

FLORIDA WORKFORCE NEEDS STUDY

 \bigcirc

 \bigcirc

Contents

- 3 About the Florida Chamber Foundation and This Report
- 5 A Florida Perspective
- 6 Key Insights
- 9 Florida Labor Market Overview
- 14 Target Career Areas
- 24 Guiding Florida's Workforce and Reskilling Opportunities
 - 27 Frequent Transitions out of Oversupplied Career Areas
 - 29 Entry Level Access Points
- 31 Policy Recommendations
- 32 Conclusion
- 33 Appendix



"Talent is quickly replacing the tax incentive as the most important economic development tool in the toolkit."

MARK WILSON President, Florida Chamber Foundation

This report is based on research funded in part by the **BILL & MELINDA GATES FOUNDATION** and would not have occurred otherwise. The findings and conclusions contained within are those of the authors and do not necessarily reflect positions or policies of the Bill & Melinda Gates Foundation (www.gatesfoundation.org).

We are grateful to the Foundation for their continued interest for a better world for all.

Emsi is a leader in advanced labor market analytics, including the development of skills data to better connect job seekers and employers. We provide our clients with the knowledge and tools needed to make strategic, data-driven decisions, increase the efficiency and effectiveness of their action plans, that ultimately result in wealth creation for their citizens.

For over 20 years, Emsi's economists and data scientists have been taking traditional labor market and industry data and making it understandable and actionable for clients. Emsi Skills represents the next evolution of analyzing labor market information, leveraging novel insights from online job postings and professional resumes.

The Florida Chamber Foundation

T HE FLORIDA 2030 BLUEPRINT¹ led by the Florida Chamber Foundation, is a unifying strategic plan for the state of Florida. In the Blueprint that can grow Florida to the 10th-largest global economy in ten years if Florida was a nation, 39 goals for Florida are identified including six for improving Florida's talent pipeline for a better workforce. These goals include ensuring more than 80 percent of the Florida workforce has essential employability skills and more than 60 percent of Floridians aged 25-64 have a high-value postsecondary certificate, degree, or training experience. These metrics and goals are tracked on the Florida Scorecard at <u>www.theFloridaScorecard.org</u>.

With an expected increase of as many as 4 million more Floridians by 2030, Florida Chamber members and other employers need to create an additional 2 million jobs. One key to attracting companies to Florida and helping current Florida companies expand will be the development of a workforce that is highly trained in the skills needed by Florida businesses. As Florida Chamber President and CEO Mark Wilson is often heard saying, "Talent is replacing the tax incentive as the most important economic development tool."

The Florida Chamber Foundation has been creating solutions to workforce issues for decades. *Florida Jobs 2030*² was a breakthrough report that analyzed five of Florida's target industries: Aerospace and Aviation, Finance and Professional Services, Healthcare and Life Sciences, Logistics and Distribution, and Manufacturing. These industries are expected to grow and provide job opportunities not only for those with higher-level degrees, but also those with high school diplomas, postsecondary certifications, and associate's degrees. That Florida Chamber Foundation report helped Florida's state college system identify academic programs as opportunities for training future employees in the workforce.

Earlier this year, the Florida Chamber Foundation surveyed Florida businesses about their future workforce needs. Business leaders, human resource professionals, and local chambers of commerce produced more than 1,000 responses to questions about their workforce's current skills, potential disruptions, and work-based learning opportunities. Many respondents also gave input on how to strengthen the skill levels of the Florida workforce.

1 https://www.flchamber.com/florida-2030



² https://www.flchamber.com/research/research-programs/florida-jobs-2030

In summary, 80.8% of respondents from the survey are expecting to hire new employees over the next year. Yet, about half of the respondents said that additional skills training is needed when new employees show up for work. When employers were asked about their level of concern about the lack of key skills, such as employability skills and digital skills, 75.1% indicated a level of concern, 25.0% were extremely concerned, and 50.1% were somewhat concerned. However, many Florida companies have access to state and federal workforce training programs. When asked about their awareness of such programs, incredibly, 66.8% indicated that they were not aware of the state and federal workforce training programs.

The Florida Chamber Foundation's *Florida Workforce Needs Study* takes a different approach in identifying Florida's workforce needs. Instead of looking at specific industries to identify job opportunities, this report looks at individual occupations that will be needed considering the expected growth in Florida's employment. The advantage of this approach is two-fold. With the knowledge of occupational demand, we can tailor workforce training to the skills being asked for by employers. In addition, we can help those workers who have skills that may not be in-demand in the future by training them with the skills needed for those in-demand jobs.

The reskilling opportunities identified in this report will be especially helpful for adult workers. These workers have already been in the workforce, some for decades, but may find themselves in an occupation with a current or expected low employer demand. In many cases, adult workers have some of the skills needed for a transition to a new occupation. Furthermore, the addition of one or a few new skills may help adult workers obtain new employment in a different industry with faster growth and more job openings.

For additional perspective, at the publishing of this report, Florida has approximately the same number of open jobs looking for people as people looking for jobs. With an anticipated need to create and fill 2 million new jobs by 2030, it's important to remember Florida has 829,342 children under 18 in poverty and 1.8 million adults who lack a High School level education. The Florida Chamber Foundation's Florida Equality of Opportunity Initiative is focused on including these important Floridians in our solutions to secure Florida's future. 80.8% of respondents from the survey are expecting to hire new employees over the next year. Yet, about half of the respondents said that additional skills training is needed when new employees show up for work.

A Florida Perspective

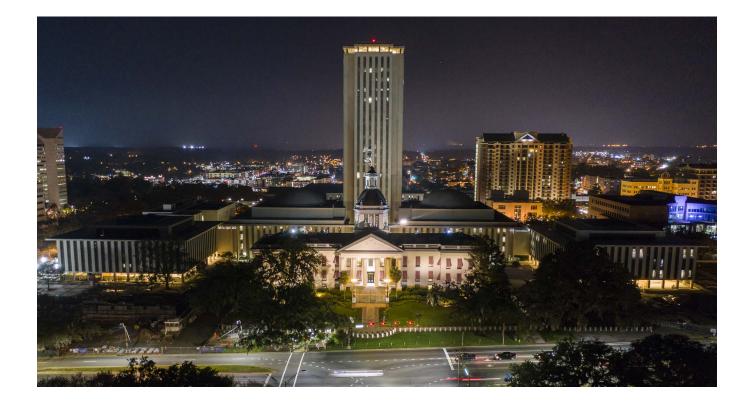
This report is focused on the talent supply and demand gaps across Florida as a whole. Nine separate metro skill reports mirror the analysis of in-demand career areas, competencies, and skills within nine Florida metropolitan statistical areas (MSAs).

With a population of nearly 22 million, Florida is the 3rd most populous state in the nation. Florida's population grew by 1.6 million residents (8%) over the previous five years, the fastest growth rate among the 10 most populous states. Florida's total employment was measured at more than 9 million non-farm jobs in early 2020. In addition, Florida created more than one out of every 11 U.S. jobs between 2015 and 2020.

The largest shares of Florida's jobs are Healthcare, Government, Retail, and Accommodation and Food Services. Florida's Hospitality industry is displayed in the concentration of Accommodation and Food Services jobs, which are 20% more prevalent in Florida compared to national employment. In this analysis, Florida's workers are divided across 17 Emsi Skills-defined broad career areas. Note that since Emsi Skills analyses are conducted from a career area (occupational) perspective, workers in Government and Accommodation and Food Services are distributed throughout numerous career groups.

This report provides a snapshot of Florida's **in-demand careers**

that present opportunities to aid workforce development efforts.



Key Insights

Four career areas showing promise of advanced wages and long-term resiliency:

∰ ÷ IT/Math

(ISI) Business/Finance

B Healthcare

< Architecture/Engineering

These four career areas each display high-volume supply and demand gaps for core competencies in Florida's jobs. They also offer average wage rates well above the state's average, presenting beneficial impacts to both transitioning workers and state employment. These target career areas remained largely aligned across the nine accompanying metro skill reports. Several variations of high-wage and undersupplied career areas did occur. Top skill gaps for each career area are evaluated in full below. The four career areas are shown in **Table 1**.

TABLE 1: TARGET CAREER AREAS AND EXAMPLE SUB-AREAS

CAREER AREA	EXAMPLES
Healthcare	Nursing, medical technology, therapy, medical support
Business/Finance	Financial services, quality/compliance, social sciences, process improvement
⊖+ ⊕+ IT/Math	Software development, cloud data modeling, information security
	Mathematics, electronics, drafting/CAD, industrial/mechanical engineering

These four target career areas represent **32% of all job postings** in Florida.

In Florida, the COVID-induced economic contraction in 2020 led to a 21% drop in job postings between April 2019 and April 2020. Postings slowly recovered from the April 2020 low point by December 2020 and have continued to increase. Job postings in April 2021 were up 53% compared to April of 2020 and up 21% compared to April 2019.

These four target career areas represent 32% of all job postings in Florida. Among the four, postings for healthcare-related occupations are more rapidly increasing. These occupations include registered nurses, surgical technicians, pharmacists, and dental hygienists, each with a more than 100% increase in postings from April 2020 to April 2021. Roles within the target career areas also form a core component of high-wage job posting demand, as with registered nursing, accounting, and computer occupations.

2 Jobs in Florida are built around employment in several career areas which have the state's largest oversupply of skills.

Hospitality, Sales/Customer Service, and Office/Administrative Services have a larger employment share in Florida compared to the national average. One out of three Florida workers is employed in one of these fields. Furthermore, the same sectors present some of the largest oversupply volumes in Florida. Hospitality leads this list by a large margin, with a competency oversupply exceeding 885,000. Sales/Customer Service is similarly oversupplied by 375,000 and Office/Administrative Services by 112,000.

The oversupply of talent creates a competitive environment, limiting the career prospects for many Florida workers. The three career areas were among those most impacted by the 2020 contraction.³ Each of the career areas has a median salary similar to or below Florida's average salary.

Output: Section 2015 Section

The career areas in which the largest skills gaps were identified also offer some of the most competitive wages. These earnings differentials provide a critical incentive to the transitioning worker, as well as to those regional stakeholders and institutions working to support and align reskilling for the workforce. At the top of the undersupplied list, the four target career areas (Healthcare, Business/ Finance, IT/Math, and Architecture/Engineering) each present average annual wages that are at least \$20,000 above Florida's average annual wage. Employers in these fields are providing the incentive to attract qualified workers.

The volume of undersupply gaps between employer demand and workforce supply are large enough to have dramatic effect on Florida employment.

Over the past five years, Florida's total employment and population have grown at rates (each 8%) twice that of the U.S. This growth presents a diversity of opportunities to transitioning workers.

It might have been the case that job growth was largely concentrated in career areas with a high supply of talent and relatively low wage rates. However, Florida's economic growth has fostered new employment opportunities, creating larger volumes of high-wage and undersupplied career areas.



These four target career areas provide average annual wages **\$20,000 above** Florida's average annual wage.

³ Though not a perfect corollary to the career areas, BLS-based occupation data demonstrates that relevant SOC categories continue to account for 63% of the unemployed in Florida through February of 2021. As of February, unemployment shares in Florida were: Sales Occupations (47%), Food Prep and Service Occupations (7%), and Office/Administrative Services Occupations (10%).

In the past five years, 133,000 new Healthcare jobs were added in Florida; Business/Finance added 200,000 new jobs, IT/Math jobs grew by 43,000, and Architecture/Engineering added 11,000 new jobs. This growth in target career areas, and the rising demand it embodies, is responsible for a share of the undersupply in these career areas. It also positions the transitioning workforce as a critical component in the reshaping and development of jobs in Florida.

Many pathways exist from oversupplied and low wage career areas to undersupplied and high wage career areas.

The low-wage roles, sometimes found in career areas like Hospitality, Sales/ Customer Service, and Transportation, have transition opportunities into in-demand careers, particularly those in Business/Finance. These destination roles provide the chance to leverage previous work experience, including employability skills, while attaining skills in new career areas that offer better paying, more secure employment in the future.

Figure 14 on page 26 illustrates the pathways from many key, oversupplied and low wage roles into roles within undersupplied and high wage skill clusters. These career pathways are based upon the actual transitions observed in worker profiles in Florida. The destination roles (selected from the many undersupplied roles highlighted in each target career area) account for a competency gap of more than 113,225.



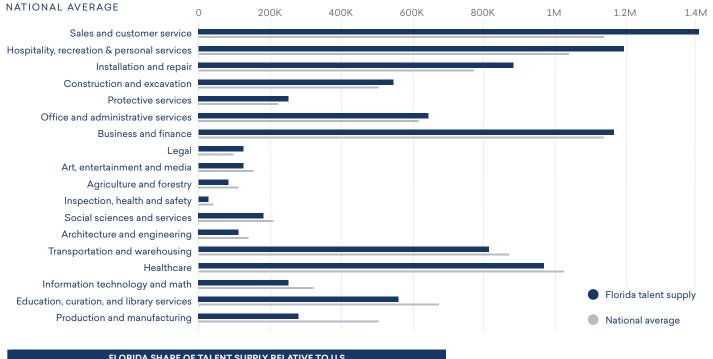
DID YOU KNOW?

For 5 years in a row, U.S. News and World Report has ranked Florida's Colleges and Universities **#1 in the nation**.

Florida Labor Market Overview

THE ECONOMIC OVERVIEW section introduces high-level data at the broadest career area level within Florida's employment. Figure 1 includes a comparative analysis of Florida's share of talent by career area relative to the U.S., the workforce makeup of each career area from a demographic lens, and a highlight of the career areas and competencies (aggregation of more detailed skills) facing the most substantial shortages in terms of supply and demand. Each component of the economic overview will shed light on Florida's strengths and opportunities, particularly the areas of over and under supply in the market. The identification of key competency gaps serves as the first step in exploring workforce-readiness and transition solutions.

FIGURE 1: FLORIDA EMPLOYMENT BY CAREER AREA AND COMPARISON TO



Higher	Equal	Lower	
Sales and Customer Service	Business and Finance	Information Technology and Math	
Hospitality, Recreation, and Personal Services	Legal	Education, Curation, and Library Services	
Installation and Repair	Art, Media, and Entertainment	Production and Manufacturing	

Source: Emsi Skills and BLS employment

Occupation Career Areas

The career areas with the greatest employment volumes in Florida include Sales/Customer Service, Hospitality/Recreation/Personal Services, Business/ Finance, and Healthcare. Each of those career areas, with the exception of Healthcare, form a higher share of Florida's employment than employment in the U.S. Over 1.4 million workers are employed in the Sales/Customer Service career area in Florida, a 14.3% share of Florida's jobs. At the national level, only 11.7% of workers are found in Sales/Customer Service. This represents an extra 260,000 workers engaged in the Sales/Customer Service career area in Florida. At 12.2% of Florida's jobs, Hospitality/Recreation/Personal Services accounts for an additional 154,000 workers above national employment levels.

In contrast, several career areas in Florida fall below national average employment volumes. Production/Manufacturing, with 286,000 total jobs, forms 2.9% of Florida's jobs while the career area forms 5.2% of the nation's jobs. Education/ Curation/Library Services, with 555,000 jobs, supports 5.7% of state employment and 6.8% of national employment. Employment in Healthcare and IT/Math career areas in Florida are approximately 0.5% below national levels.



Table 2 organizes Florida's career fields in descending rank based upon the median annual salary. The median annual salary across all fields was \$41,600, and Florida's median annual salary was \$35,563. IT/Math careers top the list with a median salary of \$83,145 per year, more than double the average rate.

TABLE 2: FLORIDA EN	MPLOYMENT BY	CAREER AREA.	SORTED BY TO	P MEDIAN SALARY

Career Area	Posted Median Salary	Total Employment
Information Technology and Math	\$83,145	253,654
Architecture and Engineering	\$71,389	105,850
Business and Finance	\$62,662	1,167,100
Healthcare	\$61,989	963,900
Construction and Excavation	\$54,581	549,953
Social Sciences and Services	\$52,632	186,242
Education, Curation, and Library Services	\$48,876	555,810
Inspection, Health and Safety	\$48,720	24,354
Legal	\$48,172	122,898
Art, Entertainment and Media	\$46,668	131,097
Installation and Repair	\$44,525	884,021
Protective Services	\$42,760	254,504
Sales and Customer Service	\$42,550	1,400,482
Hospitality, Recreation & Personal Services	\$42,444	1,195,151
Agriculture and Forestry	\$42,309	90,870
Transportation and Warehousing	\$41,612	809,817
Production and Manufacturing	\$40,775	286,747
Office and Administrative Services	\$37,631	649,384
Source: Emsi Skills & BLS employment		

Architecture/Engineering, Business/Finance, and Healthcare follow, each with a median annual salary more than \$20,000 above the state's average.

Supply of Talent and Employer Demand for Career Areas and Competencies

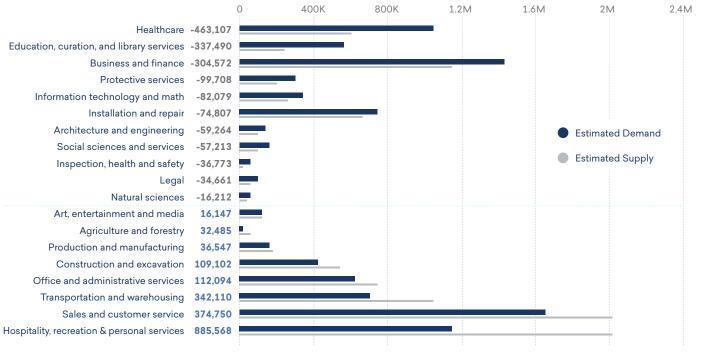
The regional skills insights highlighted throughout the remainder of the report, including the supply-demand comparison by career area presented in **Figure 2** below, are derived from analyzing job posting and profile data over a two-year horizon—August 2018 through July 2020. While Emsi collects postings data daily, and the profile dataset updates monthly, regional skills analyses require a longer timeframe. Utilizing data collected over the two-year period results in stronger relationships between how skills coalesce, thereby providing more meaningful, statistically significant analysis. Forecasts of demand for these occupations in each case are through the year 2024.

For additional information and context on Emsi Skills methodology, please read the appendix included at the end of this report.

As **Figure 2** shows, the career areas experiencing the greatest shortage of talent in Florida are Healthcare, Education/Curation/Library Services, Business/ Florida has too many qualified workers in some fields and nowhere near enough in others. Florida doesn't have an unemployment problem, **Florida has a skills-gap opportunity** and mismatch.

FIGURE 2: ESTIMATED SUPPLY AND DEMAND BY CAREER AREA IN FLORIDA

Career areas in order of greatest supply-demand gap (negative number indicating shortage, positive number indicating surplus)



Source: Emsi Skills

Finance, Protective Services, and IT/Math. Healthcare alone has a competency gap of more than 460,000. Education/Curation/Library and Business/Finance each display a competency gap above 300,000. Protective Services and IT/ Math have gaps of almost 100,000 and more than 82,000 respectively.

Meanwhile, substantial surpluses exist in Hospitality/Recreation/Personal Services, Sales/Customer Service, and Transportation/Warehousing. Supply in Hospitality/Recreation/Personal Services exceeds demand by 885,000. Sales/Customer Service supply exceeds demand by more than 374,000, and Transportation/Warehousing by more than 342,000.

The high workforce volumes represented by these gaps and surpluses represent both the significant challenge and opportunity in front of the State of Florida as it seeks to align its workforce with employer demand and sustainable economic development.

Supply Gaps for In-Demand Competencies

On the following page, **Figure 3** highlights the most substantial gaps in Florida's labor market for competencies—or a broad collection of related skills. It is important to note that this identifies competency gaps across all career areas and industries. As such, the estimated gaps signal open opportunity in the workforce in total. It is not, therefore surprising that Employability Skills tops the list. This competency, built out of skills such as Professionalism, Detail Orientation, Empathy, Punctuality, Communication, and working with teams represent employer demands common to all employment types. The large supply and demand gap is likely indicative of a common need across all industries for professional employees, as well as a tendency to include these skills as basic requirements in a job posting, no matter the nature of the work. Workers are less likely to list these employability skills on their profiles, tempering the completeness of the gap measure for this competency.

Skills common to IT/Math and Business/Financial careers are strongly represented throughout the top list of competency gaps. The wage impacts these high-demand competencies carry is evidenced at several points, differentiated significantly even at the top of this competency distribution. The appearance of the Software Development competency on a job listing draws the average annual salary upwards to \$86,044. Business Intelligence and Market Research and Intelligence similarly lead those competencies typically identified with core "Business" skillsets, with median annual salaries of \$69,000. Skills such as Professionalism, Detail Orientation, Empathy, Punctuality, Communication, and working with teams represent employer demands common to all employment types. The balance between specific technical skills and more general human and professional skills varies from field to field. A programmatic approach to balancing both human and technical skills in workforce preparation, education, and training will prove crucial in offering pathways to long-term, gainful employment for Florida's workers.

FIGURE 3: GREATEST DEMAND-SUPPLY SHORTAGES FOR SKILL COMPETENCIES IN FLORIDA

Listed in order of demand-supply gap size; Bottom labels indicate demand supply-gap, top indicate median advertised salary from postings for competency



Source: Emsi Skills

Target Career Areas for Florida

BASED ON THE DATA available from Emsi Skills, four target career areas have been identified that represent opportunities to reposition Florida's workforce to fit the undersupplied and in-demand career areas in Florida. The target career areas are:





Healthcare

Business & Finance

Architecture/Engineering

THE CRITERIA USED TO IDENTIFY THESE TARGET CAREER AREAS INCLUDE:

- High-volume shortages of in-demand competencies and skills observed in the career area.
- Advertised wage rates significantly exceeding state averages.
- Expectation for continued growth as evidenced by high demand relative to supply.
- A wide array of career entry and growth opportunities that support workforce transitions, training, and upskilling/reskilling initiatives.

Figure 4 on page 15 outlines the supply shortages and surpluses in all career areas in Florida. Those careers with the largest supply gaps are shown at the top of the chart. The four target career areas selected for detailed evaluation place first, third, fifth, and seventh in this ranking.

The target careers were distinguished by their high salaries and rapid growth rates. Each target career area has a median annual salary at least \$20,000 above state averages and grew employment by more than 11.7% over the last five years. Business/Finance careers in Florida grew by 20.8% during that period and IT/ Math careers grew by 20.2%.

Several career areas with a high-volume supply and demand shortage failed to meet these criteria and are not studied in additional detail within this report. Education/Curation/Library Services displays the second largest supply shortage. The field, however, offers salaries only slightly higher than state averages and grew at a relatively slow 4.0% over the past five years. Additionally, a majority of roles within the Education/Curation/Library Services career area



Florida needs to create **2 million** net new jobs by 2030.

FIGURE 4: ESTIMATED DEMAND/SUPPLY AND MEDIAN ADVERTISED SALARY BY CAREER AREA (IN ORDER OF LARGEST GAP), FLORIDA



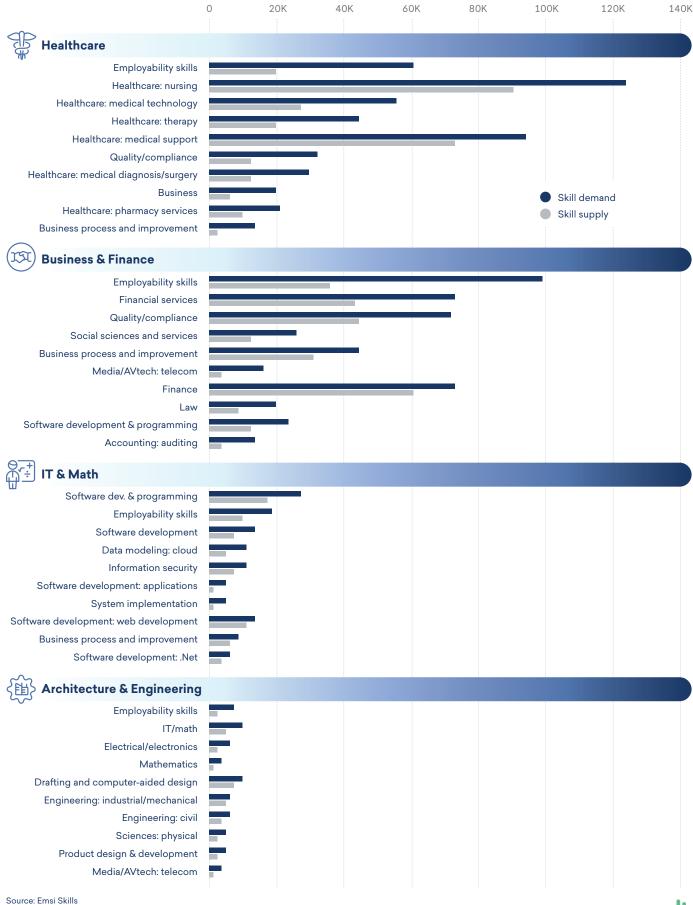
Source: Emsi Skills

requires at least a bachelor's degree, providing steeper pathways to transition into the field. Similarly, Instillation/Repair employment grew by only 3.2% and Protective Services by 5.2% over the past five years while offering salaries on par with the regional average. Entry level careers into these fields are highlighted in **Table 3** on page 29.

The targeting of high-shortage, high-growth, and high-wage career areas will direct workforce realignment to those fields which offer the most leverage in substantially impacting Florida's citizens and economy in the future.

Within the target career areas, **Figure 5** on the following page highlights the competencies demanded by employers which face the largest supply shortages. These competencies reveal skillsets that may allow transitioning workers to enter and align with demand in the field. Occurrences of overlap between career areas also indicate skill adjacencies that allow transitions between career areas.

FIGURE 5: TOP COMPETENCY GAPS WITHIN TARGET CAREER AREAS



16

In-Demand Roles within Target Career Areas

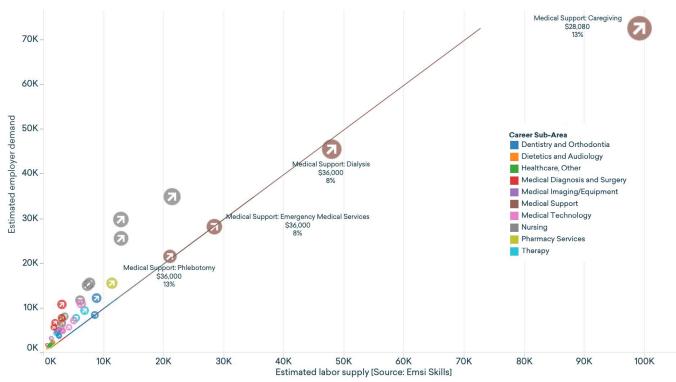
Substantial demand exists throughout all four target career areas. **Figures 6 through 10** highlight each career area individually for a more detailed review of supply vs. demand. In each figure, the x-axis represents estimated labor supply, and the y-axis represents estimated labor demand. Each bubble throughout the scatterplot represents a more detailed description of job functions that exist within each career area and sub-area. Detailed information near a bubble highlights the role name, median annual salary, and projected five-year employment growth.

Figure 6 shows the supply/demand for Healthcare roles in Florida and mirrors the supply shortage seen nationwide and in each of the metropolitan regions highlighted in the separate metro skill reports. It is noteworthy that every role in Healthcare is projected to grow over the next five years.

The figure demonstrates how Medical Support and Nursing dominate the Healthcare map—other Healthcare sub-areas are confined to the bottom left corner. An oversupply exists in Medical Support while Nursing roles lead the Healthcare field in supply shortages. Advanced Cardiovascular and Trauma Nursing has a supply shortage of more than 17,000 statewide while offering annual earnings of \$61,462. Licensed Practical Nursing is undersupplied by

FIGURE 6: SUPPLY-DEMAND FOR HEALTHCARE ROLES, FLORIDA

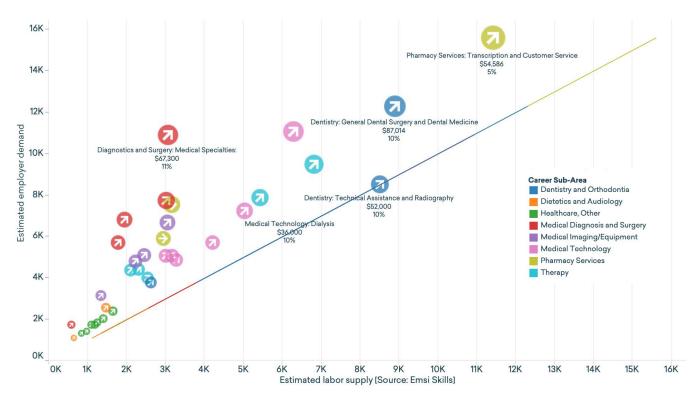
Labels include role name, median advertised salaries, and projected five year growth rate (2019–2024)



Every role in healthcare is **projected to grow** over the next five years. and Performance Management faces a shortage of 12,700 with earnings of \$51,443 per year. Employment in each of these nursing roles is projected to expand by 9% over the next five years.

Caregiving and Medical Support: Dialysis surpasses the workforce supply of all other Healthcare roles by a wide margin. These roles are oversupplied and offer relatively low salaries. Medical Support and Nursing roles are excluded from the career area in **Figure 6b**, to focus on those Healthcare roles with supply shortages.

FIGURE 6B: SUPPLY-DEMAND FOR HEALTHCARE ROLES (EXCLUDING NURSING AND MEDICAL SUPPORT), FLORIDA Labels include role name, median advertised salaries, and projected five year growth rate (2019-2024)



Every additional Healthcare role, with the exception of Dental Technical Assistants and Radiographers, contains a supply shortage in Florida. Career sub-areas in Dentistry, Therapy, and Medical Technology have significant shortages of workers.

General Dentistry Surgery and Medicine stands out with a supply gap of 3,400, a median annual salary of \$87,014 with a projected growth of 10.0%. Therapy roles in Geriatrics and Home Care and Patient Education and Safety each face a supply shortage of approximately 2,500 workers. Though clustered closely around Florida's median salary level, Medical Technology roles are also undersupplied in Florida. Clinical Laboratory Testing faces the largest supply gap of over 4,700 workers. Salaries in this sub-area range between \$39,000 and \$53,000 per year while the career area anticipates growth of an average of 10.0% over the next five years. The Diagnostics and Surgery career-sub area displays a high supply shortage on multiple fronts. Medical Specialties has a supply gap of more than 7,800. Veterinary Medicine as well as Family Medicine and Primary Care each have a supply shortage of over 7,500. Oncology follows closely behind with a supply shortage of 4,000. Wages in these roles are quite high, ranging from Medical Specialties at \$67,000 per year to Family Medicine at \$199,000 per year.

For entry level Healthcare roles that do not require a bachelor's degree or higher, Pharmacy Transcription and Customer Service presents the largest supply gap. Supply in this role is 4,100 below employer demand statewide and the role offers a median annual salary of \$54,586.

FIGURE 7: SUPPLY-DEMAND FOR BUSINESS/FINANCE ROLES, FLORIDA

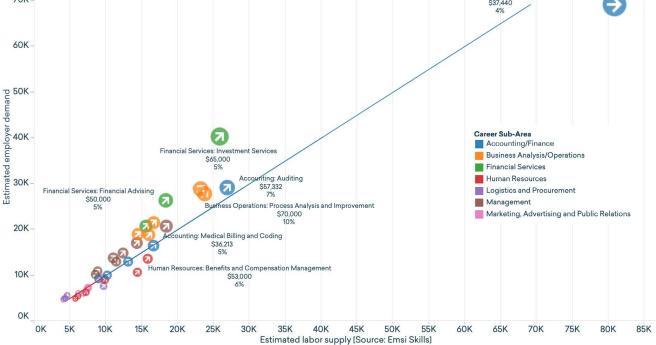
 Zabels include role name, median advertised salaries, and projected five year growth rate (2019-2024)

 70K

 Finance: Collections, Accounts Payable, and Account Receivable

 \$37,440

 4%



Like Healthcare, Business/Finance roles across career subgroups have more demand in Florida than supply (**Figure 7**). The Business/Finance field contains a wider distribution of supply shortages and surpluses, presenting current and transitioning workers with a mixed landscape of roles to navigate. By supply and demand volume, the financial role Collections/Accounts Payable/Accounts Receivable far exceeds all other roles. This role is over supplied in Florida by almost 12,000 and offers low wages of \$37,440 per year at the median. **Figure 7b** on the following page excludes this role.

Florida's Financial Services career sub-area demonstrates one of the most significant supply shortages in the markets. Investment Services faces a shortage of 14,300, Financial Advising a shortage of 8,000, and Insurance Sales

FIGURE 7B: SUPPLY-DEMAND FOR BUSINESS/FINANCE ROLES (EXCLUDING FINANCE COLLECTIONS, ACCOUNTS PAYABLE, ACCOUNTS RECEIVABLE), FLORIDA

40K 7 Financial Services: Investment Services \$65,000 35K ness Operations: Program Ma \$56,160 age 9% 30K Estimated employer demand Financial Services: Financial Advising Inting: Auditing \$50,000 857.332 5% 25K Restaurant Management \$55.000 20K inting: Medical Billing and Coding Statuting, Weature Drinning and Cooking \$36,213 Human Resources: Benefits and Compensation Management 15K nt: Project Manag ge Career Sub-Area \$80,000 2 Ø \$53,000 Accounting/Finance 8% 6% Human Resources: Talent Acquisition and Recruiting Business Analysis/Operations \$52,000 5% 6 10K Financial Services Logistics: Estim ons and Bidding Processes Human Resources \$70,000 10% Logistics and Procurement Management 5K Marketing, Advertising and Public Relations 0K OK 2K 4K 6K 8K 10K 12K 14K 16K 18K 20K 22K 24K 26K 28K 30K 32K 34K 36K 38K 40K 42K Estimated labor supply [Source: Emsi Skills]

Labels include role name, median advertised salaries, and projected five year growth rate (2019-2024)

a shortage of 5,000. Each role within Business Analysis/Operations is similarly situated in a supply shortage. Program Management and Banking and Financial Management each have supply gaps of close to 5,000.

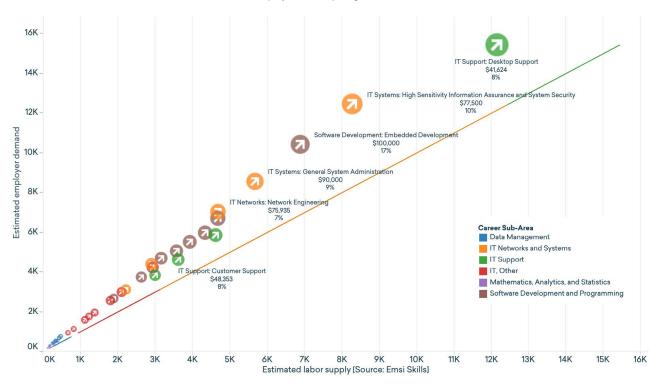
Importantly, annual salaries across these roles range between \$50,000 and \$80,000, representing a large positive differential to Florida's average earnings. Business/Finance careers also offer some of the richest opportunities to workers without a bachelor's degree. Many roles in Financial Services and Business Operations employ workers with an associate's degree or lower. Even undersupplied management roles can become accessible to workers with lower educational attainment after some experience in the field. Several of these Business/Finance roles appear in the transition pathways in **Figure 13** on page 25 as well as the target entry level positions in **Table 2**.

As a category, every Human Resources role is consistently oversupplied in Florida. This surplus in this sub-area is led by the Talent Acquisition and Recruiting role with an excess supply of 3,600.

As seen above in Healthcare, every role in the IT/Math career area is expected to grow in employment volume over the next 5 years. Without exception, every IT/ Math role is also currently undersupplied in Florida (**Figure 8**). This combination forms a potent hiring environment as Florida's employers pursue IT/Math talent.

FIGURE 8: SUPPLY-DEMAND FOR IT/MATH ROLES, FLORIDA

Labels include role name, median advertised salaries, and projected five year growth rate (2019-2024)



This trend certainly follows the growing national demand for IT/Math talent as employers of all industries adjust their processes to an increasingly technical environment. Even though total IT/Math employment is of a smaller scale than either Healthcare or Business/Finance, the field remains an important factor and opportunity for Florida. Florida's employment growth in the IT/Math career area (20.2%) has significantly outpaced the field's national growth rate (13.0%) over the same period. This rapid expansion reveals a shift in the nature of work conducted by Florida's employers who need the support of a ready and skilled IT/Math workforce.

Nationwide, IT Support typically has lower barriers to entry and more demand than supply. In Florida, this role leads the IT/Math field in supply and demand volume, but still maintains a supply shortage in excess of 3,200. Earnings for IT Support are on par with state averages.

Roles in IT Networks and Systems present numerous high-volume shortages in Florida. Sensitive Information and Systems Security has a supply shortfall of 4,100, a median annual salary of \$77,500, and projected growth of 10.0%. General Systems Administration faces a supply gap of 2,900, offers a median salary of \$90,000 per year, and is projected to grow by 9.2%. Network Engineering follows suit with a shortage of 2,350, a median annual salary of \$77,935, and projected growth of 7.3%.

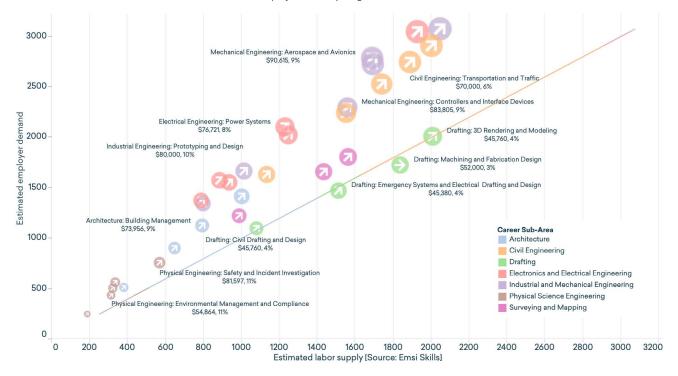
The Software Development and Programming career sub-area leads the IT/ Math field in salary opportunities. Demand for these roles is constant in Florida and consistently undersupplied. Embedded Development faces a supply



gap of 3,500, offers a median annual salary of \$100,000, and is expected to grow by 17.0% over the next five years. Amongst several additional Software Development roles, Cloud Development has a supply shortfall of 2,000, a median annual salary of \$114,400, and projected growth at 18.2%.

The IT/Math career area offers rapid growth and high wage rates that are hard to match in Florida. Entry into the field is often dependent upon attainment of a bachelor's degree, though some industry shifts are being seen nationwide to short-term technical certifications. Roles like Desktop and IT Support provide some of the most approachable entry-level opportunities into IT that can later transition into careers that offer higher wages, including those in IT Networks/ Systems and Software Development/Programming.

FIGURE 9: SUPPLY-DEMAND FOR ARCHITECTURE/ENGINEERING ROLES, FLORIDA Labels include role name, median advertised salaries, and projected five year growth rate (2019-2024)



Supply gaps in Architecture/Engineering are of a smaller scale than the other three target clusters, but represent a highly-skilled and high-impact segment of talent for many industries. The career area grew in Florida at a rate (12.0%) three times faster than the national level (4.0%). Within the Architecture/Engineering career area, the vast majority of roles face supply shortages, as shown in **Figure 9**. The single exception to this is the Drafting career sub-area, which sits consistently at the equilibrium between supply and demand. This sub-area also offers the field's lowest wages, ranging from \$45,000 to \$52,000 per year.

The largest supply shortages in Florida are primarily found between Industrial and Mechanical Engineering and Civil Engineering. In Mechanical Engineering CAD and 3D Design, Aerospace and Avionics, and Lean Manufacturing and Quality Management each face supply gaps in excess of 1,000. Annual salaries in this sub-area ranged between \$72,000 and \$91,000 per year. Projected growth rates average 4.5% over the next five years.

In Civil Engineering, Construction and Project Management, Transportation and Traffic, Environmental Engineering, and Structural Engineering faced supply shortages of 700 or more. Annual salaries in this sub-area ranged between \$70,000 and \$74,000. Projected growth rates averaged 5.7% over the next five years.

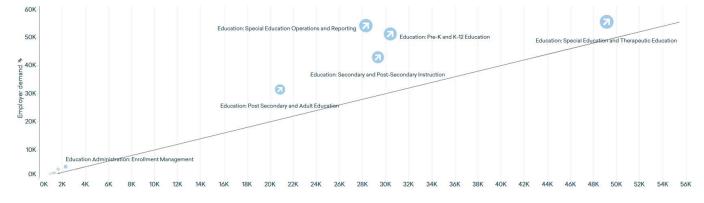
Numerous Electrical Engineering roles also faced unmet demand in Florida. The role with the highest volume supply, demand, and gap is Calibration and Testing. This position has a supply gap of 1,100, a median annual salary of \$61,984, and projected employment growth at 6.8%. Across the Electrical Engineering sub-area, annual salaries range from \$61,000 to \$95,000.

Engineering/Architecture also offers several entry-level roles which do not require a bachelor's degree. These surveying and drafting roles are displayed in **Table 3** on page 29 and offer an accessible transition point for workers looking to enter the Engineering/Architecture field.

Although not listed among the top four career areas, Education is one of the most important areas of employment for Florida. Florida's educators will be the ones who are the most important persons to help the state reach its education goals. Florida has recently raised starting teacher salaries, and many career paths exist for educators in Florida.

FIGURE 10: SUPPLY-DEMAND FOR EDUCATION ROLES, FLORIDA

Labels include role name, median annual salary, and projected five-year growth rate (2019-2024)



Some of the categories undersupplied in the career area include Pre-K and K-12 Education, with a gap of 20,688 positions by 2024 (**Figure 10**). Secondary and Post-Secondary Instruction shows a gap of 13,553 positions, and Post-Secondary and Adult Education shows a gap of 10,596 to meet the estimated employer demand. Two career options are related to Special Education. Operations and Reporting has a gap of 25,772, and Special Education and Therapeutic Education has a gap of 6,263 positions.

Guiding Florida's Workforce to Reskilling Opportunities

MPLOYMENT in Florida has numerous roles with a significant oversupply of talent that offer low wages with relatively low projected growth rates. These roles often provide workers with career experience and a starting point from which they aim to transition into higher wage and sustainable roles. The oversupplied roles identified are concentrated in the following career areas:

- Hospitality/Recreation/Personal Services
- Sales/Customer Service
- Transportation/Warehousing
- Office/Administrative Services
- Construction/Excavation

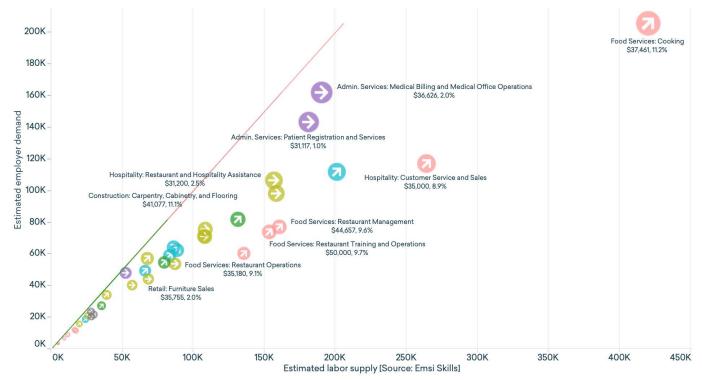


FIGURE 11: SUPPLY-DEMAND FOR RESKILLING OPPORTUNITY ROLES, FLORIDA

Hospitality/Recreation/Personal Services leads Florida employment with its excess talent supply (**Figure 11**). That oversupply of more than 885,000 workers forms a pool of available talent to be repositioned to meet employers' expressed

skill requirements. Transitioning these workers employed in oversupplied fields requires identification of adjacent skill sets that translate to in-demand career areas.

One specific example includes the Administrative Services role: Medical Billing and Medical Office Operations (**Figure 11**). This role faces an oversupply in Florida exceeding 28,000 and wages of only \$36,000 per year. As **Figure 12** demonstrates, the most frequent next jobs observed from actual worker transitions moving out of this role lead into a wide range of career areas. The skills developed in this oversupplied position are demanded by employers in many fields, including several of Florida's target, undersupplied career areas.

One of the most frequent next jobs for an Administrative Services: Medical Billing and Medical Office Operations worker is a role in Business/Finance: Banking and Financial Management. This role is one of the Business/Finance roles identified previously demonstrating a high supply shortage (4,800) within the career area in Florida. Furthermore, the Banking and Financial Management role provides a median annual salary of \$72,800 and a projected growth rate of 10.9%. This information is shown in **Figure 13**.

FIGURE 13: TOP SKILLS REQUIRED FOR BUSINESS/FINANCE: BANKING AND FINANCIAL MANAGEMENT, FLORIDA

Social Sciences and Services	Office Of Foreign Assets Controls		
Engineering: Industrial/Mechanical			
Information Security	Certified Information System Auditor (CISA)		
Quality/Compliance	Bank Secrecy Act		
,/	Internal Auditing		
	Regulatory Compliance		
Personal Attributes	Influencing Skills		
	Risk Appetite		
Finance: Investments	Investment Management		
Accounting: Auditing	Certified Internal Auditor		
Financial Services: Risk Analysis	Anti Money Laundering		
Business	Relationship Management		
	Risk Mitigation		
Business Process and	Operational Risk		
Improvement	Operational Risk Management		
Business Planning & Continuity	Risk Analysis		
	Risk Management Framework		
Business Strategy and Leadership	Governance		
Financial Services	Banking Services		
	Brokerage		
	Capital Markets		
	Commercial Banking		
	Equities		
	Financial Industry Regulatory Authorities		
	Financial Institution		
	Tinancial Market		
	Financial Services		
	Investment Banking		
	Investments		
	Mortgage Loans		
	Retail Banking		
	Securities (Finance)		
	Series 7 General Securities Representative License (Stockbroker)		
	Truth In Lending Act		
	Underwriting		
	Wealth Management		
	0K 2K 4K 6K 8K 10K 12K 14K 16K 18K Estimated supply and demand		

FIGURE 12: MOST FREQUENT TRANSITIONS FOR ADMINISTRATIVE SERVICES: MEDICAL BILLING AND MEDICAL OFFICE OPERATIONS ROLE BASED ON PROFILE/RESUME DATA

Most Frequent Next Job

Management: Construction Management Sales: General Sales Representation Sales: Forecasting and Strategic Planning Legal Services: Operations Support Manufacturing: Lean and Six Sigma Management: Project Management Education: Post Secondary and Adult Education Marketing: Public Relations and Communications Financial Services: Banking and Financial Management IT Support: Desktop Support Education: Pre-K and K-12 Education Management: Restaurant Management Sales: Product Demonstration and Promotion Communication: Public Relations and Strategic Communication Human Resources: Organization Development and Change Management Manufacturing: Supply Chain Management IT: Project Management Social Services: Case Management

Source: Emsi Skills

Leveraging the skills identified in Figure 13, Florida stakeholders can target training and education programming that will equip transitioning Administrative Service workers to supplement their current skill set with the most indemand skills in Business/Finance.

Current skills and competencies:

- Ledgers (Accounting)
- Verbal Communication Skills
- Records Management
- Data collection

Skills and competencies needed:

- Financial Services
- Influencing Skills
- CISA
- Relationship Management
- Regulatory Compliance

The Sankey diagram in **Figure 14** sheds light on the numerous transition opportunities available from roles that have oversupply (left) into in-demand roles within the four target career areas (right). The origin and destination roles have been filtered to include high employment and opportunity volumes as well as a transition from low to average salary positions to high salary roles.

Agriculture: Arboriculture and Horticulture Operations Management: Project Management \$80,000 Agriculture: Safety, Planning, and Oversight Construction: Carpentry, Cabinetry, and Flooring Food Services: Cooking Food Services: Restaurant Management Management: Construction Management Hospitality: Customer Service and Sales \$65.000 Hospitality: Restaurant and Hospitality Assistance Maintenance: Housekeeping and Cleaning Maintenance: Landscaping and Irrigation Merchandising: Stocking and Material Handling Personal Services: Cosmetology and Hairstyling Retail: Floor Assistance Retail: Furniture Sales Management: Restaurant Management \$55,000 **Retail: General Floor Operations Retail: Point of Sales and Customer Service Retail: Sales and Performance Management Retail: Store Management Business Analysis: Budgeting and Forecasting** Sales: Product Demonstration and Promotion \$80.000 Management: Supply Chain Management Transportation: Heavy Equipment Operations \$80,000 Transportation: Independent Freight Operations Financial Services: Banking and Financial Management, \$72,800 Financial Services: Investment Services, \$65,000 Transportation: Air Traffic Control, \$76,964 Transportation: Truck Driving

FIGURE 14: TRANSITION OPPORTUNITIES FROM OVERSUPPLIED LOW-WAGE ROLES INTO HIGH-DEMAND, HIGH-WAGE CAREERS

Warehousing: Material Handling and Backroom Operations

This mapping displays the diversity of pathways that workers have taken between roles with surplus supply and roles with unmet demand. In particular, Business/Financial roles make up the largest share of destination roles from this wide range of starting positions. The entry-level access advantages provided by the Business/Financial field are clear and emphasized again in **Table 3** on page 29. Leveraging these transition opportunities in Florida can help move individuals from low-paying, oversupplied jobs into in-demand, high-paying careers that provide security.

Frequent Transitions out of Oversupplied Career Areas

Four of the career sub-areas with the largest surplus of talent are Hospitality and Food Services, Office and Administrative Services, Sales, and Retail. As shown in **Figures 15 to 18**, these career transitions display workers crossing over from one oversupplied career area to another undersupplied area, carrying with them transferable employability skills. Destination job titles are displayed in descending order based on the number of workers observed making the transition.

Workers from each oversupplied career area achieved transitions into the target career areas identified in this report. Management roles in Restaurant Management, Construction Management, and Project Management consistently top each list. This data follows the path of workers who gain first experience and baseline skills in oversupplied sectors (such as Hospitality) before returning to the job market to seek more advanced and lucrative employment opportunities.

Florida workers transitioning from roles in Hospitality and Food Services progress into Restaurant Management roles in the highest frequency. This transition is a natural one given the alignment of industry knowledge and skillsets demanded by Restaurant Management roles. Perhaps less predictably, a large share of Hospitality and Food Service workers also transition into Manufacturing roles. The volume of Hospitality and Food Service workers moving into manufacturing exceeds the volume moving into Business, Finance, or IT by a wide margin.

The transitions of Retail workers largely align with those of Hospitality and Food Services workers. Business and Finance roles form the middle tier of common career destinations for both groups. IT opportunities for either category are among the most rare.

Office and Administrative Services workers also transition to the same management positions in the highest volumes. The corporate access and experience of these workers uniquely supports transitions into Legal Services and Education roles.

Sales workers are among the most likely to transition into Business Analysis and Financial roles, while being the least likely to move into construction or manufacturing. Sales workers are also among the most likely to progress into IT careers, a pathway that gives access to rapid employment growth and very high salaries.



FIGURE 15: MOST FREQUENT CAREER TRANSITIONS FOR ADVANCING HOSPITALITY & FOOD SERVICE WORKERS

STARTING CAREER SUB-AREA	MOST FREQUENT NEXT JOBS
	Management: restaurant management
	Management: construction management
<u>~</u>	Management: project management
	Manufacturing: lean and Six Sigma
X	Business analysis: budgeting and forecasting
Hospitality	Finance: collections, accounts payable/receivable
& Food Services	OTHER COMMON NEXT JOBS
	Legal services: operations support
	IT: project management
	Education: pre-K and K-12 education
	Construction: contracting and sourcing

FIGURE 16: MOST FREQUENT CAREER TRANSITIONS FOR ADVANCING OFFICE & ADMINISTRATIVE SERVICES WORKERS

STARTING CAREER SUB-AREA	MOST FREQUENT NEXT JOBS
	Management: construction management
	Management: restaurant management
	Manufacturing: lean and Six Sigma
	Management: project management
Office &	Legal services: operations support
Admin.	OTHER COMMON NEXT JOBS
Services	Education: pre-K and K-12 education
	IT: project management
	Business analysis: budgeting and forecasting
	Construction: contracting and sourcing

FIGURE 18: MOST FREQUENT CAREER TRANSITIONS FOR

ADVANCING RETAIL WORKERS

FIGURE 17: MOST FREQUENT CAREER TRANSITIONS FOR ADVANCING SALES WORKERS

STARTING CAREER SUB-AREA	MOST FREQUENT NEXT JOBS	STARTING CAREER SUB-AREA	MOST FREQUENT NEXT JOBS
	Management: project management		Management: restaurant management
	Management: restaurant management		Management: construction management
(\$)	Management: construction management		Manufacturing: lean and Six Sigma
RR	IT: project management	$\mathcal{N} = \mathcal{N} \subset \mathcal{N}$	Management: project management
Sales	OTHER COMMON NEXT JOBS		Finance: collections, accounts payable/receivable
	Business analysis: budgeting and forecasting		Business analysis: budgeting and forecasting
	Construction: contracting and sourcing	Retail	OTHER COMMON NEXT JOBS
	Manufacturing: lean and Six Sigma		Education: pre-K and K-12 education
			Construction: contracting and sourcing
			Legal services: operations support

IT: project management

Entry Level Access Points

The four target career areas identified in this report—Healthcare, Business/ Finance, IT/Math, and Architecture/Engineering—contain some of the largest areas of opportunities across Florida. Regional stakeholders, including the State of Florida, post-secondary institutions, and workforce/economic development organizations, can leverage the data available in this report and other tools to better assist Florida's workers in career exploration and transition opportunities.

Because these target fields represent some of the leading salary, growth, and technical opportunities in Florida, it is true that many of the roles within them require some level of work experience or educational attainment.

TABLE 3: IDEAL ENTRY-LEVEL ROLES IN TARGET CAREER AREAS THATTYPICALLY REQUIRES LESS THAN A BACHELOR'S DEGREE

Roles with median posted salaries greater than state average

Career Area	Role	Top Degree	Posted Median Salary
	Drafting: civil drafting and design	High school or GED	\$45,760
Architecture & Engineering	Mapping: GIS and spatial mapping and modeling	High school or GED	\$49,884
	Surveying: construction management	High school or GED	\$59,983
Business & Finance	Food services: restaurant operations	High school or GED	\$56,620
Business & Finance	Management: restaurant management	High school or GED	\$55,000
	Dentistry: general dental surgery and dental medicine	High school or GED	\$120,000
	Dentistry: hygiene and scaling	Associate's degree	\$58,240
	Dentistry: technical assistance and radiography	High school or GED	\$52,000
	Medical imaging: electrocardiography	High school or GED	\$70,720
	Medical imaging: oncology and radiation therapy	High school or GED	\$65,778
	Medical imaging: sanitation and patient safety	High school or GED	\$60,000
	Medical imaging: ultrasound and other sonography	High school or GED	\$65,000
Healthcare	Medical technology: general medical operations	High school or GED	\$43,414
HealthCare	Medical technology: medical coding	High school or GED	\$43,867
	Medical technology: surgical operations	High school or GED	\$52,707
	Nursing: advanced cardiovascular and trauma nursing	Associate's degree	\$61,462
	Nursing: education and performance management	Associate's degree	\$51,443
	Nursing: licensed practical nursing	Associate's degree	\$55,515
	Nursing: primary care and family nursing	Associate's degree	\$69,000
	Pharmacy services: transcription and customer service	High school or GED	\$54,586
	Therapy: respiratory therapy	Associate's degree	\$64,480

To that end, **Table 3** focuses on the roles within the target career areas which do not require a bachelor's degree but offer the salary and access advantages desired by transitioning workers. Despite the lower educational requirements of these roles, many of the median annual salaries are very high and certainly competitive against state averages. These traits present an ideal opportunity to further develop a career in a growing and sustainable target field.

TABLE 4: ADDITIONAL ENTRY-LEVEL ROLES IN OTHER UNDERSUPPLIED CAREER AREAS THAT TYPICALLY REQUIRES LESS THAN A BACHELOR'S DEGREE

Career Area	Role	Top Degree	Posted Median Salary
Inspection, Health and Safety	Health and safety: product testing and certification	High school or GED	\$52,000
	Maintenance: safety and security systems maintenance	High school or GED	\$44,889
	Maintenance: telecommunication and cabling	High school or GED	\$44,452
Installation and Repair	Vehicle maintenance: aircraft maintenance	High school or GED	\$50,000
	Vehicle maintenance: business operations	High school or GED	\$50,232
	Vehicle maintenance: diesel engine maintenance	High school or GED	\$47,840
	Vehicle maintenance: transmission and drive train repair	High school or GED	\$45,463
Protective Services	Protective services: law enforcement	High school or GED	\$46,000
	Protective services: physical security	High school or GED	\$44,157

Roles with median posted salaries greater than state average

Table 4 removes the filter of the four target career areas and draws attentionto entry level roles in Florida's other undersupplied career areas. These posi-tions, within Inspection/Health/Safety, Installation and Repair, and ProtectiveServices offer salaries above the Florida average.

The roles shown in **Tables 3 and 4**, each part of an undersupplied career area in Florida, present a strong list of targets for regional stakeholders and transitioning workers alike. By matching these transitions to the underlying skill demands of employers, workers can equip themselves with the confidence knowing that opportunities exist within high-demand careers. They will better understand how past and current job experiences translate into skills. Combining these with future skills gained from additional education, training, and job experience will set Florida's workforce on the path to economic success.

Policy Recommendations



- Facilitate career area specific information through a statewide database that will help Florida students and parents make data-backed career decisions
- Expand rapid credentialing in order to help mitigate the negative economic impact of structural unemployment and facilitate training in new career pathways for the underemployed and the unemployed
- Formally align Florida adult education, job training, and postsecondary education policies, while providing the results of that alignment directly to adult learners to help facilitate career upskilling
- Support and expand access to state college programs that help workers quickly get into the workforce by a coordinated effort between/among state colleges and businesses
- Support expanded advancements in Career and Technical Education to help ensure that at least 80% of Florida's workforce has essential employability skills
- Expand eligibility requirements to become a high school guidance counselor to better inform students of a broader swath of career options outside of a traditional 4-year degree
- Support establishment of regular, independent analyses of estimated supply and demand by career area and by geographic region in the pursuit of better facilitating employment needs
- Align regional skills gaps with regional economic development needs
- Require Florida legislature to educate their constituents on the forecasted supply and demand in their region

Conclusion

LORIDA HAS SET OUT THE GOAL of having the #1 workforce in America. To achieve that goal, stakeholders must focus on the *Florida 2030 Blueprint* goals for improving Florida's talent pipeline for a better workforce. These include:

- More than 80% of Florida's workforce has essential employability skills.
- More than 60% of Floridians 25-64 years have a high-value postsecondary certificate, degree, or training experience.
- 95% of students who enter high school graduate within 4 years.
- 100% of Florida 8th graders read and perform math at or above grade level.
- 100% of Florida's 3rd graders read at or above grade level.
- 100% of Florida's children are ready for kindergarten.

One of the keys to making sure students, their parents, and educators know what career opportunities will be available is to forecast both their supply and demand. The data contained in this report identifies the in-demand career areas, the skills demanded by employers, and transition opportunities that will align Florida's workforce supply with employer demand. Surging demand in highpaying careers has resulted in chronic talent shortages, particularly in career areas like Healthcare, Business/Finance, IT/Math, and Architecture/Engineering.

The target career areas of Healthcare, Business/Finance, IT/Math, and Architecture/Engineering present opportunities for growth in the state as they offer a diverse set of well-paying jobs to transition workers in Florida. Creating a talent pipeline for these in-demand areas will alleviate talent gaps preventing local employers from growing their businesses.

By leveraging Florida Chamber Foundation and Emsi Skills data, Florida stakeholders can identify transition opportunities to move individuals from lowpaying, oversupplied jobs to in-demand, high-paying careers. Many low-paying jobs have very high numbers of excess workforce supply, like those in Hospitality, Sales and Customer Service, and Office/Administrative career areas. As evidenced by the data, these workers have skill and competency overlap with higher paying, in-demand career areas, particularly in Business/Finance, that will enable transitions via efficient education and training programs.



The data contained in this report identifies four of the in-demand career areas, the skills demanded by employers, and transition opportunities that will **align Florida's workforce** supply with employer demand.

Appendix

Emsi's Skill Cluster Methodology

Skills Clustering and Quantifying Demand, Supply, and Gaps

Emsi aggregates the widely used federal statistical standard of 867 detailed occupations codified in the Standard Occupation Codes (SOCs), breaking those into a more manageable and user-centric group of career areas and career sub-areas.

Rather than looking at occupational titles (for example, "software engineer") Emsi analyzes the specific skills needed for a job (for example, "coding in Python"), giving a clearer picture of what a job applicant needs to get hired. Skills data in job postings are analyzed at the scale of career sub-areas for specific regions, using statistical methods that account for the relationships between skills in job postings. The result is sets of skill clusters for a given region and career sub-area, which reflect the kinds of roles that employers are posting for based on the skills they seek. Posting data are updated in real-time, but analysis of postings is completed over the most recent two years to account for seasonality. Skills clusters are updated approximately once every six months to reflect the introduction of new and emerging skills or the waning importance of skills as they are deprioritized in the labor market.

Skill demand, skill supply, and the difference between them—skill gaps—are all modeled estimates, based on job postings (market demand) and profiles (talent supply) that match to clusters, scaled according to BLS jobs data (numbers of actual jobs and annual openings).

Emsi matches job postings and professional profiles to regional clusters, based on alignment between the skills contained in each. The proportionate demand for skills is determined from matching postings to clusters, and proportionate supply of skills from matching profiles. The resultant relative distributions are the qualitative "skill shape" of supply and demand.

Emsi tags postings and profiles with occupations (SOC codes), which are rigorously tracked by the Bureau of Labor Statistics (BLS) to quantify numbers of existing new jobs by occupation. The qualitative demand estimates based on matched postings and profiles are therefore rescaled so that the SOC distributions reflect the actual distributions of SOCs in the labor market according to BLS. Emsi matches postings and profiles to clusters to determine the shape of demand and supply, and then uses the more reliable and representative distribution of occupations from BLS data to rescale the shape to an estimate of actual demand and supply.

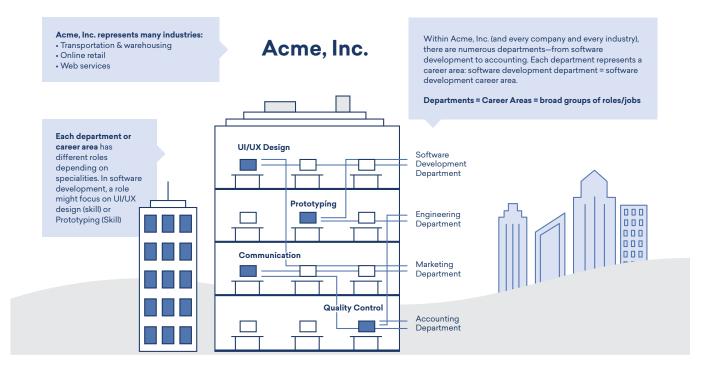
Some common skills, such as Communications, are excluded from the cluster analysis because they are so ubiquitous that they tend to dilute or confound the important relationships between other skills, while not adding very much of value in and of themselves.

Please note that while the incorporation of traditional LMI–like employment data from the BLS–enhances Emsi's Skills data, online profiles and job postings are inherently biased toward certain roles. Consequently, the data presented in this report should not be directly compared to traditional LMI, such as employment data from the BLS. Employment data from the BLS aids Emsi Skills data in better reflecting a regional labor market, however, the supply of talent in Emsi Skills does not directly correlate to traditional employment data on a 1:1 scale. Ultimately, the skills data in Florida demonstrates the region's evolution into a hub for in-demand career areas that require complex, highly technical skillsets. Emsi Skills work highlights these sought-after skills, and the examples contained in this report were explicitly chosen based on the data to showcase opportunities for regional stakeholders to create efficient training pipelines and ensure equitable growth for all citizens of the state of Florida.

Industry vs. Occupation vs. Emsi Skills-Based Career Areas, Sub-Career Areas, and Roles

When reading this report, remember that Emsi Skills language has a foundation related to (SOC) codes—*not industry North American Industry Classification System (NAICS) codes.* The latter are used for classifying, collecting, analyzing, and publishing business establishment data for the industry that provides a certain good or service, while SOC codes identify the workers employed by establishments. For example, the career area (Emsi's broad grouping of occupations) business/ finance has a large supply of workers in Florida. This career area represents all the different types of business/finance roles (jobs)—including financial accountants, logistics analysts, and human resource representatives. Therefore, in this report, business/finance *does not* represent companies from an industry perspective such as banks, financial advising, and insurance firms. Instead, business/finance represents the aforementioned roles or occupations that can be found across every industry—every company or organization in Florida, ranging from private firms like Oracle or Lockheed Martin, private universities like the University of Miami as well as public organizations like the State of Florida require business/finance *workers*.

See the graphic below using an example to better understand the difference between industry, occupation, and skills data.



2021 FLORIDA CHAMBER FOUNDATION EVENTS

2021 FLORIDA TECHNOLOGY & INNOVATION SOLUTION SUMMIT

The Westin Tampa Waterside, Tampa, FL August 5, 2021

Presented by:





Visit <u>flchamber.com/TISummit</u> for event details and registration.

2021 FUTURE OF FLORIDA FORUM & ANNUAL MEETING

Hyatt Regency Grand Cypress, Orlando, FL October 27-28, 2021

Presented by: **Fidelity**

Visit <u>flchamber.com/F3</u> for event details and registration.

INTERESTED IN ENGAGING WITH THE FLORIDA CHAMBER FOUNDATION TO SECURE FLORIDA'S FUTURE? CONTACT AARON KINNON AT AKINNON@FLFOUNDATION. ORG

WWW.FLFOUNDATION.ORG



Despite the setbacks brought on by the COVID-19 pandemic, we have not wavered on the Florida 2030 Blueprint goal to grow Florida to the 10th largest economy in the world by 2030. In order to realize this goal, we must continue strengthening our education system and aligning a high-quality skilled workforce to the future needs of employers. •••

> Mark Wilson Florida Chamber Foundation President



SECURING FLORIDA'S FUTURE flfoundation.org

FLORIDA CHAMBER FOUNDATION 136 S Bronough St I Tallahassee, FL I 32301 www.flfoundation.org I 850-521-1200