

### 2018 EDITION

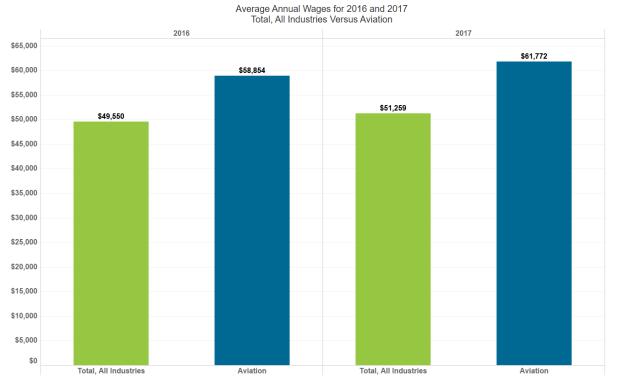
## Labor Market Industry Profile

# Broward County Aviation & Aerospace Industry

Prepared by the Rorida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research

Florida has a rich history of aviation firsts, being the site of the first night flight in aviation history (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 Enterprise Florida, Inc. Florida commercial airports accommodate more than 149.3 million passengers annually. The aviation industry in Florida includes air transportation, support activities for air transportation, and flight training.

- The aviation industry includes the following detailed subsectors: scheduled air transportation; nonscheduled air transportation; support activities for air transport and technical and trade schools.
- The Broward County aviation industry had 321 establishments and employment of 11,328 in June 2017, up 1,585 jobs (+16.3 percent) from June 2016. Total jobs for all industries increased by 2.2 percent during the same time period.
- The largest subsectors in aviation in June 2017 were scheduled passenger air. Transportation (7,043 jobs); and support activities for air transportation (2,895 jobs). These two subsectors made up 87.8 percent of aviation employment in June 2017. Employment in scheduled passenger air transportation alone represents 62.2 percent of total aviation employment.
- Within the aviation industry, scheduled passenger air transportation gained the most jobs over the year in June 2017 (+1096 jobs, +18.4 percent). The subsector losing the most jobs over the year in aviation was technical and trade schools (-27 jobs, -3.6 percent).



Source: Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research, Quarterly Census of Employment and Wages Program.

- The 2017 average annual wage for workers in the aviation industry was \$61,772, exceeding Broward County's total average annual wage for all industries (\$51,259) by 20.5 percent. This gap has widened since 2016, when the aviation average annual wage exceeded the average annual wage for all industries by 18.8 percent.
- Aviation's average annual wage increased more than the average annual wage for all industries over the year and grew at a faster rate. The average annual wage increased by \$2,918 (+5.0 percent), while for all industries it grew by \$1,709 (+3.5 percent).
- The Nonscheduled Air Transportation had the highest average annual wage in aviation (\$92,727). Technical and Trade Schools had the lowest average annual wage in 2017 (\$43,158) and was 18.8 percent lower than the wage for all industries. Two of the four aviation subsectors had average annual wages that exceeded the wage for all industries in Broward County (\$51,259). Two of the four subsectors in aviation had 2017 average annual wages exceeding \$50,000. Compared to the average annual wage for all industries in 2017, most aviation subsectors had relatively high average annual wages.

#### All Education and Training Levels

Top Occupations in the Aviation Industry Cluster For All Training Levels									
Broward County	Employ	ment	2018-202	4 Change	% of Industry	2017 Median Hourly	Training		
Occupation Title	2018	2026	Total	Percent	Total	Wage	Requirement		
Total, All Aviation Occupations	12,122	14,183	2,061	17.00%					
Reservation and Ticket Agents and Travel Clerks	1,539	1,840	301	19.56%	12.70%	\$21.37	High School Diploma/GED		
Aircraft Mechanics and Service Technicians	1,480	1,667	187	12.64%	12.21%	\$18.22	Postsecondary Vocational		
Laborers and Freight, Stock, and Material Movers, Hand	1,294	1,540	246	19.01%	10.67%	\$11.79	Less than High School		
Transportation Workers, All Other	828	985	157	18.96%	6.83%	\$18.59	Less than High School		
Customer Service Representatives	342	405	63	18.42%	2.82%	\$14.57	Postsecondary Vocational		
First-Line Superv. of Office and Admin. Support Workers	246	283	37	15.04%	2.03%	\$25.57	Associate Degree		
Vocational Education Teachers, Postsecondary	236	214	(22)	-9.32%	1.95%	\$23.41	Associate Degree		
First-Line Superv. of Mechanics, Installers, and Repairers	138	163	25	18.12%	1.14%	\$29.46	Postsecondary Vocational		
Cleaners of Vehicles and Equipment	121	142	21	17.36%	1.00%	\$10.87	Less than High School		
Office Clerks, General	101	109	8	7.92%	0.83%	\$14.32	High School Diploma/GED		
Aircraft Cargo Handling Supervisors	79	95	16	20.25%	0.65%	\$25.68	Associate Degree		
Cargo and Freight Agents	73	87	14	19.18%	0.60%	\$17.71	Postsecondary Vocational		
Secretaries, Except Legal, Medical, and Executive	55	49	(6)	-10.91%	0.45%	\$16.26	Postsecondary Vocational		
Bookkeeping, Accounting, and Auditing Clerks	54	57	3	5.56%	0.45%	\$19.00	Associate Degree		
General and Operations Managers	50	58	8	16.00%	0.41%	\$48.74	Associate Degree		

Note: Occupations displayed exclude any that are not reportable to due confidentiality rules.

Source: Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research, Long Term Projections Program, forecast to 2026.

- The top 15 aviation-specific occupations account for 54.7 percent of total occupational employment in aviation.
- The largest occupation in the aviation industry by 2018 employment is reservation and ticket agents and travel clerks, which has an average wage of \$21.37 per hour.
- Aircraft cargo handling supervisors (+20.25 percent) are projected to grow the fastest from 2018 to 2026. Secretaries, except legal medical and executive (-10.91 percent) are projected to grow the slowest.
- Reservation and ticket agents and travel clerks are projected to gain the most jobs (+301 jobs) from 2018 to 2026 among the top fifteen aviation-specific occupations, followed by laborers and freight, stock and material movers, hand (+246 jobs).
- Average hourly wages for the top 15 aviation-specific occupations range from a high of \$48.74 for general and operations managers to a low of \$10.87 for cleaners of vehicles and equipment.
- Six of the fifteen largest occupations have an average wage greater than \$20.00 per hour.
- Ten of the top fifteen occupations require training beyond high school. Higher wages are found in occupations with greater training requirements.

Top Occupations in the Aviation Industry Cluster That Require a Bachelor's Degree or Higher							
Broward County					% of	2017 Median	
	Employ	Employment 2018-		2018-2024 Change		Hourly	Training
Occupation Title	2018	2026	Total	Percent	Total	Wage	Requirement
Total, All Aviation Occupations	12,122	14,183	2,061	17.0%			
Sales Managers	29	34	5	17.24%	0.24%	\$57.86	Bachelor's Degree
Human Resources Specialists	25	28	3	12.00%	0.21%	\$27.68	Bachelor's Degree
Accountants and Auditors	24	26	2	8.33%	0.20%	\$30.28	Bachelor's Degree
Education Administrators, Postsecondary	21	19	(2)	-9.52%	0.17%	\$60.98	Bachelor's Degree
Training and Development Specialists	10	12	2	20.00%	0.08%	\$30.28	Bachelor's Degree

Note: Occupations displayed exclude any that are not reportable to due confidentiality rules.

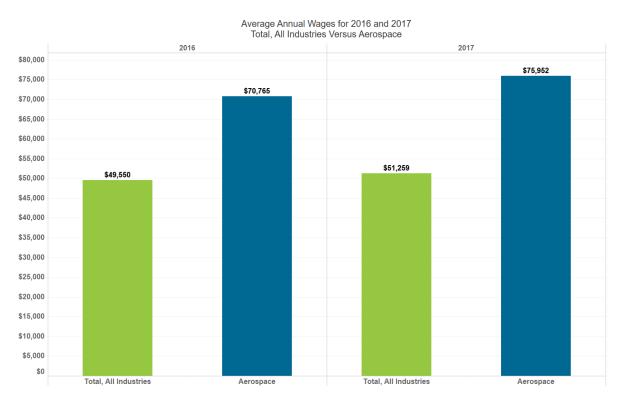
Source: Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research, Long Term Projections Program, forecast to 2026.

- Training and development specialists (+20.00 percent have the highest projected growth rates from 2018 to 2026, while education administrators, postsecondary are the only occupations in the 5 whose employment is projected to decrease.
- Sales managers are projected to gain the most jobs among top high skill aviation occupations (+5 jobs). Four of the top five occupations are projected to have increasing employment from 2018 to 2026.
- Average hourly wages for the top five high skill aviation occupations range from a high of \$60.98 for education administrators, postsecondary to a low of \$27.68 for human resources specialists.
- All the five largest high skill information technology occupations have an average wage greater than \$20.00 per hour.

Florida is known as the premier location in the world for space technologies. Virtually every major aerospace company and defense contractor from the U.S. and abroad has operations in Florida. The state has been a center for aerospace research and testing since 1946. With 35 colleges and university enrolling over 300,000 students near Broward County, it provides access to a healthy pool of talent within this industry.

- The aerospace industry includes the following detailed subsectors: electronic instrument manufacturing; aerospace product & part manufacturing; satellite telecommunications.
- The aerospace industry had 98 establishments in June 2017 with employment of 1,907, down -7 jobs (-0.4 percent) from June 2016. Total jobs for all industries increased by 2.2 percent during the same time period.

- The largest subsector in aerospace in June 2017 was aerospace product & parts manufacturing (1,148). This subsector made up 60.2 percent of aerospace employment in June 2017.
- Within the aerospace industry, aerospace product & parts manufacturing gained the most jobs over the year in June 2017 (+31 jobs). The subsector losing the most jobs over the year in aerospace was electronic instrument manufacturing (-43 jobs, -8.7 percent).



Source: Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research, Quarterly Census of Employment and Wages Program.

- The 2017 average annual wage for workers in the aerospace industry was \$75,952, exceeding Broward County's total average annual wage for all industries (\$51,259) by 48.2 percent. This gap has expanded since 2016, when the aerospace average annual wage exceeded the average annual wage for all industries by 42.8 percent.
- Aerospace's average annual wage increased more than the average annual wage for all industries over the year and grew at a faster rate. The average annual wage increased by \$5,187 (+7.3 percent), while for all industries it grew by \$1,709 (+3.5 percent).

• The satellite telecommunications subsector had the highest average annual wage in aerospace (\$82,668). Aerospace product & parts manufacturing had the lowest average annual wage in 2017 (\$68,464) but was still 33.5 percent higher than the wage for all industries. All three of the aerospace subsectors had average annual wages that exceeded the wage for all industries in Broward County (\$51,259). All three subsectors in aerospace had 2017 average annual wages exceeding \$50,000.

Top Occupations in the Aerospace Industry Cluster For All Training Levels							
Broward County	Employ	ment	2018-202	24 Change	% of Industry	2017 Median Hourly	Training
Occupation Title	2018	2026	Total	Percent	Total	Wage	Requirement
Total, All Aerospace Occupations	1,855	1,934	79	4.26%			
Aircraft Mechanics and Service Technicians	303	356	53	17.49%	16.33%	\$26.15	Postsecondary Vocational
Inspectors, Testers, Sorters, Samplers, and Weighers	125	118	(7)	-5.60%	6.74%	\$17.49	High School Diploma/GED
Machinists	102	114	12	11.76%	5.50%	\$18.25	Postsecondary Vocational
Avionics Technicians	83	92	9	10.84%	4.47%	\$29.02	Postsecondary Vocational
First-Line Superv. of Production and Operating Workers	67	64	(3)	-4.48%	3.61%	\$25.60	Postsecondary Vocational
Telecommunications Equipment Installers and Repairers	59	64	5	8.47%	3.18%	\$31.08	Postsecondary Vocational
Customer Service Representatives	50	54	4	8.00%	2.70%	\$14.57	Postsecondary Vocational
General and Operations Managers	45	52	7	15.56%	2.43%	\$48.74	Associate Degree
Shipping, Receiving, and Traffic Clerks	42	44	2	4.76%	2.26%	\$14.90	Postsecondary Vocational
Aerospace Engineers	39	46	7	17.95%	2.10%	\$51.00	Bachelor's Degree
Office Clerks, General	31	29	(2)	-6.45%	1.67%	\$14.32	High School Diploma/GED
First-Line Superv. of Office and Admin. Support Workers	27	29	2	7.41%	1.46%	\$25.57	Associate Degree
Maintenance and Repair Workers, General	25	28	3	12.00%	1.35%	\$16.46	Postsecondary Vocational
Industrial Engineers	23	24	1	4.35%	1.24%	\$29.83	Bachelor's Degree
Sales Representatives, Services, All Other	23	25	2	8.70%	1.24%	\$23.78	High School Diploma/GED

#### All Education and Training Levels

Note: Occupations displayed exclude any that are not reportable to due confidentiality rules.

Source: Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research, Long Term Projections Program, forecast to 2026.

- The top 15 aerospace occupations account for 56.28 percent of total occupational employment in aerospace.
- The largest occupation in the aerospace industry by 2018 employment is aircraft mechanics and service technicians (+303 jobs), which has an average wage of \$26.15 per hour.
- Aerospace engineers (+17.95 percent) are projected to grow the fastest from 2018 to 2026. Office clerks, general (-6.45 percent) are projected to grow the slowest.
- Aircraft mechanics and service technicians are projected to gain the most jobs (+53 jobs) from 2018 to 2026 among the top fifteen aerospace-specific occupations, followed by machinists (+12 jobs). Two of the top 15 occupations are projected to have declining employment from 2018 to 2026.

- Average hourly wages for the top 15 aerospace-specific occupations range from a high of \$51.00 for aerospace engineers to a low of \$14.32 for office clerks, general.
- Nine of the fifteen largest occupations have an average wage greater than \$20.00 per hour.
- Twelve of the top fifteen occupations require training beyond high school. Higher wages are found in occupations with greater training requirements.

Top Occupations in the Aerospace Industry Cluster That Require a Bachelor's Degree or Higher								
Broward County					% of	2017 Median		
	Employment 2018-2024 Change		4 Change	Industry	Hourly	Training		
Occupation Title	2018	2026	Total	Percent	Total	Wage	Requirement	
Total, All Aerospace Occupations	1,855	1,934	79	4.26%				
Aerospace Engineers	39	46	7	17.95%	2.10%	\$51.00	Bachelor's Degree	
Industrial Engineers	23	24	1	4.35%	1.24%	\$29.83	Bachelor's Degree	
Architectural and Engineering Managers	22	24	2	9.09%	1.19%	\$54.57	Bachelor's Degree	
Budget Analysts	19	23	4	21.05%	1.02%	\$28.67	Bachelor's Degree	
Accountants and Auditors	17	18	1	5.88%	0.92%	\$30.28	Bachelor's Degree	

#### Bachelor's Degree or Higher

Note: Occupations displayed exclude any that are not reportable to due confidentiality rules.

Source: Florida Department of Economic Opportunity, Bureau of Workforce Statistics and Economic Research, Long Term Projections Program, forecast to 2026.

- Architectural and engineering managers (+21.05 percent) and aerospace engineers (+17.95 percent) have the highest projected growth rates from 2018 to 2026, while industrial engineers (4.35 percent) have the lowest projected growth rate among the five occupations.
- Aerospace engineers are projected to gain the most jobs among top high skill aerospace occupations (+7 jobs). All the top five occupations are projected to have increasing employment from 2018 to 2026.
- Average hourly wages for the top five high skill aerospace occupations range from a high of \$54.57 for Architectural and engineering managers to a low of \$28.67 for budget analysts.
- All the five largest high skill aerospace occupations have an average wage greater than \$20.00 per hour.