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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 2020 in the 16-county WIN region and includes summative data for April, May, and June of 2020. 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. For more information about jobseeker resources and our partners, please visit www.micareertraining.org.



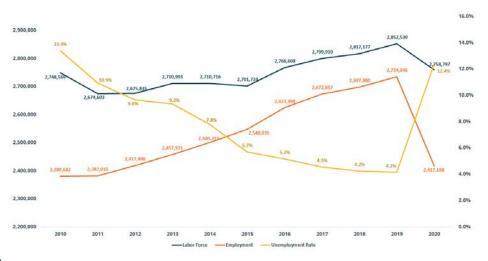
State of the Labor Market in the 16-County WIN Region

During the second quarter of 2020, the labor force and employment figures both fell in southeast Michigan. Major shifts in the labor market due to the COVID-19 crisis are reflected in this quarter's report, and gradual reopening and hiring trend shifts are visible through monthly data. A larger drop in employment than labor force caused the number of unemployed individuals to more than triple in the region, causing the quarterly unemployment rate to rise 17.0 percentage points to 21.2 percent in Q2 2020. Employer demand for each occupation group analyzed by WIN fell during Q2 2020, though some groups declined more than others. Agriculture, Construction, and Health Care postings each dropped by under ten percent. As additional 2020 data becomes available, employer demand will likely show dramatic shifts.

Annual Labor Market Information

The labor force in southeast Michigan continues to decline from its 2019 peak, decreasing by nearly 100,000 individuals between 2019 annual figures and the yearto-date (YTD) levels through June 2020. Employment fell by an even greater amount, reporting over 300,000 fewer workers between 2019 and YTD 2020. The YTD unemployment rate rose to 12.4 percent as of June 2020. However, due to major swings in month-to-month employment levels in 2020, both temporary and permanent, examining data over shorter timeframes may be more instructive as the pandemic response continues to evolve.

Annual Labor Force, Employment, Unemployment Rate 2010–2020



Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Employer Demand Overview

Data from the second quarter of 2020, including posting information from April, May, and June, showed a continued drop in employer demand levels in southeast Michigan due to ripple effects from the COVID-19 pandemic. There were 51,306 fewer postings (16.3 percent) during Q2 2020 than in Q1 2020, and nearly 120,000 fewer than Q2 2019. Monthly demand suggests that levels are stabilizing to suit cautious reopening and slowed hiring, however; the fall in postings occurred between March and April 2020, while May and June represented a modest improvement.

Monthly Posting Analysis, WIN Region Q2 2019-Q2 2020



Data: Emsi | Analysis: Workforce Intelligence Network

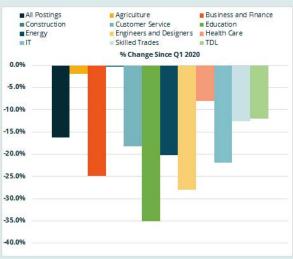
Employer demand sinks to 264,128 jobs posted during Q2 2020, reflecting both an overall pattern of slowing demand and the results of COVID-19 shutdown measures.

During Q2 2020, there were 264,128 job postings, 51,306 fewer (16.3 percent) than the 315,434 postings made during Q1 2020 in the 16-county WIN region. Due to the exceptional demand impacts caused by the pandemic, Q2 2020 demand levels were also 30.9 percent lower than in Q2 2019. Percent decreases in job postings for each occupation group between the first and second quarters of 2020 can be seen to the right, displaying divergences in the way different occupation groups are affected by the COVID-19 pandemic. For more information about quarterly job postings, see page 9.

Health care top-posting occupations shift in demand during Q2 2020, while other groups retain typical hiring patterns despite posting decreases.

While registered nurses retained their usual spot as the top health care occupation, many other occupations varied greatly in demand. While the need for nurses, respiratory specialists, and other COVID response workers expanded, elective procedure limitations and hospital budget decreases slowed demand for other positions. Top jobs typically show little change in order for large occupation groups, but the top 50 health care occupations shifted, on average, three places in demand ranking this quarter. The occupations showing the greatest increases in posting or tank are shown to the right. For more information about health care trends, see page 40.

Posting Trends by Occupation Group Q2 2020

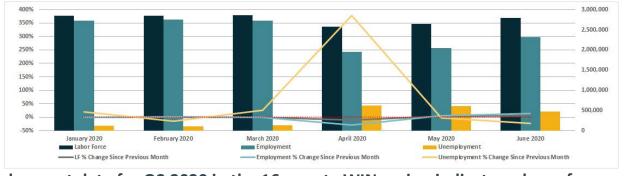


Fastest-Growing Health Care Occupations Q2 2020

Occupation (SOC)	Q2 2020 Unique	Posting Growth	Rank Increase
	Postings	Q1-Q2	Q1 -Q2
Nursing Assistants	2,199	☆10.7%	☆1
Licensed Practical and Licensed Vocational Nurses	1,703	☆24.0%	☆4
Home Health Aides	1,335	☆10.3%	☆1
Respiratory Therapists	1,167	☆61.4%	☆5
Psychiatrists	551	☆10.6%	☆4
Internists, General	434	☆12.7%	☆6
Surgeons	367	☆9.6%	1€5
Emergency Medical Technicians and Paramedics	341	☆1.2%	☆2
Dental Hygienists	230	★46.5%	☆11
Pediatricians, General	190	☆15.9%	☆7

Monthly Labor Market Data

Data: Bureau of Labor Statistics



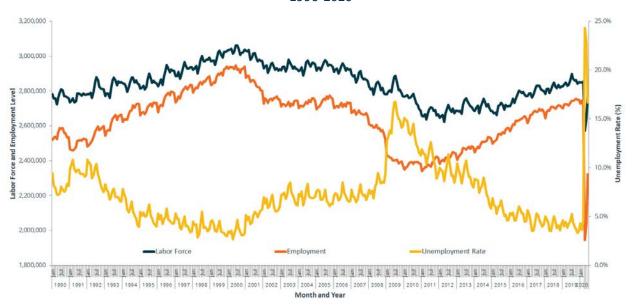
Quarterly employment data for Q2 2020 in the 16-county WIN region indicates a loss of 628,890 jobs, or 23.0 percent, while monthly data indicates some recovery.

Following a strong trend of growth in the labor force both quarterly through 2019 and annually since 2011, as well as consistently falling unemployment, the second quarter of 2020 showed sharp decline in the labor market. During Q2 2020, labor force figures were 6.4 percent smaller (183,317 individuals) than in Q1 2020, and 6.2 percent smaller (175,526 individuals) than in Q2 2019. The decrease in labor force participants was compounded by a 628,890-worker drop in employment and 17.0 percentage point rise in the unemployment rate compared to Q1 2020. Monthly data show that this decline took place almost entirely between March and April 2020. For more information about this year's unemployment rate and other labor market indicators, see page 4.

Labor Force, Employment, and Unemployment

Through the second quarter of 2020, the labor market in southeast Michigan departed dramatically from the relative stability shown each year since 2010. The labor force fell by 183,317 individuals (6.4 percent) between Q1 2020 and Q2 2020 while employment in the 16-county area dropped by 628,890 workers (23.0 percent). With employment decreasing at a faster rate than labor force, the unemployment rate shot up this quarter: the quarterly unemployment rate increased by 17.0 percentage points between Q1 2020 and Q2 2020 to 21.2 percent.

Labor Force, Employment, Unemployment Rate 1990-2020



Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Labor Market Data Q2 2019 - Q2 2020

	2nd Quarter 2019	3rd Quarter 2019	4th Quarter 2019	1st Quarter 2020	2nd Quarter 2020	Change from 1st Quarter 2020	Percent Change from 1st Quarter 2020	Change from 2nd Quarter 2019	Percent Change from 2nd Quarter 2019
Labor Force	2,842,665	2,876,719	2,851,971	2,850,456	2,667,138	-183,317	-6.4%	-175,526	-6.2%
Employment	2,723,564	2,745,813	2,751,261	2,731,643	2,102,752	-628,890	-23.0%	-620,812	-22.8%
Unemployment	119,100	130,906	100,710	118,813	564,386	445,573	375.0%	445,286	373.9%
Unemployment Rate	4.2%	4.6%	3.5%	4.2%	21.2%	17.0%	n/a	17.0%	n/a

Note: Monthly data averaged by quarter | Data: BLS

Annual Labor Market Data 2010 - 2020

	2010 Annual	2011 Annual	2012 Annual	2013 Annual	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual	2019 Annual	2020 YTD	Change from 2019	Percent Change from 2019
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	2,852,530	2,758,797	-93,733	-3.3%
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	2,734,046	2,417,198	-316,849	-11.6%
Unemployment	367,888	292,593	257,935	253,021	210,500	153,690	142,610	127,053	119,297	118,484	341,600	223,115	188.3%
Unemployment Rate	13.4%	10.9%	9.6%	9.3%	7.8%	5.7%	5.2%	4.5%	4.2%	4.2%	12.4%	8.2%	n/a

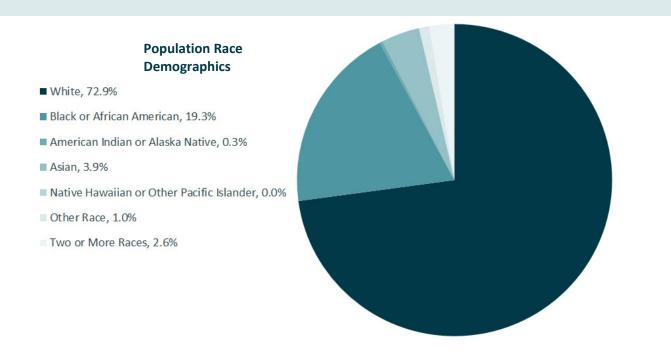
Note: Monthly data averaged by year | Data: BLS

Population Demographics

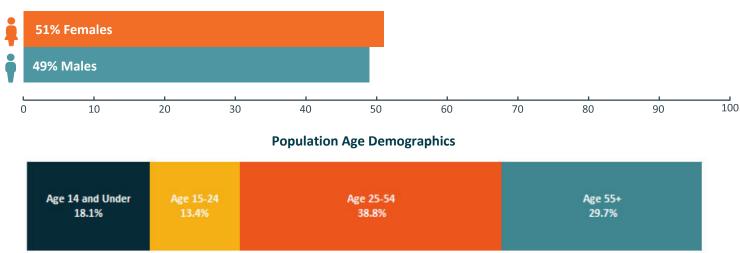
According to data from the most recent Census Bureau 2018 ACS Five Year estimates, the population in southeast Michigan increased by nearly 0.3 percent between 2017 and 2018. During 2018, 5,740,079 people were living in the region. The sex of the populace was split almost evenly, with about 51 percent 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; 29.7 percent of population was over the age of 55, compared to 31.5 percent aged 24 or under.



0.3% Increase from 2017



Population Gender Demographics



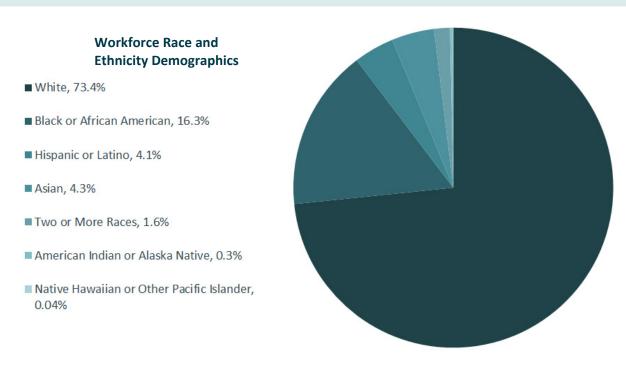
Labor Market Demographics

During 2018, the most recent census year, there were about 2.85 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, or about 2,650,327 individuals (46.2 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 15.0 percent.

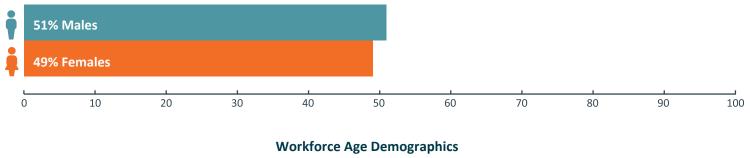
	Civilian Labor Force by Demographic Group									
	Civilian Labor	Total	Total	Unemployment						
Demographic Group	Force	Employment	Unemployment	Rate						
Total Population 16 +	2,848,717	2,650,105	198,612	7.0%						
Sex										
Male 16+	1,489,883	1,382,915	106,968	7.2%						
16-19	62,691	48,704	13,987	22.3%						
20-24	152,604	131,923	20,681	13.6%						
25-54	948,896	890,460	58,436	6.2%						
55-64	252,572	241,437	11,135	4.4%						
65 Plus	73,120	70,391	2,729	3.7%						
Female 16+	1,358,834	1,267,190	91,644	6.7%						
16-19	63,662	51,957	11,705	18.4%						
20-24	146,529	129,901	16,628	11.3%						
25-54	854,968	802,799	52,169	6.1%						
55-64	232,811	223,793	9,018	3.9%						
65 Plus	60,864	58,740	2,124	3.5%						
Race										
White	2,137,524	2,025,722	111,802	5.2%						
Black / African										
American	504,949	429,023	75,926	15.0%						
Native American	8,354	7,622	732	8.8%						
Asian	116,731	111,362	5,370	4.6%						
Native Hawaiian /										
Pacific Islander	906	885	021	2.3%						
Some Other Race	27,086	25,031	2,056	7.6%						
Two or More Races	53,840	48,286	5,554	10.3%						
Ethnicity										
Hispanic	168,259	155,048	13,211	7.9%						

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. In 2019, there were a total of 2,531,090 individuals working in southeast Michigan. A slight majority (51.1 percent or 1,293,170 workers) were male, while 48.9 percent (1,237,919 workers) of the workforce was female. Most of those working in the region were white, accounting for 73.4 percent of the workforce, while African American or black workers accounted for 16.3 percent of the workforce. Those identifying as having a Hispanic or Latino ethnicity accounted for 4.1 percent. Only 13.9 percent of workers were under the age of 25 compared to 22.6 percent over the age of 55, indicating an aging workforce in southeast Michigan.



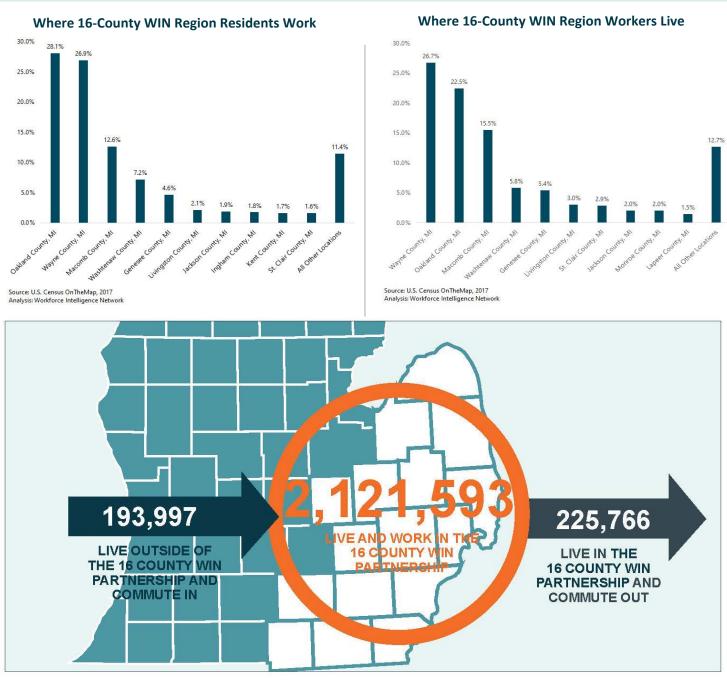






Regional Commuting Patterns

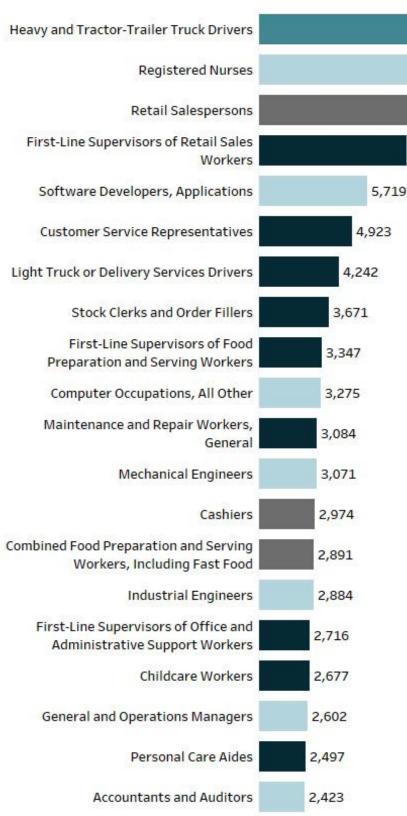
According to the most recent OnTheMap data set available from the Census Bureau, during 2017, the region's workforce consisted of 2,347,359 residents. 2,121,593 (90.4 percent) of the residents lived and worked within the 16-county region, while the remaining 225,766 residents (9.6 percent) traveled outside of the region for work. There were 2,315,590 workers employed in the region during 2015. Of those, 193,997 workers (8.4 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.



Data: U.S. Census OnTheMap, 2017 | Analysis: Workforce Intelligence Network

19,716

Top Posted Jobs Q2 2020



Typical Entry Education

8,122

7,788

- No formal educational credential
 - High school diploma or equivalent

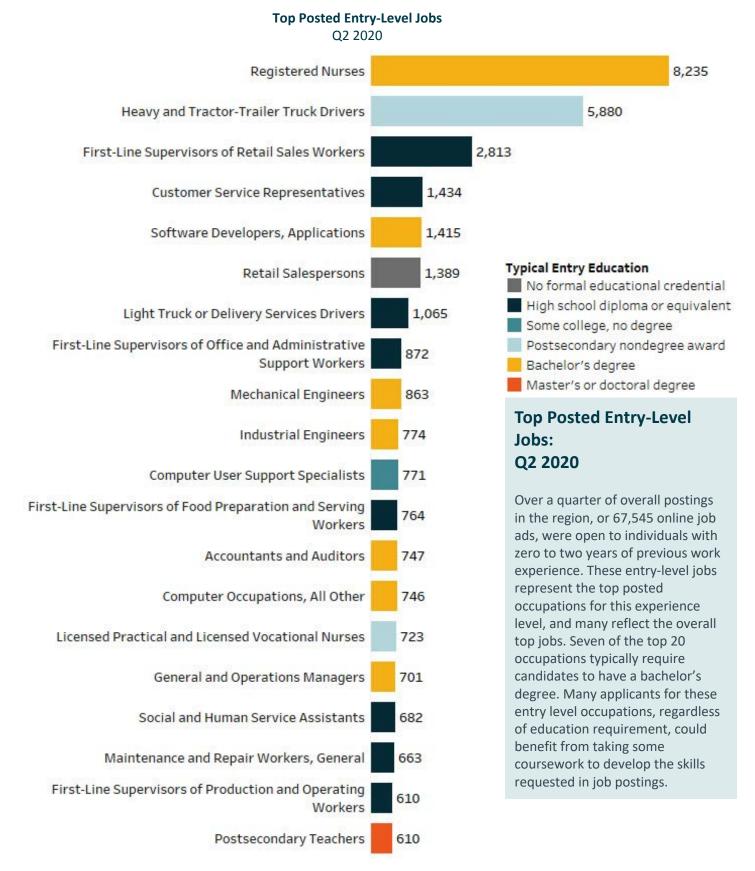
15,266

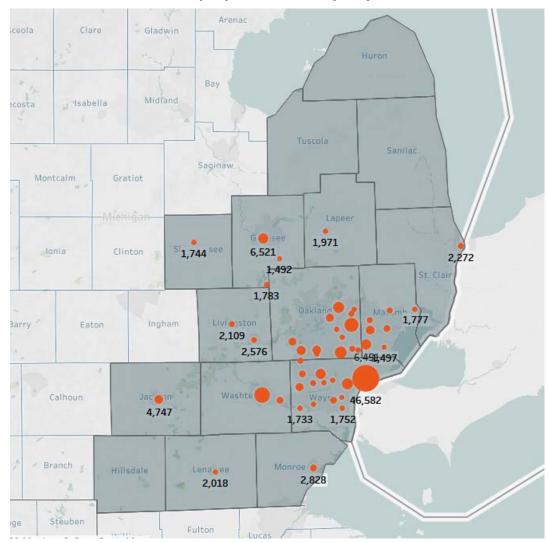
- Postsecondary nondegree award
- Bachelor's degree

Top Posted Jobs: Q2 2020

Despite an ongoing decline in postings, Heavy and Tractor-Trailer Truck Drivers remained the highest in-demand occupation into the second quarter of 2020, with 19,716 online job postings. In part due to increased importance of online commerce, the 13.7 percent decline in postings was lower than the 16.3 percent decline in postings overall. Of the top five overall in-demand occupations, two typically require a bachelor's degree for entry. Registered Nurses (15,266 postings, only a 5.3 percent drop from the previous quarter) and Software Developers, Applications (5,719 postings) also offer higher wages than many top jobs. Customer service occupations retained their places despite slowing retail activity, rounding out the remaining top five posted jobs with Retail Salespersons (8,122 postings) and First-Line Supervisors of Retail Sales Workers (7,788 postings). Customer Service Representatives and Light Truck or Delivery Drivers were also in high demand during Q2 2020.

Data: Emsi | Analysis: Workforce Intelligence Network





Top In-Demand Qualifications

- Commercial Driver's License (CDL)
- Certified Nursing Assistant
- Licensed Practical Nurse
- Hazmat Endorsement
- Automotive Service Excellence (ASE) Certification
- Certified Medical Assistant
- Nurse Practitioner
- Transportation Worker Identification Credential (TWIC) Card
- Certified Pharmacy Technician
- Certified Public Accountant (CPA)

Top In-Demand Skills

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

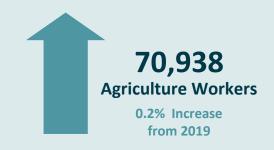
Top Posting Employers*

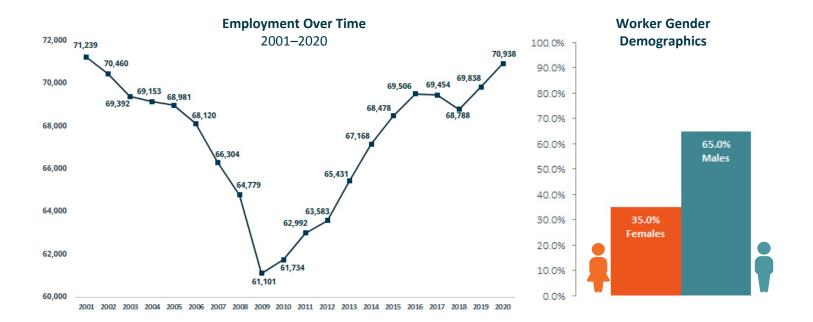
- CRST International, Inc.
- General Healthcare Resources, Inc.
- Henry Ford Health System
- McDonald's Corporation
- University of Michigan
- U.S. Xpress, Inc.
- Trinity Health Corporation
- Soliant Health, Inc.
- C.R. England, Inc.
- The Home Depot

^{*}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. There are approximately 10,700 openings for these positions each year in Southeast Michigan.





Agriculture Worker Demographics

According to the most recent Emsi data set available (2019), the 70,938 workers in agriculture occupations are not very diverse. A large majority of workers are white males between the ages of 25 and 54. Only 35.0 percent of agriculture workers identify as women. Only 14.1 percent of workers were under the age of 25, compared to 22.6 percent of workers are age 55 or older.

Race and Ethnicity Demographics

76.0% White | 12.3% Black or African American | 7.0% Hispanic or Latino

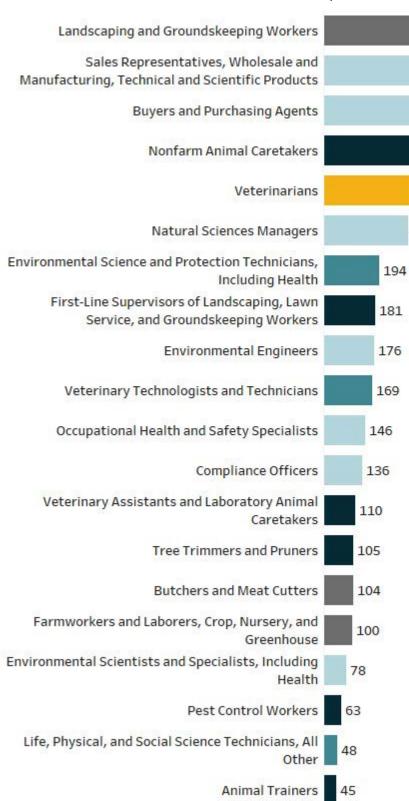
Worker Age Demographics



1,097

AGRICULTURE OCCUPATION GROUP 16-County WIN Region | Q2 2020

Agriculture Top Posted Jobs Q2 2020



Typical Entry Education

591

425

311

295

- No formal educational credential
- High school diploma or equivalent

892

- Associate's degree
- Bachelor's degree
- Master's or doctoral degree

Top Posted Jobs: Q2 2020

Agriculture postings overall declined by 2.0 percent during Q2 2020, one of the smallest drops recorded in all analyzed occupation groups. With 1,097 online job postings, Landscaping and Groundskeeping workers experienced a relatively unique increase of nearly 500 ads and took the top in-demand spot. Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products (892 postings) and Buyers and Purchasing Agents (591 postings) were also in high demand during Q2 2020. Other top posted occupations include Nonfarm Animal Caretakers (425 postings) and Veterinarians (311 postings).

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, Landscaping and Groundskeeping Workers, offers median hourly earnings of \$13.60, which translates to annual earnings of approximately \$28,300. With such a broad array of skillsets represented, Agriculture wages tend to scale with education and experience needs.

Wage Overview for Top Posted Agriculture Jobs in Q2 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
53-7062	Landscaping and Groundskeeping Workers	\$10.06	\$11.39	\$13.60	\$16.25	\$19.60
53-7072	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$22.97	\$28.37	\$37.91	\$54.34	\$71.74
13-1028	Buyers and Purchasing Agents	\$19.95	\$25.29	\$33.25	\$43.56	\$54.85
53-7063	Nonfarm Animal Caretakers	\$9.36	\$9.89	\$10.79	\$11.98	\$13.57
53-7072	Veterinarians	\$29.95	\$33.60	\$39.56	\$52.72	\$91.15
53-7063	Natural Sciences Managers	\$34.26	\$40.84	\$50.21	\$64.86	\$81.64
13-1031	Environmental Science and Protection Technicians, Including Health	\$14.57	\$16.71	\$22.19	\$28.45	\$33.37
13-1031	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	\$15.13	\$17.51	\$21.52	\$27.38	\$32.63
13-1031	Environmental Engineers	\$29.35	\$35.47	\$44.62	\$56.00	\$65.50
53-7072	Veterinary Technologists and Technicians	\$12.92	\$14.97	\$17.23	\$19.82	\$22.61

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Landscaping
- Purchasing
- Mowing
- Selling Techniques
- Trimming

In-Demand Education Level*

High School Diploma: 16.6%
Associate Degree: 5.0%
Bachelor's Degree: 28.2%
Master's Degree: 5.6%

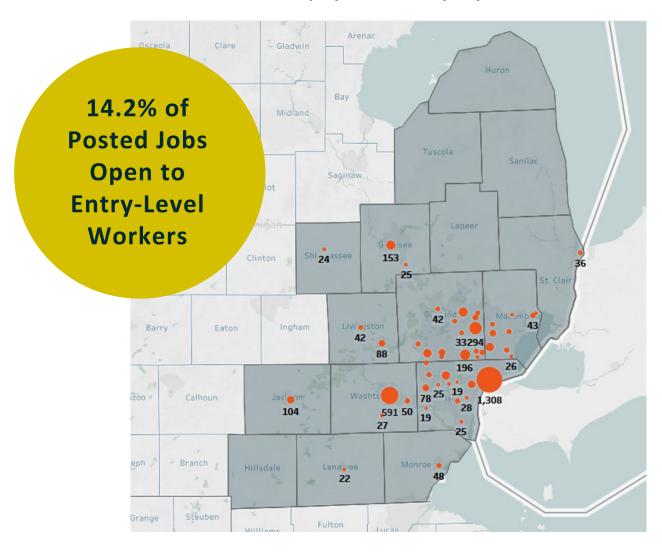
*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Foundational Skills

- Communications
- Management
- Sales
- Leadership
- Valid Driver's License

In-Demand Qualifications

- Commercial Driver's License (CDL)
- Certified Veterinary Technician
- Pesticide Applicator License
- Tanker Endorsement
- Certified Arborist



Top Posting Employers*

- Banfield Pet Hospital
- Petsmart, Inc.
- The Davey Tree Expert Company
- Oracle Corporation
- University of Michigan
- Petco Inc
- Care.com, Inc.
- Kelly Services, Inc.
- VCA Inc.
- Bluepearl LLC

Job Postings by City

1. Detroit: 1,308 Postings

2. Ann Arbor: 591 Postings

3 T---- 304 B--+i----

3. Troy: 294 Postings

4. Southfield: 196 Postings

5. Auburn Hills: 158 Postings

6. Flint: 153 Postings

7. Novi: 132 Postings

8. Warren: 132 Postings

9. Livonia: 125 Postings

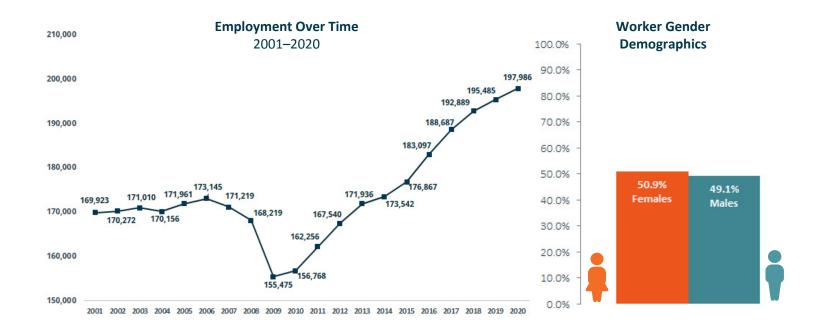
10. Dearborn: 104 Postings

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

Introduction

Jobs in the business and finance occupation group can be found in nearly every type of establishment 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 the region, with 29,358 online postings reported for Q4 2019.





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 nearly 198,000 workers. Half the working population identify as female (50.9 percent), but 79.9 percent of workers identified as white, indicating much less diversity with respect to race than to gender. Only 5.2 percent of the working population in business and finance is under the age of 25, compared to 24.6 percent age 55 and older. In some ways this indicates an aging business and finance workforce, though it also reflects the consistent need for a bachelor's degree in these occupations.

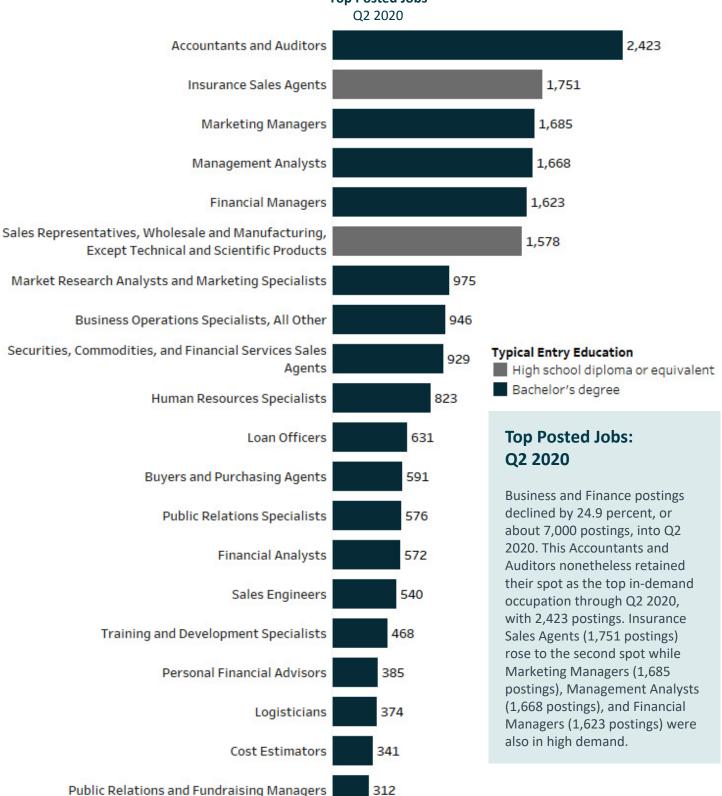
Race and Ethnicity Demographics

79.9% White | 11.3% Black or African American | 4.4% Asian

Worker Age Demographics



Business and Finance Top Posted Jobs



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, Accountants and Auditors, offers median hourly wages of \$33.29, translating to annual earnings of approximately \$69,200. 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 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
13-2011	Accountants and Auditors	\$21.29	\$26.01	\$33.29	\$43.63	\$58.37
53-7061	Insurance Sales Agents	\$14.37	\$18.94	\$25.72	\$38.45	\$60.23
53-7063	Marketing Managers	\$38.54	\$48.21	\$63.26	\$80.57	\$122.87
53-7063	Management Analysts	\$24.96	\$30.95	\$40.47	\$54.58	\$75.00
13-1031	Financial Managers	\$36.41	\$45.26	\$59.57	\$77.00	\$111.02
53-7072	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$15.95	\$22.15	\$33.04	\$48.66	\$63.20
53-7063	Market Research Analysts and Marketing Specialists	\$16.91	\$23.66	\$32.34	\$45.20	\$58.41
13-1011	Business Operations Specialists, All Other	\$18.06	\$24.04	\$32.71	\$45.36	\$57.91
53-7072	Securities, Commodities, and Financial Services Sales Agents	\$14.01	\$17.02	\$24.47	\$42.88	\$85.55
53-7061	Human Resources Specialists	\$17.54	\$22.23	\$29.27	\$38.32	\$49.14

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Accounting
- Auditing
- Selling Techniques
- Financial Statements
- Forecasting

In-Demand Education Level*

High School Diploma: 14.0%Associate Degree: 5.6%Bachelor's Degree: 53.0%

• Master's Degree: 13.5%

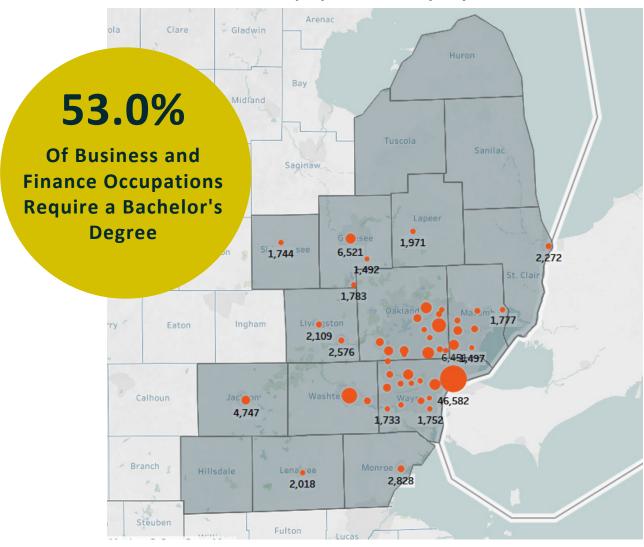
*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Foundational Skills

- Communications
- Sales
- Management
- Leadership
- Customer Service

In-Demand Certifications

- Certified Public Accountant
- Series 7 General Securities Representative License (Stockbroker)
- Certified Internal Auditor
- Certified Financial Planner
- Series 6 Investment Company and Variable Contracts License (Mutual Funds/Variable Annuities)



Top Posting Employers*

- Robert Half International Inc.
- Deloitte LLP
- Flagstar Bancorp, Inc.
- Kelly Services, Inc.
- Oracle Corporation
- National Agents Alliance
- Independent Insurance Agents
- Huntington Bancshares Incorporated
- Growing People and Companies
- Comerica Incorporated

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

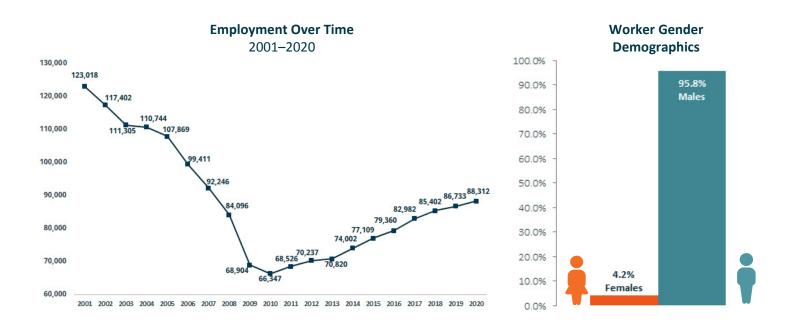
Job Postings by City

- 1. Detroit: 5,387 Postings
- 2. Troy: 1,883 Postings
- 3. Ann Arbor: 1,489 Postings
- 4. Southfield: 1,258 Postings
- 5. Auburn Hills: 819 Postings
- 6. Dearborn: 741 Postings
- 7. Novi: 565 Postings
- 8. Livonia: 560 Postings
- 9. Farmington Hills: 444 Postings
- 10. Warren: 390 Postings

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, with about 14,000 annual job openings 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 over 88,000 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 4.2 percent of workers identified as female, and only 16 percent identified as race other than white. With just over ten percent of workers under the age of 25, this group has a slightly greater proportion of young workers than other groups.

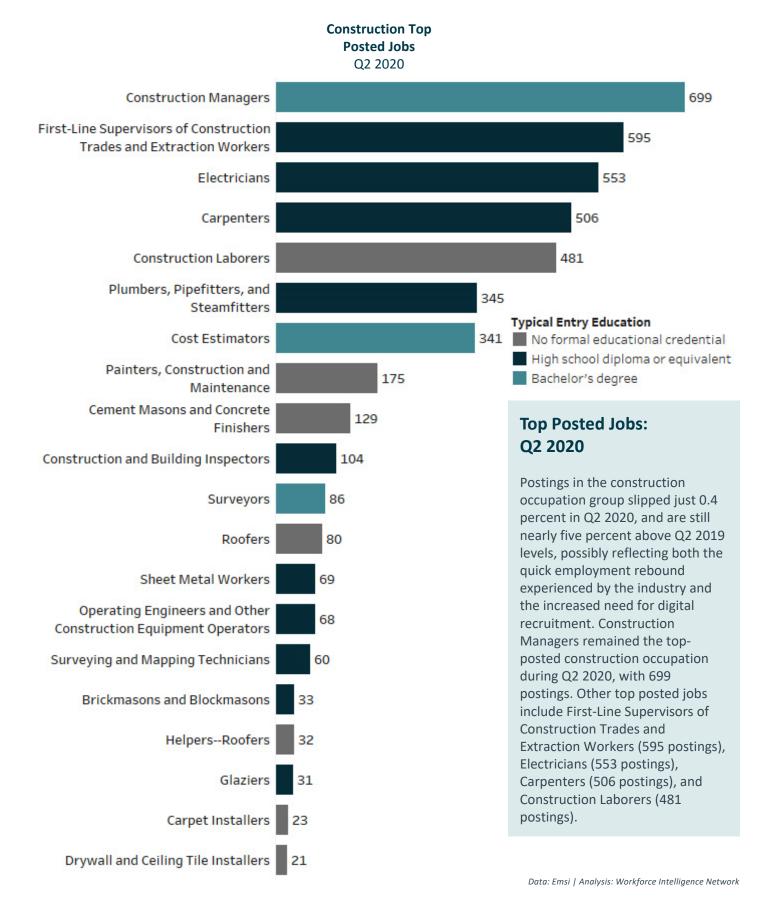
Race and Ethnicity Demographics

83.5% White | 7.1% Black or African American | 6.9% Hispanic or Latino

Worker Age Demographics



CONSTRUCTION OCCUPATION GROUP 16-County WIN Region | Q2 2020



Construction Wage Overview

The top posted construction job, Construction Managers, offers a median wage of \$47.23 per hour or \$98,200 per year. According to the Bureau of Labor Statistics (BLS), those working in apprentice-able occupations can also anticipate high wage potential, such as Plumbers, Pipefitters, and Steamfitters, which report a median wage of \$34.03 per hour or \$70,800 annually.

Wage Overview for Top Posted Construction Jobs in Q2 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
13-1031	Construction Managers	\$28.66	\$36.42	\$47.23	\$61.37	\$77.32
13-1031	First-Line Supervisors of Construction Trades and Extraction Workers	\$19.20	\$26.02	\$32.93	\$43.21	\$51.41
13-1031	Electricians	\$15.60	\$21.05	\$31.51	\$37.56	\$43.27
13-1028	Carpenters	\$14.02	\$18.01	\$25.04	\$32.36	\$37.88
13-1031	Construction Laborers	\$12.38	\$14.83	\$19.12	\$24.65	\$29.62
53-7071	Plumbers, Pipefitters, and Steamfitters	\$16.08	\$26.48	\$34.03	\$38.02	\$40.97
13-1031	Cost Estimators	\$16.48	\$21.81	\$30.09	\$41.38	\$50.27
53-7071	Painters, Construction and Maintenance	\$13.15	\$15.79	\$20.59	\$26.95	\$31.22
13-1028	Cement Masons and Concrete Finishers	\$14.67	\$18.03	\$22.80	\$29.32	\$36.37
13-1031	Construction and Building Inspectors	\$13.01	\$19.02	\$27.21	\$32.78	\$37.78

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Carpentry
- Subcontracting
- Artisan
- Construction Management
- Plumbing

In-Demand Education Level*

High School Diploma: 19.5%
Associate Degree: 4.1%
Bachelor's Degree: 14.8%
Master's Degree: 1.1%

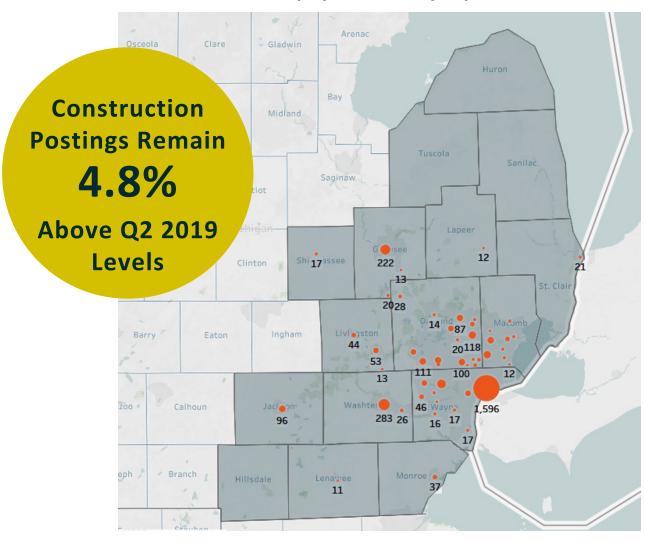
*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Foundational Skills

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

In-Demand Certifications

- Commercial Driver's License (CDL)
- Journeyman Electrician
- Project Management Professional (PMP)
 Certification
- National Apprenticeship Certificate
- LEED Accredited Professional (AP)



Top Posting Employers*

- Growing People and Companies
- Michael Page International, Inc.
- Thumbtack, Inc.
- Tradesmen International, LLC
- Army National Guard
- Concrete Placement, Inc.
- Contractor
- Aerotek, Inc.
- Advance Employment Services, Inc.
- Ram Construction Services of Michigan, Inc.

Job Postings by City

1. Detroit: 1,596 Postings

2. Ann Arbor: 283 Postings

3. Flint: 222 Postings

4. Livonia: 173 Postings

5. Warren: 121 Postings

6. Troy: 118 Postings

7. Novi: 111 Postings

8. Southfield: 100 Postings

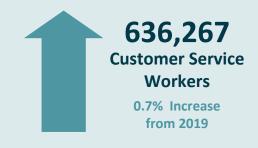
9. Jackson: 96 Postings

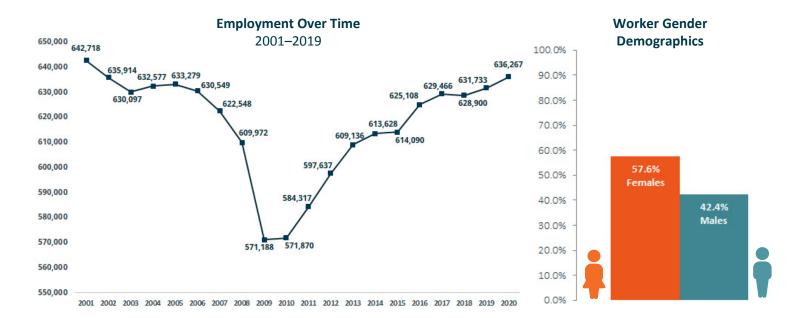
10. Sterling Heights: 96 Postings

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

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 very important to the region because it is often a leading indicator, being the first to grow when the economy expands and the first to contract in a downturn. 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.





Customer Service Worker Demographics

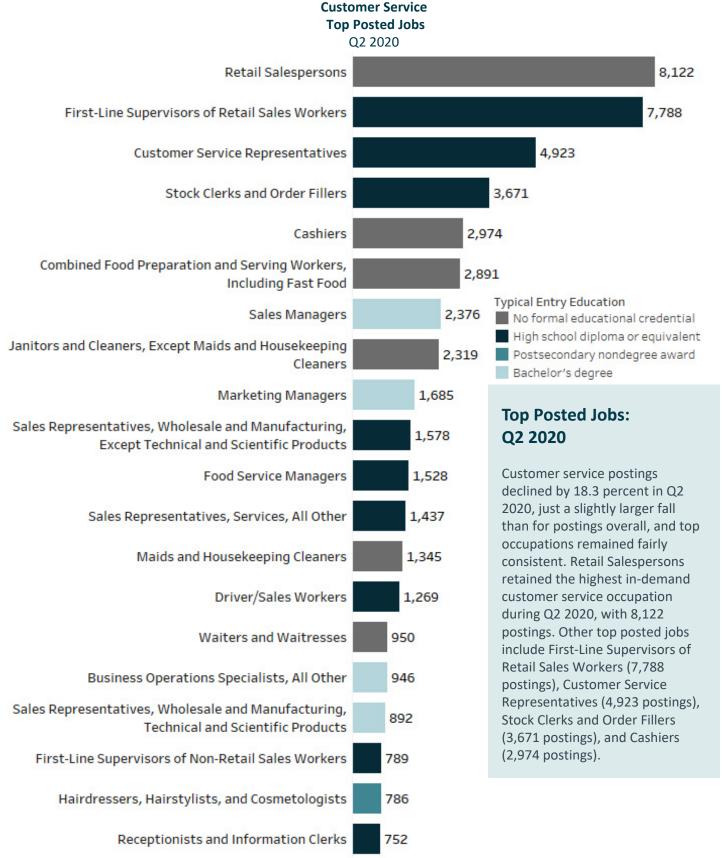
According to the most recent Emsi data set available (2019), having nearly 636,000 workers, the customer service occupation group is more diverse than other occupation groups. During 2020, 57.6 percent of workers identified as female. 28 percent of workers in customer service identified as a racial minority. A quarter of the customer service workers (25.8 percent) were under the age of 24, a much higher percentage than in other occupation groups analyzed by WIN.

Race and Ethnicity Demographics

71.9% White | 17.9% Black or African American | 4.6% Hispanic or Latino

Worker Age Demographics





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, four of the top ten posted occupations report median wages over the state's median wage of \$18.60 per hour, many of which are management roles requiring both education and experience. First-Line Supervisors of Retail Sales Workers earn a median hourly wage of \$18.94 or an annual salary of about \$39,400, and is a position open to top-posted job Retail Salespersons with interest in gaining additional experience and training.

Wage Overview for Top Posted Customer Service Jobs in Q2 2020

Q								
Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages		
53-7072	Retail Salespersons	\$9.35	\$9.91	\$11.30	\$14.08	\$19.33		
13-1031	First-Line Supervisors of Retail Sales Workers	\$12.02	\$14.56	\$18.94	\$25.73	\$35.51		
13-1031	Customer Service Representatives	\$10.23	\$12.62	\$16.15	\$20.99	\$28.12		
53-7072	Stock Clerks and Order Fillers	\$9.55	\$10.44	\$12.12	\$15.62	\$19.54		
13-1028	Cashiers	\$9.36	\$9.64	\$10.43	\$11.93	\$14.62		
13-1031	Combined Food Preparation and Serving Workers, Including Fast Food	\$9.32	\$9.54	\$9.90	\$11.08	\$12.34		
53-7072	Sales Managers	\$35.39	\$49.04	\$65.05	\$81.48	\$122.99		
53-7061	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$9.51	\$10.20	\$11.84	\$15.14	\$18.93		
53-7063	Marketing Managers	\$38.54	\$48.21	\$63.26	\$80.57	\$122.87		
53-7072	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$15.95	\$22.15	\$33.04	\$48.66	\$63.20		

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

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

In-Demand Education Level*

High School Diploma: 33.9%
Associate Degree: 4.4%
Bachelor's Degree: 15.0%
Master's Degree: 2.3%

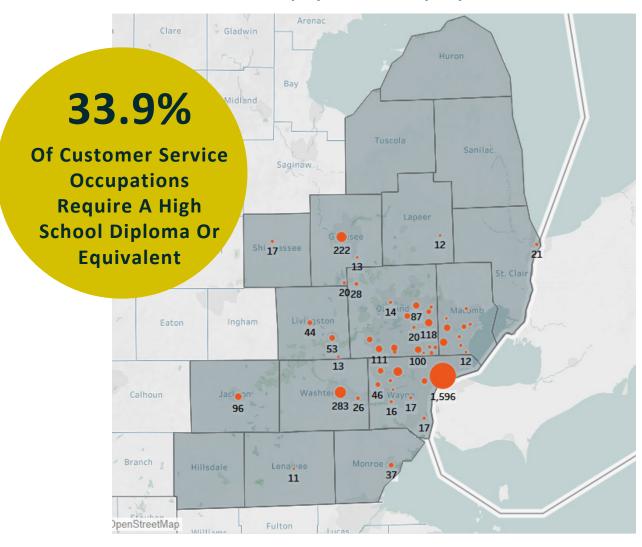
*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Foundational Skills

- Sales
- Customer Service
- Management
- Communications
- Leadership

In-Demand Certifications

- Automotive Service Excellence (ASE) Certification
- Commercial Driver's License (CDL)
- Food Handler's Card
- Certified Medical Assistant
- Cosmetology License



Top Posting Employers*

- Dollar General Corporation
- The Home Depot
- AutoZone, Inc.
- Wal-Mart, Inc.
- McDonald's Corporation
- The Kroger Co
- CVS Health Corporation
- Amazon.com, Inc.
- Taco Bell Corp
- Lowe's Companies, Inc.

Job Postings by City

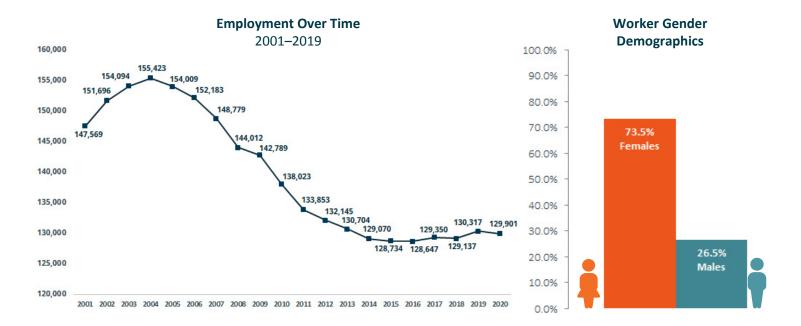
- 1. Detroit: 6,898 Postings
- 2. Ann Arbor: 2,691 Postings
- 3. Troy: 2,678 Postings
- 4. Livonia: 1,450 Postings
- 5. Novi: 1,444 Postings
- 6. Southfield: 1,415 Postings
- 7. Flint: 1,358 Postings
- 8. Canton: 1,233 Postings
- 9. Auburn Hills: 1,183 Postings
- 10. Dearborn: 1,115 Postings

^{*}Employer names are listed as they appear in online job 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, and there are about 15,000 openings for these positions annually. 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.

129,901 Education Workers 416 Worker Decrease from 2019



Education Worker Demographics

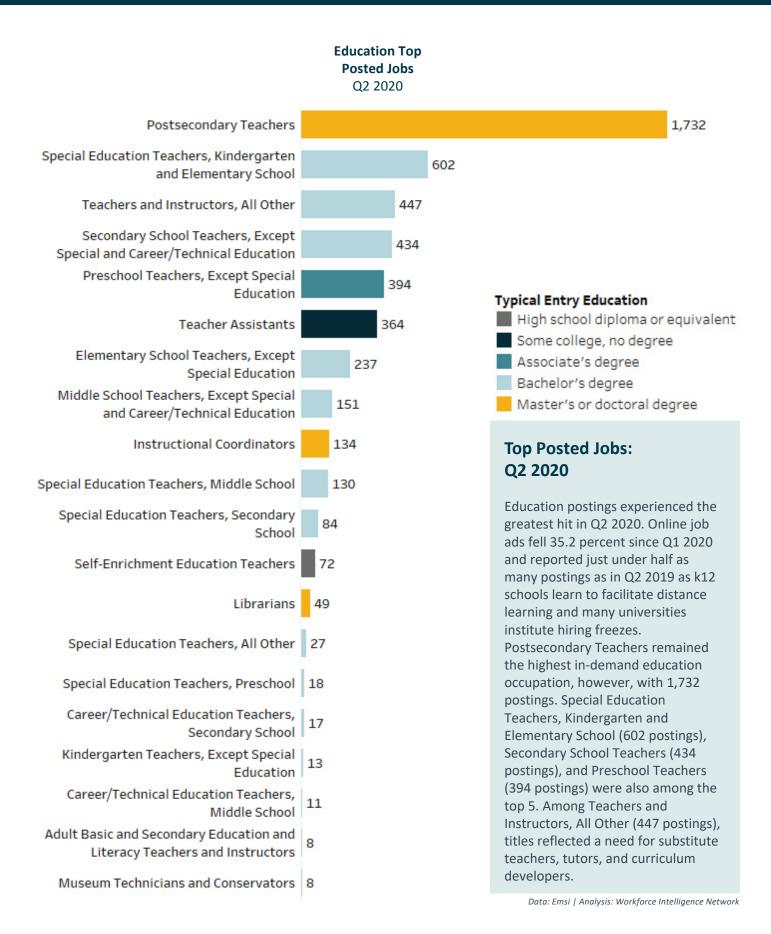
According to the most recent Emsi data set available (2019), among its 130,000 workers, the education occupation group is composed primarily of white females between the ages of 25 and 54. Only 26.5 percent of workers are males, and only 19.9 percent of workers identify as a racial minority.

Race and Ethnicity Demographics

80.1% White | 10.9% Black or African-American | 4.6% Asian

Worker Age Demographics





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 \$32.07 hourly, translating to annual earnings of about \$66,700.

Wage Overview for Top Posted Education Jobs in Q2 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
53-7071	Postsecondary Teachers	\$12.84	\$18.46	\$32.07	\$51.90	\$78.36
53-7072	Special Education Teachers, Kindergarten and Elementary School	\$19.89	\$25.03	\$32.41	\$40.13	\$47.05
53-7072	Teacher Assistants	\$9.56	\$10.63	\$12.71	\$14.99	\$17.84
53-7072	Teachers and Instructors, All Other	\$10.13	\$12.14	\$18.69	\$28.60	\$38.64
53-7072	Secondary School Teachers, Except Special and Career/Technical Education	\$19.06	\$23.36	\$31.51	\$38.98	\$45.87
53-7071	Preschool Teachers, Except Special Education	\$9.87	\$11.51	\$15.28	\$21.48	\$27.65
13-1031	Elementary School Teachers, Except Special Education	\$18.47	\$23.12	\$32.38	\$41.57	\$50.00
53-7063	Middle School Teachers, Except Special and Career/Technical Education	\$17.26	\$22.17	\$31.48	\$38.17	\$44.92
53-7072	Special Education Teachers, Middle School	\$18.74	\$22.48	\$29.70	\$36.17	\$40.22
53-7061	Instructional Coordinators	\$16.93	\$21.69	\$31.05	\$39.28	\$48.17

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Special Education
- Lesson Planning
- Child Development
- Individualized Education Programs (IEP)
- Cardiopulmonary Resuscitation (CPR)

In-Demand Education Level*

High School Diploma: 15.9%
Associate Degree: 8.9%
Bachelor's Degree: 32.2%
Master's Degree: 15.6%

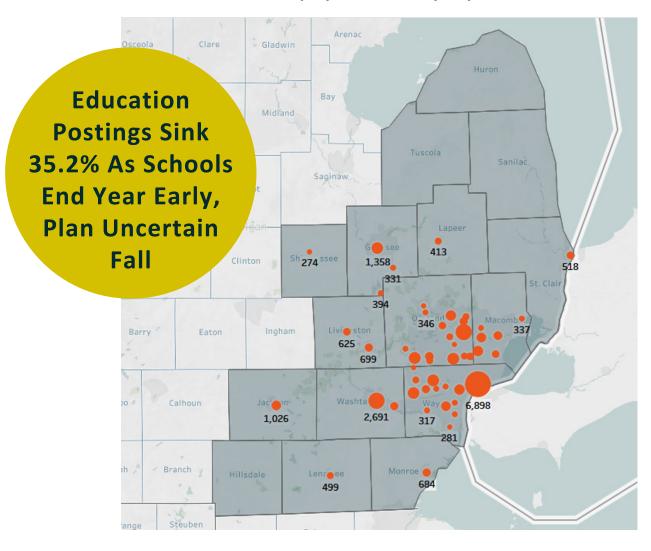
*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Foundational Skills

- Teaching
- Communications
- Research
- Leadership
- Mathematics

In-Demand Certifications

- NHA Certified
- Teaching English As A Foreign Language
- Certificate In English Language Teaching To Adults (CELTA)
- Alternative Teacher Certification
- Math Endorsement



Top Posting Employers*

- Soliant Health, Inc.
- C.R. England, Inc.
- University of Michigan
- Sunbelt Staffing, LLC
- Wayne RESA
- Oakland University
- KinderCare Learning Centers
- National Heritage Academies, Inc.
- Learning Care Group, Inc.
- Charles Stewart Mott College Community

Job Postings by City

1. Detroit: 853 Postings

2. Ann Arbor: 439 Postings

3. Flint: 256 Postings

4. Troy: 186 Postings

5. Dearborn: 154 Postings

6. Rochester: 151 Postings

7. Wayne: 135 Postings

8. Warren: 125 Postings

9. Southfield: 121 Postings

10. Ypsilanti: 109 Postings

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

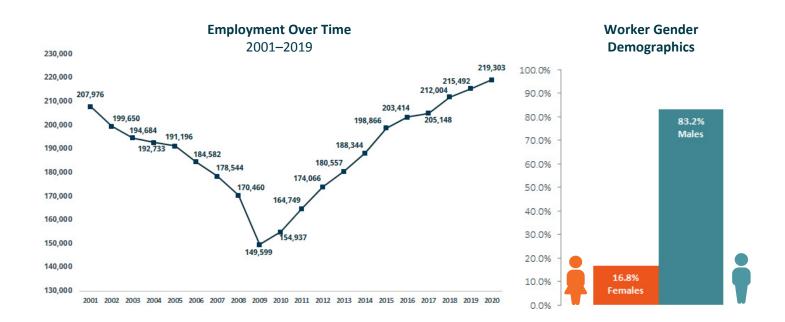
Introduction

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. Posting data referenced in this section pertain only to job postings from energy-related businesses, while employment and wage data apply for these workers in every industry.



219,303 Energy Workers

1.8% Increase from 2019



Energy Worker Demographics

According to the most recent Emsi data set available (2019), The over 219,000 workers in the energy occupation group are primarily white males between the ages of 25 and 54, with 16.8 percent of workers identifying as female and just 20.9 percent identifying as a racial minority. Only 5.4 percent of the workers in the occupation group are under the age of 25 compared to 24.3 percent over 55, indicating that the energy field faces a particular threat from the region's aging workforce.

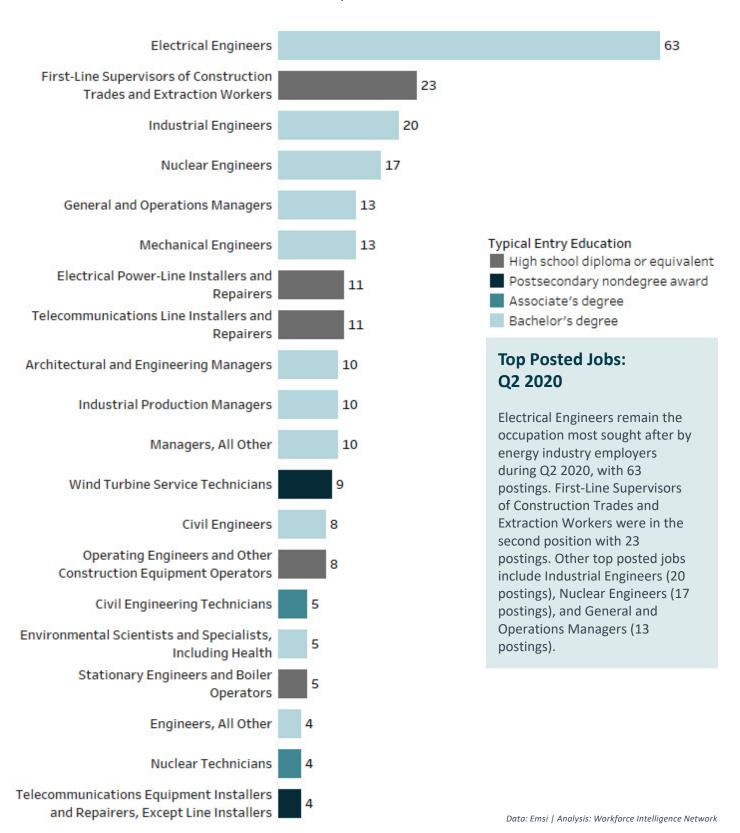
Race and Ethnicity Demographics

79.1% White | 9.8% Black or African American | 6.4% Asian

Worker Age Demographics



Energy Top Posted Jobs Q2 2020



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. Each 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 \$44.64, 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 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
13-1031	Electrical Engineers	\$29.87	\$35.92	\$44.64	\$54.53	\$62.78
13-1031	First-Line Supervisors of Construction Trades and Extraction Workers	\$19.20	\$26.02	\$32.93	\$43.21	\$51.41
53-7061	Industrial Engineers	\$30.91	\$36.28	\$44.44	\$53.69	\$61.27
53-7063	Nuclear Engineers	\$36.95	\$42.98	\$49.04	\$55.95	\$61.86
53-7061	General and Operations Managers	\$21.78	\$33.71	\$52.86	\$82.24	\$115.87
53-7063	Mechanical Engineers	\$30.21	\$35.72	\$44.40	\$54.95	\$63.76
13-1031	Electrical Power-Line Installers and Repairers	\$20.63	\$28.20	\$36.14	\$43.67	\$52.02
53-7072	Telecommunications Line Installers and Repairers	\$12.24	\$14.35	\$18.28	\$26.32	\$39.04
53-7061	Industrial Production Managers	\$35.47	\$44.48	\$56.39	\$71.00	\$87.37
11-9041	Architectural and Engineering Managers	\$46.09	\$54.16	\$64.15	\$76.55	\$91.66

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Electrical Engineering
- Chemistry
- Corrective and Preventive Action (CAPA)
- Customer Satisfaction
- Electric Power Distribution

In-Demand Education Level*

High School Diploma: 27.4%
Associate Degree: 15.4%
Bachelor's Degree: 54.8%
Master's Degree: 18.2%

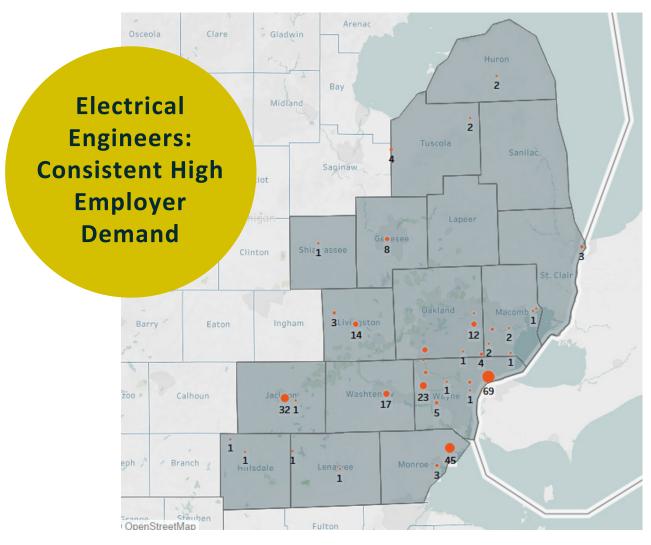
*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Foundational Skills

- Communications
- Management
- Operations
- Problem Solving
- Presentations

In-Demand Certifications

- Commercial Driver's License (CDL)
- Journeyman Lineman
- Operator Certification
- Professional Engineer
- Project Management Professional (PMP) Certification



Top Posting Employers*

- DTE Energy Company
- CMS Energy Corporation
- Henkels & McCoy, Inc.
- Lg Electronics
- Itc Holdings Corp.
- Aegion Corporation
- Service Electric Company
- ROYAL DUTCH SHELL PLC
- Schlumberger Limited
- Black Hills Corporation

Job Postings by City

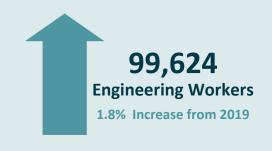
Detroit: 69 Postings
 Newport: 45 Postings
 Jackson: 32 Postings
 Canton: 23 Postings
 Ann Arbor: 17 Postings
 Howell: 14 Postings
 Novi: 13 Postings

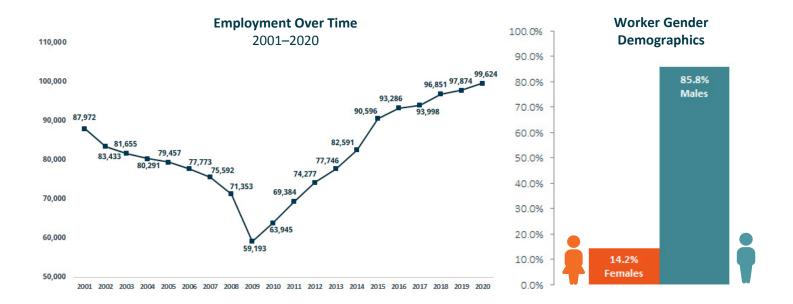
8. Troy: 12 Postings9. Flint: 8 Postings

10. Plymouth: 5 Postings

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

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. There are about 8,500 openings annually for engineers in southeast Michigan.





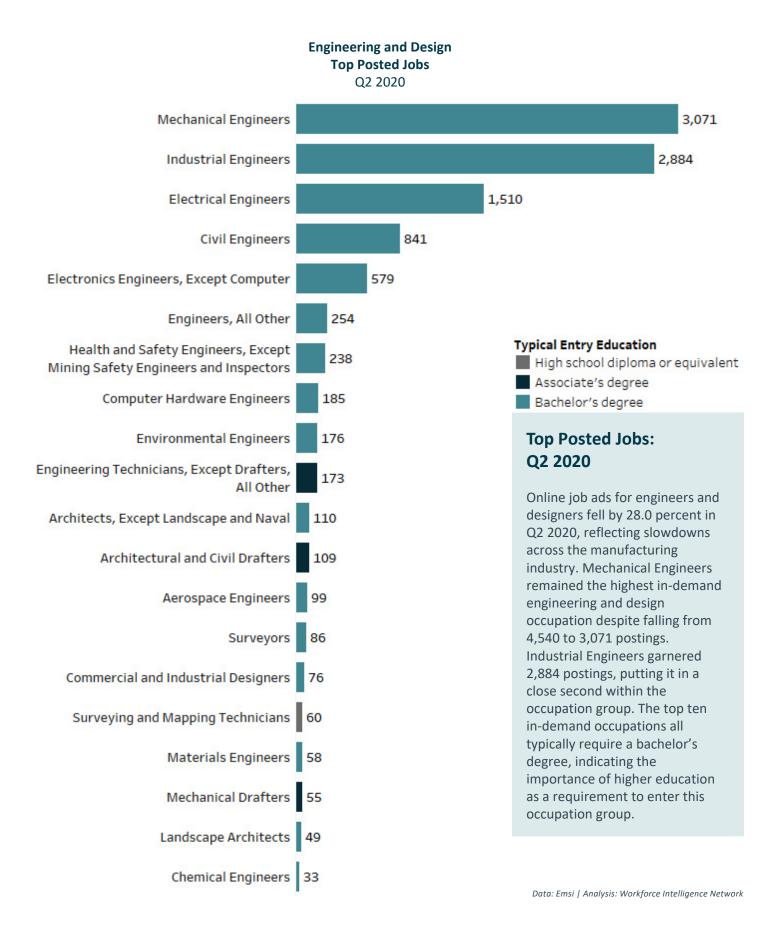
Engineering and Design Worker Demographics

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 5.4 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 22 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

78.4% White | 10.1% Asian | 7.3% Black or African American





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 \$44.40. 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 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
53-7063	Mechanical Engineers	\$30.21	\$35.72	\$44.40	\$54.95	\$63.76
53-7061	Industrial Engineers	\$30.91	\$36.28	\$44.44	\$53.69	\$61.27
13-1031	Electrical Engineers	\$29.87	\$35.92	\$44.64	\$54.53	\$62.78
13-1028	Civil Engineers	\$25.49	\$30.03	\$36.80	\$46.35	\$58.06
13-1031	Electronics Engineers, Except Computer	\$30.14	\$35.82	\$43.74	\$53.60	\$63.73
13-1031	Engineers, All Other	\$23.56	\$33.63	\$43.72	\$55.46	\$63.69
53-7061	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	\$26.69	\$30.41	\$39.41	\$52.80	\$63.68
13-1031	Computer Hardware Engineers	\$20.18	\$28.68	\$43.64	\$56.25	\$65.13
13-1031	Environmental Engineers	\$29.35	\$35.47	\$44.62	\$56.00	\$65.50
13-1031	Engineering Technicians, Except Drafters, All Other	\$17.38	\$22.75	\$32.29	\$41.27	\$49.09

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Electrical Engineering
- Mechanical Engineering
- New Product Development
- AutoCAD
- Computer-Aided Design

In-Demand Education Level*

High School Diploma: 5.8%
Associate Degree: 5.7%
Bachelor's Degree: 63.7%
Master's Degree: 14.8%

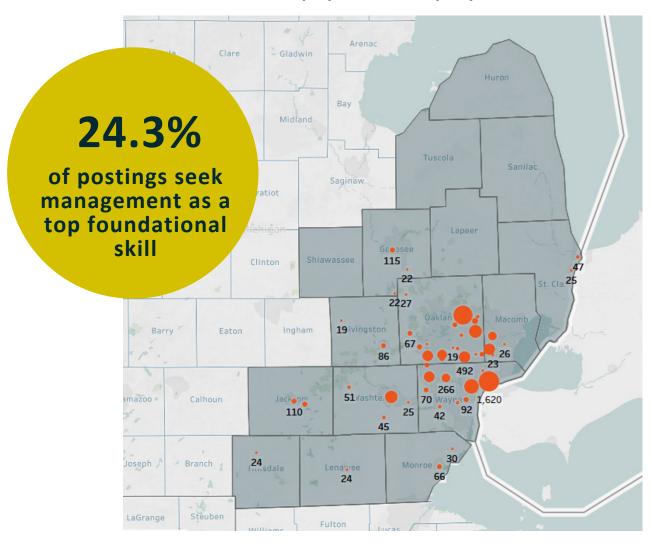
*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Foundational Skills

- Communications
- Management
- Problem Solving
- Leadership
- Microsoft Office

- Professional Engineer
- Licensed Professional Engineer
- Six Sigma Green Belt Certification
- Engineer in Training
- LEED Accredited Professional (AP)

Employer Demand by City



Top Posting Employers*

- General Motors Company
- Kelly Services, Inc.
- Growing People and Companies
- FCA US LLC
- Gtech Services, Inc
- Ford Motor Company
- Advantage Resourcing
- Cynet Systems Inc.
- Wilson, Jeff Chrysler Automobiles, Inc
- Aerotek, Inc.

Job Postings by City

• Detroit: 1,620 Postings

• Auburn Hills: 1,432 Postings

Dearborn: 827 Postings

• Troy: 657 Postings

Ann Arbor: 609 Postings

Warren: 501 Postings

Southfield: 492 Postings

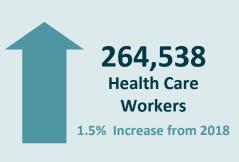
Plymouth: 452 Postings

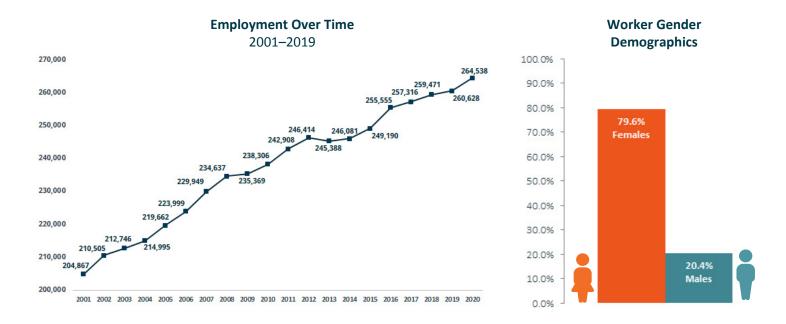
Novi: 421 Postings

Farmington Hills: 367 Postings

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

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. Annually, there are about 23,600 job openings for these positions, and this is projected to continue increasing.





Health Care Worker Demographics

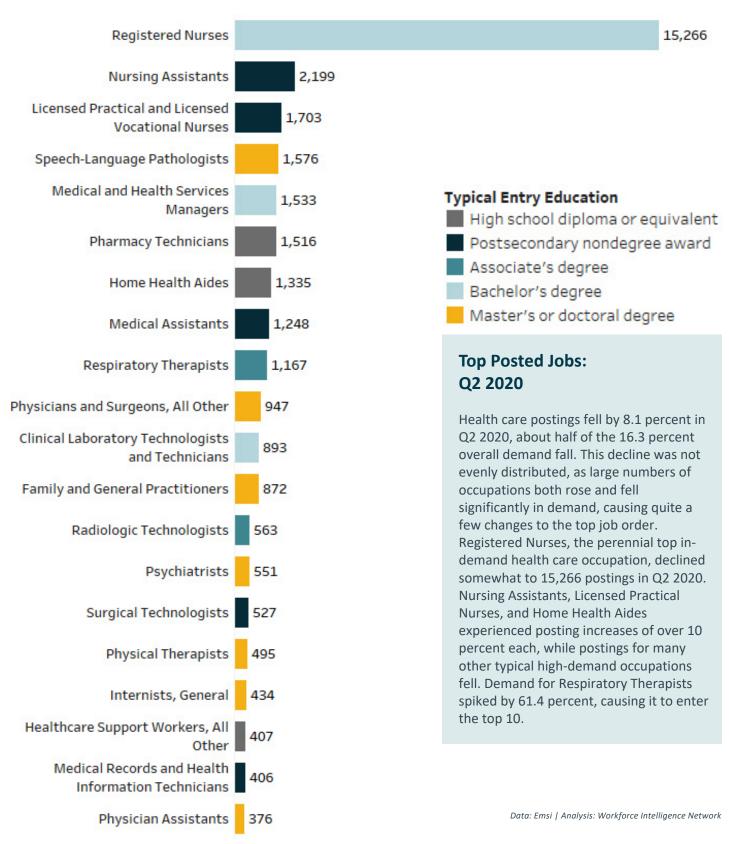
According to the most recent Emsi data set available (2019), the health care occupation group employs around 265,000 workers, who are overwhelmingly female (79.6 percent) and between the ages of 25 and 54 (69.4 percent), although 23 percent of workers are over 55. The group has a similar proportion of racial minorities as the workforce as a whole, with 69.1 percent of workers identifying as white, 20.7 percent identifying as Black or African American, and 10.2 percent identifying otherwise.

Race and Ethnicity Demographics

69.1% White | 20.7% Black or African American | 5.7% Asian







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 state's median wage of \$18.60 per hour. Respiratory Therapists earn a median hourly wage of \$27.67 per hour or annual salary of about \$57,600 according to the Bureau of Labor Statistics (BLS).

Wage Overview for Top Posted Health Care Jobs in Q2 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
53-7072	Registered Nurses	\$26.81	\$30.63	\$35.31	\$40.12	\$46.97
53-7063	Nursing Assistants	\$11.45	\$12.91	\$14.51	\$16.65	\$18.73
53-7062	Licensed Practical and Licensed Vocational Nurses	\$20.01	\$22.06	\$25.25	\$28.32	\$30.46
53-7072	Speech-Language Pathologists	\$27.02	\$32.03	\$37.71	\$46.85	\$65.81
53-7063	Medical and Health Services Managers	\$27.37	\$34.18	\$46.16	\$62.33	\$93.45
53-7071	Pharmacy Technicians	\$10.48	\$12.42	\$15.56	\$18.96	\$23.12
53-7061	Home Health Aides	\$9.45	\$9.91	\$11.15	\$13.01	\$14.99
53-7063	Medical Assistants	\$12.36	\$13.55	\$15.46	\$18.06	\$20.22
53-7072	Respiratory Therapists	\$21.25	\$24.32	\$27.67	\$31.00	\$35.25
53-7071	Physicians and Surgeons, All Other	\$22.88	\$29.46	\$69.41	\$107.50	\$134.85

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Nursing
- Basic Life Support
- Advanced Cardiovascular Life Support (ACLS)
- Nursing Care
- Cardiopulmonary Resuscitation (CPR)

In-Demand Education Level*

High School Diploma: 16.8%
Associate Degree: 13.1%
Bachelor's Degree: 16.1%
Master's Degree: 6.9%

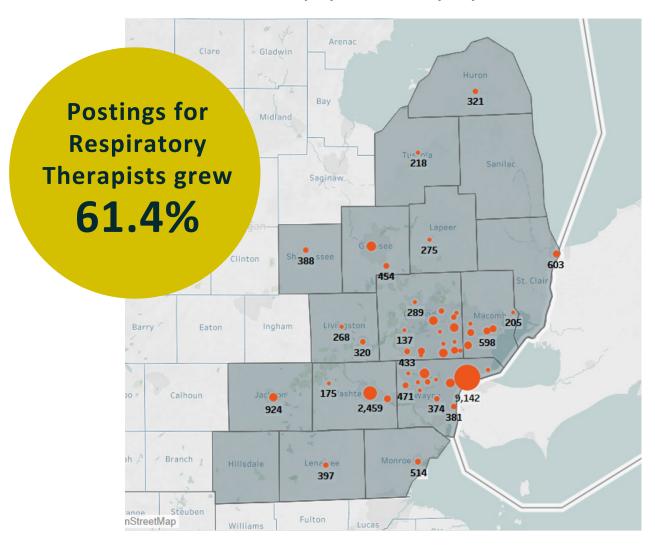
*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Foundational Skills

- Communications
- Management
- Customer Service
- Leadership
- Operations

- Licensed Practical Nurse
- Certified Nursing Assistant
- Nurse Practitioner
- Certified Pharmacy Technician
- Licensed Vocational Nurses

Employer Demand by City



Top Posting Employers*

- General Healthcare Resources, Inc.
- Henry Ford Health System
- Trinity Health Corporation
- Manor Care, Inc.
- Soliant Health, Inc
- Beaumont Health System
- McLaren, Inc.
- Ascension
- Nomad Health
- Mercy Medical Center, Inc

Job Postings by City

1. Detroit: 9,142 Postings

2. Ann Arbor: 2,459 Postings

3. Flint: 1,233 Postings

4. Livonia: 1,230 Postings

5. Southfield: 1,178 Postings

6. Pontiac: 1,166 Postings

7. Dearborn: 1,033 Postings

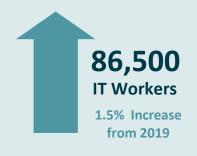
8. Troy: 1,011 Postings

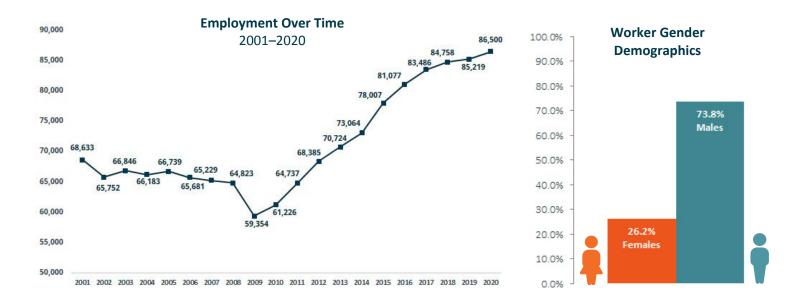
9. Jackson: 924 Postings

10. Warren: 789 Postings

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

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, and about 7,000 job openings are reported in the region annually.





IT Worker Demographics

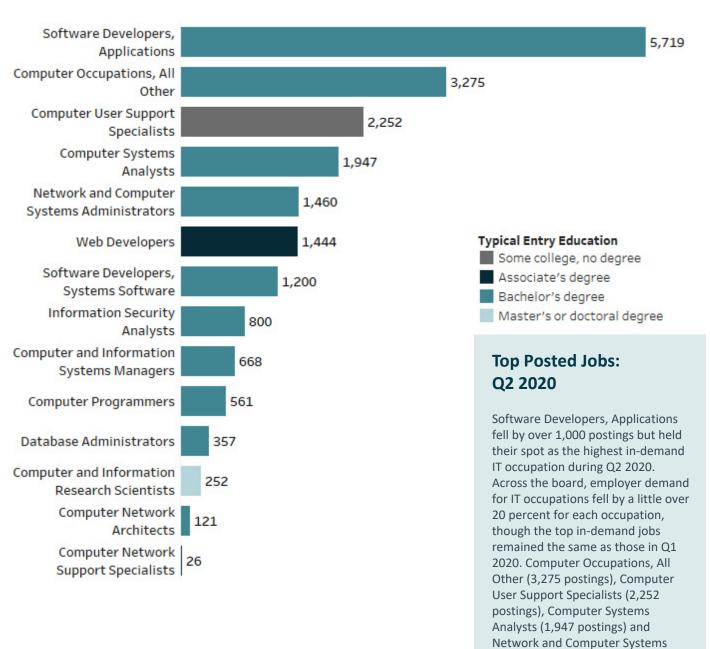
According to the most recent Emsi data set available (2019), despite having nearly 87,000 workers, the IT occupation group is not very diverse. A large majority of workers are white males between the ages of 25 and 54. Currently, 73.8 percent of the workers in IT in southeast Michigan identify as male, and 67.6 percent identify as white. 78.3 percent are between the ages of 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

67.6% White | 10.1% Black or African American | 18.1% Asian







Administrators (1,460 postings) round out the top 5 jobs.

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 Q3 2019, offers a median hourly wage of \$43.73 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 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
53-7072	Software Developers, Applications	\$28.28	\$34.67	\$43.73	\$54.53	\$63.13
13-1031	Computer Occupations, All Other	\$20.12	\$26.61	\$36.87	\$48.56	\$59.90
13-1031	Computer User Support Specialists	\$13.25	\$16.84	\$22.67	\$29.47	\$37.43
13-1031	Computer Systems Analysts	\$25.78	\$31.96	\$39.62	\$49.18	\$59.81
53-7063	Network and Computer Systems Administrators	\$24.99	\$30.74	\$37.96	\$47.50	\$57.23
53-7072	Web Developers	\$18.05	\$24.17	\$32.32	\$42.01	\$49.34
53-7072	Software Developers, Systems Software	\$23.74	\$33.81	\$43.34	\$52.88	\$62.70
53-7061	Information Security Analysts	\$28.93	\$34.30	\$44.02	\$56.46	\$65.60
13-1031	Computer and Information Systems Managers	\$39.56	\$49.81	\$62.55	\$77.23	\$96.95
13-1031	Computer Programmers	\$22.24	\$29.79	\$37.23	\$45.21	\$52.29

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Computer Science
- Agile Software Development
- Java
- SQL
- Software Development

In-Demand Education Level*

High School Diploma: 4.9%
Associate Degree: 4.4%
Bachelor's Degree: 55.5%
Master's Degree: 12.5%

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

In-Demand Foundational Skills

- Communications
- Management
- Problem Solving
- Troubleshooting (Problem Solving)
- Leadership

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

INFORMATION TECHNOLOGY OCCUPATION GROUP 16-County WIN Region | Q2 2020

Employer Demand by City



Top Posting Employers*

- Cynet Systems Inc.
- Oracle Corporation
- Teksystems, Inc.
- Kelly Services, Inc.
- General Motors Company
- Deloitte LLP
- Ford Motor Company
- Fast Switch, Ltd.
- V2soft Inc.
- Strategic Staffing Solutions, Inc.

Job Postings by City

1. Detroit: 5,344 Postings

2. Troy: 2,085 Postings

3. Ann Arbor: 1,749 Postings

4. Southfield: 1,544 Postings

5. Dearborn: 1,477 Postings

6. Auburn Hills: 1,378 Postings

7. Farmington Hills: 665 Postings

8. Warren: 554 Postings

9. Novi: 535 Postings

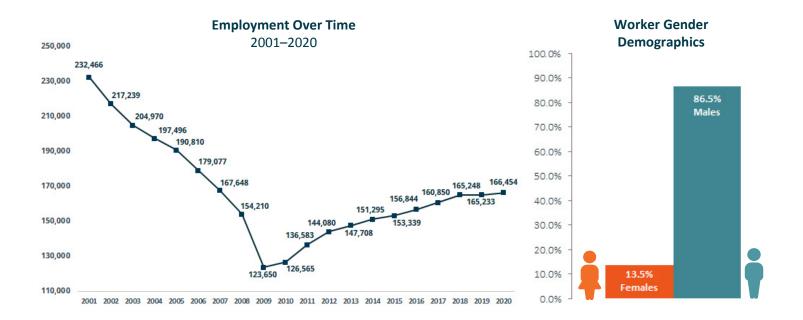
10. Livonia: 486 Postings

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

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. There are about 21,000 openings for these workers annually.

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





Skilled Trades Worker Demographics

According to the most recent Emsi data set available (2019), the skilled trades occupation group employs about 166,000 workers in southeast Michigan. A large 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 26.9 percent, the group has a somewhat higher proportion than average of workers over age 55. This proportion continues to grow, as the 2020 level is one percentage point greater than that in 2019.

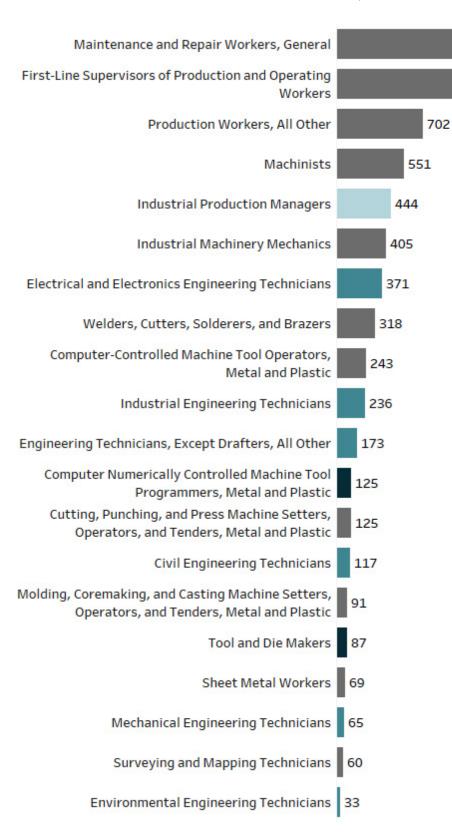
Race and Ethnicity Demographics

77.4% White | 13.8% Black or African American | 4.3% Hispanic or Latino



2,652

Skilled Trades Top Posted Jobs Q2 2020



Typical Entry Education

High school diploma or equivalent

1,951

- Postsecondary nondegree award
 - Associate's degree
 - Bachelor's degree

Top Posted Jobs: Q2 2020

Demand for Skilled Trades occupations fell by 12.5 percent in Q2 2020, a little under the 16.3 percent decline experienced by occupations overall. While many of the top jobs remained the same as in Q1 2020, Production Workers, All Other, Civil Engineering Technicians, and Surveying and Mapping Technicians all experienced significant posting growth. Maintenance and Repair Workers, General remained the highest indemand skilled trades occupation during the second quarter, with 2,652 postings. Other top posted jobs include First-Line Supervisors of Production and Operating Workers (1,951 postings), Production Workers, All Other (702 postings), Machinists (551 postings), and Industrial Production Managers (444 postings).

Skilled Trades Wage Overview

Eight of the top ten in-demand skilled trades occupations have median wages above the state median of \$18.60 per hour according to the Bureau of Labor Statistics (BLS), with management and technician roles earning even more. Maintenance and Repair Workers, General, the top posted skilled trades job in Q1 2020, offers a median hourly wage of \$17.09. This translates to an annual salary of about \$35,500.

Wage Overview for Top Posted Skilled Trades Jobs in Q2 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
53-7063	Maintenance and Repair Workers, General	\$10.52	\$13.06	\$17.09	\$22.83	\$28.70
13-1031	First-Line Supervisors of Production and Operating Workers	\$18.89	\$24.14	\$31.82	\$41.01	\$50.68
53-7071	Production Workers, All Other	\$9.54	\$11.29	\$15.76	\$23.42	\$36.37
53-7063	Machinists	\$11.87	\$15.51	\$19.95	\$25.81	\$30.42
53-7061	Industrial Production Managers	\$35.47	\$44.48	\$56.39	\$71.00	\$87.37
53-7061	Industrial Machinery Mechanics	\$15.77	\$19.82	\$25.34	\$31.04	\$36.75
13-1031	Electrical and Electronics Engineering Technicians	\$17.10	\$22.53	\$30.38	\$35.64	\$40.06
53-7072	Welders, Cutters, Solderers, and Brazers	\$13.49	\$15.84	\$18.88	\$23.30	\$28.76
13-1031	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$12.36	\$14.70	\$19.16	\$23.81	\$29.21
53-7061	Industrial Engineering Technicians	\$16.96	\$20.96	\$26.68	\$33.82	\$39.89

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Plumbing
- Machining
- HVAC
- Tooling
- Painting

In-Demand Education Level*

High School Diploma: 39.8%
Associate Degree: 8.8%
Bachelor's Degree: 14.6%
Master's Degree: 1.4%

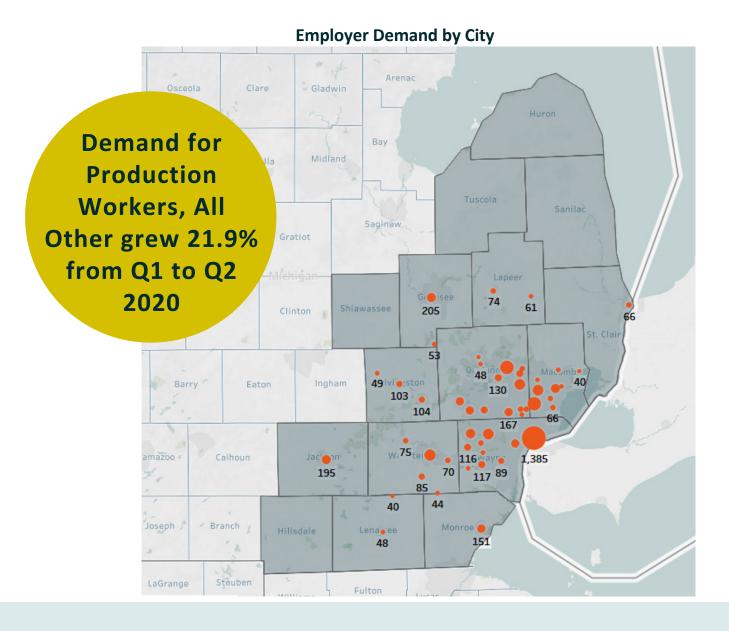
*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Foundational Skills

- Communications
- Operations
- Troubleshooting (Problem Solving)
- Management
- Leadership

- Commercial Driver's License (CDL)
- HVAC Certification
- EPA 608 Technician Certification
- Automotive Service Excellence (ASE) Certification
- Certified Forklift Operator

SKILLED TRADES OCCUPATION GROUP 16-County WIN Region | Q2 2020



Top Posting Employers*

- Kelly Services, Inc.
- Express Employment Professionals
- Aerotek, Inc.
- McDonald's Corporation
- ManpowerGroup Global
- Roehl Transport, Inc.
- Nesco Resource
- FCA US LLC
- The Home Depot
- Michigan Works Service Center, Alpena C

Job Postings by City

1. Detroit: 1,385 Postings

2. Warren: 434 Postings

3. Auburn Hills: 399 Postings

4. Ann Arbor: 301 Postings

5. Sterling Heights: 291 Postings

6. Livonia: 288 Postings

7. Troy: 272 Postings

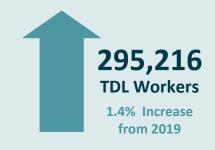
8. Plymouth: 213 Postings

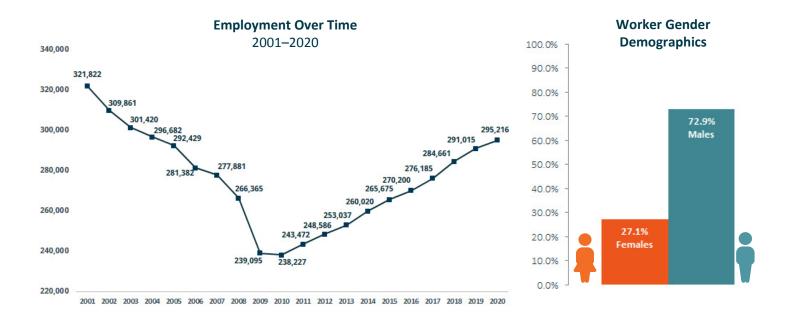
9. Flint: 205 Postings

10. Jackson: 195 Postings

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

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. For all TDL workers, there are over 37,000 job openings annually in Southeast Michigan.





TDL Worker Demographics

According to the most recent Emsi data set available (2019), the TDL occupation group has a large workforce, employing nearly 300,000 individuals. These workers are 72.9 percent male and 69.6 percent white. Only 12.4 percent of the workers in this occupation group are under the age of 25, indicating an aging TDL workforce.

Race and Ethnicity Demographics

69.6% White | 21.2% Black or African American | 4.8% Hispanic or Latino



19,696

TDL Top Posted Jobs

4,015

3,654



Typical Entry Education

- No formal educational credential
- High school diploma or equivalent
- Postsecondary nondegree award
- Bachelor's degree

Top Posted Jobs: Q2 2020

Demand for TDL occupations fell by 12.0 percent in Q2 2020, a little under the 16.3 percent decline experienced by occupations overall. While many of the top jobs remained the same as in Q1 2020, a number of stock and packaging workers as well as many maintenance positions experienced significant posting growth. Heavy and Tractor-Trailer Truck Drivers retained their spot as the highest indemand TDL occupation during Q2 2020, with 19,696 postings. Other top posted jobs include Light Truck or Delivery Services Drivers (4,015 postings), Stock Clerks and Order Fillers (3,654 postings), Laborers and Freight, Stock, and Material Movers, Hand (1,863 postings) and Managers, All Other (1,405) postings).

TDL Wage Overview

According to the Bureau of Labor Statistics (BLS), six of the top ten in-demand TDL occupations offer median wages over the state median wage of \$18.60 per hour. Heavy and Tractor-Trailer Truck Drivers, the top posted TDL job, earn a median hourly wage of \$19.71, 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 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
53-7061	Heavy and Tractor-Trailer Truck Drivers	\$13.17	\$15.96	\$19.71	\$23.96	\$28.87
53-7062	Light Truck or Delivery Services Drivers	\$9.72	\$11.19	\$15.70	\$22.69	\$30.05
53-7072	Stock Clerks and Order Fillers	\$9.55	\$10.44	\$12.12	\$15.62	\$19.54
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$9.87	\$11.59	\$14.28	\$17.85	\$21.51
53-7063	Managers, All Other	\$29.66	\$37.08	\$48.57	\$59.82	\$73.99
13-1011	Automotive Service Technicians and Mechanics	\$10.17	\$12.78	\$20.19	\$27.98	\$33.81
13-1011	Business Operations Specialists, All Other	\$18.06	\$24.04	\$32.71	\$45.36	\$57.91
13-1031	First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	\$14.40	\$19.62	\$25.55	\$34.05	\$41.39
53-7072	Shipping, Receiving, and Traffic Clerks	\$10.95	\$13.06	\$16.07	\$20.41	\$26.90
13-1011	Bus and Truck Mechanics and Diesel Engine Specialists	\$14.93	\$18.38	\$22.31	\$27.04	\$31.46

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Flatbed Truck Operation
- Warehousing
- Merchandising
- Dry Van Truck Operation
- Forklift Truck

In-Demand Education Level*

High School Diploma: 18.9%Associate Degree: 1.9%Bachelor's Degree: 6.9%

• Master's Degree: 1.3%

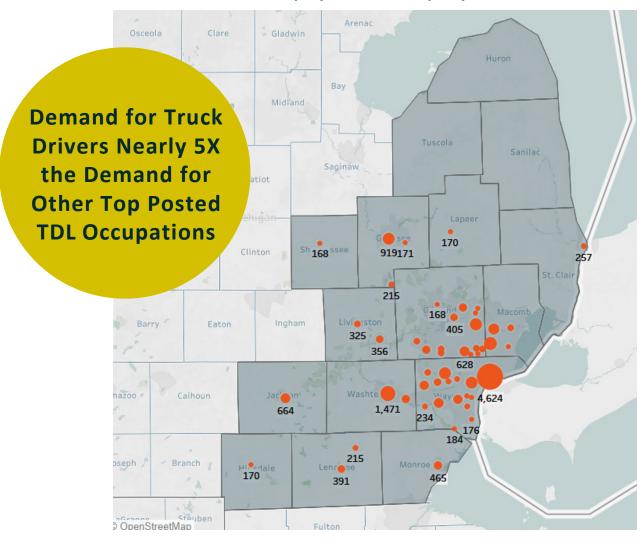
*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent

In-Demand Foundational Skills

- Customer Service
- Valid Driver's License
- Customer Service
- Management
- Operations

- Commercial Driver's License (CDL)
- Hazmat Endorsement
- Transportation Worker Identification Credential (TWIC) Card
- Tanker Endorsement
- Automotive Service Excellence (ASE) Certification

Employer Demand by City



Top Posting Employers*

- CRST International, Inc.
- Roehl Transport, Inc.
- Amazon.com, Inc.
- C.R. England, Inc.
- Pegasus Transportation, Inc.
- U.S. Xpress, Inc.
- USA Truck, Inc.
- Maverick Transportation, LLC
- Schneider National, Inc.
- Doordash

Job Postings by City

1. Detroit: 4,624 Postings

2. Ann Arbor: 1,471 Postings

3. Warren: 1,095 Postings

4. Troy: 956 Postings

5. Flint: 919 Postings

6. Livonia: 910 Postings

7. Dearborn: 866 Postings

8. Sterling Heights: 784 Postings

9. Jackson: 664 Postings

10. Southfield: 628 Postings

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

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