



State of Flight Training

2021 Survey and Report



The State of Flight Training 2021

Welcome to Redbird's comprehensive resource on the current state of the flight training industry. This report is designed to take the pulse of the industry and become your go-to resource for strategic data. This is our first edition of this report, but it won't be our last.

Despite the unprecedented year we just faced, the flight training industry is thriving, and the future looks brighter than it has in decades. Redbird's goal is to provide the benchmarks and insights to help the industry grow and its customers succeed.

Join the **Migration**.



Thank you to our Partners

This report is only possible because of the many organizations that care deeply about the flight training industry. Those listed below were indispensable in helping us shape our questions and the analysis of the responses. Additionally, they were critical in reaching a wide enough audience that we feel strongly that the results are valid and represent a quality snapshot of the industry.



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Methodology

We collected the data used to generate this report via two surveys.

1. A survey of industry participants in which respondents were asked to select their role in the industry and then asked different questions based on their response.
2. A survey of the US general public via Google Surveys that we used to gauge interest in aviation for the wider population.

We learned a lot from these surveys, both from the data we collected and from the improvements we can make to conducting them in 2022.



Terminology: Industry Roles

1. Flight Training Organization (FTO): A flight school, aviation university program, academy, flying club, or training center that provides flight training of any kind.
2. Independent Instructor: A Certified Flight Instructor who provides training under FAA Part 61 (or equivalent) outside of an FTO.
3. Active Student: A person who has received training for a new certificate or rating in the last three months. This person may already be a licensed pilot, but not a pilot training for proficiency only (for example, a flight review, IPC, or recurrent training).
4. Lapsed Student: A person who started flight training but hasn't received training in the last three months. This does not include licensed pilots.
5. Prospective Student: A person who is considering or planning on starting flight training, but hasn't started yet. This does not include licensed pilots who are planning on starting training for a new rating or certificate.
6. Active Pilot: A licensed pilot who has flown in the last 12 months but isn't receiving training towards a new certificate or rating.
7. Lapsed Pilot: A licensed pilot who has not flown in the last 12 months and isn't receiving training towards a new certificate or rating.



Terminology: FTO Size

The operations and challenges of an FTO vary greatly depending on the size of the organization. To help illustrate the differences, we categorized FTOs by the number of training aircraft in their fleet. While the categorizations are not perfect, they provide a better framework for understanding these critical players in the industry.

1. Small FTO: Operates less than 10 training aircraft.
2. Medium FTO: Operates between 10 and 20 training aircraft.
3. Large FTO: Operates 20 or more training aircraft.



Industry Response

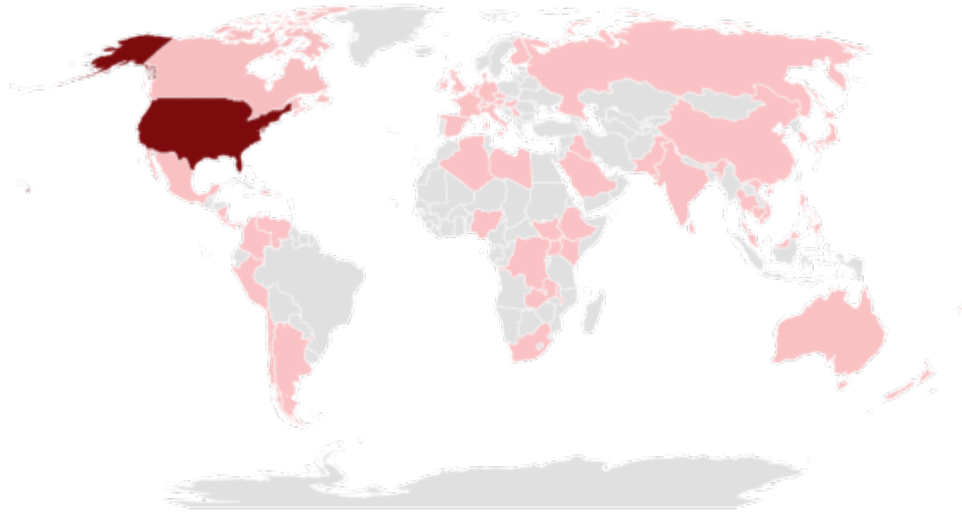
We received over 2,400 individual responses from industry participants. They represent a wide range of ages and aviation backgrounds. Given the survey's focus on flight training, our audience does skew older and more experienced. However, we have a solid representation from a younger demographic, especially among Student Pilots and CFIs working for a Flight Training Organization.

Most training occurs in the US, and this is clearly shown in our geography response distribution. That said, we saw a good number of responses from other areas of the world that actively engage in civil pilot training.



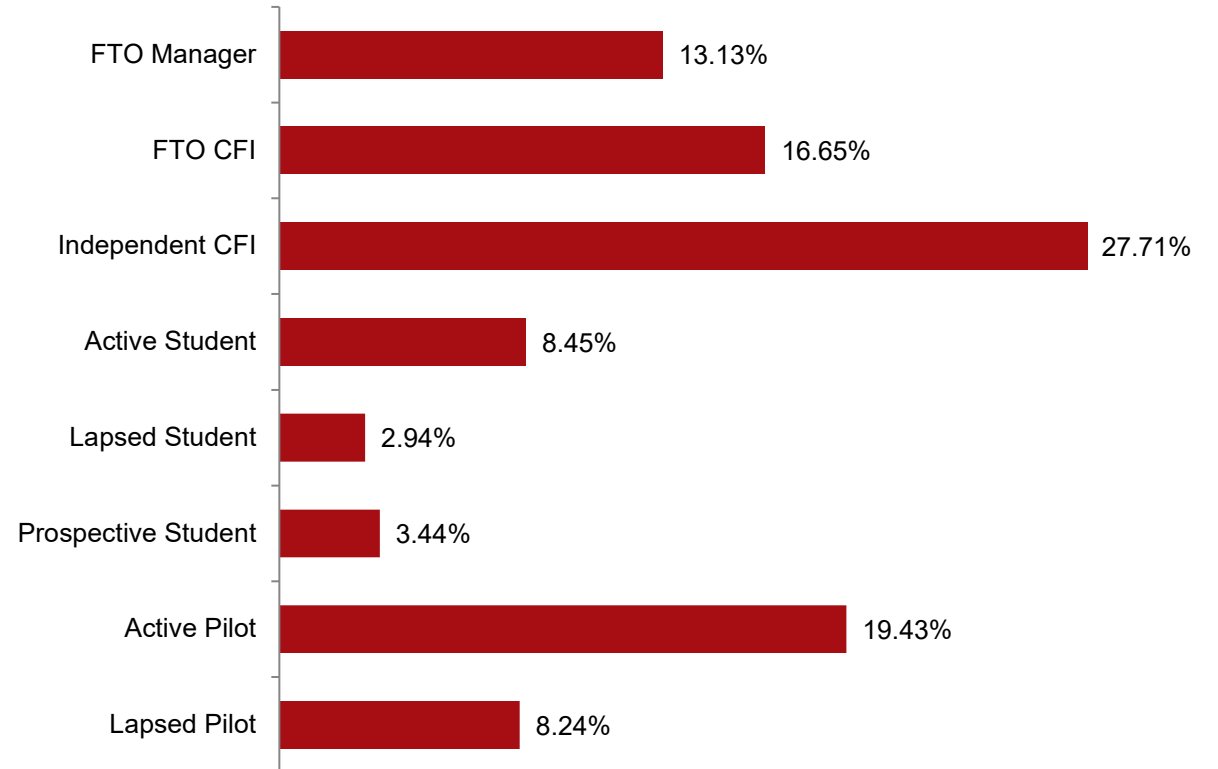
Total Industry Responses

2,414 Responses from Industry Participants



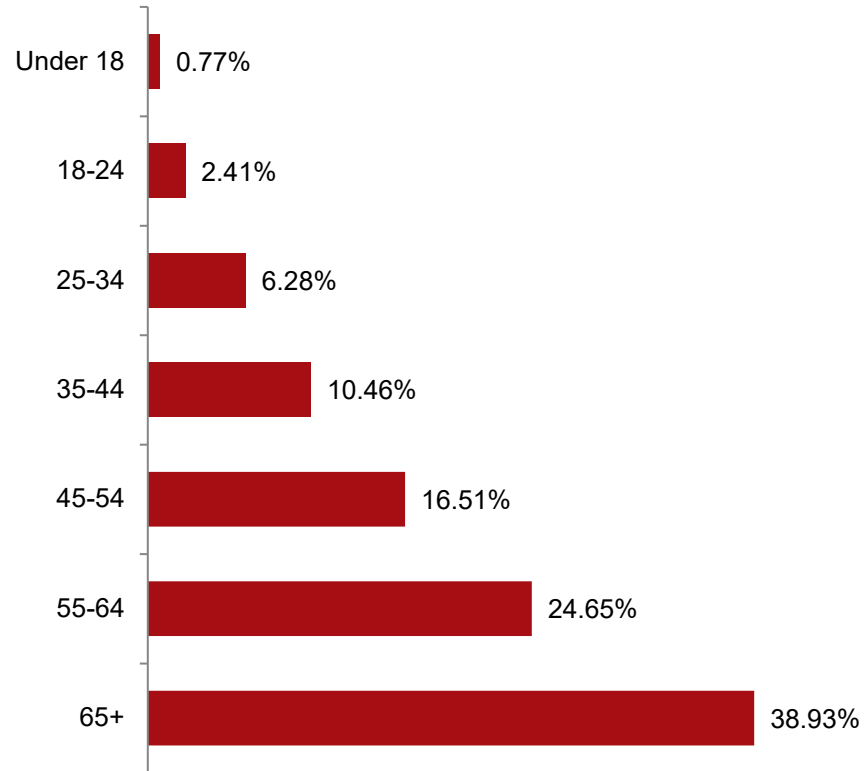
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Industry Role



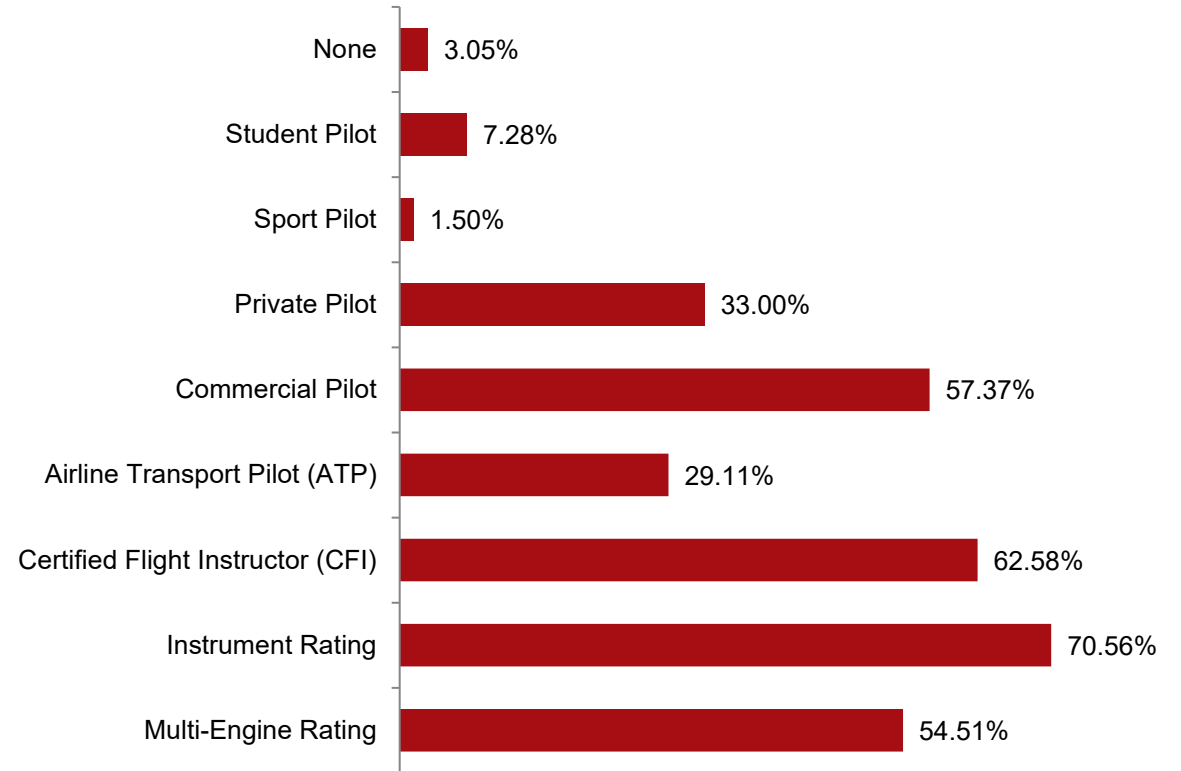
Profile of Respondents

Age Range



Note: Avg age of all FAA Pilot Certificate holders is 44.2 (Source: FAA)

Pilot Certificates and Ratings Held



Flight Training Organizations

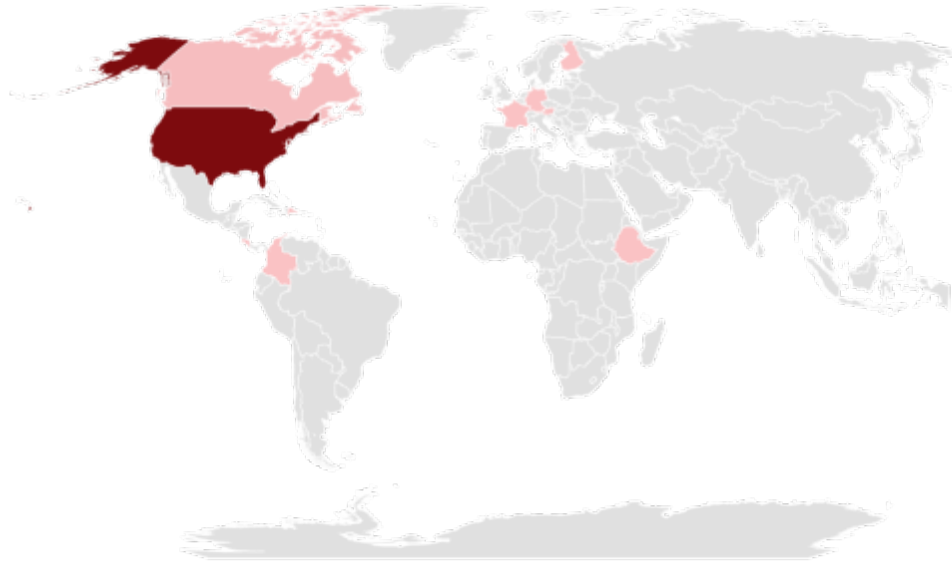
FTOs are the backbone of the industry; most training happens under their direction. One of our goals for the report is to provide insights into their needs, challenges, and operations, so we focused heavily on reaching the owners and managers of FTOs of all sizes.

We received over 300 unique responses for FTOs, which gives us a rich dataset to analyze.



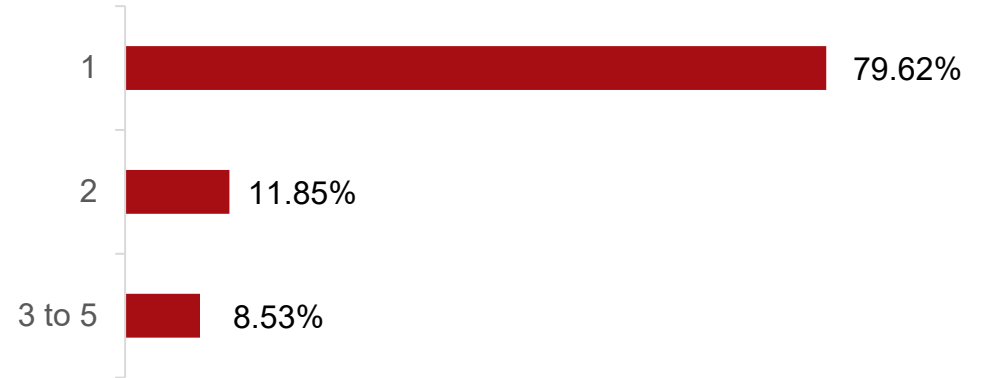
FTOs Represented

315 FTOs Total

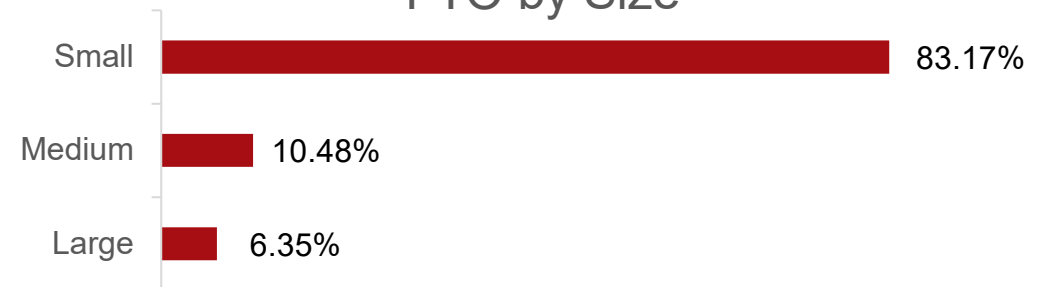


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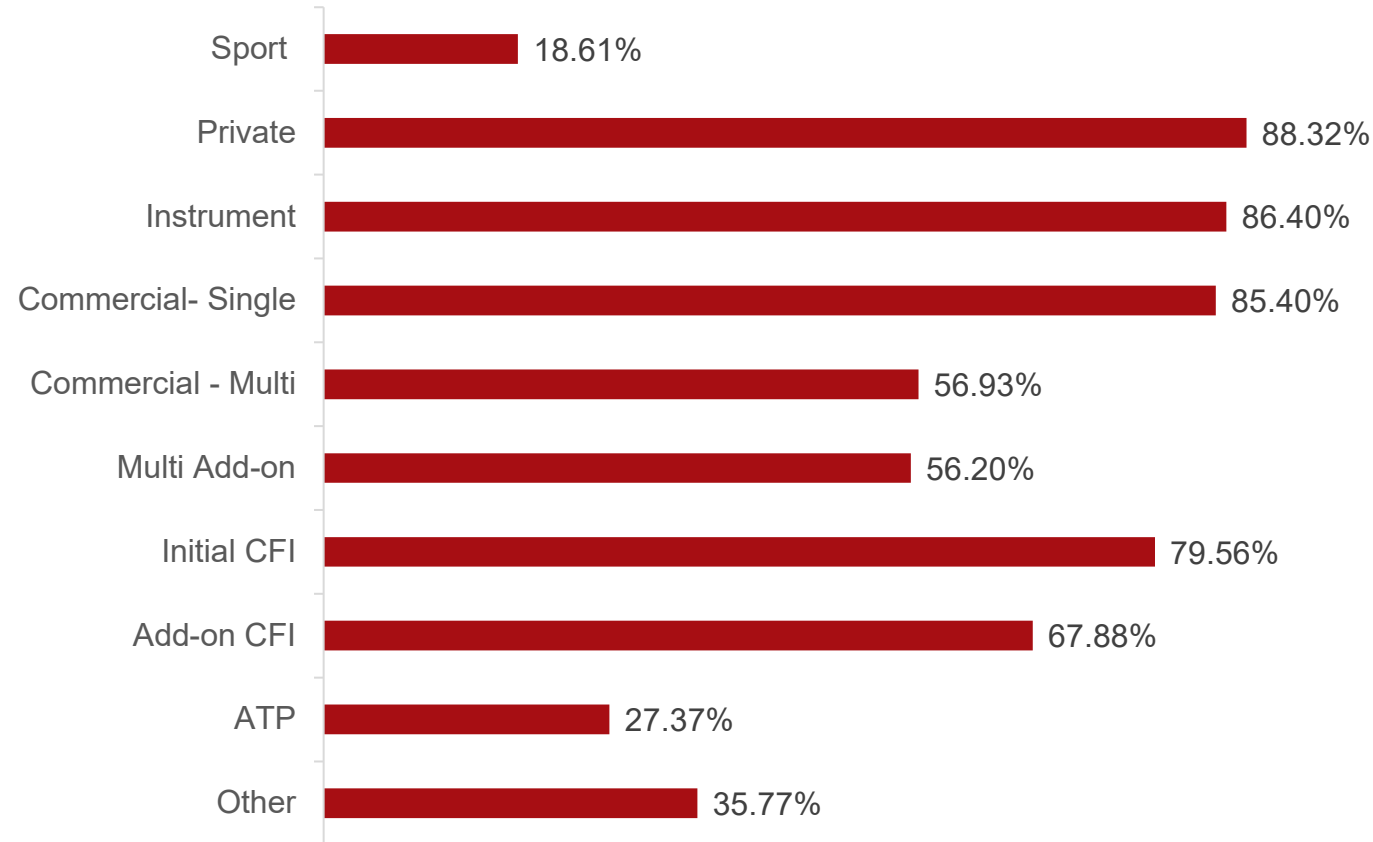
FTO Operating Locations



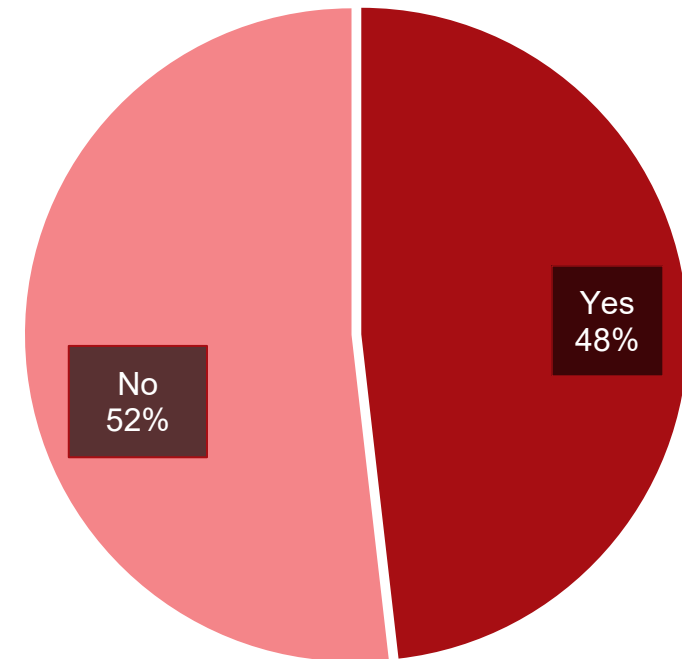
FTO by Size



Training Provided by FTO

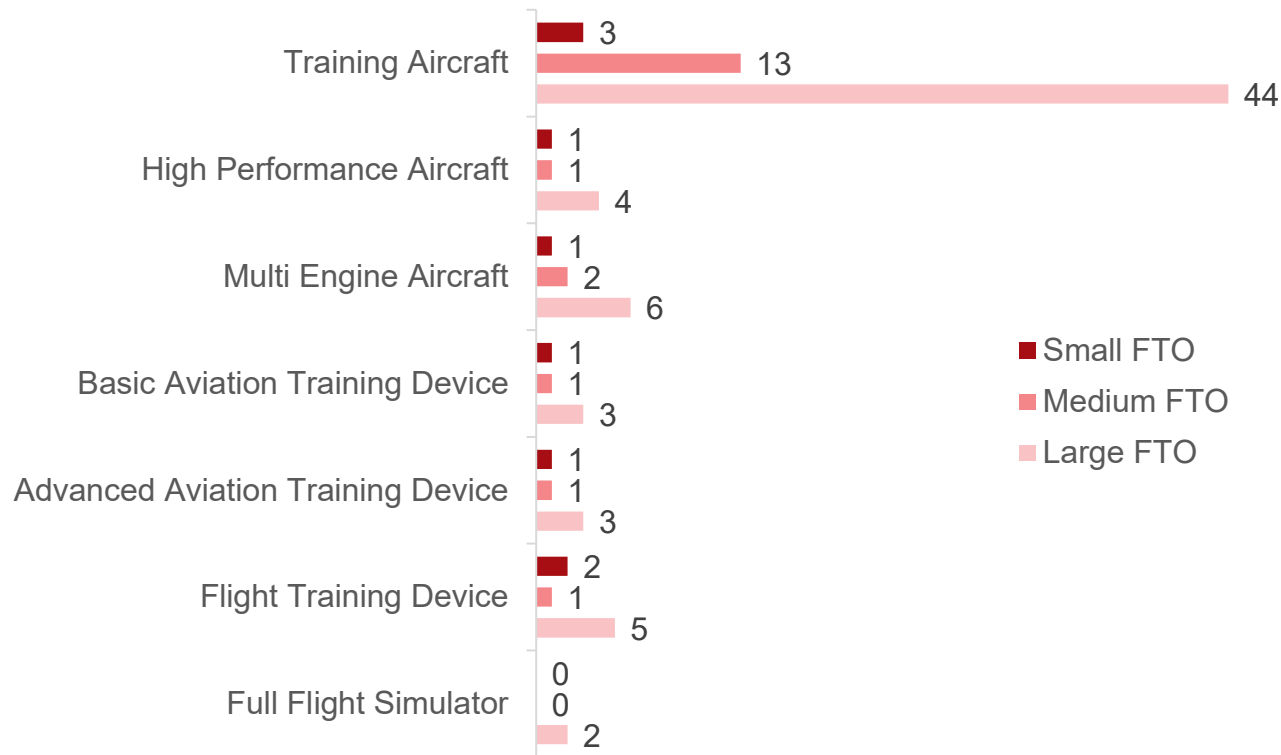


Offers Part 141 Training

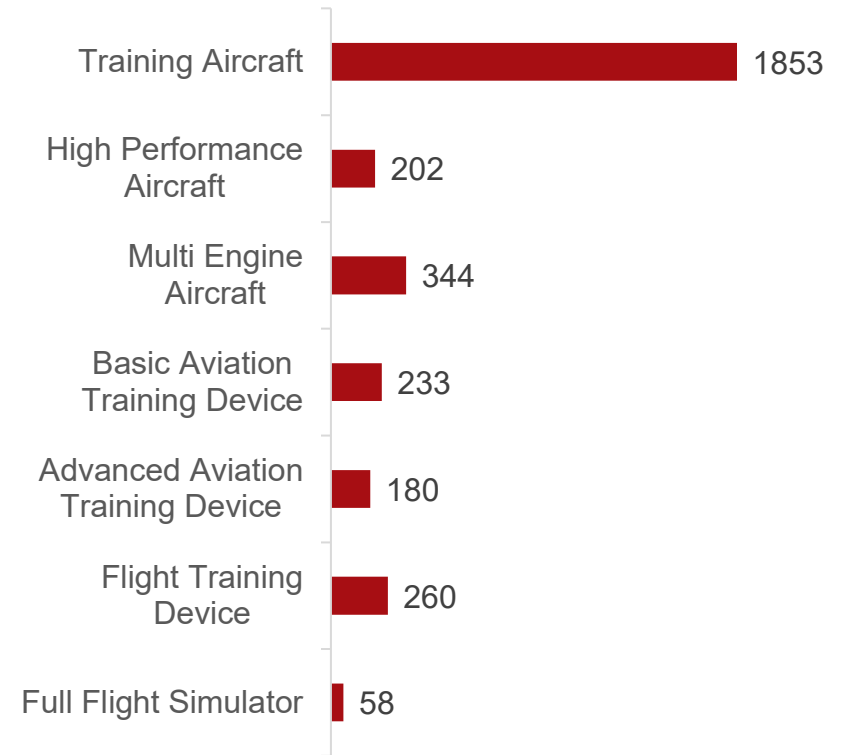


Overall Fleet Composition of FTOs

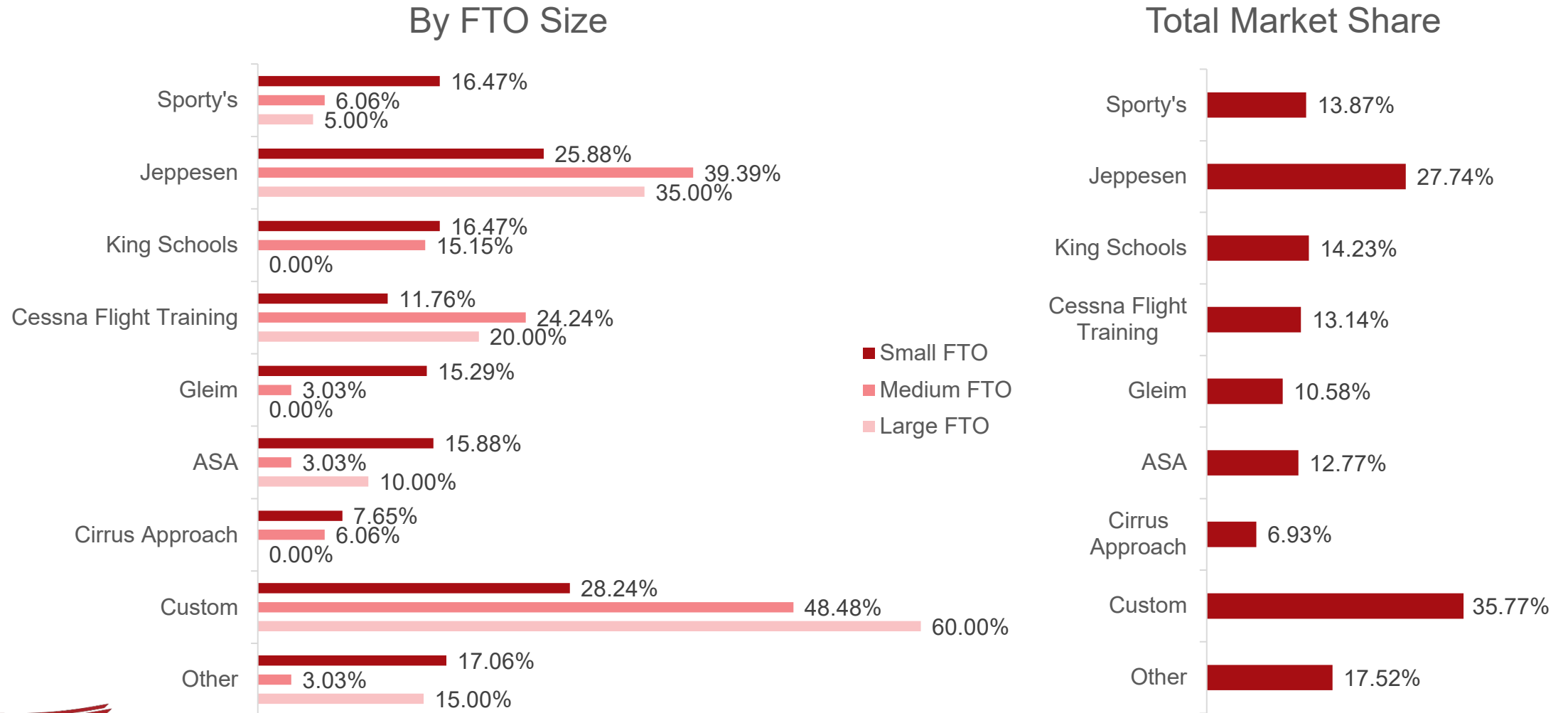
Avg Number of Units per FTO by Type



Total Number of Units in Fleet by Type

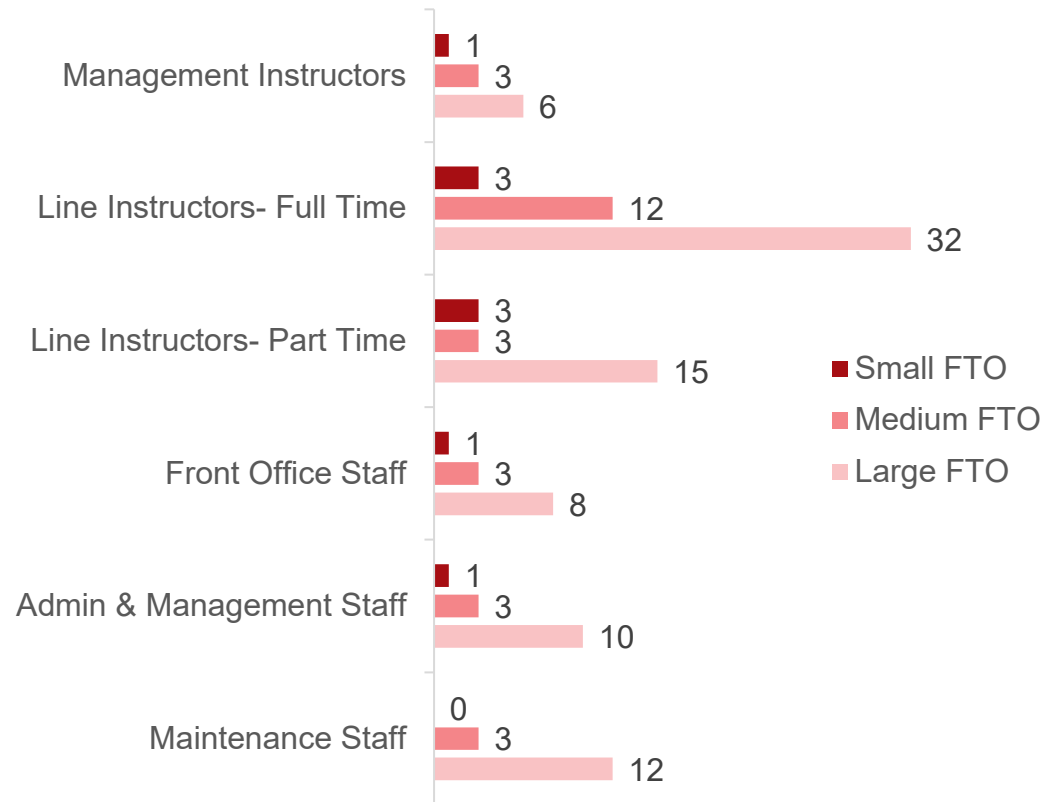


Training Curriculums Used by FTO

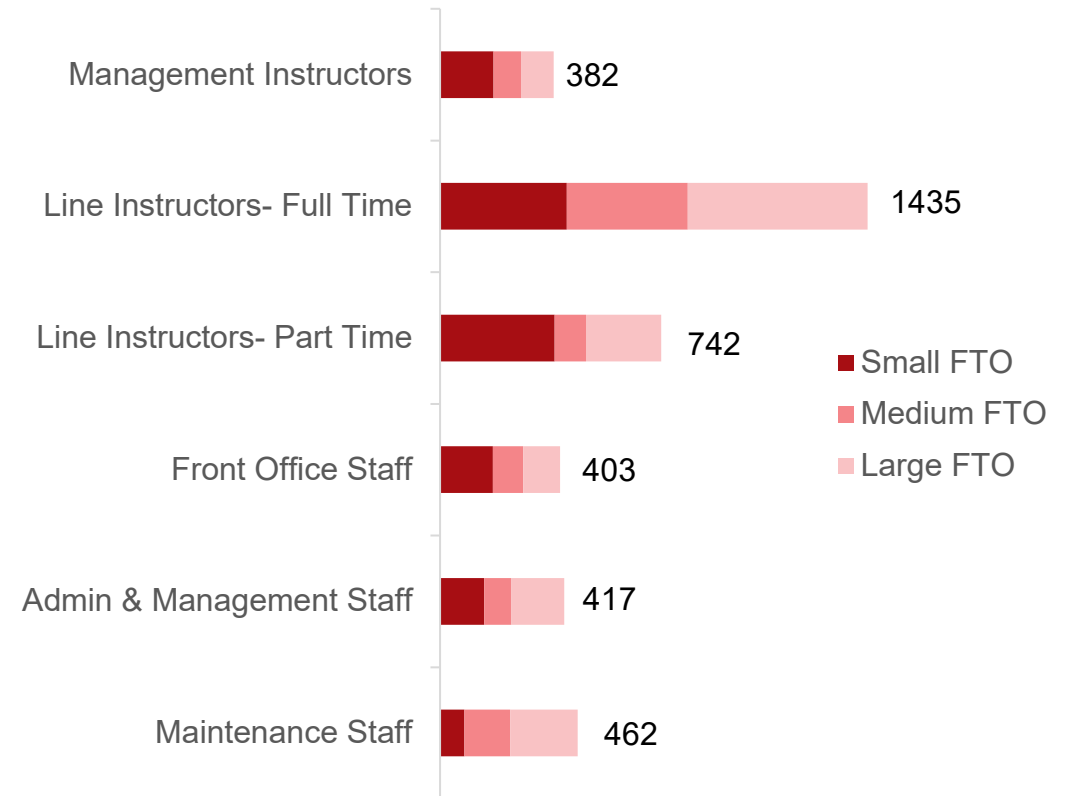


FTO Employee Composition

Avg Number of Employees per FTO

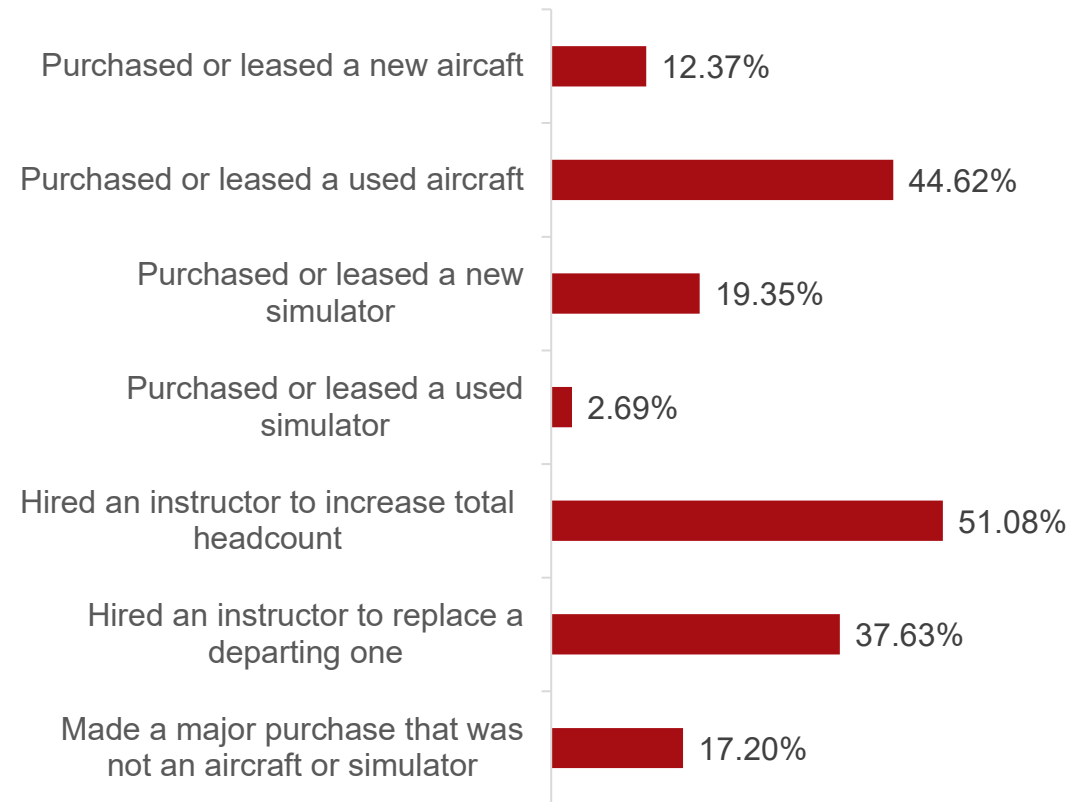


Total Number of Employees by Type

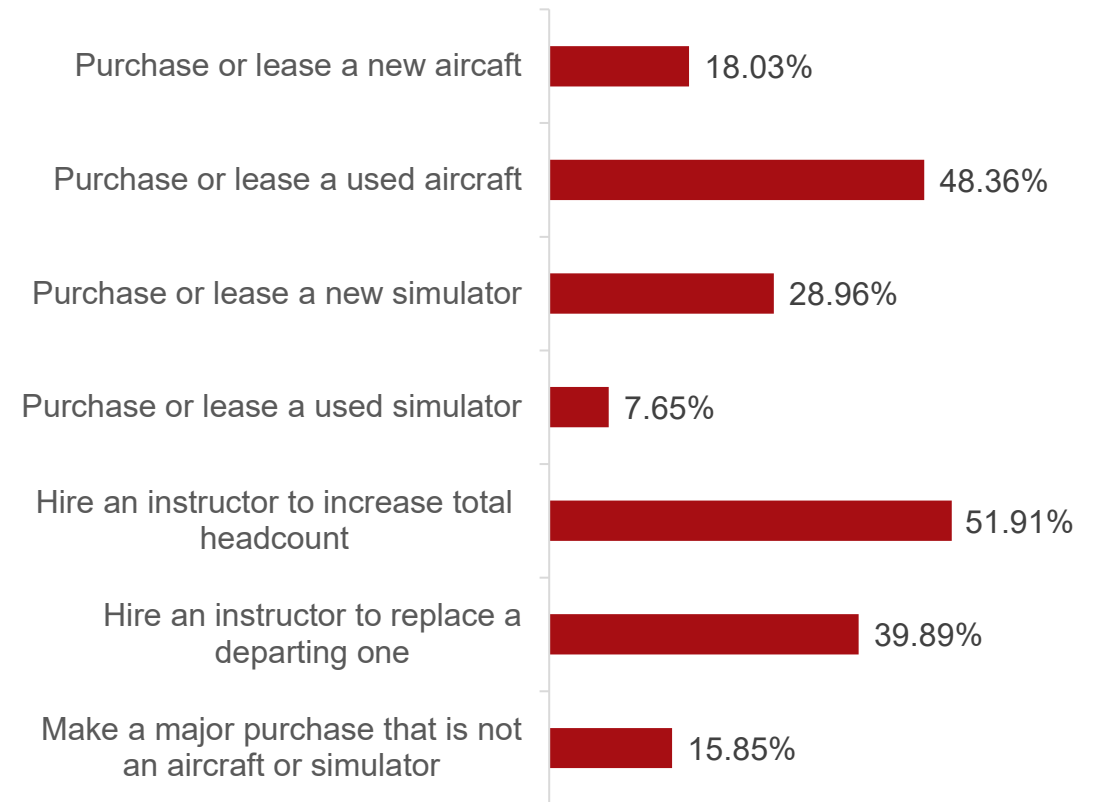


FTO Activities and Plans

Major Activities Completed in 2020



Major Activities Planned for 2021



FTO Challenges in 2020

Top 5

1. COVID Restrictions (3.67)
2. Cost of Insurance (3.49)
3. DPE Issues (2.9)
4. Acquiring New Students (2.86)
5. Aircraft Maintenance (2.76)

Bottom 5

1. Regulatory Issues (2.2)
2. CFI Retention (2.24)
3. Finding & Hiring CFIs (2.33)
4. Airport/Facility Issues (2.41)
5. Financing for Equipment (2.5)



FTO Results and Outlook

Overall Business Rating for 2020



Overall Business Outlook for 2021



Certified Flight Instructors

Flight training would not be possible without Certified Flight Instructors (CFI). All civil flight training done towards a certificate, rating, or endorsement must be provided by a CFI.

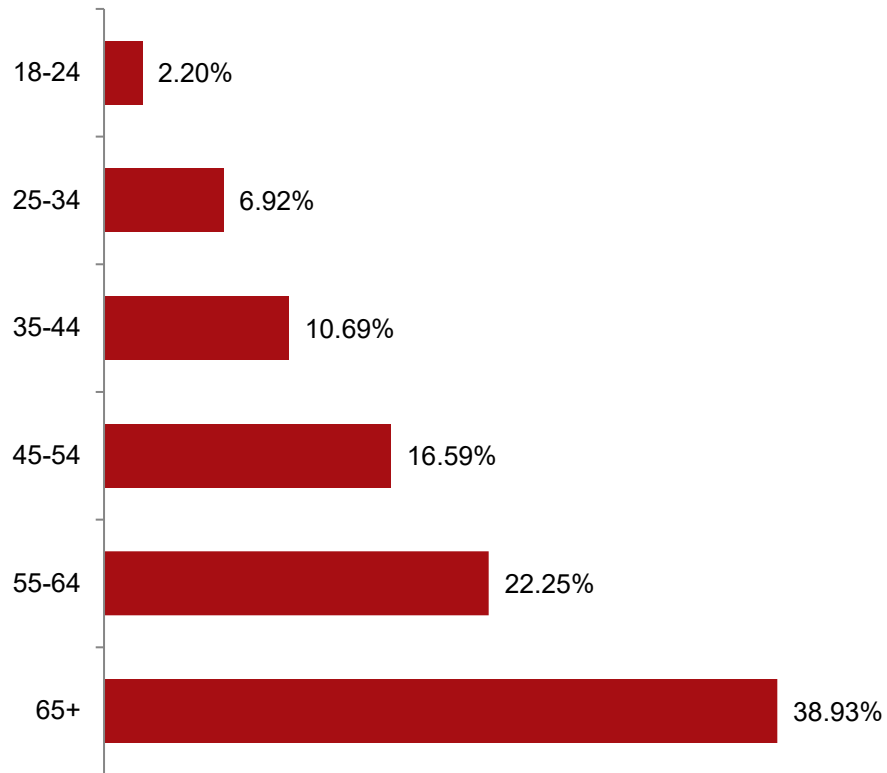
The profiles of CFIs are complex. Some CFIs work for an FTO, and others provide training independently. Some CFIs are building time for a career in the airlines or corporate aviation world, and others are retired or working as full-time instructors with no intention of doing anything else.

Given the diversity of age, experience, motivation, and employment status, the results show a dynamic and varied pool of CFIs. Some are struggling while others are excelling.



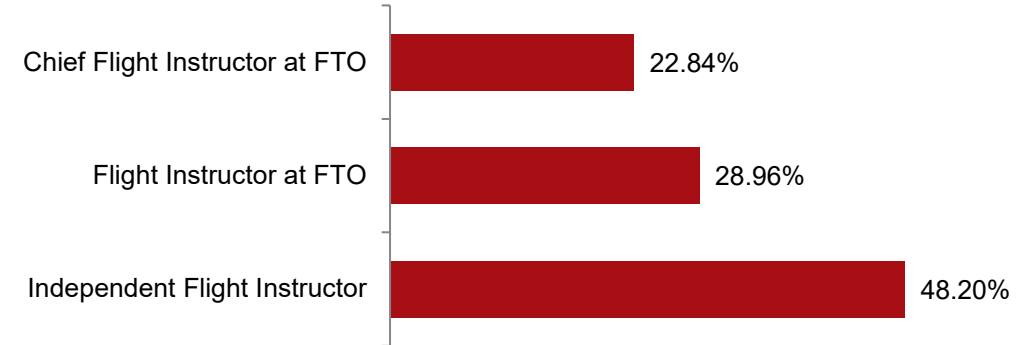
CFI Profiles: All Roles

Age Range

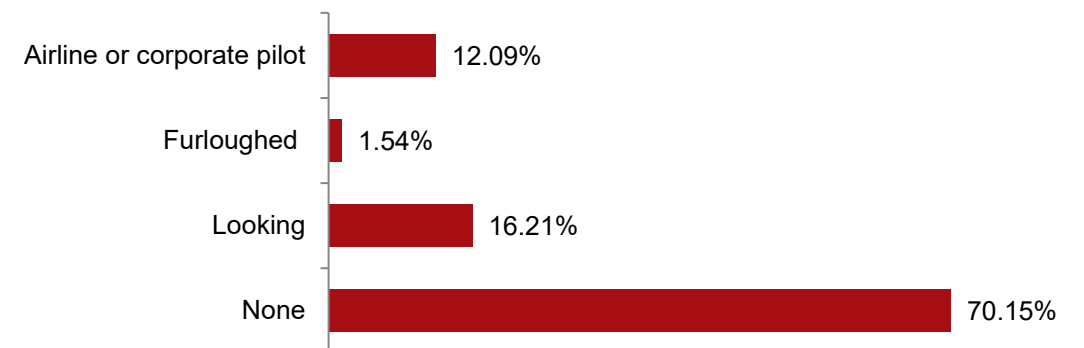


Note: Avg age of all FAA Pilot Certificate holders is 44.2 (Source: FAA)

Role in Flight Training

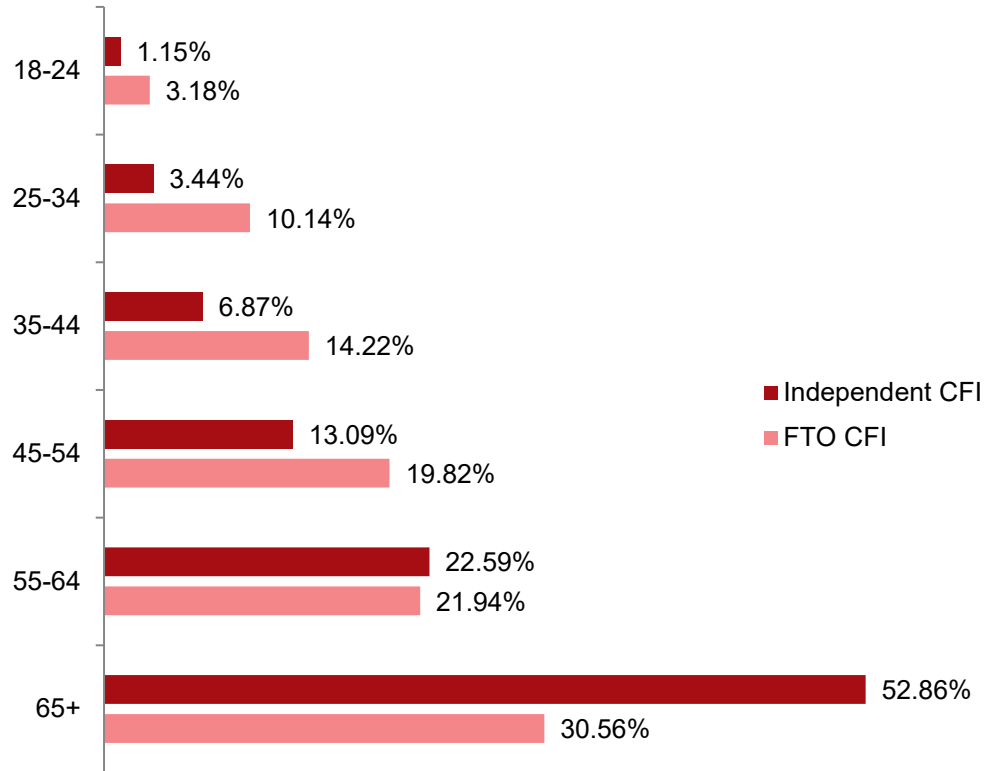


Additional Professional Pilot Roles

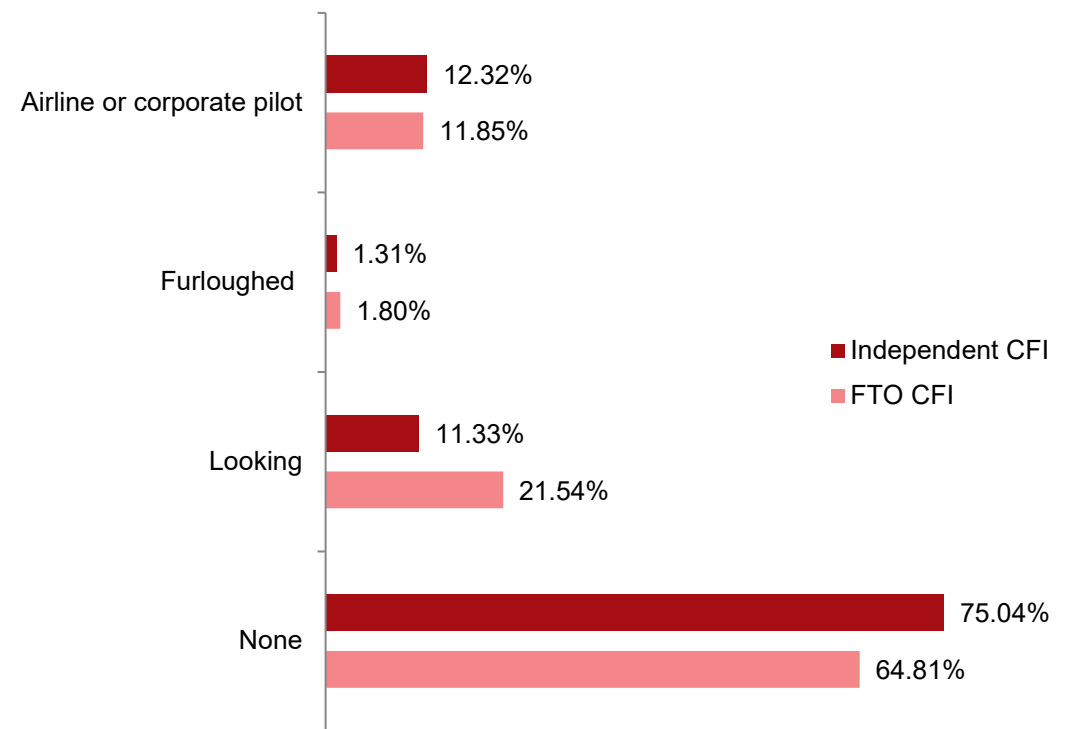


CFI Profiles: Independent vs FTO

Age Range



Additional Professional Pilot Roles

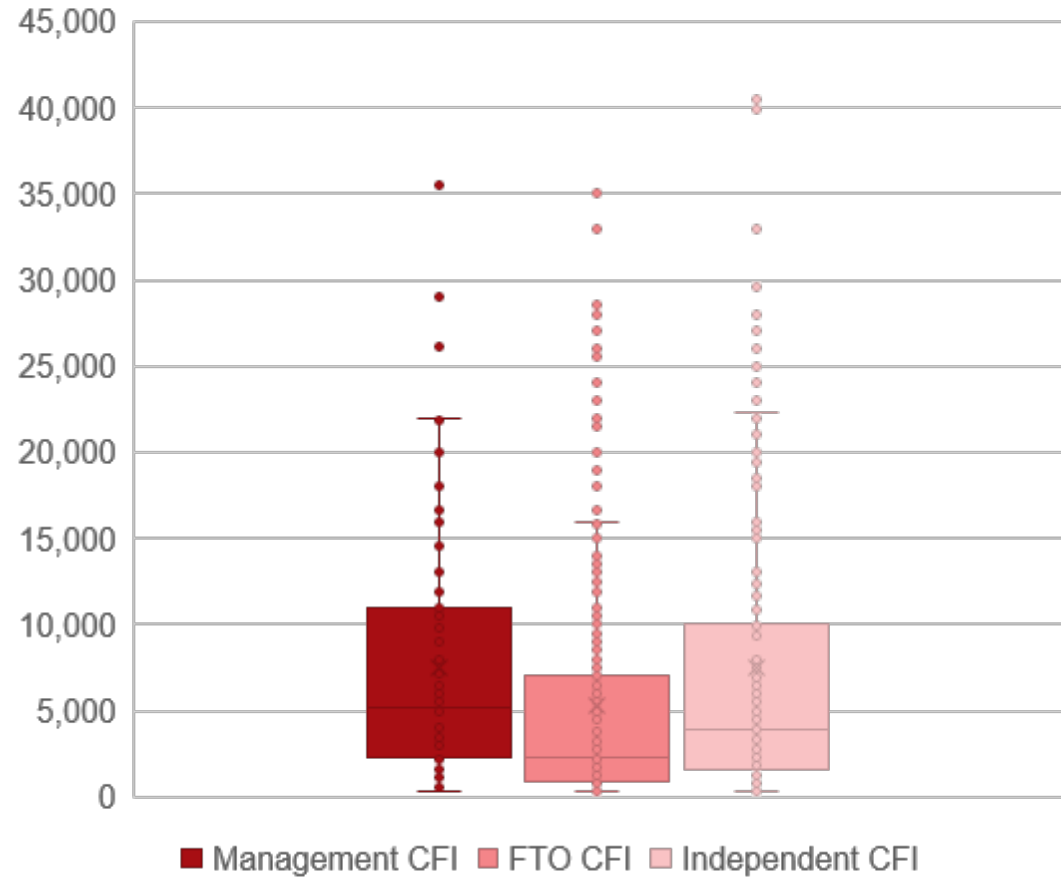


Note: Avg age of all FAA Pilot Certificate holders is 44.2 (Source: FAA)

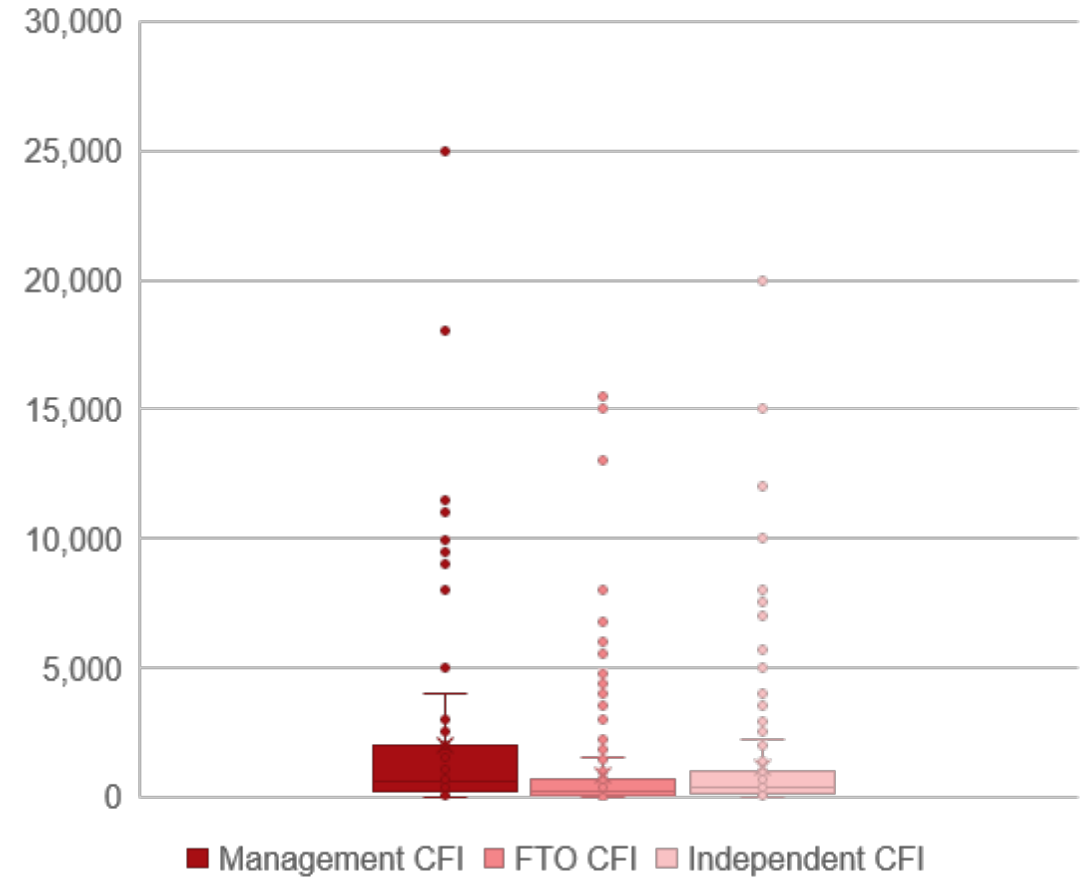


CFI Flight Experience by Role

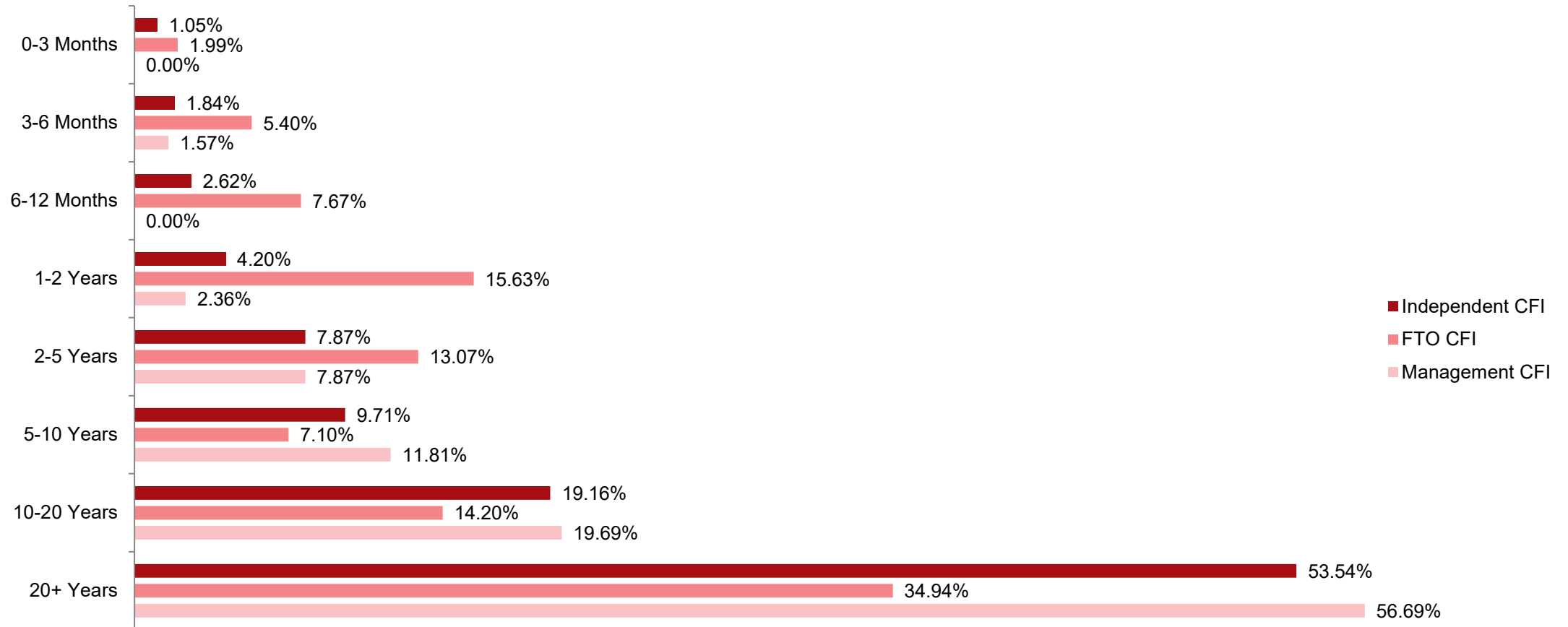
Total Flight Hours by Role



Instrument Flight Hours by Role

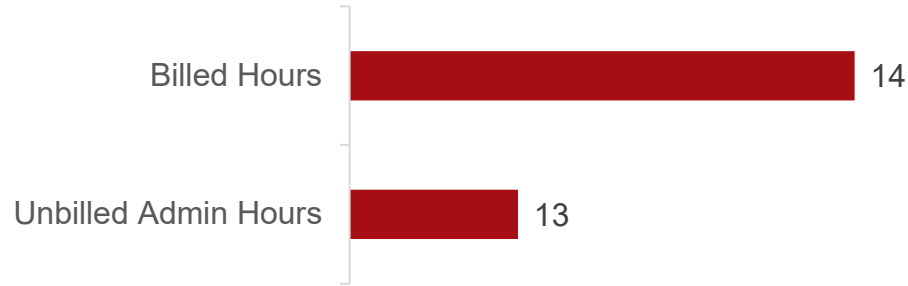


CFI Years of Experience by Role

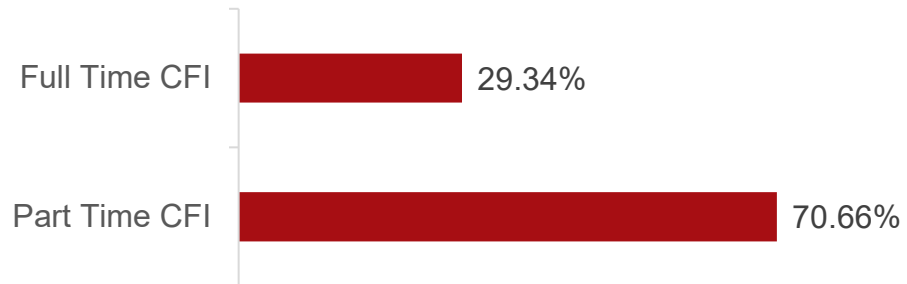


CFI Billing and Rates

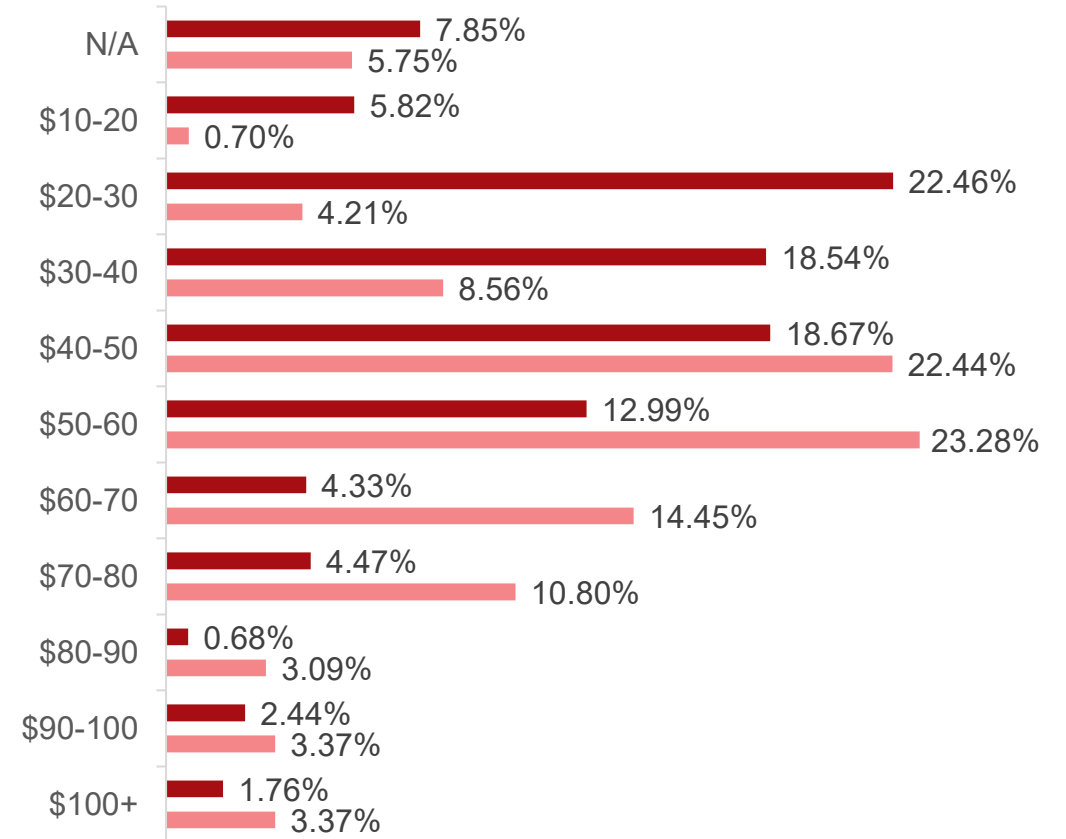
Avg Number of Hours per Week



Employment Status



Hourly Rate vs Pay

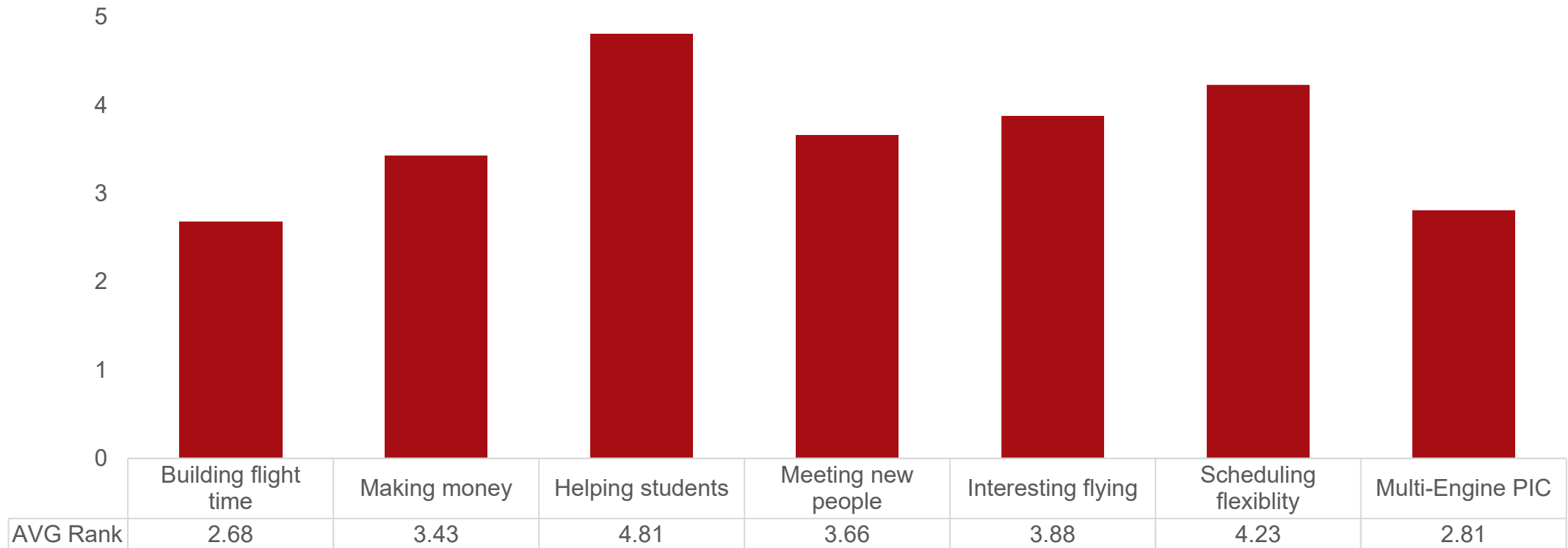


■ Hourly Pay ■ Hourly Rate



CFI Motivation

Only CFIs employed by an FTO were asked this question.



Ranked from Most Important (5) to Least Important (1)

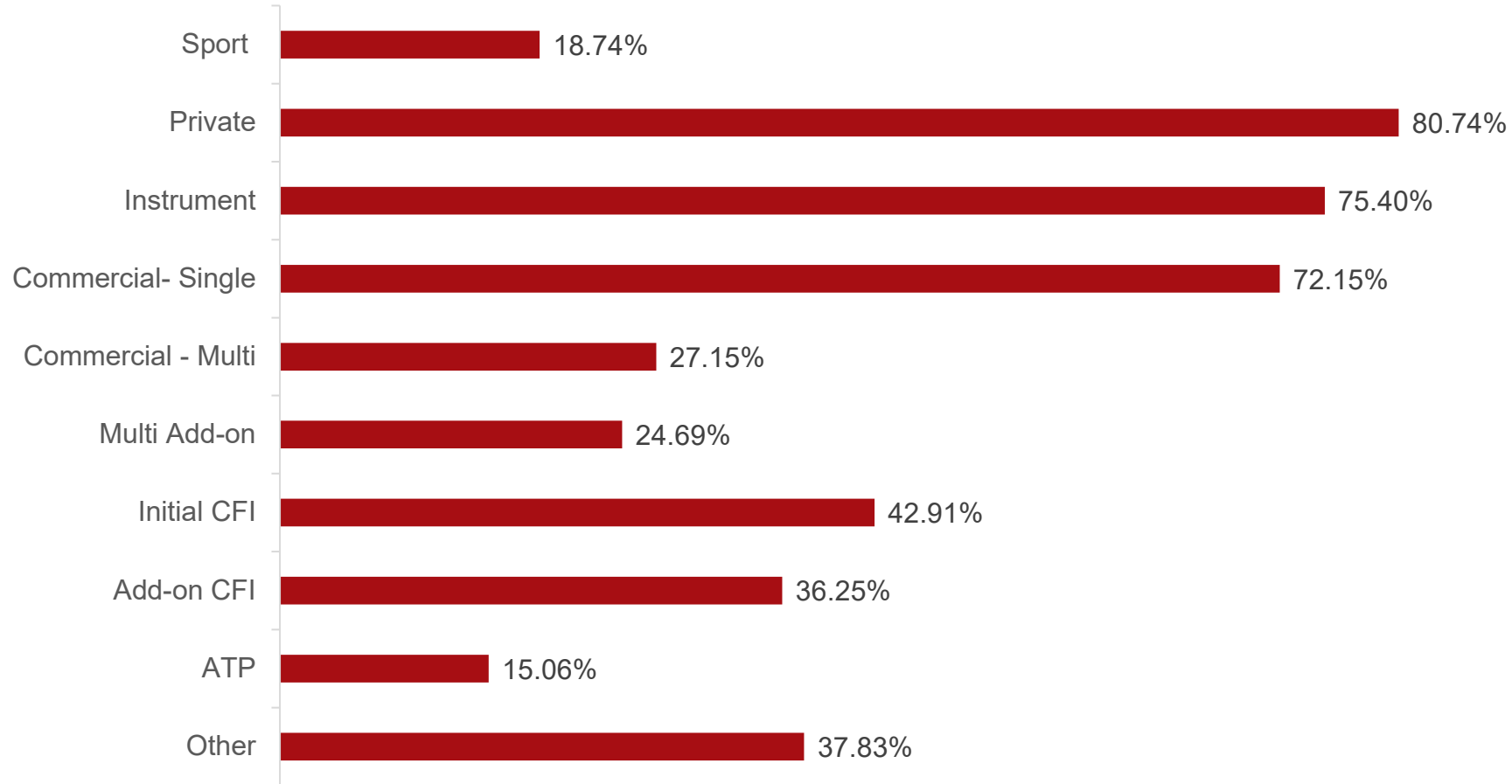


Independent CFI Business

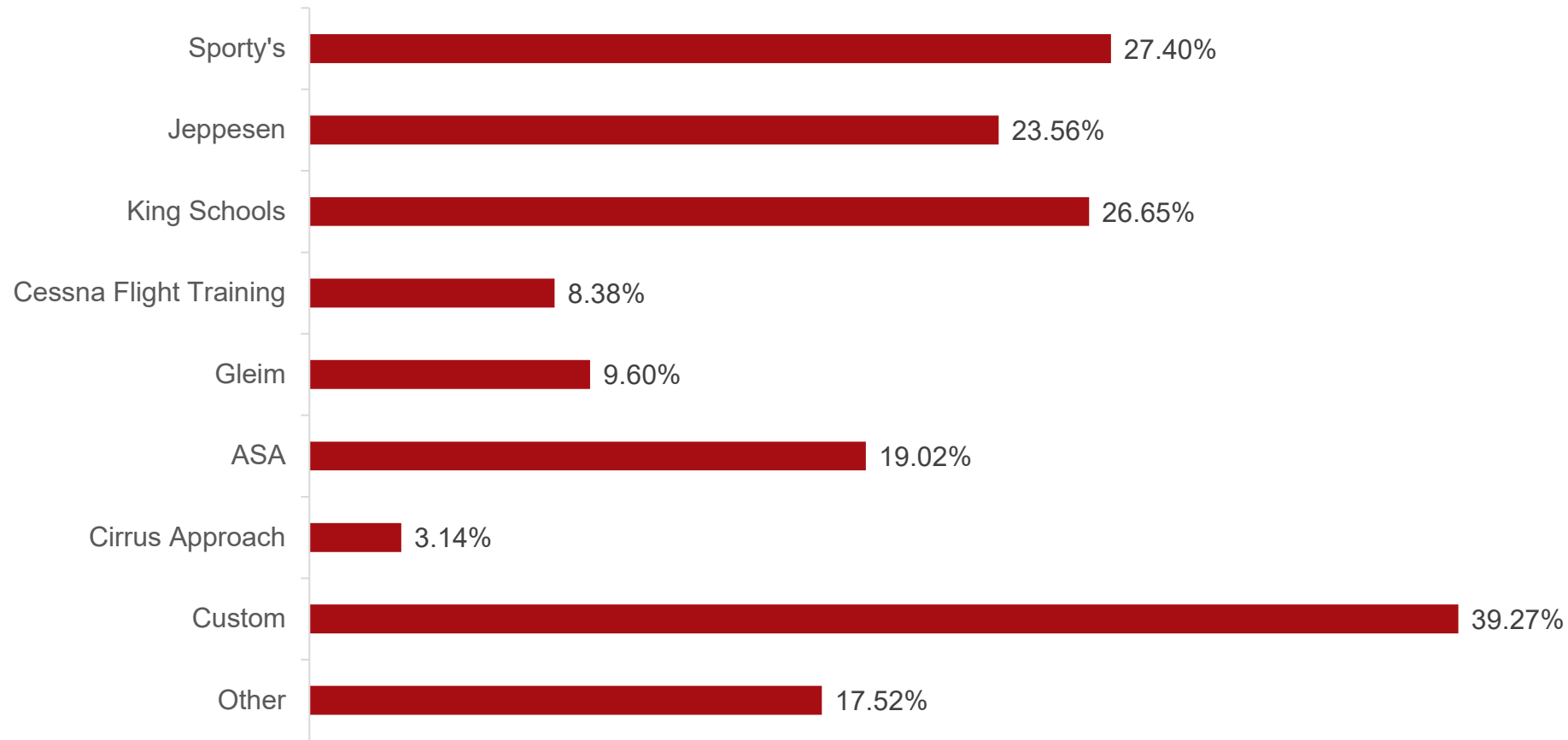
Independent CFIs are both instructors and business owners. To account for this fact, we asked Independent CFIs questions related to how they run their business, their results from 2020, and their outlook for 2021. Independent CFIs were hit especially hard by the COVID-19 pandemic and resulting lockdowns. Many of these CFIs are struggling, and our industry faces a huge loss of experience and knowledge if we can't help them maintain and grow their businesses.



Training Provided by Independent CFI

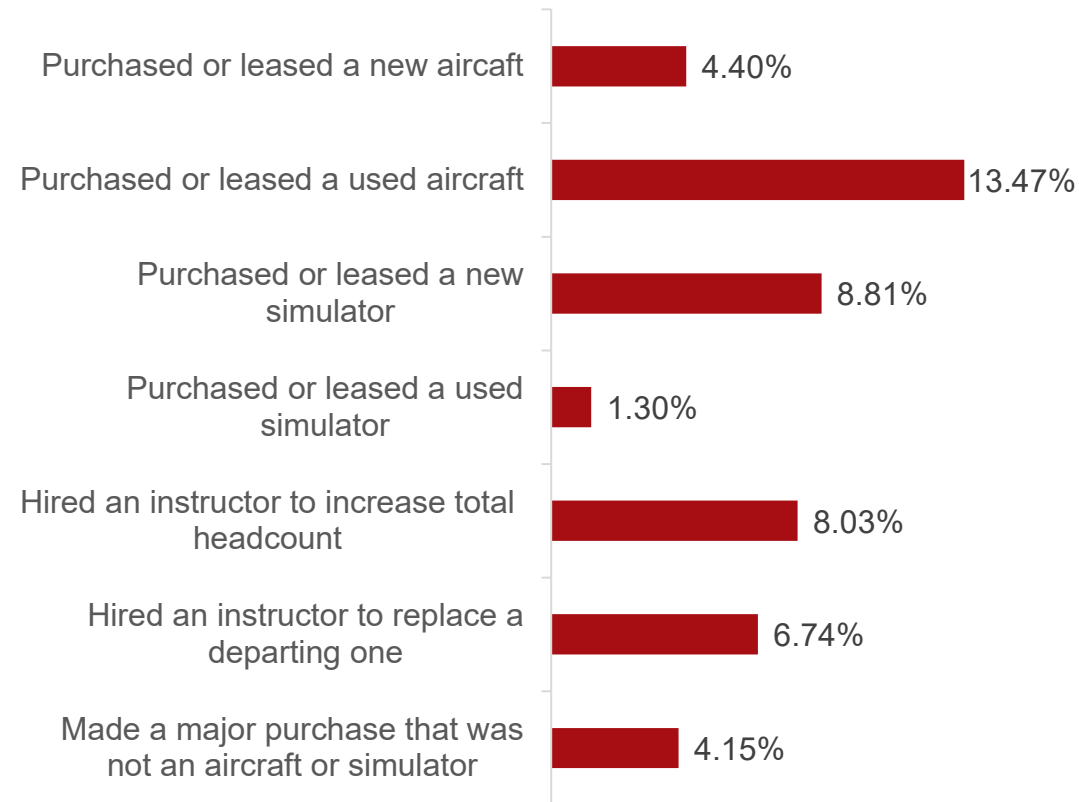


Training Curriculums Used by CFI

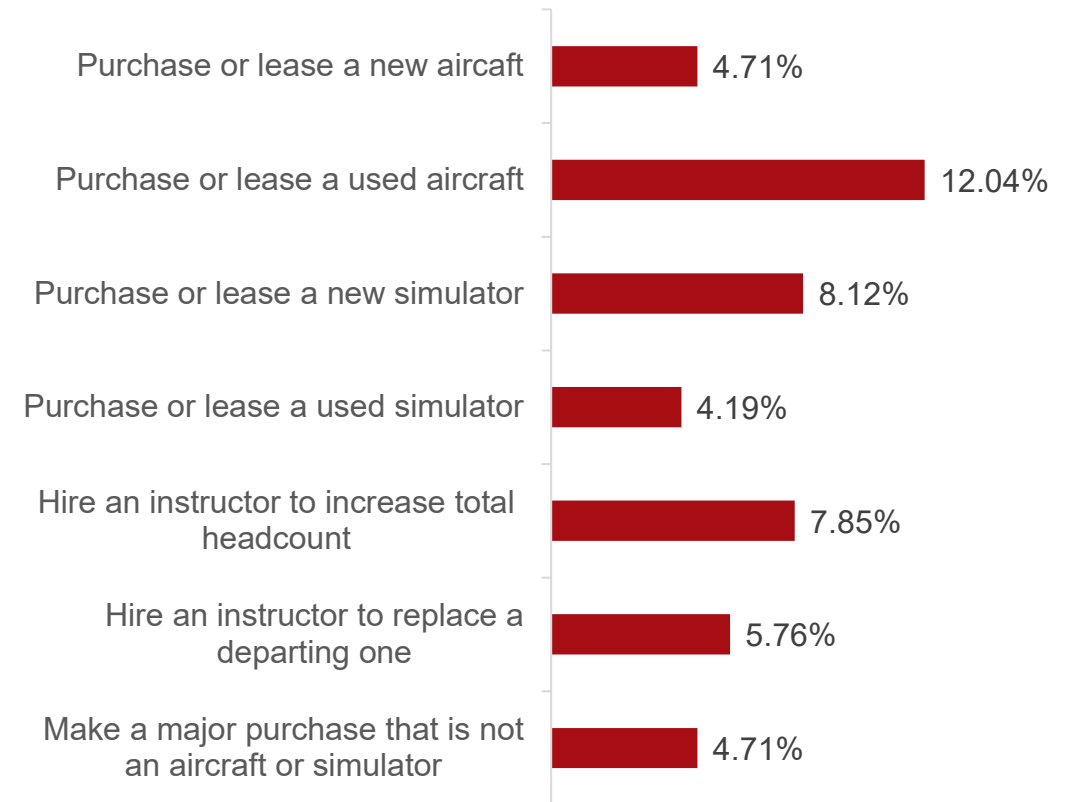


Independent CFI Activities and Plans

Major Activities Completed in 2020



Major Activities Planned for 2021



Independent CFI Results and Outlook

Only Independent CFIs were asked this question.

Overall Business Rating for 2020



Overall Business Outlook for 2021



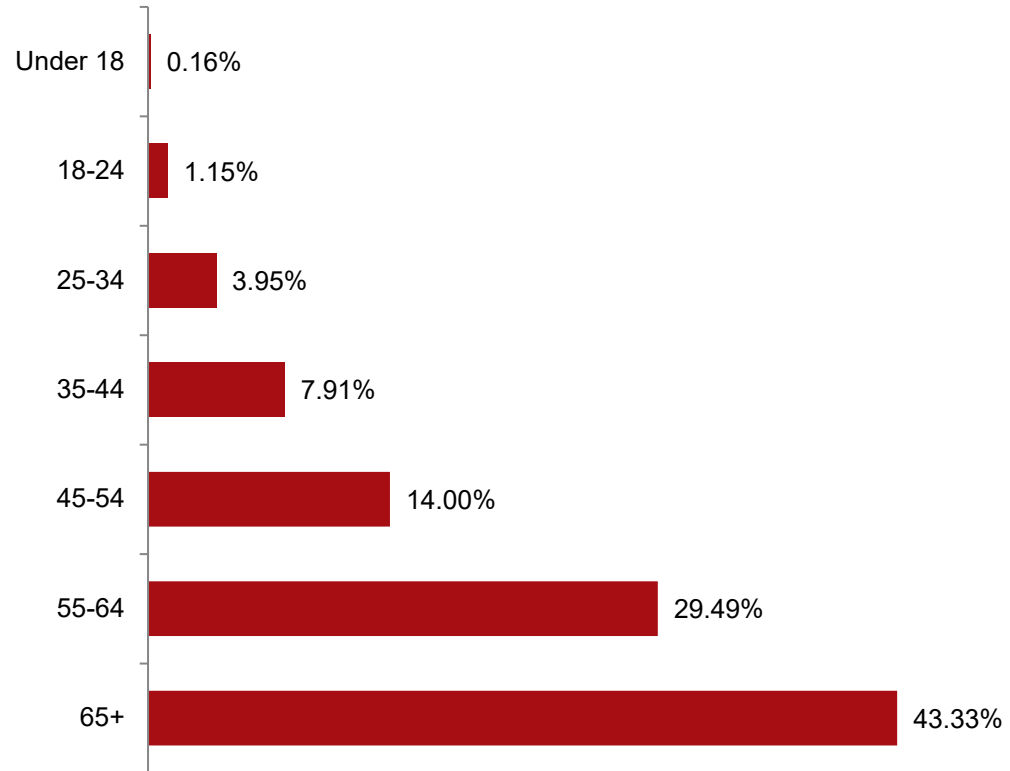
Pilots

Just because a Pilot earns her certificate or rating, it doesn't mean training is over. Ongoing proficiency training, flight reviews, and instrument proficiency checks are essential for safety and as a source of revenue for the industry. Additionally, the data suggest many Pilots are planning on pursuing a new certificate or rating this year.

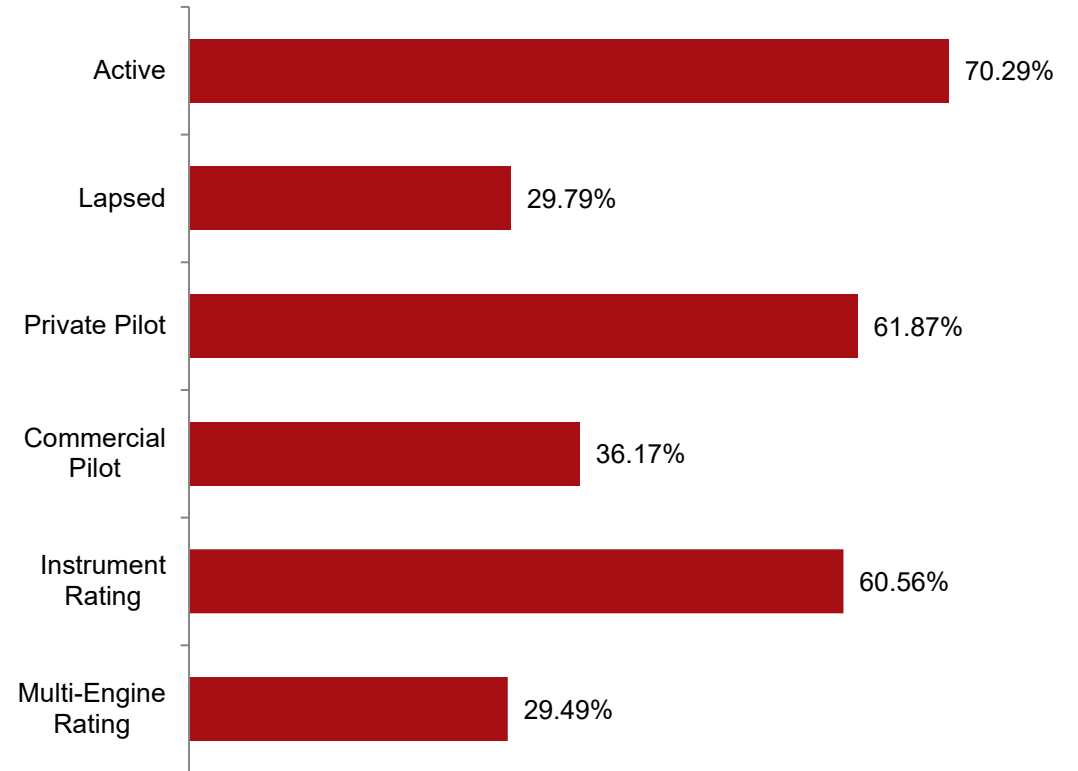


Pilot Profiles

Age Range



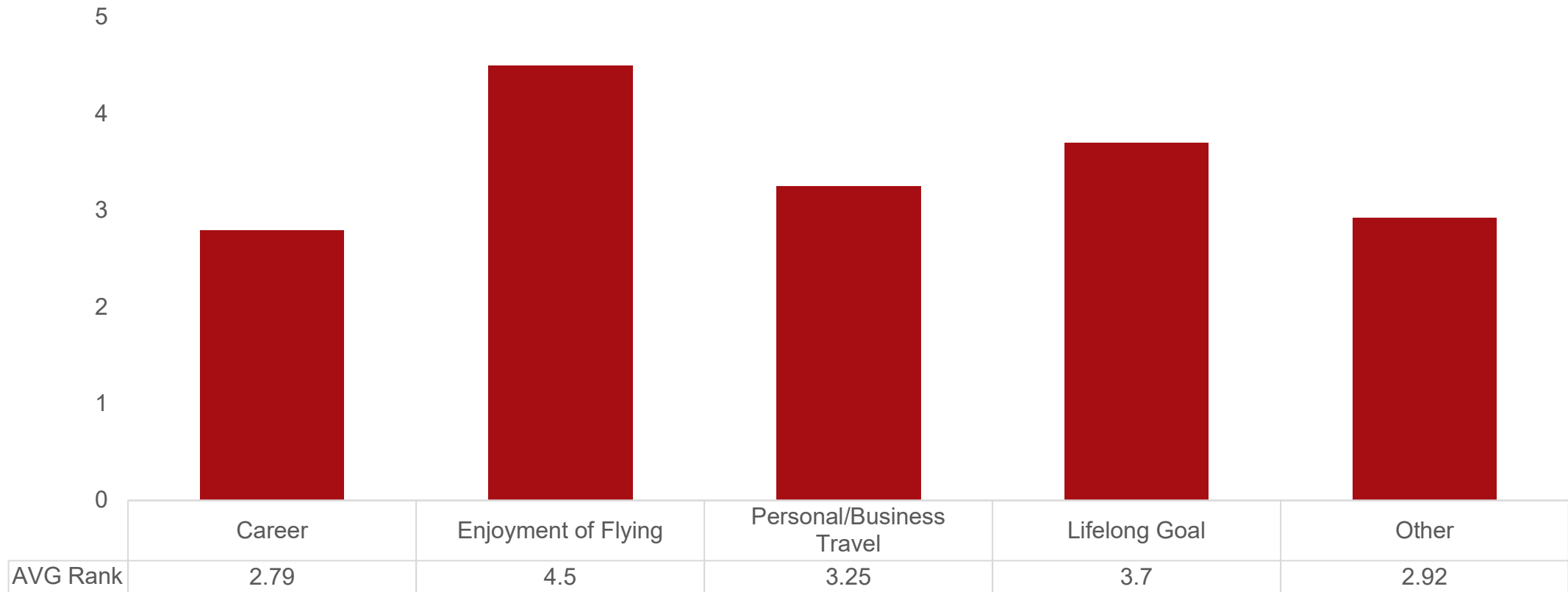
Current Status



Note: Avg age of all FAA Pilot Certificate holders is 44.2 (Source: FAA)



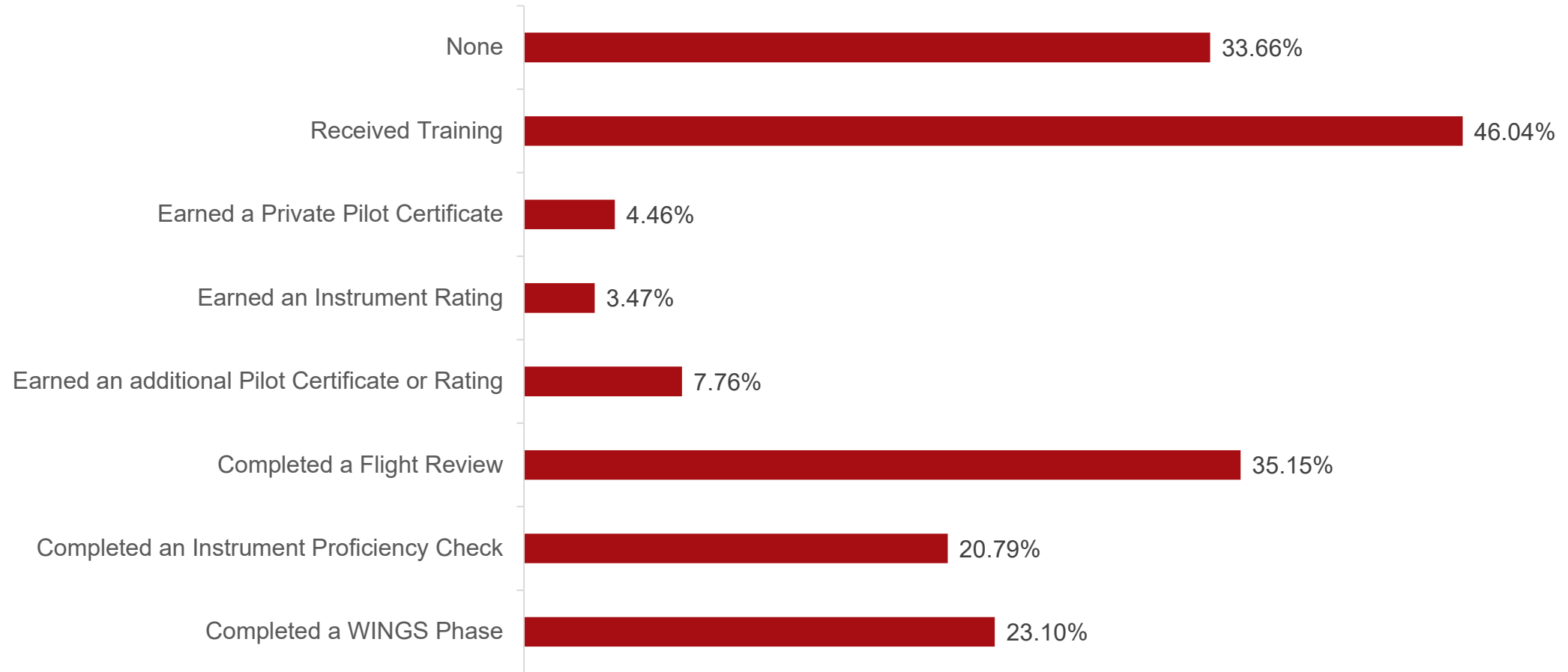
Pilot Motivation



Ranked from Most Important (5) to Least Important (1)



Pilot Activities in 2020



Pilot Training Received in 2020

Overall Training Experience Rating

4.0 

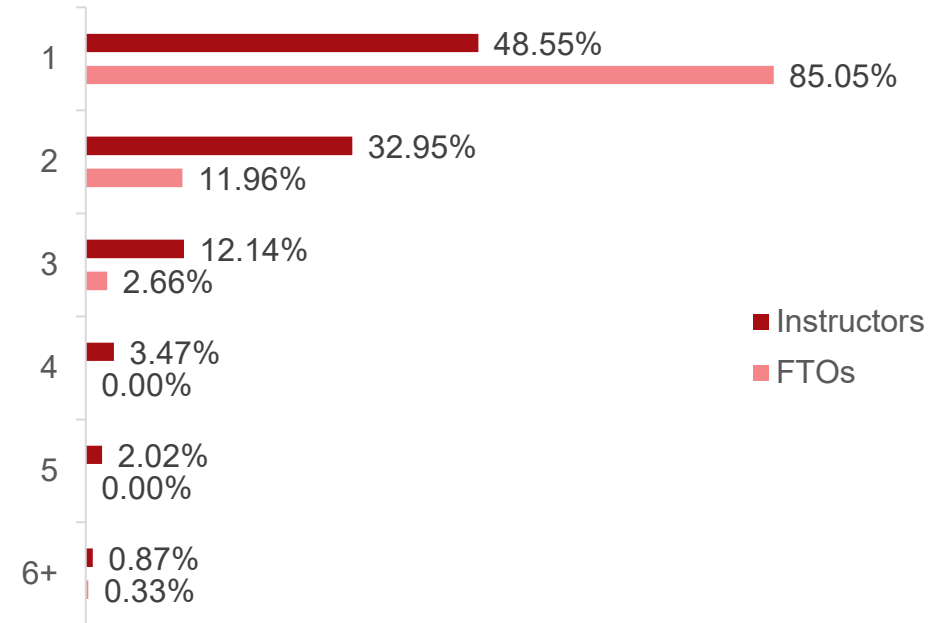
Instructor Rating

4.0 

Flight School Rating

3.7 

Number of Instructors and FTOs Flown With in 2020



Median Hours of Training: 8

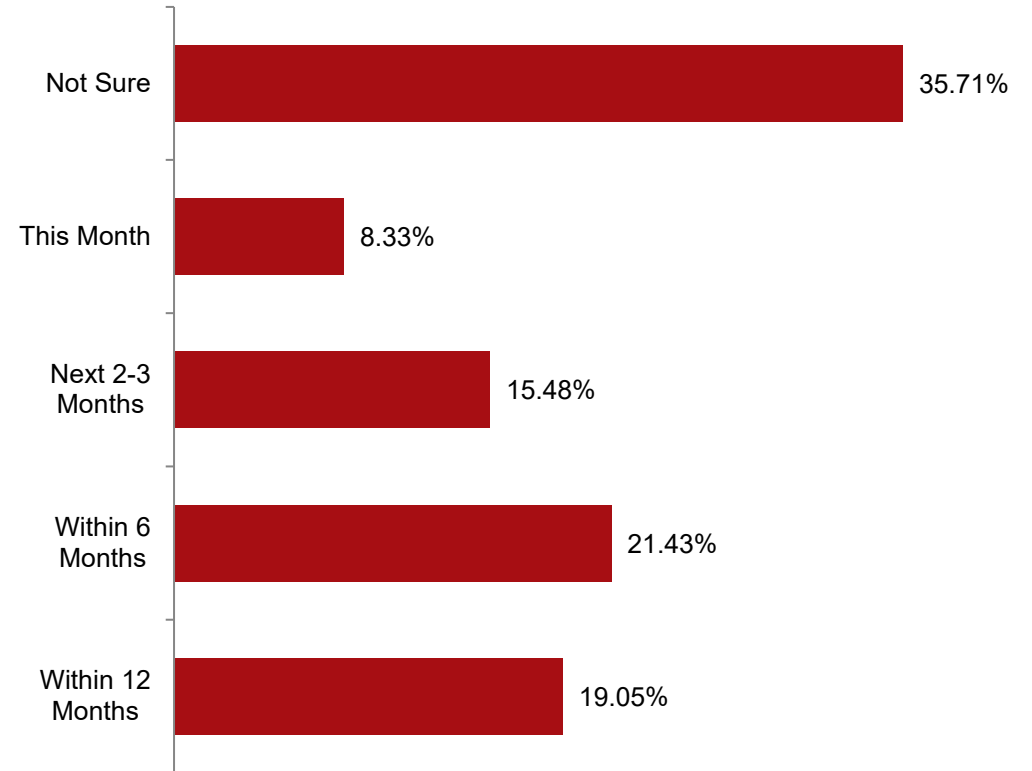


Pilot Plans for 2021

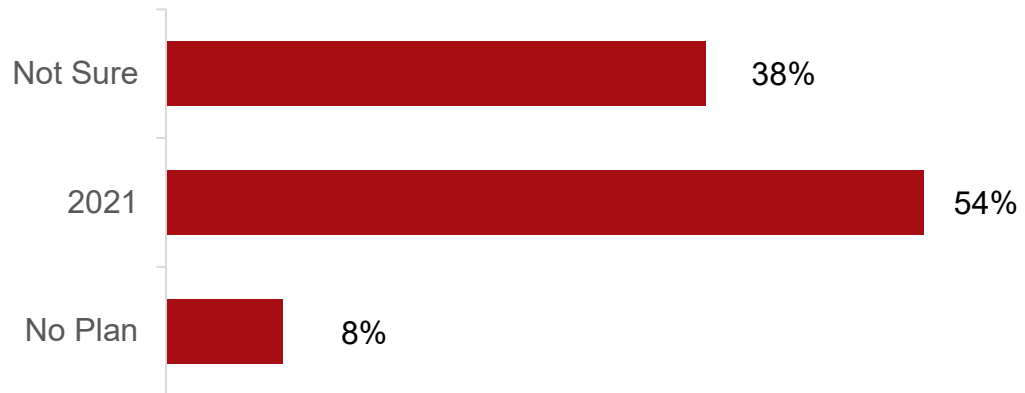
Training for a New Certificate/Rating



Timeline for Starting Training



Lapsed Pilots Plan to Get Current



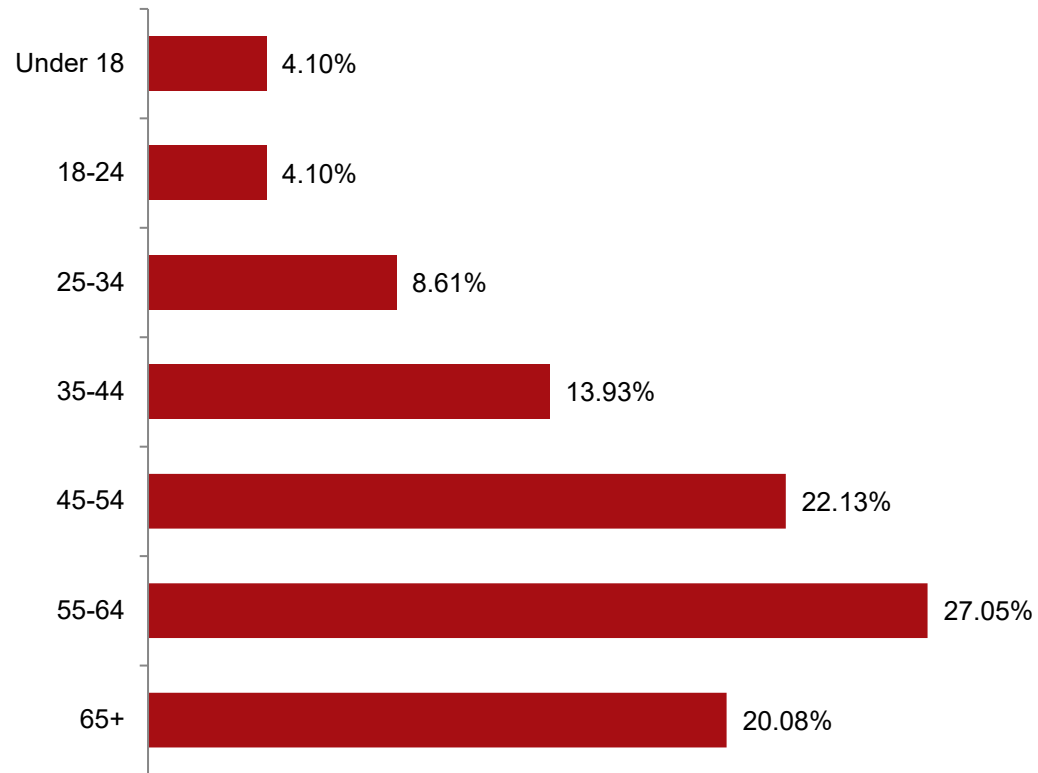
Students

Clearly, Students are a key group of industry stakeholders. Training providers and other industry groups should pay close attention to the makeup, motivations, and outlook of this group. In general, Students are pleased with the training offered by the industry, but they prefer their instructor(s) to their FTO.

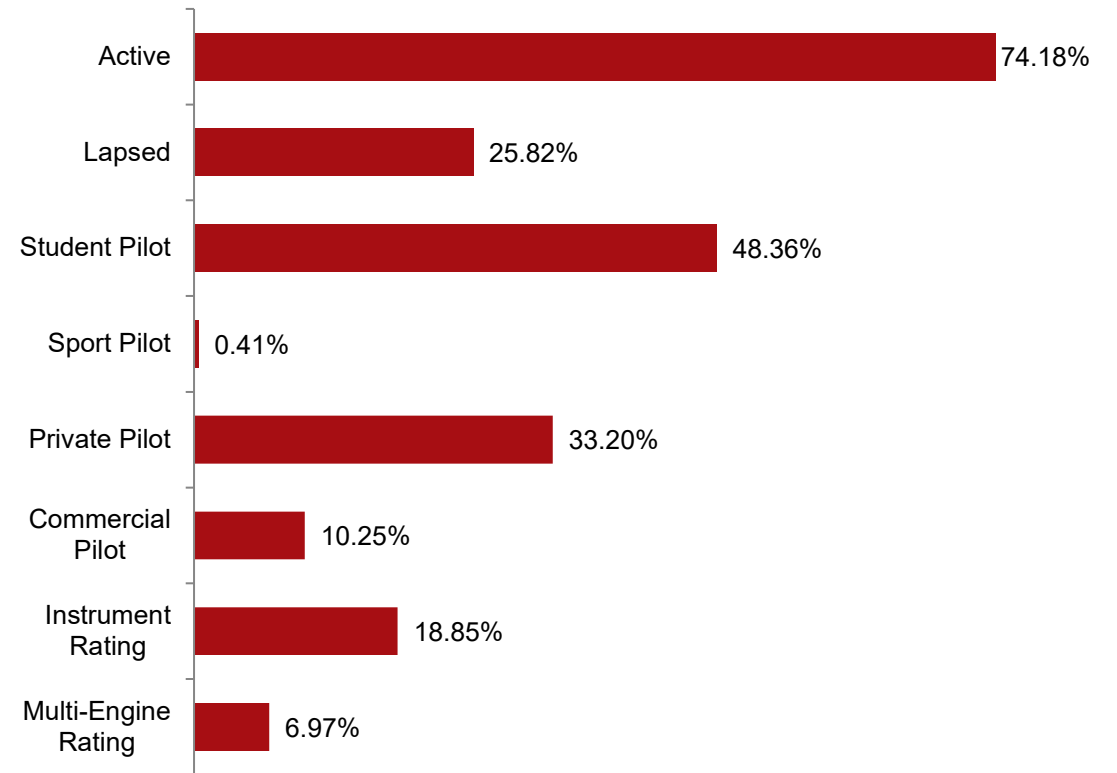


Student Profiles

Age Range



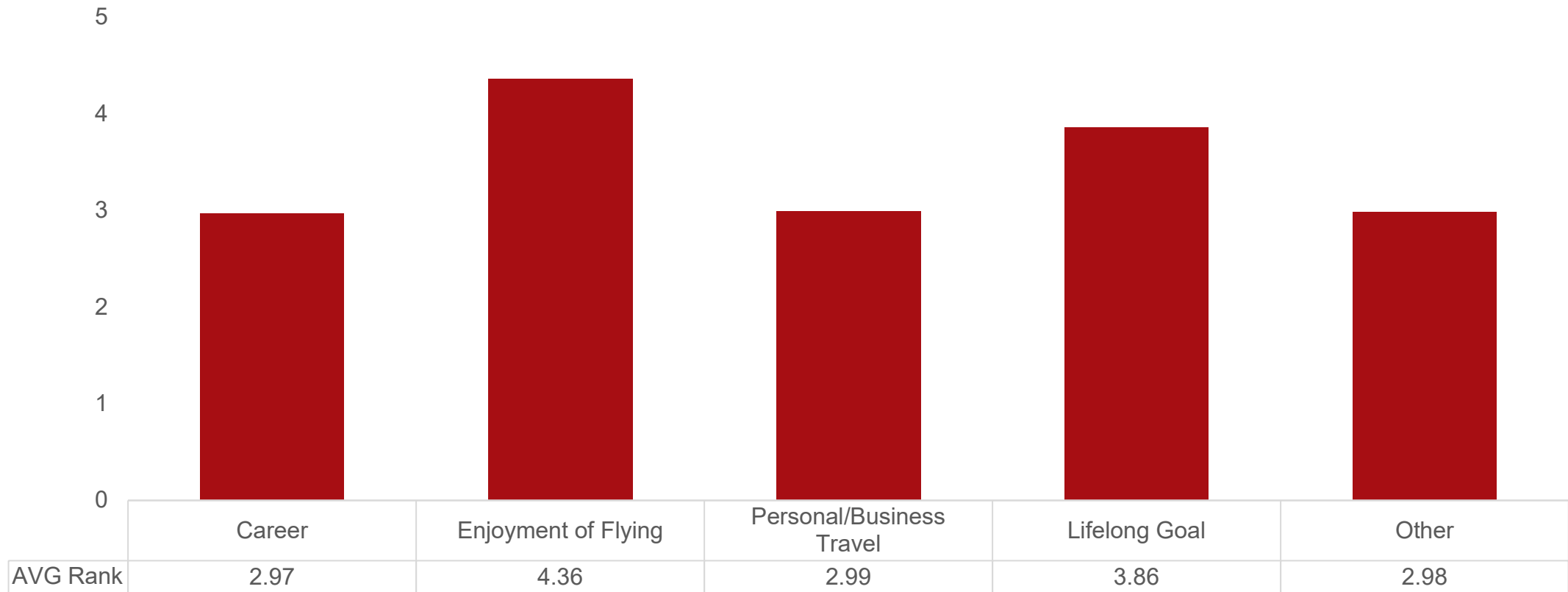
Current Status



Note: Avg age of all FAA Pilot Certificate holders is 44.2 (Source: FAA)



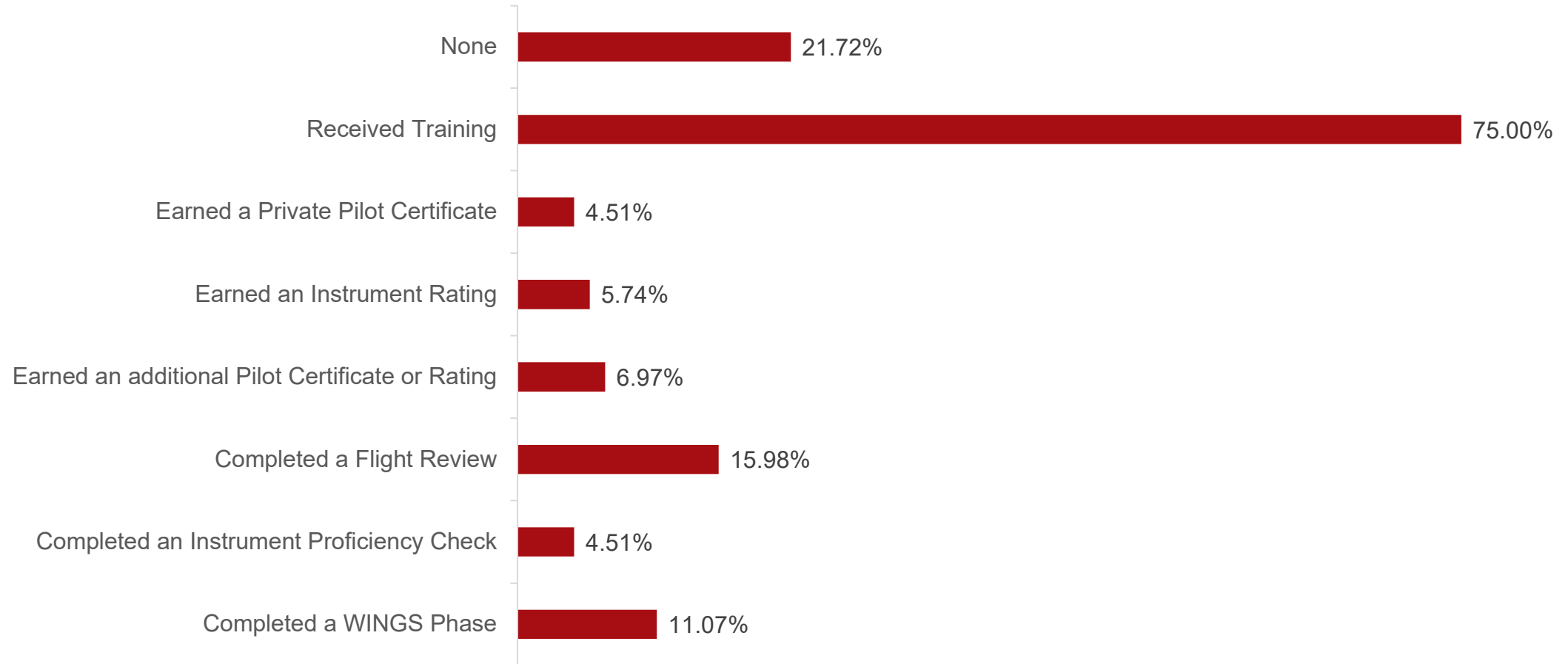
Student Motivation



Ranked from Most Important (5) to Least Important (1)



Student Activities in 2020



Student Training Received in 2020

Overall Training Experience Rating

4.0 

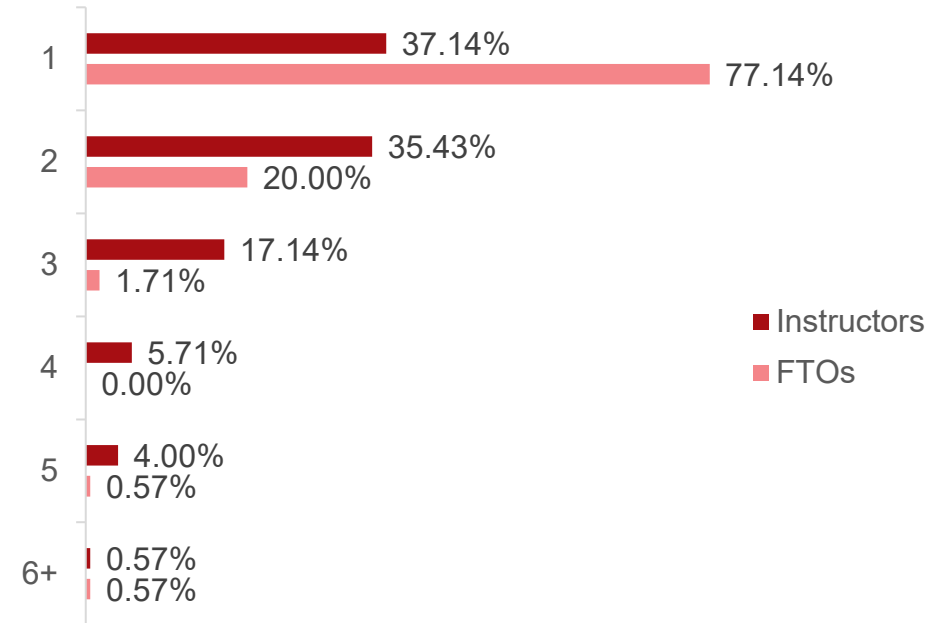
Instructor Rating

4.2 

Flight School Rating

3.9 

Number of Instructors and FTOs Flown With in 2020



Median Hours of Training: 18

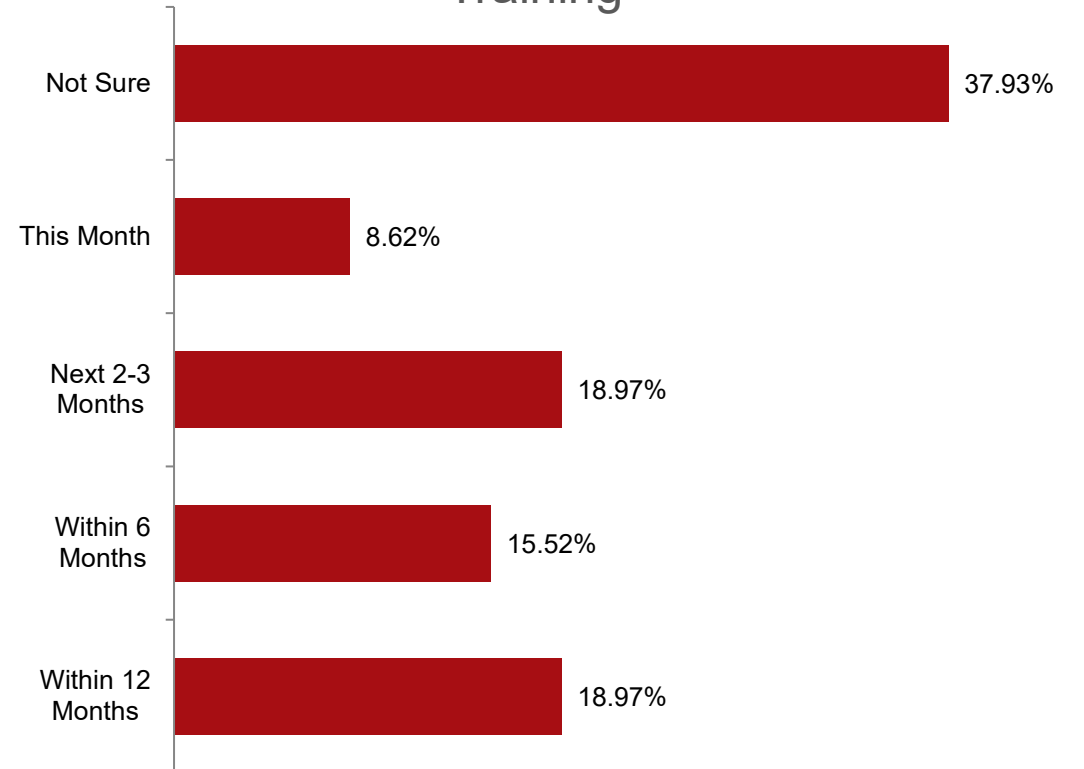


Pilot Plans for 2021

Training for a New Certificate/Rating



Timeline for Starting/Restarting Training



Lapsed Students Restart Training



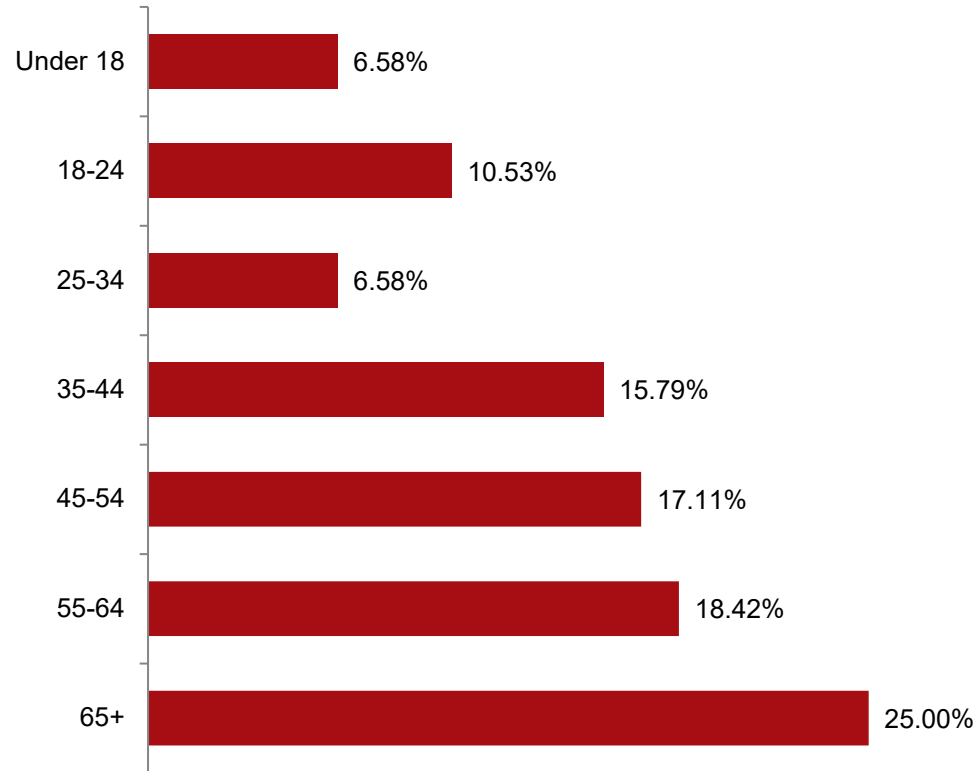
Prospective Students

The flight training industry needs a full pipeline of prospective students that it constantly replenishes. Clearly, the COVID-19 pandemic had an impact on student activity, but it wasn't as dire as some were predicting in March and April of last year. Many students aspire to be airline pilots once they complete their training, and those opportunities are starting to reappear as overall economic conditions and vaccination rates improve. Restored career opportunities will continue to fill the seats at flight schools around the world. However, interestingly, many students rate their intrinsic motivations—such as enjoyment of flight and lifelong goals—as more important than their extrinsic motivations. So, while student pilots may be in it for a paycheck, aviation remains a romantic and attractive aspiration on its own.

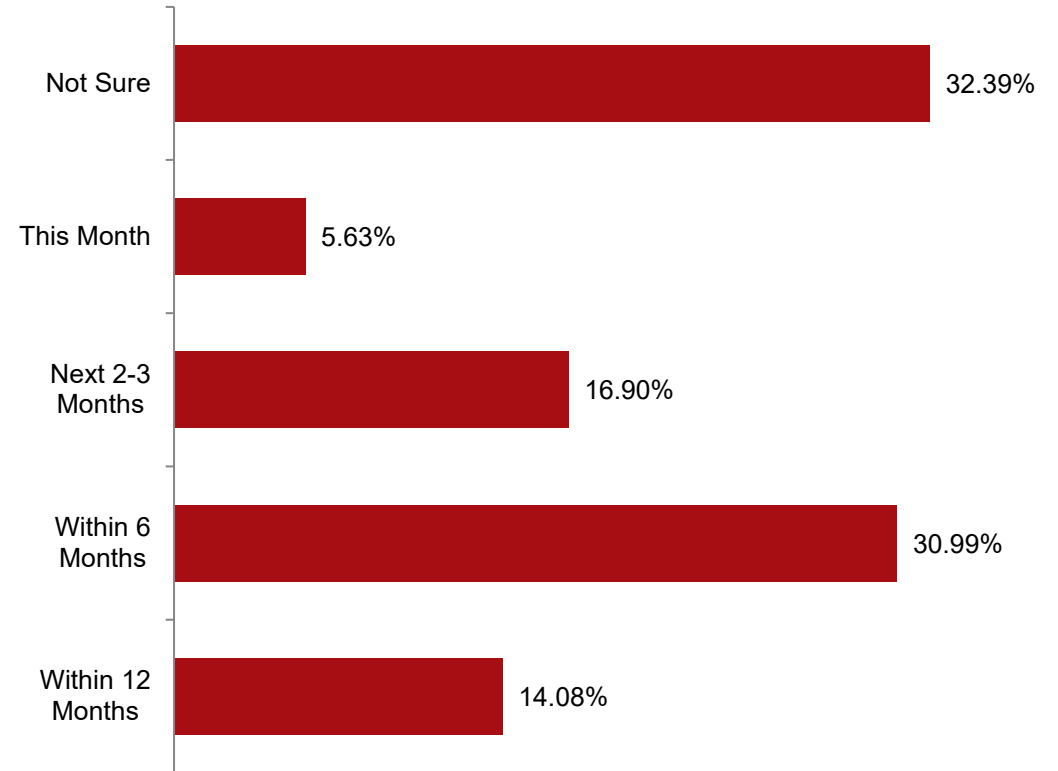


Prospective Student Profiles

Age Range



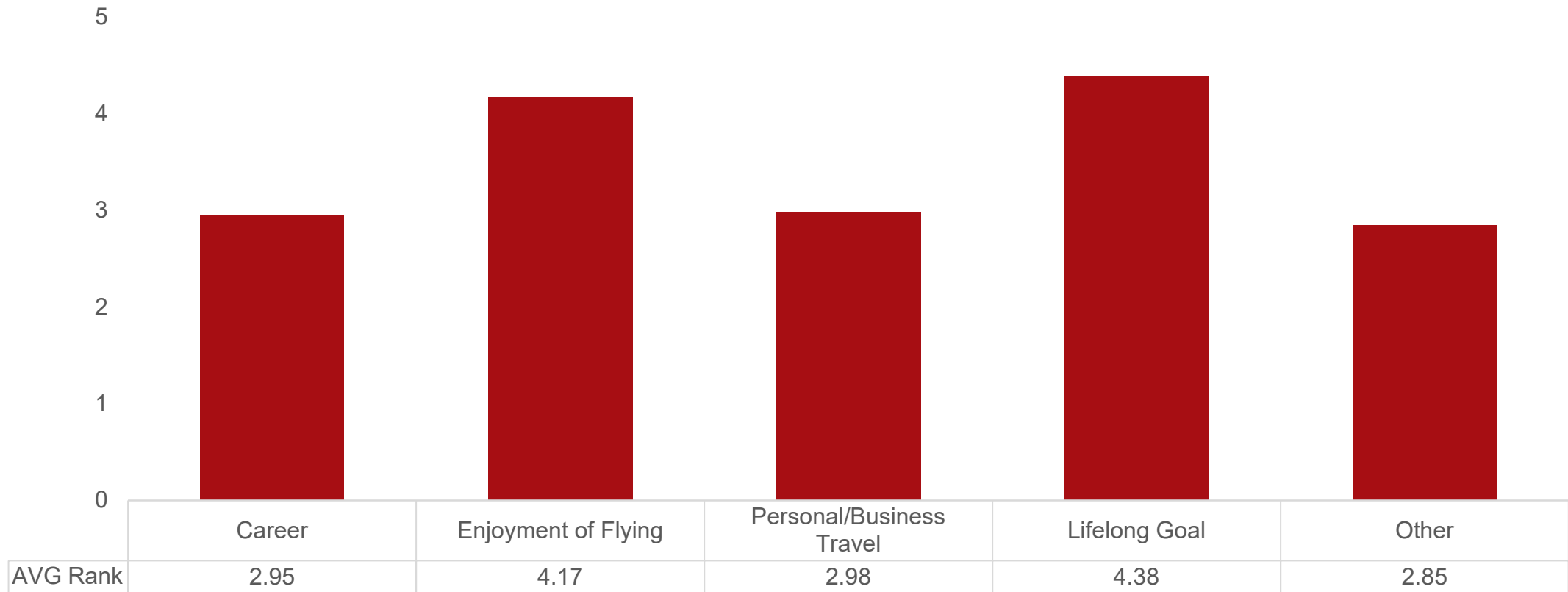
Timeline for Starting Training



Note: Avg age of all FAA Pilot Certificate holders is 44.2 (Source: FAA)



Prospective Student Motivation



Ranked from Most Important (5) to Least Important (1)



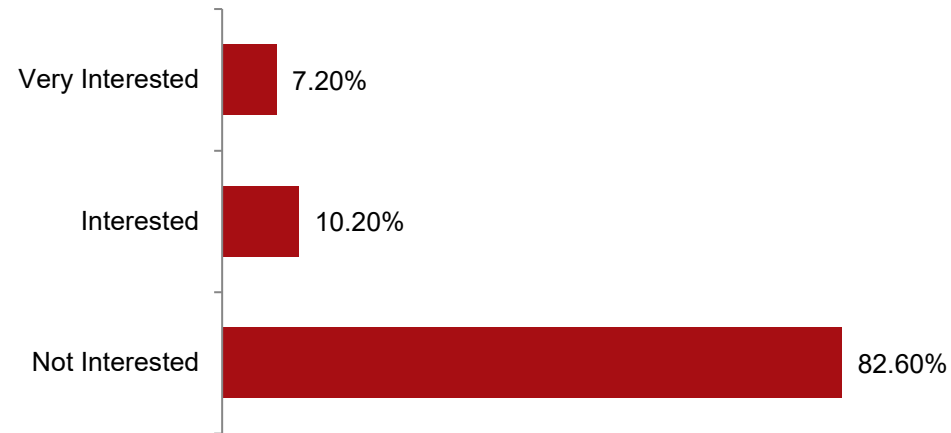
General Public

It is vitally important for the industry to understand how the general public views aviation and how those views change over time. This knowledge not only informs how to grow aviation and flight training, but also how to help customers talk about aviation with the people in their lives who may not understand their interest in it.

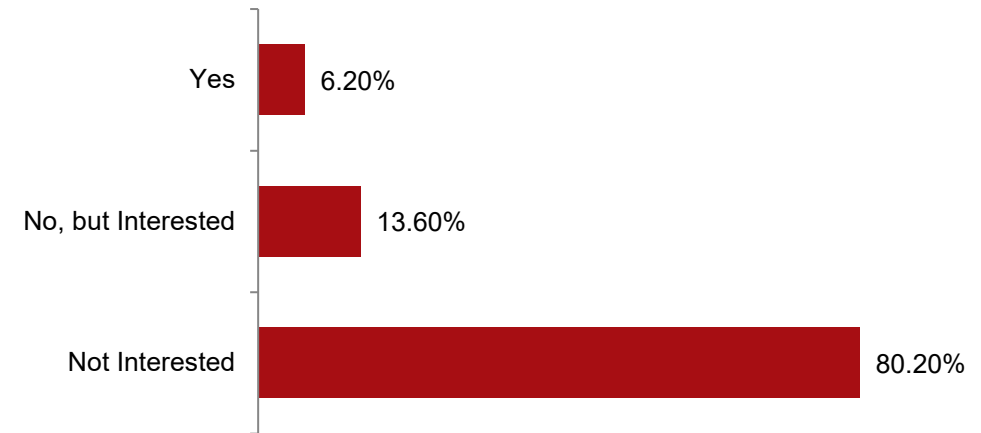


General Public Interest in Flight Training

If cost was not a factor, how interested would you be in becoming a pilot?



Have you ever considered becoming a professional pilot?



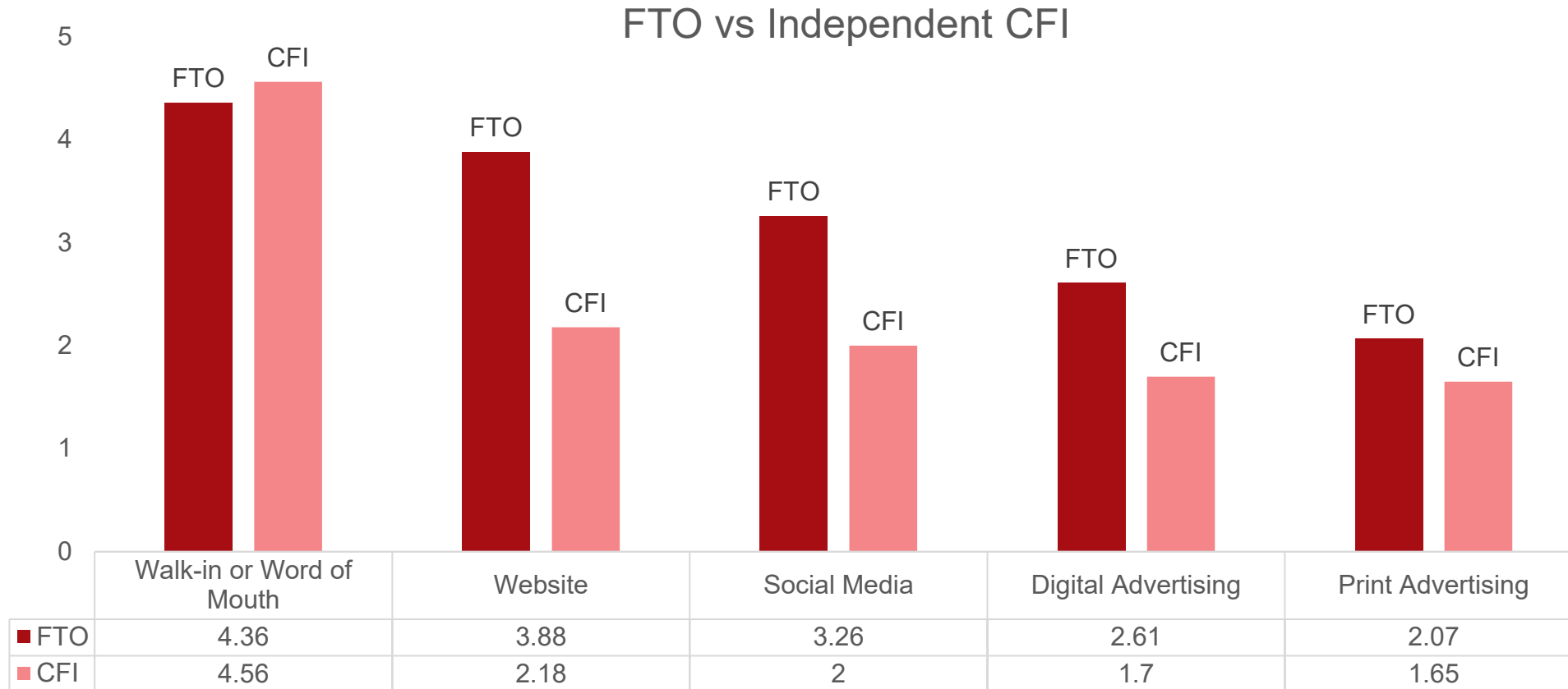
Flight Training Marketing

Marketing is the first step to growth. Analyzing how and where flight training providers reach their audiences is key to understanding how the industry can build on its strengths and overcome its weaknesses.

Marketing tactics and results vary greatly between FTOs and Independent CFIs. The most successful organizations are embracing a digital-first marketing strategy. This is an area where many smaller and independent providers are struggling.



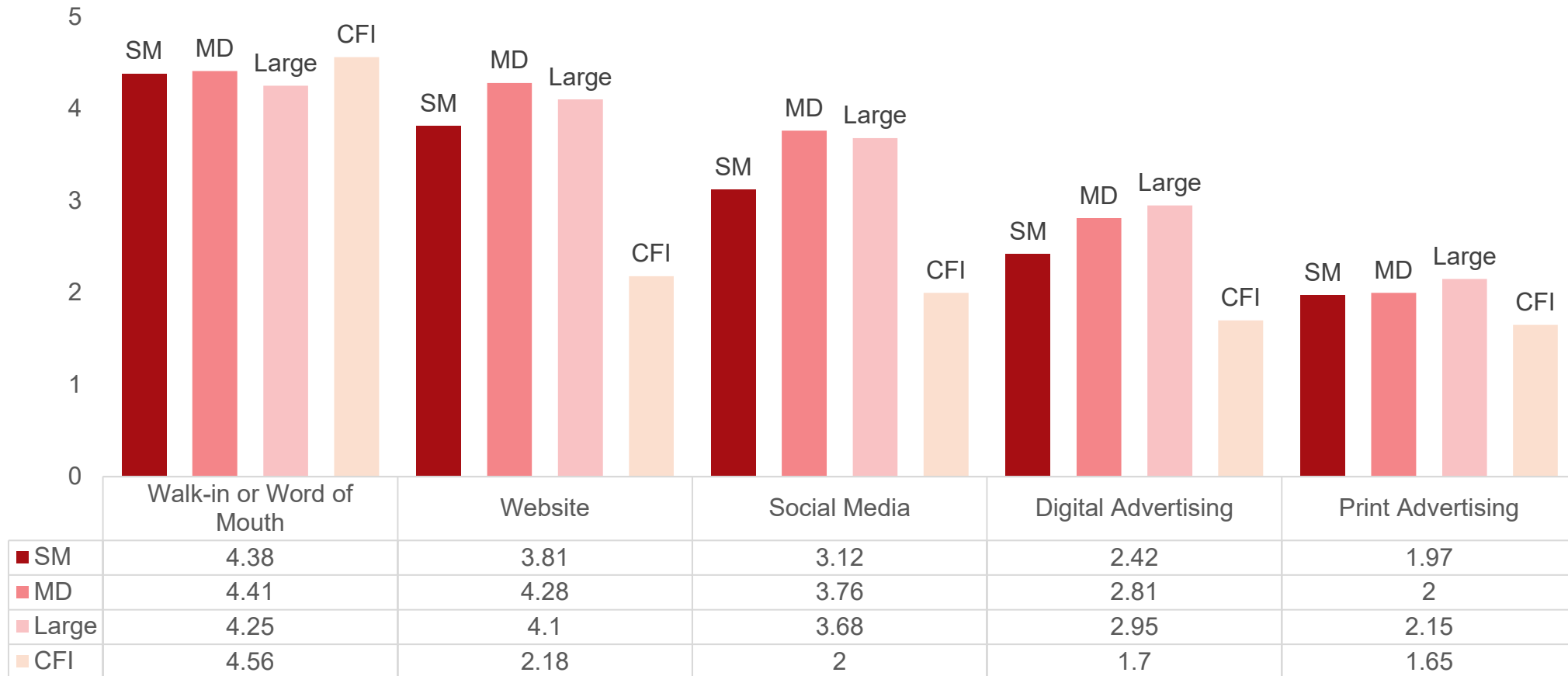
Marketing Channels



Ranked from Most Important (5) to Least Important (1)



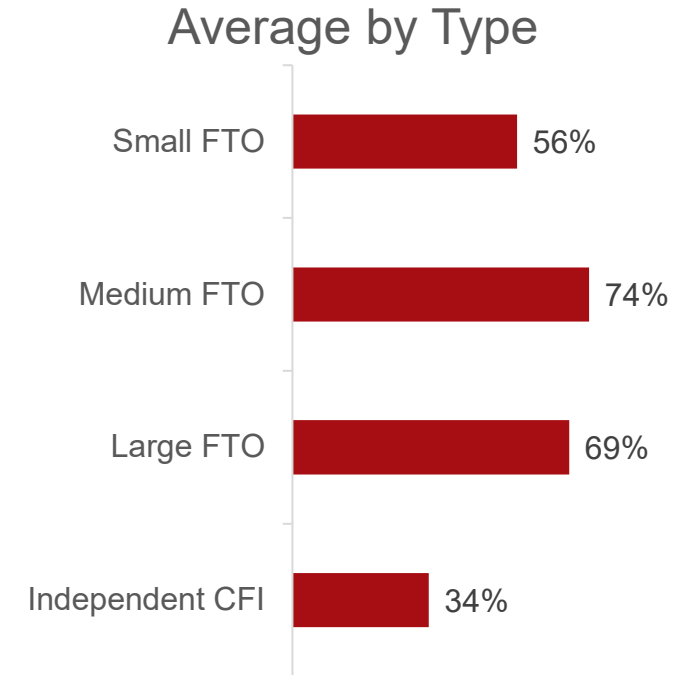
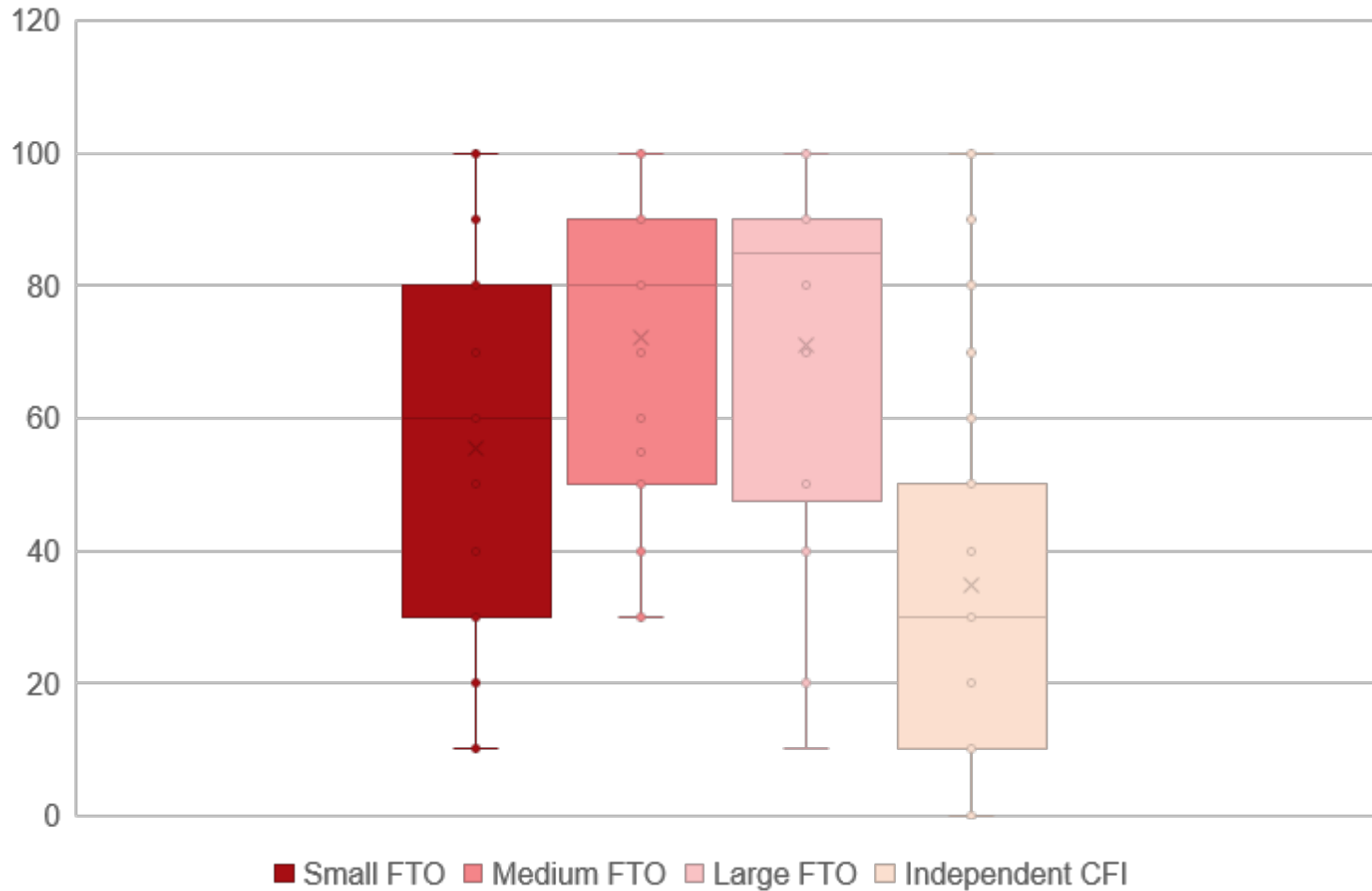
Marketing Channels by FTO Size



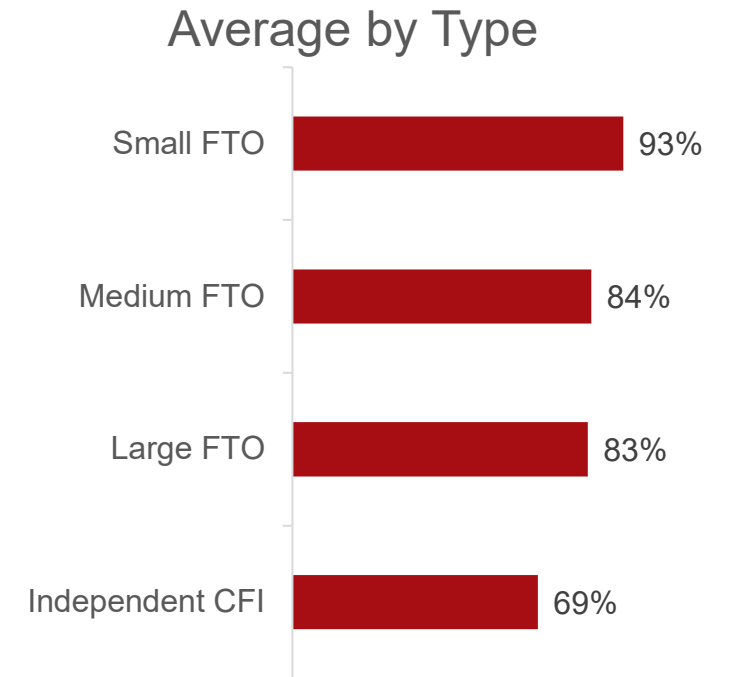
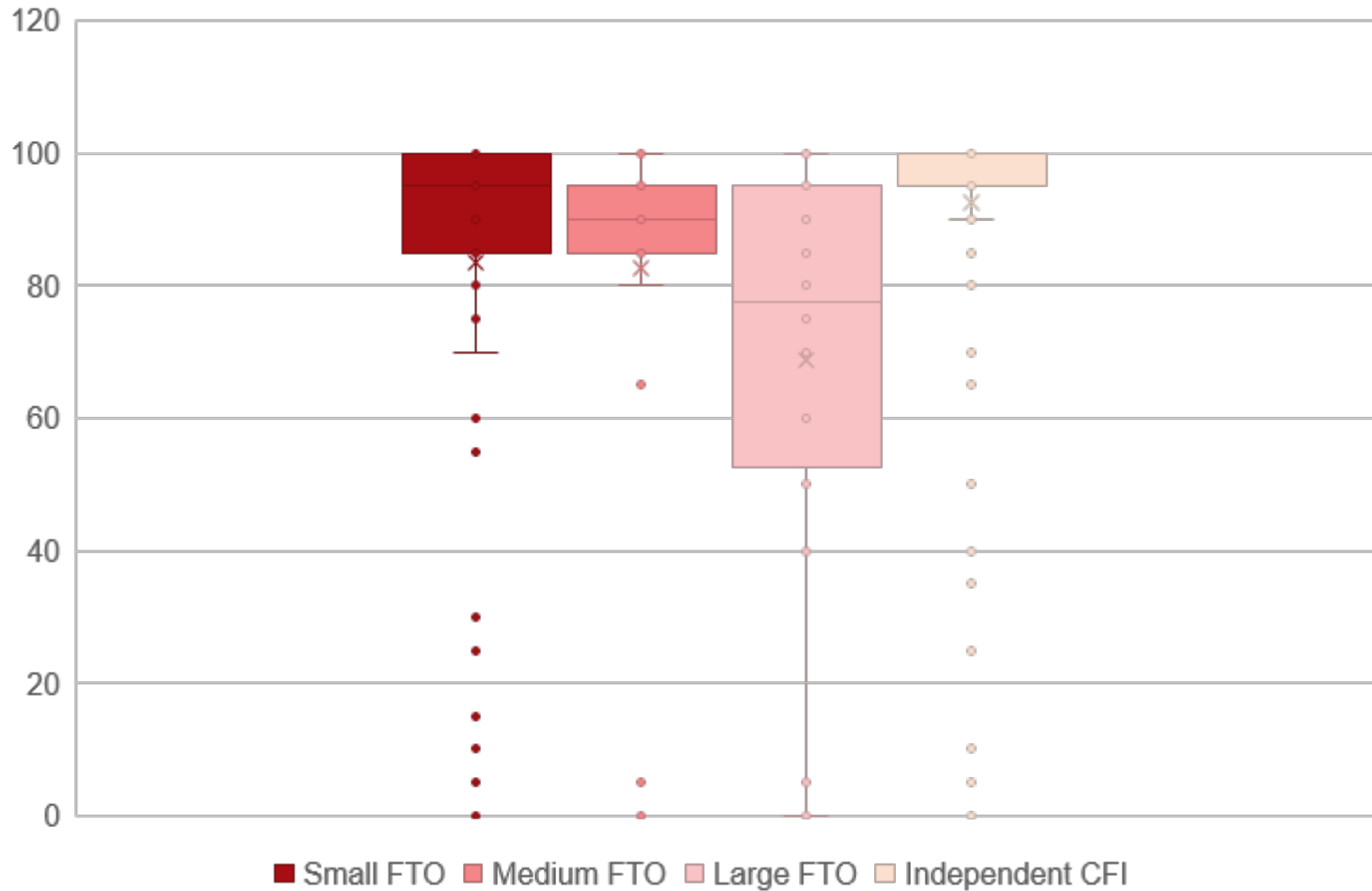
Ranked from Most Important (5) to Least Important (1)



Percent of Customers Pro Pilot Track



Percent of Customers US Citizen



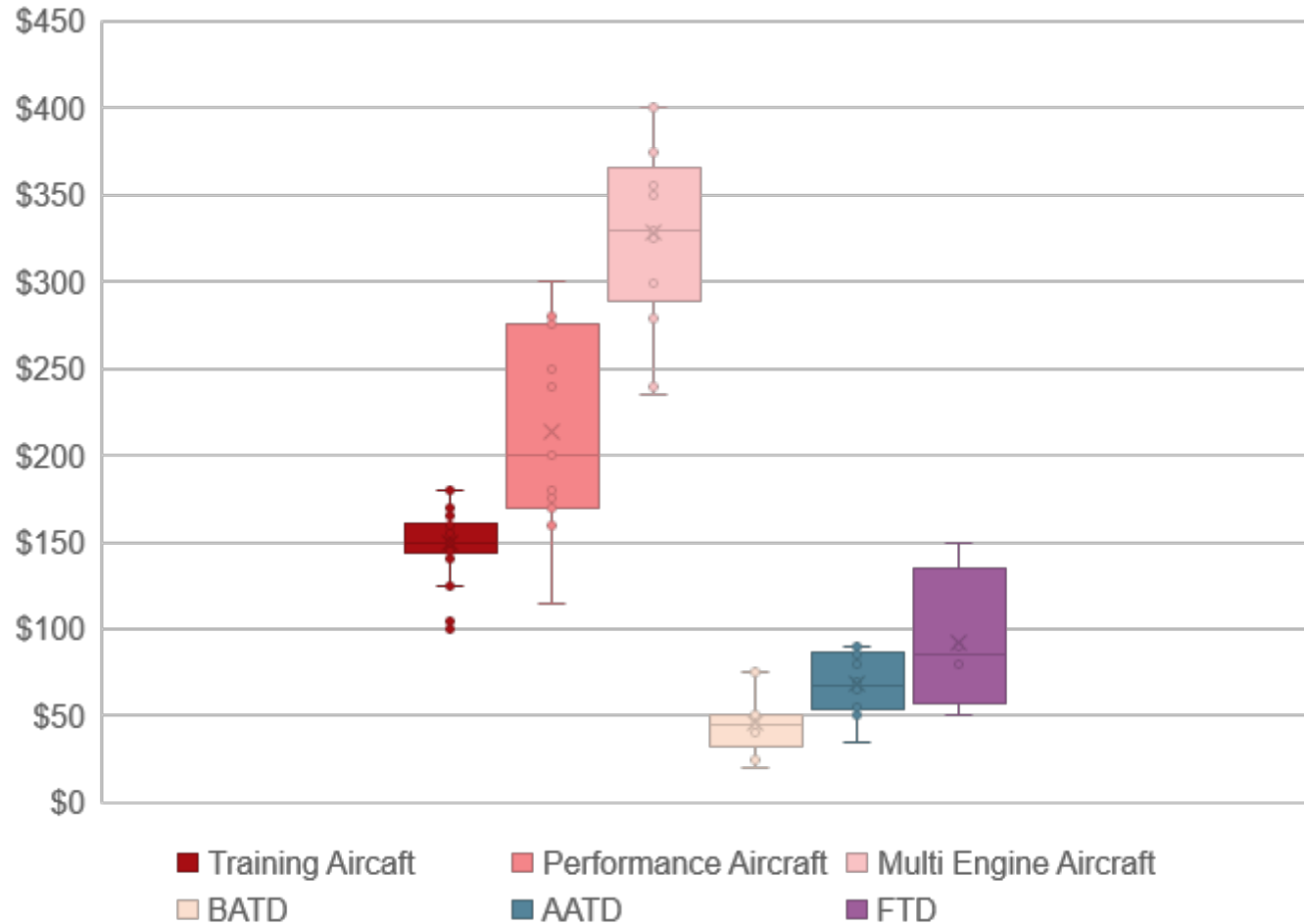
Training Costs and Time

The biggest obstacles a student must overcome are the cost and time required to complete flight training. They are the reasons industry pessimists cite most often in arguments that our best days are behind us.

While the responses show a wide range of results, clear medians and trends do emerge. Even small time-saving efficiencies and reductions in per hour costs during training can have a big impact on the total commitment a student needs to make. Providers should look for every available avenue to reduce this commitment while continuing to develop safe and proficient pilots.



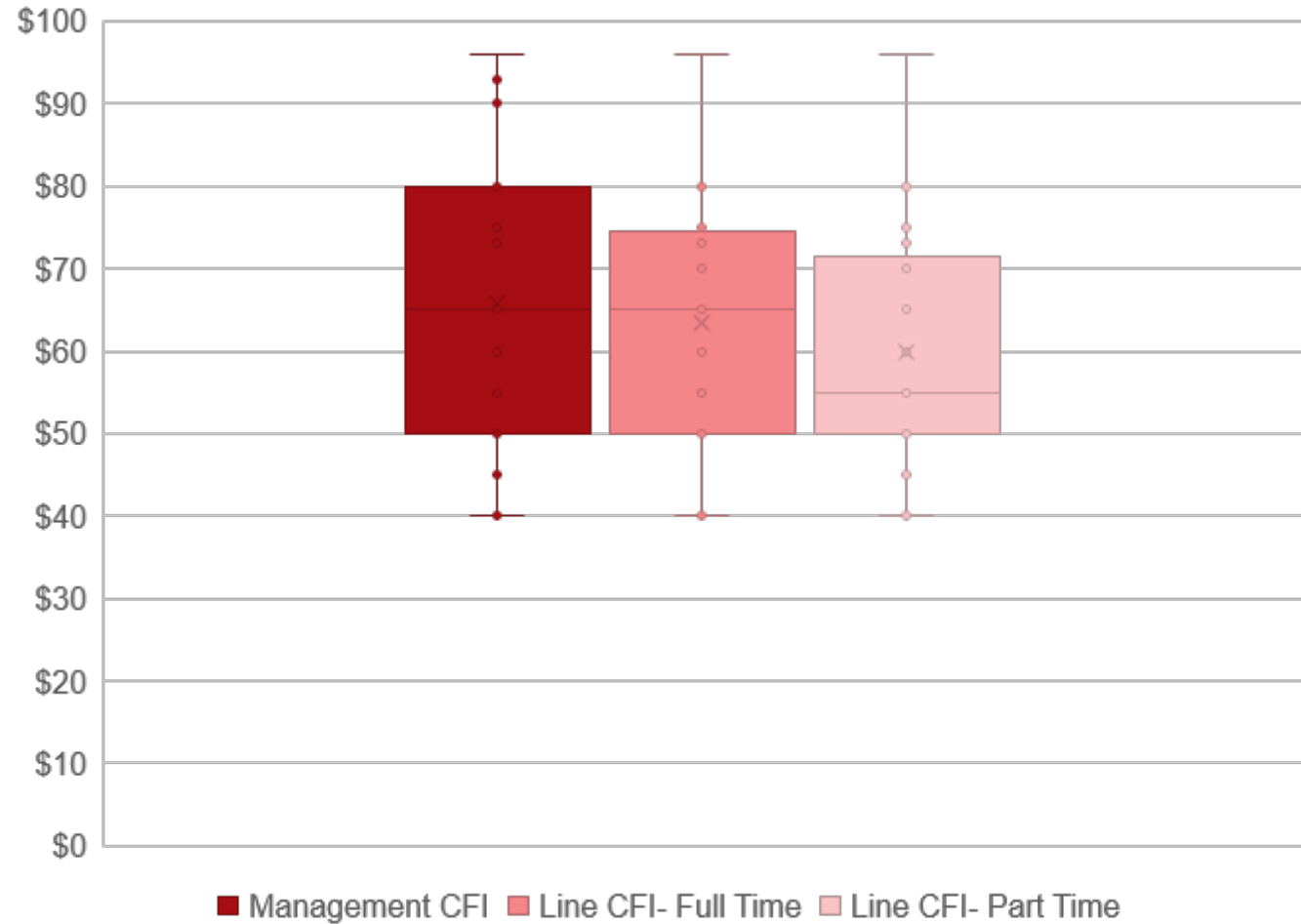
Equipment Rates per Hour



Type	Q1	MED	Q3
Training Aircraft	\$145	\$150	\$160
Performance Aircraft	\$172	\$299	\$262
Multi-Engine Aircraft	\$299	\$330	\$355
BATD	\$40	\$45	\$50
AATD	\$57	\$67	\$84
FTD	\$73	\$85	\$105



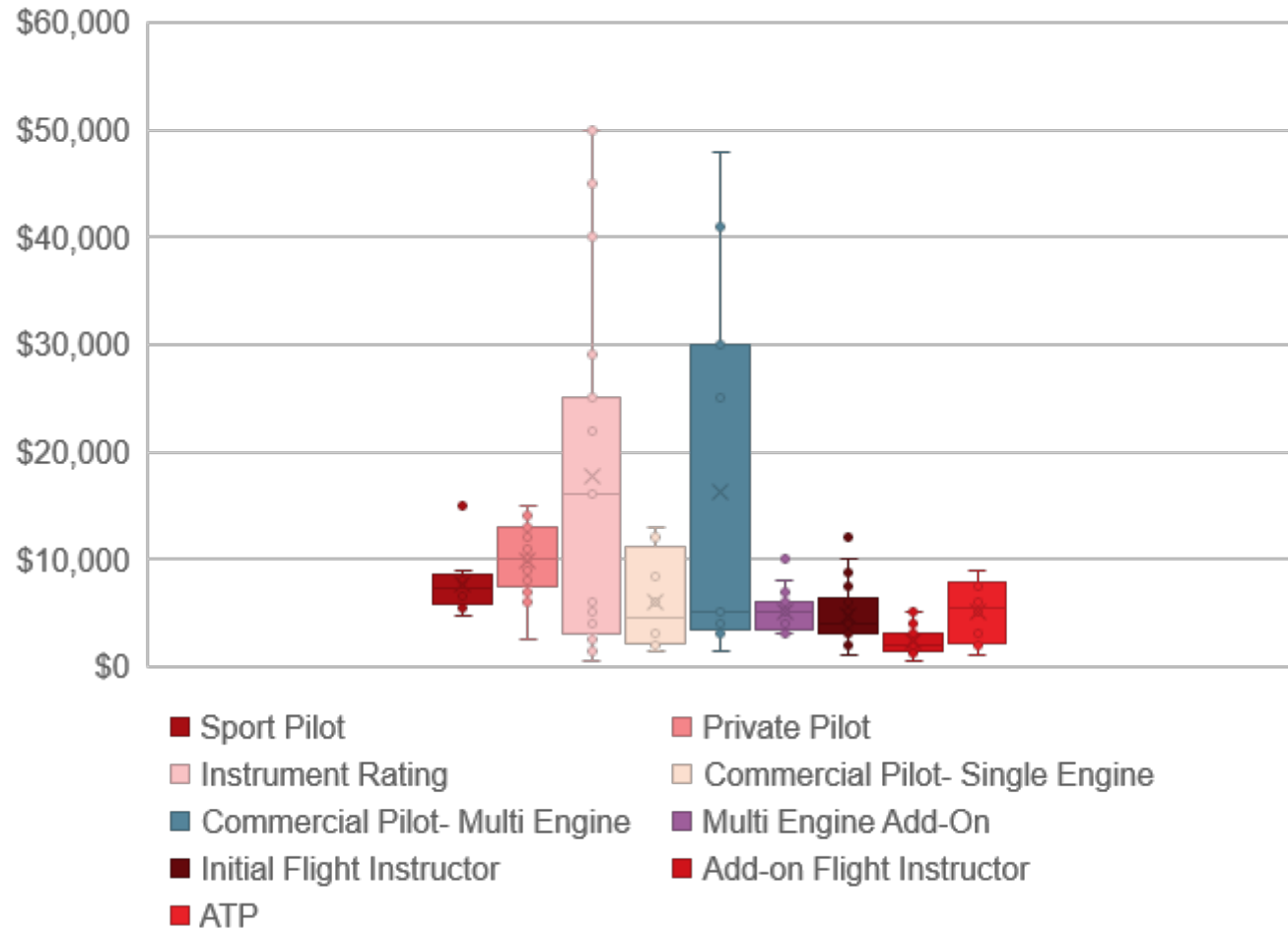
Instructor Rates per Hour



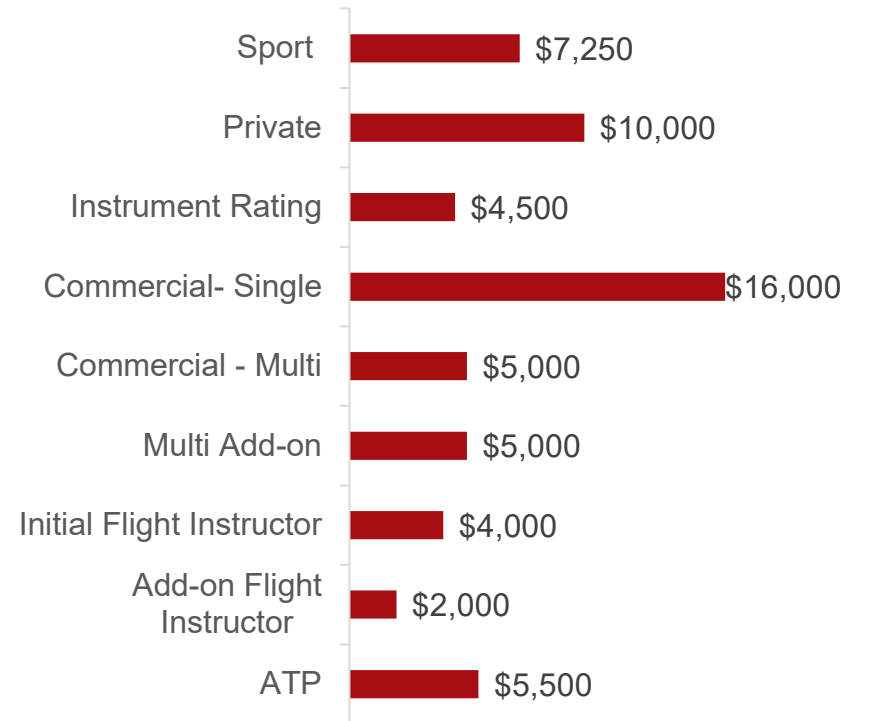
Type	Q1	MED	Q3
Management CFI	\$50	\$65	\$80
Line CFI- Full Time	\$50	\$65	\$74
Line CFI- Part Time	\$50	\$55	\$70



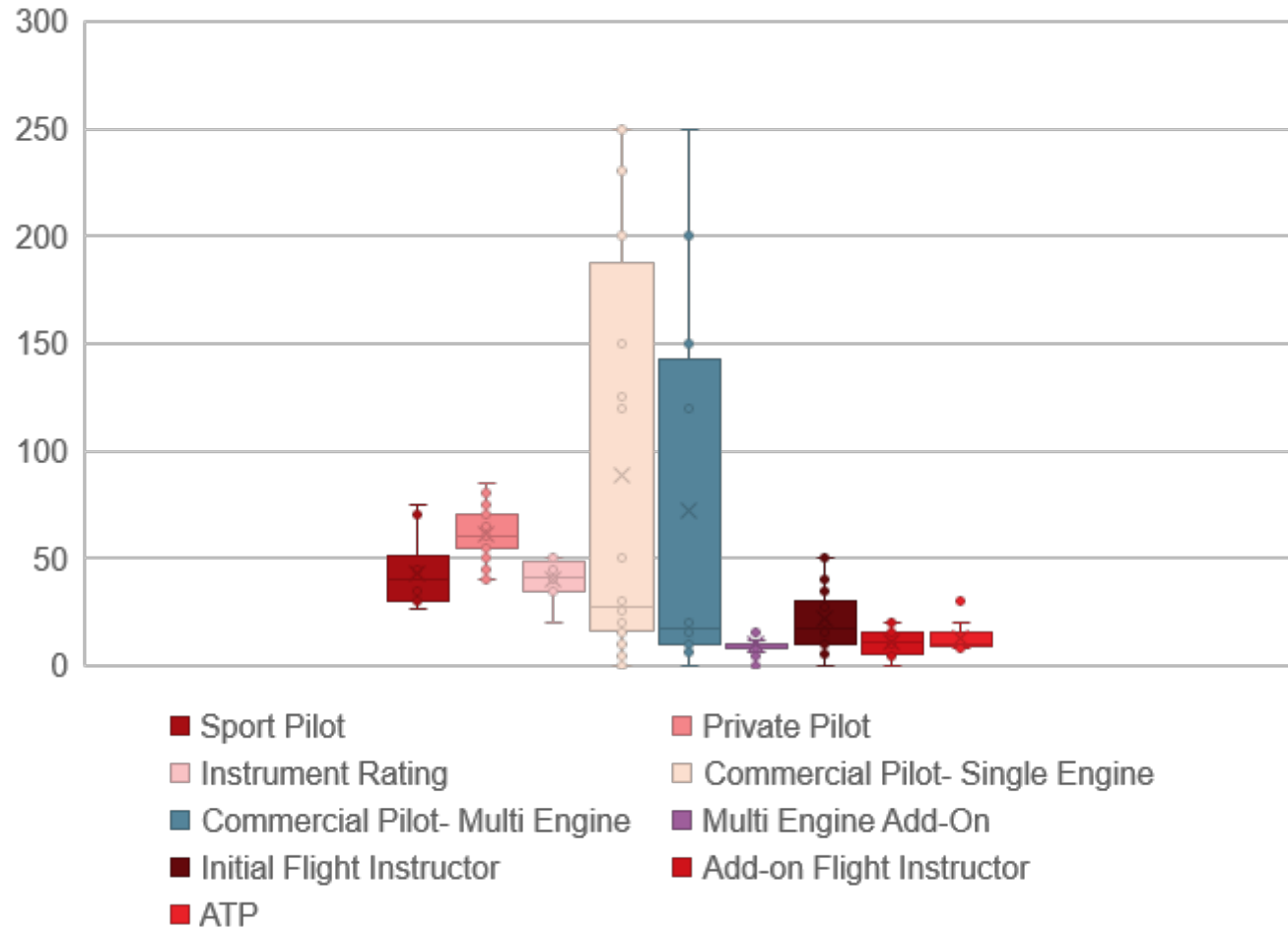
Cost to Complete Training



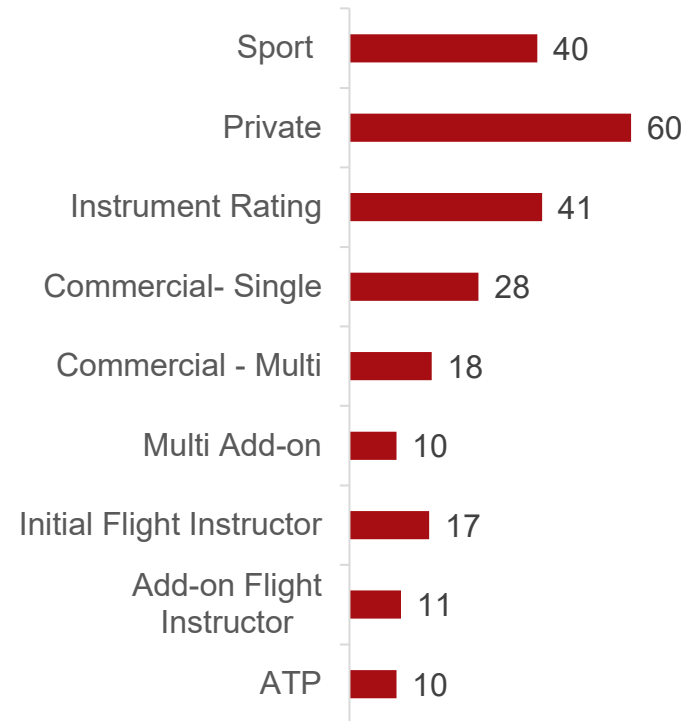
Median Cost to Complete by Course



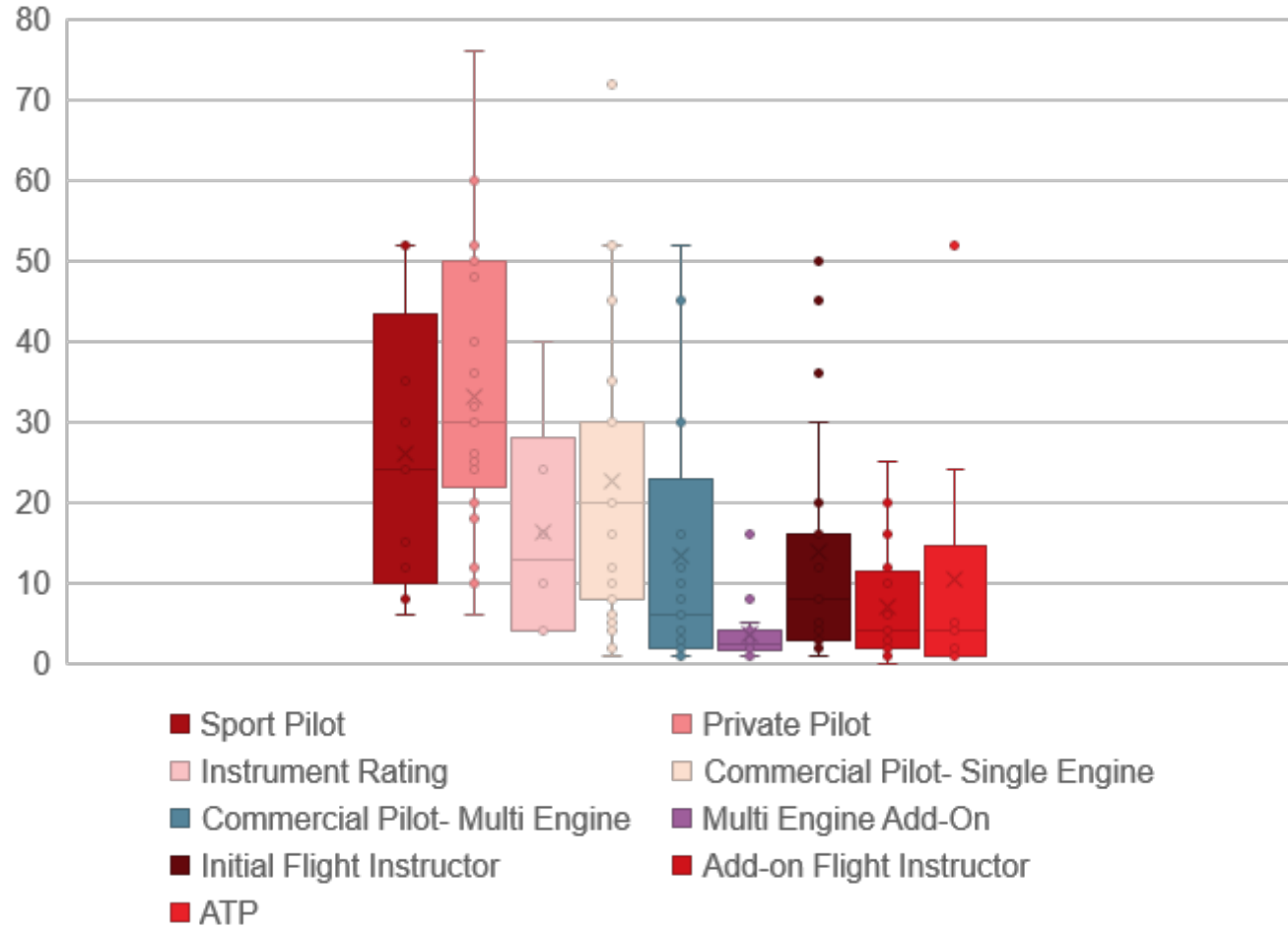
Flight Time to Complete Training



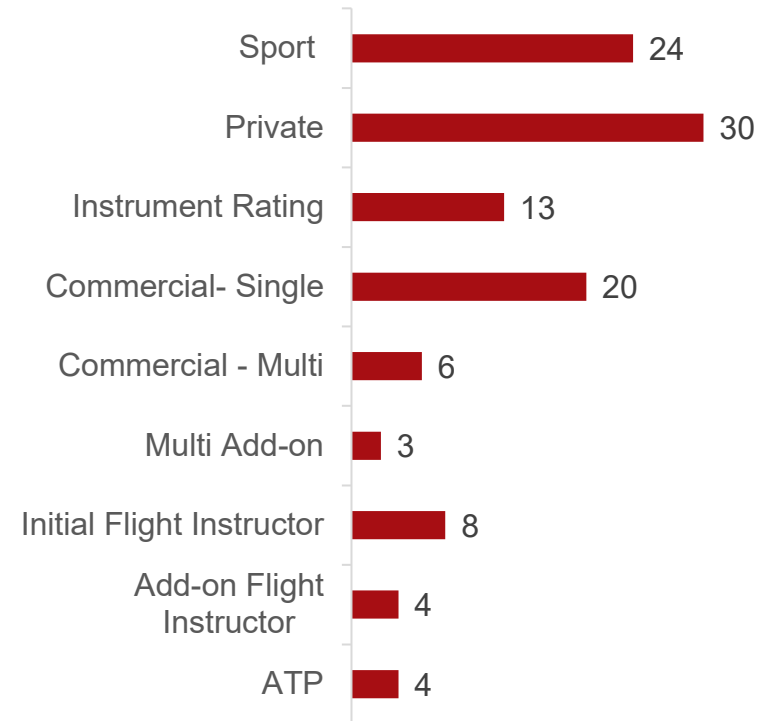
Median Flight Time to Complete by Course



Weeks to Complete Training



Median Weeks to Complete by Course



Trends

Several clear trends and insights emerged from this year's data. We will be exploring many of these in detail over the coming months.

We selected three of the most significant to include in this report to give you some context and material to inform your thinking for 2021.



Trend 1

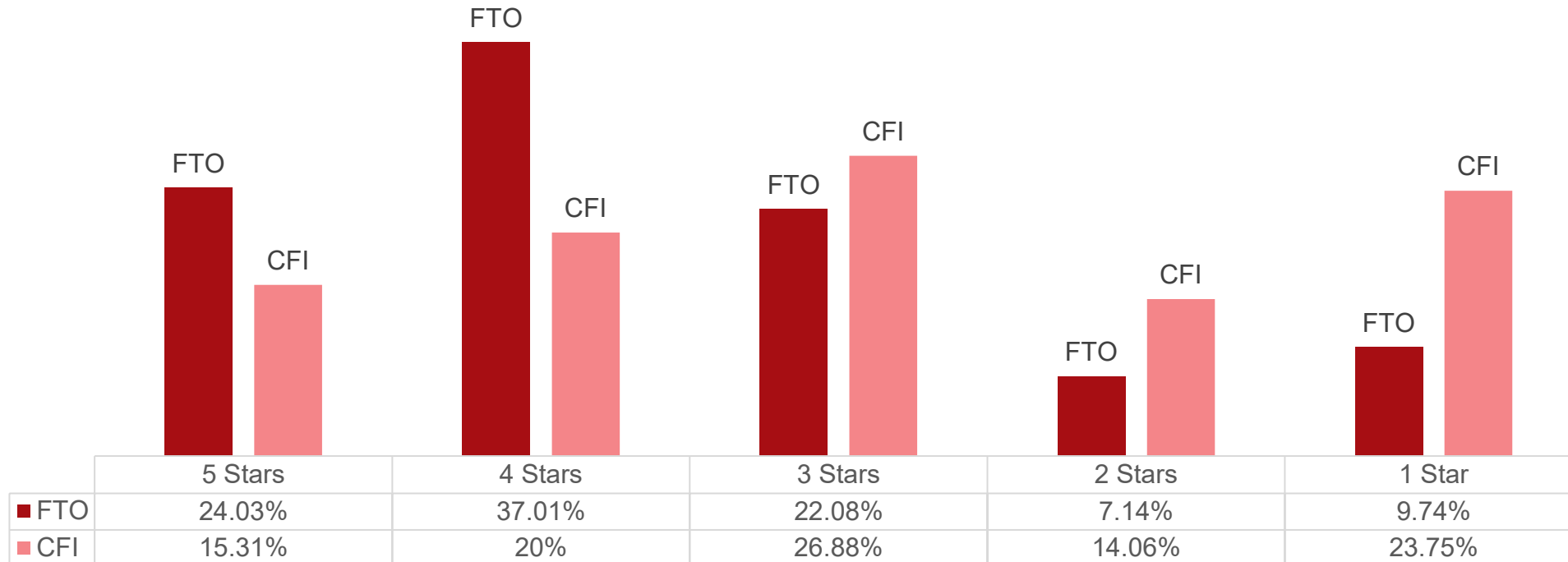
The Impacts of COVID-19 on Flight Training Providers

Like the rest of the world, the flight training industry was impacted massively by COVID-19 and the resulting lockdowns and restrictions. However, Independent Certified Flight Instructors (I-CFI) disproportionately felt that impact. In broad terms, most Flight Training Organizations (FTO) weathered the storm reasonably well, and some even benefitted from the increased disposable income and free time of consumers. Conversely, I-CFIs faced immense challenges and lacked the infrastructure and industry support to succeed during the pandemic.



2020 Outcome: FTO vs Independent CFI

FTO vs Independent CFI



Ranked from 5 Stars (Great) to 1 Star (Poor)



The Impacts of COVID-19

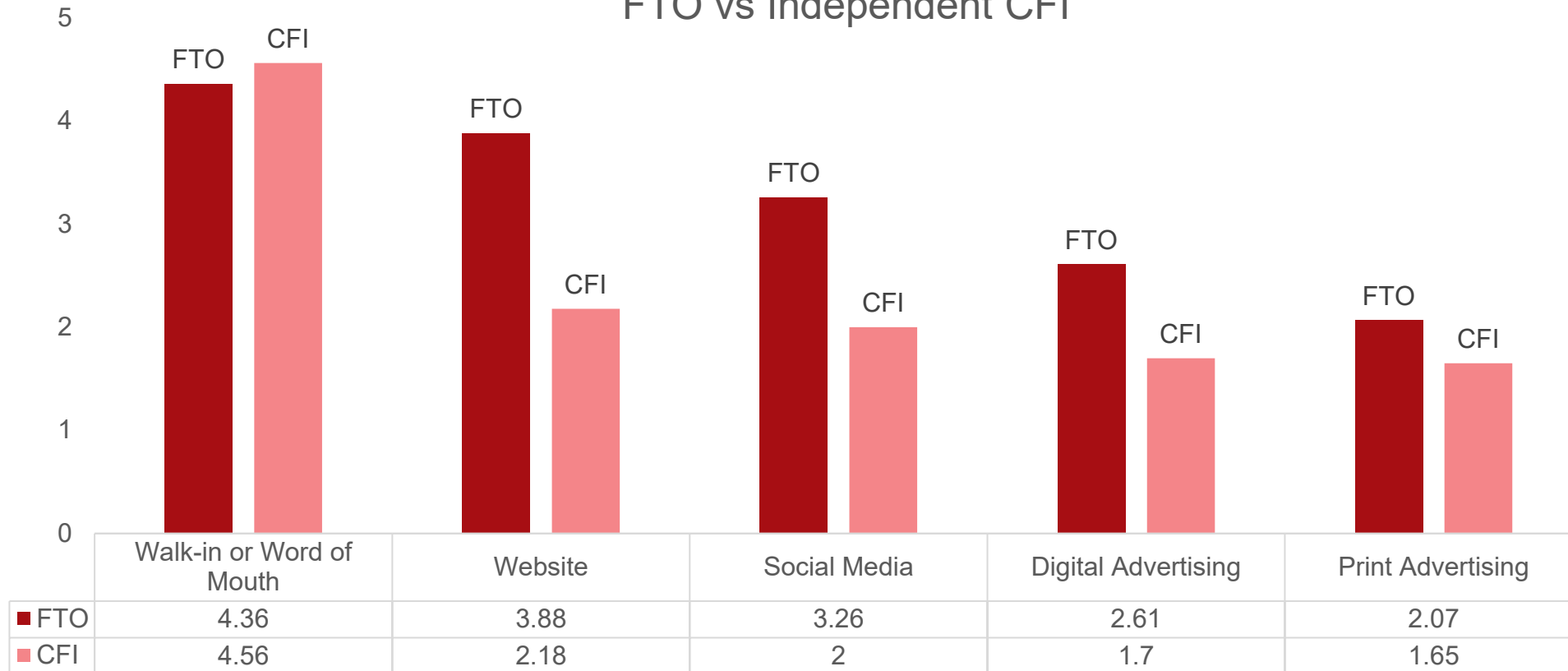
These drastically lower performance ratings are likely due to several factors. However, the reliance of Independent Flight Instructors on word-of-mouth and walk-in marketing for new business stands out. In a world of lockdowns, a more sophisticated digital marketing model is a requirement.

In general, FTOs ranked their websites and social media channels as far more impactful than I-CFIs did. As the consumer base for flight training shifts younger and more digitally savvy, this area will continue to factor into who wins and loses in the industry.



Marketing Channels

FTO vs Independent CFI



Ranked from Most Important (5) to Least Important (1)



The Impacts of COVID-19

Thankfully, building a modern website and social media presence has never been easier or cheaper. With tools like Squarespace and Wix, more I-CFIs can establish a basic digital presence. This is also an area where industry groups can provide much-needed knowledge and support. It is time for the industry organizations that care about a healthy and robust cohort of I-CFIs to communicate the value of digital marketing, and most critically, provide tools to help.

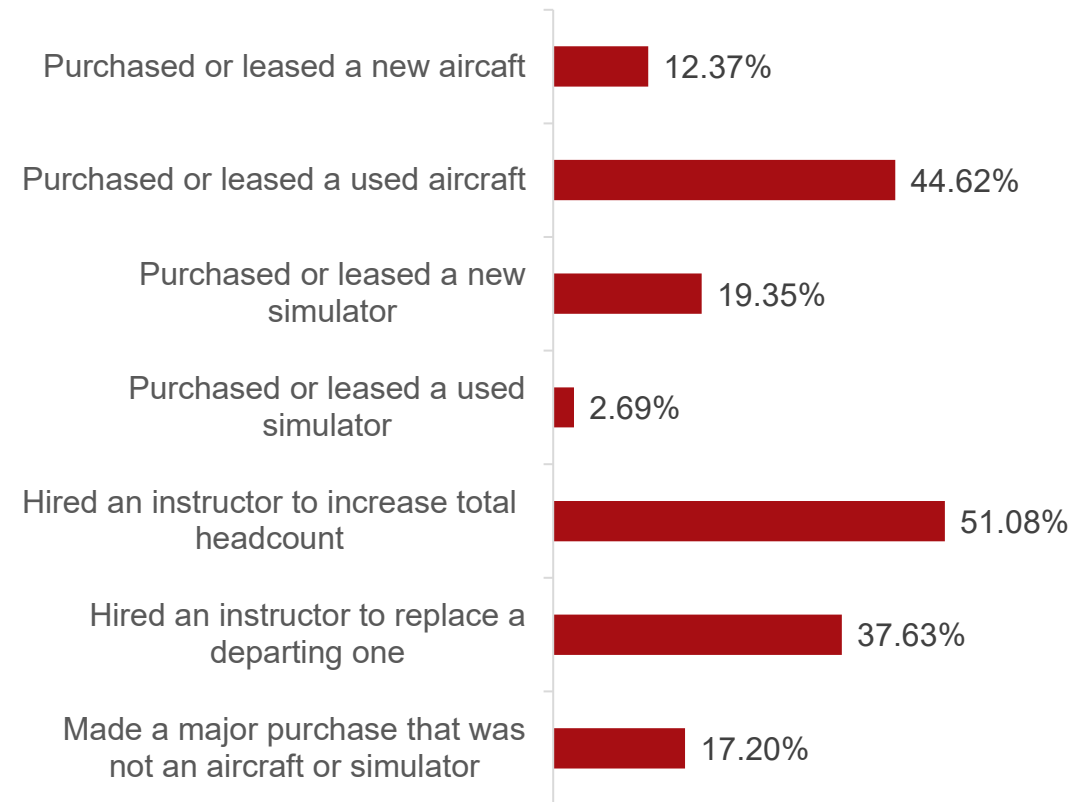
This shift to a digital-first marketing approach does not only apply to I-CFIs. All training providers should continue or accelerate their efforts to reach consumers where they are most active: online.



The Impacts of COVID-19

FTOs leveraged their relative success this year to add to their aircraft fleet, hire instructors, and expand their simulator offerings. Over 50% of FTOs made a major purchase, lease, or increased instructor headcount in 2020.

Major Activities Completed in 2020



The Impacts of COVID-19

As you would expect, the results flight training providers achieved in 2020 greatly influence their plans for 2021. Consequently, FTOs are generally far more optimistic about this year, and they plan to continue their growth. Like many industries, flight training is at a critical juncture. The larger organizations strengthened in 2020, and the smaller ones weakened. Without substantial changes, this trend is likely to continue in 2021, and many small and independent providers will be acquired or go out of business.

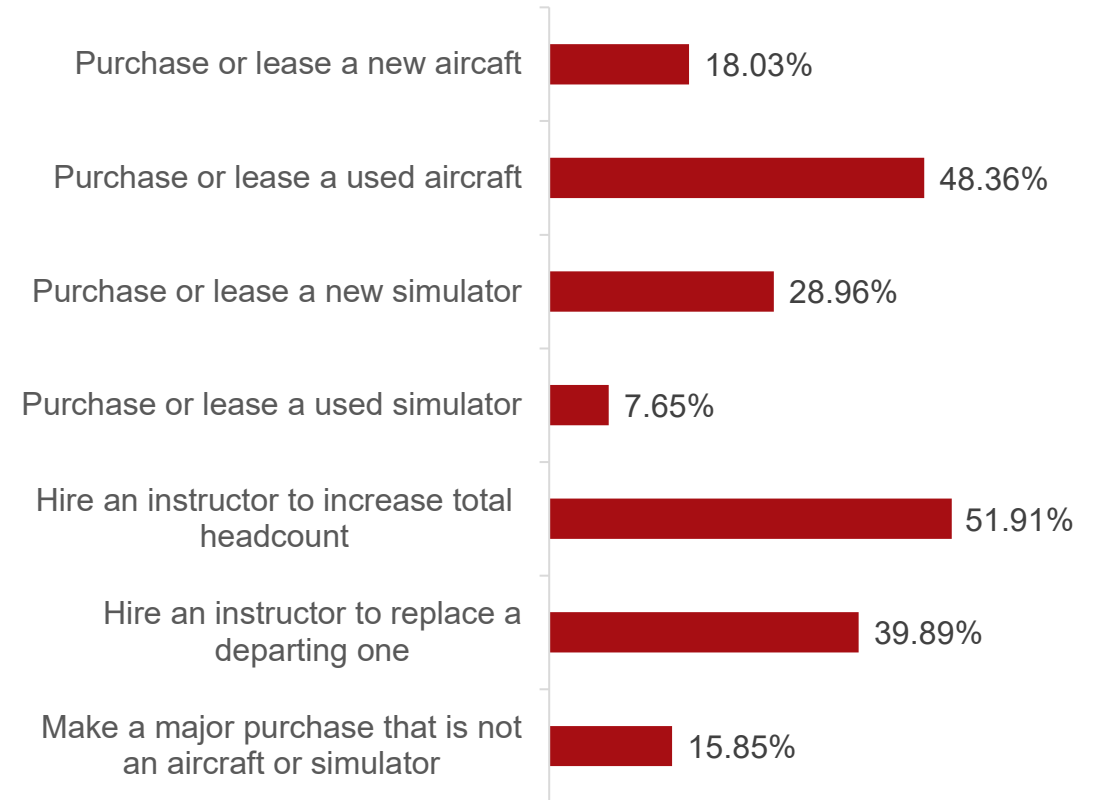


The Impacts of COVID-19

Overall Business Outlook for 2021



Major Activities Planned for 2021



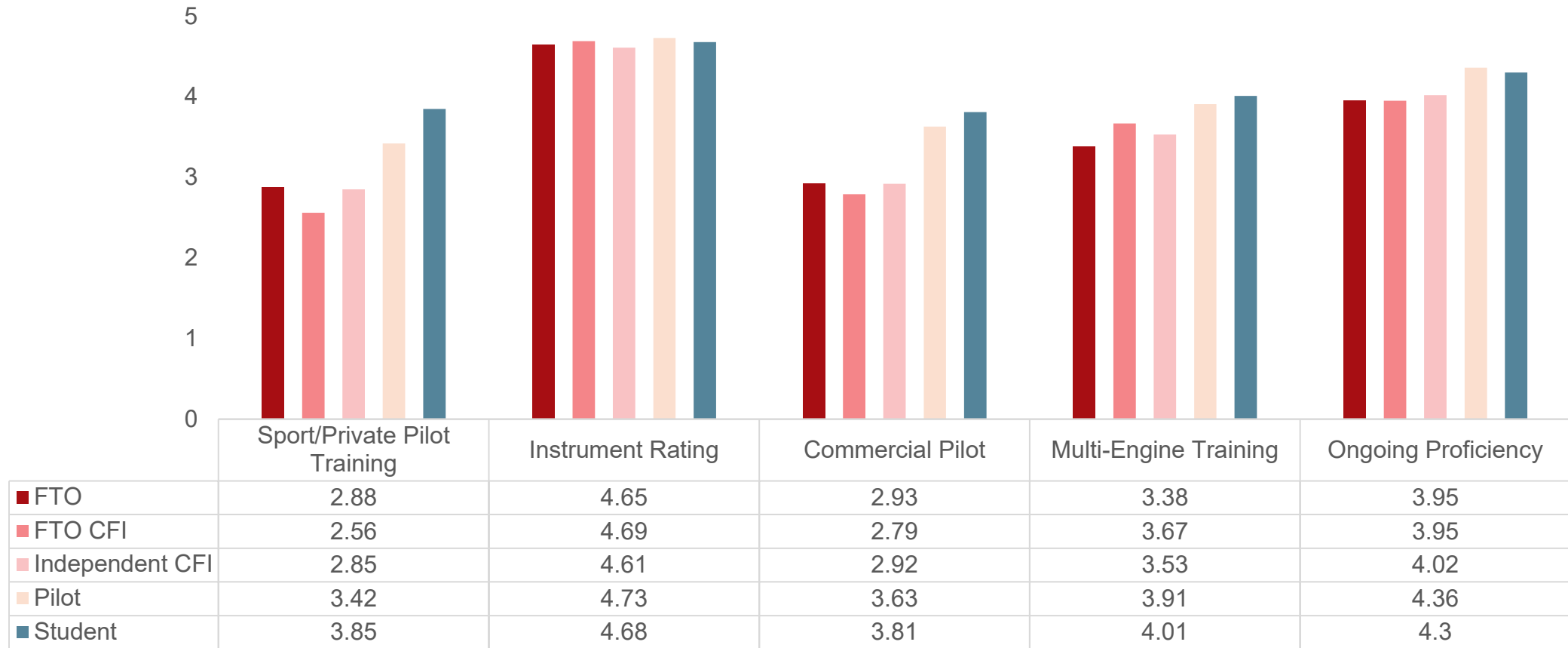
Trend 2

Students and Instructors Disagree About the Value of Simulation

There is a common line of thinking you hear in flight instructor circles: “This sim is great and all, but people just want to get in the airplane. It’s why they are learning to fly.” This idea makes some sense at face value, and instructors reference it frequently to justify lower simulator utilization rates. However, the truth is likely more nuanced. Based on the data from this year’s survey, Students and Pilots tend to value training time in a simulator more than instructors.



Perception of Sim by Training Type



Ranked from Most Important (5) to Least Important (1)

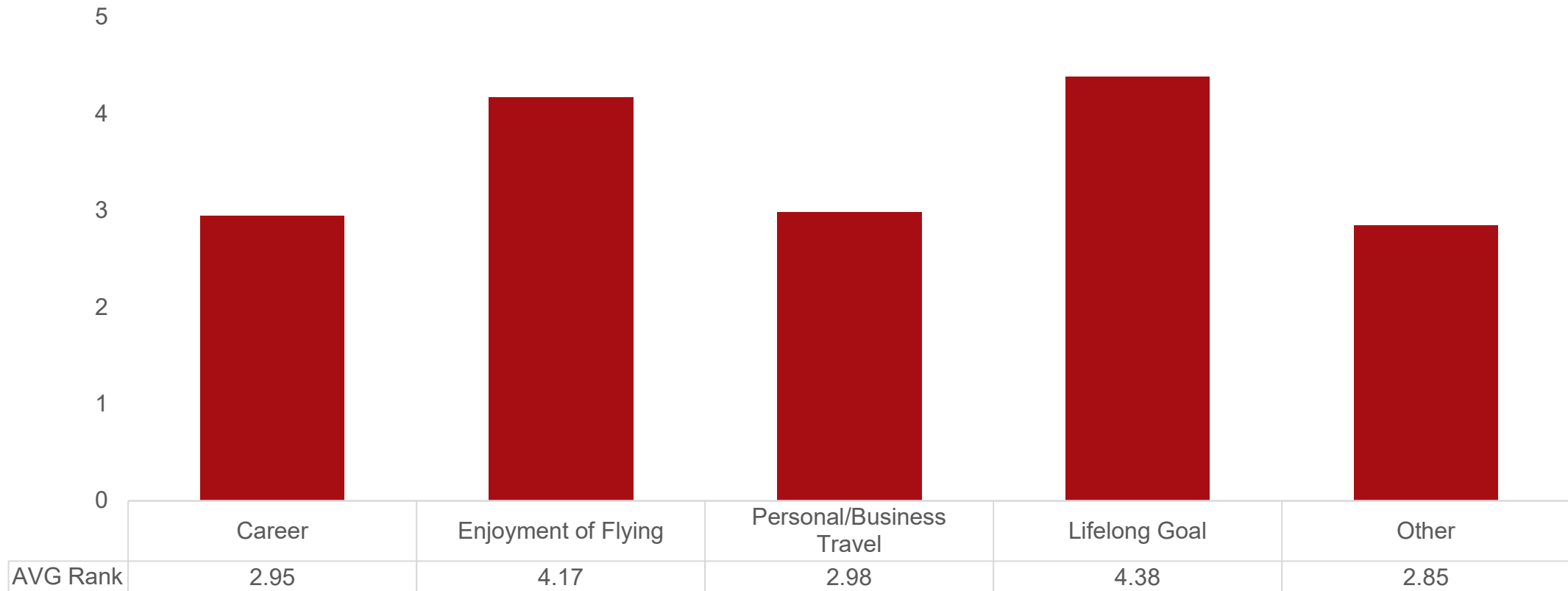


Simulator Value Disagreement

Students and Pilots who are actively training are not spending their time and money for pleasure flights; they are working to achieve a goal. They innately recognize the value of simulation and appreciate its potential to lower the cost and decrease the time to achieve their goal. It is true that most Students and Pilots rate “Enjoyment of Flight” as their primary motivating factor for being a pilot, but their motivation during training is not “to just get in the airplane.” They want to achieve their goal, and they are willing to use tools to help them do it as quickly and efficiently as possible.



Prospective Student Motivation



Ranked from Most Important (5) to Least Important (1)



Simulator Value Disagreement

Perhaps flight instructors who doubt the value of simulation or their students' willingness to use it should reevaluate their reasoning and remember that the goal of flight training is not to fly. The goal is to earn a certificate, rating, or endorsement and become a better pilot.



Trend 3

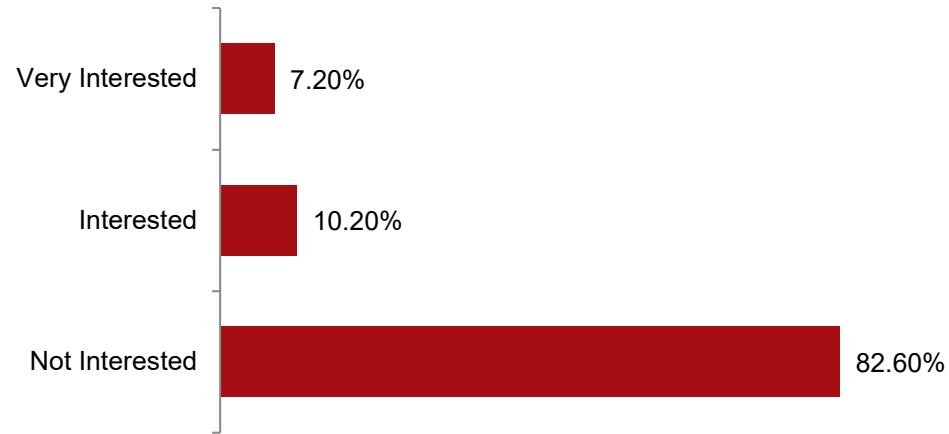
Not Everyone Wants to Be a Pilot

If you are involved in the flight training industry, you likely have made some painful sacrifices and choices. Learning to fly is not cheap, and it is notoriously time-consuming. Pursuing a career in aviation is equivalent to becoming an attorney in both dollars and years. Many professional pilots and instructors have education debts that would make a financial planner blush. If you are in this industry, you love flying. It is the only explanation for why you would put yourself through the pain. Resultantly, you may find it hard to understand that not everyone wants to be a pilot. In fact, approximately 80% of the general public in the United States has no interest in becoming a pilot, even if cost was not a factor.

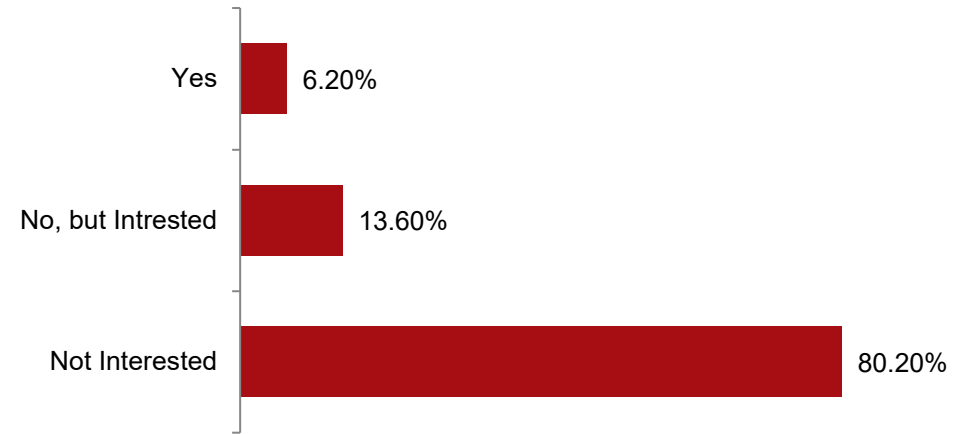


Not Everyone Wants to Be a Pilot

If cost was not a factor, how interested would you be in becoming a pilot?



Have you ever considered becoming a professional pilot?



Not Everyone Wants to Be a Pilot

This statistic is significant for a few reasons. First, it defines the total addressable market size of our industry. At first glance, this limit may seem like a negative, but the data show a total addressable market of over 40,000,000 eligible and interested potential pilots. That is 60 times the current number of pilots in the US. The industry has a lot of room to grow before it hits a market limit.



Not Everyone Wants to Be a Pilot

Next, the industry needs to recognize that its customers have influential people in their lives who just don't get it. These people have no interest in aviation and cannot understand why their spouse, child, or friend wastes time and money flying around in small, unsafe airplanes. Training providers, instructors, and industry groups need to provide support and materials to help customers justify and explain the benefits, costs, and safety of general aviation. Aircraft OEMs understand this dynamic. The recent domination of the single-engine piston market by Cirrus is in no small part due to the company's innovative CAPS parachute and the soothing effects it has on spouses. The flight training industry needs to reduce the friction its customers face at home by putting more energy into similar efforts.



State of Flight Training 2021

Thank you to everyone who participated in this year's survey and a special thank you to our partners shown below. For more information about Redbird Flight Simulations, please visit www.redbirdflight.com or email info@redbirdflight.com.

