FBO Statistics

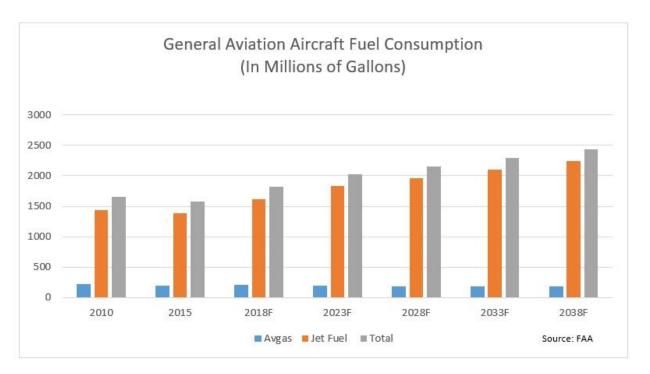
- 75% of public-use airports with a 3000' or greater paved runway have one FBO
- There are 3,534 public-use airports with a 3000' or greater paved runway, featuring 3,384 FBOs.
 - 789 of these FBOs only provide Avgas, 2,595 provide Avgas and Jet.
- There are 1,313 public-use airports with less than a 3000' paved runway.
 - O Approximately 75% of these airports do not have any fuel and those remaining will primarily have Avgas only.

Data Source: Aviation Management Consulting Group (AMCG)



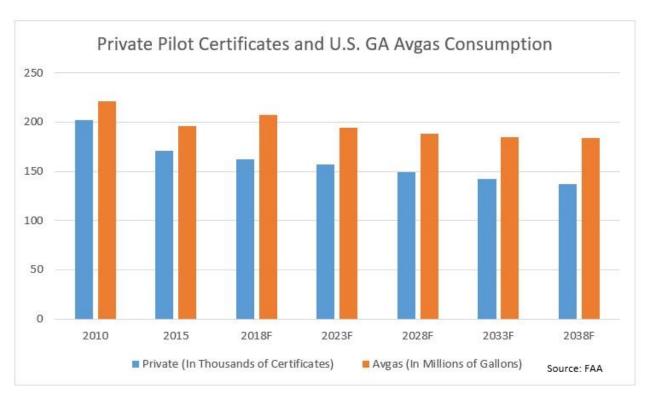
Contemporary FBO Market in Relation to FBO Locations

- There are 3,537 public-use airports with a 3000' or greater paved runway featuring 3,384 FBOs, an increase of 2.5% between 1995 and 2015
- 75% of public-use airports with a 3000' or greater paved runway have one FBO
- Approximately 81.75% of those airports have one or two FBOs, compared to 80.75% of airports in 2010, 81.25% in 2005, 82% in 2000, and 81.25% in 1995
- This is a remarkably stable number given the changes we have seen in the general aviation industry during that same time



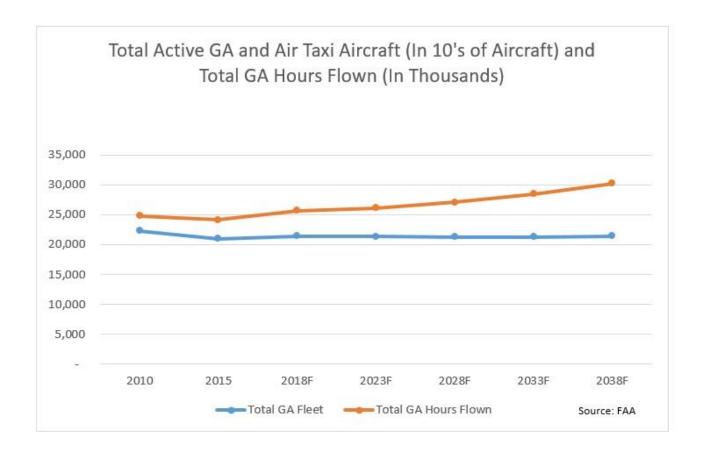
General Aviation Aircraft Fuel Consumption from 2010 to the forecasted consumption of avgas in 2038

- Derived from the FAA APO Estimates.
- The forecasted consumption of avgas is projected to decrease by 0.6% each year from 2018-2038 versus the projected growth per annum of 1.7% for jet fuel and a projected growth per annum of 1.4% for total fuel consumed.
 - O The data includes:
 - Fixed wing piston single engine and fixed wing piston multi-engine
 - Fixed wing turbine turbo-prop and fixed wing turbine turbo-jet
 - Rotorcraft piston and rotorcraft turbine
 - Experimental/other
 - Light Sport



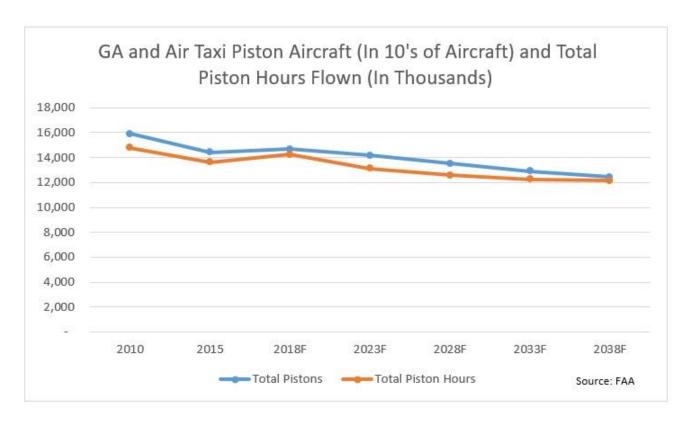
Trend of Private Pilot Certificates and U.S. General Aviation Avgas Consumption

- Derived from FAA data
- The forecasted number of private pilot certificates is projected to decrease by 0.9% each year from 2018-2038 versus the projected decline per annum of 0.6% for avgas



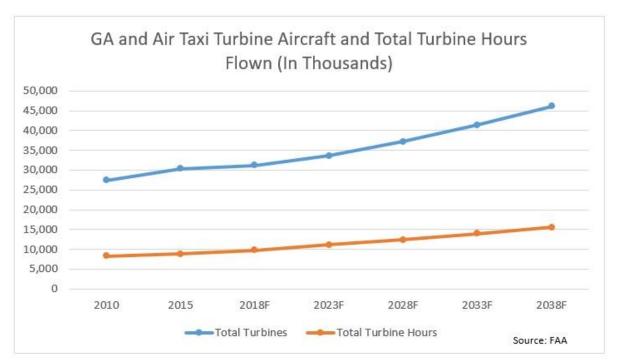
GA Fleet and Hours Flown

- Source: 2001-2010, 2012-2016, FAA General Aviation and Air Taxi Activity (and Avionics) Surveys.
- Note: An active aircraft is one that has a current registration and was flown at least one hour during the calendar year.
- The forecasted total general aviation fleet is projected to be 0.0% each year from 2018-2038 versus the projected increase per annum of 0.8% for total general aviation hours.
- This graph illustrates the GA fleet size is forecasted to track stagnant while the total GA hours is forecasted for higher utilization.



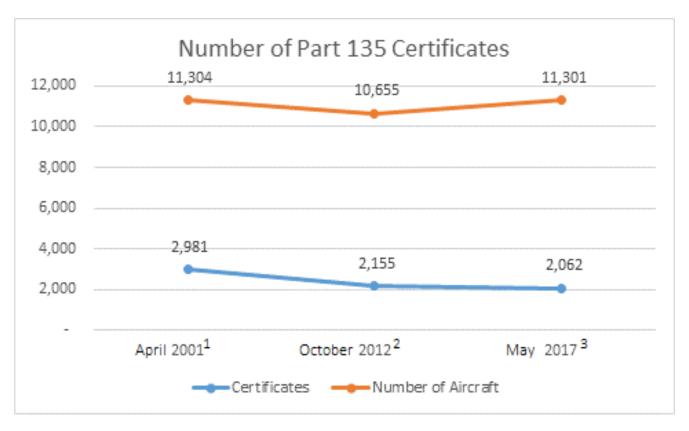
Piston Aircraft and Total Piston Hours Flown

- Source: 2001-2010, 2012-2016, FAA General Aviation and Air Taxi Activity (and Avionics) Surveys.
- Note: An active aircraft is one that has a current registration and was flown at least one hour during the calendar year
- The forecasted total piston aircraft fleet is projected to decrease by 0.8% each year from 2018-2038 versus the projected decrease per annum of 0.8% for total piston aircraft hours flown.



Turbine Aircraft and Total Turbine Hours Flown

- Source: 2001-2010, 2012-2016, FAA General Aviation and Air Taxi Activity (and Avionics) Surveys.
- Note: An active aircraft is one that has a current registration and was flown at least one hour during the calendar year
- Note: Includes Turboprop and Turbojet Aircraft
- The forecasted total turbine aircraft fleet is projected to increase by 2.0% each year from 2018-2038 versus the projected increase per annum of 2.4% for total turbine aircraft hours flown.



Sources:

- Report to Congress Under Section 735 of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century
- 2 Study of Operator Regulated Under Part 135, FAA Modernization and Reform Act of 2012
- 3 Download of data from FAA at http://av-info.faa.gov/dd sublevel.asp?Folder=%5CAirOperators on May 30, 2017

Data Includes:

- On-Demand Passenger, Passenger & Cargo, Cargo Only Operators and Scheduled Part 135
 Operators ("commuters")
- Operators with dual 121/135 certification are excluded from 2001 and 2012 data, but included in other dates.

April 2016 Study of Operators Regulated Under Part 135

<u>Automatic Dependent Surveillance-Broadcast (ADS-B) Equipage</u>

• Learn more at **Equip ADS-B**

- By January 1, 2020, aircraft operators must be equipped with ADS-B Out to fly in most controlled airspace. The FAA's <u>website</u> provides further information on the agency's <u>equipage rebate</u> program, Exemption 12555, links to federal regulations, articles and ACs, and FAQs
- 14 CFR 91.225 and 14 CFR 91.227 provides further information on ADS-B Out equipment, use, and performance requirements.

Current ADS-B Industry Adoption

- As of July 1, 2018, roughly 52% of the business jets registered in the United States have not yet complied with the upcoming ADS-B mandate. That means that a little over 7,000 business jets do not yet have ADS-B Out capability.
- At the current rate of ADS-B adoption, which in July was roughly 203 aircraft per month, about 3,300 aircraft will still need ADS-B when the mandate goes into effect. Those aircraft, for all intents and purposes, will be grounded. For the entire fleet to be ADS-B compliant, 406 aircraft need to be updated every month from now until the mandate goes into effect.
- This data was provided by Duncan Aviation. Duncan Aviation's data analytics team compiles ADS-B compliance information from several different sources, including the company's proprietary customer database and the FAA, to track ADS-B compliance in the U.S. business jet fleet. The data is updated every two months.

All US Aircraft Equipage & Avionics Performance

