

The logo for JETNET iQ, featuring the word "JETNET" in a bold, italicized, sans-serif font, followed by "iQ" in a smaller, bold, italicized, sans-serif font. The logo is set against a dark blue background with white horizontal lines.

➤➤ KNOW MORE.

JETNET iQ Snap! Report Q2 2016 Summary Report

➤ BUSINESS AVIATION MARKET INTELLIGENCE ➤ REPORTS ➤ SUMMITS ➤ CONSULTING

Prepared for:
JETNET iQ Global Business Aviation Survey Respondents

June 30, 2016

JETNET iQ Snap!: 2nd Quarter 2016 - 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.

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.

Rolland 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



- 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 - Q2 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

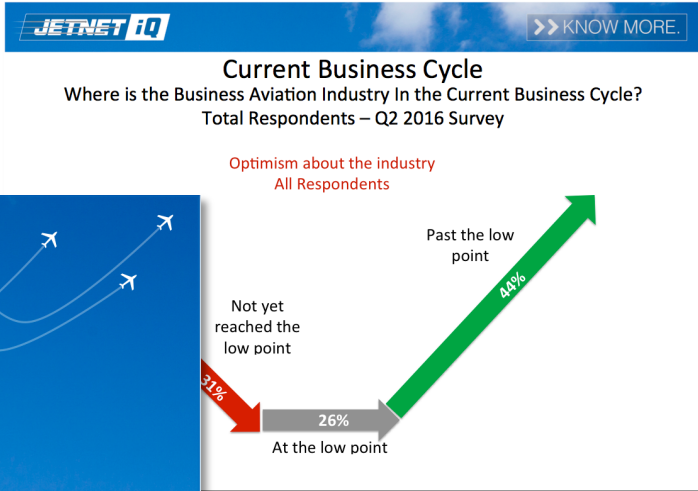
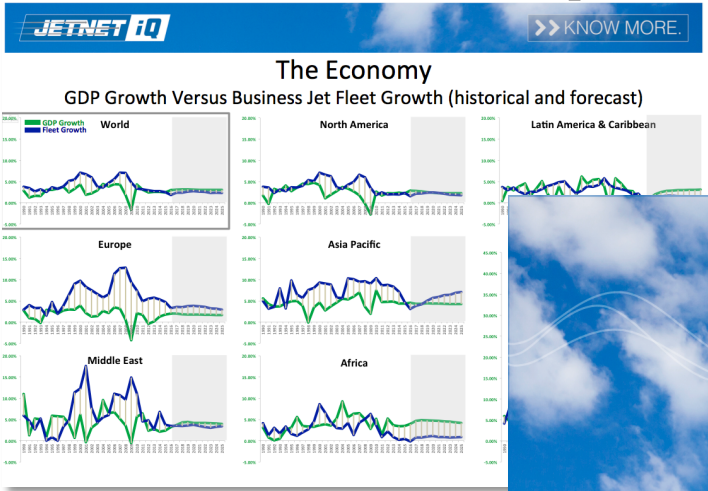
PASSWORD:

For questions about this survey, please contact:



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

JETNET iQ Reports



JETNET iQ

>> KNOW MORE.

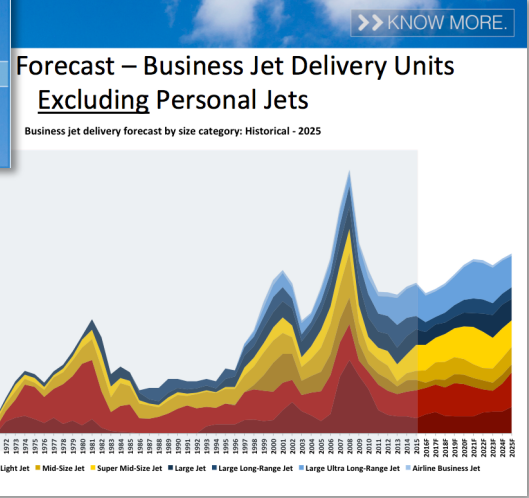
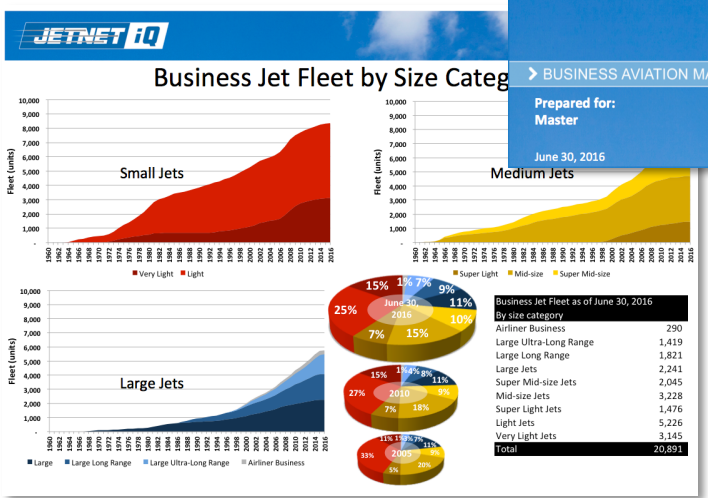
Q2 2016 Report

Prepared for:
 Master

June 30, 2016

JETNET iQ REPORT: 2nd Quarter 2016 - Private & Confidential

BUSINESS AVIATION MARKET INTELLIGENCE > REPORTS > SUMMITS > CONSULTING



JETNET iQ Summits

- Thought leadership and networking conferences
- The 6th Global Business Aviation Summit will be in New York City on September 13-14, 2016
 - <http://www.jetnetiq.com/summit.shtml>

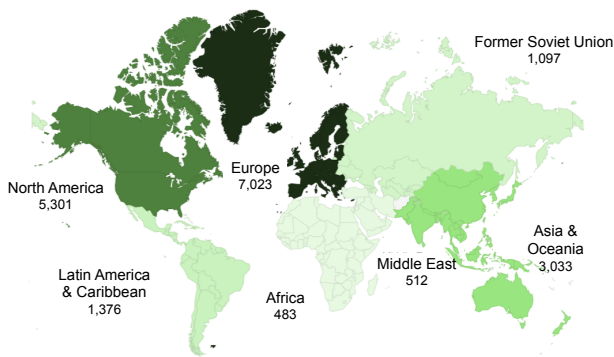


June 30, 2016

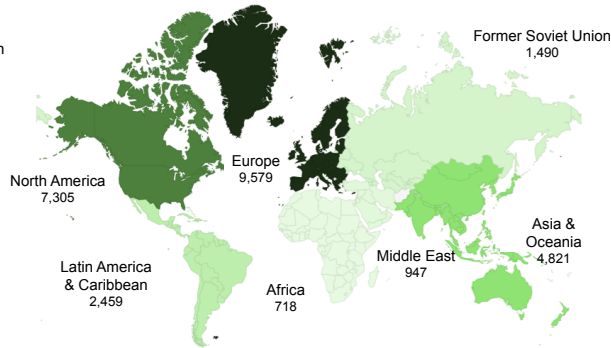
JETNET iQ Snap!: 2nd Quarter 2016 - Private & Confidential

The Global Economy

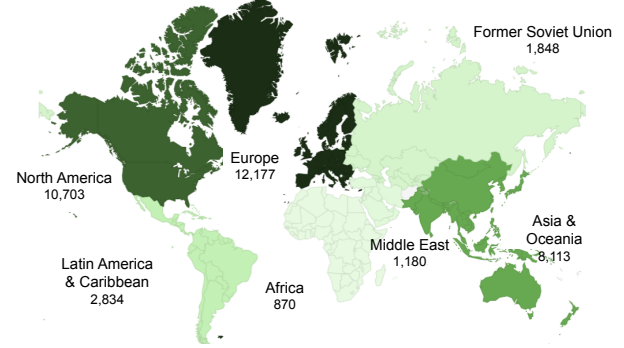
Regional GDP in 1970 (\$US 2010 Billion)



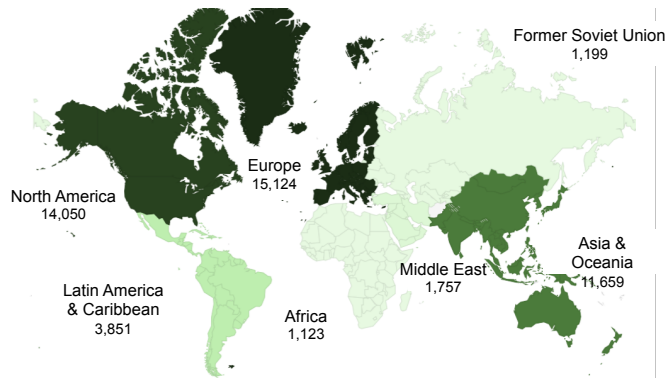
Regional GDP in 1980 (\$US 2010 Billion)



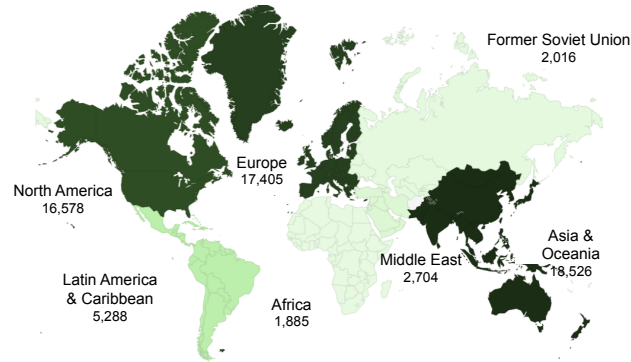
Regional GDP in 1990 (\$US 2010 Billion)



Regional GDP in 2000 (\$US 2010 Billion)



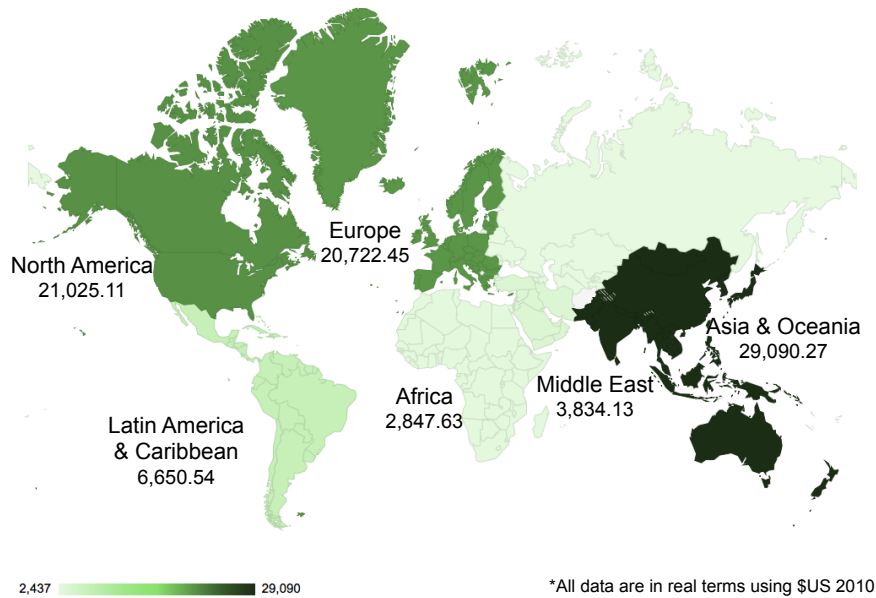
Regional GDP in 2010 (\$US 2010 Billion)



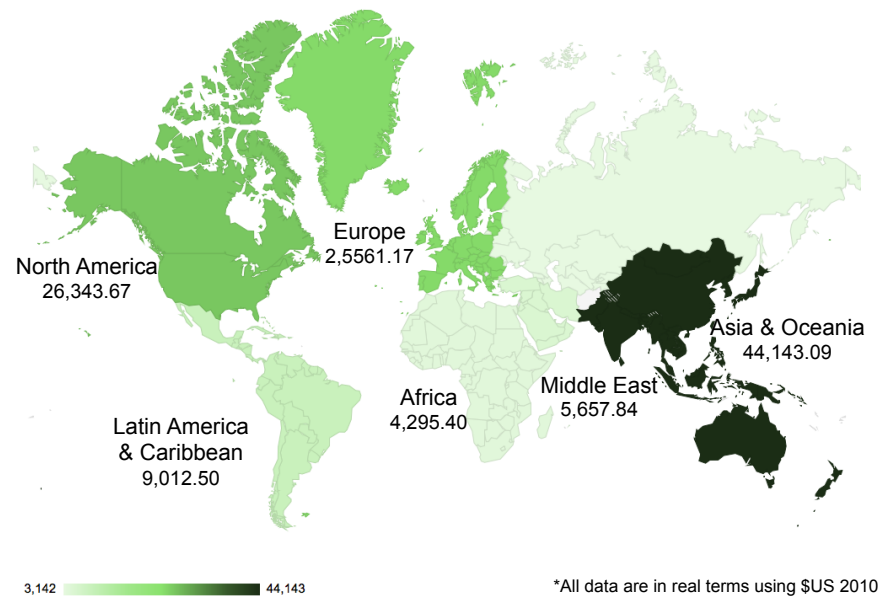
Sources: U.S. Economic Research Service

The Global Economy

Forecasted Regional GDP in 2020 (in \$US Billion*)



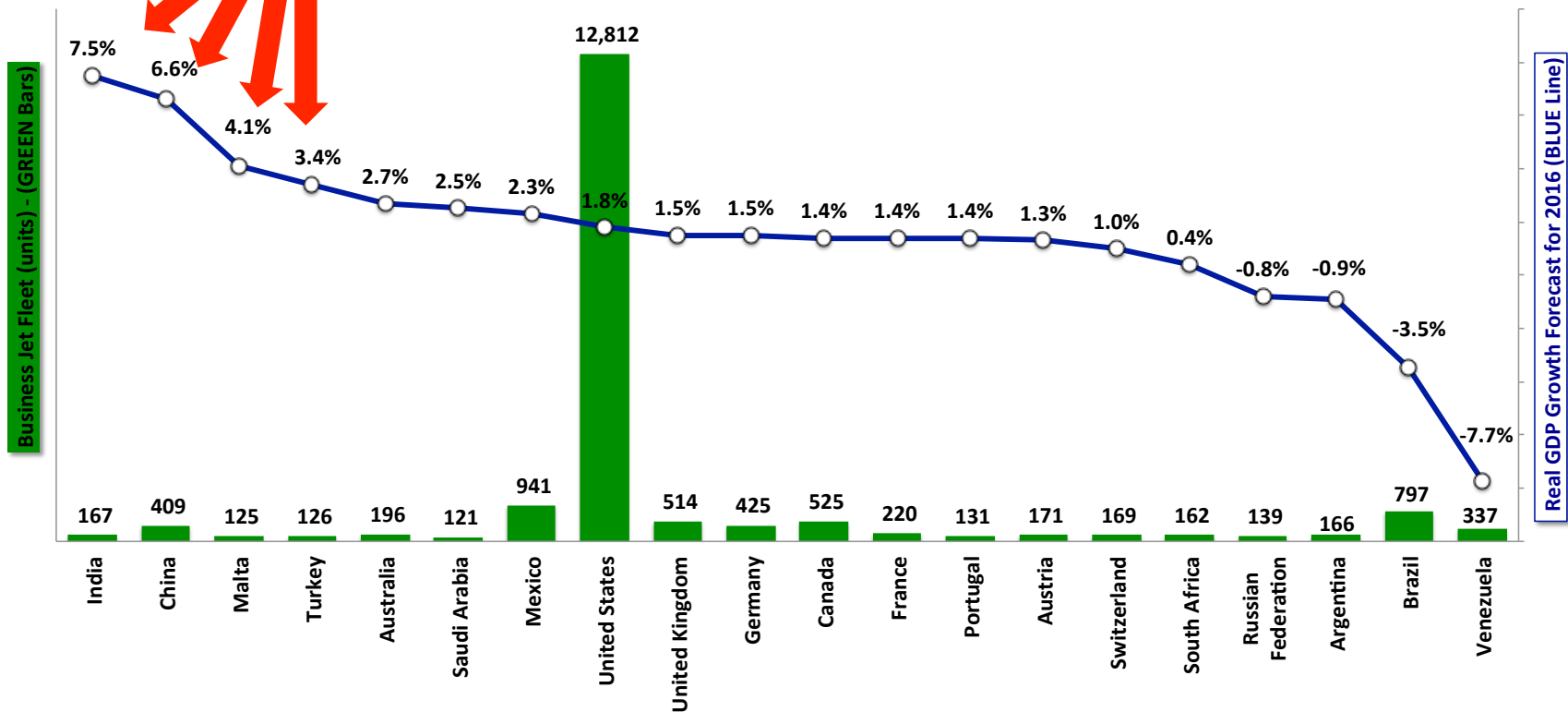
Forecasted Regional GDP in 2030 (in \$US Billion*)



The Economy

Key markets with 3%+ forecasted 2016 GDP growth represent just 4% of the world business jet fleet

2016 GDP Forecasts and "Top 20" Business Jet Fleets

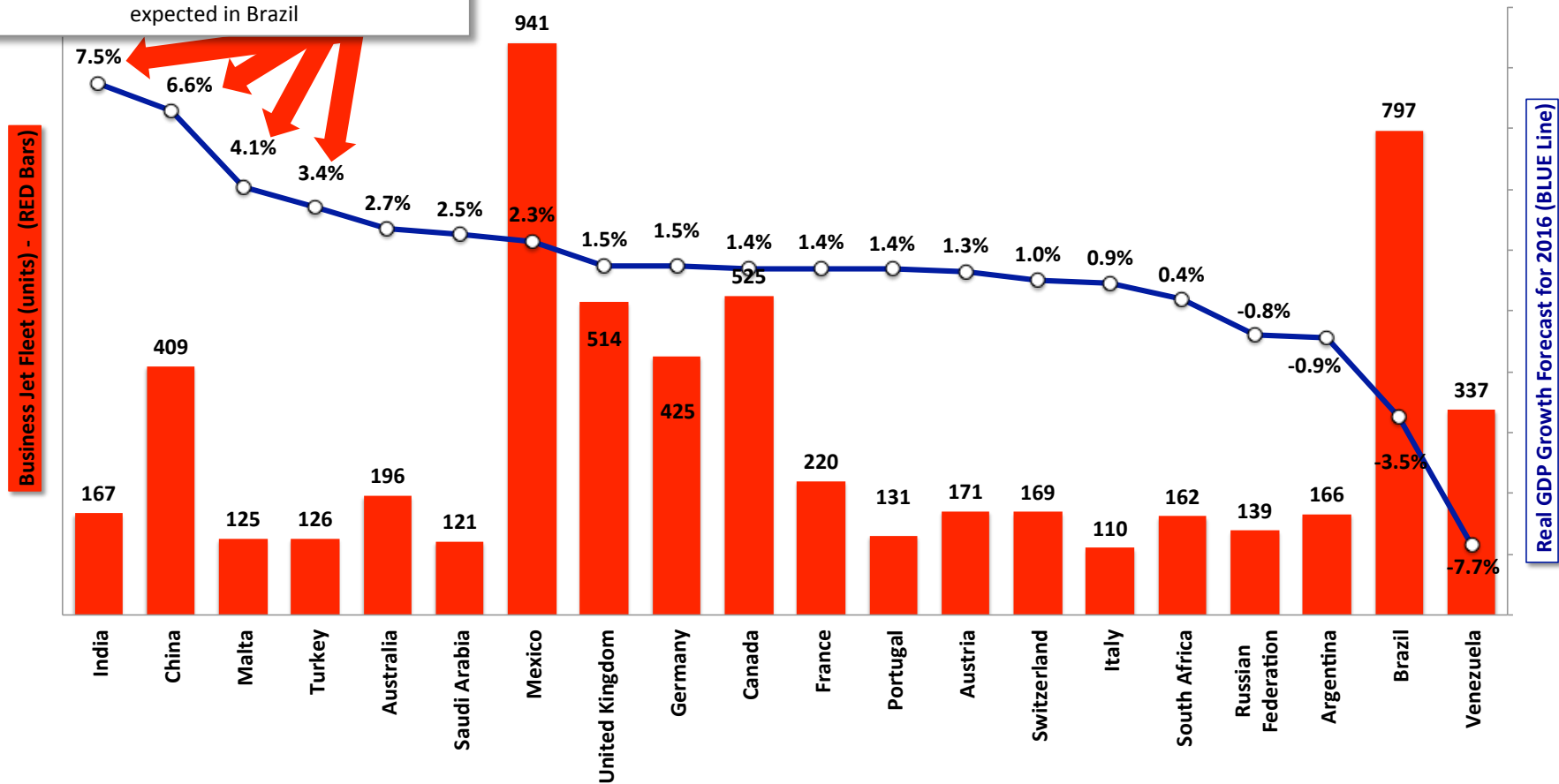


Economic growth forecasts for 2016 have been lowered; U.S. now at 1.8%

The Economy

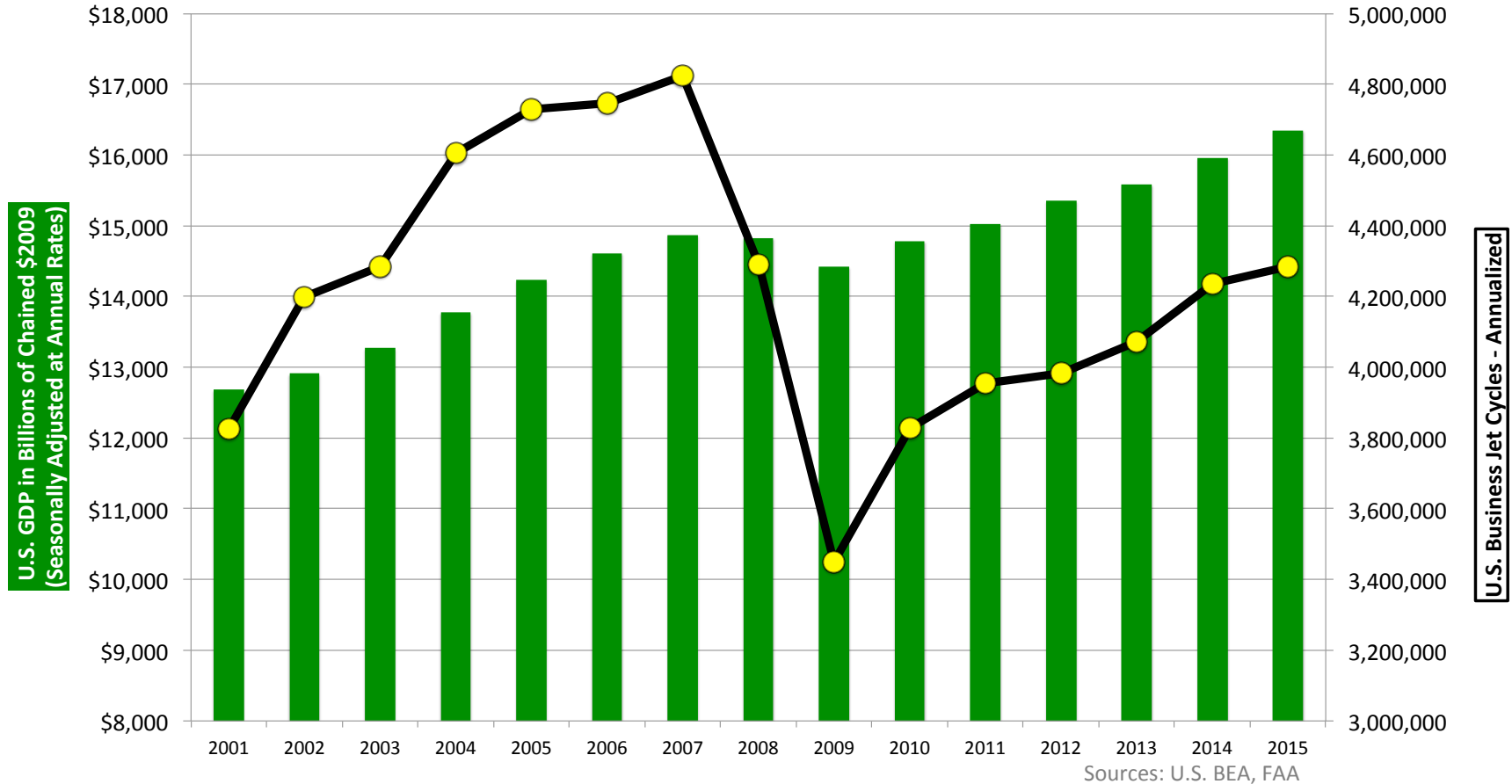
Key markets (excluding the United States) with 3%+ forecasted 2016 GDP growth represent just 4% of world business jet fleet; most 2016 growth forecasts have been lowered; sharp slowdown expected in Brazil

2016 GDP Forecasts and "Top 20" Business Jet Fleets (excluding the United States)



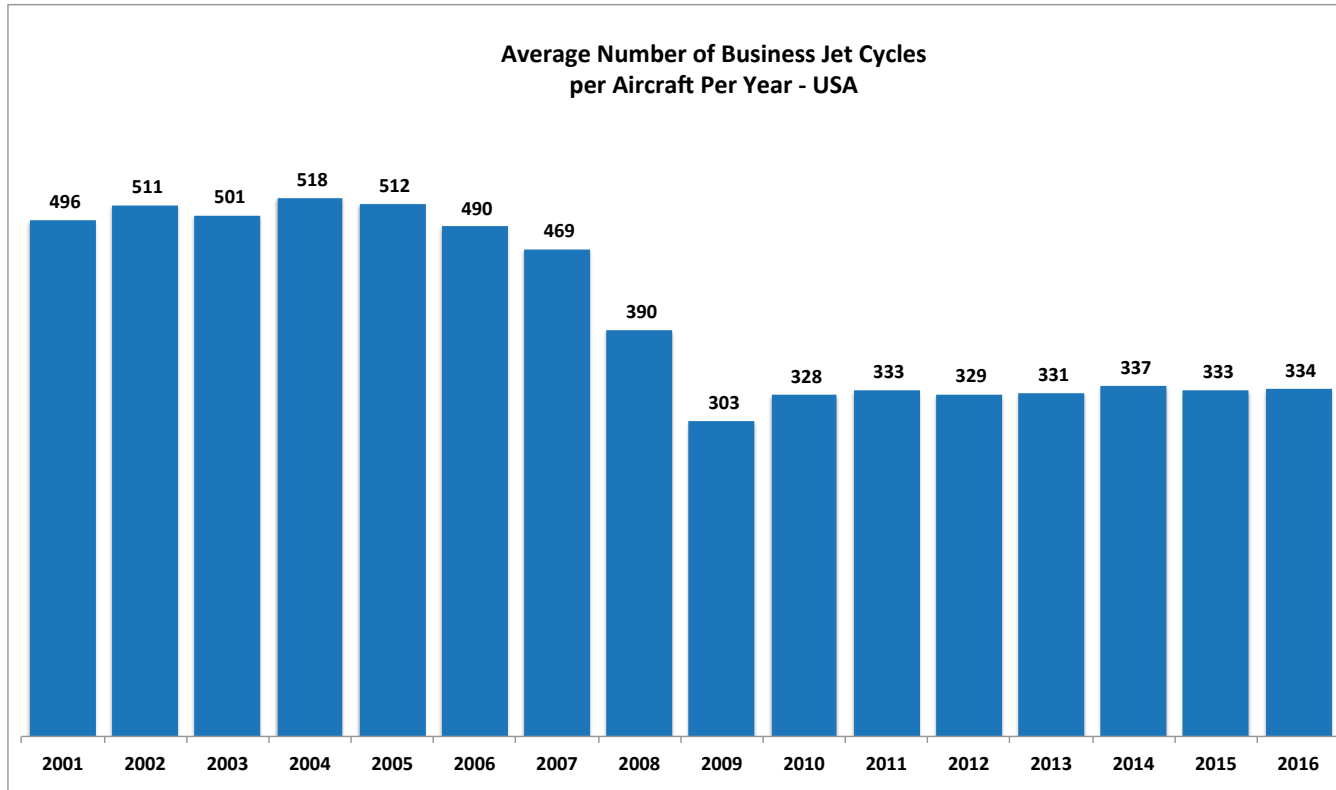
The Economy

U.S. GDP and U.S. Business Jet Cycles



U.S. business jet cycles have steadily increased but remain below 2003-2008 levels

The Economy

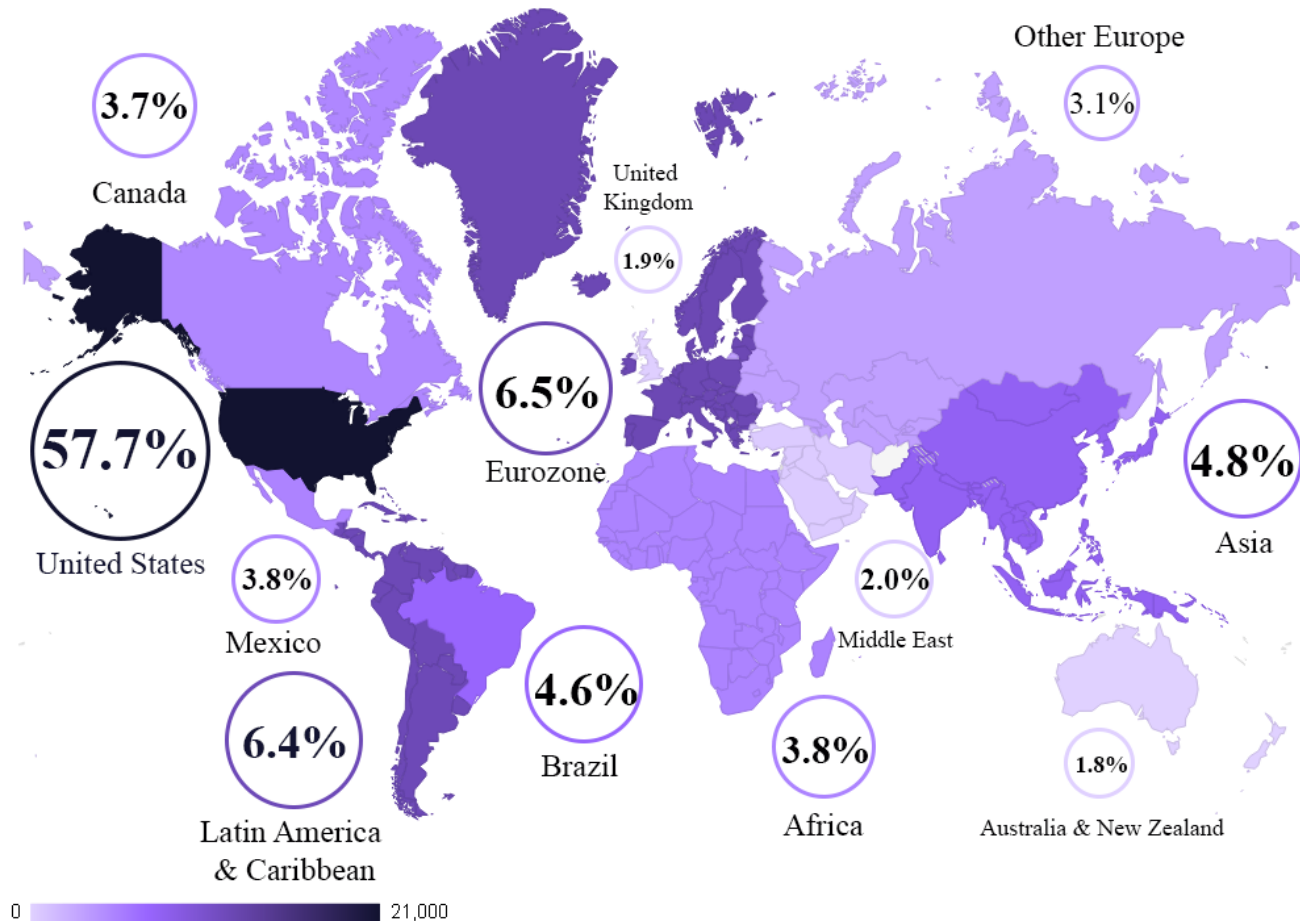


Sources: U.S. FAA, JETNET

Cycles per U.S.-based business jet have not recovered to pre-crisis levels

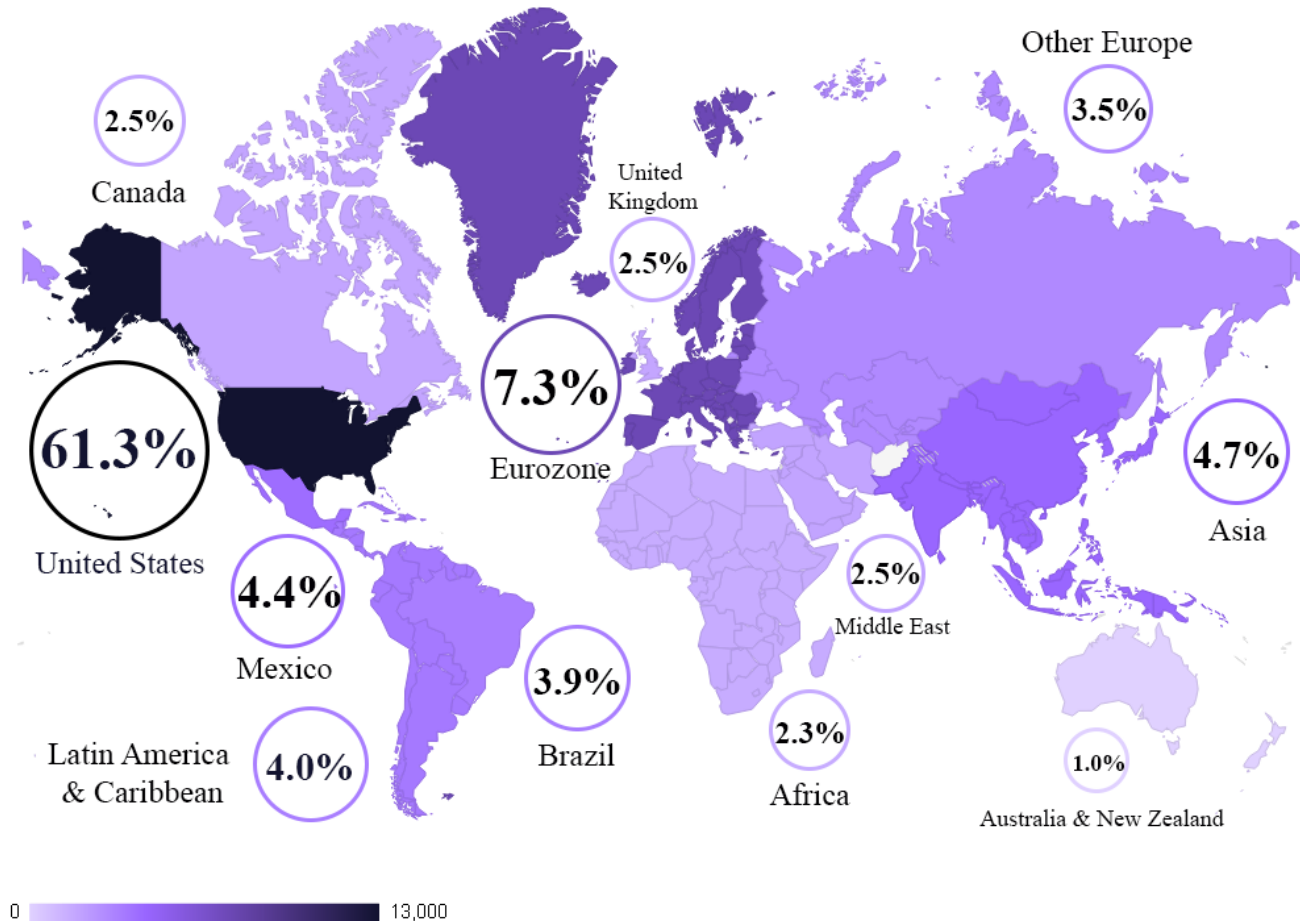
Business Aircraft Fleet by Region

Share of Business Aircraft Fleet by Region As of Q1 2016



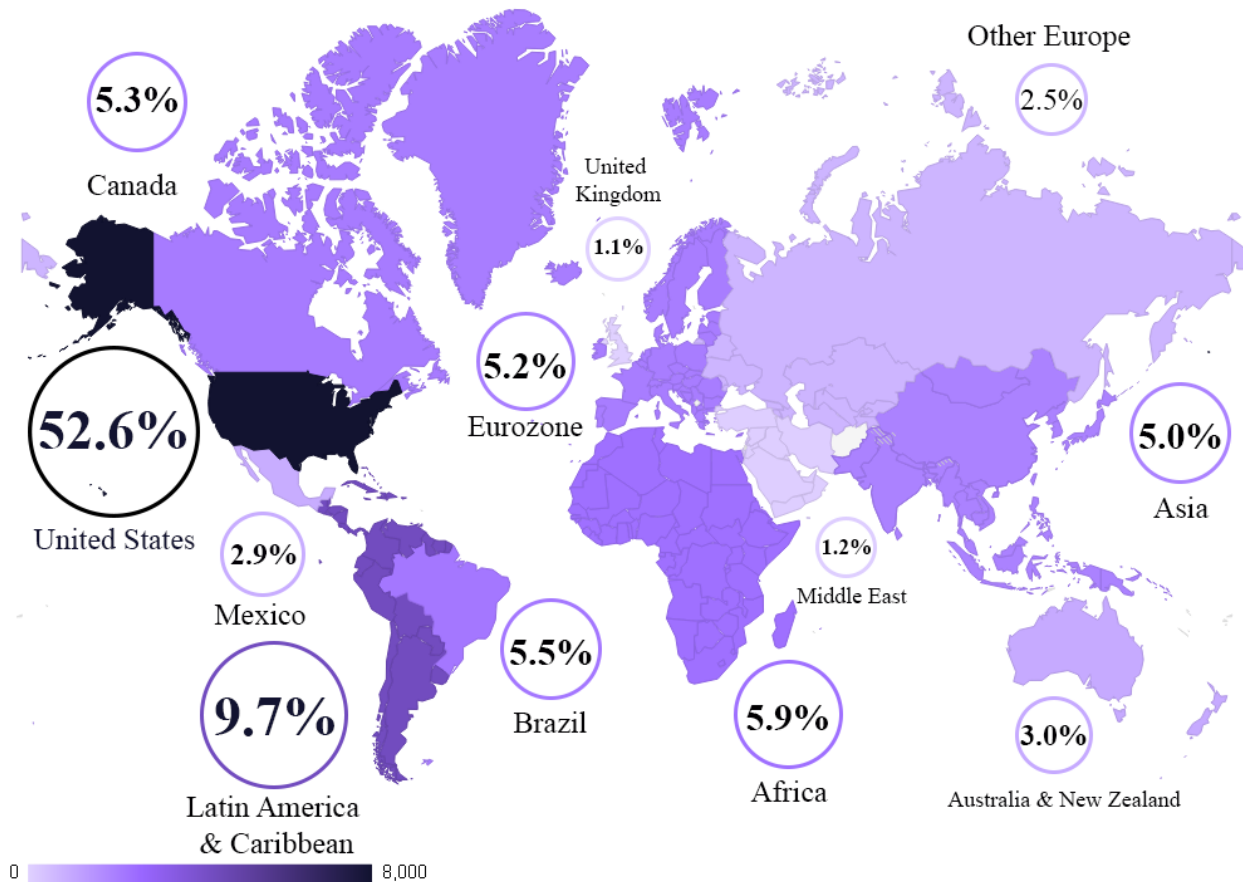
Business Jet Fleet by Region

Share of Business Jet Fleet by Region
As of Q1 2016



Turboprop Fleet by Region

Share of Turboprop Fleet by Region As of Q1 2016



Business Jet Fleet by Manufacturer

NORTH AMERICA	Fleet as of
OEM	Jun 30, 2016
Beechcraft	248
Bombardier	2,898
Cessna Citation	4,720
Dassault Falcon	1,345
Embraer	479
Gulfstream	1,777
Hawker	1,248
Other	622
Total	13,337

EUROPE	Fleet as of
OEM	Jun 30, 2016
Beechcraft	19
Bombardier	628
Cessna Citation	830
Dassault Falcon	450
Embraer	150
Gulfstream	202
Hawker	179
Other	94
Total	2,552

FORMER SOVIET UNION	Fleet as of
OEM	Jun 30, 2016
Beechcraft	-
Bombardier	72
Cessna Citation	25
Dassault Falcon	28
Embraer	23
Gulfstream	28
Hawker	34
Other	19
Total	229

MIDDLE EAST	Fleet as of
OEM	Jun 30, 2016
Beechcraft	4
Bombardier	112
Cessna Citation	62
Dassault Falcon	63
Embraer	41
Gulfstream	103
Hawker	62
Other	74
Total	521

LATIN AMERICA & CARIBBEAN	Fleet as of
OEM	Jun 30, 2016
Beechcraft	63
Bombardier	646
Cessna Citation	839
Dassault Falcon	138
Embraer	211
Gulfstream	208
Hawker	310
Other	170
Total	2,585

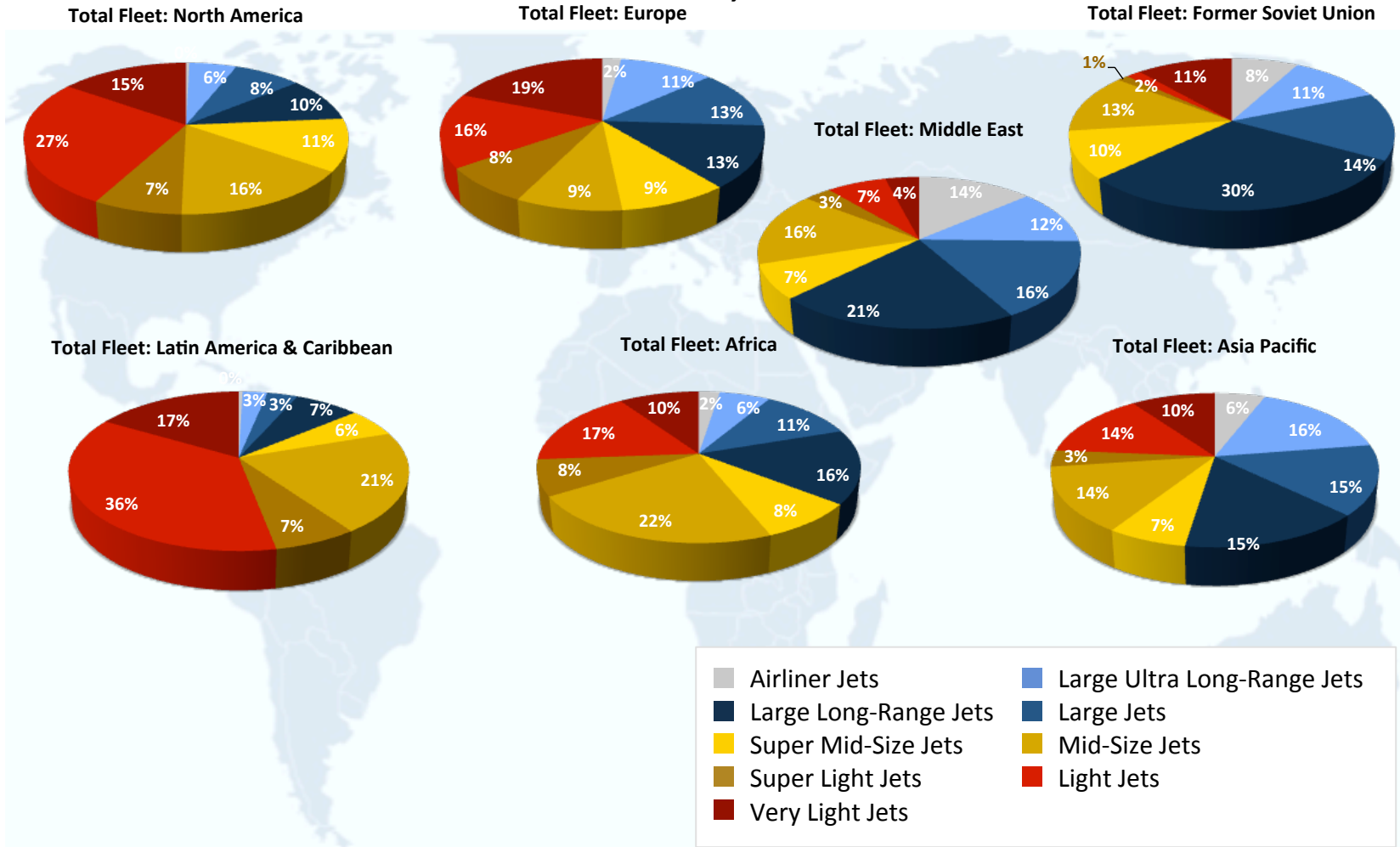
AFRICA	Fleet as of
OEM	Jun 30, 2016
Beechcraft	5
Bombardier	100
Cessna Citation	104
Dassault Falcon	67
Embraer	21
Gulfstream	63
Hawker	101
Other	20
Total	481

ASIA PACIFIC	Fleet as of
OEM	Jun 30, 2016
Beechcraft	10
Bombardier	287
Cessna Citation	223
Dassault Falcon	99
Embraer	79
Gulfstream	276
Hawker	134
Other	78
Total	1,186

World business jet fleet was 20,891 jets on June 30, 2016

Business Jet Fleet by Size Category

June 30, 2016

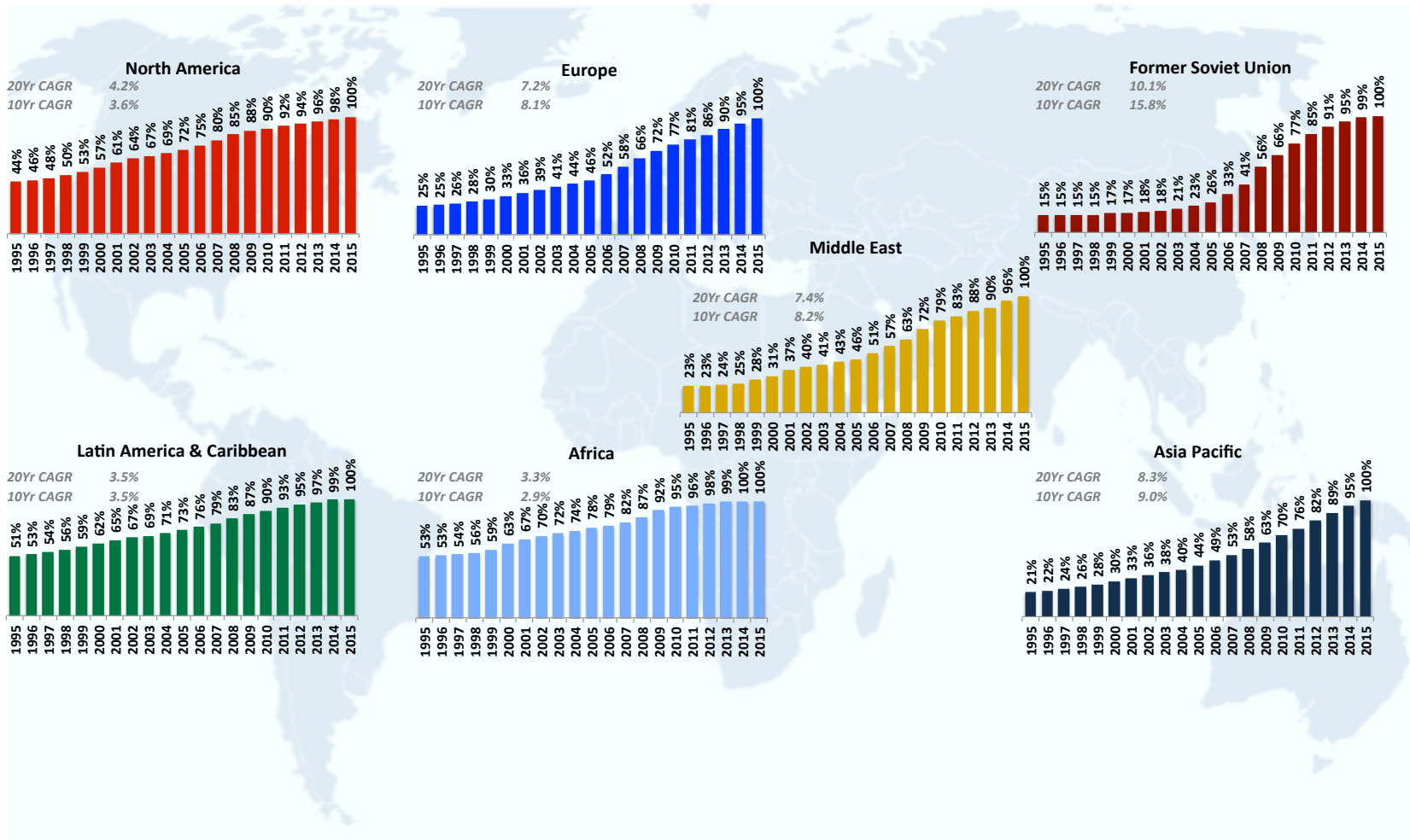


June 30, 2016

JETNET iQ Snap!: 2nd Quarter 2016 - Private & Confidential

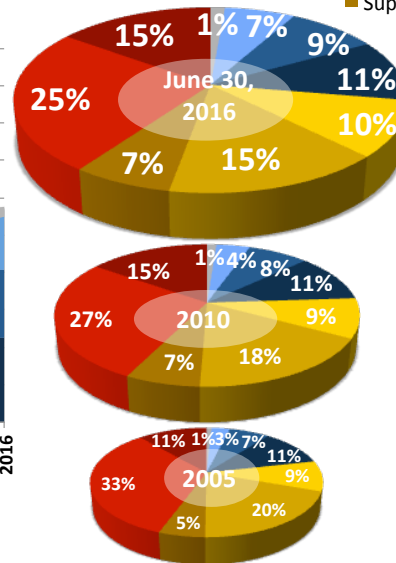
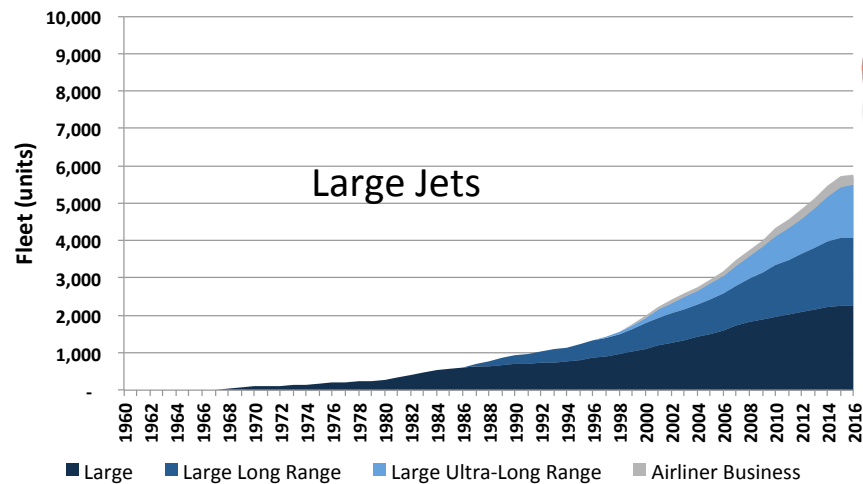
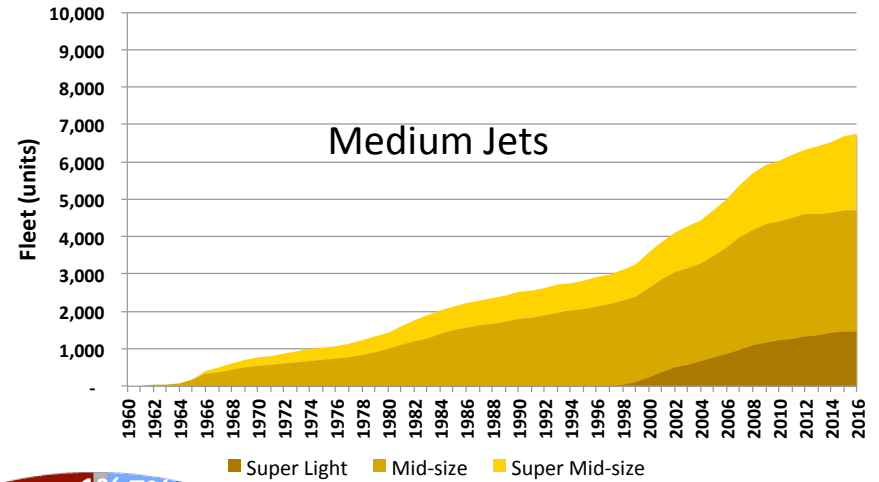
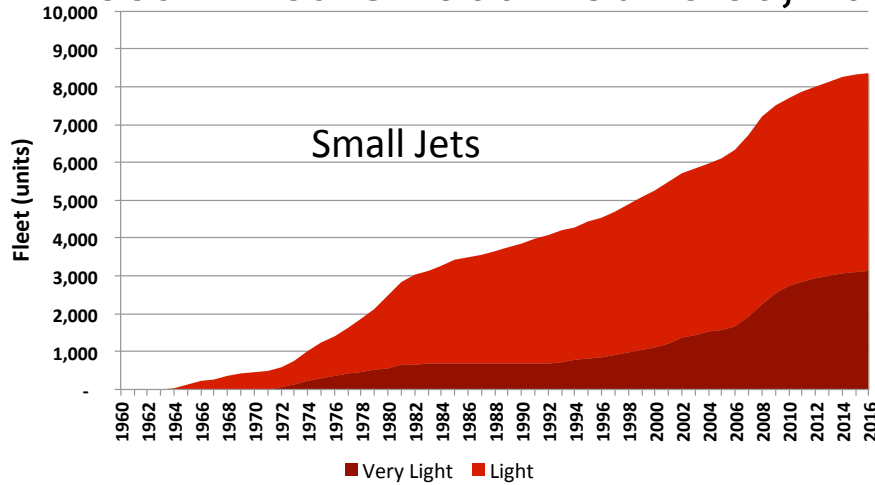
Business Jet Fleet Growth: 1996-2015

Fleet in Years 1996 to 2015 as a % of Year-End 2015 Fleet by Region



Business Jet Fleet by Size Category

Fleet in Years 1960 – June 30, 2016



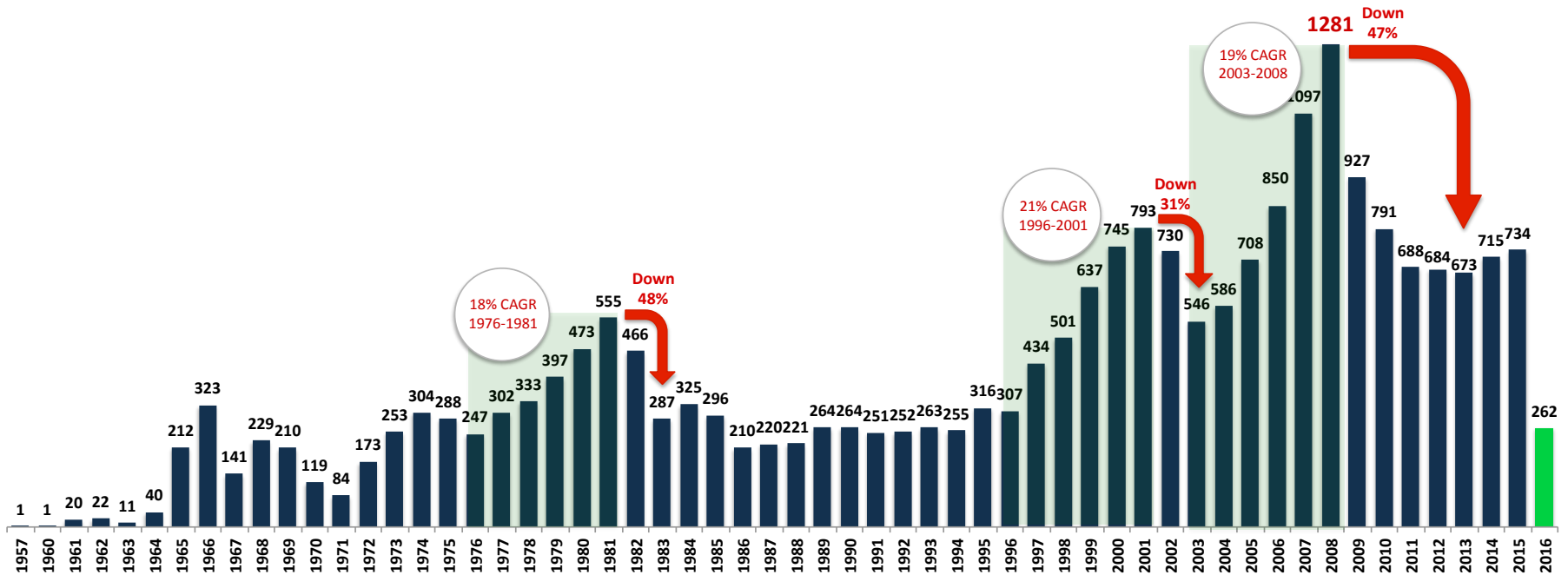
Business Jet Fleet as of June 30, 2016	
By size category	
Airliner Business	290
Large Ultra-Long Range	1,419
Large Long Range	1,821
Large Jets	2,241
Super Mid-size Jets	2,045
Mid-size Jets	3,228
Super Light Jets	1,476
Light Jets	5,226
Very Light Jets	3,145
Total	20,891

June 30, 2016

JETNET iQ Snap!: 2nd Quarter 2016 - Private & Confidential

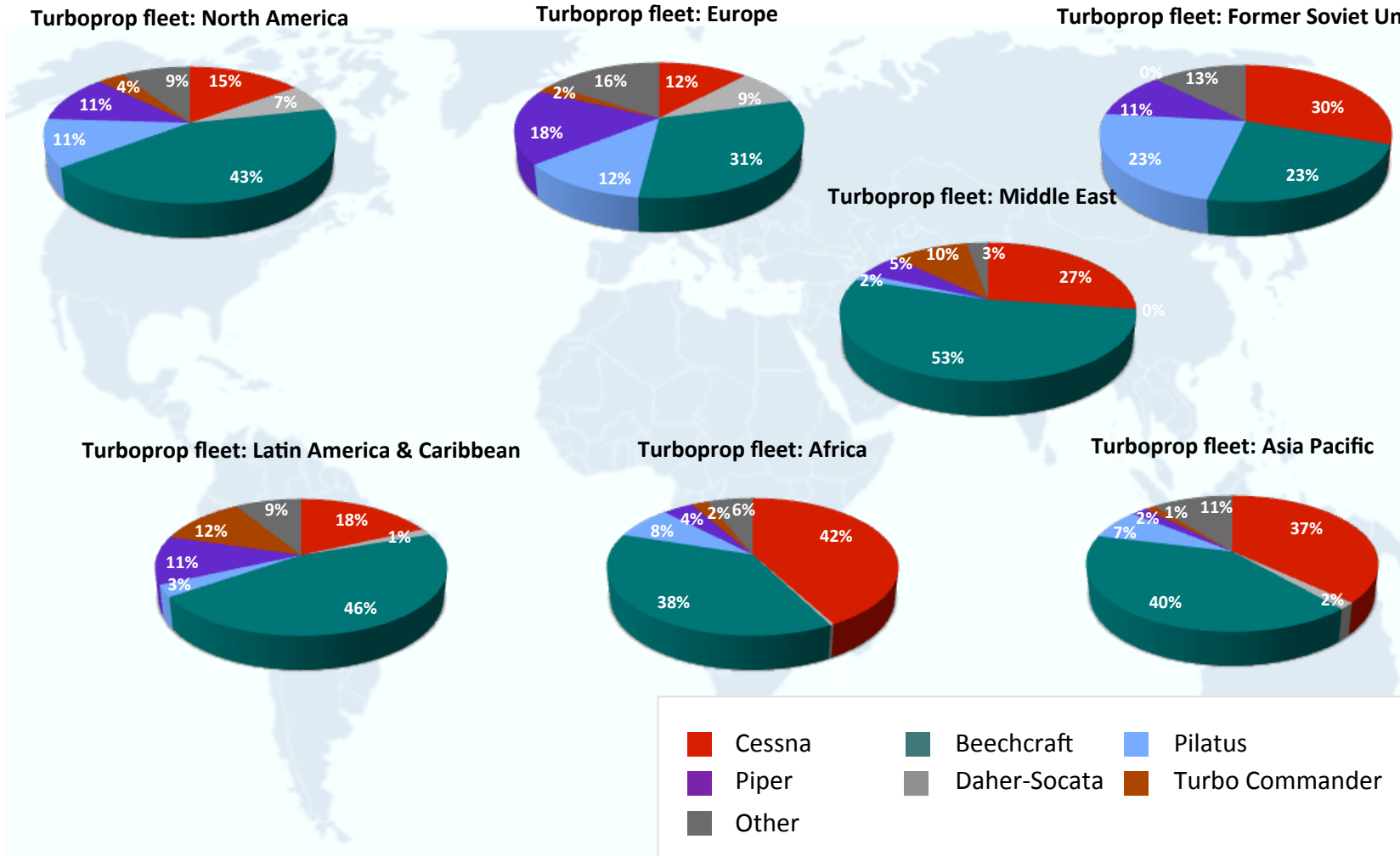
Business Jet Deliveries (units)

Business Jet Deliveries

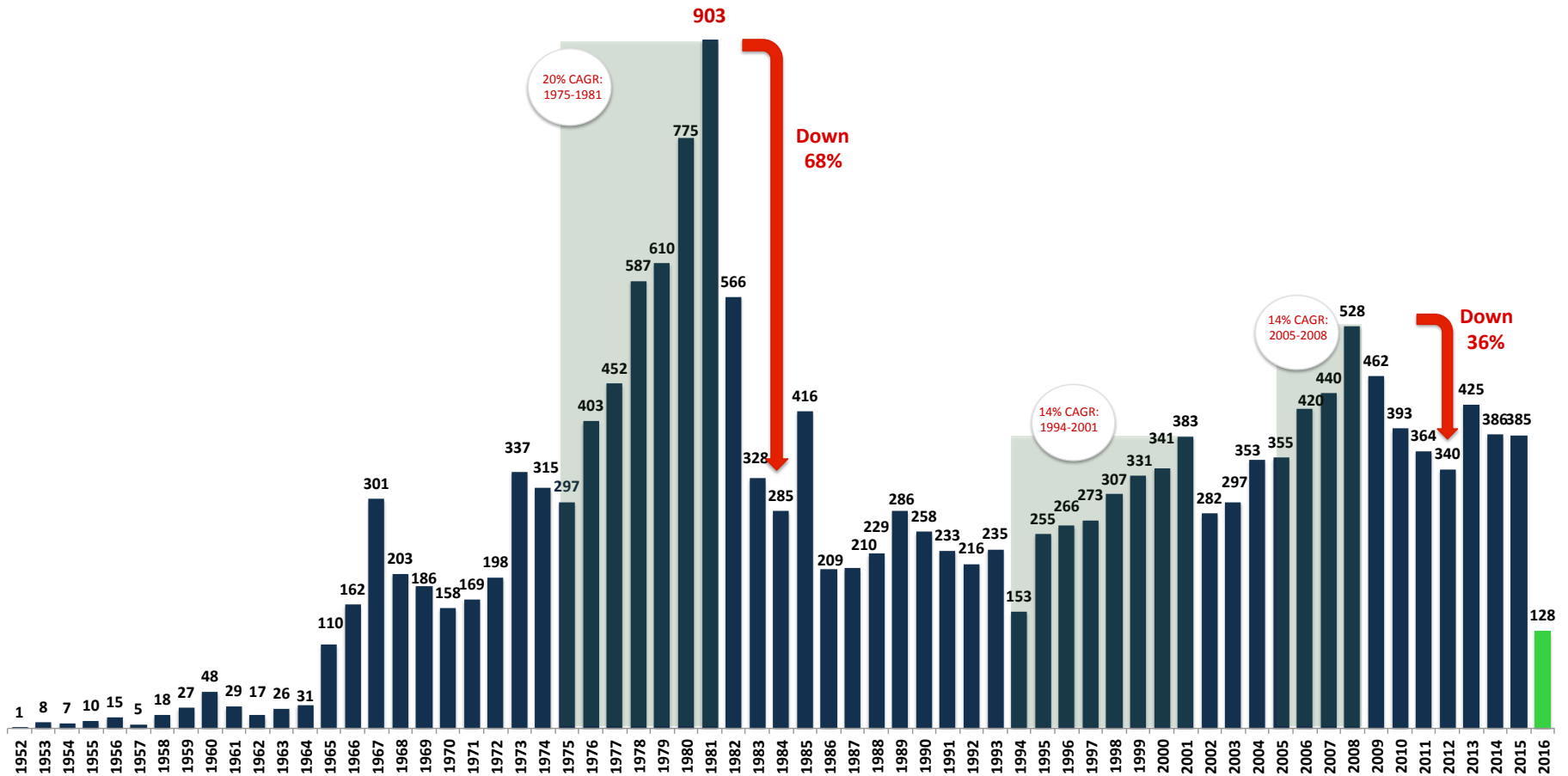


New business jet delivery units have remained relatively flat for 5 years;
 New business jet delivery value in 2015 was about \$22B based on equipped list prices

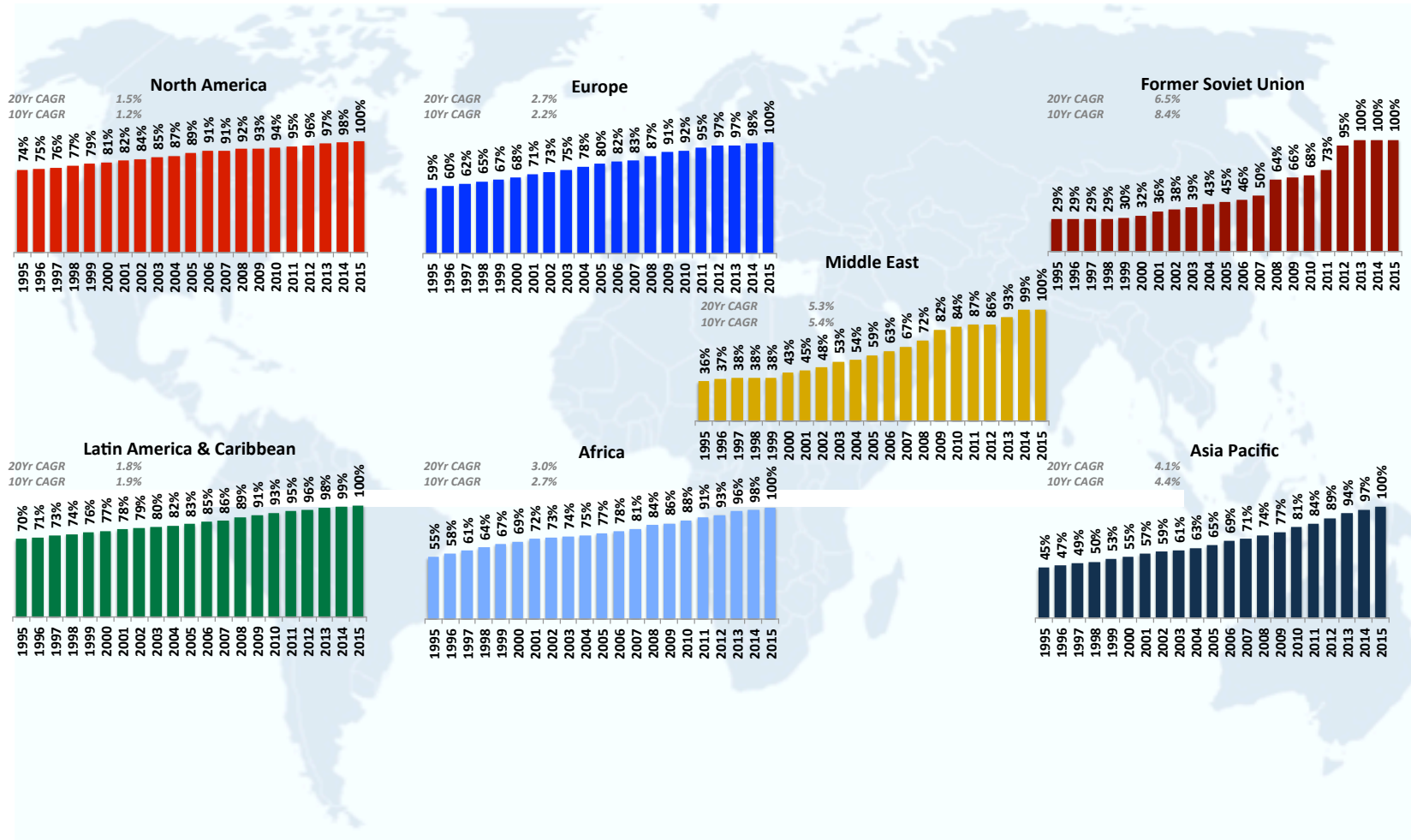
Business Turboprop Fleet by Manufacturer



Business Turboprop Deliveries (units)



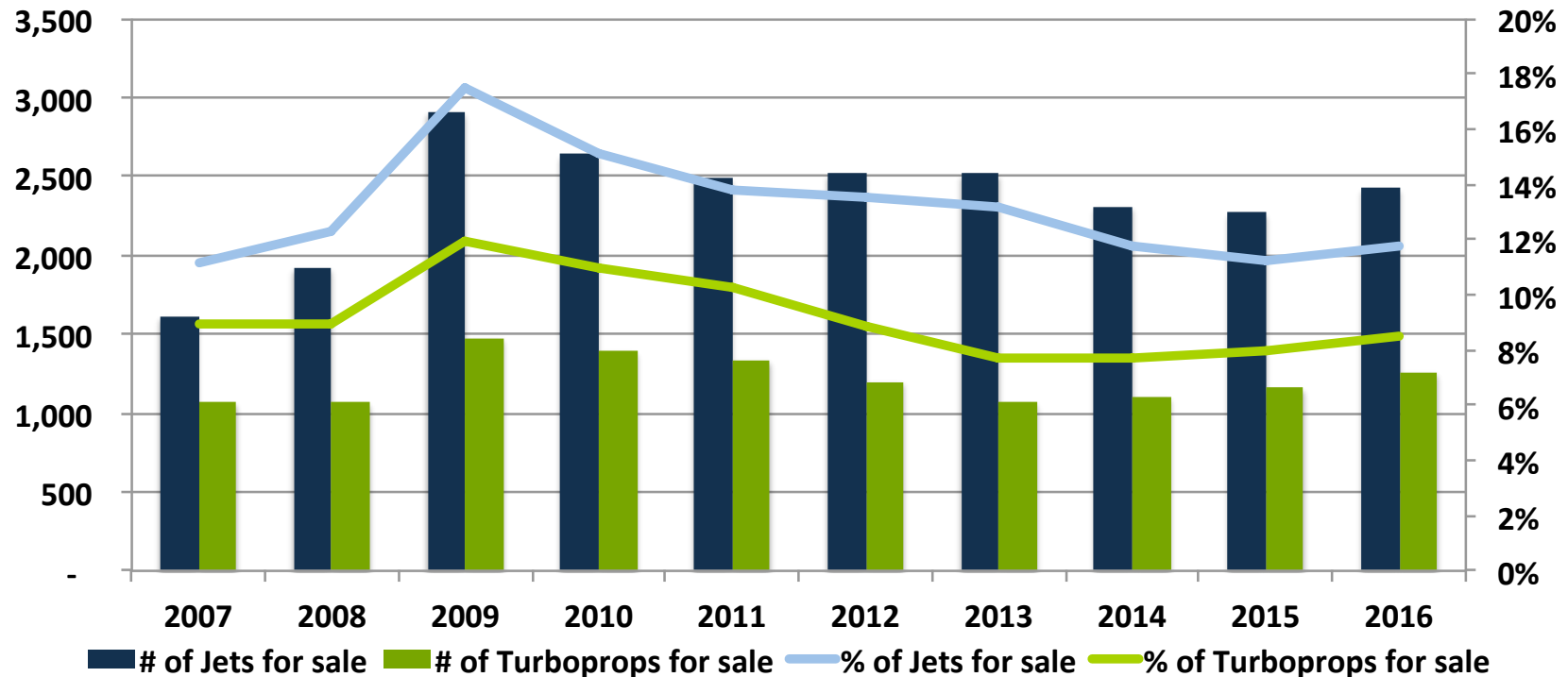
Business Turboprop Fleet Growth: 1996-2015 Fleet in Years 1996 to 2015 as a % of Year-End 2015 Fleet by Region



Pre-Owned Business Aircraft Inventory

Business Jets and Turboprops for sale

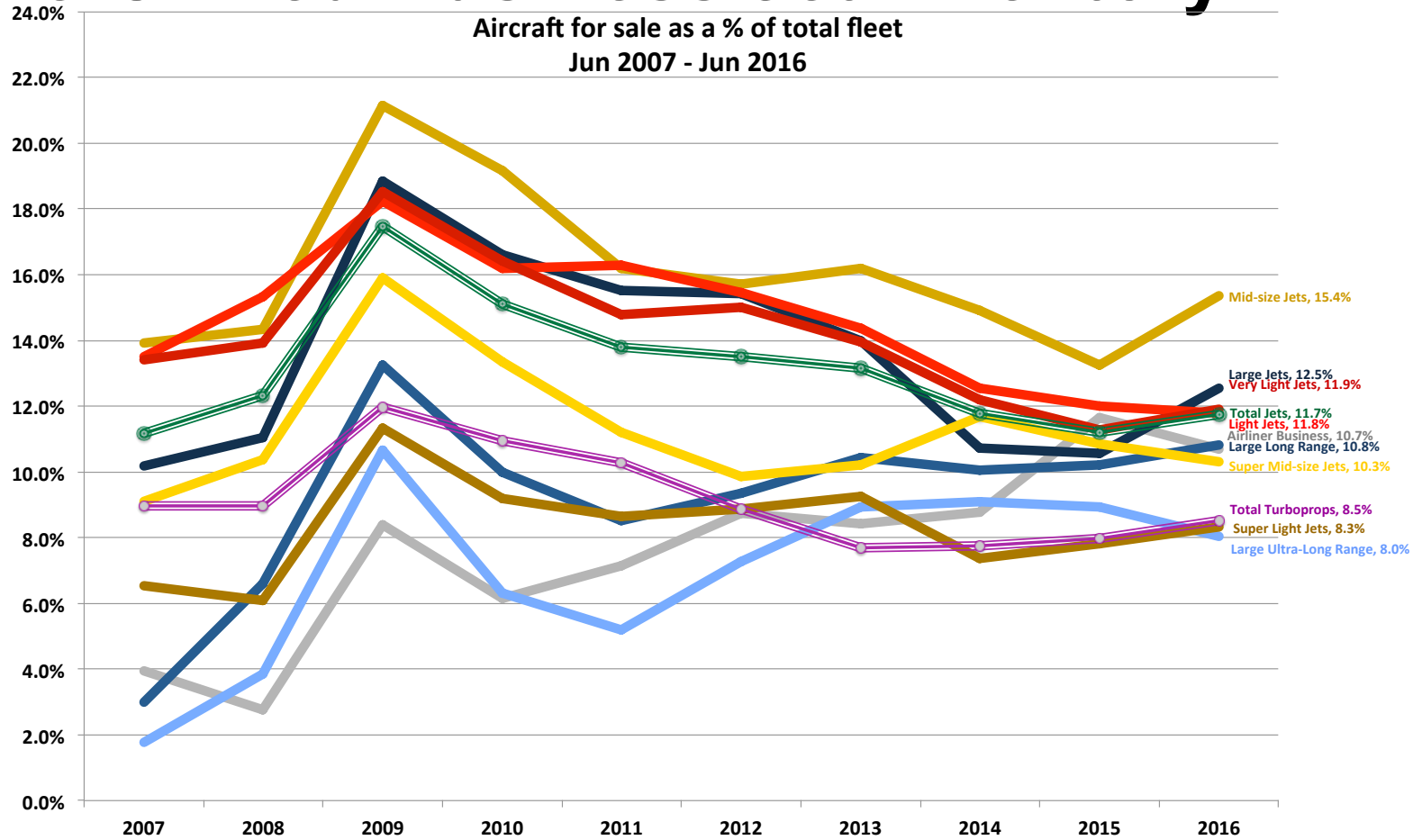
Jun 2007 - Jun 2016



Aircraft Available for Sale as % of World Fleet (as of June 30)										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Business Jets	11.2%	12.3%	17.5%	15.1%	13.8%	13.5%	13.2%	11.8%	11.2%	11.7%
Turboprop	9.0%	9.0%	12.0%	10.9%	10.3%	8.9%	7.7%	7.7%	8.0%	8.3%

For-sale inventory of pre-owned business aircraft has begun to increase once again

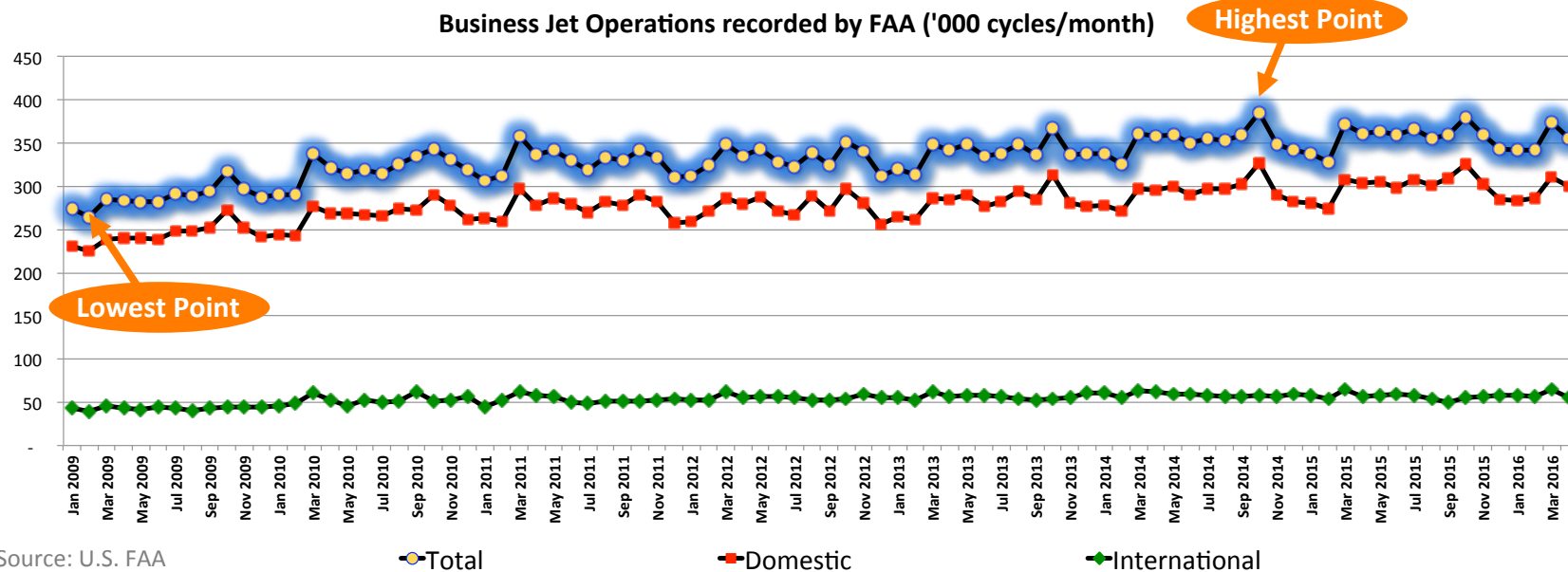
Pre-Owned Business Jet Inventory



Pre-owned jet inventory levels in most size categories have begun to increase

U.S. Business Jet Utilization

FAA BUSINESS JET OPERATIONS - APR 2016		Trailing 12 Months
TOTAL CYCLES		
Total Cycles	355,756	4,299,952
Change vs. prior month	-5.1%	-0.1%
Change vs. prior year	-1.4%	1.1%
Change vs. 24 months ago	-0.5%	4.1%
DOMESTIC CYCLES		
Total Domestic Cycles	299,796	3,614,222
Change vs. prior month	-3.4%	-0.1%
Change vs. prior year	-1.4%	1.7%
Change vs. 24 months ago	1.5%	5.1%
INTERNATIONAL CYCLES		
Total International Cycles	55,960	686,732
Change vs. prior month	-13.0%	-0.1%
Change vs. prior year	-1.1%	-2.0%
Change vs. 24 months ago	-10.0%	-0.9%



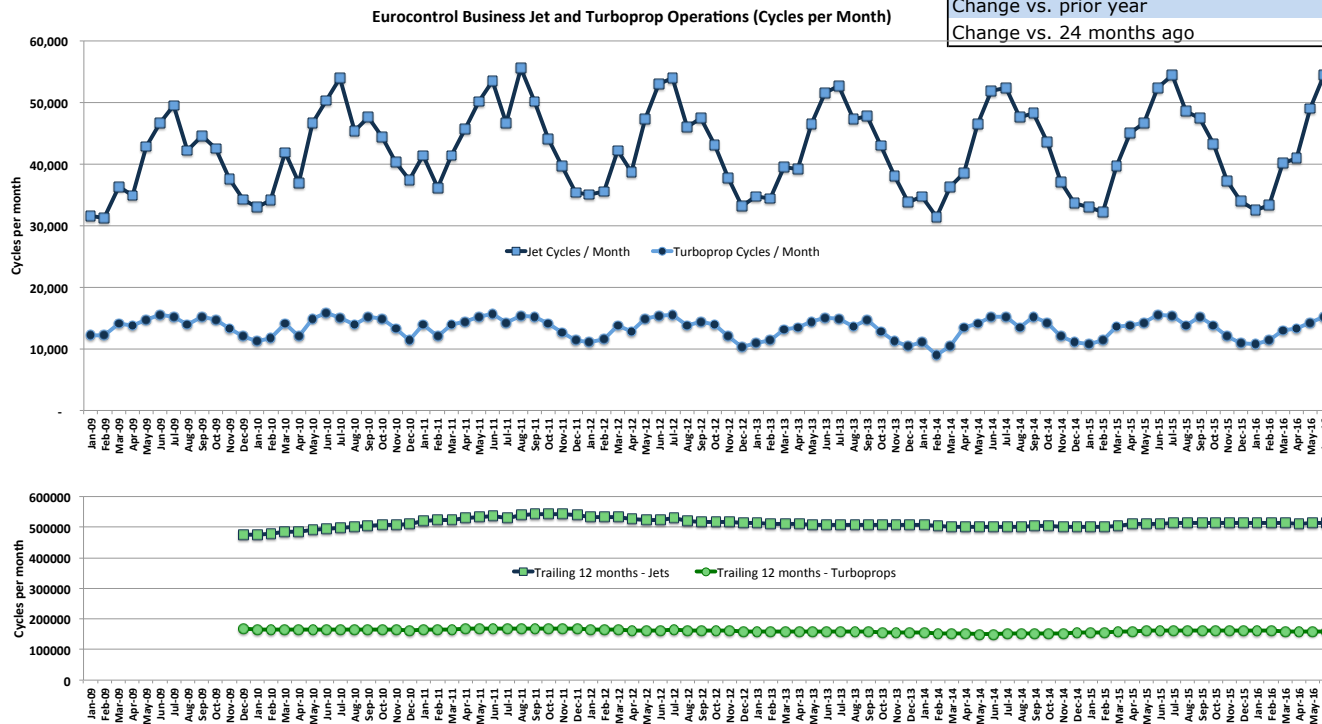
Source: U.S. FAA

June 30, 2016

JETNET iQ Snap!: 2nd Quarter 2016 - Private & Confidential

European Business Aircraft Utilization

EUROCONTROL BUSINESS JET & TURBOPROP OPERATIONS - JUN 2016		Trailing 12 Months
BUSINESS JETS (EXCLUDING AIRLINERS)		
Total Cycles	54,407	515,305
Change vs. prior month	11.1%	0.4%
Change vs. prior year	3.7%	0.7%
Change vs. 24 months ago	4.9%	2.6%
TURBOPROPS		
Total Cycles	15,250	159,323
Change vs. prior month	6.9%	-0.2%
Change vs. prior year	-2.3%	-1.0%
Change vs. 24 months ago	0.2%	5.6%

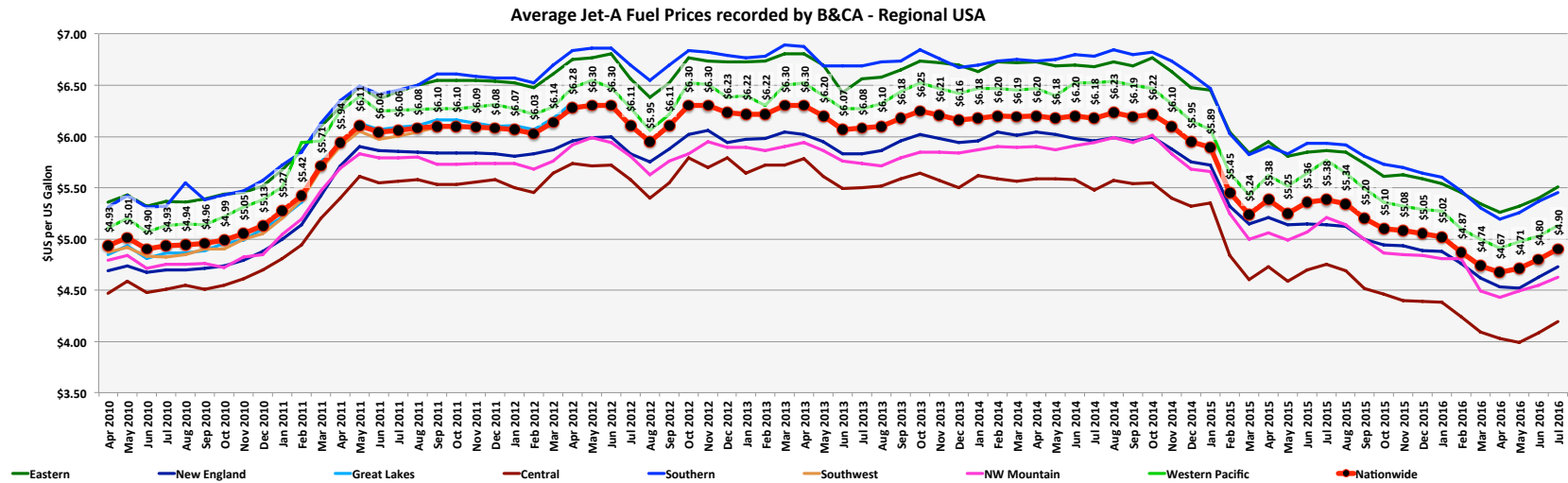


Source: Eurocontrol

June 30, 2016

JETNET iQ Snap!: 2nd Quarter 2016 - Private & Confidential

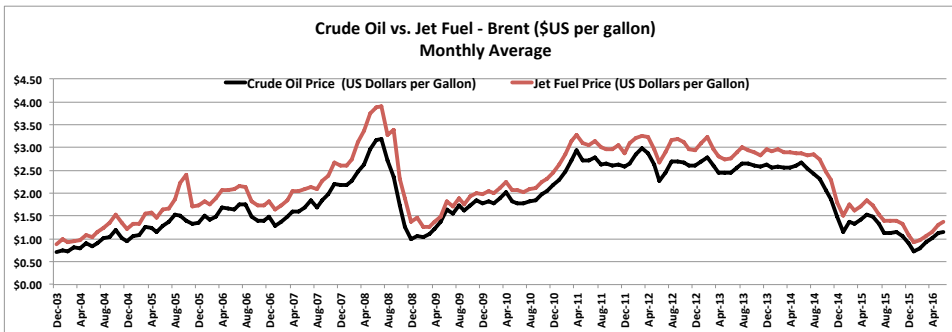
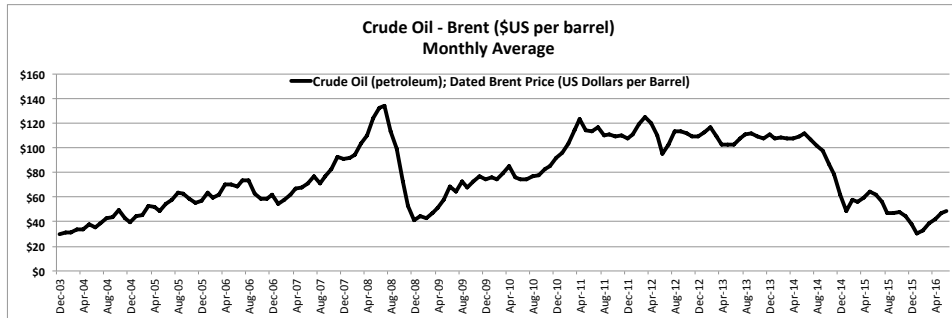
Jet-A Fuel Prices at U.S. FBOs



Source: [Business & Commercial Aviation](#)

Jet-A fuel prices in June 2016 are averaging about \$4.90 at U.S. FBOs, down from \$5.38 year-over-year

Crude Oil and Jet Fuel Prices



IATA Fuel Price Monitor Jul 8 2016)	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%	\$ 1.332	\$ 56.00	153.00	-5.1%	-9.2%	-17.1%
Asia & Oceania	22%	\$ 1.337	\$ 56.20	160.50	-2.7%	-7.1%	-14.8%
Europe & CIS	28%	\$ 1.325	\$ 55.60	149.90	-4.2%	-9.7%	-19.1%
Middle East & Africa	7%	\$ 1.286	\$ 54.00	161.30	-3.7%	-8.9%	-14.3%
North America	39%	\$ 1.337	\$ 56.20	149.30	-7.1%	-10.0%	-17.6%
Latin & Central America	4%	\$ 1.395	\$ 58.60	162.30	-6.5%	-9.7%	-15.7%

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

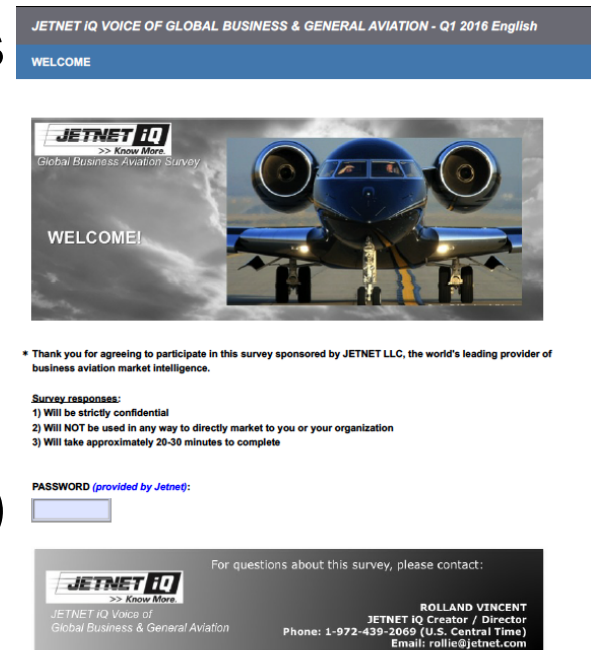
Source: IndexMundi; IATA from PLATTS

June 30, 2016

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JETNET iQ Quarterly Surveys

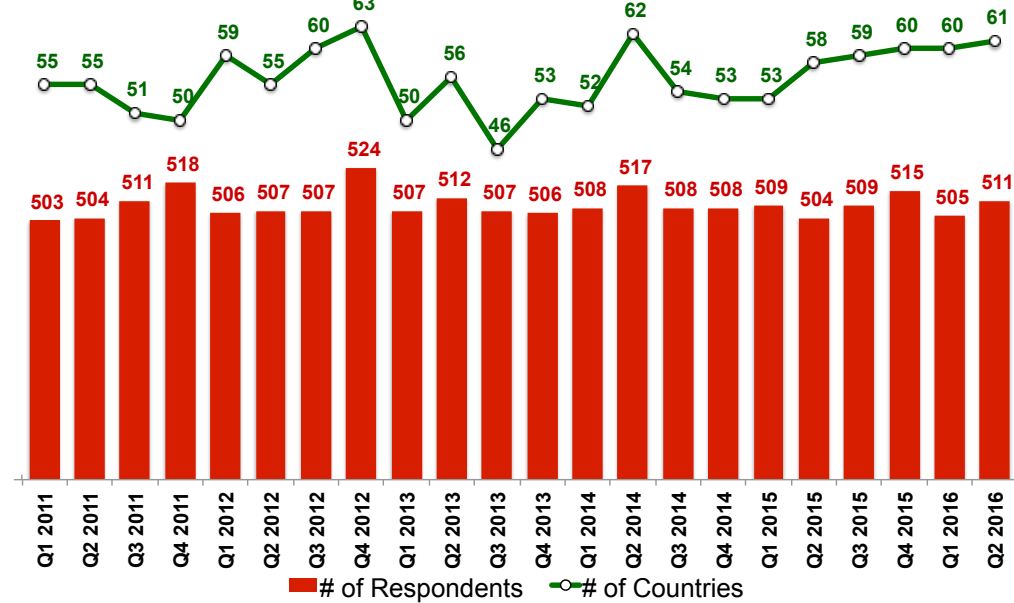
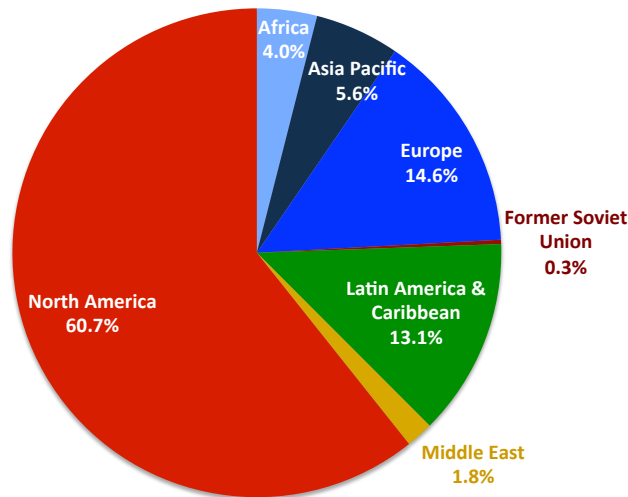
- Multilingual owner / operator surveys
 - Utilization patterns and expectations
 - Brand perceptions
 - Purchase criteria / inhibitors
 - Purchase / selling intentions
 - New product preferences
- Special topics of interest (examples)
 - New products
 - The environment
 - Mood of the market



JETNET iQ Surveys: Quarterly, multilingual, worldwide

JETNET iQ Survey Respondents

Respondent Fleet Location Q1 2011 - Q2 2016



	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	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Total
# of Respondents	503	504	511	518	506	507	507	524	507	512	507	506	508	517	508	508	509	504	509	515	505	511	11,206
# of Countries	55	55	51	50	59	55	60	63	50	56	46	53	52	62	54	53	53	58	59	60	60	61	129

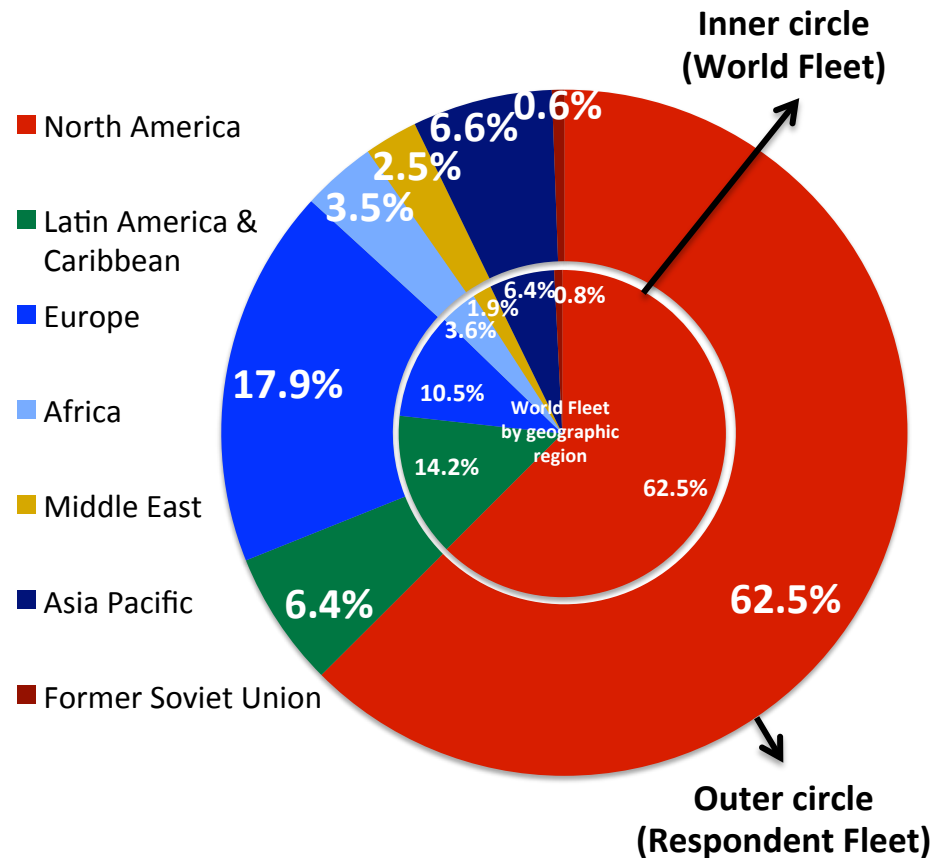
JETNET iQ Surveys: Since Q1 2011, >11,000 respondents from 129 countries

Survey Respondents' Location

By Aircraft Base Location

Q2 2016 Survey

RESPONDENT COUNTRIES FROM Q2 2016 SURVEY			
COUNTRIES/TERRITORIES	# of respondents		# of respondents
ALBANIA	1	PAKISTAN	1
ARGENTINA	6	PANAMA	1
AUSTRALIA	11	PARAGUAY	1
AUSTRIA	6	PERU	1
BELGIUM	3	PHILIPPINES	2
BRAZIL	21	POLAND	2
BULGARIA	1	QATAR	1
CAMEROON	1	ROMANIA	1
CANADA	23	RUSSIAN FEDERATION	1
CAYMAN ISLANDS	1	SAUDI ARABIA	1
CHILE	1	SINGAPORE	2
COLOMBIA	2	SLOVAK REPUBLIC	1
CZECH REPUBLIC	3	SOUTH AFRICA	17
DENMARK	3	SWEDEN	2
DOMINICAN REPUBLIC	1	SWITZERLAND	5
ESTONIA	1	TANZANIA	1
FINLAND	3	THAILAND	1
FRANCE	2	TRINIDAD AND TOBAGO	1
GERMANY	11	TURKEY	4
GREECE	1	UKRAINE	1
GUATEMALA	2	UNITED KINGDOM	10
HONDURAS	1	UNITED STATES	315
INDIA	5	VENEZUELA	1
IRELAND	3	ZAMBIA	1
ITALY	5	ZIMBABWE	1
JAMAICA	1	Total # of respondents	511
KENYA	1	Total # of countries	61
LATVIA	1		
MALTA	2	Africa	24
MEXICO	6	Asia Pacific	23
MONTENEGRO	1	Europe	72
NAMIBIA	1	Former Soviet Union	2
NETHERLANDS	2	Latin America & Caribbean	46
NEW ZEALAND	1	Middle East	6
NIGERIA	1	North America	338
NORWAY	1	Total	511



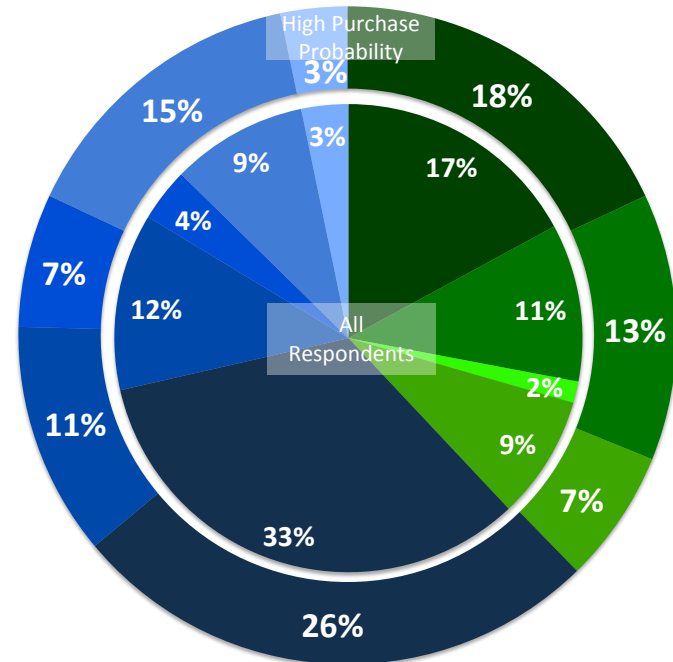
Survey Respondents' Roles

By Job Title

Q2 2016 Survey

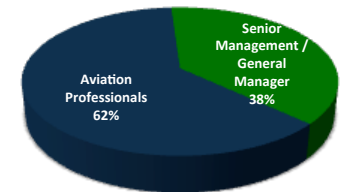
Title of respondent	Completed
Business owner/shareholder/partner	116
C-Level/President/Managing Director	74
Vice President / Senior Management	10
General Manager / Director	58
Chief Pilot / head of flight operations	227
Dispatcher / Scheduler / Flight Coordinator	83
Head of maintenance	25
Pilot	64
Vice President / Director of Aviation	22
Total	679

Note: Respondent was able to chose whichever applied



Aviation Professionals	421	62%
Senior Management / General Manager	258	38%

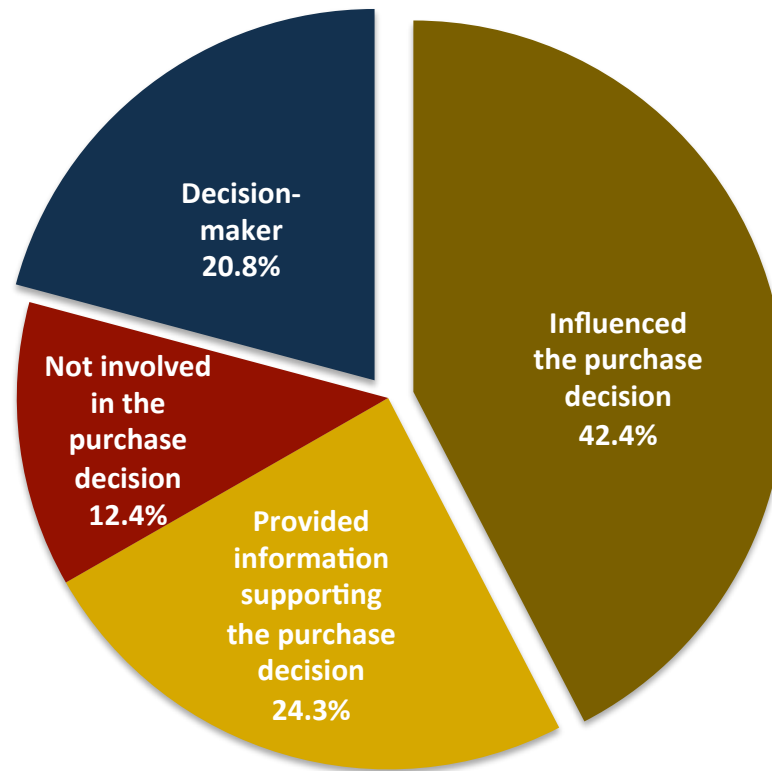
- Business owner/shareholder/partner
- C-Level/President/Managing Director
- Vice President/Senior Management
- General Manager/Director
- Chief Pilot/Head of flight operations
- Dispatcher/Scheduler/Flight Coordinator
- Head of maintenance
- Pilot
- Vice President/Director of Aviation



Survey Respondents' Roles

By Involvement in Last Fixed-Wing Turbine Aircraft Purchase

Q2 2016 Survey

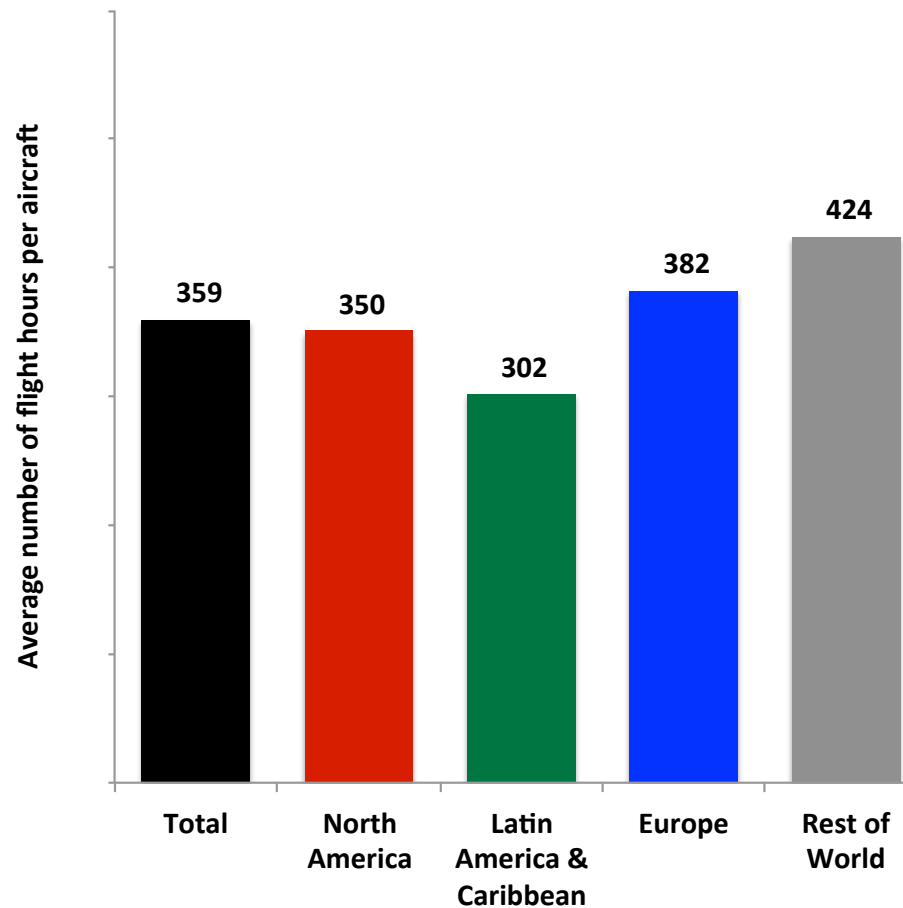


Survey Respondents' Flight Operations

Regional Average Utilization per Aircraft in Prior 12 Months

Average flight hours per year

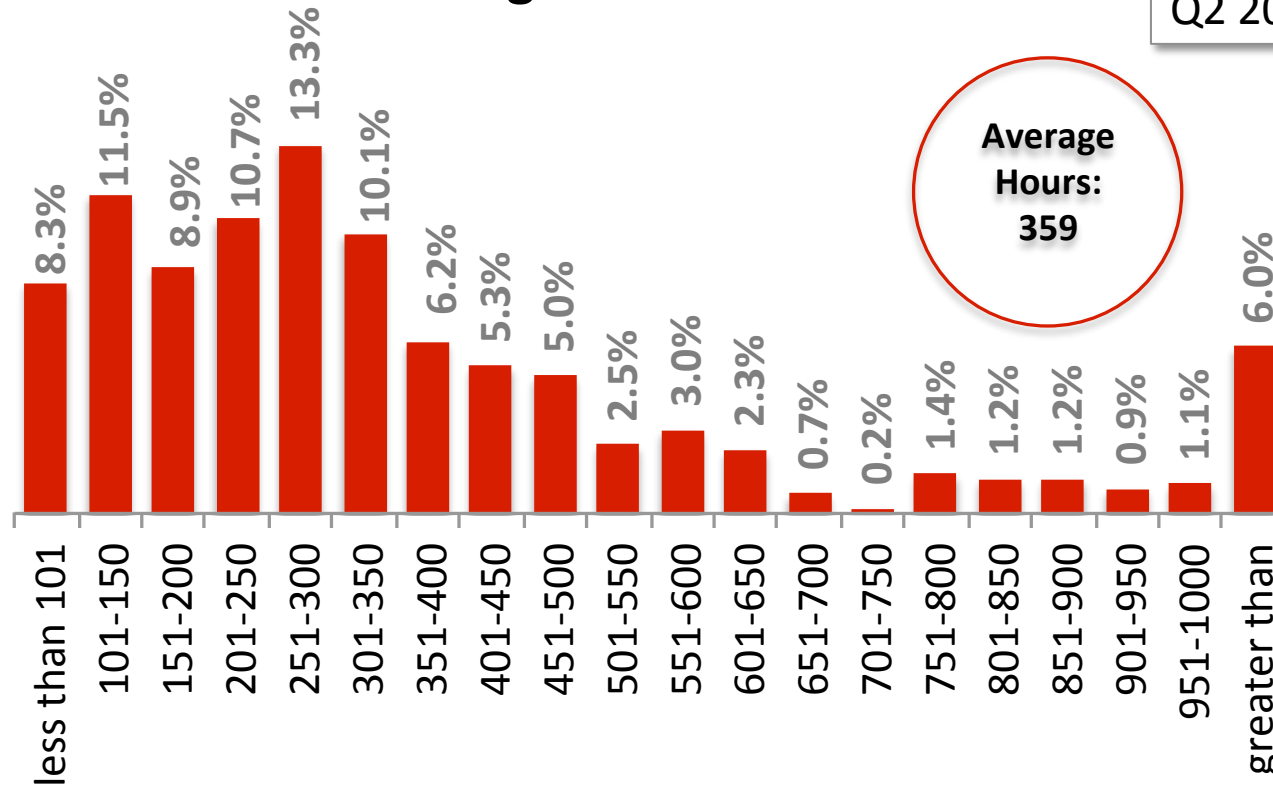
Q2 2016 Survey



Survey Respondents' Flight Operations

Last 12 Months – Worldwide (Fixed-Wing Business Jets and Turboprops Only)
Annual Flight Hours Per Aircraft

Q2 2016 Survey

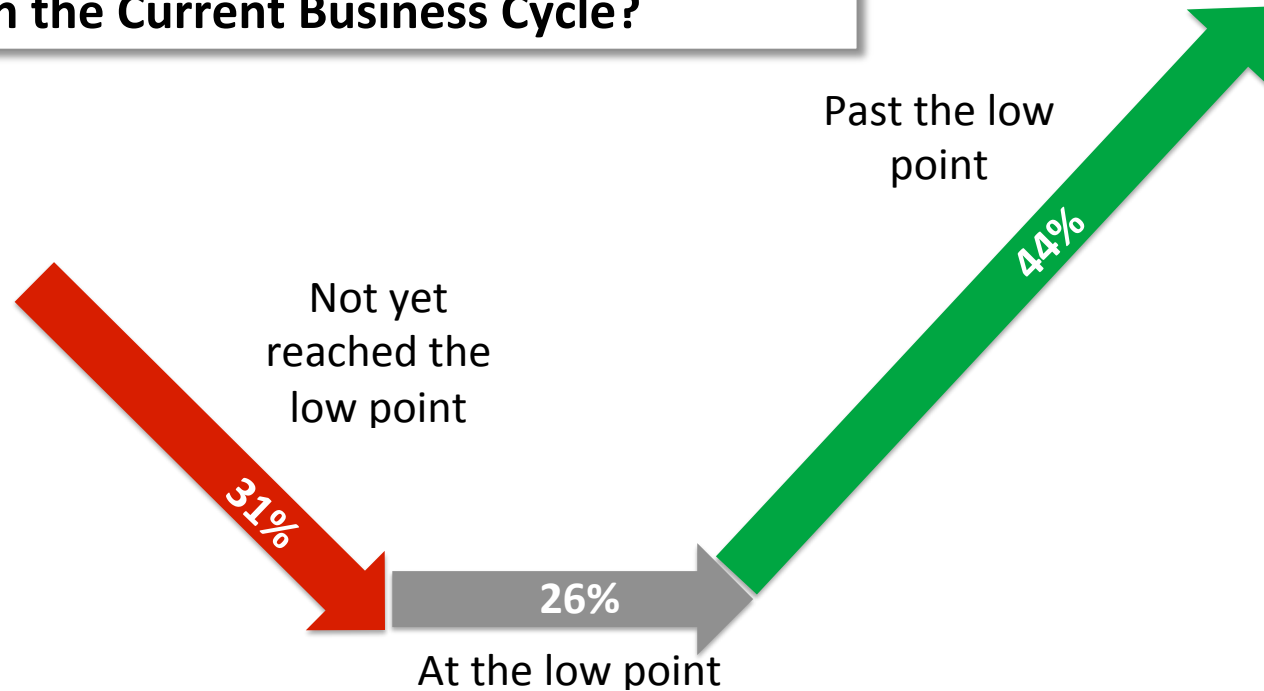


Survey Respondents' Sentiment

Current Market Sentiment

Q2 2016 Survey

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

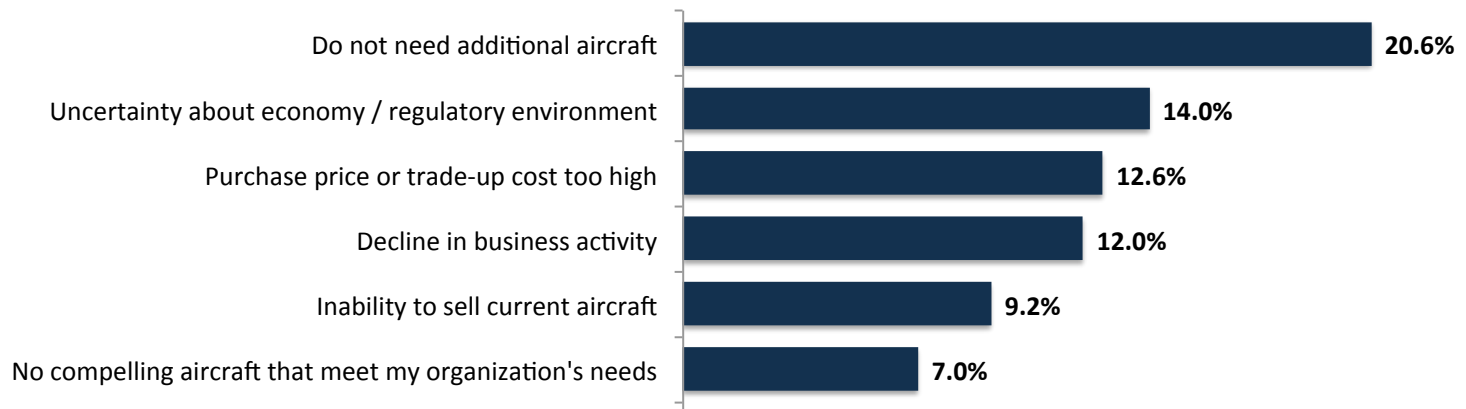


Aircraft Purchase Inhibitors

Top 5 Inhibitors – Weighted Average

Q2 2016 Survey

Purchase inhibitors

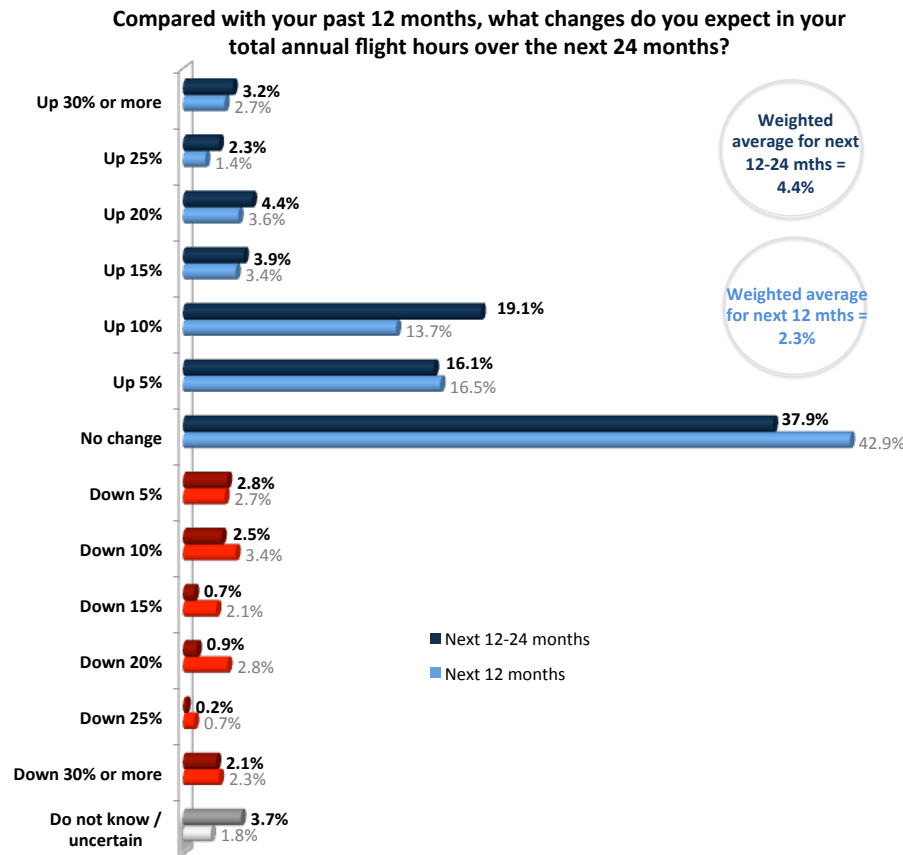


“Which of the following factors are most likely to prevent or delay your organization from purchasing a business aircraft over the next 12 months?”

Aircraft Utilization

Next 12 and 12-24 Months versus Prior 12 Months

Q2 2016 Survey

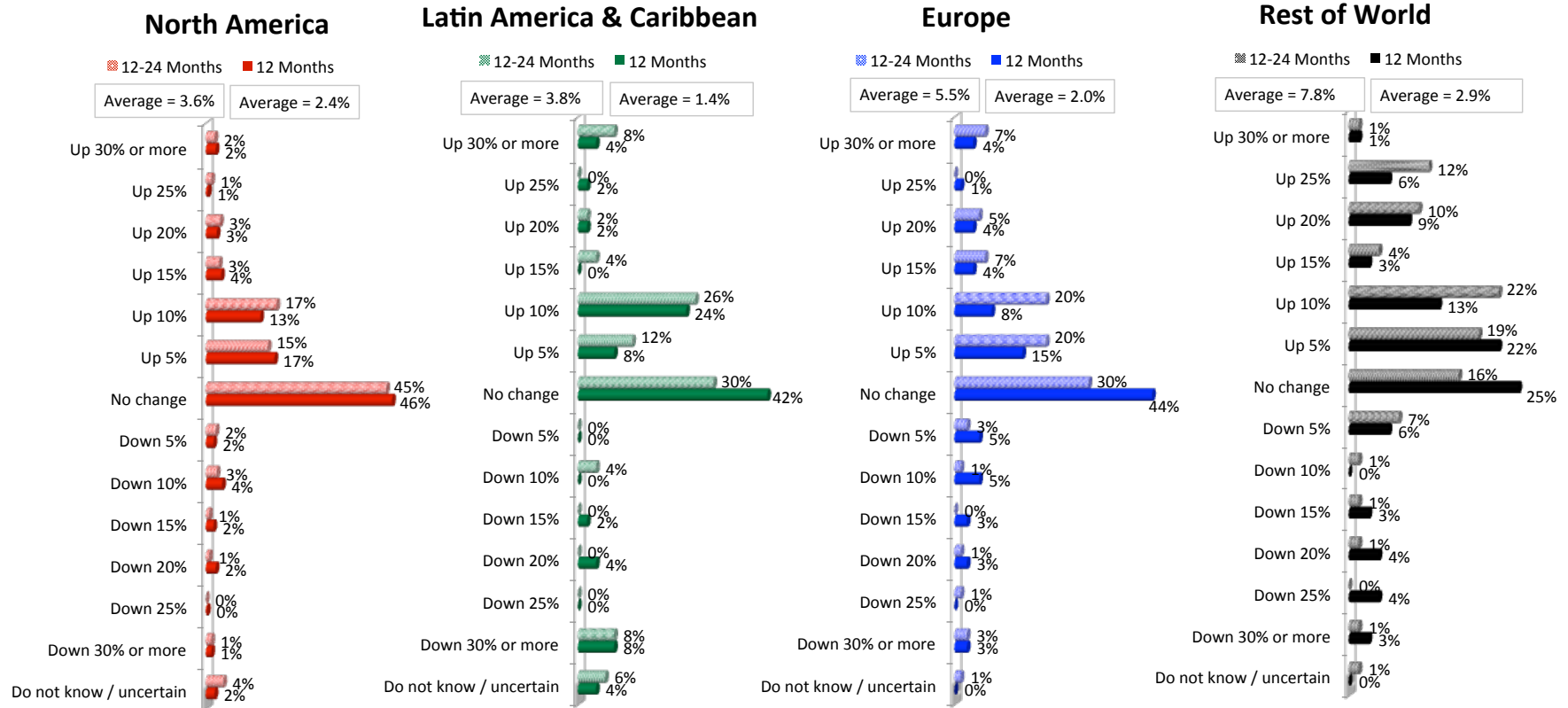


Respondents expect to fly 2.3% more hours in the next 12 months vs. prior 12 months and 4.4% in the next 24 months

Aircraft Utilization

Next 12 and 12-24 Months versus Prior 12 Months

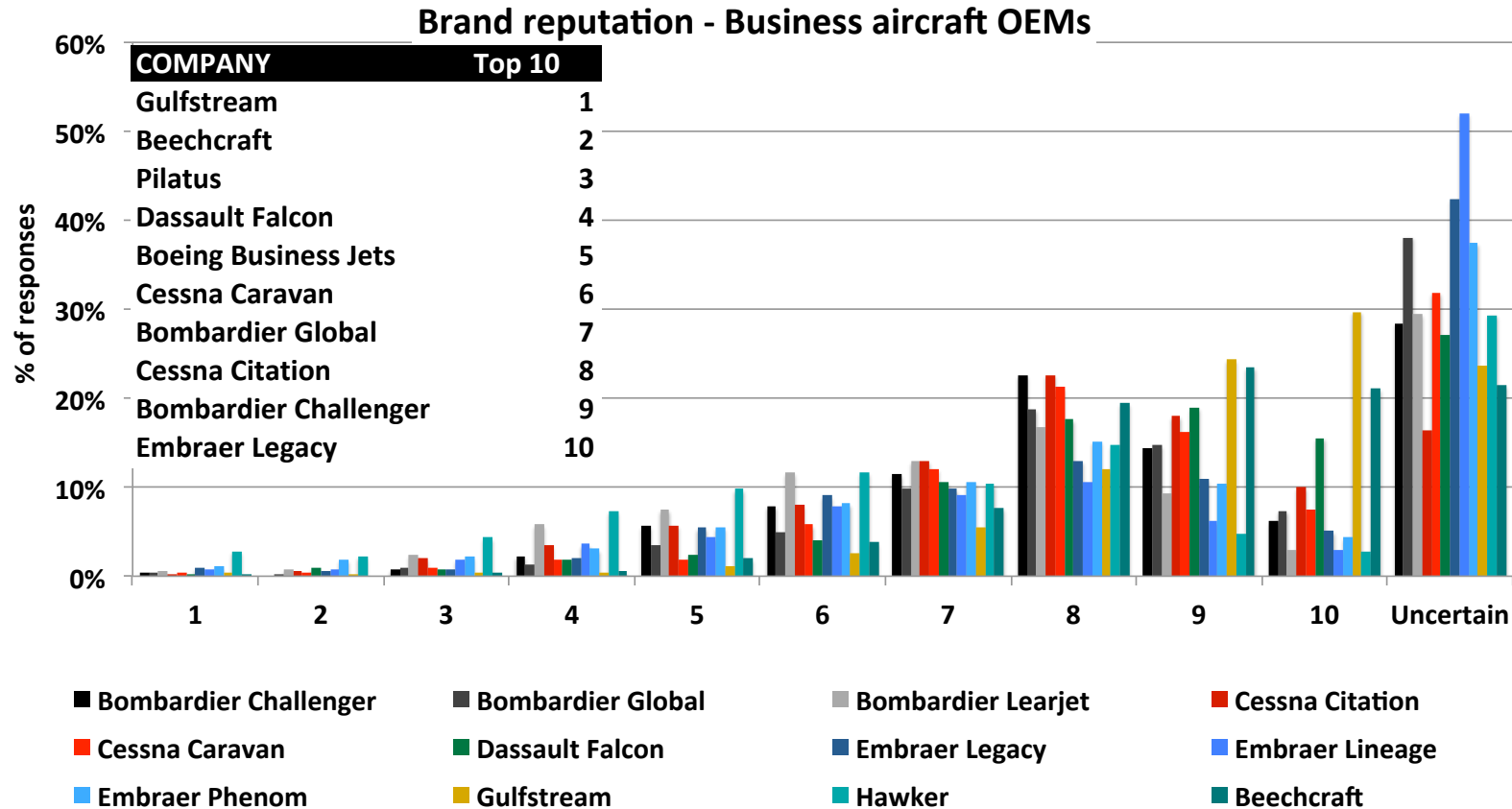
Q2 2016 Survey



Respondents expect to fly 2.3% more hours in the next 12 months vs. prior 12 months

Brand Reputations

Aircraft Manufacturers on a 1-10 Scale, where "10" = Highest Q2 2016 Survey

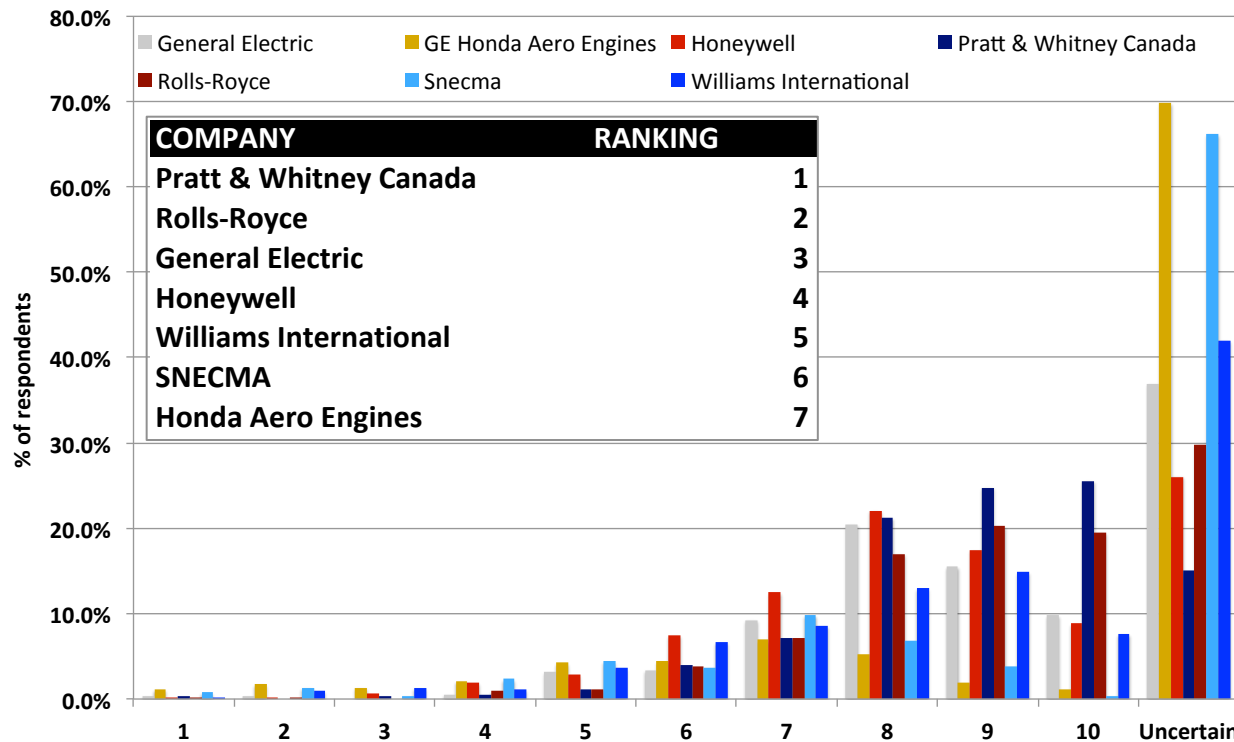


Gulfstream, Beechcraft and Pilatus are the top rated business aircraft brands

Brand Reputations

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

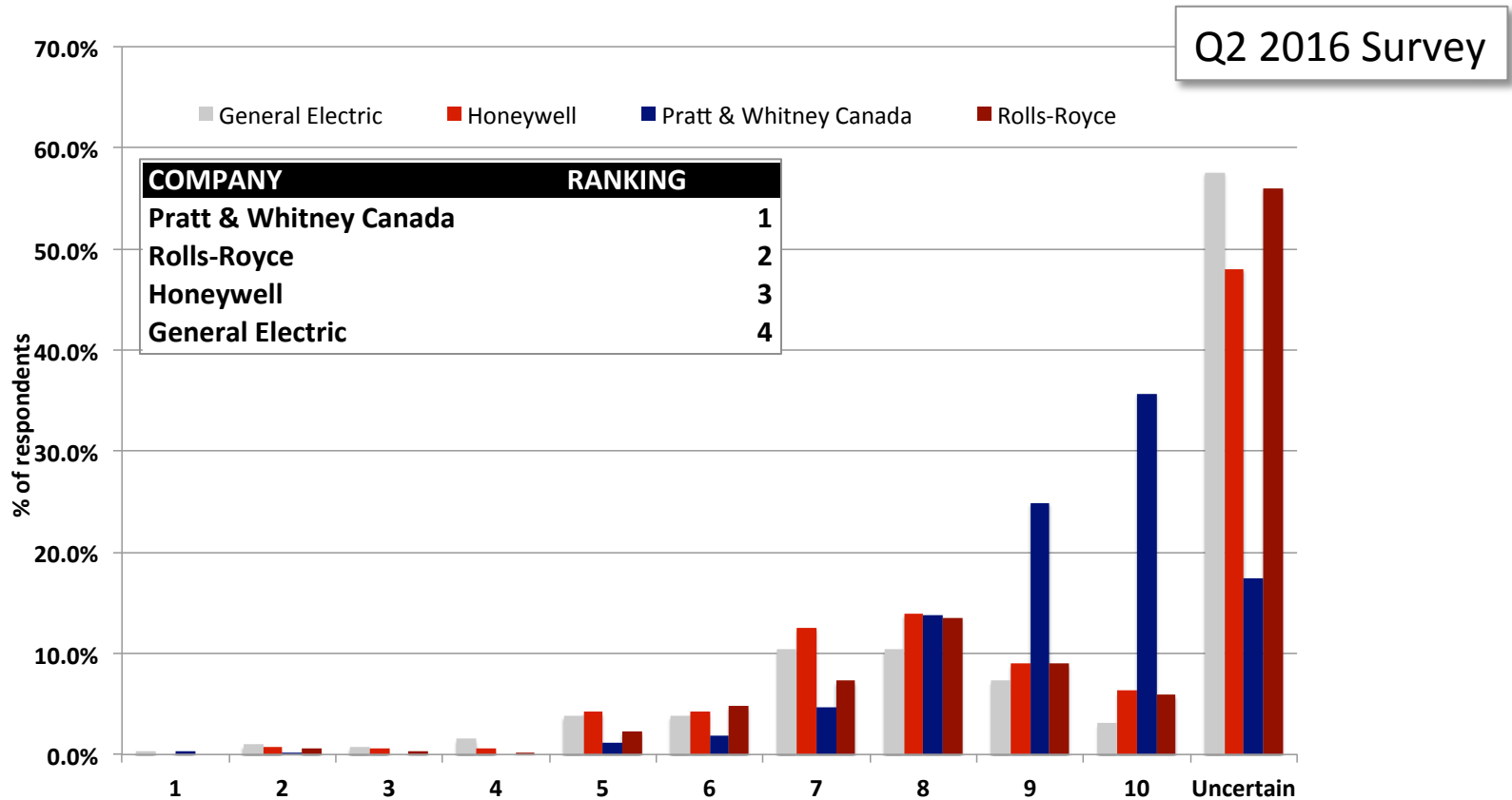
Q2 2016 Survey



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, where “10” = Highest



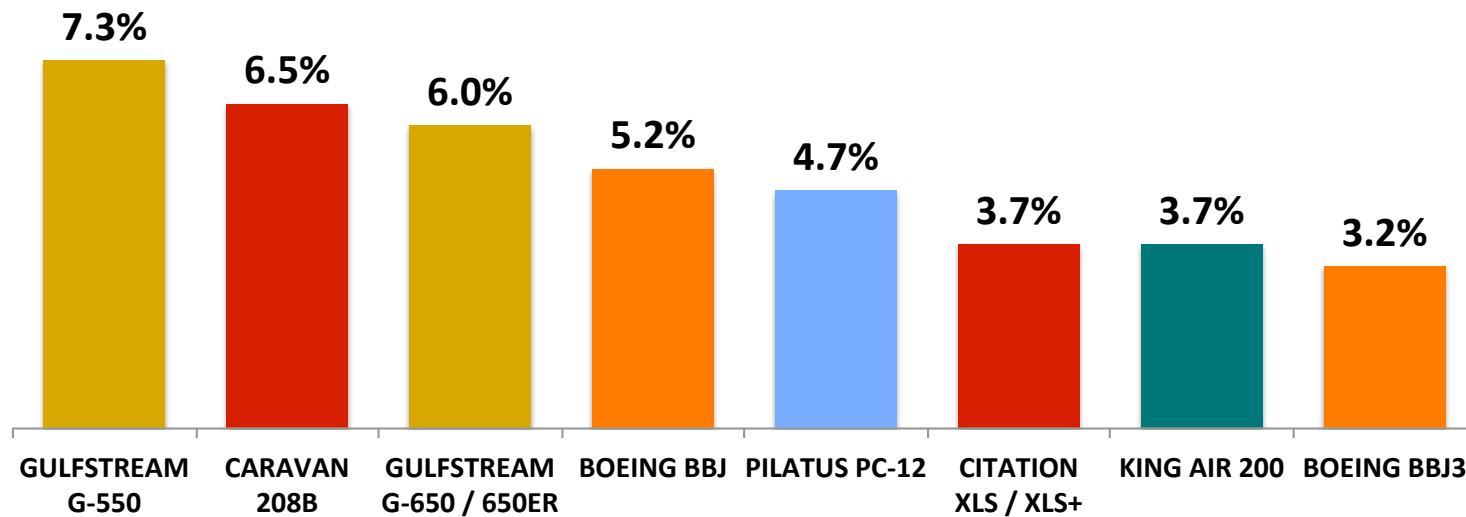
Pratt & Whitney Canada is the highest rated turboprop engine manufacturer brand, well ahead of Rolls-Royce and General Electric

Aircraft Brands

Designed and Built for High Utilization

Top 8 models - worldwide
Designed and Built for High Utilization
Q2 2016

Q2 2016 Survey



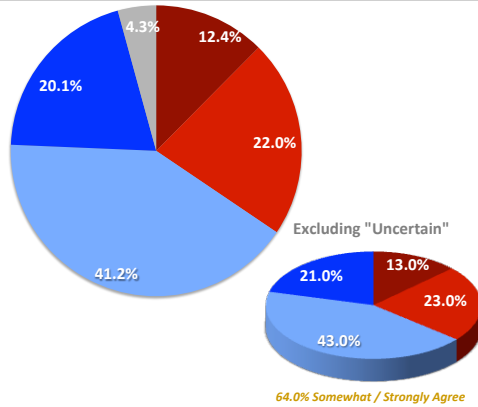
According to the Q2 2016 survey respondents, the top 2 models designed and built for high utilization are Gulfstream G-550 and Caravan 208B.

Opinions

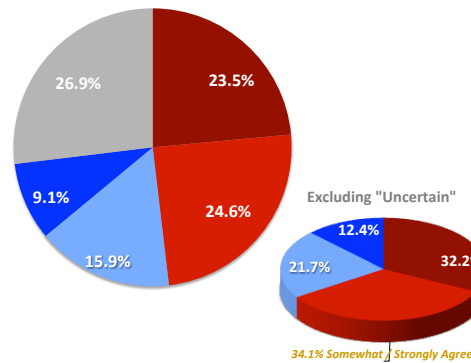
Please evaluate these statements and indicate the extent to which you agree or disagree:

■ Strongly Disagree
 ■ Somewhat Disagree
 ■ Somewhat Agree
 ■ Strongly Agree
 ■ Uncertain

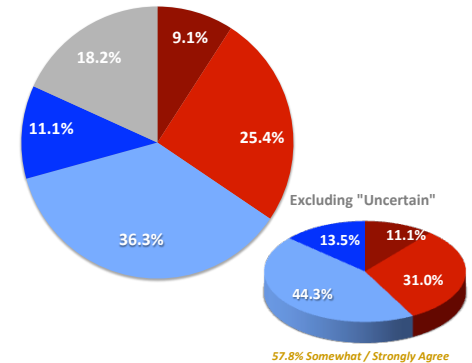
We consider ourselves to be loyal to a single aircraft brand



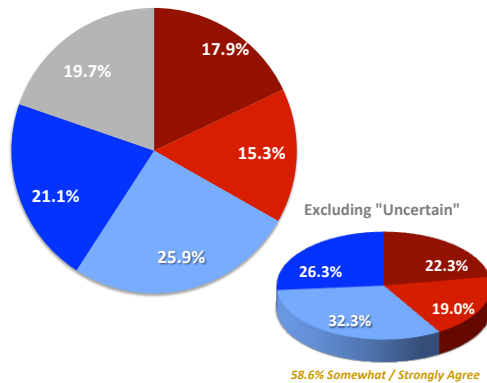
We are seeking fly-by-wire controls in our next aircraft



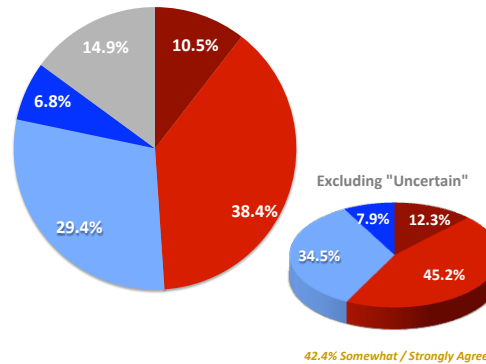
All-composite aircraft are the way of the future in business aviation



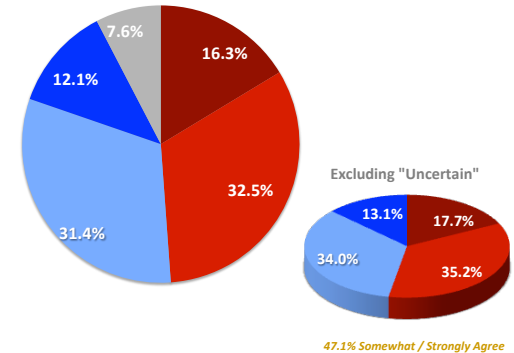
We expect to increase WiFi speeds on our aircraft in the next 12 months



We expect prices for pre-owned aircraft less than 5 years old to increase in the next 12 months

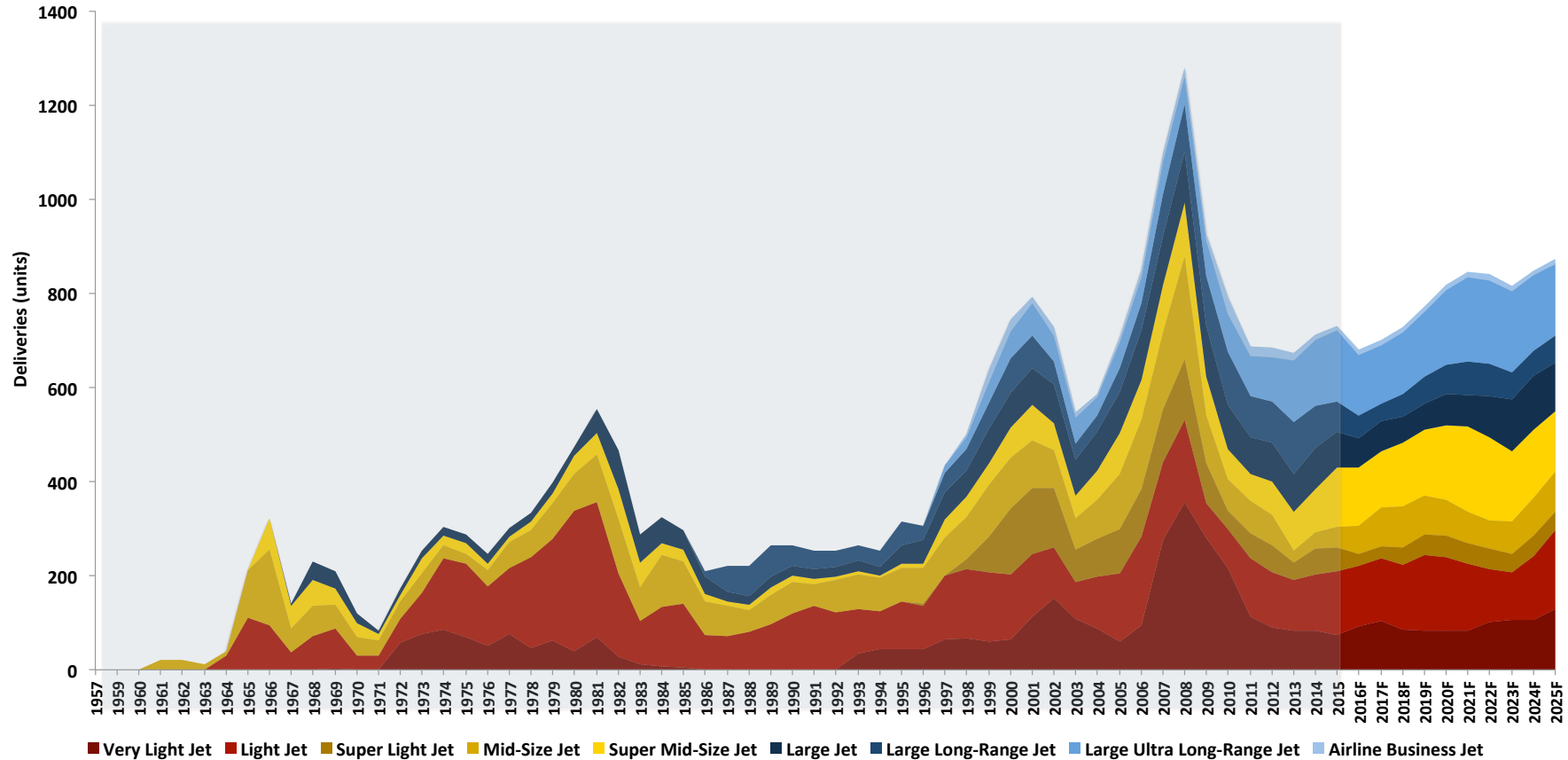


Lower fuel prices have increased usage of our fleet over the past 12 months



Business Jet Delivery History & Forecast

Business jet delivery forecast by size category: Historical - 2025



JETNET iQ 10-year forecast for 2016-2025 is for 7921 new business jet deliveries (excluding personal jets) valued at \$226 billion in \$2015

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 110,000 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.