REGIONAL AIRLINES ARE CRITICAL INFRASTRUCTURE
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.

Regional Airlines are Critical Infrastructure

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

64% of U.S. airports with scheduled passenger air service in 2016

U.S. Regional airlines operated

42% 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

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

Estimated Active Pilot Certificates Held by Category Ages 20-59
Federal Aviation Administration U.S. Civil Airmen Statistics, Table 12

-20.6% since 2009
-992 per month
-33 per day
Fewer New Certificates Across All Categories

Original Airmen Certificates Issued by Category
Federal Aviation Administration U.S. Civil Airmen Statistics, Table 17
“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
Negative ATP Trend Despite Change
ATP Certificate Issuances Close-up

Original ATP Certificates Issued by Year

- 2008: 5,204
- 2009: 3,113
- 2010: 3,072
- 2011: 4,677
- 2012: 6,396
- 2013: 8,346
- 2014: 7,749
- 2015: 6,544
- 2016: 9,520
- 2017: 4,449

- PL 111-216
- FOQ Rule
- Practical Exam Window Closes
All Categories Declining

Original Airmen Certificates Issued by Category

Federal Aviation Administration U.S. Civil Airmen Statistics, Table 17

- Private
- Commercial
- Airline Transport

Calendar Year


Original Airmen Certificates Issued

0 10,000 20,000 30,000 40,000 50,000 60,000
Shrinking Age-Qualified Pilot Pool

18.5% fewer pilots younger than Age 65 in 2017 vs. 2009.
Aging Pilots in all Categories

Average Age of Active Pilots by Category
Federal Aviation Administration U.S. Civil Airmen Statistics, Table 13

- Private
- Commercial
- Airline Transport
Aging ATP Pilots

Average Age of Active Pilots by Category
Federal Aviation Administration U.S. Civil Airmen Statistics, Table 13

- 2002: 46.6 years
- 2017: 50.6 years
FORECASTS
Forecast Pilot Supply & Demand Imbalance

- **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

Major Airlines Hiring Forecast

Source: University of North Dakota Pilot Supply Forecast 2016
Cumulative Shortages Predicted

(Analysis does not include regional airline staffing needs)

Forecast Yearly and Cumulative Shortages of Pilots to Staff the U.S. Airline Fleet

Includes new pilots entering the workforce; Reflects only the major airline cumulative shortage

Source: University of North Dakota Pilot Supply Forecast 2016
ECONOMIC IMPACT
Small Airports Could Soon Be Doomed Thanks to America’s Growing Pilot Shortage

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.

**Age of economic expansions since 1945**

The U.S. is on track for the longest expansion ever

- March 1991 to March 2001: 120 months
- February 1961 to December 1969: 106 months
- **June 2009 - ongoing**: 103 months
- December 1982 to July 1990: 92 months
- November 2001 to December 2007: 73 months
- March 1975 to January 1980: 58 months
- October 1949 to July 1953: 45 months
- May 1954 to August 1957: 39 months
- October 1945 to November 1948: 37 months
- November 1970 to November 1973: 36 months
- April 1958 to April 1960: 24 months

Source: National Bureau of Economic Research
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.

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
The pilot shortage is a shared problem.
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.

Gen. David Goldfein, U.S. Air Force Chief of Staff

“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.”

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
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.
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 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

Source: https://www.bls.gov/oes/tables.htm
2013 FOQ RULE IMPACTED PILOT SUPPLY AND PROFICIENCY
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.
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.
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

"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

"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."

Former FAA Administrator Randy Babbitt
House Transportation & Infrastructure Committee hearing on Aviation Safety and Airline Pilot Training, February 4, 2010

"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
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 best outcomes.**

Source: https://www.pilotsourcestudy.org/
STRUCTURED TRAINING PATHWAYS ENHANCE SAFETY
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.
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.