Regional Airline Association

Pilot Workforce and Training Solutions

March 2018

REGIONAL AIRLINES ARE CRITICAL INFRASTRUCTURE

Economic Impact of Civil Aviation

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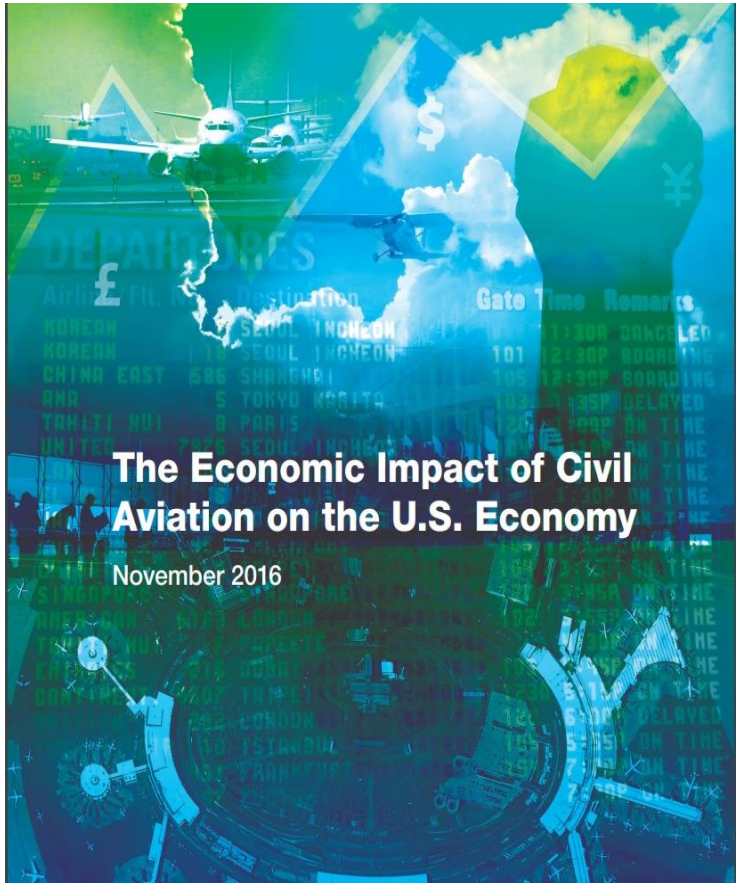
- In 2014, civil aviation generated **$1.6 trillion** in economic activity and supported **10.6 million jobs.**
- Civil aviation accounted for **5.1%** (846 billion) of the U.S. gross domestic product in 2014.
- Commercial airline operations enabled **$310.0 billion** of visitor expenditures on goods and services.
- Civil aircraft manufacturing continues to be the top net exporter in the U.S. with a positive trade balance of **$59.9 billion.**



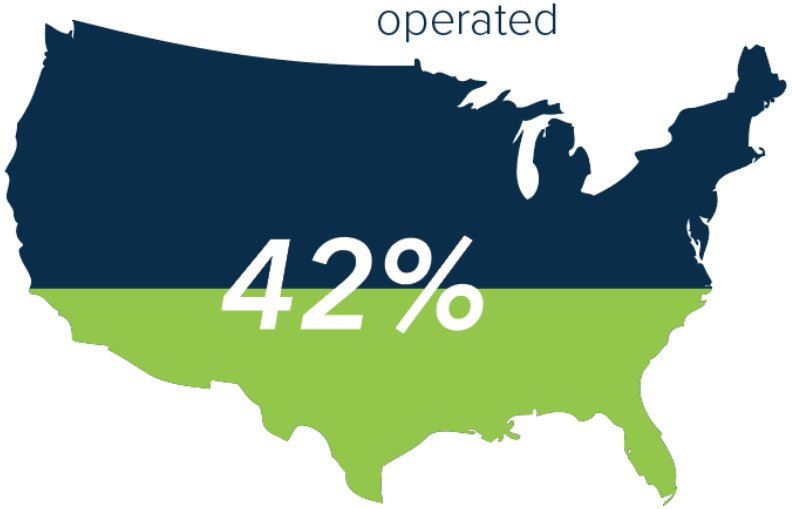
* Source: U.S. DOT FAA *"The Economic Impact of Civil Aviation on the U.S. Economy"* November 2016

Regional Airlines are Critical Infrastructure

Regional airlines provide the **ONLY** source of air service to

with scheduled passenger air service in 2016

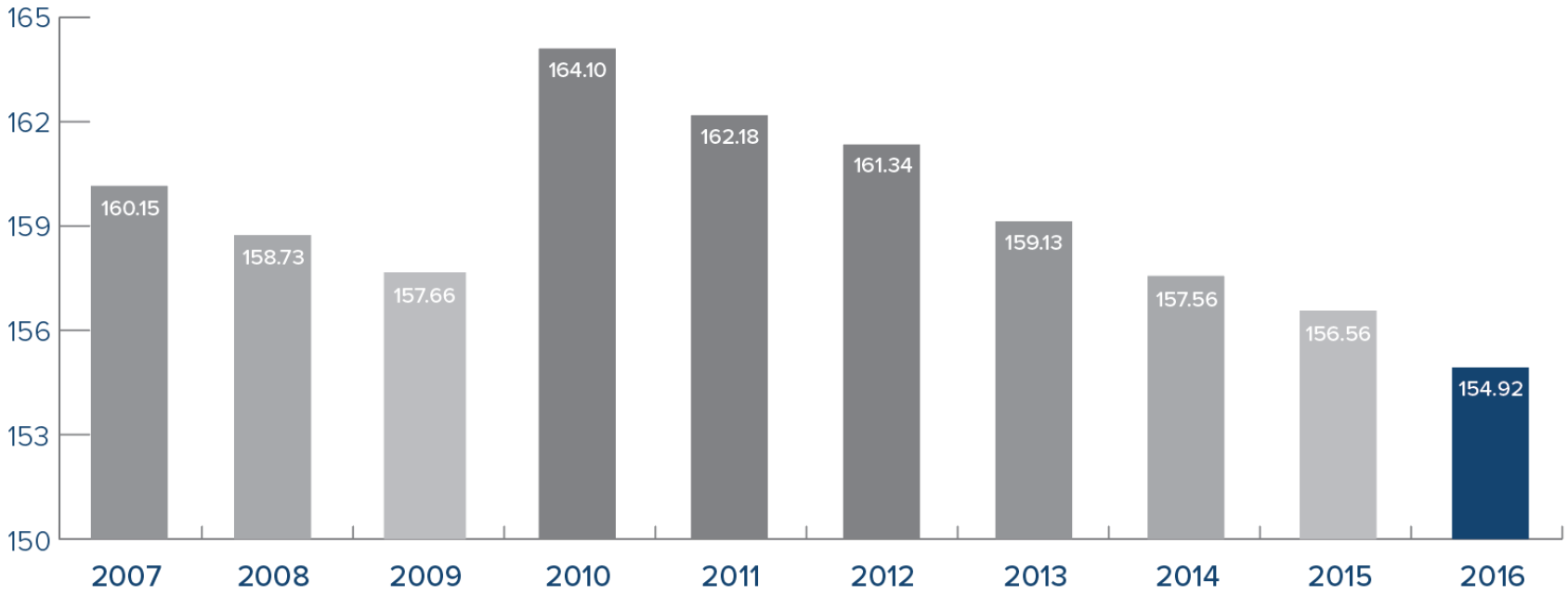
U.S. Regional airlines operated



of scheduled passenger departures in 2016

Regional Airline Industry is Contracting

Passengers Enplaned *(Millions)*



Regional Airlines First to Feel Pilot Shortage

Small and Rural Communities First and Hardest Hit

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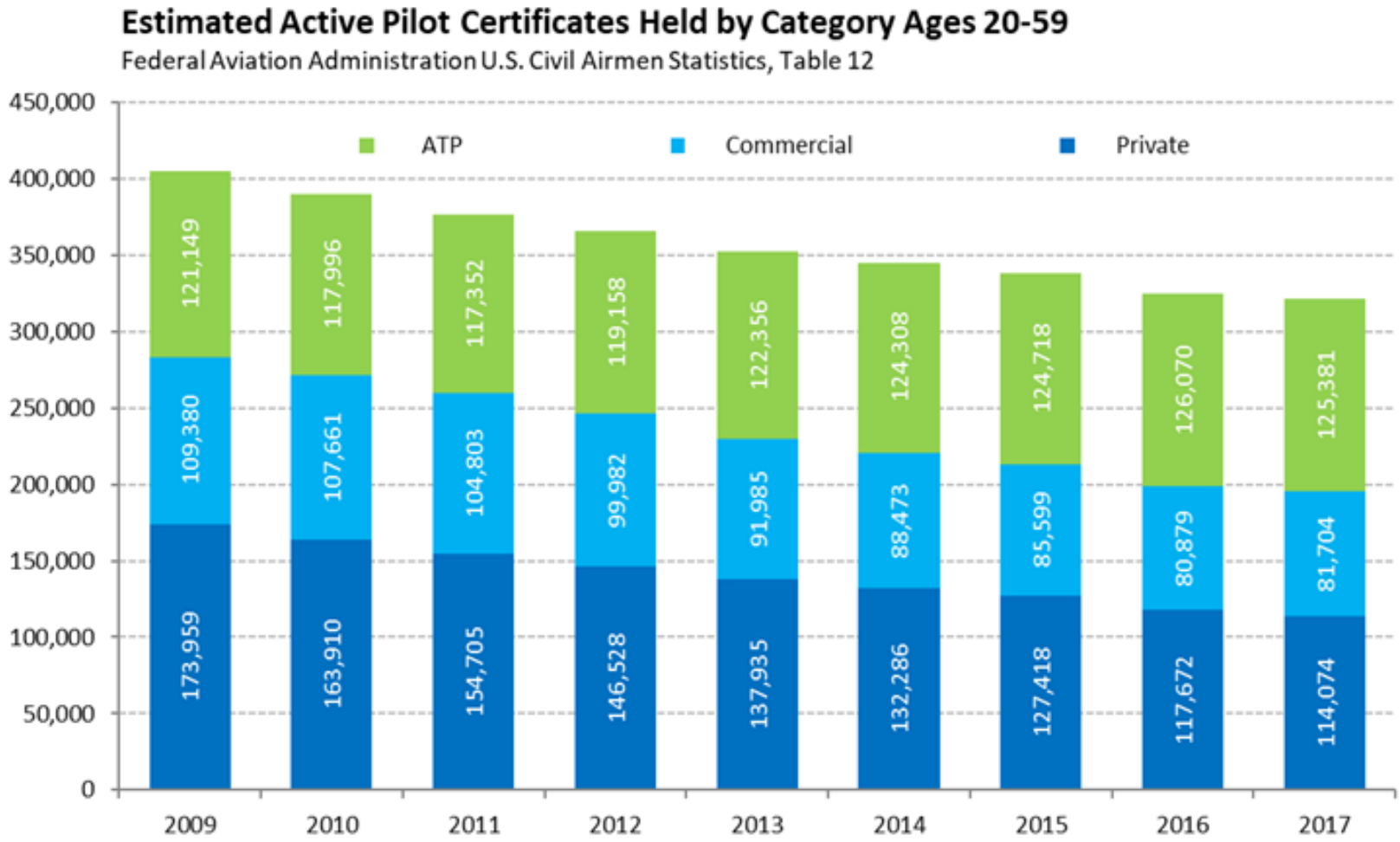
- The regional airline industry contracted during a period of economic expansion. What's going on?
  - Major airlines are replacing unprecedented number of pilots due to mandatory Age 65 retirements and growing air service demand during a time when fewer pilots are entering the career than retiring from it
  - Regional airlines are the career entry point; major airlines draw heavily from regional airlines when hiring
  - With too few pilots, airlines have been forced to curtail frequency and in some case exit markets
  - Regional airlines provide the ONLY source of air service to most U.S. airports. Industry contraction is a national crisis.

FAA CIVIL AIRMEN DATA SHOWS A SHRINKING PILOT POOL

Shrinking Hirable Pilot Pool

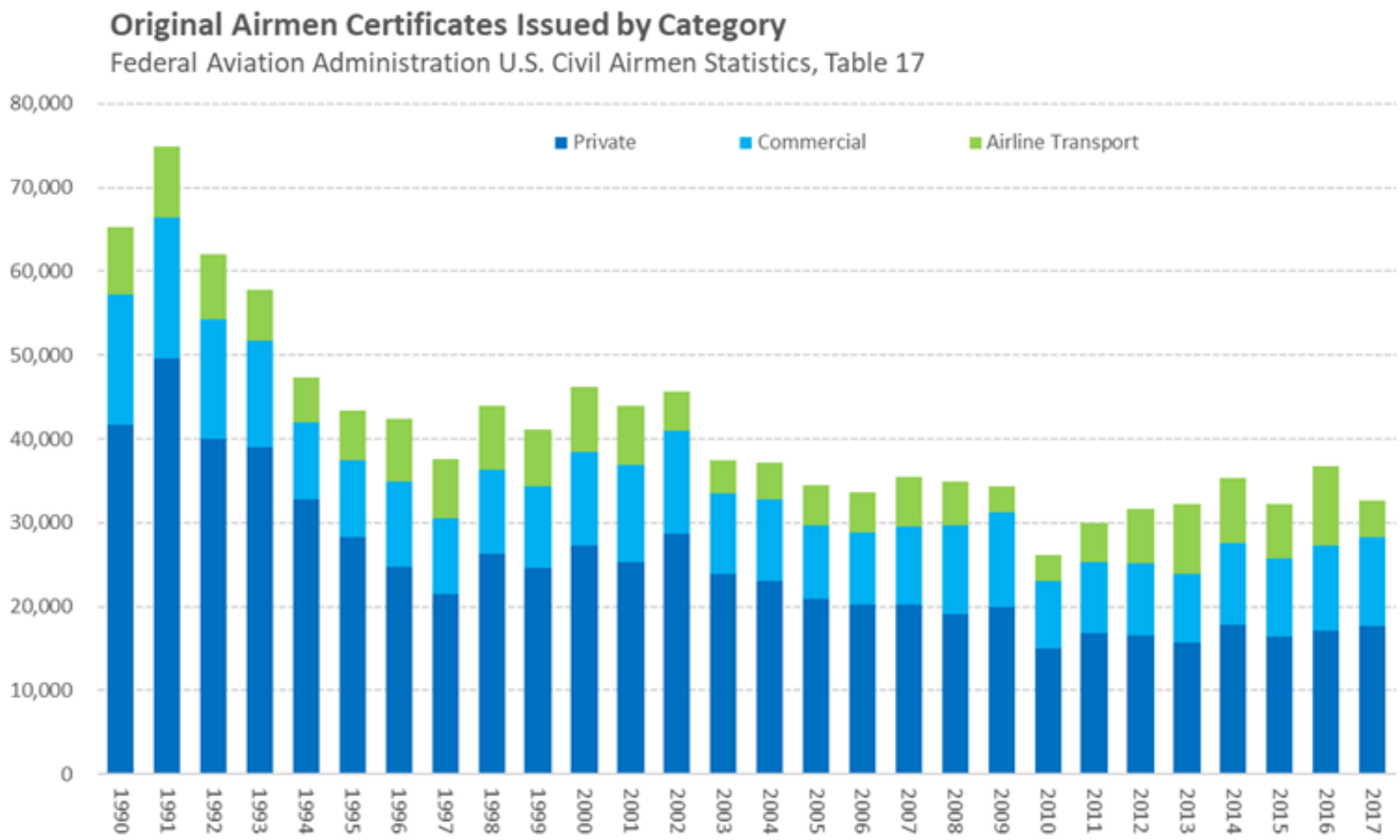


-20.6% since 2009

-992 per month

-33 per day

Fewer New Certificates Across All Categories



Regulatory Change Influenced ATP Issuance

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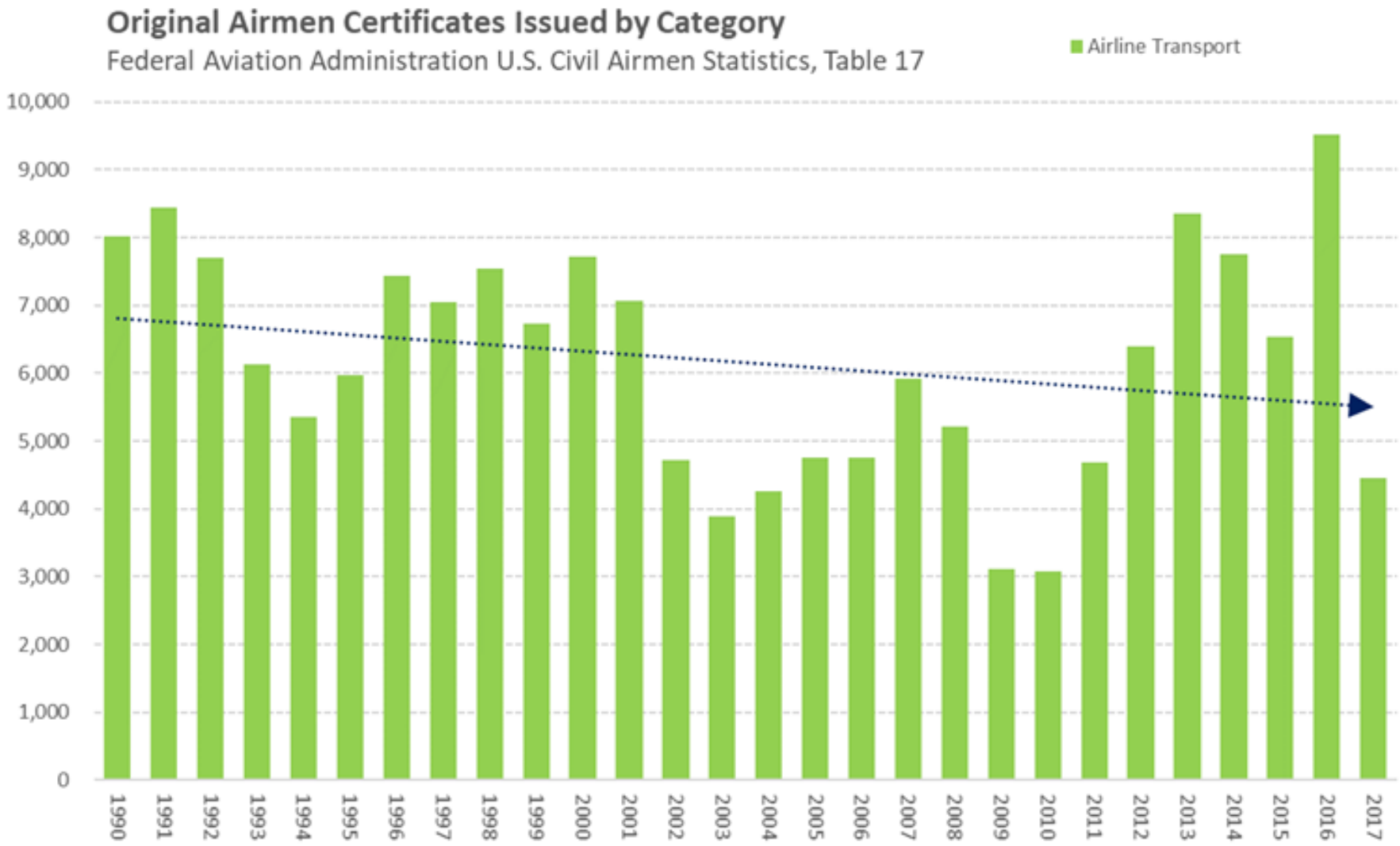
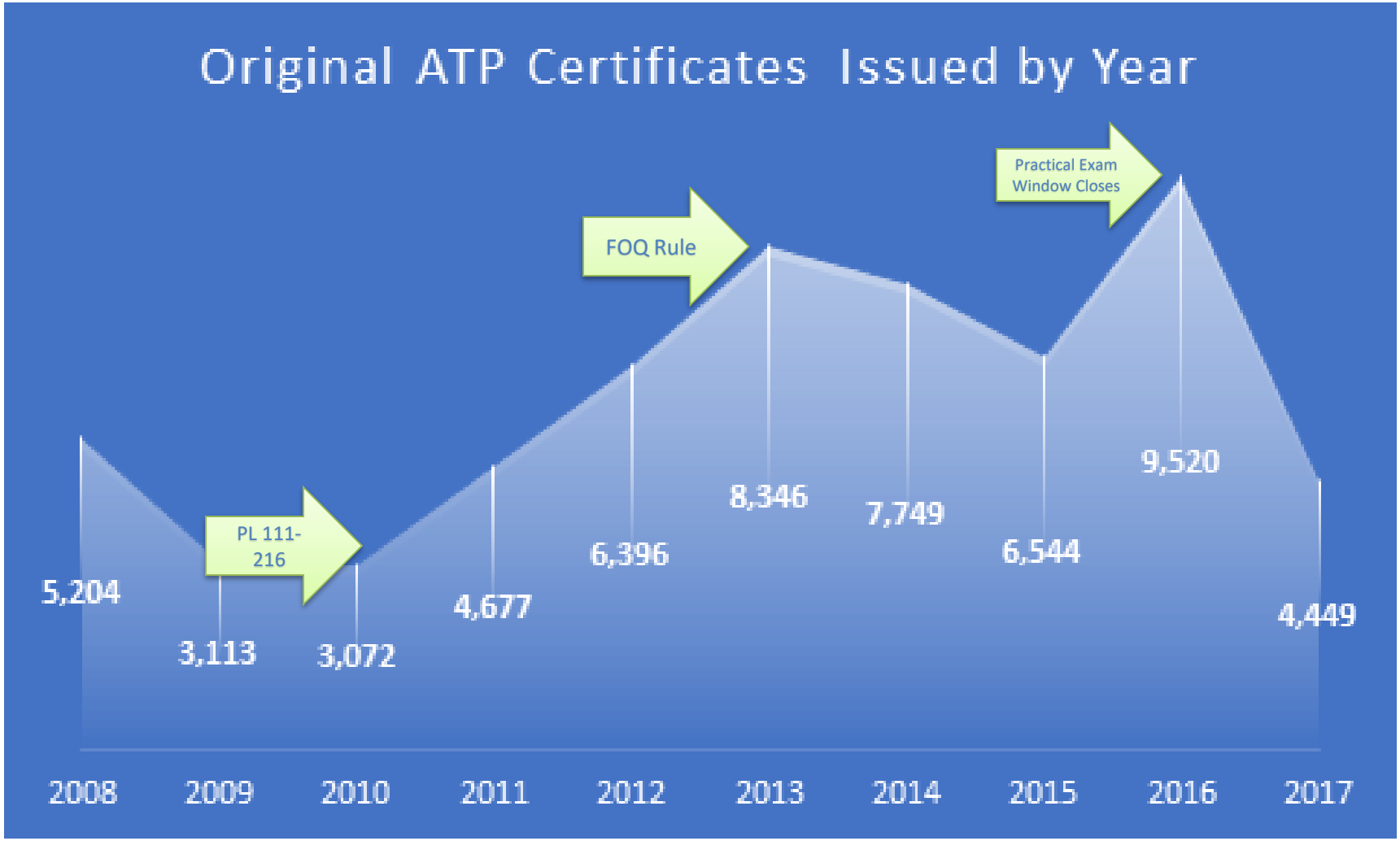
"Commercial and air transport pilot (ATP) certificates have been impacted by a legislative change… The Airline Safety and Federal Aviation Administration Extension Act of 2010 mandated that all part 121 flight crew members would hold an ATP certificate by August 2013. Airline pilots holding a commercial pilot certificate and mostly serving at Second in Command positions at the regional airlines could no longer operate with only a commercial pilot certificate after that date, and the FAA data showed a faster decline in commercial pilot numbers, accompanied by a higher rate of increase in ATP certificates."

source: FAA 2018-2038 Aerospace Forecast, March 15, 2018
https://www.faa.gov/data_research/aviation/aerospace_forecasts/media/FY2018-38_FAA_Aerospace_Forecast.pdf

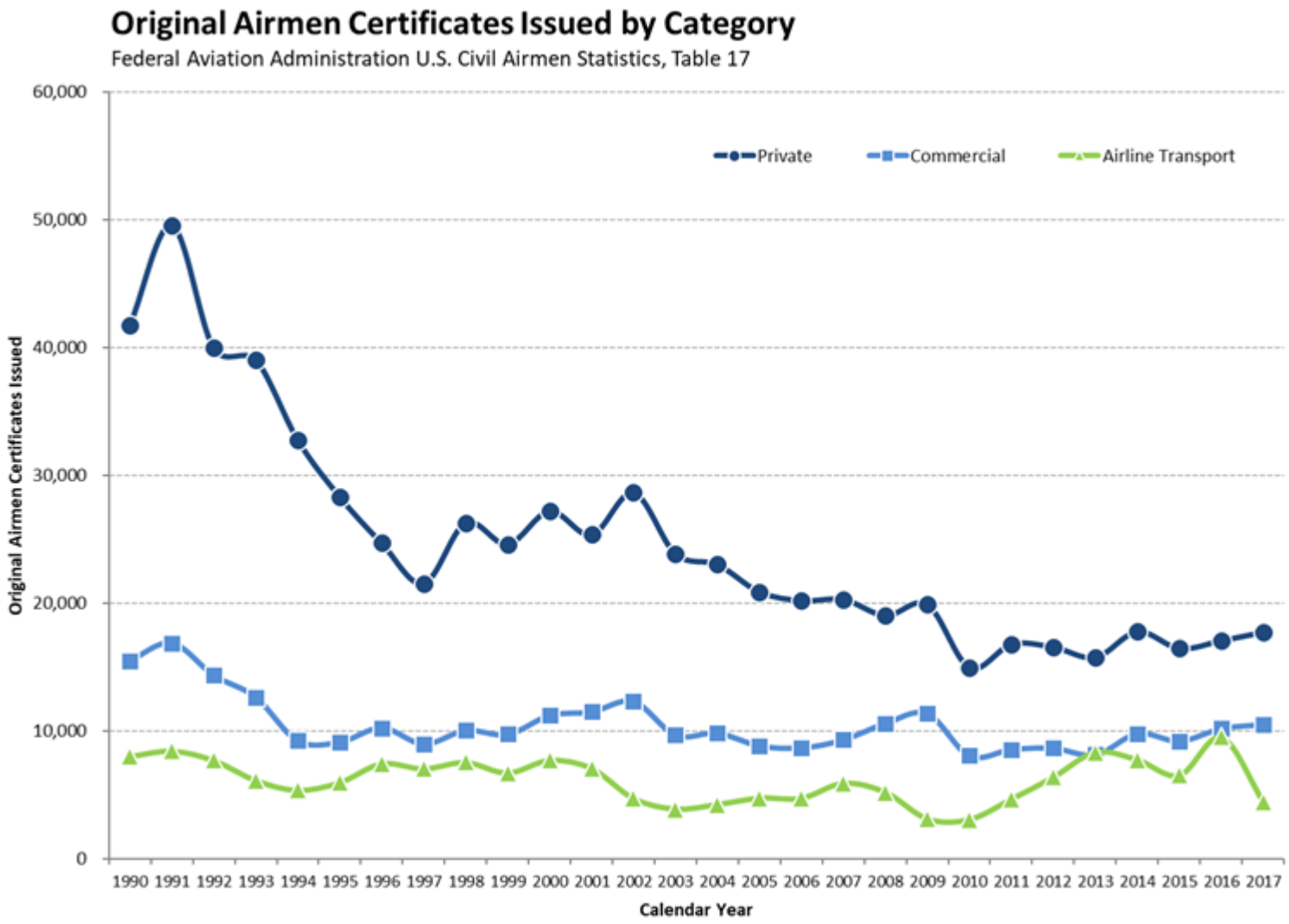
Negative ATP Trend Despite Change



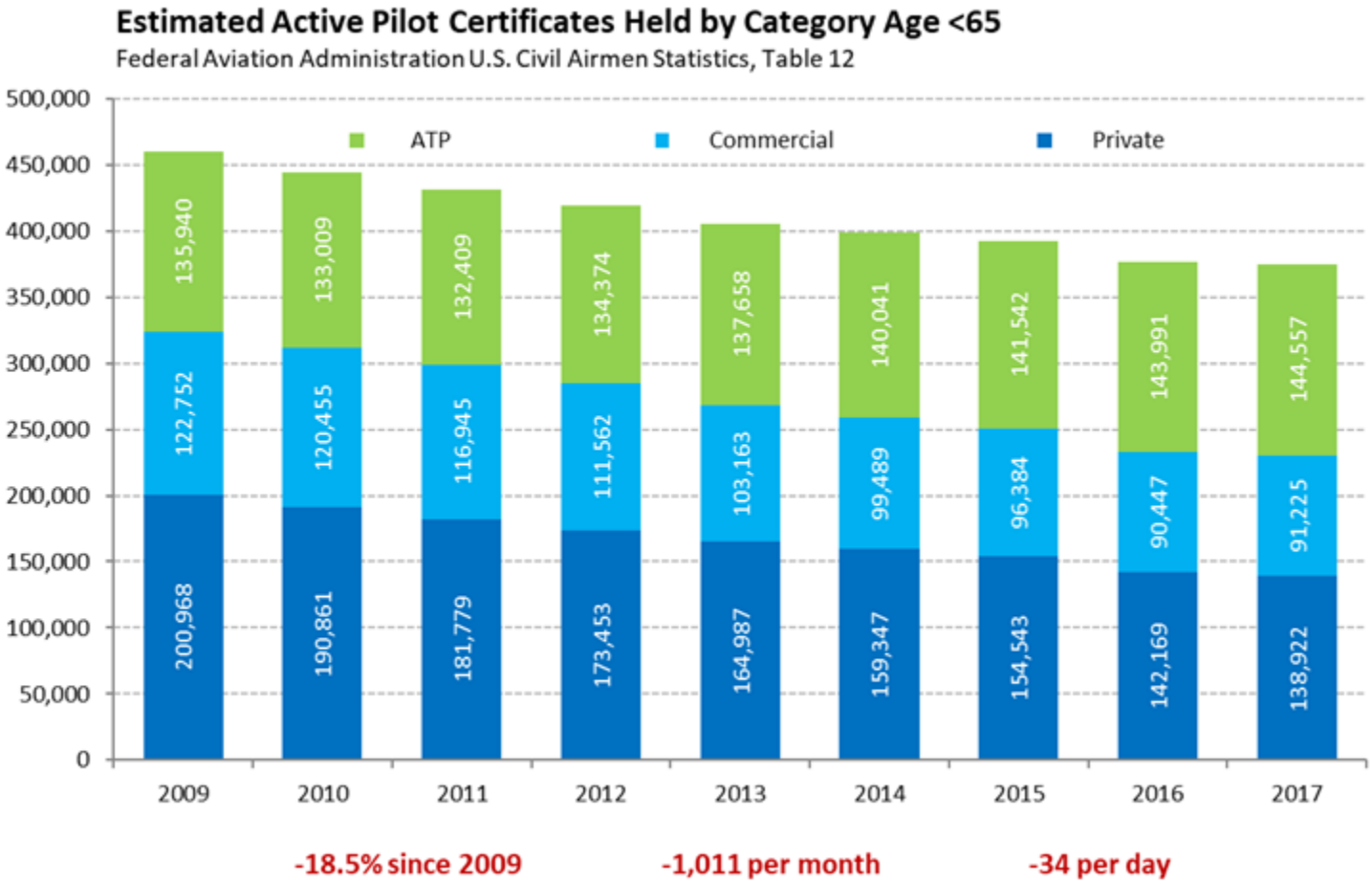
ATP Certificate Issuances Close-up



All Categories Declining

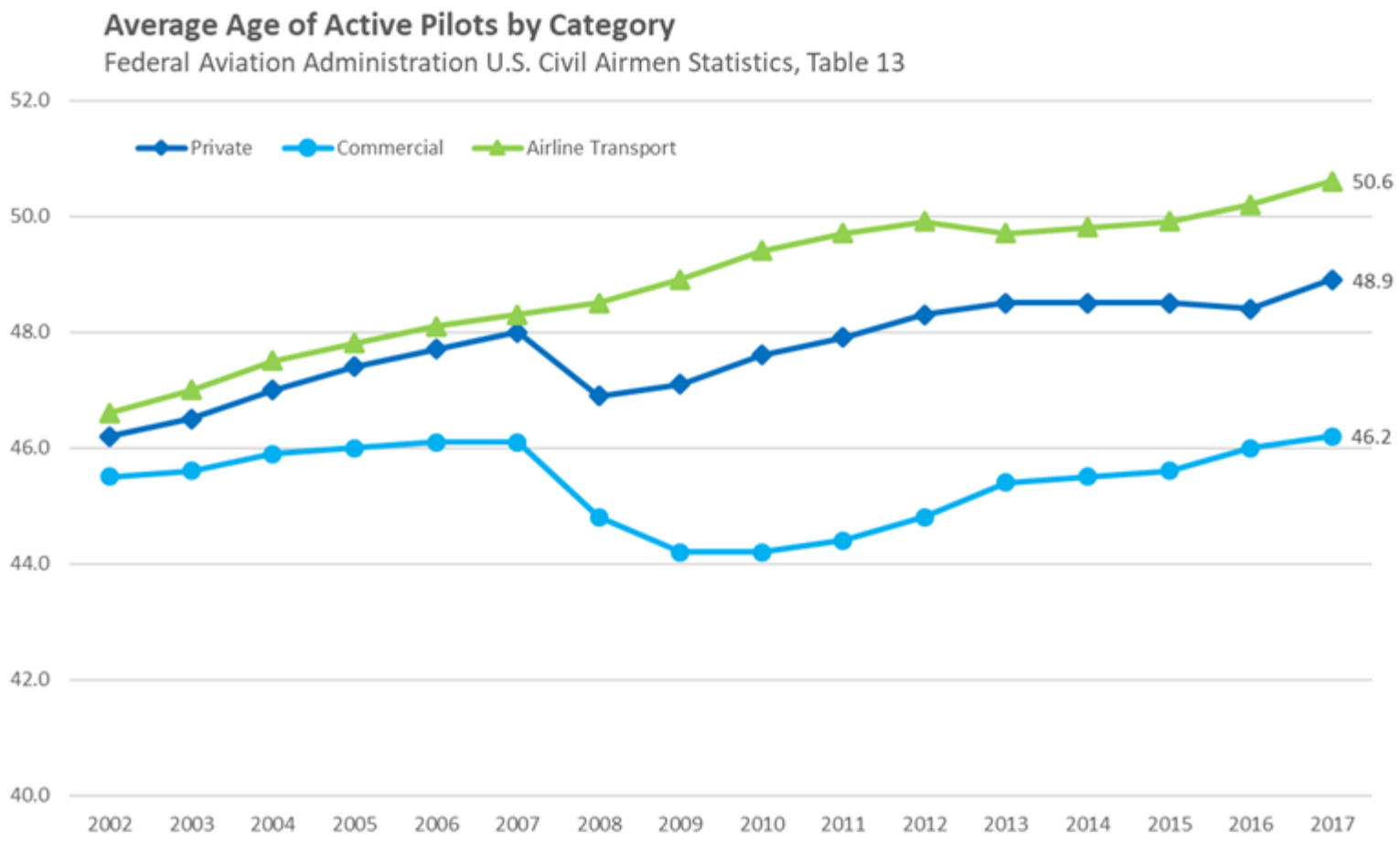


Shrinking Age-Qualified Pilot Pool

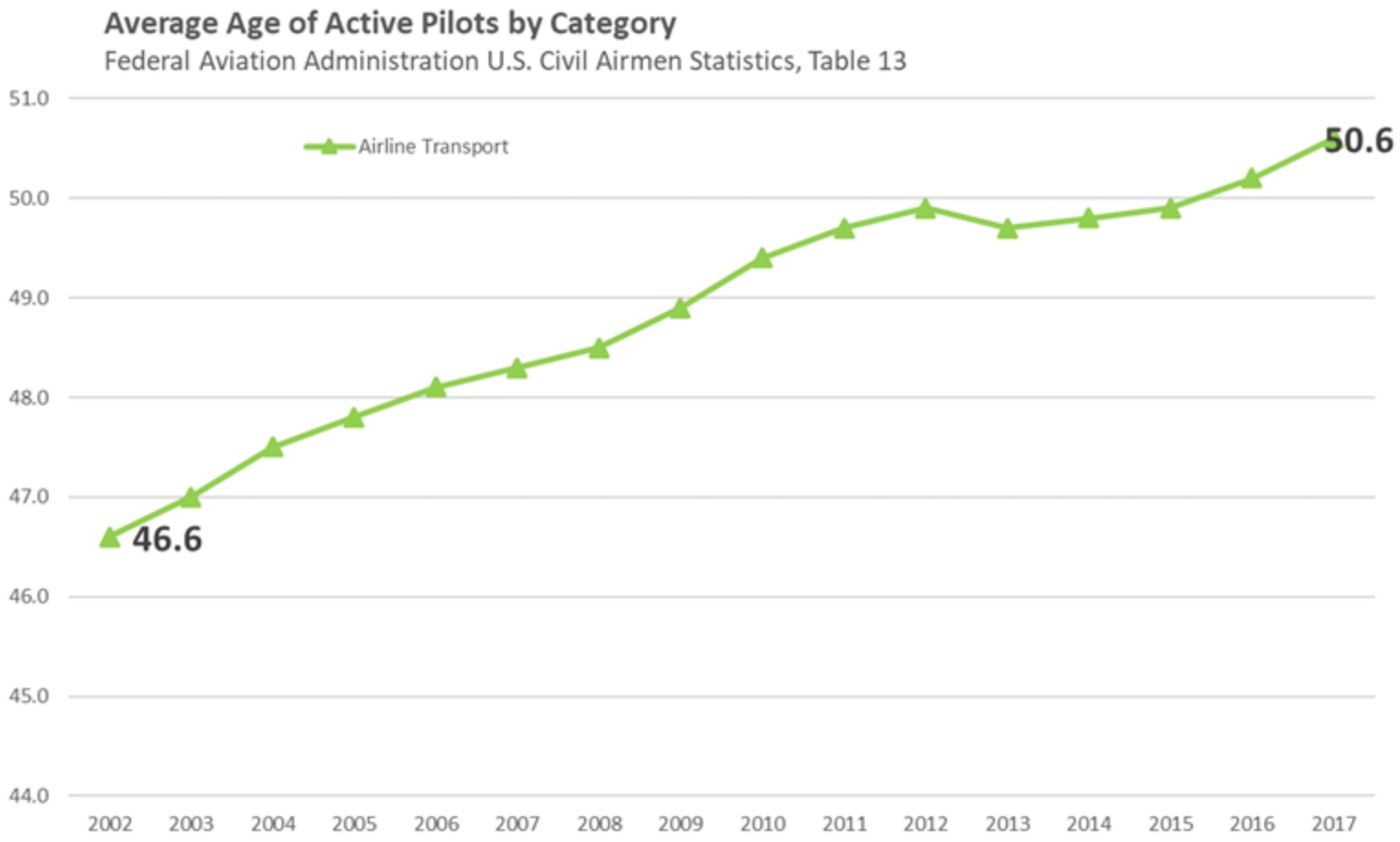


18.5% fewer pilots younger than Age 65 in 2017 vs. 2009.

Aging Pilots in all Categories



Aging ATP Pilots



FORECASTS

Forecast Pilot Supply & Demand Imbalance

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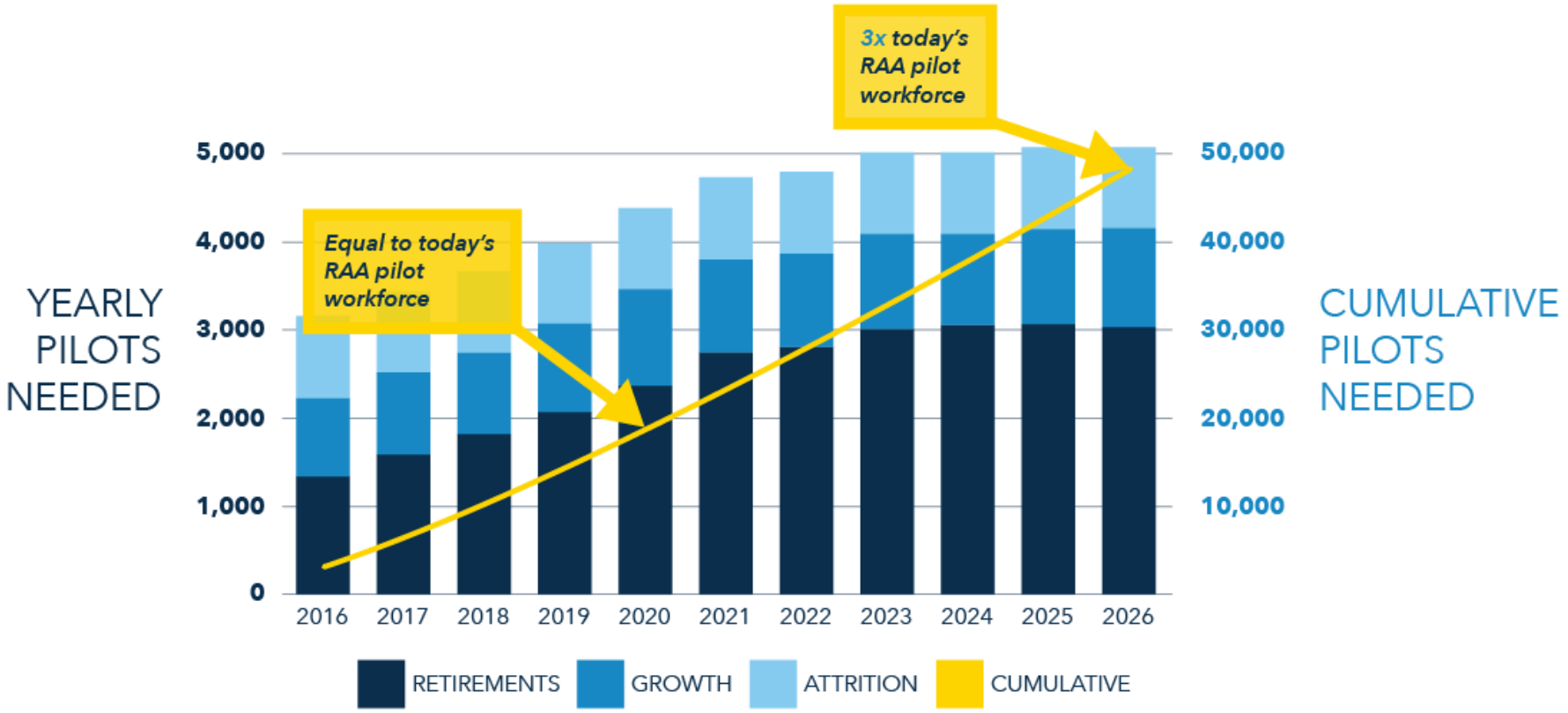
- **UND US Airline Pilot Supply Forecast** (2016) predicts cumulative pilot shortage of 14,000 by 2026
- **Boeing Pilot Outlook** (2017) projects worldwide growth in pilot demand, with 117,000 pilots needed in North America by 2036
- **CAE Airline Pilot Demand Outlook** (2017) indicates 85,000 new airline pilots needed, by 2027, including 62,000 new captains; cites large number of retirements as significant challenge
- **FAA Aerospace Forecast** (2018) notes "regional airlines are facing pilot shortages and tighter regulations regarding pilot training. Their labor costs are increasing as they raise wages to combat the pilot shortage" and "…network carrier consolidation and new rules on pilot training have left regional carriers saddled with either excess capacity or a lack of pilots."

Unprecedented Attrition

RAA
Regional Airline Association

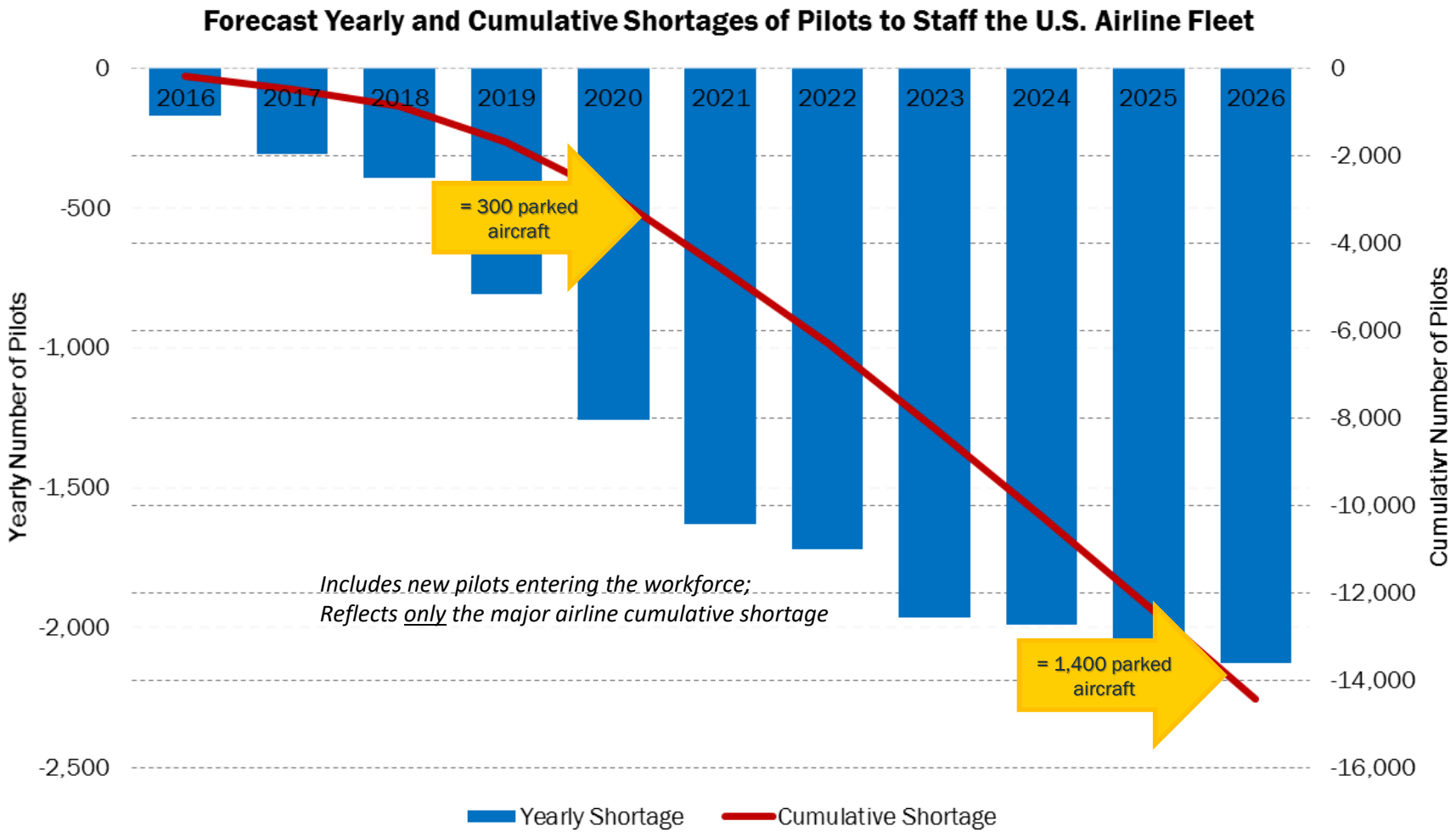
Major Airlines Hiring Forecast



Source: University of North Dakota Pilot Supply Forecast 2016

Cumulative Shortages Predicted

(Analysis does not include regional airline staffing needs)



Source: University of North Dakota Pilot Supply Forecast 2016

ECONOMIC IMPACT

Struggling

Pilot shortage a blow to regional

Boeing & Aerospace | Business

Pilot crisis has Horizon Air grappling with industry's new reality

Originally published September 28, 2017 at 6:00 am | *Updated September 30, 2017 at 12:04 am*

COMMENTARY • AIRLINE INDUSTRY

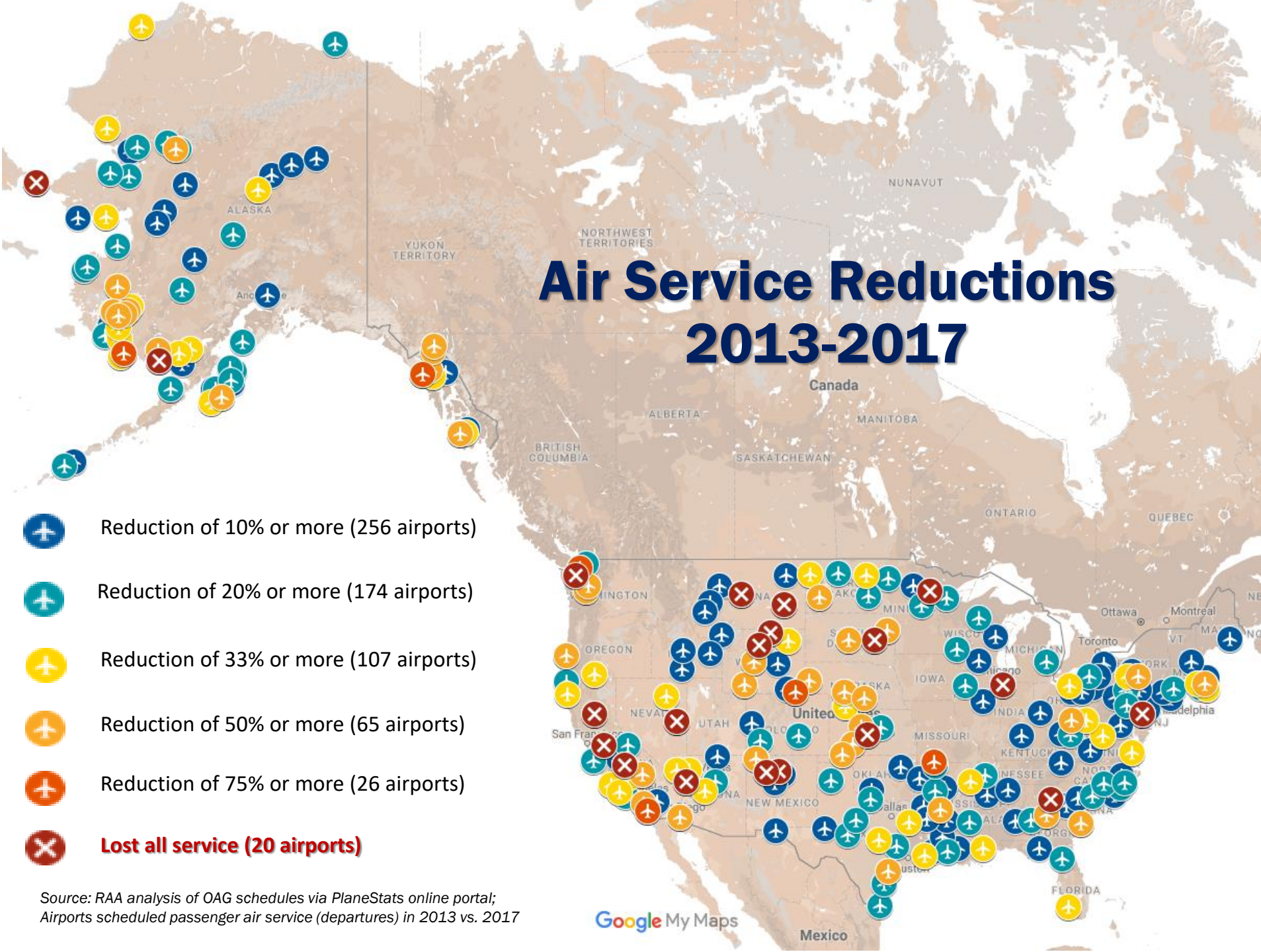
Small Airports Could Soon Be Doomed Thanks to America's Growing Pilot Shortage

Ai

that could reach crisis levels in a few years

Transportation recently terminated the county's Essential Air Service contract awarded to Southern Airways Express in 2014 that expires in September.

Air Service Reductions 2013-2017



Reduction of 10% or more (256 airports)

Reduction of 20% or more (174 airports)

Reduction of 33% or more (107 airports)

Reduction of 50% or more (65 airports)

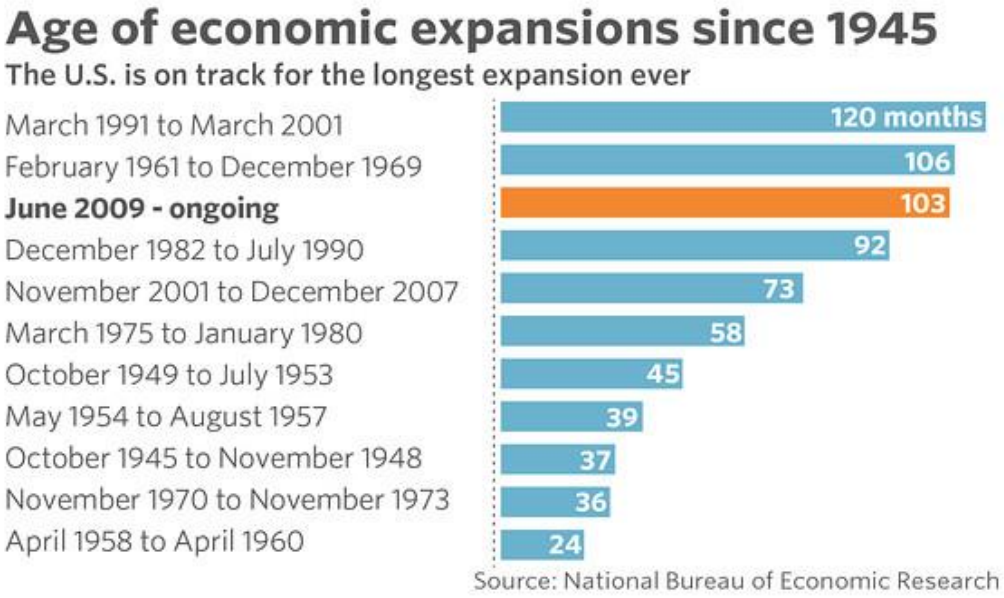
Reduction of 75% or more (26 airports)

Lost all service (20 airports)

Source: RAA analysis of OAG schedules via PlaneStats online portal; Airports scheduled passenger air service (departures) in 2013 vs. 2017

"It's (*not*) the Economy…"

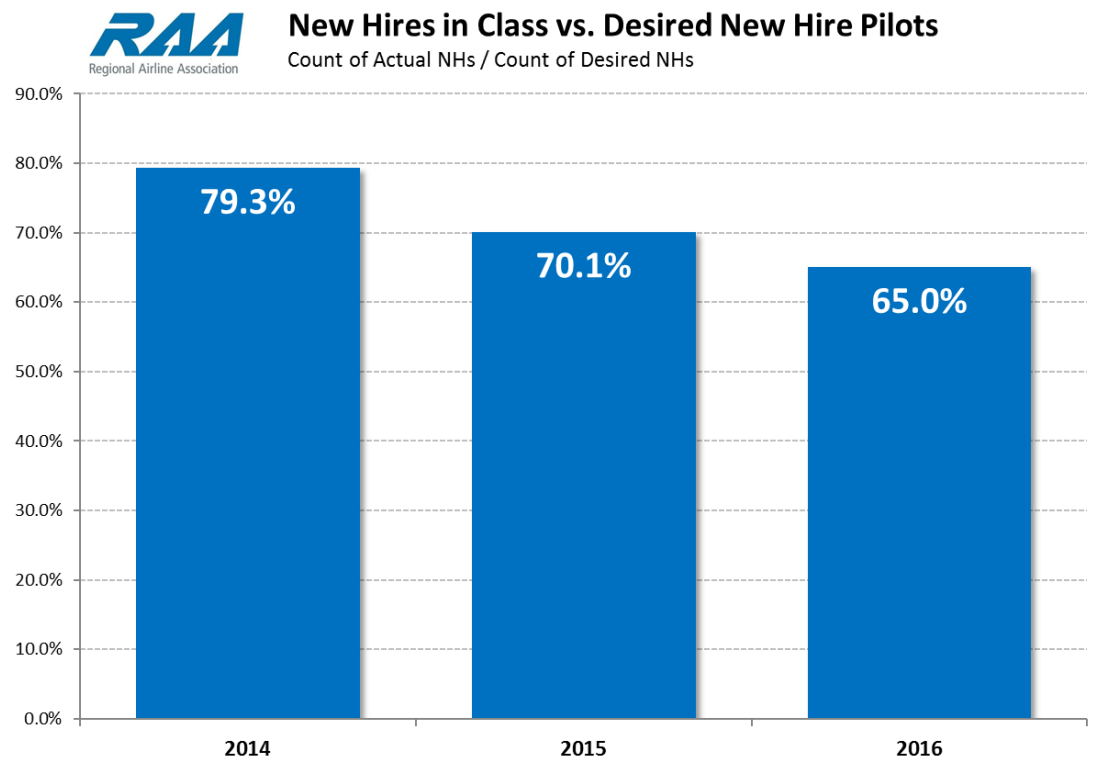
- U.S. Communities losing air service during a period of economic recovery.
- Typically at this point in the cycle, communities would gain frequency and options.



Market Response Alone Won't Fix Policy Problem

Underlying Issue is Career Path Inaccessibility

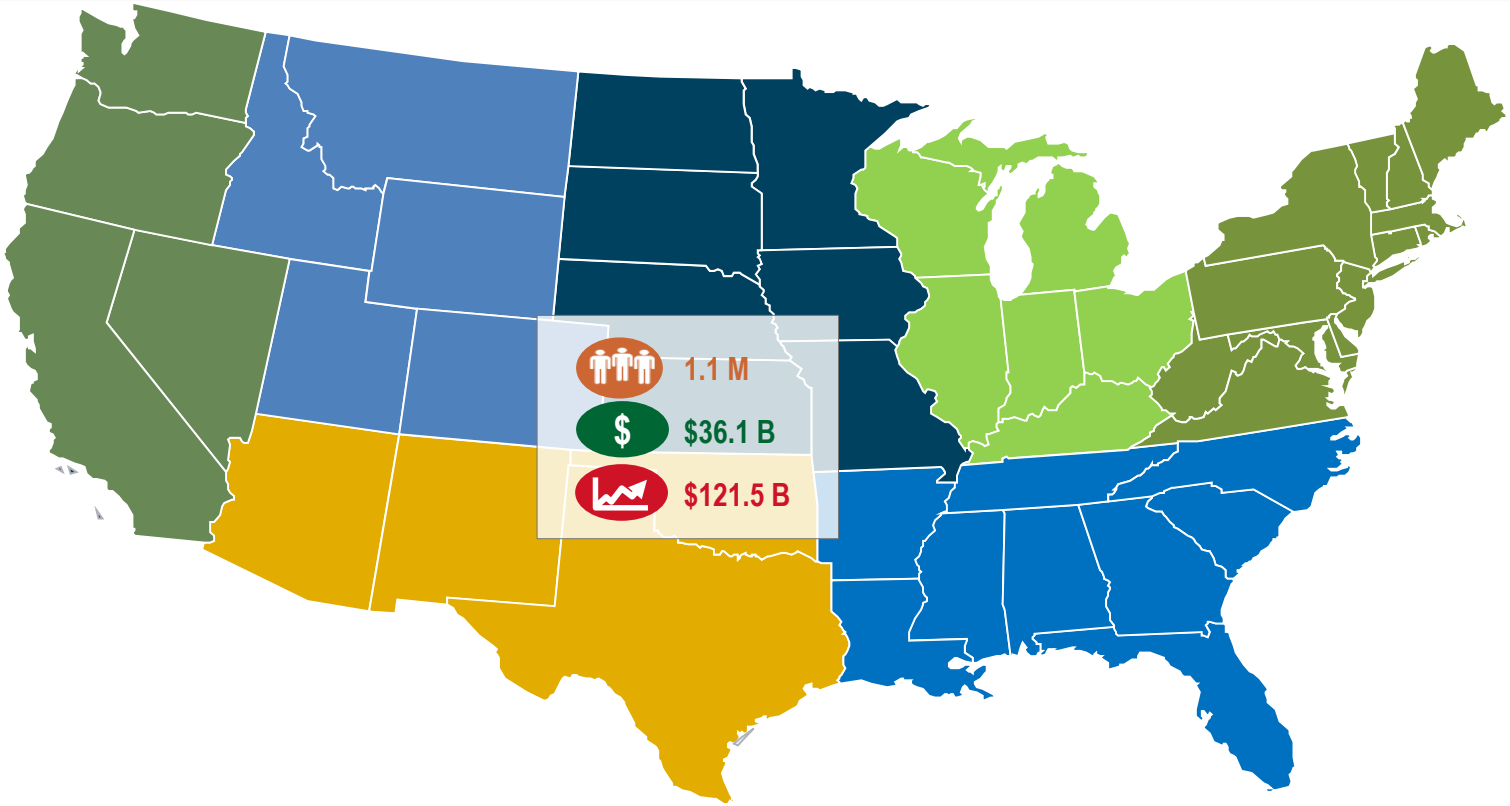
- RAA member airline first year, First Officer average compensation rose more than **150 percent** between 2015 and today.
- Overall recruiting success ***declined*** during the same period.
- Higher pay won't resolve shortage until sufficient pilots can afford and access the career path.



Small Communities Face Economic Consequences

- When air service is lost and connectivity reduced, communities….
  - struggle to attract and retain businesses
  - lose essential service providers, including medical professionals
  - experience diminished economic viability

Economic Consequences Add Up



In 2015, the economic impact of air service to small and non-hub airports alone in the *contiguous* 48 states was an estimated $121B — supporting over **1.1m jobs**

Source: InterVistas, http://www.airservicealliance.com/wp-content/uploads/2014/08/IVC-ECON-IMPACT-FOR-RASA-IN-MSP.pdf

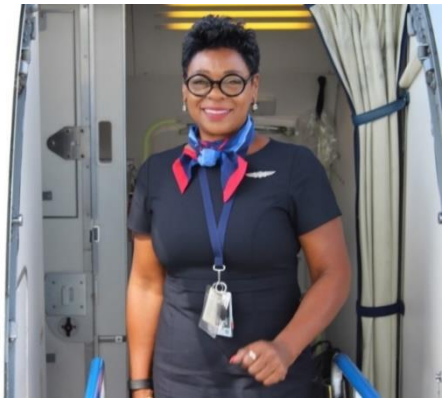
Far-Reaching Potential Direct Job Losses

- When aircraft are parked without pilots, the impact is widespread and complex.
- RAA airline members employ **more than 59,000** individuals.

15,000 flight attendants

10,000 support staff

1,000 flight control



8,000 mechanics

5,000 customer service

20,000 pilots

U.S. Military Facing a Pilot Shortage

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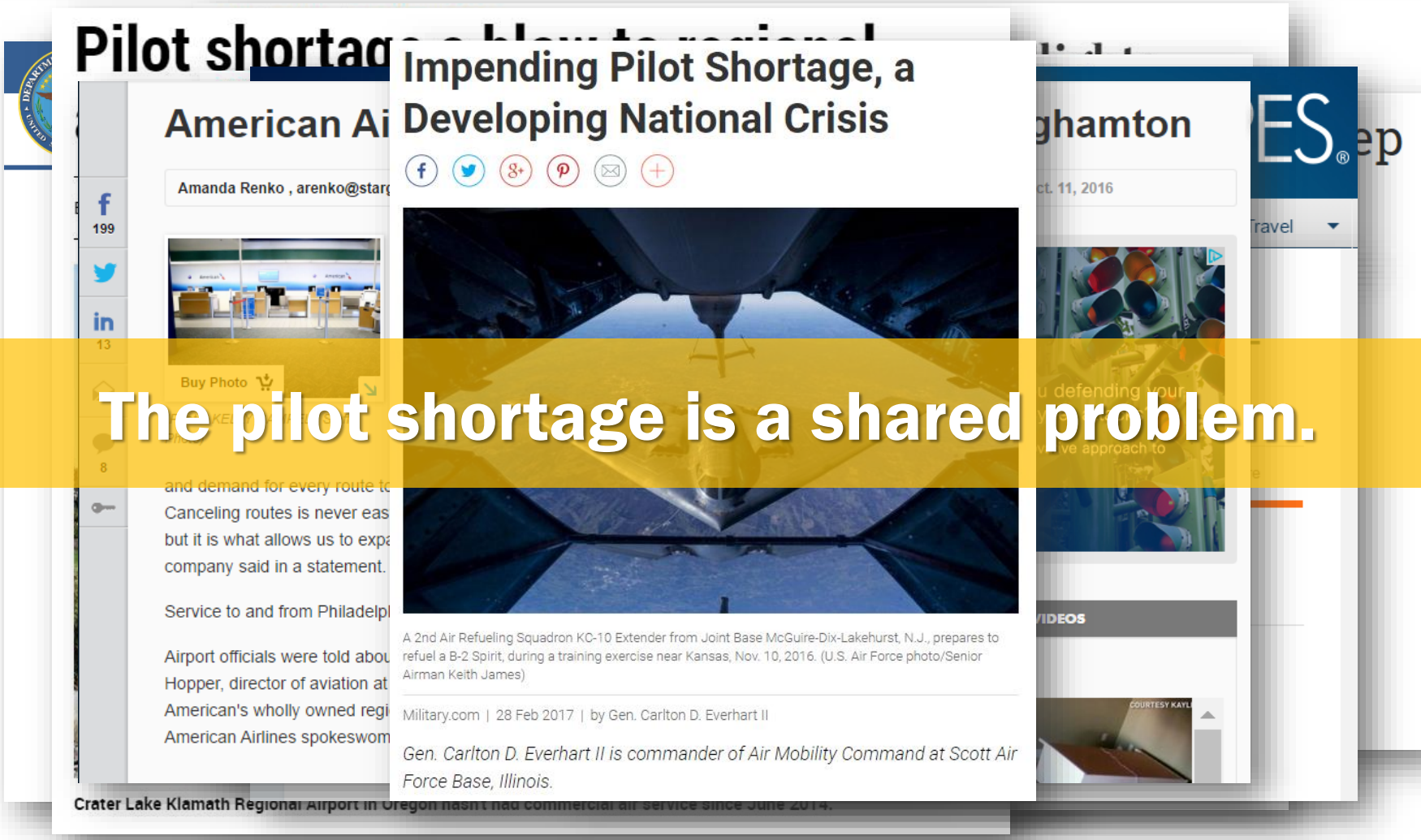

The pilot shortage is a shared problem.

U.S. Military on the Pilot Shortage

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Gen. David Goldfein,
U.S. Air Force Chief of Staff
https://federalnewsradio.com/air-force/2017/04/air-force-chief-squashes-reports-military-will-force-pilots-stay-uniform/

"This is a supply-demand mismatch…The nation as a whole is producing less pilots than we need in order to service commercial, business and military aviation. I'm the lead advocate as the airman on the Joint Chiefs of Staff, because we're all affected by this — but we have to look nationally at incentives to increase the supply."

"Pilots are strategic national assets and the pilot crisis extends beyond the Air Force and military. It is a national problem which requires senior-level attention in Congress, the Commercial Industry, and the DoD…Today the Air Force has a rated manpower shortfall of approximately 1,550 pilots across the Total Force."

Lt. Gen. Mark C. Nowland,
U.S. Air Force Deputy Chief of Staff, Operations
Senate Armed Services Committee, March 29, 2017

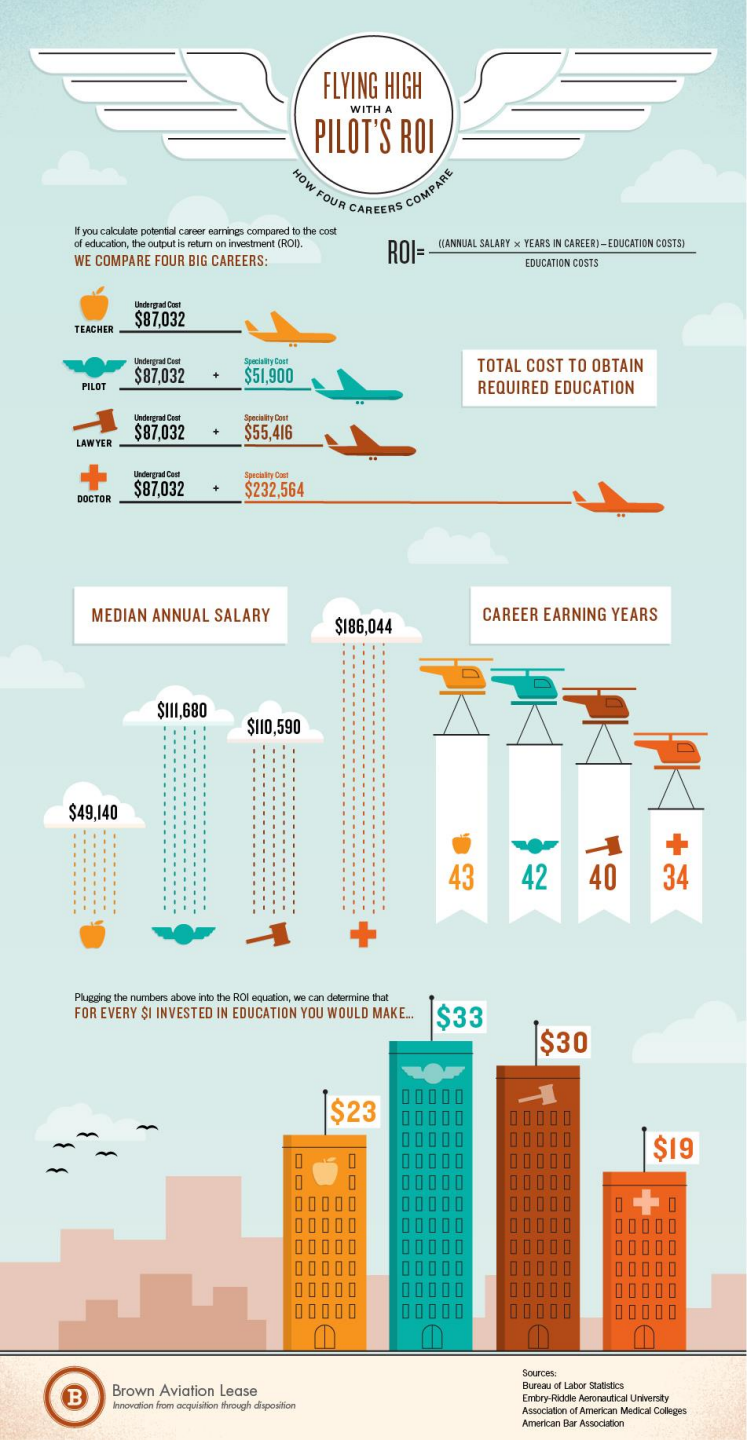
"The Air Force faces an ongoing pilot shortage. This is not the first time the Air Force has been in this position, and as long as there is a market for highly-trained, professional, disciplined Airmen it will not be the last."

Gen. Carlton Everhart II, U.S. Air Force Commander, Air Mobility Command
http://www.military.com/daily-news/2017/09/17/oped-family-first-approach-key-addressing-pilot-shortage.html

ENHANCING THE CAREER

Regional Airlines are Investing in Pilots

- Significant salary investments, starting year one.
- Collegiate and training institution partnerships focused on career opportunities; preferred hiring agreements.
- Internship, cadet, and leadership development programs.
- Tuition reimbursement agreements.
- Flow and guaranteed interview programs with major airlines to support career stability.



Pilot Compensation

A pilot's ROI is better than these high-prestige fields.

For every $1 invested in education:

- Doctors earn $19
- Teachers earn $23
- Lawyers earn $30
- Pilots earn **$33**

Source: Brown Aviation Lease

RAA Member Airline Pilot Compensation

- RAA member airlines pay first year, First Officers an average total compensation of **$58,549**.
- 90% of RAA member airlines (by fleet) pay first year, First Officers an average compensation of **$61,334**.

Compensation includes minimum base pay, bonus, & tuition reimbursements only; does not include per-diem, commuter support, retirement, health, or other benefits.

- The Bureau of Labor and Statistics (BLS) reported 2016 median annual wage for all U.S. occupations at all levels was **$37,040**.

Airline Pilot Compensation Increased Significantly Faster than Other Occupations

RAA Member 1st Year, FO Compensation (up ~150% since 2015) increased at higher rate than median for all airline pilots

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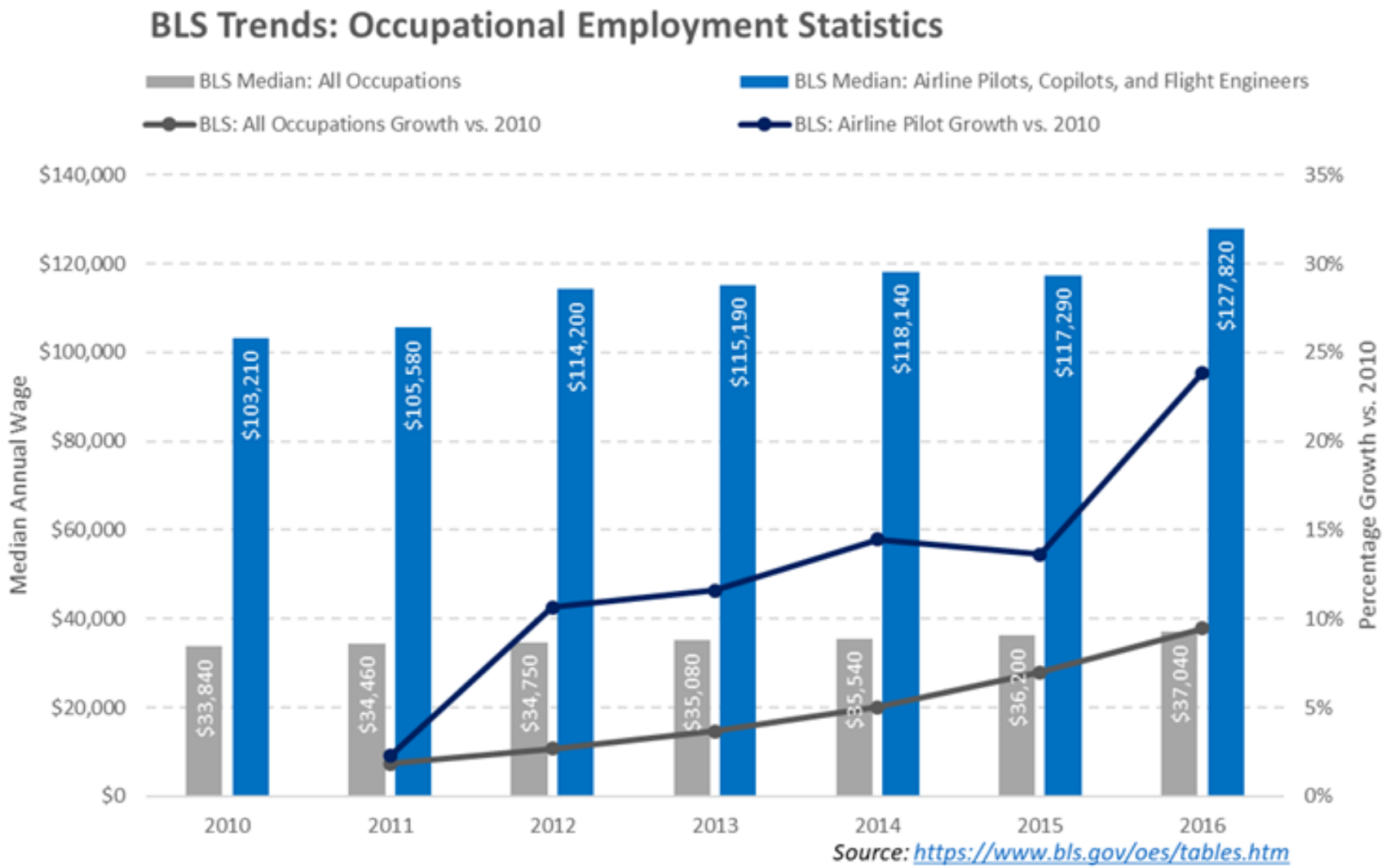
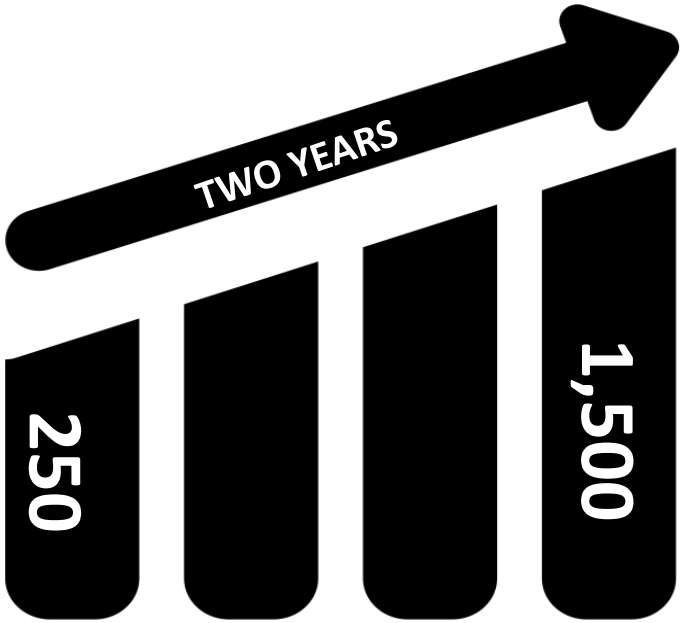


2013 FOQ RULE IMPACTED PILOT SUPPLY AND PROFICIENCY

Pilot Shortage + Policy = Crisis

- The 2013 First Officer Qualifications (FOQ) Rule constrained supply further by elongating the pilot career path and driving up training costs.
- The Rule required Part 121 First Officers to hold ATP certificates, formerly required for Captain upgrades. An unrestricted ATP certificate requires 1,500 hours in flight.
- Historically, pilots attained flight hour experience as First Officers in commercial operations before upgrading. Requiring these hours at the outset of a pilot's career changed the nature of the experience gained.

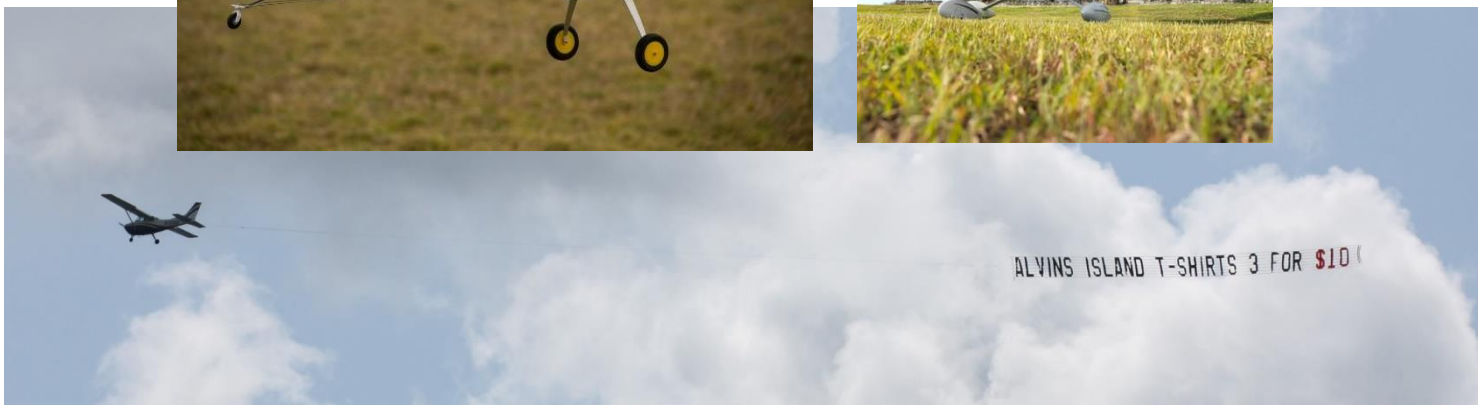
Pilots graduate training with around 250 hours. On average, it now takes approximately **two more years** for student pilots to earn the additional time required to reach 1,500 hours.



The Additional Training Myth

Pilots now spend up to two years after graduating building flight hours in aircraft that bear no resemblance to the technologically advanced jets used by today's regional airlines -- typically flying in fair weather and in uncontrolled airspace.

Pilots do not receive additional training during this time.



FOQ Rule Increased Pilot Training Costs

- The added cost of getting additional flight hours boosted the price tag for becoming a commercial airline pilot to about **$200,000**.
- Most pilot training costs, such as flight training or gaining additional hours in flight, are not covered by student loans.
- It is becoming financially impossible for all but the wealthiest students to become pilots.

FOQ Rule Impacted Pilot Supply

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- The 2013 FOQ rule change created a new barrier of career entry by making it more expensive and burdensome to go through a part 141 or part 61 pathway to become a pilot - effectively limiting the pilot career path to wealthy students.
- The FOQ rule also presented a new barrier to aviation university graduates, who must spend additional time accumulating flight hours after graduation and before hiring eligibility.
- A 2015 UND / University of Nebraska Omaha "Pilot Careers Aspiration Study" found more than 1/3 of aspiring aviators in flight training environments had been discouraged or decided against becoming a commercial pilot because of the rule. Many considered relocating overseas for earlier career start.

Experts Challenge an Hours-based Qualification Standard

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Former FAA Administrator Randy Babbitt

House Transportation & Infrastructure Committee hearing on Aviation Safety and Airline Pilot Training, February 4, 2010

"I know some people are suggesting that simply increasing the minimum number of hours required for a pilot to fly in commercial aviation is appropriate. As I have stated repeatedly, I do not believe that simply raising quantity – the total number of hours of flying time or experience – without regard to the quality and nature of that time and experience – is an appropriate method by which to improve a pilot's proficiency in commercial operations."

"It's not always about the hours because we see very experienced pilots with tens of thousands of hours making mistakes. In fact, in the Colgan accident, those pilots had more than 1,500 hours, but they still made mistakes."

Former NTSB Chair Deborah Hersman

"5 years after N.Y. crash, some airline safety progress"
USATODAY Published 4:15 p.m. ET Feb. 11, 2014

"The Foundation attributed the outstanding safety record of commercial aviation to "a wide variety of factors and the diligent efforts of thousands of aviation professionals around the world who design increasingly reliable aircraft, engines, and parts; maintain, repair and overhaul aircraft; regulate and enforce performance-based safety rules; investigate accidents and incidents; manage air traffic; develop sophisticated avionics and navigational aids; operate airports; and fly sophisticated aircraft in increasingly complex environments." The Foundation noted: "It is not the result of any one factor, including any particular change in the hours requirement for pilot experience."

Flight Safety Foundation

Position Paper: Pilot Training and Competency
March 1 2018

FOQ Rule Impacted Pilot Proficiency

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An independent, peer-reviewed population study of 7000 pilot training records, conducted by six of the most trusted aviation universities in the country, showed:

- Pilots hired after the rule required more extra training and failed to complete training than those before the rule.
- Pilots with lower hours in flight performed better than pilots with higher hours in flight.
- The longer the span between graduation and hire, the worse a pilot performed in training.
- ***Pilots with structured training credit toward flight hours had the <u>best</u> outcomes.***

Source: https://www.pilotsourcestudy.org/

STRUCTURED TRAINING PATHWAYS ENHANCE SAFETY

Structured Training Pathways

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Congress authorized Alternate (R-ATP) Pathways to replace a portion of the unsupervised flight hours with *additional* structured training.

Military & Academic Institutions are already approved for these R-ATP Pathways

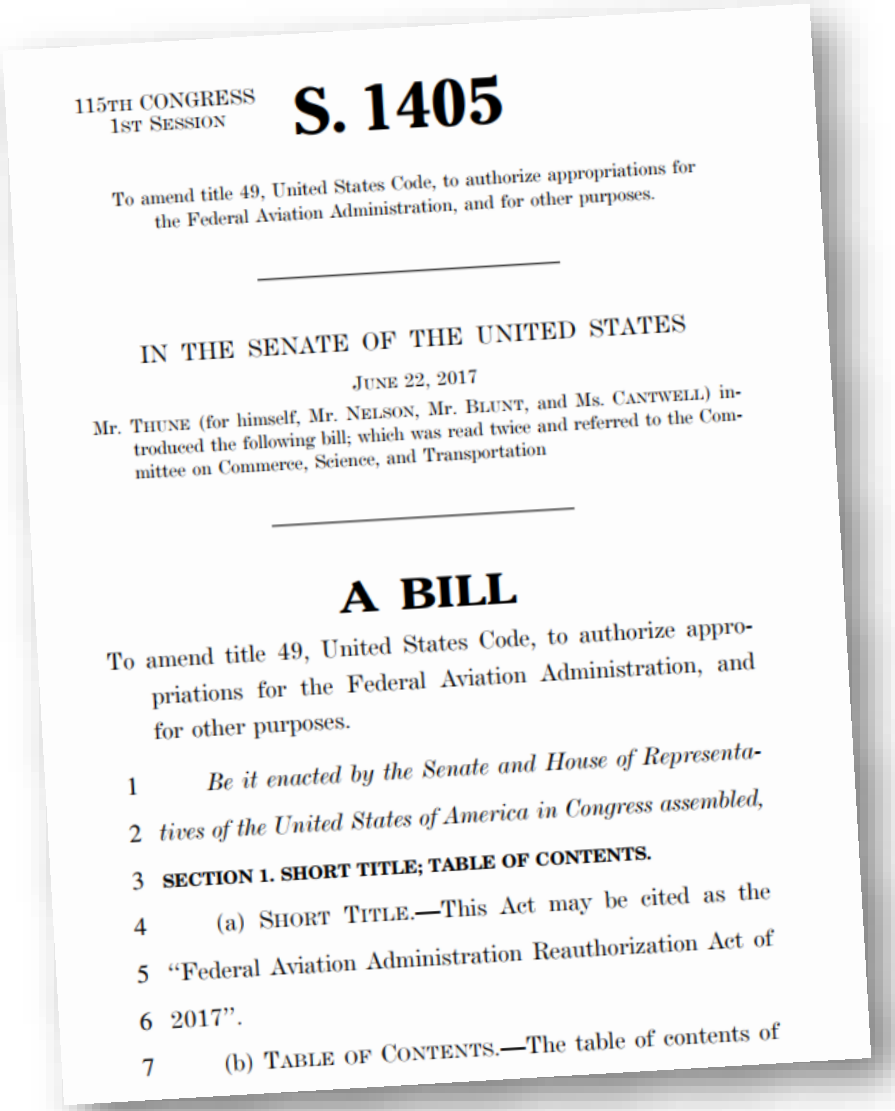
Structured Training Pathways

- Bridge gap between pilot training and qualification, providing *additional* structured training before a pilot is released to line flying.
- Incorporate rigorous screening, testing, academics, checks, audits & more.
- Use high-quality simulators to prepare pilots for scenarios they don't usually encounter when building flight hours, like **icing on the wing** or **losing an engine.**
- Airlines propose to offer additional, comprehensive structured training programs that FAA could approve if they *enhance safety*.

WASHINGTON'S ROLE IN RECOVERY

Requested Actions for Policymakers

- Encourage FAA to approve structured training pathways offered by certificated air carriers for credit toward a R-ATP certificate in cases where they *enhance safety*.
- Encourage FAA to evaluate new R-ATP pathways and provide credit for scenario-based structured training methods, such as high-fidelity flight simulators.
- Open financial avenues to support pilot training: expand student loan coverage, establish loan forgiveness programs; ensure GI bill funding; and create tax incentives for employer-based programs.



115TH CONGRESS
1ST SESSION

S. 1405

To amend title 49, United States Code, to authorize appropriations for the Federal Aviation Administration, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JUNE 22, 2017

Mr. THUNE (for himself, Mr. NELSON, Mr. BLUNT, and Ms. CANTWELL) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

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A BILL

To amend title 49, United States Code, to authorize appropriations for the Federal Aviation Administration, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the "Federal Aviation Administration Reauthorization Act of 2017".

(b) TABLE OF CONTENTS.—The table of contents of

FAA Reauthorization

- Senate Commerce Committee Chairman John Thune (R-SD) included language in the Senate FAA Reauthorization that affirms and expands FAA's authority to approve additional structured training pathways.
- Senate Minority Leader Chuck Schumer (D-NY) has threatened to filibuster FAA reauthorization over the pathway language.
- This safety-enhancing solution improves pilot training, allows airlines to invest more to support pilot education, and protects small community air service across the country.


Thank you.