



THE FLORIDA TALENT CENTER

**DATAHUB**

# Case Study:

Leveraging Workforce Data to Strengthen Aviation Talent Pipelines in South Florida and the Florida Panhandle

Cleared for Takeoff: Strengthening Aviation Workforce Readiness in Florida

2025

**THE FLORIDA  
TALENT CENTER**  
*Powered by the Florida Chamber Foundation*

Florida's aviation industry serves as a cornerstone of the state's economy, driving growth in travel, trade, and innovation. In 2022 alone, Florida's aviation industry contributed to the state's total economic output by \$336 billion. <sup>1</sup>The industry supports over two million jobs, and accounts for roughly 13.5% <sup>2</sup>of Florida's GDP. The Target Industry Report from FloridaCommerce reports that, between 2022 and 2024, Florida continued to grow amongst the nation's leaders in job creation within the aerospace and aviation sector, adding over 16,000 new jobs (12.3% increase) as well as adding 3,000 more jobs than any other state.

As the state's aviation sector continues to experience rapid economic and job growth, industry leaders are faced with an aging skilled workforce and a steep imbalance in workforce supply and demand. To address these factors, businesses in Florida are seeking more strategic ways to attract, develop, and retain the talent needed to sustain long-term success for the industry.

The Florida Talent Center Data Hub, powered by the Florida Chamber Foundation, can help employers like those in the aviation industry proactively align their talent strategies with real-time education and workforce trends. Local businesses use the Florida Talent Center Data Hub's Postsecondary Dashboard to better understand their potential talent pipeline for specific positions, degrees and certifications. By utilizing this tool, the user can filter by the State University System Institution, State College, or District Technical College that they consider their talent pool. The Data Hub enables users to view the program type, average wage, enrollment, and the percentage of individuals who continue their education or are employed upon graduation for the entire postsecondary talent pool. For further details, they can also filter by career cluster such as aviation-related fields, or even more specifically, the program title.

## Anticipating Essential Workforce Needs

Retirement risk is one of the largest concerns in today's aviation industry, with 35% of industry certificate holders in 2024 aged 62 or older<sup>3</sup>. Leaders in aviation across the state can turn to the Data Hub to see the current completion numbers and forecast the pipeline of graduates in aviation mechanics, logistics, ground operations and related positions.

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[1] FDOT 2022 Statewide Executive Summary

[2] RSW 2022 FDOT Economic Impact Study

[3] Aviation Week Article: ATEC Highlights U.S. MRO Workforce Progress and Challenges

By using dashboards that showcase post-secondary completion rates and workforce placement outcomes, employers can identify how many learners are graduating from programs like Miami-Dade County Public Schools, Miami Dade College, Broward County Public Schools, Broward College, Escambia County Public Schools, Pensacola State College, or the University of West Florida, and where additional capacity might be needed. This allows industry leaders to focus on developing new talent at a faster rate to prevent a vast talent gap as generations retire.

With this information, leaders in the aviation industry could proactively collaborate with these institutions to expand their existing programs, support scholarship opportunities, or co-invest in facilities that help scale the aviation workforce in alignment with the region's Top 30 High-Demand Careers.

## **Regional Trends in Aviation**

Regional aviation trends in Miami and the Florida Panhandle include rapid growth, workforce challenges, and emerging opportunities for innovation. The Miami region's industry is rapidly expanding with increased global connectivity. For example, Miami International Airport (MIA) is significantly expanding its global and transatlantic flights for both passenger travel and freight, thereby reinforcing Miami as a vital hub connecting the US to Europe, South America, and beyond. This same rapid growth can be observed in Pensacola, which has become a thriving hub for aviation maintenance and engineering. However, for both regions, a critical challenge lies in workforce sustainability, as a significant portion of the skilled labor force, including technicians, engineers, and pilots, is nearing retirement age. Currently, not enough students are enrolling in aviation technical programs to match the rate at which older generations are retiring, resulting in an imbalance between supply and demand.

Companies like ST Engineering Pensacola Aerospace are stepping up to be part of the solution and investing in workforce training programs to bridge this gap and ensure operational resilience. "Continued aerospace growth in Florida depends on a steady talent pipeline of skilled aviation mechanics that are prepared for the evolving demands of the industry," said Ed Murray, Vice President of Government Relations & Business Development, ST Engineering North America.

“By using the Florida Chamber Foundation’s real-time workforce data and strengthening partnerships across education and industry, Florida can proactively address talent shortages and support continued innovation and expansion.” Technical colleges play a vital role in addressing the needs of Florida’s aviation workforce demands by providing hands-on training for high-demand occupations. One of those high-demand roles includes Aviation Maintenance Technicians, with an almost 25% increase in Miami’s demand in the last 10 years. A business in South Florida could utilize the data hub to view public postsecondary institutions with Aviation Technician programs offered at Technical Colleges in Miami-Dade County Public Schools, Broward County Public Schools, etc., and a business in the Florida Panhandle could do the same with District program enrollments. While these programs offer high-quality programs, there is an evident gap in regional talent supply and demand when compared to the current 830 unique job postings for aviation technicians in the last 12 months.

In line with this commitment, ST Engineering has partnered with Pensacola State College to establish a new Aviation Maintenance Training Center, which is expected to boost the local community by creating over fifty FAA-certified technicians annually. Initiatives like this show the opportunity for regional stakeholders to collaborate and invest in local talent development.

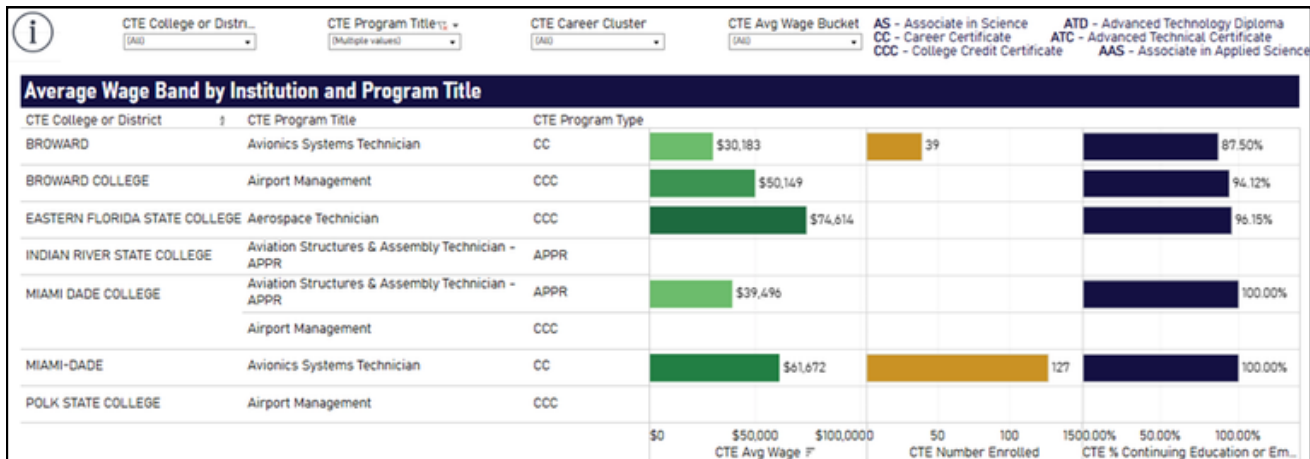
By addressing workforce shortages while embracing innovation and collaboration, Florida’s aviation sector is positioned to sustain growth and reinforce its reputation as a global center for aviation excellence.

## **Technical College’s Role in Meeting Aviation Workforce Needs**

Technical colleges play a vital role in addressing the needs of Florida’s aviation workforce demands by providing hands-on training for high-demand occupations. One of those high-demand roles includes Aviation Technicians, with an almost 25% increase in Miami’s demand in the last 10 years. A business in South Florida could utilize the data hub to view public postsecondary institutions with Aviation Technician programs offered at Technical Colleges in Miami-Dade County Public Schools, Broward County Public Schools, etc., and a business in the Florida Panhandle could do the same with District program enrollments.

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Figure 1. Data Hub Details for Florida Schools Offering Programs in Aviation



## State College and University’s Role in Meeting Aviation Workforce Needs

Florida’s State College and University Systems play a vital role in bridging the gap in aviation workforce supply and demand, especially in the Miami and Pensacola regions where demand continues to outpace supply.

While technical programs serve to train for maintenance, avionics, and flight operations roles, bachelor’s degrees in fields such as engineering, aviation administration, and computer science provide deeper expertise in testing, design, management, and innovation, which are also essential to the industry. Institutions like Florida International University, Florida Atlantic University, Miami Dade College, Broward College, Pensacola State College, and University of West Florida serve as key training pipelines to meet increasing regional demand in these respective regions.

By partnering with and investing in these established programs, industry leaders can aid in expanding enrollment capacity, aligning curriculum with industry needs, and reducing the price of attendance for students. Florida’s State Colleges and Universities are essential in addressing the workforce supply shortage and creating a steady flow of new skilled talent into Florida’s aviation industry to sustain growth.

Figure 2. Data Hub Details for UWF Students pursuing Engineering and IT degrees

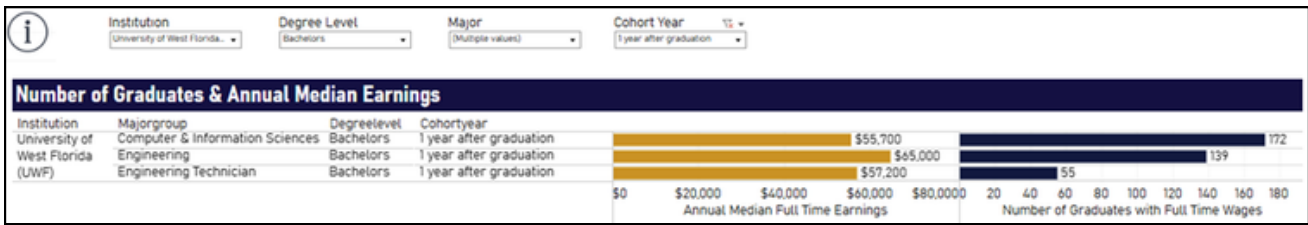


Figure 3. Data Hub Details for FIU Students pursuing Engineering and IT degrees

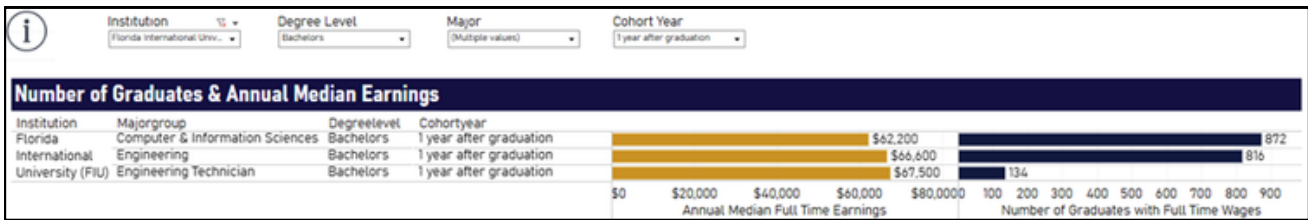


Figure 4. Data Hub Details for FAU Students pursuing Engineering and IT degrees

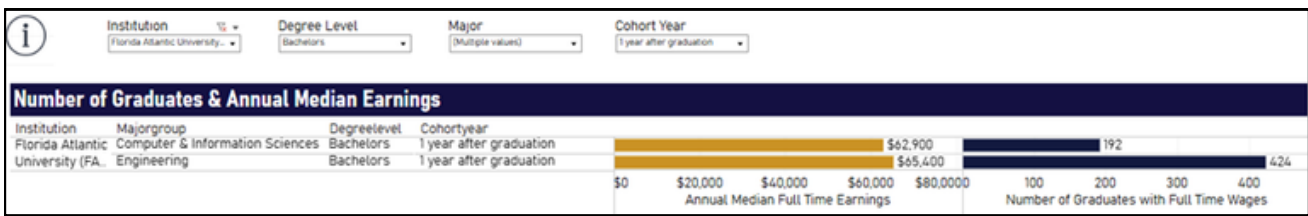
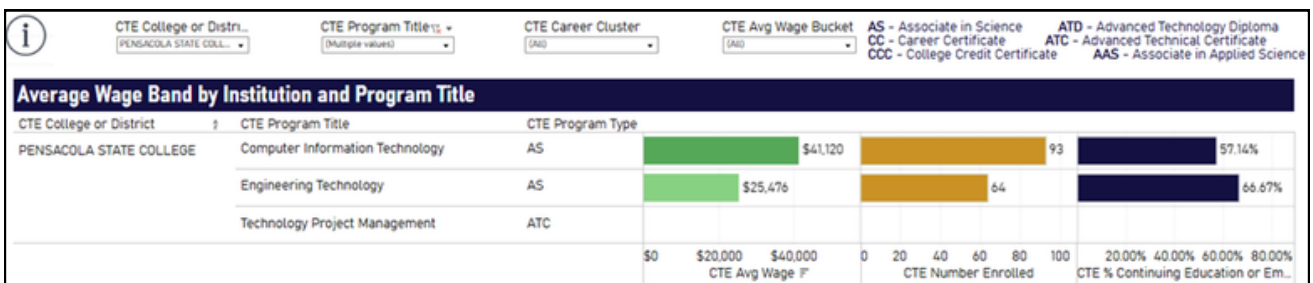


Figure 5. Data Hub Details for Pensacola State College Students pursuing Engineering and IT degrees



## Challenges Facing the Industry

The aviation industry in Florida faces a wide range of challenges that threaten its ability to meet growing workforce demands. Accessibility remains a critical issue, as the number of aviation programs along with available slots at those programs fall short of industry needs. The aging workforce intensifies this problem with retiring mechanics, pilots, and engineers outpacing the rate of new talent.

Educational costs also present barriers. Pilot training programs can cost tens of thousands of dollars, and technical certification programs are often expensive, which deters many potential candidates. Finally, limited exposure and awareness of aviation careers among youth reduces the pipeline of future talent, pointing out the need for stronger outreach and engagement initiatives across Florida’s education system.

Figure 7. Data Hub Details for Miami-Dade College Students pursuing degrees in Aviation

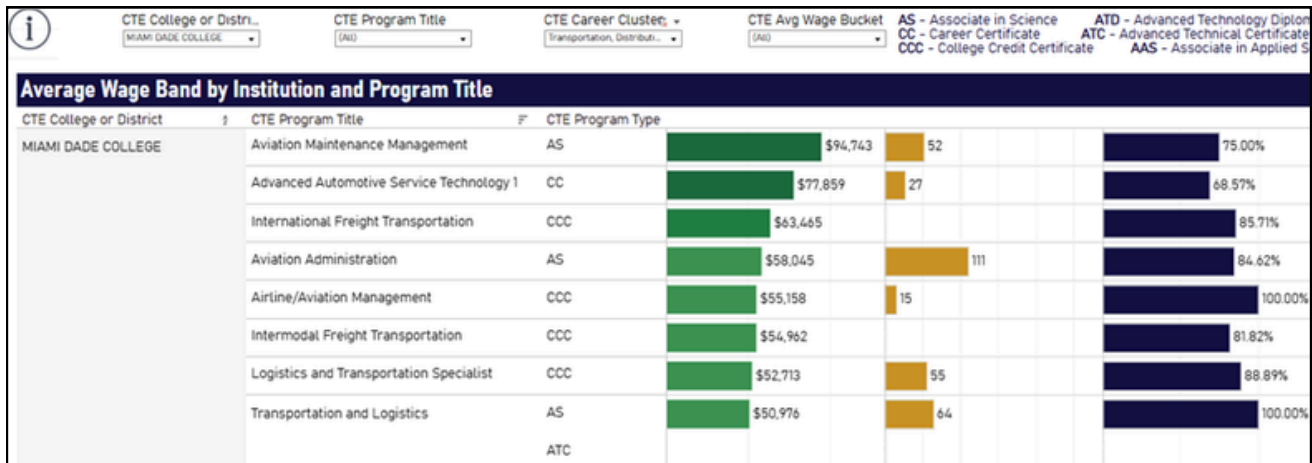
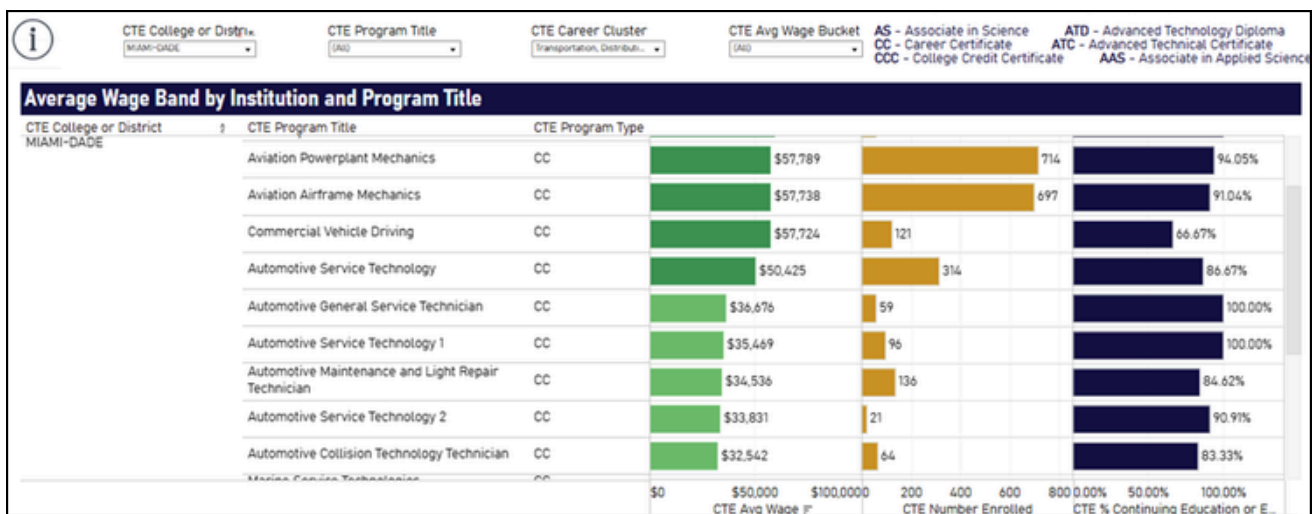


Figure 8. Data Hub Details for Miami-Dade Public Schools Students pursuing degrees in Aviation



There is a notable gap in Florida’s aviation workforce between supply and demand across several key roles. For Aircraft Maintenance Technicians, there is a shortfall of 307 between program completers and job openings, highlighting the supply gap. Commercial Pilots have 175 completions against 1,041 openings, leaving a whopping 83.2% deficit in position filling.

These figures serve as evidence of the significant workforce shortages that Florida's aviation industry is facing and will continue to face as the sector grows rapidly.

- **Aircraft maintenance technicians:**  
1,574 Completions Vs. 1,881 Openings
- **Avionics technicians:**  
58 Completions Vs. 301 Openings
- **Commercial pilots:**  
175 Completions Vs. 1,041 Openings
- **Flight attendants:**  
3,023 Completions Vs. 2,158 Openings
- **Air traffic controllers:**  
592 Completions Vs. 261 Openings

## **Opportunities and Call for Action**

To solve the aviation workforce gap and strengthen the talent pipeline, South Florida and the Florida Panhandle have several opportunities for action. Employers, educators, and regional industry leaders can leverage the Florida Talent Center Data Hub to identify specific program gaps and target investments where they will have the greatest impact. Expanding partnerships between aviation companies and technical colleges such as the program highlighted above at ST Engineering can create innovative training programs, apprenticeships, and work-based learning experiences that directly align with employer needs.

Additionally, incentivizing upskilling and reskilling programs can help prepare existing workers and attract new ones for advanced roles. State and local leaders can also utilize this information to support grant funding, facility expansion, and scholarship initiatives aimed at increasing enrollment in existing aviation industry programs. By initiating these efforts across the state, Florida can build a more sustainable aviation workforce capable of sustaining long-term growth and global competitiveness.

## Conclusion and Next Steps

The Florida Talent Center Data Hub presents a meaningful opportunity for South Florida and the Florida Panhandle area businesses to adopt a data-informed approach to not only aviation talent pipeline planning but to strengthen the workforce needs across every industry.

By utilizing this resource and engaging with local education partners, employers can strengthen their talent pipeline, close workforce gaps, and help ensure Florida remains the best state for business and talent.

For more information or to discuss talent pipeline needs and solutions in your region, please contact **Corrie Melton, Vice President of Talent Development for the Future of Work**, [cmelton@flchamber.com](mailto:cmelton@flchamber.com), or visit the Florida Talent Center Data Hub.

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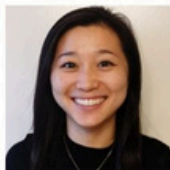
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