

Metro Atlanta Workforce: *Industries in Demand & Opportunity Occupations*

October, 2018

Atlanta Regional Commission
For more information, contact:
cdegiulio@atlantaregional.org

regional impact + local relevance

In Sum

In looking at a more comprehensive and expansive definition of unemployment (the so-called “U-6” measure), Georgia’s unemployment rate (the U-6 definition) is 8.3%, which is slightly higher than the nation’s 8.1%,

Out of the 50 largest metro areas, metro Atlanta has the 7th highest underemployment rate, (only Grand Rapids, Raleigh, New York, Charlotte, Nashville, and Orlando were higher). Here we are using the New York FED’s measure of underemployment

Throughout the state, the counties with the highest underemployment rates tend to be located in metro areas, which suggests that these metro areas attract/retain those with college degrees.

Registered Nurses will remain a hard-to-fill occupation as it is projected to have the largest occupation gap over the next 10 year, according to JobsEQ.

The 2016 Metro Atlanta Regional Workforce Plan identified three targeted in-demand industry clusters in the 10-county region: Healthcare, Information Technology and Transportation and Logistics

The National Picture

Underemployment and Skilled Labor Shortages

Wonkblog

2018's challenge: Too many jobs, not enough workers

Economics

Underemployment Is the New Unemployment

Western countries are celebrating low joblessness, but much of the new work is precarious and part-time.

By [Leonid Bershidsky](#).

September 26, 2018, 8:07 AM EDT

The Atlantic

BUSINESS

Wages Are Low and Workers Are Scarce. Wait, What?

The low unemployment rate and stagnant pay point to a depressed economy underneath.

SEP 19, 2018



Annie Lowrey

Contributing editor at The Atlantic
covering economic policy

How Serious is Underemployment in Metro Atlanta?

**Hint* It's All in How You Measure It*

Involuntary Part-time Workers

- Underemployment is defined as **workers employed part-time for economic reasons**, calculated by the Bureau of Labor Statistics.
- If you REALLY need to know how this is derived:
Involuntary part-time workers are derived by subtracting the U-5 measure of unemployment (all unemployed+ discouraged + marginal workers) from the U-6 measure (all unemployed + discouraged + marginal + those employed part-time for economic reasons).
- Only national (monthly) and state-level (four-quarter moving average) data available.

Overqualified Workers

- Underemployment is defined as the percentage of all **college educated workers in a job that typically does not require a college degree**.
- Method developed by the Federal Reserve Bank of New York, national data published quarterly.
Chmura Economics uses this method to calculate underemployment at smaller geographies – the smallest being by county, and makes this data available through their JobsEQ analytic tools.

So, How Does Georgia Look? Involuntary Part-Time Laborers

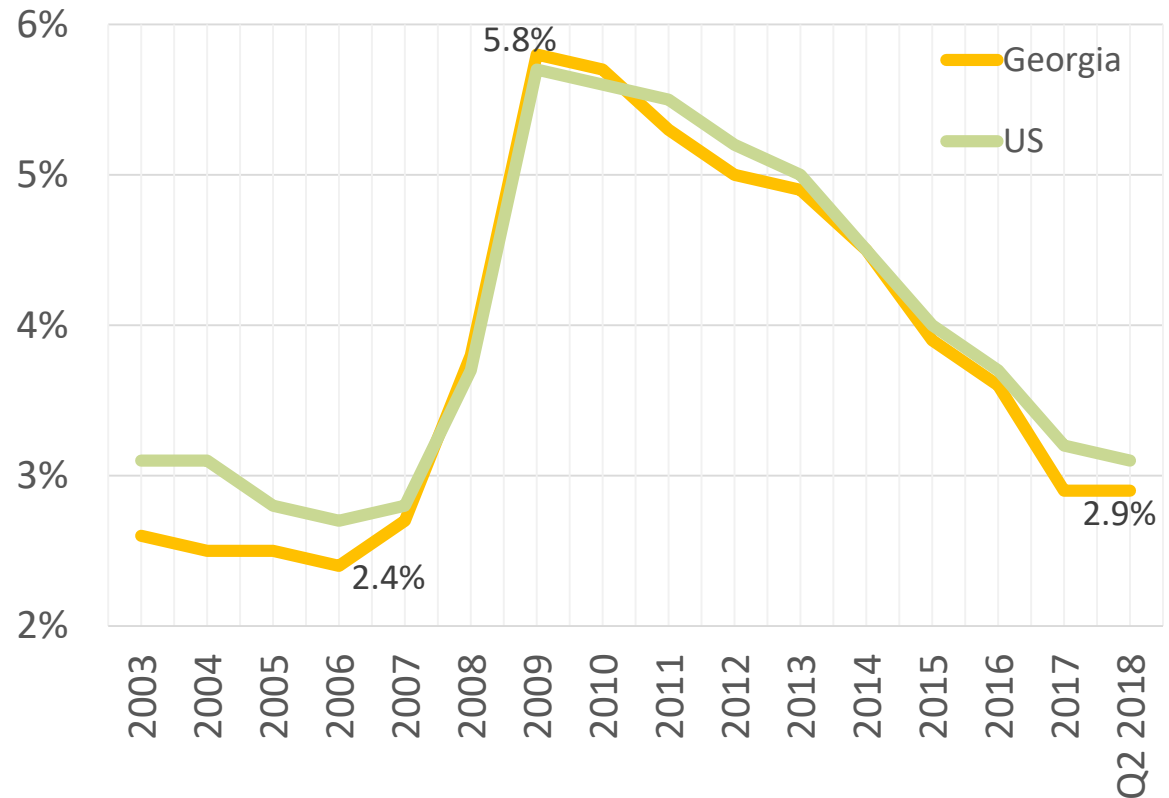
For **Q2 2018***, the rate of **underemployment** (involuntary part-time) in **Georgia** is **2.9%**

Comparatively, the **underemployment** rate for the **nation** during the same period is **3.1%**

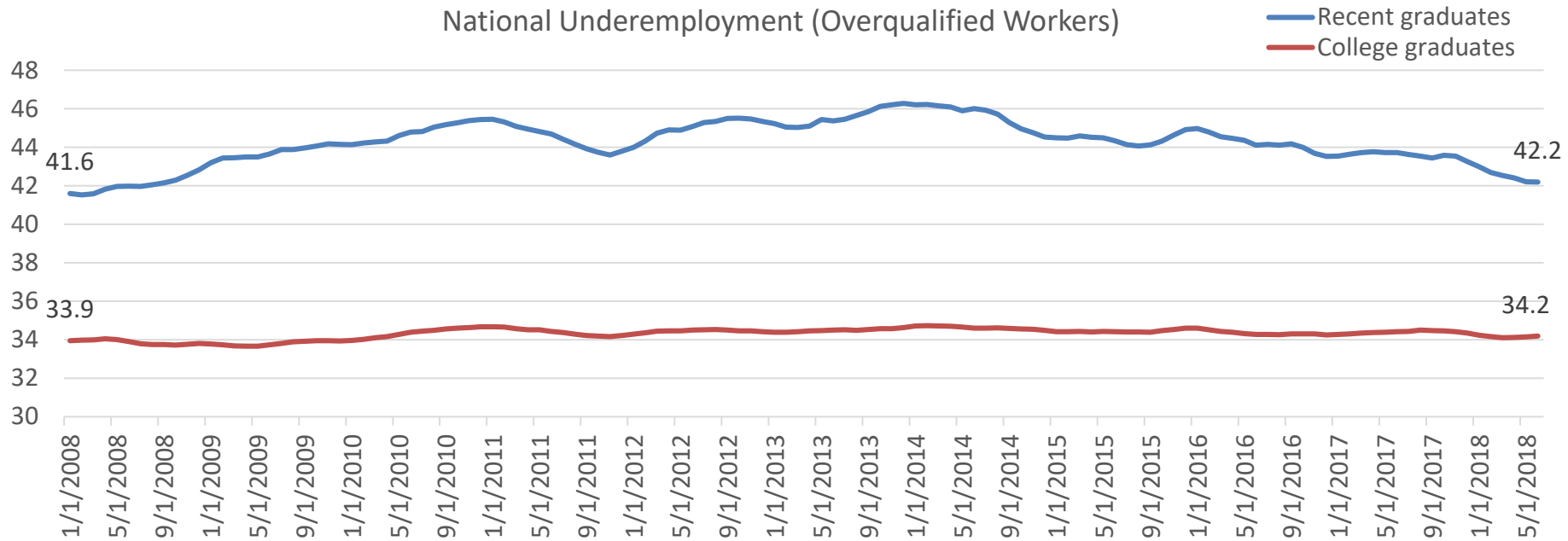
U-6 unemployment rates (total unemployed + discouraged + marginal + involuntary PT) for the same period are:

Georgia: 8.3%

United States: 8.1%

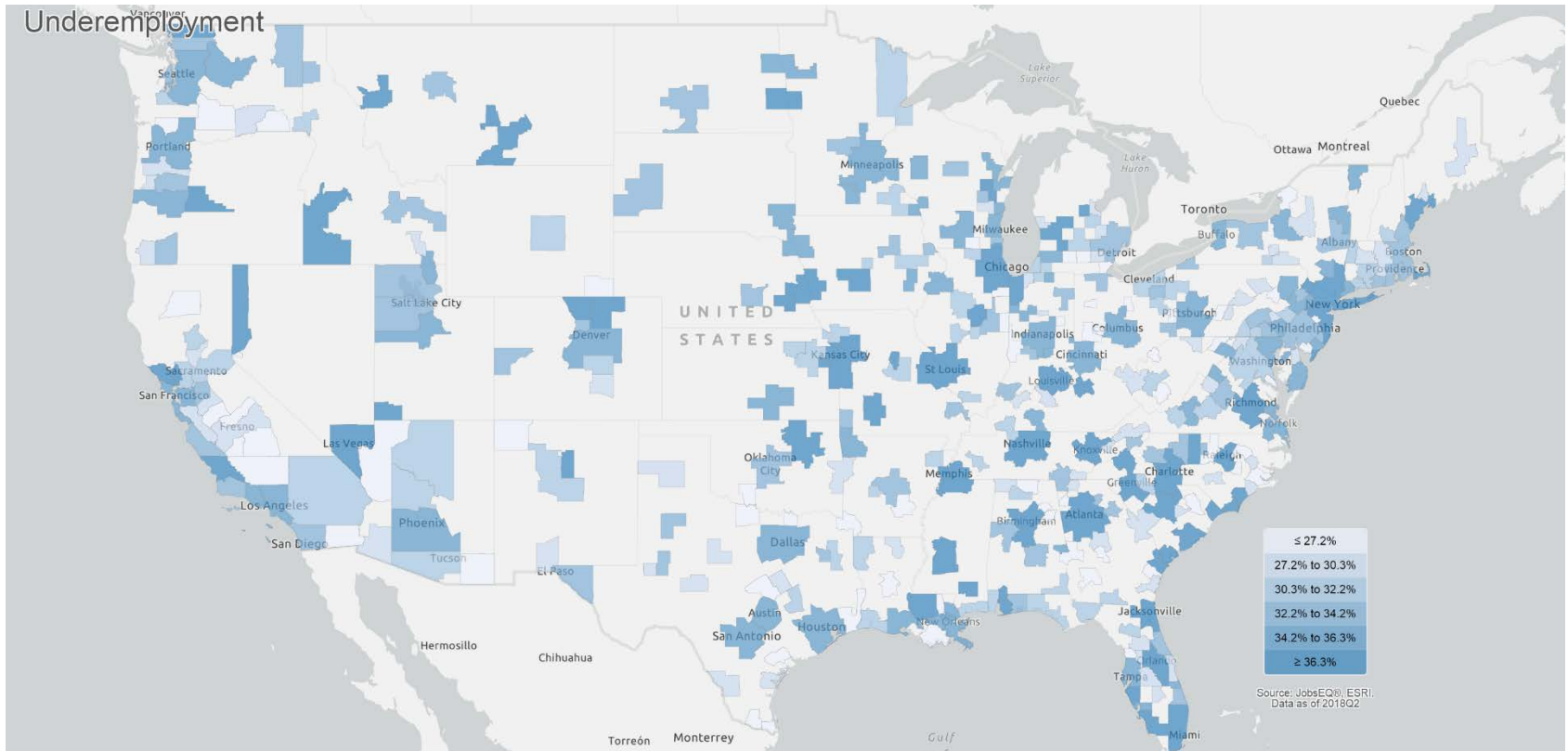


Nationally, the % of Underemployed (Overqualified) Workers Has Stayed Stable Since the Recession



The chart above shows the national underemployed (overqualified) worker rate for recent college grads (in blue) vs. all college grads (in red). Even as the formal national unemployment rate has fluctuated post-recession, the national underemployed (overqualified) worker rate has remained stable, hovering around 34%, (the rate for recent college grads shows more variability, but tracks roughly 10 percentage points higher). The following slides will explore disparities in the underemployment rate by MSA and county.

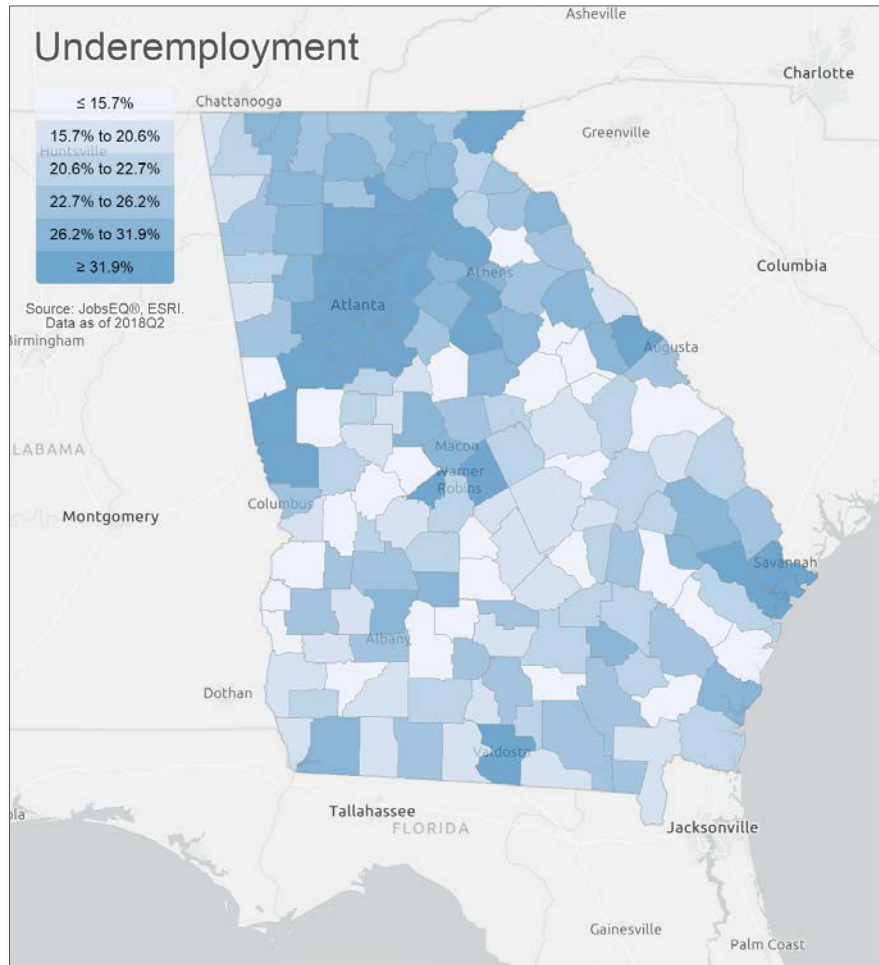
MSA-Level Measures of Underemployment Show Some Disparities



In a ranking of the 50 largest US metros by underemployment rate for Q1 2018, metro Atlanta ranked 44th with a rate of 38.1%. Only six other metros of those ranked had higher rates of underemployment (Grand Rapids, Raleigh, New York, Charlotte, Nashville, and Orlando). By comparison, the national rate was 34.4%.

Underemployment (Overqualified Worker) Rates Highest in the State's Metro Areas

% of Underemployment, by County



Regional differences in underemployment are a function of two factors:

1. the share of jobs that require a college degree, and
2. the share of the workforce that has a college degree.

Together these factors measure the supply and demand for college-educated labor in a region.

The map to the left shows the rate of underemployment in the state by county, with dark blue shades showing higher rates of underemployment. In general, the state's metro areas have the highest rates of underemployment, perhaps as a function of the higher-than-average rates of college educated workers residing in those areas.

A Look at Regional Trends... Labor Shortages? *I thought you just said we had underemployed workers...*



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Some Industries Encountering Worker Shortages

June 14, 2018

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DAVID PENDERED

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April 19, 2018, 3:16 pm / [0 Comments](#)

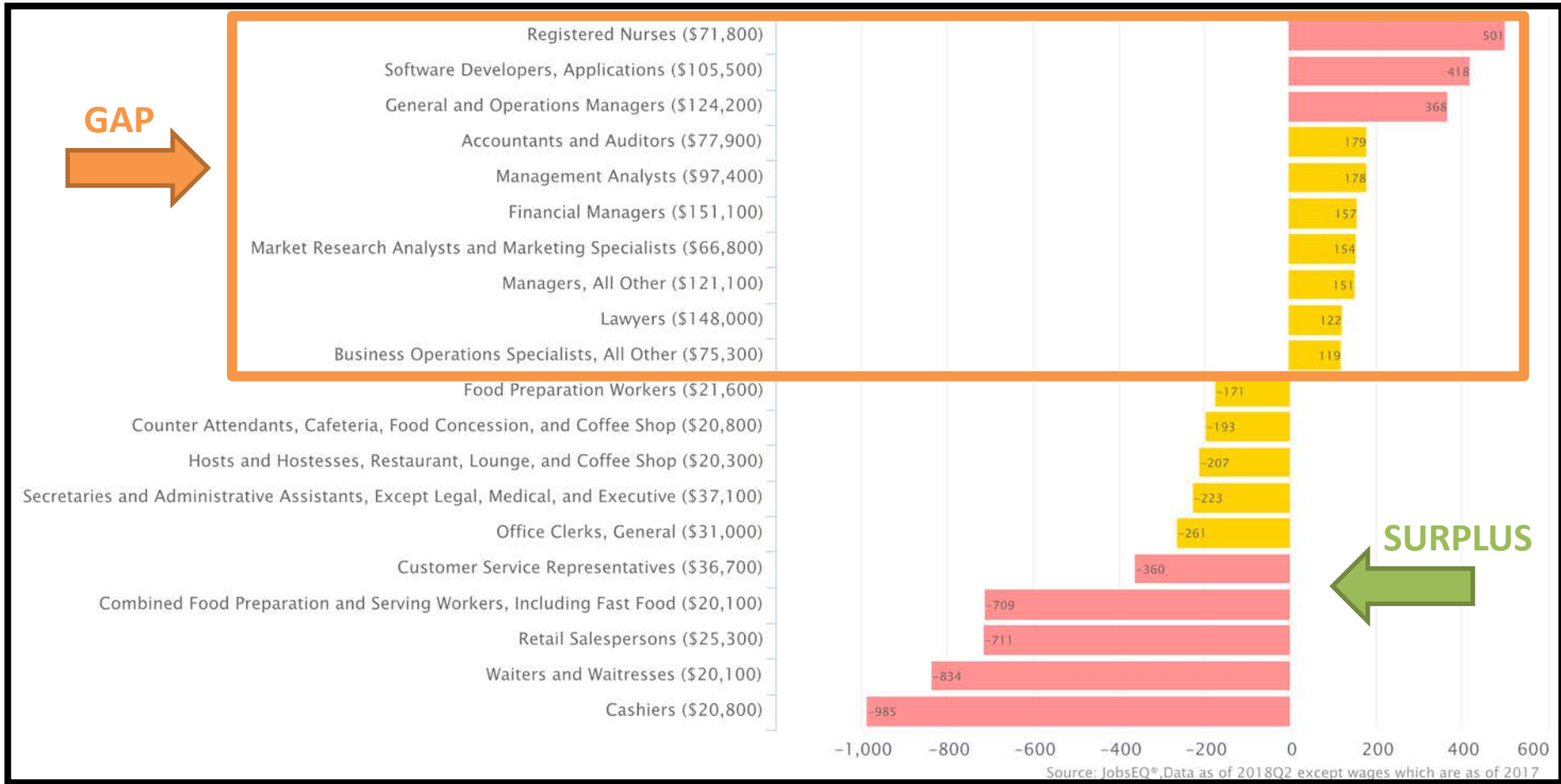
News

Warehousing's Labor Crunch Has Few Answers Other Than Robots

June 15, 2018 | Jarred Schenke, Bisnow Atlanta 

Potential Occupation Gaps

Potential Average Annual Occupation Gaps over 10 Years in ARC 10-County Region



This infographic shows the potential occupation gap, using a variety of factors such as occupational growth, population growth and the potential education needed of residents to fill these jobs. Registered Nurses is projected to have the largest gaps, meaning these jobs will remain hard to fill.

Award Gaps by Occupation for Top 10 Occupations with Largest Award Gaps

SOC	Title	2018Q2 Employment	Award Gap	Awards (2016-2017)	Target Range
11-1021	General and Operations Managers	51,866	1,642	2,858	4,499 – 5,098
29-1141	Registered Nurses	37,337	1,291	1,403	2,694 – 2,760
13-2011	Accountants and Auditors	26,845	680	666	1,347 – 2,877
13-1111	Management Analysts	19,063	673	1,143	1,816 – 2,017
25-2021	Elementary School Teachers, Except Special Education	21,640	662	782	1,444 – 1,827
33-9032	Security Guards	20,376	600	760	1,360 – 3,018
31-9092	Medical Assistants	10,432	542	704	1,246 – 1,525
29-2061	Licensed Practical and Licensed Vocational Nurses	9,189	489	66	555 – 831
13-1161	Market Research Analysts and Marketing Specialists	14,262	414	421	835 – 1,845
25-2022	Middle School Teachers, Except Special and Career/Technical Education	10,826	332	392	723 – 916

The table examines the “award gap” in the 10-county Atlanta region. The award gap explores how well local educational institutions are preparing students for the jobs that employers are demanding. So, for example, according to this JobsEQ analysis, “General Operations and Managers” have the largest award gap in the region. It is estimated that some 1,642 more post-secondary awards (degrees, certificates, etc.) are needed annually to keep up with the annual demand for “General Operations and Managers,” which is estimated to be between 4,499 and 5,098 per year.

Registered Nurses and Accountants and Auditors also experience large award gaps.

Award Gaps by Degree Type for Top 15 Programs with Largest Award Gaps

CIP Code	CIP Title	Total Award Gap	<2yrs Gap	Associate's Gap	Bachelor's Gap	Master's Gap	PhD Gap
52.0101	Business/Commerce, General	3,271	844	320	1,411	583	113
52.0201	Business Administration and Management, General	3,271	844	320	1,411	583	113
13.0101	Education, General	2,305	53	50	954	1,077	171
52.0801	Finance, General	2,190	580	218	970	364	57
52.1301	Management Science	1,866	536	198	781	299	53
44.0401	Public Administration	1,848	572	209	757	269	41
44.9999	Public Administration and Social Service Professions, Other	1,848	572	209	757	269	41
52.0701	Entrepreneurship/Entrepreneurial Studies	1,757	536	198	720	257	46
52.1101	International Business/Trade/Commerce	1,757	536	198	720	257	46
52.0212	Retail Management	1,653	519	192	674	232	37
31.0399	Parks, Recreation and Leisure Facilities Management, Other	1,642	519	192	674	227	31
51.3818	Nursing Practice	1,429	0	463	710	213	43
51.3803	Adult Health Nurse/Nursing	1,401	0	455	690	206	51
51.3805	Family Practice Nurse/Nursing	1,401	0	455	690	206	51
51.3806	Maternal/Child Health and Neonatal Nurse/Nursing	1,401	0	455	690	206	51

Similar to the previous slide, this table also examines the award gap, but this time explores the gaps by degree type offered by local educational institutions. These degree programs are then correlated to specific occupations to determine the gap. In general, these program award gaps track with the occupational award gaps on the previous slide. These gaps overlap with industries and occupations expected to see the greatest demand over the next ten years (healthcare, IT, transportation & logistics industries; management, education, finance, and medical professions).

In the 2016 Metro Atlanta Regional Workforce Plan, three high-demand industry clusters were identified for the region:

Healthcare

Information Technology

Transportation & Logistics

In-demand industry clusters were selected for a variety of reasons, including their size, past and projected growth, demand for workers, existing skill gaps, relevance to multiple counties in the region, and the accessibility and quality of the jobs offered.



*Source: [The 2016 Metro Atlanta Regional Workforce Plan](#)

Metro Atlanta's In-Demand Industry Clusters

Healthcare Cluster* Overview

EMPLOYMENT

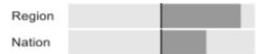


179,143

Regional employment / 13,194,929 in the nation

3.2% ↑

Avg Ann % Change Last 10 Years / +1.8% in the U.S.



7.4%

% of Total Employment / 8.5% in the U.S.



WAGES

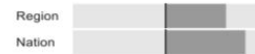


\$62,142

Avg Wages per Worker / \$61,485 in the nation

1.6% ↑

Avg Ann % Change Last 10 Years / +2.1% in the U.S.



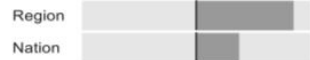
The infographics to the left offer an overview of the Healthcare Industry Cluster in the 10-County ARC region.

On average, growth of the Healthcare cluster in metro Atlanta is outpacing the nation, with overall growth of more than 3% in the last decade (compared to 1.8% for the nation). Top industries within the cluster (General Medical and Surgical Hospitals, Offices of Physicians, and Offices of Dentists) are also growing at rates exceeding national averages.

TOP INDUSTRIES

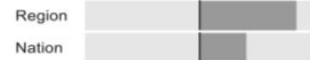
Avg Ann % Change in Employment, Last 10 Years

2.5% ↑



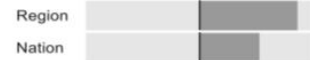
General Medical and Surgical Hospitals

3.1% ↑



Offices of Physicians (except Mental Health Specialists)

2.3% ↑



Offices of Dentists

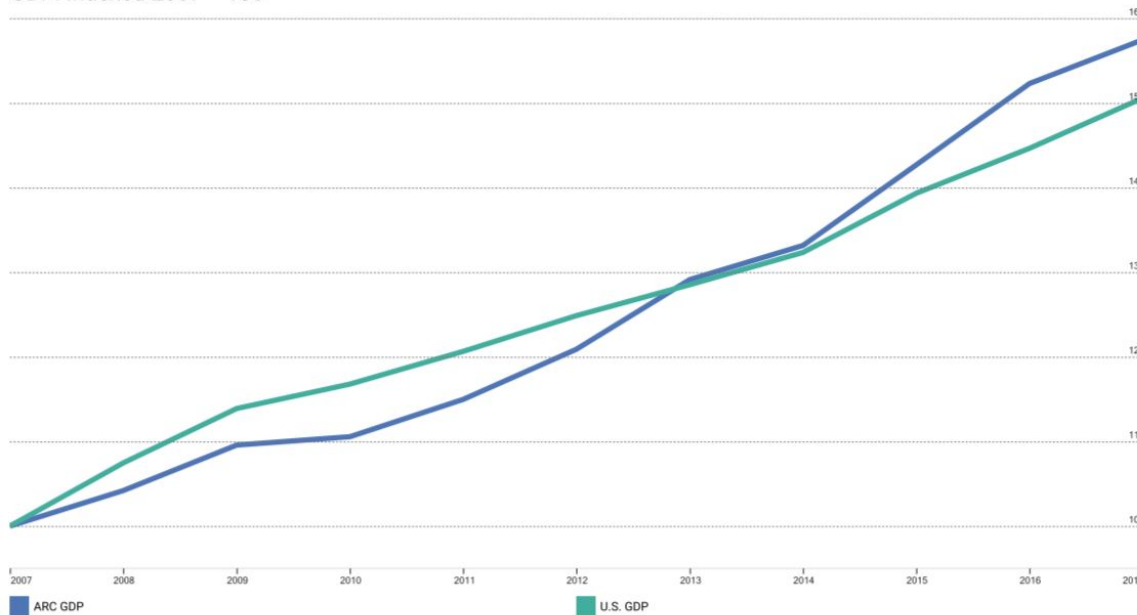
* The [2016 Metro Atlanta Regional Workforce Plan](#) used custom NAICS definitions for the industry clusters examined in this snapshot.

Metro Atlanta's In-Demand Industry Clusters

Healthcare Cluster* Overview

GDP & Productivity

GDP: Indexed 2007 = 100



In 2017, the Healthcare Industry Cluster produced \$15 billion in GDP for the 10-County ARC region.

While the cluster's share of total GDP for the region was lower than that for the nation (4.5% vs. 6.1%), the annual average change over the last decade and the output per worker both exceeded national rates.

4.5%

Industry Share of Total GDP /
6.1% in the nation



4.6% ↑

Avg Ann % Change Last 10 Yrs /
4.2% in the nation



\$154k

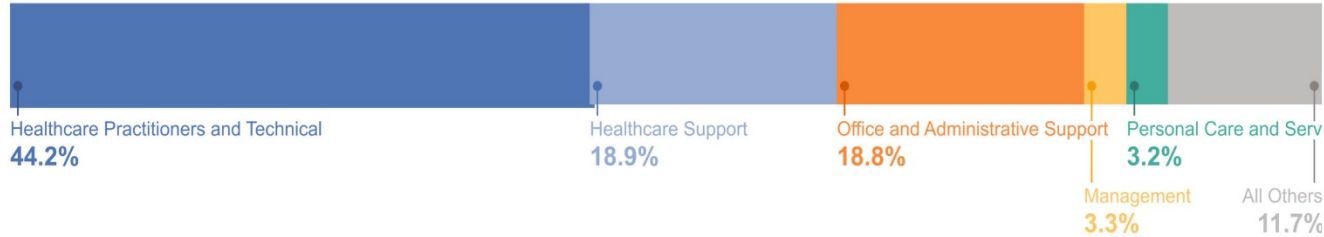
Output per Worker /
\$152k in the nation



* The [2016 Metro Atlanta Regional Workforce Plan](#) used custom NAICS definitions for the industry clusters examined in this snapshot.

Healthcare Cluster* Overview

TOP OCCUPATION GROUPS



SOC	Title	Current		10-Year Demand			
		Empl	Regional Average Wage	Labor Exits	Occ Transfers	Growth	Total
29-1141	Registered Nurses	28,451	\$71,800	8,937	6,780	5,367	21,084
31-1014	Nursing Assistants	8,636	\$27,200	5,746	4,804	1,758	12,308
43-4171	Receptionists and Information Clerks	6,704	\$30,200	4,624	4,922	1,665	11,211
31-9092	Medical Assistants	8,982	\$34,400	4,523	6,271	3,020	13,814
39-9021	Personal Care Aides	4,665	\$22,200	4,494	3,371	2,245	10,109
43-6013	Medical Secretaries	6,012	\$34,900	3,627	3,493	1,623	8,742
31-1011	Home Health Aides	4,121	\$24,400	3,134	2,620	2,435	8,189
31-9091	Dental Assistants	5,252	\$39,000	2,974	3,324	1,319	7,616
43-9061	Office Clerks, General	3,934	\$31,000	2,452	2,369	468	5,289
29-2061	Licensed Practical and Licensed Vocational Nurses	4,953	\$43,700	1,894	1,894	1,061	4,849
Total		179,143	n/a	79,653	84,747	39,895	204,294

The infographic above shows the top occupation groups within the regional Healthcare Cluster – overall Healthcare Practitioners and Technical Occupations make up nearly half of the regional cluster’s employment. The table below shows the current employment, wages, and forecasted 10-year demand for the 10 top occupations by employment within the regional Healthcare Industry Cluster. Registered Nurses make up the largest share of Healthcare employees in the region (28,451), and an additional 21,000 positions are forecasted for RNs in the next decade.

* The [2016 Metro Atlanta Regional Workforce Plan](#) used custom NAICS definitions for the industry clusters examined in this snapshot.

Metro Atlanta's In-Demand Industry Clusters

IT Cluster* Overview

EMPLOYMENT



62,274

Regional employment / 2,567,009 in the nation

2.9% ↑

Avg Ann % Change Last 10 Years / +3.7% in the U.S.



2.6%

% of Total Employment / 1.6% in the U.S.



WAGES



\$105,411

Avg Wages per Worker / \$119,240 in the nation

1.3% ↑

Avg Ann % Change Last 10 Years / +2.8% in the U.S.



The infographics to the left offer an overview of the Information Technology Industry Cluster in the 10-County ARC region.

On average, growth of IT in metro Atlanta is slightly slower than that of the nation, with overall growth of nearly 3% in the last decade (compared to 3.7% for the nation). Top industries within IT (Custom Computer Programming Services, Computer Systems Design Services, and Software Publishers) are also growing at slightly slower rates than the nation; however, the region has a larger share of IT Cluster employees.

TOP INDUSTRIES

Avg Ann % Change in Employment, Last 10 Years

2.6% ↑



Custom Computer Programming Services

3.6% ↑



Computer Systems Design Services

2.8% ↑



Software Publishers

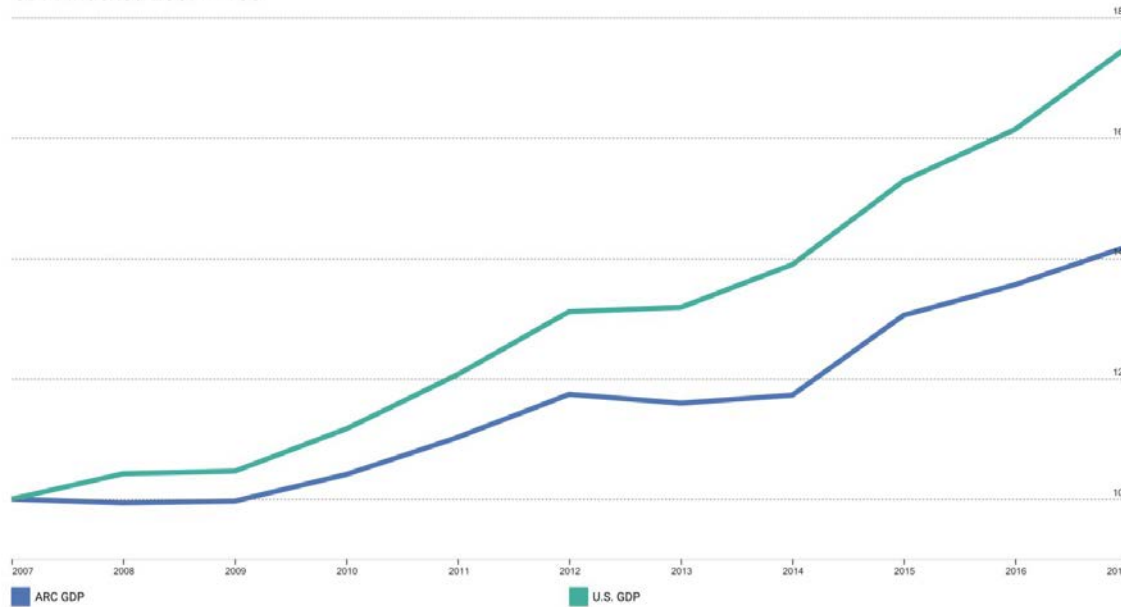
* The [2016 Metro Atlanta Regional Workforce Plan](#) used custom NAICS definitions for the industry clusters examined in this snapshot.

Metro Atlanta's In-Demand Industry Clusters

IT Cluster* Overview

GDP & Productivity

GDP: Indexed 2007 = 100



In 2017, the IT Industry Cluster produced \$9.8 billion in GDP for the 10-County ARC region.

While the annual average change over the last decade and output per worker for the region were both lower than national rates, the cluster's share of total GDP exceeded that of the nation (2.9% vs. 2.2%).

2.9 %

Industry Share of Total GDP /
2.2 % in the nation



3.6 % ↑

Avg Ann % Change Last 10 Yrs /
5.8 % in the nation



\$267k

Output per Worker /
\$283k in the nation



* The [2016 Metro Atlanta Regional Workforce Plan](#) used custom NAICS definitions for the industry clusters examined in this snapshot.

Metro Atlanta's In-Demand Industry Clusters

IT Cluster* Overview

TOP OCCUPATION GROUPS



SOC	Title	Current		10-Year Demand			
		Empl	Regional Average Wage	Labor Exits	Occ Transfers	Growth	Total
15-1132	Software Developers, Applications	10,693	\$105,500	1,780	6,230	4,706	12,716
15-1151	Computer User Support Specialists	4,383	\$55,000	970	2,475	1,039	4,484
15-1121	Computer Systems Analysts	4,619	\$91,100	919	2,298	1,072	4,289
15-1133	Software Developers, Systems Software	4,459	\$103,100	691	2,420	1,061	4,172
11-3021	Computer and Information Systems Managers	2,817	\$144,100	562	1,717	677	2,956
15-1131	Computer Programmers	3,720	\$88,200	636	1,683	20	2,339
41-3099	Sales Representatives, Services, All Other	1,480	\$61,600	526	1,413	359	2,297
11-1021	General and Operations Managers	1,943	\$124,200	453	1,294	471	2,218
43-4051	Customer Service Representatives	1,368	\$36,700	746	1,097	203	2,046
13-1161	Market Research Analysts and Marketing Specialists	1,298	\$66,800	406	1,038	473	1,917
Total		62,274	n/a	15,650	36,637	15,897	68,183

The infographic above shows the top occupation groups within the regional IT Cluster – overall Computer and Mathematical Occupations make up nearly 60% of the regional cluster’s employment. The table below shows the current employment, wages, and forecasted 10-year demand for the 10 top occupations by employment within the regional IT Industry Cluster. Software Developers (Applications) make up the largest share of IT employees in the region (10,693), and an additional 13,000 positions are forecasted for software developers (applications) in the next decade.

* The [2016 Metro Atlanta Regional Workforce Plan](#) used custom NAICS definitions for the industry clusters examined in this snapshot.

Metro Atlanta's In-Demand Industry Clusters

Transportation & Logistics Cluster* Overview

EMPLOYMENT



126,376

Regional employment / 3,894,016 in the nation

WAGES



\$64,611

Avg Wages per Worker / \$53,827 in the nation

2.3% ↑

Avg Ann % Change Last 10 Years / +1.6% in the U.S.



5.2%

% of Total Employment / 2.5% in the U.S.



2.1% ↑

Avg Ann % Change Last 10 Years / +1.8% in the U.S.



TOP INDUSTRIES

Avg Ann % Change in Employment, Last 10 Years

0.6% ↑



Scheduled Passenger Air Transportation

7.3% ↑



General Warehousing and Storage

2.2% ↑



Couriers and Express Delivery Services

The infographics to the left offer an overview of the Transportation & Logistics Industry Cluster in the 10-County ARC region.

On average, growth of the Transportation & Logistics Cluster in the region is outpacing the nation, with overall growth of more than 2% in the last decade (compared to 1.6% for the nation). Top industries within the transportation & logistics cluster (Scheduled Passenger Air Transportation, General Warehousing & Storage, & Couriers & Express Delivery Services) are also growing at rates exceeding national averages.

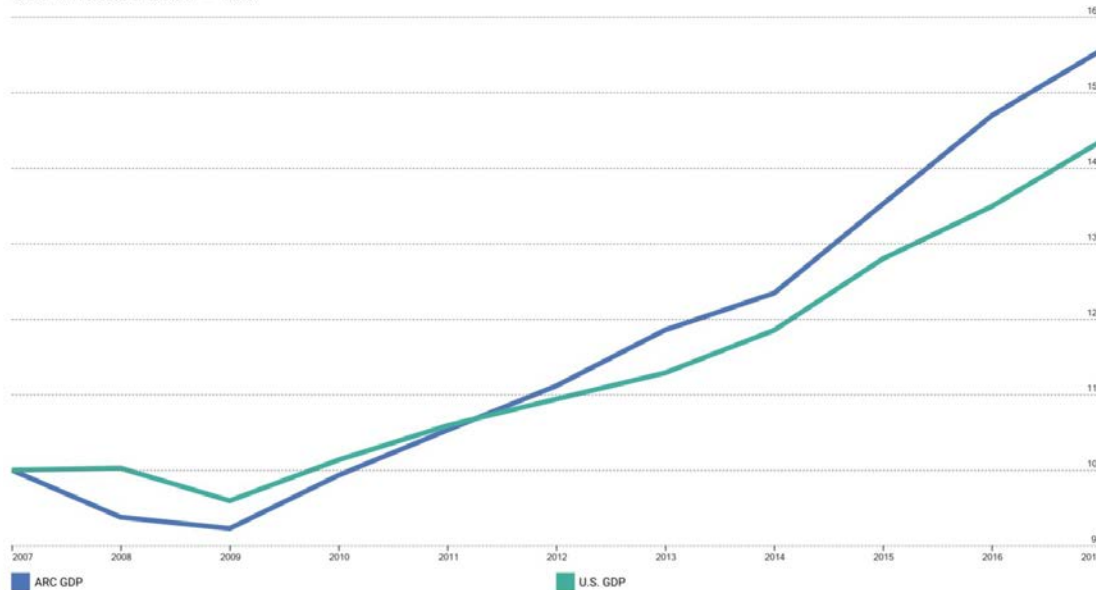
* The [2016 Metro Atlanta Regional Workforce Plan](#) used custom NAICS definitions for the industry clusters examined in this snapshot.

Metro Atlanta's In-Demand Industry Clusters

Transportation & Logistics Cluster Overview

GDP & Productivity

GDP: Indexed 2007 = 100



5.0 %

Industry Share of Total GDP /
2.0 % in the nation



4.5 % ↑

Avg Ann % Change Last 10 Yrs /
3.7 % in the nation



\$253k

Output per Worker /
\$185k in the nation



In 2017, the Transportation & Logistics Cluster produced \$17 billion in GDP for the 10-County ARC region.

The cluster's share of total GDP more than doubled that of the nation (5.0% vs. 2.0%). The annual average change over the last decade also exceeded the national rate (4.5% vs. 3.7%), while output per worker for the region was \$68k more than in the nation (\$253k vs. \$185k).

* The [2016 Metro Atlanta Regional Workforce Plan](#) used custom NAICS definitions for the industry clusters examined in this snapshot.

TOP OCCUPATION GROUPS



SOC	Title	Current		10-Year Demand			
		Empl	Regional Average Wage	Labor Exits	Occ Transfers	Growth	Total
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	21,797	\$27,800	11,700	20,123	3,546	35,369
53-3032	Heavy and Tractor-Trailer Truck Drivers	19,255	\$44,000	8,428	12,642	1,793	22,863
53-2031	Flight Attendants	10,182	\$50,100	5,320	6,189	1,501	13,010
43-4181	Reservation and Transportation Ticket Agents and Travel Clerks	7,554	\$39,400	3,360	4,689	563	8,612
53-3033	Light Truck or Delivery Services Drivers	6,737	\$38,500	3,018	4,527	982	8,526
53-7051	Industrial Truck and Tractor Operators	5,366	\$35,100	2,022	4,333	897	7,252
53-2011	Airline Pilots, Copilots, and Flight Engineers	6,677	\$105,200	1,934	4,420	493	6,846
53-7064	Packers and Packers, Hand	1,918	\$24,700	1,485	1,791	575	3,850
43-4051	Customer Service Representatives	2,729	\$36,700	1,442	2,120	215	3,777
53-3021	Bus Drivers, Transit and Intercity	2,623	\$34,500	2,184	1,148	389	3,721
Total		126,376	n/a	57,153	87,998	15,696	160,847

Overall Transportation & Material Moving Occupations make up nearly 65% of the regional transportation & logistics industry employment. Laborers and Freight, Stock, and Material Movers make up the largest share of transportation and logistics employees in the region (21,797), and an additional 35,000 positions are forecasted in the next decade.

* The [2016 Metro Atlanta Regional Workforce Plan](#) used custom NAICS definitions for the industry clusters examined in this snapshot.