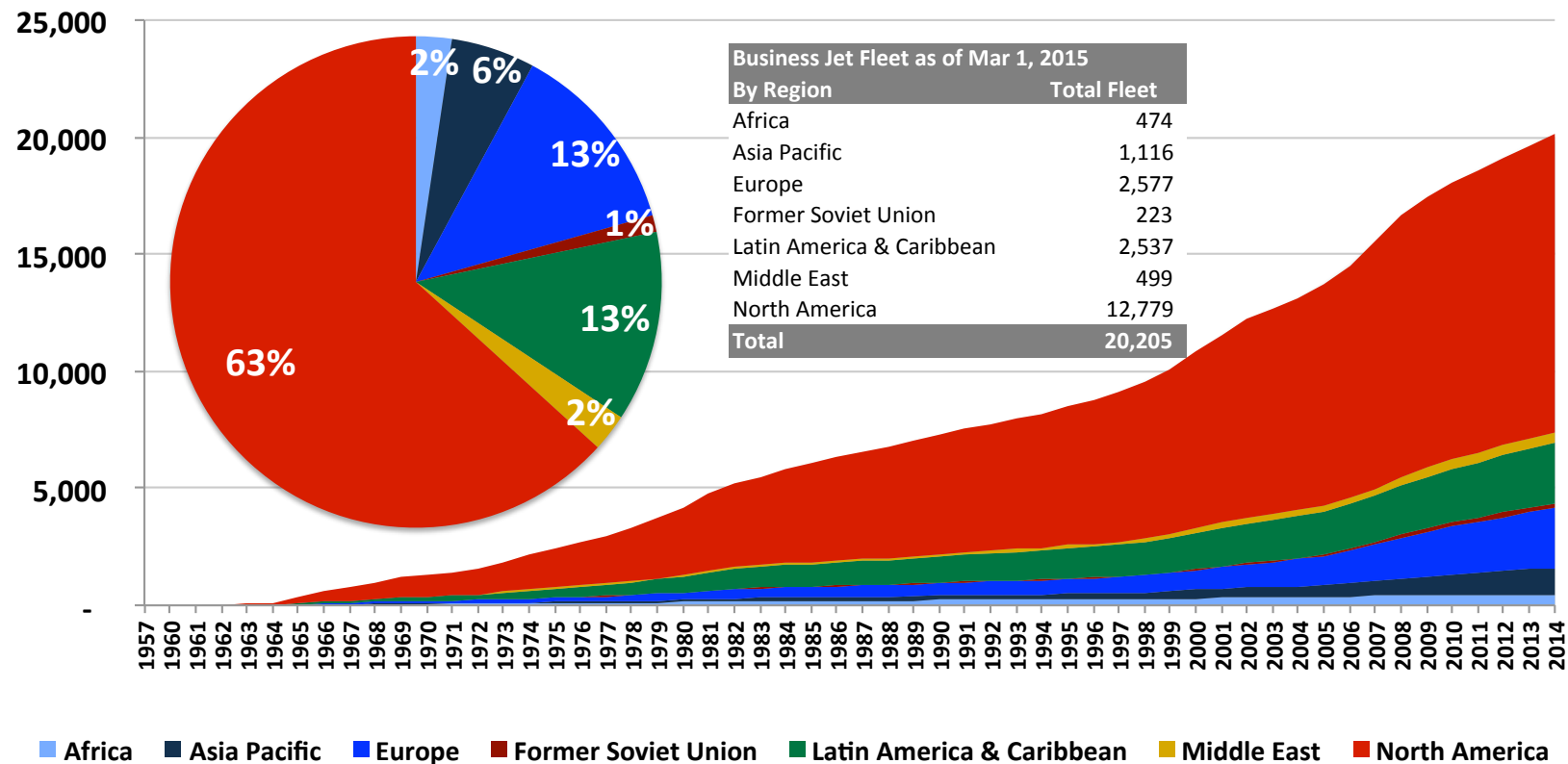
Mexico and Brazil have the next largest fleets after the USA; China is fastest growing

# The Economy



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

# Business Jet Fleet by Region



# Business Jet Fleet by Manufacturer

<b>NORTH AMERICA OEM</b>	<b>Fleet as of Mar 1, 2015</b>
Beechcraft	252
Bombardier	2,783
Cessna Citation	4,474
Dassault Falcon	1,274
Embraer	378
Gulfstream	1,678
Hawker	1,234
Other	706
<b>Total</b>	<b>12,779</b>

<b>EUROPE OEM</b>	<b>Fleet as of Mar 1, 2015</b>
Beechcraft	19
Bombardier	584
Cessna Citation	871
Dassault Falcon	460
Embraer	122
Gulfstream	202
Hawker	204
Other	115
<b>Total</b>	<b>2,577</b>

<b>FORMER SOVIET UNION OEM</b>	<b>Fleet as of Mar 1, 2015</b>
Beechcraft	-
Bombardier	71
Cessna Citation	18
Dassault Falcon	28
Embraer	24
Gulfstream	24
Hawker	39
Other	19
<b>Total</b>	<b>223</b>

<b>MIDDLE EAST OEM</b>	<b>Fleet as of Mar 1, 2015</b>
Beechcraft	5
Bombardier	112
Cessna Citation	58
Dassault Falcon	60
Embraer	39
Gulfstream	91
Hawker	61
Other	73
<b>Total</b>	<b>499</b>

<b>LATIN AMERICA &amp; CARIBBEAN OEM</b>	<b>Fleet as of Mar 1, 2015</b>
Beechcraft	71
Bombardier	620
Cessna Citation	833
Dassault Falcon	154
Embraer	201
Gulfstream	188
Hawker	310
Other	160
<b>Total</b>	<b>2,537</b>

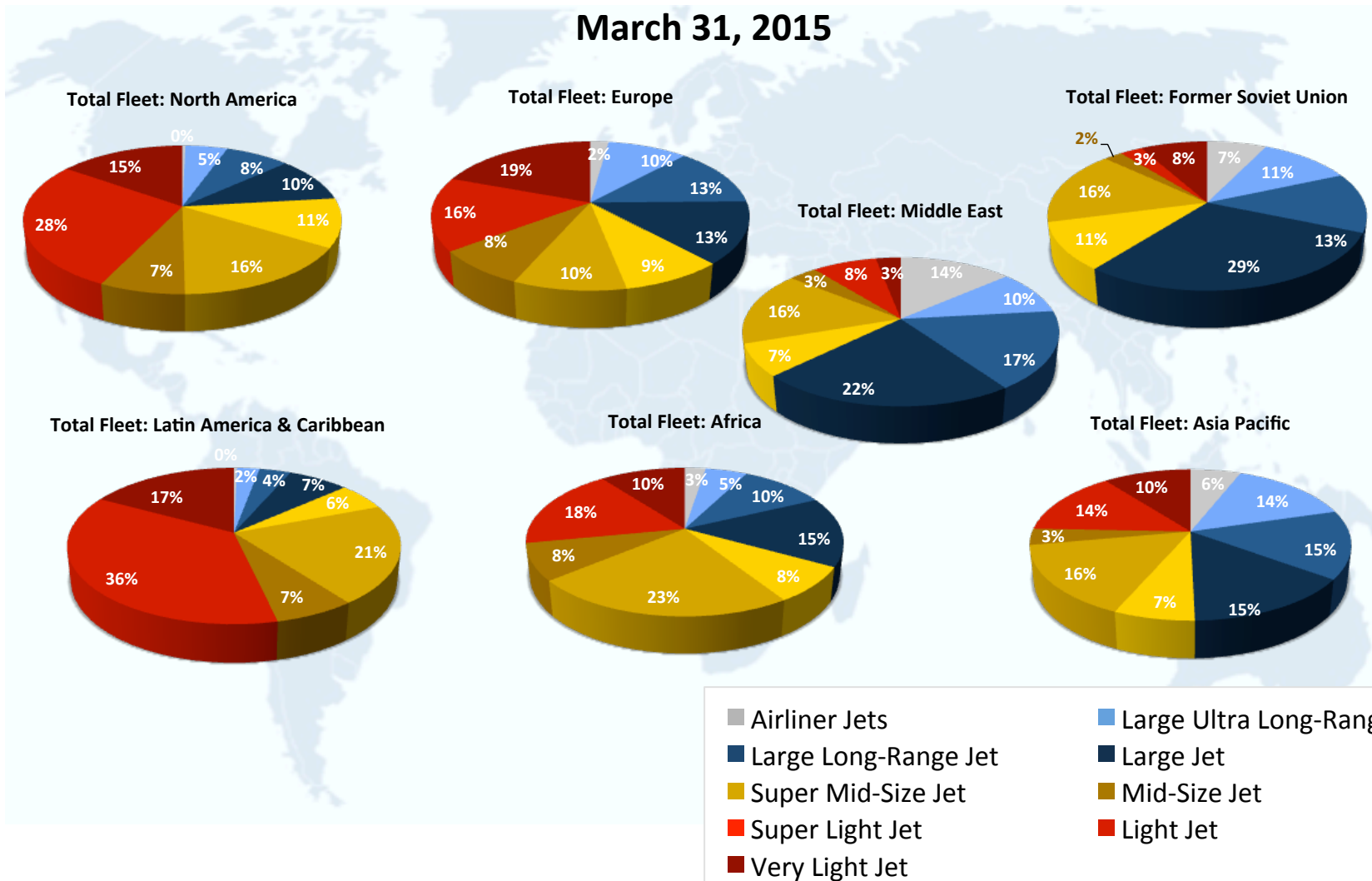
<b>AFRICA OEM</b>	<b>Fleet as of Mar 1, 2015</b>
Beechcraft	5
Bombardier	91
Cessna Citation	108
Dassault Falcon	65
Embraer	18
Gulfstream	60
Hawker	107
Other	20
<b>Total</b>	<b>474</b>

<b>ASIA PACIFIC OEM</b>	<b>Fleet as of Mar 1, 2015</b>
Beechcraft	12
Bombardier	255
Cessna Citation	219
Dassault Falcon	89
Embraer	72
Gulfstream	246
Hawker	145
Other	78
<b>Total</b>	<b>1,116</b>

**World business jet fleet was 20,205 jets on March 31, 2015 (preliminary estimates)**

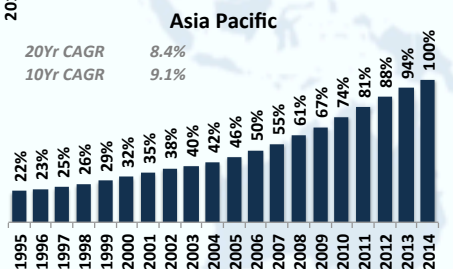
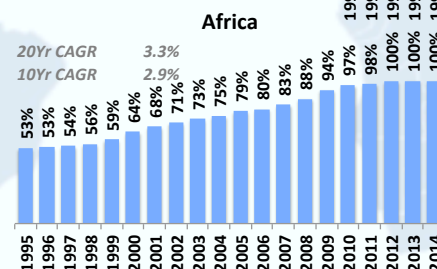
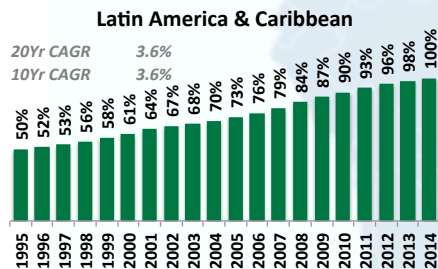
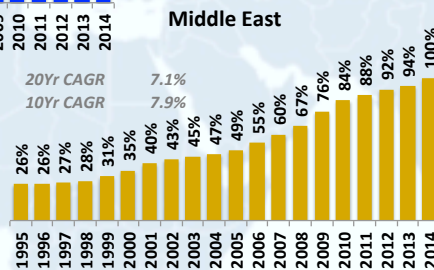
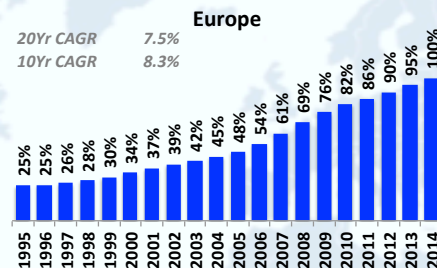
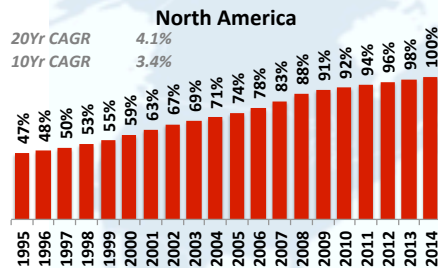
# Business Jet Fleet by Size Category

March 31, 2015



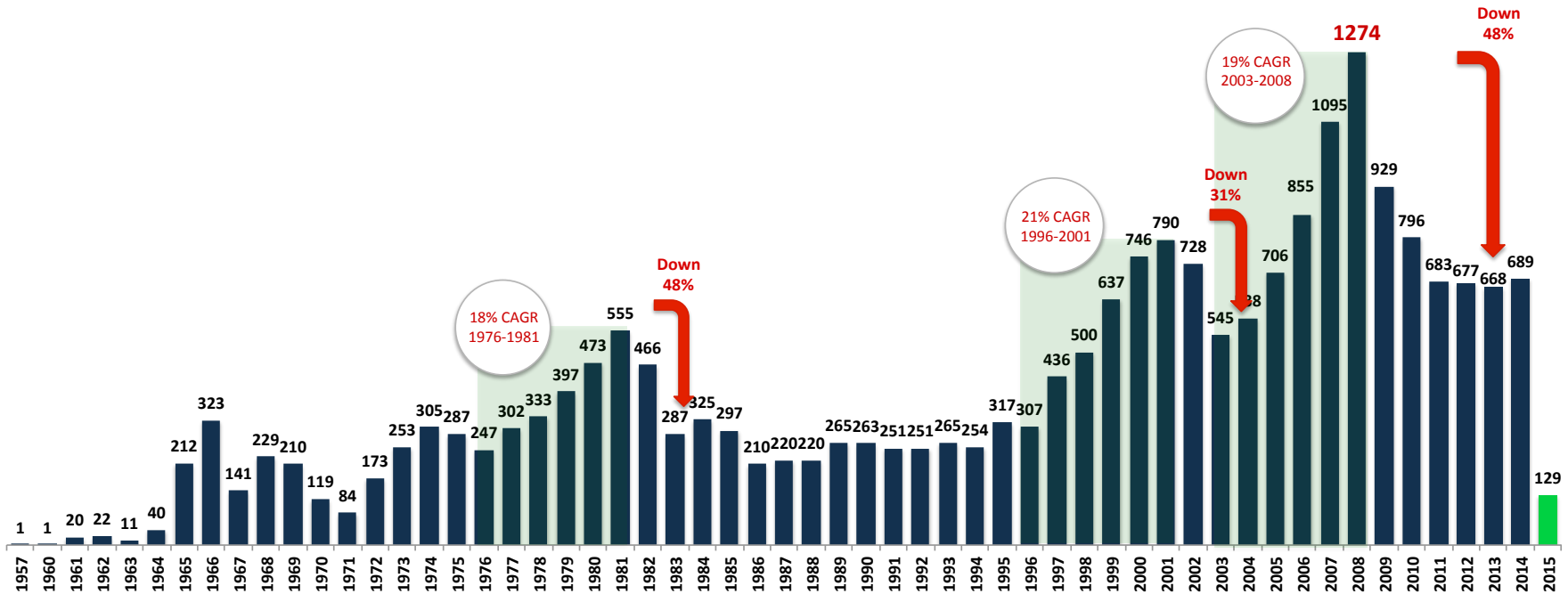
## Business Jet Fleet Growth: 1995-2014

Fleet in Years 1995 to 2013 as a % of Year-End 2014 Fleet by Region



# Business Jet Deliveries (units)

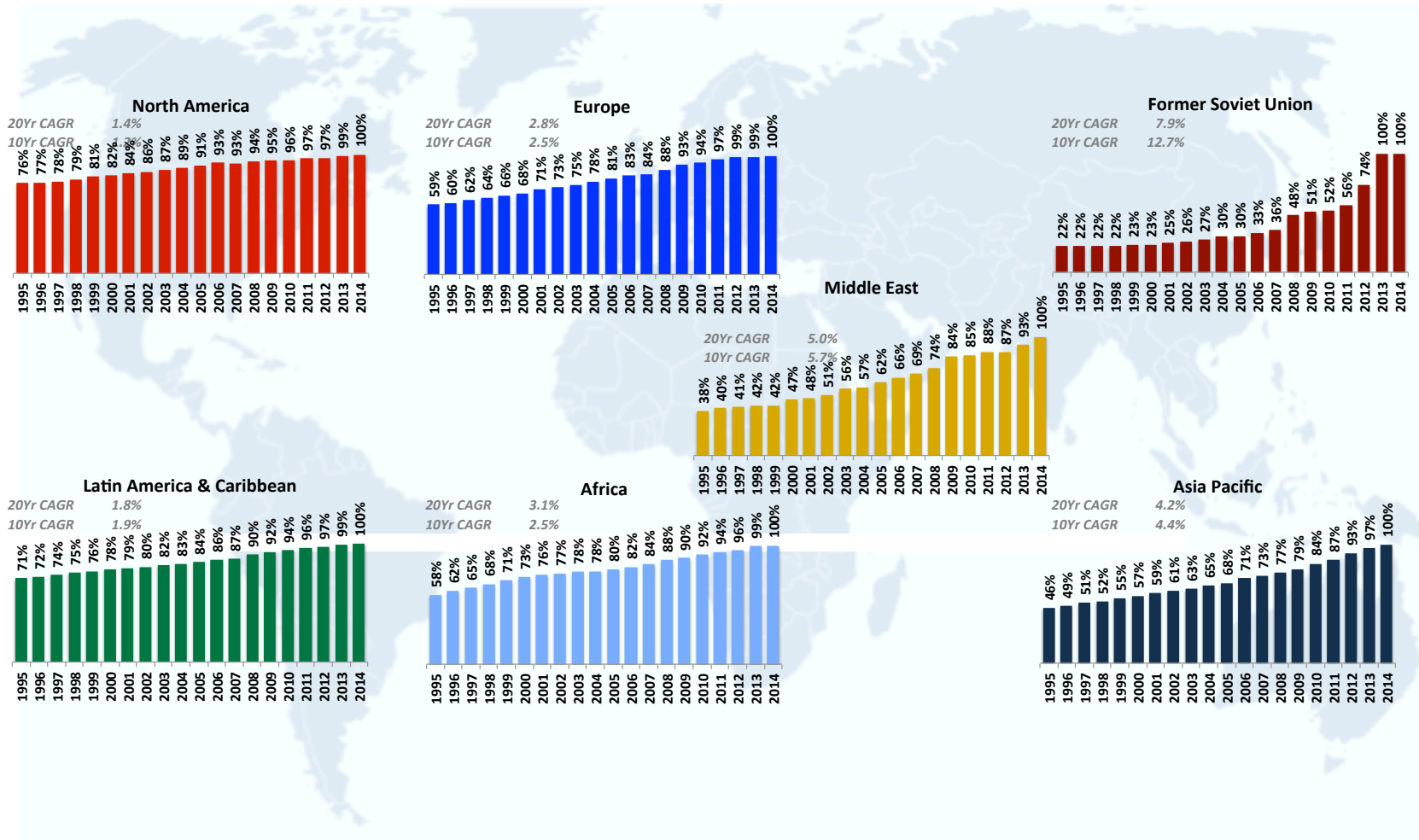
Jet Deliveries



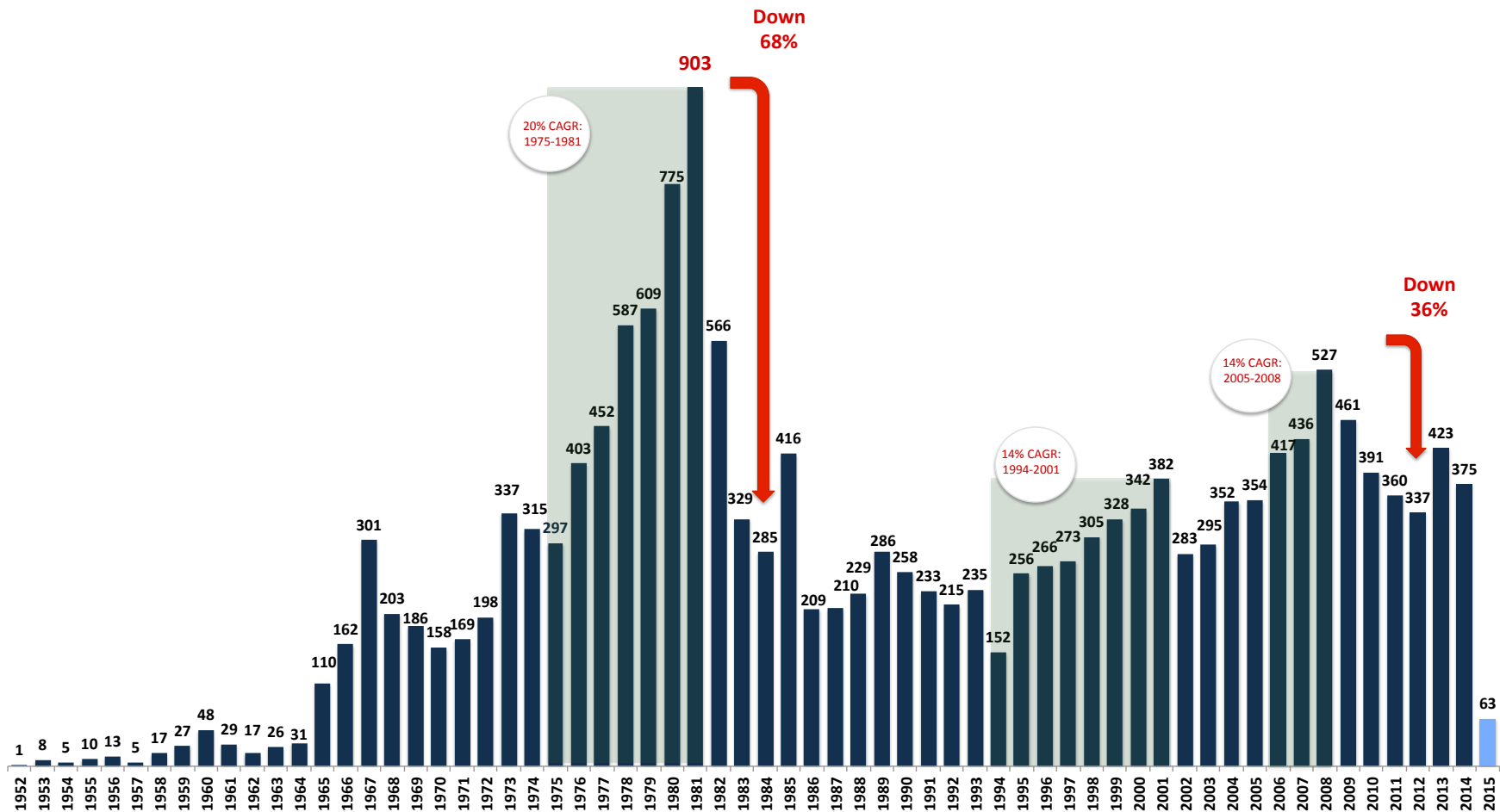
New business jet delivery units have remained relatively flat for 4 years;  
 New business jet delivery value in 2014 was about \$22B based on equipped list prices

# Turboprop Fleet Growth: 1995-2014

Fleet in Years 1995 to 2013 as a % of Year-End 2014 Fleet by Region



# Business Turboprop Deliveries (units)

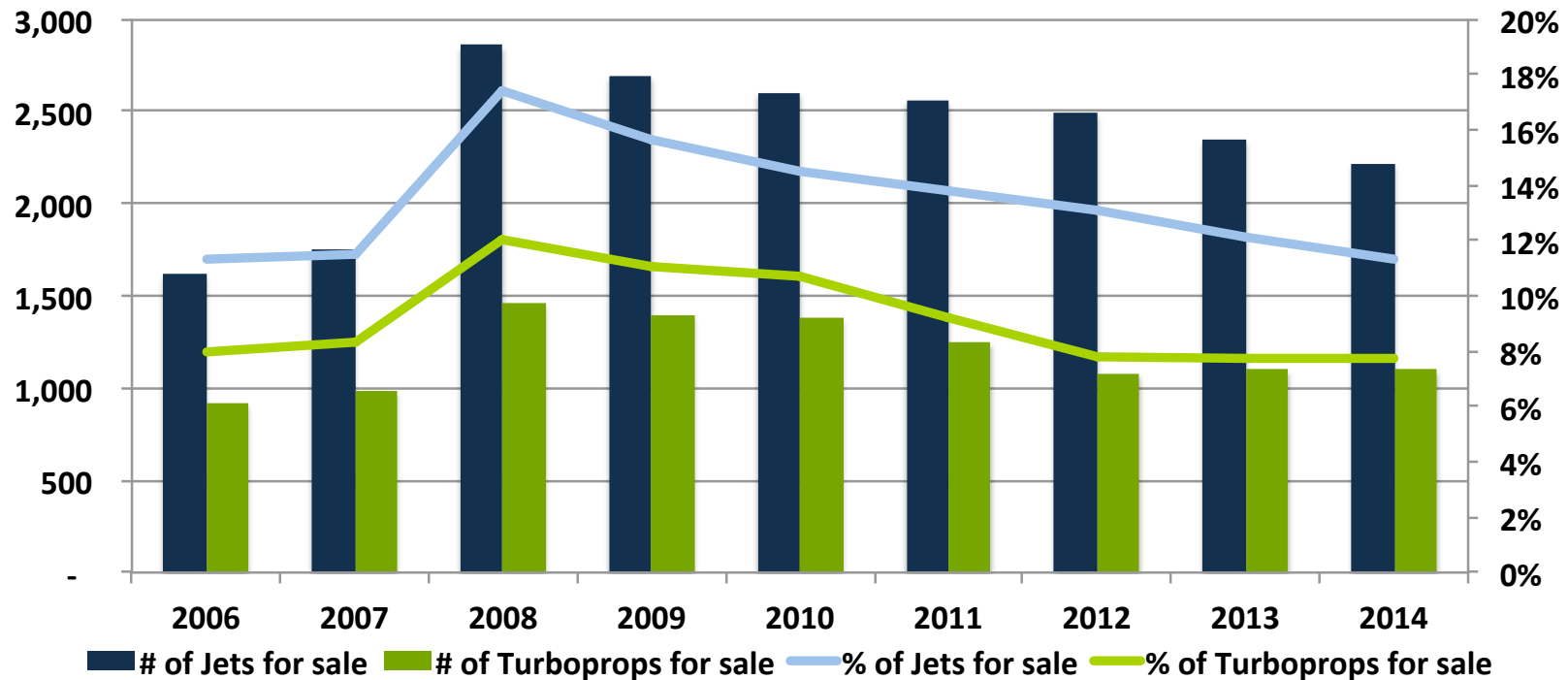


New turboprop deliveries increased 25% from 2012 to 2013

# Pre-Owned Business Aircraft Inventory

Business Jets and Turboprops for sale

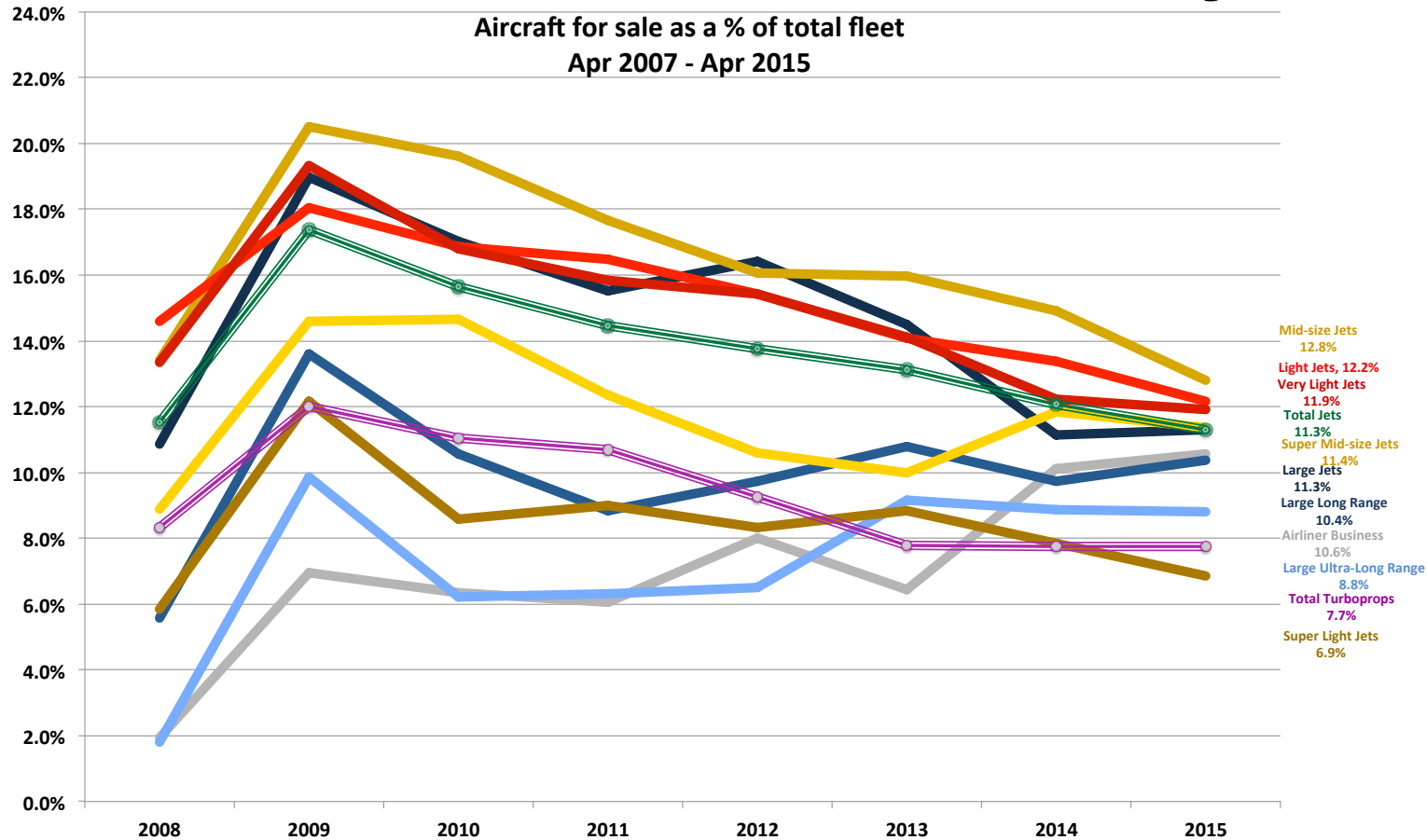
Apr 2007 - Apr 2015



Aircraft Available for Sale as % of World Fleet (as of April 1)									
	2007	2008	2009	2010	2011	2012	2013	2014	2015
Business Jets	11.3%	11.5%	17.4%	15.6%	14.5%	13.8%	13.1%	12.1%	11.3%
Turboprop	8.0%	8.3%	12.0%	11.1%	10.7%	9.2%	7.8%	7.7%	7.7%

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

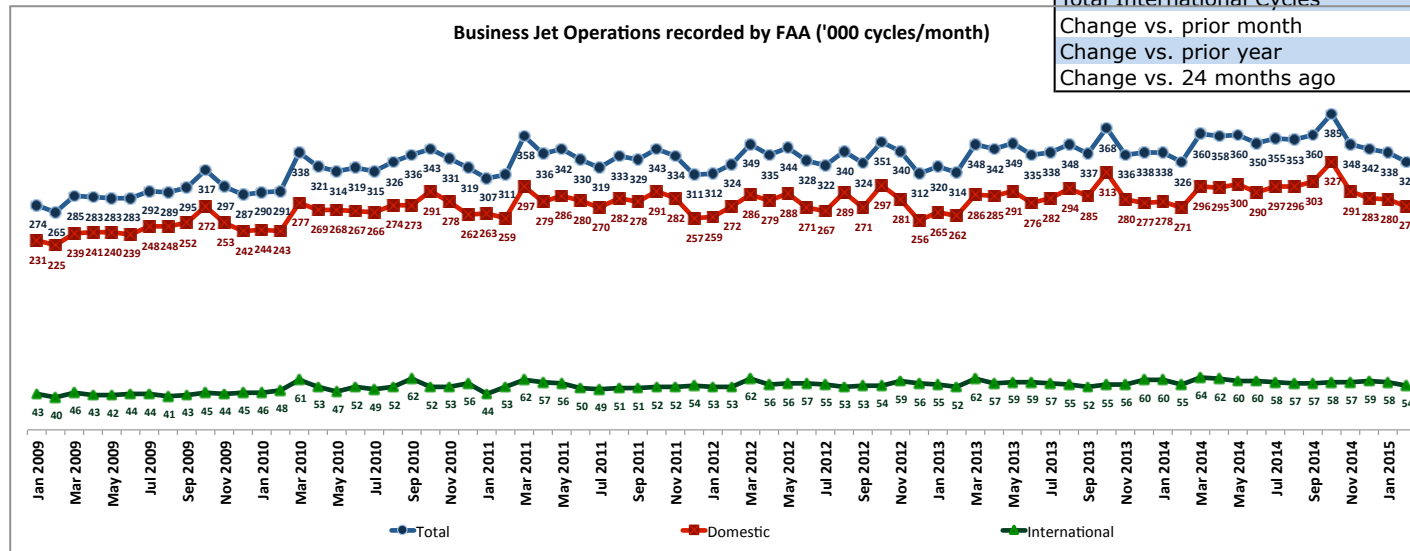
# Pre-Owned Business Jet Inventory



Pre-owned jet inventory levels vary significantly by size category, with light, very light and mid-size still with highest % for sale (with downward trend since 2009)

# U.S. Business Jet Utilization

FAA BUSINESS JET OPERATIONS - FEB 2015		Trailing 12 Months
<b>TOTAL CYCLES</b>		
Total Cycles	327,086	4,236,998
Change vs. prior month	-3.3%	0.0%
Change vs. prior year	0.3%	3.3%
Change vs. 24 months ago	4.3%	6.5%
<b>DOMESTIC CYCLES</b>		
Total Domestic Cycles	272,816	3,531,656
Change vs. prior month	-2.7%	0.1%
Change vs. prior year	0.8%	3.4%
Change vs. 24 months ago	4.3%	6.6%
<b>INTERNATIONAL CYCLES</b>		
Total International Cycles	54,270	705,442
Change vs. prior month	-6.0%	-0.1%
Change vs. prior year	-1.7%	2.8%
Change vs. 24 months ago	3.9%	5.5%

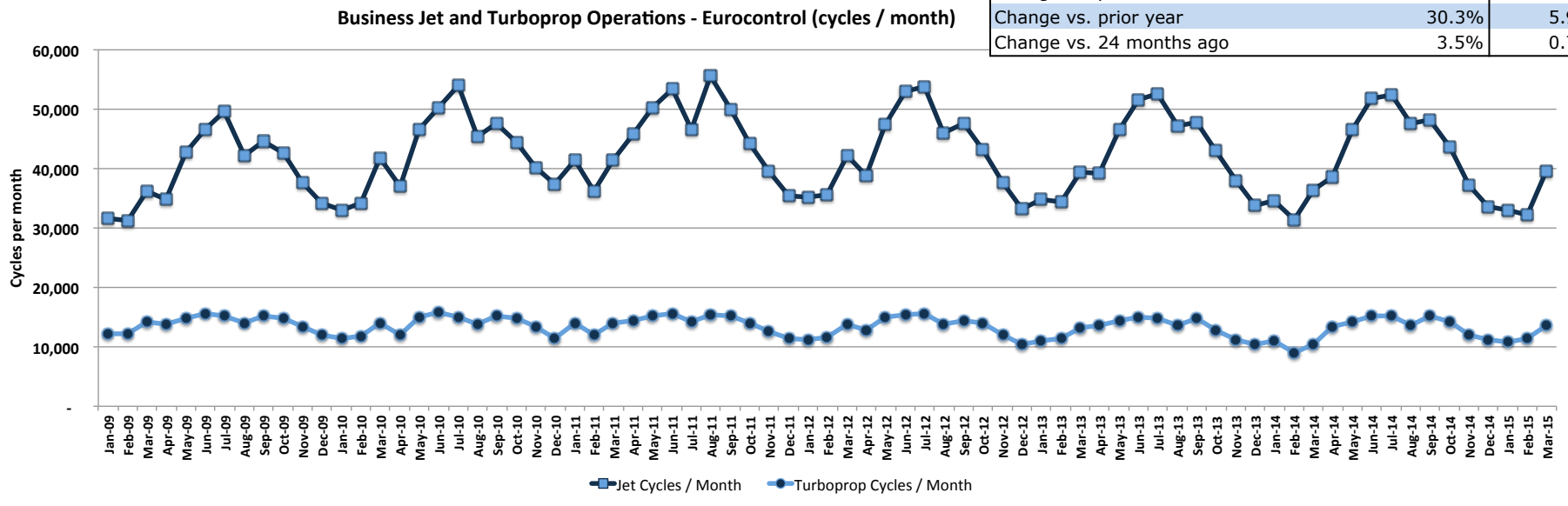


Source: U.S. FAA

Annualized U.S. business jet cycles through Feb. 2015 are up 6.5% over 2 years ago

# European Business Aircraft Utilization

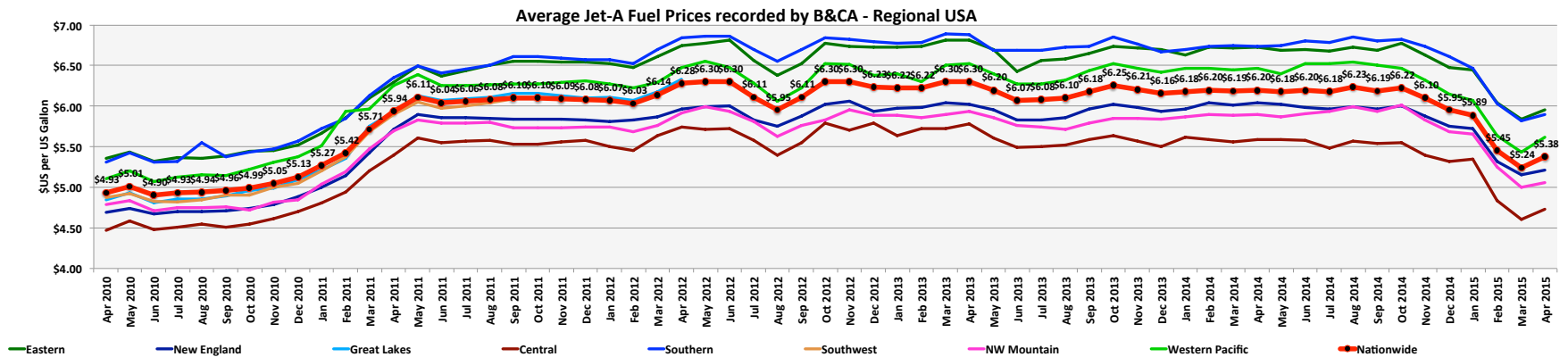
EUROCONTROL BUSINESS JET & TURBOPROP OPERATIONS - MAR 2015		Trailing 12 Months
<b>BUSINESS JETS (EXCLUDING AIRLINERS)</b>		
Total Cycles	39,629	504,539
Change vs. prior month	23.0%	0.6%
Change vs. prior year	8.9%	0.4%
Change vs. 24 months ago	0.5%	-0.9%
<b>TURBOPROPS</b>		
Total Cycles	13,663	160,062
Change vs. prior month	20.2%	2.0%
Change vs. prior year	30.3%	5.9%
Change vs. 24 months ago	3.5%	0.7%



Source: Eurocontrol

Annualized European cycles are up 0.4% for business jets and up 5.9% for business turboprops over the prior year on a trailing 12 months (TTM) basis

# Jet-A Fuel Prices at U.S. FBOs



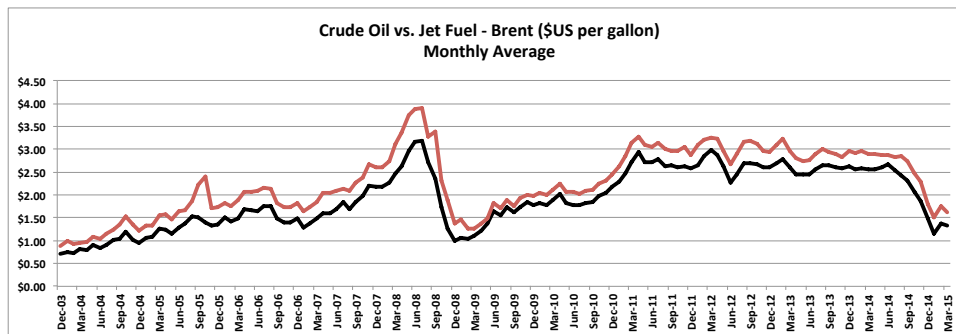
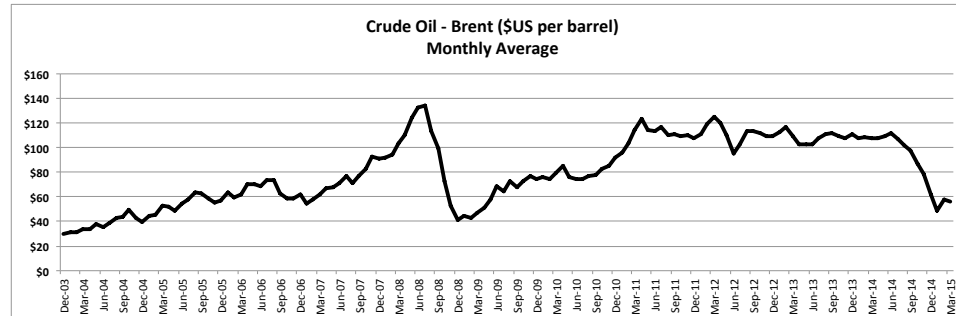
Source: [Business & Commercial Aviation](#)

Jet-A fuel prices at U.S. FBOs have begun to turn upwards again, with jet fuel prices rising from \$66/bbl in January 2015 to \$75/bbl in April. (vs. \$121/bbl in April 2014)

March 31, 2015

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# Crude Oil and Jet Fuel Prices



IATA Fuel Price Monitor Apr 17, 2015)	Share in World Index	\$/US gallon	\$/barrel	Index Value 2000= 100	vs. 1 week ago	vs. 1 month ago	vs.1 yr ago
<b>Jet Fuel Price</b>	<b>100%</b>	<b>\$ 1.780</b>	<b>\$ 74.80</b>	<b>204.40</b>	<b>6.5%</b>	<b>8.6%</b>	<b>-39.8%</b>
Asia & Oceania	22%	\$ 1.781	\$ 74.80	213.70	8.9%	12.3%	-39.0%
Europe & CIS	28%	\$ 1.814	\$ 76.20	205.30	6.9%	10.7%	-38.5%
Middle East & Africa	7%	\$ 1.708	\$ 71.70	214.20	8.0%	11.2%	-40.7%
North America	39%	\$ 1.761	\$ 74.00	196.80	4.9%	4.7%	-41.0%
Latin & Central America	4%	\$ 1.862	\$ 78.20	216.70	6.5%	8.4%	-40.0%

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

Source: IndexMundi; IATA from PLATTS

March 31, 2015


JETNET iQ Snap!: 1st Quarter 2015 - Private & Confidential

## 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



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:

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PASSWORD:

For questions about this survey, please contact:

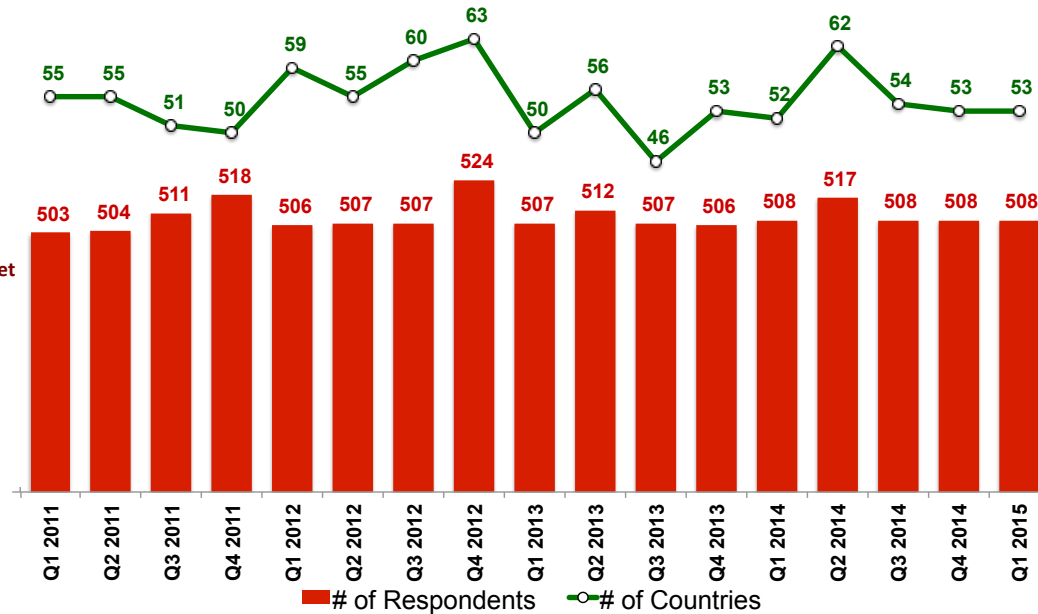
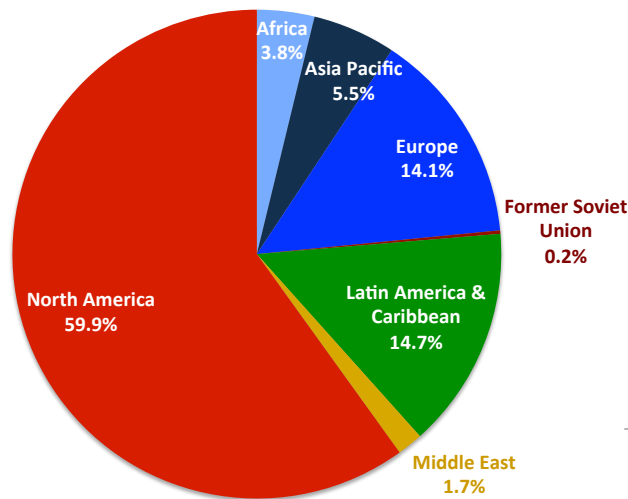


ROLAND VINCENT  
JETNET iQ Creator / Director  
Phone: 1-972-439-2069 (U.S. Central Time)  
Email: rollie@jetnet.com

JETNET iQ Surveys: Quarterly, multilingual, worldwide

## JETNET iQ Survey Respondents

Respondent Fleet Location Q1 2011 - Q1 2015



	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012	Q2 2012	Q3 2012	Q4 2012	Q1 2013	Q2 2013	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Total
# of Respondents	503	504	511	518	506	507	507	524	507	512	507	506	508	517	508	508	509	8,662
# of Countries	55	55	51	50	59	55	60	63	50	56	46	53	52	62	54	53	54	124

JETNET iQ Surveys: Since Q1 2011, >8,600 respondents from 124 countries

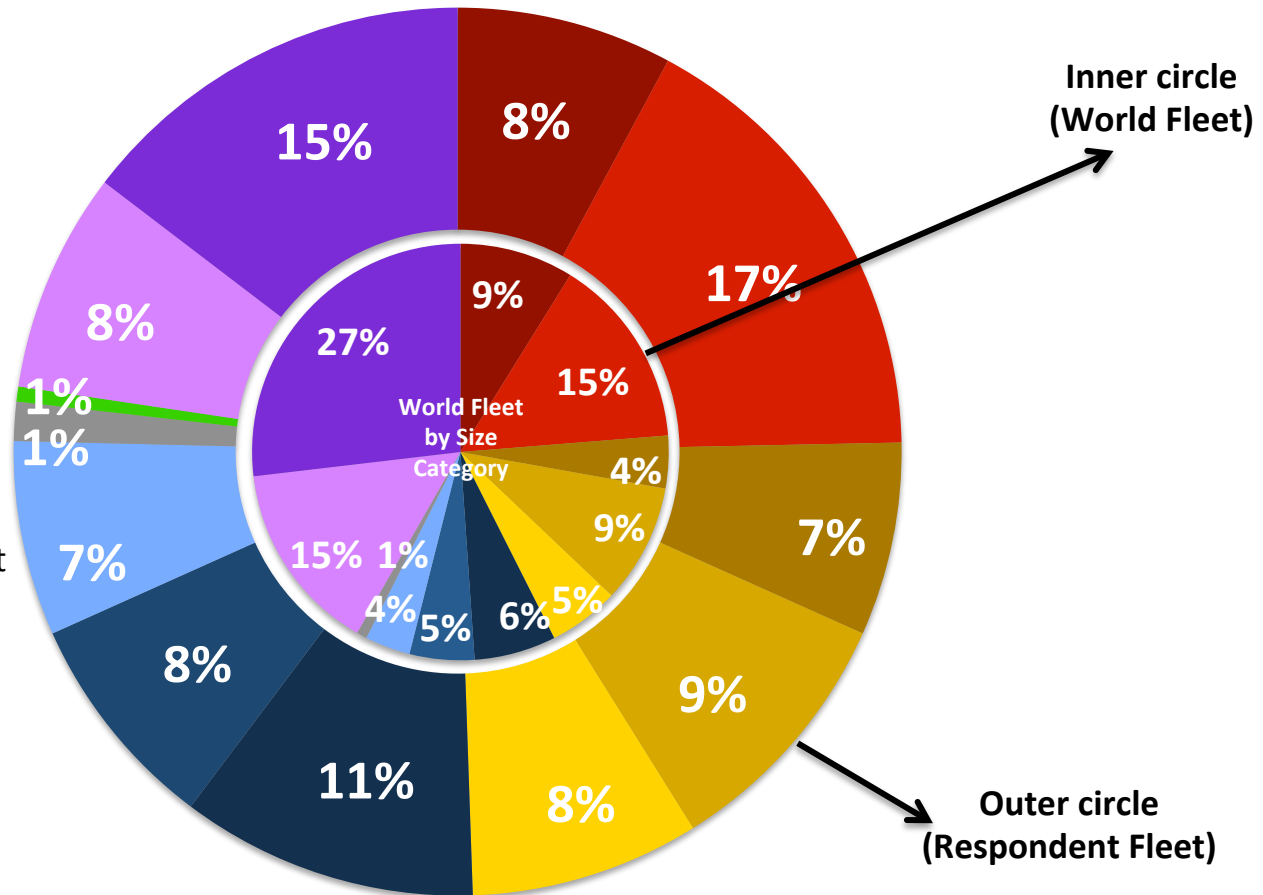


# Survey Respondents' Fleet

## By Aircraft Size Category

Q1 2015 Survey

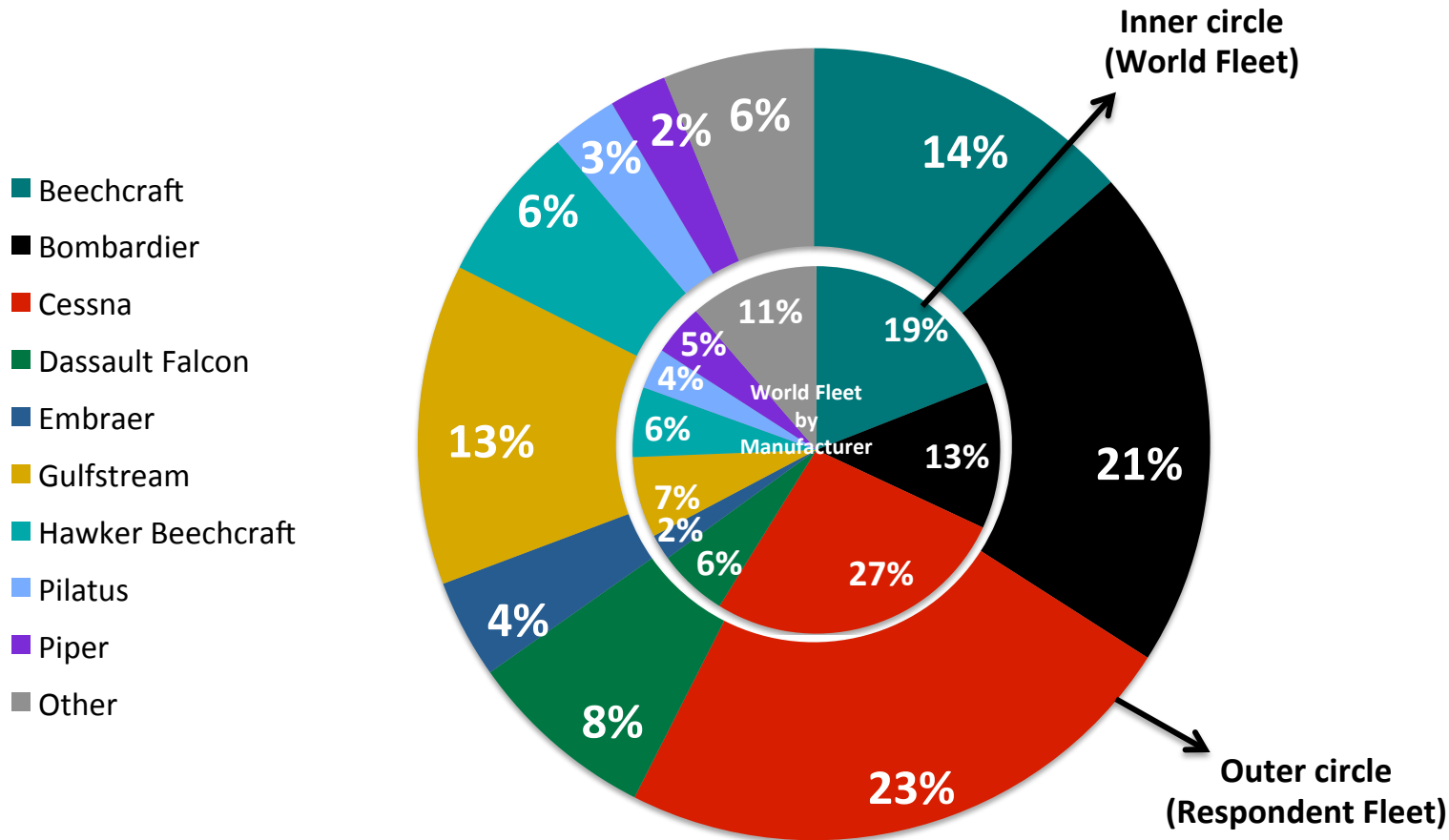
- Very Light Jet
- Light Jet
- Super Light Jet
- Mid-Size Jet
- Super Mid-Size Jet
- Large Jet
- Large Long-Range Jet
- Large Ultra Long-Range Jet
- Airline Business Jet
- Airliner Jet Converted
- Single-Engine Turbo-Prop
- Multi-Engine Turbo-Prop



# Survey Respondents' Fleet

By Aircraft Manufacturer

Q1 2015 Survey



## Survey Respondents' Roles

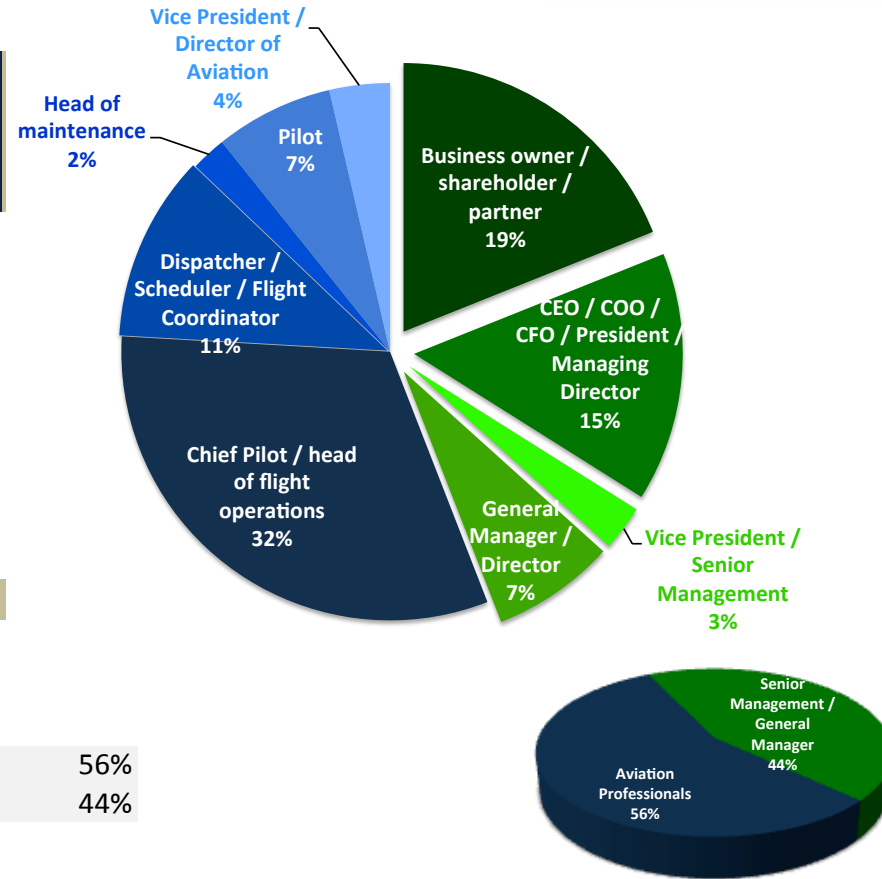
### By Job Title

Q1 2015 Survey

Title of respondent	Completed
Business owner / shareholder / partner	125
CEO / COO / CFO / President / Managing Director	99
Vice President / Senior Management	18
General Manager / Director	49
Chief Pilot / head of flight operations	210
Dispatcher / Scheduler / Flight Coordinator	74
Head of maintenance	14
Pilot	47
Vice President / Director of Aviation	24
<b>Total</b>	<b>660</b>

Note: Respondent was able to chose whichever applied

<b>Aviation Professionals</b>	369	56%
<b>Senior Management / General Manager</b>	291	44%

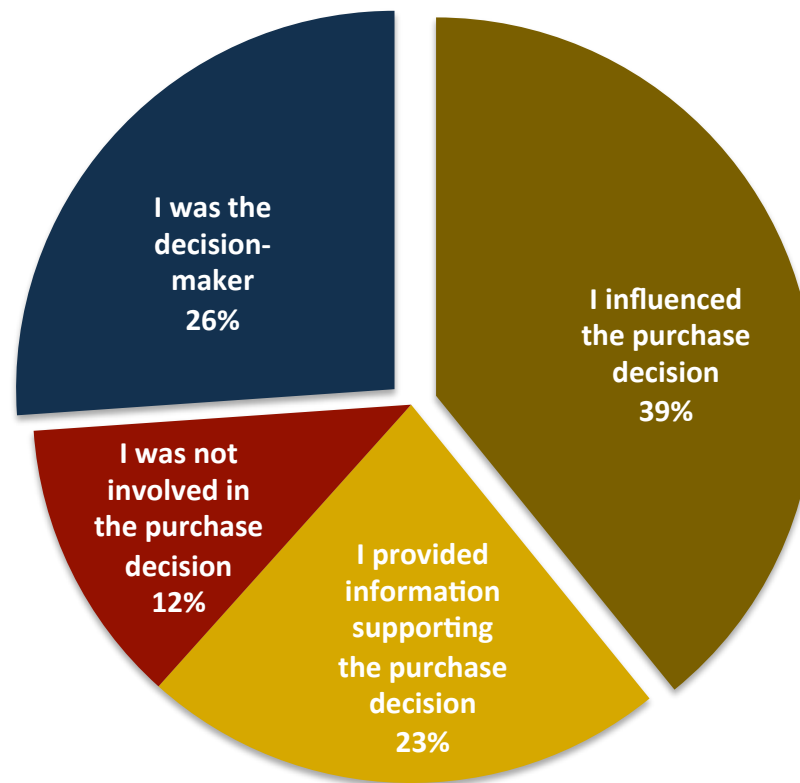


# Survey Respondents' Roles

By Involvement in Last Fixed-Wing Turbine Aircraft Purchase

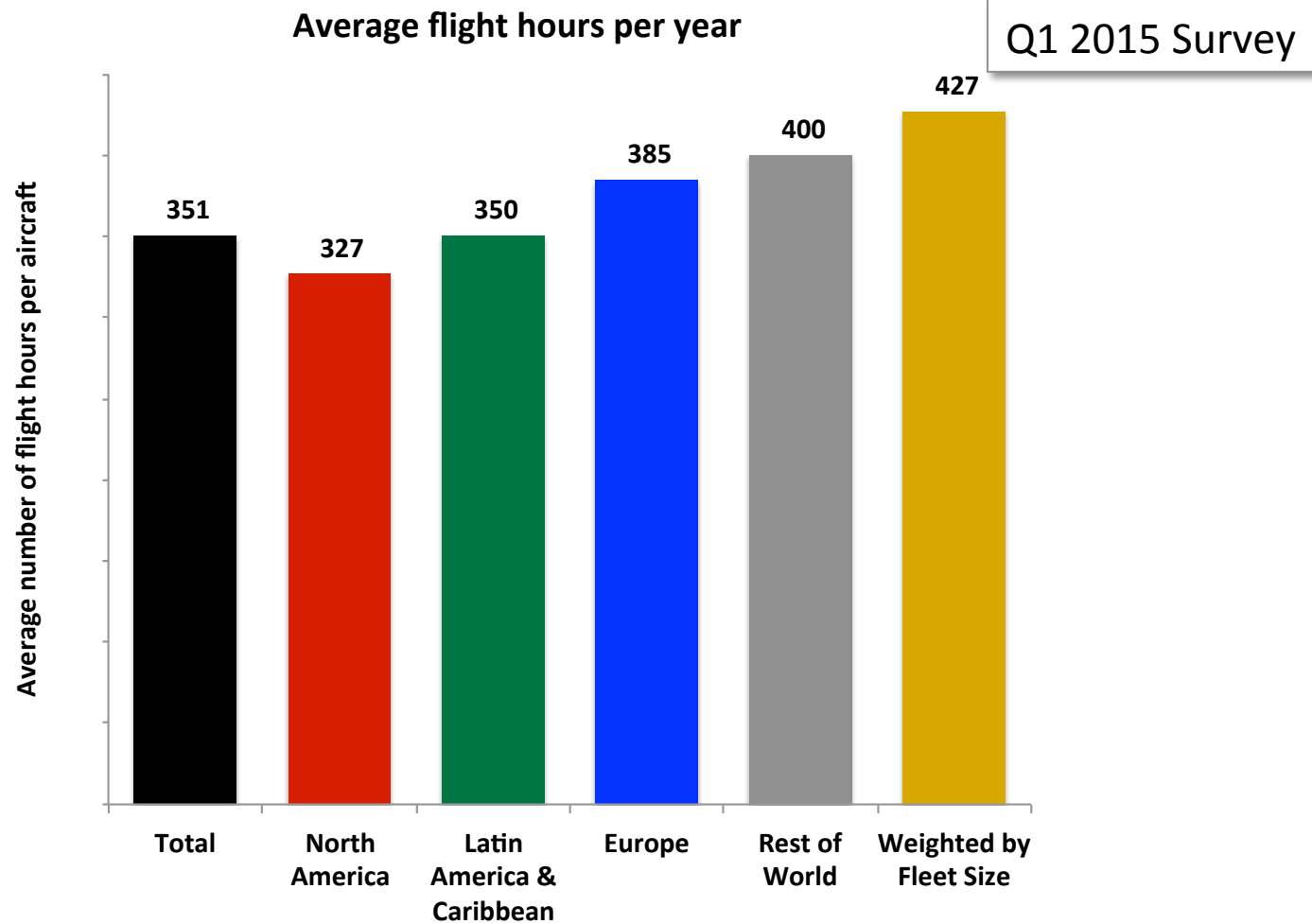
Q1 2015 Survey

Involvement in the purchase decision



# Survey Respondents' Flight Operations

## Regional Average Utilization per Aircraft in Prior 12 Months

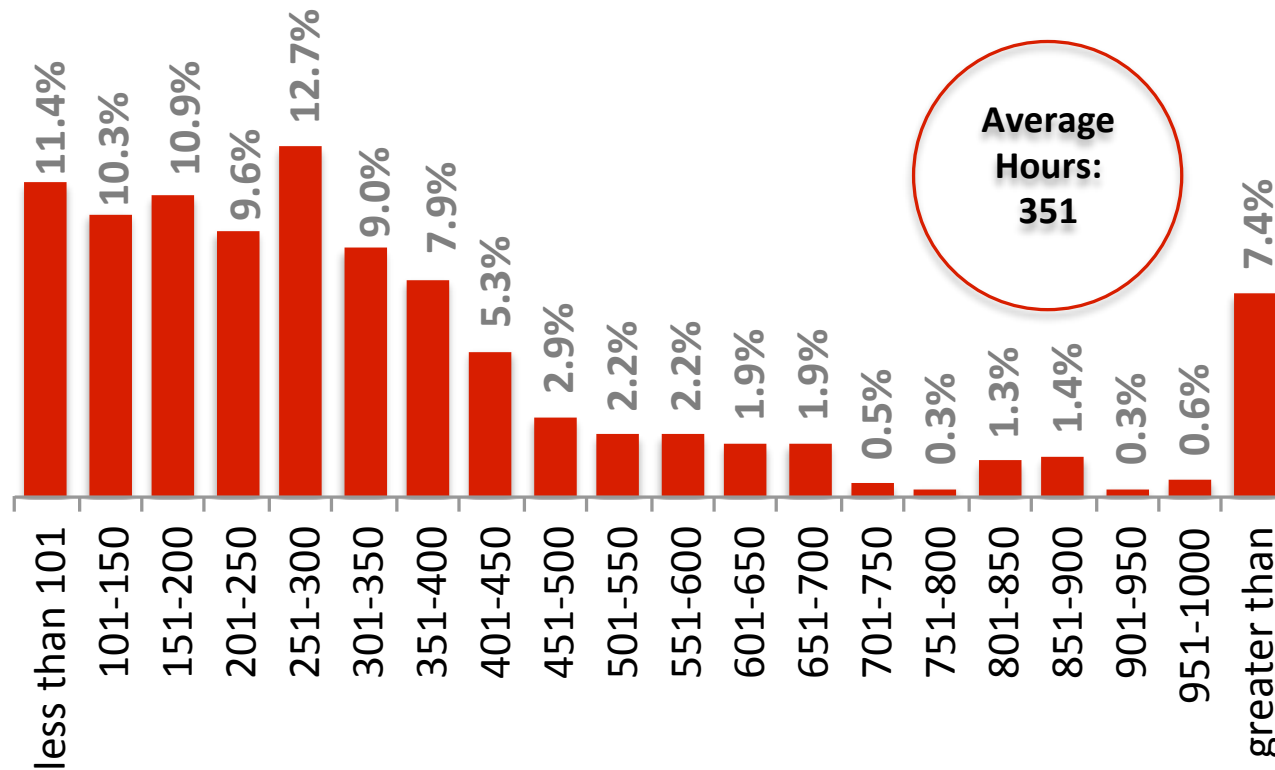


# Survey Respondents' Flight Operations

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

Q1 2015 Survey

**Annual Flight Hours Per Aircraft**

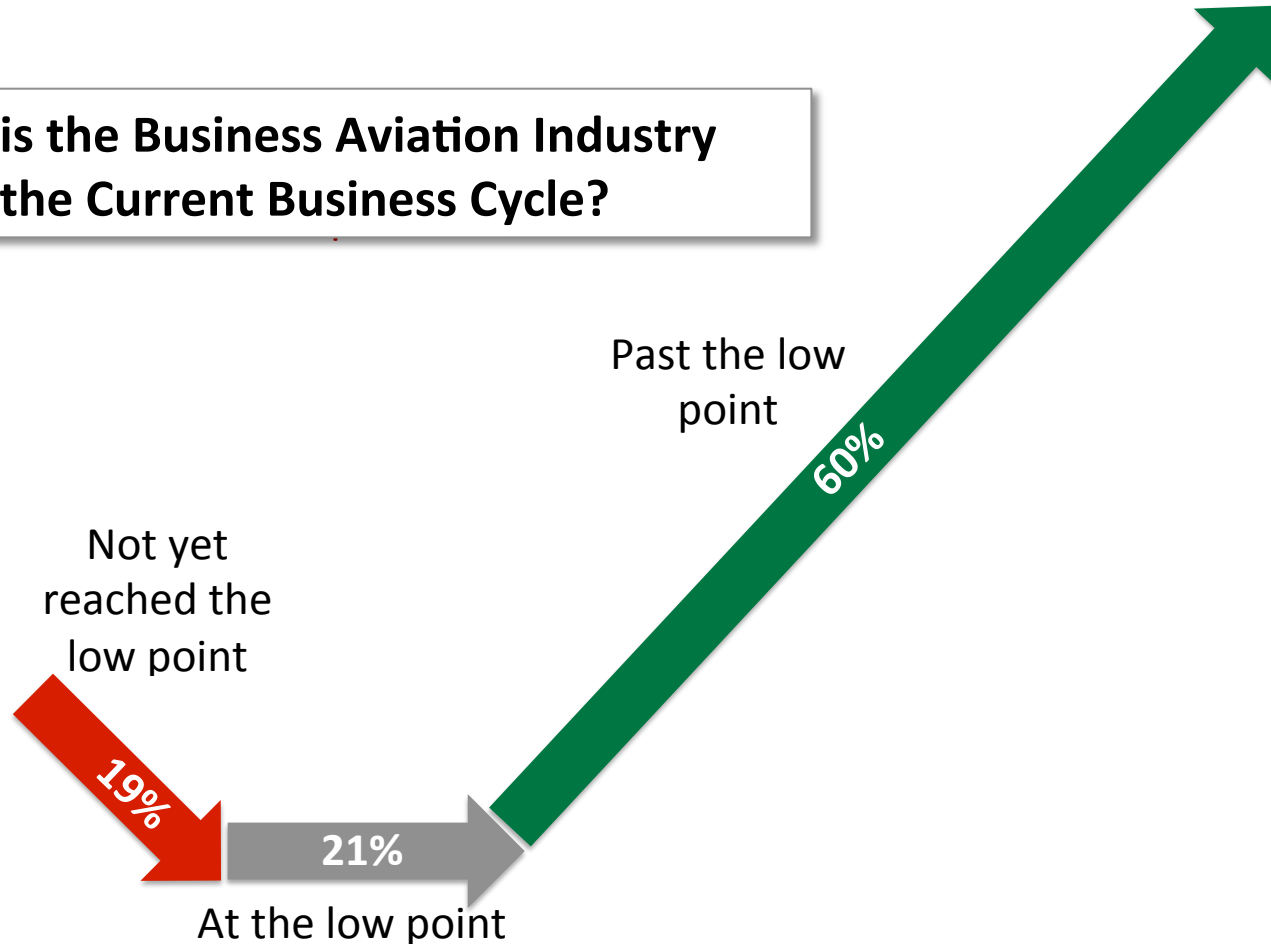


# Survey Respondents' Sentiment

Current Market Sentiment

Q1 2015 Survey

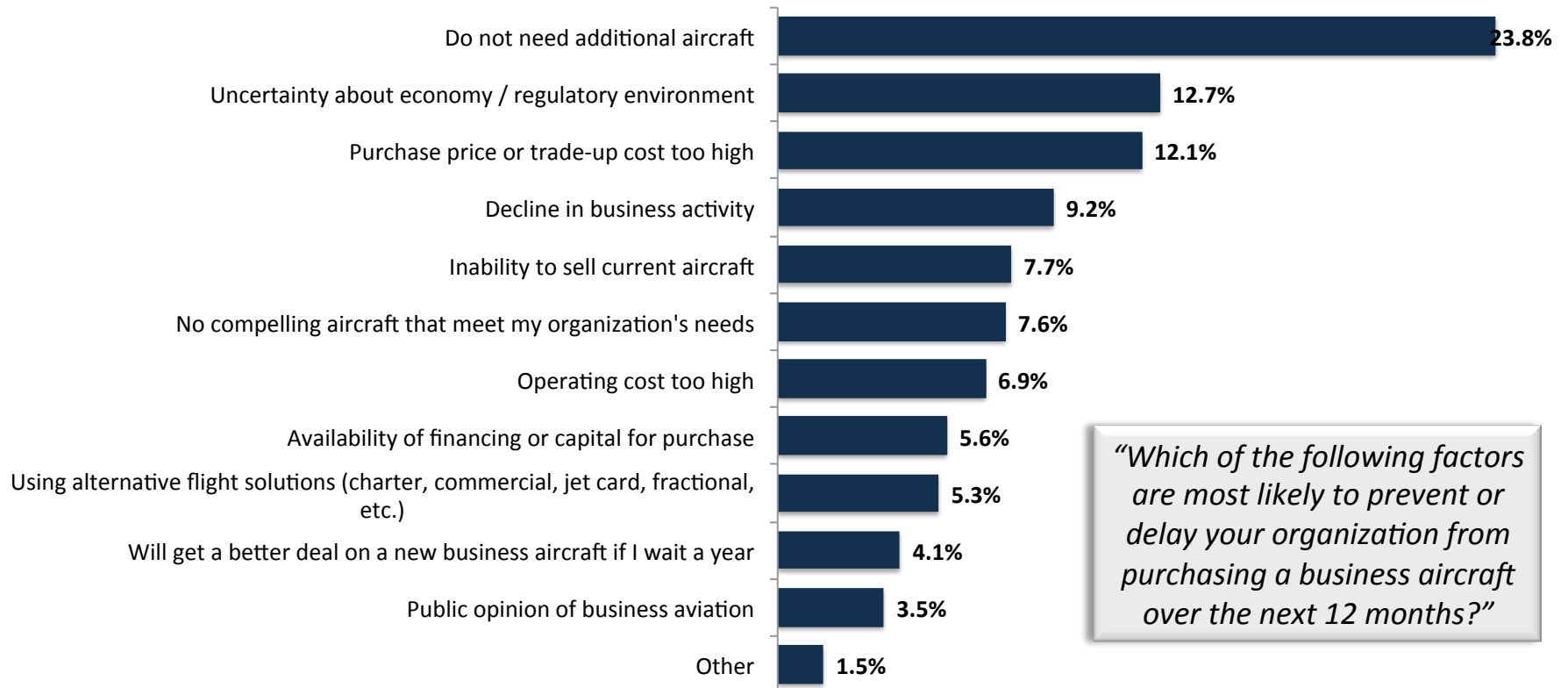
**Where is the Business Aviation Industry  
In the Current Business Cycle?**



# Aircraft Purchase Inhibitors

## Top 3 Inhibitors – Weighted Average

Q1 2015 Survey



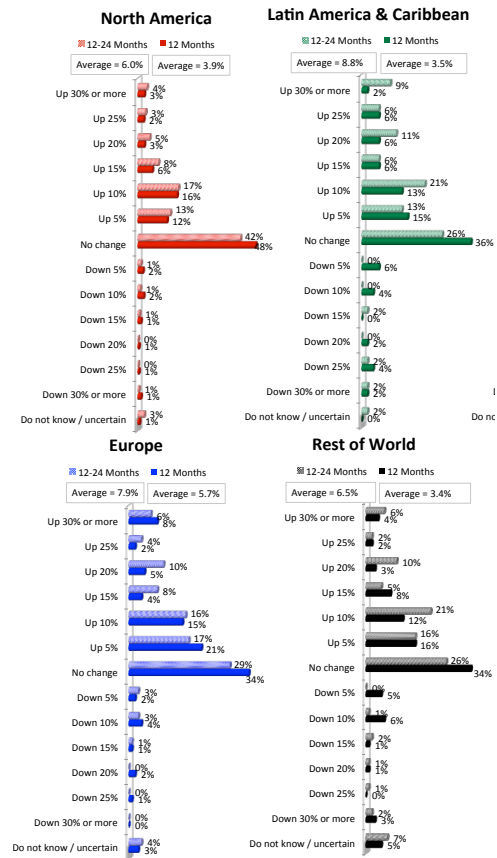
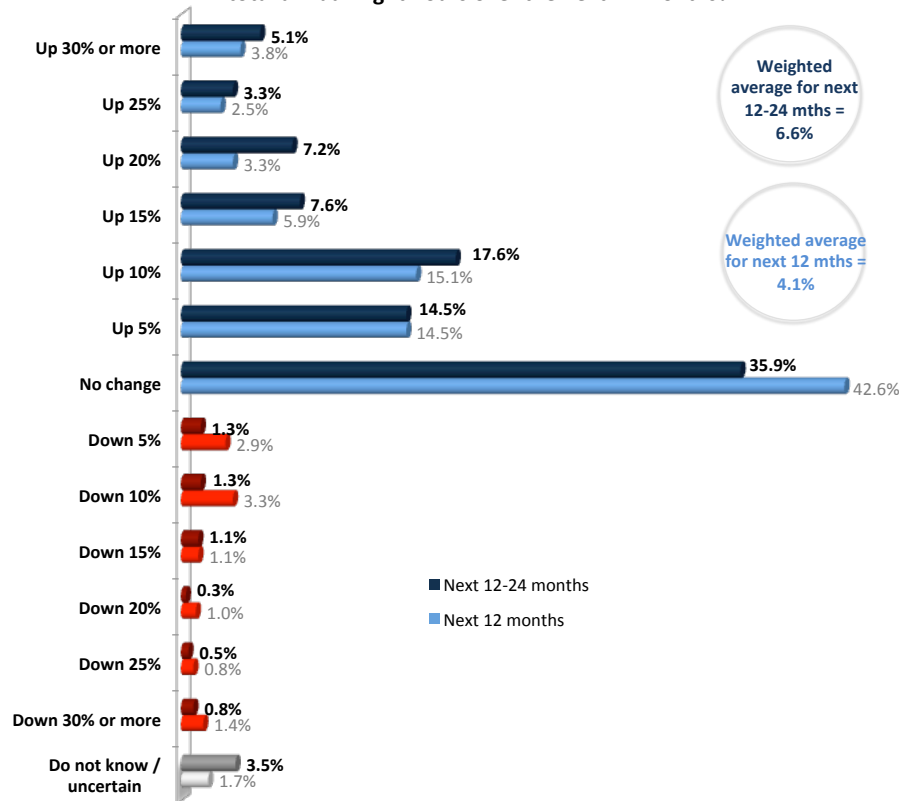
*“Which of the following factors are most likely to prevent or delay your organization from purchasing a business aircraft over the next 12 months?”*

## Aircraft Utilization

### Next 12 and 12-24 Months versus Prior 12 Months

Q1 2015 Survey

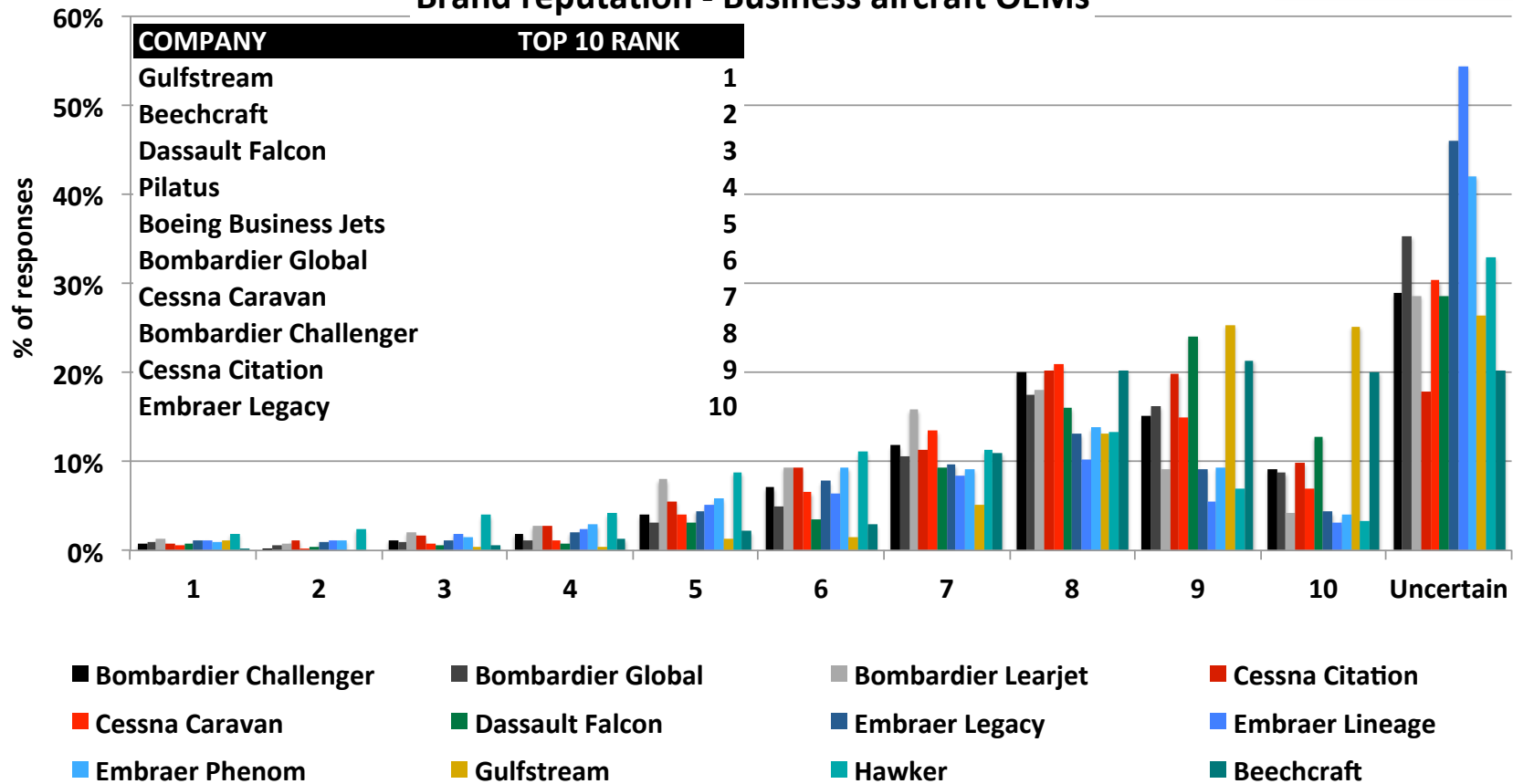
Compared with your past 12 months, what changes do you expect in your total annual flight hours over the next 24 months?



Respondents expect to fly 4.1% more hours in the next 12 months vs. prior 12 months

# Brand Reputations

Aircraft Manufacturers on a 1-10 Scale, where "10" = Highest  
 Brand reputation - Business aircraft OEMs Q1 2015 Survey

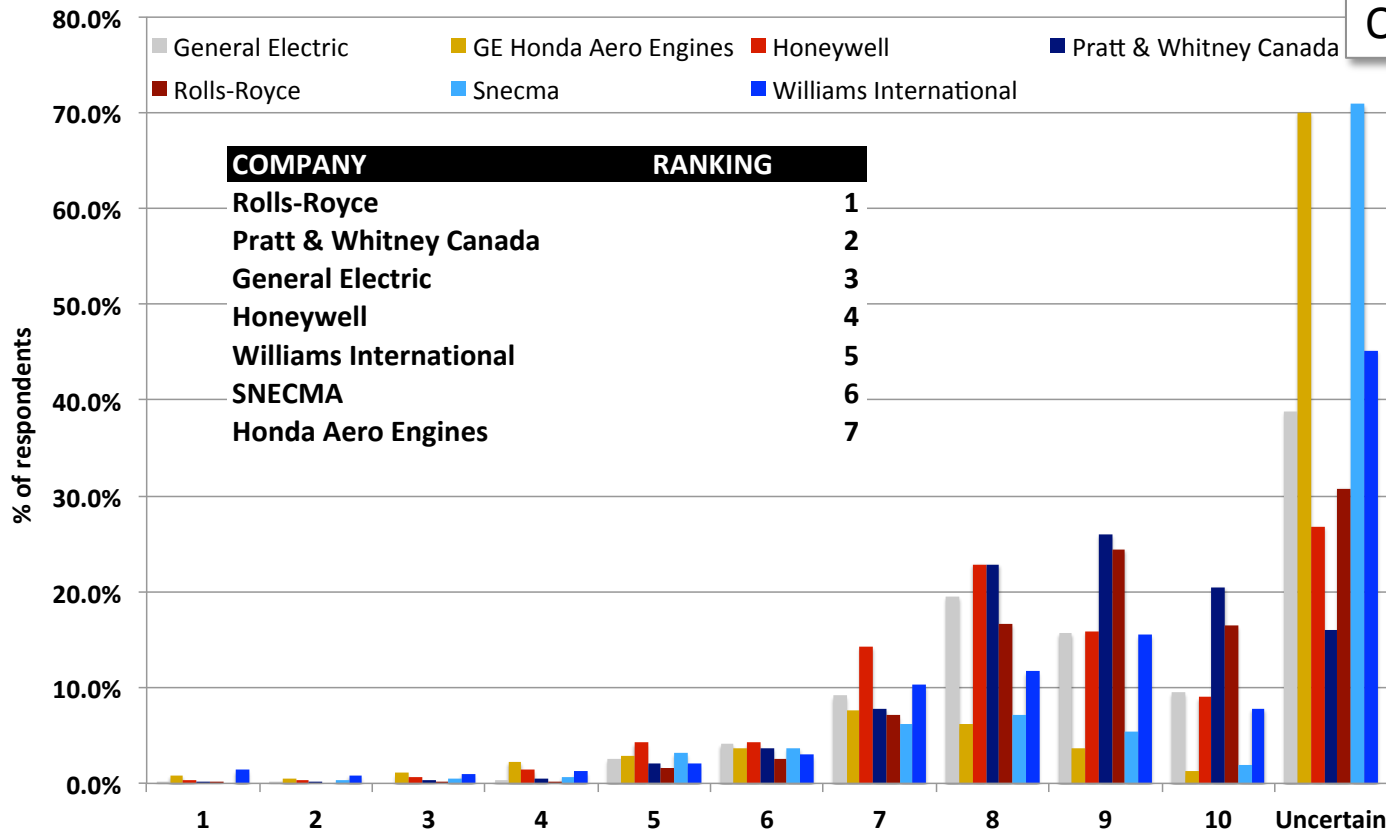


**Gulfstream, Beechcraft and Dassault Falcon are the top rated business aircraft brands**

# Brand Reputations

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

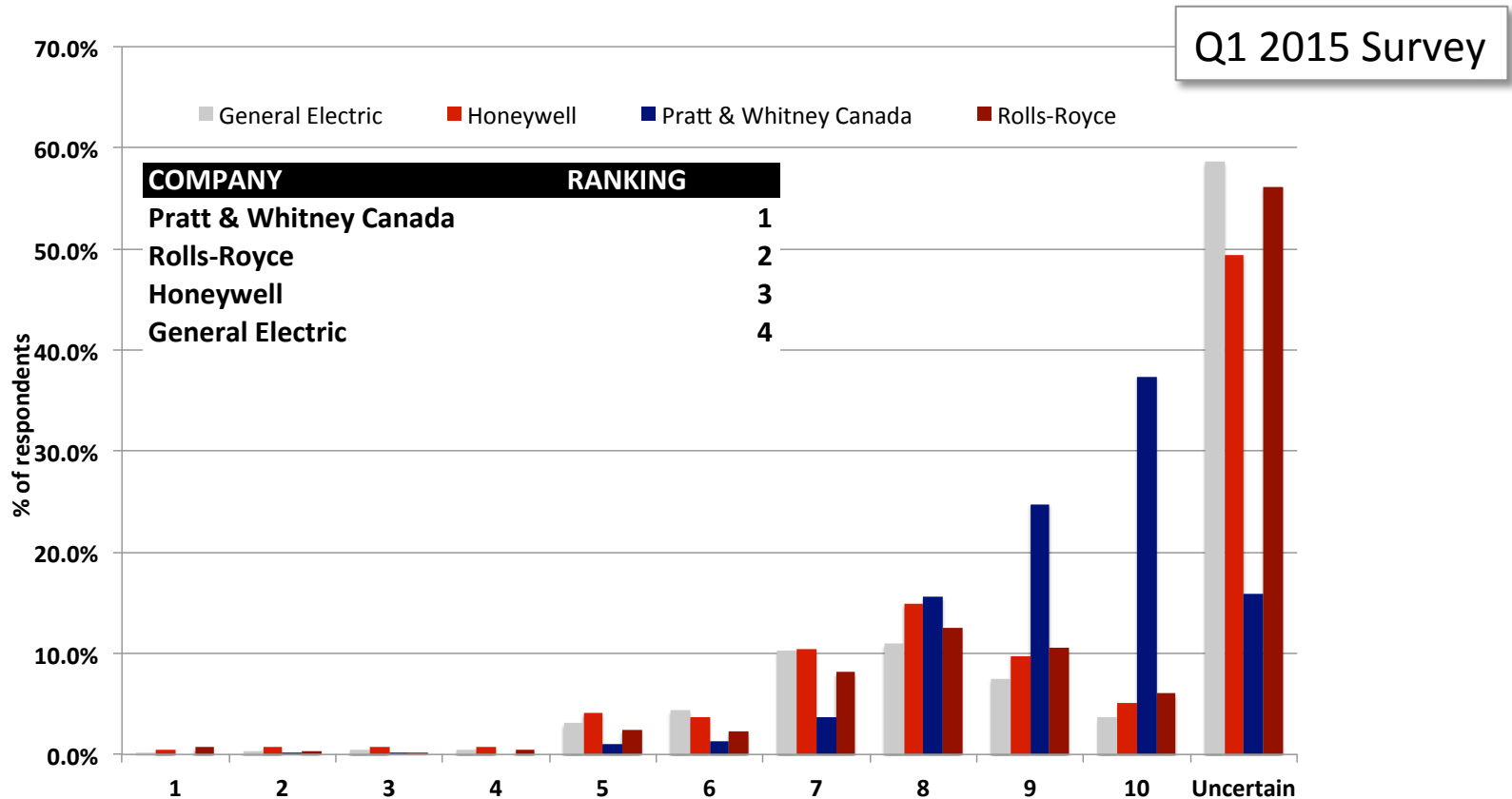
Q1 2015 Survey



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

# Brand Reputations

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

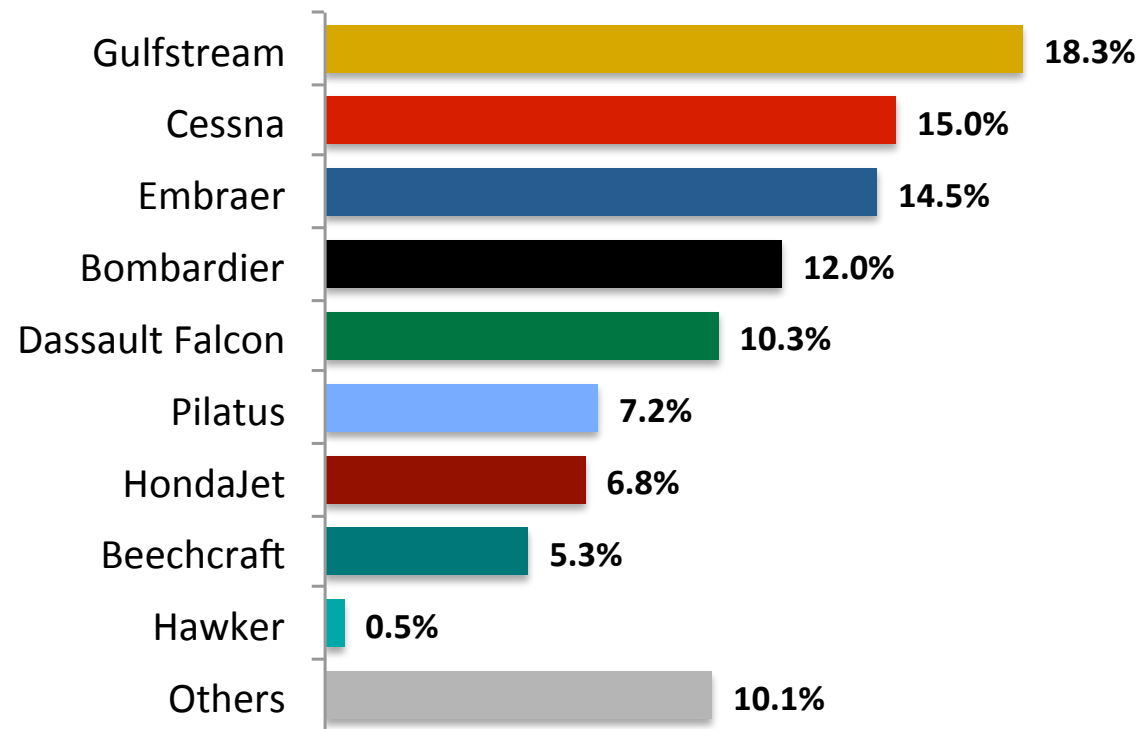


Respondents believe that Pratt & Whitney Canada is the highest rated turboprop engine manufacturer brand, well ahead of Rolls-Royce and Honeywell

# Aircraft Brands

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

Q1 2015 Survey

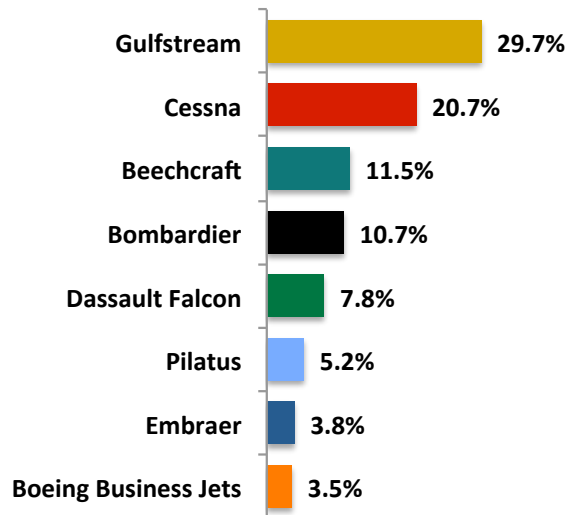


According to Q1 2015 survey respondents, Gulfstream, Cessna, and Embraer are expected to be the most improved brands over the next 5-10 years

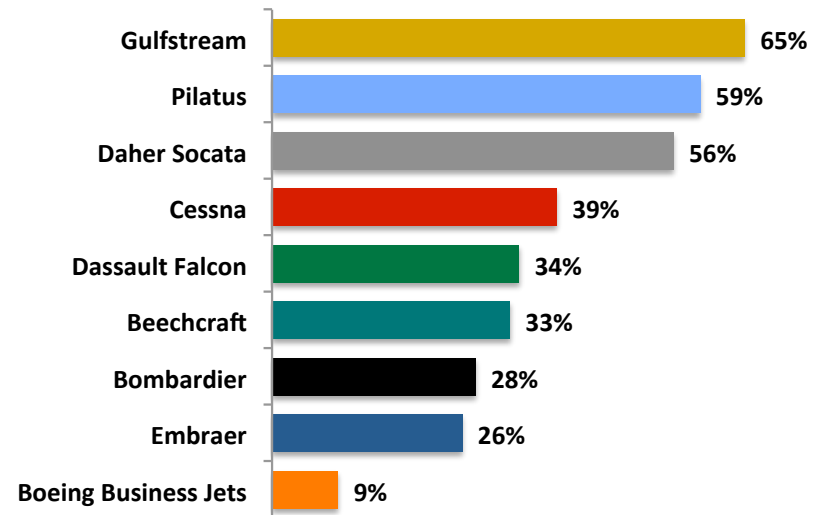
## Aircraft Brands

### Interior Finish Quality & Cabin Noise

Handling customers with honesty & integrity  
Top 8 brands - Q1 2015



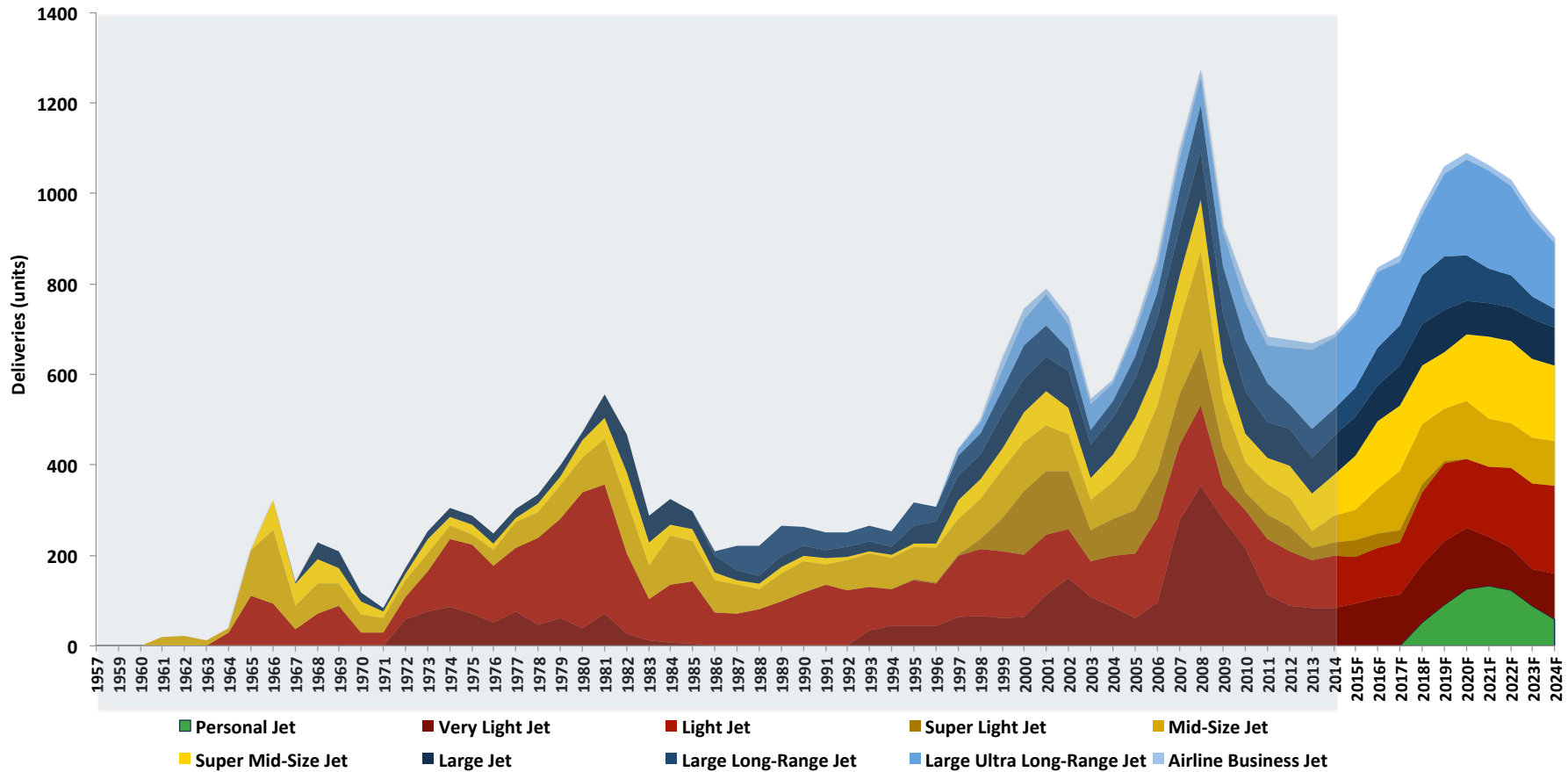
Handling customers with honesty & integrity  
% of respondents choosing their own brand



According to Q1 2015 survey respondents choosing Top-Of-Mind brand, Gulfstream earns highest points for handling customers with honesty and integrity

# Business Jet Delivery History & Forecast

Business jet delivery forecast by size category: Historical - 2024



**JETNET iQ latest 10-year forecast is for 9,514 new business jet deliveries valued at \$256 billion in \$2014 from 2015-2024**

## 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](http://www.jetnetiq.com) or contact Rolland Vincent, JETNET iQ Creator / Director at 1-972-439-2069 or [rollie@jetnet.com](mailto: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](http://jetnet.com) or contact Paul Cardarelli, JETNET Vice President of Sales, at 800-553-8638 (USA) or [paul@jetnet.com](mailto: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](mailto:karim@jetnet.com).