

# SKILLS GAP **AND** JOB VACANCY SURVEY

STATEWIDE  
2018



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## EXECUTIVE SUMMARY

The Florida Skills Gap and Job Vacancy Survey was designed to provide a statistically valid analysis of the skills gaps statewide and in Florida's local labor markets. The existence of skills gaps has been a matter of much discussion among employer groups, industry associations, labor economists, and others throughout the workforce system. To research skills gaps, CareerSource Florida, in coordination with CareerSource Broward, funded a pilot project survey conducted in 2016 by the Florida Department of Economic Opportunity (DEO) Bureau of Labor Market Statistics (LMS). The success of the Broward pilot project showed that skills gap data could be collected and enabled CareerSource Florida and DEO to proceed with a full survey of all 24 Local Workforce Development Areas in Florida in 2017. Building on deep knowledge and experience in conducting local job vacancy surveys, LMS designed a survey instrument that collected skills gaps and job vacancies, along with the attributes of vacancies.

The survey questionnaire was provided by DEO to the survey vender and loaded into a computer assisted telephone inquiry (CATI) software system. Florida's LMS was a pioneer in the use of CATI technology for job vacancy/hiring needs surveys and CATI has been shown to provide fast response times, excellent sample control and monitoring with minimal employer burden. The survey sample was drawn from a file of employers covered by Florida's Reemployment Assistance law using U.S. Bureau of Labor Statistics (BLS) methods and software. The sample was stratified by size and industry sector. Within the size/industry strata, establishments were selected at random except for large employers (250+), of which all were selected. Only private-sector establishments were included in the sampling frame. The final sample had almost 54,000 establishments. Based on random probability sampling, these employers represented all employers in the industry sampling frame. Data collection extended from April 2017 until mid-November 2017. The survey had a final response rate of 72.9 percent. All industry super sectors exceeded the required 70 percent response rate. The survey files were submitted to LMS as they were completed and the entire survey was finished in December 2017. The raw survey data were then converted to estimates representing all employment in the sampling frame using BLS methodology. Publishable and valid results were produced for all of Florida's 24 Local Workforce Development Areas.

### WHAT IS A SKILLS GAP?

*While there is no single definition of a skills gap, a skills gap is generally considered to be a difference in the skills required or desired for a job by an employer and the actual skills and capabilities of the available workforce.*



The final survey results measured 247,399 job vacancies. The largest number of vacancies by Industry were found in Education and Health Services, which had an estimated 60,843 vacancies, followed by Leisure and Hospitality with 51,772 vacancies. The largest number of vacancies by Occupational Group were found in Food Preparation and Serving Occupations (39,302). Sales and Related Occupations ranked second in the number of vacancies (35,394).

Skills gaps were estimated for job vacancies using the weights assigned to the establishment in the random sample selection process, along with adjustments for survey nonresponse. Skills gaps measures are presented as either total gaps reported or gaps per vacancy. Individual occupations could have several gaps for both soft and hard skills. The highest number of skills gaps were reported in the soft skills of Communication. The next highest soft skills gaps were reported in Reliability/Time Management. The number of hard skills gaps reported were much lower than those for soft skills. Information Technology/Research skills ranked first among hard skills gaps followed by Workplace skills, such as Tool Use and Selection and Safety skills.

The Mining and Construction industry had the largest number of soft and hard skills gaps per vacancy of all of the industry groups statewide. The Building and Grounds Cleaning and Maintenance major occupation group reported the most soft skills gaps per vacancy. The Farming, Fishing, and Forestry major occupation group reported the most hard skills gaps per vacancy. Employers without gaps were asked how they avoided skills gaps in hiring, recruitment, training, and retention. Around one-third of the skills gap mitigation responses indicated that applicants are screened carefully before hiring. The next most used gap mitigation technique was to retain high skilled/productive staff. Less than 3 percent of respondents outsourced hiring. The Education and Healthcare industry reported the highest use of gap mitigation followed by Leisure and Hospitality.

Out of a total of 247,399 estimated vacancies reported by the nearly 54,000 Florida private-sector employers surveyed, 62,941 vacancies were reported to have skills gaps. This represented about one-third of the total employers that experienced skills gaps with job seekers, current and former employees. According to these employers, skills gaps are found across all occupations and education levels in Florida's labor market. As such, the survey results provide one of the clearest signals from private-sector employers to the workforce, education, and economic development partnerships about employers' skills needs. Skills are a key to growing an economy and a viable labor market for employees, students, and job seekers.

Upgraded skills will help Florida's workers be more competitive in the production of the goods and services demanded by state, national, and international economies. The results of enhanced skills to Florida's workers will include better wages, increased wage gains, higher rates of job retention, broader opportunities for career advancement, and more stable and rewarding career pathways. For the workforce and education partnerships, enhancements made to wraparound services, training, and curriculum developed from gap results could make the workforce and education systems much more effective in meeting the skills needs of private-sector employers. The skills gap survey results contain enough actionable data to inform both individual workers and the industries (and employers) who need higher skilled workers. They can be used to develop tools and strategies based on gap mitigation findings to promote gap mitigation and retention among employers struggling with retention issues. It also can be used to help better align workforce and educational training program outcomes and design to better fit employer-reported needs.

## BACKGROUND

The question of the existence of skills gaps has generated much discussion in human resource management, workforce development, and economic development. Academics and journalists take sides on the question, authoring articles to disclaim the existence of a skills gaps. However, it is important for state and local workforce agencies to address skills gaps when implementing the Workforce Innovation and Opportunity Act (WIOA). Since there is no national statistical program to collect information on skills gaps, CareerSource Florida partnered with LMS and CareerSource Broward to design and implement a pilot survey to capture job vacancies and skills gaps directly from Florida employers. Using experience in conducting job vacancy/hiring needs surveys, LMS designed a survey instrument to collect both job vacancies and skills gaps. Broward County was selected for the pilot survey study due to its large and complex labor market. In addition, CareerSource Broward has been a state leader in its support of job vacancy/hiring needs surveys and in promoting skills gap research. Because of the success of the pilot, LMS was able to proceed with the full statewide survey of all 24 Local Workforce Development Areas. This survey and study is one of the largest efforts to date addressing the issue of skills gaps in the labor market.

## SURVEY GOALS

The survey was designed to collect job vacancies and vacancy attributes in Florida with skills gaps. Additionally, it was designed to identify whether gaps are soft skills such as Reliability/Time Management, Communication, Leadership, Problem-Solving or hard skills such as Math, Technology/Research, and Workplace skills, such as safety. Though job vacancy data were collected, the major focus of the study was on skills gaps. The survey was also intended to provide insights on how businesses mitigate against skills gaps in hiring, retention, and staff development. By following the basic design and methods of prior Job Vacancy/Hiring Needs Surveys, LMS was able to capitalize on experiences gained in order to collect and analyze skills gap data. In addition, a baseline of previous results could be compared to the 2017 results. The research design would allow extensive analysis including gaps by industry, educational requirements, occupation, and major occupational group. Patterns of employer recruiting and gap reporting could likewise be analyzed. The survey was conducted across all of Florida's 24 Local Workforce Development Areas enabling the analysis of both local and statewide results for vacancies, skills gaps, and gap mitigation techniques.

The final results were designed to be actionable enabling workforce, economic development, and education partners to modify their operations and service delivery to be more aligned to meet the skill needs of private-sector employers in their areas.

## SURVEY INSTRUMENT DESIGN

A search of other skills gap surveys helped to identify effective survey structures and viable questionnaire wording for skills gaps. The final survey design conformed to widely used questions from job vacancy surveys, with skills gap questions added. The survey instrument was designed to first collect job vacancies, along with vacancy attributes, with a structured loop from the vacancy questions to address the skills gap questions. This provided a direct link between active job vacancies and the barriers to filling them. The gap questions were divided into seven major questions and then broken down further into soft and hard skills. The final design of 19 soft skills and 10 hard skills with an additional open-ended "other" skills gap selection for each. If an establishment reported no gaps, they were asked how gaps were avoided in hiring, retention, and recruitment (gap mitigation). There were four gap mitigation choices and an "other" mitigation category. If the establishment reported no vacancies, they were asked if they were experiencing skills gaps in any occupations for which they had no current vacancies. If they reported yes, they were asked to identify the occupations and related skills gaps. See Appendix I for the final survey questions.

## DATA COLLECTION

The survey data collection was conducted by a DEO contractor, Oppenheim Research. The survey was conducted by phone using CATI technology. This method of data collection has proven response times, provides excellent sample control, and allows for monitoring with minimal employer burden. Since the survey instrument was new, a pre-test was conducted before the full survey was commenced in April 2017. The survey was completed in mid-November 2017. Data collection was extended in South Florida due to Hurricane Irma.

## SAMPLE FRAME AND SELECTION

The sample was drawn from a file of employers covered by Florida's Reemployment Assistance program using BLS methods and software. The sample included only private-sector establishments, and was stratified by six size classes within two-digit North American Industry Classification System (NAICS) industry sectors. Establishments were selected at random within the size/industry strata, except for large employers (250+ employment) of which all were included. Utilizing this methodology resulted in a representative sample for each Local Workforce Development Area and industry size strata. Each sample member was assigned a strata code (combination of industry and size) and a weight (the count of total establishments divided by the number of sample establishments in each strata) that was used to produce the final estimates. This sample design resulted in 113 strata for larger areas with a total of approximately 54,000 establishments. Smaller areas could have fewer strata if no establishments were found in the various size classes or industries. The final sample in each area was adjusted for nonresponse based on the required response rate by industry (70 percent).

**TABLE 1: RESPONSE RATE FLORIDA SKILLS GAP SURVEY 2017**

NAICS Super Sector	Total Sample	Useable Sample	Completed	Useable Response Rate
Trade, Transportation and Utilities	13,584	12,118	8,974	74.1%
Leisure and Hospitality	10,325	9,285	6,706	72.2%
Education and Health Services	8,191	7,352	5,326	72.4%
Professional and Business Services	7,994	6,390	4,572	71.5%
Mining, Logging and Construction	4,578	4,057	2,977	73.4%
Financial Activities	3,390	2,793	2,009	71.9%
Manufacturing	2,749	2,474	1,804	72.9%
Other Services	2,089	1,847	1,397	75.9%
Information	1,087	725	528	72.8%
<b>Total</b>	<b>53,987</b>	<b>47,041</b>	<b>34,293</b>	<b>72.9%</b>

*\*Usable Sample is defined as sample that is not out of scope (out of business or out of region)*

*Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics*

## ESTIMATION OF VACANCIES AND SKILLS GAPS

All the sample establishments in the survey were assigned an estimating strata based on the parameters set when the sample was designed and selected. For example, one of the strata was size class 1 of the information industry, which contained 224 employers. The sample selection software indicated that 10 employers were needed in this strata. Consequently, this strata was assigned a weight of 22.4 (224/10) when the sample was selected using BLS software. When the job vacancy, attributes, gaps, and gap mitigation data were collected by establishment, they were arrayed by estimating strata and each numeric response was multiplied by the weight. Additional weighting was applied due to survey nonresponse within the estimating strata. The goal was to account for all of the survey units and employment originally found in all of the size/industry estimating strata. The final vacancy estimate for an occupation was the aggregate weighted estimate for the occupation by estimating strata. Vacancy attributes (full-time/part-time, temporary/permanent, experience requirements, etc.), skills gaps, and gap mitigations were weighted and aggregated the same way. All data reported was subjected to extensive review including coding, proper data format, and adherence to data definitions.

Final estimates for skills gaps were calculated. The total number of skills gaps could be fairly high as they represented responses for all establishments in an area. Job vacancy data were calculated as the number of estimated vacancies by occupation and these could be combined to provide data by occupational group or industry.

## CONFIDENTIALITY SCREENING OF RESULTS

Estimates by industry and occupation were screened for confidentiality and suppressed if either: (a) there were fewer than three establishments used in the estimate for the geographic area, or (b) one employer constituted more than 80 percent of the estimated employment. This method was in conformance with BLS suppression rules.

It is important to define the following terms that will be referenced throughout this report: industry, industry super sector, major occupational group, and occupation. An industry is a group of employers that produce similar goods or provide similar types of services. An industry super sector is an aggregated grouping of employers that produce and provide similar goods and services. In other words, an industry super sector is a collection of similar industries. Industry super sectors will be denoted by using italics.

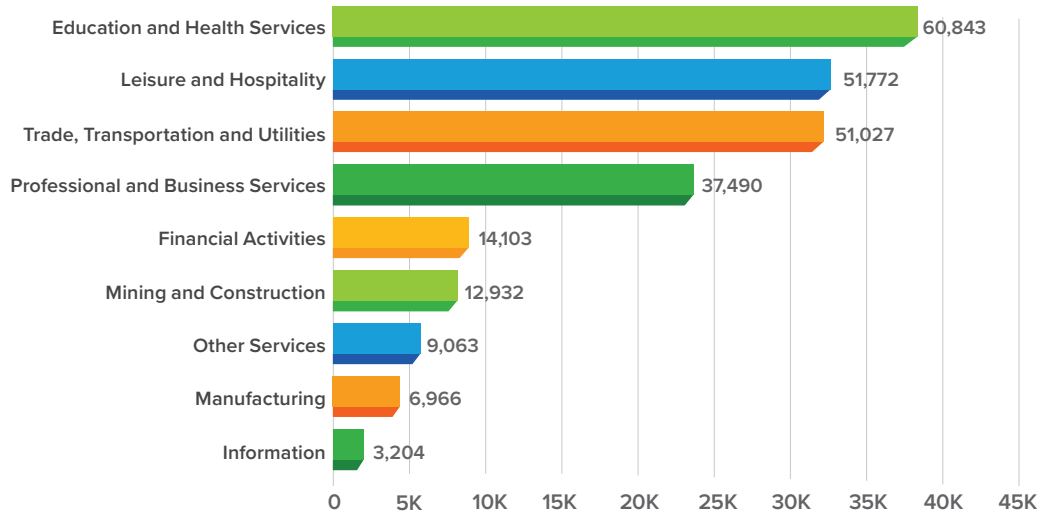
The Standard Occupational Classification (SOC) system is used by government agencies to assist in the collection and analysis of occupational data. An occupation is a group of jobs that have been categorized by the job duties performed. Under the SOC system, there are 840 classified occupations and those are grouped into 23 major occupational groups based on the type of work performed. Occupations and occupational groups are also italicized.

## JOB VACANCIES

**FIGURE 1** shows estimated vacancies by industry super sector. Most of the vacancies were in *Education and Health Services* (60,843), followed by *Leisure and Hospitality* (51,772). These are two of the largest employment super sectors in Florida. *Trade, Transportation, and Utilities* ranked third among the industry super sectors with 51,027 estimated vacancies.



**FIGURE 1: JOB VACANCIES BY INDUSTRY SUPER SECTOR**

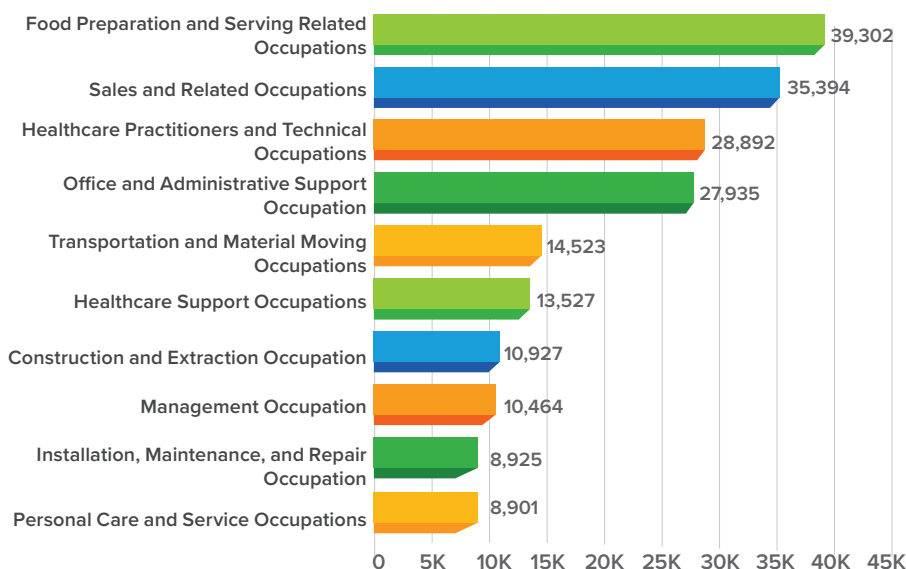


Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics

Note: Total sum of vacancies across industries differ from the total 247,399 vacancies reported due to rounding.

**FIGURE 2** shows the 10 major occupational groups in Florida with the most vacancies. An estimated 39,302 job vacancies were found in the major occupational group *Food Preparation and Serving Related* occupations followed by *Sales and Related* occupations (35,394 vacancies). Occupations in these groups support Florida's *Leisure and Hospitality* and *Wholesale and Retail Trade* industries. *Healthcare Practitioners and Technical* occupations (28,892 vacancies) and *Healthcare Support* occupations (13,527 vacancies) were found almost exclusively in the health care industry. *Management* occupations had 10,464 job vacancies and were found across all industry sectors. *Office and Administrative Support* occupations ranked fourth based on major occupational groups and had 27,935 vacancies. Note that these vacancies were all in the private sector. The fewest vacancies were estimated in the *Farming, Fishing, and Forestry* occupational group (136 vacancies).

**FIGURE 2: JOB VACANCIES BY MAJOR OCCUPATIONAL GROUP**



Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics



**FIGURE 3** shows the 15 occupations in Florida with the most vacancies. Examining occupations by estimated vacancies measures the demand for the knowledge, skills, and abilities (KSAs) within the occupation. These are the KSAs needed by employers to deliver the goods and services demanded by the economy. Many of the top occupations reflect employers in the *Trade, Transportation, and Utilities, Education and Health Services, and Leisure and Hospitality* super sectors with *Retail Salespersons, Registered Nurses, and Combined Food Preparation and Serving Workers* being the top occupations. Several of the top 15 occupations were healthcare-related, including *Registered Nurses*, which ranked second with 14,657 vacancies, and *Nursing Assistants* which ranked fifth with 7,190 vacancies. *Licensed Practical Nurses* was another high demand healthcare occupation with 2,981 vacancies.

Eight of the top 15 occupations could be referred to as tourism-related as they are most likely to be found in *Leisure and Hospitality* and *Retail Trade* industries. *Retail Salespersons* (16,025 vacancies), *Combined Food Preparation and Serving Workers* (10,260 vacancies), and *Waiters and Waitresses* (6,573 vacancies) were among the top occupations found in the leisure and hospitality industry.

Many occupations support the demand for goods and services across several sectors of Florida's economy. These occupations include *Security Guards* (5,205 vacancies), *Stock Clerks and Order Fillers* (5,292 vacancies), and *Receptionists and Information Clerks* (3,289 vacancies). *Heavy Tractor-Trailer Truck Drivers* (3,396 vacancies) supports the *Transportation and Warehousing* industry within the *Trade, Transportation, and Utilities* industry super sector.



Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics

## JOB VACANCY ATTRIBUTES

The attributes of job vacancies were also collected along with the number of vacancies. Attributes included permanent/temporary status, full-time/part-time, experience in years and also whether the job required a certification or license, how long the vacancy had been open (in days), and the education requirement specified by the employer. Attributes were important since they provided more detailed information about the nature of the vacancy. Vacancies opened for an extended length could be classified as hard-to-fill and possibly in shortage, while education requirements specify what the employer specifically needs. This was an important measure and provided better employer-based needs as opposed to entry-level requirements. The majority of vacancies (90.1 percent, or 222,938 vacancies) in Florida were permanent positions, as shown in Table 2A.

### TABLE 2A: PERMANENT/TEMPORARY STATUS OF VACANCIES

Description	Estimated Vacancies	Percent
Permanent	222,938	90.1%
Temporary/Seasonal	24,448	9.9%
<b>Total</b>	<b>247,386</b>	<b>100%</b>

Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics

Note: Total estimated vacancy counts may differ due to varying valid response totals received for each question. Values may not sum to the total due to rounding.

### TABLE 2B: FULL-TIME/PART-TIME STATUS OF VACANCIES

Description	Estimated Vacancies	Percent
Full-Time	168,215	68.0%
Part-Time	79,166	32.0%
<b>Total</b>	<b>247,381</b>	<b>100%</b>

Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics

Note: Total estimated vacancy counts may differ due to varying valid response totals received for each question. Values may not sum to the total due to rounding.

Over two-thirds of vacancies statewide were for full-time positions, as shown in Table 2B. Nearly one-third required less than one year of experience, as shown in Table 2C. One to two years of experience was required for 26.6 percent of vacancies and 5.9 percent of vacancies required over five years of experience.

### TABLE 2C: EXPERIENCE REQUIREMENT OF VACANIES

Experience	Estimated Vacancies	Percent
Less than 1 year required	72,713	29.4%
1-2 years required	65,889	26.6%
3-4 years required	19,134	7.7%
Over 5 years required	14,694	5.9%
Not reported	74,945	30.3%
<b>Total</b>	<b>247,375</b>	<b>100%</b>

Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics

Note: Total estimated vacancy counts may differ due to varying valid response totals received for each question. Values may not sum to the total due to rounding.

## TABLE 2D: CERTIFICATE/LICENSE REQUIREMENT OF VACANCIES

Certificate/License	Estimated Vacancies	Percent
Certificate Required	87,666	35.4%
No Certificate Required	159,727	64.6%
<b>Total</b>	<b>247,393</b>	<b>100%</b>

Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics

Note: Total estimated vacancy counts may differ due to varying valid response totals received for each question. Values may not sum to the total due to rounding.

Almost two-thirds of reported vacancies required no certificate or license requirement (159,727) as reported in Table 2D. Table 2E shows the minimum education level required for the reported vacancies. The most frequent education requirement of vacancies reported was for high school or GED (31.4 percent), followed by no specific education requirement (22.2 percent). Less than three percent of vacancies required a Master's degree or higher. A total 28.2 percent of the reported vacancies required an education level beyond High School.

## TABLE 2E: EDUCATION REQUIREMENT OF VACANCIES

Education Level	Estimated Vacancies	Percent
No Education Requirement	54,903	22.2%
High School / GED	77,559	31.4%
Vocational or Technical Training	18,682	7.6%
Associate's Degree	14,836	6.0%
Bachelor's Degree	29,105	11.8%
Advanced Degree	6,809	2.8%
Not Specified	45,502	18.4%
<b>Total</b>	<b>247,396</b>	<b>100%</b>

Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics

Note: Total estimated vacancy counts may differ due to varying valid response totals received for each question. Values may not sum to the total due to rounding.

Just over one-third of vacancies (86,981) were open for less than 30 days, as reported in Table 2F. Employers were constantly recruiting and hiring for 18.9 percent of vacancies, while 30.1 percent did not define the length of the vacancy. These figures were consistent with previous studies.

## TABLE 2F: LENGTH OF VACANCIES

Length Vacant	Estimated Vacancies	Percent
Less than 30 days	86,981	35.2%
Between 30 and 59 days	20,709	8.4%
More than 60 days	18,502	7.5%
Always recruiting\hiring	46,778	18.9%
Not Specified	74,405	30.1%
<b>Total</b>	<b>247,375</b>	<b>100%</b>

Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics

Note: Total estimated vacancy counts may differ due to varying valid response totals received for each question. Values may not sum to the total due to rounding.

## SKILLS GAPS

Employers reported skills gaps in applicants applying for vacancies from a list of four major soft skills groups and three major hard skills groups. These were estimated like vacancies with the sample weight and nonresponse adjustments applied to provide gap totals for all gap measures across all employers in the private sector. These were then converted to a skills gap per vacancy by dividing by the number of vacancies in each industry, occupational group, and occupation. Each major soft and hard skills gaps group was comprised of detailed skills. For example, the major soft skills gap group Reliability/Time Management included the detailed skills of Attendance, Meeting Deadlines, and Dependability. Figure 4 displays a list of detailed skills categories that make up each major skills gap group.

**FIGURE 4: SOFT/ HARD SKILLS GAPS OF JOB APPLICANTS**

Soft Skills	Hard Skills
<b>Reliability and Time Management</b> Attendance Meeting Deadlines Dependability <b>Communication</b> Interpersonal Reading and Writing Phone Etiquette Customer Service Sales Active Listening Following Directions <b>Leadership</b> Management Team Work/ Team Participation Initiative Motivation Entrepreneurial/ Business Ideas <b>Problem-Solving</b> Critical Thinking Analytical Research Trouble-Shooting <b>Other Soft Skills</b>	<b>Math</b> Arithmetic Accounting/ Bookkeeping Logic Job-Specific Mathematics Requirements <b>Information Technology or Research</b> Computer/ Information Technology Usage System-Specific Job Related Research Electrical/ Electronic <b>Workplace</b> Tool Use and Selection Safety Skills <b>Other Hard Skills</b>

Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics

## GAP MITIGATION

Out of a total of 247,399 estimated vacancies, 184,458 were reported with no skills gaps. This represented about two-thirds of the total employers. If employers reported no skills gaps, they were asked how they avoided gaps in hiring, training, and retention. Four options were available to report gap mitigation.

By industry, employers in *Education and Health Services* had the highest ratio of mitigation gap scores to vacancies within the industry as reported in Table 3. Gaps in the *Education and Health Services* industry were primarily mitigated through tight screening criteria in hiring practices and the retention of the best staff members. On the other hand, employers in the *Leisure and Hospitality* industry used a combination of careful screening practices and post-hire training to reduce skills gaps. Across all industries, careful screening practices and retaining valuable staff were the most favored techniques. Outsourcing was the least used gap mitigation method.

**TABLE 3: SKILLS GAP MITIGATION BY INDUSTRY**

Industry	Screen applicants carefully, then hire	Hire and then train or upskill	Retain high skill/productive staff	Contract out or outsource	Other Methods
Education and Health Services	98.5%	73.6%	96.1%	6.0%	2.5%
Leisure and Hospitality	94.7%	95.0%	91.6%	7.2%	1.7%
Trade, Transportation, and Utilities	96.4%	95.6%	91.9%	5.3%	2.2%
Professional and Business Services	98.3%	89.9%	95.5%	14.6%	3.9%
Financial Services	96.2%	91.5%	95.6%	13.0%	1.6%
Mining, Logging, and Construction	96.5%	89.2%	91.0%	10.1%	2.9%
Other Services	96.0%	92.5%	96.4%	7.3%	0.5%
Manufacturing	93.4%	82.4%	96.1%	22.8%	3.0%
Information	98.8%	91.2%	97.1%	6.0%	0.4%

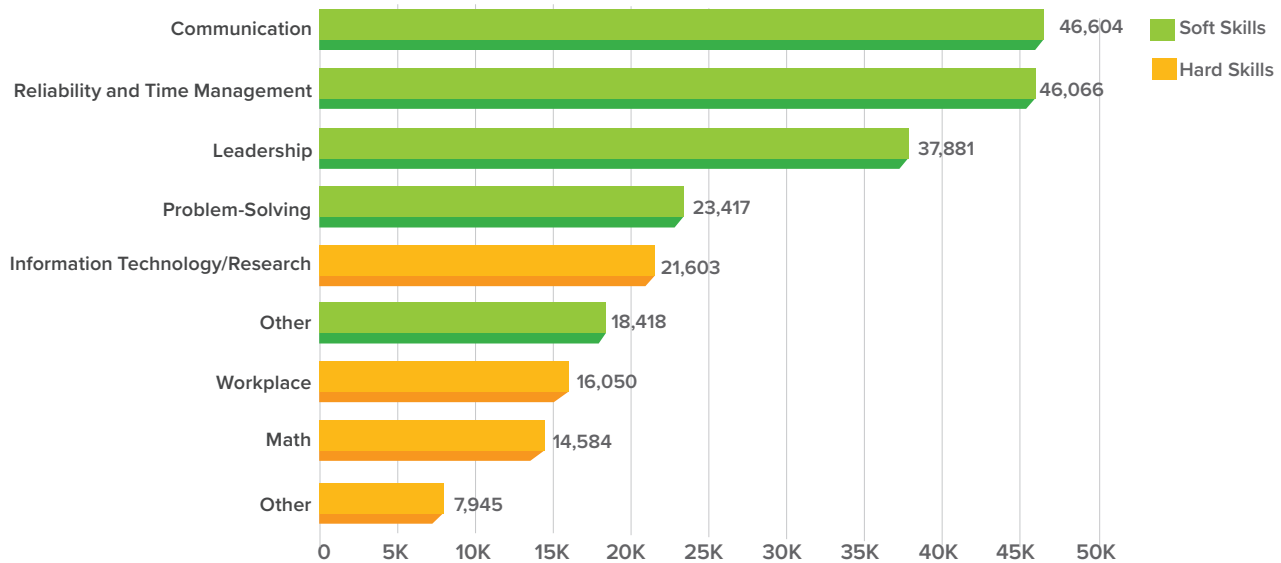
Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics

The top 25 occupations, by ratio of mitigation gap scores to vacancies available for the occupation, were also evaluated. *Security Guards* were ranked the highest by this metric, with an overall score of 3.57 gaps to every vacancy, followed by *Bill and Account Collectors* (3.53). Employers of both occupations typically used screening, training, or upskilling and then retention as a way of mitigating skills gaps. For the top 25 occupations, careful screening was the most frequently reported gap mitigation method, followed by retention methods. Outsourcing was the least frequently used.

## GAP MEASUREMENT

**FIGURE 5** reports the frequency of occurrence for soft and hard skills gaps in Florida. Communication skills as well as Reliability/Time Management were the most significant soft skills gaps reported in Florida. Gaps in Communication skills occurred in 18.1 percent of all vacancies and gaps in Reliability/Time Management occurred in 17.9 percent of all vacancies.

**FIGURE 5: SOFT AND HARD SKILLS GAP TOTALS**



Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics

Gaps in hard skills were reported much less frequently than gaps in soft skills. Information Technology/Research skills represented the largest estimated hard skills gaps across all sectors, with skills gaps occurring in 8.4 percent of vacancies.

Among employers reporting skills gaps, soft skills gaps were reported twice as often as hard skills gaps. The greater prevalence of soft skills gaps at the statewide level is consistent with initial findings in DEO's pilot study based in Broward County.

**TABLE 4A** reports the rate of occurrence of soft skills gaps by industry super sector. The number in the column “Number of Skills Gaps per Vacancy” indicates the average number of skills gaps per vacancy reported. For example, the two industry sectors that reported the largest overall gaps per vacancy were *Mining and Construction* and *Professional and Business Services*, reporting ratios of 0.87 and 0.82, respectively.

The percent in each skills column can be interpreted as the percent of vacancies in which a skills gap had been reported in each industry listed. For example, 19.5 percent of the job vacancies in the *Leisure and Hospitality* industry had reported Communication skills gaps compared to the 13.1 percent of the job vacancies in the *Manufacturing* industry that reported Communication skills gaps.

*Mining and Construction* reported its largest soft skills gap rates in the areas of Reliability/Time Management (25.5 percent) and Communication (18.1 percent). Problem-Solving skills gaps occurred the least frequently.

*Professional and Business Services* reported its largest soft skills gap rates in the areas of Communication and Reliability/Time Management, followed closely by Leadership. Together these three skills gaps represented over 75 percent of gaps reported in the industry. The Problem-Solving skills gaps occurred almost half as frequently as the next most common gap in this industry.

**TABLE 4A: PERCENT OF VACANCIES WITH SOFT SKILLS GAPS BY INDUSTRY SUPER SECTOR**

Industry	Communication	Reliability and Time Management	Leadership	Problem-Solving	Other	Number of Skills Gaps per Vacancy
Mining and Construction	18.1%	25.5%	17.0%	12.4%	13.8%	<b>0.87</b>
Professional and Business Services	22.8%	21.2%	19.2%	10.9%	8.1%	<b>0.82</b>
Leisure and Hospitality	19.5%	19.6%	16.4%	7.7%	7.0%	<b>0.70</b>
Trade, Transportation, Utilities	19.2%	18.9%	13.9%	7.9%	7.8%	<b>0.68</b>
Other Services	18.0%	19.2%	12.7%	6.2%	10.6%	<b>0.67</b>
Education and Health Services	15.5%	14.9%	13.0%	11.2%	4.7%	<b>0.59</b>
Manufacturing	13.1%	12.9%	12.0%	7.3%	5.8%	<b>0.51</b>
Financial Services	12.2%	8.9%	9.5%	5.5%	4.9%	<b>0.41</b>
Information	7.6%	3.6%	3.9%	3.0%	5.2%	<b>0.23</b>

Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics



Although some industries may share high concentrations of gaps in the same skills group, the individual skills contributing to those gaps frequently vary across industries. Employers in both *Mining and Construction* and *Professional and Business Services* reported high gap rates in Communication skills, however, within that skills group, the more detailed skill that contributed the most to those gaps is different for each industry. In *Mining and Construction*, the top Communication skills gap was following directions, while in *Professional and Business Services* it was interpersonal skills. The *Trade, Transportation, and Utilities* super sector also reported a relatively high rate of Communication skills gaps, but the largest contributor to the high rate in this sector was customer service, which is a useful skill in an industry where employees interact on a daily basis with customers.

**TABLE 4B** reports the rate of occurrence of hard skills gaps by industry super sector. Mining and Construction and Manufacturing reported the largest overall numbers of gaps per vacancy at 0.45 and 0.35 hard skills gaps per vacancy, respectively. The hard skills gaps reported by Mining and Construction employers were driven by Information Technology/Research gaps as well as Workplace skills. The hard skills gaps with the most reported gaps in Manufacturing was Information Technology/Research.

**TABLE 4B: PERCENT OF VACANCIES WITH HARD SKILLS GAPS BY INDUSTRY SUPER SECTOR**

Industry	Information Technology / Research	Workplace-Related	Math	Other	Number of Skills Gaps per Vacancy
Mining and Construction	15.2%	12.7%	10.4%	6.8%	<b>0.45</b>
Manufacturing	12.9%	8.9%	8.2%	5.2%	<b>0.35</b>
Professional and Business Services	11.6%	6.8%	6.8%	4.2%	<b>0.29</b>
Other Services	11.2%	6.0%	4.6%	5.1%	<b>0.27</b>
Trade, Transportation, Utilities	8.6%	5.6%	6.3%	3.0%	<b>0.23</b>
Education and Health Services	6.8%	8.8%	4.3%	2.3%	<b>0.22</b>
Financial Services	9.1%	2.6%	4.0%	3.0%	<b>0.19</b>
Information	6.3%	2.7%	2.7%	3.3%	<b>0.15</b>
Leisure and Hospitality	4.7%	2.7%	4.9%	1.6%	<b>0.14</b>

Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics

Gaps in Information Technology/Research skills are the most common among hard skills gaps, but this is another case where we can see that it is not the same specific skill causing high gap rates. In *Professional and Business Services*, the most common skills gap is in Computer skills, which is commonly required for occupations that provide more technical services like an architect or an accountant. In the *Mining and Construction* and *Manufacturing* industries however, the most common Information Technology gap comes from system specific/job skills.



## SKILLS GAPS BY MAJOR OCCUPATIONAL GROUP

**TABLE 5A** breaks down the soft skills gaps by each major occupational group. *Building and Grounds Cleaning and Maintenance* had the largest ratio of total soft skills gaps to vacancies with 1.17 gaps per vacancy. Gaps in Reliability/Time Management were the most frequent for this occupation group, with employers reporting that 34.5 percent of vacancies featured a gap in this skill. *Healthcare Support* had the second highest ratio of total gaps per vacancy with 1.15. Gaps in Communication skills were the most frequent for this occupation group, with employers reporting that 29.0 percent of vacancies featured a gap in this skill. *Farming, Fishing, and Forestry* had the third highest ratio of total soft skills gaps to vacancies with 1.02 gaps per vacancy, followed by *Construction and Extraction* with 0.90 gaps per vacancy. Gaps in Leadership skills were the most commonly cited soft skills gap in *Farming, Fishing, and Forestry*, with 27.5 percent of vacancies experiencing such a gap, while gaps in Reliability/Time Management were the most common in *Construction and Extraction* with 30.9 percent of vacancies experiencing a gap.

**TABLE 5A: PERCENT OF VACANCIES WITH SOFT SKILLS GAPS BY MAJOR OCCUPATIONAL GROUP**

Major Occupational Group	Communication	Reliability and Time Management	Leadership	Problem-Solving	Other	Number of Skills Gaps per Vacancy
Building and Grounds Cleaning and Maintenance	27.5%	34.5%	29.0%	10.8%	14.8%	<b>1.17</b>
Healthcare Support	29.0%	28.8%	22.0%	22.7%	12.8%	<b>1.15</b>
Farming, Fishing, and Forestry	21.1%	21.1%	27.5%	13.5%	19.1%	<b>1.02</b>
Construction and Extraction	17.8%	30.9%	17.5%	11.4%	12.3%	<b>0.90</b>
Personal Care and Service	22.8%	23.9%	20.1%	8.2%	7.2%	<b>0.82</b>
Protective Service	24.9%	21.4%	17.9%	7.5%	6.8%	<b>0.79</b>
Food Preparation and Serving Related	20.8%	21.1%	17.6%	8.5%	7.5%	<b>0.76</b>
Sales and Related	21.8%	20.0%	15.5%	8.9%	8.4%	<b>0.75</b>
Installation, Maintenance, and Repair	19.0%	18.1%	15.3%	10.8%	9.5%	<b>0.73</b>
Transportation and Material Moving	19.2%	19.0%	15.1%	5.7%	10.6%	<b>0.70</b>
Production	18.4%	19.5%	14.6%	10.0%	6.8%	<b>0.69</b>
Office and Administrative Support	19.4%	16.8%	14.6%	9.7%	5.5%	<b>0.66</b>
Architecture and Engineering	12.1%	11.9%	10.1%	6.5%	5.8%	<b>0.46</b>
Business and Financial Operations	12.7%	7.8%	10.6%	9.8%	5.4%	<b>0.46</b>
Arts, Design, Entertainment, Sports, and Media	10.7%	9.9%	9.4%	7.7%	6.6%	<b>0.44</b>
Education, Training, and Library	11.4%	11.1%	10.8%	5.3%	4.7%	<b>0.43</b>
Legal	13.7%	5.0%	4.2%	12.7%	6.0%	<b>0.42</b>
Community and Social Services	8.8%	6.6%	8.2%	5.3%	5.6%	<b>0.34</b>
Healthcare Practitioners and Technical	9.2%	8.3%	7.7%	7.3%	1.4%	<b>0.34</b>
Management	7.2%	4.8%	6.4%	4.6%	3.2%	<b>0.26</b>
Life, Physical, and Social Science	4.7%	4.8%	5.7%	5.0%	0.9%	<b>0.21</b>
Computer and Mathematical	3.8%	3.1%	4.4%	4.0%	1.9%	<b>0.17</b>

Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics

**TABLE 5B** breaks down each hard skills gap by major occupational group. *Farming, Fishing, and Forestry* reported the largest ratio of total hard skills gaps to vacancies with 0.49 gaps per vacancy. For this occupational group, gaps in Workplace skills were most commonly reported (19.8 percent of vacancies). *Construction and Extraction* was second with 0.45 gaps per vacancy, followed closely by *Installation, Maintenance, and Repair* and *Production*, both of which reported 0.44 gaps per vacancy. Gaps in Information Technology/Research skills were most commonly reported for *Construction and Extraction* and *Production* (14.4 percent of vacancies in both occupational groups), while gaps in Workplace skills were most commonly reported for *Installation, Maintenance, and Repair* (15.3 percent of vacancies).

**TABLE 5B: PERCENT OF VACANCIES WITH HARD SKILLS GAPS BY MAJOR OCCUPATIONAL GROUP**

Major Occupational Group	Information Technology / Research	Workplace-Related	Math	Other	Number of Skills Gaps per Vacancy
Farming, Fishing, and Forestry	14.7%	19.8%	13.5%	1.3%	<b>0.49</b>
Construction and Extraction	14.4%	13.2%	10.5%	6.6%	<b>0.45</b>
Installation, Maintenance, and Repair	14.6%	15.3%	7.8%	6.7%	<b>0.44</b>
Production	14.4%	12.5%	8.9%	7.6%	<b>0.44</b>
Building and Grounds Cleaning and Maintenance	11.7%	13.5%	7.3%	6.8%	<b>0.39</b>
Architecture and Engineering	16.6%	6.3%	6.9%	4.3%	<b>0.34</b>
Office and Administrative Support	11.5%	7.3%	6.3%	4.1%	<b>0.29</b>
Transportation and Material Moving	8.2%	5.7%	6.7%	5.5%	<b>0.26</b>
Healthcare Support	14.8%	7.6%	2.5%	0.0%	<b>0.25</b>
Sales and Related	9.8%	3.6%	6.6%	2.1%	<b>0.22</b>
Computer and Mathematical	9.7%	1.6%	3.8%	5.4%	<b>0.21</b>
Arts, Design, Entertainment, Sports, and Media	8.7%	3.9%	3.0%	4.5%	<b>0.20</b>
Legal	5.0%	1.7%	10.8%	2.5%	<b>0.20</b>
Business and Financial Operations	8.4%	2.0%	5.2%	2.7%	<b>0.18</b>
Healthcare Practitioners and Technical	4.8%	6.5%	2.8%	1.4%	<b>0.16</b>
Personal Care and Service	4.1%	3.8%	5.3%	1.8%	<b>0.15</b>
Education, Training, and Library	7.4%	3.0%	3.2%	1.2%	<b>0.15</b>
Food Preparation and Serving Related	4.7%	3.5%	4.8%	1.5%	<b>0.15</b>
Life, Physical, and Social Science	3.2%	3.8%	4.0%	1.7%	<b>0.13</b>
Management	5.1%	2.1%	2.5%	2.1%	<b>0.12</b>
Protective Service	5.2%	1.8%	3.8%	0.8%	<b>0.12</b>
Community and Social Services	4.1%	0.5%	0.7%	1.3%	<b>0.07</b>

Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics



**TABLE 6A** shows the top 15 occupations by ratio of total soft skills gaps to vacancies for the occupation, and breaks down the soft skills for each occupation by share of vacancies reporting gaps for the skill.

**TABLE 6A: PERCENT OF VACANCIES WITH SOFT SKILLS GAPS BY OCCUPATION**

Occupation	Communication	Reliability and Time Management	Leadership	Problem-Solving	Other	Number of Skills Gaps per Vacancy
Tax Preparers	67.2%	50.6%	67.0%	65.2%	36.8%	<b>2.87</b>
Telemarketers	56.9%	58.4%	40.5%	31.4%	33.6%	<b>2.21</b>
Ushers, Lobby Attendants, and Ticket Takers	71.0%	68.6%	68.9%	0.3%	1.9%	<b>2.11</b>
Landscaping and Groundskeeping Workers	38.9%	53.2%	50.2%	14.4%	28.6%	<b>1.85</b>
Counter and Rental Clerks	67.5%	26.9%	24.9%	16.1%	17.2%	<b>1.53</b>
Pest Control Workers	37.8%	46.7%	40.7%	16.6%	10.1%	<b>1.52</b>
Medical Assistants	39.4%	36.7%	17.4%	30.3%	23.3%	<b>1.47</b>
Automotive Body and Related Repairers	33.3%	33.7%	29.7%	21.1%	16.8%	<b>1.35</b>
Nursing Assistants	30.3%	30.6%	26.5%	23.2%	14.7%	<b>1.25</b>
Surgical Technologists	32.9%	30.4%	27.6%	30.8%	0.2%	<b>1.22</b>
Respiratory Therapists	35.3%	33.7%	31.9%	18.2%	0.8%	<b>1.20</b>
Light Truck or Delivery Services Drivers	33.1%	29.4%	25.3%	11.6%	17.0%	<b>1.16</b>
Shipping, Receiving, and Traffic Clerks	28.2%	29.5%	26.0%	26.3%	6.0%	<b>1.16</b>
Electricians	23.6%	28.7%	20.1%	19.9%	20.0%	<b>1.12</b>
Construction Laborers	21.5%	42.9%	21.4%	13.8%	10.4%	<b>1.10</b>

Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics

*Tax Preparation* featured 2.87 total soft skills gaps per vacancy. Gaps in Communication, Leadership, and Problem-Solving skills occurred most frequently in this occupation, with gaps in these three skills each being reported in over 65 percent of vacancies. Soft skills gaps for *Telemarketers* were most commonly reported due to gaps in Reliability/Time Management, Communication, and Leadership skills (58.4 percent, 56.9 percent, and 40.5 percent of vacancies, respectively).

**TABLE 6B** reports the top 15 occupations by highest ratio of total hard skills gaps to vacancies for the occupation, and breaks down the hard skills gaps for each occupation by share of vacancies reporting gaps for the skill.

**TABLE 6B: PERCENT OF VACANCIES WITH HARD SKILLS GAPS BY OCCUPATION**

Occupation	Information Technology / Research	Workplace-Related	Math	Other	Number of Skills Gaps per Vacancy
Shipping, Receiving, and Traffic Clerks	11.7%	33.9%	34.0%	2.2%	<b>0.82</b>
Roofers	28.3%	22.2%	23.8%	6.7%	<b>0.81</b>
Landscaping and Groundskeeping Workers	23.6%	28.2%	12.0%	17.0%	<b>0.81</b>
Surgical Technologists	20.2%	33.8%	17.0%	6.5%	<b>0.78</b>
Pest Control Workers	17.9%	15.8%	33.1%	2.3%	<b>0.69</b>
Electricians	35.1%	13.1%	7.2%	10.3%	<b>0.66</b>
Bus and Truck Mechanics and Diesel Engine Specialists	22.3%	30.3%	5.3%	6.8%	<b>0.65</b>
Welders, Cutters, Solderers, and Brazers	14.9%	21.9%	16.5%	6.4%	<b>0.60</b>
Respiratory Therapists	17.3%	35.6%	2.0%	4.1%	<b>0.59</b>
Plumbers, Pipefitters, and Steamfitters	19.2%	19.0%	13.9%	6.1%	<b>0.58</b>
Automotive and Watercraft Service Attendants	17.7%	16.7%	2.0%	16.6%	<b>0.53</b>
Automotive Body and Related Repairers	10.6%	27.7%	7.0%	5.6%	<b>0.51</b>
Pharmacy Technicians	16.4%	16.1%	10.6%	7.5%	<b>0.50</b>
Dental Assistants	14.7%	22.1%	8.3%	4.4%	<b>0.50</b>
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	23.9%	4.0%	6.0%	14.2%	<b>0.48</b>

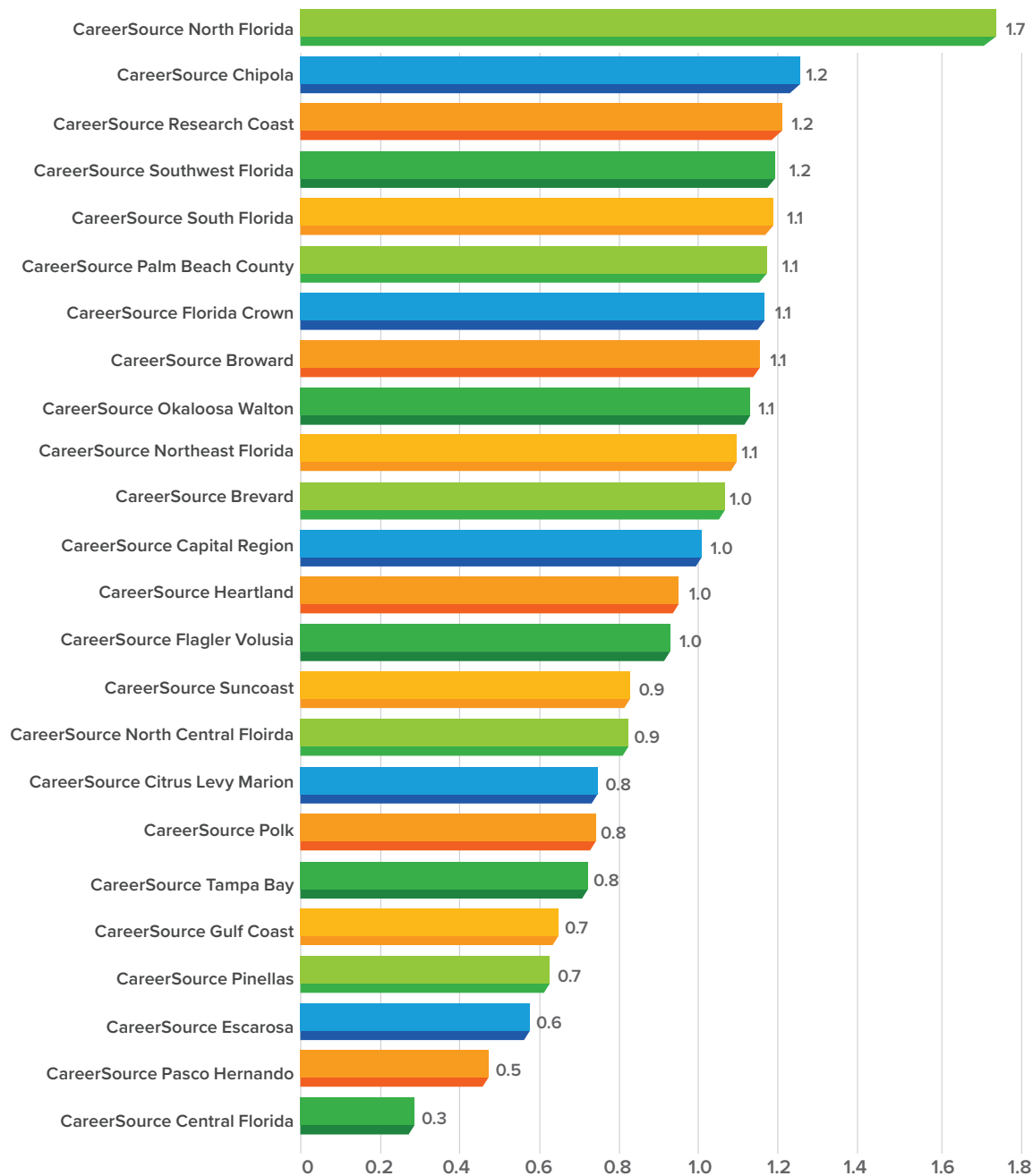
Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics

*Shipping, Receiving, and Traffic Clerks, Roofers, and Landscaping and Groundskeeping Workers* report the highest ratios of total skills gaps to vacancies. In *Shipping, Receiving, and Traffic Clerks*, 34 percent of vacancies were reported to have Math and Workplace hard skills gaps. Among *Roofers*, gaps in Information Technology/Research and Math skills are the most common (28.3 percent and 23.8 percent, respectively), while in *Landscaping and Groundskeeping Workers*, gaps in Workplace skills and Information Technology/Research are the most common (28.2 percent and 23.6 percent, respectively).

## REGIONAL SKILLS GAPS

Employers in each of the 24 Local Workforce Development Areas were included in the survey sample. Figure 6 displays the skills gap concentration for each area, defined as the relative presence of skills gaps in an area controlling for differing regional vacancy levels.

**FIGURE 6: SKILLS GAP CONCENTRATION BY LOCAL AREA**



Source: Skills Gap & Job Vacancy Survey, Florida Department of Economic Opportunity, Bureau of Labor Market Statistics



CareerSource North Florida had the highest concentration of any Local Workforce Development Area at a concentration of 1.7, followed by the CareerSource Chipola (1.2), CareerSource Research Coast (1.2), and CareerSource Southwest Florida (1.2) areas. The Local Workforce Development Areas with the lowest concentration were the CareerSource Central Florida (0.3), CareerSource Pasco Hernando (0.5), and CareerSource Escarosa (0.6) areas.

The three local workforce development areas with the largest gap-to-vacancy ratios contain three of the largest metropolitan areas in the state: Jacksonville, Tampa, and Orlando. In November 2017, the last month of the skills gap survey, all three of these metropolitan areas had seasonally adjusted unemployment rates less than or equal to the state rate of 3.6 percent. This result could indicate that higher skills gap rates are associated with labor markets that are more dynamic and that have a wider variety of both employers and job seekers.

## EDUCATIONAL ATTAINMENT

Job vacancies for different occupations often require different levels of educational attainment. Occupations reported in the skills gap survey were matched to their respective Florida education levels. The Florida education levels represent the minimum educational level for a given occupation as defined by the Florida Department of Education. The Florida education levels are different from the education levels reported by the employers in Table 2E.

Reliability/Time Management skills are the most common soft skills gaps for occupations that require less than High School Diploma/GED. Gaps in Communication skills, such as interpersonal skills and reading, writing, and comprehension, were the most frequent soft skills gaps among occupations that require higher levels of educational attainment. Information Technology/Research skills are the most common hard skills gaps for occupations of all education levels.

## CONCLUSION

Florida's skills gap survey offers an insightful look into the real decisions employers face when confronted with today's challenging and rapidly changing workforce environment. Unlike aggregate data produced at the national level, this data provides a window into the challenges facing Florida's businesses. To that end, this data set offers a wealth of data to employers across the state, Florida's educational institutions and Florida's workforce system. Employers were able to mitigate skills gaps for 75 percent of the reported vacancies, but still had trouble with the other 25 percent of the vacancies reported. The results of this study can be used to develop tools and strategies based on gap mitigation findings to promote gap mitigation and retention among employers struggling with retention issues. It also can be used to help better align workforce and educational training program outcomes and design to better fit employer-reported needs.

This study was made possible because of the participation of employers throughout the state of Florida. The continued cooperation of employers, Local Workforce Development Boards, CareerSource Florida and DEO in studies like this will help Florida become the nation's top performing economy and be recognized as the world's best place to live, learn, play, work and do business.

## APPENDIX I

### JOB VACANCY AND SKILLS GAPS CORE QUESTIONS

Do you currently have any job vacancies at your business or office? If yes, collect vacancies by occupation

- |     |  |
|-----|--|
| JQ1 | Job Title  |
| JQ2 | Job Type:<br>a. Full-Time<br>b. Part-Time  |
| JQ3 | Job Status:<br>a. Permanent<br>b. Temporary  |
| JQ4 | Number of openings   |
| JQ5 | What are the general responsibilities and description for this position?   |
| JQ6 | What minimum education level is required?<br>a. No education required<br>b. High school or GED<br>c. Vocational or technical training<br>d. Associate's Degree<br>e. Bachelor's Degree<br>f. Advanced Degree<br>g. Not specified |
| JQ7 | Is a license or certification required?<br>a. Yes<br>b. No<br>c. Not specified   |
| JQ8 | How much work experience does this position require?<br>a. Less than 1 year<br>b. 1-2 years<br>c. 3-4 years<br>d. Over 5 years<br>e. Not Specified   |
| JQ9 | How long has this position been vacant?<br>a. Less than 30 days<br>b. 30-59 days<br>c. 60+ days<br>d. Always hiring<br>e. Not specified  |

Do applicants for this vacancy lack any soft or hard skills?

If no skills gaps ask gap mitigation question:

If you have no skills gaps, do you:

- a. Screen applicants carefully, then hire?
- b. Hire and then train or upskill?
- c. Retain high skill/productive staff?
- d. Contract out or outsource?
- e. Other (SPECIFY)

End Survey if no gaps and mitigation questions collected.

If yes to gap question collect both soft and hard skills by occupation.

- |     |   |
|-----|---|
| SQ1 | Do applicants for this vacancy lack any of the following skills related to reliability and time management? <ul style="list-style-type: none"><li>a. Attendance</li><li>b. Meeting deadlines</li><li>c. Dependability</li></ul>   |
| SQ2 | Do applicants lack any of the following communication-related skills? <ul style="list-style-type: none"><li>a. Interpersonal</li><li>b. Reading and writing</li><li>c. Phone etiquette</li><li>d. Customer Service</li><li>e. Sales</li><li>f. Active listening</li><li>g. Following directions</li></ul> |
| SQ3 | Do applicants lack any of the following leadership skills? <ul style="list-style-type: none"><li>a. Management</li><li>b. Team work/Team participation</li><li>c. Initiative</li><li>d. Motivation</li><li>e. Entrepreneurial/business ideas</li></ul>  |
| SQ4 | Do applicants lack any of the following problem-solving skills? <ul style="list-style-type: none"><li>a. Critical thinking</li><li>b. Analytical</li><li>c. Research</li><li>d. Trouble-shooting</li></ul>  |
| SQ5 | Are there any other soft skills applicants lack?  |

- SQ6 Do applicants lack any of the following math skills?
- a. Arithmetic
  - b. Accounting/Bookkeeping
  - c. Logic
  - d. Job-specific mathematics requirements
- SQ7 Do applicants lack any of the following technology, information technology, or research-related skills?
- a. Computer/information technology usage
  - b. System-specific job related
  - c. Research
  - d. Electrical/Electronic
- SQ8 Do applicants lack any of the following workplace-related skills?
- a. Tool use and selection
  - b. Safety skills
- SQ9 Are there any other hard or technical skills applicants lack?

Note: This reflects the core questions of the 2017 survey and does not include instructions to interviewers or skip patterns used in the actual survey script. The actual survey was conducted using CATI technology. There are numerous checks used in the actual script to collect employment at the business site, verify area, and verify addresses and to find out if the employer would like to be contacted by local CareerSource Florida network staff.

## APPENDIX II

### FLORIDA'S 24 LOCAL WORKFORCE DEVELOPMENT AREAS

Local workforce development areas may encompass one or more Florida counties as noted below.

CareerSource Escarosa | Escambia, Santa Rosa

CareerSource Okaloosa Walton | Okaloosa, Walton

CareerSource Chipola | Calhoun, Holmes, Jackson, Liberty, Washington

CareerSource Gulf Coast | Bay, Gulf, Franklin

CareerSource Capital Region | Gadsden, Leon, Wakulla

CareerSource North Florida | Hamilton, Jefferson, Lafayette, Madison, Suwannee, Taylor

CareerSource Florida Crown | Columbia, Dixie, Gilchrist, Union

CareerSource Northeast Florida | Baker, Clay, Duval, Nassau, Putnam, St. Johns

CareerSource North Central Florida | Alachua, Bradford

CareerSource Citrus Levy Marion | Citrus, Levy, Marion

CareerSource Flagler Volusia | Flagler, Volusia

CareerSource Central Florida | Orange, Osceola, Seminole, Lake, Sumter

CareerSource Brevard | Brevard

CareerSource Pinellas | Pinellas

CareerSource Tampa Bay | Hillsborough

CareerSource Pasco Hernando | Pasco, Hernando

CareerSource Polk | Polk

CareerSource Suncoast | Manatee, Sarasota

CareerSource Heartland | DeSoto, Hardee, Highlands, Okeechobee

CareerSource Research Coast | Indian River, Martin, St. Lucie

CareerSource Palm Beach County | Palm Beach

CareerSource Broward | Broward

CareerSource South Florida | Miami-Dade, Monroe

CareerSource Southwest Florida | Charlotte, Collier, Glades, Hendry, Lee

