



December 2018

Global Airline Trends and Impacts

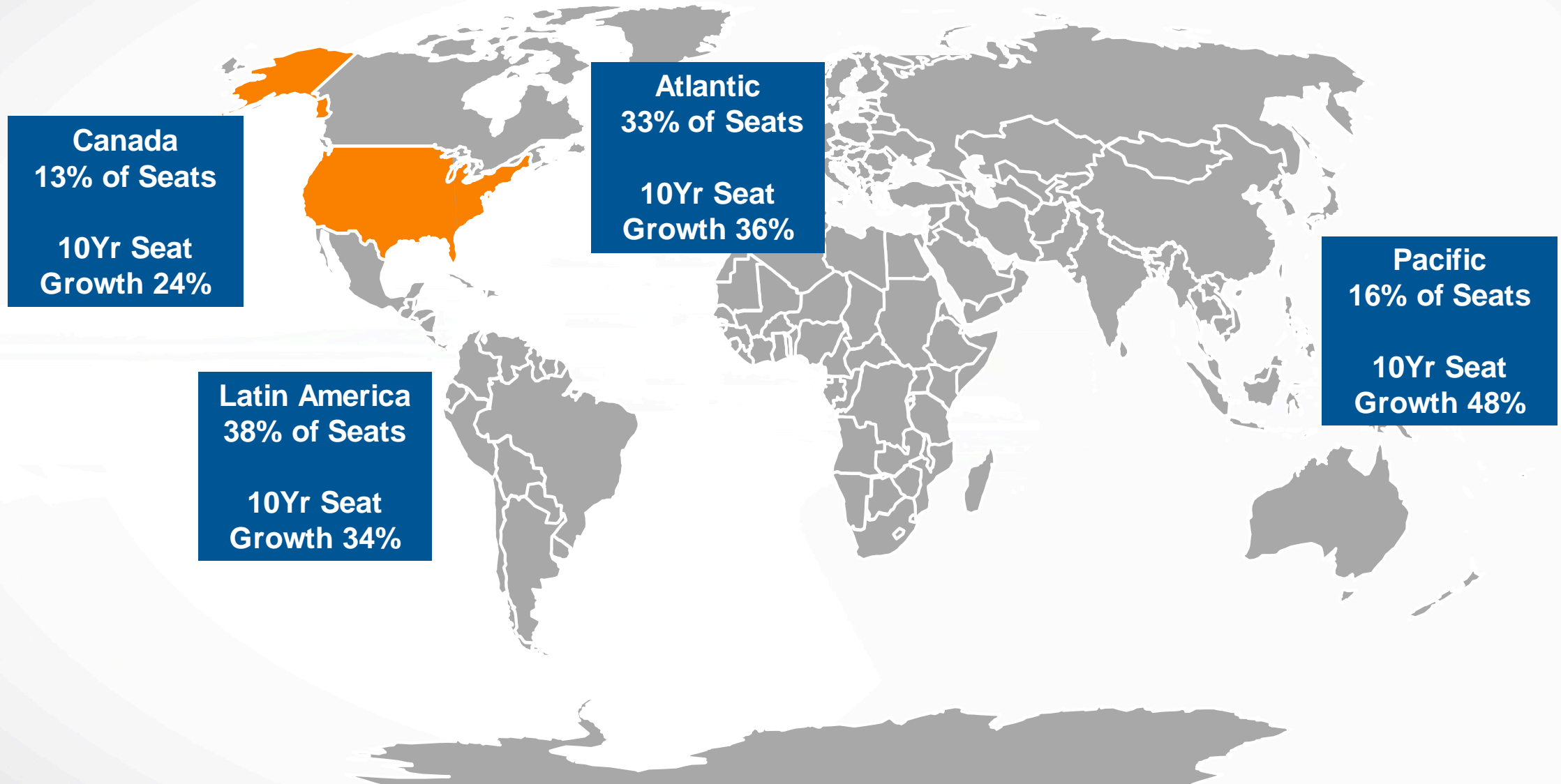
ACI International Aviation Issues Seminar – Mike Lopez, Vice President

- U.S. international capacity is trending up
- Foreign carriers gaining seat share in U.S. market
- Gluttony of aircraft new and healthy airline margins
- Yield trending downward due to capacity, competition, and new aircraft
- Risks looking forward: potential economic downturn, unstable politics, trade wars, currency exchange rates, etc.

Agenda

- Overview
- Overall Capacity and Fleet
- Regional Overview
- Financials, Traffic and Yield
- External Variables

As of 2018, Latin America is the largest int'l destination from the U.S. with 38% of seats



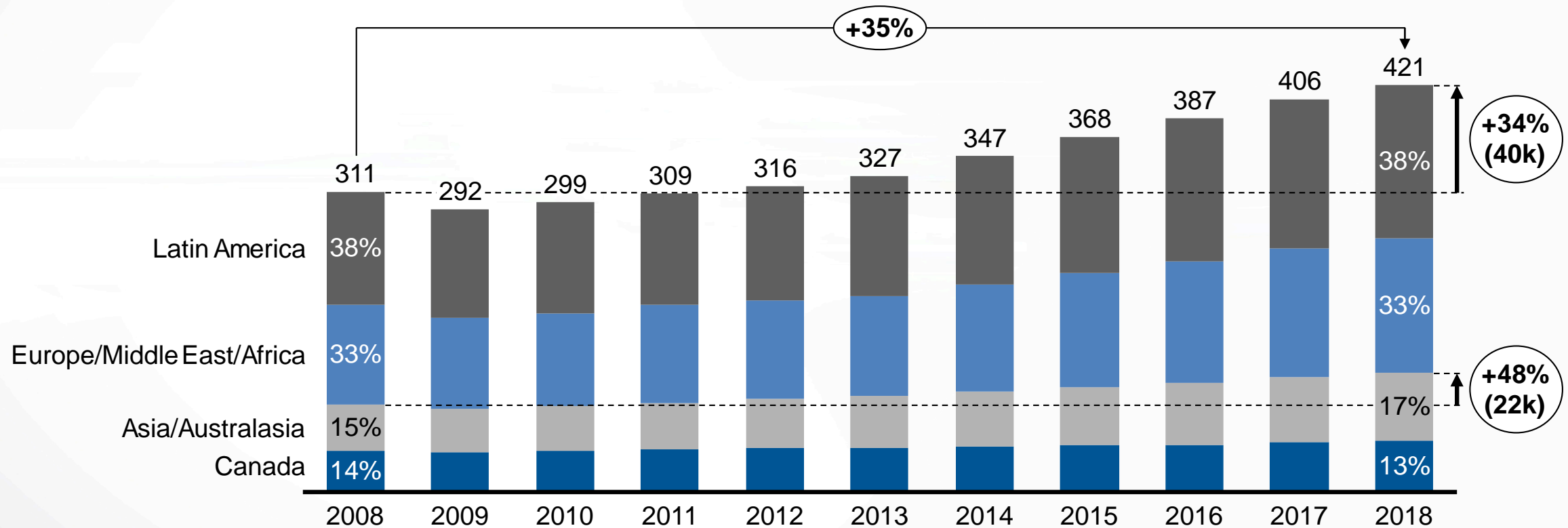
Note: Latin America includes Mexico, Caribbean, Central America, and South America; Source: Innovata schedule data via Diio Mi

Overall, international capacity from the U.S. is up 35% from 2008 to 2018

Each global region kept its share of the U.S. seats; Latin America gained the most daily seats with 40k, while Asia/Australasia gained 2ppts of seat share which translates to the largest percentage growth at 48% or 22k daily seats to the U.S.

Total U.S. to International Daily Scheduled Seats by Regions (in 000s)

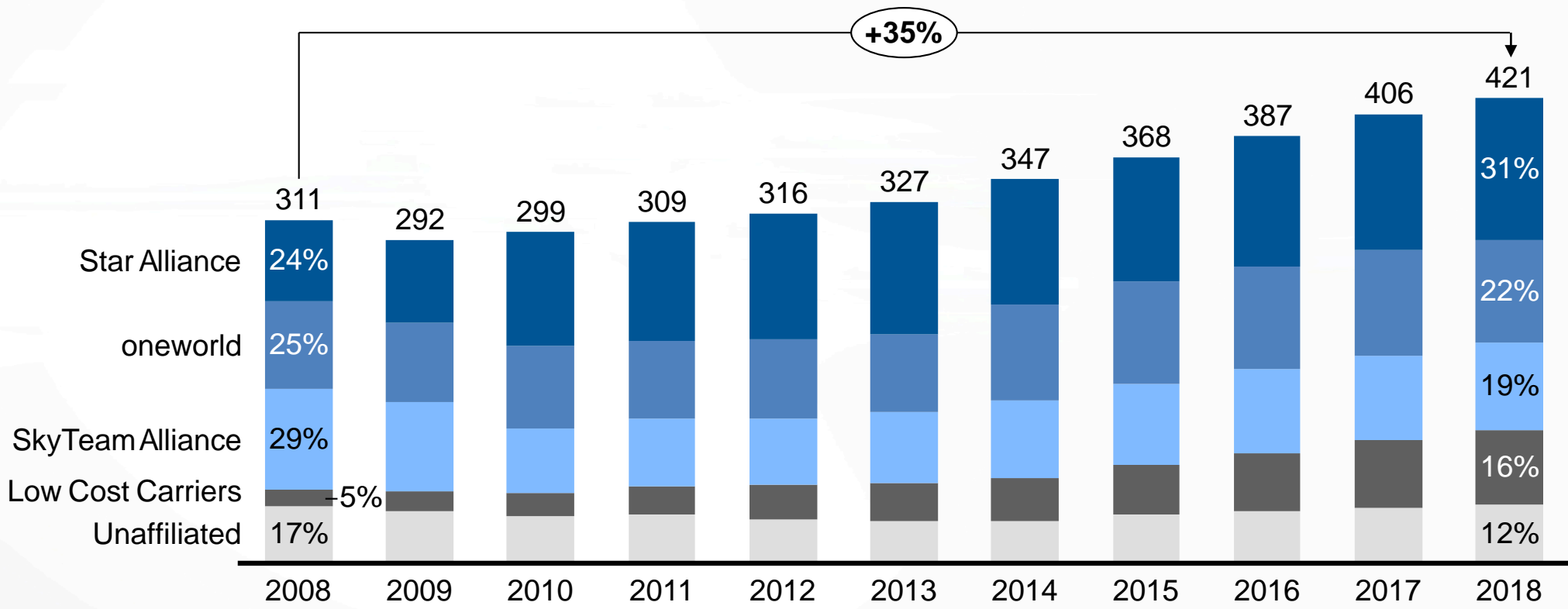
2008 through 2018



Note: Latin America includes Mexico, Caribbean, Central America, and South America; Source: Innovata schedule data via Diio Mi

After Continental left SkyTeam to join Star Alliance in late 2009, Star Alliance has the largest U.S.-International seat share

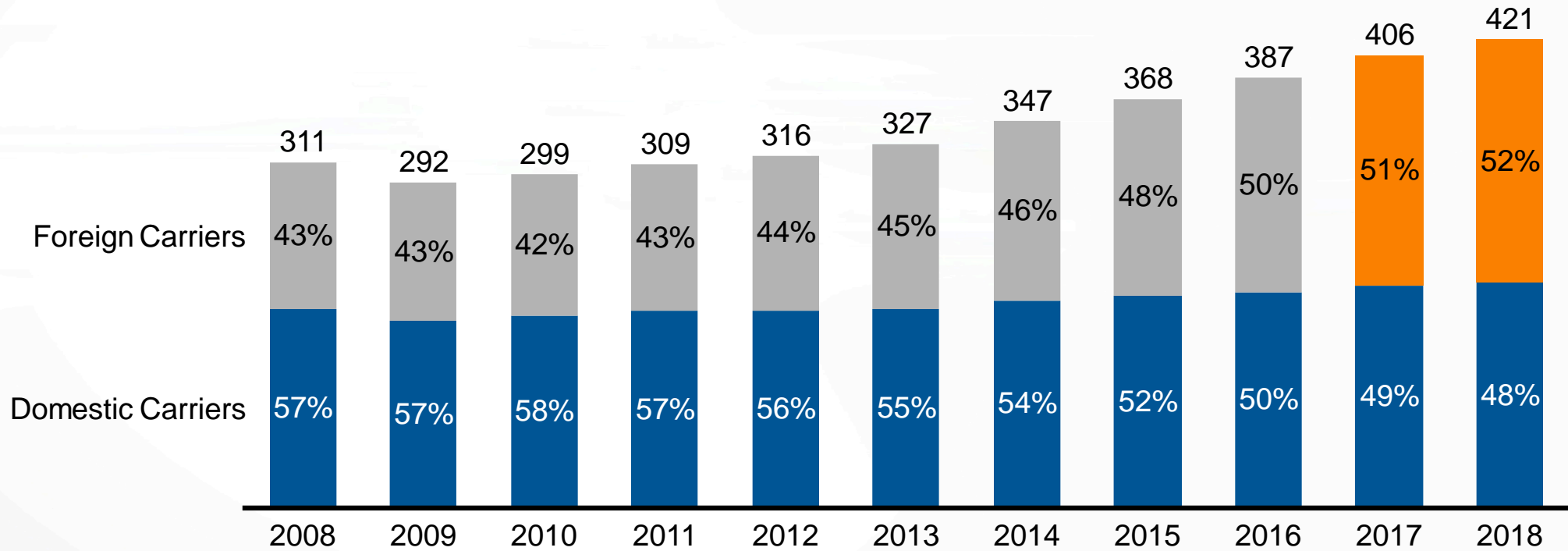
Total U.S. to International Daily Scheduled Seats by Alliance (in 000s)
2008 through 2018



Source: Innovata schedule data via DiiMi

Foreign carriers now account more than half of US-international capacity since 2017

Total U.S. to International Daily Scheduled Seats – Domestic vs Foreign Carriers (in 000s)
2008 through 2018



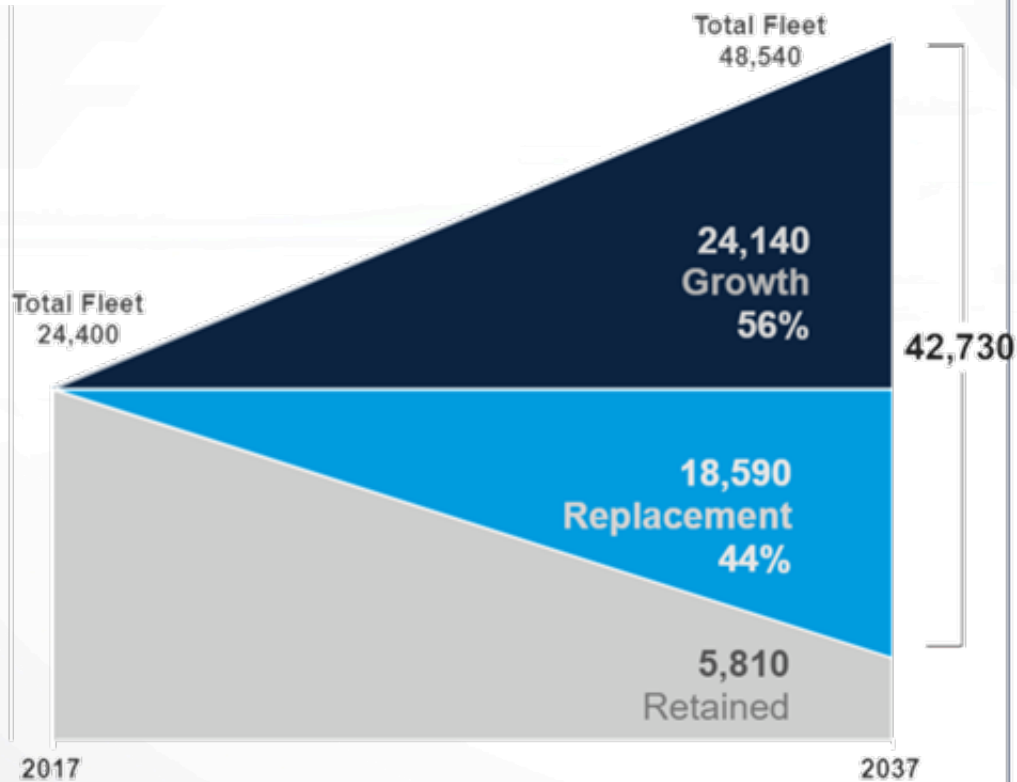
Source: Innovata schedule data via Diio Mi

accenture.com/seaburyconsulting

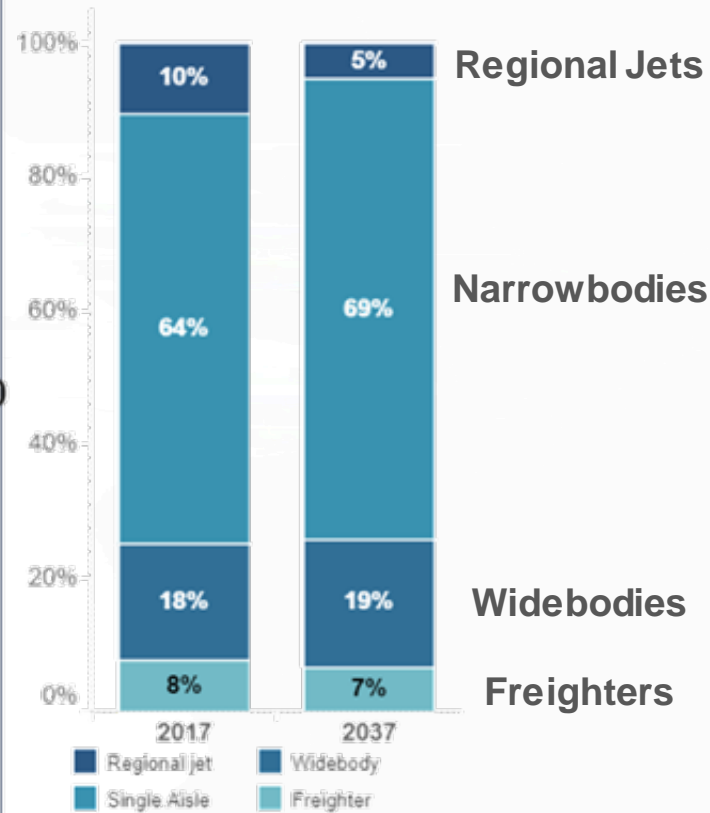
Global fleet forecasted to grow 98% from 2017 to 2037

44% of the new aircraft delivered in the next 20 years will replace retiring aircraft; the remaining 56% of the new global fleet are to accommodate forecasted traffic growth; majority of new aircraft expected to be narrowbodies and widebodies

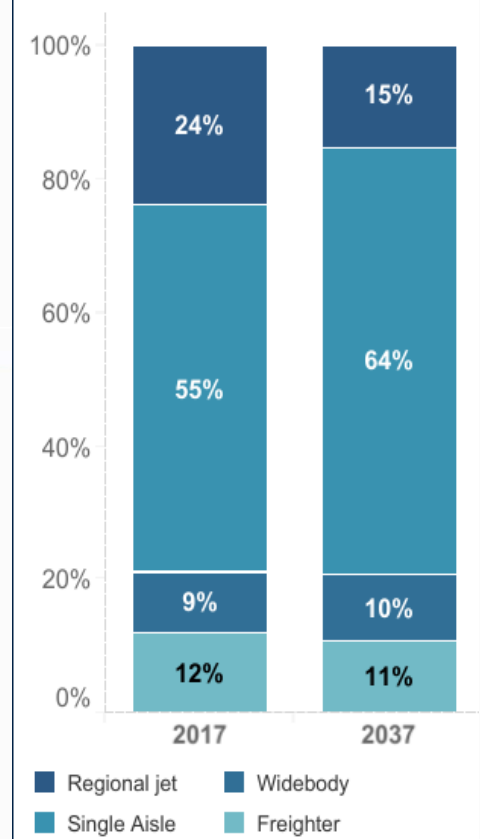
2017-2037 Global Fleet Growth, Replacement, & Retainment



Global Composition of fleet



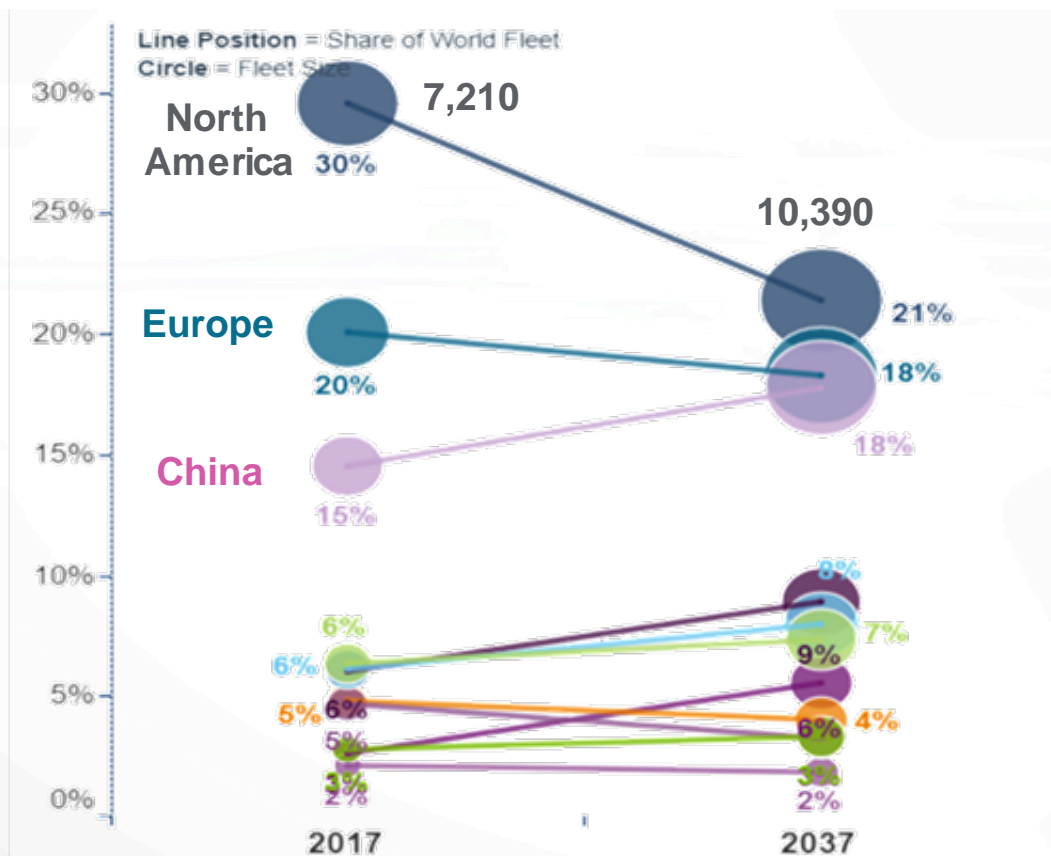
North America Airlines Composition of fleet



North American fleet to grow in size but will yield global market share to Asian carriers

Airlines in the U.S. and Canada are expected to grow their fleets from 7,210 to 10,390 aircraft or 44% through 2037; however, carriers in other parts of the world, particularly China and other Asia regions, will grow significantly faster

Regional Contribution to the Size and Share of the World Fleet



Foreign carriers will be equipped to continue gaining seat share in U.S.-International markets vs. Domestic carriers

The Boeing 787 has opened up a number of new U.S. route opportunities since 2011

In addition to operating on existing U.S.-International routes, the 787 has enabled several new routes such as DEN-NRT and BNA-LHR for example



New orders for 787s going forward are mostly non-North American carriers

North America has roughly 172 Boeing 787s on order making up only 27% of the global order book

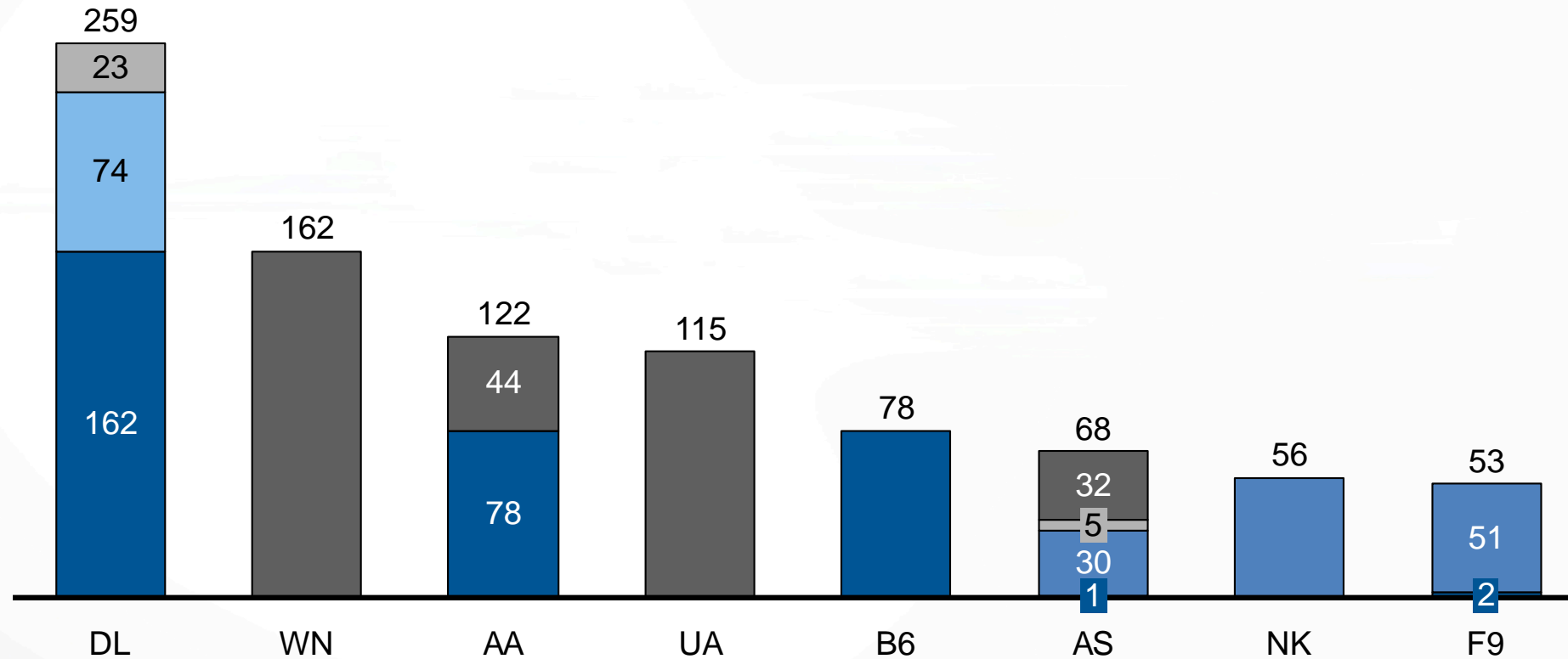
Customer Name	787-8	787-9	787-10	Grand Total
Etiihad Airways		20	29	49
Singapore Airlines			40	40
AerCap		30		30
Qatar Airways		30		30
*United Airlines		13	14	27
*American Airlines		27		27
Turkish Airlines		25		25
Aeroflot - Russian Airlines	18	4		22
Air France-KLM Group		10	8	18
EVA Air			18	18
All Nippon Airways Co., Ltd.		14	3	17
British Airways	1		12	13
Gulf Air		13		13
*WestJet Airlines		10		10
Republic of Iraq	10			10
Japan Airlines	4	6		10
Jet Airways		10		10
Arik Air		9		9
GECAS		4	4	8
LATAM Airlines Group		8		8
Other	53	169	33	255
Total Unfulfilled Orders	86	402	61	649
ASC 606 Adjustment				(18)
Backlog	86	402	161	631

More than 900 aircraft are on order in the next 4 years among these US carriers

Total Narrowbody Aircraft on Order

On order between 2018-2023

■ A321 ■ A320 ■ A220 ■ 737 NG ■ 737 Max



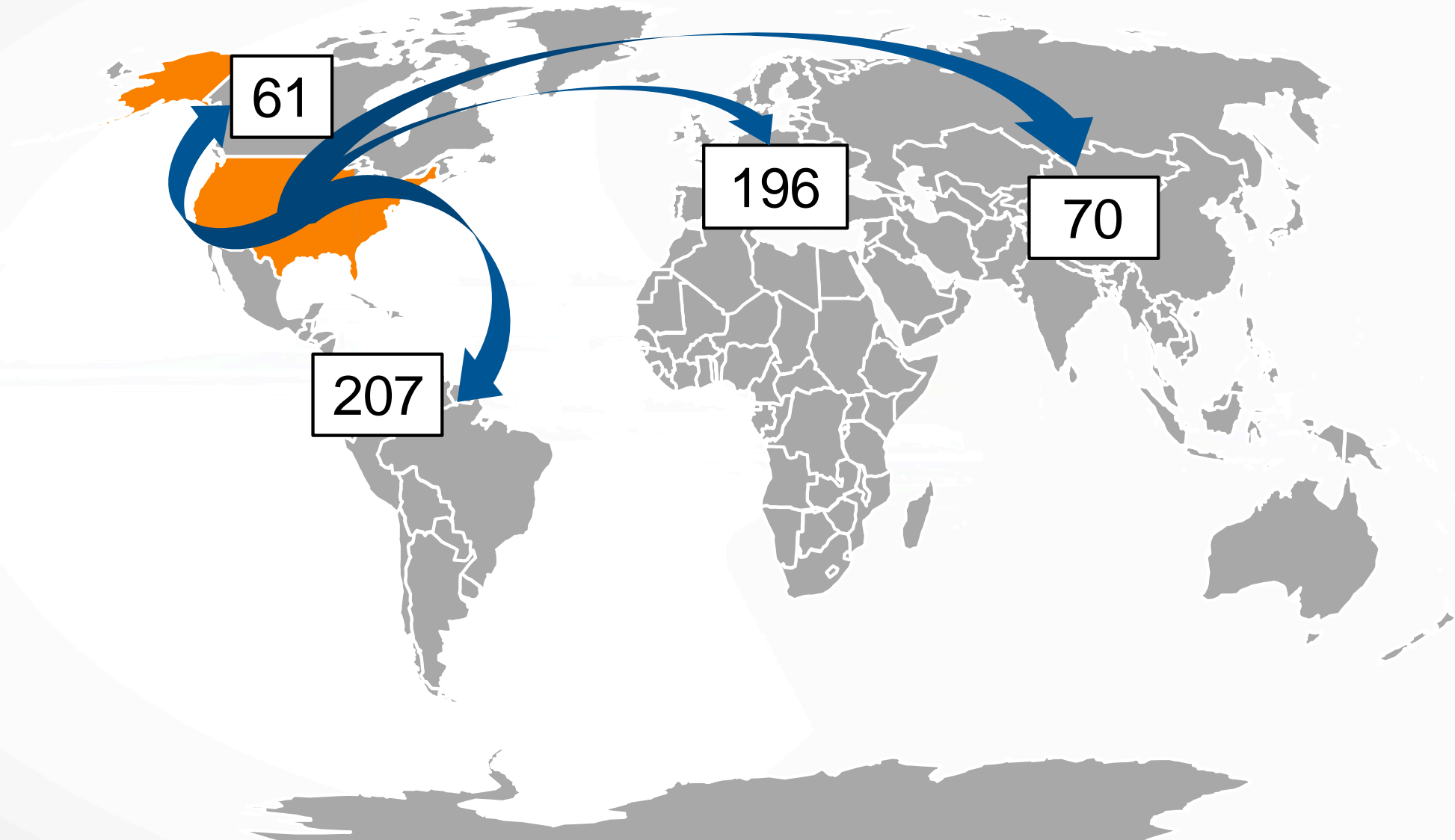
Source: Fleet data via Diio Mi

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Since 2008, 534 new unique international city pairs have been added from U.S.!

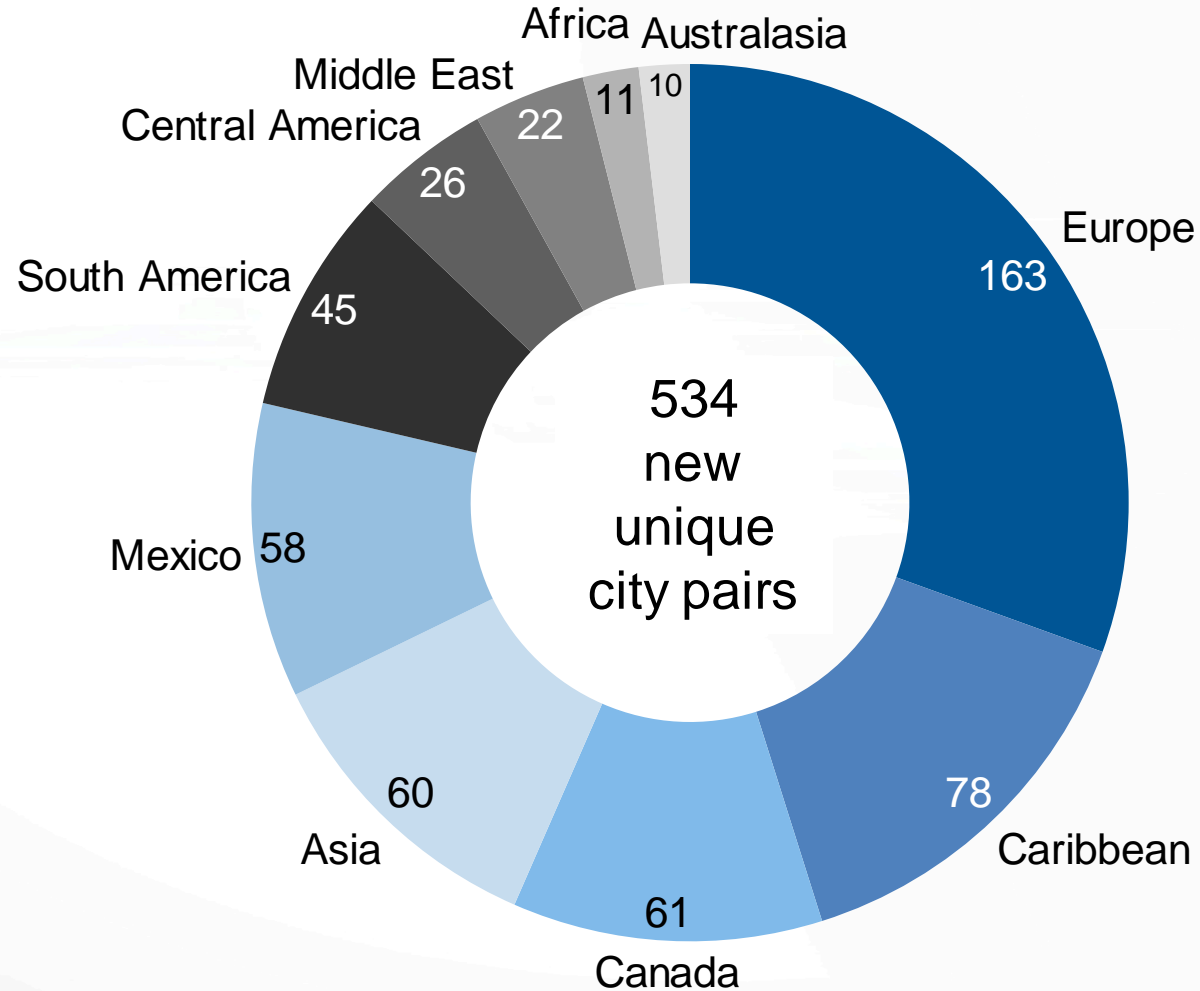


Note: Excludes U.S. Pacific territories; Latin America includes Mexico, Caribbean, Central America, and South America
Source: Innovata schedule data via Diio Mi

More than 30% of new U.S.-International city pairs are to Europe

New Unique City Pairs – U.S. to International Regions

2018 versus 2008



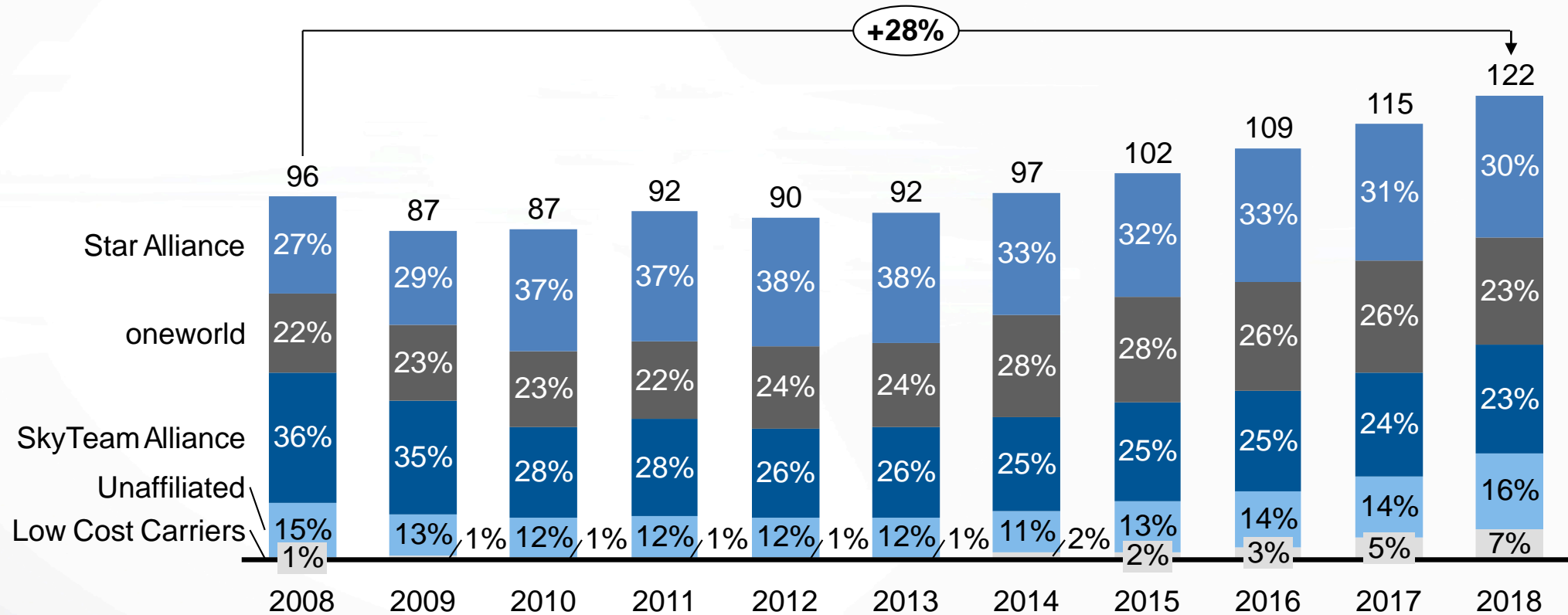
Note: Excludes U.S. Pacific territories

Source: Innovata schedule data via Diio Mi

LCCs now account for 7% of U.S.-Europe capacity in 2018

U.S.-Europe Daily Scheduled Seats – by Alliance

2008 through 2018

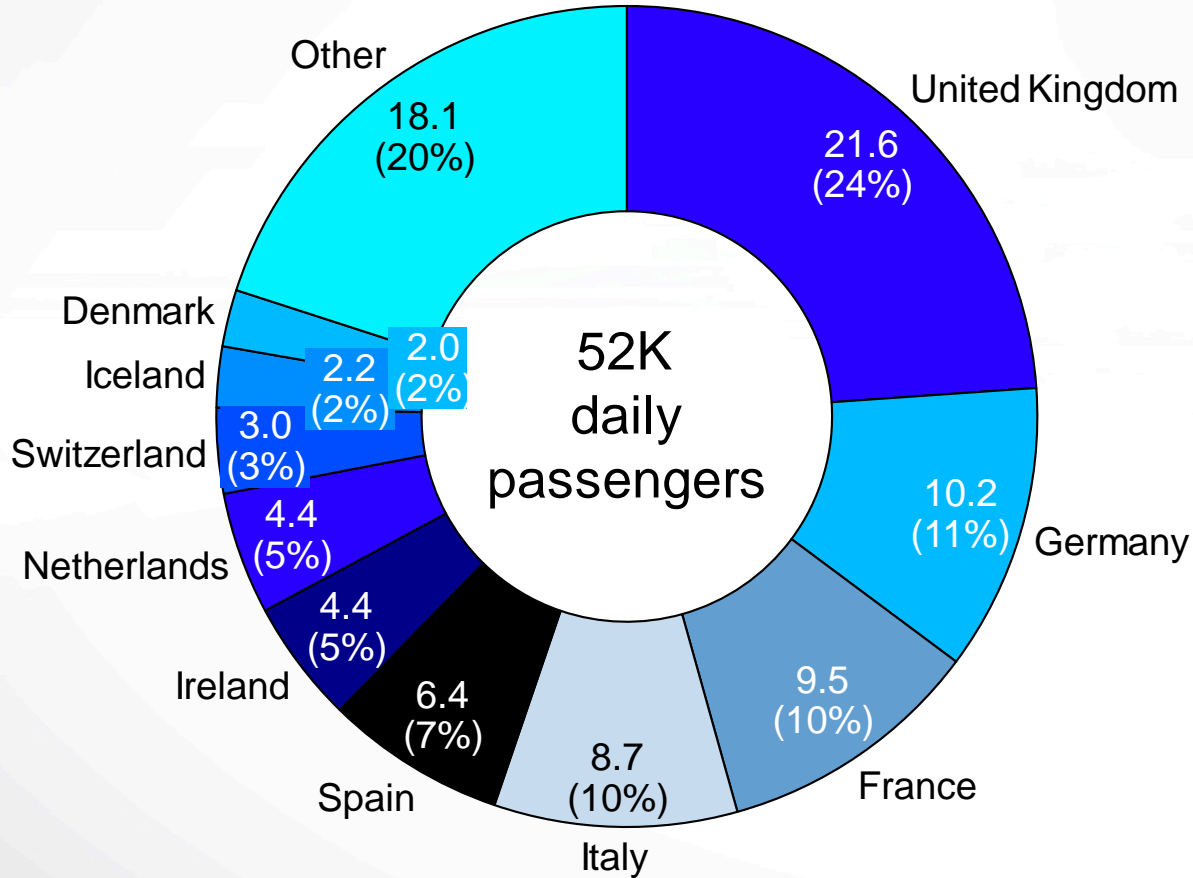


Source: Innovata schedule data via Diio Mi

U.K., Germany and France combined represents 46% of U.S.-Europe traffic

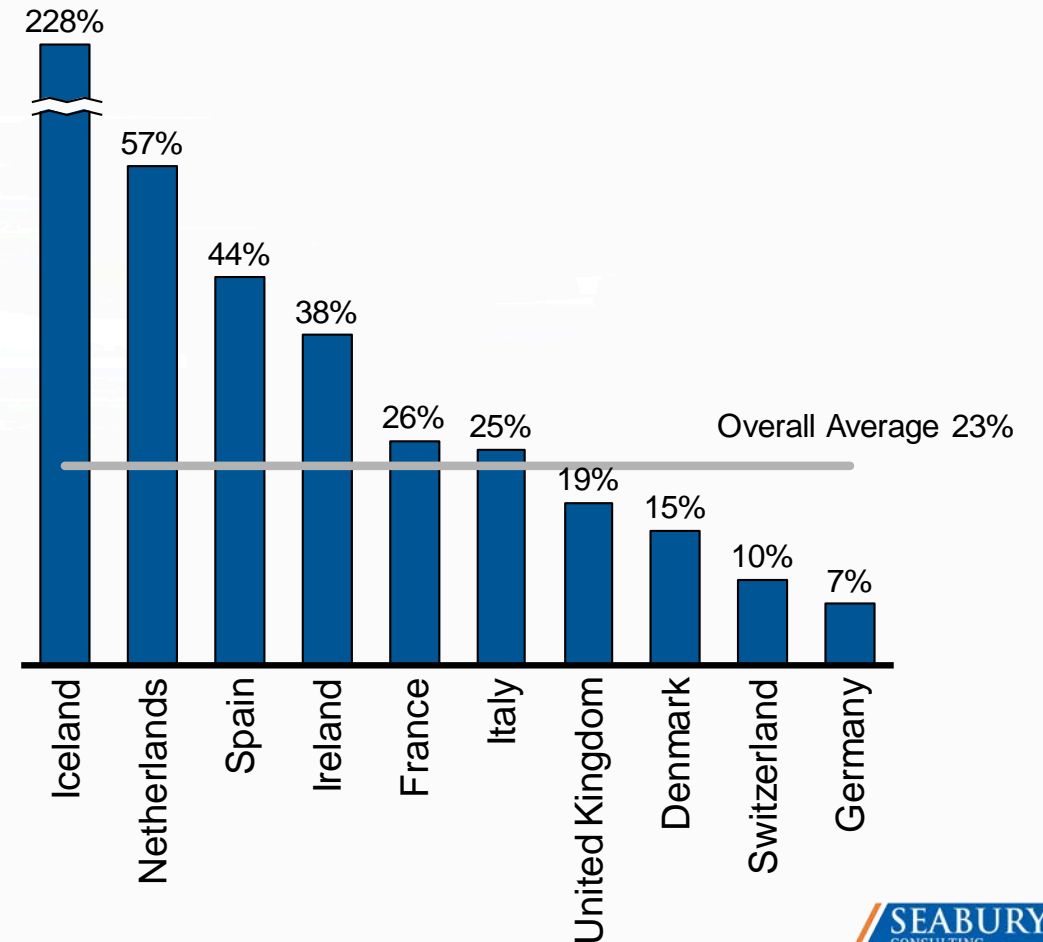
Daily O&D Passenger U.S.-Europe (in 000s)

Year-ending September 2018



Change in O&D Passengers U.S.-Europe

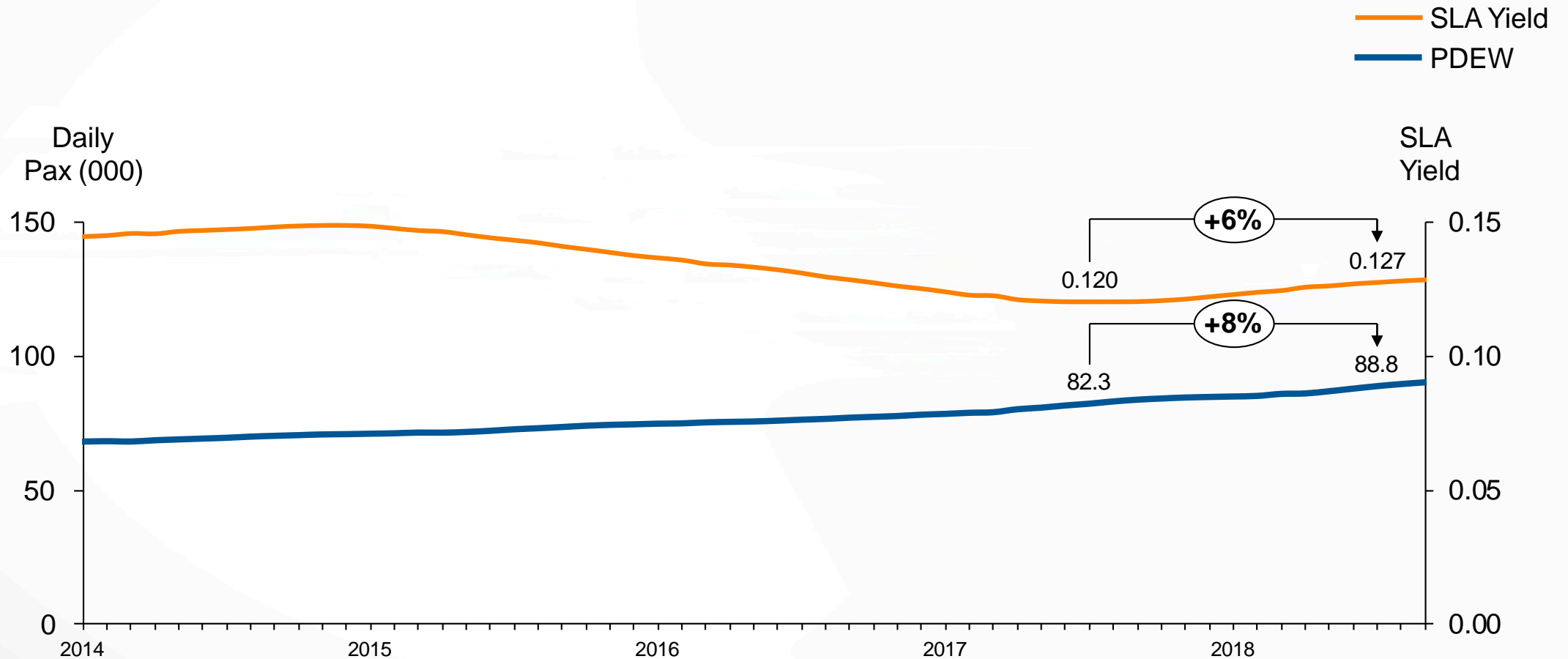
Year-ending September 2018 vs. Year-ending September 2015



Source: IATA BSP- and ARC-based ticketing data via DDS

Despite additional capacity, yields on U.S.-Europe and O&D passengers have increased year-over-year

U.S.-Europe Daily Passengers and Stage Length Adjusted Yield
12 Month Moving Average - January 2014 through August 2018

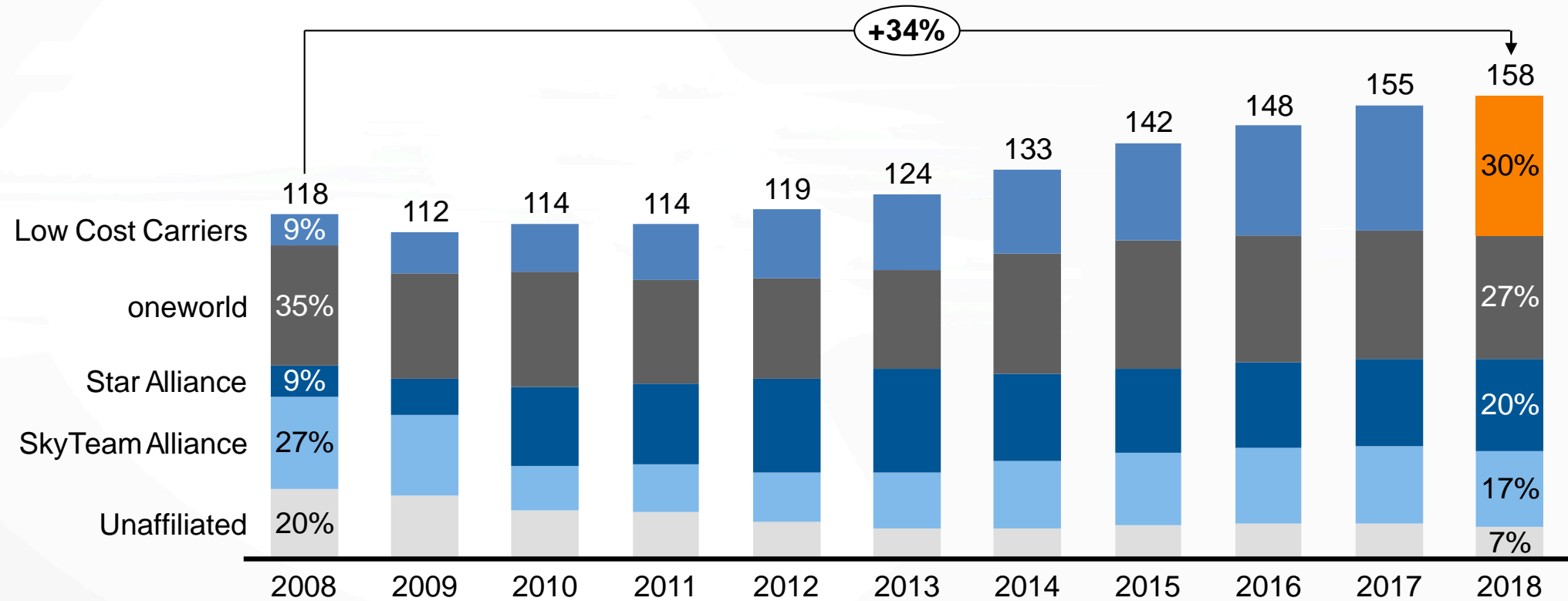


Note: Stage length adjusted to global international average 3,723 miles
Source: IATA BSP- and ARC-based ticketing data via DDS

LCCs have the largest seat share between U.S. and Latin America markets in 2018

Total Daily Scheduled Seats between U.S. and Latin America – by Alliance

2008 through 2018



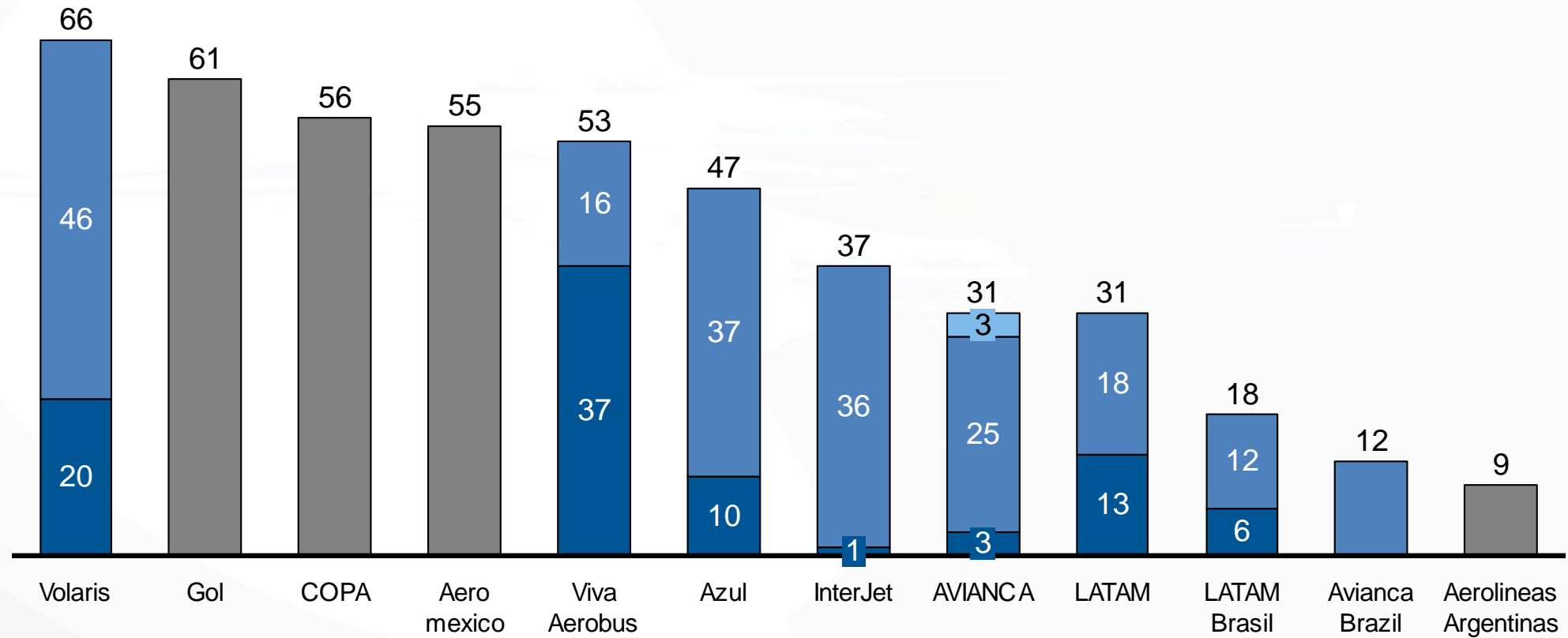
Note: Latin America includes Mexico, Caribbean, Central America, and South America
 Source: Innovata schedule data via Diio Mi

More narrowbody aircraft are coming to this region –nearly 500 in total for these selected carriers

Total Narrowbody Aircraft on Order – Select Latin America Carriers

On order between 2018-2023

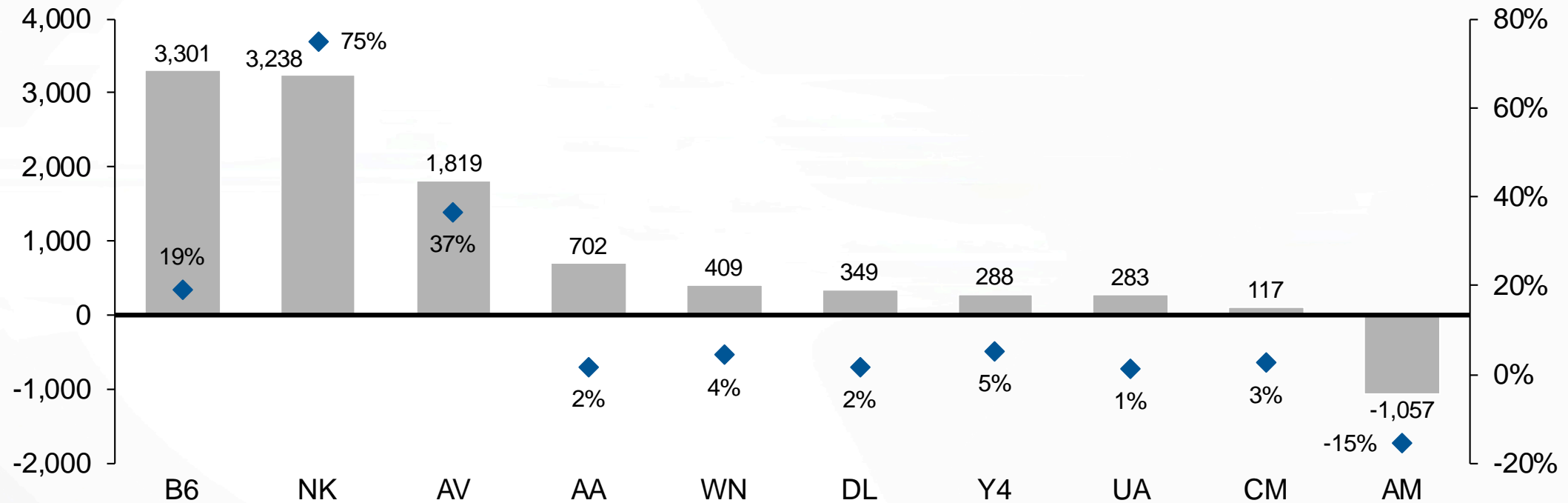
■ A321
 ■ A320
 ■ A319
 ■ 737 Max



Source: Fleet data via Diio Mi

JetBlue and Spirit will add more than 3,000 daily seats each between U.S. and Latin America in 1Q 2019

Year-over-Year Daily Seat Change (Absolute and Percentage) for 10 Largest U.S.-Latin America Carriers
1Q 2019 versus 1Q 2018

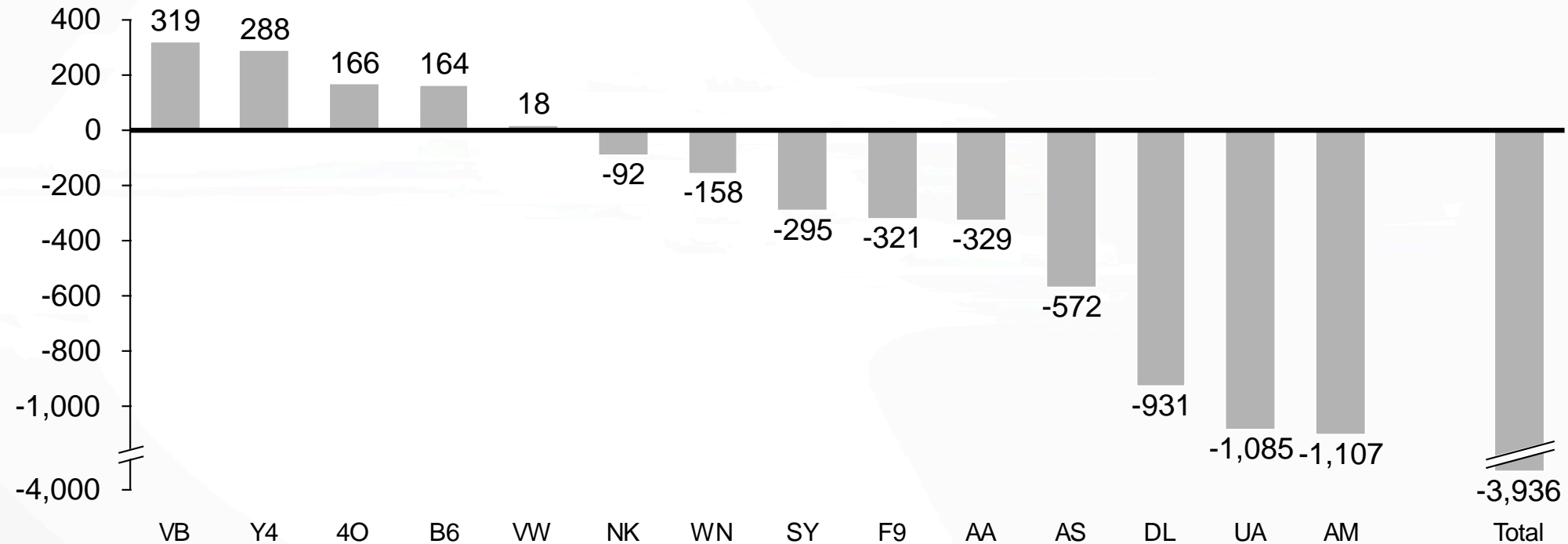


Note: Latin America includes Mexico, Caribbean, Central America, and South America
Source: Innovata schedule data via Diio Mi

After recent weak performance in US-Mexico markets, U.S. carriers and Aeromexico exercised capacity constraint in 1Q 2019

Year-over-Year Daily Seat Change between U.S. and Mexico

1Q 2019 versus 1Q 2018

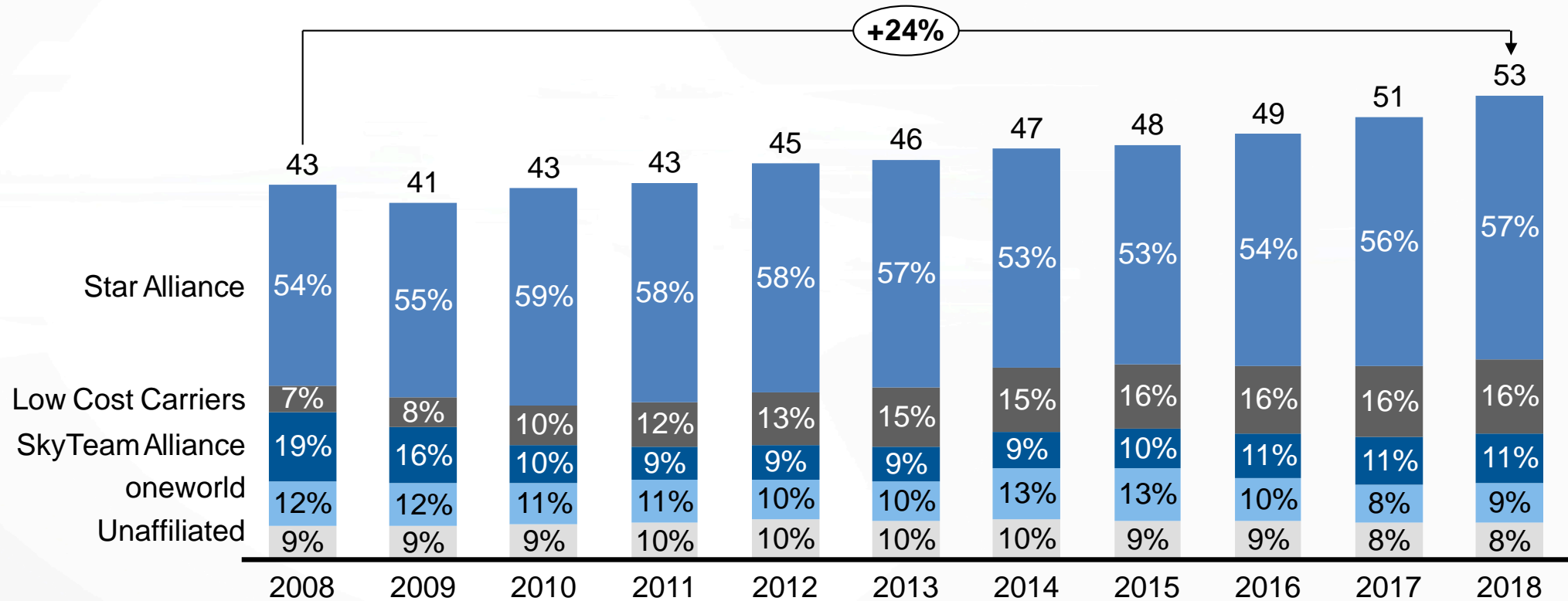


More than half of US-Canada trans border seats belong to Star Alliance

Star Alliance seat share growth not surprisingly driven by Air Canada

U.S.-Canada Daily Scheduled Seats – by Alliance

2008 through 2018



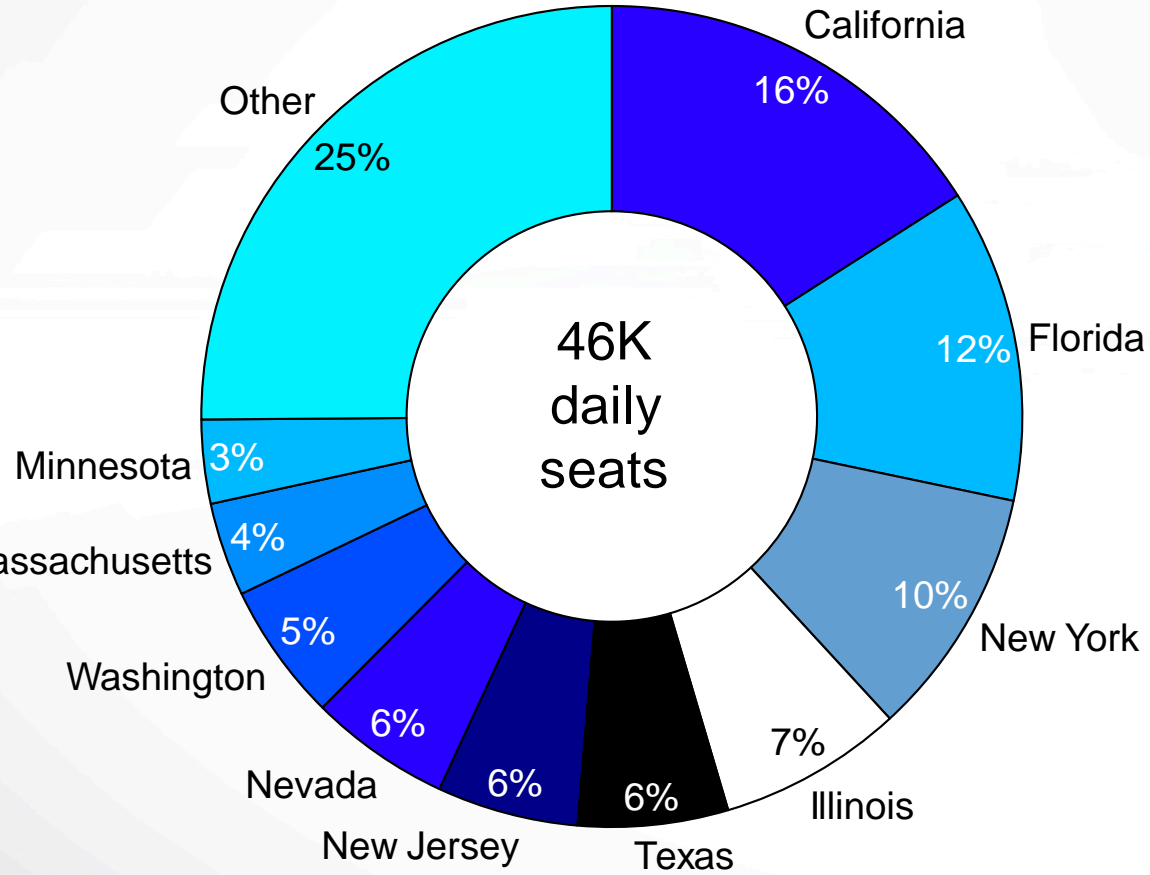
Source: Innovata schedule data via Diio Mi

Nearly half of the U.S.-Canada capacity is to Ontario and 16% to California

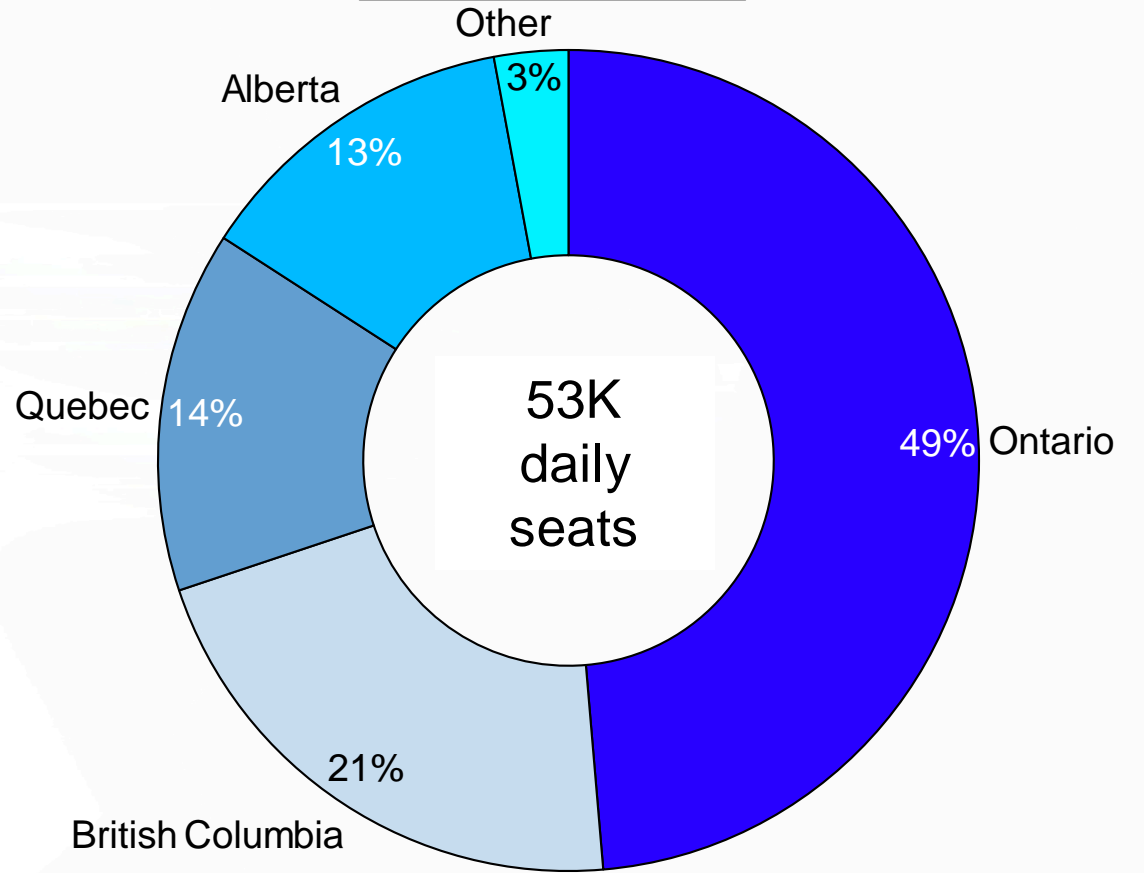
Seat Share U.S.-Canada

Y2018

By U.S. State



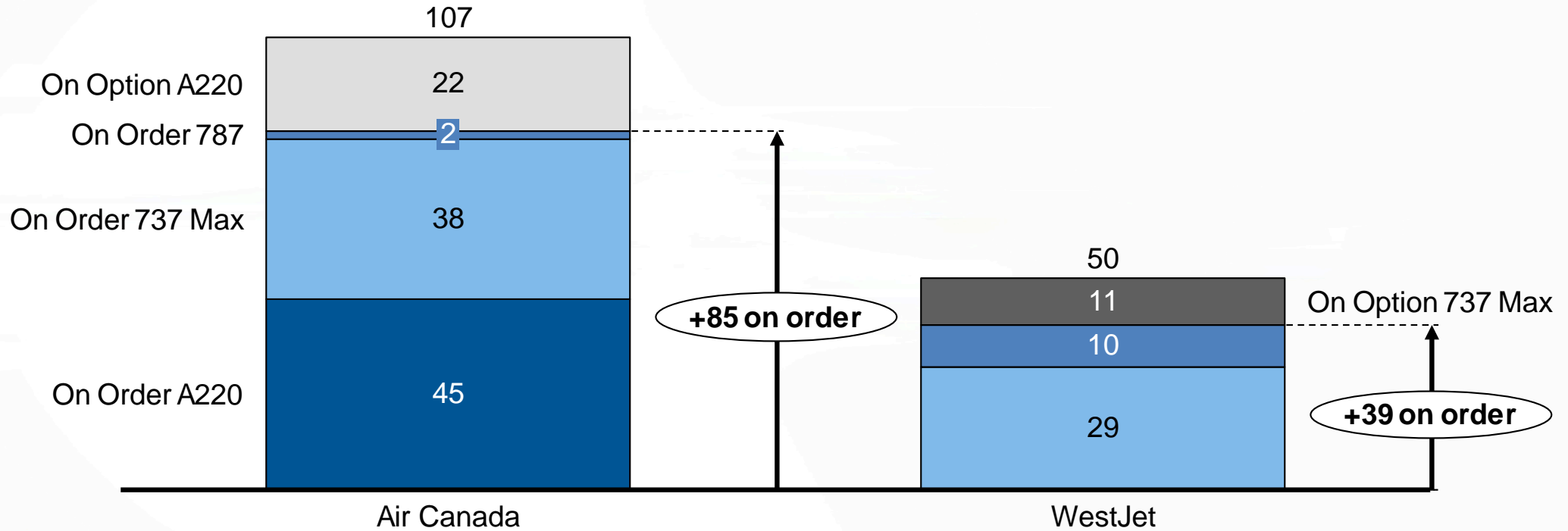
By Canada Province



Both Canadian carriers have B737 Max and B787 on order

Total Aircraft on Order

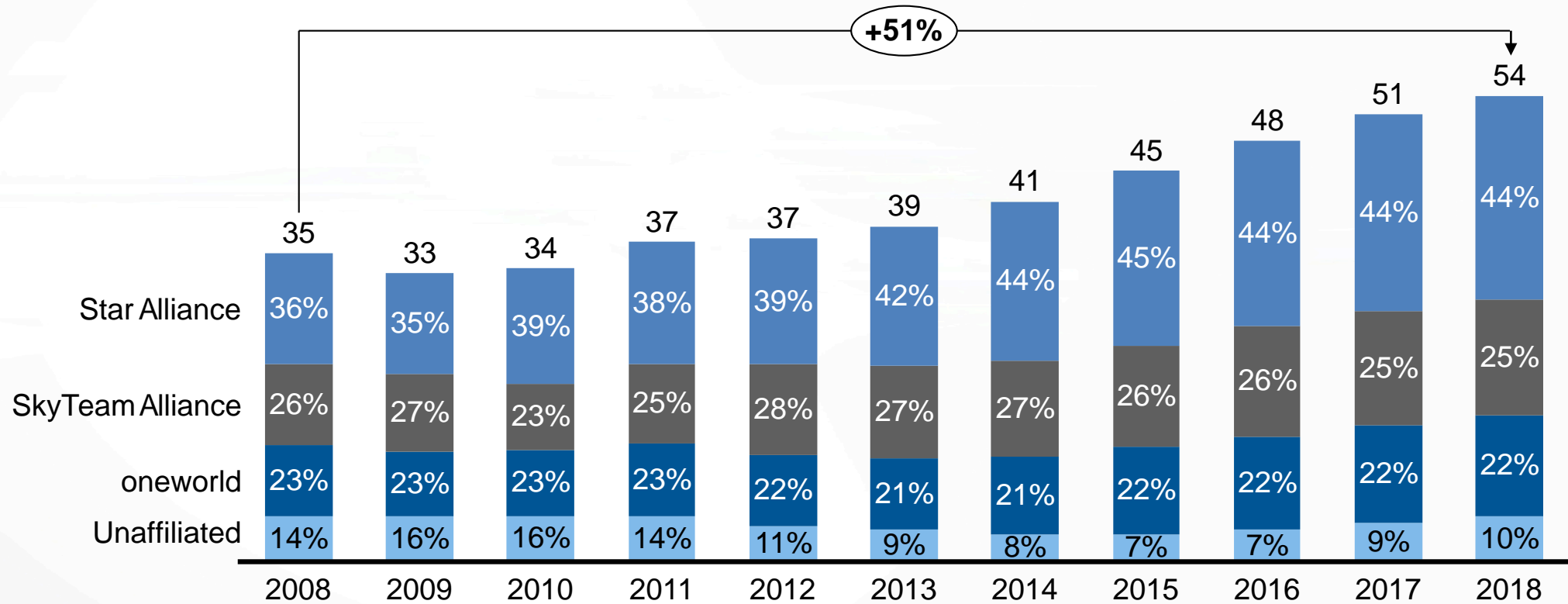
On order between 2018-2023



Star Alliance again has the largest seat share in Asia/Australasia region

Total Daily Scheduled Seats between Continental U.S. and Asia/Australasia – by Alliance

2008 through 2018

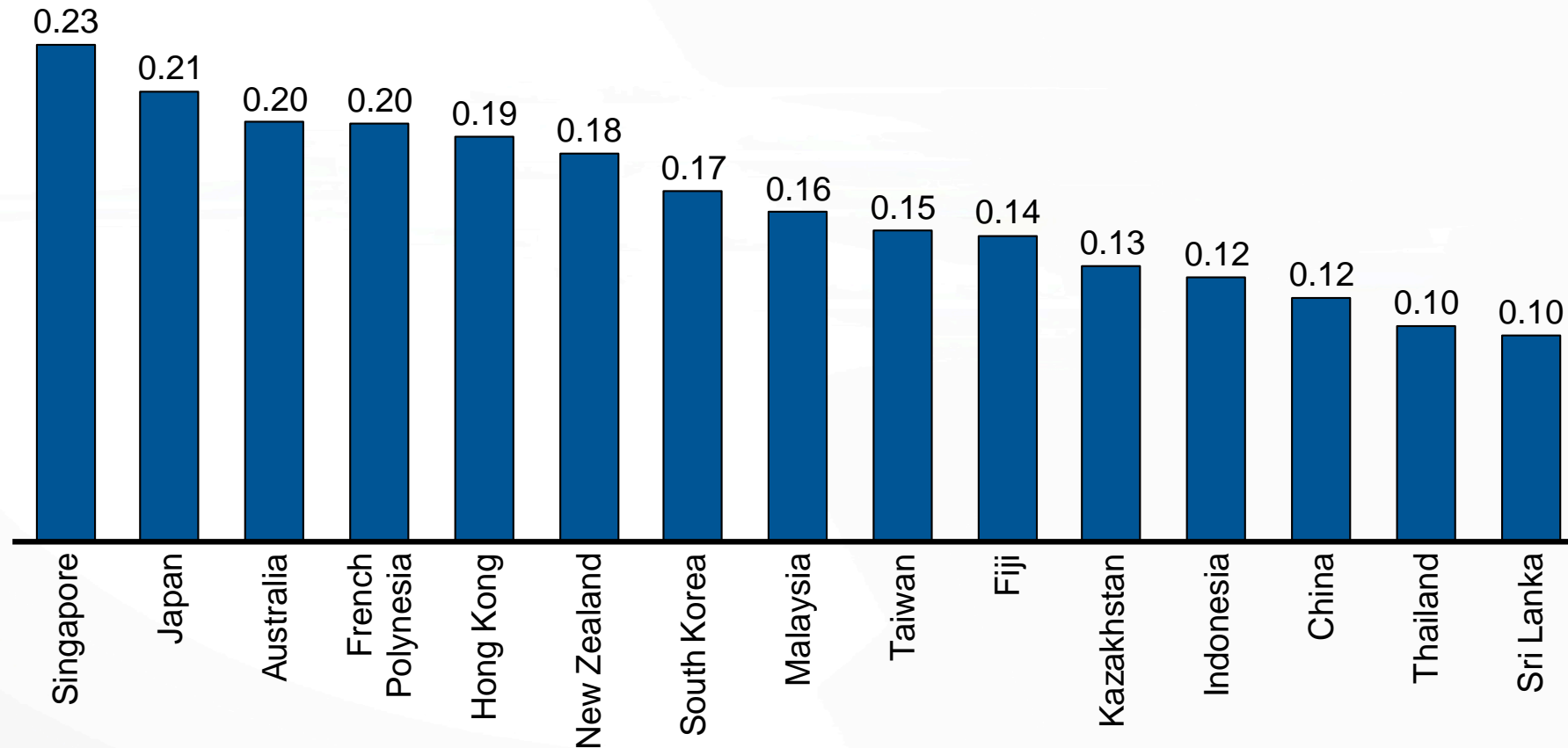


Note: Continental U.S. includes contiguous 48 states only
 Source: Innovata schedule data via Diio Mi

Yield from U.S. to Japan is second to Singapore only; SLA yield for Continental U.S.-India is 8-cents

Stage Length Adjusted Yield – Continental U.S.-Asia/Australasia

Year-ending September 2018



Note: Stage length adjusted to global international average 3,723 miles; Continental U.S. includes contiguous 48 states only; Limited to countries with more than 100 PDEW
Source: IATA BSP- and ARC-based ticketing data via DDS

Yields in both regions appear to be stabilized with increasing traffic

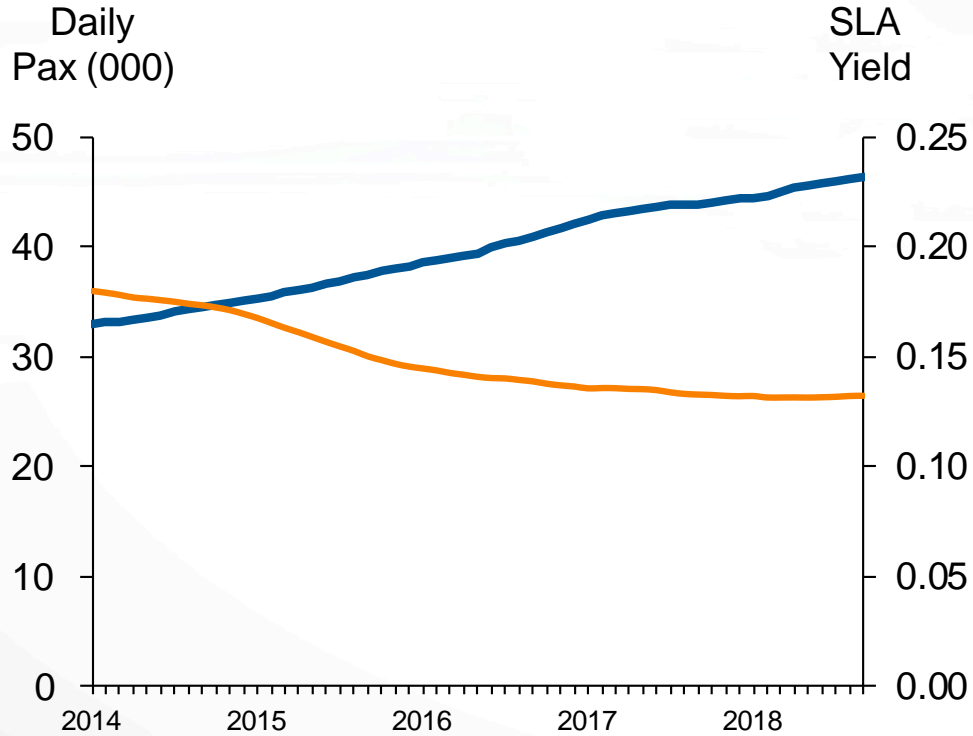
Context

Daily Passengers and Stage Length Adjusted Yield – Continental U.S.-Asia and Continental U.S.-Australasia

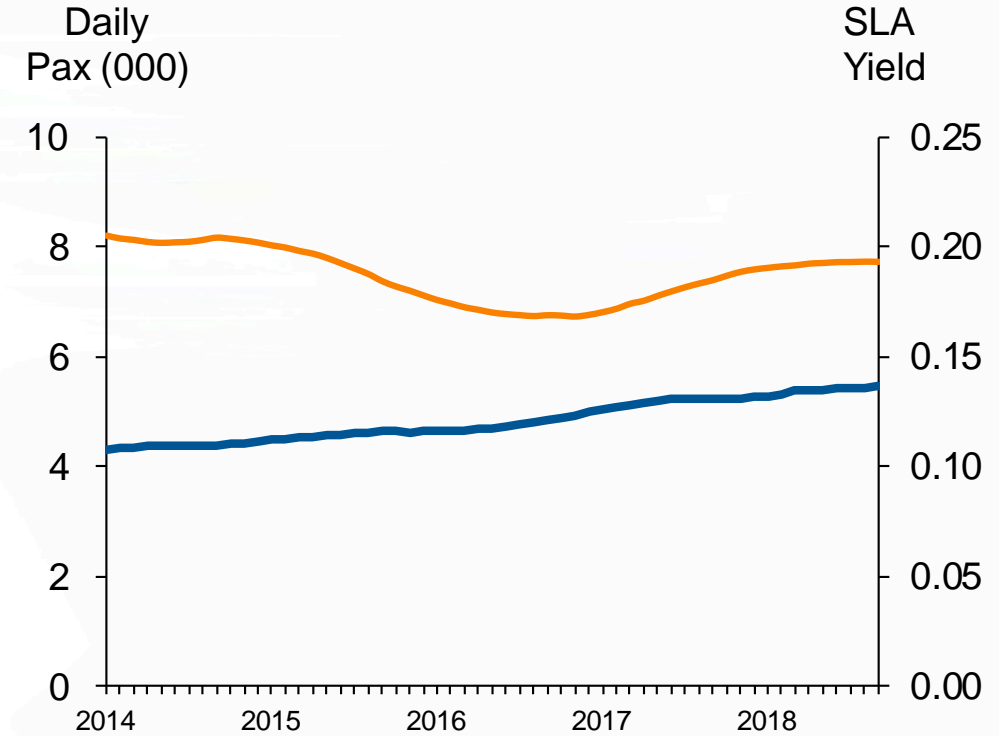
12 Month Moving Average - January 2014 through August 2018

— SLA Yield — PDEW

Continental U.S.-Asia



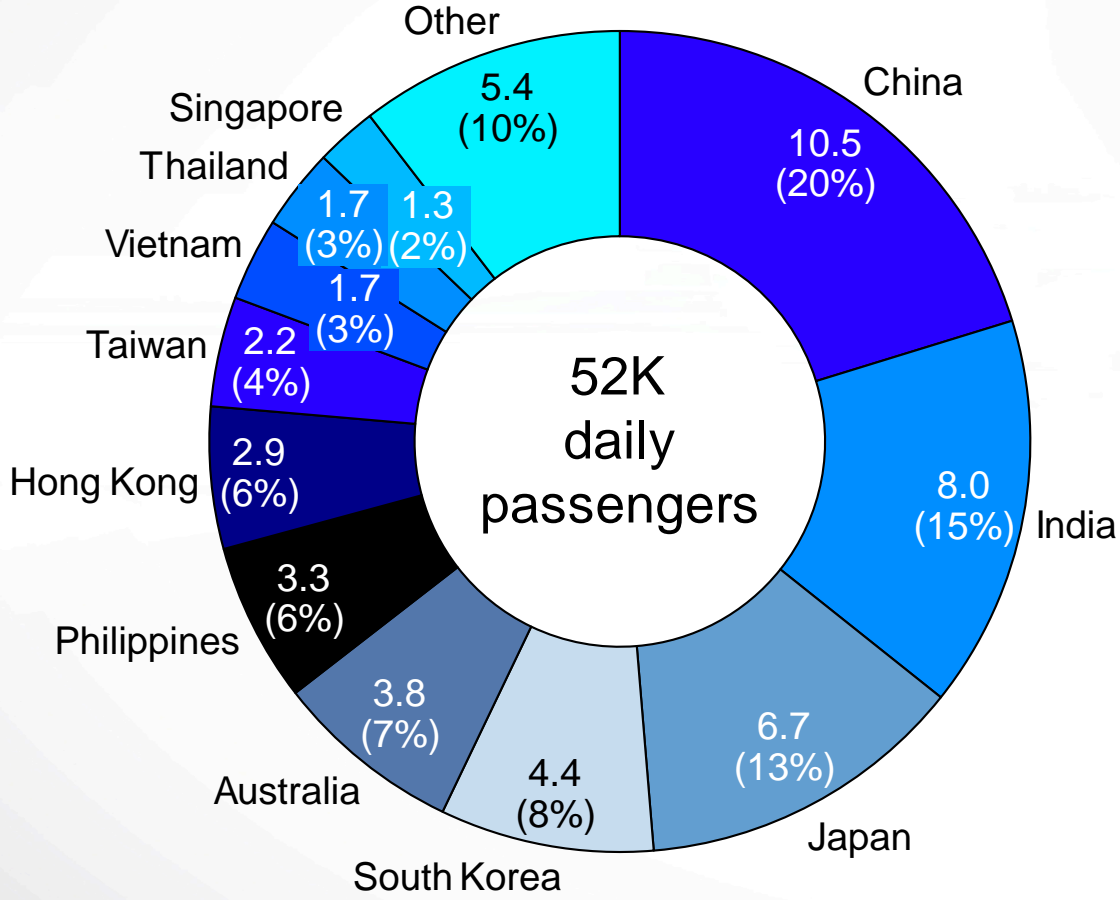
Continental U.S.-Australasia



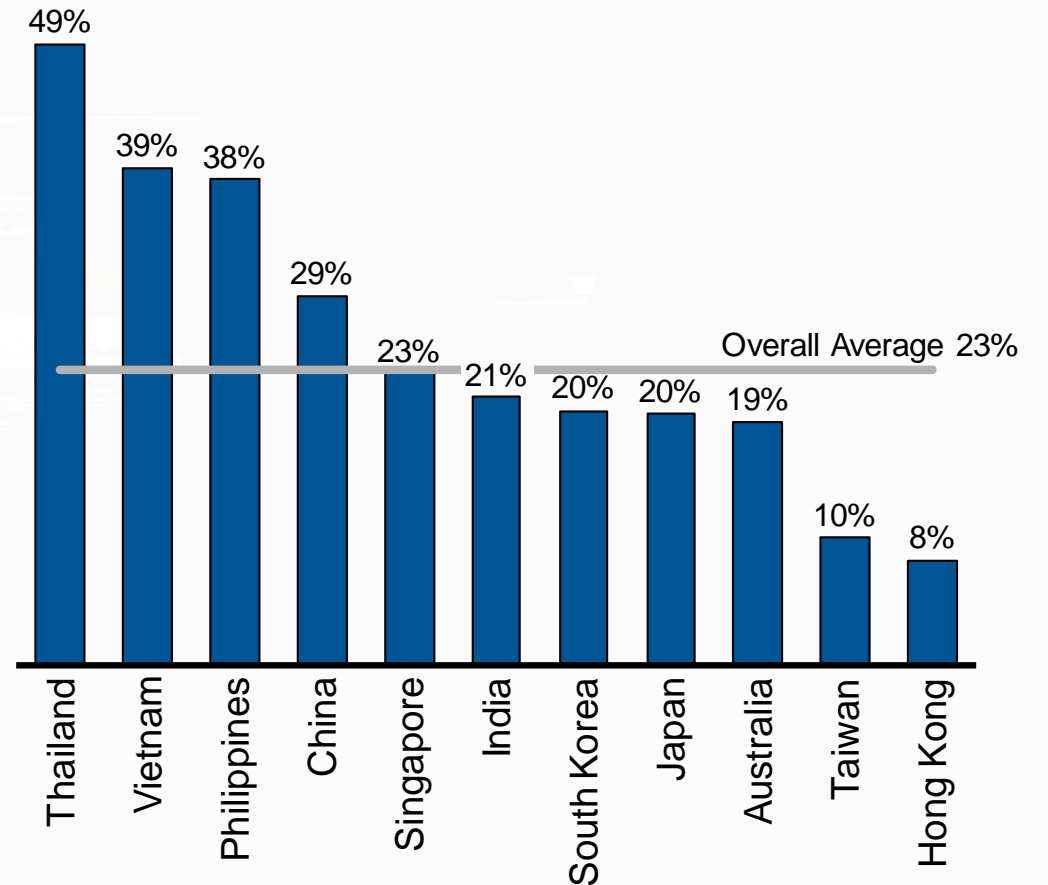
Note: Stage length adjusted to global international average 3,723 miles
Source: IATA BSP- and ARC-based ticketing data via DDS

U.S.-China O&D traffic increased an average rate of 800 daily passengers a year in the past three years

Daily O&D Passenger U.S.-Asia/Australasia (in 000s)
Year-ending September 2018



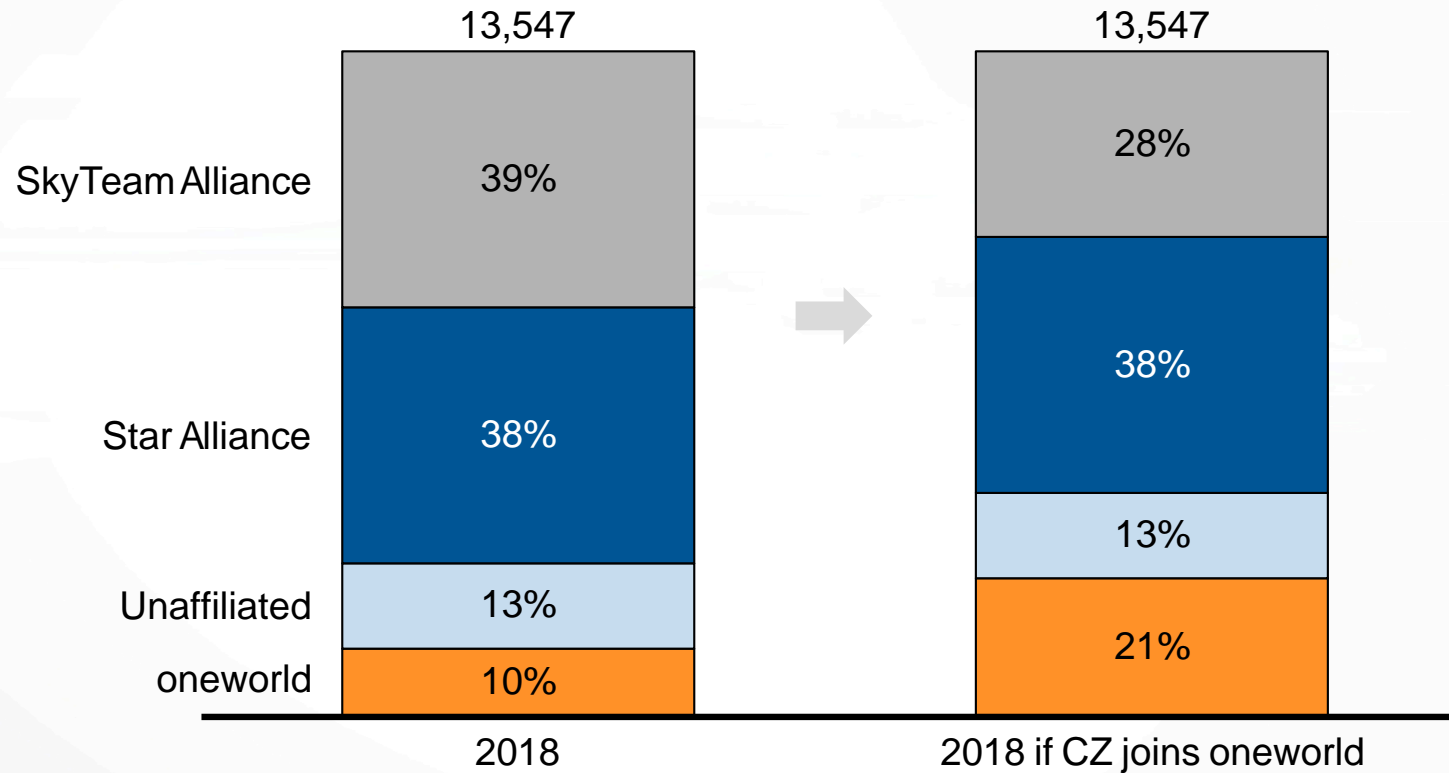
Change in O&D Passengers U.S.-Asia/Australasia
Year-ending September 2018 vs. Year-ending September 2015



Source: IATA BSP- and ARC-based ticketing data via DDS

If China Southern joins oneworld after exiting SkyTeam in 2019, Star Alliance will have the largest seat share between U.S. and China

Daily Scheduled Seats between U.S. and China – By Alliance
Year-ending December 2018

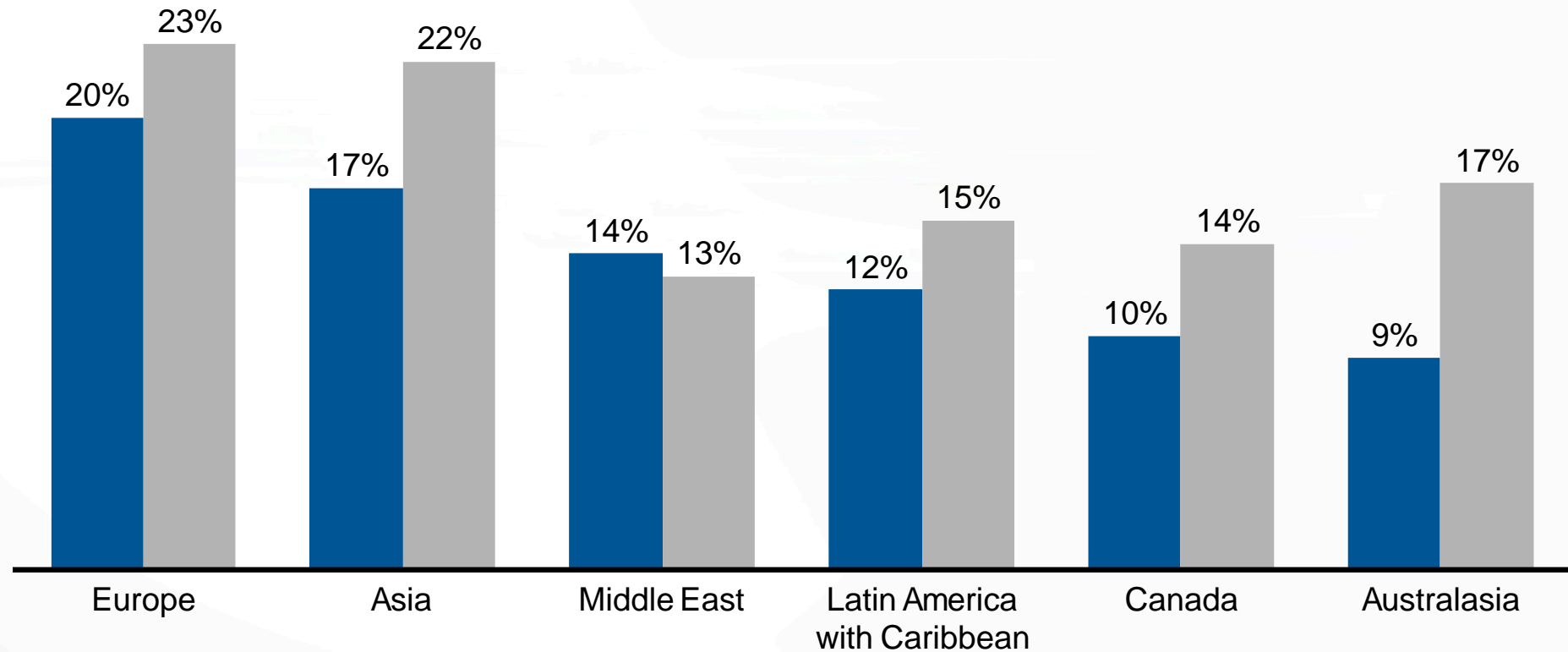


All regions except Middle East see faster passenger growth rate than capacity

Change in U.S. to International Daily Scheduled Seats and O&D Daily Passenger – by Region

Year-ending September 2018 vs year-ending September 2015

■ % Change in Seat Capacity ■ % Change in Passenger



Source: Innovata schedule data via Diio Mi and IATA BSP- and ARC-based ticketing data via DDS

Agenda

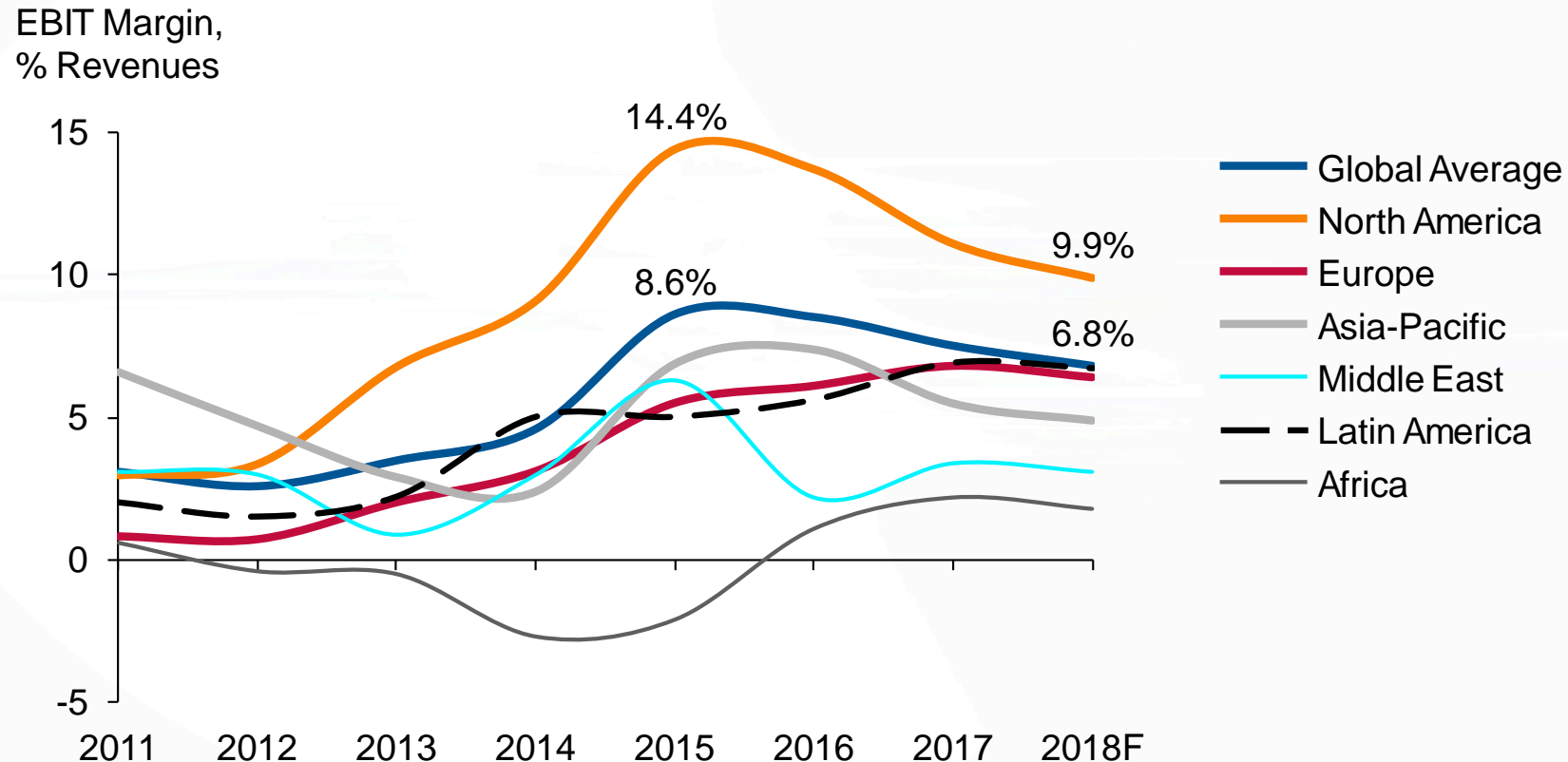
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North American carriers' financial performance is higher than global average

Prudent capacity management and relatively low fuel costs over the past few years allowed north American carriers to flourish financially peaking in 2015

Earnings Before Interest & Taxes (EBIT) Margin, % Revenues

2011 through 2018 (Forecast)



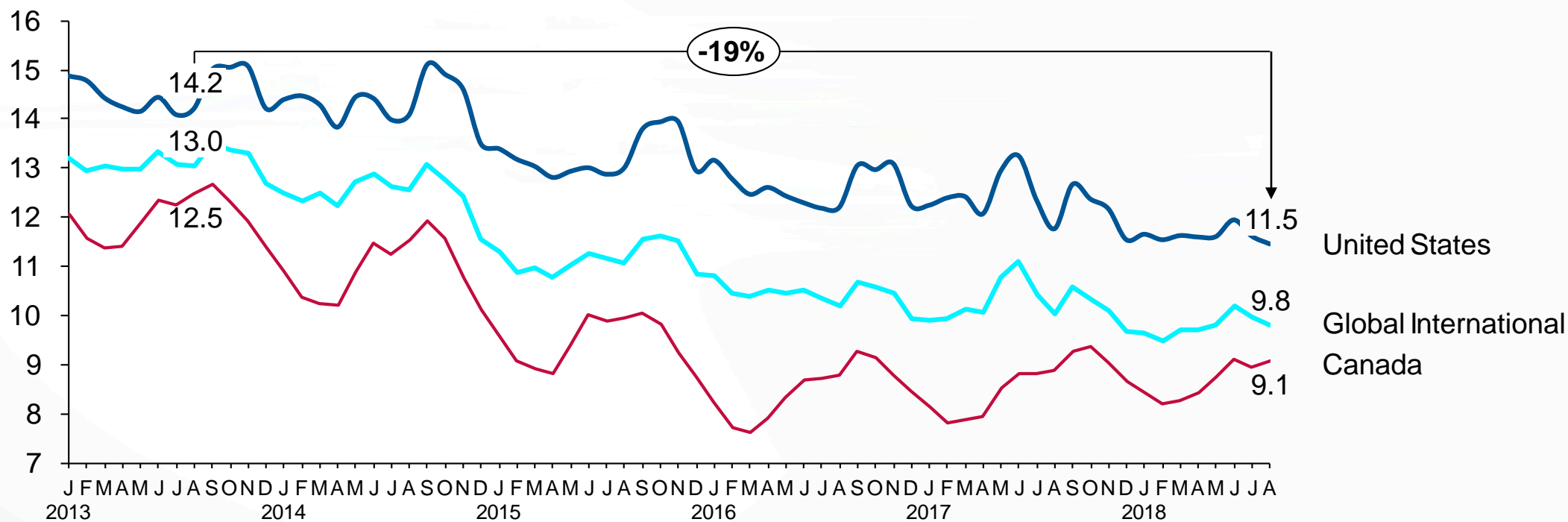
International yield has been declining since 2013

With new capacity coming into international markets, fiercer competition, and new LCC carriers going into more international markets, international yields in the U.S., Canada, and globally have fallen

International Stage Length Adjusted Yield – by Global Average versus U.S. and Canada

January 2013 through August 2018

Stage Length Adjusted Yield



Note: Stage length adjusted to global international average 3,723 miles
Source: IATA BSP- and ARC-based ticketing data via DDS

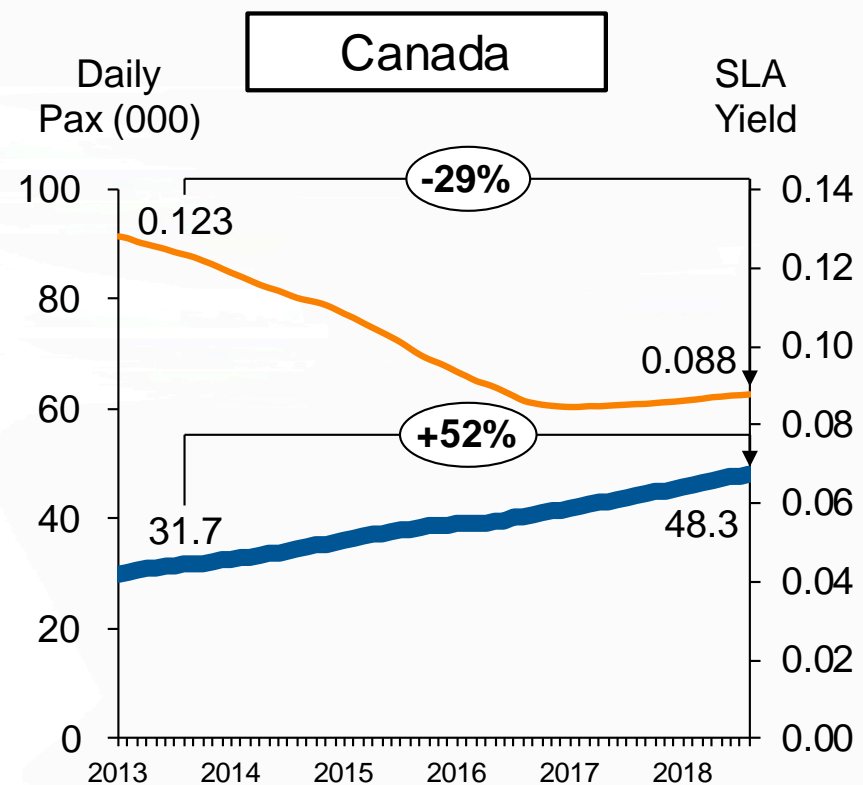
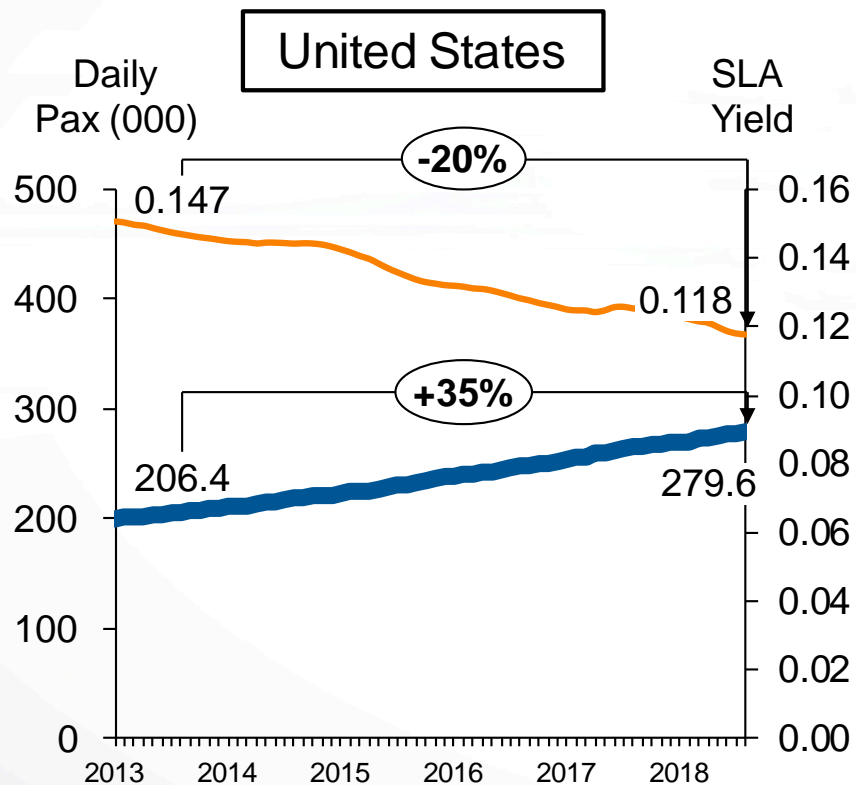
Added capacity and lower yields drawing significant new international traffic

U.S.-International traffic is up 35% in the last five years; Canada-International traffic is up 52%

International Daily Passengers and Stage Length Adjusted Yield – U.S. and Canada to Non-US/Canada* Regions

12 Month Moving Average - January 2013 through August 2018

— SLA Yield
— PDEW



Note: Stage length adjusted to global international average 3,723 miles
Source: IATA BSP- and ARC-based ticketing data via DDS

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Averaging \$2.35 per gallon in October 2018, fuel price drops to \$1.78 at November end

Excess oil supply and decline in global demand has allowed fuel prices to fall in October and November 2018; economic health will play a key role going forward...

Daily Fuel Price – U.S. Gulf Coast Kerosene – Type Jet Fuel Spot Price FOB

January 4, 2016 through November 26, 2018

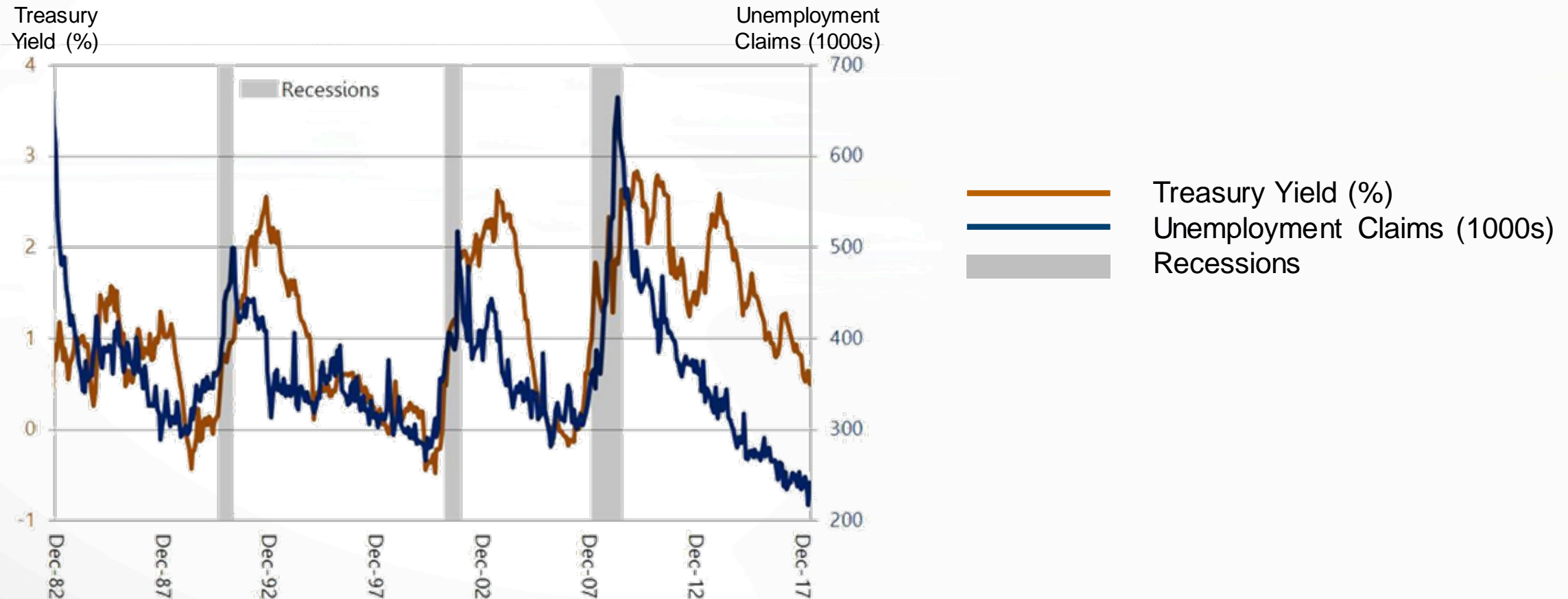


Economic indicators may have peaked, now appear ready for downturn

Indicators of economic health such as yield short-term vs. long-term safe investments (i.e. U.S. Treasury bonds) and unemployment claims have reached the same low levels or lower than they did right before previous economic recessions

Economic Indicators – 10Yr minus 2Yr U.S. Treasury Yield(%) and U.S. Unemployment Claims(1000s)

January 1982 through December 2017



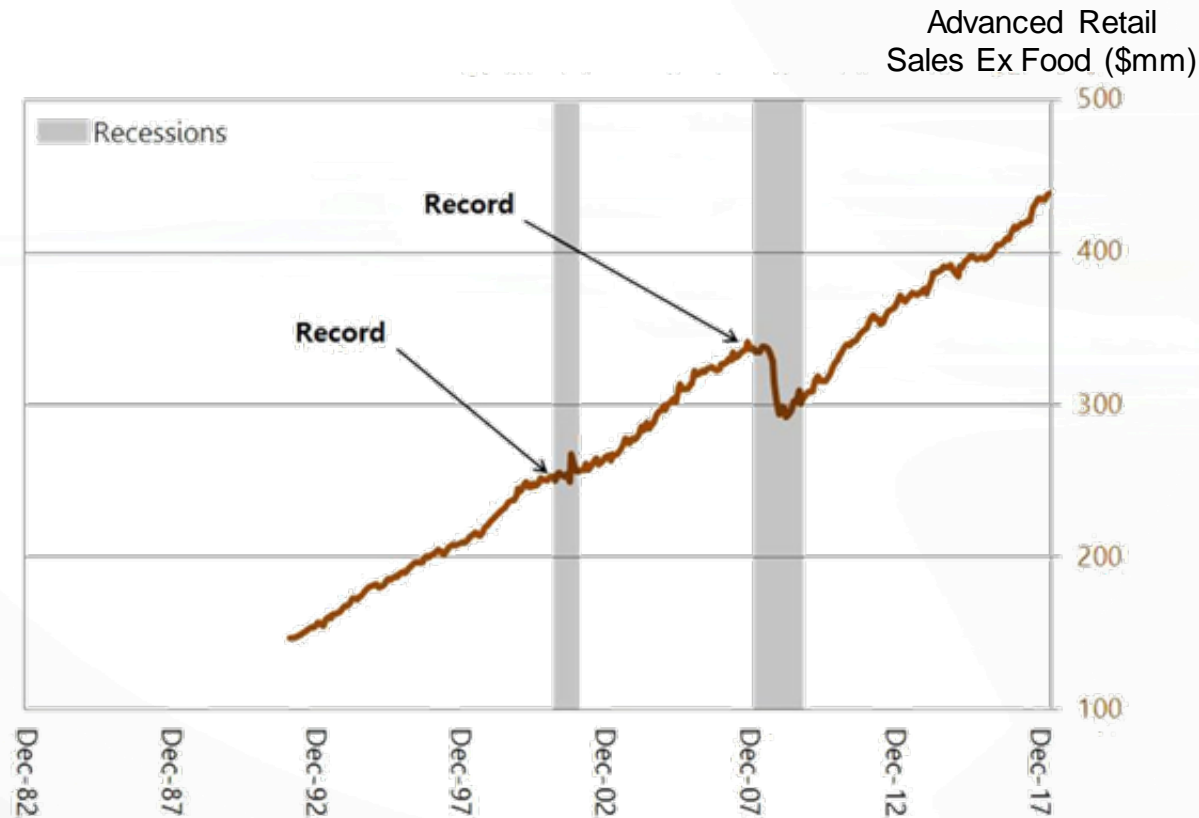
Source: St. Louis Federal Reserve via Forbes

Note of Caution: retail sales at record high, similar to last two recessions

Advanced retail sales (excluding food) are now at record high levels! But they were also at record high levels just before the previous two recessions

Economic Indicators – Advanced Retail Sales Excluding Food Services (US\$mm)

January 1992 through December 2017



▼
**What goes up,
must come down**

Other external variables to watch...



- Currency fluctuations



- Domestic and International instability



- Terrorism in important leisure destinations



- Fuel prices

Thank you!!!