2025

Pipeline Report

& AMTS DIRECTORY

AVIATION TECHNICIAN EDUCATION COUNCIL

ATEC

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2025 Pipeline Report AND AMTS DIRECTORY

AVIATION TECHNICIAN EDUCATION COUNCIL

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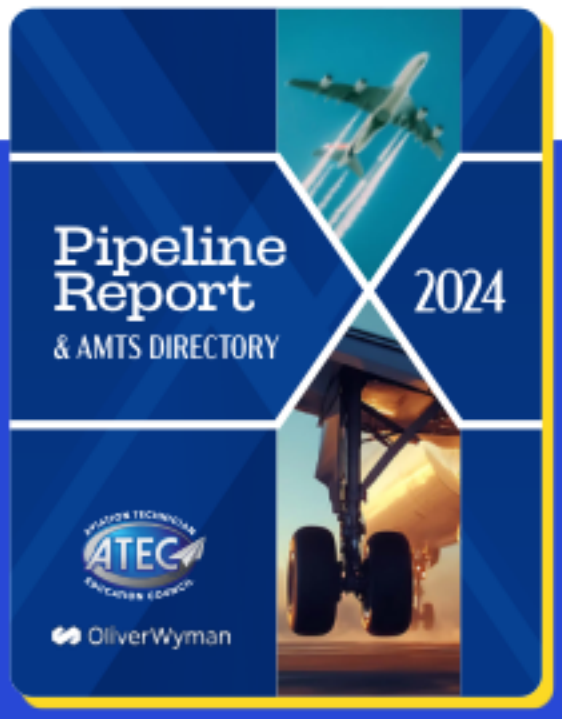

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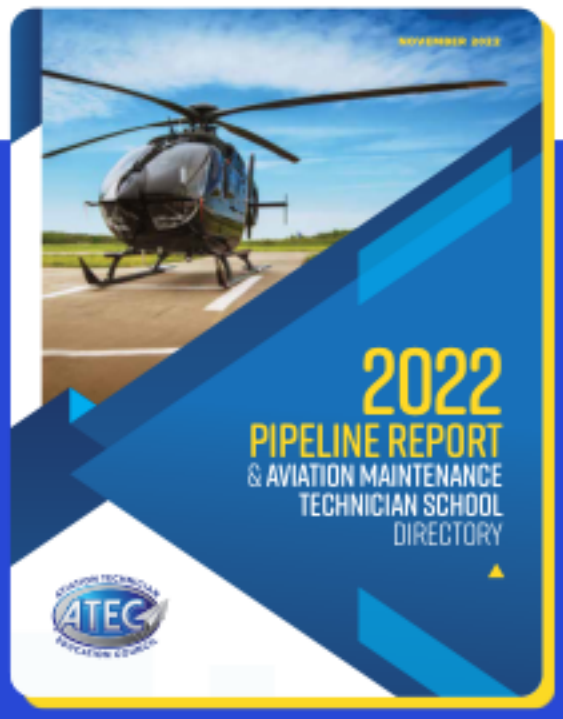

ABOUT THE REPORT

This report was developed by the **Aviation Technician Education Council (ATEC)** and **Oliver Wyman**, which have combined their respective datasets to offer a comprehensive view of the aviation technician pipeline. This collaboration enables ATEC to offer in-depth insights into the aviation technician landscape, enhancing our ability to inform collective workforce initiatives.

ATEC is a partnership of aviation maintenance technician schools, organizations that support them, and employers that hire their graduates. The council is committed to advancing and strengthening technician education through its communication channels, advocacy initiatives, and networking events.

Oliver Wyman—a business of Marsh McLennan (NYSE: MMC)—is a global leader in management consulting. With offices in more than 70 cities across 30 countries, Oliver Wyman combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation. **Oliver Wyman Vector**, a division of the company, supports certification and maintenance programs for aviation clients worldwide.

This report is a compilation of information about Federal Aviation Administration (FAA) airframe and powerplant (A&P) mechanic certificate holders, the aviation maintenance technician schools (AMTS, part 147 programs, or "A&P schools") that prepare the majority of such individuals for careers in aviation maintenance, and the companies that employ maintenance professionals. ATEC publishes the report annually as The Pipeline Report.

This year's edition covers the period since the last version was published in September 2024. Supporting data was collected through an ATEC-conducted survey of educational institutions holding an FAA certificate issued under Title 14 of the Code of Federal Regulations (CFR) part 147. The survey took place between April and June 2025. Almost half of all AMTS certificated in 2024 responded to the questionnaire; contributing programs are recognized with an asterisk (*) in the list of AMTS starting on page 26.

Additional data was gathered from the National Center for Education Statistics, FAA Airmen Certification Branch personnel, the FAA maintenance school database, FAA US Civil Airmen Statistics, Regional FAA Active Airmen Tables, FAA data downloads, Aviation Week Network, the FAA airmen certification database, and Oliver Wyman's proprietary data. Information used in the report from these sources is based on data available as of January 1, 2025.

BACK COVER PHOTO CREDITS Top left **PIA** Top right **US Aviation Academy** Bottom **AIM**

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EXECUTIVE SUMMARY

After record-setting post-pandemic growth in 2023, the aviation maintenance industry saw its second largest increase in new mechanic certificates in 2024; this was only 4.3% below last year's decades-long high and nearly 30% above the previous ten-year average. AMTS certificated graduates followed a similar trend, coming in just shy of last year's blockbuster numbers and well above pre-pandemic levels. The 208 AMTS programs produced two-thirds of all new mechanics last year.

But while supply is growing, demand is expected to grow faster, with the North American commercial air transport fleet projected to increase by about 13% over the next 10 years. In addition, due to a record new-build backlog and new platform issues, we are about to see a maintenance, repair, and overhaul (MRO) "super cycle"—in response to an aging fleet requiring more maintenance and increased aircraft utilization.

Expanding demand and worker retirements are expected to drive a 10% shortage in certificated mechanics to meet commercial aviation needs this year. This shortfall is projected to soften to 6% by the end of the decade but not surpass demand, representing a gap of 4,200 certificated mechanics in 2035. This analysis does not account for business and general aviation or for emerging markets, which will place additional pressure on the technical workforce.

Female representation in the mechanic workforce continues to grow at a glacial pace, with women making up only 2.9% of the total workforce. This figure increases by just tenths of a percentage point annually, highlighting a significant untapped opportunity. Meanwhile, the share of military veterans transitioning to civilian maintenance jobs dropped by nearly 14% last year—the first decline in three years. ATEC estimates that less than 10% of experienced veterans are moving into comparable civilian mechanic roles.

Given the current landscape, key components to increasing the number of aviation mechanics will be developing work-based certification pathway programs, attracting historically underrepresented groups and experienced military veterans to the industry, and expanding AMTS enrollment.

More than one-third of AMTS seats are empty; schools cite insufficient marketing and faculty as challenges to increasing enrollment. While maximizing current capacity would help reduce the technician shortage, it would not close the gap entirely. Eliminating the shortfall will require not only meeting but expanding capacity through both community-level efforts and broader initiatives to raise awareness among targeted populations.

One solution to increasing A&P school enrollment that is gaining traction is ATEC's sister foundation, Choose Aerospace. The program was created to introduce high school students to aviation technical careers, allowing them to complete their general coursework before entering an A&P school—arriving both prepared and motivated. Last year, nearly 1,000 students enrolled in 45 Choose Aerospace programs across 17 states. While most adopters are secondary schools, the curriculum is also being implemented in part 147 institutions as well as corporate apprenticeship and training programs.

This new initiative is beginning to produce graduates. While some students continue on to A&P school, others are moving directly into the workforce, filling critical non-certificated technician roles at repair stations. AMTS supporting these programs as a way to boost enrollment and reduce attrition are offering incentives and credit opportunities for program graduates. While the current data set of graduates is small, preliminary results are positive and suggest these non-certificated early pathway programs could be a key solution to filling empty A&P seats and ultimately meeting rising demand.

One of the most pressing challenges for AMTS—and one that is likely to intensify—is the shortage of qualified instructors. As demand for technical talent grows, AMTS face steep competition from industry, where salaries are significantly higher. Recent data show that AMTS instructors earn an average of $61,000 to $70,000 annually, and more than 90% of schools report that compensation and benefits pose major obstacles to recruiting and retaining faculty. To help address this gap, the ATEC Academy provides professional development for AMTS, supports (mostly retired) industry professionals in transitioning to the classroom, and assists schools in retaining new educators.

Some 35% of AMTS report that a shortage of Designated Mechanic Examiners (DMEs) is hindering their ability to certify graduates. ATEC estimates that the DME workforce must grow by at least 15% to keep pace with current graduate volumes; and yet, the number of DMEs actually declined last year. While ATEC continues to push for regulatory reforms—such as removing DME geographical limitations—the council has long encouraged the FAA to expand examiner availability by incorporating airman testing into the Organization Designation Authorization (ODA) program, a solution the FAA has promised for years. As of this writing, the FAA has yet to issue the necessary guidance to implement the program.

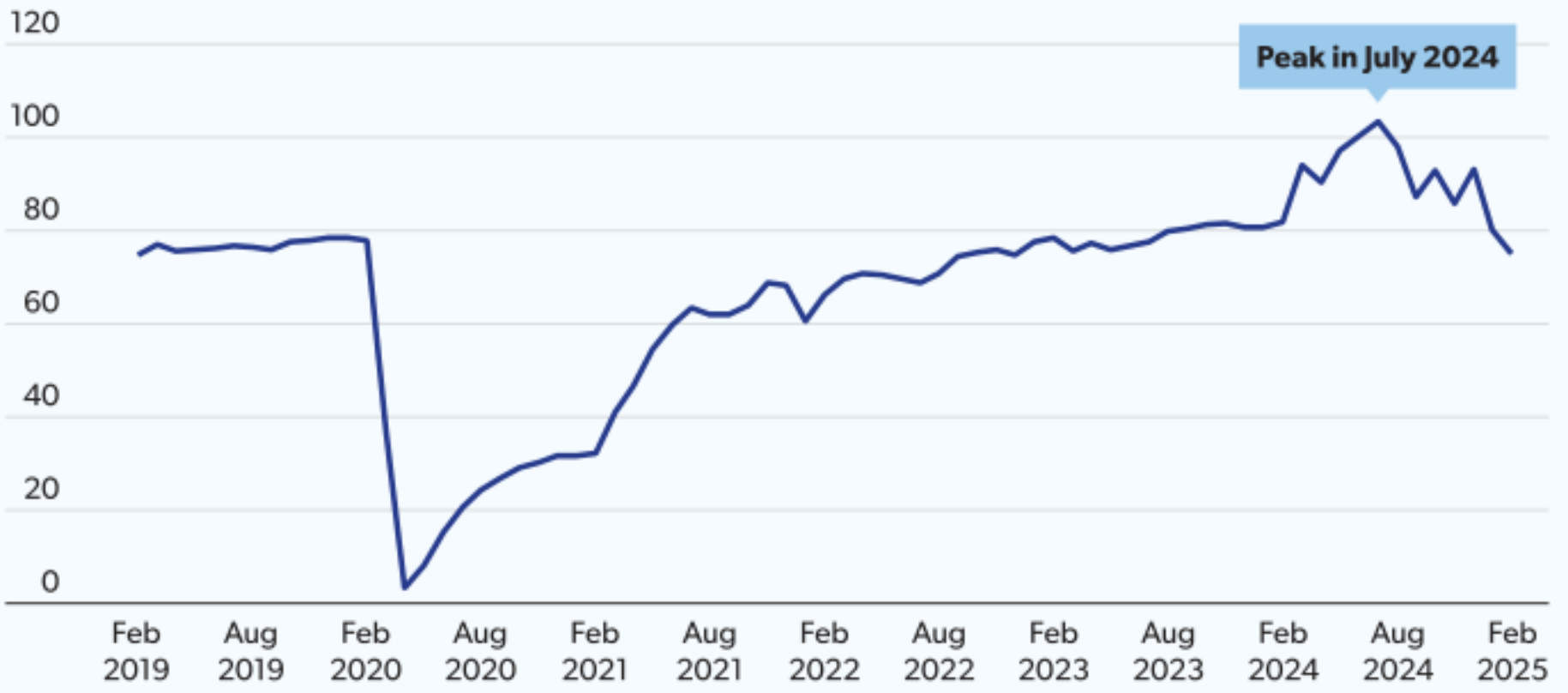
On a brighter note, the rate of A&P students becoming certificated mechanics increased yet again in 2024: 63% of AMTS graduates became certificated, up three basis points over the prior year and 13 basis points above 2022's seven-year low. A driving force is an increase in the number of schools leveraging the flexibility offered by the new part 147, with 83% of AMTS scheduling FAA testing during the training cycle, strengthening the integration of testing within the curriculum.

INDUSTRY BACKDROP

As shown in Figure 1, global air traffic has grown beyond pre-pandemic levels. According to the US Bureau of Transportation Statistics, US passenger traffic (as measured in scheduled-service passengers) reached a high in July 2024 – 28% higher than in July 2023 and 32% higher than in December 2019.

In addition, the 2024 North American commercial aircraft fleet has grown by more than 5% from 2023. As 2024 ended, US airlines were operating 241 more mainline aircraft than they were at the end of 2023, and the North American fleet is projected to increase by about 13% over the next 10 years, according to the **Oliver Wyman Global Fleet and MRO Forecast 2025-2035**.

Figure 1
US Domestic and International Passenger Airline Traffic
Thousands



Source: US Bureau of Transportation Statistics

Airline maintenance workforces were thinned during the pandemic due to Baby Boomer and COVID-related early retirements, layoffs, and highly experienced personnel leaving for other ventures.

Workforce pipelines are changing as well. For example, many airlines used to rely on hiring technicians from third-party shops and regional partners but are now recruiting newly trained employees and, in some cases, paying for them to attend accredited schools.

These shifts are reshaping how maintenance providers attract talent and putting pressure on workforce pipelines to produce more skilled workers.

THE WORKFORCE

MAINTENANCE PERSONNEL

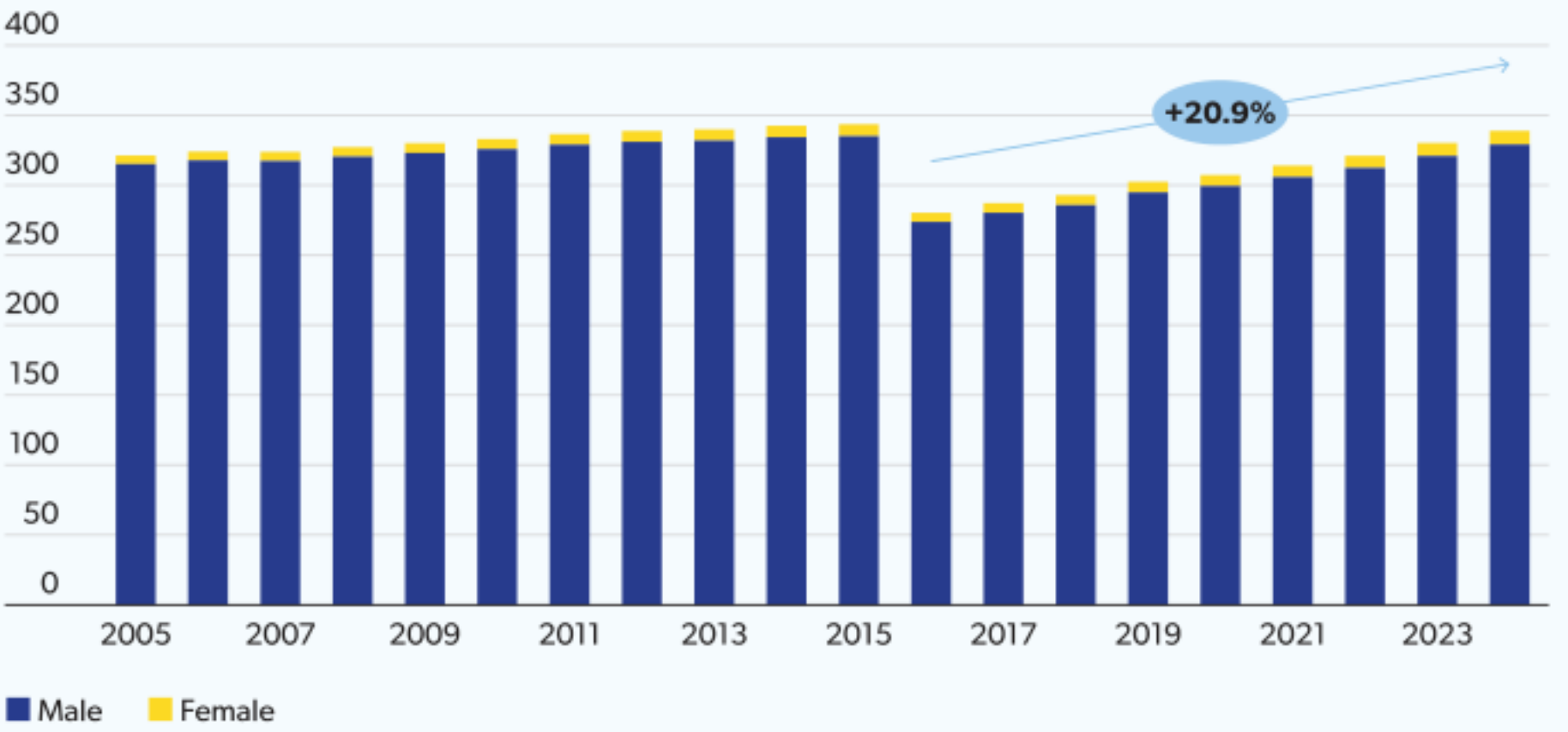
According to Oliver Wyman analysis, the US civil commercial aviation maintenance workforce—including both certificated mechanics and non-certified technicians—includes more than 431,000 personnel. This includes employees in parts manufacturing and distribution, in-house airline maintenance organizations, and those working in MRO for either part 145 repair stations or air carriers.

CERTIFICATED MECHANICS

The FAA airmen certification database includes 337,855 certificated mechanics, a 2.6% increase over the previous year's population. Despite this growth, the number of mechanics has remained relatively flat over the past two decades. Adjusting for the 2016 mandate—when the FAA required application for reissued plastic certificates—the population has grown over the past 8 years by an average annual rate of 2.4% and by 21% in total (Figure 2).

Given that the FAA database does not account for mechanic certificate holders who are not actively exercising their certificate privileges, the number of working mechanics is considerably lower than the total number of individuals possessing a certificate. This discrepancy is highlighted by the notable disparity between the FAA figures for certificated mechanics and Oliver Wyman's estimate of the total technical workforce population.

Figure 2
US Certified Mechanics
Thousands



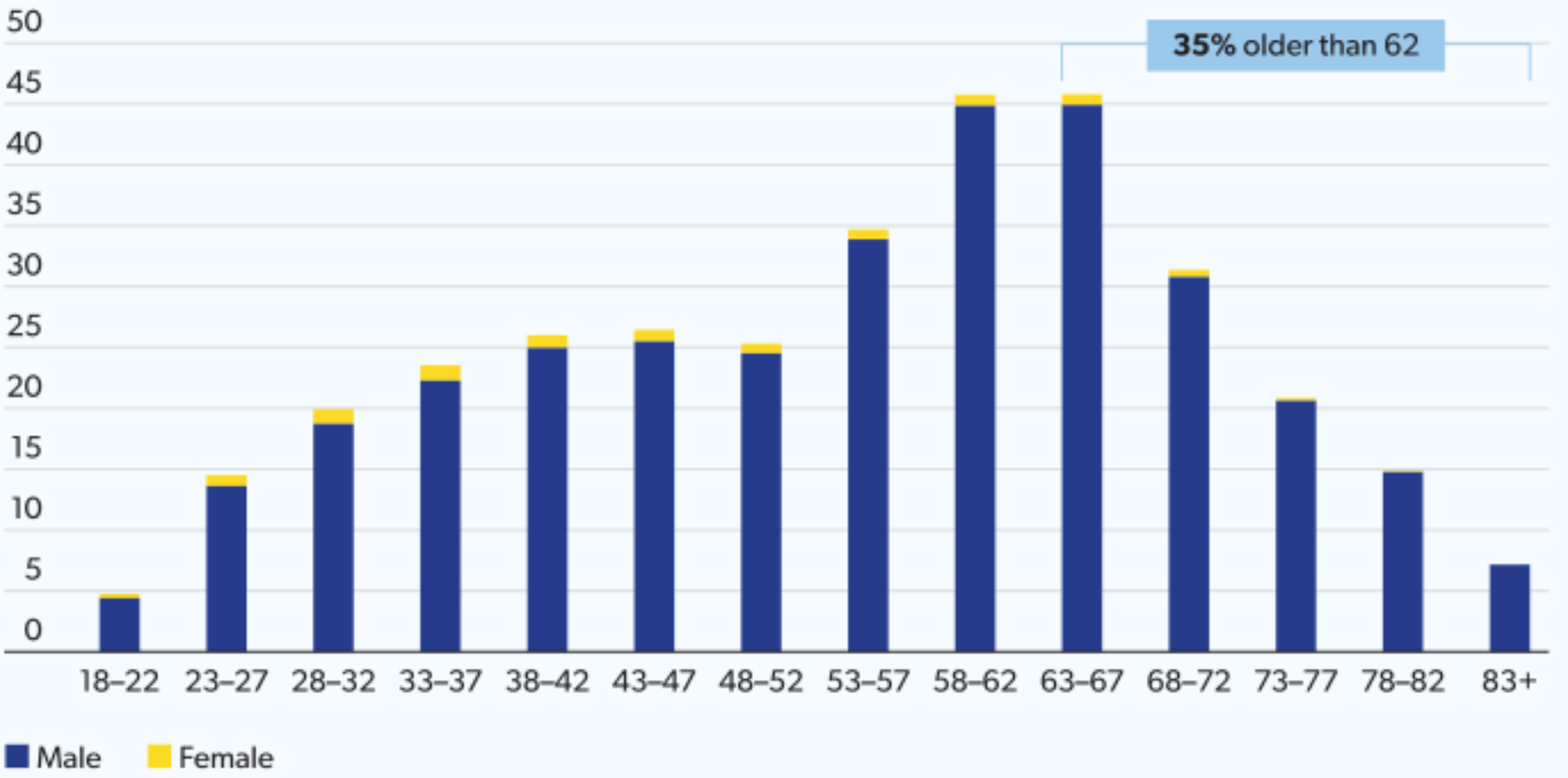
Source: FAA Civil Airman Statistics

DEMOGRAPHICS

Women make up 2.9% of the certificated mechanic population, a figure that has nominally but steadily climbed year over year during the past decade.

As shown in Figure 3, the aviation mechanic population continues to grow older, with 41% over the age of 60. Over the next 10 years, more than 45,000 mechanics will reach retirement age. The average FAA mechanic is 54, which is 12 years older than the average US worker, as reported by the US Bureau of Labor Statistics. Female mechanics comprise a somewhat younger demographic, with an average age of 46.

Figure 3
US Mechanic Age Distribution, 2024
Thousands



Source: FAA

SUPPLY

Last year, the FAA issued 9,013 new mechanic certificates—a modest 4% dip from the previous year's record high. Even so, 2024 was the second-highest year for new mechanic certificates since at least 1999 (when the FAA began publishing the data), underscoring the industry's sustained post-pandemic strength. This consistently higher output positions the workforce pipeline to better meet rising demand, provided the industry maintains momentum in attracting and supporting new entrants.

Two-thirds of new mechanics obtained certification through an A&P school, with the remainder earning certification through military experience (14%) or work experience (20%) (Figure 4).

The number of A&P school-certificated graduates dipped by 5% from last year's record-setting total, but this was still the second-highest annual output on record—underscoring the continued strength of this training pathway. And this

may be a short-term blip, since the decline occurred alongside a healthy 9% increase in overall A&P school enrollment and a continued rise in student certification rates to 63%, suggesting a strong foundation for future growth.

The rise in certification rates is likely tied to the growing use of progressive testing. More than 80% of programs now report that students take portions of the FAA test immediately after completing the corresponding sections of the curriculum. This practice is becoming more widespread since changes to part 147 made it easier for schools to modernize their program structure and integrate FAA testing into the training cycle.

Figure 4
US New Aviation Mechanic Certificates
Thousands

Source: FAA

More than 7% of new AMTS-sourced certificated mechanics are women, compared to 2.9% and 4.3% of those sourced from military or civilian experience, respectively. The work-to-learn civilian pathway grew by 5%, reflecting momentum in certification based on work experience. And while the rate of military personnel obtaining civilian mechanic certification via military aviation experience fell by 13%, outputs remain well above pre-COVID levels.

The 1,300 individuals who obtained FAA certification based on military experience represent only a fraction of the estimated 22,000[1] service members with aviation maintenance backgrounds who leave the military annually. ATEC estimates the civil aviation industry is capturing less than 10% of veterans with at least some aviation maintenance experience. To address this gap, an FAA-industry working group established under Section 426 of the FAA Reauthorization Act of 2024 is drafting a rulemaking recommendation to create more direct pathways to mechanic certification for military personnel with aviation-related occupational specializations.

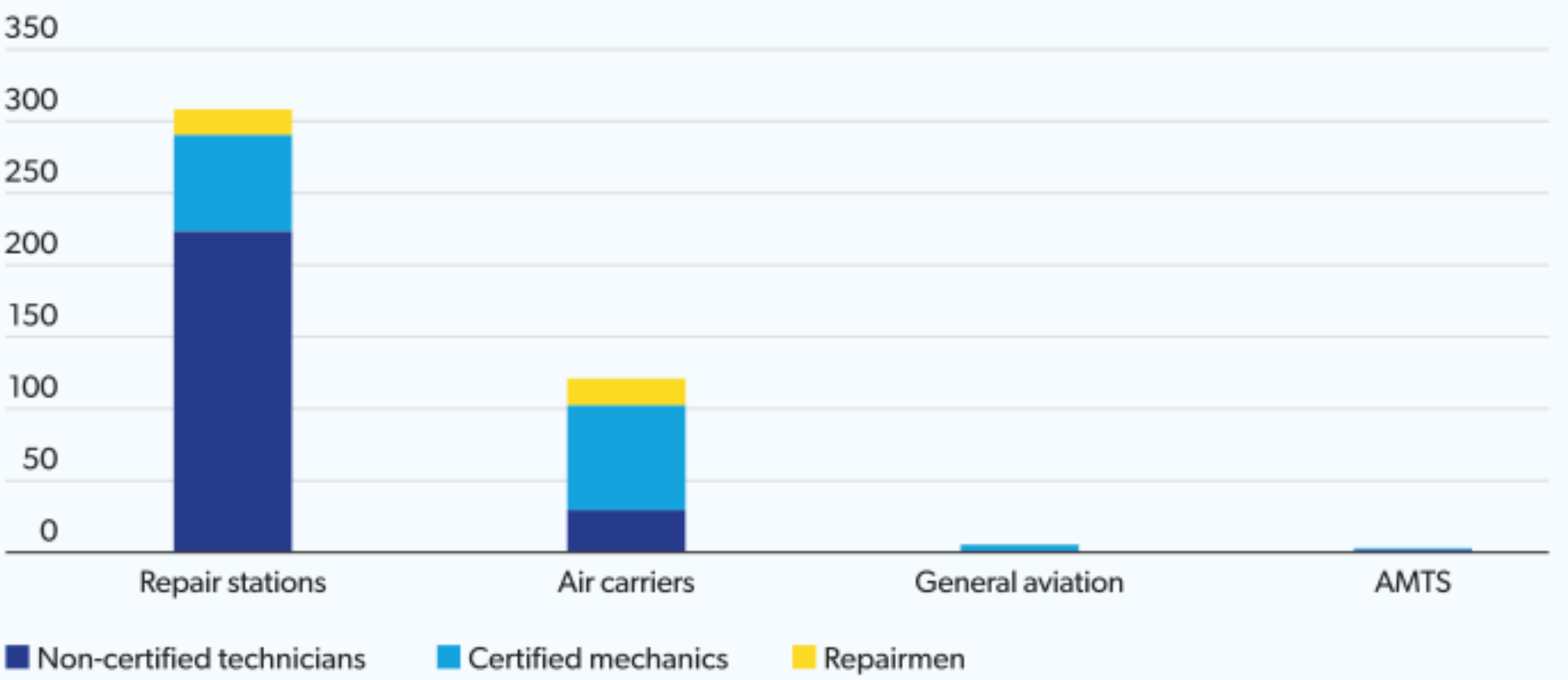
[1]Note: this estimate is derived from a 2020 Government Accountability Office report (GAO-20-206) stating that more than 22,000 service members with aviation maintenance backgrounds separated from the Air Force and Navy in 2018.

EMPLOYERS

In 2024, the FAA reported that one-third of certificated mechanics were engaged in general aviation or working for repair stations, air carriers, or AMTS.[2] This group represents 61% of the air operator maintenance workforce, 22% of the repair station workforce, and 86% of the general aviation workforce. Repair stations employ about 71% of all technical personnel and almost half of all certificated mechanics (Figure 5).

Less than 1% of certificated mechanics work in A&P schools. Despite an almost 9% increase in total student enrollment, the A&P instructor workforce remained flat in 2024 compared to the previous year, underscoring the growing gap between teacher supply and demand and the challenges programs face in hiring and retaining certificated instructors.

Figure 5
US Technical Personnel Aviation Employers, 2024
Thousands



Source: FAA

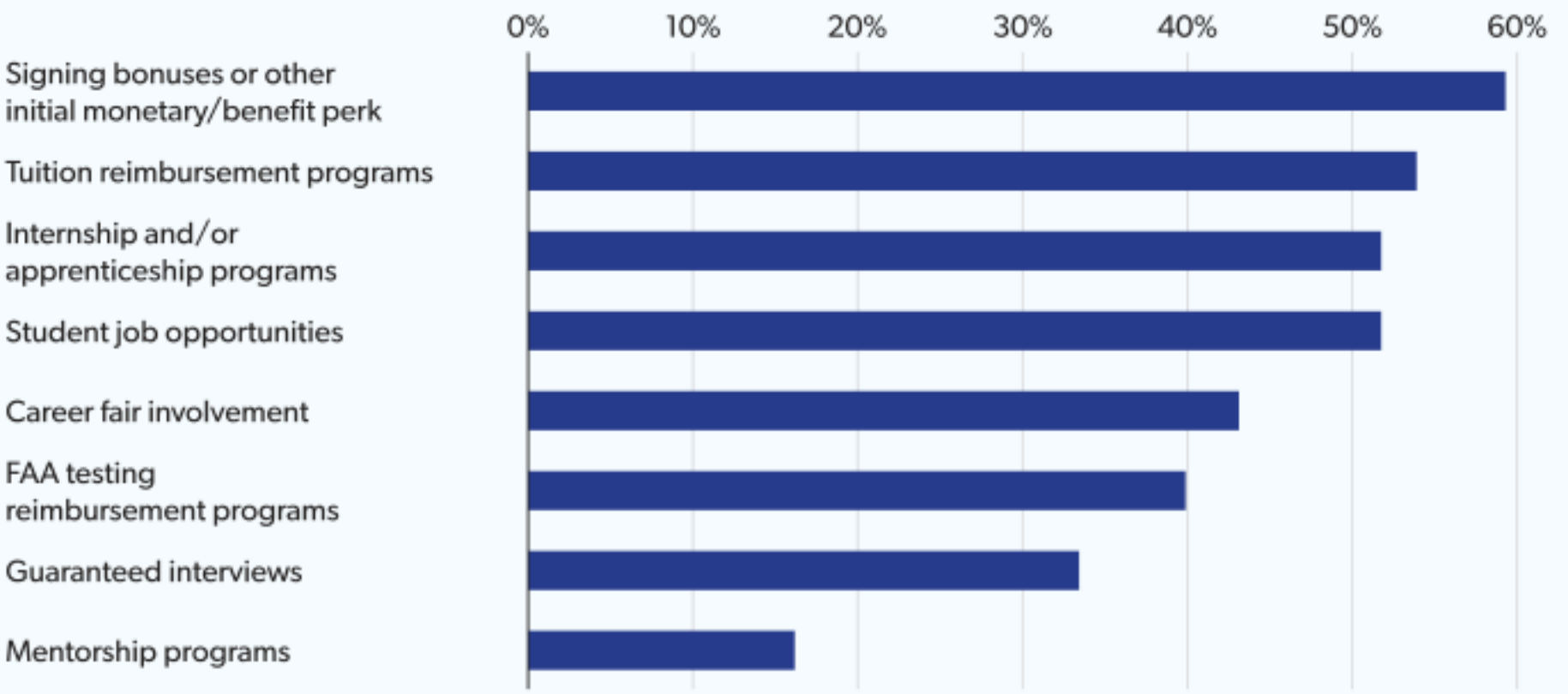
According to this year's survey, tuition reimbursement and signing bonuses are seen as the most effective incentives for recruitment (Figure 6). This indicates that financial support in general is a significant draw for prospective students. Other key incentives include internships and student job opportunities, which facilitate direct connections between students and employers. Overall, these findings suggest that a combination of financial incentives and hands-on opportunities is crucial for effective recruitment in the aviation maintenance field.

[2]The information is based on an analysis of FAA repair station and air operator data for entities certificated under 14 CFR parts 91, 133, and 137 ("general aviation"); parts 121, 125, 129, and 135 ("air carriers"); and part 147. The dataset does not include certificated employee counts for design approval holders, those that work as maintenance contractors, or those employed elsewhere in the supply chain.

Figure 6

"What type of involvement by industry appears to be most successful for recruiters?"

Percent of survey respondents, selecting all that apply



Source: ATEC 2025 Survey

PROJECTED SHORTAGE

While the influx of new mechanics over the next decade is expected to increasingly outpace retirements (Figure 7), this will still not be enough to meet demand. As shown in Figure 8, Oliver Wyman estimates a North American shortfall of roughly 17,800 commercial aviation technical personnel in 2025, including 5,338 certificated mechanics.

By 2027, the deficit is expected to increase to almost 7,000 certificated mechanics, a shortfall of nearly 12% versus demand. Workforce growth will reduce the gap thereafter, but as aviation industry growth drives new demand, the certificated mechanic population is still expected to be about 4,200 short compared to North American commercial aviation needs in 2035.[3] A similar trend is expected for non-certificated maintenance personnel, leading to a total aviation maintenance worker deficit of 22,000 in 2027 and over 14,000 in 2035.

It is also worth noting that this projection does not include non-commercial needs for mechanics—meaning that, for the foreseeable future, there is no bandwidth at all to meet increased demand from rotorcraft, business and general aviation, military aviation, or emerging technologies.

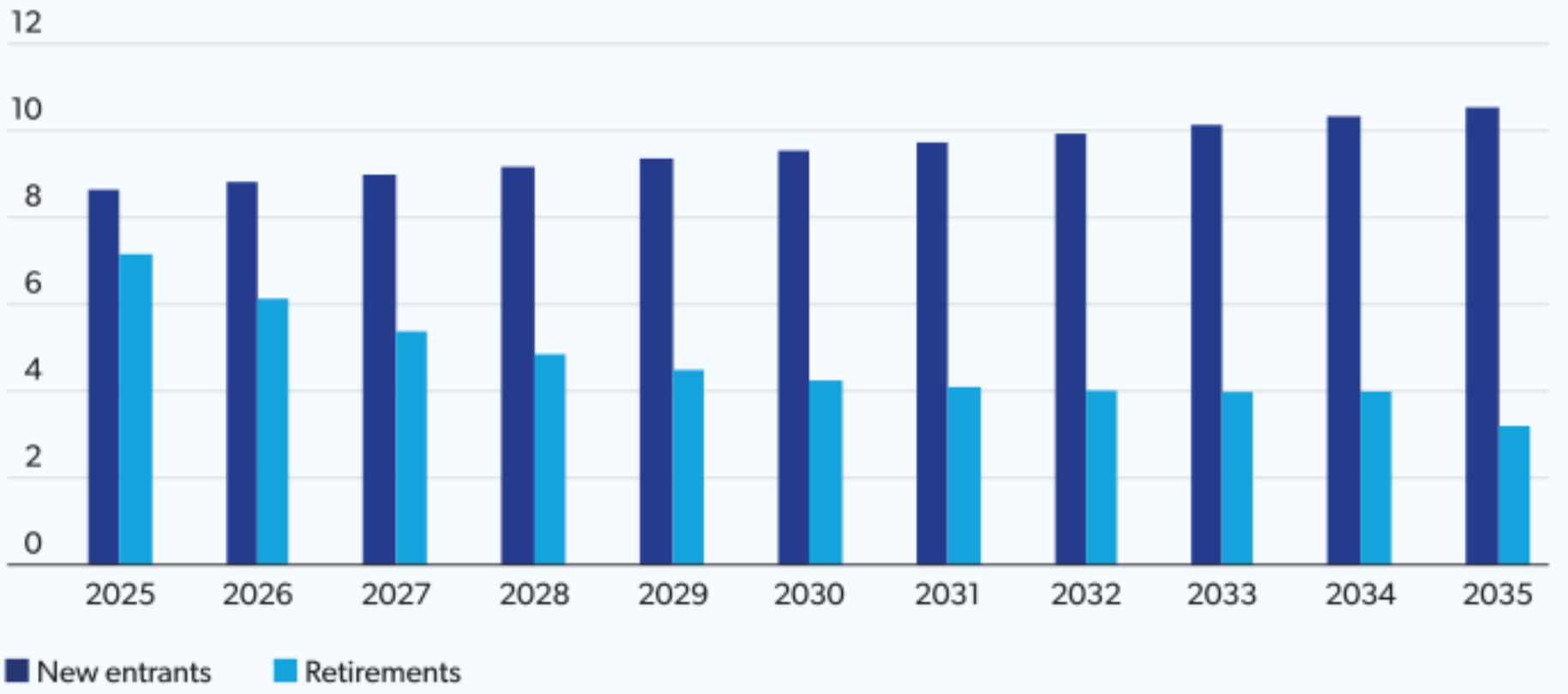
[3]The shortage calculation is based on Oliver Wyman's AMT shortage projections, which predict the gap between the supply and demand of commercial aviation mechanics in the North American region. The prediction uses data and assumptions from US government sources as well as Oliver Wyman's Fleet and MRO forecast.

Courtesy of **Pittsburgh Institute of Aeronautics**

Figure 7

Estimated North America Commercial Aviation New Mechanics vs. Retiring Mechanics

Thousands

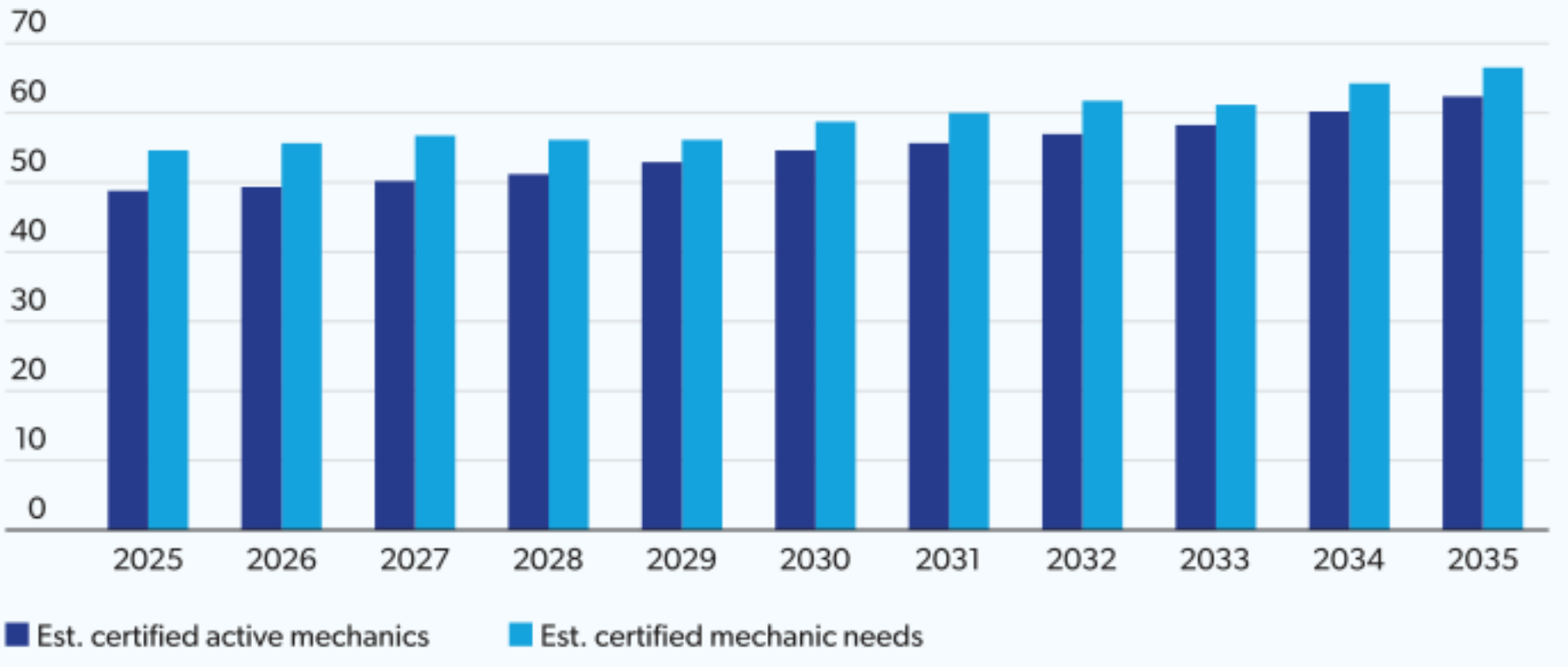


Source: Oliver Wyman and ATEC analysis

Figure 8

Estimated Supply and Demand for North America

Thousands



Source: Oliver Wyman and ATEC analysis

AVIATION MAINTENANCE TECHNICIAN SCHOOLS

THE COMMUNITY

An additional eight AMTS were added in 2024, bringing the total population of AMTS last year to 208 (Figure 9). The AMTS community has expanded by 28 programs since 2020.

Figure 9
Total US Aviation Maintenance Technician Schools

Source: FAA

A growing number of certificated programs are adding additional training locations to their operations specifications. Since the new part 147 went into effect in the fall of 2022, enabling the extension of A&P classrooms to industry partner facilities, high schools, and other campuses, A&P programs have added 77 additional training locations to their current FAA certificates.

This expansion is broadening the reach of aviation technical programs across the nation, without the added burden of full FAA certification. As these new campuses and extensions mature and more come online, ATEC anticipates that additional training locations will drive further enrollment growth, facilitate non-traditional classroom opportunities and new education-industry partnerships, and increase accessibility for prospective students.

ENROLLMENT

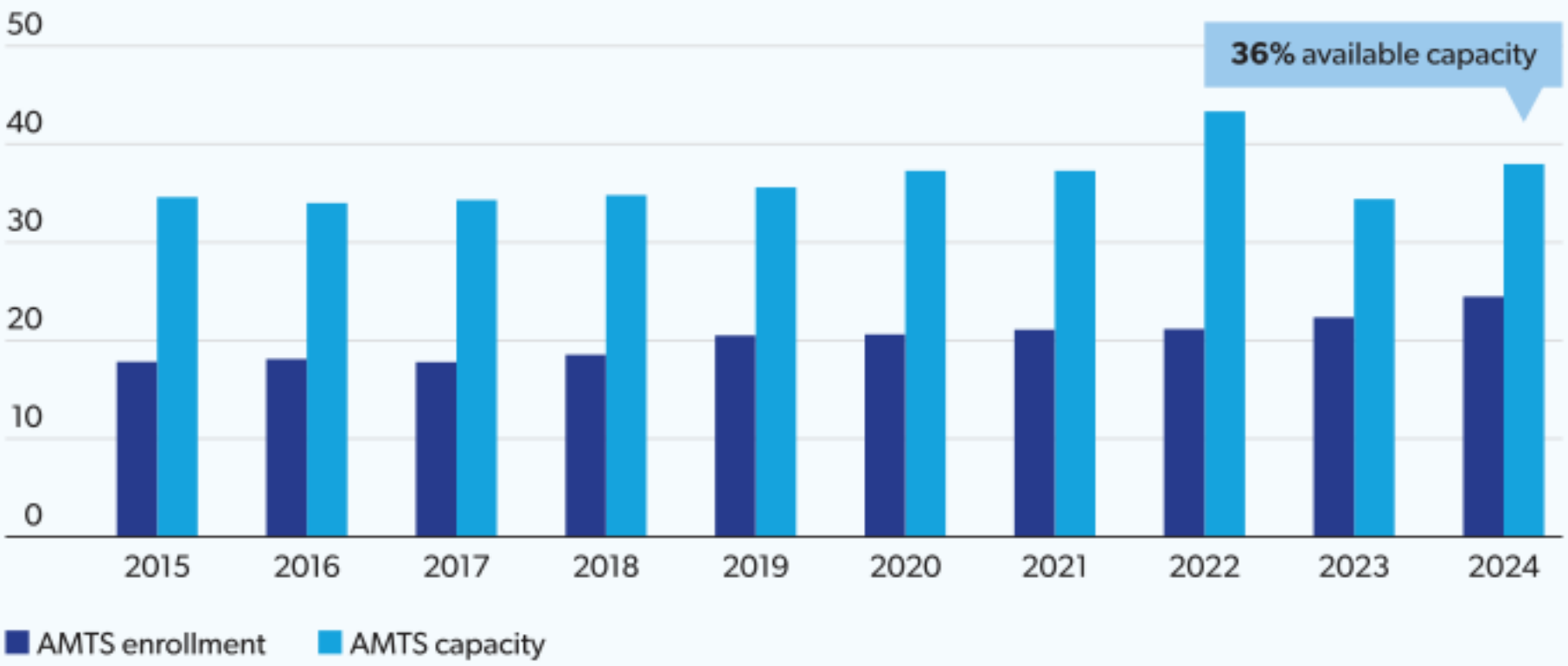
AMTS enrollment in 2024 increased by 9.5% from the prior year, to 24,449. This was well above ten-year average annual growth of 3% (Figure 10). The AMTS student load factor—the ratio of available A&P program seats to enrolled students—stands at 64%. Despite available capacity, 55% of respondents reported having a waitlist for enrollment.

This anomaly is largely driven by attrition: students drop out partway through the program, leaving seats open in later sections, yet programs can only admit a set number of students into each starting cohort. As a result, seats go unfilled even as prospective students wait to enroll. These findings suggest that improving retention rates could be at least a partial solution to addressing capacity challenges.

Figure 10

US AMTS Enrollment vs. Capacity

Thousands



Source: ATEC 2025 Survey

Courtesy of **Aviation Institute of Maintenance**

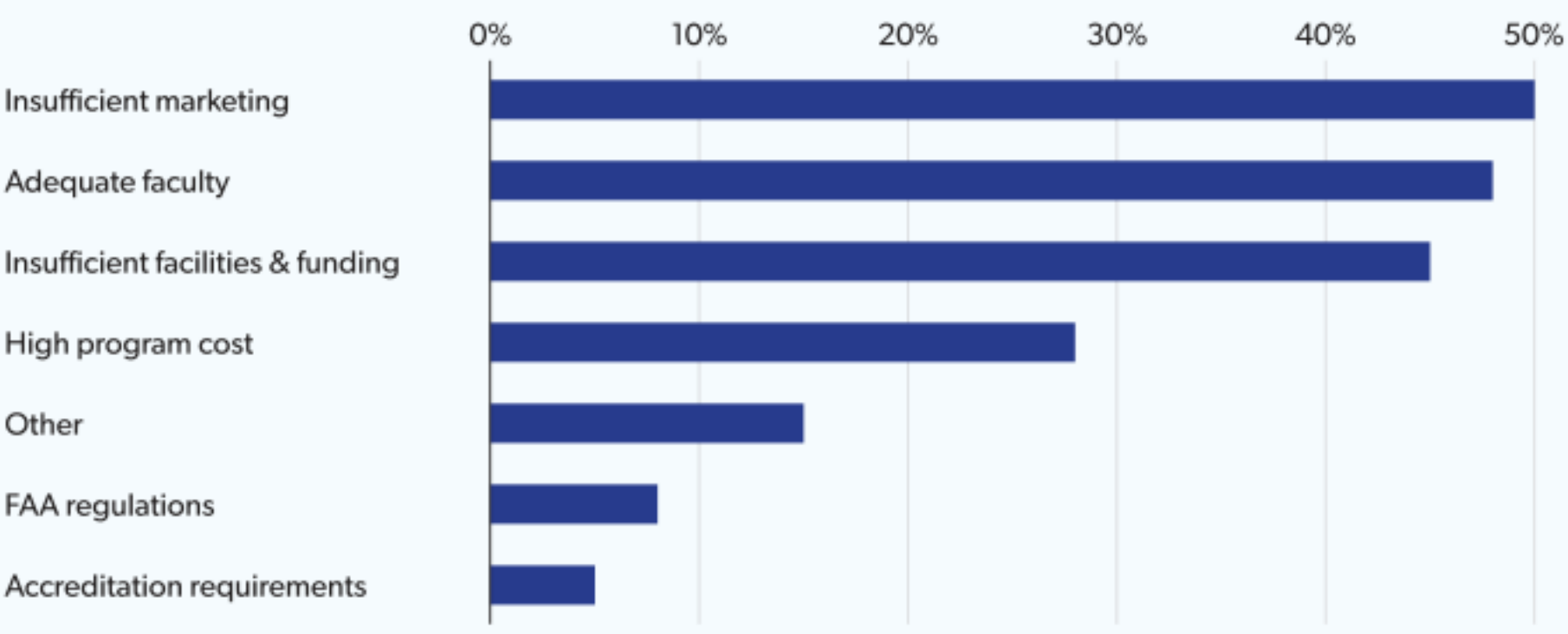
CHALLENGES AND OPPORTUNITIES

For the third consecutive year, survey respondents identified insufficient program awareness—driven by limited marketing—as the single largest barrier to program growth. More than half of the AMTS community also cited other challenges, such as difficulty hiring qualified faculty and insufficient facilities and funding (Figure 11). Notably, 88% of schools with waitlists reported difficulty meeting enrollment targets, suggesting that faculty shortages and resource constraints are likely contributing to this gap.

Efforts to address these challenges have been strengthened by federal investment, with the FAA's Aviation Workforce Development Grants channeling millions of dollars into aviation maintenance programs since 2018. The grant was recently reauthorized to provide $60 million annually through 2028, one-third of those dollars directed at aviation maintenance workforce programs, creating additional opportunities for schools to expand capacity and address resource gaps.

Complementing these federal efforts, ATEC is advancing targeted initiatives to equip the community with tools to broaden outreach and marketing, reduce attrition, and grow the pool of qualified instructors—critical steps in closing the awareness and capacity gaps identified by survey respondents.

Figure 11
"What are the most significant barriers to growth for your AMTS?"
Percent of survey respondents, selecting all that apply



Source: ATEC 2025 survey

Note: "Other" includes student interest, class time, and student capacity requirements

Choose Aerospace

Choose Aerospace was established with a clear mission: address aviation maintenance workforce needs by promoting professional roles and implementing programs that make aerospace careers more accessible. Its aviation maintenance curriculum was designed to increase awareness through secondary school programming and to create defined pathways into aviation careers.

The Choose Aerospace curriculum equips training programs, high schools, and other non–part 147 programs to teach the general subject areas of the FAA mechanic airman certification standards, placing individuals on an early path to mechanic certification. Graduates may take the ATEC industry-recognized credential exam, which offers third-party verification for FAA-certificated schools (for matriculation) and for employers (to support on-the-job training endorsements and direct-to-work opportunities).

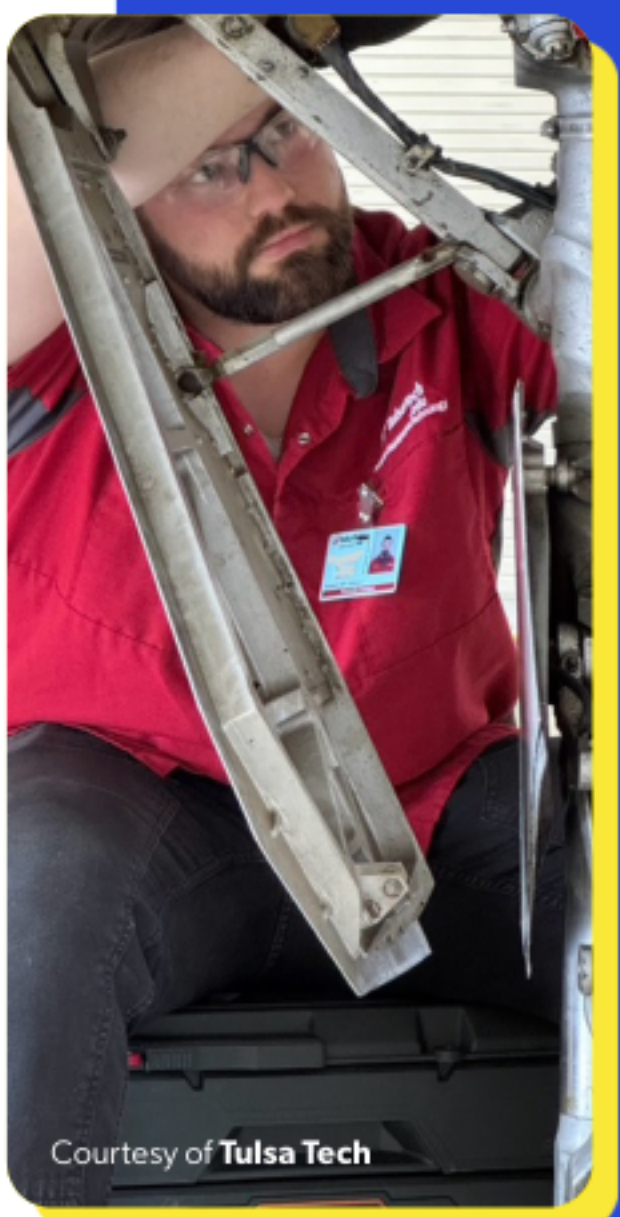
In its third academic year (2024-25), the program enrolled 933 students in 45 Choose Aerospace programs across 17 states. Nearly three-quarters of students enrolled in the high school program reside in counties with above-average poverty; 88% live in HUD-designated Opportunity Zones; and 20% come from schools where the majority of students are from rural communities. Of student survey respondents, 31% are women, and 90% expressed a high interest in choosing an aviation career.

Although still in its infancy, with only a small sample of graduate outcomes, anecdotal evidence suggests the program is driving more individuals to Choose Aerospace. High schools are reporting that graduates are interning at local repair stations, seeking employment as non-certificated technicians directly after graduation, and continuing their training at local A&P schools.

Choose Aerospace is showing strong momentum in expanding access, creating clear career pathways, and strengthening the aviation maintenance workforce pipeline. And A&P schools are beginning to take notice, with several offering credit for the general curriculum, scholarships, or priority to students that have graduated from the program. Early outcomes also suggest that Choose Aerospace students are less likely to drop out of an A&P program, improving attrition rates and the AMTS student load rate factor.

If the initiative reaches its goal of enrolling 10,000 students by 2027, it has the potential to significantly increase interest in aviation maintenance careers, creating a strong pipeline of repair station employee candidates and prospective students for A&P schools. This surge in interest could fill every available AMTS seat across the country, with a meaningful impact on the workforce shortage.

Courtesy of **National Aviation Academy**



Courtesy of **Tulsa Tech**

Instructor Workforce

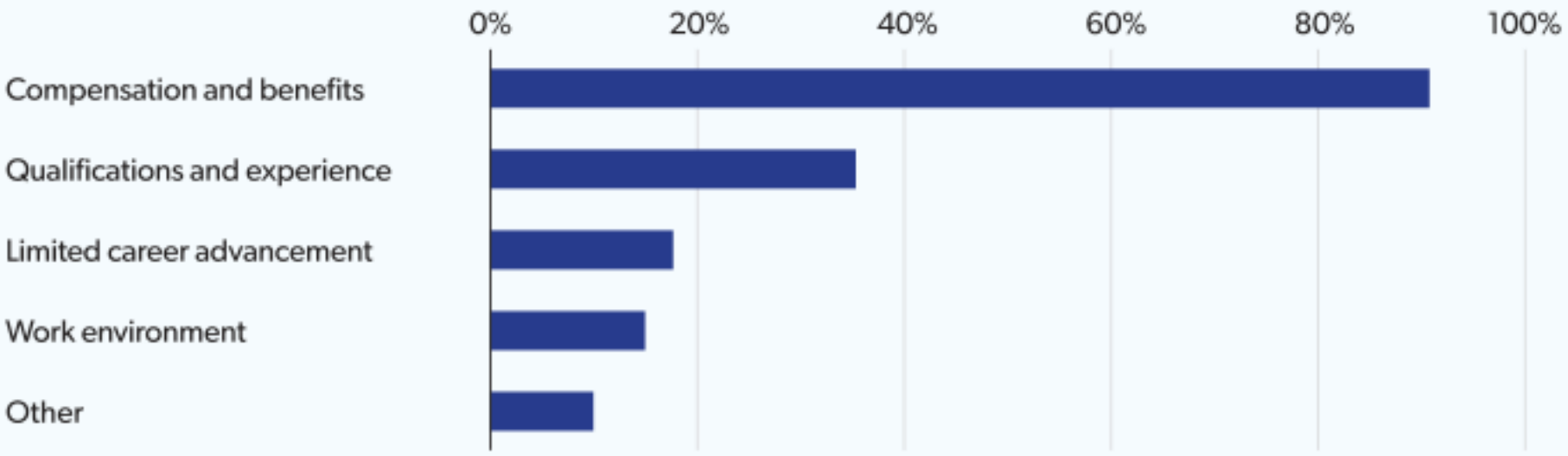
Instructor hiring challenges continue to plague the community. While student enrollment has been increasing, the size of the instructional staff is flat at best. This year's survey respondents again voiced significant and persistent challenges in recruiting and retaining qualified instructors for AMTS programs, highlighting a critical bottleneck for program growth and quality (see Figure 12).

More than 90% of respondents identified compensation and benefits as major barriers, underscoring that pay remains a key factor limiting the ability to attract and keep skilled educators. The reported average salary range for AMTS instructors falls between $61,000 and $70,000 annually, with only a small fraction (approximately 5%) earning more than $91,000. This wage disparity is particularly striking when compared to salaries in the broader aviation industry, where experienced technicians and engineers often command significantly higher compensation.

Figure 12

"What are the most significant barriers to recruiting and retaining instructors?"

Percent of survey respondents, selecting all that apply



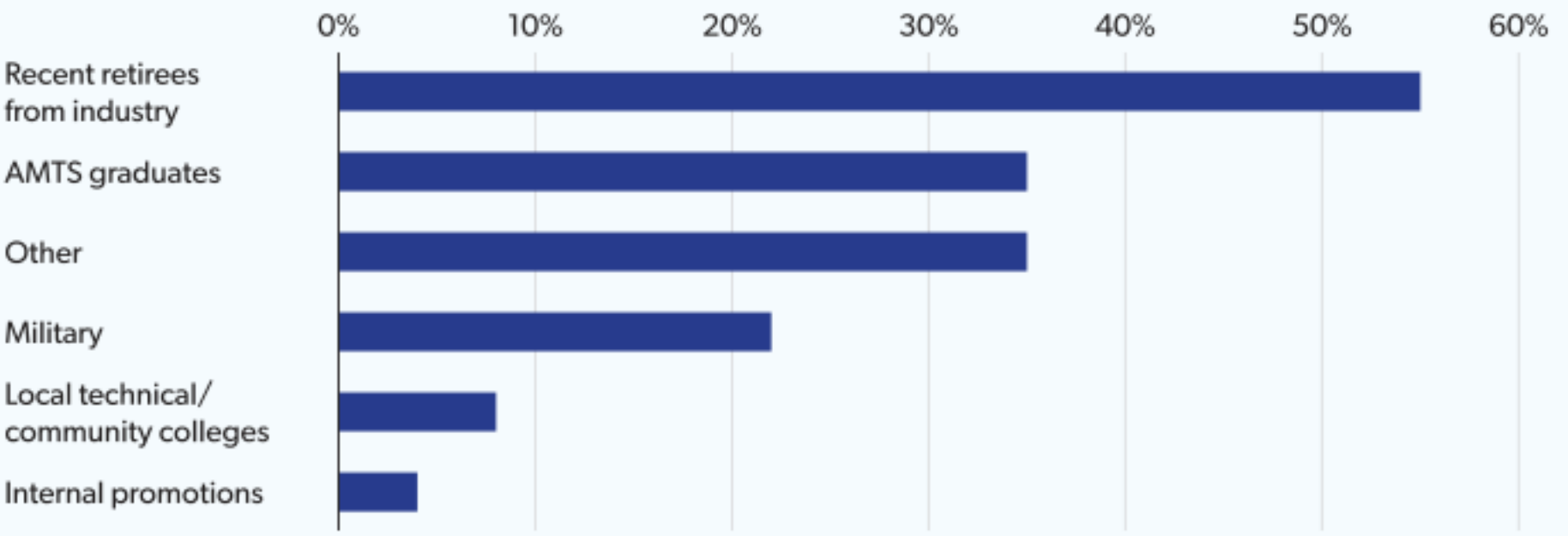
Source: ATEC 2025 survey

Note: "Other" includes relocation requirements and limited space

Courtesy of **Aerospace Maintenance Council**

Adding to the recruitment challenge is the demographic composition of the current instructor workforce (Figure 13). More than half of AMTS respondents said that industry retirees are filling open instructor positions, bringing valuable real-world experience but also shorter tenures. Meanwhile, one-third of respondents report that instructors are AMTS graduates themselves, indicating that schools are relying on their own alumni pipeline to fill teaching roles. While this internal pipeline is a positive sign of program continuity, it also reflects a limited external talent pool and raises concerns about the sustainability of instructor staffing levels.

Figure 13
"Where are your new certificated instructors coming from?"
Percent of survey respondents, selecting all that apply



Source: ATEC 2025 survey
Note: "Other" includes non-retirees from the industry or no new instructors

These factors collectively create a precarious situation for AMTS programs, where the shortage of qualified instructors threatens both capacity and quality. Recognizing this, ATEC is prioritizing an initiative aimed at expanding recruitment efforts and career pathways to ensure a sustainable instructor workforce for the future – the ATEC Academy.

ATEC Academy

The ATEC Academy is a dedicated resource for maintenance professionals and retirees transitioning into teaching roles. Leveraging the expertise of master instructors from within the community, this three-month program helps newly appointed instructors navigate the unique challenges of the classroom.

The course provides practical training in active teaching strategies, student engagement, classroom management, assessment and evaluation, lesson planning, and the integration of instructional technology—skills that directly enhance instructor effectiveness and retention. Its purpose is to equip educators with the tools, confidence, and professional network they need to succeed, thereby strengthening instructional quality, improving retention, and expanding AMTS capacity.

By creating a structured, high-quality pathway into teaching, the ATEC Academy not only helps address the shortage of qualified instructors but also lays the groundwork for a more sustainable, skilled, and inspired aviation maintenance educator workforce—critical to meeting the industry's long-term technical personnel needs.

DEMOGRAPHICS

Sixty-two percent of A&P programs are offered at public institutions, while 29% are housed at private proprietary schools and 9% at private non-profit institutions. Most AMTS are relatively small, with more than half enrolling 60 or fewer students at a time. Nearly two-thirds of all A&P students attend one of the ten largest programs nationwide.

Nearly half of all A&P students reside in Florida, New York, Texas, California, or Michigan. Georgia fell three spots in the rankings from last year, with Oklahoma moving ahead. The fastest enrollment growth was reported in Indiana (154%), Illinois (57%), and Oklahoma (34%).

Table 1
AMTS Enrollment State Ranking

2024 Rank	State	2024 A&P Students	Percent Change (2023 to 2024)	2024 Rank	State	2024 A&P Students	Percent Change (2023 to 2024)
1	FL	2,974	-0.3%	25	MN	207	-1.0%
2	NY	2,813	3.3%	26	SC	159	-35.1%
3	CA	2,460	21.7%	27	OR	147	7.3%
4	TX	2,149	7.2%	28	WV	145	16.0%
5	MI	1,037	24.2%	29	MD	145	21.8%
6	IL	1,036	56.7%	30	KY	142	0.0%
7	OK	930	33.6%	31	IA	127	154.0%
8	AL	913	-8.1%	32	PR	115	0.0%
9	OH	823	6.5%	33	AR	114	0.9%
10	GA	798	-0.3%	34	LA	112	24.4%
11	NC	744	27.4%	35	WI	105	0.0%
12	IN	591	-2.8%	36	AK	99	0.0%
13	PA	576	22.6%	37	CT	67	0.0%
14	CO	543	5.6%	38	MS	56	0.0%
15	VA	534	16.3%	39	NM	50	-2.0%
16	AZ	509	0.0%	40	HI	49	0.0%
17	TN	481	0.0%	41	ID	48	0.0%
18	KS	412	0.7%	42	DC	44	0.0%
19	NV	394	0.0%	43	MT	33	-2.9%
20	WA	388	4.3%	44	DE	31	0.0%
21	MA	309	0.3%	45	SD	25	0.0%
22	MO	302	13.5%	46	NH	24	0.0%
23	UT	255	0.0%	47	NE	16	23.1%
24	NJ	211	0.0%	48	VT	12	0.0%

Source: ATEC 2025 survey

According to Oliver Wyman's analysis, the top five states/districts with the highest employment ratio in aviation maintenance are Oklahoma, Kansas, Alaska, Georgia, and Washington, D.C.

Notably, nine of the top ten schools with the highest enrollments have waitlists. And in all five states with the highest employment ratio in aviation maintenance, schools are experiencing waitlist challenges.

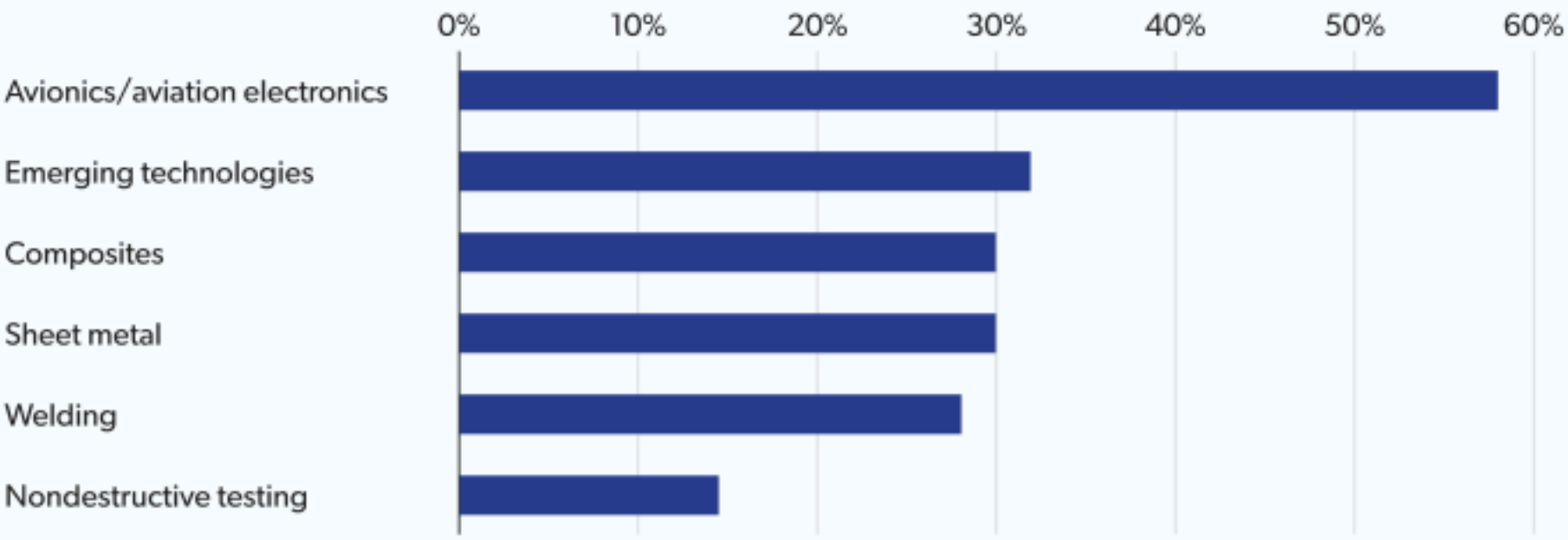
PROGRAMS AND DEGREES OFFERED

To meet the growing demand for specialized services, more than half of all AMTS provide standalone, aviation-related programs outside an A&P program, including composites, avionics, and emerging technologies (Figure 14).

Figure 14

"Outside of the A&P program, what standalone technical aviation-related programs does your institution offer?"

Percent of survey respondents, selecting all that apply



Source: ATEC 2025 survey

The Aircraft Electronics Technician (AET) certification has moved to the most popular third-party credential for A&P programs, next to NC3 Multimeter certification and NC3 Precision Measuring Instruments. Closely following behind Precision Measuring Instruments is NC3 Torque Fundamentals certification and NC3 Structural Sheetmetal Assembly.

Sixty-seven percent of all AMTS offer the A&P program as part of an associate's degree. Another 11% offer an A&P program as part of a 4-year degree. The high school community holds 11 part 147 certificates.

Courtesy of **US Aviation Academy**

GRADUATES

Demographics and Matriculation

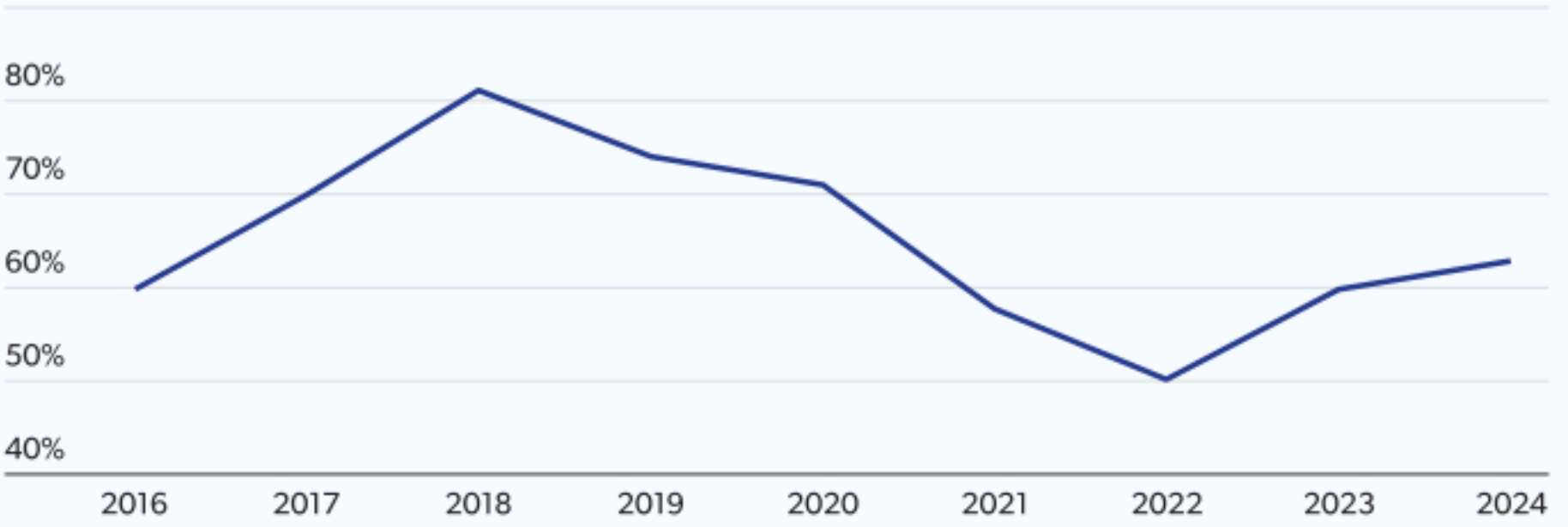
In 2024, AMTS graduated an estimated 9,300 A&P students. The average graduation rate for an A&P program was 74%. The average age of an A&P graduate is 23.

About 16% of graduates in 2024 were veterans and 40% represented a racial or ethnic minority—both of these figures represent a smaller share of the graduating class than in 2023 (19% and 62%, respectively). Foreign nationals declined from 10% in 2023 to 4% of the 2024 graduate population. Women made up 10% of the AMTS graduate student body in 2024, a slight decrease from the year before.

FAA Testing

The number of graduates obtaining FAA mechanic certification increased again for the second time in 5 years. In 2024, 63% of A&P graduates passed the FAA mechanic exam (Figure 15). The primary barriers to obtaining a mechanic certificate cited by survey respondents include fear of testing, inaccessible DMEs, and high test costs (Figure 16).

Figure 15
US AMTS Graduates Obtaining Mechanic Certification
Percent

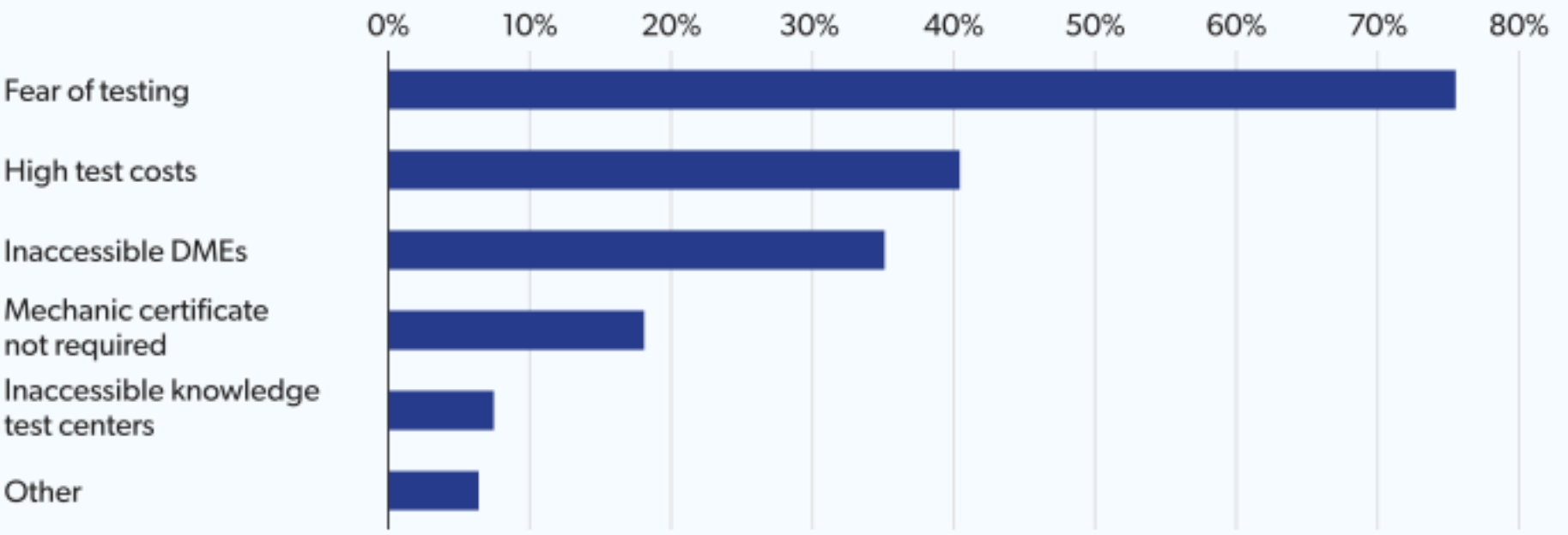


Source: ATEC 2024 survey

Figure 16

"What is the most significant barrier to obtaining a mechanic certificate for AMTS program graduates?"

Percent of survey respondents, selecting all that apply



Source: ATEC 2025 survey

Fear of testing has long been cited as a reason candidates do not sit for an A&P exam; progressive testing is one way to help combat this. Based on the ATEC survey, most aviation maintenance schools have adopted such progressive testing in their programs; that is, students take an FAA test immediately after completing the applicable curriculum (Figure 17).

This practice was not highly utilized prior to promulgation of the new part 147, likely due to the challenges associated with seeking and obtaining FAA approval of program changes. The resulting increase in student certifications since this practice has come into use testifies to the positive impacts progressive testing can have on certification rates. ATEC will continue to promote progressive testing as a best practice for A&P schools, to eliminate the idea that FAA testing is "elective."

Early testing using §65.80 is utilized by a third of A&P schools, offering a flexible approach to accommodate varying student readiness.

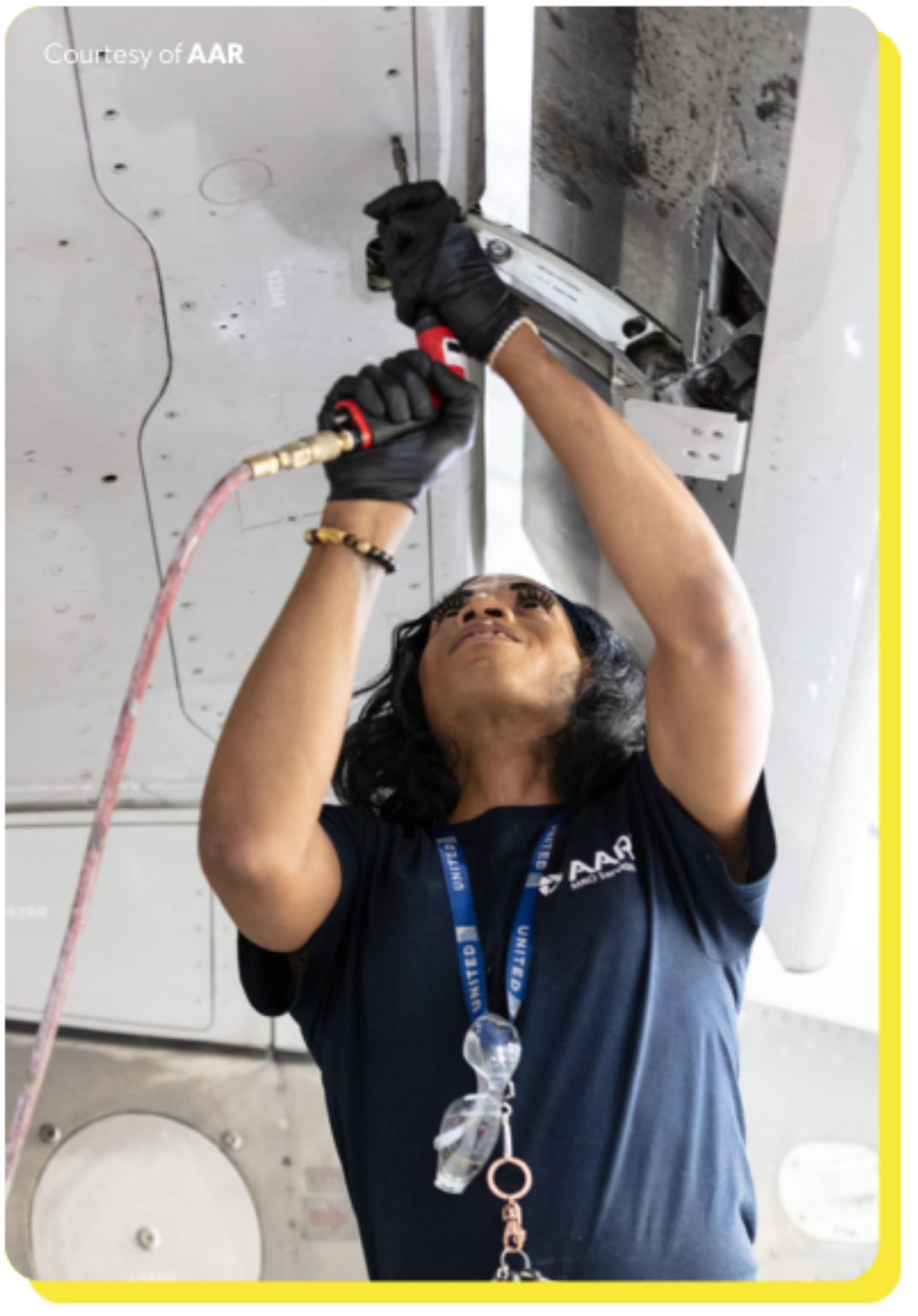
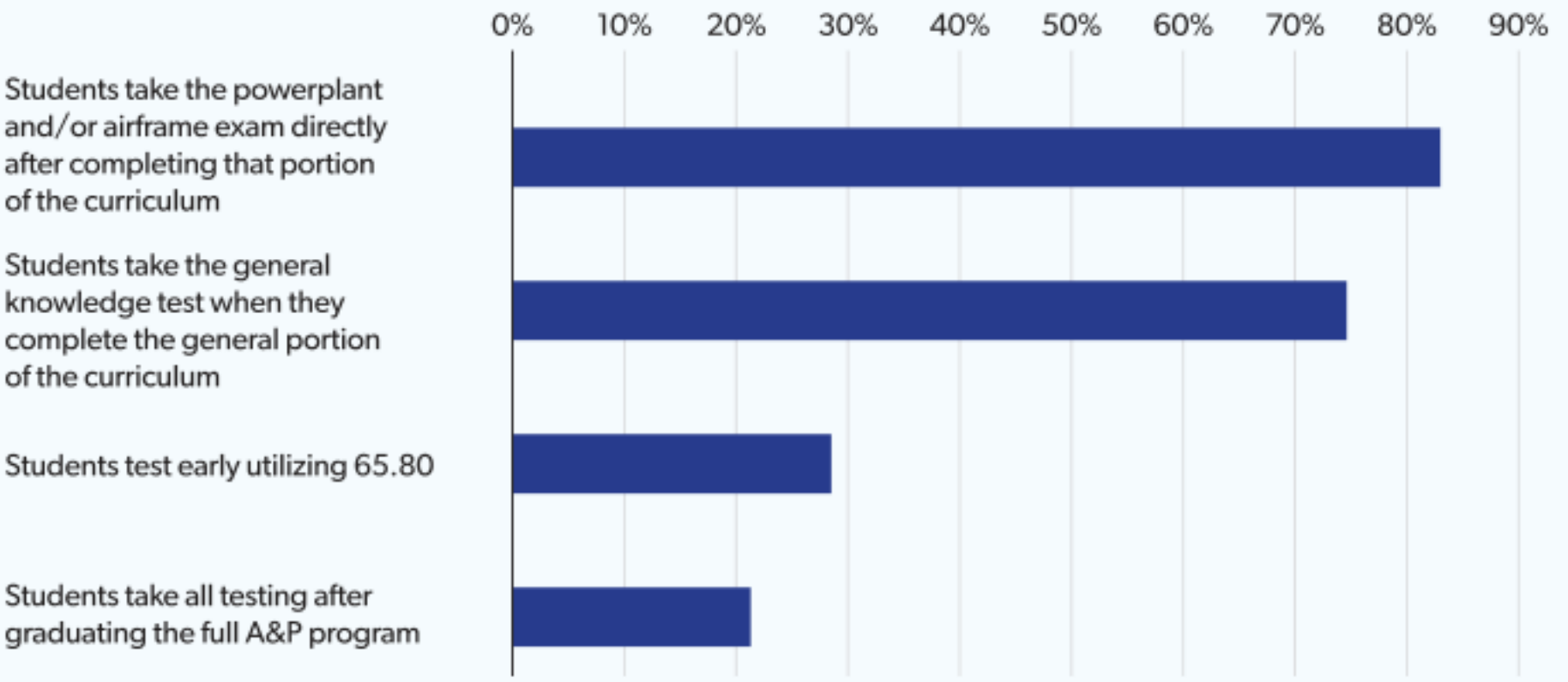


Figure 17

"How does your AMTS approach mechanic testing?"

Percent of survey respondents, selecting all that apply



Source: ATEC 2024 survey

Testing Capacity

A lack of DMEs is a growing problem, cited by nearly one in three AMTS, a fact that is continuing to drive ATEC initiatives focused on expanding access to FAA airman testing. In the past year, despite a slight decrease in the number of active DMEs—from 257 to 254—the FAA delegated a record 11,612 original issue mechanic certification tests to these examiners. This represents an increase of nearly 2,000 tests compared to the previous year, resulting in a 25% rise in the average number of tests administered per DME annually. This growing workload underscores both the critical role DMEs play in maintaining the aviation maintenance workforce pipeline and the urgent need to expand examiner capacity to keep pace with industry demand.

ATEC has long advocated for the FAA to expand testing capacity by incorporating airman certification into the Organization Designation Authorization (ODA) program. The program was established in 2005 to streamline the certification process and leverage the expertise of organizations to perform certain certification functions on behalf of the FAA. A draft revision to FAA guidance published in July 2024 would create an Airman Certification ODA (AC ODA), allowing many air agency certificate holders, including part 147 schools, to manage and conduct oral and practical testing for airframe and/or powerplant ratings and better meet student demand. If the FAA follows its anticipated timeline, program expansion could come as early as this fall.

Allowing schools (and in some instances, industry partners) to manage examiners to better meet student demand would go a long way toward expanding current capacity. In addition, ATEC has asked the agency to modify DME qualifications and remove geographic limitations for a more practical approach to delegation and designee oversight.

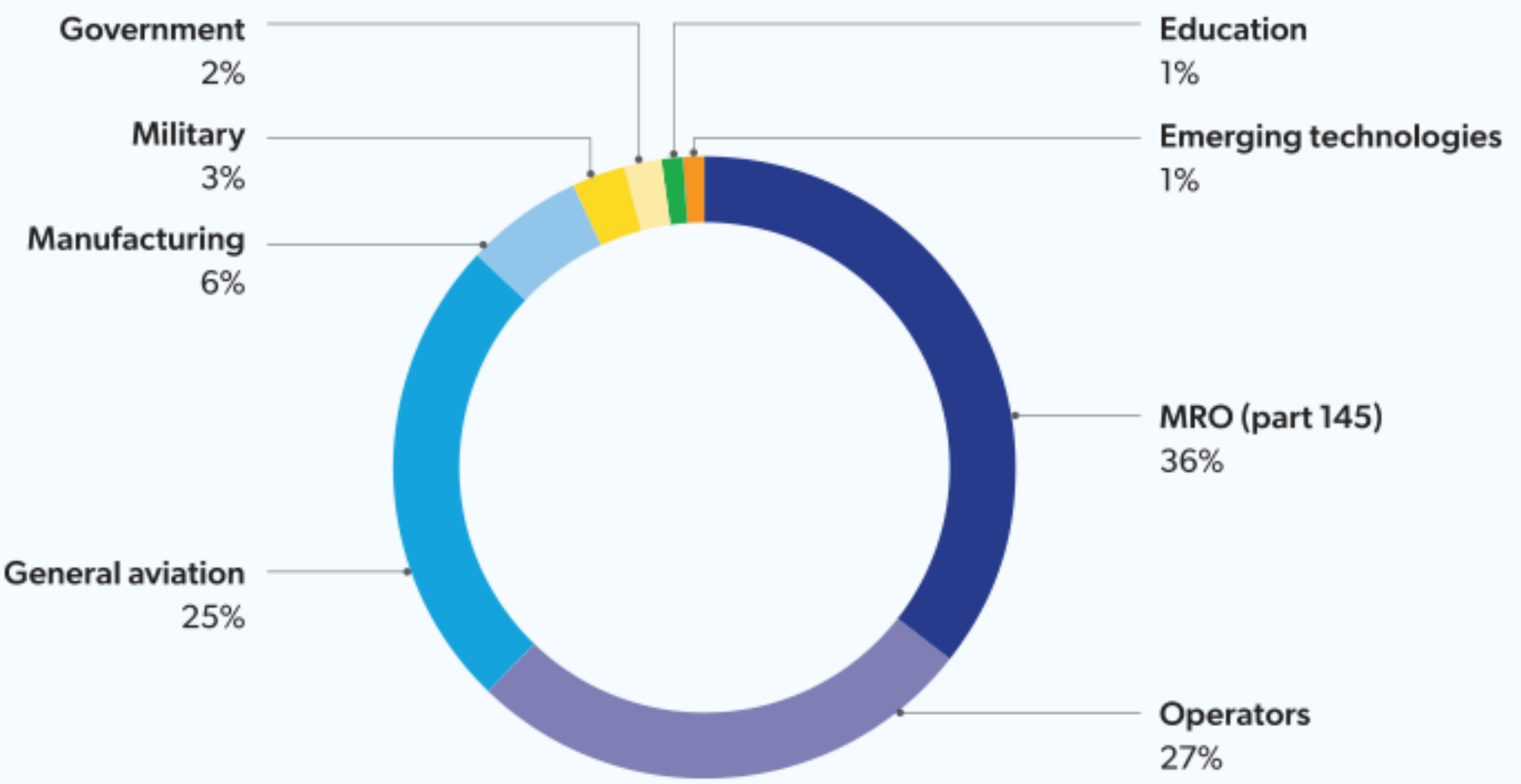
Employers

Sixty-three percent of new AMTS graduates in 2024 had a job offer upon graduation and 50% of those jobs were in aviation – an increase on both fronts compared to 2023. Nearly a third of students took a job outside of their geographic location, suggesting a good portion of new entrants are migrating from home to areas of higher demand. Among industry sectors actively hiring, MRO, general aviation, and operators account for 88% of new graduate hires (Figure 18).

Figure 18

"Of the 2023 graduates employed by an aviation-related employer, how many were placed in each of the following sectors?"

Percent of survey respondents



Source: ATEC 2025 survey

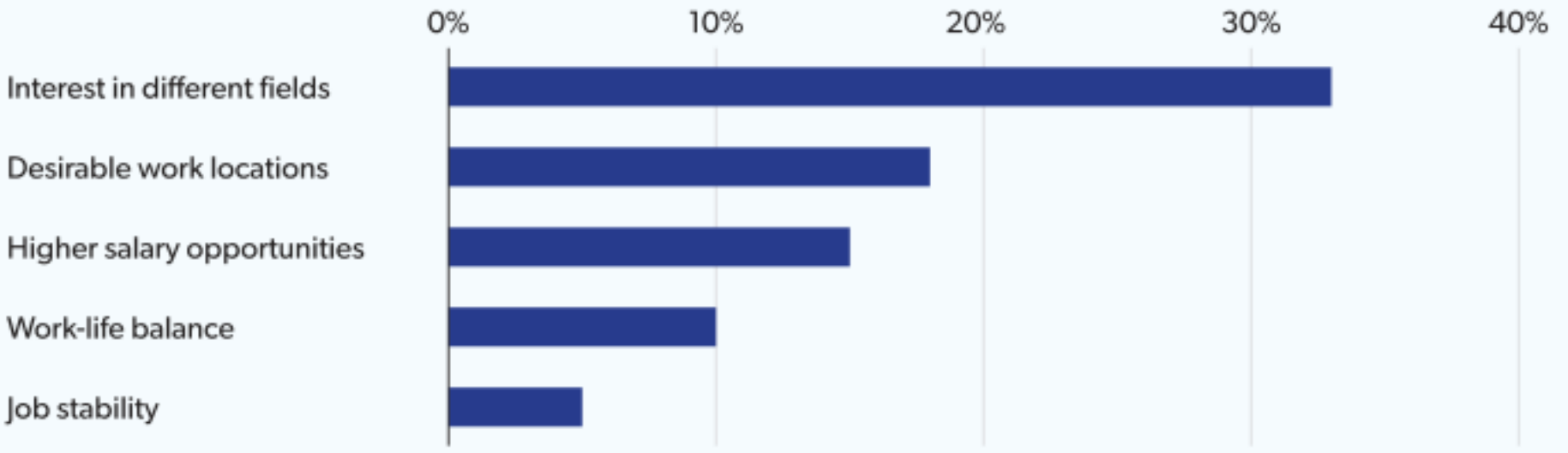
When surveyed about why their students accepted job offers outside of the aviation industry (Figure 19), one in three schools identified as a primary reason the students' interest in pursuing careers in other fields. The next most frequently cited factor was the appeal of more desirable work locations, suggesting that geographic preferences and lifestyle considerations play a significant role in career decisions.

These insights highlight the challenges the aviation maintenance sector faces in retaining talent, as students weigh their passion for aviation against broader career opportunities and quality-of-life factors. Understanding these motivations is critical for industry stakeholders aiming to improve recruitment and retention strategies, including offering competitive incentives, enhancing career awareness, and expanding opportunities in diverse geographic regions.

Figure 19

"What are the reasons graduates took a job outside of the aviation industry?"

Percent of survey respondents, selecting all that apply



Source: ATEC 2025 survey

Salary and Wages

Survey respondents report an average starting hourly rate for AMTS alumni with an FAA certificate to be $29.61 per hour (or $61,580 annually), a decrease of 6% from a year ago. Today, certificated mechanics are making 5% more than their peers that graduated just 2 years ago.[4]

Starting hourly pay for A&P graduates without a mechanic license is $21.26 per hour, almost the same as last year. This is more than $17,300 a year less than their certificated peers make, however.

These figures track broadly with US Bureau of Labor Statistics data, which shows median pay for mechanics and technicians, certificated and uncertificated, is about $38.84 per hour, or $80,800 per year.

Return on Investment

Tuition costs are not generally seen as a barrier to commencing an aviation technical career, given the relatively low cost of A&P programs compared to income potential. ATEC research and analysis of published tuition data (regardless of the degree conferred) for all AMTS found the average tuition for an A&P program is $19,427. Rates are lower for public community colleges, with average tuition costs of $12,204.

The average time it takes for a student to complete an A&P program is 21 months, with 14 programs reporting opportunities for completion in 12 months or less.

[4]Calculations assume a 40-hour work week at 52 weeks per year.

ATEC ACADEMY

Educator Professional Development Series

UPCOMING SCHEDULE

Tue. & Wed.
Oct. 21-22, 2025

United Airlines – Hangar X
4933 Wright Road
Houston, TX 77032

Thu. & Fri.
Apr. 2-3, 2026

Portland Community CLIMB Center
1626 SE Water Ave, Room #306
Portland, OR 97214

Tue. & Wed.
Jun. 9-10, 2026

Tulsa Technology Center
801 E 91st St
Tulsa, OK 74132

Struggling to find and keep instructors? Are you hiring instructors with extensive industry experience with little to no teaching experience?

Consider utilizing **ATEC Academy**. The Academy's three-month course equips new educators with essential teaching strategies, student engagement techniques, and assessment methods—ensuring they're prepared to excel in the classroom. Designed for aviation maintenance instructors and industry trainers, the program combines a two-day in-person session with virtual sessions and pairs all students with a seasoned instructor mentor. Recognizing the significant investments made by aviation maintenance programs in their instructor hiring practices, this immersive approach aims to improve student and instructor retention and persistence rates.

REGISTER NOW at **atec-amt.org/atec-academy**

AVIATION MAINTENANCE TECHNICIAN SCHOOL DIRECTORY

Full programmatic and contact information for all aviation maintenance technician schools is available to ATEC members at **www.atec-amt.org**.

ATEC MEMBER • ATEC survey respondent

Alabama

- Alabama Aviation College - Albertville •
- Alabama Aviation College - Mobile •
- Alabama Aviation College - Ozark •
- Southern Union State Community College •

Alaska

- University of Alaska Anchorage
- University of Alaska Fairbanks •
- Yuut Elitnaurviat Regional AMT School

Arizona

- American Leadership Academy Applied Technologies Trade School
- Chandler Gilbert Community College
- Pima Community College •
- Western Maricopa Education Center

Arkansas

- Arkansas Northeastern College •
- Arkansas State University Mid-South
- Southern Arkansas University Tech - Camden •
- University of Arkansas - Pulaski Technical College

California

- Antelope Valley College
- Aviation Institute of Maintenance - Fremont
- California Aeronautical University •
- Chaffey College •
- College of Alameda •
- Cuesta College •
- Gavilan College •
- MT San Antonio College
- North Valley Occupational Center
- Orange Coast College
- Reedley College
- Sacramento City College
- San Bernardino Valley College
- San Diego Miramar College •
- San Joaquin Valley College
- Solano Community College
- Spartan College of Aeronautics and Technology - Los Angeles
- Spartan College of Aeronautics and Technology - Riverside
- Victor Valley College
- West Los Angeles College

Colorado

Cherry Creek Innovation Campus

Colorado Northwestern Community College •

Spartan College of Aeronautics and Technology - Denver

Warren Tech South

Connecticut

Connecticut Aero Tech School •

Stratford School for Aviation Maintenance Technicians

Delaware

Delaware Technical Community College •

District of Columbia

University of the District of Columbia Community College •

Florida

Aviation Institute of Maintenance - Orlando

Aviator College

Broward College •

Central Florida Aerospace Academy

Charlotte County Public Schools

Eastern Florida State College

Embry-Riddle Aeronautical University

Epic Aviation

Florida State College at Jacksonville

George Stone Technical College

George T. Baker Aviation Technical College

International AeroTech Academy •

Lively Technical College

Lorenzo Walker Technical College

National Aviation Academy Inc - Clearwater

Northwest Florida State College

Pensacola State College

Tom P. Haney Technical College

Universal Technical Institute - Miramar

Georgia

Atlanta Technical College

Augusta Technical College •

Aviation Institute of Maintenance - Atlanta

Central Georgia Technical College

Chattahoochee Technical College

Georgia Northwestern Technical College •

Middle Georgia State University •

Savannah Technical College •

South Georgia Technical College

Hawaii

Honolulu Community College – Dept of Aeronautics

Idaho

Idaho State University

Illinois

Aviation Institute of Maintenance - Chicago

Lewis University

Lincoln Land Community College •

Rock Valley College

Southern Illinois University Carbondale

Southwestern Illinois College •

Indiana

- Aviation Institute of Maintenance - Indianapolis
- Ivy Tech Community College •
- Purdue University
- Vincennes University Aviation Technology Center •

Iowa

- Des Moines Public Schools •
- Indian Hills Community College •
- Iowa Western Community College
- Kirkwood Community College

Kansas

- Kansas State University Salina - Aerospace and Technology Campus •
- Wichita State University Campus of Applied Sciences and Technology (WSU Tech) - National Center for Aviation Training •

Kentucky

- Jefferson Community and Technical College
- Maysville Community and Technical College
- Somerset Community College

Louisiana

- Baton Rouge Community College
- South Louisiana Community College
- Southern University at Shreveport •
- Sowela Technical Community College •

Maine

- University of Maine - Augusta •

Maryland

- Pittsburgh Institute of Aeronautics – Hagerstown •
- University of Maryland Eastern Shore •

Massachussets

- Cape Cod Community College
- National Aviation Academy Inc – New England
- Westfield Technical Academy

Michigan

- Andrews University
- Lansing Community College •
- Legacy Aviation Learning Center •
- School of Missionary Aviation Technology •
- Universal Technical Institute - Canton •
- Western Michigan University - College of Aviation •

Minneapolis

- Lake Superior College
- Minneapolis College •
- Northland Community and Technical College •

Mississippi

- Hinds Community College
- Northwest Mississippi Community College •
- Pearl River Community College

Missouri

- Aviation Institute of Maintenance - Kansas City •
- Ozarks Technical Community College
- State Technical College of Missouri •

Montana

- Helena College University of Montana •

Nebraska

- Western Nebraska Community College •

Nevada

- Aviation Institute of Maintenance – Las Vegas •

New Hampshire

- Nashua Community College •

New Jersey

- Aviation Institute of Maintenance – Teterboro •

New Mexico

- Central New Mexico Community College •
- Eastern New Mexico University – Roswell

New York

- Aviation High School
- Aviation Training Institute at Vaughn College
- Dutchess Community College
- Hudson Valley Community College •
- Lewis Wilson Technology Center •
- Mohawk Valley Community College •

North Carolina

- Aviation Institute of Maintenance - Charlotte •
- College of the Albemarle
- Craven Community College •
- Forsyth Technical Community College
- Guilford Technical Community College
- Lenoir Community College •
- Wayne Community College •

North Dakota

- North Dakota State College of Science

Ohio

- Cincinnati State Technical and Community College •
- Columbus State Community College
- Federal Aerospace Institute
- Great Oaks Joint Vocational School •
- Greene County Career Center
- Mahoning County Career & Technical Center •
- Miami Valley Career Technology Center •
- Pittsburgh Institute of Aeronautics - Youngstown •
- Sinclair Community College
- Toledo Public Schools - Aerospace Center

Oklahoma

- Canadian Valley Technology Center
- Gordon Cooper Technology Center •
- Metro Technology Center •
- Moore Norman Technology Center •
- Southwest Technology Center •
- Spartan College of Aeronautics and Technology - Tulsa •
- Tulsa Technology Center •

Oregon

- Columbia Gorge Community College •
- Hillsboro Aero Academy
- Lane Community College
- Portland Community College •

Pennsylvania

- Aviation Institute of Maintenance - Philadelphia
- Johnson College
- Pennsylvania College of Technology •
- Pittsburgh Institute of Aeronautics - Pittsburgh •
- Saint Francis University

Puerto Rico

- Puerto Rico Aviation Maintenance Institute

South Carolina

- Greenville Technical College
- Pittsburgh Institute of Aeronautics – Myrtle Beach •
- Trident Technical College •

South Dakota

- Lake Area Technical Institute •

Tennessee

- Middle Tennessee State University
- North Central Institute
- Northeast State Community College
- Tennessee College of Applied Technology - Memphis
- Tennessee College of Applied Technology - Morristown •
- Tennessee College of Applied Technology - Nashville

Texas

- Amarillo College •
- Aviation Institute of Maintenance - Dallas
- Aviation Institute of Maintenance - Houston
- Chennault Aviation Maintenance Academy •
- Crowley Academy of Aviation
- Dallas College
- Del Mar College •
- Hallmark University
- LeTourneau University •
- Midland College •
- Skyline Career Development Center
- Southwest Texas College
- St. Philips College •
- Tarrant County College
- Texarkana College
- Texas State Technical College - Abilene
- Texas State Technical College - Harlingen •
- Texas State Technical College - Waco •
- Thrust Institute of Maintenance •
- U.S. Aviation Academy - Denton •
- Universal Technical Institute - Houston

Utah

- Salt Lake Community College •
- Southern Utah University
- Utah State University

Vermont

- Burlington Technical Center

Virginia

- Aviation Institute of Maintenance - Manassas
- Aviation Institute of Maintenance - Norfolk
- Blue Ridge Community College •
- Liberty University •

Washington

- Big Bend Community College
- Clover Park Technical College
- Everett Community College
- Moody Bible Institute, Moody Aviation •
- South Seattle College
- Spokane Community College

West Virginia

- Marshall University Aviation Maintenance Technology Program
- Pierpont Community and Technical College

Wisconsin

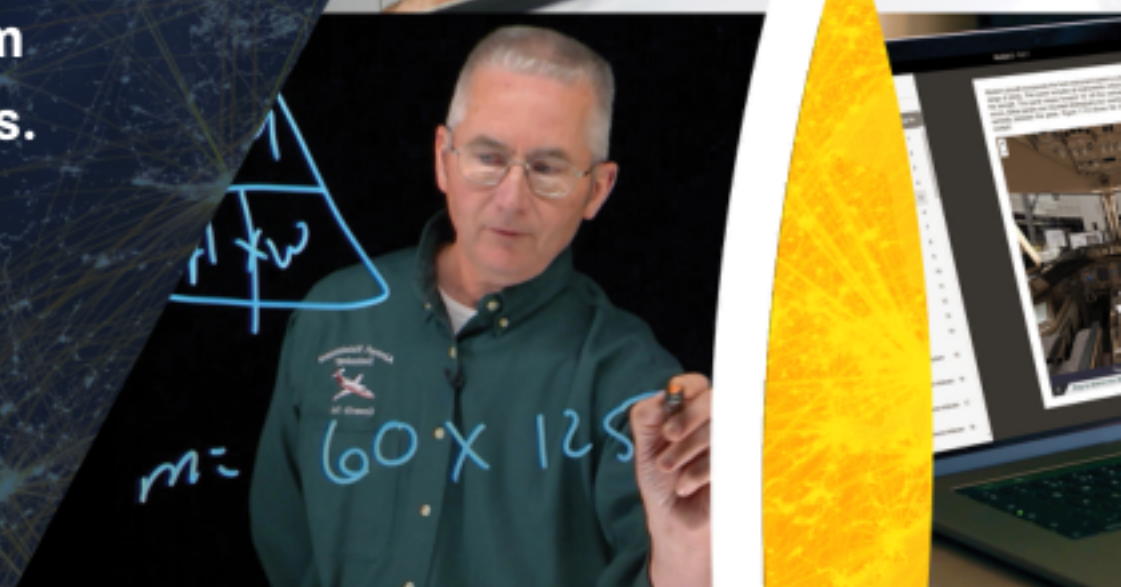
- Fox Valley Technical College
- Milwaukee Area Technical College

Courtesy of **WSU Tech**

CHOOSE AEROSPACE

Developed by ATEC's sister foundation, in collaboration with Part 147 program instructors and industry stakeholders.

- First of its kind, computer-assisted curriculum developed to build pipelines into aviation maintenance technician schools
- Aligns with the general portion of Federal Aviation Administration Mechanic Airman Certification Standards
- Intended for deployment in high schools to aid dual enrollment and/or credit bearing opportunities for students matriculating into FAA-certificated programs to complete the airframe and/or powerplant coursework



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