

Florida Information Technology Industry

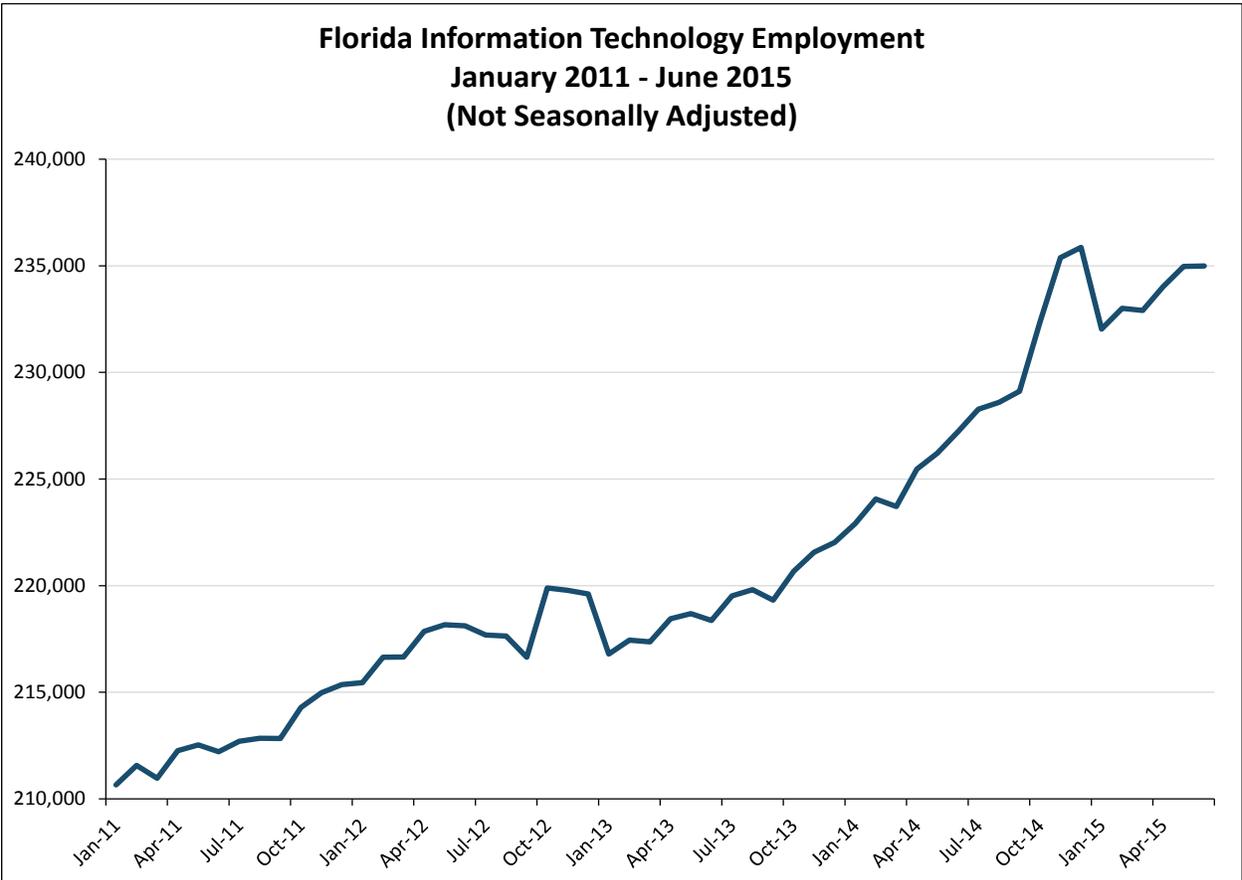
2016 Edition



Florida Information Technology Industry Cluster

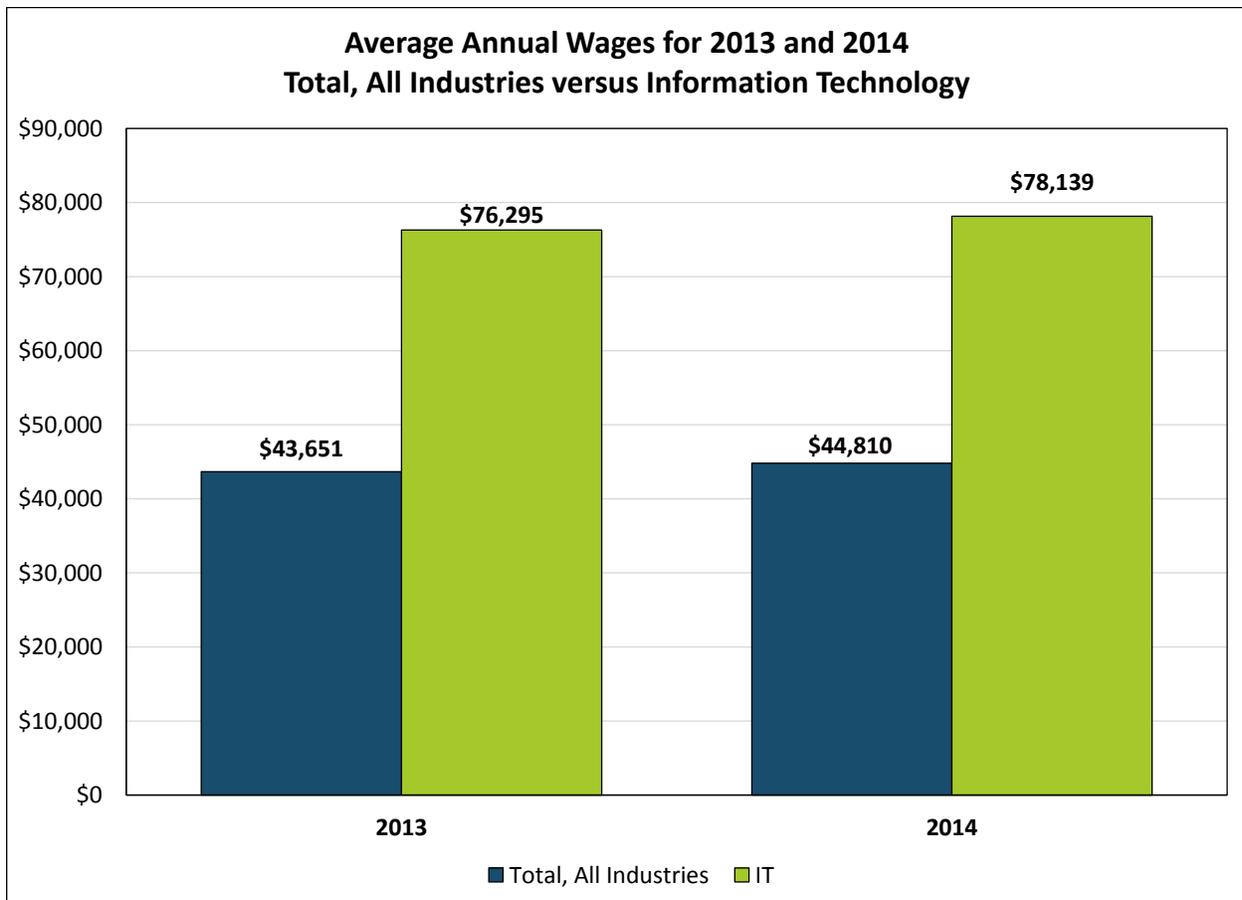
Florida's Information Technology industry cluster began to develop in support of the nation's space program and was further enhanced with the introduction of the IBM Personal Computer in Boca Raton in 1981. From these early efforts, Florida's information technology industry cluster has matured into such diverse areas as digital media; modeling, simulation and training; photonics/optics; and mobile technologies.

- The information technology industry cluster is defined as a combination of 51 different industry subsectors from both manufacturing (28) and nonmanufacturing (23). Industry subsectors within the cluster underwent a redefinition with the introduction of the 2012 North American Industry Classification System (NAICS). As a result, a consistent time series for the cluster can only be constructed from 2011 through the second quarter of 2015 with the new definitions as defined by NAICS. The subsectors included in the IT cluster are defined by Enterprise Florida, Inc.
- The information technology industry had 26,736 establishments and employment of 234,996 in June 2015. Employment was up 7,783 jobs (+3.4 percent) over the year.



Source: Florida Department of Economic Opportunity, Bureau of Labor Market Statistics, Quarterly Census of Employment and Wages Program (QCEW).

- The largest manufacturing subsectors in information technology in June 2015 were search, detection, and navigation instruments (9,092 jobs); semiconductors and related device manufacturing (confidential); and broadcast and wireless communications equipment (4,194 jobs). The largest nonmanufacturing industries were wired telecommunications carriers (40,805 jobs); custom computer programming services (34,838 jobs); computer systems design services (32,501 jobs); and data processing and related services (17,324 jobs).
- Within the information technology industry cluster, the electronic shopping subsector gained the most jobs over the year in June 2015 (+3,472 jobs, +36.6 percent). The subsector losing the most jobs over the year in the cluster was data processing and related services (-1,513 jobs, -8.0 percent).



Source: Florida Department of Economic Opportunity, Bureau of Labor Market Statistics, Quarterly Census of Employment and Wages Program (QCEW).

- The 2014 average annual wage for workers in the information technology industry was \$78,139, exceeding the total average annual wage for all industries (\$44,810) by 74.4 percent. This gap narrowed slightly from 2013, when the information technology average annual wage exceeded the average annual wage for all industries by 74.8 percent.

- Information technology's average annual wage increased more than the average annual wage for all industries over the year, but at a lower rate. The average annual wage increased by \$1,844 (+2.4 percent), while for all industries it grew by \$1,159 (+2.7 percent).
- Broadcast and wireless communications equipment had an average annual wage of \$106,407 in 2014, the highest in information technology and 137.5 percent higher than the wage for all industries. Consumer electronics repair and maintenance had the lowest average annual wage in 2014 (\$38,005). Forty-six information technology subsectors had average annual wages that exceeded the wage for all industries (\$44,810). Thirty information technology subsectors had annual wages greater than \$60,000. Compared to the average annual wage for all industries in 2014, most information technology subsectors had relatively high average annual wages.

All Education and Training Levels

Top Occupations in the Information Technology Industry Cluster For All Training Levels							
Occupation Title	Employment		2015-2023 Change		% of Industry	2016 Median Hourly Wage	Training Requirement
	2015	2023	Total	Percent	Total		
Total, All Information Technology Occupations	271,025	295,343	24,318	8.97			
Software Developers, Applications	15,288	18,603	3,315	21.68	5.64	40.58	Associate
Telecommunications Equipment Installers and Repairers	14,780	14,927	147	0.99	5.45	24.20	Postsecondary Vocational
Computer Programmers	8,843	9,687	844	9.54	3.26	35.36	Postsecondary Vocational
Electrical and Electronic Equipment Assemblers	8,704	8,450	-254	-2.92	3.21	14.47	Postsecondary Vocational
Computer Systems Analysts	8,211	9,549	1,338	16.30	3.03	38.17	Associate
Computer User Support Specialists	8,144	10,058	1,914	23.50	3.00	20.35	Postsecondary Vocational
Software Developers, Systems Software	6,690	7,587	897	13.41	2.47	45.55	Bachelor's Degree
Computer Network Architects	5,911	6,951	1,040	17.59	2.18	33.28	Postsecondary Vocational
General and Operations Managers	4,643	5,211	568	12.23	1.71	53.07	Associate
Network and Computer Systems Architects and Admins.	4,392	4,802	410	9.34	1.62	37.55	Associate
Management Analysts	3,974	4,678	704	17.72	1.47	33.20	Bachelor's Degree
Computer Network Support Specialists	3,898	4,325	427	10.95	1.44	25.27	Postsecondary Vocational
Team Assemblers	3,748	3,772	24	0.64	1.38	12.96	High School
Telecommunications Line Installers and Repairers	3,700	3,520	-180	-4.86	1.37	18.73	Postsecondary Vocational
Computer and Information Systems Managers	3,456	3,913	457	13.22	1.28	63.01	Bachelor's Degree

Source: Florida Department of Economic Opportunity, Bureau of Labor Market Statistics, Long Term Projections Program, forecast to 2023.

- The 15 largest information technology-specific occupations comprise about 38.5 percent of the total employment in the industry cluster.
- The largest information technology-specific occupation in 2015 is application software developers, which has a median hourly wage of \$40.58.
- Among the fifteen largest industry-specific occupations, median hourly wages range from a high of \$63.01 for computer and information systems managers, to a low of \$12.96 for team assemblers.

- Twelve of the fifteen largest information technology-specific occupations have a median wage greater than \$20.00 per hour.
- Thirteen of the fifteen largest occupations are projected to gain employment through 2023.
- Software developers, applications are projected to gain the most jobs (+3,315 jobs), while computer user support specialists are projected to grow the fastest (+23.50 percent) of all of the top 15 information technology-specific occupations from 2015 to 2023. Two of the 15 occupations are projected to lose employment, with electrical and electronic equipment assemblers losing the most (-254 jobs, -2.92 percent).
- Fourteen of the top 15 information technology-specific occupations require training beyond high school, with three requiring a bachelor's degree. Higher wages are found in occupations with greater training requirements.

Bachelor's Degree

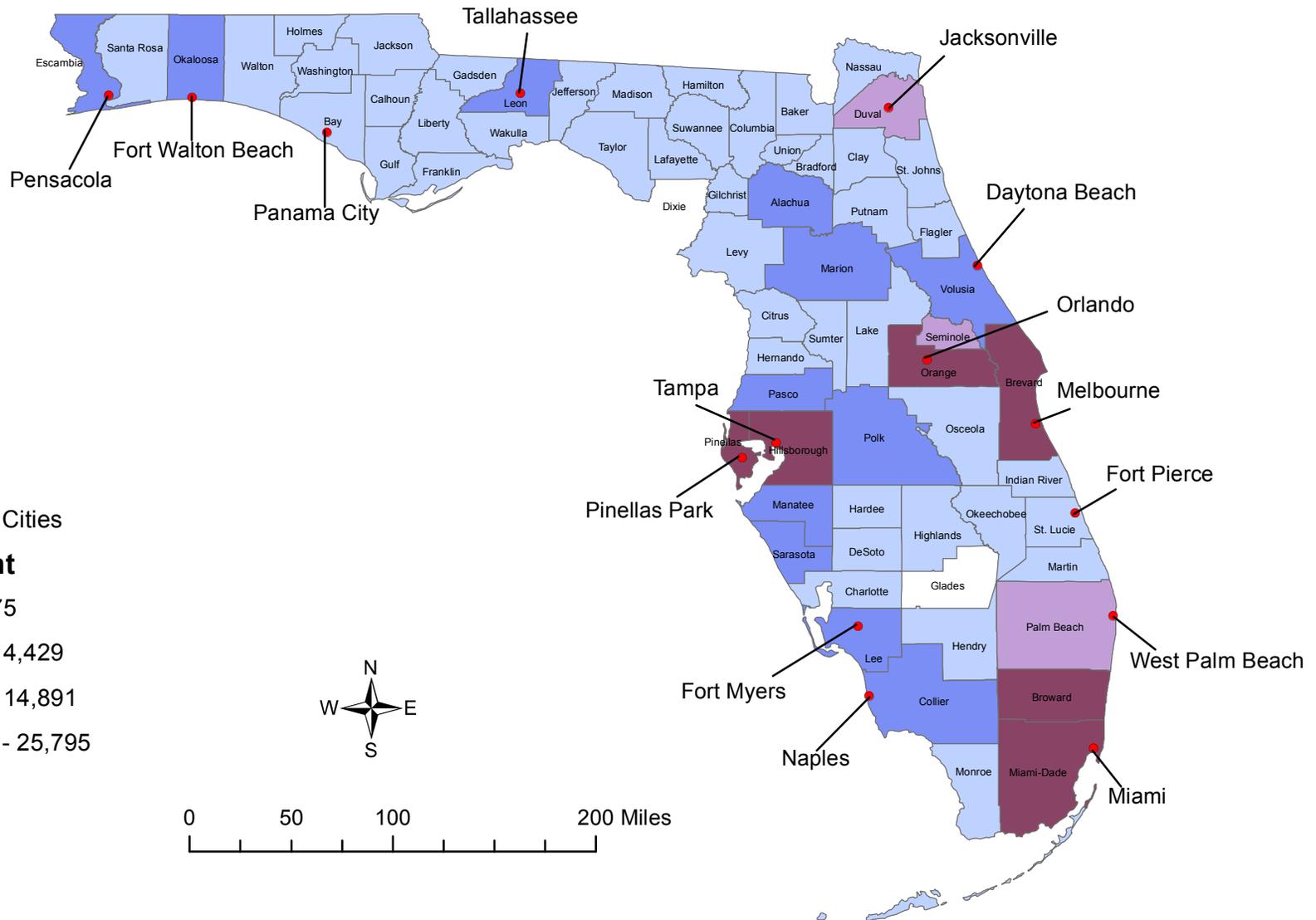
Top Occupations in the Information Technology Industry Cluster That Require a Bachelor's Degree or Higher							
Occupation Title	Employment		2015-2023 Change		% of Industry Total	2016	Training Requirement
	2015	2023	Total	Percent		Median Hourly Wage	
Total, All Information Technology Occupations	271,025	295,343	24,318	8.97			
Software Developers, Systems Software	6,690	7,587	897	13.41	2.47	45.55	Bachelor's Degree
Management Analysts	3,974	4,678	704	17.72	1.47	33.20	Bachelor's Degree
Computer and Information Systems Managers	3,456	3,913	457	13.22	1.28	63.01	Bachelor's Degree
Accountants and Auditors	3,447	3,796	349	10.12	1.27	29.93	Bachelor's Degree
Electronics Engineers, Except Computer	2,734	2,801	67	2.45	1.01	43.43	Bachelor's Degree
Industrial Engineers	2,650	2,821	171	6.45	0.98	33.97	Bachelor's Degree
Electrical Engineers	1,840	1,981	141	7.66	0.68	40.20	Bachelor's Degree
Market Research Analysts and Marketing Specialists	1,690	2,123	433	25.62	0.62	27.75	Bachelor's Degree
Producers and Directors	1,650	1,782	132	8.00	0.61	31.39	Bachelor's Degree
Training and Development Specialists	1,446	1,717	271	18.74	0.53	26.73	Bachelor's Degree
Sales Managers	1,281	1,408	127	9.91	0.47	58.35	Bachelor's Degree
Human Resources Specialists	1,188	1,231	43	3.62	0.44	24.50	Bachelor's Degree
Mechanical Engineers	1,070	1,064	-6	-0.56	0.39	40.58	Bachelor's Degree
Engineering Managers	1,059	1,099	40	3.78	0.39	58.90	Bachelor's Degree
Computer Hardware Engineers	1,033	1,195	162	15.68	0.38	44.80	Bachelor's Degree

Source: Florida Department of Economic Opportunity, Bureau of Labor Market Statistics, Long Term Projections Program, forecast to 2023.

- Approximately 13.0 percent of the occupational employment in information technology is concentrated in the 15 largest high skill occupations in this industry cluster.
- Median hourly wages for the top 15 high skill information technology occupations range from a high of \$63.01 for computer and information systems managers to a low of \$24.50 for human resources specialists.
- All of the fifteen largest high skill information technology occupations have a median wage greater than \$20.00 per hour.
- Fourteen of the fifteen largest high skill occupations are projected to gain employment through 2023.
- Software developers, systems software are projected to gain the most jobs (+897 jobs) and market research analysts and marketing specialists are projected to grow the fastest (+25.62 percent) of all of the top 15 high skill information technology occupations from 2015 to 2023. Mechanical engineers is the only occupation of the top 15 high skill information technology occupations projected to lose employment from 2015 to 2023 (-6 jobs, -0.56 percent).

- All of the top 15 high skill information technology occupations require a bachelor's degree.
- Employment in the information technology industry cluster is concentrated in the southeast, central, and northeast parts of the state. These counties include: Broward, Miami-Dade, Hillsborough, Pinellas, Orange, Brevard, Palm Beach, and Duval.

Concentration of Information Technology Employment



Source: Florida Department of Economic Opportunity, Bureau of Labor Market Statistics, Quarterly Census of Employment and Wages(QCEW), 2015q2.
 Prepared by: Florida Department of Economic Opportunity, Bureau of Labor Market Statistics, September 2016.

Concentration of Information Technology Establishments by Location

