

# TRENDS IN THE AIRLINE INDUSTRY

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Hershey, Pennsylvania



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## TRENDS IN THE AIRLINE INDUSTRY



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- Far Part 117 Rule Changes and Pilot Hour Impacts
- Industry Trends Now and Into The Future

## COLGAN AIR FLIGHT 3407

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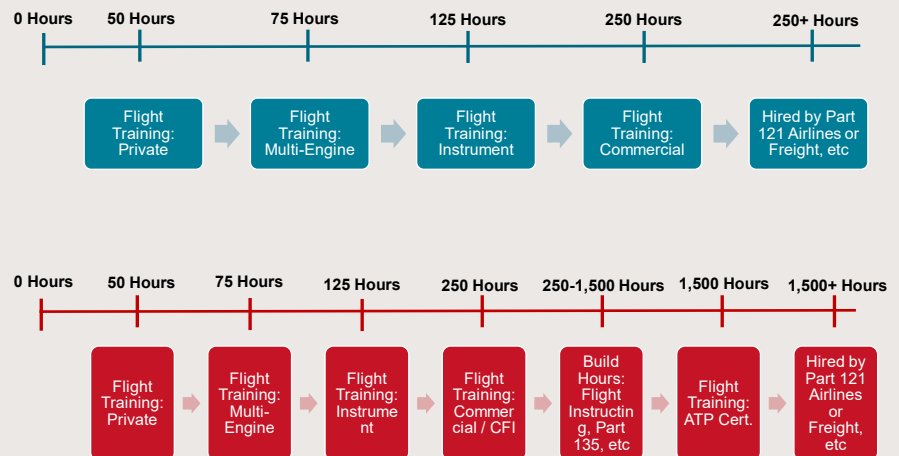
- Colgan Air #3407 on February 12, 2009, accident in Buffalo, NY that killed 50 people
  - Pilot error due to fatigue and training deficiencies with the crew
- Public and government outcry over pilot training and crew rest, and impact on this accident led to changes in rules that are affecting pilot availability
  - All pilots for Part 121 carriers must be ATP rated, requiring ~1,500 hours
    - In the past a first officer could have as few as 250 hours with a Commercial Certificate
    - Limited options on getting from 250 hours to 1,500 hours
  - Minimum crew rest increased from 8 hours plus additional rules



## PILOT CAREER PATH

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- The pilot career path has been permanently “altered”
  - Historically airlines could “flex” minimum hiring hours
  - Could accomplish full training in 6-9 months and be hired
- New world requires same training, but also 1,250 additional hours to be accumulated
  - Minimum of 2 years between starting training and being “hired”
- Military training footprint smaller and offering significant retention bonuses
- Restricted ATP ability to have lower hours for 4-year colleges and military pilots



## IMPACTS TO TRAINING CHANGES

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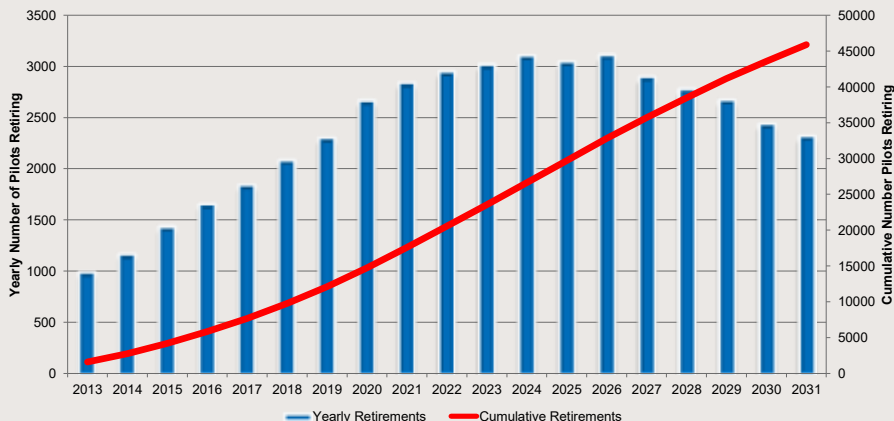
- Limited options for pilot's to get from 250 to 1,500 hours
  - Flight Instruction, Banner Towing, "Flying Around"
  - Quality of flying time is poor and does not improve CRM
- Regional Airline Association and airlines have reported that the "quality" of the pilot hires since rules changes have decreased
  - More pilots are "washing out" or requiring additional training time in order to pass initial training at the airlines
- Pilot training at most schools is treated similarly to airline environments, but many of the "good habits" are lost in the mean time

## PILOT RETIREMENTS ACCELERATING

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- Pilot retirements at Major Airlines will peak at 3,000+ per year in 2024
- Cumulatively over 45,000 mainline pilots will retire by 2031
  - Only 18,000 pilots at regional airlines today

**Forecast Retirements at Major Airlines**  
(Based Upon A4A Data)



## ECONOMICS OF BEING A PILOT IS CHANGING

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- Pilot earnings have changed dramatically since mid-2000s
  - Mainline pilots at DL/UA/WN have record contracts after years of concessionary contracts
  - Regional airline pay dramatically rising
    - Historically started ~\$25k for first year First Officer even on regional jets
    - AA's wholly owned (Envoy, Piedmont, PSA) now start with pay of \$60k for first year
  - Recent history had most pilots earning “poorly” at regionals and mainline hiring non-existent
    - Today regional pilots start in the \$60k range and top out in the mid-\$100s
    - Mainline airlines are back to hiring thousands every year, adding quick career growth
- There's never been a better time to be a pilot

## PILOT IMPACTS TO THE INDUSTRY

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- Regional airlines had difficulty with pilot union contracts
- Growth at airlines with new contracts or favorable wages
  - SkyWest, Mesa, Piedmont, Trans States Holdings
- Several regional airlines have shrunk or announced closure due to pilot concerns
  - Chautauqua eliminated from Republic
  - SkyWest removed EM2 flying completely
- United's decision to pull CLE hub was attributed to concerns over pilot availability by its regional partners
- Smaller regional jets being parked in favor of larger aircraft

## WHAT AIRLINES ARE DOING TO IMPACT

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- Pilot Wages
  - Major signing bonuses
  - First year pay increases
- Quality of Life Changes
  - Reduced reserve time
  - Guaranteed Crew Bases
- Pilot “Pipeline” deals
  - Cadet programs with Part 121 airlines & Universities
  - Bridge programs with Part 135 and Part 121 airlines
- Flow-through contracts with Regionals and Mainline airlines

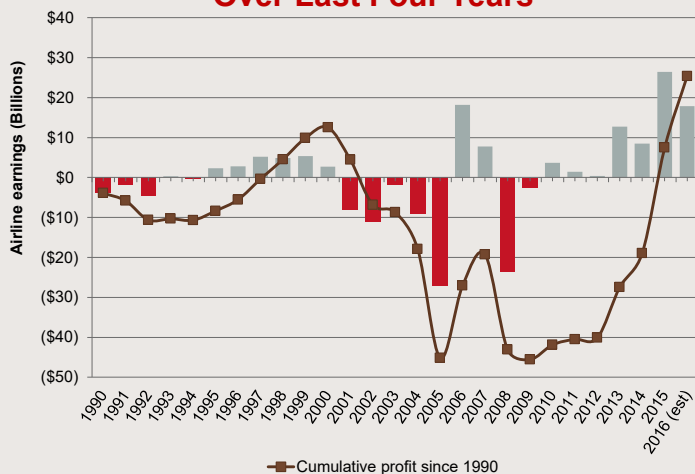
## INDUSTRY UPDATE



## INDUSTRY PROFITS

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### Strongest Profitability Ever Over Last Four Years



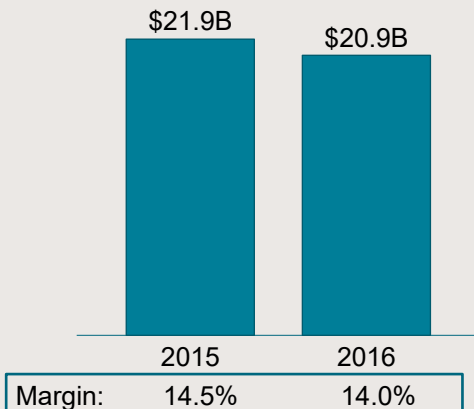
- Airlines consistently profitable since 2010
- Trend should continue in 2017 and beyond near-term
- ~\$71 billion combined net income from 2010 through 2016
- Profit drivers include:
  - Capacity restraint aided by industry consolidation
  - Lower fuel prices
  - Increases in ancillary revenue
  - Fleet renewal

Source: Dilo Mi, Form 41 Net Income (All Airlines, Total System)

## PROFIT MARGINS

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### Big Six Pre-Tax Profits



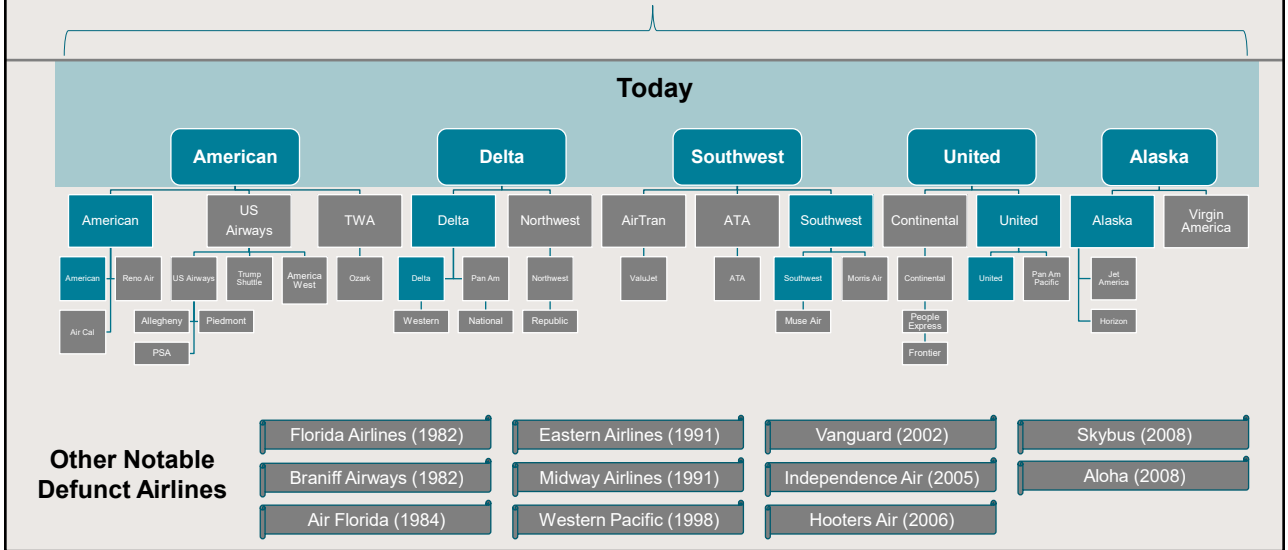
- Largest 6 airlines generated over \$20B in pre-tax profits each of the last two years
- Only back-to-back double-digit pre-tax margin performance in the last 35 years
- Slight drop off in 2016 driven by a 4% average decline in RASM
- But still driving strong double-digit margins

Source: Dilo Mi, Form 41 Net Income (All Airlines, Total System)

# INDUSTRY CONSOLIDATION

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Top 5 Control approximately 87% of U.S. Domestic Market through M&As

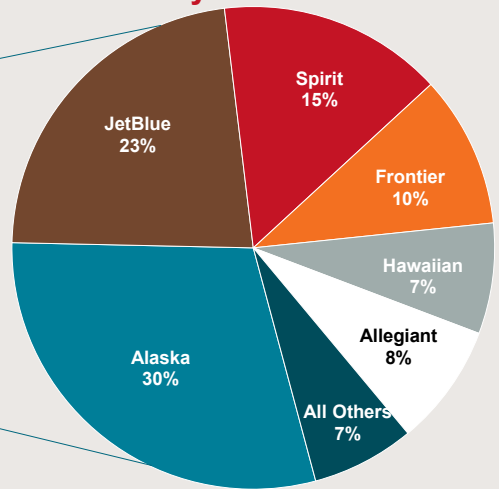
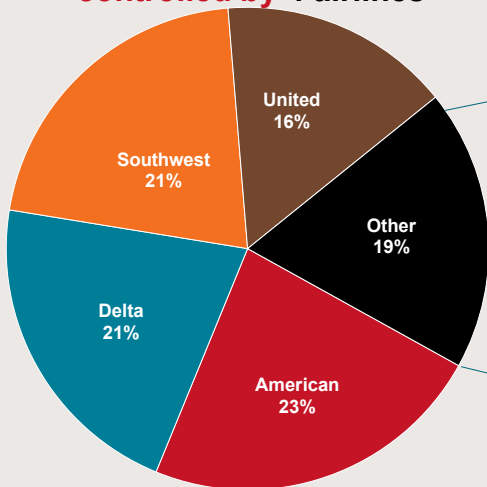


# DRIVES CAPACITY CONSOLIDATION

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81% of the market is controlled by 4 airlines

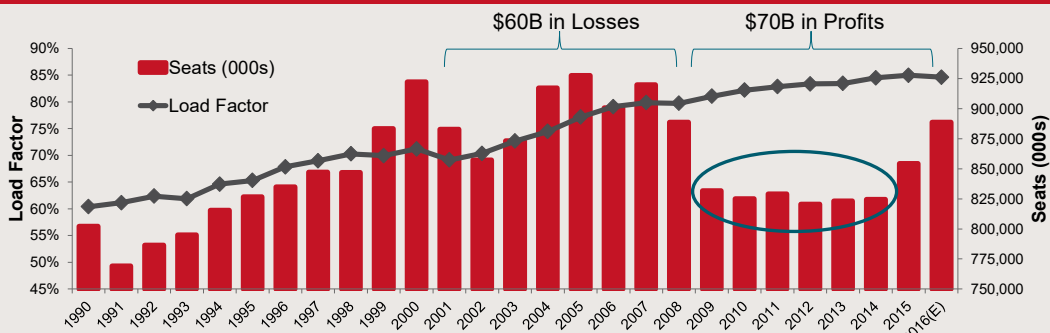
Only 19% of the market is controlled by all other carriers



Source: DIB Mi Scheduled U.S. Domestic Seats for YE June 2017

## UNPRECEDENTED CAPACITY DISCIPLINE

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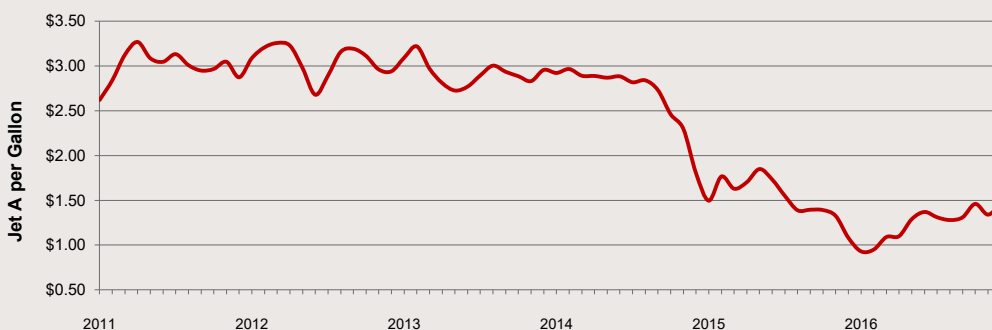


- Other than the brief period after 9-11, the US Industry had shown little interest in moderating capacity growth.
- Massive losses from 2001 through 2008 forced capacity restraint on the industry.
- Load factors continued to steadily increase throughout the last 25 years.
- Last two years suggests a return to capacity growth.
- Is it sustainable?

Source: Dilo MIT-100 U.S. Domestic Seats and Load Factor (LF = RPMs/ASMs); NOTE: 2016(E) is based on the data through November adjusted for seasonality

## FUEL PRICE DECLINES CONTINUE

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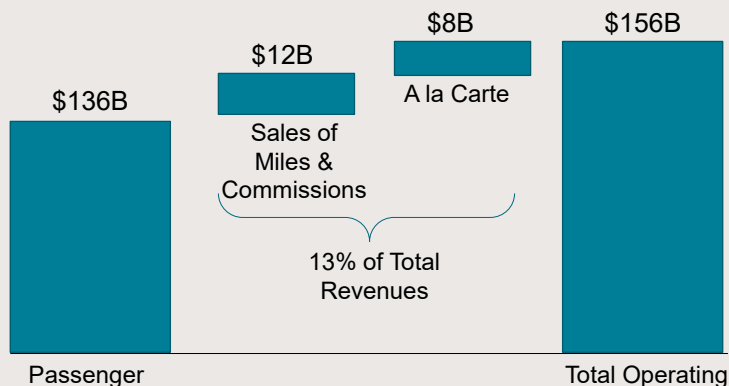
- Fuel prices held roughly around \$3.00 per gallon from 2011 to early 2015.
- 2015 average prices dropped by roughly 35% helping drive record profitability.
- 2016 prices dropped by another 20% on average, offsetting some of the revenue softness for the year.
- The 20% drop in fuel price in 2016 represents a reduction of over \$6 billion in operating expenses.

Source: US Energy Information Administration for Gulf Coast Jet Fuel Spot Price Per Gallon through December 2016



## ANCILLARY REVENUES GROWING

17

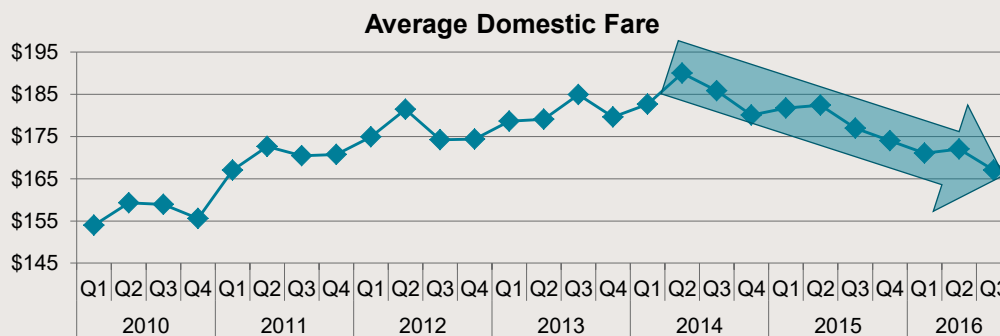


- Major US Carriers generated over \$20B in ancillary revenues in 2016.
  - \$12B in Sale of Frequent Flyer Miles and Commissions on rental car & hotel sales
  - \$8B in a la carte activity (baggage fees, change fees, onboard sales)

Source: Dilo MI, Form 41 Net Income (All Airlines, Total System)

## AIRFARES DECLINING OVER LAST 2 YEARS

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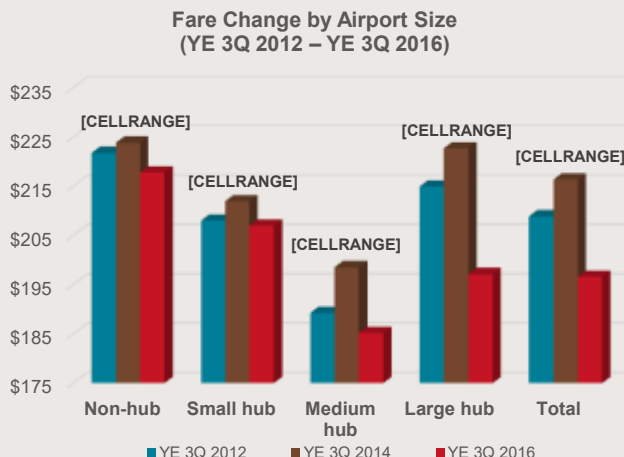
- Airfares rose 20% from 2010 to 2014 driven by:
  - Elimination of unprofitable routes
  - Strict adherence to capacity control and industry consolidation
- Last 2 years' declines driven by falling fuel prices and more recent increases in capacity**

Source: Dilo MI

## 5-YEAR FARE CHANGE BY AIRPORT SIZE

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- Overall, **average fares decreased 5.9%** from YE 3Q 2012 – 2016.
- Large hub airports had the largest decrease** in fares followed by medium hub airports.
- Fares at small hub airports only **decreased 0.5%**, while fares at non-hub airports decreased 1.8%.



Source: Diio Mi YE 3Q 2012 through YE 3Q 2016

## DEPARTURES VS. SEATS – 5-YEAR CHANGE

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- Domestic departures down 2.4% since July 2012, while seats are up 11.7% as industry shifts to **larger gauge aircraft offsetting the drop in flight departures**.
- LCC/ULCCs are experiencing most growth.
- Airlines grew international seats at essentially the same pace as domestic over the past 5 years.

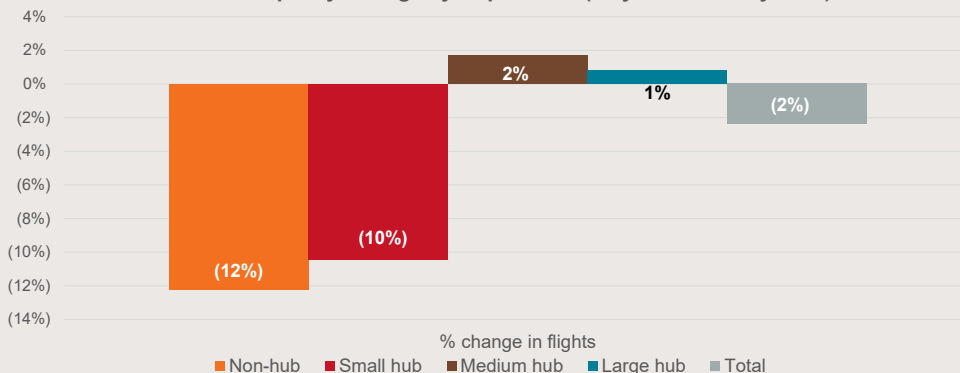
Carrier	Departures			Seats		
	July 2012	July 2017	2017 vs 2012	July 2012	July 2017	2017 vs 2012
<b>Domestic Schedule Comparison</b>						
AA/US	183,113	180,509	(1.4%)	17,457,812	18,847,725	8.0%
DL	158,539	153,090	(3.4%)	15,799,459	17,546,546	11.1%
WN/FL	122,515	117,501	(4.1%)	16,640,260	17,473,783	5.6%
UA/CO	154,705	129,718	(16.2%)	12,820,506	12,609,155	(1.6%)
AS/VX	28,964	37,182	28.4%	3,483,516	4,705,189	35.1%
B6	20,821	26,530	27.4%	2,735,550	3,559,823	30.1%
NK	6,389	14,374	125.0%	1,017,231	2,556,209	151.3%
F9	10,084	8,693	(13.8%)	1,310,111	1,571,140	19.9%
G4	4,482	8,848	97.4%	674,782	1,455,690	115.7%
HA	6,789	7,781	14.6%	1,008,586	1,139,488	13.0%
SY	948	1,692	78.5%	140,360	252,072	79.6%
<b>Subtotal</b>	<b>759,861</b>	<b>741,810</b>	<b>(2.4%)</b>	<b>73,915,973</b>	<b>82,583,906</b>	<b>11.7%</b>
<b>International Schedule Comparison</b>						
<b>Total</b>	<b>39,649</b>	<b>40,529</b>	<b>2.2%</b>	<b>5,901,301</b>	<b>6,586,559</b>	<b>11.6%</b>

Source: Diio Mi Schedule (July 2017 versus July 2012); Ranked by July 2017 seats

## FLIGHT CHANGE BY AIRPORT SIZE

21

U.S. Domestic Capacity Change by Airport Size (July 2017 vs. July 2012)



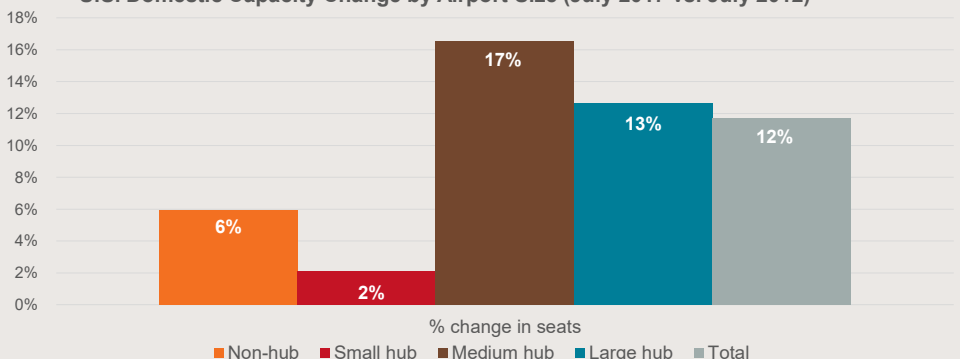
- Flights are down overall but Medium & Large hubs are up slightly while Non-hub and Small-hub markets are down double digits.
- Shift to larger gauge and higher density aircraft across the board.

Source: Diao Mi Scheduled Flights for the month of July 2017 vs July 2012

## SEAT CHANGE BY AIRPORT SIZE

22

U.S. Domestic Capacity Change by Airport Size (July 2017 vs. July 2012)



- Seats increased in all airport categories over the last 5 years.
- Non-hub and Small hubs are lagging far behind growth in larger hub categories.
- Most of this growth resurgence has just been in the last 2 years.

Source: Diao Mi Scheduled Seats for the month of July 2017 vs July 2012

## EQUIPMENT USE – 5-YEAR CHANGE

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- In the past 5 years, total flights decreased 2% in the domestic U.S.
- Type of aircraft (e.g. turboprop, regional jet, etc.) has changed significantly.
  - Turboprop aircraft-operated flights are down approximately 28%.
  - Regional jet-operated flights are down 11%.
    - Largest decrease in the 30-50 seat range
    - Largest increase in the 71-100 seat range
  - Use of narrow-body jets is up 12% - most growth in the new larger narrow-body.

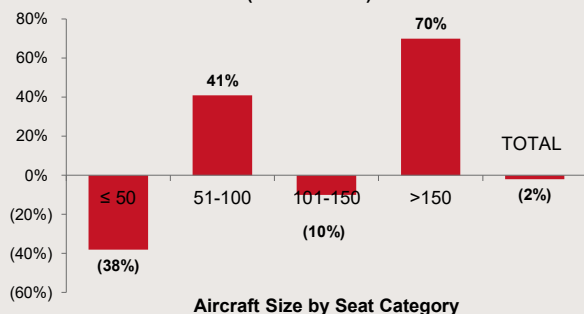
Aircraft Type	July 2017	July 2012	% Change
Turboprop (< 30)	46,016	55,494	(17%)
Turboprop (30-50)	16,587	35,467	(53%)
Turboprop (50+)	12,507	12,611	(1%)
Regional jet (30-50)	108,878	186,163	(42%)
Regional jet (51-70)	53,419	51,367	4%
Regional jet (71-100)	91,129	47,206	93%
Narrow-body (70-125)	21,719	41,155	(47%)
Narrow-body (126-160)	263,820	256,916	3%
Narrow-body (> 160)	123,124	67,118	83%
<b>Total U.S. Domestic</b>	<b>741,810</b>	<b>759,861</b>	<b>(2%)</b>
Sum of Category:			
Turboprop	75,110	103,572	(28%)
Regional jets	253,426	284,785	(11%)
Narrowbody jets	408,663	365,189	12%

Source: Diio Mi Schedules

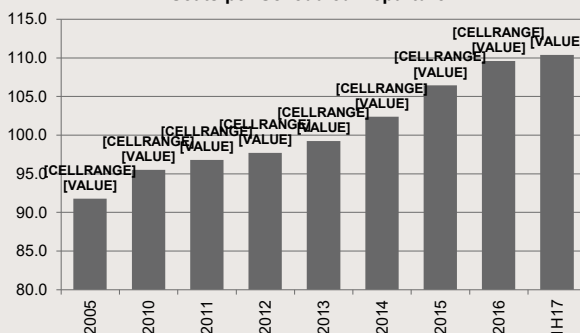
## FLEET TRENDS – AIRCRAFT SIZE

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% Change in Scheduled Domestic Departures (2017 vs 2012)



Seats per Scheduled Departure



- In the past 5 years, total flights decreased 2% in the domestic U.S.
- Smaller regional aircraft are being replaced with larger regional aircraft, including retirements of turboprop aircraft.
- Larger narrow-body aircraft, driven by 737-800's & 900's and A321's have taken off.

Source: Diio Mi US Domestic Schedule Departures and Seats for Calendar Years Shown. Note: 1H17 only includes data from Jan 2017 through June 2017

## REGIONAL JET EVOLUTION

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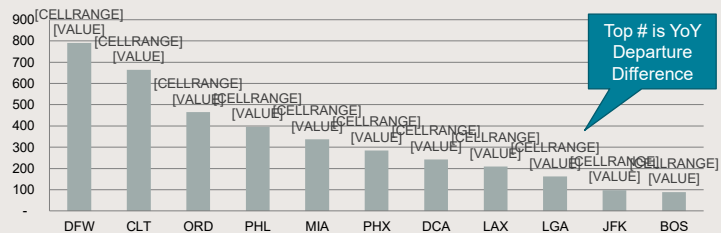
- Started initially with 37- to 50-seat jets; used to connect to further hubs
  - ~1,500 small regional jets delivered to US carriers, most by 2006
  - No orders for 50-seat regional jets in nearly a decade; Production suspended
- Aircraft ended up on traditionally trunk routes for airlines due to size of fleets and labor cost
- Early 2000's, the 2-class 70 seat regional jet was born
  - More similar to mainline product; further range and performance
- Scope changes in late 2000s and 2010s have led to 76-seat regional jets in large numbers
- Transition to larger aircraft resulting in fewer departures to offset additional seats

## AMERICAN AIRLINES

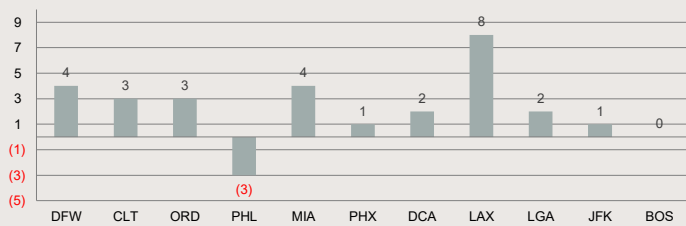
26

- Largest airline in the world
- Large influx of new aircraft sets AA on path to be youngest fleet of legacy airlines
  - 500+ Airbus, Boeing, and new regional aircraft
- Significant fleet adjustments by hubs
  - Bringing in 39 70-seat CRJ-700s with SkyWest (coming from UA)
- Investing in fortifying most of their hubs including significant increases at LAX
  - Top hubs comprise ~50% of AA's net new flights and destinations

March 2017 Average Daily Departures



# of Destinations Served YoY



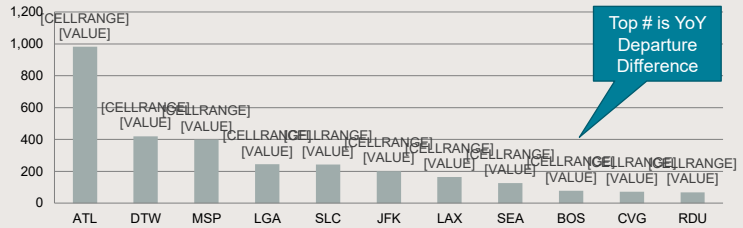
Source: Diigo Mi March 2017 vs March 2016 Average Daily Departures

# DELTA AIR LINES

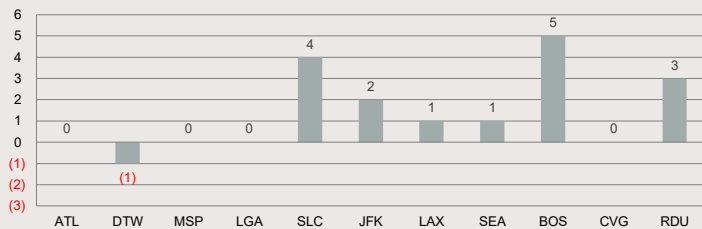
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- Active in route network adjustments to hub markets
  - MEM is no longer a hub and CVG should be considered a "focus city" similar to RDU
  - Along with investments in most hub markets, SEA continues its strong growth along with a renewed emphasis on BOS
- Focused on lowering unit costs and improving customer experience
  - Reducing 50-seat RJ fleet
  - More 76-seat CRJ-900 & EMB-175 large RJs
  - Purchased 75 C-Series 300 aircraft
  - Continues to receive new B737-900ER through 2018

March 2017 Average Daily Departures



# of Destinations Served YoY



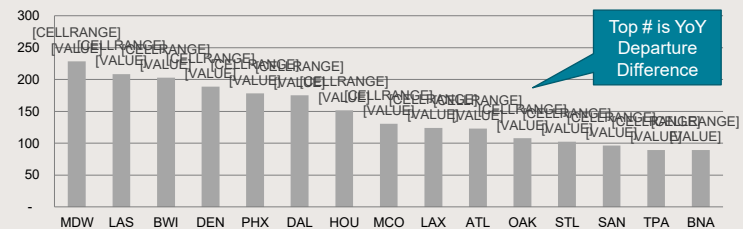
Source: Diio Mi March 2017 vs March 2016 Average Daily Departures

# SOUTHWEST AIRLINES

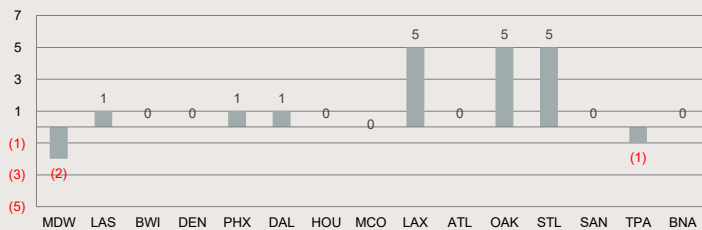
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- Fleet renewal with larger 737-800 aircraft to help lower costs
- 737-MAX aircraft start to be delivered in 2017
  - 737-MAX requires retirement of the "classic" 737-300/500 aircraft
  - Limited growth during part of this transition in 2017
- Continues to benefit from the end of the Wright Amendment
- LAX, OAK, and STL experienced significant expansion into new destinations
- New rules for ground handling and scheduling will allow limited seasonal and less-than-daily service in the future

March 2017 Average Daily Departures



# of Destinations Served YoY

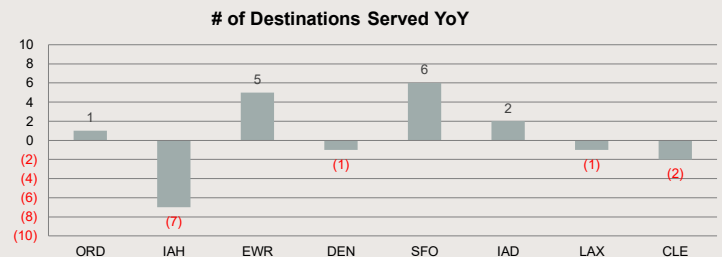
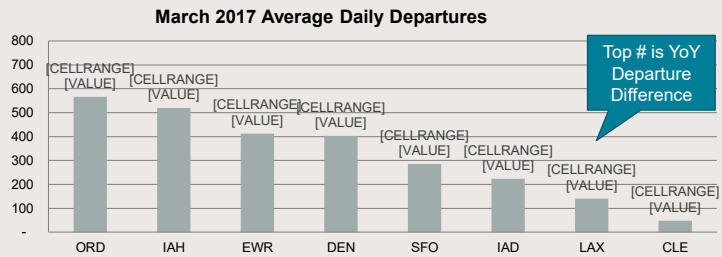


Source: Diio Mi March 2017 vs March 2016 Average Daily Departures

# UNITED AIRLINES

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- CEO Oscar Munoz onboard along with Scott Kirby from AA as the new President and Andrew Levy from G4 as CFO
  - UA's financial performance, on-time performance, and other metrics have lagged industry
- Pilot scope contract to allow for additional large RJs
  - Increased large regional aircraft to 255 (102 70-seat and 153 76-seat)
  - Hard cap of 450 RJ aircraft will result in large decline of 50-seat aircraft by 2019
- Growth in smaller "heartland" markets in 2017 with 50-seat RJs
  - UA fixing their "ignoring" of domestic flying



Source: Dilo MI March 2017 vs March 2016 Average Daily Departures

# ALASKA AIRLINES & ALLEGiant AIR

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- **Alaska Air**
  - Consistently one of the more profitable of the major airlines
  - Purchased Virgin America, Alaska surviving brand by 2019
  - Announced significant growth in CA (SJC, SFO, LAX, SAN) for 2017
  - Large order for more Boeing aircraft and EMB-175 large regional jets
- **Allegiant Air**
  - Replacing all of MD80 aircraft with Airbus A319/320 aircraft to improve reliability by 2019
  - Started moving into larger markets such as CVG, IND, OMA, OKC, PIT, TUL, LIT, ISP, SYR & CMH
  - Currently serving 115+ cities
  - Hawaii operation is being suspended and larger B757 aircraft being retired to simplify fleet
  - Majority of growth in past 2 years in medium to large markets, shying away from small markets that Allegiant started with

## SUMMARY

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- Pilot rule changes have impacted the industry and could get worse before they get better
- Industry Financials Riding The Wave
  - Consolidation, Capacity Discipline, Fuel Costs and Ancillary Revenues Driving Performance
- Fleet Trends Pushing Larger Gauge (And Thus Fewer Departures) For Now
- Driving Rationalization In Non-hub and Small Hub Airports



Thank You