



Southwest Florida Workforce Overview Study 2015



May 2016

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WORKFORCE NOW INITIATIVE

2015 Workforce Overview Study

PREFACE

Workforce Now is a regional research initiative to identify current and future talent requirements for the five counties of Southwest Florida. The initiative was created in October 2012 as an outcome of discussions following the Education Summits produced by The News-Press Media Group. It is envisioned as a systematic, strategic multi-year focus on understanding and meeting critical workforce needs.

The initiative is designed to provide better information on workforce gaps including skills, knowledge, and characteristics desired by regional employers. The plan is to provide a continuous stream of labor force information to employers and educational institutions and to look for ways to create dialogue and new partnerships between businesses and educational institutions. The quality of the regional workforce is a primary competitive factor in the region's ability to grow and prosper in a global marketplace.

This report is an annual overview of the Southwest Florida labor market that identifies the mix of industries, the industry growth trends, current employment gaps, and the average annual projected demand for regional occupations through 2022. It also defines the size of the regional employment gaps and identifies areas for further research. This information will help students, parents, businesses, and educators make more informed decisions about careers, employees, and programs.

This project and report would not be possible without the assistance of the Florida Department of Economic Opportunity and the generous support of the founding Workforce Now investors:

The News-Press Media Group
Partnership for Collier's Future Economy – Opportunity Naples
The Lee County Industrial Development Authority
The Southwest Florida Workforce Development Board
Arthrex, Inc.
Busey Bank
Chico's FAS, Inc.
Florida Gulf Coast University
Florida Southwestern State College
Hodges University
Manhattan Construction

The authors would like to thank Sarah Owen, President and CEO of the Southwest Florida Community Foundation, for leading this effort and to its numerous sponsors. We would also like to acknowledge Mei-Mei Chan, the former President and Publisher of the News-Press Media Group, whose past leadership and influence helped shape Workforce Now into such an important ongoing research effort, and Dr. Gary Jackson, whose contributions to previous Workforce Overview studies added tremendous value to this project. Florida Gulf Coast University, Florida Southwestern State College, and Hodges University provided the research leadership and staff to complete this third Workforce Now annual overview report.

The views expressed in the report and any errors contained are those of the authors and not of the institutions or companies that supported or participated in the Workforce Now project. The Workforce Now Reports are available at:

www.fgcu.edu/cob/reri/wfn/.

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EXECUTIVE SUMMARY

This is the third annual Southwest Florida workforce overview study providing key information about industries, occupations, employment gaps, and projected job growth. The study is divided into three major sections:

- Historic, current, and projected employment by industry
- Current (December 2015) employment gaps by occupation
- Projected employment demand by occupation

This information can be used by key stakeholders throughout the region to define the size of the regional employment gaps. In addition, the information will help students, parents, businesses, and educators make more informed decisions about careers, employees, and programs. Finally, the study helps researchers target future areas of investigation that will be needed to identify the regional specific skills, tasks, knowledge, abilities, and work activities for the occupational gaps identified by this study.

The study was started in the middle of November 2015 and was completed by the end of that year. Primary data collection and analysis were conducted by Dr. Christopher Westley and the Regional Economic Research Institute at Florida Gulf Coast University. The predominant source of workforce data for the study was the Florida Department of Economic Opportunity. Final report development, editing, and formatting was supported by the Workforce Now team. The Southwest Florida region is defined as Charlotte, Collier, Glades, Hendry, and Lee Counties.

KEY FINDINGS

Historic, Current, and Projected Employment by Industry

- Economic recovery continues with employment and unemployment rates reaching levels closer to normal long-term values;
- Southwest Florida has 543,906 employed workers, compared to 9.16 million employed in Florida;
- The average annual Southwest Florida wage is \$38,852 compared to \$44,810 for Florida and \$51,296 for the nation;
- The largest industries by employment are retail trade (19.0%), accommodation and food services (15.5%), health care and social assistance (14.1%), construction (9.9%), and administrative and waste services (7.1%);
- The largest industries by wage income are health care and social assistance (18.1%), retail trade (13.8%), construction (10.3%), accommodation and food services (8.4%), and professional and technical services (8.3%);
- The fastest growing industries between 2010 and 2014 as measured by employment are accommodation and food services (10,656), retail trade (8,731), construction (7,574), health care and social assistance (4,825), and administrative and waste services (4,567);
- The slowest growth industries from 2010 to 2014 have been utilities (24), information (113), mining, quarrying, and natural gas extraction (122), and finance and insurance (299);
- The fastest growth industries between 2014 and 2022 are projected to be construction adding 1,675 jobs per year, health care and social assistance adding 1,460 jobs per year, retail trade adding 991 jobs per year, accommodations and food services adding 872 jobs per year, and self-employed and unpaid family workers adding 549 jobs per year.

Current Employment Gaps by Occupation (December 2015)

The Florida Department of Economic Opportunity study/data identified 3,372 current employment gap positions for Southwest Florida, signifying a decline of one-third (or 1,638 positions) from the figure reported in the Workforce Overview Study for 2014.

The top 10 employment gaps where demand is estimated to be greater than supply are shown in the following table. Four of the top 10 occupations are in the health care industry, which compares from two of the top 10 in the previous report. These include registered nurses, retail supervisors, retail salespersons, supervisors for food preparation and serving, construction trades supervisors, maintenance and repair workers, speech language pathologists, landscaping and groundskeepers, medical and health services managers, and physical therapists. The median wage varies from \$10.59 per hour to \$46.17 per hour.

The Current Top 10 Short-Term Employment Gaps for Southwest Florida				
Occupation	Current Supply Gap	Current Employment	Median Wage	Minimum Education
Registered Nurses	-534	8,762	29.28	Associate
First-Line Supervisors of Retail Sales Workers	-397	8,481	18.73	PS Adult Voc
Retail Salespersons	-384	23,266	10.81	HS/GED
First-Line Supervisors of Food Preparation and Serving Workers	-344	3,670	16.69	PS Adult Voc
First-Line Supervisors of Construction Trades and Extraction Workers	-174	2,516	25.94	Associate
Maintenance and Repair Workers, General	-170	4,715	15.82	PS Adult Voc
Speech-Language Pathologists	-165	395	36.77	Master's or higher
Landscaping and Groundskeeping Workers	-147	11,155	10.59	Less HS/GED
Medical and Health Services Managers	-137	724	46.17	Bachelor's
Physical Therapists	-133	929	39.78	Doctorate

- Registered nurses had the largest employment gap of -534. This field did not make the top 10 list in the most previous workforce overview (in October 2014). On average, each 10 jobs filled are worth an additional \$585,600 in income;
- First line supervisors of retail salespersons had the next highest employment gap of -397. On average, each 10 jobs filled are worth an additional \$374,600 in income;
- Retail salespersons made up the next highest employment gap of -384. On average, for each 10 jobs filled, income would rise by \$216,200;

- First line supervisors in the food prep industry's employment gap was -344. For each 10 positions filled, \$333,800 in additional income is earned;
- First line supervisors in the construction trades' employment gap was -174. For each 10 positions filled, income would rise by \$518,800;
- Maintenance and repair trades' employment gap was -170. On average, each 10 jobs filled would raise income by \$316,400;
- Speech language pathologists' employment gap came next, registering -165. For each 10 vacancies filled, additional income of \$735,400 would be generated;
- Another sign of the regional recovery is an employment gap for landscaping and groundskeeping occupations of -147 positions. For each 10 job vacancies filled, additional income of \$211,800 would be generated;
- Another occupational group is medical and health services management occupations. The study identified an employment gap of -137. On average, for each 10 job vacancies filled, additional income of \$923,400 would be generated;
- Other employment gaps were found in physical therapists, wholesale sales representatives, first line supervisors of mechanics and repairers, carpenters, financial services sales agents, tellers, insurance sales agents, computer systems analysts, janitors, occupational therapists, and medical secretaries.

Projected Employment Demand by Occupation

The top 10 projected high demand regional growth occupations for 2014 to 2022 are shown in the following table. The top growth occupation is retail salespersons with an average annual demand for 1,199 employees per year. This is followed by waiters and waitresses at 1,001 employees per year, cashiers at 708 employees per year, food preparation and serving workers at 555 employees per year, and landscaping and groundskeeping workers at 463 employees per year.

The next five highest occupations in demand are registered nurses, carpenters, office clerks, customer service representatives, and secretaries and administrative assistants.

The Top 10 Long-Term Growth Occupations Southwest Florida 2014-2022

Occupation	Average Annual Growth	Current Employment	Median Wage	Minimum Education
Retail Salespersons	1,199	23,266	\$ 10.81	HS/GED
Waiters and Waitresses	1,001	14,685	\$ 9.10	Less HS/GED
Cashiers	708	12,132	\$ 9.43	HS/GED
Combined Food Prep and Servicing Workers	555	11,644	\$ 9.02	Less HS/GED
Landscaping and Groundskeeping Workers	463	11,155	\$ 10.59	Less HS/GED
Registered Nurses	449	8,762	\$ 29.28	Some College
Carpenters	399	6,265	\$ 17.12	PS Adult Voc
Office Clerks, General	345	7,723	\$ 12.37	HS/GED
Customer Service Representatives	323	6,670	\$ 13.31	PS Adult Voc
Secretaries and Administrative Assistants	305	10,572	\$ 14.71	PS Adult Voc

The study finally looked at long-run occupational growth by identifying the fastest-growing occupations by the minimal educational requirement including:

- ✓ Post-Secondary Adult Vocational or Higher
- ✓ Some College or Higher
- ✓ Bachelor's Degree or Higher
- ✓ Master's Degree or Higher

The Fastest Growing Occupations Requiring Post-Secondary Adult Vocational Training

The top projected adult vocational education growth occupations are shown in the following table. These represent positions in sales, construction, health care, and maintenance and are expected to grow between 168 and 399 positions for each year from 2014 to 2022.

The Top 10 Adult Vocational Growth Occupations Southwest Florida 2014-2022				
Occupation	Average Annual Growth	Current Employment	Median Wage	Minimum Education
Carpenters	399	6,265	\$17.12	Adult Voc.
Customer Service Representatives	323	6,670	\$13.31	Adult Voc.
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	305	10,572	\$14.71	Adult Voc.
First-Line Supervisors of Retail Sales Workers	304	8,481	\$18.73	Adult Voc.
Nursing Assistants	258	5,704	\$12.57	Adult Voc.
Cooks, Restaurant	240	6,107	\$11.21	Adult Voc.
Painters, Construction and Maintenance	200	3,123	\$14.13	Adult Voc.
Real Estate Sales Agents	196	4,614	\$18.41	Adult Voc.
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	177	4,061	\$20.29	Adult Voc.
Maintenance and Repair Workers, General	168	4,715	\$15.82	Adult Voc.

The Fastest Growing Occupations Requiring “Some College”

The top projected “some college” education growth occupations are shown in the following table. These represent positions in health care, technology, and construction and are expected to grow between 111 and 449 positions for each year from 2014 to 2022.

The Top 8 Some College Growth Occupations Southwest Florida 2014-2022				
Occupation	Average Annual Growth	Current Employment	Median Wage	Minimum Education
Registered Nurses	449	8,762	\$29.28	Some College
First-Line Supervisors of Construction Trades and Extraction Workers	182	2,516	\$25.94	Some College
Bookkeeping, Accounting, and Auditing Clerks	179	5,393	\$16.06	Some College
First-Line Supervisors of Office and Administrative Support Workers	176	3,744	\$22.61	Some College
Construction Managers	141	3,557	\$32.92	Some College
Farmers, Ranchers, and Other Agricultural Managers	139	7,201	\$28.69	Some College
General and Operations Managers	117	3,800	\$45.92	Some College
Business Operations Specialists, All Other	111	2,672	\$26.80	Some College

The Fastest Growing Occupations Requiring Bachelor's Degree or Higher

The top projected bachelor's degree or higher education growth occupations are shown in the following table. These represent positions in education, finance, medical care, finance, and management and are expected to grow between 42 and 187 positions for each year from 2014 to 2022.

The Top 10 Bachelor's or Higher Growth Occupations Southwest Florida 2014-2022				
Occupation	Average Annual Growth	Current Employment	Median Wage	Minimum Education
Elementary School Teachers	187	3,896	\$29.03	Bachelor's
Accountants and Auditors	162	3,686	\$28.73	Bachelor's
Secondary School Teachers	95	2,202	\$30.56	Bachelor's
Middle School Teachers	94	1,956	\$29.28	Bachelor's
Management Analysts	86	1,625	\$29.01	Bachelor's
Lawyers	75	1,812	\$36.67	Master's or higher
Family and General Practitioners	49	991	\$91.72	Master's or higher
Pharmacists	48	940	\$59.40	Master's or higher
Physical Therapists	44	929	\$39.78	Master's or higher
Market Research Analysts	42	510	\$23.04	Bachelor's

Summary & Recommendations

This third annual study is an important step in providing an annual overview of Southwest Florida's labor market including identification of current employment gaps and projected growth occupations. This provides an overall market assessment of the current and expected occupational needs which is an important component in the development of new or modified educational programs. The information gathered in this report includes the median hourly wage and the minimum educational requirements complementing the other Workforce Now studies completed last year. In closing, the following recommendations are put forward by the study team:

Recommendations

1. A Southwest Florida Labor Market overview should be completed annually and timed to use the latest forecasts provided by the Florida Department of Economic Opportunity.
2. The labor market overviews should identify future research opportunities and collaborative opportunities for businesses and educators.
3. Further study of the employment gaps is needed to explore local skills, knowledge, tasks, abilities and activities required to fill the employment gaps and increased demand.
4. The data show consistency with those of last year. However, there appears to be a gradual reduction in the median wage and some fluidity in the order and type of positions listed.

Southwest Florida Workforce Overview Study 2015

1.0 Introduction

Workforce Now is a recent regional initiative to better understand Southwest Florida's labor market including employment gaps, specific skills desired, and forecast occupational growth. This is the third in a series of Southwest Florida labor market overviews which are updated annually.

The purpose of this updated report is to conduct retrospective and prospective data analysis of information and forecasts from the *Florida Department of Economic Opportunity* to identify the mix of industries, the industry growth trends, current employment gaps, and the average annual projected demand for regional occupations through the year 2022.

The study was started in November 2015 and was completed at the end of that year. Primary data collection and analysis were conducted by Dr. Christopher Westley and the Regional Economic Research Institute at Florida Gulf Coast University. The final report development, editing, and formatting were supported by the Workforce Now research team. For the purposes of this study, the Southwest Florida region is defined as Charlotte, Collier, Glades, Hendry, and Lee Counties.

2.0 Employment and Income Ranked by Industry

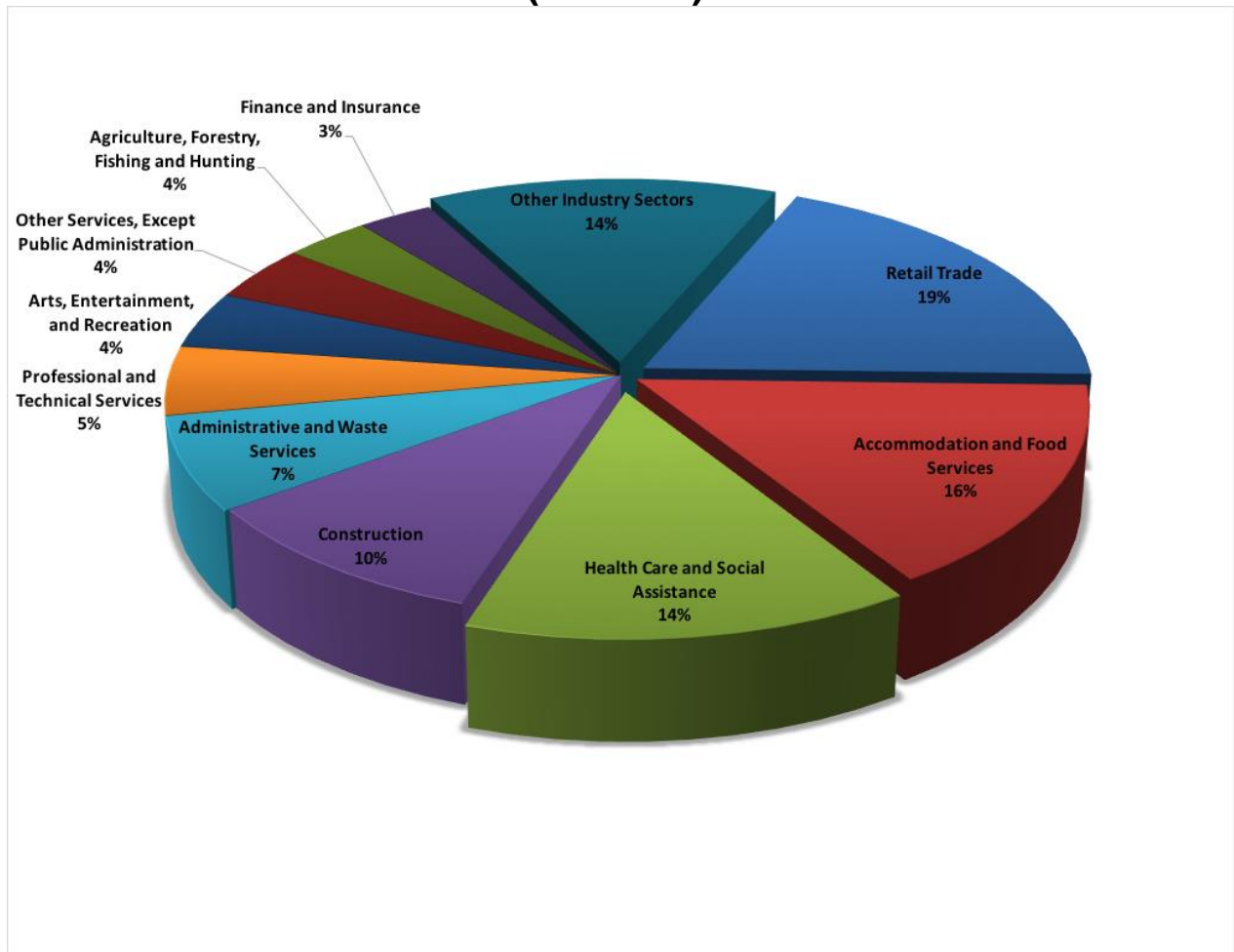
The largest industry when ranked by employment is retail trade with 67,067 employees and 19 percent of all employment, as shown in Chart 1 and Table 1 which is based on the Quarterly Census of Employment and Wages (QCEW). The QCEW includes information on employees covered by the Florida unemployment insurance so it does not include workers who are self-employed.

The second largest industry employer is accommodation and food services, with 54,624 employees and 15.5 percent of regional employment. The third largest industry is health care and social assistance at 49,719, which represents slightly over 14 percent of the region's employment. Construction has rebounded from the recession and is the fourth largest industry with 34,898 employees and almost 10 percent of the region's employment. This constitutes a 14-percent increase in construction employment from 2013 to 2014. The top four industries comprise 58.6 percent of the region's workforce, which also constitutes an increase compared to 2013's measure of just over 50 percent. The fifth largest industry is administrative and waste services employing 24,923 and with 7.1 percent of the region's workforce. This industry includes many service-type occupations.

Southwest Florida has a comparative advantage in weather (sunshine and mild winter temperatures), beaches, and recreational activities. These quality of life characteristics are drivers that support the key industries in Southwest Florida, such as retail trade, health care, accommodation and food services, construction, and support

services. Population growth has been a strong driver of wealth for the region creating the need for housing, recreation, and services.

Chart 1
Southwest Florida Employment by Industry 2014
(Percent)



Source: QCEW, Florida Department of Economic Opportunity

Table 1
Employment by Industry
2014 Southwest Florida

Industry	Average Monthly Employment	Percent of Employment
Retail Trade	67,067	19.0%
Accommodation and Food Services	54,624	15.5%
Health Care and Social Assistance	49,719	14.1%
Construction	34,898	9.9%
Administrative and Waste Services	24,923	7.1%
Professional and Technical Services	18,227	5.2%
Arts, Entertainment, and Recreation	15,079	4.3%
Other Services	14,711	4.2%
Agriculture, Forestry, Fishing & Hunting	12,262	3.5%
Finance and Insurance	10,673	3.0%
Other Industry Sectors	50,127	14.2%
Total, All Industries	352,310	100.0%

Source: QCEW, Florida Department of Economic Opportunity

The largest contribution to total wage income is health care and social assistance with average annual wage expenditures of \$2.5 billion which represents 18.1 percent of total wage expenditures in Southwest Florida. Retail trade is the next largest total wage expenditure industry with 13.8 percent of the region's total annual wage and expenditures of \$1.9 billion. The third largest industry measured by total wage expenditures is construction, with 10.3 percent of the total regional wage expenditures at \$1.4 billion. Accommodation and food services is the fourth largest industry as measured by total wages at \$1.2 billion or 8.4 percent of the region's total wage expenditures. The total wage expenditures by industry are shown in Chart 2 and Table 2.

Chart 2
Total Wage Expenditures by Industry 2014
(Percent)

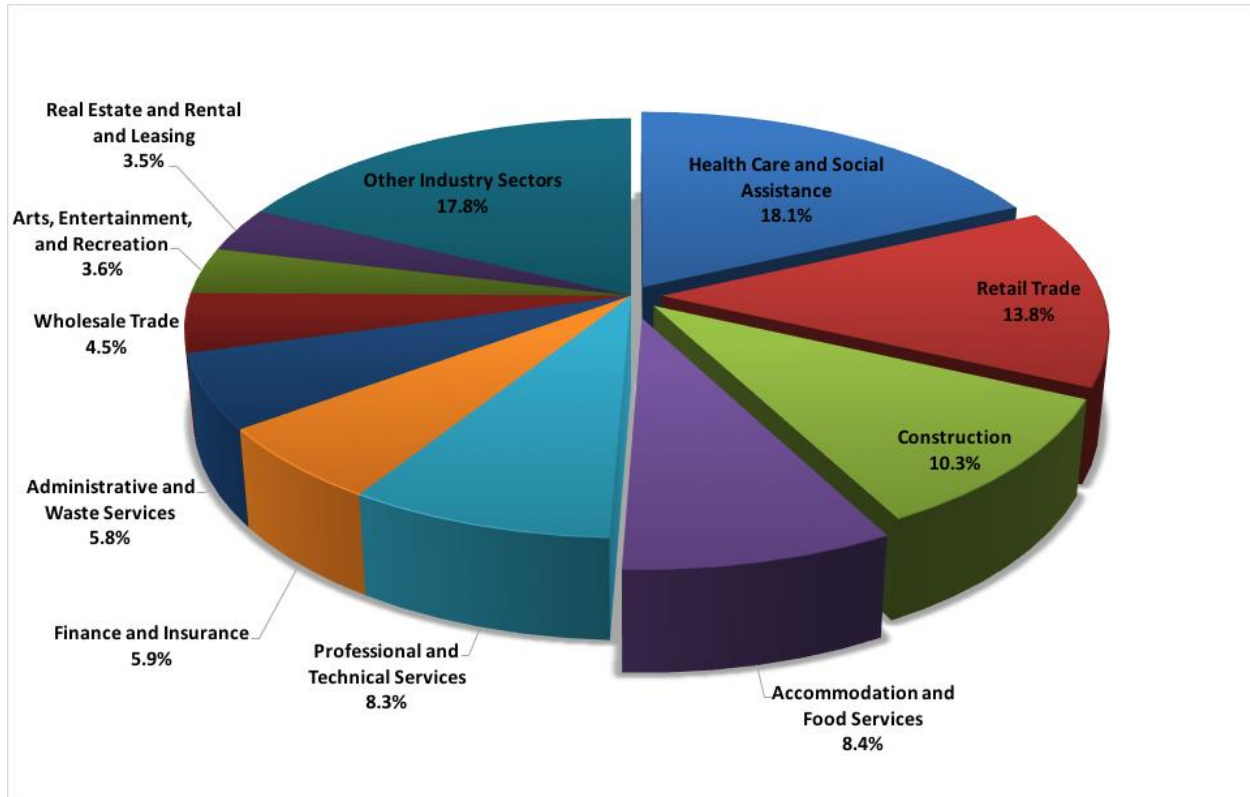


Table 2
Average Annual Wage Income by Industry
2014 Southwest Florida

Industry	Average Annual Wage Expenditures (Billions \$)	Percent of Total Wage
Health Care and Social Assistance	\$2.54	18.1%
Retail Trade	\$1.89	13.8%
Construction	\$1.41	10.3%
Accommodation and Food Services	\$1.15	8.4%
Professional and Technical Services	\$1.14	8.3%
Finance and Insurance	\$0.81	5.9%
Administrative and Waste Services	\$0.79	5.8%
Wholesale Trade	\$0.62	4.5%
Arts, Entertainment, and Recreation	\$0.49	3.6%
Real Estate and Rental and Leasing	\$0.47	3.5%
Other Industry Sectors	\$2.43	17.8%
Total, All Industries	\$15.5	100.0%

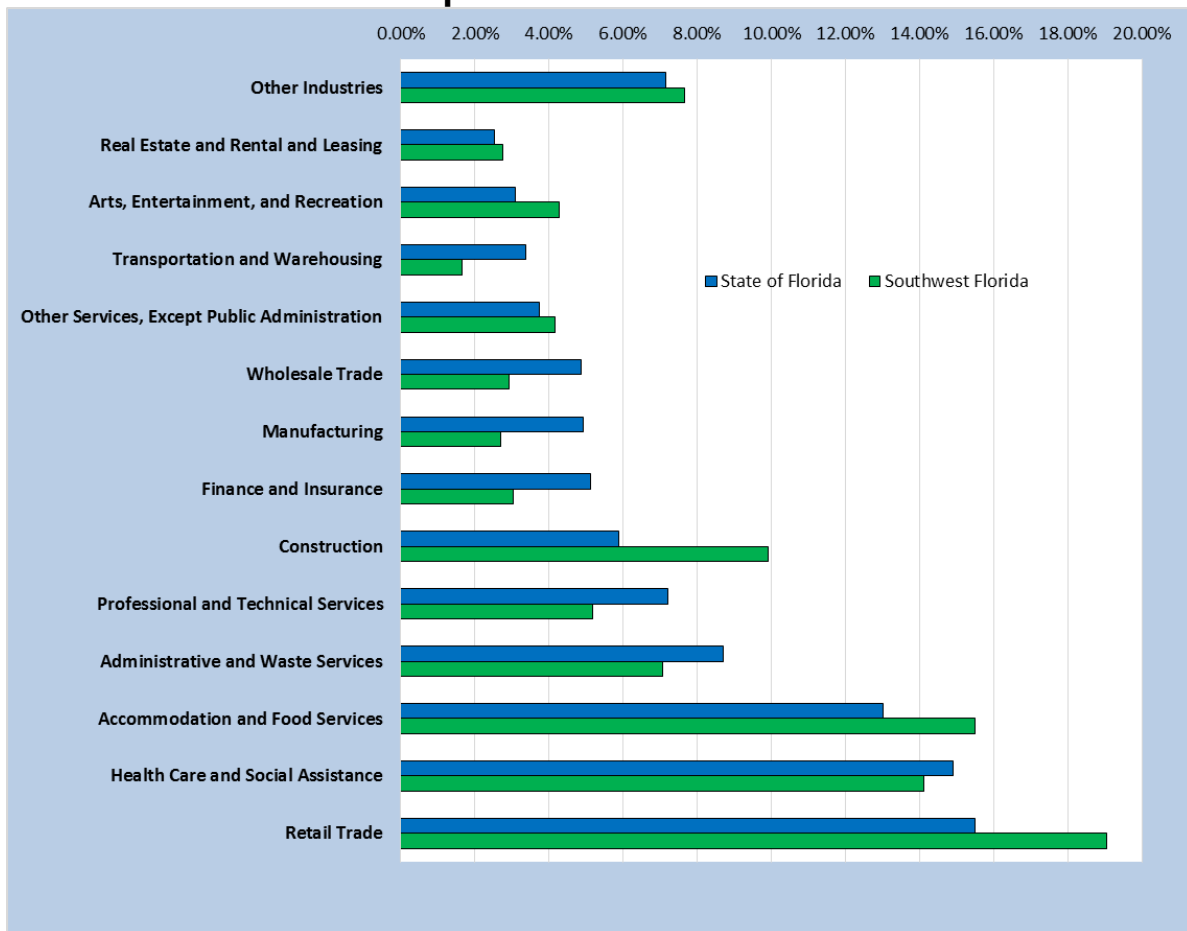
Source: QCEW, Florida Department of Economic Opportunity

3.0 Southwest Florida Industry Mix Compared to the State of Florida

Southwest Florida has a higher percentage of employees in retail trade, accommodation and food services, construction, arts, entertainment, and recreation, other services, and real estate and rental and leasing, compared to the State of Florida, as shown in Chart 3 and Table 3. Southwest Florida's competitive advantage as a preferred location for tourism and retirement certainly helps to explain why the region differs from the state-level percentages. The largest differentials are in the areas, respectively, of construction and retail trade.

The region has a smaller percentage of employment than the state in manufacturing, finance and insurance, professional and technical services, and wholesale trade. Manufacturing employment in Southwest Florida is only 2.7 percent of employment, compared to 4.9 percent for the state as whole.

Chart 3
2014 Southwest Florida Industry Mix
Compared to the State of Florida



Source: QCEW, Florida Department of Economic Opportunity

Table 3
2014 Southwest Florida Industry Mix
Compared to the State of Florida
(Percent)

Industry	State of Florida	Southwest Florida
Retail Trade	15.49%	19.04%
Health Care and Social Assistance	14.90%	14.11%
Accommodation and Food Services	13.01%	15.50%
Administrative and Waste Services	8.69%	7.07%
Professional and Technical Services	7.22%	5.17%
Construction	5.89%	9.91%
Finance and Insurance	5.11%	3.03%
Manufacturing	4.92%	2.70%
Wholesale Trade	4.87%	2.93%
Other Services, Except Public Administration	3.74%	4.18%
Transportation and Warehousing	3.36%	1.64%
Arts, Entertainment, and Recreation	3.08%	4.28%
Real Estate and Rental and Leasing	2.54%	2.76%
Other Industries	7.16%	7.67%

Source: QCEW, Florida Department of Economic Opportunity

4.0 Southwest Florida's Fastest and Slowest Growth Industries, 2010 to 2014

Although the economic recovery had been slow-going in Southwest Florida in 2010 and 2011, the strength of the recovery from 2012 through 2014 contributed to an overall increase in employees in our region by 75,260 employees from December 2010 to December 2014. The fastest-growing industries from 2010 to 2014 were accommodation and food services, retail trade, construction, health care and social assistance, and administrative and waste services, as shown in Chart 4.

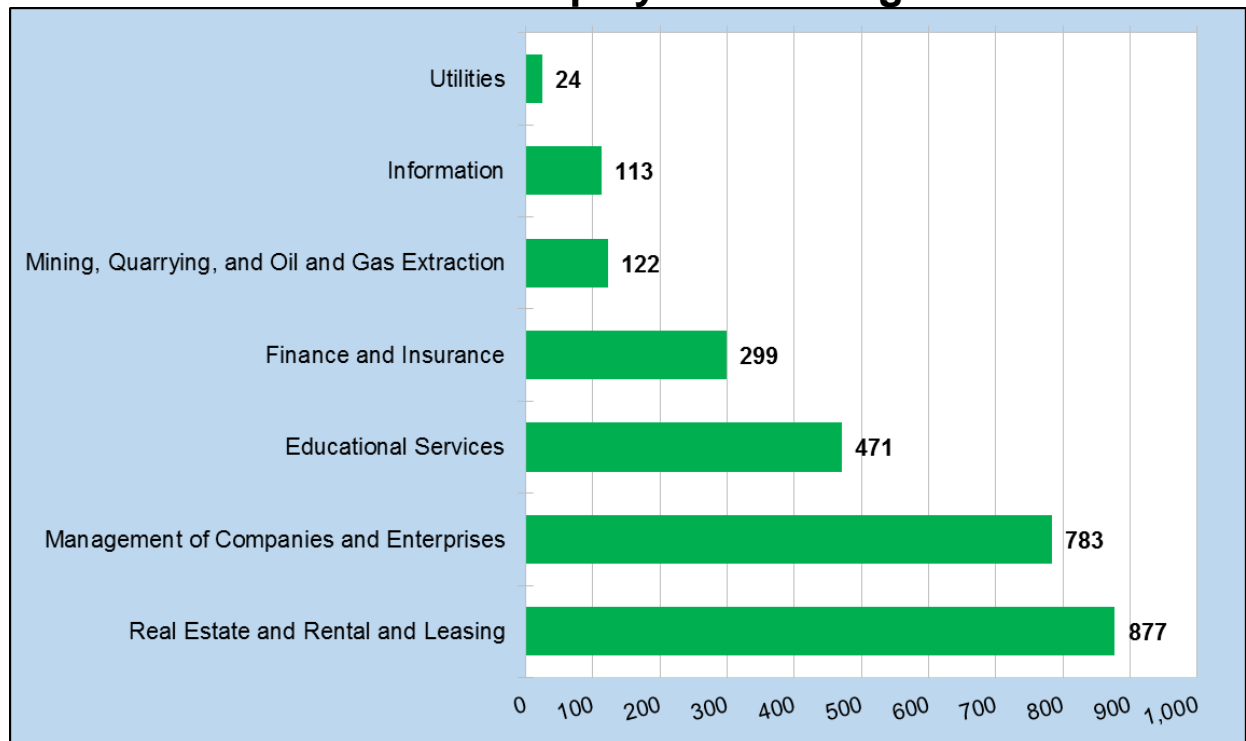
The slowest-growing industries were utilities, information (media), mining, quarrying, and oil and natural gas extraction, and finance and insurance, as shown in Chart 5 and Table 4. Construction shifted from being among the lowest-growing industries in the five-year period ending in 2013 (reported last year) to one of the fastest in the five-year period ending in 2014. Given that the recession began as a “housing bubble” and turned into a financial crisis, it is not surprising that finance, construction, and utilities are taking longer to recover than some other sectors. However, the data shows that the region is strongly rebounding, with no industries contracting from 2010 through 2014.

Chart 4
Fastest Growing Industries
Southwest Florida Employment Change 2010-2014



Source: QCEW, Florida Department of Economic Opportunity

Chart 5
Slowest Growing Industries
Southwest Florida Employment Change 2010-2014



Source: QCEW, Florida Department of Economic Opportunity

Table 4
Southwest Florida Employment Change 2010-2014

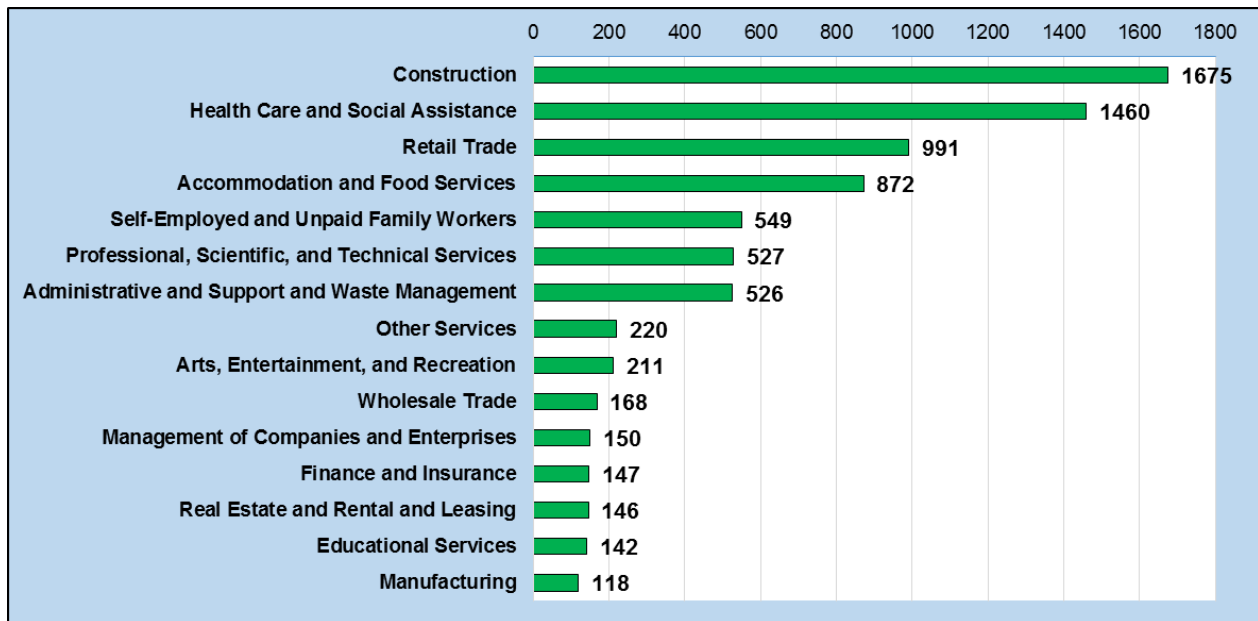
Industry Title	Change	
	Level	Percent
Total, All Industries	53,256	17.8%
Accommodation and Food Services	10,656	24.2%
Retail Trade	8,731	15.0%
Construction	7,574	27.7%
Health Care and Social Assistance	4,825	10.7%
Administrative and Waste Services	4,567	22.4%
Professional and Technical Services	3,764	26.0%
Arts, Entertainment, and Recreation	2,538	20.2%
Manufacturing	1,919	25.3%
Other Services, Except Public Administration	1,599	12.2%
Agriculture, Forestry, Fishing and Hunting	1,460	13.5%
Wholesale Trade	1,381	15.4%
Transportation and Warehousing	1,373	31.1%
Real Estate and Rental and Leasing	877	9.9%
Management of Companies and Enterprises	783	26.7%
Educational Services	471	11.7%
Finance and Insurance	299	2.9%
Mining, Quarrying, and Oil and Gas Extraction	122	89.1%
Information	113	2.3%
Utilities	24	2.1%

Source: QCEW, Florida Department of Economic Opportunity

5.0 Projected Industry Employment Growth for Southwest Florida 2014-2022

Each year the Florida Department of Economic Opportunity provides an employment forecast by industry, which is shown in Chart 6 and Table 5. Construction is projected to be the fastest-growing industry in Southwest Florida, adding an average of 1,675 employees each year from 2014 to 2022. Health care and social assistance is projected to add the second largest number of employees, adding 1,460 per year. This is followed by retail trade at 991 employees per year, accommodation and food services at 872 employees per year, and self-employed and unpaid family workers at 549 employees per year. Professional, scientific, and technical services are projected to add 527 employees per year, administrative, support and waste management is projected to add 526 per year and other services is projected to add 220 per year. Arts, entertainment, and recreation is projected to grow by 211 employees per year, wholesale trade by 168 employees per year, management of companies by 150 employees per year, finance and insurance by 147 employees per year, real estate by 146 employees per year, educational services by 142 employees per year, and manufacturing by 118 employees.

Chart 6
Projected Average Annual Employment Growth by Industry
for Southwest Florida 2014-2022



Source: Florida Department of Economic Opportunity

Table 5
Projected Average Annual Employment Change by Industry
Southwest Florida 2014-2022

Industry	Average Annual Increase	Average Annual Percentage Increase
Construction	1,675	5.0%
Health Care and Social Assistance	1,460	3.0%
Retail Trade	991	1.5%
Accommodation and Food Services	872	1.6%
Self-Employed and Unpaid Family Workers	549	1.2%
Professional, Scientific, and Technical Services	527	2.7%
Administrative and Support and Waste Management	526	2.1%
Other Services	220	1.3%
Arts, Entertainment, and Recreation	211	1.4%
Wholesale Trade	168	1.5%
Management of Companies and Enterprises	150	3.5%
Finance and Insurance	147	1.3%
Real Estate and Rental and Leasing	146	1.5%
Educational Services	142	2.6%
Manufacturing	118	1.3%
Other	-35	-0.1%

Source: Florida Department of Economic Opportunity

6.0 Southwest Florida Occupational Employment Gaps for November 2015

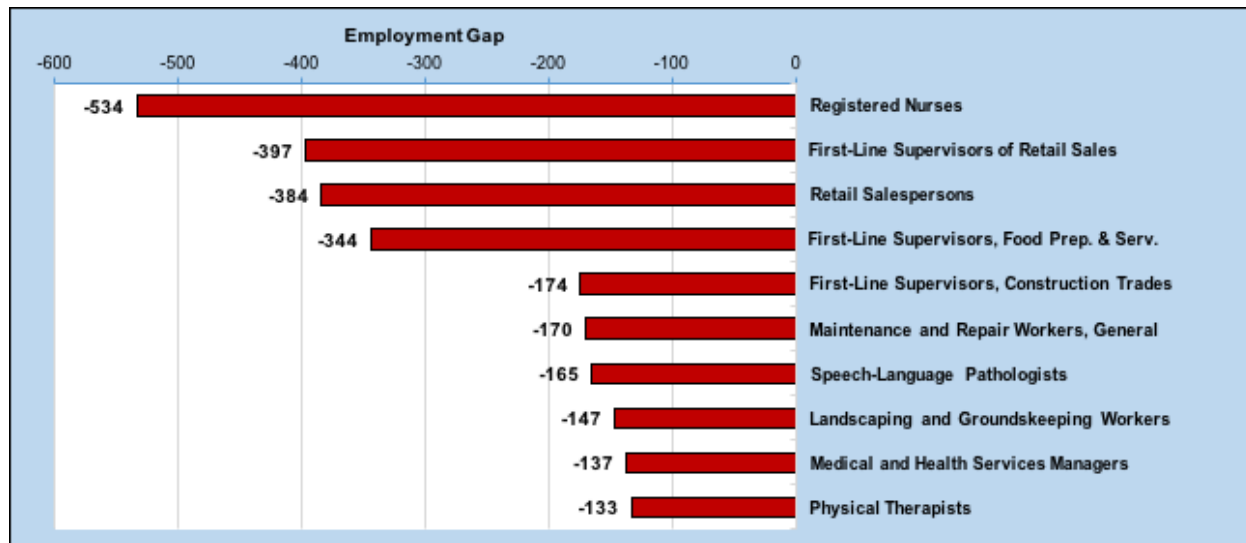
The study team worked with the Florida Department of Economic Opportunity to identify estimates of the most recent Southwest Florida employment gaps by using online job postings and graduations to identify November 2015 employment gaps. Employment gaps are defined as November 2015 demand minus the supply of applicants and graduates. The overall July employment gap identified by this study using the Florida Department of Economic Opportunity demand and supply analysis was approximately 3,372 positions.

Employment gaps are positions that have a regional demand greater than the estimated supply available for the Southwest Florida market. Some of these positions will be filled from outside the region, firms may hire less qualified candidates, or the positions may be left vacant for an extended period of time. It is our hope that identifying these regional employment gaps can assist parents, students, employers, and educators in identifying potential opportunities. This section provides charts and tables identifying the top 50 current employment gaps for Southwest Florida.

The top 10 employment gaps were for registered nurses, first-line supervisors of retail sales, retail salespersons, first-line supervisors of food preparation and service, first-line supervisors of construction trades, maintenance and repair workers, speech-language pathologists, landscaping and groundskeeping workers, medical and health services managers, and physical therapists, as shown in Chart 7. The employment gap, current employment level, median wage and minimum educational requirements for the top 10 employment gaps are shown in Table 6. The median hourly wages

ranged from \$10.59 per hour to \$46.17 per hour. The minimum education requirements for each occupation varied from less than high school to at least a master's degree.

Chart 7
Top 10 Employment Gaps
November 2015 Southwest Florida



Source: Florida Department of Economic Opportunity

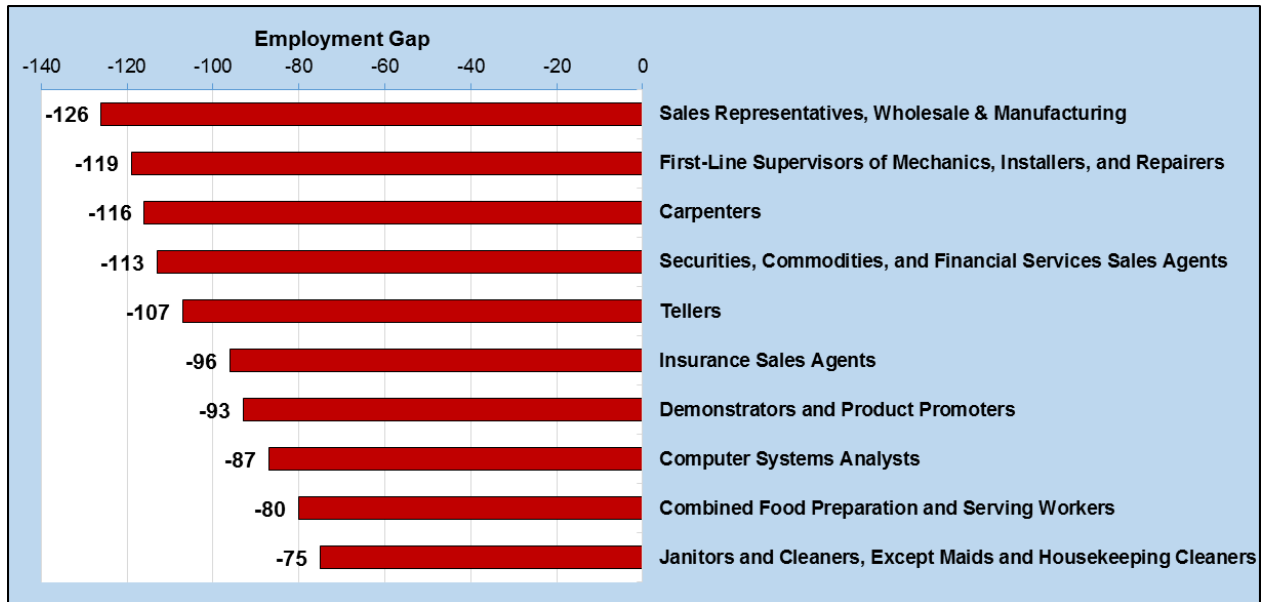
Table 6
Top 10 Employment Gaps
For Southwest Florida November 2015

No.	Occupation	Current Supply Gap	Current Employment	Median Wage	Minimum Education
1	Registered Nurses	-534	8,762	\$ 29.28	Some College
2	First-Line Supervisors of Retail Sales	-397	8,481	\$ 18.73	PS Adult Voc
3	Retail Salespersons	-384	23,266	\$ 10.81	HS/GED
4	First-Line Supervisors, Food Prep. & Serv.	-344	3,670	\$ 16.69	PS Adult Voc
5	First-Line Supervisors, Construction Trades	-174	2,516	\$ 25.94	Some College
6	Maintenance and Repair Workers, General	-170	4,715	\$ 15.82	PS Adult Voc
7	Speech-Language Pathologists	-165	395	\$ 36.77	Master's or higher
8	Landscaping and Groundskeeping Workers	-147	11,155	\$ 10.59	Less HS/GED
9	Medical and Health Services Managers	-137	724	\$ 46.17	Bachelor's
10	Physical Therapists	-133	929	\$ 39.78	Master's or higher

Source: Florida Department of Economic Opportunity

The top 11 to 20 November 2015 employment gaps for Southwest Florida are shown in Chart 8 and Table 7. These include a number of occupations in support of hospitality, health care, financial, construction, maintenance, sales, and real estate, with minimum educational requirements varying from less than high school to a bachelor's degree. The median hourly wage ranges from \$9 per hour to \$39 per hour.

Chart 8
Top 11-20 Employment Gaps
For Southwest Florida November 2015



Source: Florida Department of Economic Opportunity

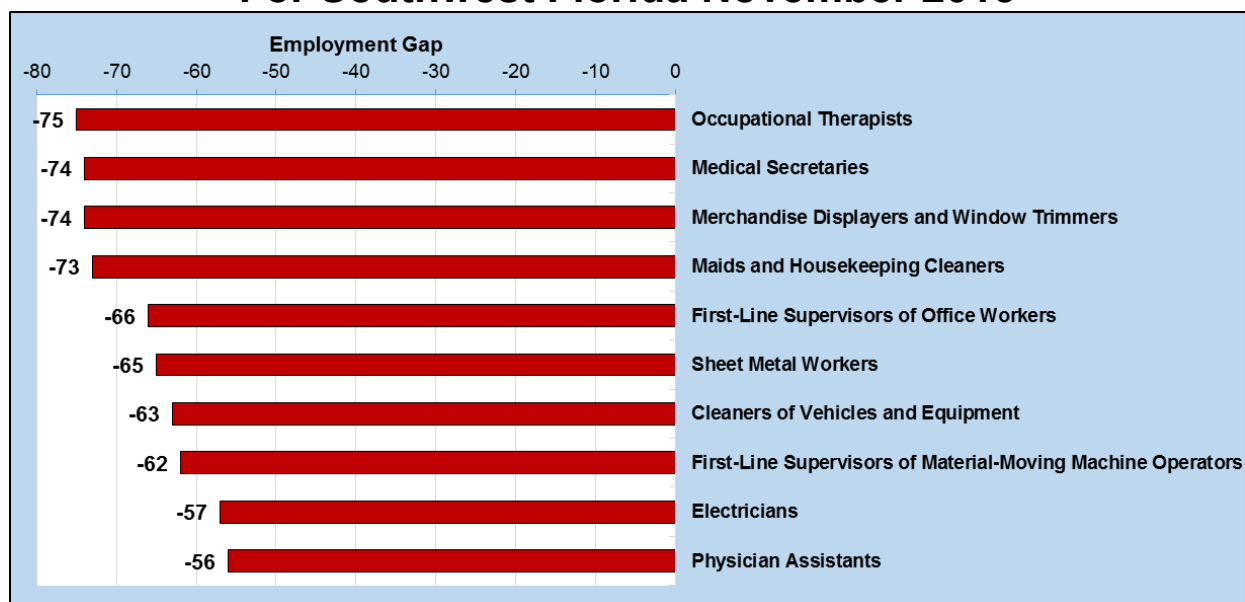
Table 7
Top 11-20 Employment Gaps
For Southwest Florida November 2015

No.	Occupation	Current Supply Gap	Current Employment	Median Wage	Minimum Education
11	Sales Representatives, Wholesale & Manufacturing	-126	4,061	\$ 20.29	PS Adult Voc
12	First-Line Supervisors of Mechanics, Installers, and Repairers	-119	1,548	\$ 26.46	PS Adult Voc
13	Carpenters	-116	6,265	\$ 17.12	PS Adult Voc
14	Securities, Commodities, and Financial Services Sales Agents	-113	891	\$ 37.30	Bachelor's
15	Tellers	-107	2,250	\$ 13.39	PS Adult Voc
16	Insurance Sales Agents	-96	1,524	\$ 22.28	PS Adult Voc
17	Demonstrators and Product Promoters	-93	N/R	\$ 10.19	HS/GED
18	Computer Systems Analysts	-87	438	\$ 38.99	Some College
19	Combined Food Preparation and Serving Workers	-80	11,644	\$ 9.02	Less HS/GED
20	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	-75	5,463	\$ 10.98	Less HS/GED

Source: Florida Department of Economic Opportunity

The top 21 to 30 current employment gaps for Southwest Florida are shown in Chart 9 and Table 8. These include a number of occupations in support of hospitality, health care, sales, information technology, trades, and transportation. The minimum education required ranges from less than high school to a master's degree and the median hourly wage ranges from \$9.46 per hour to \$47.89 per hour as shown in Table 8.

Chart 9
Top 21-30 Employment Gaps
For Southwest Florida November 2015



Source: Florida Department of Economic Opportunity

Table 8
Top 21-30 Employment Gaps
For Southwest Florida November 2015

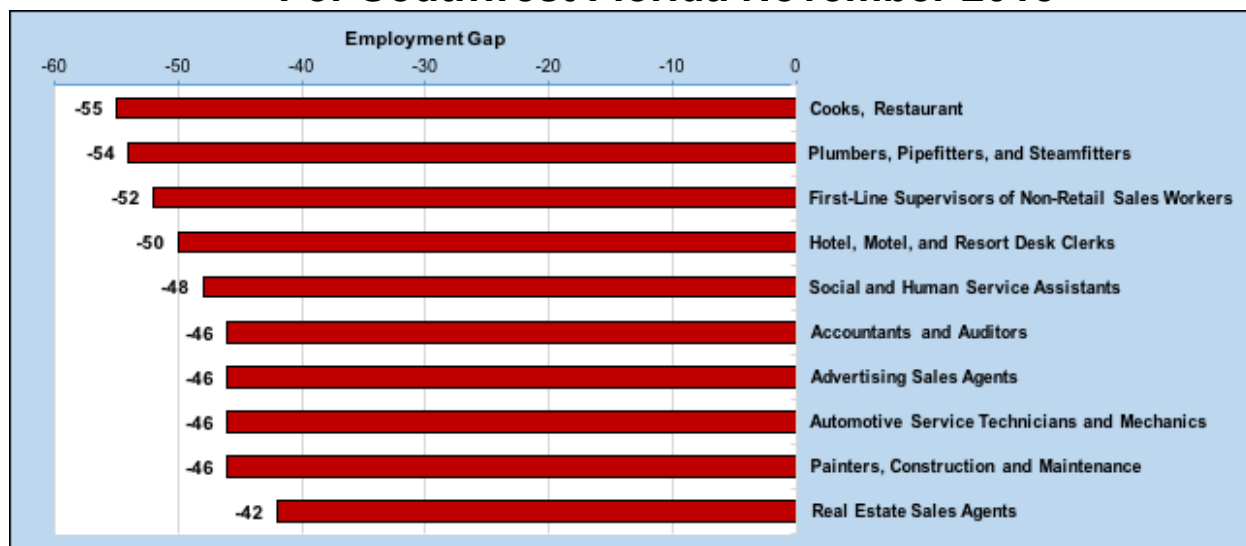
No.	Occupation	Current Supply Gap	Current Employment	Median Wage	Minimum Education
21	Occupational Therapists	-75	386	\$ 41.70	Master's or higher
22	Medical Secretaries	-74	1,004	\$ 14.91	PS Adult Voc
23	Merchandise Displayers and Window Trimmers	-74	165	\$ 11.19	HS/GED
24	Maids and Housekeeping Cleaners	-73	5,410	\$ 10.07	Less HS/GED
25	First-Line Supervisors of Office Workers	-66	3,744	\$ 22.61	Some College
26	Sheet Metal Workers	-65	741	\$ 15.90	PS Adult Voc
27	Cleaners of Vehicles and Equipment	-63	1,400	\$ 9.46	Less HS/GED
28	First-Line Supervisors of Material-Moving Machine Operators	-62	414	\$ 22.31	PS Adult Voc
29	Electricians	-57	2,143	\$ 17.09	PS Adult Voc
30	Physician Assistants	-56	337	\$ 47.89	Bachelor's

Source: Florida Department of Economic Opportunity

The top 31 to 40 current employment gaps for Southwest Florida are shown in Chart 10 and Table 9. These include a number of occupations in health care, maintenance, marketing management, construction, education, sales, accounting, and

trades. The median wage ranges from \$11 per hour to \$30 per hour and the minimum education requirement ranges from high school to a bachelor's degree.

Chart 10
Top 31-40 Employment Gaps
For Southwest Florida November 2015



Source: Florida Department of Economic Opportunity

Table 9
Top 31-40 Employment Gaps
For Southwest Florida November 2015

No.	Occupation	Current Supply Gap	Current Employment	Median Wage	Minimum Education
31	Cooks, Restaurant	-55	6,107	\$ 11.21	PS Adult Voc
32	Plumbers, Pipefitters, and Steamfitters	-54	1,423	\$ 17.95	PS Adult Voc
33	First-Line Supervisors of Non-Retail Sales Workers	-52	1,106	\$ 29.71	Some College
34	Hotel, Motel, and Resort Desk Clerks	-50	1,449	\$ 11.77	HS/GED
35	Social and Human Service Assistants	-48	442	\$ 14.75	PS Adult Voc
36	Accountants and Auditors	-46	3,686	\$ 28.73	Bachelor's
37	Advertising Sales Agents	-46	756	\$ 19.66	PS Adult Voc
38	Automotive Service Technicians and Mechanics	-46	3,085	\$ 18.35	PS Adult Voc
39	Painters, Construction and Maintenance	-46	3,123	\$ 14.13	PS Adult Voc
40	Real Estate Sales Agents	-42	4,614	\$ 18.41	PS Adult Voc

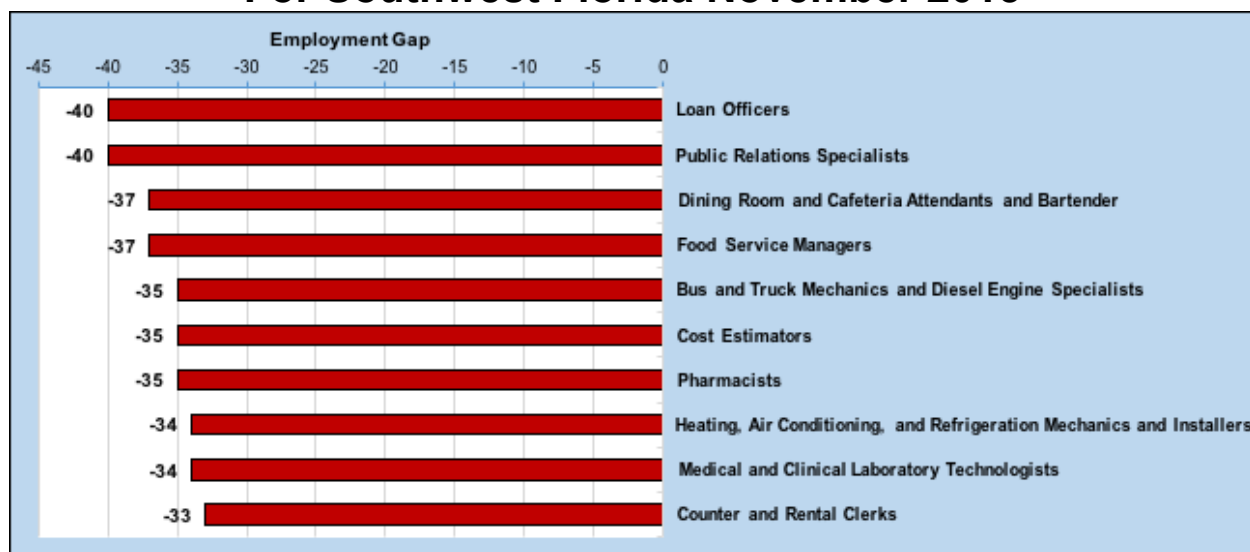
Source: Florida Department of Economic Opportunity

The top 41 to 50 current employment gaps for Southwest Florida are shown in Chart 11 and Table 10. These include a number of occupations in support of health

care, finance and banking, construction, information technology, and market research.

The median hourly wage ranges from \$9 per hour to \$60 per hour and the minimum education requirement ranges from less than high school to master's degree.

Chart 11
Top 41-50 Employment Gaps
For Southwest Florida November 2015



Source: Florida Department of Economic Opportunity

Table 10
Top 41-50 Employment Gaps
For Southwest Florida November 2015

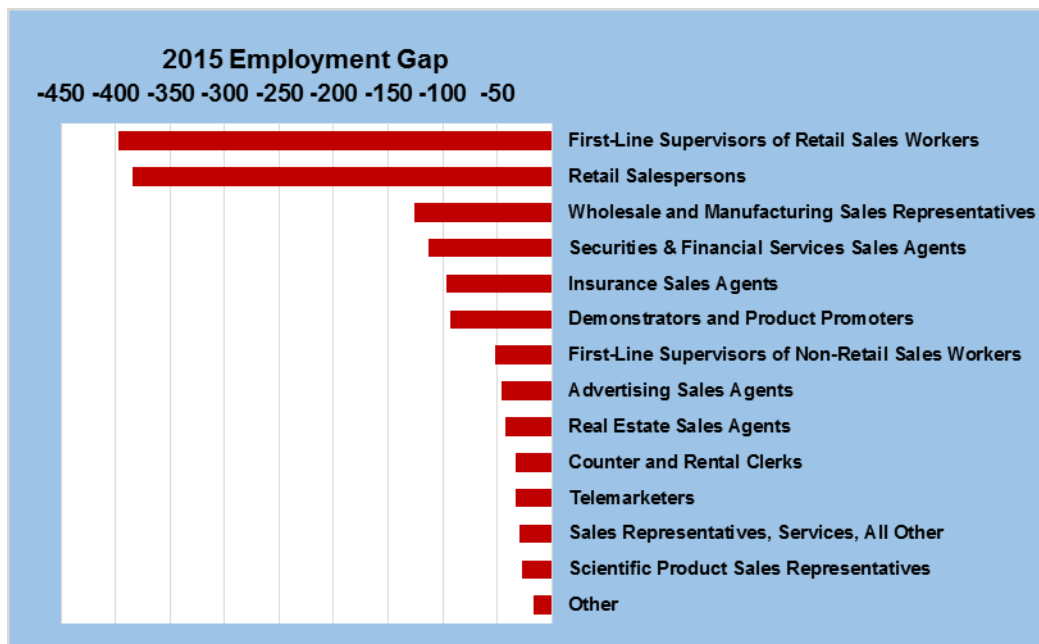
No.	Occupation	Current Supply Gap	Current Employment	Median Wage	Minimum Education
41	Loan Officers	-40	553	\$ 40.75	Some College
42	Public Relations Specialists	-40	392	\$ 23.76	Bachelor's
43	Dining Room and Cafeteria Attendants and Bartender	-37	2,754	\$ 9.13	Less HS/GED
44	Food Service Managers	-37	1,186	\$ 28.49	Some College
45	Bus and Truck Mechanics and Diesel Engine Specialists	-35	453	\$ 19.74	PS Adult Voc
46	Cost Estimators	-35	792	\$ 26.36	Some College
47	Pharmacists	-35	940	\$ 59.40	Master's or higher
48	Heating, Air Conditioning, and Refrigeration Mechanics	-34	2,214	\$ 19.18	PS Adult Voc
49	Medical and Clinical Laboratory Technologists	-34	411	\$ 27.44	Some College
50	Counter and Rental Clerks	-33	1,519	\$ 11.22	HS/GED

Source: Florida Department of Economic Opportunity

7.0 Southwest Florida Current Employment Gaps by Major Occupational Group

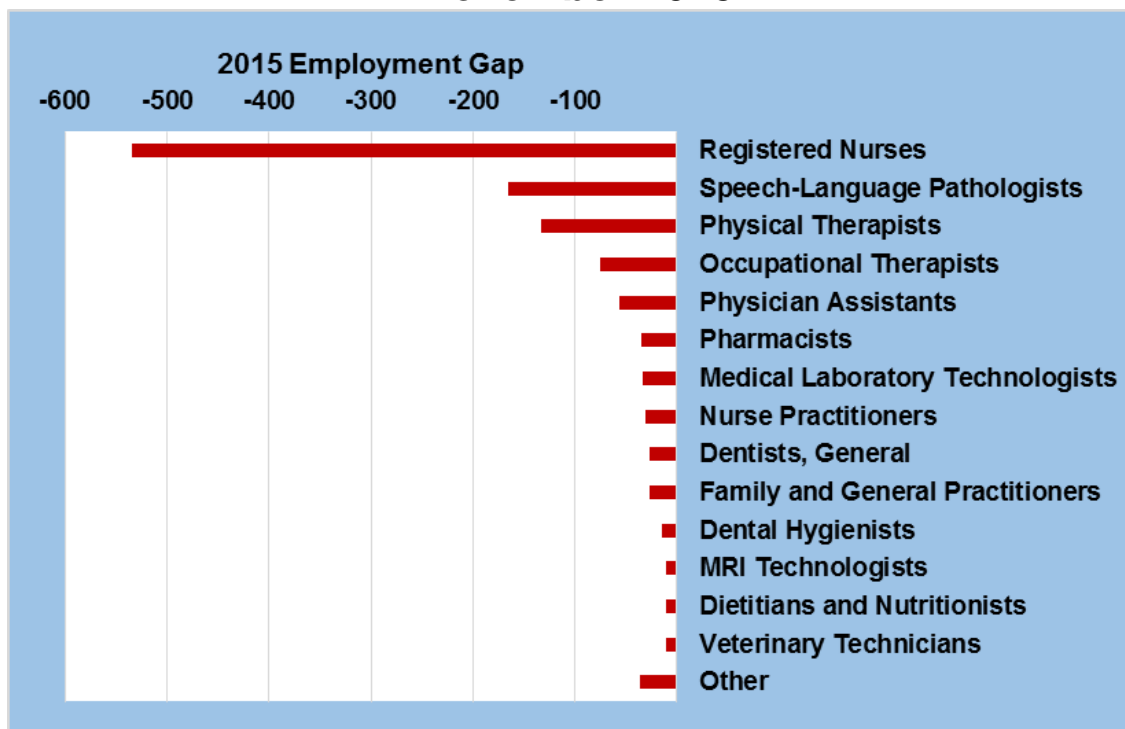
The Southwest Florida employment gaps can also be viewed by major occupational groups. The largest occupations groups with employment gaps include sales, health care, construction, installation, maintenance and repair, management, business and financial operations, computer, architecture and engineering, and office and administrative. The largest changes from last year's analysis are the increasing demands for construction, management, financial, computer, and engineering occupations. The major occupational groups are shown in Charts 12-20.

Chart 12
Employment Gap for Sales Occupations
November 2015



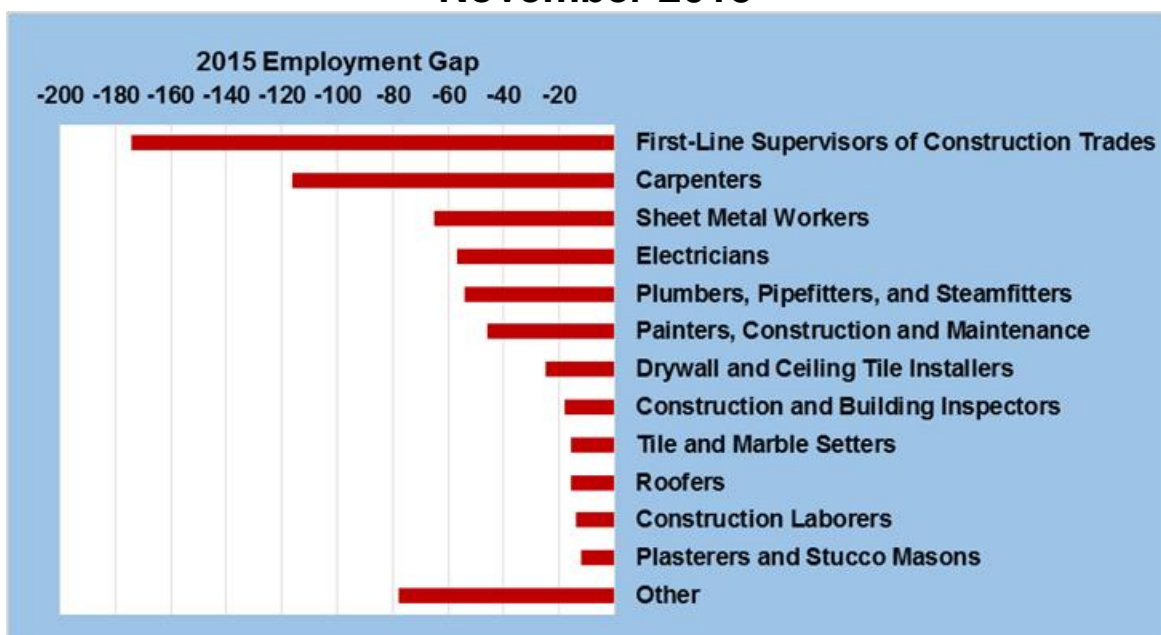
Source: Florida Department of Economic Opportunity

Chart 13
Employment Gap for Health Care Occupations
November 2015



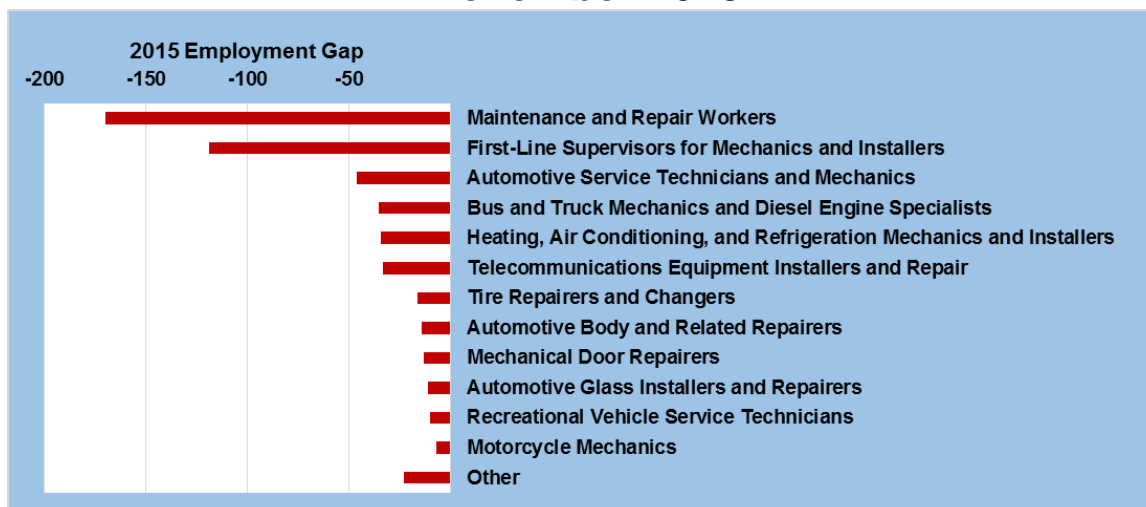
Source: Florida Department of Economic Opportunity

Chart 14
Employment Gap for Construction Occupations
November 2015



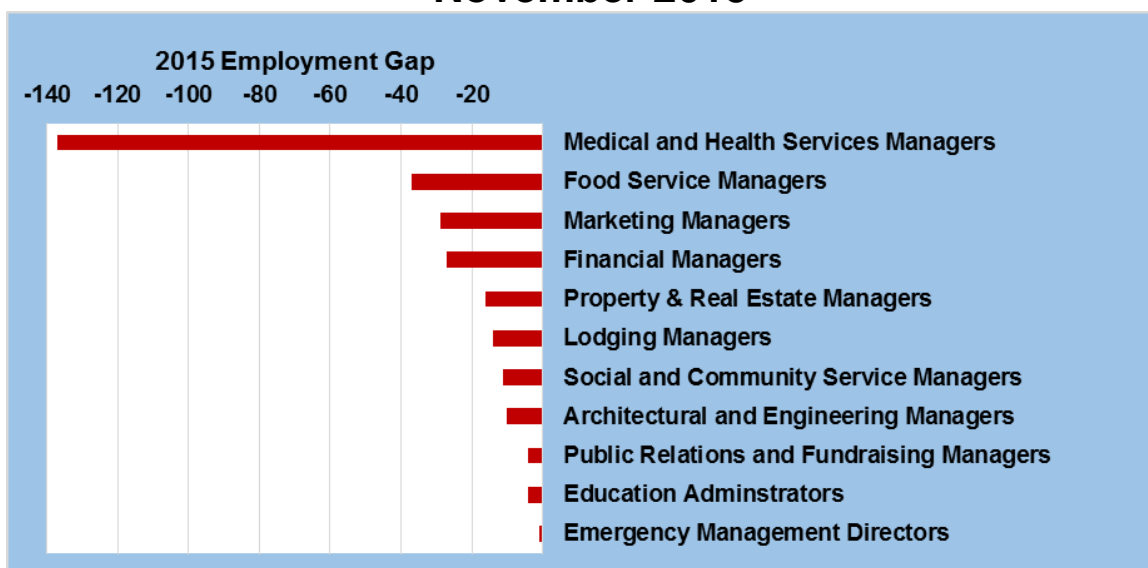
Source: Florida Department of Economic Opportunity

Chart 15
Employment Gap for Installation, Maintenance,
& Repair Occupations
November 2015



Source: Florida Department of Economic Opportunity

Chart 16
Employment Gap for Management Occupations
November 2015



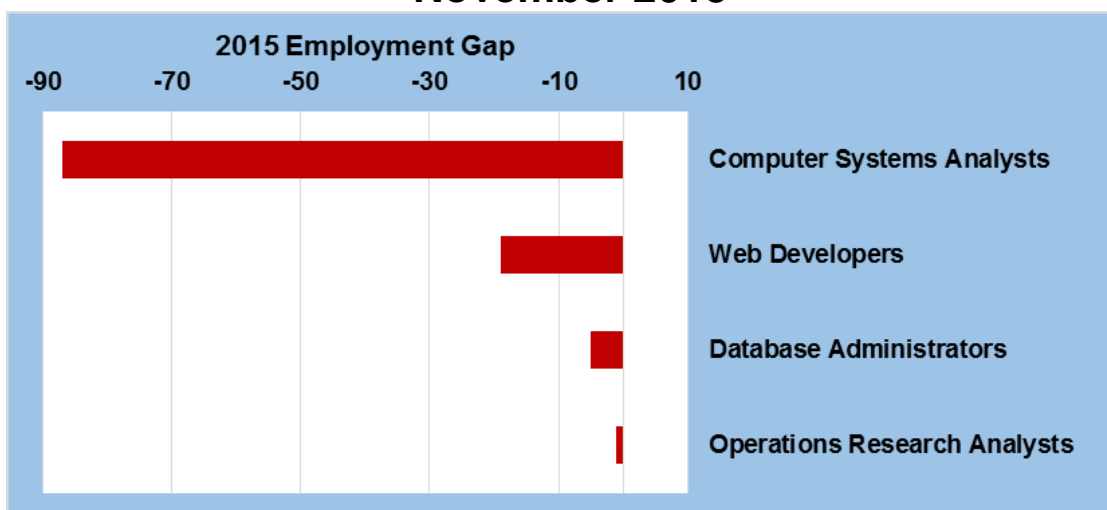
Source: Florida Department of Economic Opportunity

Chart 17
Employment Gap for Business and Financial
Operations Occupations
November 2015



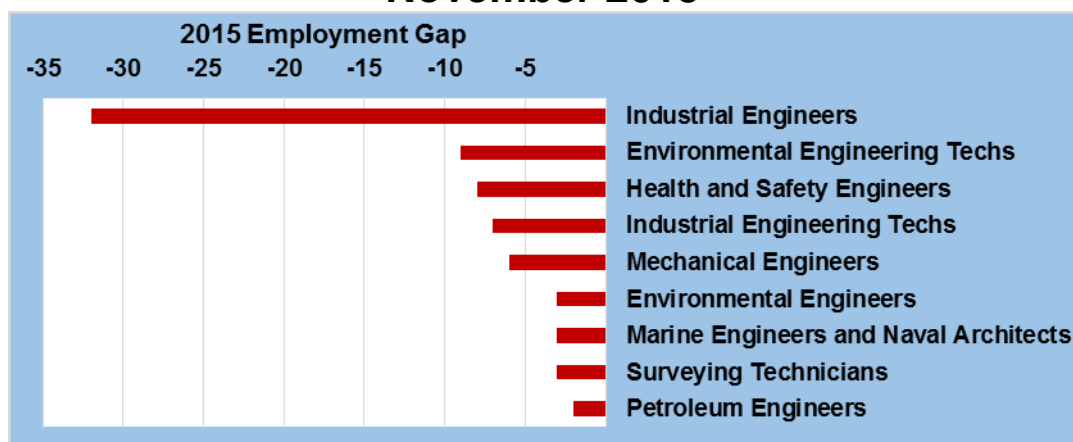
Source: Florida Department of Economic Opportunity

Chart 18
Employment Gap for Computer Occupations
November 2015



Source: Florida Department of Economic Opportunity

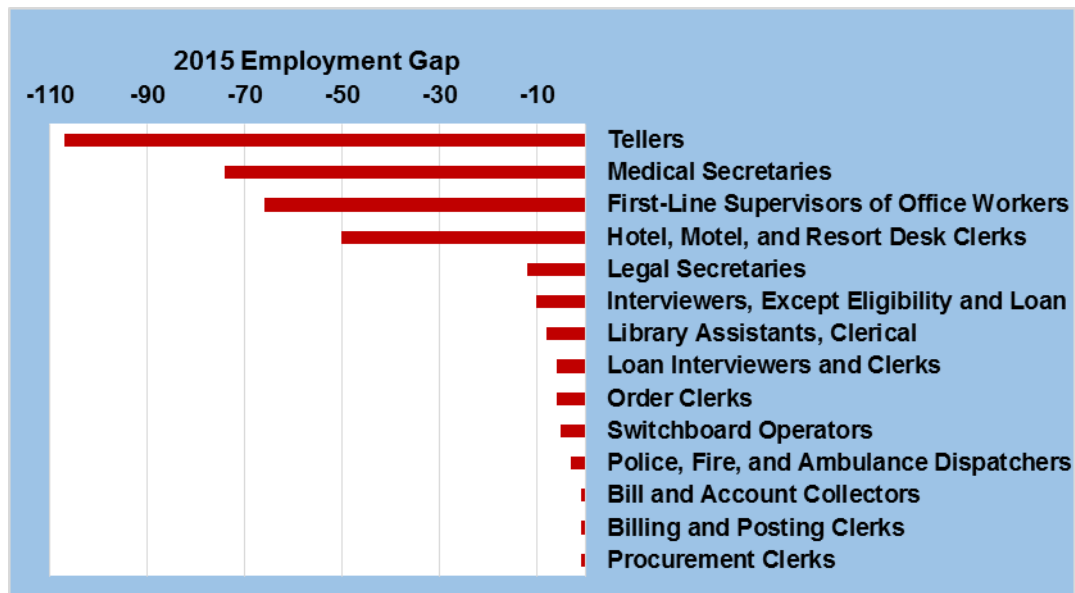
Chart 19
Employment Gap for Architecture
and Engineering Occupations
November 2015



Source: Florida Department of Economic Opportunity

Chart 20

Employment Gap for Office and Administrative Occupations November 2015



Source: Florida Department of Economic Opportunity

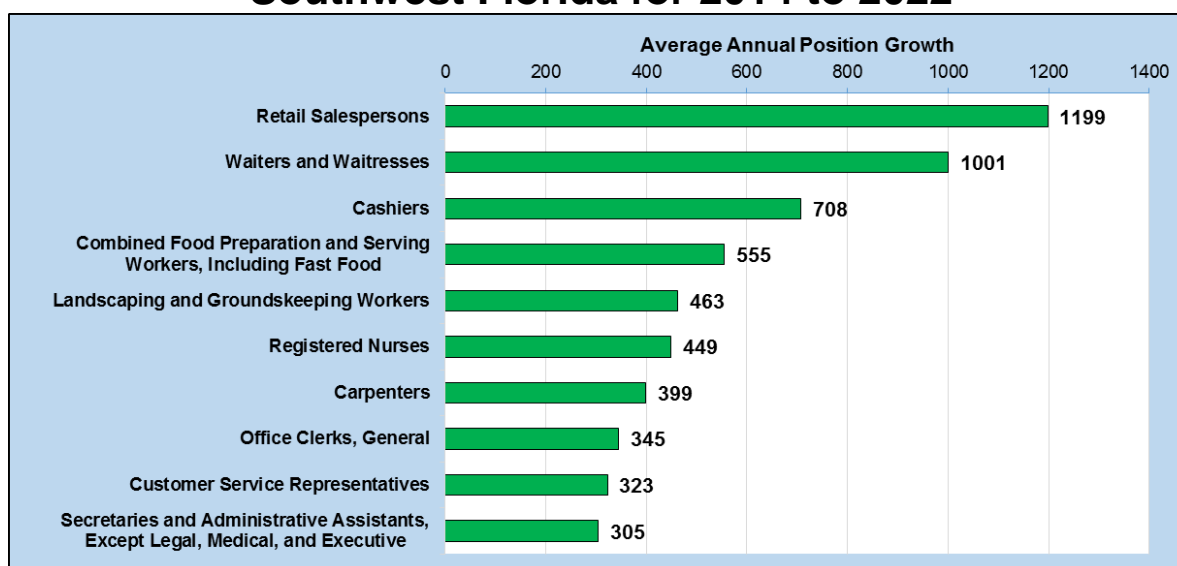
8.0 Southwest Florida Long-term Average Annual Employment Growth by Occupation 2014 to 2022

The Florida Department of Economic Opportunity provided its forecast average annual demand for Southwest Florida employees for the period 2014 to 2022. This forecast provides additional information about expected annual occupational demands for the region. Information is presented for the top 50 growth occupations along with the current hourly wage and educational requirements. The top 10 employment growth occupations are:

1. Retail salespersons
2. Waiters and waitresses
3. Cashiers
4. Food preparation and serving workers
5. Landscaping and groundskeepers
6. Registered Nurses
7. Carpenters
8. Office clerks
9. Customer service representatives
10. Secretaries and administrative assistants

The top 10 growth occupations are shown in Chart 21 and Table 11 and provide the average annual growth per occupation along with the current median wage and minimum educational requirement. The top 10 growth occupations primarily reflect expected increases in retail, tourism, health care, and construction. Three of the top growth occupations require less than a high school degree, three require a high school degree or GED, three require adult vocational training, and one requires some college. Median wage varied from \$9 per hour to \$30 per hour and was highly correlated with the required minimum education.

Chart 21
The Top 10 Long-term Employment Growth Occupations
Southwest Florida for 2014 to 2022



Source: Florida Department of Economic Opportunity

Table 11

No.	Occupation	Average Annual Growth	Current Employment	Median Wage	Minimum Education
1	Retail Salespersons	1,199	23,266	\$ 10.81	HS/GED
2	Waiters and Waitresses	1,001	14,685	\$ 9.10	Less HS/GED
3	Cashiers	708	12,132	\$ 9.43	HS/GED
4	Combined Food Preparation and Serving Workers, Including Fast Food	555	11,644	\$ 9.02	Less HS/GED
5	Landscaping and Groundskeeping Workers	463	11,155	\$ 10.59	Less HS/GED
6	Registered Nurses	449	8,762	\$ 29.28	Some College
7	Carpenters	399	6,265	\$ 17.12	PS Adult Voc
8	Office Clerks, General	345	7,723	\$ 12.37	HS/GED
9	Customer Service Representatives	323	6,670	\$ 13.31	PS Adult Voc
10	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	305	10,572	\$ 14.71	PS Adult Voc

Source: Florida Department of Economic Opportunity

The top 11-20 highest growth occupations for Southwest Florida include:

11. First line supervisors of retail sales workers,
12. Receptionists and Information Clerks
13. Nursing assistants
14. Laborers, Freight and Stock

15. Sales representatives, Services
16. Construction Laborers
17. Cooks in restaurants
18. Farmworkers, Crop, and Nursury
19. Stock Clerks
20. Painters, Construction and Maintenance

The information on these high-growth occupations is shown in Chart 22 and Table 12. Again, the recovery and growth in the tourism, health care, and construction markets are driving the growth of many of these occupations. The demand for labor is said to be a “derived” demand which depends on consumer demands in the goods and services markets. Three of the top 11-20 growth occupations do not require high school graduation. Three require high school or GED, while four require adult vocational training. The median wage ranges from \$9 per hour to \$29 per hour.

Chart 22
The Top 11-20 Long-term Employment Growth Occupations
Southwest Florida for 2014 to 2022



Source: Florida Department of Economic Opportunity

Table 12

No.	Occupation	Average Annual Growth	Current Employment	Median Wage	Minimum Education
11	First-Line Supervisors of Retail Sales Workers	304	8,481	\$ 18.73	PS Adult Voc
12	Receptionists and Information Clerks	275	4,535	\$ 12.72	HS/GED
13	Nursing Assistants	258	5,704	\$ 12.57	PS Adult Voc
14	Laborers and Freight, Stock, and Material Movers, Hand	251	4,849	\$ 10.78	Less HS/GED
15	Sales Representatives, Services, All Other	251	4,089	\$ 28.52	HS/GED
16	Construction Laborers	248	4,877	\$ 12.59	Less HS/GED
17	Cooks, Restaurant	240	6,107	\$ 11.21	PS Adult Voc
18	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	219	7,077	\$ 9.26	Less HS/GED
19	Stock Clerks and Order Fillers	203	6,523	\$ 11.20	HS/GED
20	Painters, Construction and Maintenance	200	3,123	\$ 14.13	PS Adult Voc

Source: Florida Department of Economic Opportunity

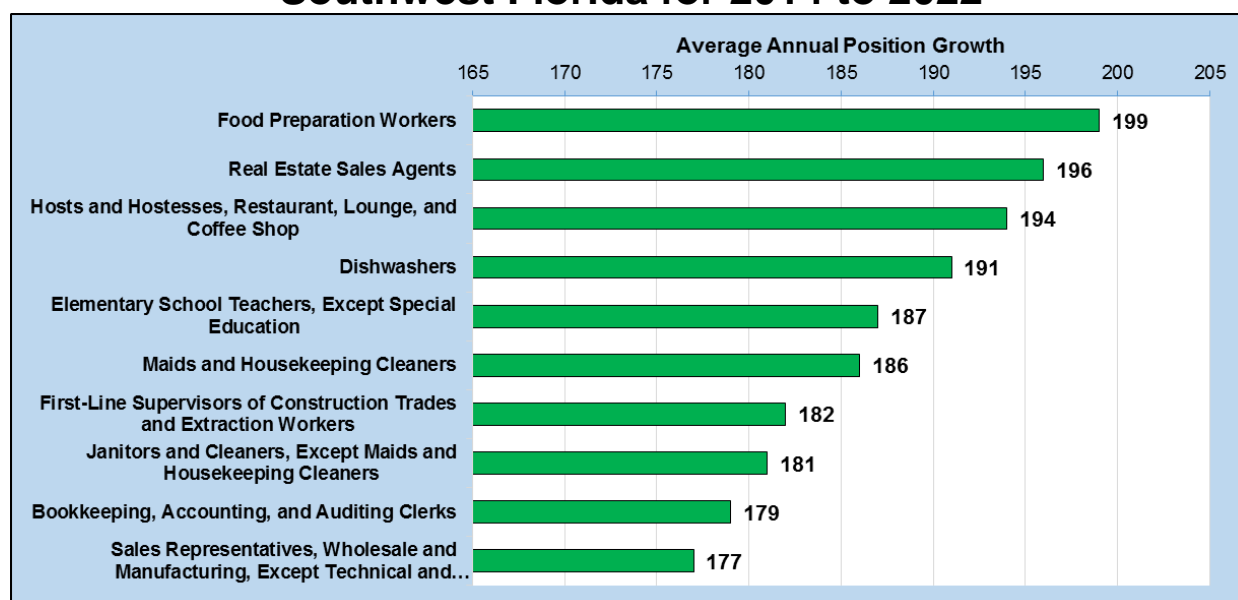
The Top 21-30 Long-term growth occupations for Southwest Florida include:

21. Food preparation workers
22. Real estate sales agents
23. Hosts and hostesses
24. Dishwashers
25. Elementary school teachers
26. Maids and housekeeping cleaners
27. First-line supervisors of construction trades
28. Janitors
29. Bookkeeping, accounting, and auditing clerks
30. Sales representatives of manufacturing

The information on these high-growth occupations is shown in Chart 23 and Table 13. These fast-growth occupations include elementary school teachers, accounting and auditing clerks, and other occupations related to tourism, retail, and real estate sales. The regional economy is providing significant employment opportunities for people with minimal educational attainment. In fact, five of the fast-growth occupations do not require high school graduation or equivalent. Two require adult vocational training, two require some college, and one requires a bachelor's degree or higher. The

median wages ranged from \$9 per hour for a dining room attendant and bartender to a high of \$29 per hour for elementary school teachers.

Chart 23
The Top 21-30 Long-term Employment Growth Occupations Southwest Florida for 2014 to 2022



Source: Florida Department of Economic Opportunity

Table 13

No.	Occupation	Average Annual Growth	Current Employment	Median Wage	Minimum Education
21	Food Preparation Workers	199	3,753	\$ 10.42	Less HS/GED
22	Real Estate Sales Agents	196	4,614	\$ 18.41	PS Adult Voc
23	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	194	2,022	\$ 10.09	Less HS/GED
24	Dishwashers	191	2,804	\$ 9.07	Less HS/GED
25	Elementary School Teachers, Except Special Education	187	3,896	\$ 29.03	Bachelor's
26	Maids and Housekeeping Cleaners	186	5,410	\$ 10.07	Less HS/GED
27	First-Line Supervisors of Construction Trades and Extraction Workers	182	2,516	\$ 25.94	Some College
28	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	181	5,463	\$ 10.98	Less HS/GED
29	Bookkeeping, Accounting, and Auditing Clerks	179	5,393	\$ 16.06	Some College
30	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	177	4,061	\$ 20.29	PS Adult Voc

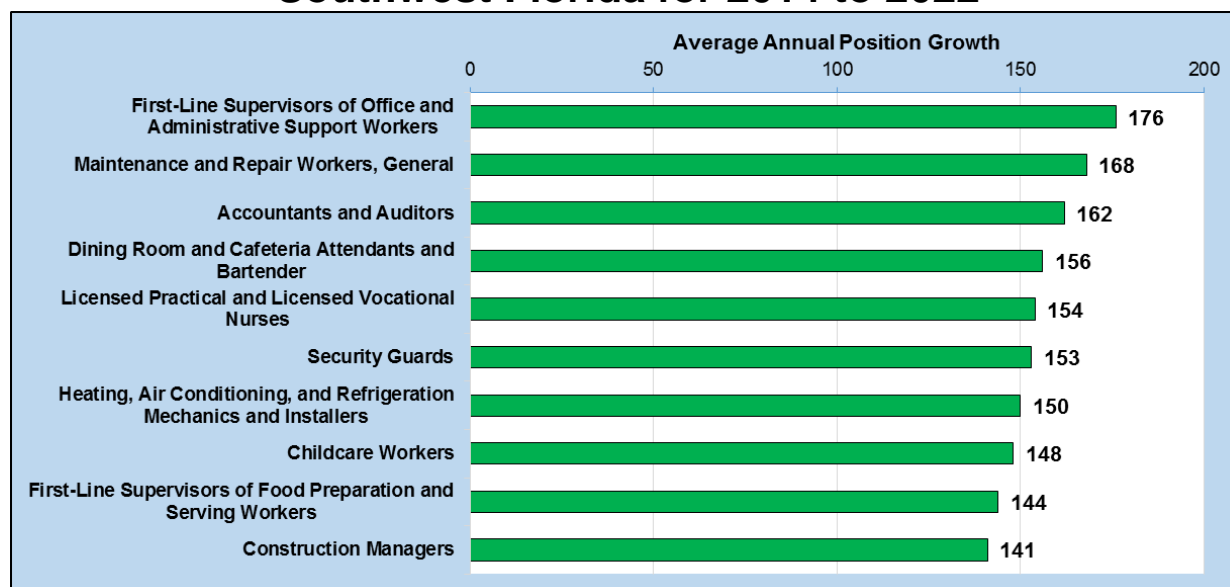
Source: Florida Department of Economic Opportunity

The Top 31-40 highest growth occupations for Southwest Florida include:

31. First-line supervisors of office workers
32. Maintenance and repair workers
33. Accountants and auditors
34. Dining room or cafeteria attendants and bartenders
35. Licensed practical and vocational nurses
36. Security guards
37. Heating, AC, and refrigeration mechanics
38. Childcare workers
39. First-line supervisors of food preparation and servicing workers
40. Construction managers

The information on these forecast high-growth occupations is shown in Chart 24 and Table 14. Two of these occupations do not require high school graduation, five require vocational training, two require some college and one requires a bachelor's degree. The median wage varied from \$9 per hour for bartenders to \$33 per hour for construction managers.

Chart 24
The Top 31-40 Long-term Employment Growth Occupations
Southwest Florida for 2014 to 2022



Source: Florida Department of Economic Opportunity

Table 14

No.	Occupation	Average Annual Growth	Current Employment	Median Wage	Minimum Education
31	First-Line Supervisors of Office and Administrative Support Workers	176	3,744	\$ 22.61	Some College
32	Maintenance and Repair Workers, General	168	4,715	\$ 15.82	PS Adult Voc
33	Accountants and Auditors	162	3,686	\$ 28.73	Bachelor's
34	Dining Room and Cafeteria Attendants and Bartender	156	2,754	\$ 9.13	Less HS/GED
35	Licensed Practical and Licensed Vocational Nurses	154	2,668	\$ 20.38	PS Adult Voc
36	Security Guards	153	4,185	\$ 10.97	PS Adult Voc
37	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	150	2,214	\$ 19.18	PS Adult Voc
38	Childcare Workers	148	2,627	\$ 10.19	PS Adult Voc
39	First-Line Supervisors of Food Preparation and Serving Workers	144	3,670	\$ 16.69	PS Adult Voc
40	Construction Managers	141	3,557	\$ 32.92	Some College

Source: Florida Department of Economic Opportunity

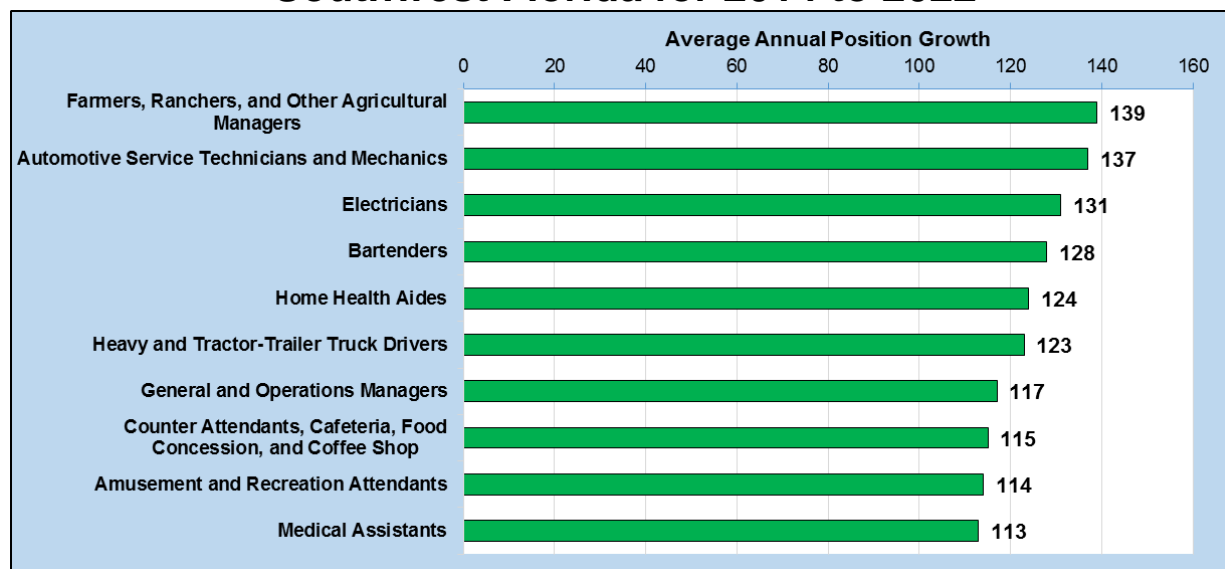
The Top 41-50 highest growth occupations for Southwest Florida include:

41. Farmers, ranchers, and other agricultural managers
42. Automotive service technicians and mechanics
43. Electricians
44. Bartenders
45. Home health aides
46. Heavy truck drivers
47. General and operations managers
48. Counter attendants and food concession
49. Amusement and recreational attendants
50. Medical assistants

The information on these forecast high-growth occupations is shown in Chart 25 and Table 15. Three occupations require less than a high school diploma, five require vocational training, and two require some college. This forecast is consistent with recent trends in employment observed on the national level, in which significant job growth is comprised of positions amenable to part-time labor. Such positions are especially concentrated in service-dominated economies such as those prevalent in

Southwest Florida. The median wage varies from \$9 per hour for counter attendants to \$46 per hour for general and operations managers.

Chart 25
The Top 41-50 Long-term Employment Growth Occupations Southwest Florida for 2014 to 2022



Source: Florida Department of Economic Opportunity

Table 15

No.	Occupation	Average Annual Growth	Current Employment	Median Wage	Minimum Education
41	Farmers, Ranchers, and Other Agricultural Managers	139	7,201	\$ 28.69	Some College
42	Automotive Service Technicians and Mechanics	137	3,085	\$ 18.35	PS Adult Voc
43	Electricians	131	2,143	\$ 17.09	PS Adult Voc
44	Bartenders	128	2,581	\$ 9.07	Less HS/GED
45	Home Health Aides	124	1,709	\$ 11.21	PS Adult Voc
46	Heavy and Tractor-Trailer Truck Drivers	123	3,153	\$ 16.19	PS Adult Voc
47	General and Operations Managers	117	3,800	\$ 45.92	Some College
48	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	115	1,159	\$ 9.07	Less HS/GED
49	Amusement and Recreation Attendants	114	1,504	\$ 9.22	Less HS/GED
50	Medical Assistants	113	2,436	\$ 14.79	PS Adult Voc

Source: Florida Department of Economic Opportunity

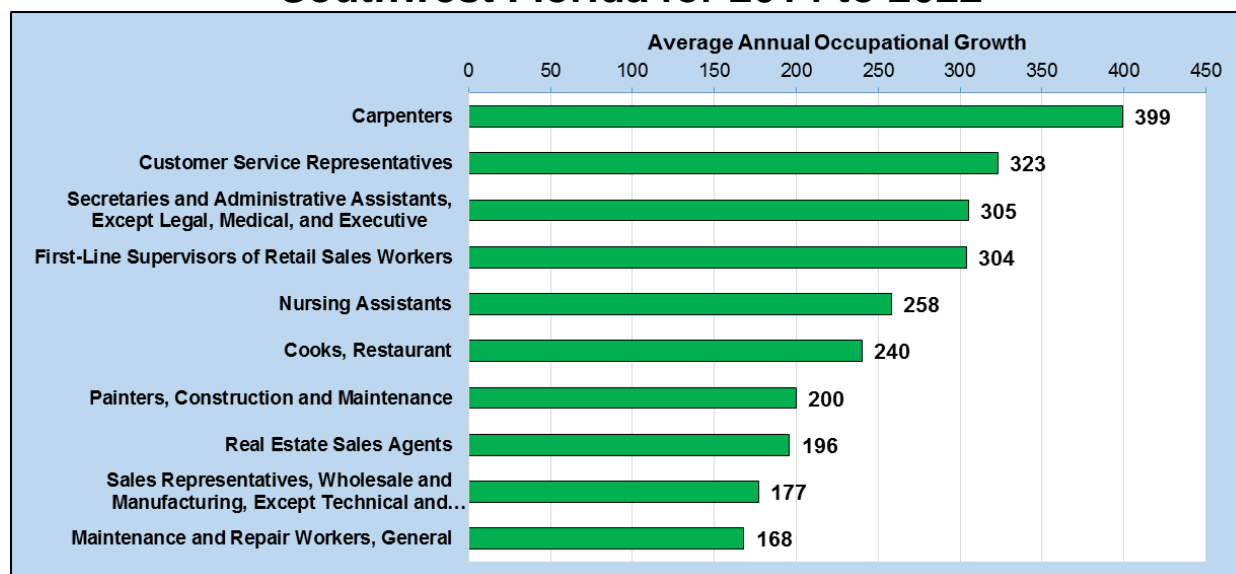
9.0 Top Growth Occupations by Minimum Educational Requirement

The study looked at long-run occupational growth by identifying the fastest-growing occupations by the minimal educational requirement including:

- Post-Secondary Adult Vocational
- Some College
- Bachelor's Degree
- Master's Degree or Higher

The expected top long-run growth occupations requiring a minimum of post-secondary adult vocational training are carpenters, customer service representatives, secretaries and administrative assistants, first-line supervisors of retail sales, nursing assistants, cooks, painters, sales representatives, and maintenance and repair workers, as shown in Chart 26 and Table 16 along with the median wage and current employment.

Chart 26
The Top 10 Adult Vocational
Long-term Employment Growth Occupations
Southwest Florida for 2014 to 2022



Source: Florida Department of Economic Opportunity

Table 16

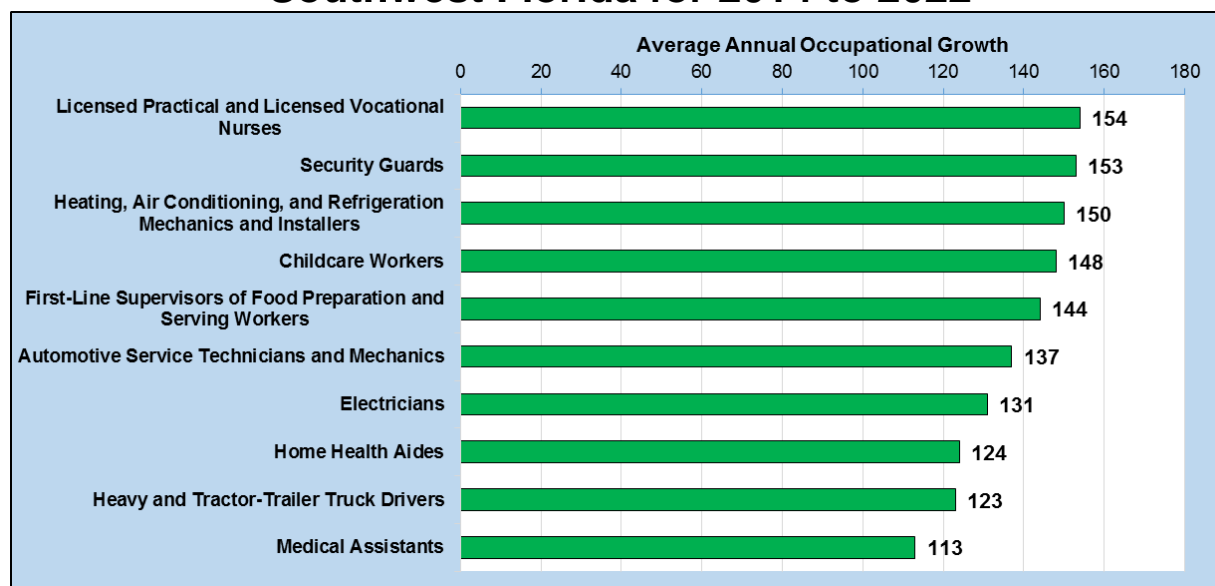
No.	Occupation	Average Annual Growth	Current Employment	Median Wage
1	Carpenters	399	6,265	\$ 17.12
2	Customer Service Representatives	323	6,670	\$ 13.31
3	Medical, and Executive	305	10,572	\$ 14.71
4	First-Line Supervisors of Retail Sales Workers	304	8,481	\$ 18.73
5	Nursing Assistants	258	5,704	\$ 12.57
6	Cooks, Restaurant	240	6,107	\$ 11.21
7	Painters, Construction and Maintenance	200	3,123	\$ 14.13
8	Real Estate Sales Agents	196	4,614	\$ 18.41
9	Technical and Scientific Products	177	4,061	\$ 20.29
10	Maintenance and Repair Workers, General	168	4,715	\$ 15.82

Source: Florida Department of Economic Opportunity

The forecast top 11 to 20 occupations for growth from 2014 to 2022 requiring a minimum of post-secondary adult vocational training are licensed practical & vocational nurses, security guards, heating, AC, and refrigeration mechanics and installers,

childcare workers, first-line supervisors of food preparation and serving, automotive service technicians, electricians, home health aides, heavy and tractor-trailer truck drivers, and medical assistants, as shown in Chart 27 and Table 17.

Chart 27
The Top 11-20 Adult Vocational
Long-term Employment Growth Occupations
Southwest Florida for 2014 to 2022



Source: Florida Department of Economic Opportunity

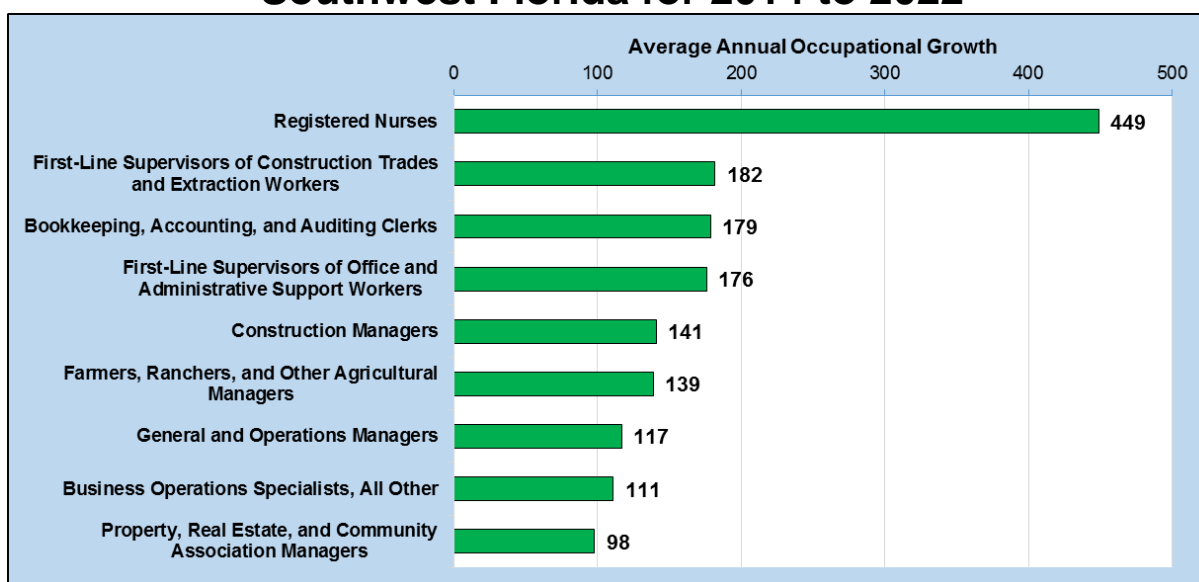
Table 17

No.	Occupation	Average Annual Growth	Current Employment	Median Wage
11	Licensed Practical and Licensed Vocational Nurses	154	2,668	\$ 20.38
12	Security Guards	153	4,185	\$ 10.97
13	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	150	2,214	\$ 19.18
14	Childcare Workers	148	2,627	\$ 10.19
15	First-Line Supervisors of Food Preparation and Serving Workers	144	3,670	\$ 16.69
16	Automotive Service Technicians and Mechanics	137	3,085	\$ 18.35
17	Electricians	131	2,143	\$ 17.09
18	Home Health Aides	124	1,709	\$ 11.21
19	Heavy and Tractor-Trailer Truck Drivers	123	3,153	\$ 16.19
20	Medical Assistants	113	2,436	\$ 14.79

Source: Florida Department of Economic Opportunity

The forecast top 10 occupations for growth from 2014 to 2022 requiring a minimum of “some college” are registered nurses, first-line supervisors of construction trades, bookkeeping, accounting, and auditing clerks, first-line supervisors of office support, construction managers, farmers, ranchers and other agricultural managers, general and operations managers, business operations specialists, property, real estate, and community association managers, and cost estimators, as shown in Chart 28 and Table 18.

Chart 28
The Top 10 Some College
Long-term Employment Growth Occupations
Southwest Florida for 2014 to 2022



Source: Florida Department of Economic Opportunity

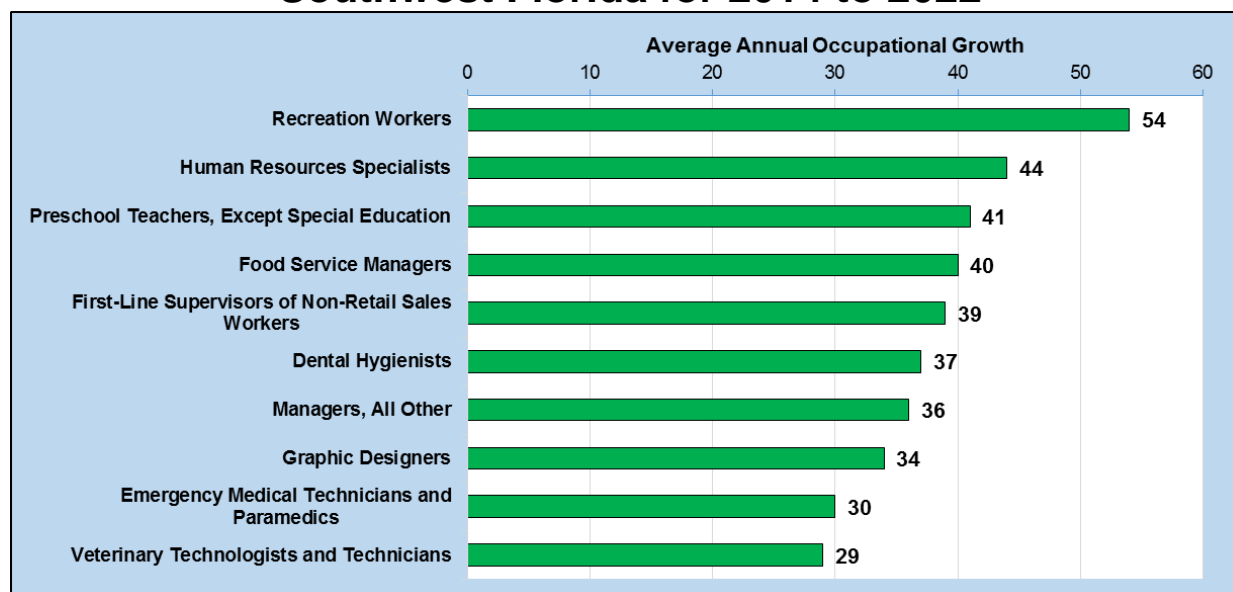
Table 18

No.	Occupation	Average Annual Growth	Current Employment	Median Wage
1	Registered Nurses	449	8,762	\$ 29.28
2	First-Line Supervisors of Construction Trades and Extraction Workers	182	2,516	\$ 25.94
3	Bookkeeping, Accounting, and Auditing Clerks	179	5,393	\$ 16.06
4	First-Line Supervisors of Office and Administrative Support Workers	176	3,744	\$ 22.61
5	Construction Managers	141	3,557	\$ 32.92
6	Farmers, Ranchers, and Other Agricultural Managers	139	7,201	\$ 28.69
7	General and Operations Managers	117	3,800	\$ 45.92
8	Business Operations Specialists, All Other	111	2,672	\$ 26.80
9	Property, Real Estate, and Community Association Managers	98	2,997	\$ 27.05
10	Cost Estimators	65	792	\$ 26.36

Source: Florida Department of Economic Opportunity

The forecast top 11 to 20 occupations for growth from 2014 to 2022 requiring a minimum of “some college” are recreation workers, human resources specialists, preschool teachers, food service managers, first-line supervisors of non-retail sales workers, dental hygienists, managers, graphic designers, emergency medical technicians and paramedics, and veterinary technologists and technicians, as shown in Chart 29 and Table 19

Chart 29
The Top 11-20 Some College
Long-term Employment Growth Occupations
Southwest Florida for 2014 to 2022



Source: Florida Department of Economic Opportunity

Table 19

No.	Occupation	Average Annual Growth	Current Employment	Median Wage
11	Recreation Workers	54	1,552	\$ 11.40
12	Human Resources Specialists	44	909	\$ 23.38
13	Preschool Teachers, Except Special Education	41	883	\$ 11.46
14	Food Service Managers	40	1,186	\$ 28.49
15	First-Line Supervisors of Non-Retail Sales Workers	39	1,106	\$ 29.71
16	Dental Hygienists	37	627	\$ 35.39
17	Managers, All Other	36	914	\$ 36.54
18	Graphic Designers	34	719	\$ 19.40
19	Emergency Medical Technicians and Paramedics	30	636	\$ 17.68
20	Veterinary Technologists and Technicians	29	497	\$ 15.30

Source: Florida Department of Economic Opportunity

The forecast top 10 occupations for growth from 2014 to 2022 requiring a bachelor's degree include elementary school teachers, accountants and auditors, secondary school teachers, middle school teachers, management analysts, market research analysts, medical and health service managers, kindergarden teachers,

securities and financial sales agents, and special education teachers. These occupations along with the current median hourly wage and current employment are shown in Chart 30 and Table 20.

Chart 30
The Top 10 Bachelor's Degree
Long-term Employment Growth Occupations
Southwest Florida for 2014 to 2022



Source: Florida Department of Economic Opportunity

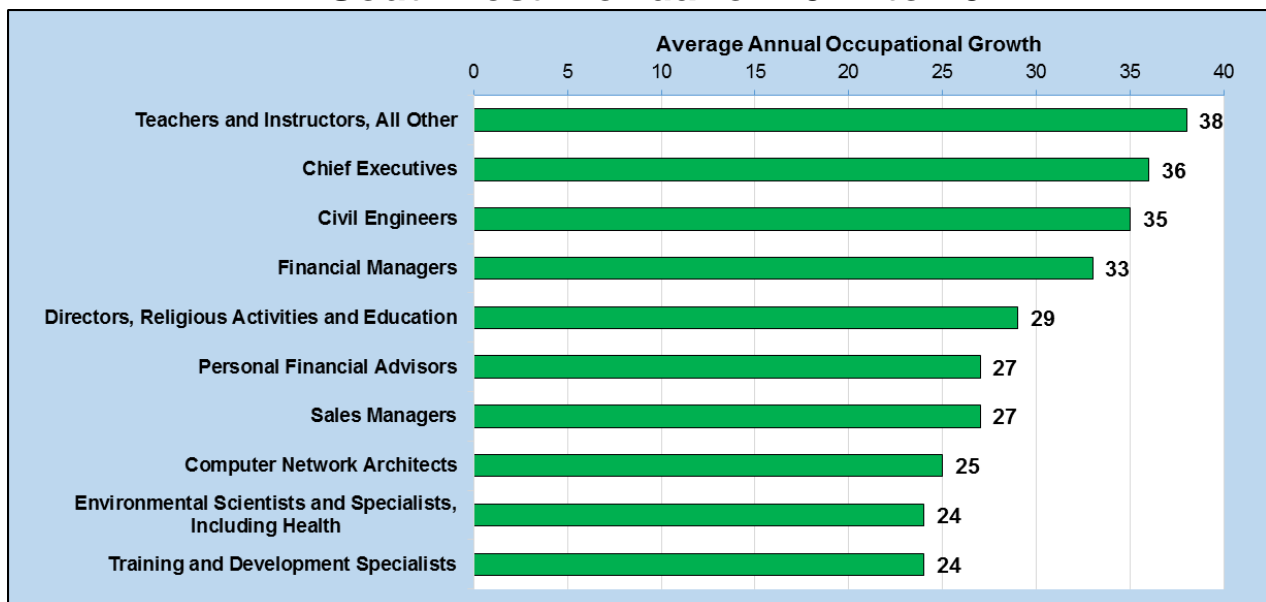
Table 20

No.	Occupation	Average Annual Growth	Current Employment	Median Wage
1	Elementary School Teachers, Except Special Education	187	3,896	\$ 29.03
2	Accountants and Auditors	162	3,686	\$ 28.73
3	Secondary School Teachers, Except Special and Career/Technical Education	95	2,202	\$ 30.56
4	Middle School Teachers, Except Special and Career/Technical Education	94	1,956	\$ 29.28
5	Management Analysts	86	1,625	\$ 29.01
6	Market Research Analysts and Marketing Specialists	42	510	\$ 23.04
7	Medical and Health Services Managers	40	724	\$ 46.17
8	Kindergarten Teachers, Except Special Education	39	747	\$ 28.24
9	Securities, Commodities, and Financial Services Sales Agents	39	891	\$ 37.30
10	Special Education Teachers, All Other	38	1,112	\$ 32.45

Source: Florida Department of Economic Opportunity

The 11 through 20 top growth occupations requiring a minimum of a bachelor's degree are teachers and instructors, chief executives, civil engineers, financial managers, directors of religious activities, personal financial advisors, sales managers, computer network architects, environmental scientists and specialists, and training and development specialists, as shown in Chart 31 and Table 21.

Chart 31
The Top 11-20 Bachelor's degree
Long-term Employment Growth Occupations
Southwest Florida for 2014 to 2022



Source: Florida Department of Economic Opportunity

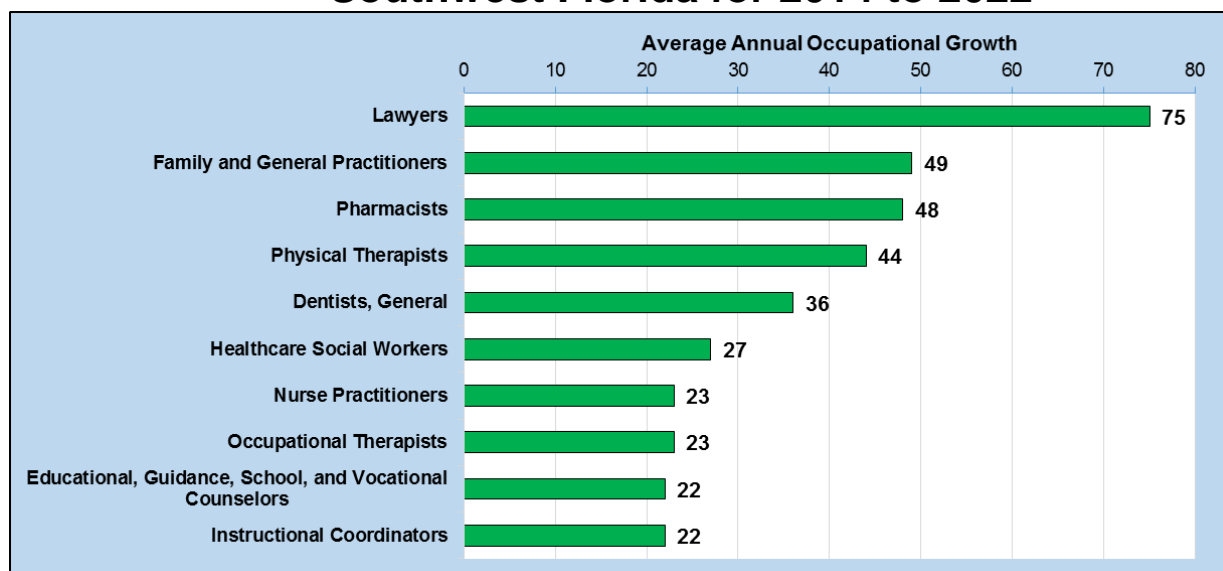
Table 21

No.	Occupation	Average Annual Growth	Current Employment	Median Wage
11	Teachers and Instructors, All Other	38	1,043	\$ 17.65
12	Chief Executives	36	832	\$ 91.88
13	Civil Engineers	35	666	\$ 36.39
14	Financial Managers	33	900	\$ 48.41
15	Directors, Religious Activities and Education	29	708	\$ 17.40
16	Personal Financial Advisors	27	659	\$ 33.36
17	Sales Managers	27	522	\$ 61.06
18	Computer Network Architects	25	619	\$ 29.19
19	Environmental Scientists and Specialists, Including Health	24	555	\$ 24.12
20	Training and Development Specialists	24	488	\$ 23.35

Source: Florida Department of Economic Opportunity

The forecast top 10 occupations for growth from 2014 to 2022 requiring a master's degree or higher include lawyers, family and general practitioners, pharmacists, physical therapists, dentists, health care social workers, nurse practitioners, occupational therapists, education, guidance and vocational counselors, and instructional coordinators, as shown in Chart 32 and Table 22.

Chart 32
The Top 10 Master's Degree or Higher
Long-term Employment Growth Occupations
Southwest Florida for 2014 to 2022



Source: Florida Department of Economic Opportunity

Table 22

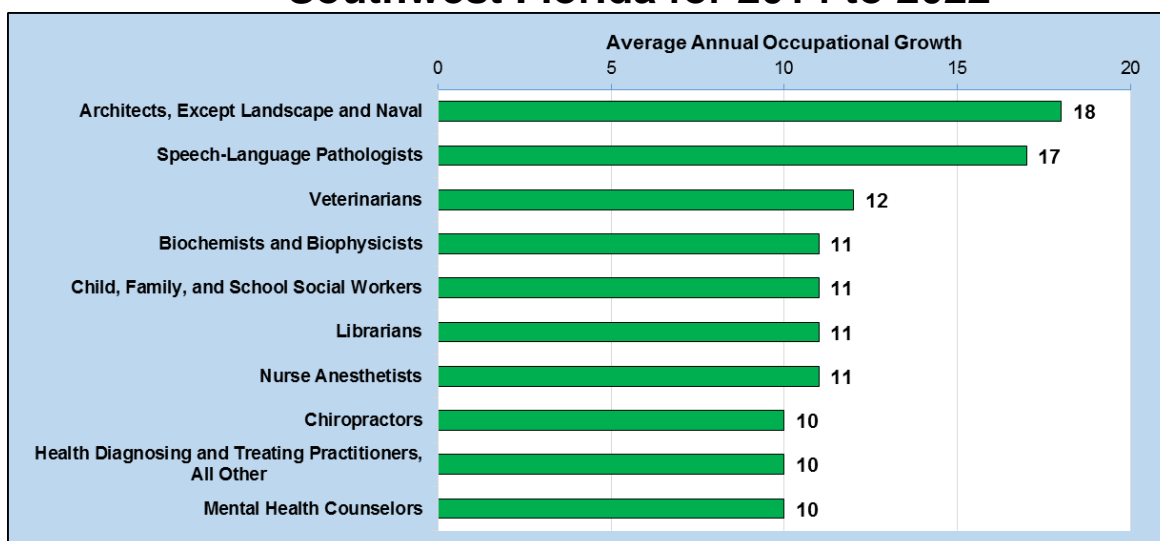
No.	Occupation	Average Annual Growth	Current Employment	Median Wage
1	Lawyers	75	1,812	\$ 36.67
2	Family and General Practitioners	49	991	\$ 91.72
3	Pharmacists	48	940	\$ 59.40
4	Physical Therapists	44	929	\$ 39.78
5	Dentists, General	36	648	\$ 66.33
6	Healthcare Social Workers	27	415	\$ 22.72
7	Nurse Practitioners	23	410	\$ 47.07
8	Occupational Therapists	23	386	\$ 41.70
9	Educational, Guidance, School, and Vocational Counselors	22	448	\$ 30.95
10	Instructional Coordinators	22	453	\$ 21.77

Source: Florida Department of Economic Opportunity

The forecast top 11 to 20 occupations for growth from 2014 to 2022 requiring a master's degree or higher include architects, speech-language pathologists, veterinarians, biochemists and biophysicists, child, family and school social workers,

librarians, nurse anesthetists, chiropractors, health diagnosing and treating practitioners, and mental health counselors, as shown in Chart 33 and Table 23.

Chart 33
The Top 11-20 Master's Degree or Higher
Long-term Employment Growth Occupations
Southwest Florida for 2014 to 2022



Source: Florida Department of Economic Opportunity

Table 23

No.	Occupation	Average Annual Growth	Current Employment	Median Wage
11	Architects, Except Landscape and Naval	18	324	\$ 36.07
12	Speech-Language Pathologists	17	395	\$ 36.77
13	Veterinarians	12	236	\$ 46.60
14	Biochemists and Biophysicists	11	113	\$ 26.34
15	Child, Family, and School Social Workers	11	269	\$ 20.55
16	Librarians	11	240	\$ 28.92
17	Nurse Anesthetists	11	185	\$ 66.60
18	Chiropractors	10	226	\$ 45.38
19	Health Diagnosing and Treating Practitioners, All Other	10	233	\$ 31.86
20	Mental Health Counselors	10	185	\$ 22.92

Source: Florida Department of Economic Opportunity

10.0 Herfindahl-Hirschman Index

Starting with the present edition of the *Southwest Florida Workforce Overview Study*, the research team presents findings for the Herfindahl-Hirshman Index applied to the Southwest Florida workforce.

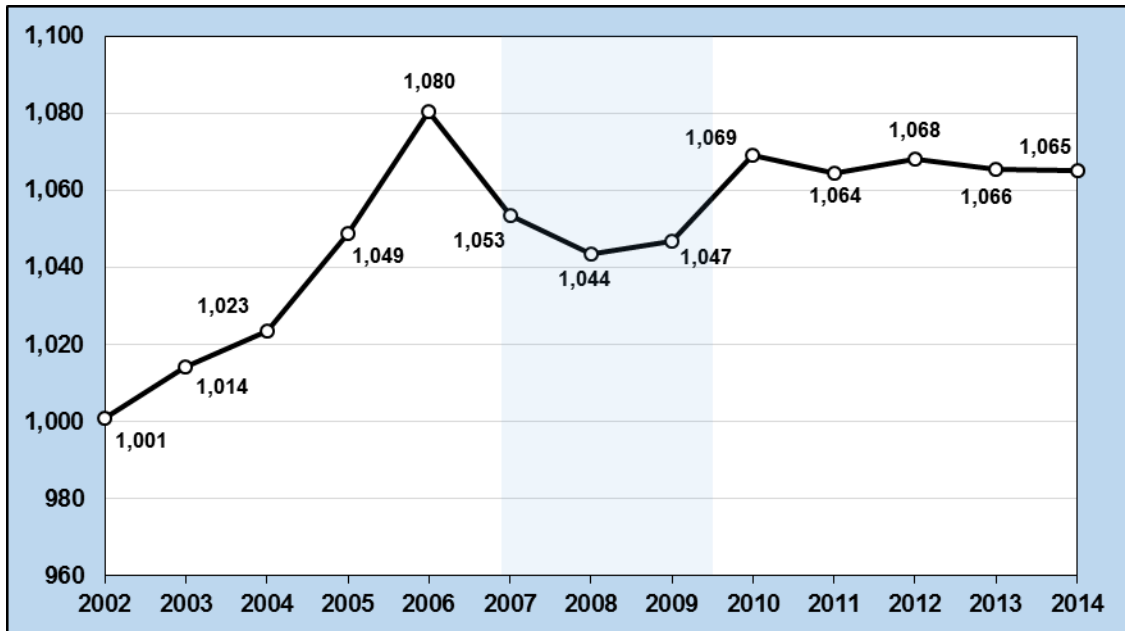
The HHI is a common economic measure of market concentration, typically used to gauge the extent to which a given market is served by few large firms (and is therefore relatively monopolistic) or many small firms (and is therefore relatively competitive). The higher the measure, the more monopolistic a given market is. For instance, it would be assumed that the market for health insurance would have a higher HHI because it is served by fewer and larger firms, whereas the market for commodities such as cotton have a lower HHI because it is served by many small producers.

The team computed the HHI for Southwest Florida's workforce in an effort to track, over time, its degree of workforce diversity based on the assumption that a more diverse labor market (in which most jobs are spread out among many industries) would have a lower HHI, and a less diverse one (in which most jobs are concentrated in a few industries) would have a higher HHI. When applied to firm size and concentration, the HHI is computed by summing the squared values of the market shares for each of the firms that comprise a given market. In this case, the research team treats Southwest Florida's workforce as a separate market, and sum the squared values of each industry's share of the market.

As shown in Chart 34, Southwest Florida's workforce became less diversified in the in the years leading up to the 2008 recession (shown in the shaded area). The increase in concentration from 2002 to 2006 is recorded by the HHI increasing from

1001 to 1080—an 8 percent increase. However, the decline in concentration that followed can be explained (partly) by the contraction of the construction industry (beginning prior to the recession), as well as by reductions in the labor force by other industries that contributed to workforce concentration during the boom.

Chart 34
Herfindahl-Hirschman Index
Southwest Florida for 2002-2014



Source: Data computed by the RERI, based on annual data obtained from the QCEW.

The HHI's relative stability in the post-recession years suggest a healthier and more stable labor market relative to the one that existed during the previous boom. A key point is not only whether the workforce is diverse enough to weather adverse economic conditions in the future, but also whether it is growing and dynamic enough to retain workers who would otherwise leave for better work opportunities elsewhere. Based on this analysis, it is reasonable to conclude that future increases in the HHI would suggest our region's economy will again growing at unsustainable rates. The

concern is that high HHI measures would signal instability characterized by a tendency to overheat during boom periods and overcorrect during recessionary periods. Also, we note that the present range of the HHI (between 1,064 and 1,069 for the five-year period ending in 2014) is not necessarily ideal and that a more dynamic labor market and a more resilient regional economy might be characterized by lower HHI measures over time.

Summary/Conclusions

Education and training and other activities that improve human capital tend to lead to greater productivity and higher wages. Twelve percent of the top 50 employment gaps identified an education requirement less than high school with an average median wage in Southwest Florida of only \$11.58 per hour. Adult vocational training covers a wide range of occupations and represented 42 percent of the top 50 employment gaps identified. The median wage for occupations requiring adult vocational training was higher at \$14.72. Some college or higher including an associate degree was required by 18 percent of the top 50 employment gaps with a median wage of \$18.79. A bachelor's degree or higher was a requirement of 10 percent of the top 50 employment gaps identified with a median wage of \$26.69 per hour and a master's degree or higher was required by 8 percent of the top 50 employment gaps identified, earning a median wage of \$35.32 per hour. Given that the major employment gains over the last year have occurred in two industries (retail and food service and accommodation) and that the growth of these jobs far outpaces that of the higher wage-earning occupations in our area, average wages in Southwest Florida have decreased. Assuming consistent metrics employed by the Florida Department of Economic Opportunity year on year, the net result is that the average annual wage in Southwest Florida has decreased by \$751 while the average annual wage in the state has increased by \$1,159 during the same time period.

This study has provided an overview of Southwest Florida's labor market including the mix of industries, current employment gaps and forecast growth occupations. The quality, depth, and diversity of a region's workforce are critical

components in fostering economic growth and development. The importance of this information in understanding what opportunities exist for students, parents, businesses, and educators will help foster discussion, better decisions, and more collaboration. Technology and globalization are driving change in our lives and employment opportunities. The Workforce Now research is designed to provide a continuous flow of research focused on Southwest Florida's labor market.