No state relies on air taxis and commuter planes as heavily as Alaska. Many Alaska communities are accessible only by air or water, and for many, flights are the only reliable form of year-round transportation. Because of that critical link, aviation provides services here that drivers would cover elsewhere, including carrying mail, groceries, and supplies and providing medical transport.

Over 1 percent of the state’s population has some level of pilot certification, which is 3.6 times the U.S. average. Per capita, Alaskans own six times the national average number of aircraft, and the state has four times the number of airports per square mile.

Pilots’ contribution to the state’s economy is just as much of a standout nationally. In 2012, their share of the state’s gross domestic product was $7.5 million, fourth-highest in the nation.

The industry’s backbone

As of July 2015, Alaska had 10,378 active pilots, of which 17.1 percent were commercial pilots and 28.4 percent were airline transport pilots or flight engineers. The rest were student pilots, private pilots, and flight instructors.

Where Alaska’s Pilots Are Located

**BY BOROUGH OR CENSUS AREA, 2013**

### Airline Pilots

- Juneau: 6.1%
- Ketchikan: 2.1%
- Mat-Su: 2.4%
- Kenai Peninsula: 3.3%
- Fairbanks: 4.0%
- All Other: 9.0%
- Anchorage: 73.1%

### Commercial Pilots

- Anchorage: 22.0%
- Juneau: 12.5%
- Ketchikan: 7.7%
- Mat-Su: 9.4%
- Kenai Peninsula: 10.2%
- Fairbanks: 10.3%
- NW Arctic: 7.8%
- Dillingham: 2.5%
- Kodiak: 2.5%
- Lake and Peninsula: 3.7%
- All Other: 7.1%
- Bethel: 6.1%

**Source:** Alaska Department of Labor and Workforce Development, Research and Analysis Section
Airline pilots, the largest group, typically fly cargo and passengers on scheduled routes using large, multi-engine aircraft. This group includes their copilots and flight engineers.

Commercial pilots fly fixed-wing planes or helicopters, sometimes on nonscheduled routes, for rescue operations, ambulance services, health care, tourism, firefighting support, and transportation. Pilots for Alaska’s companies that provide flight service to smaller communities are commercial pilots.

Harsh conditions and long hours

Alaska pilots flew more than 5.7 million air miles in 2014, or about 5,492 miles per active pilot.

During those trips, they transported about 179 million pounds of freight and 173 million pounds of mail, which was 5.8 times the national average. They also flew 3.3 million passengers, or 1.4 times the national average.

Long trips frequently involve unforgiving terrain, marginal weather, and widely dispersed airports and highways. Radio and RADAR coverage is often limited.

Irregular schedules and a significant time away from home are common. Most pilots are required to abide by Federal Aviation Administration flight duty limitations, which restrict their work to between nine and 19 hours at a time. Airline pilots fly an average of 75 hours a month, and work an additional 150 hours on other duties. Commercial pilots fly fewer hours each month, averaging 30 to 90, but often have more responsibilities outside of flying.

Commercial pilot work is also more seasonal. In 2014, 40 percent of commercial pilots worked in all four quarters of the year versus 63 percent of airline pilots.

Airline pilots nationally tend to be older and more experienced, with an average age of 49.8 versus 45.5 for commercial pilots. In Alaska, however, it’s the reverse — 44 percent of resident commercial pilots are 45 or older versus 37 percent of resident airline pilots.

Flight school and required hours

Alaska has 10 pilot training schools, three of which have Airline Transport Pilot programs, which issue the certifi-

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### Plane Crash Rates Climb Through Summer

**ALASKA MONTHLY AVERAGE, 1982 THROUGH 2014**

![Plane Crash Rates Chart]

*Source: National Transportation Safety Board*
cate required to become an airline pilot. Trainees must also have a bachelor’s degree and be at least 23 years old. Most begin their careers as commercial or military pilots to get the training and necessary flight time, which is 1,500 hours for the ATP.

Commercial pilots must be at least 18 with a high school diploma and commercial pilot certification. Certifications require 250 hours of flight time and allow pilots to accrue hours for the ATP. Additional ratings may be required, depending on the aircraft and employer.

New pilots at regional airlines generally have about 2,000 hours of flight time, and those starting at major airlines have 4,000 hours. Achieving the entry-level number of hours typically takes less than five years.

**Highest U.S. employment**

Alaska has the highest concentration of employment for both commercial and airline pilots in the country. Nearly three-quarters of Alaska’s airline pilots work in Anchorage, which is the fourth-highest paying municipality in the United States at an average of $145,450 a year. (See exhibits 1 and 2.)

Anchorage also has the nation’s highest concentration of airline pilot jobs, with a location quotient nearly three times that of the next-highest metropolitan area. The location quotient is the ratio of the area’s concentration of jobs to the national average.

Anchorage was also the top location for commercial pilots, though commercial pilots were more spread out across the state. They also made less than airline pilots. In 2014, commercial pilots in Alaska made an average of $82,430, which was 7.7 percent below the national average.

Although airline pilot employment is projected to drop by 7 percent nationally between 2012 and 2022, Alaska’s employment is expected to grow by 5.4 percent.

For commercial pilots, anticipated employment growth is 9 percent nationally, which is roughly the same as for all occupations combined, and 13 percent for Alaska.

Because pilots have a mandatory retirement age of 65, both occupations are expected to have very high numbers of job openings in the next decade.

**It’s become safer in recent years**

Alaska has the highest number of per capita plane crashes of any state. The necessity of air travel in Alaska, combined with unique meteorological conditions and mountainous terrain, make flying here more hazardous than in most states.

Accidents tend to peak in the summer and early fall. (See Exhibit 3.) Per capita, accidents during peak months are four to five times higher on average than the lower spring and winter months.

Though Alaska’s per capita accidents remain No. 1 nationally, the state’s percentage of nationwide crashes has dropped significantly since 1982. (See Exhibit 4.)

The 1990s were a deadly decade, but a combination of infrastructure improvements including weather cameras, better weather reporting, and advanced GPS tracking systems helped reduce fatal crashes in Alaska by more than half from 2000 to 2010. The occupational fatality rate also dropped by 40 percent from the ‘90s.

The total number of crashes in Alaska has steadily decreased, from a high of 220 in 1984 to 79 in 2014. Of those, just 14 involved commercial and airline pilots.

This year, there have been 39 airplane crashes as of July, six of which were fatal. Of those, five total crashes, one fatal, involved a confirmed commercial operator. However, more than 40 percent didn’t specify the type of flight.

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