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About This Report

The Workforce Intelligence Network for Southeast Michigan (WIN) partnership is a collaboration of six Michigan Works! Agencies (MWAs) and ten community colleges across a 16-county region in Michigan. The counties in the WIN partnership include: Genesee, Hillsdale, Huron, Jackson, Lapeer, Lenawee, Livingston, Macomb, Monroe, Oakland, Saint Clair, Sanilac, Shiawassee, Tuscola, Washtenaw, and Wayne, along with the City of Detroit.

This report highlights labor market information and real-time job posting data for the entire 16-county region of southeast Michigan. A workforce overview is provided within identifying key components of the area's labor market including labor force status, demographic, and commuting data. WIN's analysis of online job postings, a proxy for employer demand, is a pioneering method for tracking the health of the labor market. This data is used to provide a real-time demand overview, detailing posting related findings for both employers and job seekers. WIN's data and research team analyzes job posting data at the occupation level within eleven customized occupation groups built using specific Standard Occupational Classification (SOC) codes to provide more contextualized information. Occupation groups combine data for jobs with similar skillsets, educational attainment, and experience requirements, which provides a more indepth snapshot of the current labor market when compared to traditional industry data based upon North American Industry Classification System (NAICS) codes. Occupation outlook sections utilize these metrics to identify and display the top in-demand jobs, their entry requirements, and their earning potential. WIN produces a 16-county region report quarterly using data from all eleven occupation groups. A report focused on the city of Detroit is also produced quarterly, focusing on five occupation groups related to Detroit's labor market. County reports are produced annually and focus on five occupation groups chosen to reflect the labor market specific to the county.

This report analyzes data from the second quarter of 2019 in the 16-county WIN region and includes summative data for April, May, and June of 2019. All eleven occupation groups are analyzed for the WIN region.

For more information pertaining to the labor market in southeast Michigan, the custom occupation groups within this report, or any other workforce-related data projects, please visit www.WINintelligence.org or contact the data and research team directly at research@WINintelligence.org.

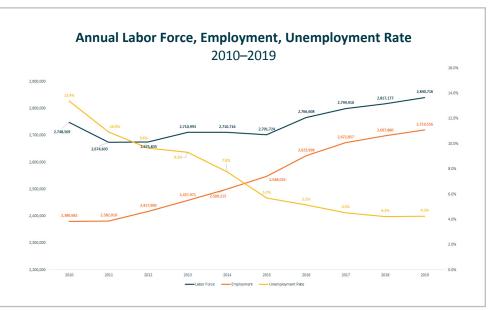


State of the Labor Market in the 16-County WIN Region

In the second quarter of 2019, the labor force and employment figures increased in southeast Michigan. A slightly greater change in employment than in labor force caused the number of unemployed individuals to decrease in the region. The unemployment rate fell from the 4.3 percent quarterly rate in Q1 2019 to the current rate of 4.2 percent in Q2 2019. Employer demand for most occupation groups analyzed by WIN grew during Q2 2019. Despite a slight decline in postings, the customer service occupation group continued to report the highest demand, with nearly 74,000 job postings during the quarter. Many top occupations, including Registered Nurses and Software Developers, Applications, reported over 2,000 more postings in Q2 as well.

Annual Labor Market Information

The labor force in the southeast Michigan continues to grow, increasing by 23,539 individuals between 2018 annual figures and the year-to-date (YTD) levels through June 2019. Employment increased by 21,675 workers between 2018 and YTD 2019. As the increase in employment accounted for most, but not all, of the massive increase in labor force, the unemployment rate rose very slightly. The current YTD rate of 4.3 percent in 2019 is up by 0.1 percentage points from the 2018 annual rate of 4.2 percent in 2018 for the 16-county WIN region.



Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Employer Demand Overview

Data from the second quarter of 2019, including posting information from April, May, and June, showed a spike in employer demand levels in southeast Michigan. There were 39,022 more postings during Q2 2019 compared to the 342,755 postings made by employers during Q1 2019, and 59,921 more than during Q2 2018.



Data: Emsi | Analysis: Workforce Intelligence Network

Employer demand grows to 382,000 jobs posted during Q2 2019, with five high-demand occupation groups experiencing at least a 20 percent jump in postings.

During Q2 2019, there were 381,777 job postings, 39,022 more than the 342,755 postings made during Q1 2019 in the 16-county WIN region. Often, postings are slower in the first half of the year than the second, so this high growth between the first and second quarters is remarkable. Most of the occupation groups analyzed by WIN experienced a decline during the first quarter of 2019 but have more than made up for it in Q2. Health care employers, for example, posted nearly 18,000 more advertisements between April and June 2019 than January through March, while IT employers posted just under 7,000 more. For more information about quarterly job postings, see page 9.

Top 5 Posting Occupation GroupsQ2 2019

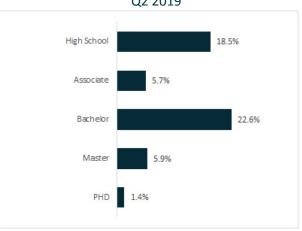


Data: Emsi | Analysis: Workforce Intelligence Network

Job postings made by employers in southeast Michigan indicate a bachelor's degree remains the most indemand minimum education level during Q2 2019.

While only 54 percent of job postings identified a minimum education level, nearly a quarter (22.6 percent) of the 381,777 jobs posted in southeast Michigan indicated the need for candidates with a bachelor's degree. Another 18.5 percent of these postings were seeking applicants with a high school diploma or equivalent. Higher education attainment tends to lead to more lucrative opportunities, but many entry-level opportunities exist for each educational attainment level. For more information about in-demand minimum education levels, see each occupation group's section.

Education Levels In-Demand Q2 2019



Data: Emsi | Analysis: Workforce Intelligence Network

Annual Labor Market Data

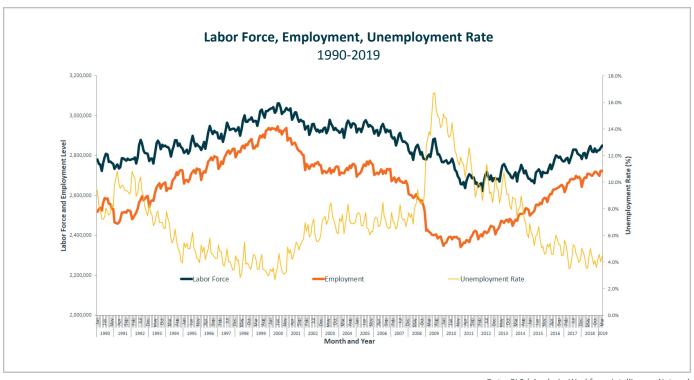
Data: BLS

	2010 Annual	2011 Annual	2012 Annual	2013 Annual	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual	2019 YTD	Change from 2018	Percent Change from 2018
Labor Force	2,748,569	2,674,603	2,675,835	2,710,993	2,710,716	2,701,724	2,766,608	2,799,910	2,817,177	2,840,716	23,539	0.8%
Employment	2,380,682	2,382,010	2,417,900	2,457,971	2,500,215	2,548,035	2,623,998	2,672,857	2,697,880	2,719,556	21,675	0.8%
Unemployment	367,888	292,593	257,935	253,021	210,500	153,690	142,610	127,053	119,297	121,160	1,864	1.5%
Unemployment Rate	13.4%	10.9%	9.6%	9.3%	7.8%	5.7%	5.2%	4.5%	4.2%	4.3%	0.0%	n/a

During the second quarter of 2019, employment in the 16-county WIN region grew by 8,018 workers.

Following a strong growth in the labor force during the past few quarters, many of the additional jobseekers found employment in Q2 2019. During Q2 2019, employment figures were 0.3 percent greater (8,018 individuals) than in Q1 2019, and 1.1 percent greater (31,762) than in Q2 2018. The growth in employment was joined by a further 3,898-worker growth in labor force participants compared to Q1 2019. The faster growth in employment than labor force caused the unemployment rate to fall slightly from 4.3 percent in Q1 2019 to 4.2 percent in Q2 2019. For more information about this year's unemployment rate and other labor market indicators, see page 4.

WORKFORCE OVERVIEW 16-County WIN Region | Labor Market Information Q2 2019



Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Labor Market Data Q2 2018 - Q2 2019

	2nd Quarter 2018	3rd Quarter 2018	4th Quarter 2018	1st Quarter 2019	2nd Quarter 2019	Change from 1st Quarter 2019	Percent Change from 1st Quarter 2019	(hange from 2nd	Percent Change from 2nd Quarter 2018
Labor Force	2,810,903	2,829,241	2,826,255	2,838,767	2,842,665	3,898	0.1%	31,762	1.1%
Employment	2,702,527	2,704,370	2,714,391	2,715,547	2,723,564	8,018	0.3%	21,038	0.8%
Unemployment	108,376	124,871	111,864	123,220	119,100	-4,120	-3.3%	10,724	9.9%
Unemployment Rate	3.9%	4.4%	4.0%	4.3%	4.2%	-0.2%	na	0.3%	na

*Note: Monthly data averaged by quarter

Data: Bureau of Labor Statistics

Note: Monthly data averaged by quarter | Data: BLS

Labor Force, Employment, and Unemployment

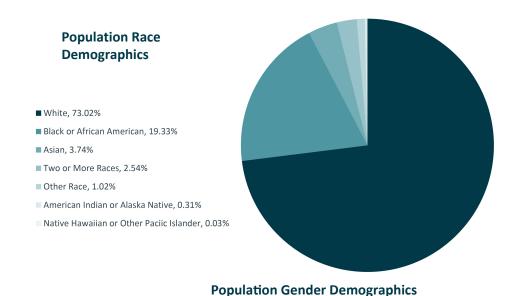
The labor market in southeast Michigan has experienced relative stability since 2010. The labor force increased by 3,898 workers (0.1 percent) between Q1 2019 and Q2 2019. Employment in the 16-county area also increased from Q1 2019 to Q2 2019, by 8,018 workers. More dramatically, this represents an increase of 31,762 workers (1.1 percent) over Q2 2018. With labor force increasing at a lesser rate than employment, the unemployment rate fell: the quarterly unemployment rate decreased by 0.1 percentage point between Q1 2019 and Q2 2019 to 4.2 percent.

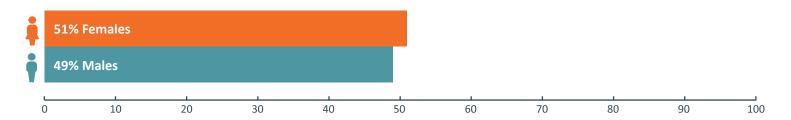
Population Demographics

According to data from the most recent Census Bureau 2017 American Community Survey (ACS) Five Year estimates, the population in southeast Michigan increased by nearly 0.1 percent between 2016 and 2017. During 2017, 5,725,576 people were living in the region. The sex of the populace was split almost evenly, with about 51 percent of the population identifying as female, and the other 49 percent identifying as male. The majority of the population identified as white (73 percent) with the second largest number of individuals identifying as black or African American (19 percent). The region as a whole is facing an aging population; 29.2 percent of population was over the age of 55, compared to 18.3 percent under the age of 24.



0.1% Increase from 2016





Population Age Demographics

Age 14 and under 18.3% Age 15-25 Age 25-54 Age 55+ 29.2%

2017 Labor Force, Employment, and Unemployment Demographics

Civilian Labor Force by Demographic Group										
	Civilian Labor	Total	Total	Unemployment						
Demographic Group	Force	Employment	Unemployment	Rate						
Total Population 16 +	2,834,232	2,608,959	224,161	7.9%						
Sex										
Male 16+	1,476,122	1,356,362	119,760	8.1%						
16-19	62,121	46,926	15,195	24.5%						
20-24	153,388	130,714	22,674	14.8%						
25-54	945,358	879,333	66,025	7.0%						
55-64	246,554	233,598	12,956	5.3%						
65 Plus	68,701	65,791	2,910	4.2%						
Female 16+	1,356,502	1,252,211	104,291	7.7%						
16-19	63,445	50,063	13,382	21.1%						
20-24	147,512	128,266	19,246	13.0%						
25-54	856,990	797,525	59,465	6.9%						
55-64	230,567	220,514	10,053	4.4%						
65 Plus	57,988	55,843	2,145	3.7%						
Race										
White	2,135,578	2,007,673	125,826	5.9%						
Black / African										
American	502,580	419,133	83,342	16.6%						
Native American	8,280	7,398	886	10.7%						
Asian	109,137	103,784	5,310	4.9%						
Native Hawaiian /										
Pacific Islander	974	872	68	7.0%						
Some Other Race	26,934	24,331	2,574	9.6%						
Two or More Races	51,757	45,649	6,076	11.7%						
Ethnicity										
Hispanic	108,194	97,579	10,413	9.6%						

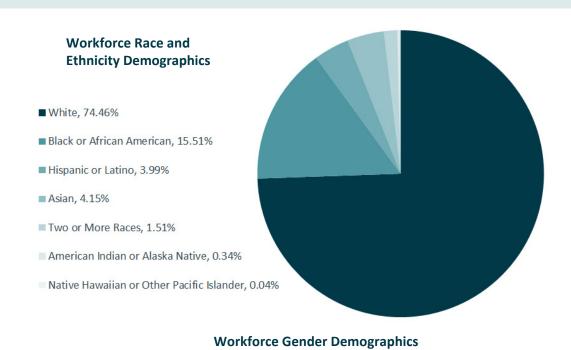
Data: American Community Survey 5-Year Estimates | Analysis: Workforce Intelligence Network

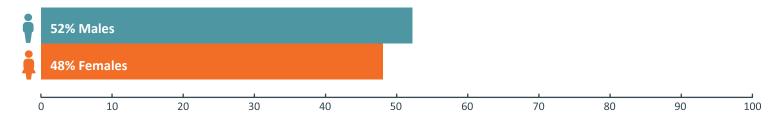
Labor Market Demographics

During 2017, the most recent census year, there were about 2.83 million people in the labor force, meaning they were either working or looking for work, in southeast Michigan. Slightly less than half of the population of 2,608,959 individuals (45.6 percent) living in the region were actively working. The highest unemployment rates were seen in those aged 24 years old or younger. Males under the age of 19 face an unemployment rate of 24.5 percent. Black or African American job seekers also have a difficult time finding employment, facing an unemployment rate of 16.6 percent.

Current Workforce Demographics

While the Census Bureau data is lagged by about two years, Emsi uses predictive modeling to estimate workforce information for the previous year, allowing for more current analysis. So far in 2019, there are a total of 2,693,742 individuals working in southeast Michigan. A slight majority (52 percent or 1,379,319 workers) were male, while 48 percent (1,290,758 workers) of the workforce was female. Most of those working in the region were white, accounting for 74.5 percent of the workforce, while African American or black workers accounted for 15.5 percent of the workforce. Those identifying as having a Hispanic or Latino ethnicity accounted for 4.0 percent. Only 13 percent of workers were under the age of 25 compared to 23 percent over the age of 55, indicating an aging workforce in southeast Michigan.





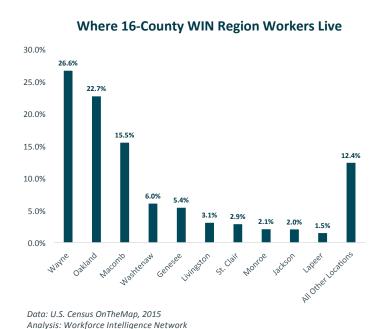


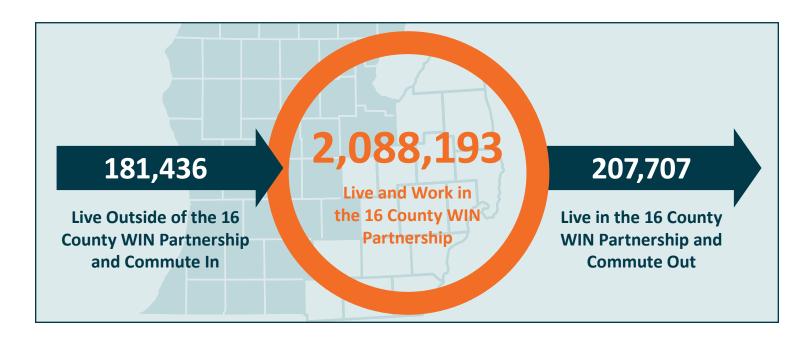
Regional Commuting Patterns

According to the most recent OnTheMap data set available from the Census Bureau, during 2015, the region's workforce consisted of 2,295,900 residents. 2,088,193 (91.0 percent) of the residents lived and worked within the 16-county region, while the remaining 207,707 residents (9.0 percent) traveled outside of the region for work. There were 2,269,629 workers employed in the region during 2015. Of those, 181,436 workers (8.0 percent) lived outside of the region's borders and commuted in. From this information, we can see that the southeast Michigan area is a net exporter of jobs, with more workers leaving the area for employment than inwardly commuting.

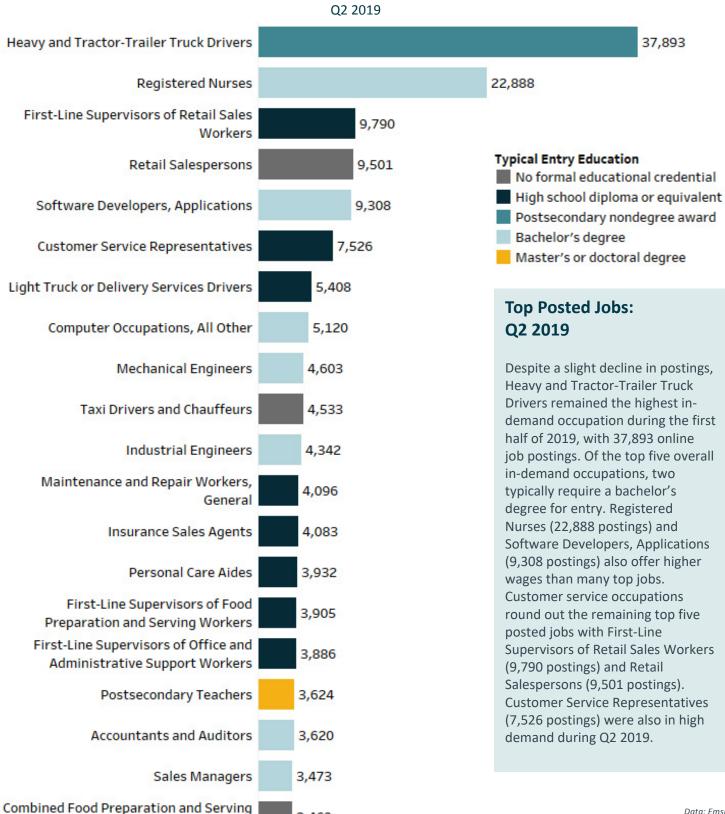
Where 16-County WIN Region Residents Work 27.9% 27.4% 25.0% 10.0% 12.4% 11.0% 10.0% 7.6% 4.8% 2.1% 1.9% 1.9% 1.6% 1.5% 0.0% Data: U.S. Census OnTheMap, 2015

Analysis: Workforce Intelligence Network





REAL-TIME DEMAND OVERVIEW 16-County WIN Region | Top Posted Jobs | Q2 2019



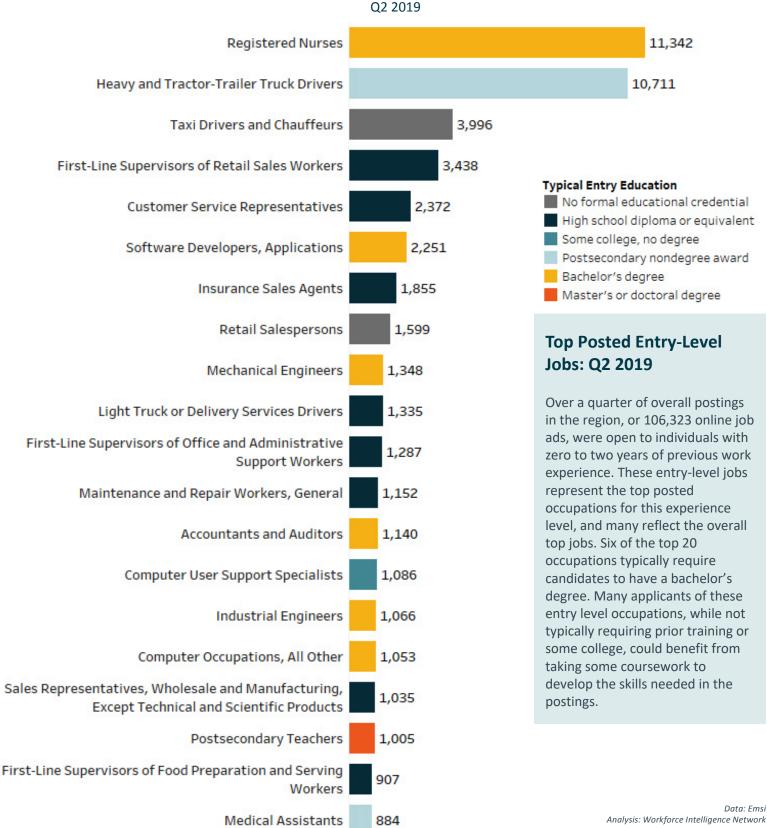
3,469

Workers, Including Fast Food

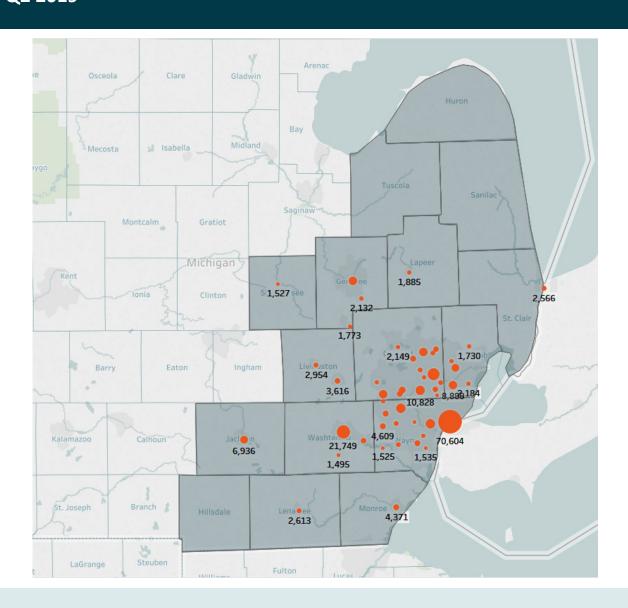
Top Posted Jobs

REAL-TIME DEMAND OVERVIEW 16-County WIN Region | Top Posted Entry-Level Jobs | Q2 2019

Top Posted Entry-Level Jobs



REAL-TIME DEMAND OVERVIEW 16-County WIN Region | Top Cities, Skills, Qualifications, and Employers | Q2 2019



Top In-Demand Qualifications

- Commercial Driver's License (CDL)
- Licensed Practical Nurse
- Certified Nursing Assistant
- Nurse Practitioner
- Critical Care Registered Nurse (CCRN)
- Transportation Worker Identification Credential (TWIC) Card
- Advanced Practice Registered Nurse
- Radiologic Technologist
- American Registry of Radiologic Technologists (ARRT) Certified
- Patient Care Technician

Top In-Demand Skills

- Nursing
- Selling Techniques
- Merchandising
- Restaurant Operation
- Accounting
- Customer Satisfaction
- Basic Life Support
- Purchasing
- Customer Experience
- Warehousing

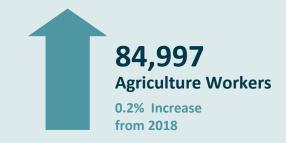
Top Posting Employers*

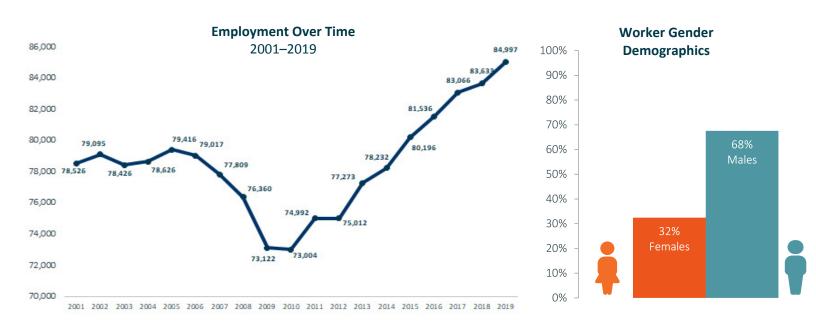
- Uber Technologies, Inc.
- CRST International, Inc.
- Travelers Healthcare
- Henry Ford Health System
- General Healthcare Resources, Inc.
- William Beaumont Hospital
- University of Michigan
- Shipt LLC
- Ascension Health
- McDonald's Corporation

^{*}Employer names are listed as they appear in online job postings.

Introduction

WIN's agriculture occupation group brings together occupations that require knowledge of the farming, livestock, the environment, and natural sciences. Occupations range from Farm Workers, to Environmental Engineers, to Meat Butchers, to Recreation Workers.





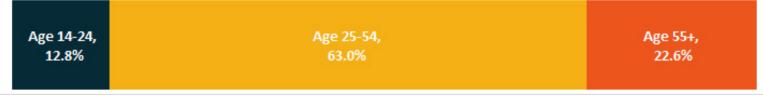
Agriculture Worker Demographics

According to the most recent Emsi data set available (2019), the 84,997 workers in agriculture occupations are not very diverse. A large majority of workers are white males between the ages of 25 and 54. Only 32 percent of agriculture workers identify as women. Only 13 percent of workers were under the age of 25, compared to 23 percent of workers who are age 55 or older.

Race and Ethnicity Demographics

78.2% White | 10.9% Black or African American | 6.8% Hispanic or Latino

Worker Age Demographics



1,301

1,098

No formal educational credential High school diploma or equivalent

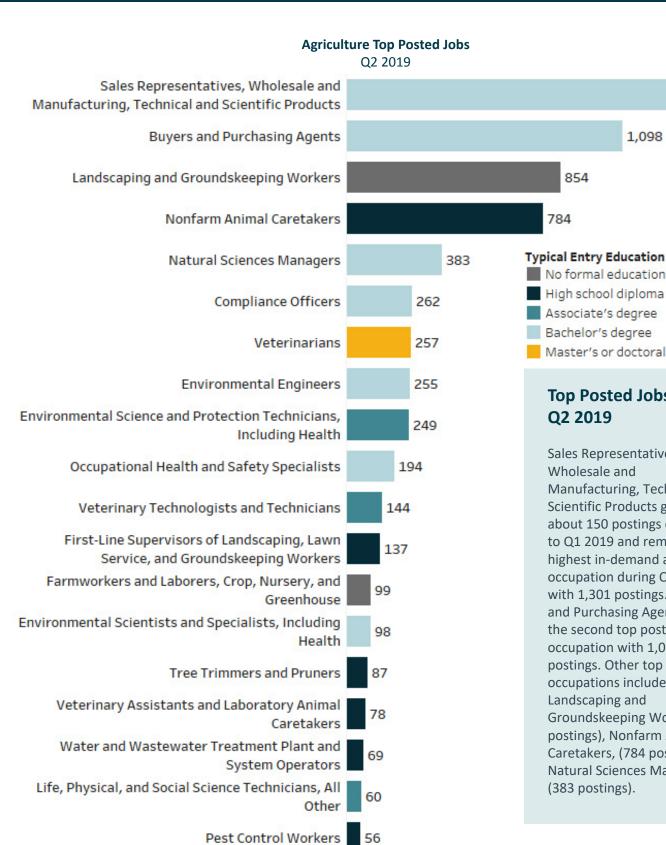


7,015 Agriculture Postings: 1,170 more than in Q1 2019



Bachelors Degree Required for Many Agriculture Jobs

854



Animal Trainers

Top Posted Jobs:

Q2 2019

Master's or doctoral degree

Associate's degree Bachelor's degree

Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products gained about 150 postings compared to Q1 2019 and remain the highest in-demand agriculture occupation during Q2 2019, with 1,301 postings. Buyers and Purchasing Agents was the second top posted occupation with 1,098 postings. Other top posted occupations include Landscaping and Groundskeeping Workers (854 postings), Nonfarm Animal Caretakers, (784 postings) and **Natural Sciences Managers** (383 postings).



High Earning Potential for Natural Science Managers



In-Demand Agriculture Certification: CDL

Agriculture Wage Overview

Of the top posted agriculture-related jobs, seven of the ten offer median wages of more than \$30 per hour according to the Bureau of Labor Statistics (BLS). The top posted job, Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products offers median hourly earnings of \$37.67, which translates to annual earnings of approximately \$78,400.

Wage Overview for Top Posted Agriculture Jobs in Q2 2019

		_				
Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$22.54	\$28.01	\$37.67	\$54.21	\$71.89
13-1028	Buyers and Purchasing Agents	\$19.42	\$24.84	\$32.98	\$43.46	\$55.01
37-3011	Landscaping and Groundskeeping Workers	\$9.25	\$10.75	\$13.37	\$16.59	\$20.98
39-2021	Nonfarm Animal Caretakers	\$7.56	\$9.59	\$10.73	\$12.40	\$16.07
11-9121	Natural Sciences Managers	\$35.64	\$41.70	\$50.92	\$65.67	\$82.05
13-1041	Compliance Officers	\$19.73	\$26.60	\$35.71	\$44.46	\$49.12
29-1131	Veterinarians	\$27.86	\$32.74	\$39.12	\$52.79	\$93.12
17-2081	Environmental Engineers	\$29.28	\$35.40	\$44.51	\$55.87	\$65.37
19-4091	Environmental Science and Protection Technicians, Including Health	\$14.23	\$16.49	\$21.89	\$28.40	\$33.51
29-9011	Occupational Health and Safety Specialists	\$21.28	\$26.86	\$35.21	\$44.77	\$53.27

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Foundational Skills

Communications

• Valid Driver's License

Management

In-Demand Technical Skills

- Purchasing
- Landscaping
- Selling Techniques
- Procurement
- Mowing

In-Demand Certifications

Leadership

Sales

- Commercial Driver's License (CDL)
- Certified Veterinary Technician
- Registered Vascular Technologist
- Professional Engineer
- Nurse Practitioner

In-Demand Education Level*

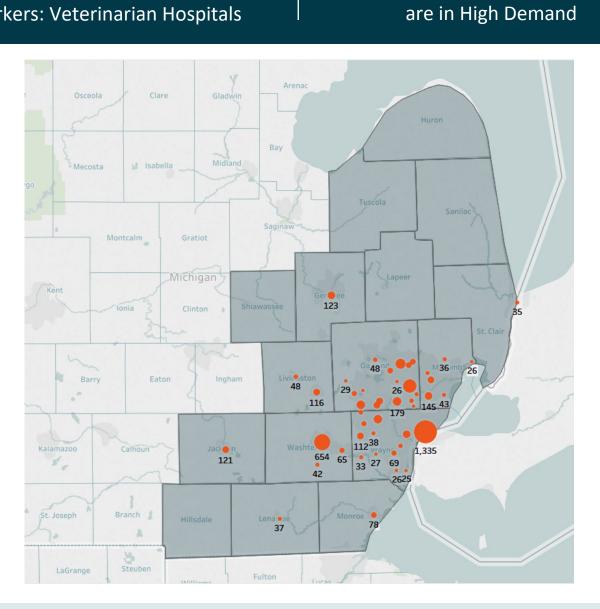
High School Diploma: 17.9%
Associate Degree: 4.9%
Bachelor's Degree: 33.3%
Master's Degree: 7.7%

*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent



Top Employers of Agriculture-related Workers: Veterinarian Hospitals





Top Posting Employers*

- Petsmart, Inc.
- Oracle Corporation
- Banfield Pet Hospital
- University of Michigan
- The Davey Tree Expert Company
- Petco Inc
- House of Gifts
- Rover Inc
- Kelly Services, Inc.
- Henry Ford Health System

Job Postings by City

- 1. Detroit, MI: 1,335 Postings
- 2. Ann Arbor, MI: 654 Postings
- 3. Troy, MI: 446 Postings
- 4. Auburn Hills, MI: 245 Postings
- 5. Novi, MI: 201 Postings

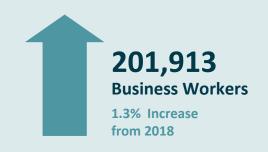
^{*}Employer names are listed as they appear in online job postings.

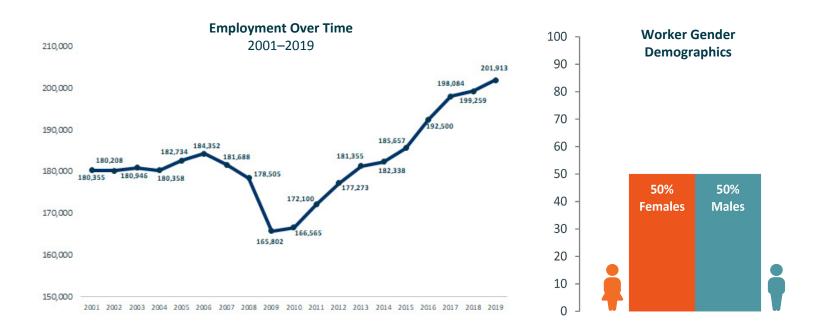


BUSINESS AND FINANCE OCCUPATION GROUP 16-County WIN Region | Q2 2019

Introduction

Jobs in the business and finance occupation group can be found in nearly every type of establishment/firm throughout the region. These workers need strong mathematical and accounting abilities along with project management and planning skills. Workers in this occupation group are in high demand in southeast Michigan.





Business and Finance Worker Demographics

According to the most recent Emsi data set available (2019), the business and finance occupation group is in some ways a relatively diverse occupation group with respect to its over 202,000 workers. Half the working population identify as female (50 percent), but 81 percent of workers identified as white, indicating less diversity with respect to race than to gender. Only five percent of the working population in business and finance is under the age of 25, compared to 25 percent age 55 and older, indicating a large aging population of business and finance workers.

Race and Ethnicity Demographics 81.0% White | 10.8% Black or African American | 4.3% Asian Worker Age Demographics



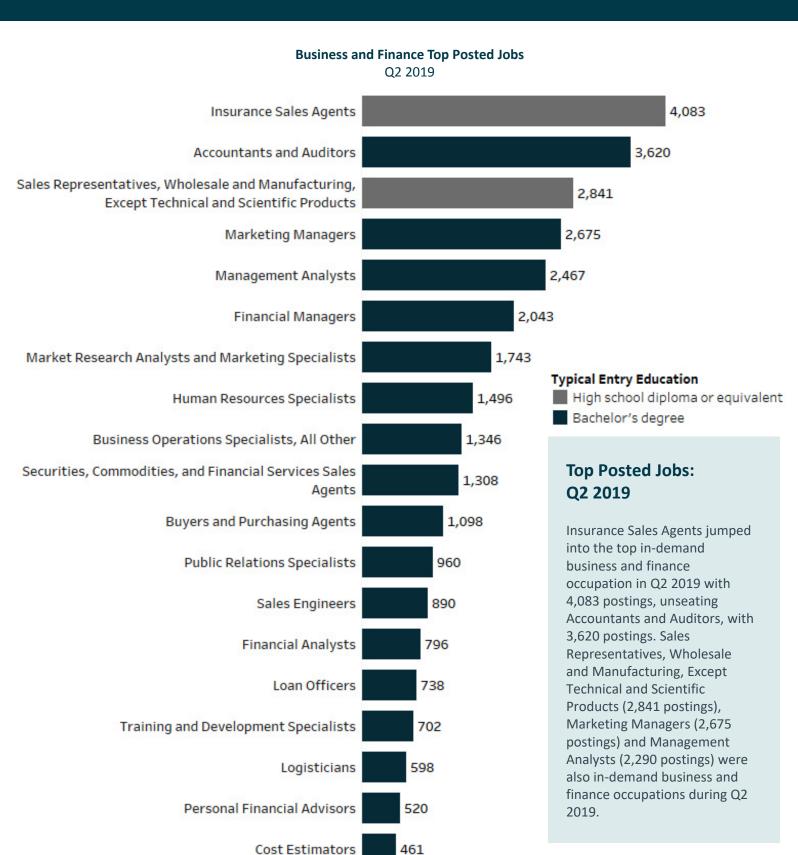




32,629 Business and Finance Postings: 3,943 more than in Q1 2019

Public Relations and Fundraising Managers

Bachelor's Degree Required for Most Business and Finance Jobs



432



High Earning Potential for Marketing Managers



CPA: In-Demand Business and Finance Certification

Business and Finance Wage Overview

Most business and finance related jobs offer high wages, providing a lucrative opportunity for job seekers willing to attain the necessary education. According to the Bureau of Labor Statistics (BLS), the top posted business and finance job, Insurance Sales Agents, requires only a high school diploma and offers median hourly wages of \$25.70, translating to annual earnings of approximately \$53,500. All of the top business occupations offer median wages over \$20 per hour, and most prefer a bachelor's degree for entry.

Wage Overview for Top Posted Business and Finance Jobs in Q2 2019

wage overview for rop rosted business and rinding sous in Q2 2015									
Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages			
41-3021	Insurance Sales Agents	\$13.84	\$18.57	\$25.70	\$39.23	\$63.27			
13-2011	Accountants and Auditors	\$20.61	\$25.52	\$33.13	\$44.01	\$59.92			
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$15.49	\$21.67	\$32.66	\$48.45	\$63.35			
11-2021	Marketing Managers	\$35.71	\$45.79	\$61.76	\$79.43	\$118.50			
13-1111	Management Analysts	\$22.27	\$28.87	\$39.51	\$55.82	\$81.88			
11-3031	Financial Managers	\$35.60	\$44.59	\$59.22	\$76.94	\$111.33			
13-1161	Market Research Analysts and Marketing Specialists	\$16.46	\$23.28	\$32.16	\$45.18	\$58.65			
13-1071	Human Resources Specialists	\$17.34	\$22.08	\$29.22	\$38.39	\$49.44			
13-1199	Business Operations Specialists, All Other	\$17.95	\$23.97	\$32.69	\$45.42	\$58.12			
41-3031	Securities, Commodities, and Financial Services Sales Agents	\$13.77	\$16.88	\$24.37	\$42.89	\$85.93			

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Accounting
- Selling Techniques
- Auditing
- Purchasing
- Insurance Sales

In-Demand Education Level*

High School Diploma: 11.1%Associate Degree: 4.7%Bachelor's Degree: 50.7%

• Master's Degree: 12.8%

*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Foundational Skills

- Management
- Sales
- Communications
- Leadership
- Operations

In-Demand Certifications

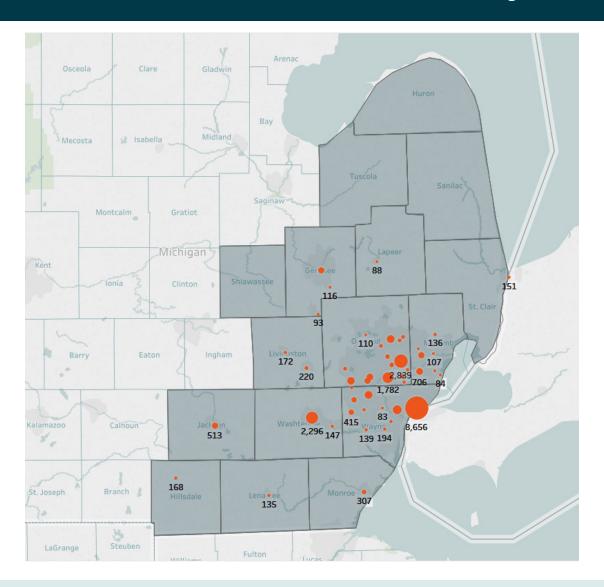
- Certified Public Accountant (CPA)
- Series 7 General Securities Representative License (Stockbroker)
- Certified Internal Auditor
- Series 63 Uniform Securities Agent State Law License
- Series 6 Investment Company and Variable Contracts License (Mutual Funds/Variable Annuities)



Banks and Financial Corporations Seeking Business and Finance Workers



Accounting and Auditing Skills are in High Demand



Top Job Posting Employers*

- Assurance
- Robert Half International Inc.
- Deloitte LLP
- Anthem, Inc.
- Oracle Corporation
- Co-Alliance, LLP
- H&R Block, Inc.
- Bank of America Corporation
- Allstate Corporation
- Quicken Loans Inc.

Job Postings by City

1. Detroit, MI: 8,656 Postings

2. Troy, MI: 2,839 Postings

3. Ann Arbor, MI: 2,296 Postings

4. Southfield, MI: 1,782 Postings

5. Dearborn, MI: 1,228 Postings

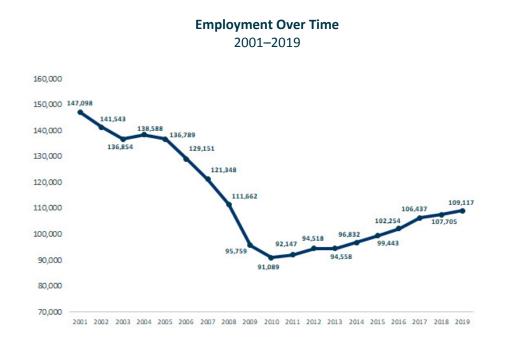
^{*}Employer names are listed as they appear in online job postings.

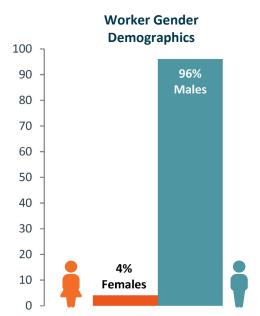
CONSTRUCTION OCCUPATION GROUP 16-County WIN Region | Q2 2019

Introduction

Jobs in the WIN construction occupation group are associated with the skilled trades, engineering, management, and planning. Many construction employers are slowly adopting online job search methods, so online job ads may not provide a complete picture of demand for these workers. Even so, it is an important and in-demand occupation group for southeast Michigan and posting data provides a glimpse into employer needs.







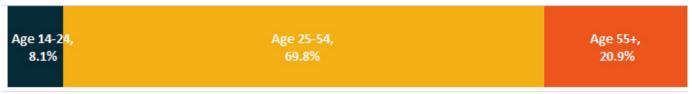
Construction Worker Demographics

According to the most recent Emsi worker demographic data set available (2019), despite having nearly 110,000 workers, the workers in the construction occupation group are not very diverse. A large majority of workers are white males between the ages of 25 and 54. Only four percent of workers identified as female, and only 14 percent identified as race other than white.

Race and Ethnicity Demographics

85.6% White | 6.1% Black or African American | 6.2% Hispanic or Latino

Worker Age Demographics







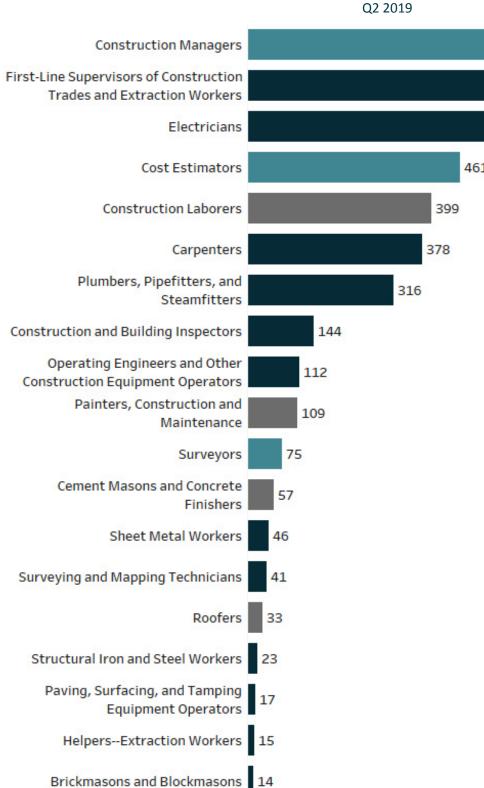
4,444 Construction Postings: 691 More than in Q1 2019

Vocational Training Required for Most Construction Jobs

582

552

Construction Top Posted Jobs



Drywall and Ceiling Tile Installers 13

Typical Entry Education

No formal educational credential High school diploma or equivalent

902

Bachelor's degree

Top Posted Jobs: Q2 2019

Construction Managers were the top-posted construction occupation during Q2 2019, with 902 postings. Other top posted jobs include First-Line **Supervisors of Construction** Trades and Extraction Workers (582 postings), Electricians (552 postings), Cost Estimators (461 postings) and Construction Laborers (399 postings).



High Earning Potential for Plumbers, Pipefitters, and Steamfitters



LEED Accredited Professional: In-Demand Construction Certification

Construction Wage Overview

The top posted construction job, Construction Managers, offers a median wage of \$30.67 per hour or \$64,000 per year. According to the Bureau of Labor Statistics (BLS), those working in apprentice-able occupations can expect even higher wage potential, such as Plumbers, Pipefitters, and Steamfitters, which report a median wage of \$33.16 per hour or \$69,000 annually.

Wage Overview for Top Posted Construction Jobs in Q2 2019

Occupation		10th	25th	Median	75th	90th
Code	Occupation Name	Percentile Wages	Percentile Wages	Wages	Percentile Wages	Percentile Wages
11-9021	Construction Managers	\$7.98	\$15.69	\$30.67	\$50.21	\$66.85
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$14.94	\$21.71	\$30.85	\$41.66	\$51.12
47-2111	Electricians	\$14.76	\$20.05	\$30.86	\$37.34	\$43.31
13-1051	Cost Estimators	\$16.20	\$21.54	\$29.89	\$41.28	\$50.37
47-2061	Construction Laborers	\$7.97	\$12.48	\$17.36	\$23.71	\$30.23
47-2031	Carpenters	\$9.06	\$13.90	\$21.06	\$30.31	\$37.35
47-2152	Plumbers, Pipefitters, and Steamfitters	\$13.83	\$23.41	\$33.16	\$37.78	\$41.02
47-4011	Construction and Building Inspectors	\$12.52	\$18.46	\$27.00	\$32.99	\$38.50
47-2073	Operating Engineers and Other Construction Equipment Operators	\$18.45	\$22.10	\$26.62	\$30.62	\$35.97
47-2141	Painters, Construction and Maintenance	\$5.94	\$10.86	\$16.36	\$24.03	\$32.06

Data: Emsi. BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Construction Management
- Subcontracting
- Carpentry
- Renovation
- Estimators

In-Demand Education Level*

• High School Diploma: 22.0%

• Associate Degree: 5.7%

Bachelor's Degree: 21.2%

Master's Degree: 2.3%

*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Foundational Skills

- Construction
- Management
- Valid Driver's License
- Communications
- Operations

In-Demand Certifications

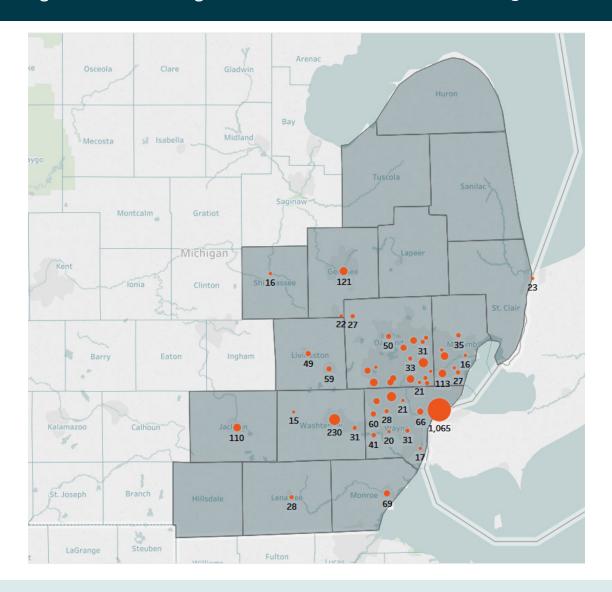
- Commercial Driver's License (CDL)
- LEED Accredited Professional (AP)
- Project Management Professional Certification
- Professional Engineer
- Operator Certification



Entry-Level Electricians Needed Throughout the WIN Region



Construction Management Skills are in High Demand



Top Posting Employers*

- Tradesmen International, Inc
- Page Michael International Inc
- Cybercoders, Inc.
- City of Detroit
- Walbridge Aldinger LLC
- Homeadvisor, Inc.
- Express Services Inc
- Growing People and Companies
- Allied Building Svc.
- Contractor

*Employer names are listed as they appear in online job postings.

Job Postings by City

1. Detroit, MI: 1,065 Postings

2. Ann Arbor, MI: 230 Postings

3. Livonia, MI: 177 Postings

4. Troy, MI: 165 Postings

5. Flint, MI: 121 Postings

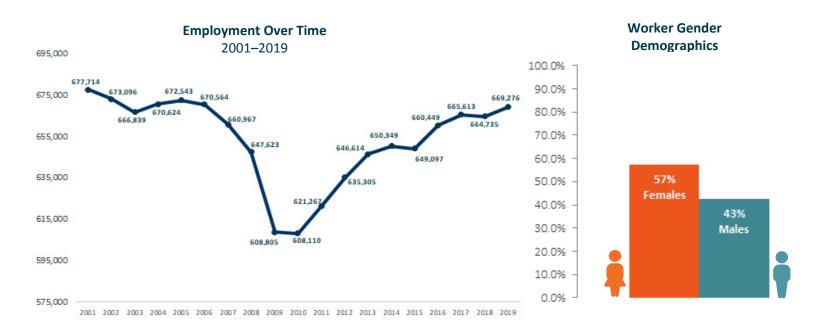


CUSTOMER SERVICE OCCUPATION GROUP 16-County WIN Region | Q2 2019

Introduction

The customer service group is the largest occupation group that WIN analyzes, both in terms of employment and online job postings. This group is of very high importance to the region because it is the first to grow when the economy expands and the first to contract in a downturn: it is often a leading indicator. The large number of postings for this occupation group are due in part to the relatively high worker turnover. As defined by WIN, this group encompasses all customer service occupations, with skills transferrable across the retail sector, the hotel industry, food and beverage service industry, call centers, and other areas. These skills are also transferrable to public-facing positions in many other occupation groups.





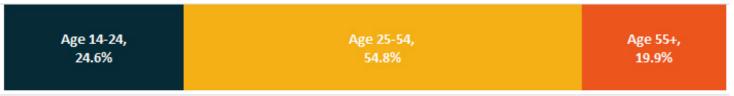
Customer Service Worker Demographics

According to the most recent Emsi data set available (2019), having nearly 670,000 workers, the customer service occupation group is more diverse than other occupation groups. During 2019, 57 percent of workers identified as female. Twenty-seven percent of workers in customer service identified as a racial minority. A quarter of the customer service workers (25 percent) were under the age of 24, a much higher percentage than in other occupation groups analyzed by WIN.

Race and Ethnicity Demographics

73.1% White | 17.1% Black or African American | 3.1% Asian

Worker Age Demographics





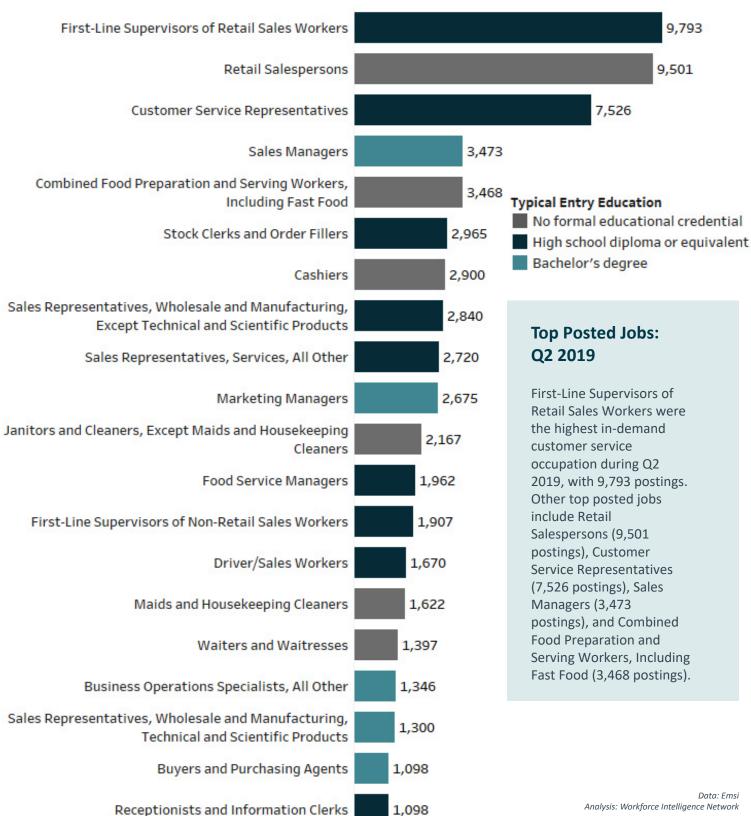
73,090 Customer Service Postings: 1,097 Fewer than in Q1 2019



Opportunities Available with High School Diploma or College Degree

Customer Service Top Posted Jobs







High Earning Potential for Sales Managers



NHA Certification: In-Demand Customer Service Certification

Customer Service Wage Overview

Despite being in high demand, most customer service related occupations offer relatively low wages according to the Bureau of Labor Statistics (BLS). However, six of the top ten posted occupations report median wages over \$15 per hour. The top posted job, First-Line Supervisors of Retail Sales Workers, offers a median hourly wage of \$17.21, translating to an annual salary of about \$36,000.

Wage Overview for Top Posted Customer Service Jobs in Q1 2019

wage overview for Top Posted Customer Service 1003 in Q1 2013										
Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages				
41-1011	First-Line Supervisors of Retail Sales Workers	\$11.42	\$13.38	\$17.21	\$23.81	\$32.24				
41-2031	Retail Salespersons	\$9.06	\$9.44	\$10.64	\$13.73	\$18.65				
43-4051	Customer Service Representatives	\$9.90	\$12.06	\$15.62	\$20.30	\$26.81				
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	\$9.00	\$9.20	\$9.51	\$10.22	\$12.19				
43-5081	Stock Clerks and Order Fillers	\$9.15	\$9.66	\$11.26	\$15.01	\$18.82				
11-2022	Sales Managers	\$32.66	\$45.07	\$61.67	\$78.11	\$115.33				
41-2011	Cashiers	\$9.04	\$9.24	\$9.85	\$11.64	\$14.47				
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$14.26	\$20.44	\$29.28	\$44.48	\$60.37				
41-3099	Sales Representatives, Services, All Other	\$11.67	\$18.26	\$26.78	\$39.22	\$54.89				
11-2021	Marketing Managers	\$31.48	\$41.38	\$59.34	\$78.22	\$107.89				

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Merchandising
- Selling Techniques
- Restaurant Operation
- Cash Register
- Customer Satisfaction

In-Demand Education Level*

High School Diploma: 30.1%Associate Degree: 4.2%Bachelor's Degree: 17.4%

• Master's Degree: 2.6%

*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Foundational Skills

- Sales
- Customer Service
- Management
- Communications
- Leadership

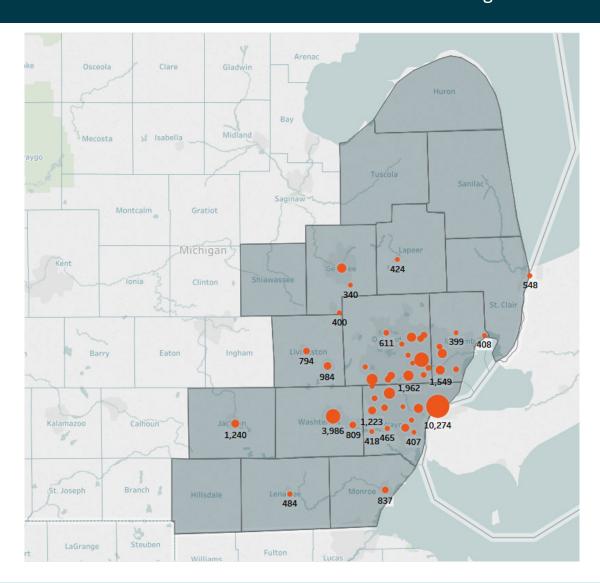
In-Demand Certifications

- Commercial Driver's License (CDL)
- Licensed Practical Nurse (LPN)
- Series 7 General Securities Representative License (Stockbroker)
- NHA Certified
 - Project Management Professional Certification



Brick and Mortar Retail Stores in **Need of Customer Service Workers**





Top Posting Employers*

- **Dollar General Corporation**
- Shipt LLC
- McDonald's Corporation
- The Home Depot Inc
- Meijer, Inc.
- Family Dollar Stores, Inc.
- **CVS Health Corporation**
- **Target Corporation**
- **Oracle Corporation**
- Dollar Tree, Inc.

*Employer names are listed as they appear in online job postings.

Job Postings by City

1. Detroit, MI: 10,274 Postings

2. Ann Arbor, MI: 3,986 Postings

3. Troy, MI: 3,978 Postings

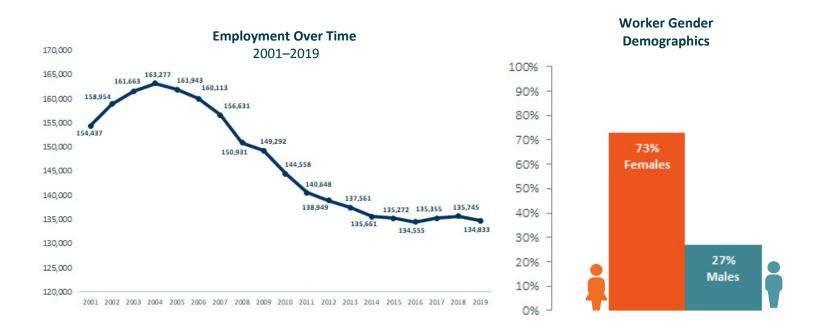
4. Novi, MI: 2,324 Postings

5. Livonia, MI: 2,304 Postings

Introduction

Education-related jobs can be found both in the private and public sectors. Teachers and other education related workers are employed in public schools, private schools, and training institutions. Jobs in the education occupation group require a variety of skills and credentials dependent on the target age group and topic area for the educator. From elementary school teachers to college professors, educators are the backbone of training the future workforce.





Education Worker Demographics

According to the most recent Emsi data set available (2019), among its 135,000 workers, the education occupation group is composed primarily of white females between the ages of 25 and 54. Only 27 percent of workers are males, and only 19 percent of workers are of a minority race.

Race and Ethnicity Demographics

81.0% White | 9.9% Black or African American | 4.3% Asian

Worker Age Demographics







10,188 Education Postings: 2,444 Fewer than in Q1 2019

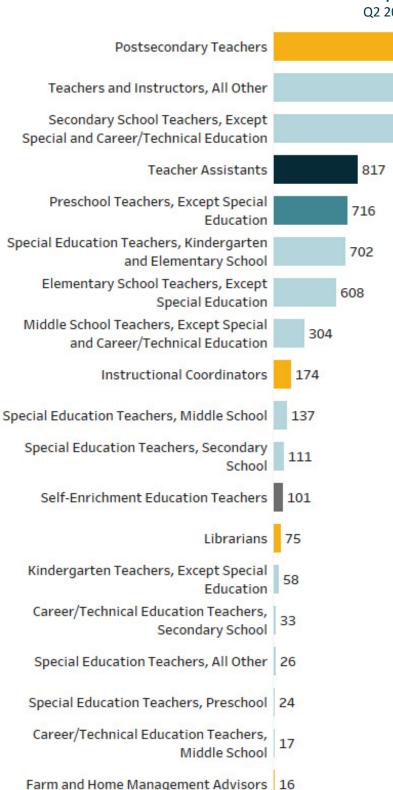
Bachelor's Degree Required for Most Education Jobs





1,359

1,252



Adult Basic and Secondary Education and

Literacy Teachers and Instructors

Typical Entry Education

High school diploma or equivalent

3,625

- Some college, no degree
- Associate's degree
- Bachelor's degree
- Master's or doctoral degree

Top Posted Jobs: Q2 2019

Postsecondary Teachers were the highest in-demand education occupation during Q2 2019, with 3,625 postings. Most of the top jobs in the education occupation group typically require at least a bachelor's degree, but there are many openings for Teacher Assistants and Preschool Teachers, Except Special Education for those with associate degrees or some college coursework.



High Earning Potential for Postsecondary Teachers



Certificate in English Language Teaching to Adults: In-Demand Education Certification

Education Wage Overview

Many education-related jobs, particularly permanent positions that require teaching older students, offer competitive median wages with growth potential. These positions provide an excellent opportunity for job seekers willing to attain the necessary credentials and experience. According to the Bureau of Labor Statistics (BLS), six of the top ten posted education jobs offer median wages of over \$30 per hour. The top posted job, Postsecondary Teachers, offers a median wage of \$31.86 hourly, translating to annual earnings of nearly \$66,000.

Wage Overview for Top Posted Education Jobs in Q2 2019

wage overview for rop rosted Eddedfor 3005 in Q2 2015									
Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages			
25-1099	Postsecondary Teachers	\$12.75	\$18.31	\$31.86	\$51.60	\$79.05			
25-3097	Teachers and Instructors, All Other	\$9.91	\$11.90	\$18.55	\$28.83	\$39.68			
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	\$18.99	\$23.30	\$31.46	\$38.96	\$45.86			
25-9041	Teacher Assistants	\$9.55	\$10.62	\$12.71	\$15.00	\$17.86			
25-2011	Preschool Teachers, Except Special Education	\$9.78	\$11.39	\$15.15	\$21.38	\$27.63			
25-2052	Special Education Teachers, Kindergarten and Elementary School	\$19.90	\$25.00	\$32.40	\$40.08	\$47.11			
25-2021	Elementary School Teachers, Except Special Education	\$18.33	\$22.97	\$32.26	\$41.52	\$50.00			
25-2022	Middle School Teachers, Except Special and Career/Technical Education	\$17.11	\$21.98	\$31.33	\$38.12	\$44.95			
25-9031	Instructional Coordinators	\$16.71	\$21.64	\$31.18	\$39.79	\$49.38			
25-2053	Special Education Teachers, Middle School	\$18.69	\$22.45	\$29.66	\$36.16	\$40.23			

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Curriculum Development
- Child Development
- Lesson Planning
- Learning Platforms
- Enhanced Data GSM Environment

In-Demand Foundational Skills

- Teaching
- Leadership
- English Language
- Research
- Innovation

In-Demand Education Level*

High School Diploma: 17.4%
Associate Degree: 6.4%
Bachelor's Degree: 37.2%
Master's Degree: 10.0%

*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Certifications

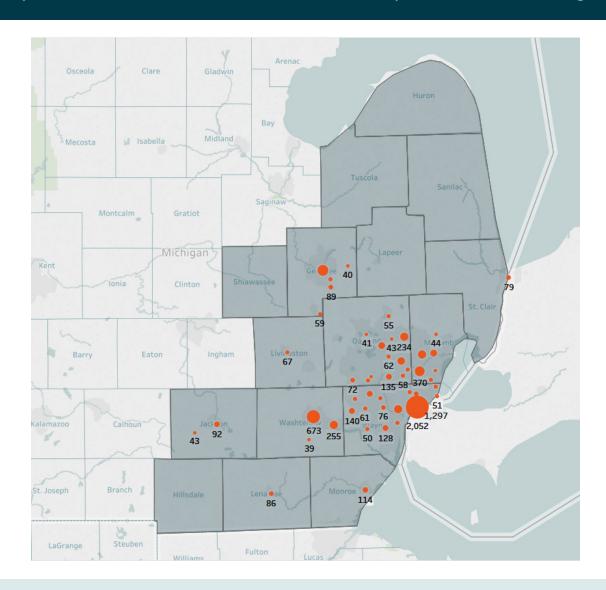
- Certificate in English Language Teaching to Adults (CELTA)
- NHA Certified
- Medical License
- Licensed Practical Nurse
- Project Management Professional Certification



Child Care Organizations are Top Employers of Education Workers



Curriculum Development and Child Development Skills are in High Demand



Top Posting Employers

- VIPKID
- Ef Education First, Inc.
- Soliant Health, Inc.
- Kindercare Learning Centers
- Super Pro
- University of Michigan
- Sunbelt Staffing, LLC
- Wayne County Schools
- National Heritage Academies, Inc.
- Wayne Reese

*Employer names are listed as they appear in online job postings.

Job Postings by City

1. Detroit, MI: 2,052 Postings

2. Ann Arbor, MI: 673 Postings

3. Flint, MI: 444 Postings

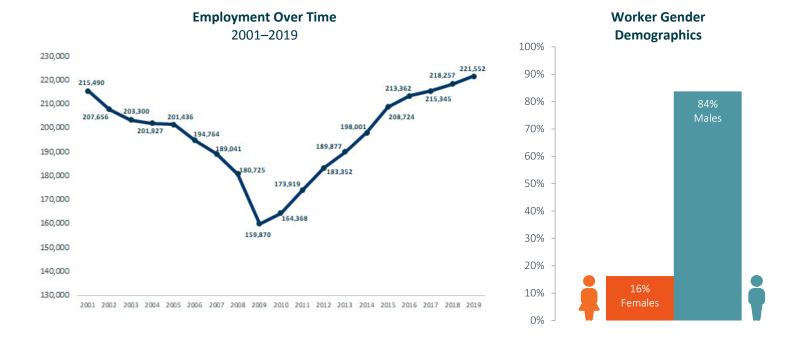
4. Warren, MI: 370 Postings

5. Dearborn, MI: 265 Postings

Introduction

Energy-related occupations encompass jobs in engineering, science, mining, and extraction. Workers in this field have a range of skills all related to keeping businesses and homes powered. Energy companies employ workers in a variety of occupations, many of which are also included in other WIN occupation groups. Data referenced in this section pertain only to job postings from energy-related businesses.





Energy Worker Demographics

According to the most recent Emsi data set available (2019), the over 220,000 workers in the energy occupation group are primarily white males between the ages of 25 and 54, with 16 percent of workers identifying as female and just 19 percent identifying as a racial minority. Only five percent of the workers in the occupation group are under the age of 25, indicating that the energy field faces a particular threat from the region's aging workforce.

Race and Ethnicity Demographics

80.7% White | 9.0% Black or African American | 5.9% Asian

Worker Age Demographics



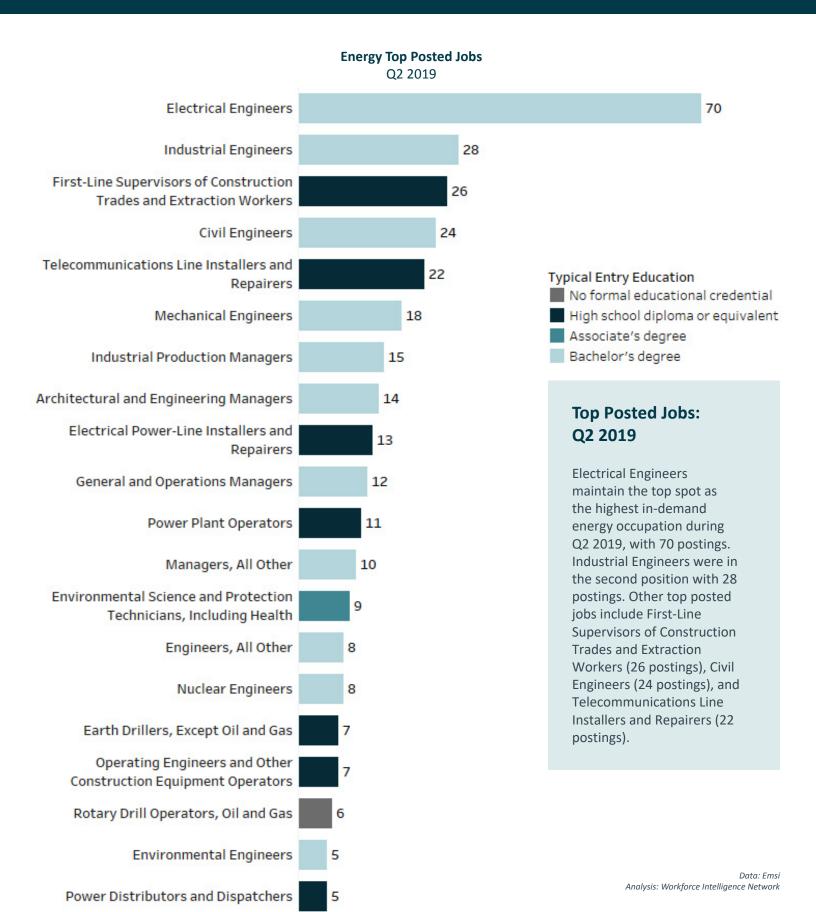




357 Energy Postings: 89 More than in Q1 2019



Bachelors Degree Required for Most Energy Jobs





High Earning Potential for General and Operations Managers



Professional Engineering Certification: Most In-Demand Energy Certification

Energy Wage Overview

The demand for engineers and highly specialized trades in the energy field create lucrative opportunities for job seekers willing to achieve the education or training related to these jobs. Nine of the top ten energy occupations have median wages over \$30 per hour. According to the Bureau of Labor Statistics (BLS), the top posted energy job, Electrical Engineers, offers a median hourly wage of \$44.63, or annual earnings of approximately \$93,000. Technician and construction-focused positions related to energy generally have shorter term educational requirements than engineers and pay somewhat higher than similar occupations in other industries.

Wage Overview for Top Posted Energy Jobs in Q2 2019

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2071	Electrical Engineers	\$29.81	\$35.88	\$44.63	\$54.55	\$62.83
17-2112	Industrial Engineers	\$30.90	\$36.28	\$44.45	\$53.70	\$61.29
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$14.94	\$21.71	\$30.85	\$41.66	\$51.12
17-2051	Civil Engineers	\$25.25	\$29.94	\$36.88	\$46.79	\$59.13
49-9052	Telecommunications Line Installers and Repairers	\$12.12	\$14.11	\$18.11	\$26.43	\$40.44
17-2141	Mechanical Engineers	\$30.19	\$35.71	\$44.41	\$54.97	\$63.80
11-3051	Industrial Production Managers	\$35.08	\$44.22	\$56.26	\$70.93	\$87.31
11-9041	Architectural and Engineering Managers	\$46.03	\$54.13	\$64.13	\$76.55	\$91.69
49-9051	Electrical Power-Line Installers and Repairers	\$19.98	\$27.77	\$35.80	\$43.52	\$51.81
11-1021	General and Operations Managers	\$21.51	\$33.42	\$52.66	\$82.06	\$115.71

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Customer Satisfaction
- Corporate Social Responsibility
- Electrical Engineering
- Continuous Improvement Process
- Engineering Design Process

In-Demand Foundational Skills

- Management
- Operations
- Communications
- Valid Driver's License
- Problem Solving

In-Demand Education Level*

High School Diploma: 28.3%Associate Degree: 13.7%

Bachelor's Degree: 51.8%

Master's Degree: 11.5%

*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Certifications

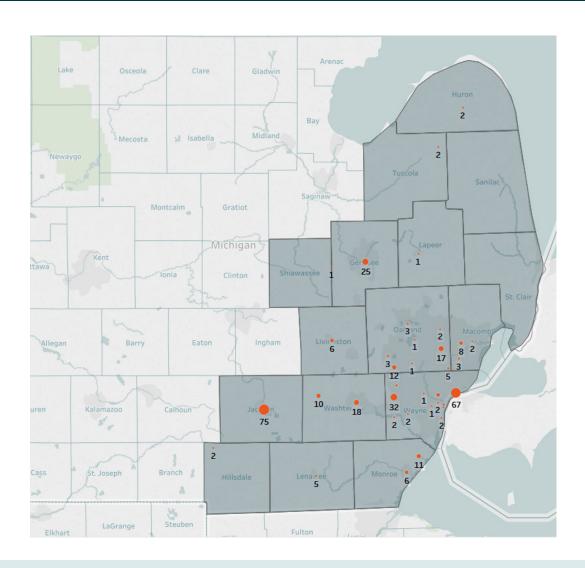
- Commercial Driver's License (CDL)
- Operator Certification
- Professional Engineer
- Drug Recognition Expert
- American Society for Quality (ASQ) Certified



Utility and Electronic Companies: Top Employers



Corporate Social Responsibility Skills are in High Demand



Top Posting Employers*

- CMS Energy Corporation
- DTE Energy Company
- Henkels & McCoy, Inc.
- Lg Electronics
- Usic Locating Services, Inc.
- Itc Holdings Corp.
- Service Electric Company
- Schlumberger Limited
- Aegion Corporation

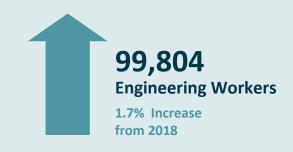
Job Postings by City

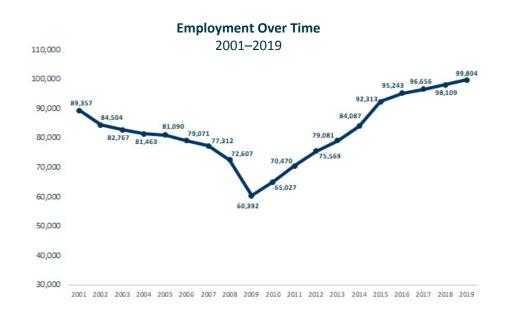
- 1. Jackson, MI: 75 Postings
- 2. Detroit, MI: 67 Postings
- 3. Canton, MI: 32 Postings
- 4. Flint, MI: 25 Postings
- 5. Ann Arbor, MI: 18 Postings

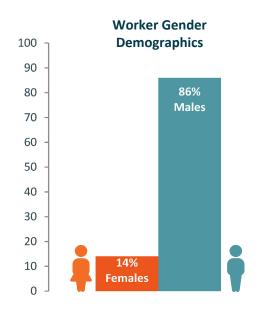
^{*}Employer names are listed as they appear in online job postings.

Introduction

Jobs in the manufacturing industry can range from assembly and production, to skilled trades and technicians, designers and engineers, and even computer-related occupations such as software development. Demand for engineers in the region has been consistent, and employment has been growing quickly.







Engineering and Design Worker Demographics

According to the most recent Emsi data set available (2019), the nearly 100,000 workers in the engineering and design group are not particularly diverse. Just five percent of the related workforce is under 25, likely due to the consistently high educational requirements. Fourteen percent of current workers are female, and only 21 percent identify as a race other than white; as the labor force overall continues to change, this is one field that could benefit from seeking more diverse talent.

Race and Ethnicity Demographics

79.5% White | 7.2% Black or African American | 9.4% Asian





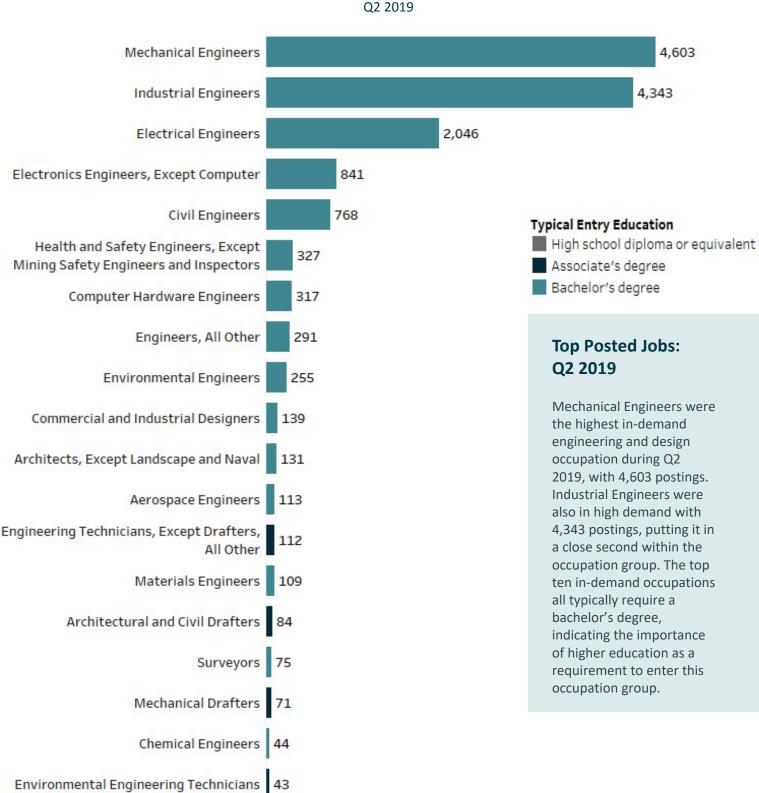


14,848 Engineering and Design Postings: 629 More than in Q1 2019

Surveying and Mapping Technicians 41

Bachelor's Degree Required for Most Engineering and Design Jobs







High Earning Potential for Engineers, All Other



Professional Engineer: Most In-Demand Engineering and Design Certification

Engineering and Design Wage Overview

Most engineering and design related jobs offer high wages, providing a lucrative opportunity to job seekers willing to meet the minimum education requirements related to these jobs. Median wages are near \$40 per hour across the group, and the top posted engineering and design job, Mechanical Engineers, offers a median hourly wage of \$44.41. This reflects an annual salary of approximately \$92,000 according to the Bureau of Labor Statistics (BLS).

Wage Overview for Top Posted Engineering and Design Jobs in Q2 2019

wage Overview for Top Posted Engineering and Design Jobs in Q2 2019						
Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2141	Mechanical Engineers	\$30.19	\$35.71	\$44.41	\$54.97	\$63.80
17-2112	Industrial Engineers	\$30.90	\$36.28	\$44.45	\$53.70	\$61.29
17-2071	Electrical Engineers	\$29.81	\$35.88	\$44.63	\$54.55	\$62.83
17-2072	Electronics Engineers, Except Computer	\$29.96	\$35.65	\$43.70	\$53.59	\$63.74
17-2051	Civil Engineers	\$25.25	\$29.94	\$36.88	\$46.79	\$59.13
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	\$26.76	\$30.62	\$39.60	\$53.00	\$63.81
17-2061	Computer Hardware Engineers	\$20.15	\$28.72	\$43.82	\$56.49	\$65.46
17-2199	Engineers, All Other	\$23.29	\$33.48	\$43.78	\$55.78	\$64.35
17-2081	Environmental Engineers	\$29.28	\$35.40	\$44.51	\$55.87	\$65.37
27-1021	Commercial and Industrial Designers	\$22.32	\$30.43	\$40.64	\$47.06	\$52.29

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Mechanical Engineering
- Electrical Engineering
- Computer-Aided Design
- Systems Engineering
- Product Design

In-Demand Foundational Skills

- Management
- Communications
- Problem Solving
- Leadership
- Operations

In-Demand Education Level*

High School Diploma: 3.7%
Associate Degree: 5.2%
Bachelor's Degree: 65.0%
Master's Degree: 14.6%

*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Certifications

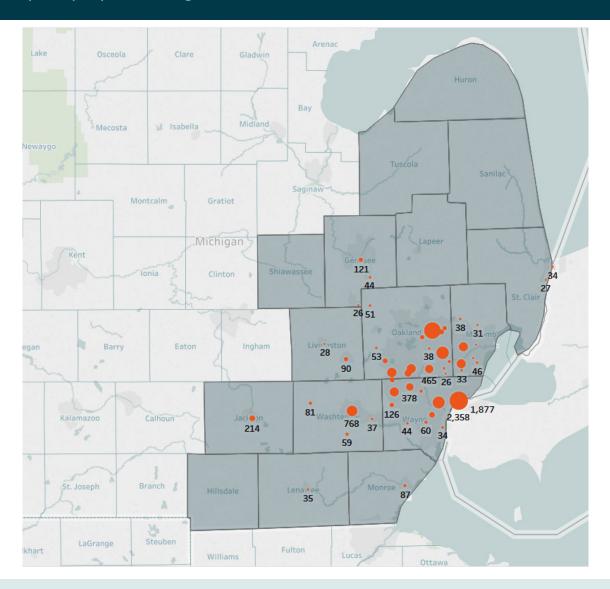
- Professional Engineer
- Six Sigma Green Belt Certification
- Licensed Professional Engineer
- Drug Recognition Expert
- Certified Quality Engineer



Automakers and Manufactures are Top Employers of Engineers



Product Design Knowledge is in High Demand



Top Posting Employers*

- Ford Motor Company
- FCA US LLC
- General Motors Company
- Wilson, Jeff Chrysler Automobiles, Inc
- ALTAIR ENGINEERING, INC.
- Gtech Services, Inc
- Kelly Services, Inc.
- Aerotek, Inc.
- Cybercoders, Inc.
- ZF Inc

Job Postings by City

1. Detroit, MI: 2,358 Postings

2. Auburn Hills, MI: 1,876 Postings

3. Troy, MI: 1,051 Postings

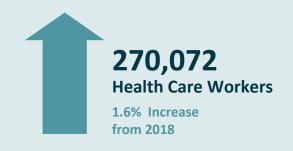
4. Dearborn, MI: 979 Postings

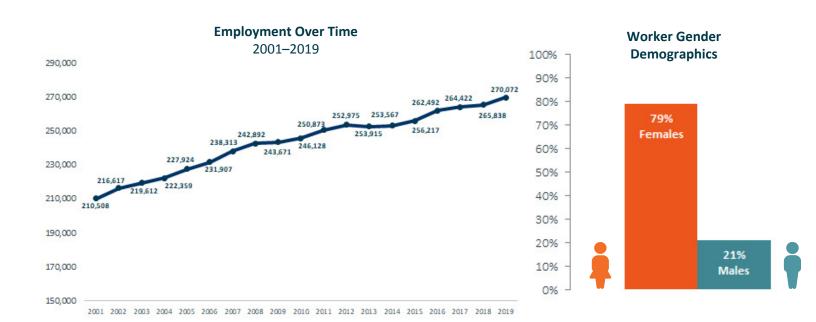
5. Ann Arbor, MI: 768 Postings

^{*}Employer names are listed as they appear in online job postings.

Introduction

WIN's health care occupation group includes jobs related to health care support and practitioners. Employment in this group has been consistently growing, more health care workers needed to care for Michigan's aging population and in response to regulatory and other changes. Registered nurses are routinely the most in-demand job in this group.



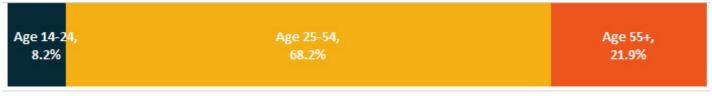


Health Care Worker Demographics

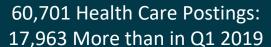
According to the most recent Emsi data set available (2019), the health care occupation group employs around 265,267 workers, who are primarily female (79 percent) and between the ages of 25 and 54 (68 percent), although 22 percent of workers are over 55. The group has a similar proportion of racial minorities as the workforce as a whole, with 70 percent of workers identifying as white, 19 percent identifying as black or African American, and 11 percent identifying otherwise.

Race and Ethnicity Demographics

70.2% White | 18.6% Black or African American | 6.9% Asian





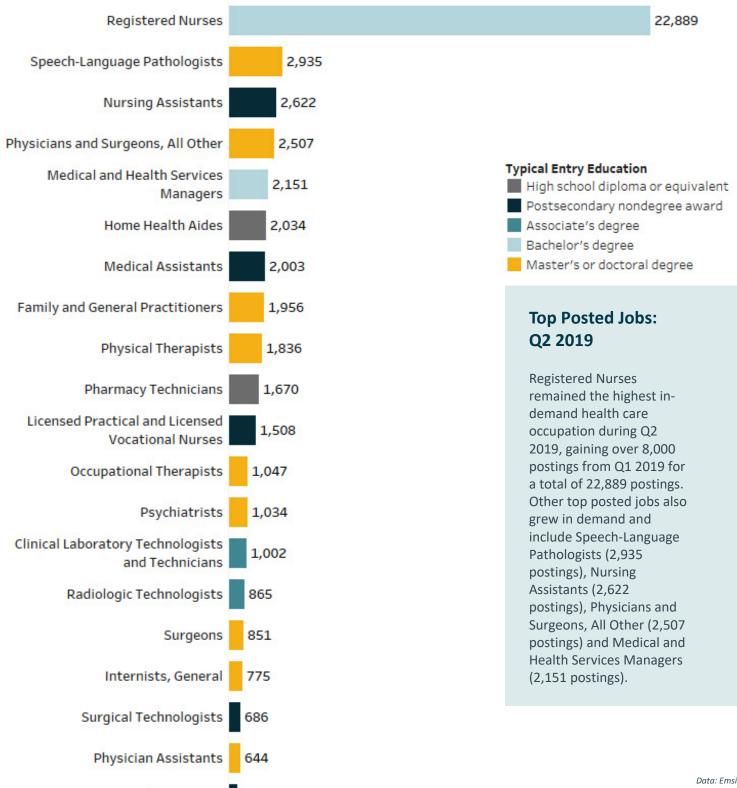


Dental Assistants



Bachelor's Degree Required for High Paying Health Care Jobs

Health Care Top Posted Jobs Q2 2019





High Earning Potential for Medical and Health Services Managers



Licensed Practical Nurse: Most In-Demand Health Care Certification

Health Care Wage Overview

Wages in the high-demand health care field tend to scale with both education and experience. The health care occupation group offers a relatively broad array of entry requirements and a high volume of jobs are open to candidates with less than a bachelor's degree. However, most of the top-posted jobs that require less than a bachelor's degree pay under than the region's median wage of \$17.81 per hour. Registered Nurses, the top posted health care job, offers a median hourly wage of \$35.34 per hour or annual salary of about \$73,500 according to the Bureau of Labor Statistics (BLS).

Wage Overview for Top Posted Health Care Jobs in Q2 2019

Wage Overview for Top Posted Health Care Jobs in Q2 2019							
Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages	
29-1141	Registered Nurses	\$26.72	\$30.57	\$35.34	\$40.16	\$47.04	
29-1127	Speech-Language Pathologists	\$26.50	\$31.70	\$37.60	\$46.99	\$66.01	
31-1014	Nursing Assistants	\$11.38	\$12.88	\$14.49	\$16.65	\$18.75	
29-1069	Physicians and Surgeons, All Other	\$22.85	\$29.70	\$69.97	\$108.33	\$136.79	
11-9111	Medical and Health Services Managers	\$26.58	\$33.47	\$45.68	\$62.03	\$93.46	
31-1011	Home Health Aides	\$9.38	\$9.85	\$11.09	\$13.00	\$15.06	
31-9092	Medical Assistants	\$12.36	\$13.54	\$15.46	\$18.06	\$20.23	
29-1062	Family and General Practitioners	\$41.80	\$57.09	\$87.09	\$103.05	\$162.92	
29-1123	Physical Therapists	\$30.91	\$36.62	\$43.72	\$50.37	\$66.92	
29-2052	Pharmacy Technicians	\$10.48	\$12.42	\$15.56	\$18.97	\$23.15	

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Nursing
- Basic Life Support
- Advanced Cardiovascular Life Support (ACLS)
- Intensive Care Unit
- Nursing Care

In-Demand Foundational Skills

- Management
- Communications
- Leadership
- Research
- Teaching

In-Demand Education Level*

High School Diploma: 14.0%
Associate Degree: 12.2%
Bachelor's Degree: 14.7%
Master's Degree: 6.9%

*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Certifications

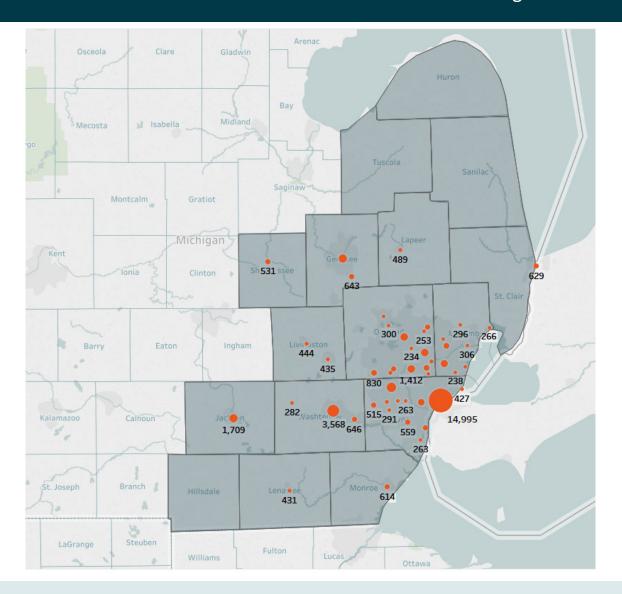
- Licensed Practical Nurse (LPN)
- Certified Nursing Assistant (CNA)
- Nurse Practitioner
- Critical Care Registered Nurse (CCRN)
- Advanced Practice Registered Nurse



Hospitals and Pharmacies were Top Employers of Health Care Workers



Nursing and Management Skills are in High Demand



Top Posting Employers*

- Travelers Healthcare
- General Healthcare Resources, Inc.
- Henry Ford Health System
- Ascension Health
- William Beaumont Hospital
- Mercy Medical Center, Inc.
- Trinity Health Corporation
- Soliant Health, Inc
- Locumtenens.com, LLC
- Tenet Healthcare Corporation

Job Postings by City

- 1. Detroit, MI: 14,995 Postings
- 2. Ann Arbor, MI: 3,568 Postings
- 3. Livonia, MI: 2,282 Postings
- 4. Jackson, MI: 1,709 Postings
- 5. Flint, MI: 1,685 Postings

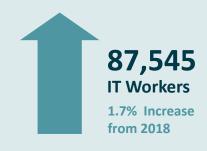
 $[\]hbox{\it *Employer names are listed as they appear in online job postings}.$

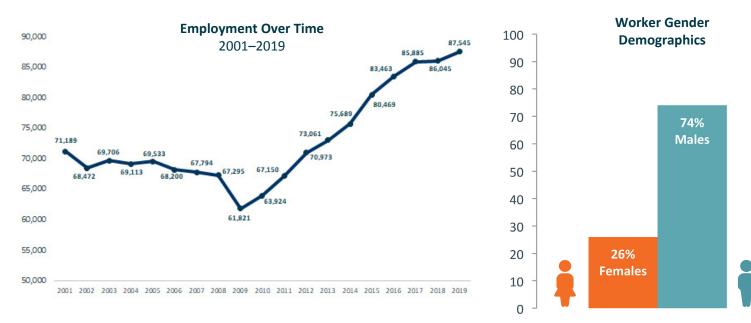


INFORMATION TECHNOLOGY (IT) OCCUPATION GROUP 16-County WIN Region | Q2 2019

Introduction

Information technology (IT) jobs include occupations that are associated with entry-level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services. While the information technology group does not currently employ as many individuals as the other groups here, it is quickly growing.



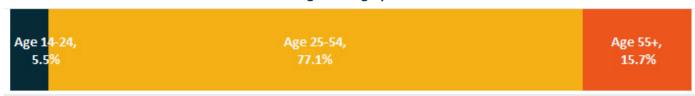


IT Worker Demographics

According to the most recent Emsi data set available (2019), despite having over 87,000 workers, the IT occupation group is not very diverse. A large majority of workers are white males between the ages of 25 and 54. Currently, 74 percent of the workers in IT in southeast Michigan identify as male, and 69 percent identify as white. 77 percent are between 25 and 54. There are a broad range of organizations providing specialized training resources for female and minority IT workers in the City of Detroit as well as throughout southeast Michigan. With the push to diversify the IT field, more opportunities are opening for women and minorities.

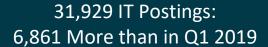
Race and Ethnicity Demographics

68.6% White | 10.0% Black or African American | 17.3% Asian



9,306

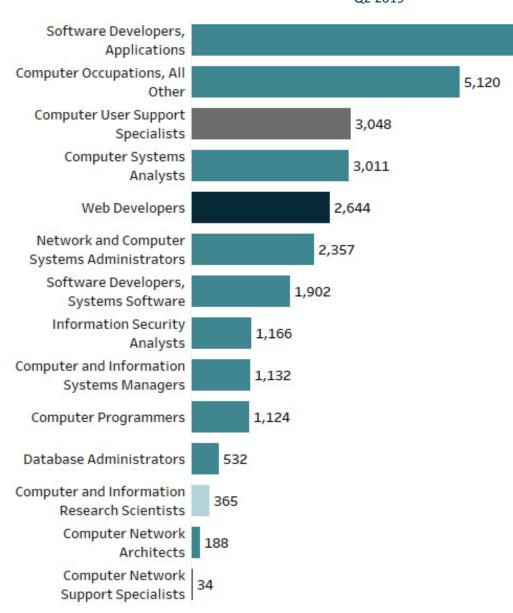






Bachelors Degree Required for Most IT Jobs

Information Technology Top Posted Jobs Q2 2019



Top Posted Jobs: Q2 2019

Typical Entry Education

Associate's degree

Bachelor's degree

Some college, no degree

Master's or doctoral degree

Software Developers, Applications held their spot as the highest in-demand IT occupation during Q2 2019, with 9,306 postings. In addition to representing about 3,000 more postings than during Q1 2019, this pushed the occupation into the top five overall jobs. While most of the top IT jobs typically posted the requirement for a bachelor's degree, one of the top five, Computer User Support Specialists, typically require only an associate degree. Computer Occupations, All Other, Computer Systems Analysts, and Web Developers were also in demand in the region.



High Earning Potential for Computer and Information System Managers



CISSP: Most In-Demand IT Certification

IT Wage Overview

Most IT-related jobs offer high wages providing a lucrative opportunity to job seekers willing to meet the minimum education requirements related to these jobs. Software Developers, Applications, the top posted IT job in Q2 2019, offers a median hourly wage of \$43.66 per hour or nearly \$91,000 per year according to the Bureau of Labor Statistics (BLS). Even occupations requiring shorter-term training, such as Computer User Support Specialists and Web Developers, make over \$20 per hour.

Wage Overview for Top Posted IT Jobs in Q2 2019

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
15-1132	Software Developers, Applications	\$28.02	\$34.49	\$43.66	\$54.54	\$63.25
15-1199	Computer Occupations, All Other	\$19.50	\$26.03	\$36.53	\$48.43	\$60.02
15-1151	Computer User Support Specialists	\$13.13	\$16.74	\$22.62	\$29.50	\$37.58
15-1121	Computer Systems Analysts	\$25.29	\$31.63	\$39.48	\$49.19	\$60.09
15-1134	Web Developers	\$10.60	\$18.69	\$29.20	\$40.24	\$49.32
15-1142	Network and Computer Systems Administrators	\$24.72	\$30.52	\$37.85	\$47.46	\$57.27
15-1133	Software Developers, Systems Software	\$23.32	\$33.52	\$43.19	\$52.85	\$62.79
15-1122	Information Security Analysts	\$28.87	\$34.26	\$44.00	\$56.46	\$65.65
11-3021	Computer and Information Systems Managers	\$38.86	\$49.25	\$62.24	\$77.08	\$96.99
15-1131	Computer Programmers	\$19.91	\$27.66	\$36.40	\$44.95	\$52.69

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- SQL
- Java
- Agile Software Development
- Software Engineering
- Software Development

In-Demand Foundational Skills

- Management
- Communications
- Integration
- Problem Solving
- Operations

In-Demand Education Level*

High School Diploma: 3.8%Associate Degree: 3.5%Bachelor's Degree: 51.0%

Master's Degree: 12.3%

In-Demand Certifications

- Certified Information Systems Security Professional
- Project Management Professional (PMP) Certification
- Certified Information System Auditor (CISA)
- Cisco Certified Network Associate
- Microsoft Certified Systems Engineer

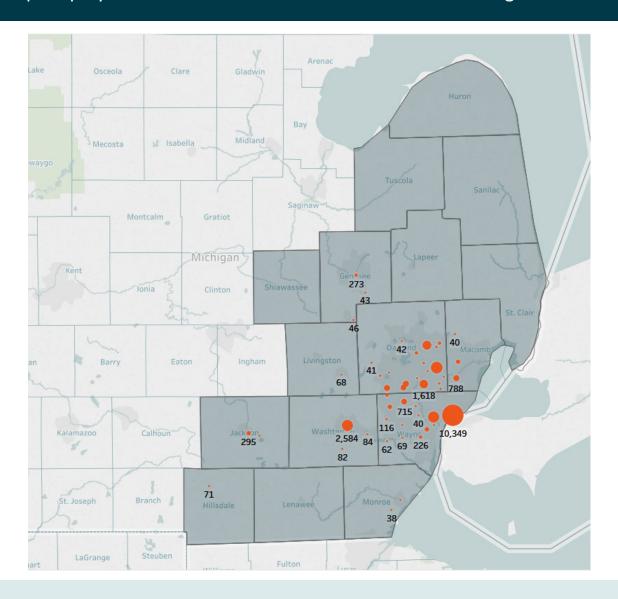
*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent



Automotive and Tech Companies are Top Employers of IT Workers



Programming Language Skills are in High Demand



Top Posting Employers*

- Ford Motor Company
- Oracle Corporation
- Deloitte LLP
- Renature, Inc.
- Teksystems, Inc.
- V2soft Inc.
- Fast Switch, Ltd.
- General Motors Company
- Kelly Services, Inc.
- Anthem, Inc.

*Employer names are listed as they appear in online job postings.

Job Postings by City

1. Detroit, MI: 10,349 Postings

2. Troy, MI: 3,011 Postings

3. Dearborn, MI: 2,733 Postings

4. Ann Arbor, MI: 2,584 Postings

5. Auburn Hills, MI: 1,731 Postings



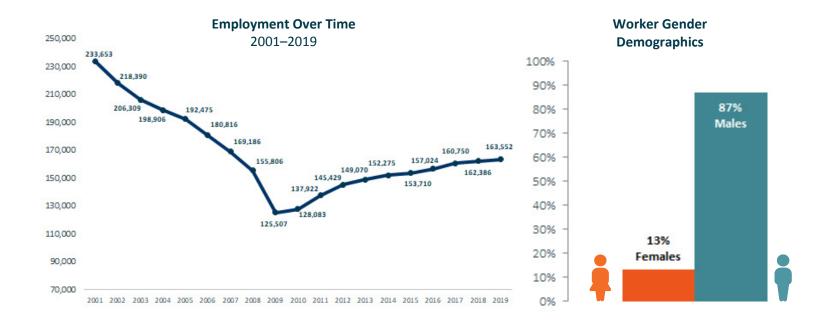
SKILLED TRADES AND TECHNICIANS (MANUFACTURING) OCCUPATION GROUP 16-County WIN Region | Q2 2019

Introduction

WIN's technicians/skilled trades category includes jobs related to advanced manufacturing. Southeast Michigan has more demand for skilled-trades labor, such as CNC machinists and welders, than almost anywhere else in the country.

NOTE: Skilled trades related to construction and assembly are not included in this cluster, as the focus is on advanced manufacturing only.





Skilled Trades and Technicians Worker Demographics

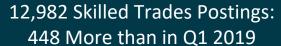
According to the most recent Emsi data set available (2019), the skilled trades occupation group employs about 163,000 workers in southeast Michigan. A majority of skilled trades workers are white males between the ages of 25 and 54. Additional outreach may be necessary in the near future, as at 26.3 percent, the group has a somewhat higher proportion than average of workers over age 55. This proportion is also growing, as the 2019 level is 0.5 percentage points greater than that in 2018.

Race and Ethnicity Demographics

79.1% White | 12.6% Black or African American | 2.9% Asian



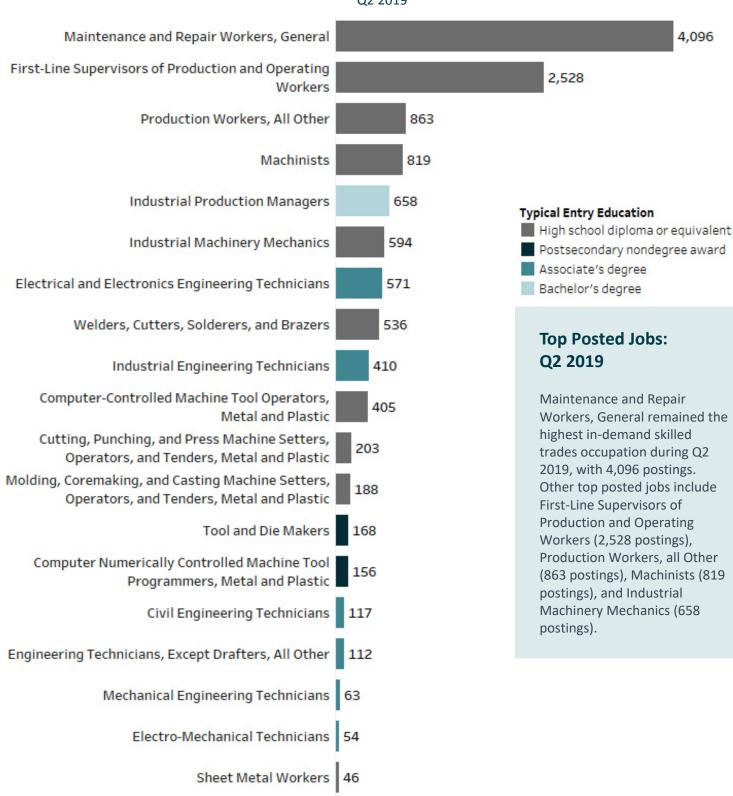






Vocational Training Required for Most Skilled Trades Jobs

Skilled Trades and Technicians Top Posted Jobs Q2 2019



Environmental Engineering Technicians 43



High Earning Potential for Industrial Production Managers



In-Demand Skilled Trades Certification: Operator Certification

Skilled Trades and Technicians Wage Overview

Half of the top ten in-demand skilled trades occupations have median wages above \$20 per hour according to the Bureau of Labor Statistics (BLS), and four more above the state's median wage of \$17.81. Maintenance and Repair Workers, General, the top posted skilled trades job in Q2 2019, offers a median hourly wage of \$17.07. This translates to an annual salary of about \$35,500.

Wage Overview for Top Posted Skilled Trades and Technicians Jobs in Q2 2019

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
49-9071	Maintenance and Repair Workers, General	\$10.47	\$13.02	\$17.07	\$22.84	\$28.75
51-1011	First-Line Supervisors of Production and Operating Workers	\$18.69	\$23.98	\$31.72	\$40.96	\$50.69
51-9199	Production Workers, All Other	\$9.41	\$11.07	\$15.38	\$23.44	\$36.77
51-4041	Machinists	\$11.81	\$15.47	\$19.93	\$25.80	\$30.44
11-3051	Industrial Production Managers	\$35.08	\$44.22	\$56.26	\$70.93	\$87.31
49-9041	Industrial Machinery Mechanics	\$15.67	\$19.74	\$25.29	\$31.04	\$36.80
17-3023	Electrical and Electronics Engineering Technicians	\$16.91	\$22.37	\$30.31	\$35.63	\$40.09
51-4121	Welders, Cutters, Solderers, and Brazers	\$13.16	\$15.62	\$18.79	\$23.35	\$29.08
17-3026	Industrial Engineering Technicians	\$16.89	\$20.91	\$26.67	\$33.86	\$39.89
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$12.36	\$14.69	\$19.16	\$23.80	\$29.20

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- HVAC
- Continuous Improvement Process
- Machining
- Plumbing
- Welding

In-Demand Foundational Skills

- Management
- Operations
- Communications
- Troubleshooting (Problem Solving)
- Valid Driver's License

In-Demand Education Level*

High School Diploma: 36.7%
Associate Degree: 8.3%
Bachelor's Degree: 14.0%
Master's Degree: 1.4%

*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Certifications

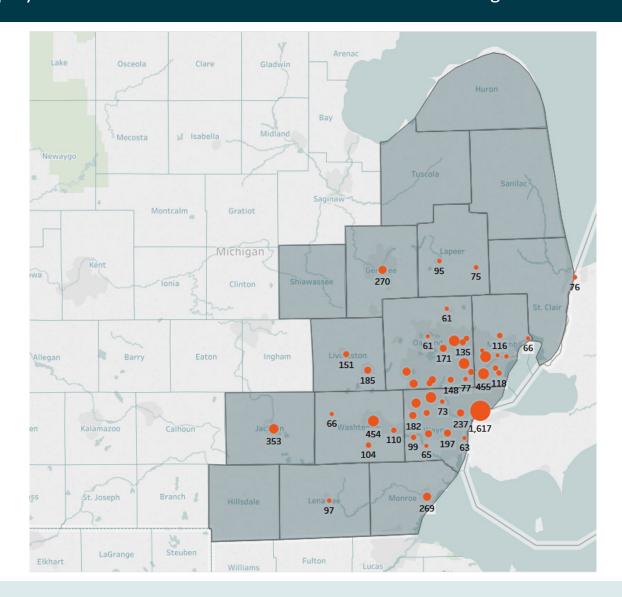
- Commercial Driver's License (CDL)
- Six Sigma Green Belt Certification
- · American Society for Quality (ASQ) Certified
- Certified Quality Engineer
- Operator Certification



Staffing Agencies and Manufacturers: Top Employers of Skilled Trades Workers



HVAC and Management Skills are in High Demand



Top Posting Employers*

- McDonald's Corporation
- Express Services Inc
- Kelly Services, Inc.
- ManpowerGroup Global
- · Aerotek, Inc.
- Nesco Resource
- Sentech Services
- The Home Depot Inc
- The Wendy's Company
- FCA US LLC

*Employer names are listed as they appear in online job postings.

Job Postings by City

1. Detroit, MI: 1,617 Postings

2. Sterling Heights, MI: 455 Postings

3. Warren, MI: 455 Postings

4. Ann Arbor, MI: 454 Postings

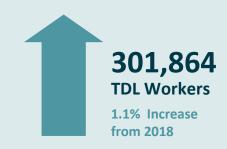
5. Troy, MI: 439 Postings

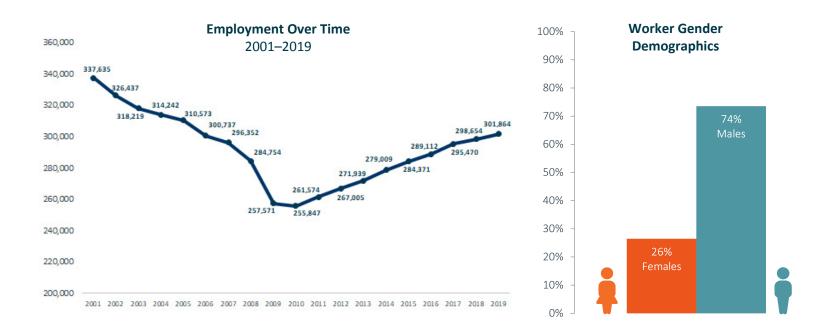


TRANSPORTATION, DISTRIBUTION, AND LOGISTICS (TDL) OCCUPATION GROUP 16-County WIN Region | Q2 2019

Introduction

Transportation, distribution, and logistics (TDL) workers help move materials in an efficient manner, whether it is from one company to another or directly to consumers. Logistics workers range from materials movers to logistics analysts, coordinating and analyzing material and goods movement.



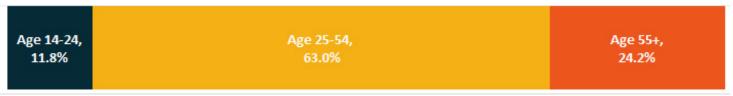


TDL Worker Demographics

According to the most recent Emsi data set available (2019), the TDL occupation group has a large workforce, employing over 300,000 individuals. These workers are 74 percent male and 72 percent white. Only 12 percent of the workers in this occupation group are under the age of 25, indicating an aging TDL workforce.

Race and Ethnicity Demographics

71.9% White | 19.3% Black or African American | 2.4% Asian





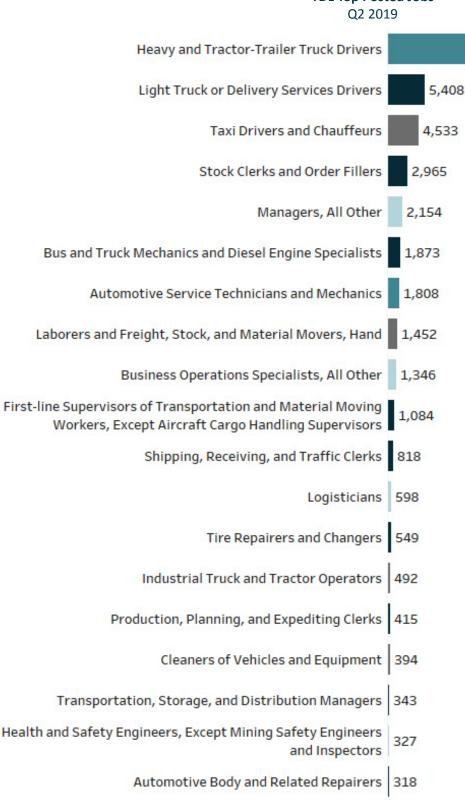
2,828 More than in Q1 2019





Postsecondary Credentials Required for Many TDL Jobs

TDL Top Posted Jobs



Bus Drivers, School or Special Client 271

Typical Entry Education

- No formal educational credential
- High school diploma or equivalent

37,893

- Postsecondary nondegree award
- Bachelor's degree

Top Posted Jobs: Q2 2019

Heavy and Tractor-Trailer Truck Drivers were the highest in-demand TDL occupation during Q2 2019, with 37,893 postings. Other top posted jobs include Light Truck or **Delivery Services Drivers** (5,408 postings), Taxi **Drivers and Chauffeurs** (4,533 postings), Stock Clerks and Order Fillers (2,965 postings), and Managers, All Other (2,154 postings).



High Earning Potential for Managers, All Other



CDL: Most In-Demand TDL Certification

TDL Wage Overview

According to the Bureau of Labor Statistics (BLS), four of the top ten in-demand TDL occupations offer median wages of more than \$20 per hour. Heavy and Tractor-Trailer Truck Drivers, the top posted TDL job in Q2 2019, offers a median hourly wage of \$19.64, or an annual salary of nearly \$41,000. Logistics roles that require additional education, such as Business Operations Specialists, typically offer even higher wages.

Wage Overview for Top Posted TDL Jobs in Q2 2019

	wage Overview for 10p Posted 1DL 10bs iii Q2 2013						
Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages	
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$12.64	\$15.60	\$19.64	\$24.32	\$30.07	
53-3033	Light Truck or Delivery Services Drivers	\$9.68	\$11.15	\$15.71	\$22.81	\$30.38	
53-3041	Taxi Drivers and Chauffeurs	\$5.99	\$9.53	\$10.73	\$12.98	\$16.63	
43-5081	Stock Clerks and Order Fillers	\$9.54	\$10.43	\$12.12	\$15.63	\$19.56	
11-9199	Managers, All Other	\$5.80	\$13.84	\$30.72	\$51.86	\$70.96	
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$14.58	\$18.12	\$22.18	\$26.99	\$31.49	
49-3023	Automotive Service Technicians and Mechanics	\$9.69	\$11.94	\$18.70	\$27.39	\$33.74	
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$9.81	\$11.53	\$14.25	\$17.87	\$21.59	
13-1199	Business Operations Specialists, All Other	\$17.95	\$23.97	\$32.69	\$45.42	\$58.12	
53-1048	First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	\$14.26	\$19.50	\$25.50	\$34.04	\$41.45	

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Warehousing
- Truckload Shipping
- Merchandising
- Mechanics
- Flatbed Truck

In-Demand Foundational Skills

- Valid Driver's License
- Management
- Good Driving Record
- Communications
- Operations

In-Demand Education Level*

High School Diploma: 12.9%Associate Degree: 2.0%

• Bachelor's Degree: 5.7%

• Master's Degree: 1.4%

*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Certifications

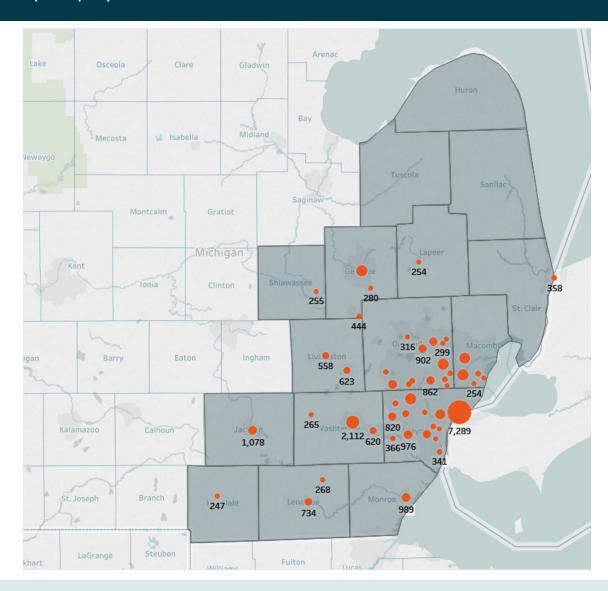
- Commercial Driver's License (CDL)
- Transportation Worker Identification Credential (TWIC) Card
- Certification
- PMI Certified
- Certified Safety Professional
- Six Sigma Green Belt Certification



Rideshare Companies and Trucking Fleets are the Top Employers of TDL Workers



Warehousing and Truckload Shipping Skills are in High Demand



Top Posting Employers*

- Uber Technologies, Inc.
- CRST International, Inc.
- Roadrunner Transportation Systems, Inc.
- Roehl Transport, Inc.
- C.R. England, Inc.
- Hogan Transports Inc
- DHT Incorporated
- U. S. Xpress, Inc.
- Dart Transit Co Inc
- Heartland Express, Inc.

*Employer names are listed as they appear in online job postings.

Job Postings by City

- 1. Detroit, MI: 7,289 Postings
- 2. Ann Arbor, MI: 2,112 Postings
- 3. Livonia, MI: 1,611 Postings
- 4. Flint, MI: 1,593 Postings
- 5. Warren, MI: 1,535 Postings

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