

MSA Regional Skills Analysis

ATLANTA





Contents

- 3 Executive Summary
- 5 Acknowledgements
- 6 Introduction
- 7 Emsi's Skill Cluster Methodology
- 10 Atlanta MSA Economic Overview
- 15 Business and Talent Attraction for Targeted Career Areas
- 20 Upskilling Opportunities—Career Pathways
- 24 Reskilling Opportunities—Career Pathways
- 27 Conclusion
- 28 Appendix



Executive Summary

The Atlanta MSA Regional Skills Analysis provides a snapshot of opportunities for reskilling and upskilling individuals in the Atlanta area labor force. This report is based on a proprietary Emsi database of skills of local workers and the job opportunities available to them, along with other relevant labor market insights as of July 2020. The analysis was undertaken in partnership with the City of Atlanta, UNCF, the Ash Center for Democratic Governance and Innovation at Harvard Kennedy School, and Emsi.

NOTWITHSTANDING the largely unknown long-term impacts of COVID-19 on regional economies, the data in this report demonstrate that the Atlanta Metropolitan Statistical Area (MSA) is primed to sustain economic growth based on traditional projections and current employer demand. Short-term impacts to regional employment and demand caused by the national crisis are more easily identifiable—note the COVID-19 callouts throughout the report. Key insights from the data presented in this report include:

- **Atlanta has experienced recent rapid economic growth and had been on track to continue that trend and exceed national growth over the next five years before the national crisis caused by COVID-19.** The Atlanta MSA economy has grown rapidly since the Great Recession. Consequently, five-year employment projections, based on Bureau of Labor Statistics (BLS) data and Emsi's projection methodology, expected the Atlanta MSA economy to grow 8.5 percent through 2024, significantly faster than the national projected growth rate of 6.8 percent.
- **Black workers in Atlanta are concentrated in lower wage roles and have been disproportionately hit by job and wage declines due to COVID-19.** As shown by the data, Black workers have less than average representation in two of the highest paying career areas—Business/Finance and IT /Math. Relatedly, lower paying career areas and roles employ a higher percentage of Black workers in the Atlanta MSA. Further, many of the career areas with concentrations of Black workers have been disproportionately affected by COVID-19 shutdowns and face substantial health risks as economies reopen. For example, Black workers have higher concentrations of employment in career areas like Hospitality/Transportation/Warehousing which typically offer low pay, few career advancement opportunities, and require frequent person-to-person contact.

THE FOUR CAREER AREAS WITH THE HIGHEST EXPECTATION OF RESILIENCE TO THE ECONOMIC DOWNTURN ARE:



IT/Math



Healthcare



Business/Finance



Production/Manufacturing.¹

These four areas are less likely to be negatively impacted long-term by recent layoffs and have the greatest anticipated growth. These key areas reflect Atlanta's future economy that will demand complex, highly technical skillsets of its workers.

- **Looking specifically at the Healthcare field shows how the current equity gap may only get worse in the economic recovery if no corrective action is taken.** A substantial portion of the Healthcare workforce in Atlanta MSA is Black. When analyzing the more detailed roles that comprise the Healthcare career area, however, lower paying Healthcare Support roles have an overrepresentation of Black workers while the higher paid Healthcare Practitioner roles have underrepresentation.
- **Atlanta enjoys a surplus of local talent in two of the four key growth areas.** The Business/Finance and IT/Math career areas have a substantial number of roles with an oversupply of talent—this can serve as an attraction tool or represent an opportunity to assist regional companies as they continue to grow. Additionally, this oversupply signals as an upskilling opportunity to ensure these workers can experience earnings growth and maintain competitiveness by addressing new and evolving skills demanded by employers.
- **Atlanta will need to cultivate local skills to address anticipated needs in Healthcare and Production/Manufacturing.** Meanwhile, the Healthcare and Production/Manufacturing career areas have roles experiencing substantial shortages of talent relative to demand. Regional stakeholders can leverage this information to identify reskilling opportunities thereby helping workers in low-wage, low-growth jobs transfer into high-wage, high-growth career areas and roles.
- **Reskilling of workers in Hospitality, Healthcare Support, Retail, and Clerical roles can help close equity gaps.** Reskilling opportunities should be prioritized in roles—like the ones mentioned above—that offer little to no career growth opportunities, low wages, and have high shares of Black employment. Too often, workers in these roles – for a variety of factors – are not able to leverage the skillsets gained in these roles to pursue more opportunities. As the reskilling section of the report demonstrates, workers in these roles have diverse skillsets that can be leveraged to earn higher wages and join career areas poised to grow in the Atlanta MSA economy.

¹ See figure 9 for explanation of the selection of these target career areas.

Acknowledgements

Emsi gratefully acknowledges the outstanding support from the numerous stakeholders that made this project and report possible. First, special thanks to Mayor Keisha Lance Bottoms and Deputy Chief Operating Officer Jon Keen from the City of Atlanta, who helped form the regional stakeholder group with members from the following organizations:



Additional thanks go to our partners from UNCF, including Dr. Michael Lomax, Ed Smith-Lewis, and Julian Thompson and our partners from Harvard Kennedy School of Government, including Jane Wiseman and Michael Holland for their contributions to this report and the overall project.

Finally, Emsi would like to thank the Strada Education Network for funding this project, including Vice President of Philanthropy, Pat Roe.



Introduction

POST-SECONDARY attendance and completion remain out of reach for far too many students of color. Further, the lack of career pathways leading students from high school into high-wage, high-value jobs has challenged residents in predominantly urban areas, while producing labor gaps that strain both employers and municipal leaders. Finally, too little objective, accessible data is available to urban leaders to proactively engage in workforce development efforts.

To address this challenge, UNCF has joined with the Harvard Kennedy School and Emsi to advance data-driven approaches to closing workforce equity gaps. This team received grant funding for the development of a national model and for two pilot projects testing the model, one of which is the Atlanta MSA. The project is striving to inform new learning ecosystems using Emsi Skills—an advanced clustering model. This report reflects a first step in providing a data foundation for Atlanta to use in making workforce investment decisions.

An important aspect of this project included the creation of Emsi SkillScape, an Emsi tool designed to showcase Emsi's skill-based roles, and provide actionable analytics on overall role gaps, as well as specific skill gaps and surpluses at the skill competency level. Emsi SkillScape was built leveraging the interactive capabilities of Tableau so stakeholders in Atlanta can engage with Emsi Skills to make data-informed policy decisions. Much of the data contained in this report stems from Emsi SkillScape to illustrate how data users can utilize the interactive data.

*This report reflects a first step in providing a **data foundation for Atlanta** to use in making workforce investment decisions.*



Emsi

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, now from a real-time perspective.

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 known as 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 (such as “Software Development/Programming”) 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.

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).

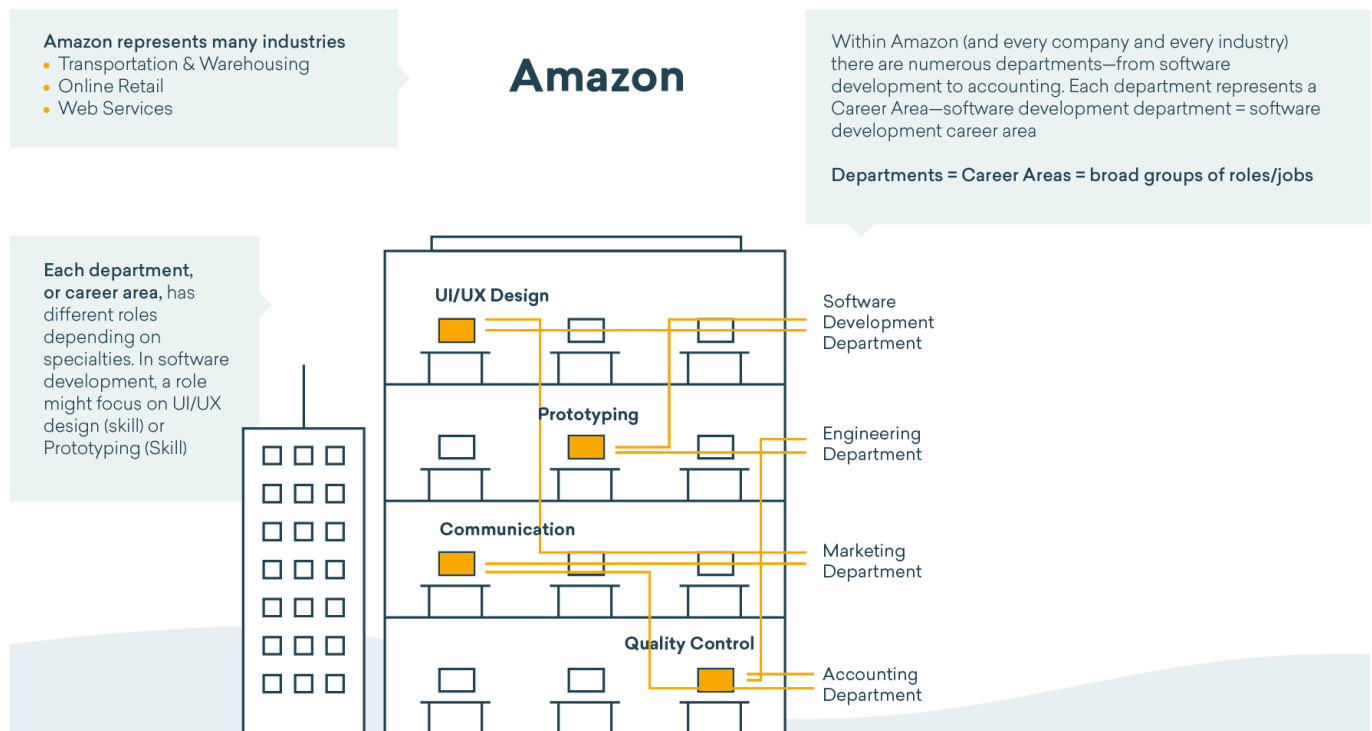
Please note that while the incorporation of traditional Labor Market Information (LMI)—like employment data from the BLS—enhances Emsi's Skills data, online profiles and job postings are inherently biased toward certain roles. Consequently, the data presented in this report should not be directly compared to traditional LMI, such as employment data from the BLS. Employment data from the BLS aids Emsi's Skills data in better reflecting a regional labor market. However, the supply of talent in Emsi's Skills does not directly correlate to traditional employment data on a 1:1 scale. Ultimately, the skills data in Atlanta demonstrates the region's evolution into a hub for in-demand career areas that require complex, highly technical skillsets. Emsi's Skills work highlights these sought-after skills—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 Atlanta MSA.



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

When reading this report, remember that Emsi's 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 the largest supply of workers in the Atlanta MSA. This career area represents all the different types of Business/Finance roles (occupations)—including financial accountants, logistics analysts, and human resources representatives. Therefore, in this report, Business/Finance *does not* represent companies from an industry perspective such as banks, financial advising, and capital investment firms. Instead, Business/Finance represents the aforementioned roles or occupations that can be found across every industry—every company or organization in the Atlanta MSA, ranging from private firms like Delta or Home Depot to public organizations like the City of Atlanta Government and Atlanta Public Schools require Business/Finance workers.

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



Geography

For the purposes of this report, any use of the term “Atlanta” refers to the broader Atlanta-Sandy Springs-Alpharetta, Georgia MSA, because the vast majority of relevant data is provided at the MSA level.

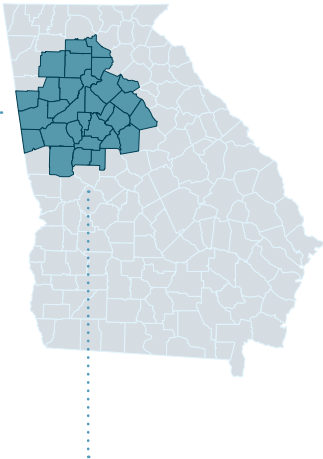
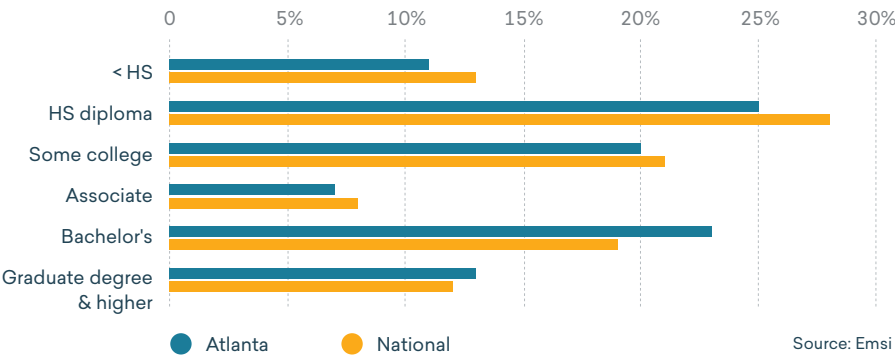


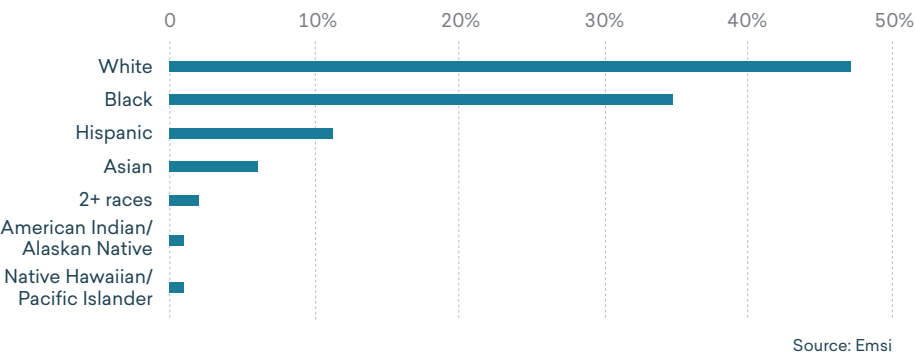
FIGURE 1: EDUCATIONAL ATTAINMENT, ATLANTA MSA, 2019



THE ATLANTA MSA INCLUDES THE FOLLOWING COUNTIES

Barrow	Douglas	Meriwether
Bartow	Fayette	Morgan
Butts	Forsyth	Newton
Carroll	Fulton	Paulding
Cherokee	Gwinnett	Pickens
Clayton	Haralson	Pike
Cobb	Heard	Rockdale
Coweta	Henry	Spalding
Dawson	Jasper	Walton
DeKalb	Lamar	

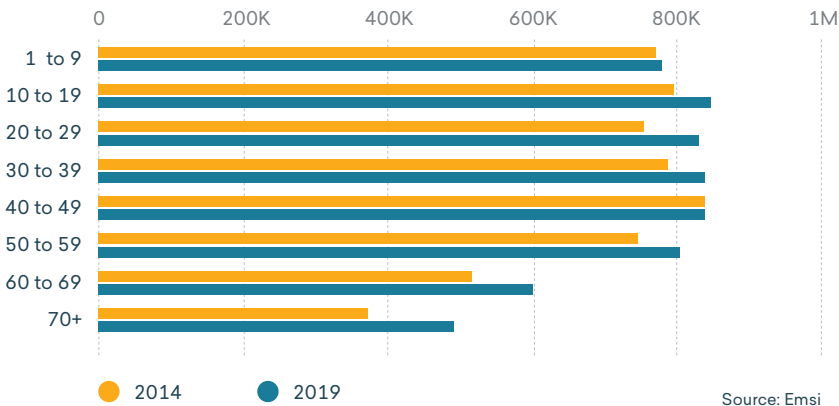
FIGURE 2: RACE/ETHNICITY, ATLANTA MSA, 2019



MOST POPULATED CITIES, ATLANTA MSA, 2018

City	2018 Population
Atlanta	479,655
Sandy Springs	105,411
South Fulton	94,912
Roswell	94,257
Johns Creek	83,637
Alpharetta	64,672
Marietta	60,410
Smyrna	55,976
Stonecrest	53,772
Brookhaven	53,140

FIGURE 3: AGE OF POPULATION, ATLANTA MSA, 2014 AND 2019



Source: American Community Survey

Atlanta MSA Economic Overview

ATLANTA MSA,
ECONOMIC OVERVIEW

Occupation Career Areas

The career areas with the greatest supply of talent (workers who have the needed skills) in the Atlanta MSA include Business/Finance, IT/Math, Sales/Customer Service, and Healthcare. With respect to Healthcare, however, the share of talent in this career area is substantially less than the national average. Despite having the fourth highest level of supply in the region with over 300,000 worker profiles, Healthcare is the second most represented career area nationally—a comparable sized region to the Atlanta MSA would have an estimated talent supply of 434,000 based on the national share.

Across all career areas, Emsi's Skills has identified over 2.4 million workers in the Atlanta MSA.



Population (2019)

6,036,322

Population grew by 441,749 over the last 5 years and is projected to grow by 321,299 over the next 5 years.



Total Regional Employment

2,968,573

Jobs grew by 355,187 over the last 5 years and are projected to grow by 220,387 over the next 5 years.



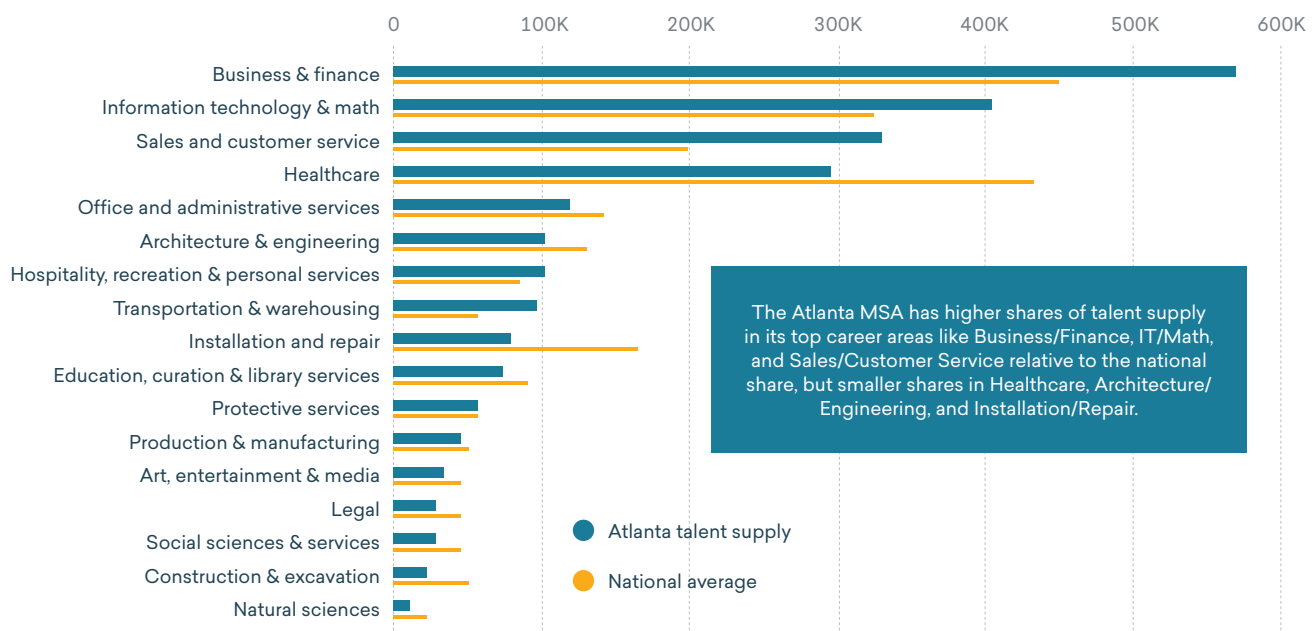
Median Household Income

\$64.8K

Median household income (2018) is \$4.5K above the national median household income of \$60.3K.











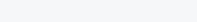
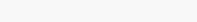
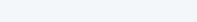
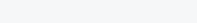
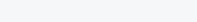
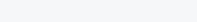
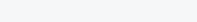
Source: Emsi

FIGURE 4: ATLANTA MSA SUPPLY OF TALENT BY CAREER AREA AND COMPARISON TO NATIONAL AVERAGE (2019)



Source: Emsi Skills and BLS employment

TABLE 1: CAREER AREA TALENT SUPPLY IN THE ATLANTA MSA, RELATIVE NATIONAL AVERAGE, AND MEDIAN AVERAGE ADVERTISED SALARY (SORTED BY TOP ADVERTISED SALARY)

Career Area	2019 Estimated Atlanta Talent Supply	2019 Atlanta Share	2019 National Share	Difference between Atlanta and National Share	Median Advertised Salary in Atlanta MSA (March 2018–March 2020)
Information technology and math	406,557	16.8%	13.6%	3.2%	\$90,303 
Architecture and engineering	100,888	4.2%	5.5%	-1.3%	\$77,439 
Natural sciences	13,345	0.6%	0.9%	-0.3%	\$72,677 
Business and finance	572,877	23.6%	18.8%	4.8%	\$70,181 
Healthcare	300,304	12.4%	18.0%	-5.6%	\$61,270 
Sales and customer service	332,950	13.7%	8.4%	5.3%	\$60,468 
Education, curation, and library services	71,662	3.0%	3.7%	-0.7%	\$57,265 
Art, entertainment and media	35,692	1.5%	1.9%	-0.4%	\$57,173 
Legal	31,185	1.3%	1.8%	-0.5%	\$56,671 
Construction and excavation	25,288	1.0%	2.1%	-1.1%	\$56,025 
Transportation and warehousing	97,875	4.0%	2.4%	1.6%	\$50,794 
Social sciences and services	27,739	1.1%	1.8%	-0.7%	\$50,019 
Installation and repair	82,630	3.4%	6.8%	-3.4%	\$48,957 
Protective services	55,559	2.3%	2.3%	0%	\$43,057 
Production and manufacturing	48,646	2.0%	2.2%	-0.2%	\$40,283 
Hospitality, recreation, and personal services	100,814	4.2%	3.6%	0.6%	\$39,131 
Office and administrative services	119,560	4.9%	6.0%	-1.1%	\$38,419 
Total	2,423,571	100%	100%		

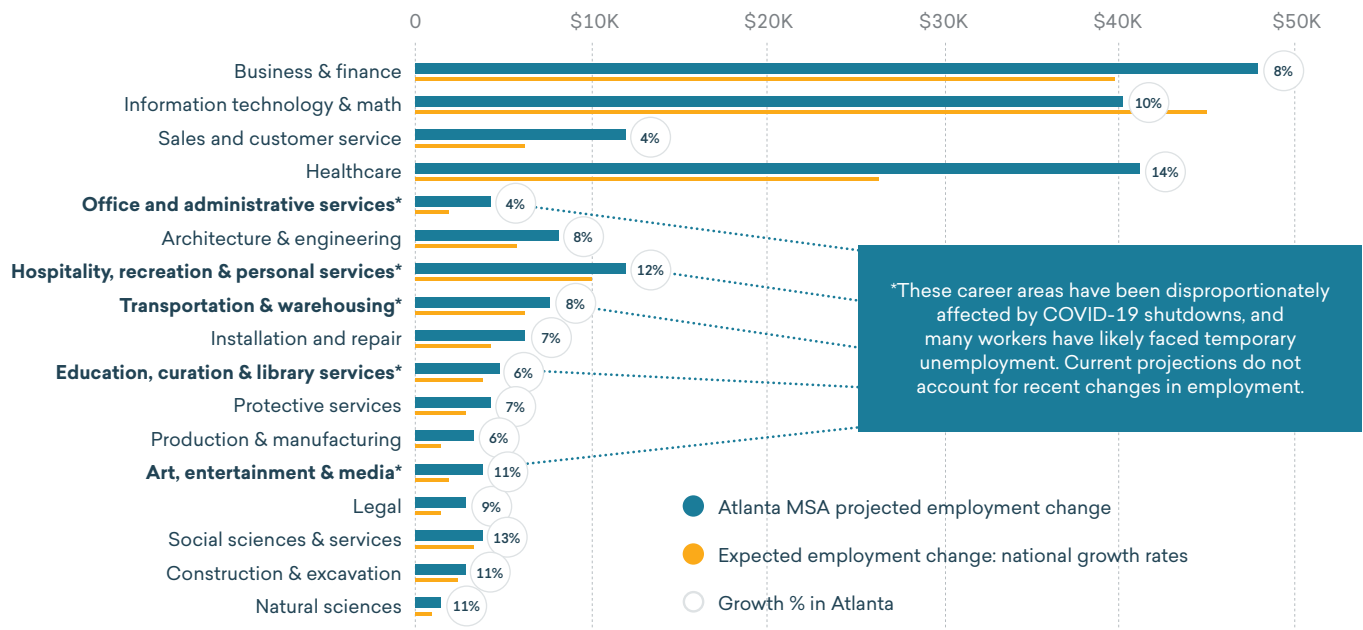
Source: Emsi Skills and BLS employment

The top career areas of talent supply also tend to offer middle to high wages based on advertised salaries from job posting data, with the IT/Math career area offering the highest at over \$90,000 annually.

The Atlanta MSA economy has grown rapidly since the Great Recession. Consequently, five-year employment projections, based on BLS data and Emsi's projection methodology, expect the Atlanta MSA economy to grow 8.5 percent through 2024, faster than the national projected growth rate of 6.8 percent. Note that current projections do not yet account for COVID-19 impacts. Career areas that could experience stunted growth, or that have faced high levels of temporary unemployment because of current events, have been highlighted in Figure 5 below.

The career areas expected to experience the most growth through 2024 generally reflect the top employment areas in Figure 4. One exception includes Hospitality/Recreation/ Personal Services. For ease of comparison, the career areas below are presented in the same order as those in Figure 4.

FIGURE 5: PROJECTED EMPLOYMENT CHANGE BY CAREER AREA IN THE ATLANTA MSA COMPARED TO EXPECTED EMPLOYMENT CHANGE BASED ON NATIONAL GROWTH RATES, 2019–2024




Source: Emsi Skills and BLS employment

In partnership with UNCF efforts to create equitable, sustainable growth, particularly for the Black community, part of this analysis highlights racial job inequity in the Atlanta MSA economy. In general, most Black workers are employed in the largest career areas in the Atlanta MSA – the top four career areas of total employment and Black employment are the same. However, comparing Black employment by career area against their share of the overall workforce (33%) reveals disparities and opportunities for investment and strategic engagement.

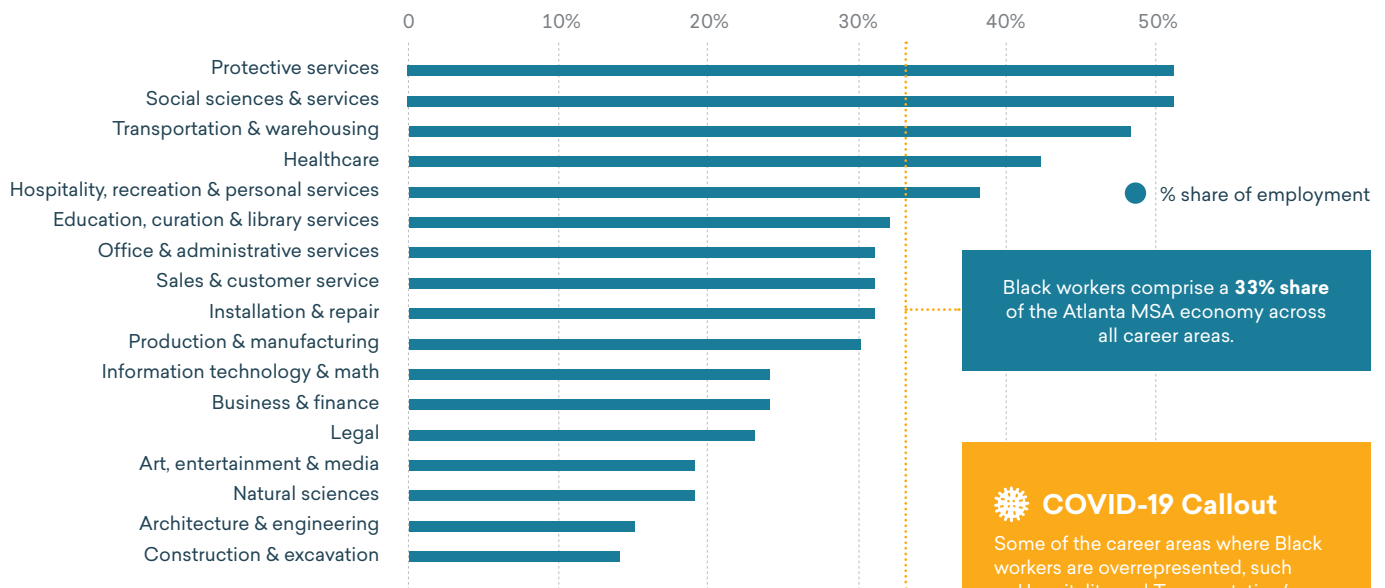
For example, despite having the same top four career areas of employment, Black workers in Atlanta remain underrepresented in all four except Healthcare, including the highest paying career area—IT/Math. Furthermore, Black workers tend to have overrepresentation in lower-paying roles within these career areas, such as IT Support for IT/Math and Healthcare Support roles within Healthcare. Conversely, they tend to be underrepresented in high-paying roles related to Software Development, Cyber Security, and Healthcare Practitioners.

Atlanta’s Black workforce also has overrepresentation in some of the lowest paying career areas, including Hospitality/Recreation/Personal Services and Protective Services.

**COVID-19 Callout**

Hospitality/Recreation/Personal Services roles disproportionately experienced heavy job losses in the wake of COVID-19 economic shutdowns. Consequently, nearly 100,000 workers in this career area alone likely faced temporary unemployment in 2020, and long-term growth in this career area could slow down considerably in the long-term due to social distancing measures and lower consumer spending.

FIGURE 6: CURRENT BLACK EMPLOYMENT BY CAREER AREA COMPARED TO BLACK EMPLOYMENT SHARE OF WORKFORCE (2019)



Source: Emsi Skills and BLS employment

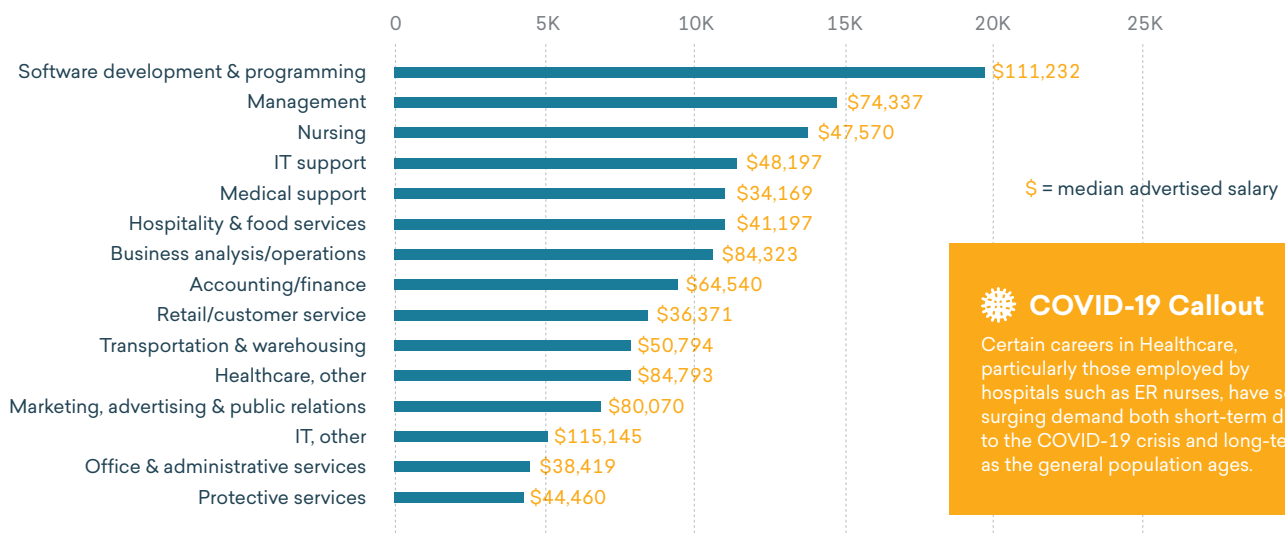
COVID-19 Callout

Some of the career areas where Black workers are overrepresented, such as Hospitality and Transportation/ Warehousing, tend to require person-to-person interaction. Consequently, these career areas currently face greater health risks as economies open.

Trends in Fastest Growing Career Sub-Areas

When analyzing career sub-areas in the Atlanta MSA region by projected employment growth, the data show that medium to high-paying sub-areas, particularly in the IT/Math, Healthcare, and Business/Finance career areas expect to see impressive growth over the coming years. These are promising, growing fields that will need a pipeline of talent with a diverse skillset.

FIGURE 7: TOP GROWING SUB-CAREER AREAS FOR THE ATLANTA MSA, PROJECTIONS 2019-2024



Source: Emsi Skills and BLS employment

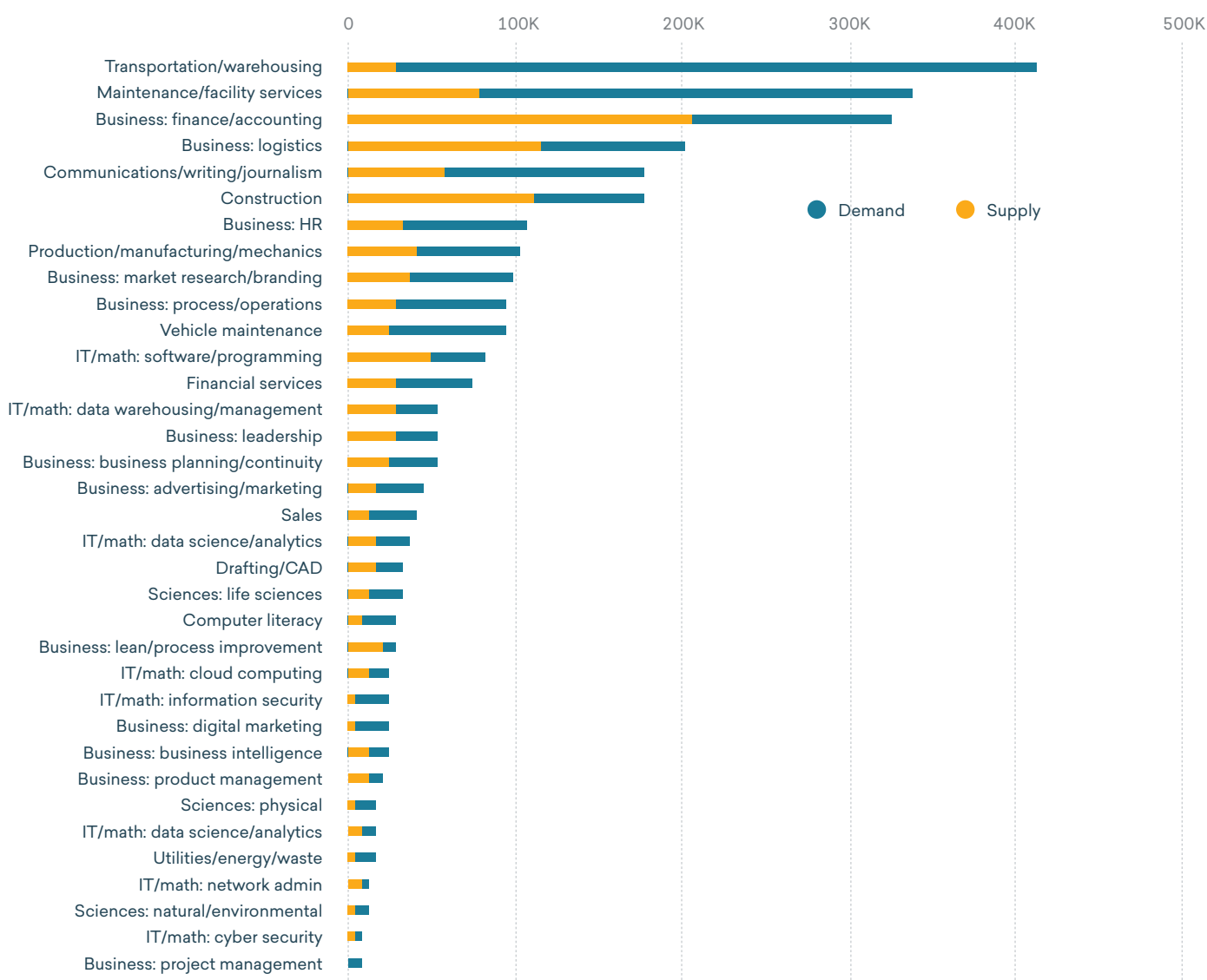
COVID-19 Callout

Certain careers in Healthcare, particularly those employed by hospitals such as ER nurses, have seen surging demand both short-term due to the COVID-19 crisis and long-term as the general population ages.

Figure 8 below reveals competencies (broad grouping of skills) experiencing substantial gaps in the Atlanta MSA. The largest gaps are found in Transportation/Warehousing, Maintenance/Facility Services, Business, Communications/Journalism, and Construction. As a specific example, the Business: Finance/Accounting competency has a demand value of nearly 330,000 job postings, yet a talent supply of just 205,000. Regional stakeholders should ensure that training not only exists but is also easily accessible, particularly to underserved populations.

The skillsets found in Figure 8 showcase the diversity of employer-driven demand in Atlanta's regional economy and signify gaps that should be addressed immediately to ensure continued economic growth and prosperity in the region.

FIGURE 8: MOST IN-DEMAND SKILL COMPETENCIES IN THE ATLANTA MSA (MARCH 2018–MARCH 2020)



Source: Emsi

Business and Talent Attraction for Targeted Career Areas

Target Career Areas Identified

Based on the creation of Emsi's Skills dashboard, analysis, as well as surveys and conversation with regional stakeholders, four target career areas have been identified that demonstrate promising growth opportunities. The target career areas include:



IT/Math



Business/Finance



Healthcare



Production/Manufacturing

These target careers have a wide range of roles requiring diverse competencies and skills that can help Atlanta's workforce and businesses grow—if the supply can match demand. Figure 9 below highlights the most sought-after skills in each career area based on employer demand and the corresponding supply.

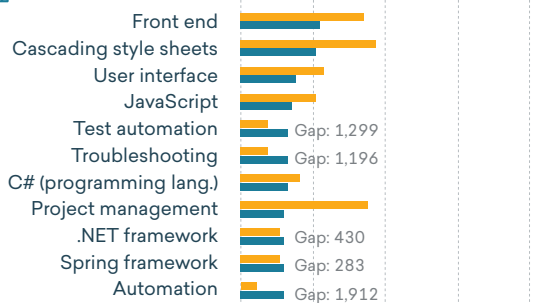
In Healthcare, Business/Finance, and Production/Manufacturing, the skills experiencing the greatest supply/demand gaps typically reflect a specific job or role associated with that skill. For example, in Healthcare, gap shortages are found for Critical Care RN's and Speech-Language Pathologists. Similarly, in Business/Finance, skill gaps are for either accounting/finance positions or sales. Within Production/Manufacturing the skill gaps reflect the region's need for Machinists, Lathe Operators, and Welders. IT/Math differs slightly in that the skills needed most revolve around a skillset (automation) that could apply to various IT roles.

FIGURE 9: TOP SKILLS REQUIRED FOR TARGET CAREER AREAS (MARCH 2018–MARCH 2020)

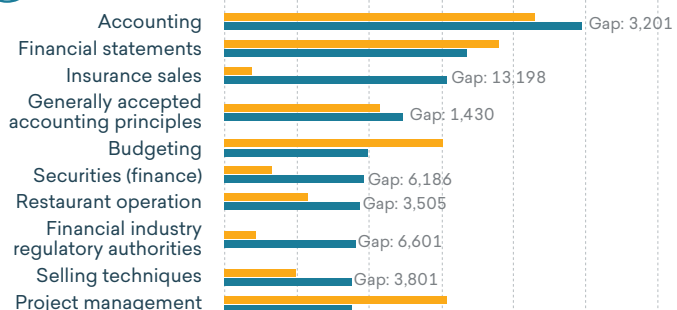
● Demand ● Supply



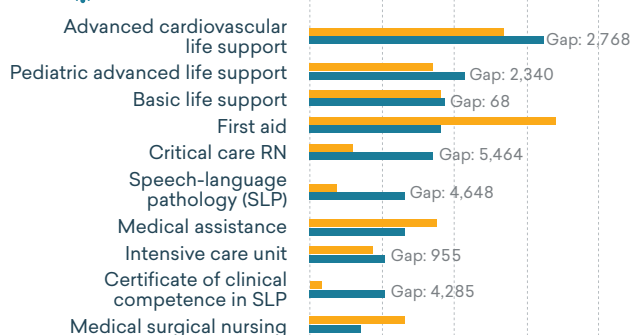
IT/Math



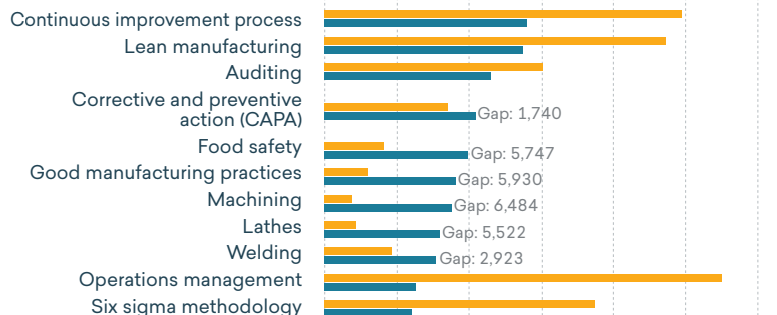
Business/Finance



Healthcare



Production/Manufacturing



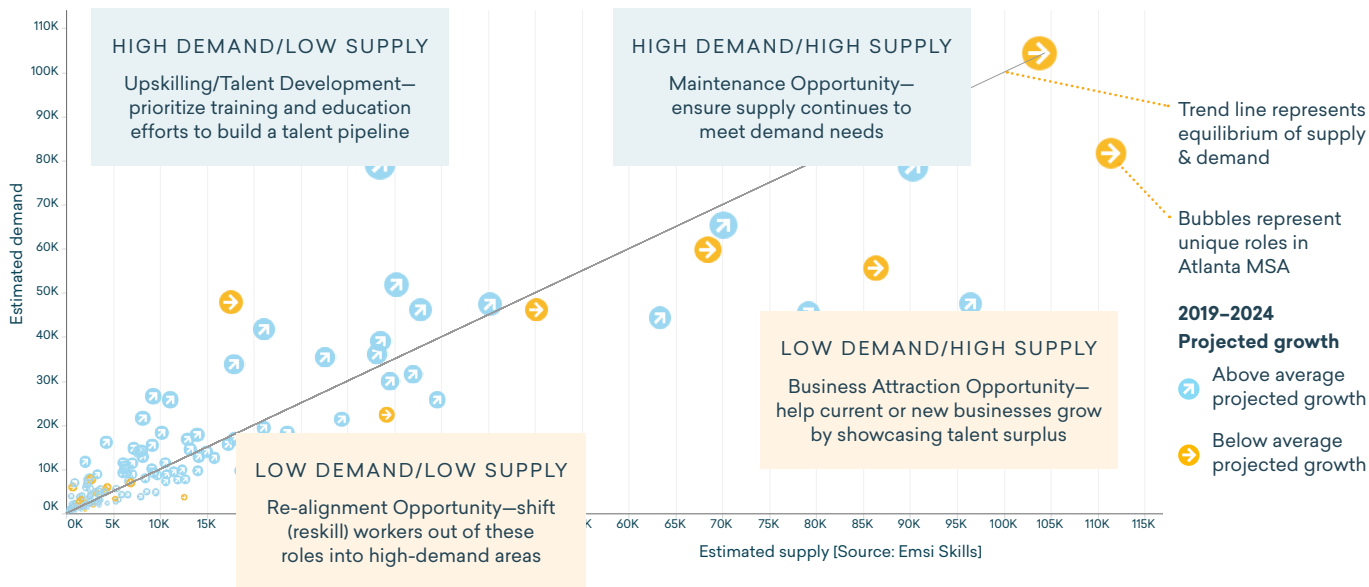
Source: Emsi Skills

Business Attraction & Expansion Opportunities

By leveraging Emsi Skills, regional stakeholders can now identify strengths and opportunities in the Atlanta region, particularly regarding business attraction and expansion opportunities. Reviewing the figure below where the x-axis represents estimated labor supply and the y-axis estimated demand, different quadrants indicate unique opportunities. For example, where a role—represented by the blue and yellow circles below—is found will determine what the share of supply or demand for that role implies for potential business growth.

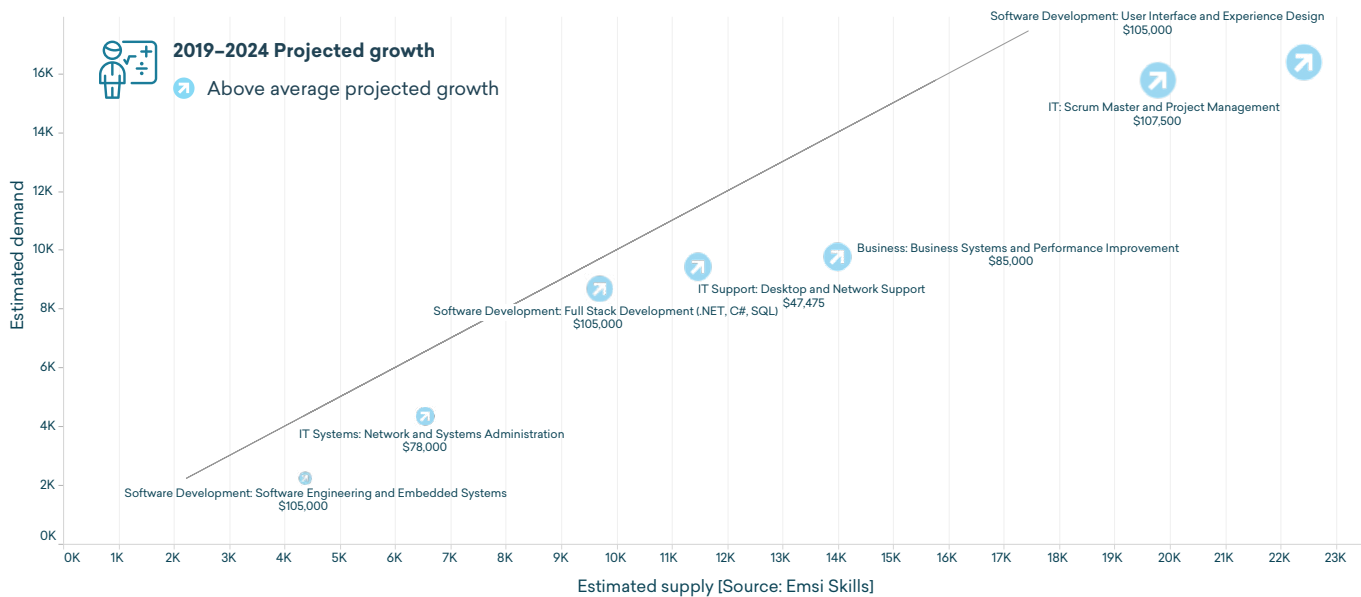
For example, a role found in the lower right quadrant (low demand/high supply) dictates that an oversupply of workers exists in the Atlanta region. Therefore, the potential to expand locally or attract new businesses that require these roles exists. Conversely, the upper left quadrant showcase roles that experience high demand relative to the supply of workers in the region. Consequently, the lack of supply serves as a signal to workforce education and training providers that upskilling and talent development efforts should prioritize these roles.

FIGURE 10: SUPPLY AND DEMAND OF WORKERS IN THE ATLANTA MSA



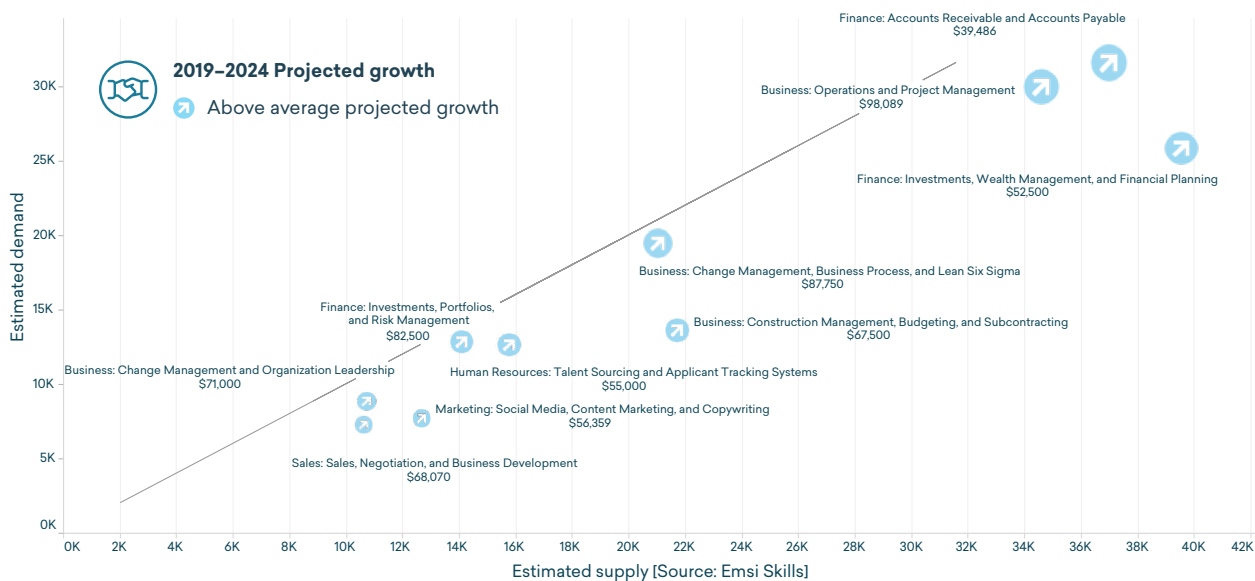
The Atlanta MSA has several career areas, career sub-areas, and groupings of roles that could serve as business attraction and expansion opportunities. For example, several roles in the IT/Math career area have a relatively high supply of workers yet low demand from current employers. Consequently, an opportunity exists to either attract businesses or assist current Atlanta businesses to grow based on the relative high supply of these roles. From numerous Software Development roles to Business Systems/Performance Improvement, the roles found on the chart below have thousands more workers in supply in the region than current demand.

FIGURE 11: OVERSUPPLY IN MATH/IT ROLES (MARCH 2018–MARCH 2020)



Additionally, the Business/Finance career area has a plethora of roles that could aid in the Atlanta regional economy's growth—these roles are crucial across nearly every industry.

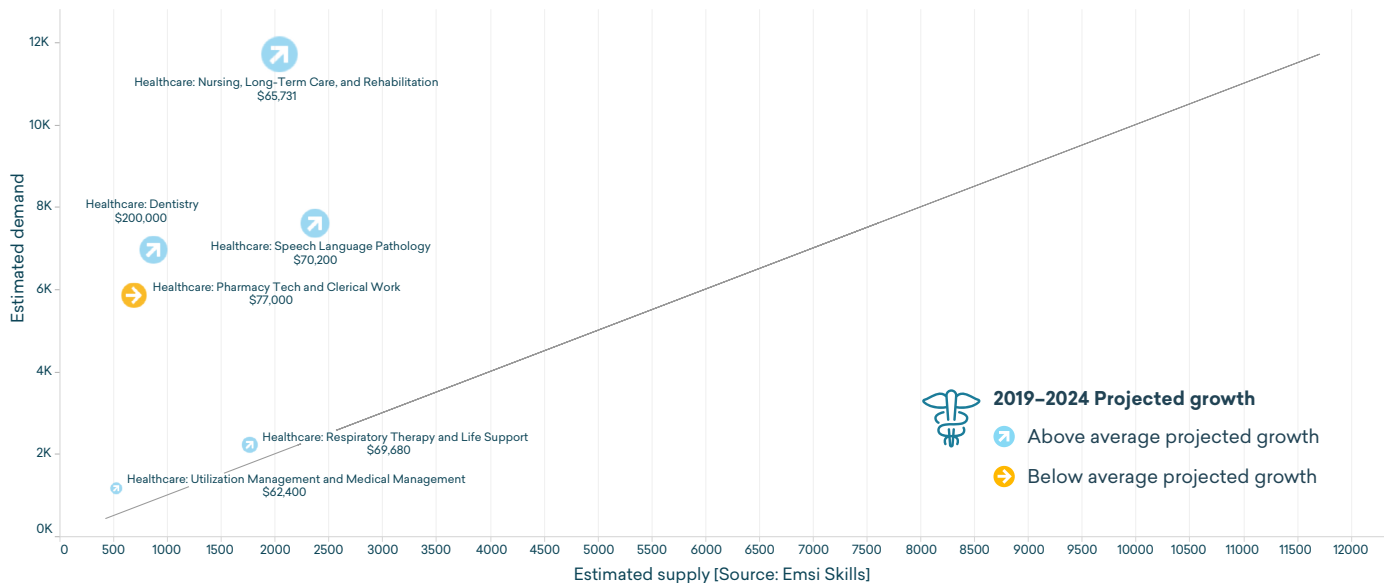
FIGURE 12: OVERSUPPLY IN BUSINESS/FINANCE ROLES (MARCH 2018–MARCH 2020)



Talent Attraction and Training Opportunities

Whereas the Atlanta region has exciting opportunities to grow business in areas like IT/Math because of an abundance of supply, the opposite opportunity exists in careers like Healthcare—where Atlanta employers struggle to grow because demand far outpaces supply. A wide variety of healthcare roles—from Pharmacy Tech to Speech Language Pathology—need more workers in these specialized fields to fulfill the growing demand in Atlanta’s Healthcare sector.

FIGURE 13: HEALTHCARE ROLES EXPERIENCING GREATER DEMAND THAN AVAILABLE SUPPLY (MARCH 2018–MARCH 2020)



The Healthcare roles above demonstrate just one example of talent attraction and training opportunities for the region. Production/Manufacturing represents another career area experiencing intense demand relative to supply.

Numerous Production/Manufacturing roles have experienced greater demand from regional employers recently, particularly roles with skills related to welding, soldering, and machining. While the blue arrows indicating above average expected growth for these roles through 2024, some concern remains around prioritizing Manufacturing/Production as the U.S. economy—and Atlanta’s in particular—increasingly becomes a service-sector

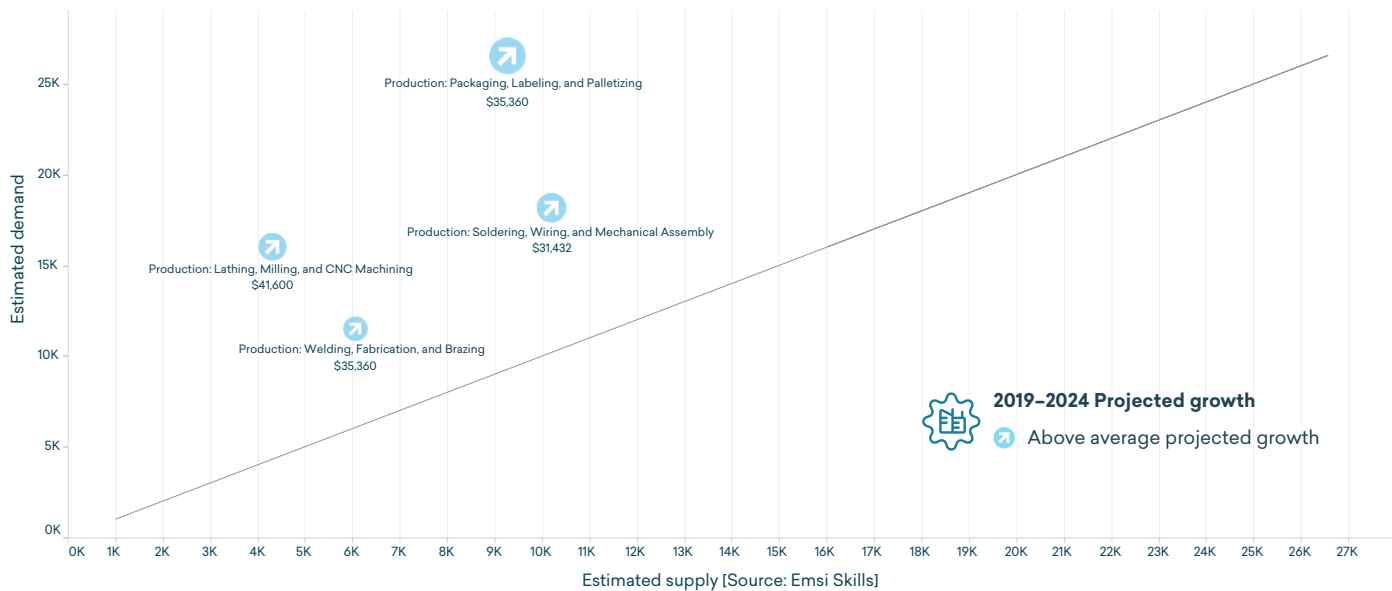
*Healthcare roles represent just one example of **talent attraction and training opportunities** for the region. Production/Manufacturing is also experiencing **intense demand** relative to supply.*

driven economy. While these roles may not be *projected* to grow as considerably as roles found in the other target career areas, additional context tells a different, more promising story for Production/Manufacturing.

Production/Manufacturing roles were some of the hardest hit during the Great Recession and the last to fully recover to post-Recession employment levels—some in just the last few years. Consequently, since projections incorporate historical data, heavy job losses during and slow growth following the Great Recession mute projections for these roles.

As the tens of thousands of job postings from Atlanta MSA employers indicate, these roles have great current demand, however, growth is also stunted by a lack of supply. These roles offer excellent opportunities as they often require short-term or on-the-job training and certifications rather than substantial post-secondary investment.

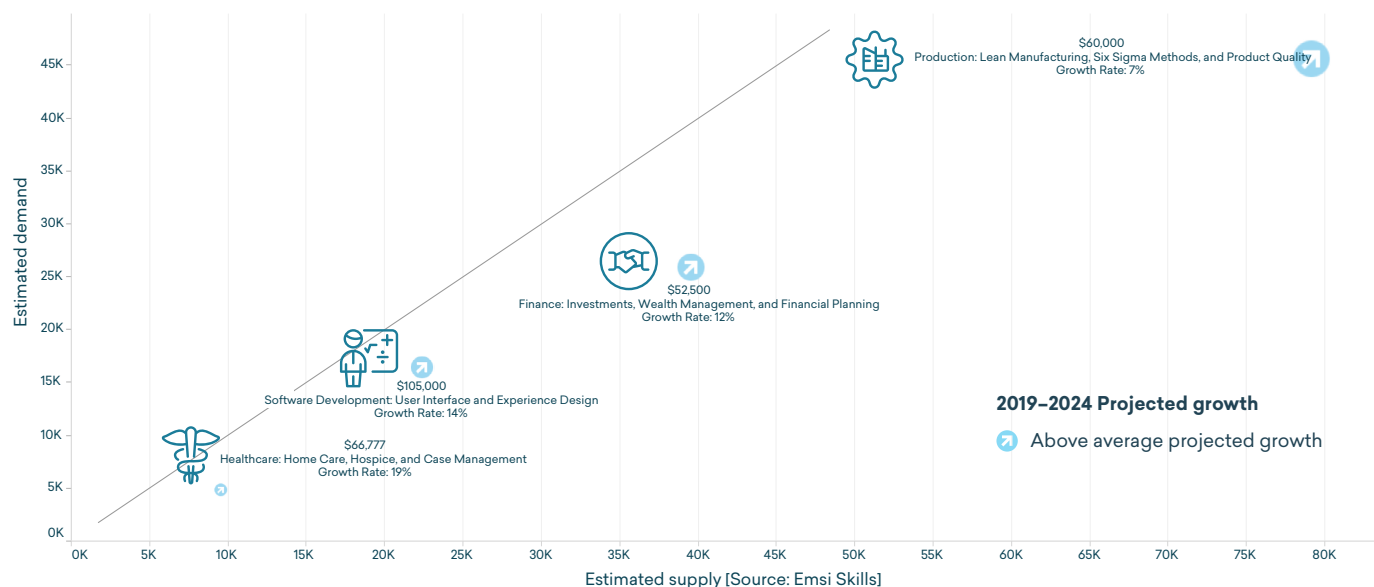
FIGURE 14: PRODUCTION/MANUFACTURING ROLES EXPERIENCING GREATER DEMAND THAN AVAILABLE SUPPLY (MARCH 2018–MARCH 2020)



Upskilling Opportunities — Career Pathways

Roles and Career Areas to Explore Upskilling

FIGURE 15: UPSKILLING OPPORTUNITIES IDENTIFIED IN THE FOUR TARGET CAREER AREAS



The four roles above were identified by Emsi as upskilling opportunities in the Atlanta MSA based on the following criteria:

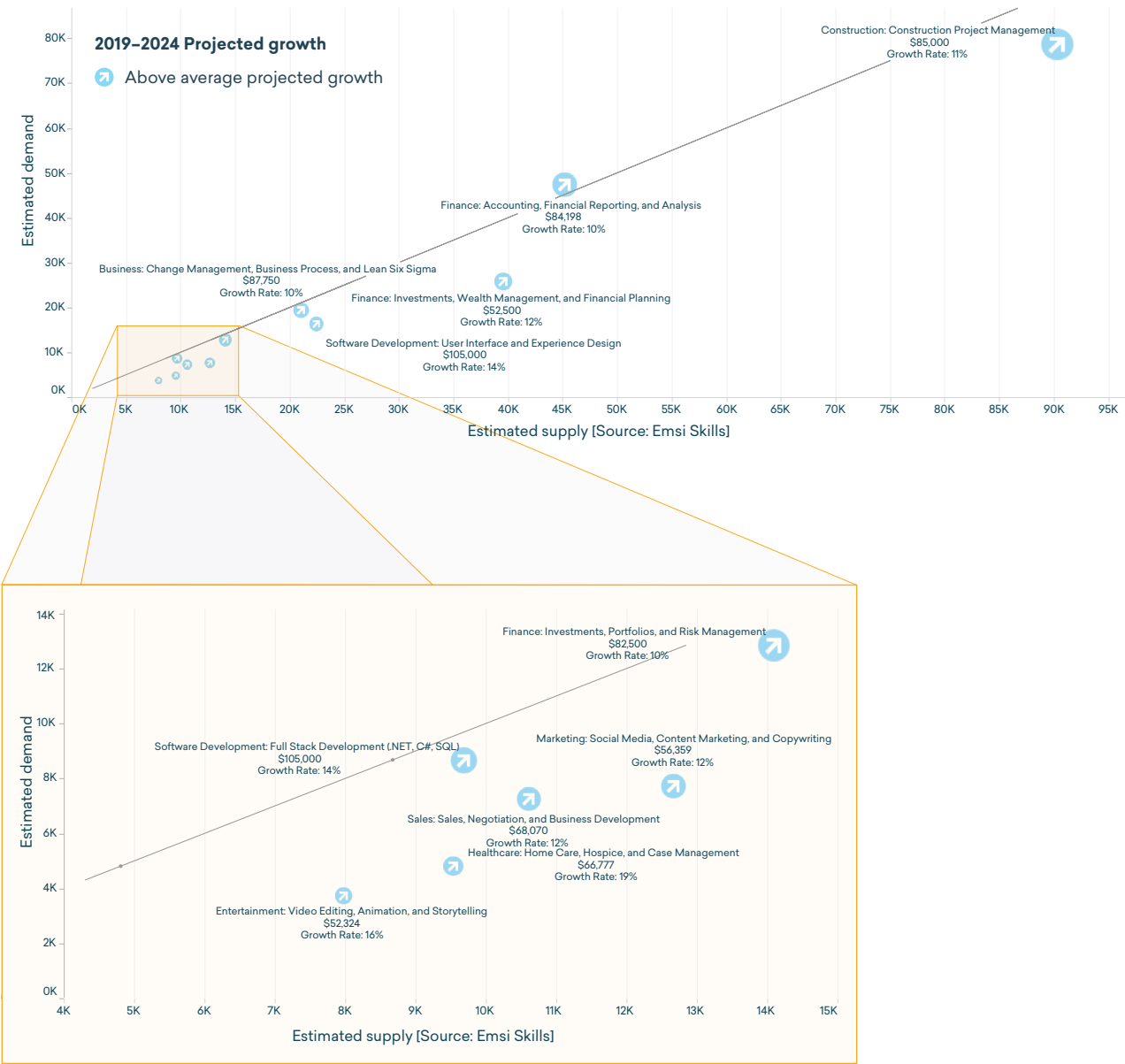
- A role within one of the four target career areas
- Competitive—greater talent supply than demand
- Double digit percent growth projected for the five-year period 2019–2024
 - With exception of Production: Lean Manufacturing, Six Sigma Methods, and Product Quality—see note regarding employment projections for Production roles on page 19
- Transforming skillsets

High projected growth indicates that these roles will continue to remain prevalent in the region for the foreseeable future. Consequently, workers in these fields will need to remain competitive and have cutting-edge skills to differentiate themselves from others since more supply exists than demand.

Figure 16 below highlights the top roles identified for upskilling opportunities in the Atlanta MSA based on the criteria listed above. Regional stakeholders can leverage training opportunities to ensure workers in these roles maintain competitiveness in the labor market and enhance the ability for businesses to grow with a talent pipeline.

Most of the roles identified represent the four target career areas, however, two outliers exist in Construction and Entertainment. Intuitively these roles make sense—Atlanta was the fourth fastest growing MSA from 2014 – 2019 and has a burgeoning Motion Picture and Video Editing industry that employs a substantial share of the Entertainment role.

FIGURE 16: TOP ROLES FOR UPSKILLING IN THE ATLANTA MSA



Competencies and Skills Needed for Upskilling



Using the four identified roles from Figure 15 as an example, Figure 17 below showcases the competencies and skills critical for upskilling Atlanta MSA workers. The Finance role has several skill gaps present in the Atlanta MSA labor market, particularly related to certifications required such as Series 6 and 66 as well as becoming a Certified Financial Planner. Similarly, the Healthcare role has numerous skill gaps ranging from treatment planning to continuous quality improvement (CQI).

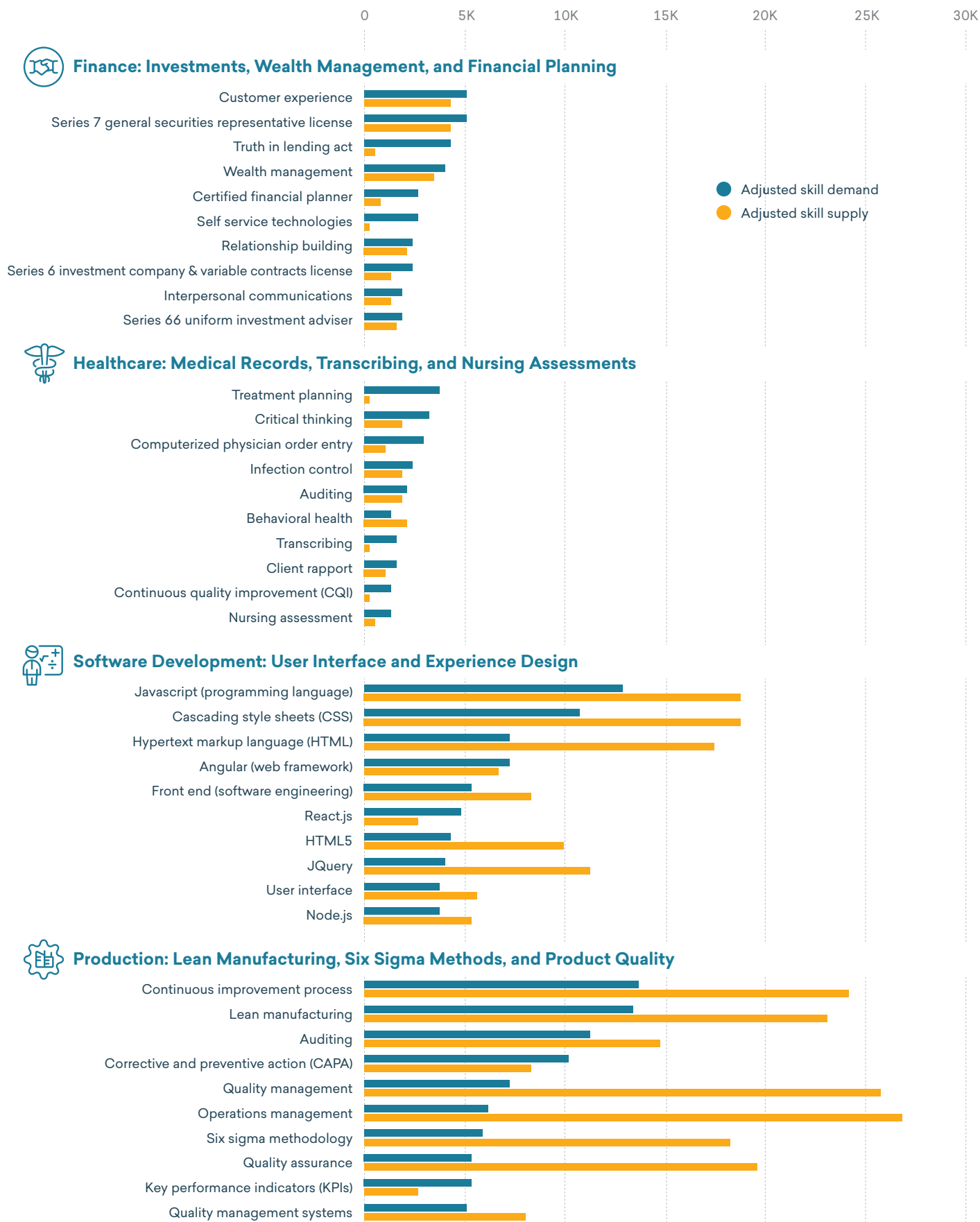
Meanwhile, the Software role has skills with tremendous demand as demonstrated by the tens of thousands of job postings. At the same time, however, these same in-demand skills tend to have an oversupply of talent in the region. For example, many of the programming languages for UI/UX design, such as JavaScript, have an oversupply despite high demand. The same issue exists in the Production role with in-demand skills such as continuous improvement process and lean manufacturing.

Nonetheless, these two roles still have gaps present that could be addressed such as a shortage of UI/UX designers with React.js experience and Lean Manufacturing Production workers with corrective and preventative action (CAPA).

Upskilling workers serves multiple purposes—training workers in these roles with these skills will give them a competitive edge in the labor market. Consequently, obtaining skillsets that reflect demand from regional employers will allow these workers to improve their odds of not only increased pay, but more importantly, maintaining job security in a quickly evolving labor market. Moreover, addressing the skills demanded by employers will fuel continued growth for the Atlanta MSA economy.

Addressing the skills demanded by employers will fuel continued growth for the Atlanta MSA economy.

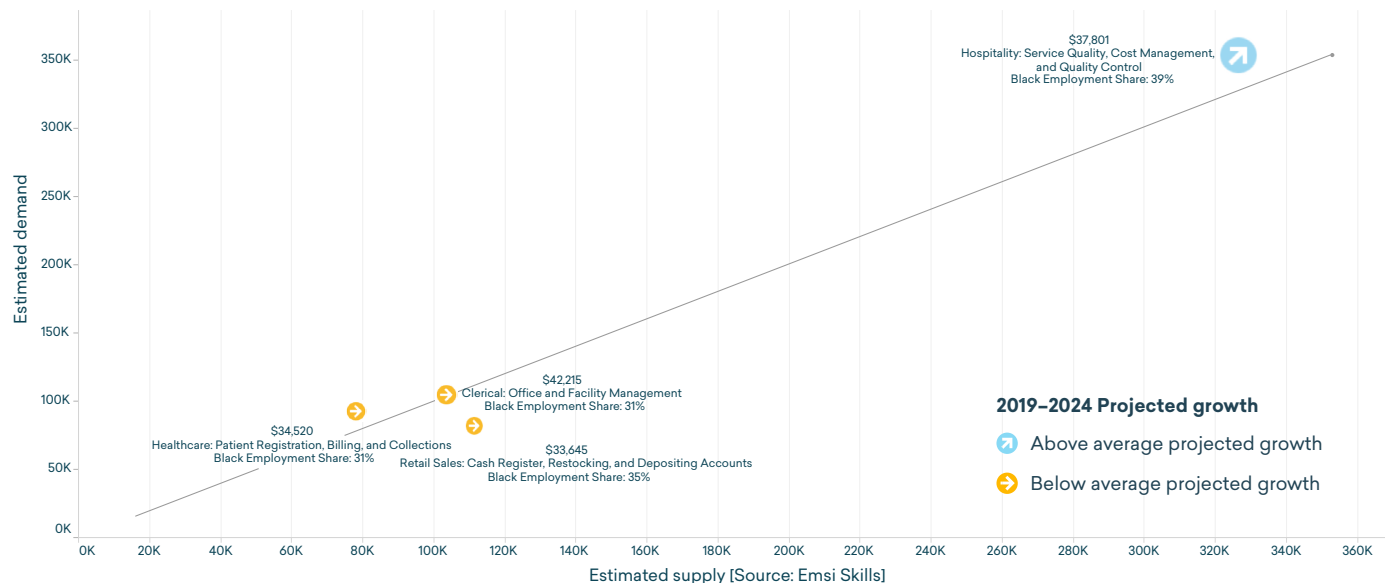
FIGURE 17: IMPORTANT COMPETENCIES AND SKILLS IN FOUR TARGET ROLES



Reskilling Opportunities— Career Pathways

Roles and Career Areas to Explore Reskilling

FIGURE 18: RESKILLING OPPORTUNITIES IN FOUR DIFFERENT ROLES



The four roles above were identified as reskilling opportunities in the Atlanta MSA based on the following criteria:

- Experiencing slow growth and offer low wages
- Offer low wages and do not present career growth opportunities through upskilling (Hospitality)
- Average or above-average representation of Black workers

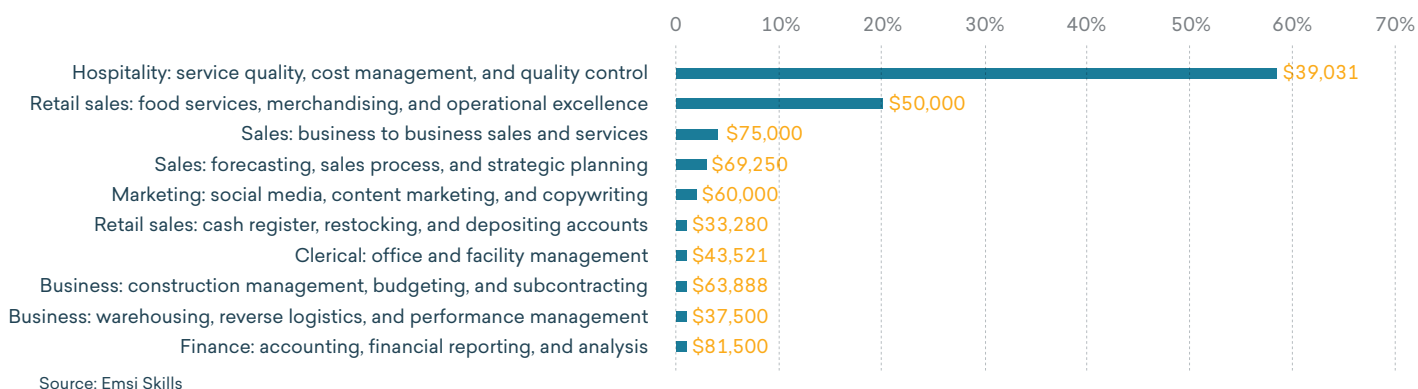
Reskilling Opportunity for Hospitality Workers

Hospitality roles represent terrific case studies in identifying career pathway opportunities. Too often, workers in Hospitality remain either in their current role or move only to other Hospitality roles—these workers do not realize that

their skillsets apply to many other career areas. Figure 20 below demonstrates this phenomenon for Hospitality workers in the Atlanta MSA, and furthermore, presents pathway opportunities into other career areas that typically offer more growth prospects and higher wages.

Likely transitions can be described as transitions occurring based on Emsi's national profile data. In the example above, transitions within the same role occur the most frequently (this is true of nearly all roles). Transitions from Hospitality: Service Quality, Cost Management, and Quality Control to Retail Sales: Food Services, Merchandising, and Operational Excellence are the second most common based on transitions occurring in profile data.

FIGURE 19: LIKELY TRANSITIONS OUT OF HOSPITALITY (MARCH 2018–MARCH 2020, NATIONALLY)



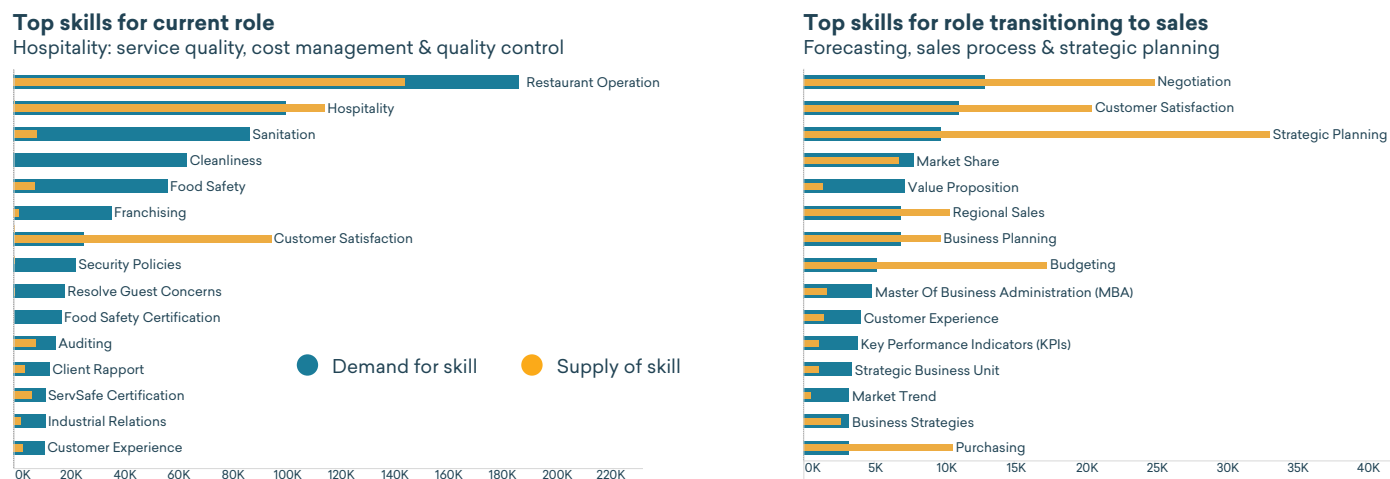
Aligned transitions, on the other hand, represent probable pathway opportunities based on the relationship between the skills required for two roles. A higher transition probability indicates that the skillsets between the two roles complement each other. In the example above, Sales: Forecasting, Sales Process, and Strategic Planning represents the fifth most likely transition based on skills. However, this transition does not make the top ten in terms of probable transitions.

FIGURE 20: ALIGNED TRANSITIONS FROM OUT OF HOSPITALITY (MARCH 2018–MARCH 2020, NATIONALLY)



Skills Required for Successful Transition

FIGURE 21: TOP 15 SKILLS REQUIRED FOR HOSPITALITY AND SALES ROLE (MARCH 2018–MARCH 2020)



Source: Emsi Skills

The top skills between the two roles, while different, also have similarities which point out the feasibility of transitioning from Hospitality to Sales. For example, numerous skills required in the Hospitality role revolve around the customer—the same is true for the Sales role. Moreover, the Hospitality role develops business and management skills that will transition well to the Sales position.

Some key skills that would help a Hospitality worker transition to a Sales role are listed below:

SKILL GAPS PRESENT IN SALES ROLE:

- Value proposition
- MBA
- Customer Experience
- Key Performance Indicators (KPIs)
- Strategic Business United
- Market Trend

These skills identified can be used to develop a strategy to realign training efforts in the Atlanta MSA to match current demand. The transition from Hospitality to Sales represents just one example of many career pathway opportunities in Atlanta, and this specific transition was highlighted in response to Hospitality workers being disproportionately affected by COVID-19.

Conclusion

Now, more than ever, municipal and workforce development leaders need access to real-time, relevant data to address workforce shortages. Emsi's skills clusters help identify specific gaps that strain local employer expansion efforts and prevent equitable growth among the working population. By leveraging the analysis in this report and skills data available to the City's designated stakeholder group, regional leaders, and data users can now engage with their communities equipped with the knowledge of skills, roles, and career areas that will provide high-wage, high-value opportunities.



Appendix

Emsi's Detailed 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. Postings data is 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 quarter 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 (e.g. 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 Labor Market Information (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’s Skills data in better reflecting a regional labor market. However, the supply of talent in Emsi’s Skills does not directly correlate to traditional employment data on a 1:1 scale. Ultimately, the skills data in Atlanta demonstrates the region’s evolution into a hub for in-demand career areas that require complex, highly technical skillsets. Emsi’s Skills work highlights these sought-after skills—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 Atlanta MSA.