



# Workforce Assessment of the Greater Columbus Georgia Region

April 28, 2017

Prepared for the Greater Columbus Georgia Chamber of Commerce  
By Avalanche Consulting, Inc.



# PROJECT PARTNERS



The Greater Columbus Economic Development Alliance is part of the Greater Columbus Georgia Chamber of Commerce, the voice of business in West Georgia. In addition to leading progress in West Georgia, the Chamber offers its members opportunities to increase their prospects, develop their professional skills, and growing their businesses. The Chamber leads studies such as this to help inform the Greater Columbus region's economic development activities and inspire greater investment in workforce development.

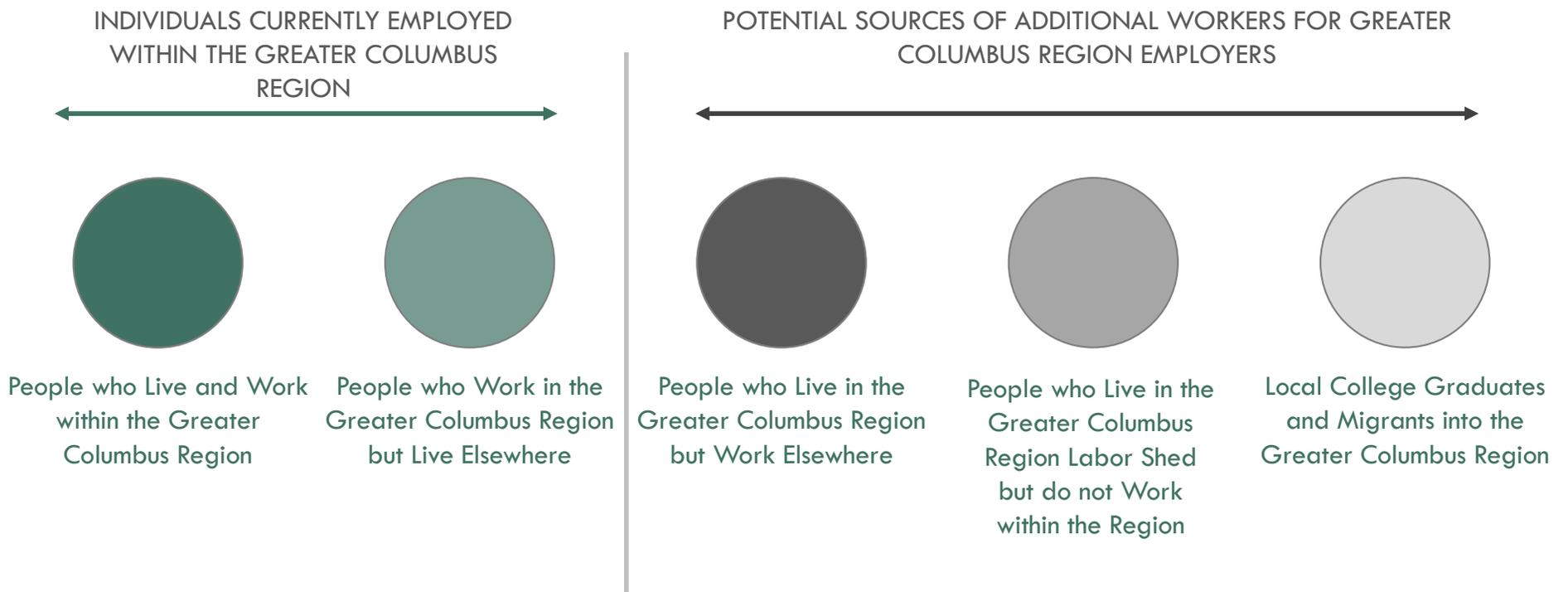
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# ABOUT THIS STUDY

The *Greater Columbus Workforce Assessment* examines existing and potential sources of labor for local employers. The analysis begins with a look at those already working within the Greater Columbus region, including residents and individuals who commute into the region from other communities. The analysis then explores the size and skills possessed by individuals who reside within the Greater Columbus labor shed. Next, the analysis examines current residents of the Greater Columbus region who work outside of the community. The analysis concludes with a look at talent production and attraction levels.



# GREATER COLUMBUS

Greater Columbus Georgia, which includes the Columbus metropolitan area, provides existing and prospective employers with a community rich with skilled workers. Located approximately 100 miles southwest of Atlanta, Greater Columbus and its broader labor shed are home to 250,000 workers. Greater Columbus also boasts extremely competitive wages and a sustained pipeline of talent thanks to the presence of several colleges and universities. These strengths are projected to propel the creation of more than 5,000 jobs throughout the region during the next decade.

## AN ABUNDANCE OF SKILLED WORKERS



Workers in Greater Columbus Region Labor Shed  
**250,000**

## HIGHLY COMPETITIVE WAGES

**\$52K**

Average annual wages in Greater Columbus are \$9,000 less than the statewide average.

## INDUSTRY HIGHLIGHTS

### AEROSPACE



**3X MORE CONCENTRATED IN GREATER COLUMBUS**

### FINANCE



**2X MORE CONCENTRATED IN GREATER COLUMBUS**

### SOFTWARE/IT



**20% GROWTH BETWEEN 2011 AND 2016**

## MULTIPLE TALENT PIPELINES

Individuals Living and Working in Greater Columbus

**65,275**

Greater Columbus Workers Living Outside the Community

**33,925**

Graduates from Local Educational Institutions Each Year  
**3,570**

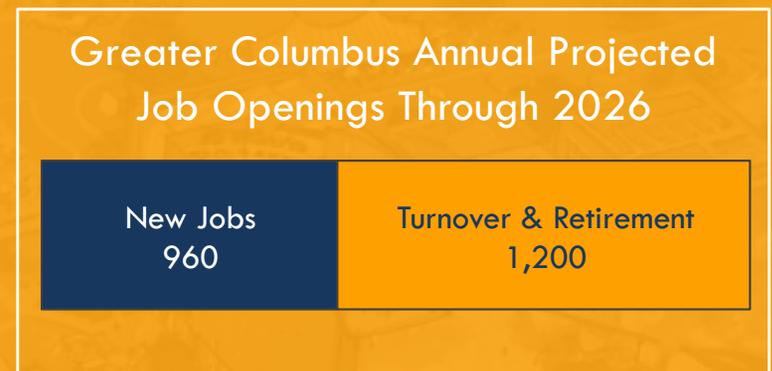
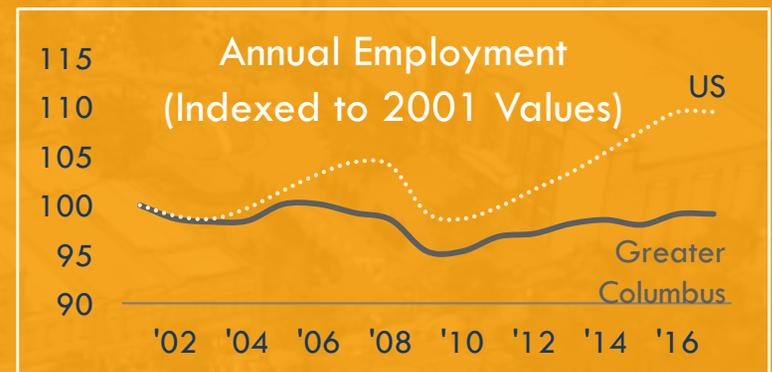
# EXECUTIVE SUMMARY

During the past 15 years, employment in Greater Columbus has proven relatively stable. In most years, job growth rises modestly. At the same time, Greater Columbus tends to experience relatively small job losses during economic downturns.

While the economic resiliency of the local economy has helped Greater Columbus avoid the destructive forces that ravaged many communities during economic downturns, such stability has come at a price. During more economically dynamic periods, job growth within Greater Columbus has been modest. As a result, total employment within Greater Columbus has remained largely unchanged since 2001. Nationwide, employment has increased nearly 10% during this period.

Fortunately, current employment estimates for Greater Columbus project stronger employment growth in the years ahead. Through 2026, Greater Columbus is expected to create nearly 1,000 jobs annually. During the past five years, average annual employment gains within Greater Columbus have totaled less than 600. In addition to net job growth, Greater Columbus is projected to have an additional 1,200 job openings annually due to turnover and the impending retirement of the Baby Boomer Generation.

With Greater Columbus on the cusp of its greatest level of job growth in at least a decade, developing an abundant and skilled workforce will be critical in ensuring greater economic vibrancy throughout the region. Whether looking to expand existing facilities or to construct new operations, companies exploring investments within Greater Columbus will want assurances that the regional workforce is capable of meeting their needs.

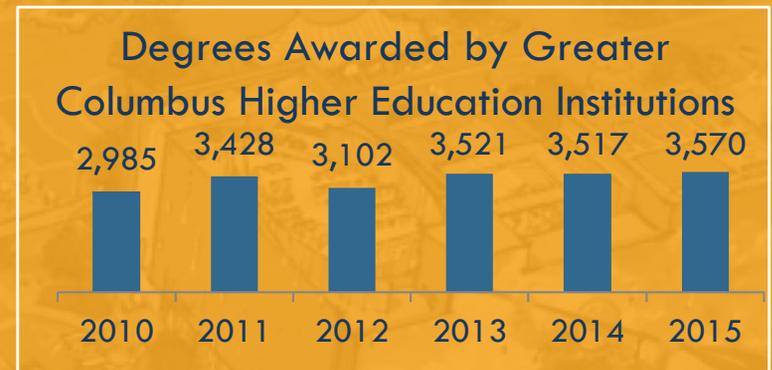
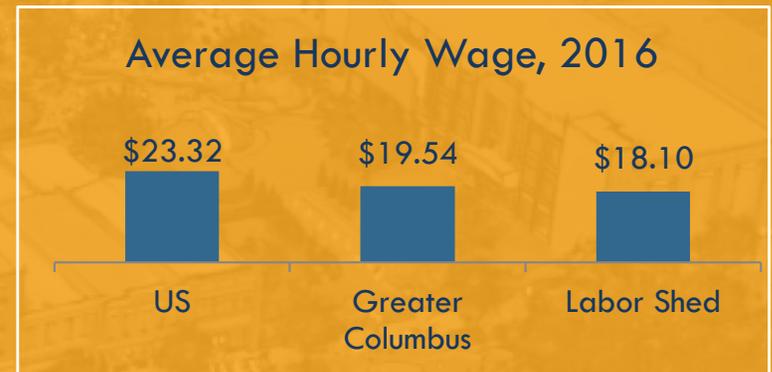


# EXECUTIVE SUMMARY (continued)

Greater Columbus has several critical assets that contribute to a workforce that is both skilled and responsive to the needs of local employers.

Most immediately, the region has access to thousands of additional workers living outside the metropolitan boundaries. Already, nearly a third of workers employed within Greater Columbus live elsewhere. Greater Columbus is not only the single largest employment hub within the region, but also possesses extensive cultural and lifestyle amenities not available anywhere else in west Georgia. Additionally, while average annual wages in Greater Columbus are less than the US average, they remain higher than in neighboring communities. The resulting regional wage premium, combined with the diversity of local employment opportunities, helps Greater Columbus provide employers with access to a labor force that extends far beyond its borders.

Colleges and universities within Greater Columbus also ensure that employers have access to a continuous supply of new talent. In 2015, Greater Columbus post-secondary educational institutions awarded nearly 3,600 certificates and degrees each year—a regional record. During the past five years, the number of post-secondary degrees awarded in Greater Columbus has risen 20% as local colleges and universities have expanded existing programs and created new ones. Greater Columbus colleges and universities, for example, have proven adept at collaborating with local employers to develop and scale new academic programs. Pratt & Whitney's recent 500 job expansion in Greater Columbus, for example, will involve an expansion of an existing partnership with Columbus Technical College. At Columbus State University, global payments provider TSYS invested \$5 million to launch a new cybersecurity program focused on financial services.



# EXECUTIVE SUMMARY (continued)

The addition of new academic disciplines, as well as the expansion of existing programs at Greater Columbus colleges and universities, will help the region deliver the workforce necessary to fuel future job growth. Approximately 40% of job openings in Greater Columbus will require some type of post-secondary education. The figure is even higher for three of the occupational clusters expected to experience the largest gains in Greater Columbus during the next decade—Business & Finance, Health & Biomedical, and Software & IT.

Greater Columbus employment in Business & Finance is projected to increase by nearly 3,700 during the next decade, representing nearly 40% of all job growth within the region through 2026. While local colleges and universities annually award hundreds of degrees aligned with Business & Finance, the region may not be producing a sufficient level of analyst and human resources talent. In other areas such as data processing and accounting, however, local talent production appears to be meeting the demand for labor.

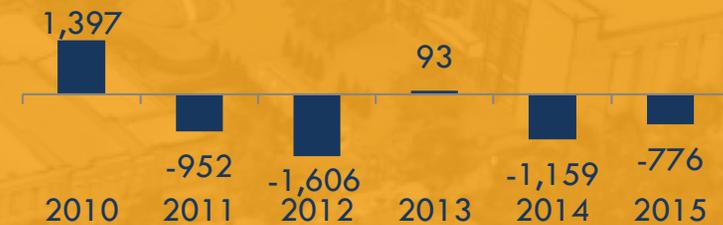
Thanks to an abundance of local college graduates, the Health & Biomedical cluster in Greater Columbus should have a sufficient labor pool in the years ahead. In areas such as Engineering and Software & IT that are expected to experience more modest growth, the region may be at risk of labor shortages.

Engineering and Software & IT represent less than 7% of degrees awarded by colleges and universities within Greater Columbus. While Greater Columbus employment growth within Software & IT is expected to be much smaller than Business & Finance in absolute terms, on a percentage basis the cluster is expected to enjoy some of the greatest levels of growth among all of the region's occupations. Currently, Greater Columbus is at risk for experiencing labor shortages in areas such as computer network administrators and software developers. Still, the recent performance of local colleges and universities within Greater Columbus reveal a community capable of rising to the challenge.

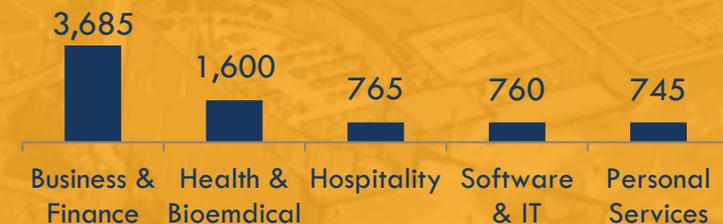
## Job Openings Through 2026 by Educational Attainment Requirement

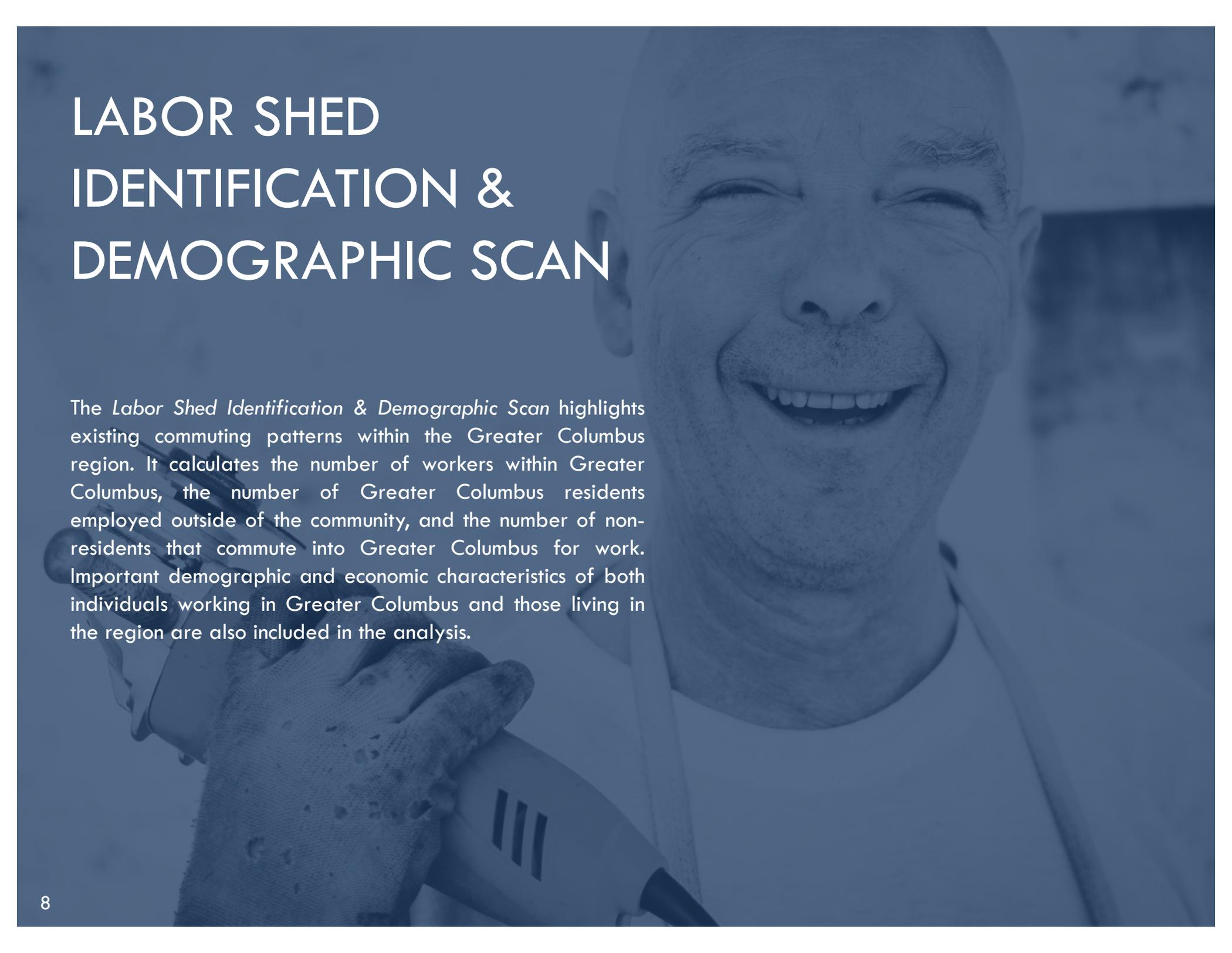


## Net Influx of College Educated Individuals into Greater Columbus



## Leading Occupational Clusters by Projected Job Growth Through 2026





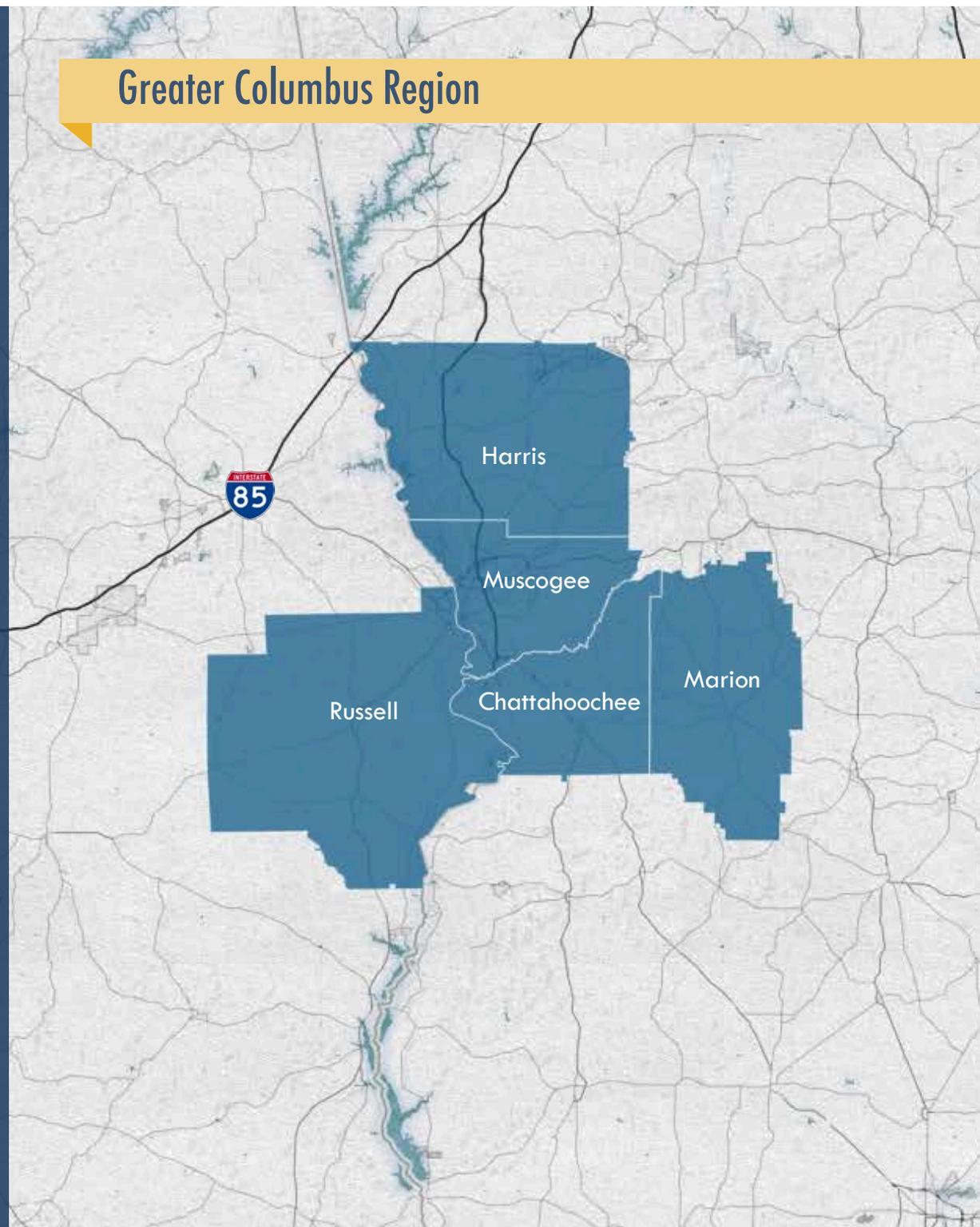
# LABOR SHED IDENTIFICATION & DEMOGRAPHIC SCAN

The *Labor Shed Identification & Demographic Scan* highlights existing commuting patterns within the Greater Columbus region. It calculates the number of workers within Greater Columbus, the number of Greater Columbus residents employed outside of the community, and the number of non-residents that commute into Greater Columbus for work. Important demographic and economic characteristics of both individuals working in Greater Columbus and those living in the region are also included in the analysis.

## WHAT IS THE GREATER COLUMBUS REGION?

- Greater Columbus is located approximately 100 miles southwest of Atlanta, GA.
- The Columbus metropolitan area encompasses five counties in two states. Chattahoochee, Harris, Marion, and Harris counties are located in Georgia. Russell County is located in Alabama.
- As reflected in the metropolitan definition, the Greater Columbus economy does not follow strict jurisdictional boundaries. Workers throughout the region flow across state and county borders.

### Greater Columbus Region

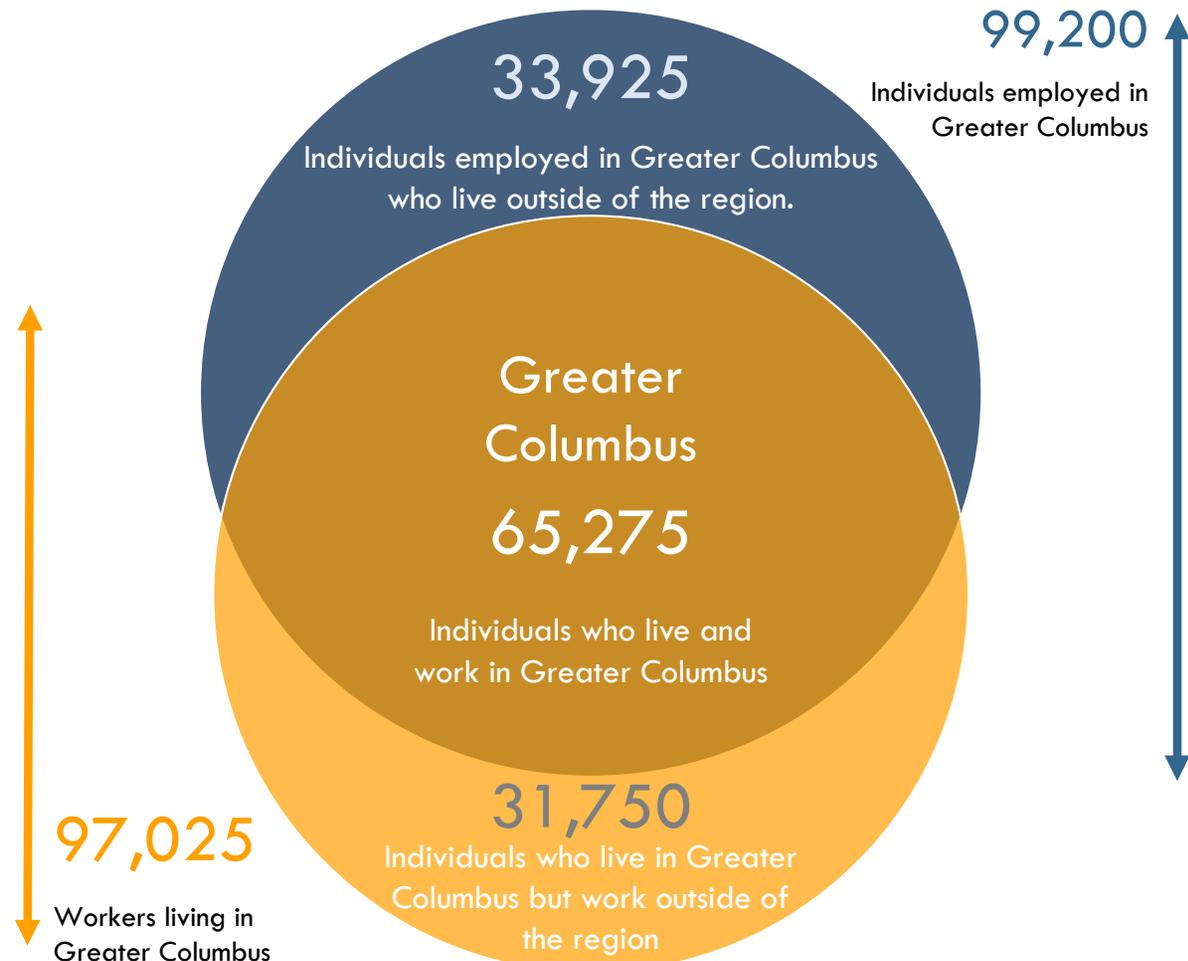


## WHAT IS THE GEOGRAPHIC COMPOSITION OF THE GREATER COLUMBUS WORKFORCE?

- Greater Columbus features a remarkably dynamic workforce. The region is both an exporter and importer of talent.
- Greater Columbus employs nearly 100,000 workers. In addition, nearly 32,000 residents live in Greater Columbus but work elsewhere.
- Greater Columbus has a proven ability to recruit talent from beyond its borders—nearly 34,000 individuals employed within Greater Columbus live outside of the region.

Greater Columbus is home to a dynamic workforce with a significant number of in-commuters and out-commuters.

### GREATER COLUMBUS COMMUTER INFLOW/OUTFLOW ANALYSIS, 2014

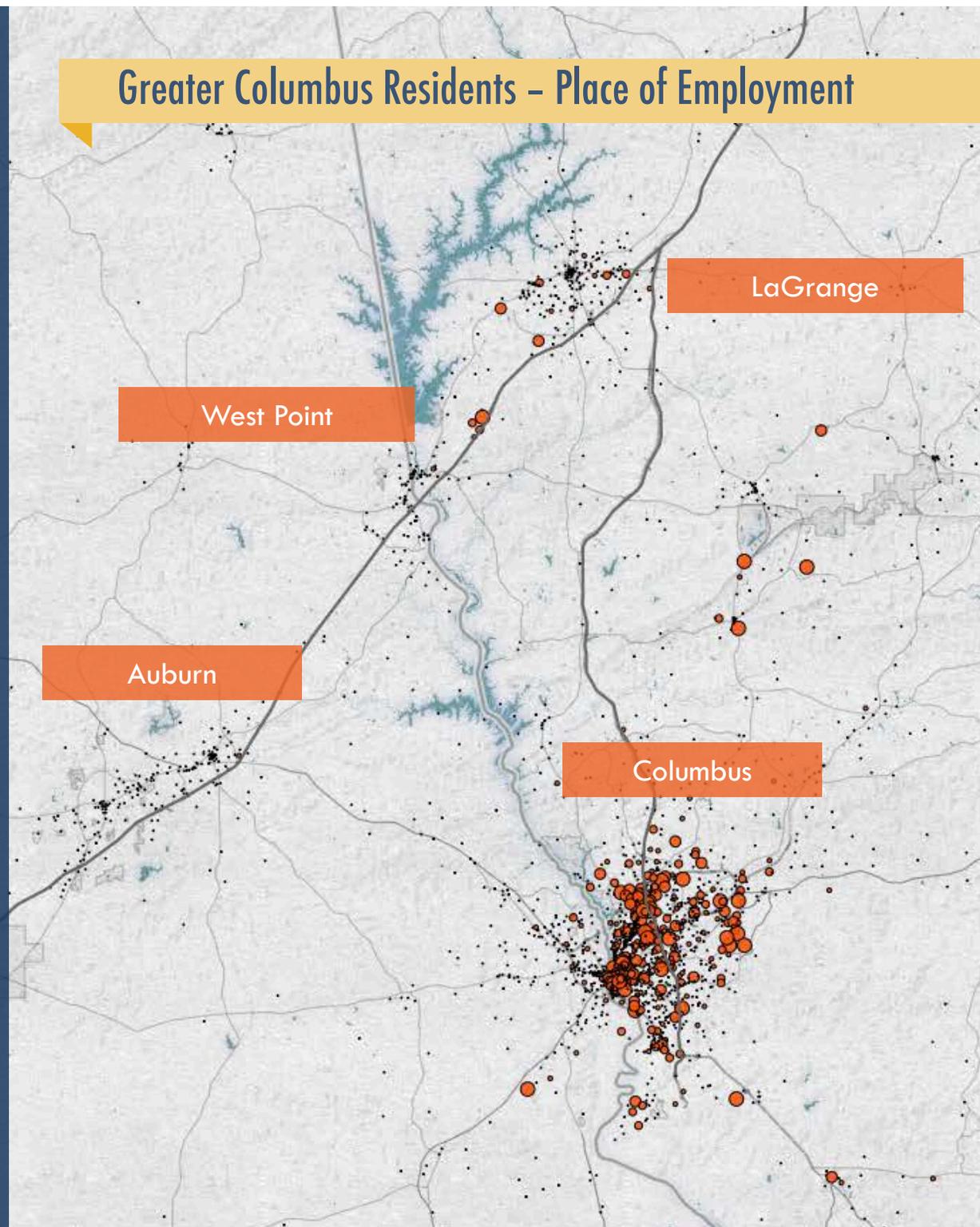


SOURCE: US CENSUS BUREAU / AVALANCHE CONSULTING

## WHERE DO GREATER COLUMBUS RESIDENTS WORK?

- While the majority of employed individuals living within Greater Columbus work locally, the region also exports thousands of workers to adjacent communities.
- Most employed Greater Columbus residents who work outside of the region commute to cities located along interstate 85, including LaGrange and Auburn.

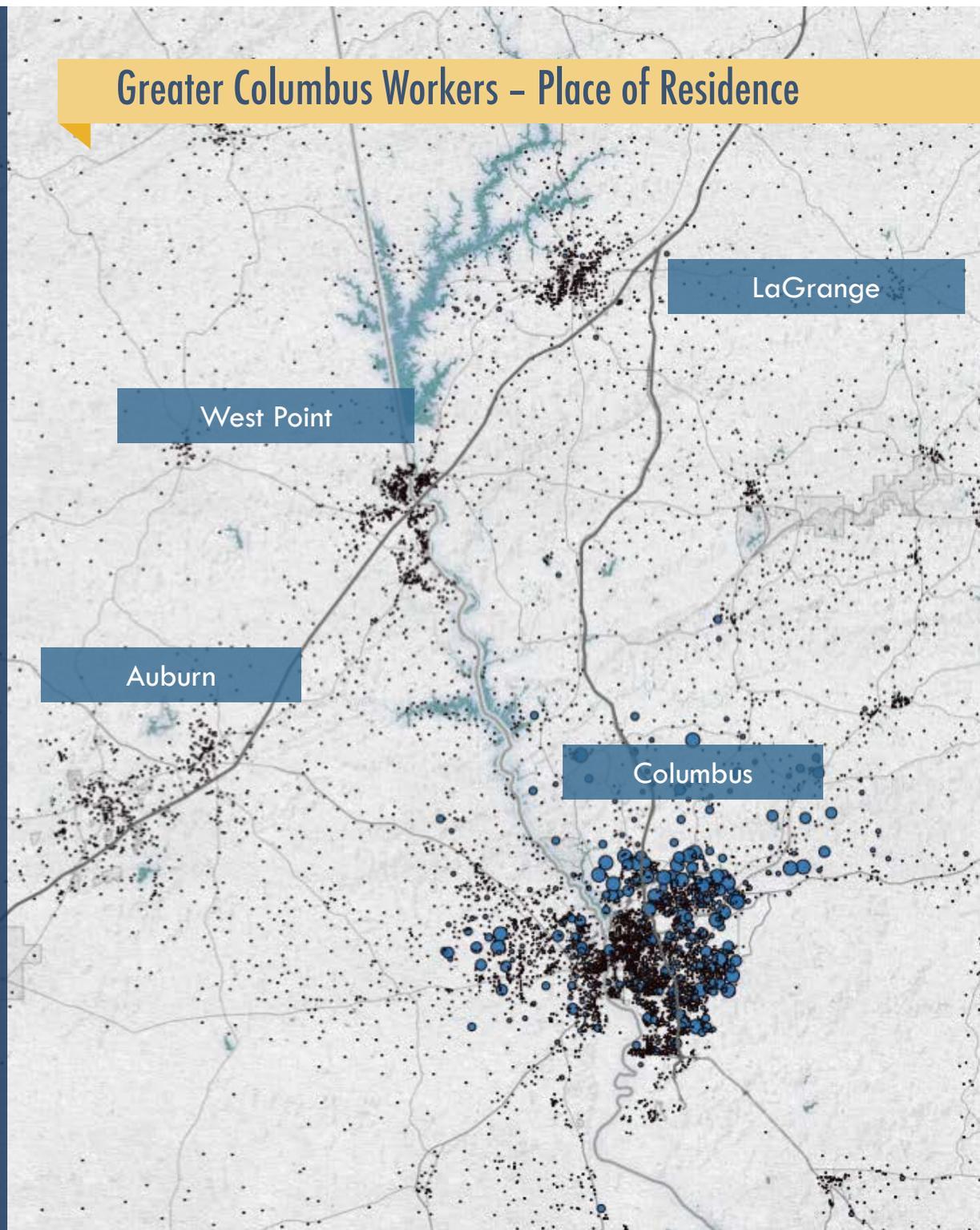
### Greater Columbus Residents – Place of Employment



## WHERE DO GREATER COLUMBUS WORKERS LIVE?

- Approximately 1 in 3 Greater Columbus workers live outside of the region.
- Greater Columbus imports workers from many of the same cities that attract Greater Columbus residents, including Auburn and LaGrange.
- Greater Columbus also attracts thousands of workers from smaller communities along the Georgia/Alabama border. Individually, these communities don't export large numbers of workers. Collectively, however, they represent a significant contribution to the workforce of Greater Columbus.

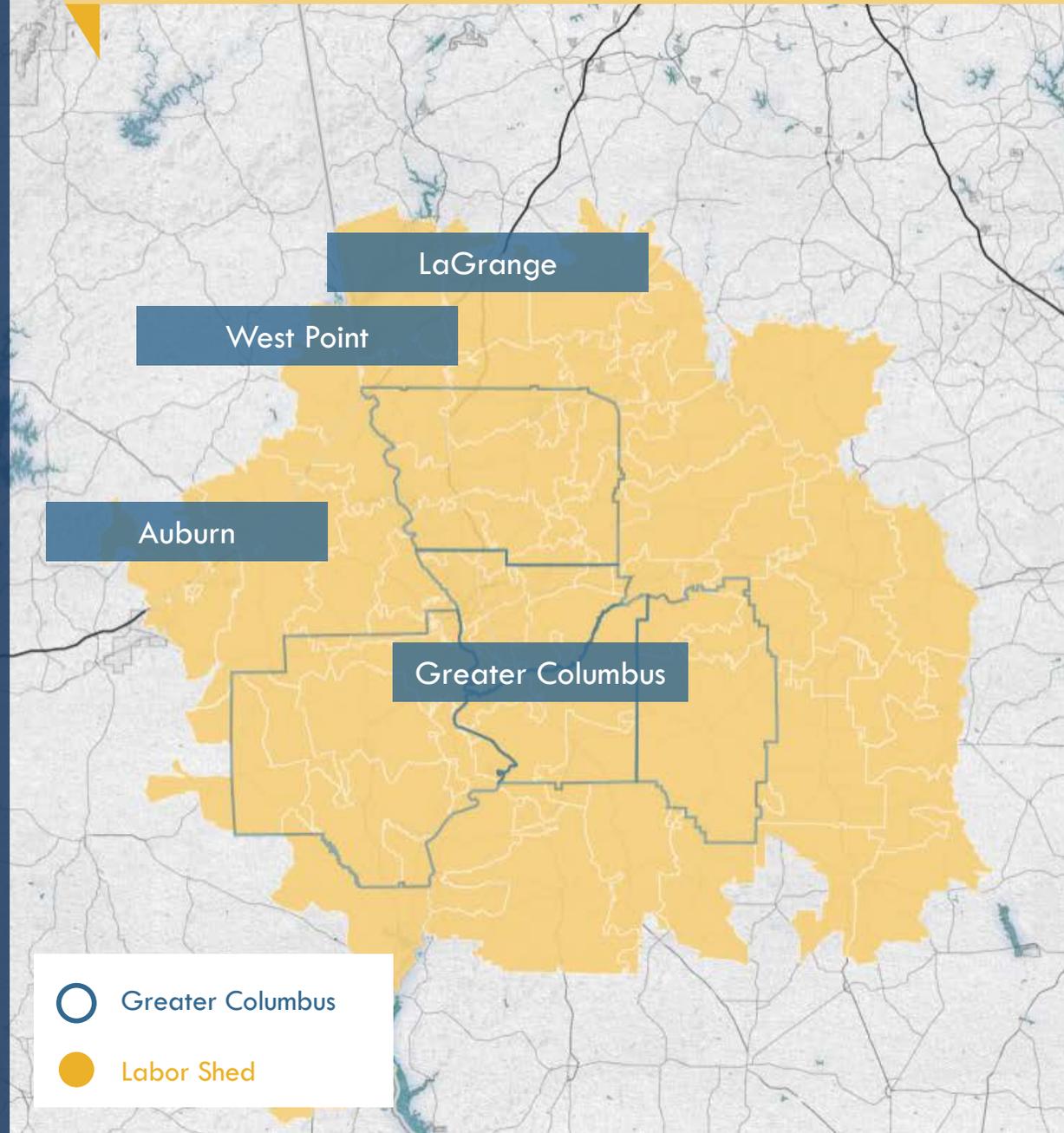
### Greater Columbus Workers – Place of Residence



## HOW LARGE IS THE GREATER COLUMBUS LABOR SHED?

- The labor shed of Greater Columbus extends far beyond the region's formal boundaries.
- The labor shed of Greater Columbus extends north to include the southern portions of LaGrange and west to the eastern edges of Auburn. The labor shed also extends to the south and east to encompass several smaller rural communities.
- Collectively, Greater Columbus and its labor shed are home to more than 250,000 workers.

Greater Columbus' labor shed is home to approximately 250,000 workers.



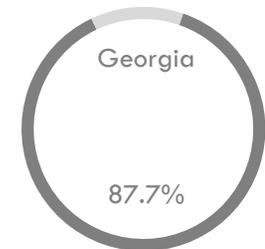
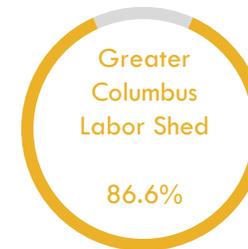
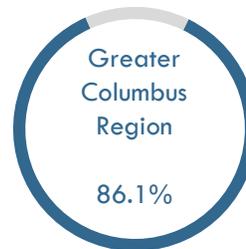
## HOW EDUCATED ARE GREATER COLUMBUS WORKERS?

- Overall educational attainment levels within Greater Columbus and its labor shed are comparable to statewide averages.
- Approximately 86% of individuals in both Greater Columbus and its labor shed are high school graduates, nearly identical to the Georgia average.
- Nearly a third of residents age 25 and above in Greater Columbus and its labor shed possess an associate degree, a percentage point greater than the Georgia average.
- 23% of Greater Columbus residents are college graduates.

Greater Columbus' labor shed provides the region with a wealth of talent.

### EDUCATIONAL ATTAINMENT (AMONG RESIDENTS AGE 25+), 2014

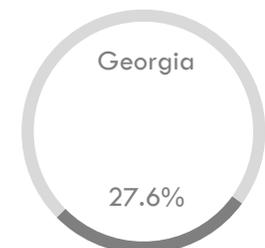
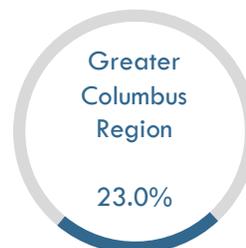
#### HIGH SCHOOL



#### ASSOCIATE DEGREE



#### BACHELOR'S DEGREE OR HIGHER



SOURCE: US CENSUS BUREAU / AVALANCHE CONSULTING

# HOW OLD ARE GREATER COLUMBUS WORKERS?

- 24% of workers in both Greater Columbus and its labor shed are between the ages of 19 and 24. In Georgia, less than 22% of workers are between 19 and 24 years old.
- Approximately 55% of workers in both Greater Columbus and its labor shed are between the ages of 25 and 44. In Georgia, young professionals represent more than 58% of workers.
- Approximately 20% of workers in both Greater Columbus and its labor shed are between the ages of 45 and 64, virtually identical to the statewide average.

Greater Columbus and its labor shed feature a relatively young workforce.

## LABOR FORCE BY AGE 2014

### PRIME STUDENT AGE (19 TO 24)



### YOUNG PROFESSIONALS (AGE 25 TO 44)



### SEASONED PROS (AGE 45 TO 64)



SOURCE: US CENSUS BUREAU / AVALANCHE CONSULTING

## HOW COMPETITIVE ARE WAGES IN GREATER COLUMBUS?

- Within Georgia, average annual wages in Greater Columbus make the region cost competitive for existing and prospective firms while also remaining alluring to workers throughout the region.
- At \$52,000 annually, average wages in Greater Columbus are approximately \$9,000 less than the statewide average.
- At the same time, average annual wages in Greater Columbus are nearly \$2,000 greater than in the broader labor shed. This wage differential helps Greater Columbus attract outside labor.

Greater Columbus offers existing and prospective firms competitive wages.

### AVERAGE ANNUAL SALARY, 2016

Greater Columbus

\$52.0K

Greater Columbus Labor Shed

\$48.2K

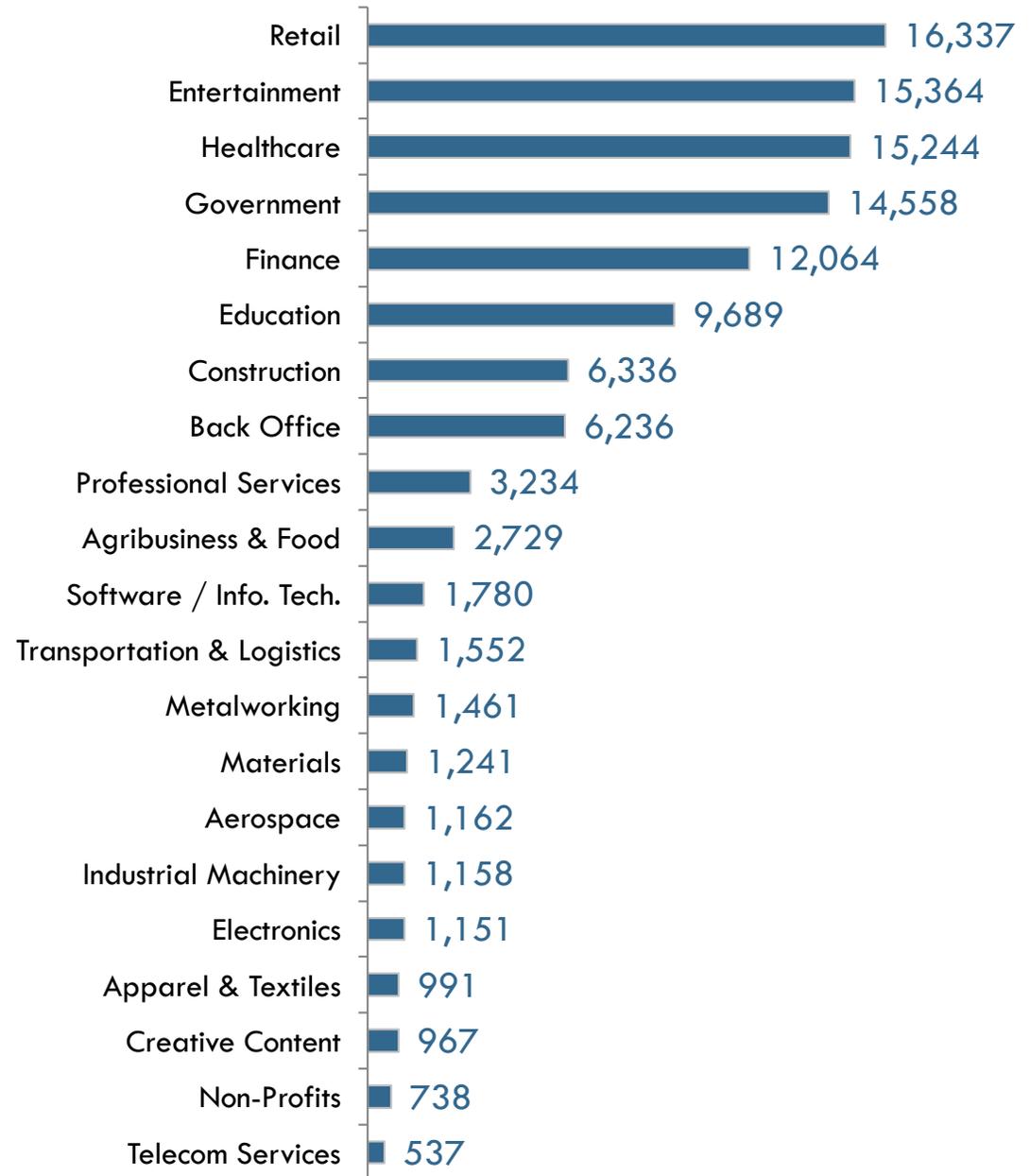
Georgia

\$60.9K

## WHAT ARE THE DOMINANT INDUSTRIES IN GREATER COLUMBUS?

- Employment in Greater Columbus is dominated by a handful of industries. Entertainment, Finance, Government, Healthcare, and Retail collectively account for approximately 66,000 jobs representing more than 60% of all employment within the region.
- Other leading industries within Greater Columbus include Education (9,690 jobs), Back Office (6,230), and Construction (6,335).
- Columbus is home to several smaller but vibrant manufacturing industries, including Aerospace, Metalworking, and Industrial Machinery.

## PRIVATE EMPLOYMENT BY INDUSTRY\*, 2016



\*15 LARGEST PRIVATE SECTOR INDUSTRIES  
SOURCE: EMSI / AVALANCHE CONSULTING

# WHAT IS A LOCATION QUOTIENT?

Location Quotients, also called “LQs”, represent the relative concentration or density of a specific occupation cluster in the region compared to the US average for that occupation cluster. A 1.5 LQ indicates that the region has 50% more concentration on a per capita basis than the US, which is a sign of relative local strength in that occupation cluster. Note that LQ is a relative measure: a high concentration in one cluster means that others will have lower LQs.

Each bubble chart illustrates:

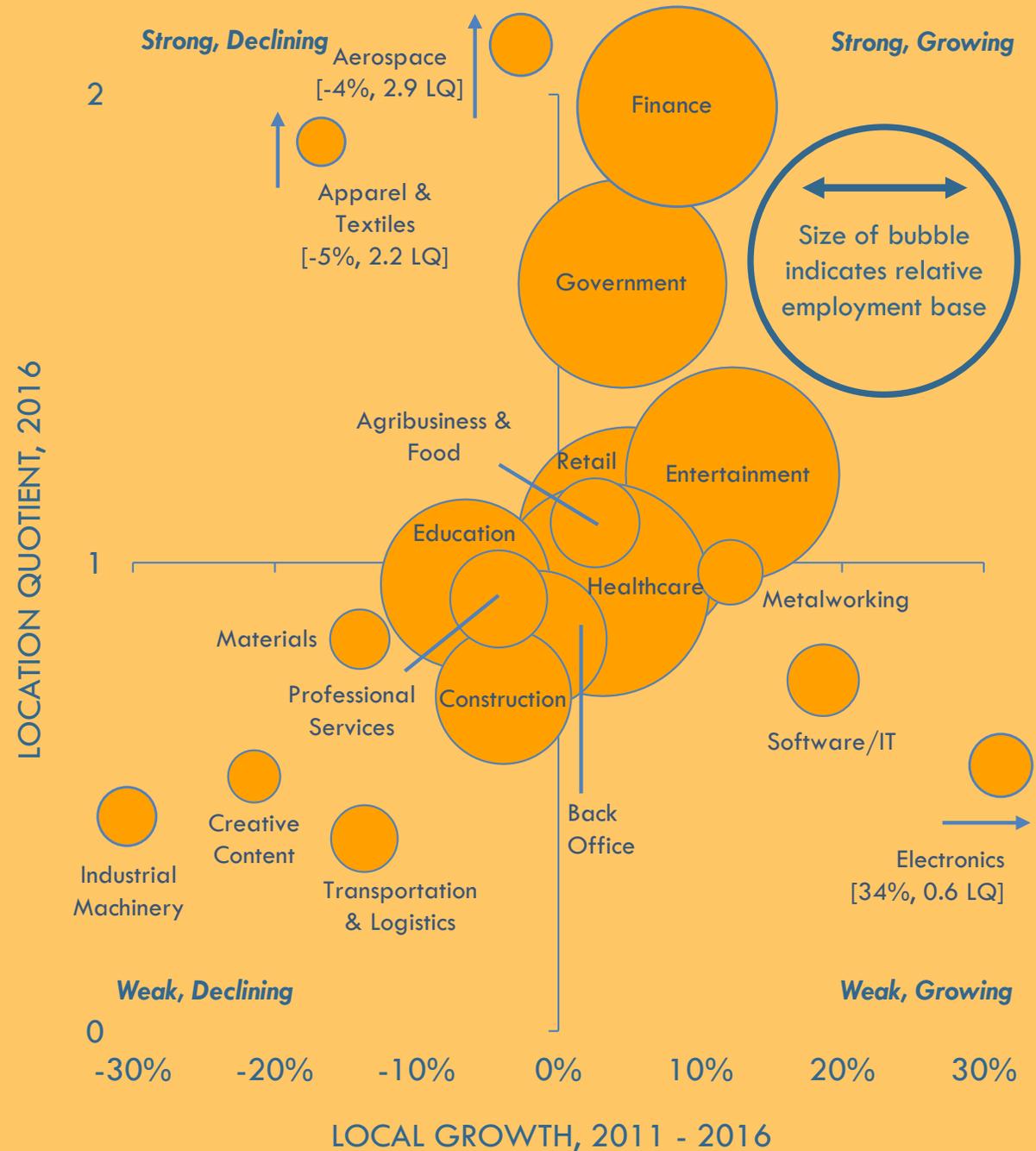
- The growth of each occupational cluster along the horizontal axis
- The LQ of each occupational cluster along the vertical axis
- The size of each bubble indicates the number of employees within the occupation



## WHAT INDUSTRIES ARE GROWING & HIGHLY CONCENTRATED WITHIN GREATER COLUMBUS?

- The vast majority of industries in Greater Columbus posted employment gains between 2011 and 2016.
- With location quotients of 2.9 and 2.0 respectively, Aerospace and Finance are the two of the most relatively concentrated industries within Greater Columbus.
- Several of the largest industries within Greater Columbus are also among the most concentrated. On a proportional basis, the region is home to 50% more Government employment than the US average. Greater Columbus is also home to relatively large Apparel & Textiles, Retail, and Entertainment clusters.

## GREATER COLUMBUS MAJOR INDUSTRY CLUSTERS (Clusters with 500 or More Workers)



SOURCE: EMSI / AVALANCHE CONSULTING

# OCCUPATIONAL PROFILES

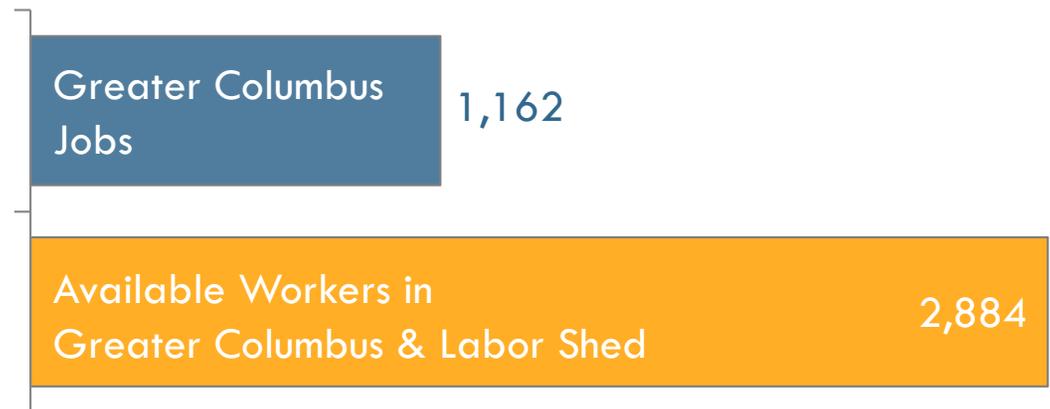
The Greater Columbus labor shed provides employers throughout the region with a reservoir of prospective employees. This “flex capacity” can help Greater Columbus address future workforce needs. The following profiles identify the surplus labor capacity across major occupational categories.

## ARCHITECTURE & ENGINEERING

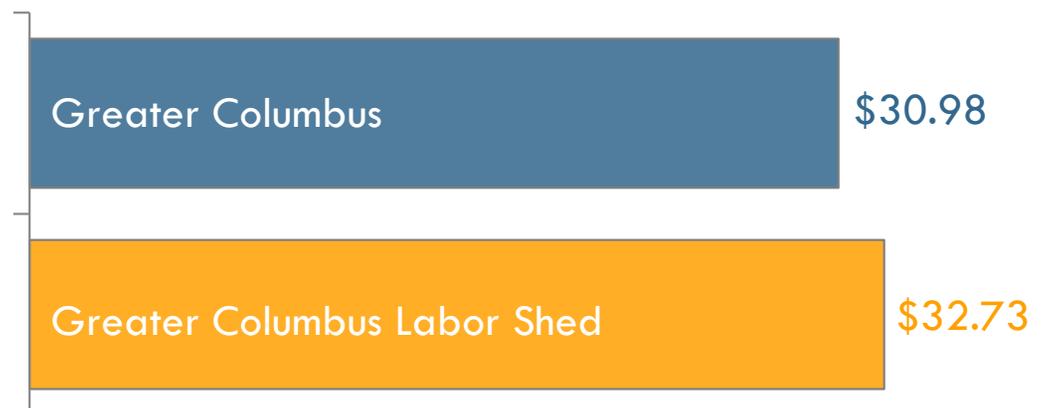
- Companies in Greater Columbus employ more than 1,150 workers in Architecture & Engineering occupations.
- More than 2,800 Architecture & Engineering workers reside in Greater Columbus and its labor shed.
- Average hourly earnings for Architecture & Engineering workers in Greater Columbus are slightly less than in the region's labor shed due to relatively high wages in parts of LaGrange, GA and Auburn, AL.

Greater Columbus' labor shed is home to nearly 2,900 Architecture & Engineering workers.

### ARCHITECTURE & ENGINEERING JOB VERSUS WORKERS 2016



### ARCHITECTURE & ENGINEERING AVERAGE HOURLY EARNINGS 2016



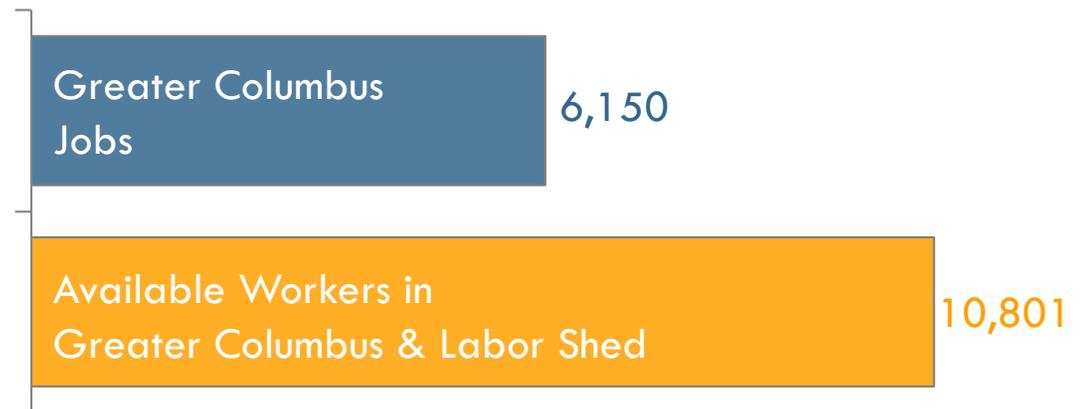
SOURCE: EMSI / AVALANCHE CONSULTING

## BUSINESS & FINANCE

- There are 6,150 Business & Finance jobs within Greater Columbus.
- Greater Columbus and its labor shed are home to more than 10,800 Business & Finance workers.
- At more than \$33 an hour, average Business & Finance wages in Greater Columbus are more than 15% greater than the average for the Greater Columbus labor shed.

Business & Finance workers in Greater Columbus enjoy relatively high wages.

### BUSINESS & FINANCE JOB VERSUS WORKERS 2016



### BUSINESS & FINANCE AVERAGE HOURLY EARNINGS 2016



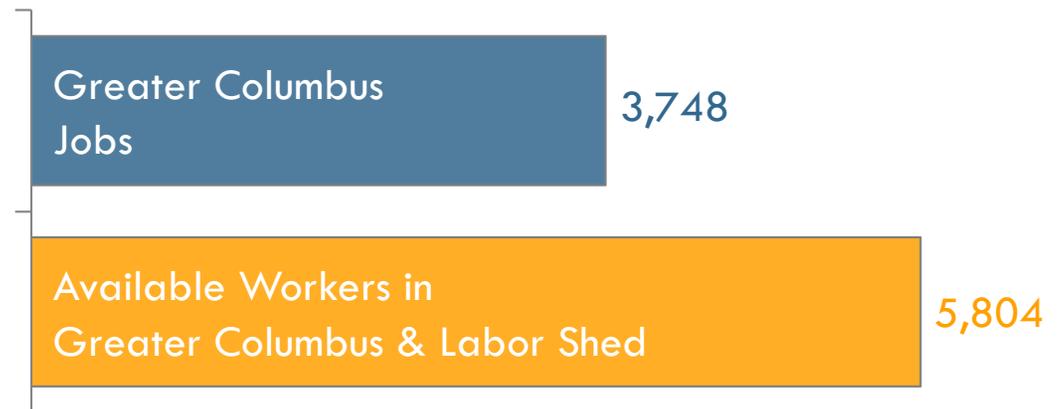
SOURCE: EMSI / AVALANCHE CONSULTING

## COMPUTER & MATH

- Greater Columbus is home to nearly 3,750 Computer & Math jobs.
- The number of Computer & Math workers residing in Greater Columbus and its labor shed exceeds 5,800.
- Average earnings for Computer & Math workers in Greater Columbus top \$35 an hour. Within the region, only Management workers enjoy greater average earnings.
- Computer & Math workers in the Greater Columbus labor shed earn an average of \$35 an hour, 10% more than in the Greater Columbus Labor Shed.

Computer & Math workers in Greater Columbus enjoy some of the highest wages in the region.

### COMPUTER & MATH JOB VERSUS WORKERS 2016



### COMPUTER & MATH AVERAGE HOURLY EARNINGS 2016



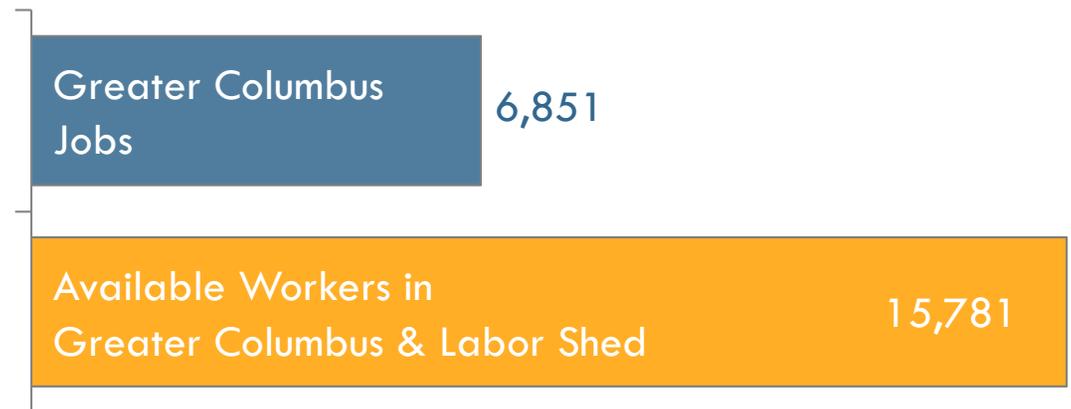
SOURCE: EMSI / AVALANCHE CONSULTING

## EDUCATION, TRAINING & LIBRARY

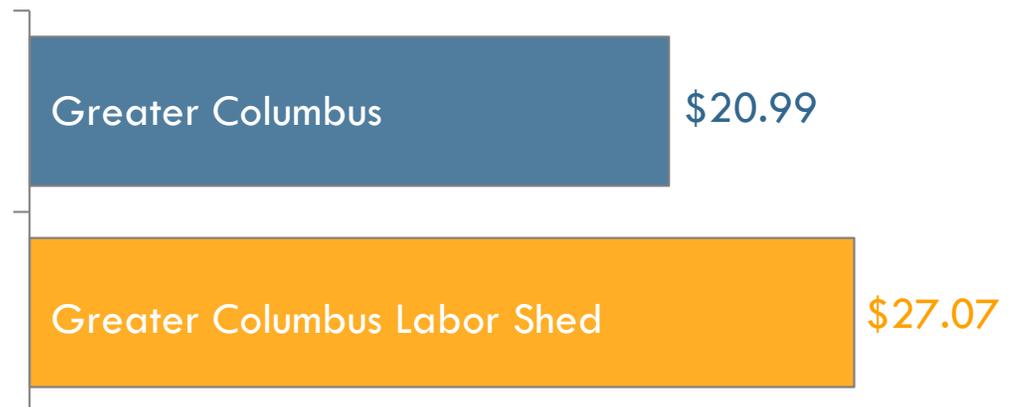
- Education, Training & Library employment in Greater Columbus totals more than 6,850.
- There are nearly 15,800 Education, Training & Library workers living in Greater Columbus and its labor shed.
- Average hourly wages for Education, Training & Library are higher in the Greater Columbus labor shed due to relatively high salaries enjoyed by some workers employed at Auburn University.

Greater Columbus has an abundance of Education, Training & Library talent.

### EDUCATION, TRAINING & LIBRARY JOB VERSUS WORKERS 2016



### EDUCATION, TRAINING & LIBRARY AVERAGE HOURLY EARNINGS 2016



SOURCE: EMSI / AVALANCHE CONSULTING

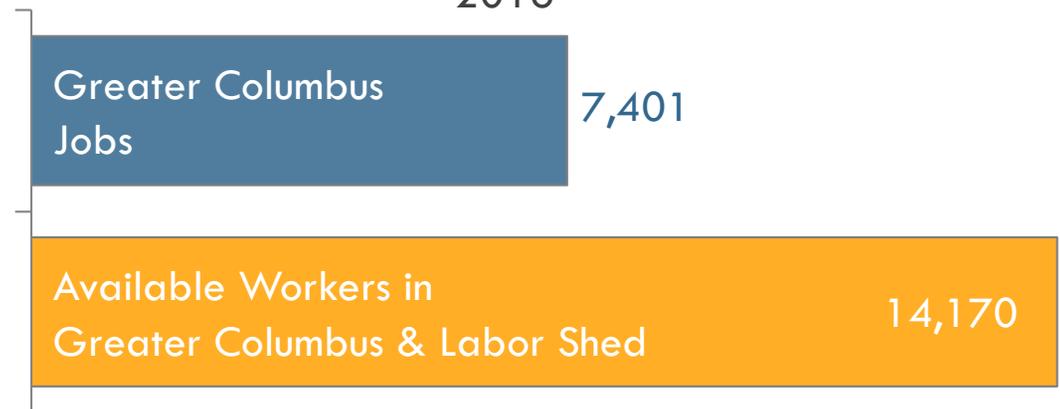
## HEALTHCARE PRACTITIONERS & TECHNICIANS

- Healthcare Practitioners & Technicians employment in Greater Columbus exceeds 7,400. Among the region's major occupational groups, only Office & Administration is larger.
- At nearly \$34 an hour, average earnings for Healthcare Practitioners & Technicians in Greater Columbus are approximately 10% greater than for workers in the region's labor shed.
- Healthcare Practitioners & Technicians workers in Greater Columbus enjoy higher wages than any other occupational group except Computer & Math and Management workers.

Healthcare Practitioners & Technicians represent one of the largest groups of workers in Greater Columbus.

### HEALTHCARE PRACTITIONERS & TECHNICIANS JOB VERSUS WORKERS

2016



### HEALTHCARE PRACTITIONERS & TECHNICIANS AVERAGE HOURLY EARNINGS

2016



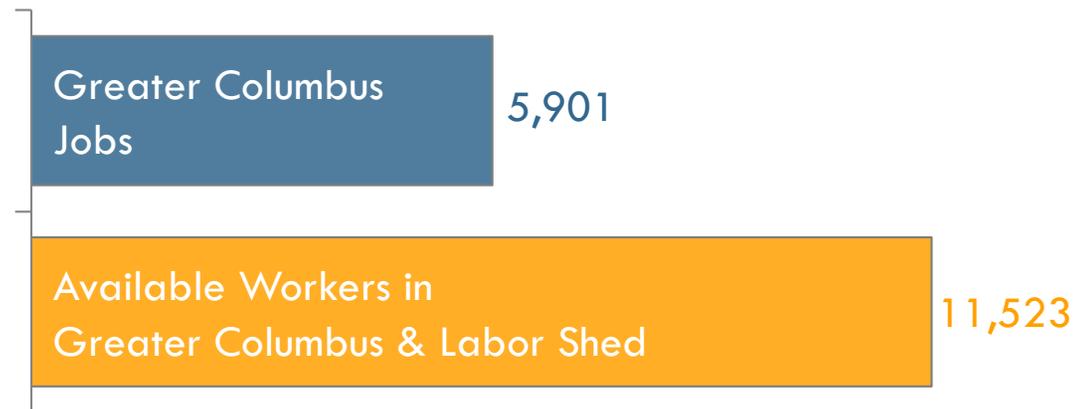
SOURCE: EMSI / AVALANCHE CONSULTING

# MANAGEMENT

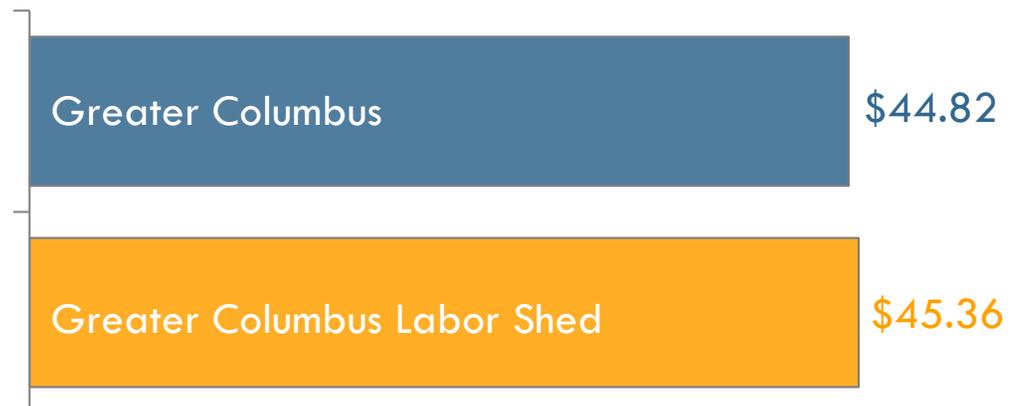
- Greater Columbus firms employ more than 5,900 individuals in Management occupations.
- Greater Columbus and its labor shed are home to approximately 11,500 Management workers.
- Average earnings for Management workers in Greater Columbus are approximately \$45 an hour, more than for any other occupational group within the region.
- Average hourly wages for Management workers are virtually identical in Greater Columbus and its labor shed.

Management workers in Greater Columbus command higher average annual wages than all other workers.

## MANAGEMENT JOB VERSUS WORKERS 2016



## MANAGEMENT AVERAGE HOURLY EARNINGS 2016



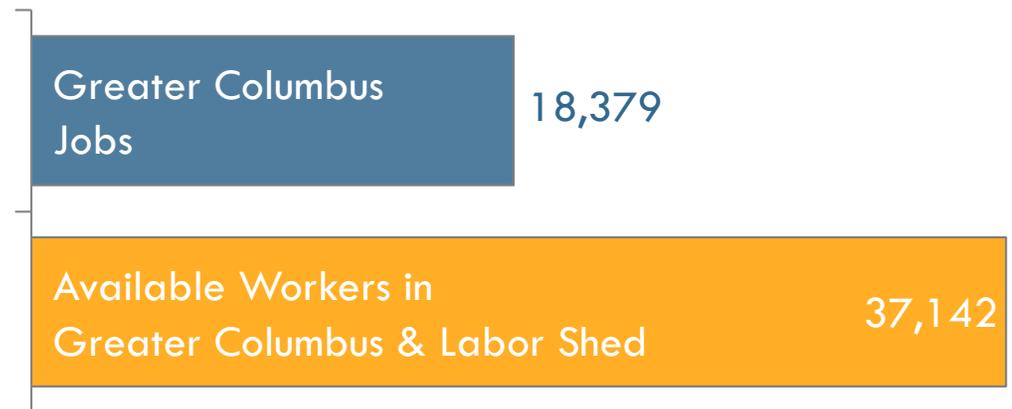
SOURCE: EMSI / AVALANCHE CONSULTING

## OFFICE & ADMINISTRATION

- Greater Columbus features nearly 18,400 jobs. No other occupational group employs more workers in Greater Columbus.
- More than 37,000 Office & Administration workers reside in Greater Columbus and its labor shed.
- At slightly more than \$15 an hour, average earnings for Office & Administration workers are similar for both workers in Greater Columbus and its labor shed.

There are more Office & Administration workers in Greater Columbus than any other occupational group.

### OFFICE & ADMINISTRATION JOB VERSUS WORKERS 2016



### OFFICE & ADMINISTRATION AVERAGE HOURLY EARNINGS 2016



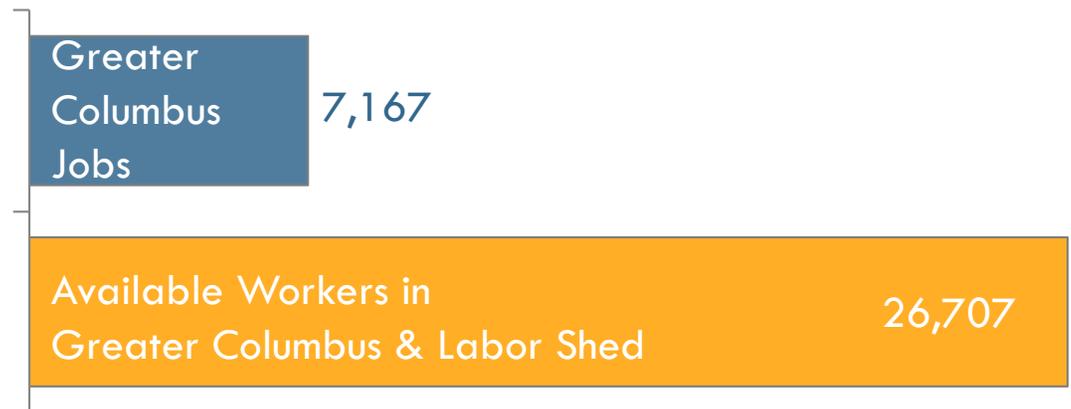
SOURCE: EMSI / AVALANCHE CONSULTING

# PRODUCTION

- Companies in Greater Columbus employ nearly 7,200 Production workers.
- More than 26,700 Production workers reside in Greater Columbus and its labor shed. Only Healthcare Practitioners & Technicians and Office & Administration represent a greater share of resident workers.
- Average earnings for Greater Columbus Production workers is slightly more than \$16 an hour. Production workers in the Greater Columbus Labor shed earn approximately 10% less on average.

Greater Columbus employers are able to draw from a large supply of skilled production workers.

## PRODUCTION JOB VERSUS WORKERS 2016



## PRODUCTION AVERAGE HOURLY EARNINGS 2016



SOURCE: EMSI / AVALANCHE CONSULTING

## TRANSPORTATION & MATERIAL MOVING

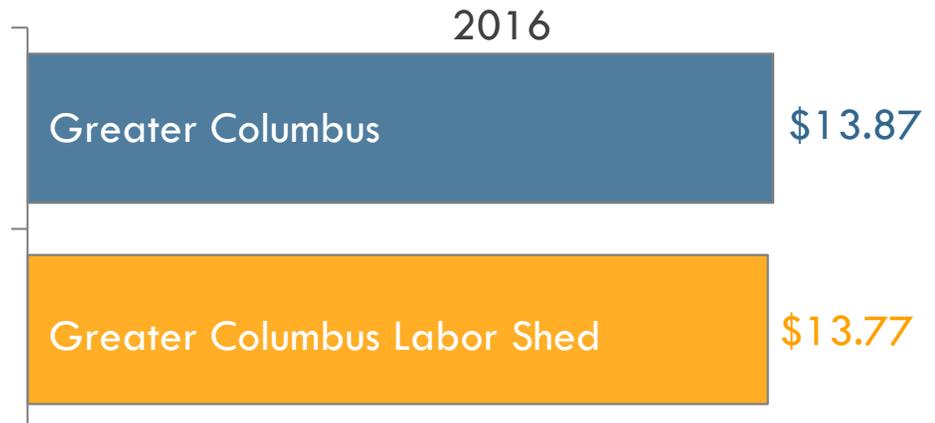
- There are more than 6,200 Transportation & Material Moving positions within Greater Columbus.
- The Transportation & Material Moving workforce in the Greater Columbus Labor Shed exceeds 18,000.
- At slightly less than \$14 an hour, average Transportation & Material Moving earnings are similar in both Greater Columbus and its labor shed.

The Greater Columbus Labor Shed is home to more than 18,000 Transportation & Material Moving workers.

### TRANSPORTATION & MATERIAL MOVING JOB VS. WORKERS



### TRANSPORTATION & MATERIAL MOVING AVERAGE HOURLY EARNINGS



# INFLOW / OUTFLOW DYNAMICS

In addition to workers within its labor sheds, Greater Columbus employers have access to another important source of labor—Greater Columbus residents currently employed outside of the region. These workers are typically accounted for in the employment data of outside jurisdictions but can serve as an additional source of “flex capacity” for area employers.

## NET WORKER FLOW BY AGE

- Worker flows reflect the difference between employed individuals living in a community and individuals working in a community. Positive numbers indicate that a community is importing more workers than it exports. Conversely, a negative number indicates that a community is exporting more workers than it imports.
- Greater Columbus is a net importer of workers across all age groups. In 2014, on a net basis Greater Columbus attracted more than 2,800 workers age 29 and younger. The region imported an additional 8,000 workers on a net basis between the ages of 30 and 54 and approximately 1,800 workers age 55 and older.

## NET INFLOW OF WORKERS INTO GREATER COLUMBUS BY AGE, 2014

Age 29  
and Younger

2,822

Age 30 to 54

7,969

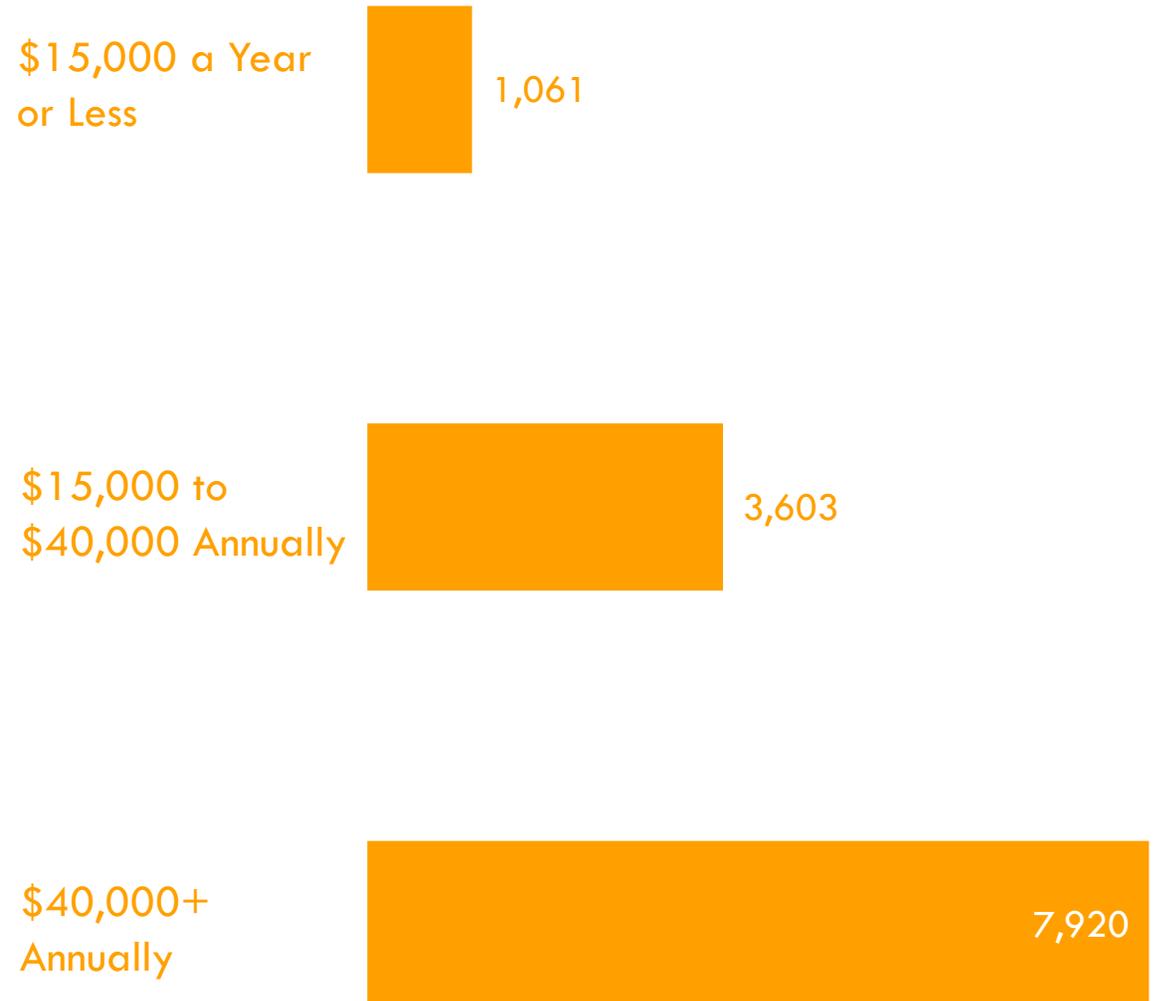
Age 55  
and Older

1,793

## NET WORKER FLOW BY EARNINGS

- High-wage jobs are far more abundant in Greater Columbus than in neighboring communities. On a net basis, nearly 8,000 workers earning \$40,000 or more annually commute into Greater Columbus from outside the region.
- Greater Columbus also attracts workers at lower wage levels, though in much smaller numbers.
- The inflow of high earning workers into Greater Columbus suggests that the region is able to attract the necessary talent to fill higher skill positions.

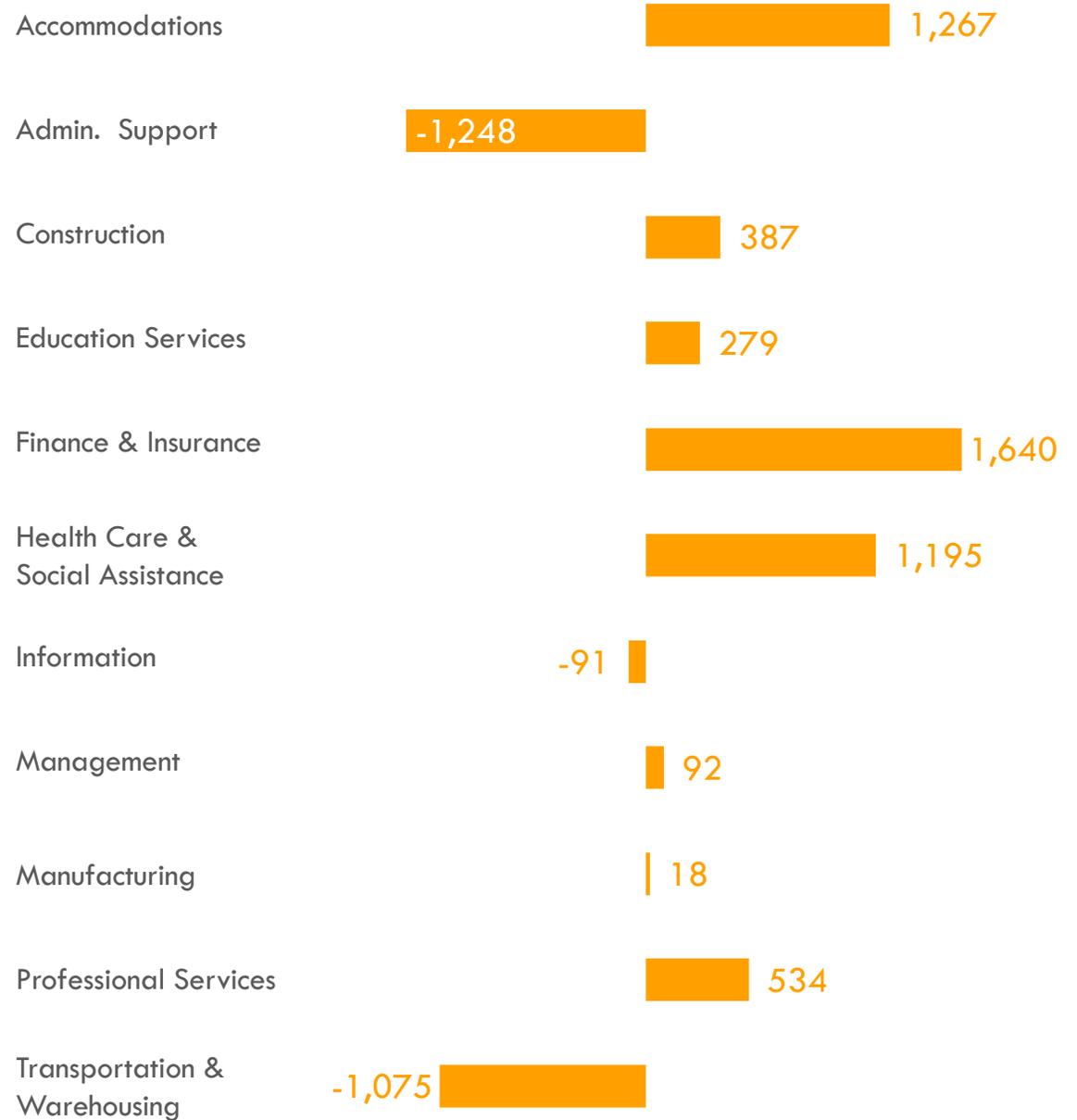
## NET INFLOW OF WORKERS INTO GREATER COLUMBUS BY EARNINGS, 2014



## NET WORKER FLOW BY INDUSTRY

- While Greater Columbus is a net importer of talent in most areas, significant differences exist between the number of Greater Columbus residents employed in specific industries relative to the number workers locally employed in such sectors.
- Greater Columbus is particularly successful in attracting professional talent as well as workers that support the manufacturing and hospitality sector. On a net basis, Greater Columbus collectively attracts more workers from outside the region to fill positions in Finance & Insurance, Management, and Professional Services. The region also draws workers from outside the region to fill Accommodations, Construction, and Healthcare positions.

## NET INFLOW OF WORKERS INTO GREATER COLUMBUS BY INDUSTRY COMPOSITION, 2014



# WORKFORCE SUPPLY & DEMAND ANALYSIS

Regional talent ecosystems thrive when local skills production is aligned with the demand for labor. The *Workforce Supply & Demand Analysis* examines the current ability of local post-secondary institutions within the Greater Columbus region to meet the needs of local employers.

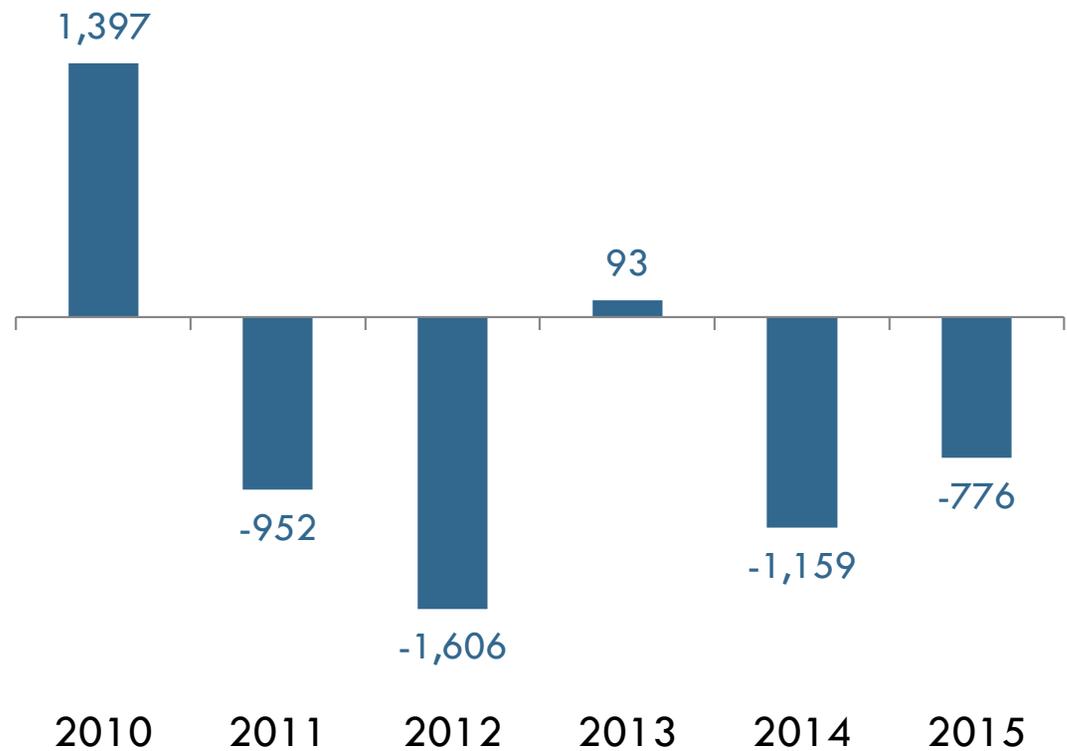
The analysis identifies occupations expected to fuel local employment gains in the years ahead as well as the number of locally-awarded post-secondary degrees in aligned fields. The analysis concludes with an identification of occupations with future potential shortages—or at least those where the supply of local graduates is insufficient to meet projected demand.

## IS GREATER COLUMBUS ATTRACTING TALENT?

- On a net basis, the flow of college-educated individuals has fluctuated widely in recent years.
- In both 2010 and 2013, the number of college-educated individuals who moved to Greater Columbus exceeded the number of college-educated residents who left the region.
- In four of the past five years, the number of college-educated residents who moved out of Greater Columbus exceeded the number of individuals who moved into the region by a significant margin.

In recent years, Greater Columbus has experienced a net outflow of college-educated individuals.

### NET INFLUX OF INDIVIDUALS WITH A BACHELOR'S DEGREE OR HIGHER LEVEL OF EDUCATIONAL ATTAINMENT INTO GREATER COLUMBUS

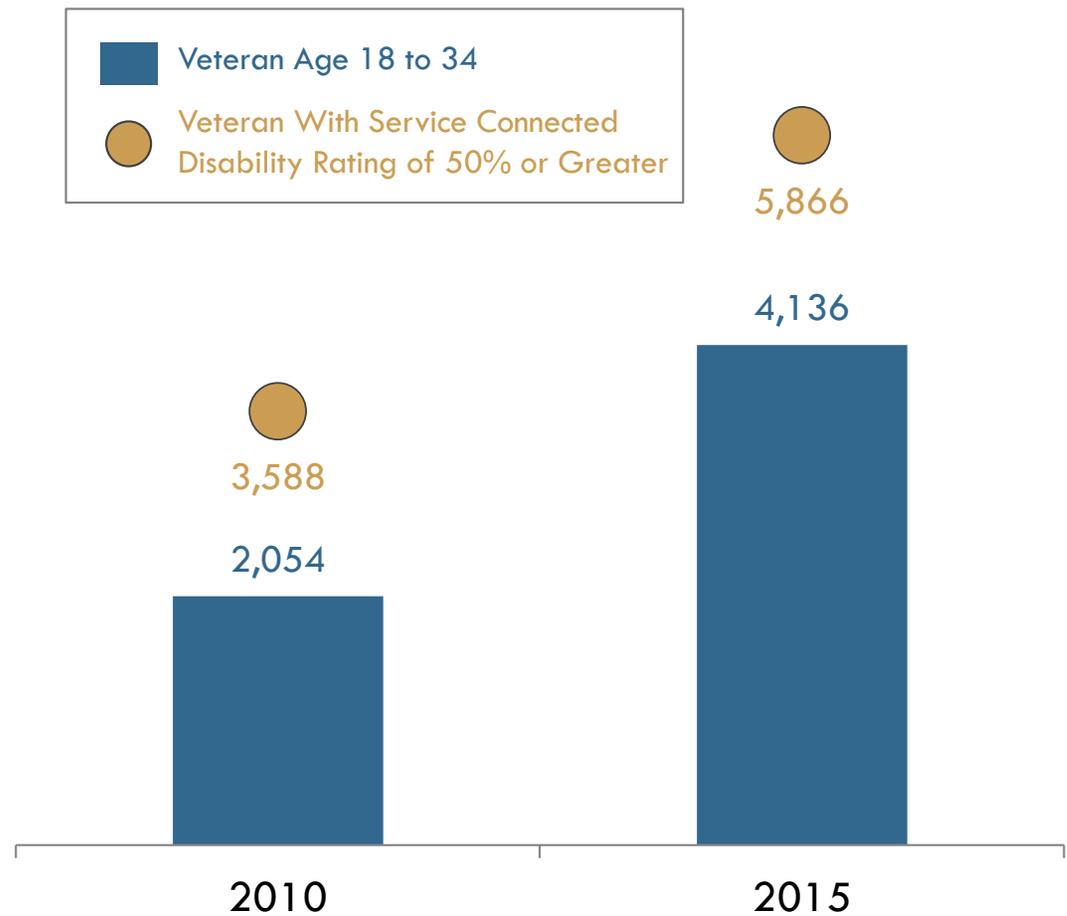


## WHAT ROLE DO VETERANS PLAY IN THE WORKFORCE?

- Between 2010 and 2015, the veteran population in Greater Columbus between the ages of 18 and 34 increased by approximately 500 individuals annually.
- There is some evidence that recent veterans in Greater Columbus may not be participating in the workforce. During the past five years, for example, the number of veterans with a service-connected disability rating of 50% or higher has increased by approximately 450 individuals annually.
- Additionally, many recent veterans pursue post-secondary educational opportunities after exiting the military. In Georgia, nearly 6% of veterans are enrolled in college. As a result, some veterans are included in the following analysis of local post-secondary graduates.

Each year, the Greater Columbus workforce absorbs hundreds of recent veterans.

### GREATER COLUMBUS VETERAN POPULATION

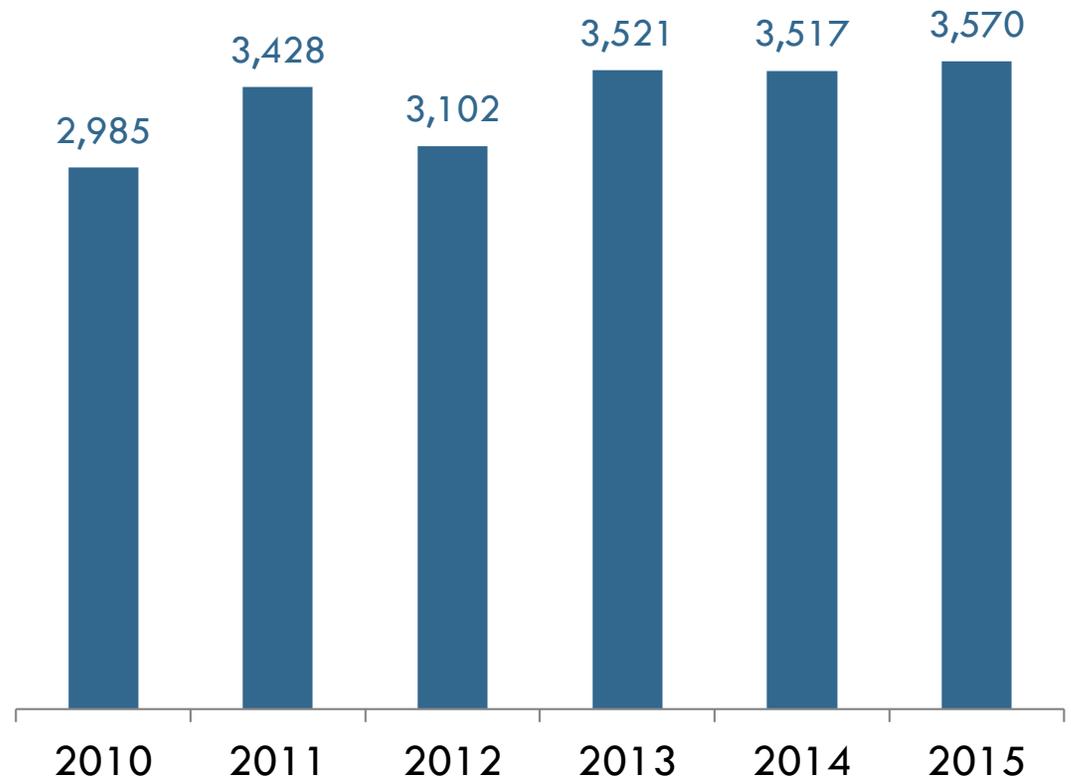


## IS GREATER COLUMBUS PRODUCING TALENT LOCALLY?

- In 2015, Greater Columbus colleges and universities awarded nearly 3,600 post-secondary certificates and degrees.
- Greater Columbus post-secondary institutions include Chattahoochee Valley Community College, Columbus Technical College, Columbus State University, Miller-Motte Technical College-Columbus, and Virginia College. Columbus Technical College, Columbus State University are responsible for approximately 80% of locally awarded post-secondary degrees.
- Between 2010 and 2015, the number of post-secondary certificates and degrees awarded by Greater Columbus colleges and universities increased nearly 20%.

Greater Columbus continues to increase local talent production.

### POST-SECONDARY DEGREES AWARDED BY GREATER COLUMBUS HIGHER EDUCATION INSTITUTIONS



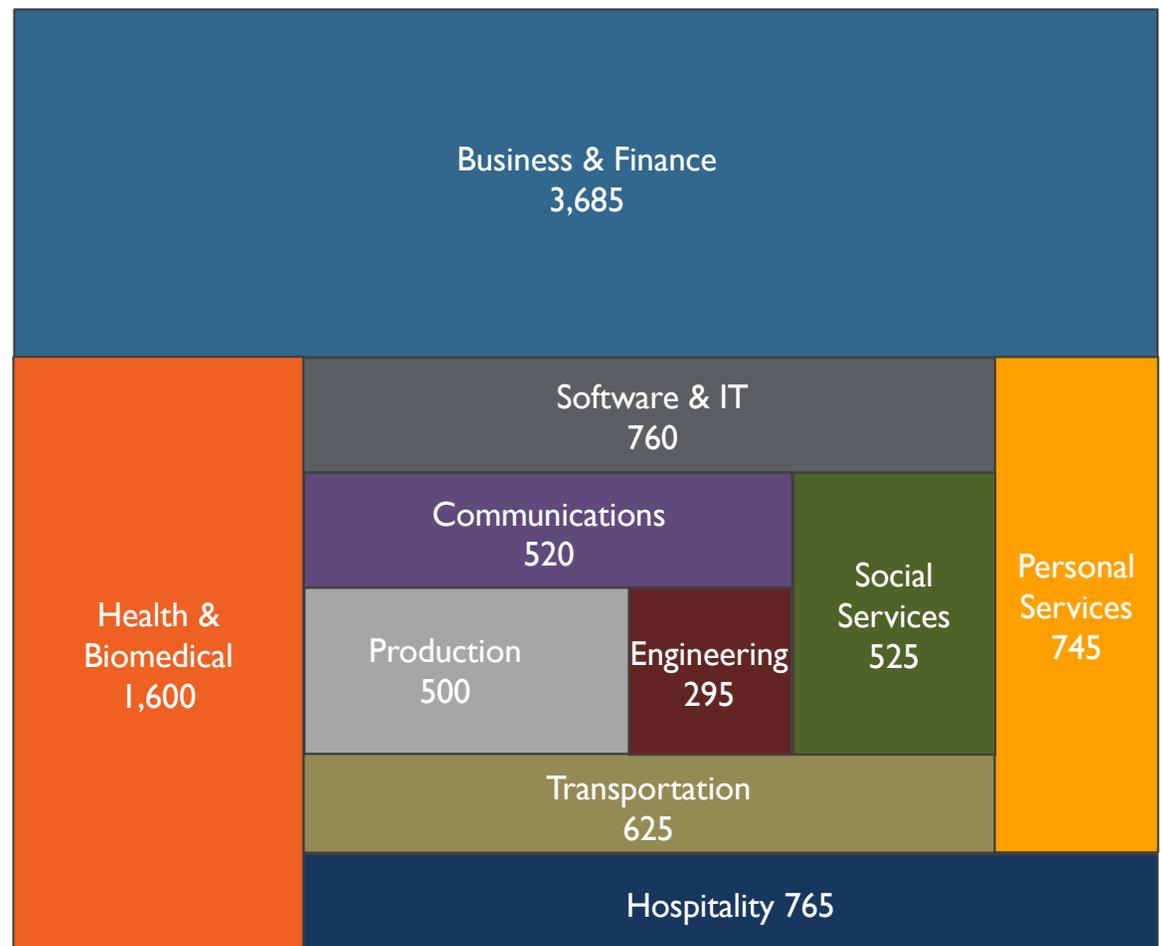
SOURCE: US CENSUS BUREAU / AVALANCHE CONSULTING

## WHAT OCCUPATIONS ARE EXPECTED TO FUEL FUTURE EMPLOYMENT GROWTH WITHIN GREATER COLUMBUS?

- Greater Columbus companies are projected to create 9,600 jobs during the next decade.
- While virtually every occupational category is expected to experience growth, approximately 75% of all gains are expected to be fueled by Business & Finance, Health & Biomedical, Hospitality, Personal Services, and Software/IT.
- Other leading sources of expected job growth include Transportation, Production, and Social Services.

Employment in Greater Columbus is projected to increase by nearly 9,600 during the next decade.

### GREATER COLUMBUS PROJECTED EMPLOYMENT GAINS BY OCCUPATION, 2016 - 2026



## DOES GREATER COLUMBUS PRODUCE SUFFICIENT TALENT?

- During the next decade, approximately 40% of job openings will require some level of post-secondary education. This may include a post-secondary certificate to more advanced degrees.
- Since 2011, local colleges and universities in Greater Columbus have awarded an average of approximately 3,375 post-secondary certificates and degrees.
- From a purely quantitative perspective, Greater Columbus appears well positioned to deliver the talent necessary for local businesses to thrive. Still, the question remains—Is local talent production aligned by skill?

Approximately 40% of job openings in Greater Columbus will require some type of post-secondary education.

884

Estimated Number of Annual Job Openings in Greater Columbus Requiring a Post-Secondary Education, 2016 - 2026

Average Number of Post-Secondary Degrees Awarded by Greater Columbus Colleges and Universities, 2010 - 2015

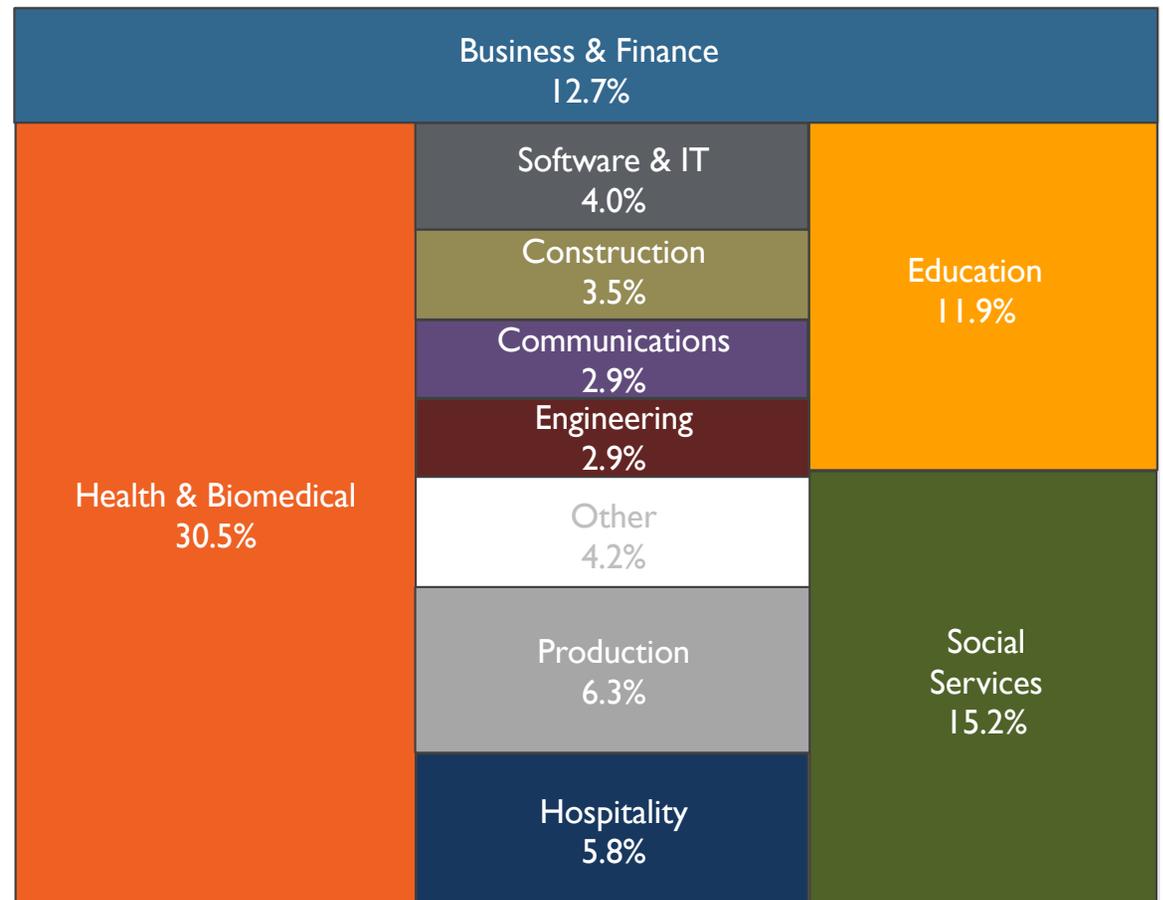
3,374

## DOES GREATER COLUMBUS PRODUCE THE RIGHT KINDS OF TALENT?

- Greater Columbus colleges and universities annually award a tremendous number of Health & Biomedical degrees. In 2015, Health & Biomedical programs represented more than 30% of all locally awarded degrees within Greater Columbus.
- While Business & Finance is projected to create more jobs in Greater Columbus than any other cluster during the next decade, less than 13% of locally awarded degrees are in aligned programs.
- Engineering and Software & IT represent less than 7% of locally produced post-secondary talent.

Health & Biomedical programs represent the largest source of local college graduates.

### GREATER COLUMBUS POST-SECONDARY AWARDS BY GENERAL COMPETENCY, 2015

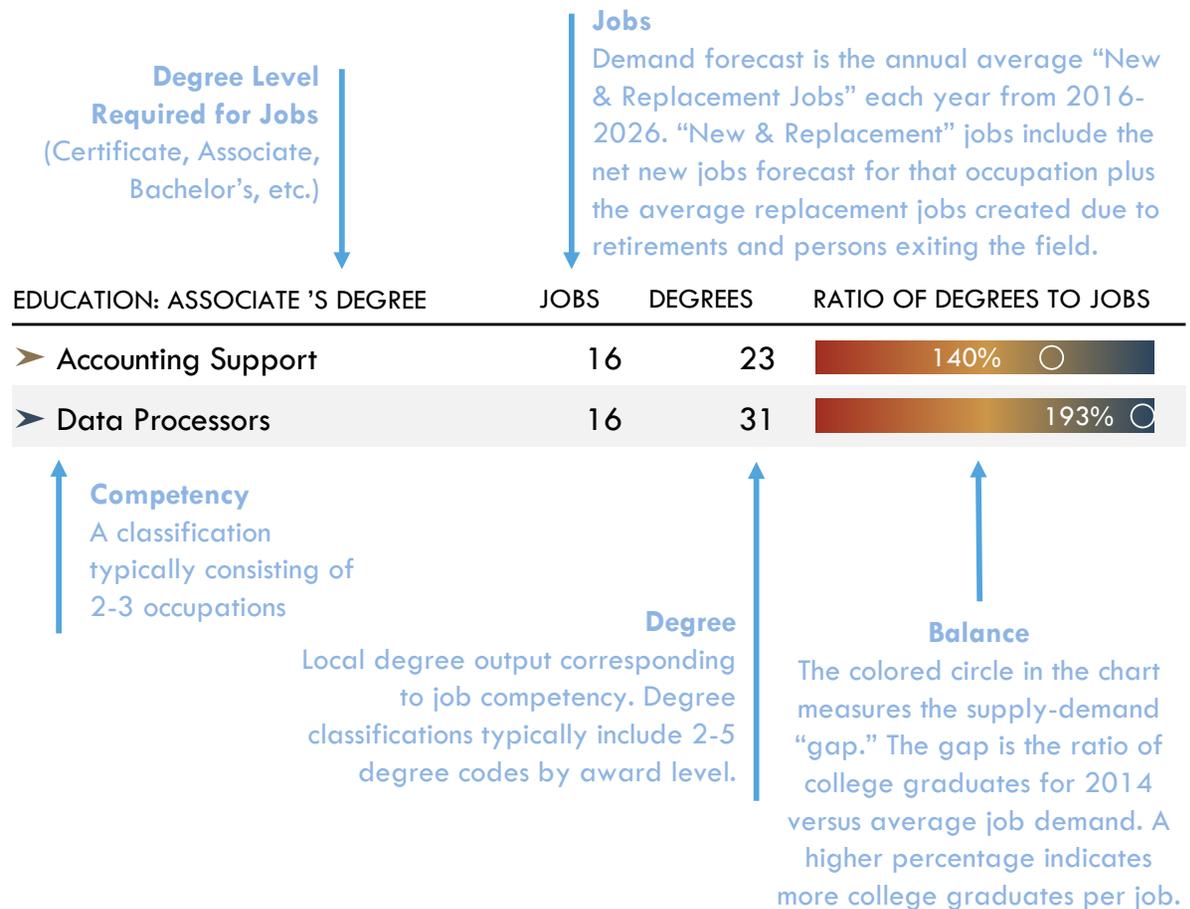


# TALENT SUPPLY & DEMAND METHODOLOGY

While some degrees are precisely designed for a single occupation, matching other disciplines is less straightforward (e.g., a Psychology graduate with a bachelor's degree is not qualified to practice without additional education), while other degrees are precisely designed for a single occupation. In addition, the degree's award level will affect its match with an occupation. For example, a certificate or two-year associate degree in computer science may only qualify someone for a computer support position, while a bachelor's degree in computer science is preparation for a computer programmer position. Unlike other supply-demand taxonomies in use today by the US Department of Labor, our taxonomy extends to matching degrees and occupations at each education level (certificates, associate, bachelor's, master's and doctorate).



Cluster Supply to Demand Ratio –  
50% to 100% Indicates Supply Equals Demand



# BUSINESS & FINANCE

- Local post-secondary institutions in Greater Columbus award numerous degrees that support Business & Finance occupations. A few Business & Finance occupations, however, may be at risk of labor shortages.
- At the associate degree level, Greater Columbus colleges and universities award a sufficient number of talent to meet demand.
- Greater Columbus may not be producing a sufficient level of talent for Banking Analysts and Human Resources Managers. As Columbus State University provides a Human Resources Concentration, some students with a Bachelor of Business Administration Management degree possess the skills necessary to fill this role. Additionally, Columbus Technical College features a Human Resources associate degree program.

## BUSINESS & FINANCE – % OF JOB NEED ADDRESSED BY LOCAL GRADUATES

SHORTAGE

TALENT SUPPLY < TALENT DEMAND

SURPLUS

TALENT SUPPLY > TALENT DEMAND



EDUCATION: ASSOCIATE DEGREE	JOB	DEGREES	RATIO OF DEGREES TO JOBS
➤ Accounting Support	16	23	139%
➤ Executive Assistants	48	89	184%
➤ Data Processors	16	31	193%
➤ Human Resources Support	3	6	200%

EDUCATION: BACHELOR'S DEGREE	JOB	DEGREES	RATIO OF DEGREES TO JOBS
➤ Accountants & Tax Examiners	22	33	152%
➤ Banking Analyst	34	0	0%
➤ Executive & Management Analysts	82	174	200%+
➤ Financial Managers & Analysts	28	24	115%
➤ Human Resources Managers	15	0	0%
➤ Supply Chain Managers & Analysts	1	5	200%+

Note: Includes occupations requiring a post-secondary education with projected region job growth of at least 10 positions annually through 2026 or occupations with at least 5 local post-secondary degrees awarded annually

SOURCE: EMSI / AVALANCHE CONSULTING

# COMMUNICATIONS

- Employment in the Communications cluster within Greater Columbus is expected to rise slightly during the next decade. Job gains will be diffuse, with just two occupational categories projected to add more than 5 jobs annually through 2026.
- While Communications talent in Greater Columbus colleges and universities appears to fall short of anticipated need, the resulting gap may be overstated. For example, many interpreting positions are likely to require a knowledge of both English and Spanish. Many individuals fluent in both languages, however, do not possess formal degrees in translation. Similarly, the region doesn't feature academic programs in advertising. Local colleges and universities, however, produce significant numbers of students with degrees that require writing and editing competencies aligned with the need of many Communications positions.

## COMMUNICATIONS – % OF JOB NEED ADDRESSED BY LOCAL GRADUATES

SHORTAGE

TALENT SUPPLY < TALENT DEMAND

SURPLUS

TALENT SUPPLY > TALENT DEMAND



EDUCATION: BACHELOR'S DEGREE	JOBS	DEGREES	RATIO OF DEGREES TO JOBS
➤ Advertising & Sales Managers	6	0	0%
➤ Interpreters and Translators	10	7	70%
➤ Marketing Managers	3	32	200%+
➤ Writers, Editors & Journalist	2	60	200%+

*Note: Includes occupations requiring a post-secondary education with projected region job growth of at least 5 positions annually through 2026 or occupations with at least 5 local post-secondary degrees awarded annually*

SOURCE: EMSI / AVALANCHE CONSULTING

# ENGINEERING

- Although demand for engineering talent in Greater Columbus is expected to experience only slight growth during the next decade, the region will have to rely heavily on outside expertise to fill several positions.
- Local employers such as Pratt & Whitney are projected to fuel demand for Aerospace Engineering, Industrial Engineering, and Mechanical Engineering within Greater Columbus.
- Engineering programs in Greater Columbus, like other regions in the state, are very limited. Engineering programs in Georgia, at least at the bachelor's degree and above level, are overwhelmingly concentrated at the Georgia Institute of Technology. In 2015, the school accounted for nearly 90% of all engineering degrees awarded within the state.

## ENGINEERING – % OF JOB NEED ADDRESSED BY LOCAL GRADUATES

SHORTAGE

TALENT SUPPLY < TALENT DEMAND

SURPLUS

TALENT SUPPLY > TALENT DEMAND



EDUCATION: ASSOCIATE DEGREE	JOB	DEGREES	RATIO OF DEGREES TO JOBS
➤ Industrial Engineering Technicians	2	20	200%+ ○
➤ Mechanical Drafters	0	18	200%+ ○

EDUCATION: BACHELOR'S DEGREE	JOB	DEGREES	RATIO OF DEGREES TO JOBS
➤ Aerospace Engineers	5	0	○ 0%
➤ Biological Technicians	1	36	200%+ ○
➤ Environmental Scientists	2	14	200%+ ○
➤ Industrial Engineers	7	0	○ 0%
➤ Mechanical Engineers	15	0	○ 0%

Note: Includes occupations requiring a post-secondary education with projected region job growth of at least 5 positions annually through 2026 or occupations with at least 5 local post-secondary degrees awarded annually

SOURCE: EMSI / AVALANCHE CONSULTING

# HEALTH & BIOMEDICAL

- During the next decade, Health & Biomedical occupations are projected to experience more growth in Greater Columbus than any other area except Business & Finance.
- Fortunately, Greater Columbus produces a wealth of Health & Biomedical Talent; during the past five years, nearly one in three post-secondary awards at regional colleges and universities have been in a Health & Biomedical discipline.
- Among Health & Biomedical occupations requiring a post-secondary, Greater Columbus is projected to have an abundance of talent.

## HEALTH & BIOMEDICAL – % OF JOB NEED ADDRESSED BY LOCAL GRADUATES

SHORTAGE

TALENT SUPPLY < TALENT DEMAND

SURPLUS

TALENT SUPPLY > TALENT DEMAND



EDUCATION: POST-SECONDARY CERT.	JOBS	DEGREES	RATIO OF DEGREES TO JOBS
➤ Dental Assistants	6	8	200%+ ○
➤ Emergency Medical Technicians	4	15	200%+ ○
➤ Licensed Practical & Vocational Nurses	4	44	200%+ ○
➤ Massage Therapists	1	41	200%+ ○
➤ Medical Assistants	14	231	200%+ ○
➤ Medical Records & Info. Technicians	3	66	200%+ ○
➤ Nursing Aide	15	41	200%+ ○
➤ Phlebotomists	6	25	200%+ ○
➤ Surgical Technicians	3	28	200%+ ○

*Note: Includes occupations requiring a post-secondary education with projected region job growth of at least 5 positions annually through 2026 or occupations with at least 5 local post-secondary degrees awarded annually*

SOURCE: EMSI / AVALANCHE CONSULTING

## HEALTH & BIOMEDICAL (continued)

- Each year, Greater Columbus colleges and universities award hundreds of Associate degrees related to Health & Biomedical occupations. While Registered Nurses represent most of these degrees, the region also awards numerous Associate degree in other Health & Biomedical specialties.
- The number of annually awarded Health & Biomedical degrees in Greater Columbus exceeds annual demand for all but one area—Physical Therapist Assistants. While Greater Columbus is projected to have 5 Physical Therapist Assistants positions open annually, the region doesn't award degrees in this discipline.

## HEALTH & BIOMEDICAL – % OF JOB NEED ADDRESSED BY LOCAL GRADUATES

SHORTAGE

TALENT SUPPLY < TALENT DEMAND

SURPLUS

TALENT SUPPLY > TALENT DEMAND



EDUCATION: ASSOCIATE DEGREE	JOB	DEGREES	RATIO OF DEGREES TO JOBS
> Dental Hygienists	3	14	200%+ C
> Diagnostic Medical Sonographers	2	10	200%+ C
> Medical & Clinical Lab. Technicians	3	20	200%+ C
> Nuclear Medicine/Radiologic Tech.	3	14	200%+ C
> Physical Therapist Assistants	5	0	0%
> Registered Nurses	65	211	200%+ C
> Respiratory Therapy Technicians	0	11	200%+ C

*Note: Includes occupations requiring a post-secondary education with projected region job growth of at least 5 positions annually through 2026 or occupations with at least 5 local post-secondary degrees awarded annually*

SOURCE: EMSI / AVALANCHE CONSULTING

# HEALTH & BIOMEDICAL

- On a net basis, Greater Columbus is projected to create a modest number of Health & Biomedical jobs that require a Bachelor's degree or higher level of educational attainment.
- For Health & Biomedical occupations such as Athletic Trainers and Medical & Health Service Managers that require a Bachelor's degree, Greater Columbus is projected to have a sufficient labor force.
- Two Health & Biomedical occupations that require a Doctorate degree, Greater Columbus may experience a shortage of skilled workers. The region does not locally produce Physical Therapists, Doctors, or Surgeons.

## HEALTH & BIOMEDICAL – % OF JOB NEED ADDRESSED BY LOCAL GRADUATES

SHORTAGE

TALENT SUPPLY < TALENT DEMAND

SURPLUS

TALENT SUPPLY > TALENT DEMAND



EDUCATION: BACHELOR'S DEGREE	JOBS	DEGREES	RATIO OF DEGREES TO JOBS
➤ Athletic Trainers	0	38	200%+
➤ Medical & Health Services Managers	12	25	200%+

EDUCATION: DOCTORATE DEGREE	JOBS	DEGREES	RATIO OF DEGREES TO JOBS
➤ Physical Therapist	5	0	0%
➤ Doctors & Surgeons	5	0	0%

Note: Includes occupations requiring a post-secondary education with projected region job growth of at least 5 positions annually through 2026 or occupations with at least 5 local post-secondary degrees awarded annually

SOURCE: EMSI / AVALANCHE CONSULTING

## PRODUCTION & RELATED MECHANICS

- During the next decade, the demand for Production & Related Mechanics talent is projected to increase modestly. Local production of Production & Related Mechanics talent is expected to keep pace with these gains.
- Within Greater Columbus, the supply of General Machinists is expected to meet the regional employer demand.
- In Greater Columbus, the number of Industrial Machinery Maintenance post-secondary degree awards exceeds local demand by a significant margin. Many of these students, however, likely address regional demand for Precision Equipment Repair labor.
- The expanding relationship between Pratt & Whitney and Columbus Technical College underscores the region's ability to quickly adapt to major employment announcements.

## PRODUCTION & RELATED MECHANICS – % OF JOB NEED ADDRESSED BY LOCAL GRADUATES

SHORTAGE

TALENT SUPPLY < TALENT DEMAND

SURPLUS

TALENT SUPPLY > TALENT DEMAND



EDUCATION: POST-SECONDARY CERT.	JOBS	DEGREES	RATIO OF DEGREES TO JOBS
> Auto Body Repair	1	14	200%+ ○
> Auto Mechanics	2	83	200%+ ○
> General Machinists	7	10	○ 143%
> Industrial Machinery Maintenance	10	45	200%+ ○
> Precision Equipment Repair	20	0	○ 0%
> Welders	0	47	200%+ ○

Note: Includes occupations requiring a post-secondary education with projected region job growth of at least 10 positions annually through 2026 or occupations with at least 5 local post-secondary degrees awarded annually

SOURCE: EMSI / AVALANCHE CONSULTING

# SOCIAL SERVICES

- Projected demand for Social Services within Greater Columbus largely reflects broader demographic trends within the region. As the region's population increases slightly, there will be a corresponding demand for additional fire fighters and police officers.
- Columbus State University is home to one of the largest and most respected criminal justice programs in Georgia. Each year, the school awards hundreds of criminal justice degrees. As a result, the region has a sufficient level of Law Enforcement & Protective Services talent to meet regional need. Each year, the region exports a significant number of law enforcement officers to other jurisdictions throughout the state.
- Greater Columbus produces a sufficient number of students to address the demand for other Social Service positions, including Fire Fighters.

## SOCIAL SERVICES – % OF JOB NEED ADDRESSED BY LOCAL GRADUATES

SHORTAGE

TALENT SUPPLY < TALENT DEMAND

SURPLUS

TALENT SUPPLY > TALENT DEMAND



EDUCATION: POST-SECONDARY CERT.	JOB	DEGREES	RATIO OF DEGREES TO JOBS
➤ Fire Fighters	9	9	100%
➤ Law Enforcement & Protective Svc.	60	323	200%+

EDUCATION: BACHELOR'S DEGREE	JOB	DEGREES	RATIO OF DEGREES TO JOBS
➤ Social Services	24	124	100%
➤ Emergency Management Svc.	1	10	200%+

EDUCATION: MASTER'S DEGREE	JOB	DEGREES	RATIO OF DEGREES TO JOBS
➤ Mental Health Counselor	5	0	0%
➤ Political Scientists	0	16	200%+
➤ School Counselor	2	30	200%+

Note: Includes occupations requiring a post-secondary education with projected region job growth of at least 5 positions annually through 2026 or occupations with at least 5 local post-secondary degrees awarded annually

SOURCE: EMSI / AVALANCHE CONSULTING

# SOFTWARE & IT

- During the past five years, Software & IT occupations have been among the fastest growing sectors within Greater Columbus. Software & IT is projected to experience strong regional growth through 2026. This growth has been facilitated by local colleges and universities—during the past decade, the number of locally awarded computer science degrees has nearly doubled.
- At the associate degree level, local post-secondary institutions award more than enough degrees to fill Computer Support Specialists positions.
- At the bachelor’s degree level, local colleges and universities produce a sufficient number of Information Security Analysts. However, there appears to be a lack of locally produced Computer Network Administrators and Software Development & Database Administrator talent.

## SOFTWARE & IT – % OF JOB NEED ADDRESSED BY LOCAL GRADUATES

SHORTAGE

TALENT SUPPLY < TALENT DEMAND

SURPLUS

TALENT SUPPLY > TALENT DEMAND



EDUCATION: ASSOCIATE DEGREE	JOB	DEGREES	RATIO OF DEGREES TO JOBS
➤ Computer Support Specialists	18	42	200%+ ○
➤ Web Developer	3	21	200%+ ○

EDUCATION: BACHELOR'S DEGREE	JOB	DEGREES	RATIO OF DEGREES TO JOBS
➤ Computer Network Administrators	14	0	0% ○
➤ Information Security Analysts	31	73	200%+ ○
➤ Software Dev. & Database Administrators	32	0	0% ○

Note: Includes occupations requiring a post-secondary education with projected region job growth of at least 5 positions annually through 2026 or occupations with at least 5 local post-secondary degrees awarded annually

SOURCE: EMSI / AVALANCHE CONSULTING

# TRANSPORTATION

- The Transportation cluster plays a relatively minor role in the Greater Columbus economy. On a proportional basis, Transportation & Logistics employment within the region is 60% less than the US average. Employment in the cluster has also declined during the past five years.
- Despite the lackluster growth of the Transportation & Logistics cluster within Greater Columbus, current projections anticipate an ongoing demand for Truck & Commercial Drivers. However, the nearest commercial vehicle operator certificate programs are located in Griffin, LaGrange, and Americus.
- Nationwide, there has been an ongoing shortage of truck drivers for the past several years. This shortage isn't expected to disappear anytime soon.

## TRANSPORTATION – % OF JOB NEED ADDRESSED BY LOCAL GRADUATES

SHORTAGE

TALENT SUPPLY < TALENT DEMAND

SURPLUS

TALENT SUPPLY > TALENT DEMAND



EDUCATION: POST-SECONDARY CERT.	JOB	DEGREES	RATIO OF DEGREES TO JOBS
> Truck & Commercial Drivers	45	0	0%

*Note: Includes occupations requiring a post-secondary education with projected region job growth of at least 5 positions annually through 2026*

SOURCE: EMSI / AVALANCHE CONSULTING

# OCCUPATIONAL PROFILE APPENDIX

The *Occupational Profile Appendix* includes more in-depth information about the competencies of Greater Columbus. Each occupational table highlights the top occupations within the group, the number of employed individuals within each geography, and median and entry-level wages (including comparisons to US figures). Data is provided for both Greater Columbus and its broader labor shed (in separate tables).



ARCHITECTURE & ENGINEERING



BUSINESS & FINANCE



COMPUTER & MATHEMATICAL



EDUCATION, TRAINING & LIBRARY



HEALTHCARE PRACTITIONERS & TECH.



MANAGEMENT



OFFICE & ADMINISTRATION



PRODUCTION



TRANSPORTATION & MATERIAL MOVING

# GREATER COLUMBUS

## ARCHITECTURE & ENGINEERING OCCUPATIONS 2016



CODE	OCCUPATION	EMPLOYMENT	GREATER COLUMBUS AVERAGE WAGE	REGIONAL MEDIAN WAGE VERSUS US MEDIAN WAGE	GREATER COLUMBUS ENTRY-LEVEL WAGE	REGIONAL ENTRY-LEVEL WAGE VERSUS US ENTRY-LEVEL WAGE
17-1010	Architects, Except Naval	37	\$30.82	-25.6%	\$17.85	-28.6%
17-1020	Surveyors, Cartographers, and Photogrammetrists	25	\$21.71	-38.9%	\$13.29	-37.8%
17-2010	Aerospace Engineers	23	\$42.88	-24.7%	\$27.34	-26.5%
17-2020	Agricultural Engineers	<10	Not Available	Not Available	Not Available	Not Available
17-2030	Biomedical Engineers	<10	Not Available	Not Available	Not Available	Not Available
17-2040	Chemical Engineers	<10	Not Available	Not Available	Not Available	Not Available
17-2050	Civil Engineers	164	\$29.88	-41.8%	\$17.04	-53.3%
17-2060	Computer Hardware Engineers	15	\$48.76	-13.3%	\$27.29	-25.2%
17-2070	Electrical and Electronics Engineers	87	\$41.52	-15.4%	\$29.75	-2.5%
17-2080	Environmental Engineers	74	\$18.63	-126.0%	\$12.16	-112.3%
17-2110	Industrial Engineers, Including Health and Safety	<10	Not Available	Not Available	Not Available	Not Available
17-2120	Marine Engineers and Naval Architects	<10	Not Available	Not Available	Not Available	Not Available
17-2130	Materials Engineers	13	\$33.20	-35.6%	\$22.36	-24.7%
17-2140	Mechanical Engineers	<10	Not Available	Not Available	Not Available	Not Available
17-2150	Mining and Geological Engineers, Including Mining Safety Engin	<10	Not Available	Not Available	Not Available	Not Available
17-2160	Nuclear Engineers	<10	Not Available	Not Available	Not Available	Not Available
17-2170	Petroleum Engineers	<10	Not Available	Not Available	Not Available	Not Available
17-2190	Miscellaneous Engineers	36	\$36.86	-27.8%	\$21.13	-26.3%
17-3010	Drafters	95	\$24.11	-11.6%	\$14.95	-13.8%
17-3020	Engineering Technicians, Except Drafters	269	\$25.54	-10.0%	\$15.48	-13.2%
17-3030	Surveying and Mapping Technicians	28	\$17.15	-26.5%	\$10.18	-32.9%

# GREATER COLUMBUS

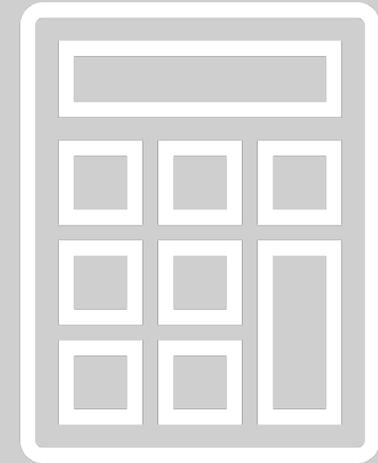
## BUSINESS & FINANCE OCCUPATIONS 2016



CODE	OCCUPATION	EMPLOYMENT	GREATER COLUMBUS AVERAGE WAGE	REGIONAL MEDIAN WAGE VERSUS US MEDIAN WAGE	GREATER COLUMBUS ENTRY-LEVEL WAGE	REGIONAL ENTRY-LEVEL WAGE VERSUS US ENTRY-LEVEL WAGE
13-1010	Agents and Business Managers of Artists, Performers, and Athletes	<10	Not Available	Not Available	Not Available	Not Available
13-1020	Buyers and Purchasing Agents	317	\$25.75	-19.5%	\$15.24	-17.3%
13-1030	Claims Adjusters, Appraisers, Examiners, and Investigators	289	\$31.44	1.6%	\$20.01	5.1%
13-1040	Compliance Officers	187	\$29.37	-13.5%	\$16.00	-20.7%
13-1050	Cost Estimators	80	\$23.92	-30.5%	\$12.78	-35.5%
13-1070	Human Resources Workers	473	\$28.49	-7.3%	\$14.81	-12.8%
13-1080	Logisticians	138	\$37.22	0.1%	\$23.90	3.8%
13-1110	Management Analysts	1,145	\$46.54	5.1%	\$21.41	-9.2%
13-1120	Meeting, Convention, and Event Planners	78	\$22.99	-8.3%	\$14.44	5.7%
13-1130	Fundraisers	47	\$26.05	-6.3%	\$12.25	-26.4%
13-1140	Compensation, Benefits, and Job Analysis Specialists	51	\$31.54	0.8%	\$18.29	-7.3%
13-1150	Training and Development Specialists	222	\$27.62	-8.8%	\$15.21	-6.2%
13-1160	Market Research Analysts and Marketing Specialists	393	\$26.58	-27.2%	\$14.13	-20.9%
13-1190	Miscellaneous Business Operations Specialists	874	\$31.27	-13.4%	\$16.25	-17.2%
13-2010	Accountants and Auditors	805	\$34.69	-5.1%	\$18.68	-10.8%
13-2020	Appraisers and Assessors of Real Estate	81	\$15.28	-85.4%	\$9.18	-66.7%
13-2030	Budget Analysts	97	\$37.06	2.6%	\$21.70	-11.5%
13-2040	Credit Analysts	53	\$28.99	-33.1%	\$15.74	-32.6%
13-2050	Financial Analysts and Advisors	289	\$38.94	-23.9%	\$17.72	-27.2%
13-2060	Financial Examiners	73	\$42.68	-0.8%	\$19.49	-22.9%
13-2070	Credit Counselors and Loan Officers	202	\$28.17	-25.2%	\$15.32	-8.3%
13-2080	Tax Examiners, Collectors and Preparers, and Revenue Agents	173	\$17.47	-40.2%	\$9.73	-41.2%
13-2090	Miscellaneous Financial Specialists	77	\$26.66	-31.4%	\$14.92	-30.3%

# GREATER COLUMBUS

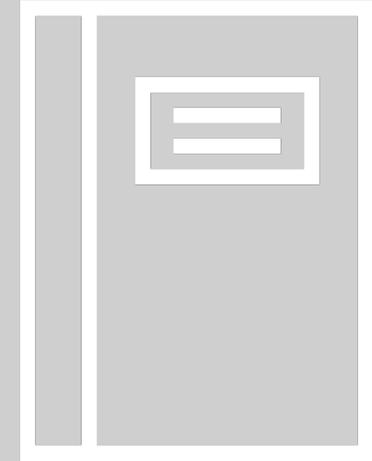
## COMPUTER & MATH OCCUPATIONS 2016



CODE	OCCUPATION	EMPLOYMENT	GREATER COLUMBUS AVERAGE WAGE	REGIONAL MEDIAN WAGE VERSUS US MEDIAN WAGE	GREATER COLUMBUS ENTRY-LEVEL WAGE	REGIONAL ENTRY-LEVEL WAGE VERSUS US ENTRY-LEVEL WAGE
15-1110	Computer and Information Research Scientists	<10	Not Available	Not Available	Not Available	Not Available
15-1120	Computer and Information Analysts	479	\$31.70	-37.8%	\$18.32	-40.7%
15-1130	Software Developers and Programmers	1,679	\$40.09	-17.9%	\$25.02	-12.9%
15-1140	Database and Systems Administrators and Network Archit	<10	Not Available	Not Available	Not Available	Not Available
15-1150	Computer Support Specialists	<10	Not Available	Not Available	Not Available	Not Available
15-1190	Miscellaneous Computer Occupations	<10	Not Available	Not Available	Not Available	Not Available
15-2010	Actuaries	<10	Not Available	Not Available	Not Available	Not Available
15-2020	Mathematicians	<10	Not Available	Not Available	Not Available	Not Available
15-2030	Operations Research Analysts	128	\$29.52	-36.8%	\$15.83	-44.9%
15-2040	Statisticians	26	\$36.23	-12.0%	\$18.66	-31.8%
15-2090	Miscellaneous Mathematical Science Occupations	<10	Not Available	Not Available	Not Available	Not Available

# GREATER COLUMBUS

## EDUCATION, TRAINING & LIBRARY OCCUPATIONS 2016



CODE	OCCUPATION	EMPLOYMENT	GREATER COLUMBUS AVERAGE WAGE	REGIONAL MEDIAN WAGE VERSUS US MEDIAN WAGE	GREATER COLUMBUS ENTRY-LEVEL WAGE	REGIONAL ENTRY-LEVEL WAGE VERSUS US ENTRY-LEVEL WAGE
25-1090	Postsecondary Teachers	893	\$23.38	-59.9%	\$13.29	-32.8%
25-2010	Preschool and Kindergarten Teachers	513	\$20.96	10.5%	\$13.87	14.3%
25-2020	Elementary and Middle School Teachers	2,217	\$24.50	-14.2%	\$18.03	-5.4%
25-2030	Secondary School Teachers	545	\$27.02	-7.4%	\$19.05	-4.0%
25-2050	Special Education Teachers	297	\$26.22	-9.4%	\$18.89	-2.0%
25-3010	Adult Basic and Secondary Education and Literacy Teachers and Instru	23	\$20.85	-24.5%	\$12.61	-25.2%
25-3020	Self-Enrichment Education Teachers	187	\$18.91	-8.9%	\$9.50	-3.9%
25-3090	Miscellaneous Teachers and Instructors	903	\$14.72	-15.8%	\$8.41	-26.6%
25-4010	Archivists, Curators, and Museum Technicians	<10	Not Available	Not Available	Not Available	Not Available
25-4020	Librarians	95	\$28.79	0.9%	\$20.23	10.7%
25-4030	Library Technicians	30	\$14.73	-13.3%	\$9.19	-18.1%
25-9010	Audio-Visual and Multimedia Collections Specialists	<10	Not Available	Not Available	Not Available	Not Available
25-9020	Farm and Home Management Advisors	<10	Not Available	Not Available	Not Available	Not Available
25-9030	Instructional Coordinators	100	\$33.87	7.4%	\$20.05	7.7%
25-9040	Teacher Assistants	848	\$9.13	-42.3%	\$7.54	-22.5%
25-9090	Miscellaneous Education, Training, and Library Workers	184	\$17.97	-19.4%	\$9.69	-22.8%

# GREATER COLUMBUS

## HEALTHCARE PRACTITIONERS & TECH. OCCUPATIONS 2016



CODE	OCCUPATION	EMPLOYMENT	GREATER COLUMBUS AVERAGE WAGE	REGIONAL MEDIAN WAGE VERSUS US MEDIAN WAGE	GREATER COLUMBUS ENTRY-LEVEL WAGE	REGIONAL ENTRY-LEVEL WAGE VERSUS US ENTRY-LEVEL WAGE
29-1010	Chiropractors	<10	Not Available	Not Available	Not Available	Not Available
29-1020	Dentists	40	\$112.61	24.7%	\$56.40	29.1%
29-1030	Dietitians and Nutritionists	80	\$24.21	-15.9%	\$12.89	-41.5%
29-1040	Optometrists	30	\$55.56	0.4%	\$26.47	-5.3%
29-1050	Pharmacists	247	\$59.08	2.9%	\$45.10	6.5%
29-1060	Physicians and Surgeons	613	\$94.59	-2.6%	\$47.83	7.4%
29-1070	Physician Assistants	104	\$45.16	-5.9%	\$25.37	-22.1%
29-1080	Podiatrists	17	\$68.67	6.4%	\$23.75	-18.7%
29-1120	Therapists	522	\$35.51	-3.2%	\$26.05	4.5%
29-1130	Veterinarians	42	\$50.16	4.7%	\$27.91	1.5%
29-1140	Registered Nurses	2,534	\$29.03	-18.1%	\$20.70	-17.3%
29-1150	Nurse Anesthetists	60	\$73.17	-5.0%	\$52.79	0.1%
29-1160	Nurse Midwives	12	\$45.37	-0.1%	\$31.21	3.2%
29-1170	Nurse Practitioners	110	\$48.27	-1.3%	\$34.92	-0.2%
29-1180	Audiologists	19	\$37.90	2.1%	\$22.83	-10.6%
29-1190	Miscellaneous Health Diagnosing and Treating Practitioners	20	\$41.69	2.1%	\$22.22	-4.0%
29-2010	Clinical Laboratory Technologists and Technicians	278	\$26.82	6.8%	\$18.41	6.8%
29-2020	Dental Hygienists	211	\$26.19	-33.8%	\$17.55	-49.6%
29-2030	Diagnostic Related Technologists and Technicians	362	\$25.78	-16.1%	\$17.95	-14.3%
29-2040	Emergency Medical Technicians and Paramedics	135	\$20.84	17.6%	\$13.40	19.4%
29-2050	Health Practitioner Support Technologists and Technicians	654	\$15.21	-10.2%	\$10.57	-10.2%
29-2060	Licensed Practical and Licensed Vocational Nurses	892	\$19.21	-10.7%	\$14.77	-9.9%
29-2070	Medical Records and Health Information Technicians	200	\$17.65	-10.7%	\$10.73	-14.2%
29-2080	Opticians, Dispensing	43	\$16.15	-9.9%	\$9.86	-15.8%
29-2090	Miscellaneous Health Technologists and Technicians	68	\$23.03	0.6%	\$12.97	-8.1%
29-9010	Occupational Health and Safety Specialists and Technicians	51	\$32.38	-1.2%	\$20.98	4.7%
29-9090	Miscellaneous Health Practitioners and Technical Workers	50	\$24.77	-5.4%	\$14.57	-1.8%

# GREATER COLUMBUS

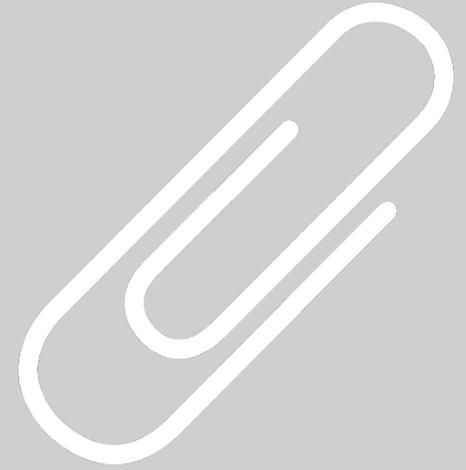
## MANAGEMENT OCCUPATIONS 2016



CODE	OCCUPATION	EMPLOYMENT	GREATER COLUMBUS AVERAGE WAGE	REGIONAL MEDIAN WAGE VERSUS US MEDIAN WAGE	GREATER COLUMBUS ENTRY-LEVEL WAGE	REGIONAL ENTRY-LEVEL WAGE VERSUS US ENTRY-LEVEL WAGE
11-1010	Chief Executives	214	\$81.40	-10.0%	\$30.08	-24.1%
11-1020	General and Operations Managers	1,914	\$43.50	-32.3%	\$16.55	-37.2%
11-1030	Legislators	75	\$11.62	-78.2%	\$7.67	-57.6%
11-2010	Advertising and Promotions Managers	30	\$40.76	-34.1%	\$19.10	-32.0%
11-2020	Marketing and Sales Managers	335	\$53.25	-20.7%	\$26.12	-16.0%
11-2030	Public Relations and Fundraising Managers	32	\$50.05	-15.2%	\$26.83	-12.1%
11-3010	Administrative Services Managers	269	\$38.36	-18.9%	\$21.00	-15.1%
11-3020	Computer and Information Systems Managers	499	\$52.67	-28.9%	\$33.78	-21.8%
11-3030	Financial Managers	399	\$57.25	-13.3%	\$27.80	-17.8%
11-3050	Industrial Production Managers	99	\$45.59	-9.1%	\$28.91	1.4%
11-3060	Purchasing Managers	35	\$44.78	-21.9%	\$29.15	-8.4%
11-3070	Transportation, Storage, and Distribution Managers	68	\$35.68	-27.6%	\$20.03	-26.7%
11-3110	Compensation and Benefits Managers	21	\$50.73	-14.8%	\$27.62	-17.7%
11-3120	Human Resources Managers	89	\$46.58	-20.6%	\$28.19	-11.6%
11-3130	Training and Development Managers	34	\$51.72	-3.8%	\$30.20	-0.7%
11-9010	Farmers, Ranchers, and Other Agricultural Managers	11	\$24.74	-28.2%	\$12.92	-59.4%
11-9020	Construction Managers	113	\$42.30	-10.8%	\$22.19	-17.5%
11-9030	Education Administrators	449	\$36.67	-19.0%	\$24.10	-11.3%
11-9040	Architectural and Engineering Managers	70	\$63.26	-7.7%	\$38.56	-11.2%
11-9050	Food Service Managers	188	\$20.66	-24.5%	\$12.39	-21.8%
11-9060	Funeral Service Managers	29	\$33.48	-15.2%	\$17.10	-20.9%
11-9070	Gaming Managers	<10	Not Available	Not Available	Not Available	Not Available
11-9080	Lodging Managers	37	\$22.15	-25.8%	\$14.29	-9.7%
11-9110	Medical and Health Services Managers	336	\$42.60	-19.9%	\$24.45	-17.4%
11-9120	Natural Sciences Managers	43	\$47.35	-38.6%	\$29.07	-30.6%
11-9130	Postmasters and Mail Superintendents	26	\$33.72	0.8%	\$28.12	6.5%
11-9140	Property, Real Estate, and Community Association Managers	138	\$28.15	-17.3%	\$14.56	-8.2%
11-9150	Social and Community Service Managers	73	\$34.05	1.8%	\$18.36	-8.2%
11-9160	Emergency Management Directors	32	\$28.01	-26.6%	\$14.07	-42.6%
11-9190	Miscellaneous Managers	242	\$46.53	-15.0%	\$26.12	-14.9%

# GREATER COLUMBUS

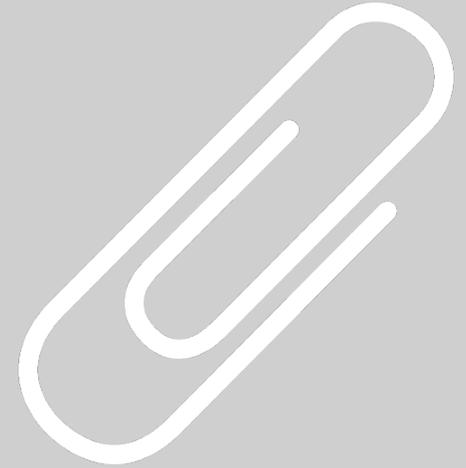
## OFFICE & ADMINISTRATION OCCUPATIONS 2016



CODE	OCCUPATION	EMPLOYMENT	GREATER COLUMBUS AVERAGE WAGE	REGIONAL MEDIAN WAGE VERSUS US MEDIAN WAGE	GREATER COLUMBUS ENTRY-LEVEL WAGE	REGIONAL ENTRY-LEVEL WAGE VERSUS US ENTRY-LEVEL WAGE
43-1010	First-Line Supervisors of Office and Administrative Support Workers	1,150	\$24.07	-12.5%	\$13.26	-19.4%
43-2010	Switchboard Operators, Including Answering Service	138	\$11.68	-19.7%	\$8.42	-15.2%
43-2020	Telephone Operators	14	\$19.50	3.7%	\$12.36	-0.4%
43-2090	Miscellaneous Communications Equipment Operators	<10	Not Available	Not Available	Not Available	Not Available
43-3010	Bill and Account Collectors	524	\$17.18	-2.6%	\$10.81	-7.3%
43-3020	Billing and Posting Clerks	433	\$14.41	-21.4%	\$10.11	-19.8%
43-3030	Bookkeeping, Accounting, and Auditing Clerks	1,246	\$17.04	-10.3%	\$10.68	-7.3%
43-3040	Gaming Cage Workers	<10	Not Available	Not Available	Not Available	Not Available
43-3050	Payroll and Timekeeping Clerks	139	\$18.71	-8.2%	\$13.35	0.8%
43-3060	Procurement Clerks	183	\$20.47	3.9%	\$14.92	11.7%
43-3070	Tellers	478	\$13.19	-0.4%	\$9.81	-2.0%
43-3090	Miscellaneous Financial Clerks	54	\$15.31	-33.4%	\$8.94	-48.0%
43-4010	Brokerage Clerks	26	\$23.41	-7.1%	\$12.39	-28.9%
43-4020	Correspondence Clerks	<10	Not Available	Not Available	Not Available	Not Available
43-4030	Court, Municipal, and License Clerks	169	\$15.73	-17.4%	\$11.40	-9.8%
43-4040	Credit Authorizers, Checkers, and Clerks	49	\$23.89	24.3%	\$14.94	18.1%
43-4050	Customer Service Representatives	2,820	\$14.83	-12.6%	\$8.86	-14.4%
43-4060	Eligibility Interviewers, Government Programs	76	\$19.76	-5.3%	\$15.22	-4.3%
43-4070	File Clerks	68	\$11.94	-21.4%	\$8.05	-17.9%
43-4080	Hotel, Motel, and Resort Desk Clerks	367	\$8.78	-28.2%	\$7.52	-19.0%
43-4110	Interviewers, Except Eligibility and Loan	75	\$13.64	-16.6%	\$9.63	-10.2%
43-4120	Library Assistants, Clerical	69	\$10.93	-19.7%	\$7.87	-16.4%
43-4130	Loan Interviewers and Clerks	68	\$14.37	-32.3%	\$9.38	-32.3%
43-4140	New Accounts Clerks	22	\$14.75	-17.8%	\$11.15	-18.1%

# GREATER COLUMBUS

## OFFICE & ADMINISTRATION OCCUPATIONS (continued) 2016



CODE	OCCUPATION	EMPLOYMENT	GREATER COLUMBUS AVERAGE WAGE	REGIONAL MEDIAN WAGE VERSUS US MEDIAN WAGE	GREATER COLUMBUS ENTRY-LEVEL WAGE	REGIONAL ENTRY-LEVEL WAGE VERSUS US ENTRY-LEVEL WAGE
43-4150	Order Clerks	67	\$17.12	3.9%	\$10.44	3.1%
43-4160	Human Resources Assistants, Except Payroll and Timekeeping	236	\$18.22	-3.5%	\$12.17	-3.2%
43-4170	Receptionists and Information Clerks	1,121	\$11.39	-21.1%	\$7.79	-20.5%
43-4180	Reservation and Transportation Ticket Agents and Travel Clerks	70	\$13.79	-26.8%	\$8.17	-27.4%
43-4190	Miscellaneous Information and Record Clerks	330	\$18.57	-0.9%	\$11.55	-6.7%
43-5010	Cargo and Freight Agents	35	\$17.09	-23.9%	\$9.84	-27.5%
43-5020	Couriers and Messengers	75	\$11.07	-27.5%	\$7.69	-24.2%
43-5030	Dispatchers	238	\$15.50	-24.6%	\$10.10	-18.7%
43-5040	Meter Readers, Utilities	43	\$16.24	-21.8%	\$11.20	-9.8%
43-5050	Postal Service Workers	342	\$25.43	3.8%	\$17.04	6.3%
43-5060	Production, Planning, and Expediting Clerks	233	\$19.14	-21.3%	\$11.36	-20.2%
43-5070	Shipping, Receiving, and Traffic Clerks	418	\$15.79	1.3%	\$10.07	1.2%
43-5080	Stock Clerks and Order Fillers	1534	\$12.03	-5.4%	\$8.11	-8.8%
43-5110	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	40	\$17.22	13.1%	\$11.68	16.5%
43-6010	Secretaries and Administrative Assistants	2232	\$16.57	-14.9%	\$10.63	-15.0%
43-9010	Computer Operators	59	\$20.55	0.9%	\$12.06	-0.3%
43-9020	Data Entry and Information Processing Workers	157	\$12.19	-30.3%	\$8.28	-30.7%
43-9030	Desktop Publishers	<10	Not Available	Not Available	Not Available	Not Available
43-9040	Insurance Claims and Policy Processing Clerks	368	\$15.87	-20.6%	\$10.99	-17.0%
43-9050	Mail Clerks and Mail Machine Operators, Except Postal Service	268	\$14.51	-0.9%	\$9.86	2.7%
43-9060	Office Clerks, General	2061	\$12.86	-20.3%	\$8.10	-14.9%
43-9070	Office Machine Operators, Except Computer	50	\$14.44	-4.1%	\$9.37	-3.9%
43-9080	Proofreaders and Copy Markers	<10	Not Available	Not Available	Not Available	Not Available

# GREATER COLUMBUS

## PRODUCTION OCCUPATIONS 2016



CODE	OCCUPATION	EMPLOYMENT	GREATER COLUMBUS AVERAGE WAGE	REGIONAL MEDIAN WAGE VERSUS US MEDIAN WAGE	GREATER COLUMBUS ENTRY-LEVEL WAGE	REGIONAL ENTRY-LEVEL WAGE VERSUS US ENTRY-LEVEL WAGE
51-1010	First-Line Supervisors of Production and Operating Workers	436	\$31.25	7.7%	\$17.31	5.1%
51-2010	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	120	\$20.16	-25.7%	\$12.05	-24.6%
51-2020	Electrical, Electronics, and Electromechanical Assemblers	333	\$16.17	-0.4%	\$11.18	6.0%
51-2030	Engine and Other Machine Assemblers	<10	Not Available	Not Available	Not Available	Not Available
51-2040	Structural Metal Fabricators and Fitters	29	\$16.27	-15.7%	\$10.87	-15.5%
51-2090	Miscellaneous Assemblers and Fabricators	679	\$14.77	-2.2%	\$9.60	0.2%
51-3010	Bakers	60	\$9.62	-33.1%	\$7.68	-18.1%
51-3020	Butchers and Other Meat, Poultry, and Fish Processing Workers	927	\$10.96	-21.2%	\$8.77	-10.5%
51-3090	Miscellaneous Food Processing Workers	185	\$14.90	7.0%	\$10.07	4.6%
51-4010	Computer Control Programmers and Operators	48	\$17.93	-9.4%	\$11.67	-9.9%
51-4020	Forming Machine Setters, Operators, and Tenders, Metal and Plastic	56	\$14.62	-21.4%	\$9.72	-22.6%
51-4030	Machine Tool Cutting Setters, Operators, and Tenders, Metal and Plastic	182	\$15.90	-4.7%	\$10.80	-1.3%
51-4040	Machinists	217	\$18.48	-9.5%	\$11.65	-8.4%
51-4050	Metal Furnace Operators, Tenders, Pourers, and Casters	24	\$18.34	-6.3%	\$12.37	-10.1%
51-4060	Model Makers and Patternmakers, Metal and Plastic	<10	Not Available	Not Available	Not Available	Not Available
51-4070	Molders and Molding Machine Setters, Operators, and Tenders, Metal and Plastic	121	\$15.71	2.9%	\$10.98	7.0%
51-4080	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	38	\$13.31	-27.9%	\$8.57	-30.6%
51-4110	Tool and Die Makers	22	\$20.41	-20.8%	\$12.66	-26.3%
51-4120	Welding, Soldering, and Brazing Workers	341	\$16.30	-19.5%	\$10.37	-24.0%
51-4190	Miscellaneous Metal Workers and Plastic Workers	38	\$17.44	-1.3%	\$12.73	9.6%
51-5110	Printing Workers	175	\$17.51	-1.0%	\$9.58	-11.4%
51-6010	Laundry and Dry-Cleaning Workers	203	\$8.80	-27.8%	\$7.40	-19.3%
51-6020	Pressers, Textile, Garment, and Related Materials	49	\$8.88	-22.3%	\$7.55	-18.0%
51-6030	Sewing Machine Operators	38	\$10.73	-13.1%	\$8.02	-13.5%
51-6040	Shoe and Leather Workers	<10	Not Available	Not Available	Not Available	Not Available

# GREATER COLUMBUS

## PRODUCTION OCCUPATIONS (continued) 2016



CODE	OCCUPATION	EMPLOYMENT	GREATER COLUMBUS AVERAGE WAGE	REGIONAL MEDIAN WAGE VERSUS US MEDIAN WAGE	GREATER COLUMBUS ENTRY-LEVEL WAGE	REGIONAL ENTRY-LEVEL WAGE VERSUS US ENTRY-LEVEL WAGE
51-6050	Tailors, Dressmakers, and Sewers	12	\$11.16	-21.7%	\$9.20	-3.2%
51-6060	Textile Machine Setters, Operators, and Tenders	338	\$13.43	0.7%	\$10.12	2.6%
51-6090	Miscellaneous Textile, Apparel, and Furnishings Workers	60	\$15.60	-5.7%	\$11.21	4.2%
51-7010	Cabinetmakers and Bench Carpenters	40	\$14.44	-13.6%	\$9.60	-11.5%
51-7020	Furniture Finishers	<10	Not Available	Not Available	Not Available	Not Available
51-7030	Model Makers and Patternmakers, Wood	<10	Not Available	Not Available	Not Available	Not Available
51-7040	Woodworking Machine Setters, Operators, and Tenders	86	\$13.52	-4.7%	\$9.22	-6.9%
51-7090	Miscellaneous Woodworkers	<10	Not Available	Not Available	Not Available	Not Available
51-8010	Power Plant Operators, Distributors, and Dispatchers	26	\$37.36	2.5%	\$29.83	15.5%
51-8020	Stationary Engineers and Boiler Operators	30	\$23.42	-24.1%	\$15.65	-27.6%
51-8030	Water and Wastewater Treatment Plant and System Operators	101	\$16.49	-37.9%	\$11.35	-33.4%
51-8090	Miscellaneous Plant and System Operators	38	\$27.37	-10.6%	\$19.60	-1.8%
51-9010	Chemical Processing Machine Setters, Operators, and Tenders	44	\$22.29	0.3%	\$13.16	-3.1%
51-9020	Crushing, Grinding, Polishing, Mixing, and Blending Workers	142	\$21.41	20.4%	\$13.85	20.6%
51-9030	Cutting Workers	56	\$14.80	-4.8%	\$10.08	-4.8%
51-9040	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	38	\$18.58	12.3%	\$11.31	3.9%
51-9050	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	19	\$19.10	7.2%	\$13.15	10.6%
51-9060	Inspectors, Testers, Sorters, Samplers, and Weighers	659	\$18.69	-1.8%	\$11.14	2.7%
51-9070	Jewelers and Precious Stone and Metal Workers	<10	Not Available	Not Available	Not Available	Not Available
51-9080	Medical, Dental, and Ophthalmic Laboratory Technicians	50	\$16.76	-8.9%	\$10.39	-7.4%
51-9110	Packaging and Filling Machine Operators and Tenders	364	\$15.05	4.1%	\$9.84	4.1%
51-9120	Painting Workers	70	\$17.67	-1.4%	\$11.86	2.4%
51-9140	Semiconductor Processors	<10	Not Available	Not Available	Not Available	Not Available
51-9150	Photographic Process Workers and Processing Machine Operators	17	\$12.06	-24.0%	\$8.33	-15.2%
51-9190	Miscellaneous Production Workers	613	\$15.11	5.4%	\$9.50	-1.3%

# GREATER COLUMBUS

## TRANSPORTATION & MATERIAL MOVING OCCUPATIONS 2016



CODE	OCCUPATION	EMPLOYMENT	GREATER COLUMBUS AVERAGE WAGE	REGIONAL MEDIAN WAGE VERSUS US MEDIAN WAGE	GREATER COLUMBUS ENTRY-LEVEL WAGE	REGIONAL ENTRY-LEVEL WAGE VERSUS US ENTRY-LEVEL WAGE
53-1010	Aircraft Cargo Handling Supervisors	<10	Not Available	Not Available	Not Available	Not Available
53-1020	First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	101	\$22.00	-8.6%	\$13.85	-1.9%
53-1030	First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	112	\$20.94	-34.1%	\$12.53	-29.6%
53-2010	Aircraft Pilots and Flight Engineers	25	\$42.77	-34.4%	\$34.46	18.3%
53-2020	Air Traffic Controllers and Airfield Operations Specialists	14	\$42.60	-17.2%	\$27.15	-9.0%
53-2030	Flight Attendants	<10	Not Available	Not Available	Not Available	Not Available
53-3010	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	25	\$9.68	-28.9%	\$7.25	-31.7%
53-3020	Bus Drivers	553	\$12.28	-30.8%	\$8.13	-28.5%
53-3030	Driver/Sales Workers and Truck Drivers	1,681	\$15.38	-19.4%	\$8.94	-27.1%
53-3040	Taxi Drivers and Chauffeurs	50	\$9.16	-39.1%	\$7.25	-24.4%
53-3090	Miscellaneous Motor Vehicle Operators	68	\$14.52	-11.8%	\$8.59	-16.9%
53-4010	Locomotive Engineers and Operators	15	\$24.81	-1.2%	\$18.84	11.9%
53-4020	Railroad Brake, Signal, and Switch Operators	<10	Not Available	Not Available	Not Available	Not Available
53-4030	Railroad Conductors and Yardmasters	86	\$21.61	-25.5%	\$15.92	-22.8%
53-4040	Subway and Streetcar Operators	10	\$21.54	-36.1%	\$16.82	-40.0%
53-4090	Miscellaneous Rail Transportation Workers	<10	Not Available	Not Available	Not Available	Not Available
53-5010	Sailors and Marine Oilers	15	\$15.80	-30.1%	\$12.84	1.6%
53-5020	Ship and Boat Captains and Operators	<10	Not Available	Not Available	Not Available	Not Available

# GREATER COLUMBUS

## TRANSPORTATION & MATERIAL MOVING OCCUPATIONS 2016



CODE	OCCUPATION	EMPLOYMENT	GREATER COLUMBUS AVERAC WAGE	REGIONAL MEDIAN WAGE VERSUS US MEDIAN WAGE	GREATER COLUMBUS LEVEL WAGE	ENTRY VERSUS REGIONAL ENTRY-LEVEL LEVEL WAGE	WAG US ENTR
53-1010	Aircraft Cargo Handling Supervisors	<10	Not Available	Not Available	Not Available		Not Available
53-1020	First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	101	\$22.00	-8.6%	\$13.85		-1.9%
53-1030	First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	112	\$20.94	-34.1%	\$12.53		-29.6%
53-2010	Aircraft Pilots and Flight Engineers	25	\$42.77	-34.4%	\$34.46		18.3%
53-2020	Air Traffic Controllers and Airfield Operations Specialists	14	\$42.60	-17.2%	\$27.15		-9.0%
53-2030	Flight Attendants	<10	Not Available	Not Available	Not Available		Not Available
53-3010	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	25	\$9.68	-28.9%	\$7.25		-31.7%
53-3020	Bus Drivers	553	\$12.28	-30.8%	\$8.13		-28.5%
53-3030	Driver/Sales Workers and Truck Drivers	1,681	\$15.38	-19.4%	\$8.94		-27.1%
53-3040	Taxi Drivers and Chauffeurs	50	\$9.16	-39.1%	\$7.25		-24.4%
53-3090	Miscellaneous Motor Vehicle Operators	68	\$14.52	-11.8%	\$8.59		-16.9%
53-4010	Locomotive Engineers and Operators	15	\$24.81	-1.2%	\$18.84		11.9%
53-4020	Railroad Brake, Signal, and Switch Operators	<10	Not Available	Not Available	Not Available		Not Available
53-4030	Railroad Conductors and Yardmasters	86	\$21.61	-25.5%	\$15.92		-22.8%
53-4040	Subway and Streetcar Operators	10	\$21.54	-36.1%	\$16.82		-40.0%
53-4090	Miscellaneous Rail Transportation Workers	<10	Not Available	Not Available	Not Available		Not Available
53-5010	Sailors and Marine Oilers	15	\$15.80	-30.1%	\$12.84		1.6%
53-5020	Ship and Boat Captains and Operators	<10	Not Available	Not Available	Not Available		Not Available

# GREATER COLUMBUS

## TRANSPORTATION & MATERIAL MOVING OCCUPATIONS (continued) 2016



CODE	OCCUPATION	EMPLOYMENT	GREATER COLUMBUS AVERAGE WAGE	REGIONAL MEDIAN WAGE VERSUS US MEDIAN WAGE	GREATER COLUMBUS ENTRY-LEVEL WAGE	REGIONAL ENTRY-LEVEL WAGE VERSUS US ENTRY-LEVEL WAGE
53-5030	Ship Engineers	<10	Not Available	Not Available	Not Available	Not Available
53-6010	Bridge and Lock Tenders	<10	Not Available	Not Available	Not Available	Not Available
53-6020	Parking Lot Attendants	28	\$8.26	-33.2%	\$7.59	-17.5%
53-6030	Automotive and Watercraft Service Attendants	117	\$14.98	23.2%	\$9.88	10.0%
53-6040	Traffic Technicians	<10	Not Available	Not Available	Not Available	Not Available
53-6050	Transportation Inspectors	38	\$31.65	-10.3%	\$19.57	-0.1%
53-6060	Transportation Attendants, Except Flight Attendants	<10	Not Available	Not Available	Not Available	Not Available
53-6090	Miscellaneous Transportation Workers	<10	Not Available	Not Available	Not Available	Not Available
53-7010	Conveyor Operators and Tenders	26	\$15.24	-9.8%	\$10.87	-4.5%
53-7020	Crane and Tower Operators	57	\$20.86	-24.9%	\$13.25	-24.2%
53-7030	Dredge, Excavating, and Loading Machine Operators	30	\$16.43	-31.2%	\$11.32	-26.6%
53-7040	Hoist and Winch Operators	<10	Not Available	Not Available	Not Available	Not Available
53-7050	Industrial Truck and Tractor Operators	314	\$13.76	-19.6%	\$9.60	-13.2%
53-7060	Laborers and Material Movers, Hand	2,703	\$11.44	-13.9%	\$7.93	-13.0%
53-7070	Pumping Station Operators	<10	Not Available	Not Available	Not Available	Not Available
53-7080	Refuse and Recyclable Material Collectors	80	\$12.86	-37.9%	\$8.61	-27.1%
53-7120	Tank Car, Truck, and Ship Loaders	<10	Not Available	Not Available	Not Available	Not Available
53-7190	Miscellaneous Material Moving Workers	<10	Not Available	Not Available	Not Available	Not Available