



Labor Market Industry Profile

2023
EDITION

Florida Aviation & Aerospace Industry

Florida Industry Profiles: Aviation and Aerospace Industry Cluster

Exploring Florida's Targeted Industries

Florida's geographic location ideally positions the state as a global hub for commerce. Florida's competitive costs, comprehensive infrastructure and a large, diverse talent pool have supported the expansion of a dynamic economy throughout the following six key areas: aviation and aerospace, life sciences, manufacturing, information technology, financial and professional services, and logistics and distribution—the subjects of this series of reports titled *Florida Industry Profiles*.

These Industry Profiles detail the benefits of these targeted industries to Florida's employment, wage-earning levels within the industry, and how each industry is forecast to perform moving forward. In an increasingly competitive global market, Florida continues to position itself for future growth in key areas as evidenced in the following profile.

Overview

Florida's Aviation and Aerospace industry cluster comprises the Aviation industry (Part I) and the Aerospace industry (Part II). The Aviation and Aerospace industry cluster includes the following industries:

Aviation (Part I)

- Scheduled Passenger Air Transportation (NAICS industry 481111),
- Scheduled Freight Air Transportation (NAICS industry 481112),
- Nonscheduled Air Passenger Chartering (NAICS industry 481211),
- Nonscheduled Air Freight Chartering (NAICS industry 481212),
- Other Nonscheduled Air Transportation (NAICS industry 481219),
- Air Traffic Control (NAICS industry 488111),
- Other Airport Operations (NAICS industry 488119),
- Other Support Activities, Air Transport (NAICS industry 488190), and
- Flight Training (NAICS industry 611512).

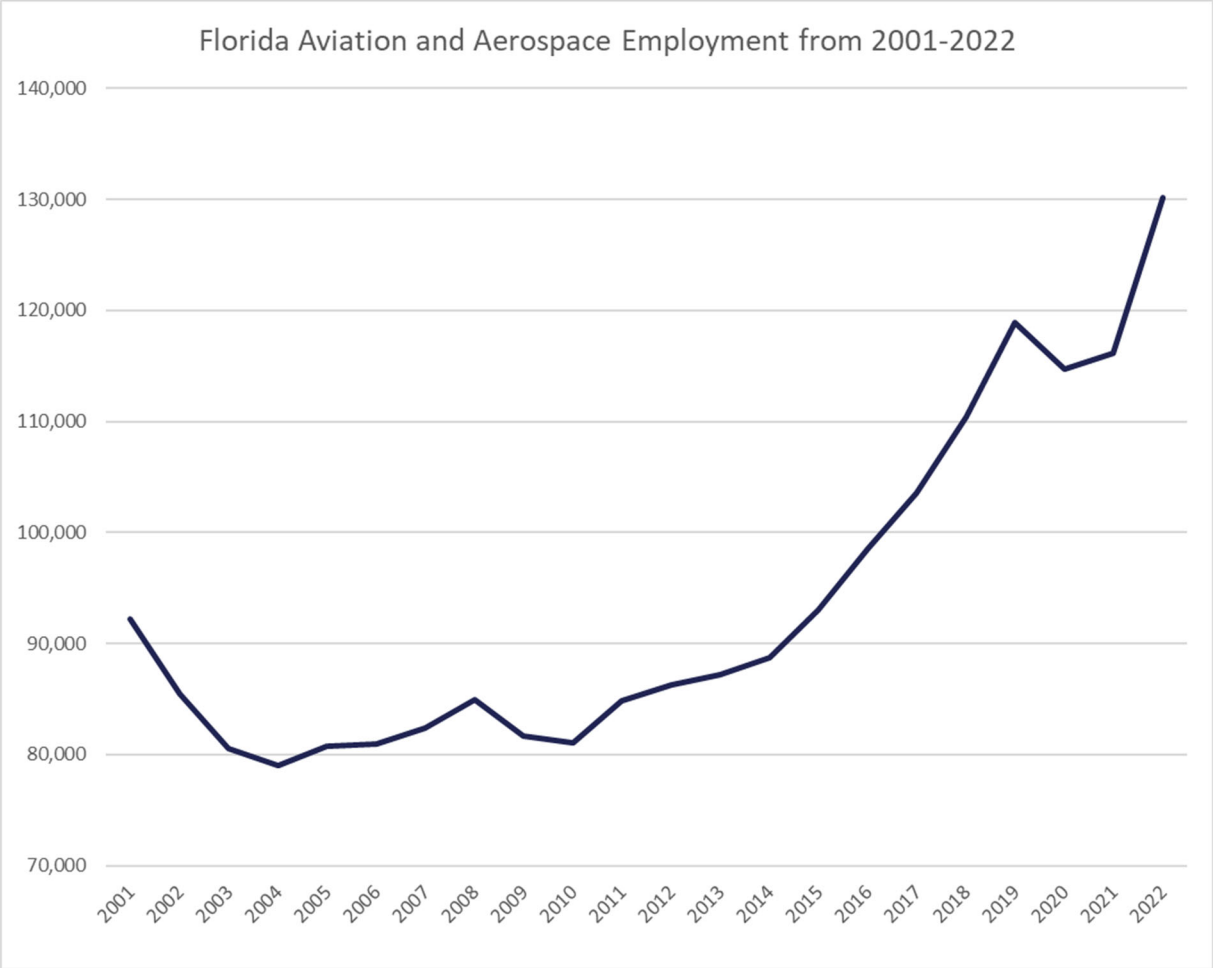
Aerospace (Part II)

- Search, Detection & Navigation Instrument Manufacturing (NAICS industry 334511),
- Aircraft Manufacturing (NAICS industry 336411),
- Aircraft Engine and Engine Parts Manufacturing (NAICS industry 336412),
- Other Aircraft Parts and Equipment Manufacturing (NAICS industry 336413),
- Guided Missiles and Space Vehicles Manufacturing (NAICS industry 336414),
- Space Vehicle Propulsion Units and Parts Manufacturing (NAICS industry 336415),
- Other Guided Missile/Space Vehicle Parts Manufacturing (NAICS industry 336419), and
- Satellite Telecommunications (NAICS industry 517410).

Some of the largest industries by employment within the Aviation and Aerospace industry cluster include Scheduled Passenger Air Transportation; Other Support Activities for Air Transportation; Other Airport Operations; Guided Missiles and Space Vehicles, and Search, Detection, and Navigation Instruments Manufacturing.

Employment Trends in the Aviation and Aerospace Industry Cluster

The Aviation and Aerospace industry cluster had 2,777 establishments in 2022 with employment of 130,198. Employment was up 14,007 jobs (+12.1 percent) from 2021. Aviation and aerospace employment reached a low of 78,999 jobs in 2004 and has gained 51,199 jobs (+64.8 percent) since then.



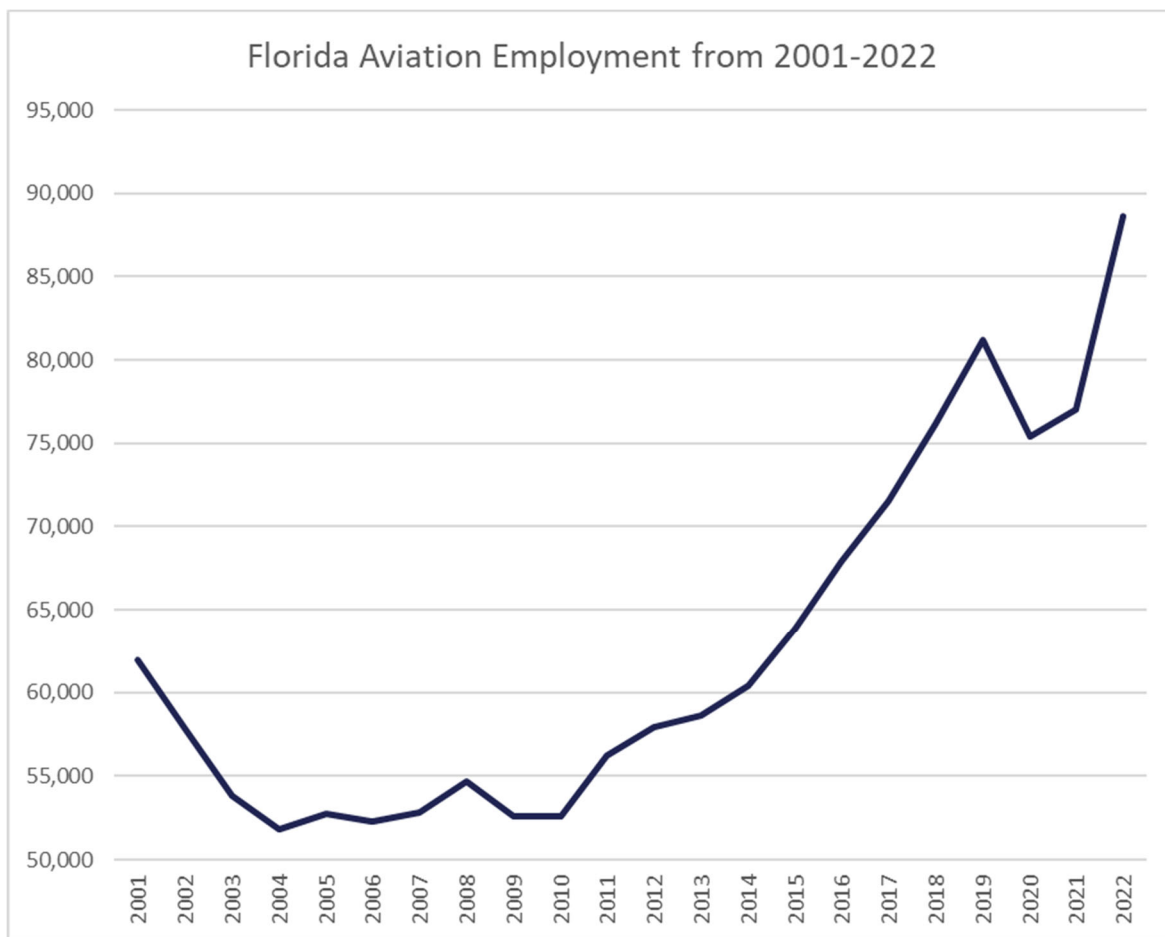
Source: FloridaCommerce, Bureau of Workforce Statistics and Economic Research, Quarterly Census of Employment and Wages Program (QCEW).

Florida Aviation Industry, Part I

Florida has a rich history of aviation firsts, being the site of the first night flight (Tampa, 1911) and having the world's first scheduled airline service (St. Petersburg to Tampa, 1914). Florida is the birthplace of commercial aviation and the air transportation hub of the Western Hemisphere, according to the Bureau of Transportation Statistics, its commercial airports accommodated nearly 193 million passengers in 2022. The aviation industry cluster in Florida includes air transportation, support activities for air transportation, and flight training.

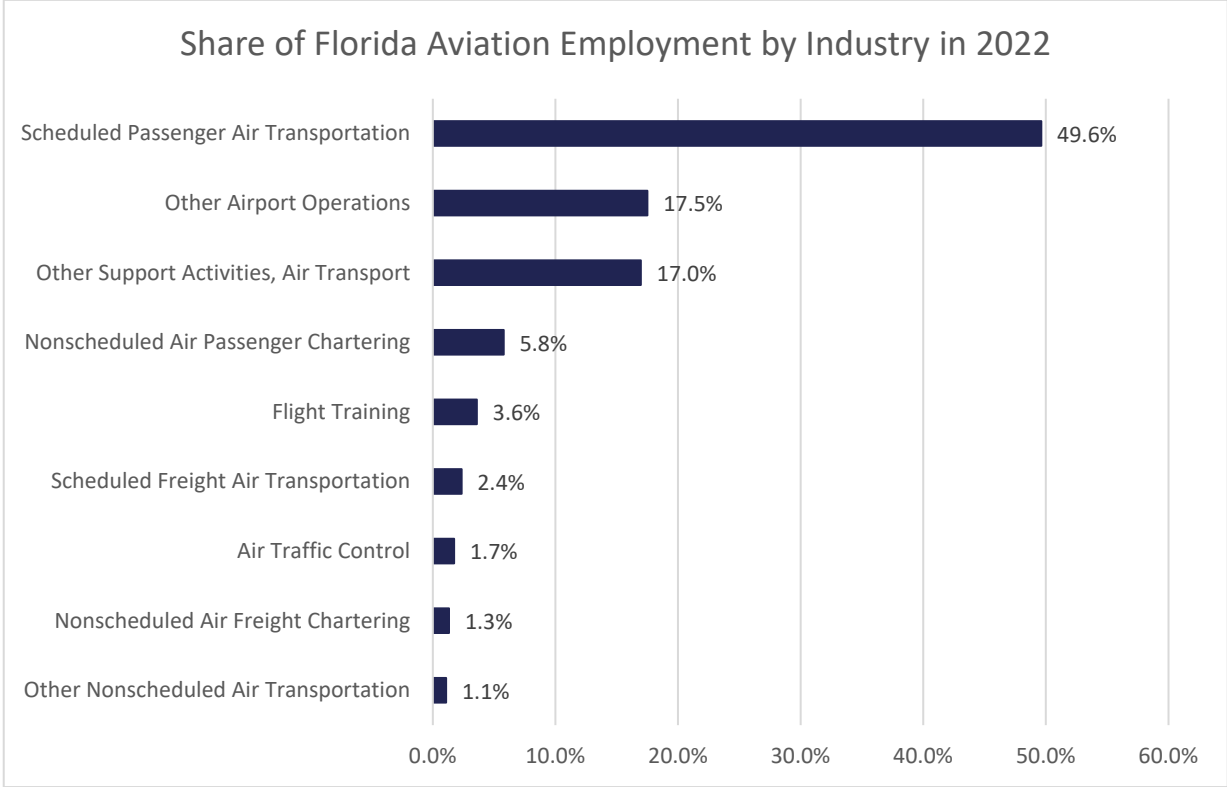
Employment Trends in the Florida Aviation Industry Cluster

There were 2,128 Aviation industry establishments in 2022 that accounted for 88,602 jobs. Employment was up 11,533 jobs (+15.0 percent) from 2021, total jobs for all industries increased by 5.6 percent during the same period. Aviation employment declined between 2001 and 2004 and remained largely stable through 2010. Aviation employment began growing from a low of 52,600 jobs in 2010 to 81,191 jobs in 2019, an increase of 54.4 percent. However, 2020 saw a decrease of 5,746 aviation jobs bringing aviation employment down to 75,445 jobs (-7.1 percent). In 2021, employment was up 1,603 jobs (+2.1 percent) from 2020 but still down 4,143 jobs from 2019 (-5.1 percent), employment reached a new highest peak in 2022.



Source: FloridaCommerce, Bureau of Workforce Statistics & Economic Research, Quarterly Census of Employment and Wages Program (QCEW).

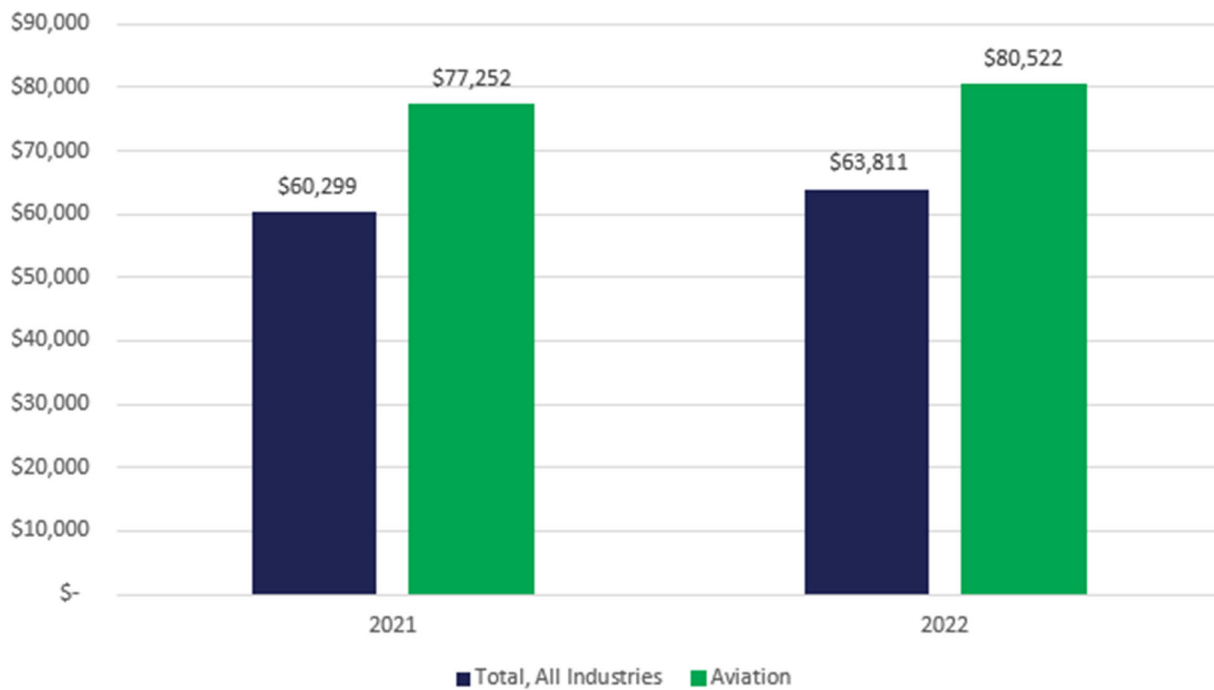
The largest industries in aviation in 2022 were: Scheduled Passenger Air Transportation (43,976 jobs); Other Airport Operations (15,511 jobs), and Other Support Activities, Air Transportation (15,036 jobs); These three industries made up 84.1 percent of aviation employment in 2022 and 57.2 percent of the Aviation and Aerospace industry cluster’s total employment. Employment in Scheduled Passenger Air Transportation alone represents 49.6 percent of total aviation employment and 33.7 percent of the Aviation and Aerospace industry cluster’s employment.



Source: FloridaCommerce, Bureau of Workforce Statistics and Economic Research, Quarterly Census of Employment and Wages Program (QCEW).

Within the Aviation industry cluster, eight of the nine industries gained jobs over the year in 2022. Scheduled Passenger Air Transportation gained the most jobs (+6,160 jobs, +16.3 percent), followed by Support Activities for Air Transport (+3,767 jobs, +13.3 percent), Other Airport Operations (+2,359 jobs, +17.9 percent), and Other Support Activities, Air Transport (+1,440 jobs, +10.6 percent). Air Traffic Control (-32 jobs, -2.0 percent) experienced a decline in jobs over the year.

Florida Average Annual Wages in 2021 and 2022 Aviation Industry versus Total, All Industries



Source: FloridaCommerce, Bureau of Workforce Statistics and Economic Research, Quarterly Census of Employment and Wages Program (QCEW).

Aviation’s 2022 average annual wage increased at a lesser rate than the average wage for all industries over the year. The 2022 average annual wage for workers in the aviation industry was \$80,522, an increase of \$3,270 (+4.2 percent) from 2021. The average annual wage for all industries grew by \$3,512 (+5.8 percent) over the year.

The 2022 average annual wage for workers in the Aviation industry cluster (\$80,522) exceeded the average annual wage for all industries (\$63,811) by \$16,711 (+26.2 percent).

The Nonscheduled Air Passenger Chartering industry had an average annual wage of \$135,006 in 2022, the highest wage in aviation. Other Airport Operations had the lowest average annual wage in 2022 (\$44,837). Eight of the nine industries in aviation had 2022 average annual wages exceeding the average annual wage for all industries. Compared to the average annual wage for all industries in 2022, most aviation industries had relatively high average annual wages.

All Education and Training Levels

Top Occupations in the Aviation Industry Cluster For All Training Levels*

Occupation Title	Employment		2022-2030 Change		% of Industry Total	2022	Training Requirement
	2022	2030	Total	Percent		Median Hourly Wage	
Total, All Aviation Industry Occupations	84,350	91,211	6,861	8.13			
Flight Attendants	11,535	13,965	2,430	21.07	13.68	^ \$ 63,101	High School Diploma or GED
Aircraft Mechanics and Service Technicians	8,686	9,296	610	7.02	10.30	\$29.58	Postsecondary non-degree award
Laborers and Freight, Stock, and Material Movers, Hand	8,659	9,384	725	8.37	10.27	\$14.39	No formal educational credential required
Reservation and Transportation Ticket Agents and Travel Clerks	7,733	8,380	647	8.37	9.17	\$19.09	High School Diploma or GED
Airline Pilots, Copilots, and Flight Engineers	4,857	5,296	439	9.04	5.76	^ \$ 292,576	Bachelor's Degree
Commercial Pilots	4,080	4,401	321	7.87	4.84	^ \$ 101,509	High School Diploma or GED
Customer Service Representatives	2,440	2,402	-38	-1.56	2.89	\$17.35	High School Diploma or GED
Cargo and Freight Agents	2,377	2,552	175	7.36	2.82	\$22.42	High School Diploma or GED
Career/Technical Education Teachers, Postsecondary	2,204	2,292	88	3.99	2.61	\$29.20	Bachelor's Degree
Aircraft Service Attendants and Transportation Workers, All Other	1,373	1,453	80	5.83	1.63	^ \$ 45,443	High School Diploma or GED
Avionics Technicians	1,078	1,145	67	6.22	1.28	\$29.01	Associate Degree
Passenger Attendants	1,017	1,073	56	5.51	1.21	\$21.85	High School Diploma or GED
Cleaners of Vehicles and Equipment	1,014	1,076	62	6.11	1.20	\$13.31	No formal educational credential required
First-Line Supervisors of Mechanics, Installers, and Repairers	942	1,007	65	6.90	1.12	\$29.23	High School Diploma or GED
Stockers and Order Fillers	883	955	72	8.15	1.05	\$14.22	High School Diploma or GED

* The Top 15 table reflects the occupations synonymous with the particular industry and best represents the required set of skills. Though still counted in the total employment of the Aviation Industry, the occupations not included for 2022 were: First-Line Supervisors of Office and Admin. Support Workers (1,357 jobs); and General and Operations Managers (1,170 jobs).

^ Annual Salary (hourly wage rates not available).

- The largest 15 occupations (by employment) in aviation made up 69.80 percent of total employment in aviation.
- Flight Attendants is projected to gain the most jobs (+2,430 jobs, +21.07 percent) among the top 15 aviation occupations. Fourteen of the top 15 occupations are projected to gain employment between 2022 and 2030, with exception of Customer Service Representatives (-38 jobs, -1.56 percent).
- Median hourly wages for the top 15 aviation occupations range from a high of \$292,576 (annual wage) for Airline Pilots, Copilots, and Flight Engineers to a low of \$13.31 per hour for Cleaners of Vehicles and Equipment.
- Four of the top 15 occupations require training beyond high school.

Bachelor's Degree or Higher

Top Occupations in the Aviation Industry Cluster That Require a Bachelor's Degree or Higher**

Occupation Title	Employment		2022-2030 Change		% of Industry Total	2022	Training Requirement
	2022	2030	Total	Percent		Median Hourly Wage	
Total, All Aviation Industry Occupations	15,259	16,293	1,034	6.78			
Airline Pilots, Copilots, and Flight Engineers	4,857	5,296	439	9.04	5.76	^\$292,576	Bachelor's Degree
Compliance Officers	450	481	31	6.89	0.53	\$29.26	Bachelor's Degree
Buyers and Purchasing Agents	271	267	-4	-1.48	0.32	\$29.18	Bachelor's Degree
Human Resources Specialists	261	273	12	4.60	0.31	\$28.75	Bachelor's Degree
Aerospace Engineers	240	255	15	6.25	0.28	\$48.79	Bachelor's Degree
Management Analysts	212	226	14	6.60	0.25	\$37.26	Bachelor's Degree
Sales Managers	193	206	13	6.74	0.23	\$50.04	Bachelor's Degree
Software Developers and Software Quality Assurance Analysts and Testers	165	189	24	14.55	0.20	NR	Master's Degree
Instructional Coordinators	161	166	5	3.11	0.19	\$29.43	Bachelor's Degree
Network and Computer Systems Administrators	129	133	4	3.10	0.15	\$37.30	Bachelor's Degree
Logisticians	113	120	7	6.19	0.13	\$29.82	Bachelor's Degree
Market Research Analysts and Marketing Specialists	101	115	14	13.86	0.12	\$29.31	Bachelor's Degree
Industrial Production Managers	85	91	6	7.06	0.10	\$47.78	Bachelor's Degree
Technical Writers	80	87	7	8.75	0.09	\$31.96	Bachelor's Degree
Industrial Engineers	78	83	5	6.41	0.09	\$40.97	Bachelor's Degree

**The Top 15 table reflects the occupations synonymous with the particular industry and best represents the required set of skills. Though still counted in the total employment of the Aviation Industry, the occupations not included for 2021 were: Career/Technical Education Teachers, Postsecondary (2,204 jobs); General and Operations Managers (1,170 jobs); Training and Development Specialists (521 jobs); Project Management Specialists and Business Operations Specialists, All Other (485 jobs); Accountants and Auditors (414 jobs); Financial Managers (282 jobs); Education Administrators, Postsecondary (276 jobs); Chief Executives (257 jobs); Tutors and Teachers and Instructors, All Other (229 jobs); Health Specialties Teachers, Postsecondary (259 jobs); Educational, Vocational, and School Counselors (239 jobs); Educational, Guidance, and Career Counselors and Advisors (189 jobs); Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other (177 jobs); Health Specialties Teachers, Postsecondary (162 jobs); Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other (161 jobs); Nursing Instructors and Teachers, Postsecondary (136 jobs); Administrative Services and Facilities Managers (134 jobs); and Education Administrators, All Other (99 jobs);

^ Annual Salary (hourly wage rates not available).

NR- Not releasable.

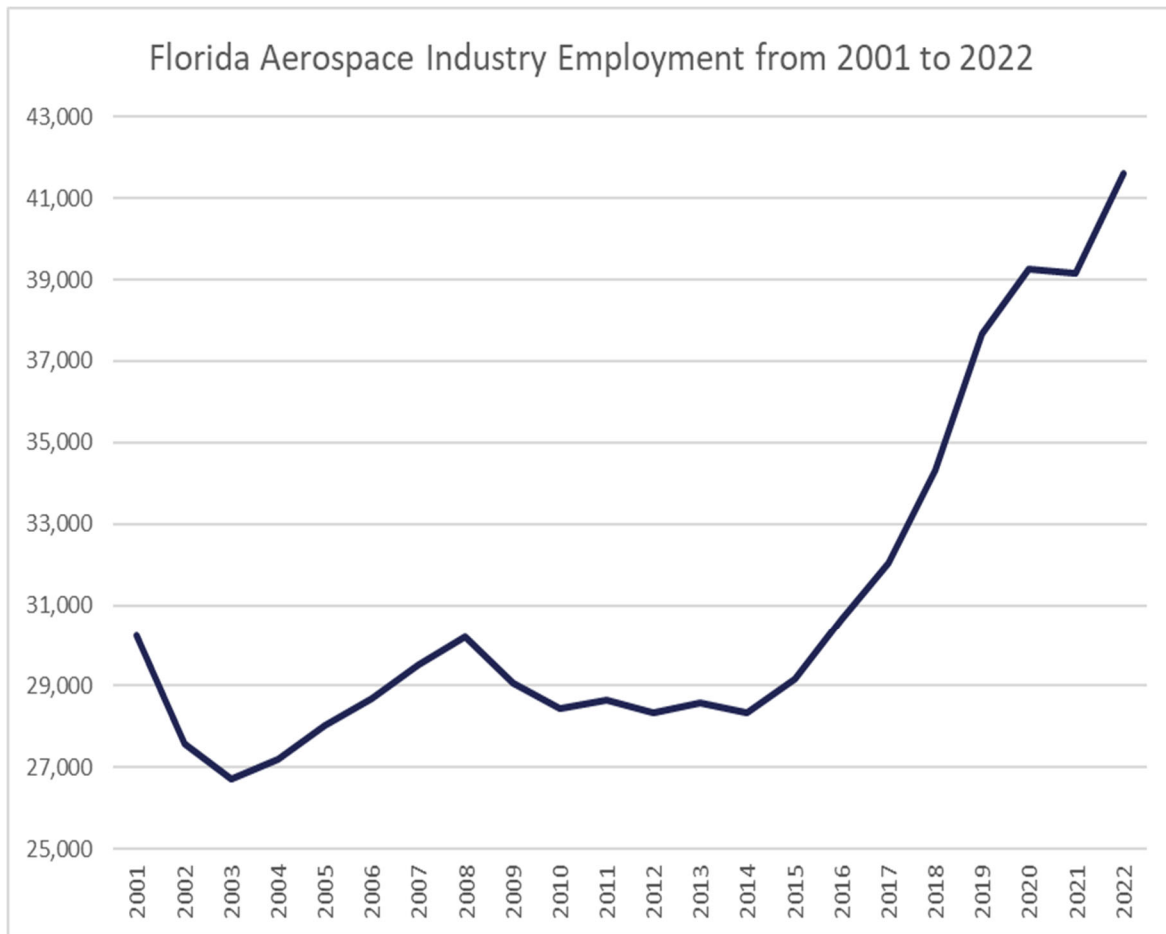
- Approximately 8.78 percent of employment in aviation is concentrated in the top 15 occupations that require at least a bachelor's degree.
- Software Developers and Software Quality Assurance Analysts and Testers (+14.55 percent) has the highest projected growth rate between 2022 and 2030.
- Airline Pilots, Copilots, and Flight Engineers is projected to have the largest gain of jobs (+439 jobs) among occupations that require a bachelor's degree or higher.
- Thirteen of the top 15 occupations that require at least a bachelor's degree are projected to have employment gains of 30 jobs or less.
- Median hourly wages for aviation occupations that require at least a bachelor's degree range from a high of \$292,576 (annual wage) for Airline Pilots, Copilots, and Flight Engineers to a low of \$28.75 for Human Resources Specialists.

Florida Aerospace Industry, Part II

Florida is known as the premier location in the world for space technologies. Virtually every major aerospace company and defense contractor in the U.S. and abroad has operations in Florida. The state has been a center for aerospace research and testing since 1946.

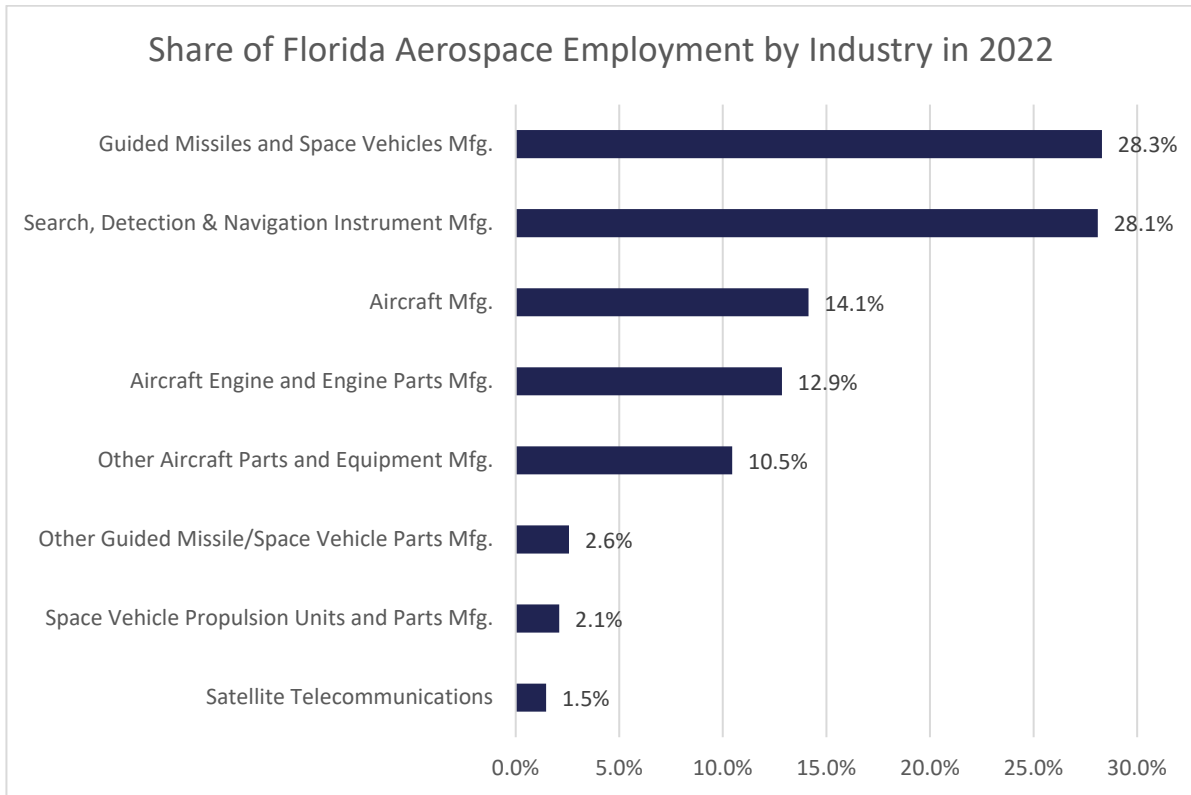
Employment Trends in the Florida Aerospace Industry Cluster

There were 649 Aerospace industry establishments in 2022 that accounted for 41,596 jobs, which was up 2,453 jobs (+6.3 percent) from 2021. Total jobs for all industries increased by 5.6 percent during this same period.



Source: FloridaCommerce, Bureau of Workforce Statistics and Economic Research, Quarterly Census of Employment and Wages Program (QCEW).

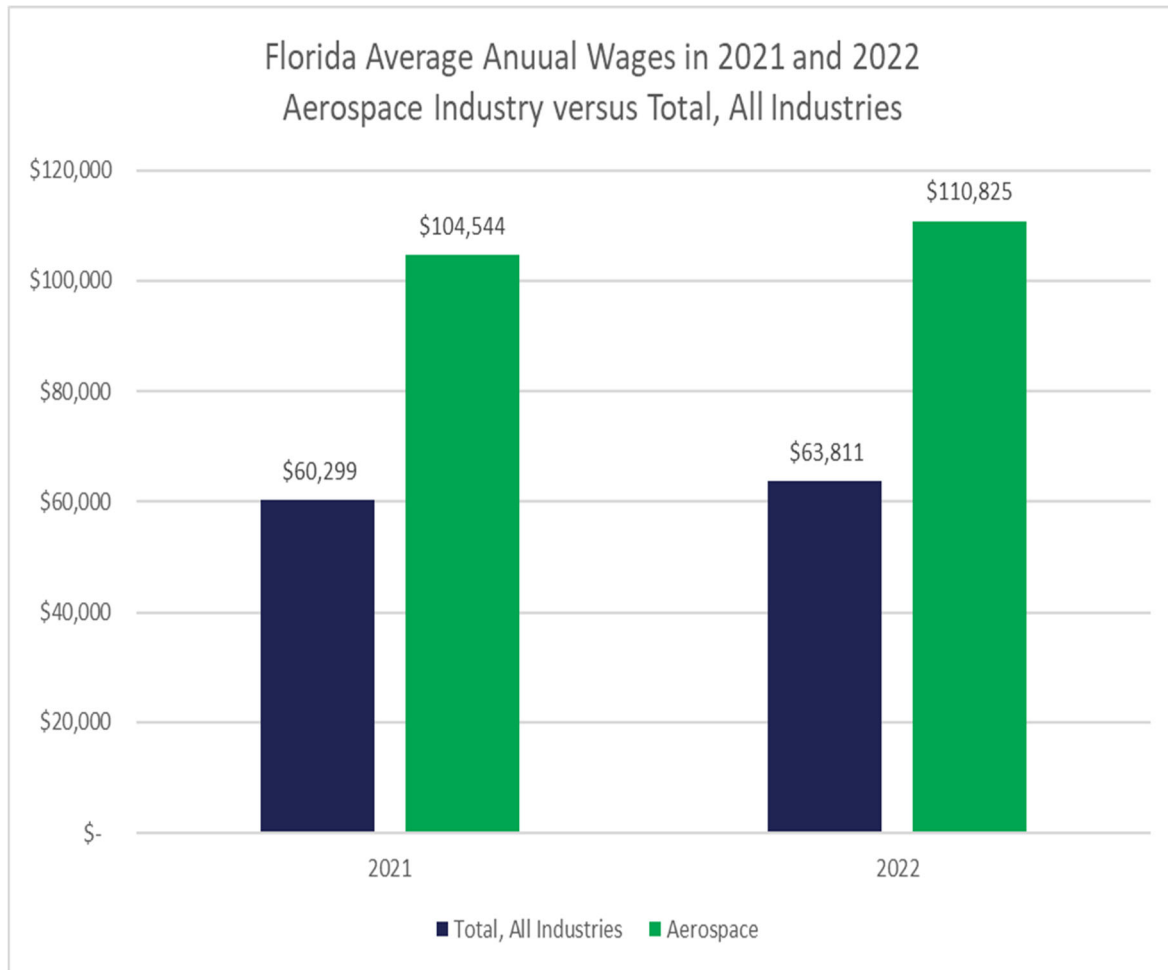
Aerospace employment grew between 2003 and 2008, peaking at 30,212 jobs in 2008. From 2008 to 2014, the industry declined, reaching a recent low of 28,335 jobs in 2014 (-6.2 percent from 2008). From this low, aerospace employment grew dramatically, to 39,249 jobs (+38.5 percent) in 2020. Aerospace employment fell by 107 jobs (-0.3 percent) in 2021, grew again in 2022 and reached to a new highest peak.



Source: FloridaCommerce, Bureau of Workforce Statistics and Economic Research, Quarterly Census of Employment and Wages Program (QCEW).

The largest industries in aerospace in 2022 were Guided Missiles and Space Vehicles Manufacturing (11,772 jobs), Search, Detection, and Navigation Instruments Manufacturing (11,688 jobs); Aircraft Manufacturing (5,880 jobs); and Aircraft Engine and Engine Parts Manufacturing (5,346 jobs).

Within the aerospace industry, all eight industries experienced growth over the year in 2022. Guided Missiles and Space Vehicles Manufacturing gained the most jobs over the year in 2022 (+815 jobs, +7.4 percent), followed by Aircraft Engine and Engine Parts Manufacturing (+470 jobs, +9.6 percent), and Other Aircraft Parts and Equipment Manufacturing (+431 jobs, +11.0 percent).



Source: FloridaCommerce, Bureau of Workforce Statistics and Economic Research, Quarterly Census of Employment and Wages Program (QCEW).

The 2022 average annual wage for workers in the aerospace industry was \$110,825, an increase of \$6,281 (+6.0 percent) from 2021. The average annual wage for all industries grew by \$3,512 (+5.8 percent) over the year. The 2022 average annual wage for workers in the Aerospace industry cluster exceeded the average annual wage for all industries (\$63,811) by \$47,014 (+73.7 percent).

All Education and Training Levels

Top Occupations in the Aerospace Industry Cluster For All Training Levels*

Occupation Title	Employment		2022-2030 Change		% of Industry Total	2022	Training Requirement
	2022	2030	Total	Percent		Median Hourly Wage	
Total, All Aerospace Industry Occupations	45,410	51,916	6,506	14.33			
Industrial Engineers	2,609	3,232	623	23.88	5.75	\$46.71	Bachelor's Degree
Aircraft Mechanics and Service Technicians	2,329	2,759	430	18.46	5.13	\$30.84	Postsecondary non-degree award
Software Developers and Software Quality Assurance Analysts and Testers	2,155	2,610	455	21.11	4.75	NR	Bachelor's Degree
Inspectors, Testers, Sorters, Samplers, and Weighers	1,797	1,868	71	3.95	3.96	\$20.01	High School Diploma or GED
Mechanical Engineers	1,299	1,502	203	15.63	2.86	\$41.85	Bachelor's Degree
Aerospace Engineers	1,138	1,352	214	18.80	2.51	\$50.79	Bachelor's Degree
Computer Systems Analysts	1,085	1,225	140	12.90	2.39	\$45.58	Bachelor's Degree
Engineers, All Other	1,047	1,234	187	17.86	2.31	\$44.51	Bachelor's Degree
Machinists	1,029	1,196	167	16.23	2.27	\$22.66	High School Diploma or GED
Architectural and Engineering Managers	1,009	1,172	163	16.15	2.22	\$71.13	Bachelor's Degree
Electronics Engineers, Except Computer	914	1,069	155	16.96	2.01	\$49.11	Bachelor's Degree
Electrical Engineers	838	957	119	14.20	1.85	\$47.01	Bachelor's Degree
First-Line Supervisors of Production and Operating Workers	804	930	126	15.67	1.77	\$29.04	High School Diploma or GED
Production, Planning, and Expediting Clerks	734	857	123	16.76	1.62	\$23.14	High School Diploma or GED
Computer Hardware Engineers	713	847	134	18.79	1.57	\$58.92	Bachelor's Degree

* The Top 15 table reflects the occupations synonymous with the particular industry and best represents the required set of skills. Though still counted in the total employment of the Aerospace Industry, the occupations not included for 2022 were: Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers (4,668 jobs); and Project Management Specialists and Business Operations Specialists, All Other (1,316 jobs).

NR- Not releasable.

- The top 15 occupations (by employment) specific to aerospace made up 42.94 percent of total employment in aerospace.
- Industrial Engineers (+23.88 percent) are projected to grow the fastest from 2022 to 2030, followed by Software Developers and Software Quality Assurance Analysts and Testers (21.11 percent). None of the top 15 occupations are projected to have declining employment from 2022 to 2030.
- Industrial Engineers (623 jobs) and Software Developers and Software Quality Assurance Analysts and Testers (+455 jobs) are projected to gain the most jobs among the top 15 aerospace occupations.
- Median hourly wages for the top 14 releasable aerospace occupations range from a high of \$71.13 for Architectural and Engineering Managers to a low of \$22.66 for Machinists.
- Ten of the top 15 occupations require a bachelor's degree and 11 require training beyond high school.

Bachelor's Degree or Higher

Top Occupations in the Aerospace Industry Cluster That Require a Bachelor's Degree or Higher**

Occupation Title	Employment		2022-2030 Change		% of Industry Total	2022	Training Requirement
	2022	2030	Total	Percent		Median Hourly Wage	
Total, All Aerospace Industry Occupations	22,805	26,747	3,942	17.29			
Industrial Engineers	2,609	3,232	623	23.88	5.75	\$46.71	Bachelor's Degree
Software Developers and Software Quality Assurance Analysts and Testers	2,155	2,610	455	21.11	4.75	NR	Bachelor's Degree
Mechanical Engineers	1,299	1,502	203	15.63	2.86	\$41.85	Bachelor's Degree
Aerospace Engineers	1,138	1,352	214	18.80	2.51	\$50.79	Bachelor's Degree
Computer Systems Analysts	1,085	1,225	140	12.90	2.39	\$45.58	Bachelor's Degree
Architectural and Engineering Managers	1,009	1,172	163	16.15	2.22	\$71.13	Bachelor's Degree
Electronics Engineers, Except Computer	914	1,069	155	16.96	2.01	\$49.11	Bachelor's Degree
Electrical Engineers	838	957	119	14.20	1.85	\$47.01	Bachelor's Degree
Computer Hardware Engineers	713	847	134	18.79	1.57	\$58.92	Bachelor's Degree
Industrial Production Managers	463	535	72	15.55	1.02	\$49.77	Bachelor's Degree
Logisticians	413	481	68	16.46	0.91	\$30.03	Bachelor's Degree
Technical Writers	406	480	74	18.23	0.89	\$35.91	Bachelor's Degree
Computer and Information Systems Managers	364	418	54	14.84	0.80	\$69.71	Bachelor's Degree
Management Analysts	349	406	57	16.33	0.77	\$37.27	Bachelor's Degree
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific	286	321	35	12.24	0.63	\$47.52	Bachelor's Degree

** The Top 15 table reflects the occupations synonymous with the particular industry and best represent the required set of skills. Though still counted in the total employment of the Aerospace Industry, the occupations not included for 2022 were: Project Management Specialists and Business Operations Specialists, All Other (1,316 jobs); Engineers, All Other (1,047 jobs); Buyers and Purchasing Agents (783 jobs); General and Operations Managers (618 jobs); Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other (615 jobs); and Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling, and Managers, All Other (344 jobs).

NR- Not releasable.

- Approximately 30.92 percent of employment in aerospace is concentrated in the top 15 occupations that require at least a bachelor's degree.
- Industrial Engineers (+23.88 percent) has the highest projected growth rates from 2022 to 2030, and is projected to gain the most jobs (+623 jobs).
- All of the top 15 occupations that require at least a bachelor's degree are projected to gain jobs from 2022 to 2030.
- Median hourly wages for the top 14 releasable aerospace occupations that require at least a bachelor's degree range from a high of \$71.13 for Architectural and Engineering Managers to a low of \$30.03 for Logisticians.
- Employment in the aerospace industry is concentrated in coastal areas of south, central, northeastern, and northwestern Florida with the largest number of jobs found in Brevard, Orange, Palm Beach, Pinellas, Broward, Miami-Dade, and Okaloosa Counties.

**FloridaCommerce
Bureau of Workforce Statistics and Economic Research**

**Caldwell Building
MSC G-020
107 E. Madison Street
Tallahassee, Florida 32399-4111
Phone (850) 245-7205**



FloridaJobs.org/wser-home
WSER.Info@Commerce.fl.gov