

Q1 2018

January–March

Detroit MSA

WIN Labor Market Report





INTRODUCTION

Detroit-Warren-Dearborn MI MSA | Q1 2018

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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 Detroit-Warren-Dearborn Metropolitan Statistical Area. 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 in-depth 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.

This report analyzes data from the first quarter of 2018 in the Detroit MSA and includes summative data for January, February, and March of 2018.

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.



ANNUAL STATE OF THE LABOR MARKET

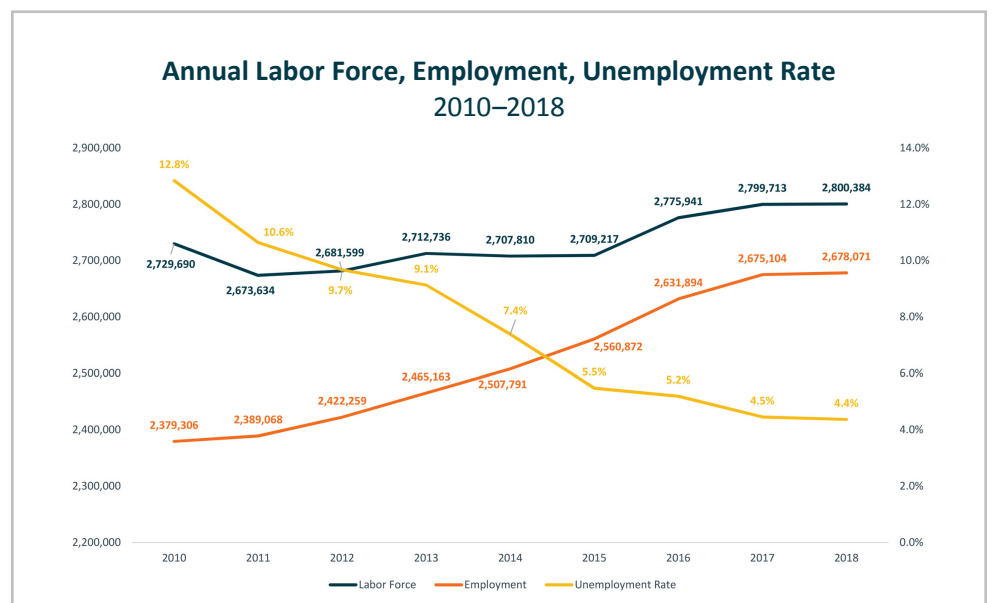
Detroit-Warren-Dearborn MI MSA | Q1 2018

State of the Labor Market in the Detroit-Warren-Dearborn MI MSA

Thus far in 2018, the labor force and employment in greater Detroit have fallen slightly, typical in the first quarter. Employment has fallen faster than the labor force, so a greater proportion of the labor force is looking for work. This has caused the Q1 2018 unemployment rate to rise to 4.6 percent from the annual rate of 4.4 percent during 2017. This is still 0.5 percentage points lower than in Q1 2017. Employer demand remains high for business and finance workers. The business and finance occupation group reported the highest demand among the five key groups analyzed for the MSA, with 23,630 job postings during Q1 2018. Other occupation groups also offer promise for active job seekers: skilled trades postings are 27.6 percent higher than in Q1 2017, and 35 percent of health care postings were open to entry-level applicants.

Annual Labor Market Information

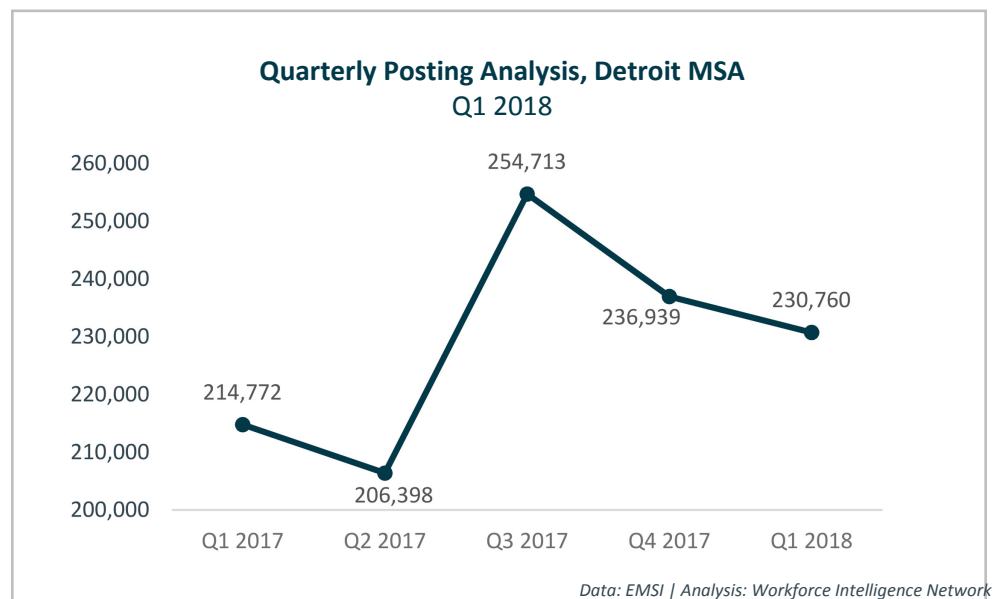
Falling slightly from 2017's ten-year high, the labor force in the Detroit MSA fell by 15,000 individuals between 2017 and the first quarter of 2018. Employment also declined by 18,333 workers between 2017 and early 2018. With employment decreasing at a greater rate than the labor force, the unemployment rate rose by 0.2 percentage points from the 2017 annual rate of 4.4 percent to a current Q1 2018 rate of 4.6 percent in the Detroit-Warren-Dearborn MSA.



Quarterly Employer

Demand Overview

Data from the first quarter of 2018, including posting information from January, February, and March, indicated strong employer demand throughout the Detroit MSA. There were 230,760 postings in the area during Q1 2018. Though demand fell by 6,179 postings between Q4 2017 and Q1 2018, Q1 levels were 16,988 greater than those in Q1 2017. Typically, the first half of the year tends to report lower postings than the second half.





QUARTERLY WORKFORCE INDICATORS

Detroit-Warren-Dearborn MI MSA | Key Findings for Q1 2018

Business and Finance Postings

Accountants and Auditors
\$34.13 Per Hour – Median Wage

23,630 Q1 2018 Postings
900-Posting Growth | Bachelor's Degree Preferred

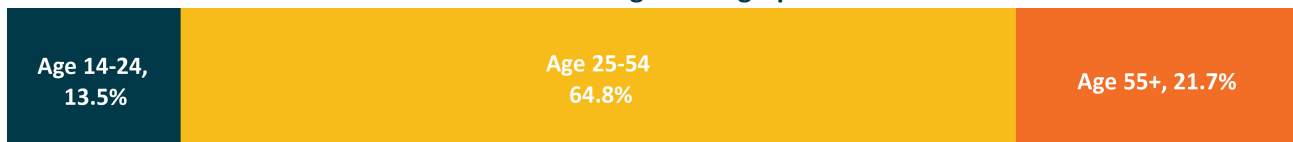
The business and finance occupation group continues to grow in demand during Q1 2018.

Employers seeking business and finance workers posted more jobs (23,630 online job postings) than those in many occupation groups during Q1 2018, though they still trail the largest groups such as customer service and transportation, distribution, and logistics (TDL). Most of the occupation groups analyzed by WIN experienced a decline in online job postings moving into 2018, but employers posted over 900 more ads for business and finance workers in Q1 2018 than in Q4 2017. Meanwhile, the IT occupation group also saw an increase in demand, with about 300 more postings during Q1 2018 than in Q4 2017. Both occupation groups typically prefer a bachelor's degree for entry and present job seekers with well-paying entry-level opportunities. For more information about the business and finance occupation group, see page 12.

The age gap between older and younger workers in southeast Michigan continues to widen in several custom occupation groups analyzed by WIN.

Of the 1.9 million workers in the Detroit MSA, only 13.5 percent identified as under the age of 24. Some occupation groups reported smaller percentages of workers under 24, including skilled trades (6.7 percent), energy (5.0 percent), and business and finance (5.1 percent). As the workforce continues to age, employers may need to focus on training younger workers to reduce the labor lost when older workers retire. For more information about worker demographics, see page 6.

Workforce Age Demographics



Data: EMSI | Analysis: Workforce Intelligence Network

The Detroit MSA's unemployment rate is currently at 4.6 percent, down 0.5 percentage points from Q1 2017.

While the unemployment rate increased between Q4 2017 and Q1 2018, the labor market may be starting 2018 stronger than it did in 2017. During the first quarter of a year, unemployment tends to surge due to many seasonal positions closing, but there were 11,000 fewer people unemployed in Q1 2018 than in Q1 2017. For more information about this quarter's unemployment rate and other labor market indicators, see page 5.

Quarterly Labor Market Data

Quarterly Labor Market Data									
	1st Quarter 2017	2nd Quarter 2017	3rd Quarter 2017	4th Quarter 2017	1st Quarter 2018	Change from 4th Quarter 2017	Percent Change from 4th Quarter 2017	Change from 1st Quarter 2017	Percent Change from 1st Quarter 2017
Labor Force	2,782,362	2,771,385	2,830,051	2,804,807	2,785,285	-19,522	-0.7%	2,923	0.1%
Employment	2,638,922	2,672,839	2,687,586	2,688,208	2,653,392	-34,816	-1.3%	14,470	0.5%
Unemployment	143,440	98,546	142,465	116,598	131,893	15,295	13.1%	-11,547	-8.1%
Unemployment Rate	5.2%	3.6%	5.0%	4.2%	4.7%	0.6%	na	-0.4%	na

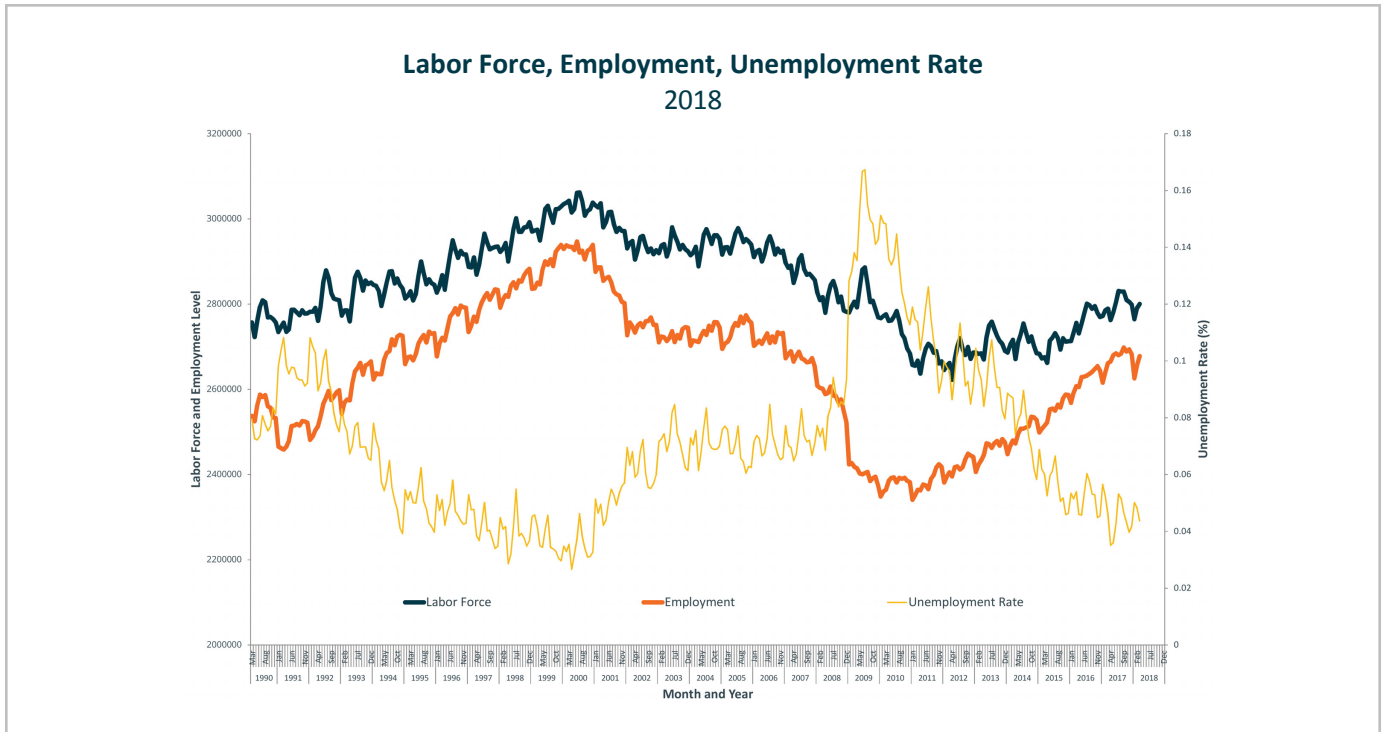
*Note: Monthly data averaged by quarter
Data: Bureau of Labor Statistics

Note: Monthly data average by quarter | Data: BLS



WORKFORCE OVERVIEW

Detroit-Warren-Dearborn MI MSA | Labor Market Information Q1 2018



Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Labor Market Data

Quarterly Labor Market Data

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*Note: Monthly data averaged by quarter
Data: Bureau of Labor Statistics

Labor Force, Employment, and Unemployment

The labor market in the Detroit MSA has been growing steadily year over year since 2010, though there is still variation between quarters. The labor force decreased by 19,667 workers (-0.9 percent) between Q4 2017 and Q1 2018. Employment in the metropolitan area has also decreased from Q4 2017, by 29,333 workers (- 1.4 percent). With employment falling faster than the labor force, the unemployment rate rose this quarter: the quarterly unemployment rate increased by 0.5 percentage points between Q4 2017 and Q1 2018 to 4.6 percent. This is still well below (-0.5 percentage points) the Q1 2017 rate of 5.1 percent, indicating a stronger start to the 2018.



WORKFORCE OVERVIEW

Detroit-Warren-Dearborn MI MSA | 2016 Annual Population Demographics

Population Demographics

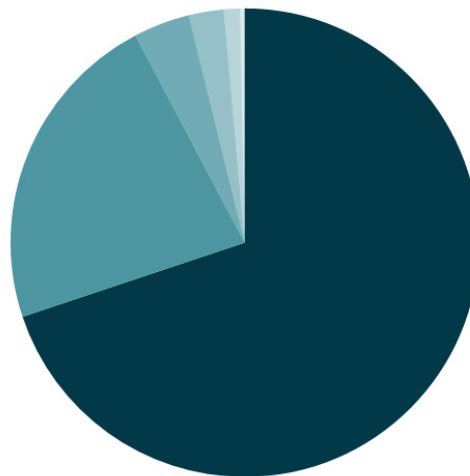
According to the data from the most recent Census Bureau 2016 ACS Five Year estimates, during 2016, 4,296,731 people were living in the Detroit MSA, just 315 more than in 2015. The sex of the populace was split almost evenly, with about 51.4 percent of the population identifying as female, and the other 48.6 percent identifying as male. The majority of the population identified as white (69.9 percent) with the second largest number of individuals identifying as black or African American (22.4 percent). The area as a whole is facing an aging population; 28.4 percent of population was over the age of 55, compared to 31.9 percent under the age of 25.



4,296,731
People in the Region
315 Individual Increase
from 2015

Population Race and Ethnicity Demographics

- White, 69.9%
- Black or African American, 22.4%
- Asian, 3.9%
- Two or More Races, 2.4%
- Other Race, 1.1%
- American Indian or Alaska Native, 0.3%
- Native Hawaiian or Other Pacific Islander, 0.02%



Population Gender Demographics



51% Females



49% Males



Population Age Demographics

Age 14 and under
18.7%

Age 15-24
13.1%

Age 25-54, 39.7%

Age 55+
28.4%



WORKFORCE OVERVIEW

Detroit-Warren-Dearborn MI MSA | 2016 Annual Labor Force Demographics

2016 Labor Force, Employment, and Unemployment Demographics

Civilian Labor Force by Demographic Group				
Demographic Group	Civilian Labor Force	Total Employment	Total Unemployment	Unemployment Rate
Total Population 16 +	2,137,435	1,941,875	196,644	9.2%
Sex				
Male 16+	1,109,853	1,005,253	104,600	9.4%
16-19	45,764	33,127	12,637	27.6%
20-24	110,991	91,853	19,138	17.2%
25-54	723,017	664,775	58,242	8.1%
55-64	182,276	170,277	11,999	6.6%
65 Plus	47,805	45,221	2,584	5.4%
Female 16+	1,027,725	935,169	92,556	9.0%
16-19	46,981	35,588	11,393	24.3%
20-24	106,354	90,011	16,343	15.4%
25-54	660,850	607,419	53,431	8.1%
55-64	171,305	161,942	9,363	5.5%
65 Plus	42,235	40,209	2,026	4.8%
Race				
White	1,550,173	1,447,156	103,862	6.7%
Black / African American	438,298	357,049	80,647	18.4%
Native American	6,094	5,340	756	12.4%
Asian	84,323	79,695	4,553	5.4%
Native Hawaiian / Pacific Islander	562	512	23	4.1%
Some Other Race	21,843	19,582	2,272	10.4%
Two or More Races	36,428	31,575	4,845	13.3%
Ethnicity				
Hispanic	80,594	71,813	8,704	10.8%

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

Labor Market Demographics

During 2016, the most recent census year, there were about 2.14 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 2,071,285 individuals (49.7 percent) living in the region were participating in the labor force. 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 27.6 percent. Black or African American job seekers also have a difficult time finding employment, facing an unemployment rate of 21.0 percent.



WORKFORCE OVERVIEW

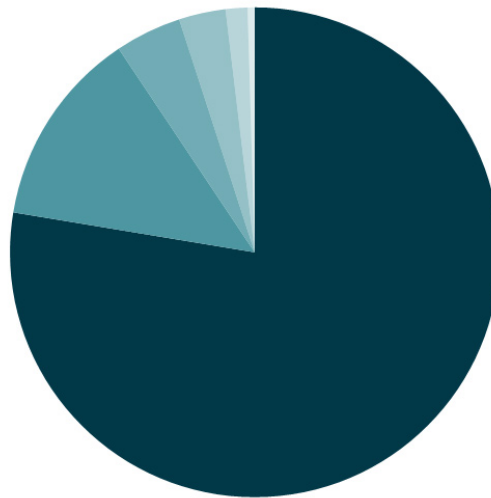
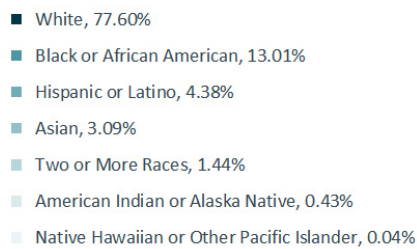
Detroit-Warren-Dearborn MI MSA |

2017 Annual Working Population Demographics

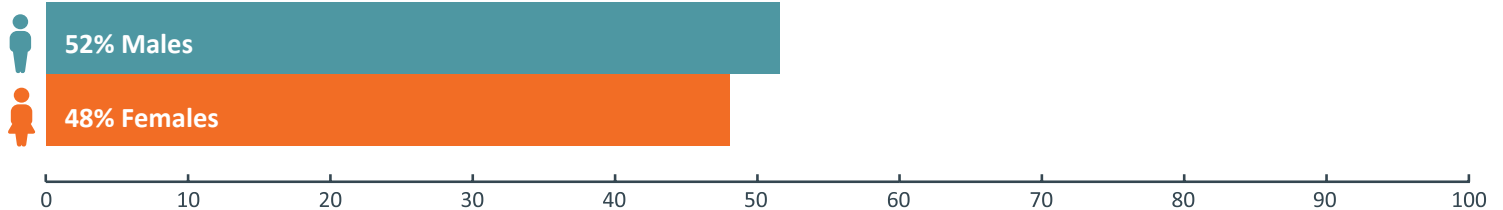
Current Workforce Demographics

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. During 2017, there were a total of 1,942,332 individuals working in the Detroit MSA. A slight majority (51.6 percent or 1,005,790 workers) were male, while 48.4 percent (941,964 workers) of the workforce was female. Most of those working in the region were white, accounting for 72.5 percent of the workforce, while African American or black workers accounted for 17.7 percent of the workforce. Those identifying as having a Hispanic or Latino ethnicity accounted for 3.9 percent. Eighty-seven percent of the workforce was 25 years or older. Only 13.5 percent of those working were under the age of 25, indicating an aging workforce in southeast Michigan.

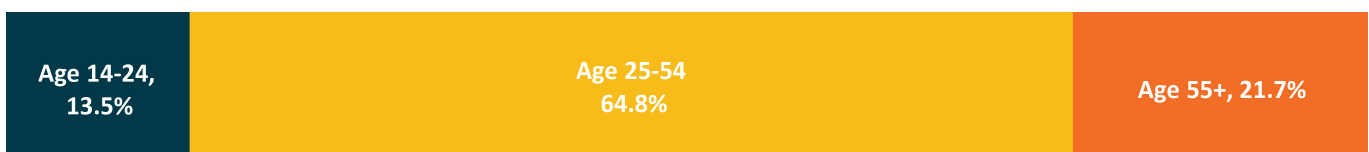
Workforce Race and Ethnicity Demographics



Workforce Gender Demographics



Workforce Age Demographics



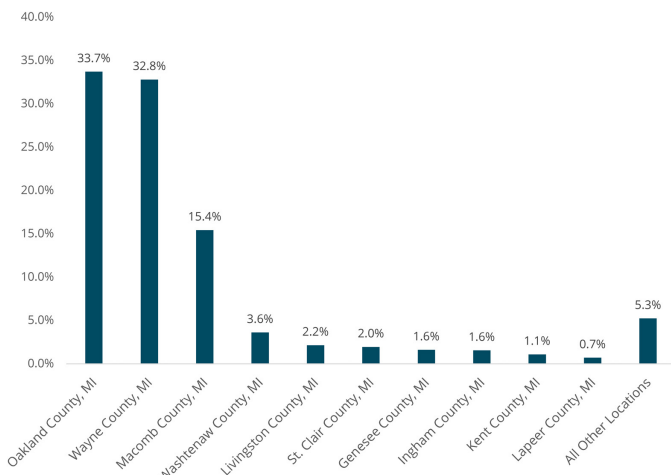
WORKFORCE OVERVIEW

Detroit-Warren-Dearborn MI MSA | 2015 Regional Commuting Patterns

Regional Commuting Patterns

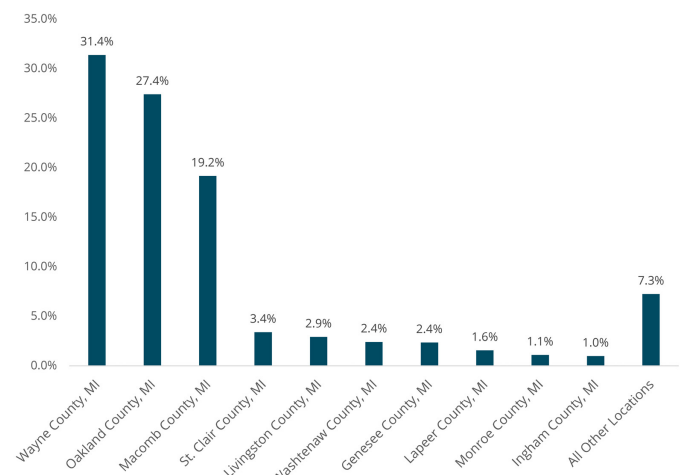
According to the most recent OnTheMap data set available from the Census Bureau, during 2015, the region's workforce consisted of 1,754,307 residents. 1,523,259 (86.8 percent) of the residents lived and worked within the MSA, while the remaining 231,048 residents (13.2 percent) traveled outside of the region for work. There were 1,773,896 workers employed in the region during 2015. Of those, 250,637 workers (14.1 percent) lived outside of the area's borders and commuted in. From this information, we can see that the Detroit MSA is a net importer of jobs, with more workers commuting into the area for employment than leaving.

Where Detroit MSA Residents Work

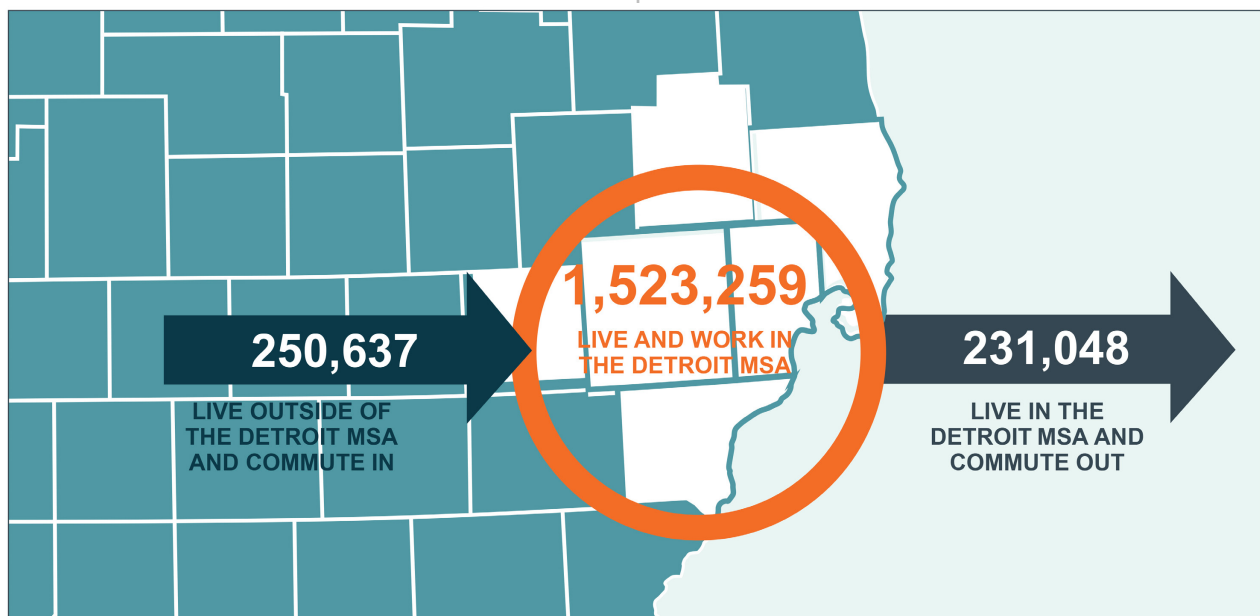


Source: U.S. Census OnTheMap, 2015
Analysis: Workforce Intelligence Network

Where Detroit MSA Workers Live



Source: U.S. Census OnTheMap, 2015
Analysis: Workforce Intelligence Network

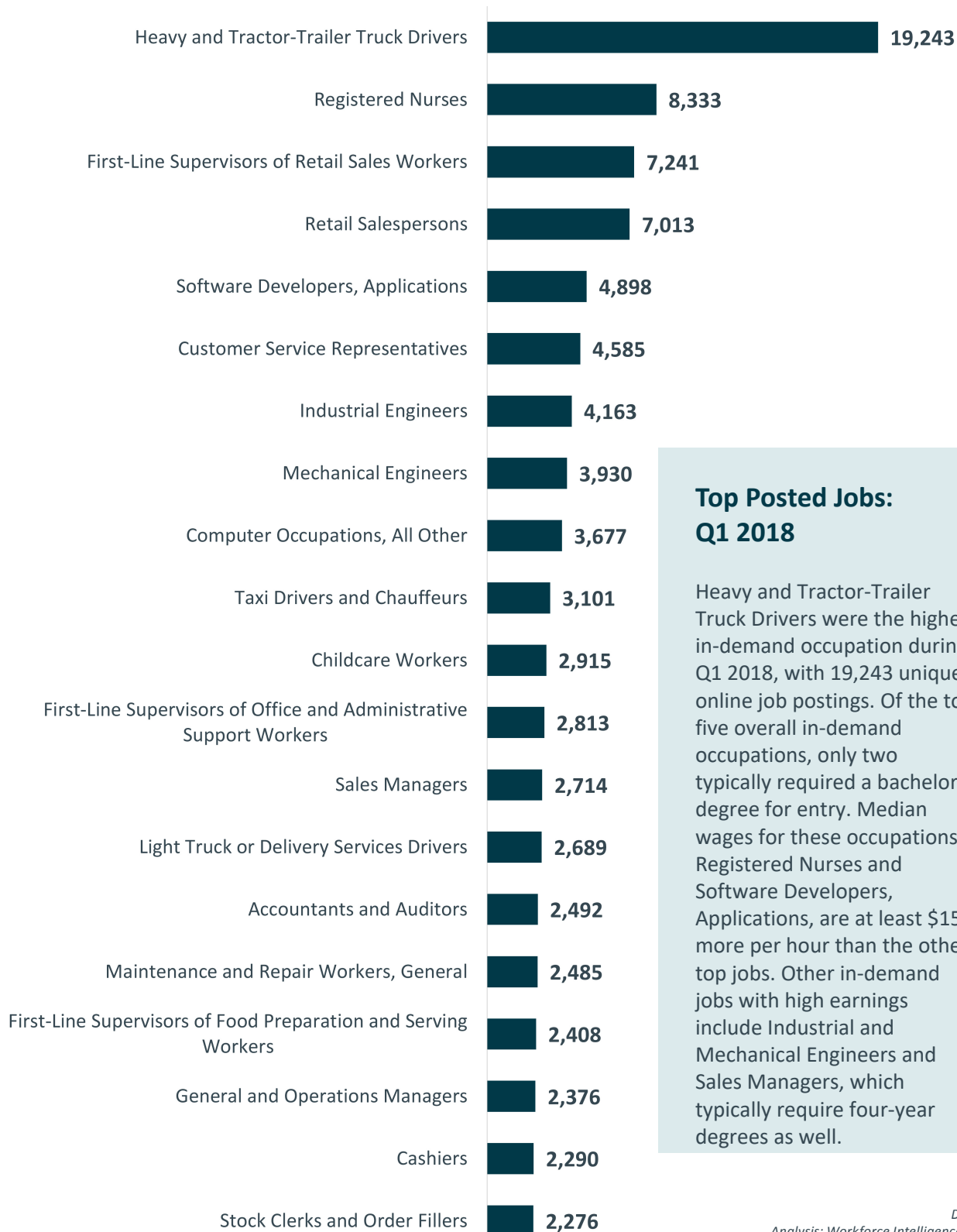




REAL-TIME DEMAND OVERVIEW

Detroit-Warren-Dearborn MI MSA | Top Posted Jobs | Q1 2018

Top Posted Jobs Q1 2018



Top Posted Jobs: Q1 2018

Heavy and Tractor-Trailer Truck Drivers were the highest in-demand occupation during Q1 2018, with 19,243 unique online job postings. Of the top five overall in-demand occupations, only two typically required a bachelor's degree for entry. Median wages for these occupations, Registered Nurses and Software Developers, Applications, are at least \$15 more per hour than the other top jobs. Other in-demand jobs with high earnings include Industrial and Mechanical Engineers and Sales Managers, which typically require four-year degrees as well.

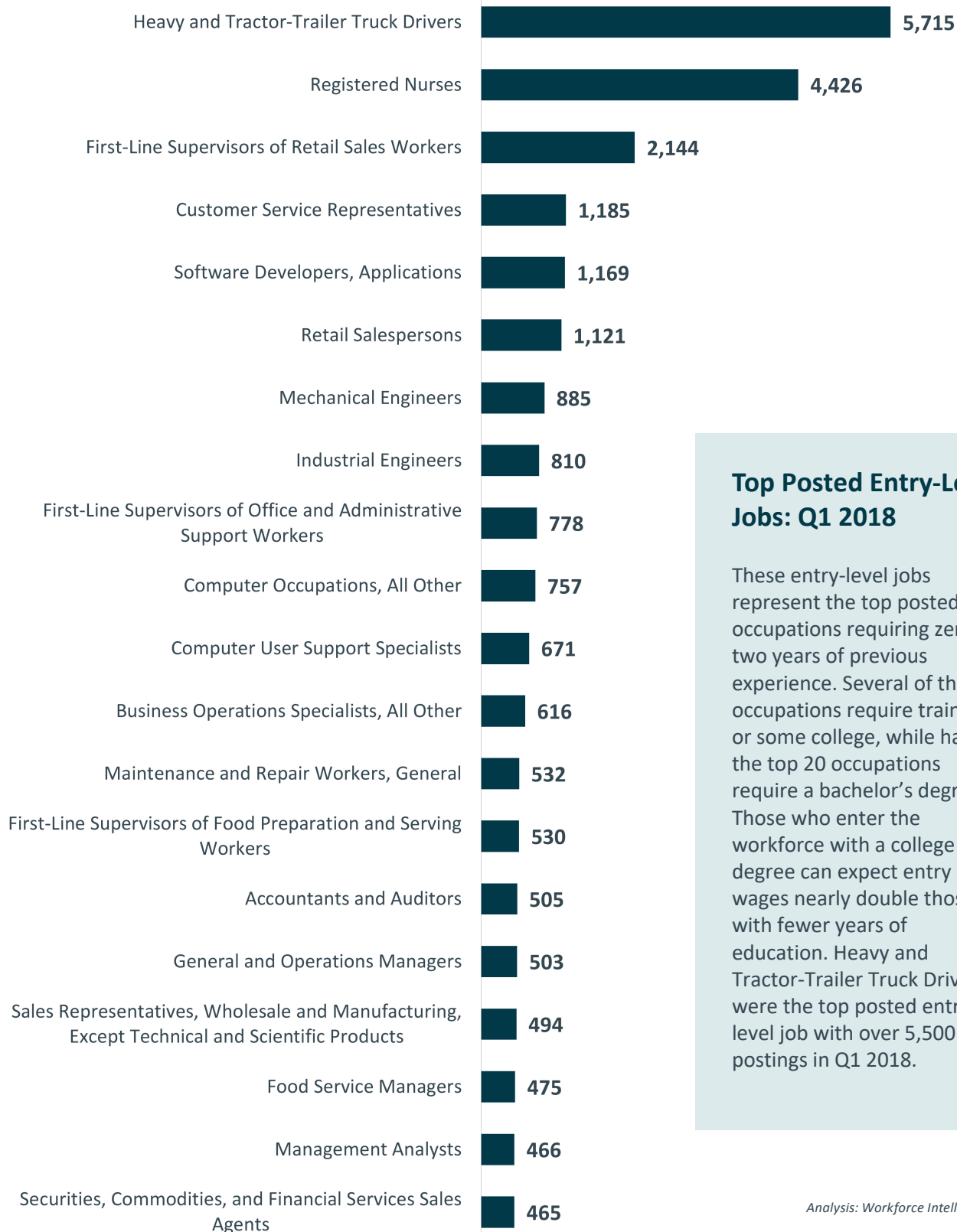


REAL-TIME DEMAND OVERVIEW

Detroit-Warren-Dearborn MI MSA | Top Posted Entry-Level Jobs | Q1 2018

Top Posted Entry-Level Jobs

Q1 2018



Top Posted Entry-Level Jobs: Q1 2018

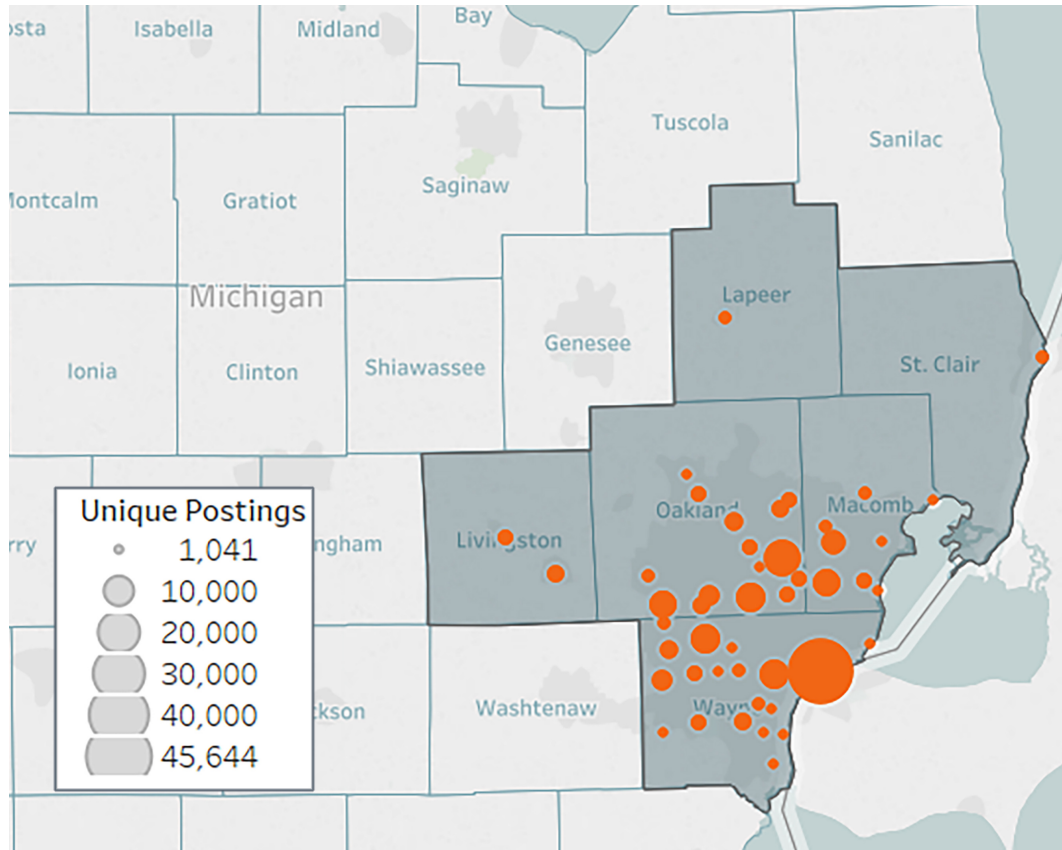
These entry-level jobs represent the top posted occupations requiring zero to two years of previous experience. Several of these occupations require training, or some college, while half of the top 20 occupations require a bachelor's degree. Those who enter the workforce with a college degree can expect entry wages nearly double those with fewer years of education. Heavy and Tractor-Trailer Truck Drivers were the top posted entry-level job with over 5,500 postings in Q1 2018.



REAL-TIME DEMAND OVERVIEW

Detroit-Warren-Dearborn MI MSA | Job Postings by City | Q1 2018

Job Postings by City
Q1 2018



Map based on Longitude (generated) and Latitude (generated). Color shows sum of Postings/hiring intensity. Size shows sum of Unique Postings (Jan 2017–Dec 2017). Details are shown for City.

Top In-Demand Qualifications

- Commercial Driver's License (CDL)
- Critical Care Registered Nurse (CCRN)
- CNOR Certification
- Licensed Practical Nurse
- Certified Nursing Assistant
- Associate of Science in Nursing
- Certified Public Accountant
- Nurse Practitioner
- Licensed Vocational Nurses
- Transportation Worker Identification Credential (TWIC) Card

Top In-Demand Skills

- Merchandising
- Selling Techniques
- Restaurant Operation
- Accounting
- Nursing
- Customer Experience
- Purchasing
- Customer Satisfaction
- Warehousing
- Food Services

Top Posting Employers

- CRST International, Inc.
- Lyft, Inc.
- William Beaumont Hospital
- The Home Depot Inc
- Henry Ford Health System
- CVS Health Corporation
- Michigan Works Service Center, Alpena C
- Uber Technologies, Inc.
- Robert Half International Inc.
- Kelly Services, Inc.
- McDonald's Corporation
- H&R Block, Inc.
- General Motors Company
- Care.com, Inc.
- ACCENTURE, INC.



BUSINESS FINANCE OCCUPATION GROUP

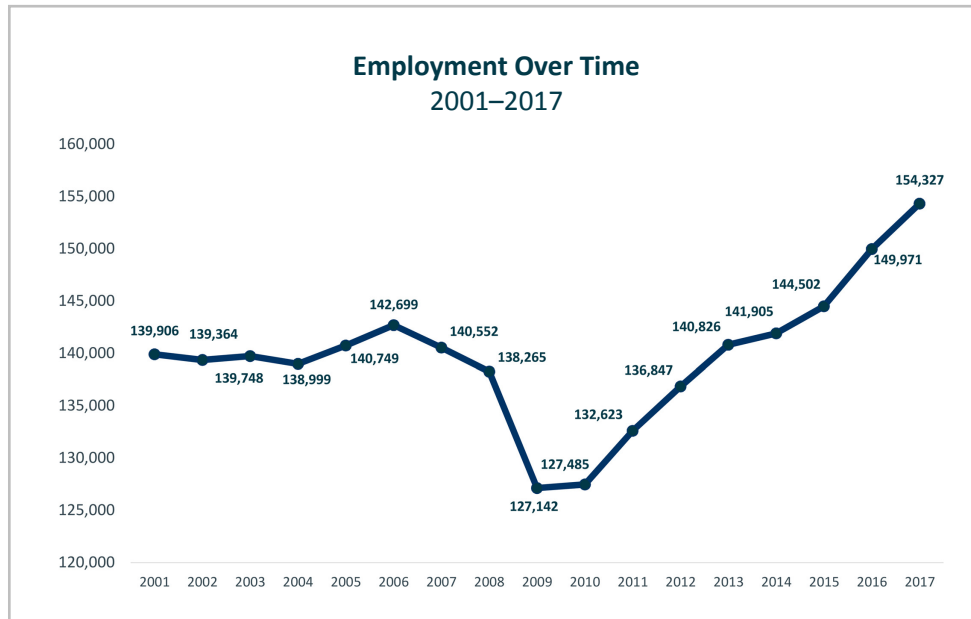
Detroit-Warren-Dearborn MI MSA | Q1 2018

Introduction

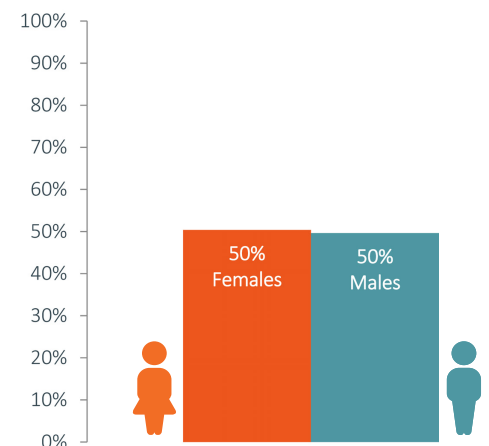
Jobs in the business and finance occupation group can be found in nearly every type of establishment/firm throughout the region. These workers need strong mathematical and accounting abilities along with project management and planning skills. Workers in this occupation group are in high demand in southeast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



154,327
Business and
Finance Workers
0.3% Increase from 2016



Population Gender Demographics



Business and Finance Worker Demographics

According to the most recent Emsi data set available (2017), the business and finance occupation group is a relatively diverse occupation group with respect to its over 150,000 workers. Half the working population identify as female (50 percent). However, 80 percent of workers are white, so the field may offer opportunity for minority workers. Only five percent of the working population is under the age of 25, indicating a large aging population of business and finance workers.

Race and Ethnicity Demographics

79.7% White | 11.9% Black or African American | 4.4% Asian

Workforce Age Demographics

Age 14-24,
5.1%



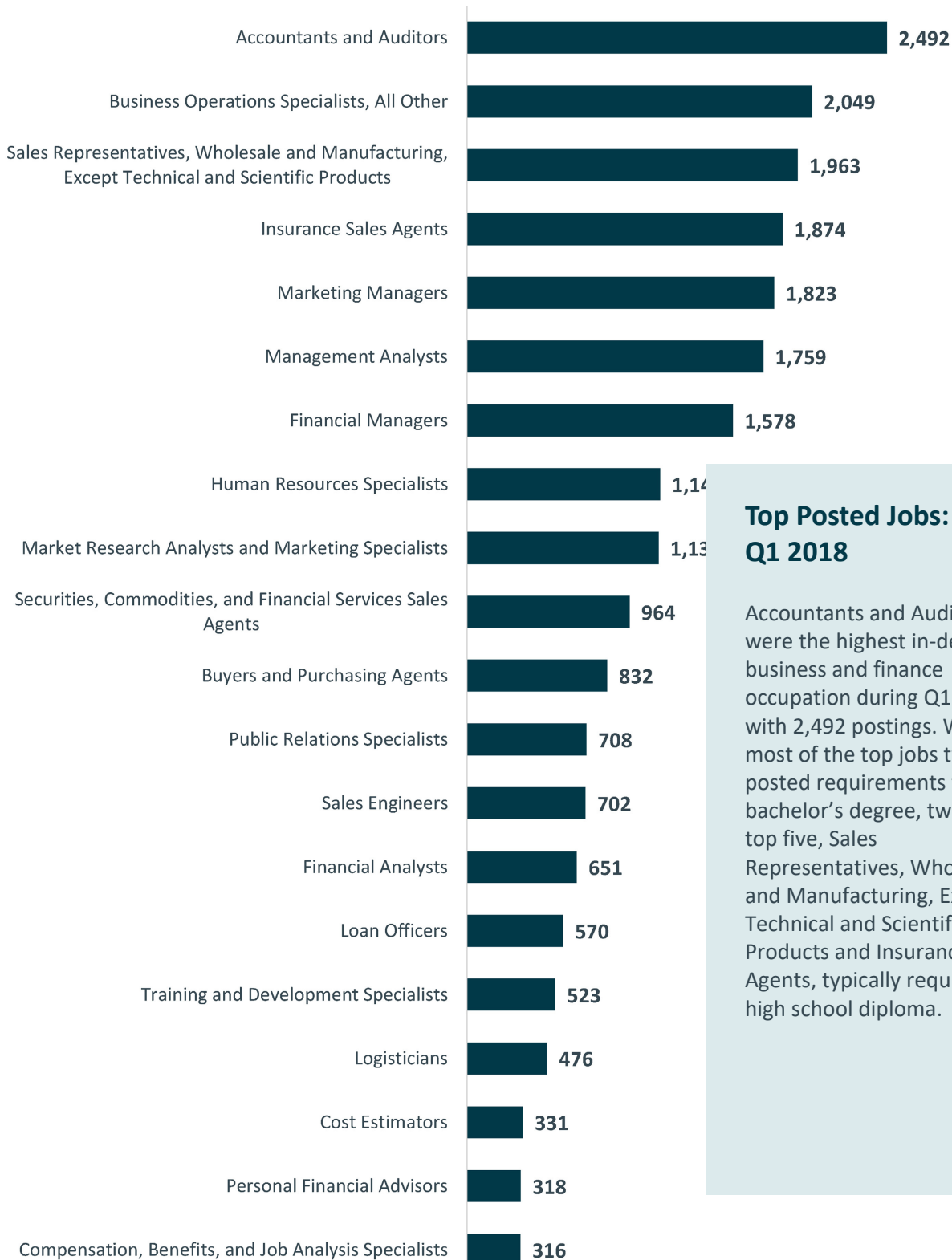


23,630 Business Postings:
105 More than Q4 2017



Bachelors Degree Required for
Most Business and Finance Jobs

Business and Finance Top Posted Jobs Q1 2018



Top Posted Jobs: Q1 2018

Accountants and Auditors were the highest in-demand business and finance occupation during Q1 2018, with 2,492 postings. While most of the top jobs typically posted requirements for a bachelor's degree, two of the top five, Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products and Insurance Sales Agents, typically require a high school diploma.



High Earning Potential for Marketing Managers



Certified Public Accountant: Most In-Demand Certification

Business and Finance Wage Overview

Most business and finance related jobs offer high wages, making for 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 \$34.13, translating to annual earnings of approximately \$71,000. Additional experience may lead to a role as a Marketing or Financial Manager, opening the door to wages around \$60 hourly.

Wage Overview for Top Posted Business and Finance Occupations Q1 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
13-2011	Accountants and Auditors	\$21.27	\$26.31	\$34.13	\$45.67	\$59.97
13-1199	Business Operations Specialists, All Other	\$18.51	\$24.27	\$34.02	\$46.28	\$57.80
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$14.39	\$21.15	\$30.90	\$46.05	\$62.02
41-3021	Insurance Sales Agents	\$15.04	\$19.88	\$28.57	\$48.53	\$71.72
11-2021	Marketing Managers	\$35.31	\$46.35	\$62.97	\$80.58	\$116.88
13-1111	Management Analysts	\$24.86	\$31.22	\$41.77	\$58.26	\$84.58
11-3031	Financial Managers	\$35.34	\$44.69	\$58.89	\$78.48	\$113.62
13-1071	Human Resources Specialists	\$17.60	\$22.19	\$29.07	\$38.35	\$50.19
13-1161	Market Research Analysts and Marketing Specialists	\$16.03	\$22.58	\$32.03	\$44.84	\$59.20
41-3031	Securities, Commodities, and Financial Services Sales Agents	\$15.63	\$18.25	\$24.94	\$38.89	\$77.25

In-Demand Technical Skills

- Accounting
- Selling Techniques
- Mortgage Loans
- Auditing
- Business Development

In-Demand Foundational Skills

- Management
- Sales
- Communications
- Operations
- Leadership

In-Demand Education Level

- High School Diploma: 12.6%
- Associate's Degree: 5.2%
- Bachelor's Degree: 58.9%
- Master's Degree: 12.0%

In-Demand Certifications

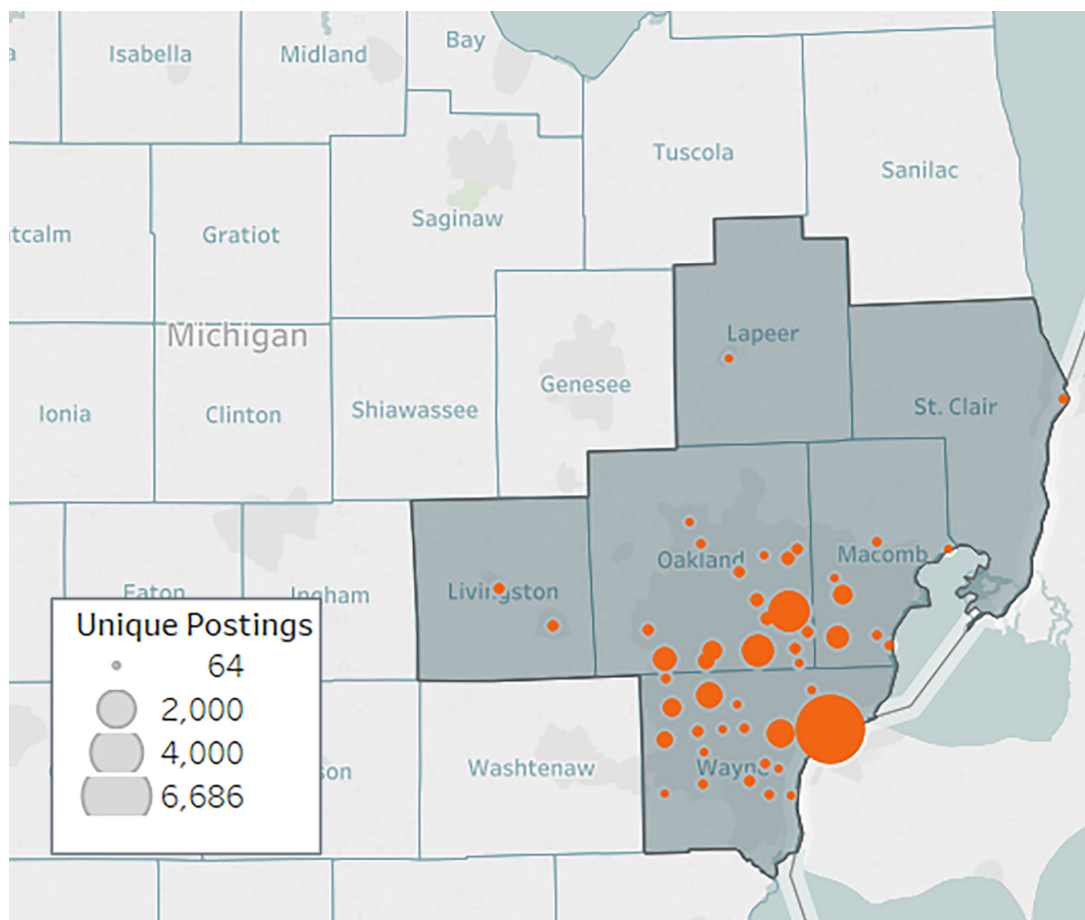
- Certified Public Accountant
- Series 7 General Securities Representative License (Stockbroker)
- Certified Financial Planner
- Series 6 Investment Company and Variable Contracts License (Mutual Funds/Variable Annuities)
- Certified Internal Auditor



Insurance and Consulting Firms Seeking Business and Finance Workers



Accounting and Management Skills are in High Demand



Map based on Longitude (generated) and Latitude (generated). Color shows sum of Postings/hiring intensity. Size shows sum of Unique Postings (Jan 2017–Dec 2017). Details are shown for City.

Top Job Posting Employers

- Co-Alliance, LLP
- H&R Block, Inc.
- Robert Half International Inc.
- Deloitte LLP
- Bank of America Corporation
- Anthem, Inc.
- Oracle Corporation
- Huntington Bancshares Incorporated
- ACCENTURE, INC.
- Quicken Loans Inc.

Top Job Posting Cities

1. Detroit, MI: 6,686 Postings
2. Troy, MI: 2,311 Postings
3. Ann Arbor, MI: 2,026 Postings
4. Southfield, MI: 1,369 Postings
5. Auburn Heights, MI: 1,148 Postings



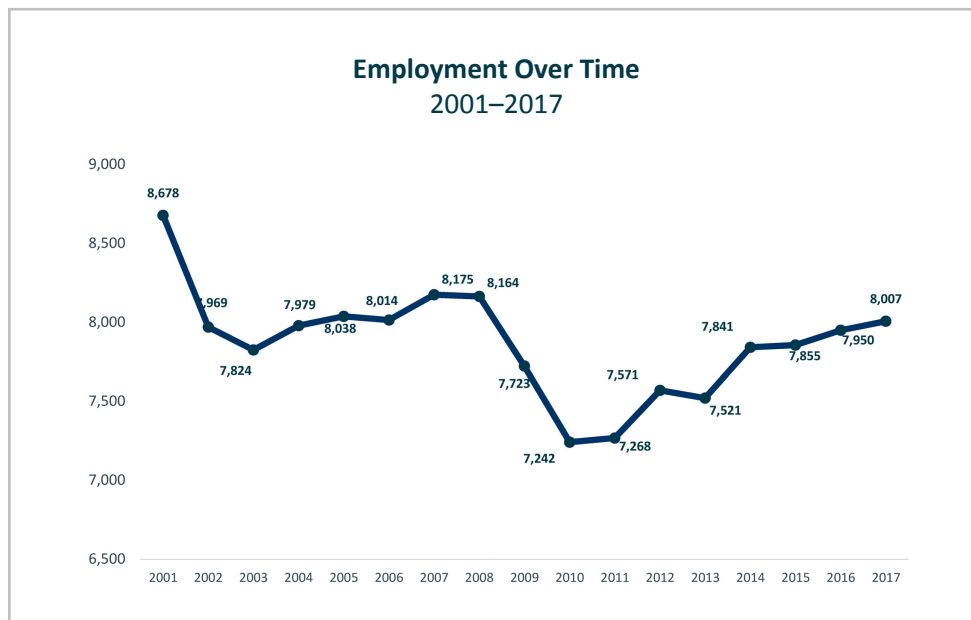
ENERGY OCCUPATION GROUP

Detroit-Warren-Dearborn MI MSA | Q1 2018

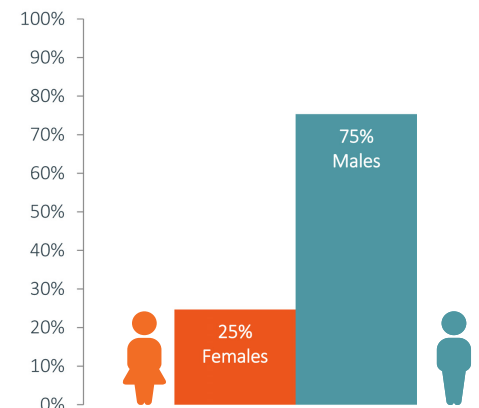
Introduction

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.

8,007
Energy Workers
0.1% Increase
from 2016



Population Gender Demographics



Energy Worker Demographics

According to the most recent Emsi data set available (2017), The over 8,000 workers in the energy occupation group are primarily white males between the ages of 25 and 54, with 25 percent of workers identifying as female and just 22 percent identifying as a racial minority. Only five percent of the workers in the occupation group are under the age of 24, indicating that the energy field faces a particular threat from the region's aging workforce.

Race and Ethnicity Demographics

79.3% White | 10.4% Black or African American | 6.0% Asian

**Age 14-24,
5.0%**

Population Age Demographics



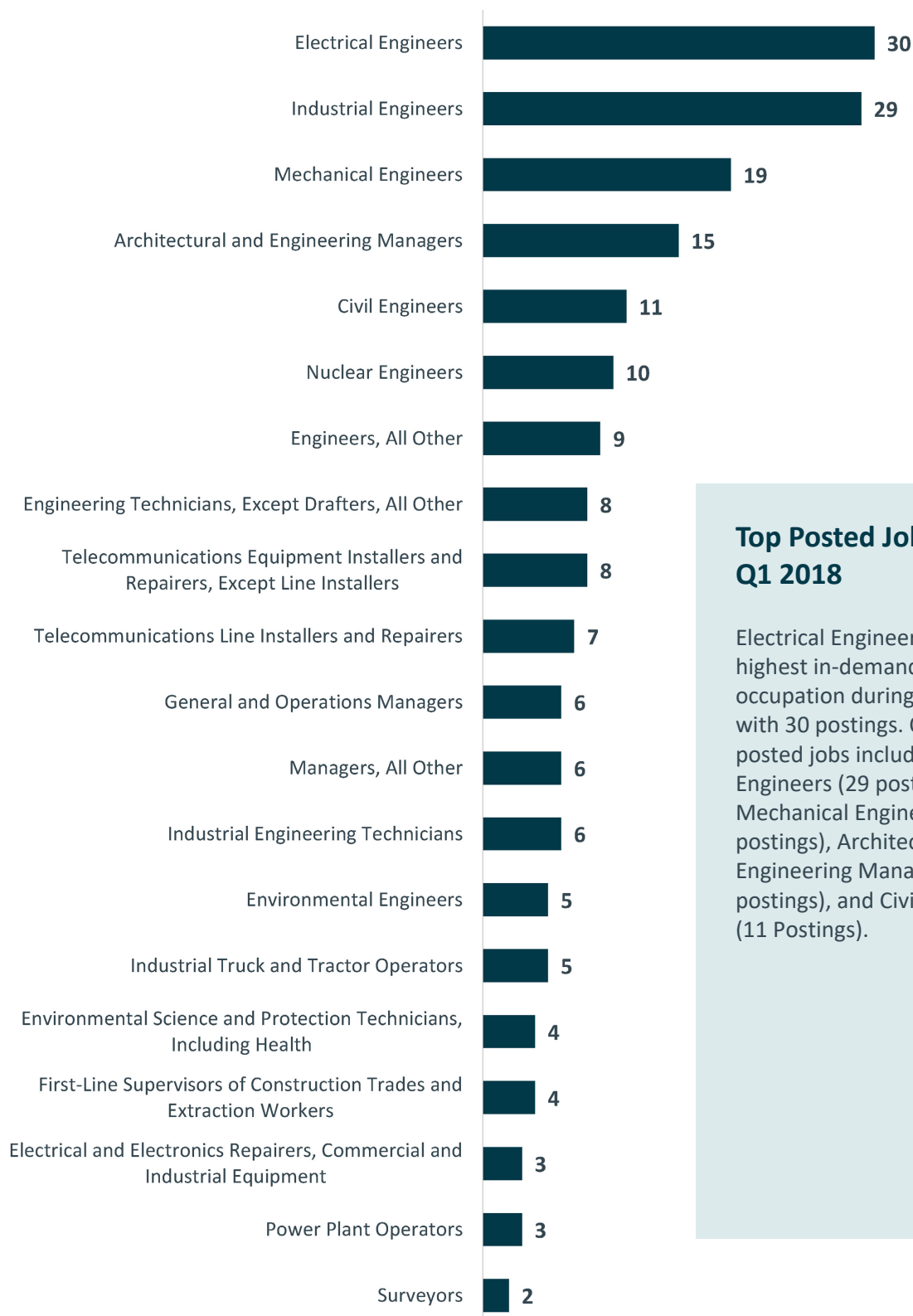


210 Energy Postings
14 More than Q4 2017



Bachelors Degree Required
for Most Energy Jobs

Energy Top Posted Jobs Q1 2018



Top Posted Jobs: Q1 2018

Electrical Engineers were the highest in-demand Energy occupation during Q2 2018, with 30 postings. Other top posted jobs include Industrial Engineers (29 postings), Mechanical Engineers (19 postings), Architectural and Engineering Managers (15 postings), and Civil Engineers (11 Postings).



High Earning Potential for Architectural and Engineering Managers



Certified Associate Project Manager: Most In-Demand Energy Certification

Energy Wage Overview

The high demand for engineers and managers in the energy field creates lucrative opportunities for job seekers willing to overcome the educational barriers related to these jobs. According to the Bureau of Labor Statistics (BLS), the top posted energy job, Industrial Engineers, offers a median hourly wage of \$42.56, or annual earnings of approximately \$89,000. Technician and construction-focused positions generally have shorter educational requirements than engineers and pay somewhat higher than similar occupations in other industries.

Wage Overview for Top Posted Energy Occupations Q1 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2071	Electrical Engineers	\$28.62	\$34.50	\$42.56	\$51.31	\$62.13
17-2112	Industrial Engineers	\$30.27	\$36.02	\$44.66	\$54.05	\$62.28
17-2141	Mechanical Engineers	\$29.54	\$35.73	\$44.61	\$54.97	\$63.55
11-9041	Architectural and Engineering Managers	\$43.41	\$52.55	\$63.20	\$75.72	\$89.21
17-2051	Civil Engineers	\$25.75	\$29.94	\$36.65	\$45.68	\$55.50
17-2161	Nuclear Engineers	\$34.38	\$42.87	\$50.82	\$57.67	\$65.40
17-2199	Engineers, All Other	\$24.34	\$36.44	\$46.42	\$57.56	\$67.97
17-3029	Engineering Technicians, Except Drafters, All Other	\$17.34	\$21.84	\$31.07	\$38.66	\$46.36
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	\$15.61	\$18.95	\$25.13	\$33.69	\$40.21
49-9052	Telecommunications Line Installers and Repairers	\$12.16	\$14.41	\$24.28	\$35.34	\$41.75

In-Demand Technical Skills

- Electrical Engineering
- Telecommunications
- Mechanical Engineering
- Engineering Design Process
- Collective Bargaining

In-Demand Foundational Skills

- Operations
- Management
- Communications
- Leadership
- Research

In-Demand Education Level

- High School Diploma: 31.3%
- Associate Degree: 11.6%
- Bachelor's Degree: 54.1%
- Master's Degree: 11.2%

In-Demand Certifications

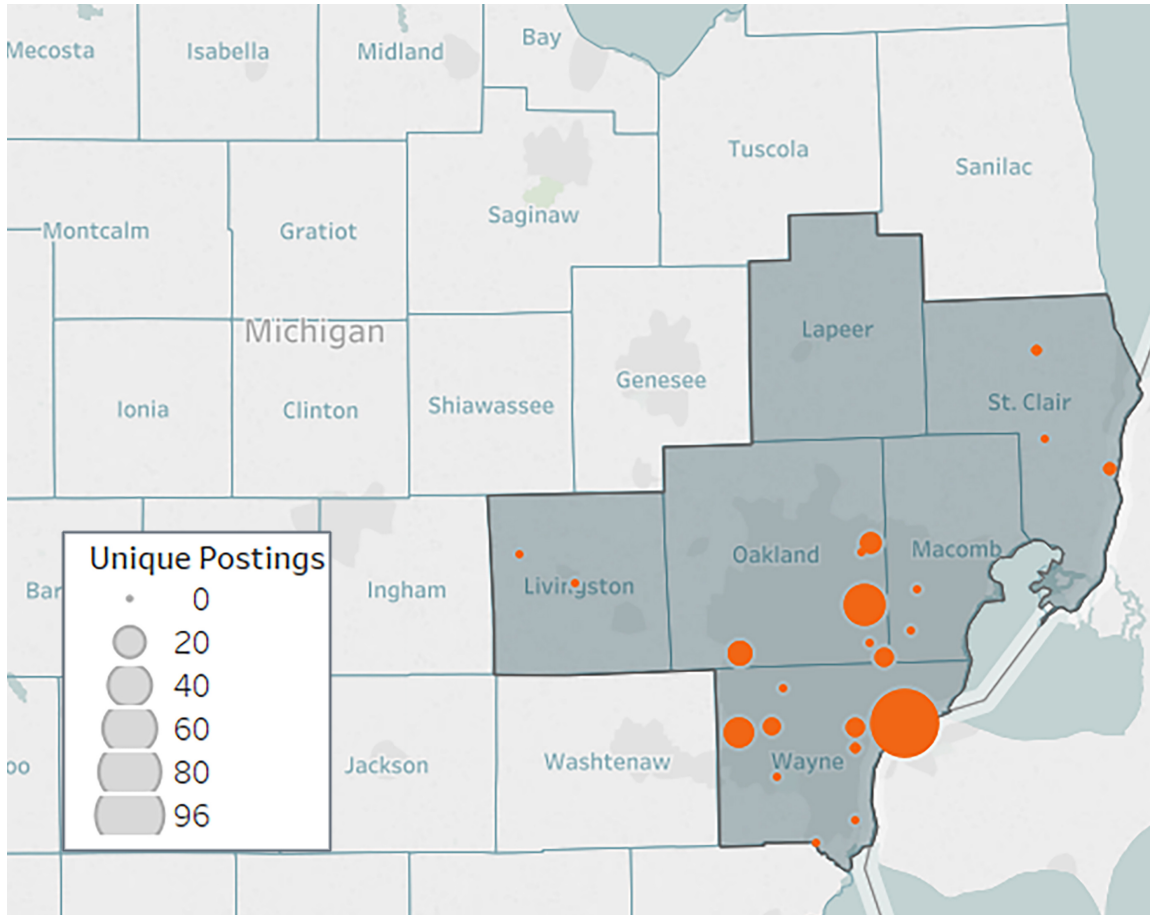
- Certified Associate Project Manager
- Commercial Driver's License (CDL)
- PMI Certified



Electrical Engineers: In-Demand Entry-Level Job



Telecommunications Skills are in High Demand



Map based on Longitude (generated) and Latitude (generated). Color shows sum of Postings/hiring intensity. Size shows sum of Unique Postings (Jan 2017–Dec 2017). Details are shown for City.

Top Job Posting Employers

- DTE Energy Company
- Lg Electronics
- Aero Communications, Inc.
- Itc Holdings Corp.
- Henkels & McCoy, Inc.
- Acuren Inspection, Inc.
- Communications Construction Group, LLC
- CMS Energy Corporation
- Semco Energy, Inc.
- Cavo Broadband Communications, LLC

Top Job Posting Cities

1. Detroit, MI: 96 Postings
2. Troy, MI: 35 Postings
3. Canton, MI: 18 Postings
4. Novi, MI: 12 Postings
5. Rochester, MI: 9 Postings



HEALTH CARE OCCUPATION GROUP

Detroit-Warren-Dearborn MI MSA | Q1 2018

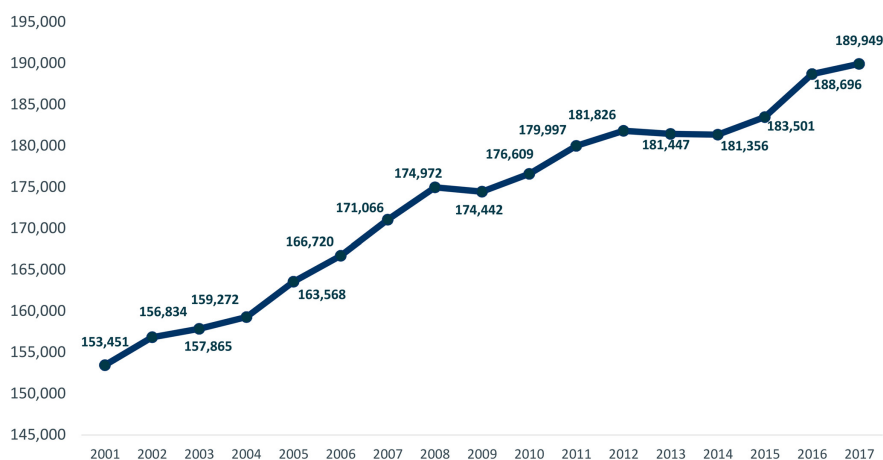
Introduction

WIN's health care occupation group includes jobs related to health care support and practitioners. Employment in this group has been consistently growing, with 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.

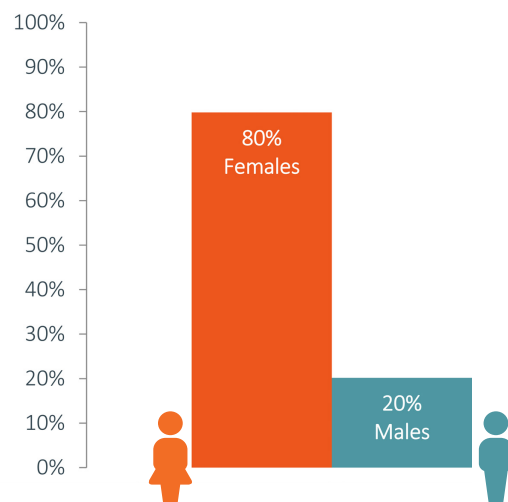


189,949
Health Care Workers
0.1% Increase from 2016

Employment Over Time
2001–2017



Population
Gender Demographics



Health Care Worker Demographics

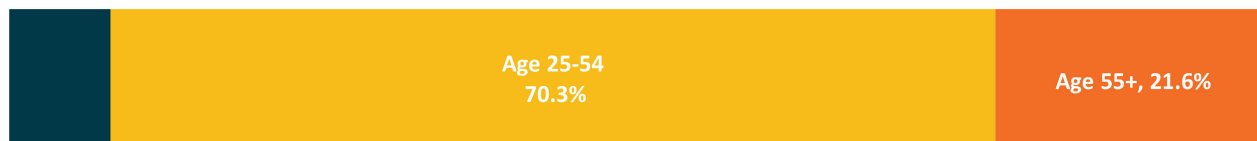
According to the most recent Emsi data set available (2017), the Health Care occupation group employs around 189,949 workers, who are primarily female (80 percent) and between the ages of 25 and 54 (70 percent), although 22 percent of workers are over 55. The group has a similar proportion of racial minorities as the workforce as a whole, with 68 percent of workers identifying as white, 21 percent identifying as black or African American, and ten percent identifying otherwise.

Race and Ethnicity Demographics

68.4% White | **21.4% Black or African American** | **6.1% Asian**

Population Age Demographics

Age 14-24,
8.0%





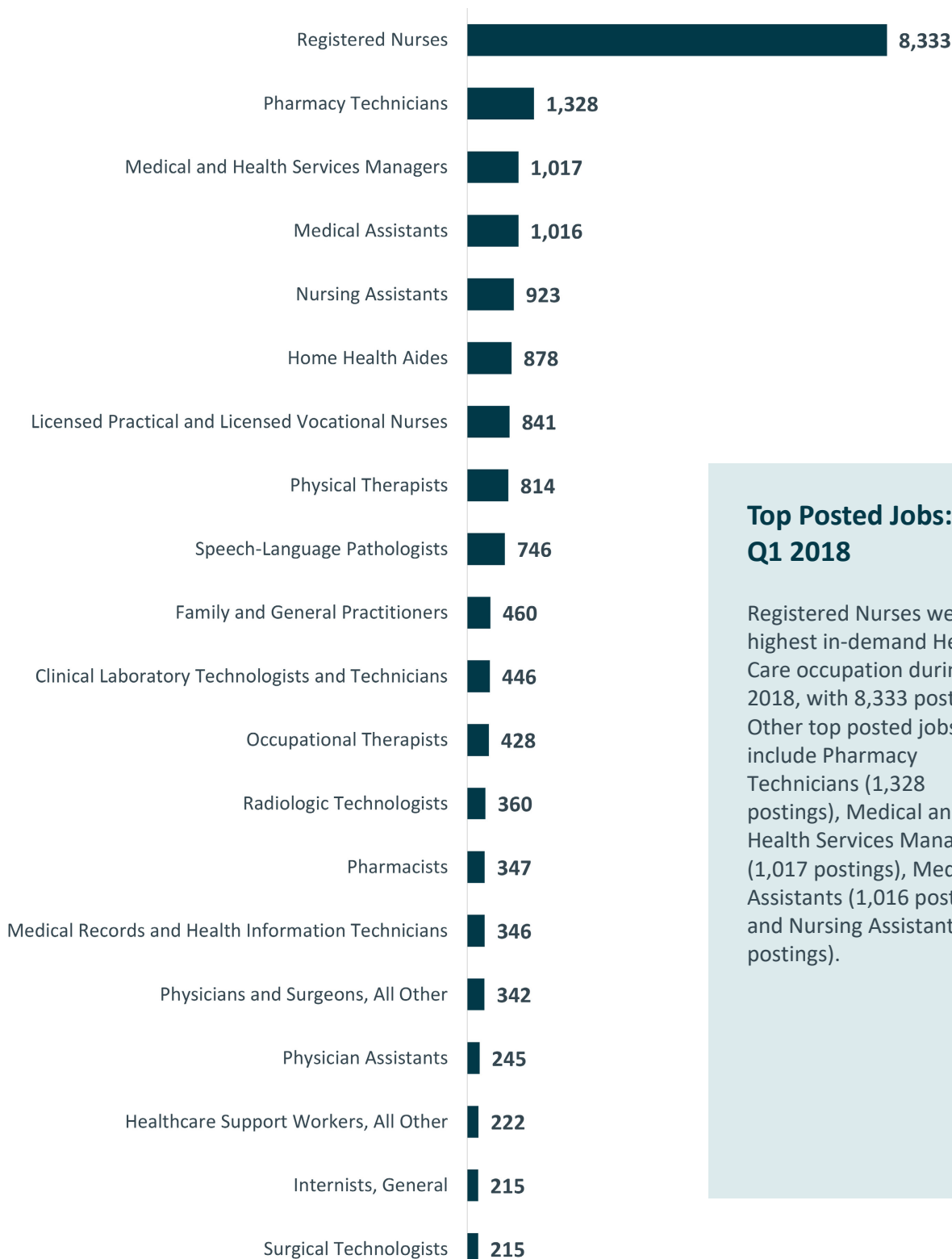
23,264 Health Care Postings:
1,524 fewer than Q4 2017



Bachelor's Degree Required for
High Earning Health Care Jobs

Health Care Top Posted Jobs

Q1 2018



Top Posted Jobs: Q1 2018

Registered Nurses were the highest in-demand Health Care occupation during Q1 2018, with 8,333 postings. Other top posted jobs include Pharmacy Technicians (1,328 postings), Medical and Health Services Managers (1,017 postings), Medical Assistants (1,016 postings), and Nursing Assistants (923 postings).



High Earning Potential for Medical and Health Services Managers



CCRN: Most In-Demand Health Care Certification

Health Care Wage Overview

Wages in the high-demand health care field scale with education and experience, though the group does boast a relatively broad array of entry requirements and high volume of jobs open to those with less than a bachelor's that pay more than the region's median wage of \$17.81 per hour. Registered Nurses, the top posted health care job in Q1 2018, offers a median annual salary of nearly \$71,000 (\$34.13 hourly) according to the Bureau of Labor Statistics (BLS).

Wage Overview for Top Posted Health Care Jobs in Q1 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
29-1141	Registered Nurses	\$25.77	\$29.47	\$34.13	\$38.47	\$44.80
29-2052	Pharmacy Technicians	\$10.24	\$12.16	\$15.25	\$18.35	\$21.57
11-9111	Medical and Health Services Managers	\$28.43	\$36.11	\$47.81	\$64.52	\$93.15
31-9092	Medical Assistants	\$11.77	\$12.96	\$14.63	\$17.03	\$19.09
31-1014	Nursing Assistants	\$10.56	\$12.30	\$13.95	\$15.89	\$18.11
31-1011	Home Health Aides	\$9.10	\$9.52	\$10.65	\$12.34	\$14.48
29-2061	Licensed Practical and Licensed Vocational Nurses	\$20.21	\$22.22	\$25.38	\$28.45	\$30.46
29-1123	Physical Therapists	\$30.26	\$36.38	\$43.07	\$49.14	\$61.47
29-1127	Speech-Language Pathologists	\$26.04	\$30.82	\$37.86	\$45.55	\$53.88
29-1062	Family and General Practitioners	\$38.00	\$53.72	\$81.00	\$102.74	\$152.41

Data: EMSI, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

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

In-Demand Foundational Skills

- Management
- Communications
- Leadership
- Operations
- Cardiopulmonary Resuscitation

In-Demand Education Level*

- High School Diploma: 18.4%
- Associate Degree: 15.7%
- Bachelor's Degree: 20.0%
- Master's Degree: 7.4%

*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

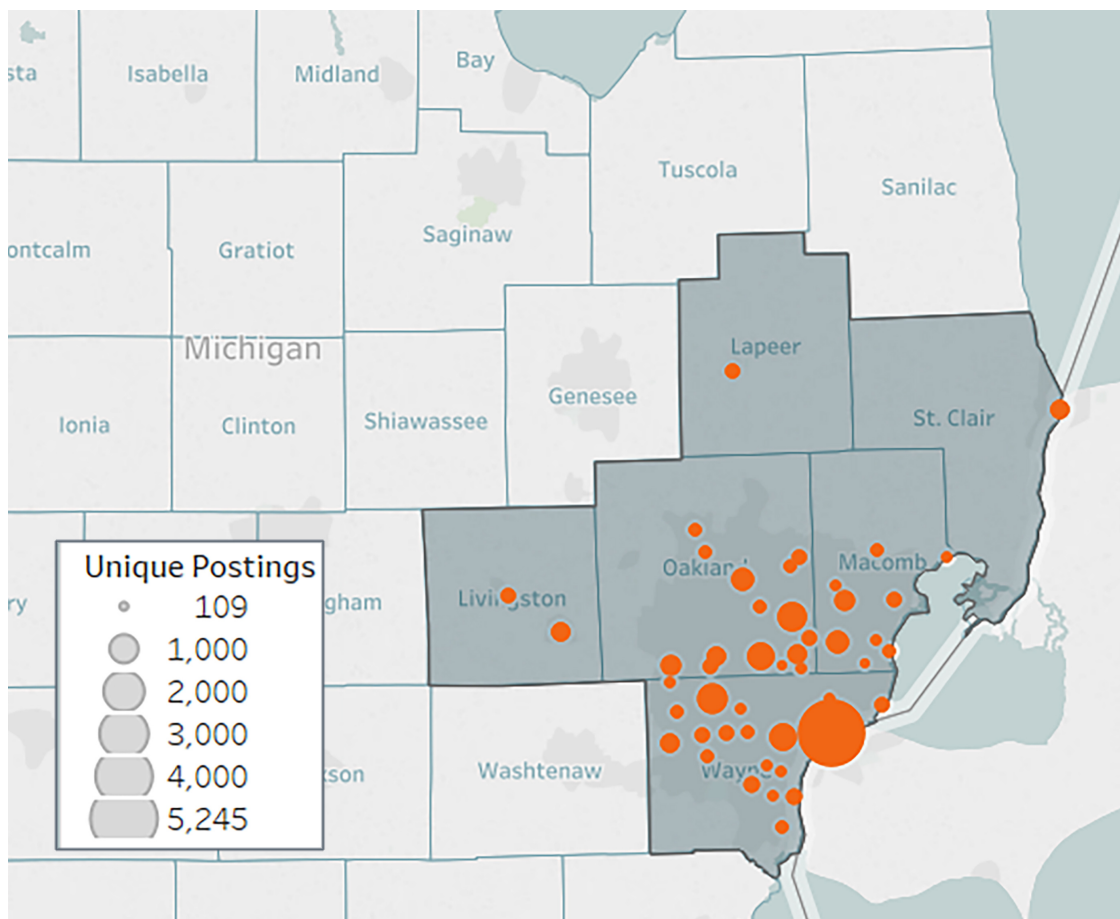
- Critical Care Registered Nurse (CCRN)
- CNOR Certification
- Licensed Practical Nurse
- Associate of Science In Nursing
- Certified Nursing Assistant



Registered Nurses: In-Demand Entry Level Occupation



Nursing and Management Skills are in High Demand



Map based on Longitude (generated) and Latitude (generated). Color shows sum of Postings/hiring intensity. Size shows sum of Unique Postings (Jan 2017–Dec 2017). Details are shown for City.

Top Job Posting Employers

- William Beaumont Hospital
- Henry Ford Health System
- Travel Nurse Inc
- HealthCare Employment Network
- CVS Health Corporation
- Ascension Health
- Trinity Health Corporation
- Sunbelt Staffing, LLC
- Manor Care, Inc.
- Soliant Health, Inc

Top Job Posting Cities

1. Detroit, MI: 5,245 Postings
2. Livonia, MI: 1,070 Postings
3. Troy, MI: 994 Postings
4. Dearborn, MI: 900 Postings
5. Southfield, MI: 867 Postings

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



INFORMATION TECHNOLOGY (IT) OCCUPATION GROUP

Detroit-Warren-Dearborn MI MSA | Q1 2018

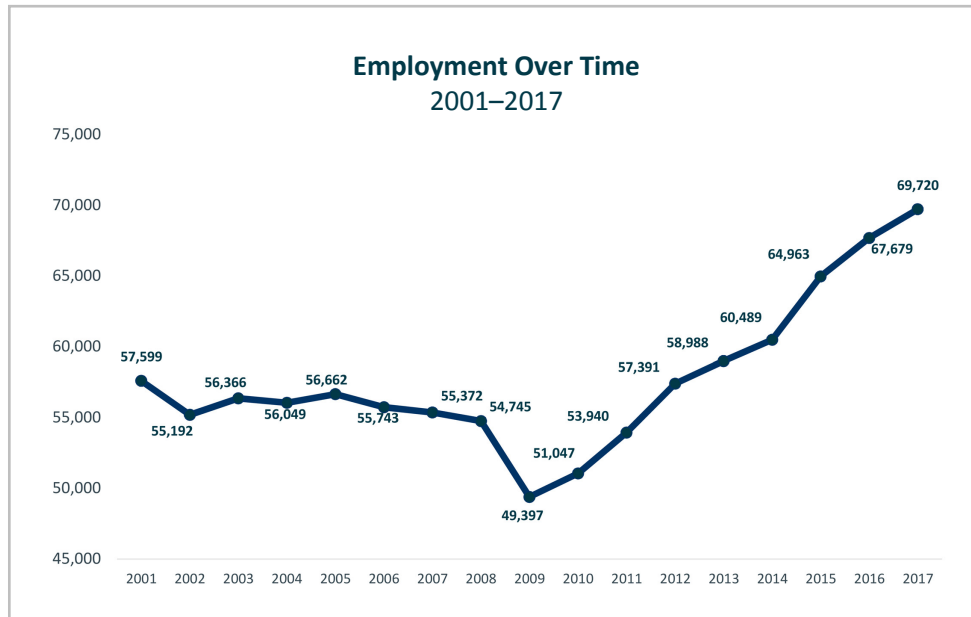
Introduction

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.

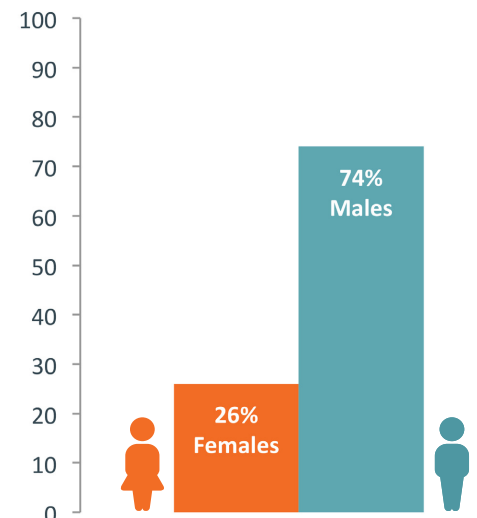


69,720
IT Workers

0.3% Increase from
2016



Population Gender Demographics



IT Worker Demographics

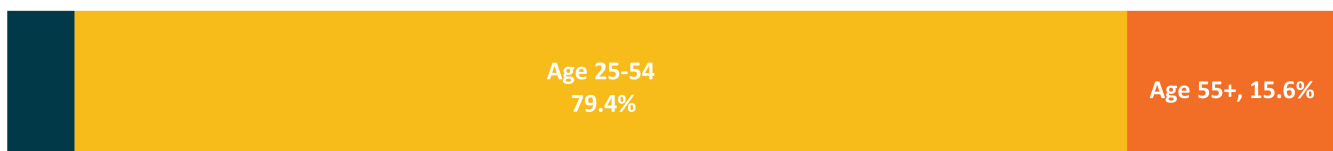
According to the most recent Emsi data set available (2017), despite having nearly 70,000 workers, the IT occupation group is not very diverse. A large majority of workers are white males between the ages of 25 and 54. Currently, 74 percent of workers identify as male, and 67 percent identify as white. 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

66.9% White | 11.0% Black or African American | 18.3% Asian

Age 14-24,
5.1%

Population Age Demographics



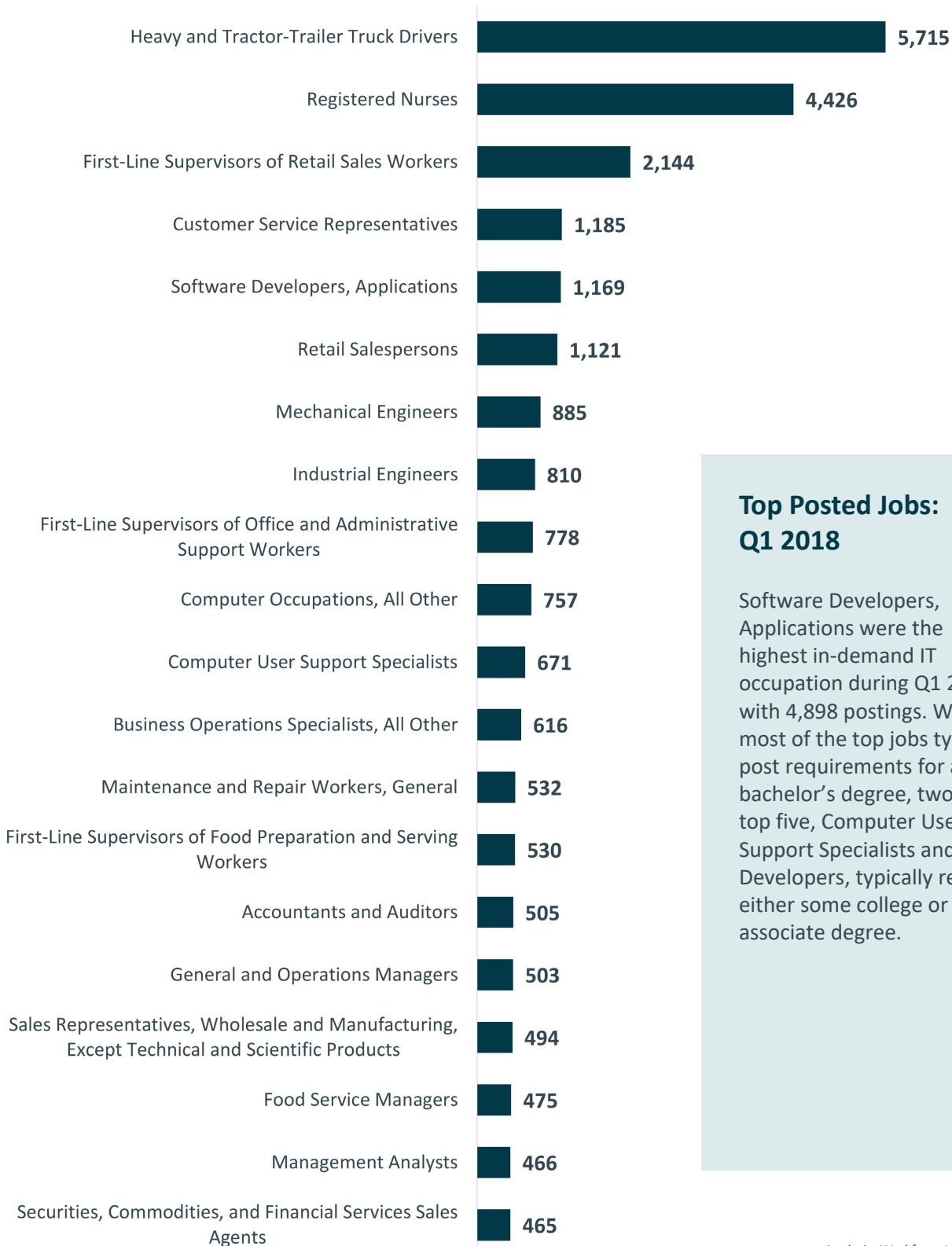


20,136 IT Postings: 276
More than Q4 2017



Bachelors Degree
Required for Most IT Jobs

Information Technology Top Posted Jobs Q1 2018



Top Posted Jobs: Q1 2018

Software Developers, Applications were the highest in-demand IT occupation during Q1 2018, with 4,898 postings. While most of the top jobs typically post requirements for a bachelor's degree, two of the top five, Computer User Support Specialists and Web Developers, typically require either some college or an associate degree.



High Earning Potential for Computer and Information System Managers



Certified Ethical Hacker: In-Demand IT Certification

IT Wage Overview

Most IT related jobs offer high wages, making for a lucrative opportunity for job seekers willing to overcome the educational barriers related to these jobs. Software Developers, Applications, the top posted IT job in Q1 2018, offers a median annual salary of nearly \$92,000 according to the Bureau of Labor Statistics (BLS).

Wage Overview for Top Posted IT Jobs in Q1 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
15-1132	Software Developers, Applications	\$27.94	\$35.06	\$44.21	\$54.78	\$63.90
15-1199	Computer Occupations, All Other	\$20.61	\$26.42	\$37.59	\$49.52	\$59.47
15-1151	Computer User Support Specialists	\$14.25	\$17.71	\$23.58	\$30.30	\$39.34
15-1121	Computer Systems Analysts	\$25.03	\$31.36	\$40.83	\$50.17	\$61.08
15-1134	Web Developers	\$19.81	\$25.64	\$32.35	\$41.80	\$48.63
15-1142	Network and Computer Systems Administrators	\$25.44	\$31.28	\$39.25	\$48.38	\$57.29
15-1133	Software Developers, Systems Software	\$23.81	\$32.45	\$42.39	\$51.72	\$62.01
15-1122	Information Security Analysts	\$28.71	\$34.23	\$45.35	\$56.89	\$66.45
11-3021	Computer and Information Systems Managers	\$41.21	\$51.48	\$62.99	\$77.13	\$96.03
15-1131	Computer Programmers	\$22.18	\$28.03	\$34.57	\$41.89	\$48.90

Data: EMSI, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- SQL (Programming Language)
- Java (Programming Language)
- Software Development
- Software Engineering
- Agile Software Development

In-Demand Foundational Skills

- Management
- Communications
- Operations
- Integration
- Leadership

In-Demand Education Level

- High School Diploma: 3.6%
- Associate's Degree: 4.9%
- Bachelor's Degree: 53.9%
- Master's Degree: 10.9%

**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

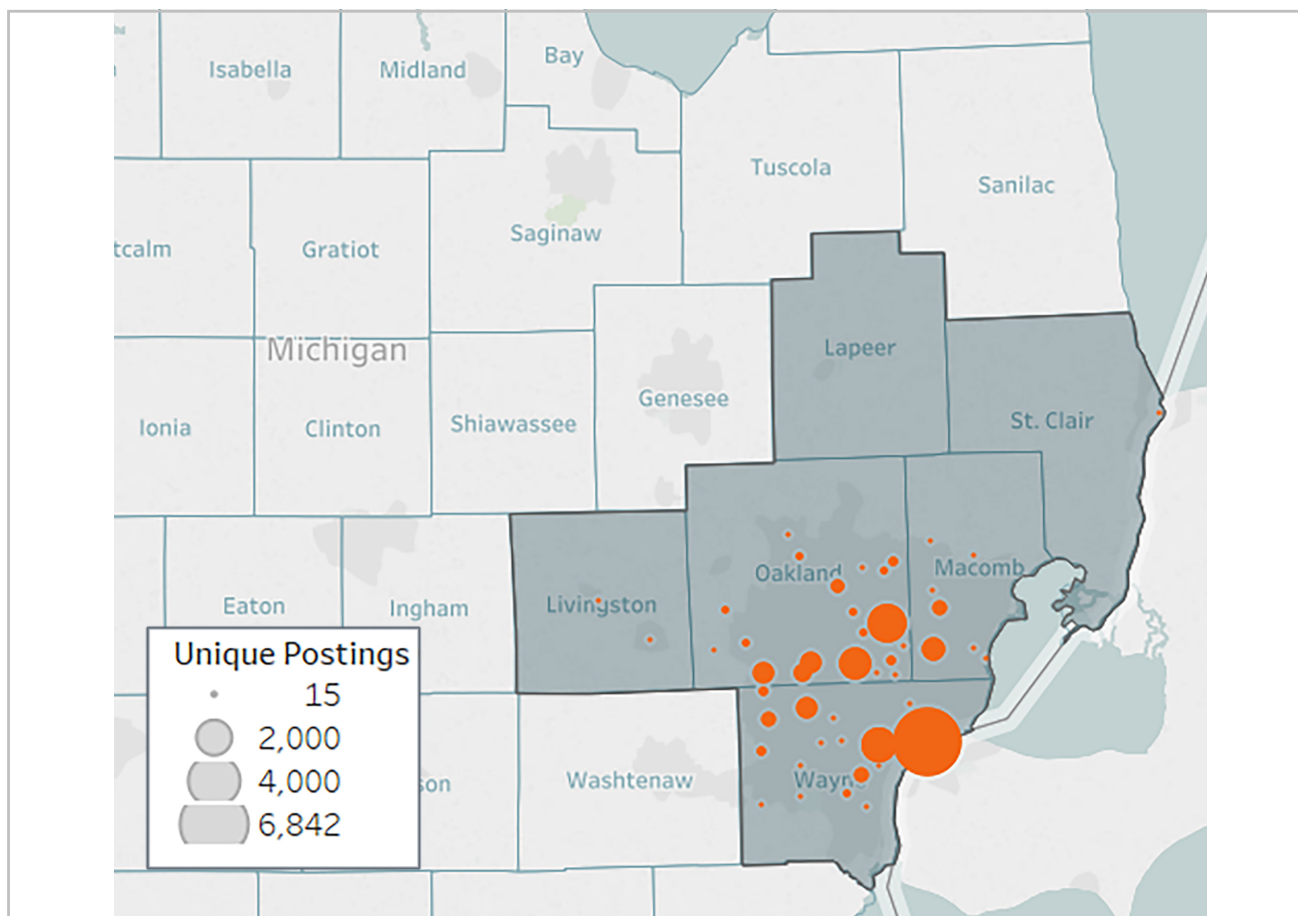
- Certified Information Systems Security Professional (CISSP)
- Certified Information Security Manager
- Cisco Certified Network Associate
- Certified Ethical Hacker
- Microsoft Certified Systems Engineer



Automotive and Tech Companies are Top Employers of IT Workers



Programming Language Skills are in High Demand



Map based on Longitude (generated) and Latitude (generated). Color shows sum of Postings/hiring intensity. Size shows sum of Unique Postings (Jan 2017–Dec 2017). Details are shown for City.

Top Job Posting Employers

- ACENTURE, INC.
- Oracle Corporation
- Deloitte LLP
- Teksystems, Inc.
- General Motors Company
- Ford Motor Company
- Ciber, Inc.
- Technosoft Corporation
- Quicken Loans Inc.
- Fast Switch, Ltd.

Top Job Posting Cities

1. Detroit, MI: 6,842 Postings
2. Troy, MI: 2,167 Postings
3. Dearborn, MI: 1,788 Postings
4. Southfield, MI: 1,483 Postings
5. Auburn Heights, MI: 1,268 Postings



SKILLED TRADES OCCUPATION GROUP (MANUFACTURING FOCUSED)

Detroit-Warren-Dearborn MI MSA | Q1 2018

Introduction

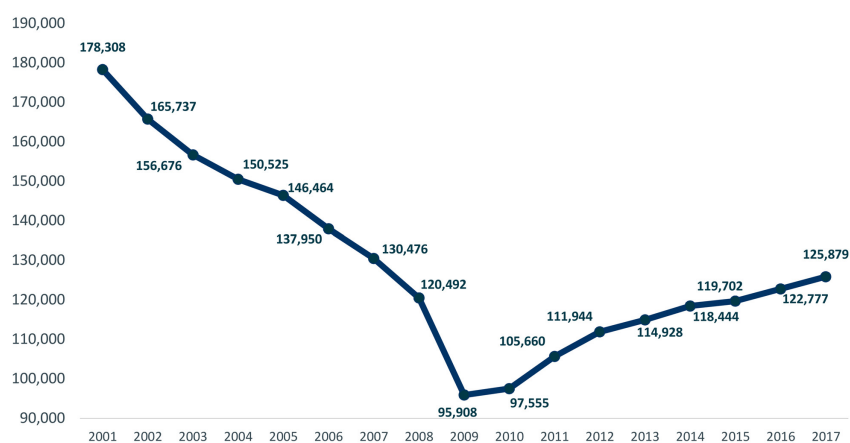
WIN's technicians/skilled trades category includes jobs related to advanced manufacturing. Southeast Michigan has more demand for skilled- trades labor, such as CNC machinists and welders, than almost anywhere else in the country. NOTE: Skilled trades related to construction and assembly are not included in this cluster, as the focus is on advanced manufacturing only.



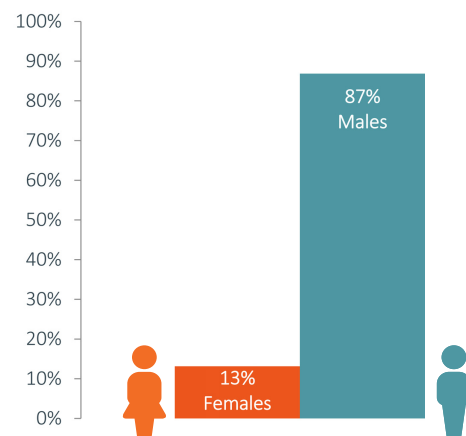
125,879
Skilled Trades
Workers

0.3% Increase
from 2016

Employment Over Time
2001–2017



Population
Gender Demographics



Skilled Trades Worker Demographics

According to the most recent Emsi data set available (2017), the Skilled Trades occupation group employs about 126,000 workers in southeast Michigan. A majority of workers are white males between the ages of 25 and 54. Additional outreach may be necessary in the near future, as at 25.5 percent, the group has a somewhat higher proportion than average of workers over age 55.

Race and Ethnicity Demographics

77.5% White | **14.0% Black or African American** | **3.0% Asian**

Age 14-24,
6.7%

Population Age Demographics



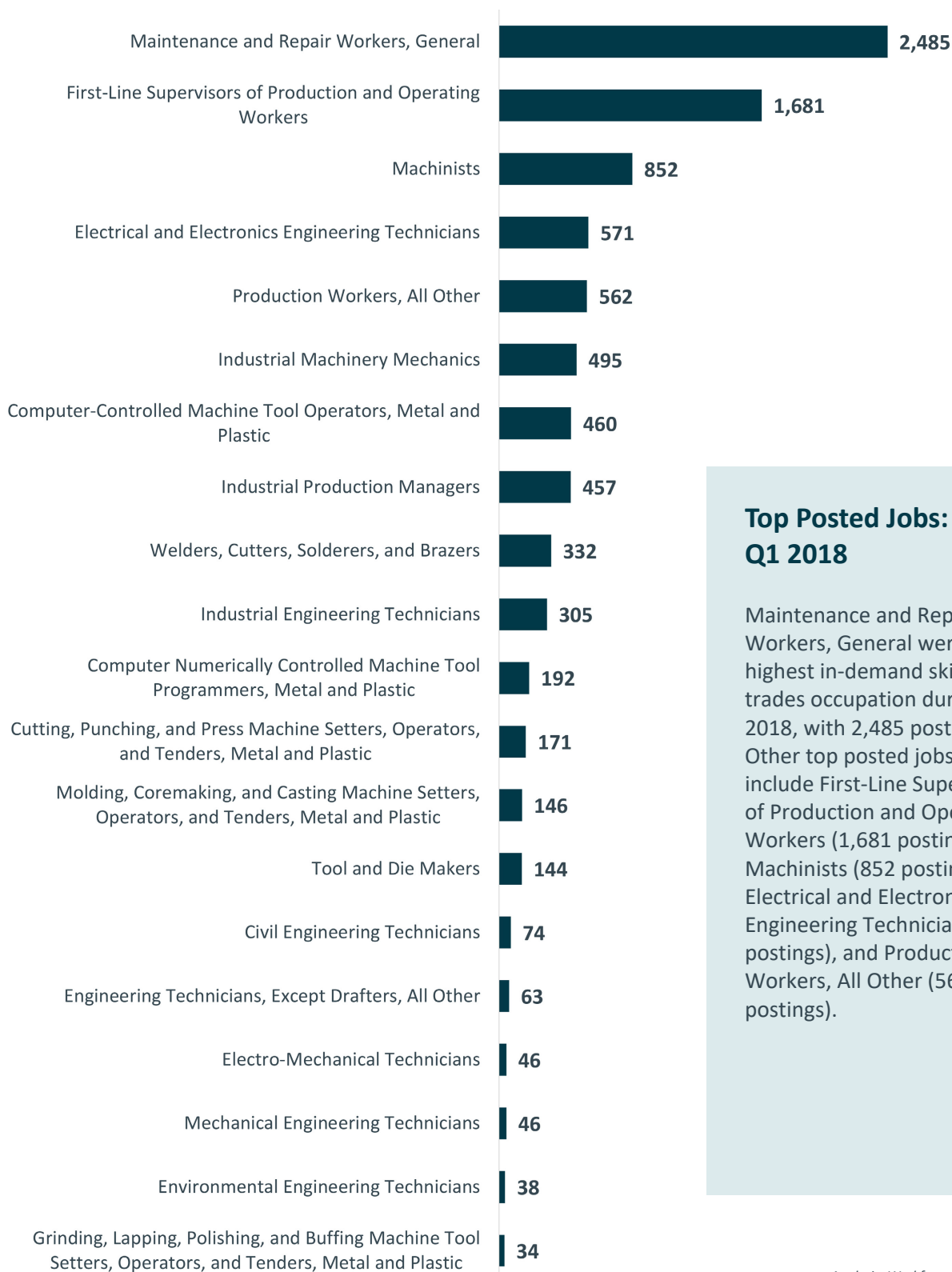


9,511 Skilled Trades Postings:
565 fewer than Q4 2017



Vocational Training Required for
Most Skilled Trades Jobs

Skilled Trades Top Posted Jobs Q1 2018



Top Posted Jobs: Q1 2018

Maintenance and Repair Workers, General were the highest in-demand skilled trades occupation during Q1 2018, with 2,485 postings. Other top posted jobs include First-Line Supervisors of Production and Operating Workers (1,681 postings), Machinists (852 postings), Electrical and Electronics Engineering Technicians (571 postings), and Production Workers, All Other (562 postings).



High Earning Potential for Industrial Production Managers



Certified Quality Engineer: In-Demand Skilled Trades Certification

Skilled Trades Wage Overview

Half of the top ten in-demand skilled trades occupation have median wages above \$20 per hour according to the Bureau of Labor Statistics (BLS). Maintenance and Repair Workers, General, the top posted skilled trades job in Q1 2018, offers a median hourly wage of \$17.28, which translates to an annual salary of nearly \$36,000.

Wage Overview for Top Posted Skilled Trades Occupations Q1 2018

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	\$10.83	\$13.35	\$17.28	\$23.08	\$29.06
51-1011	First-Line Supervisors of Production and Operating Workers	\$18.60	\$24.01	\$32.22	\$42.14	\$52.13
51-4041	Machinists	\$12.23	\$15.50	\$20.31	\$25.56	\$30.06
17-3023	Electrical and Electronics Engineering Technicians	\$16.88	\$21.83	\$29.29	\$35.01	\$40.61
51-9199	Production Workers, All Other	\$10.46	\$14.98	\$18.03	\$21.72	\$26.59
49-9041	Industrial Machinery Mechanics	\$16.38	\$20.81	\$26.59	\$33.10	\$38.29
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$12.28	\$14.39	\$19.07	\$24.07	\$28.88
11-3051	Industrial Production Managers	\$35.03	\$44.25	\$56.09	\$70.45	\$86.99
51-4121	Welders, Cutters, Solderers, and Brazers	\$13.29	\$15.81	\$19.15	\$23.68	\$29.07
17-3026	Industrial Engineering Technicians	\$16.79	\$20.14	\$25.87	\$33.11	\$39.67

In-Demand Technical Skills

- Machining
- Lathe Experience
- Tooling
- HVAC
- Mill Experience

In-Demand Foundational Skills

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

In-Demand Education Level

- High School Diploma: 39.2%
- Associate Degree: 11.0%
- Bachelor's Degree: 12.8%
- Master's Degree: 1.4%

In-Demand Certifications

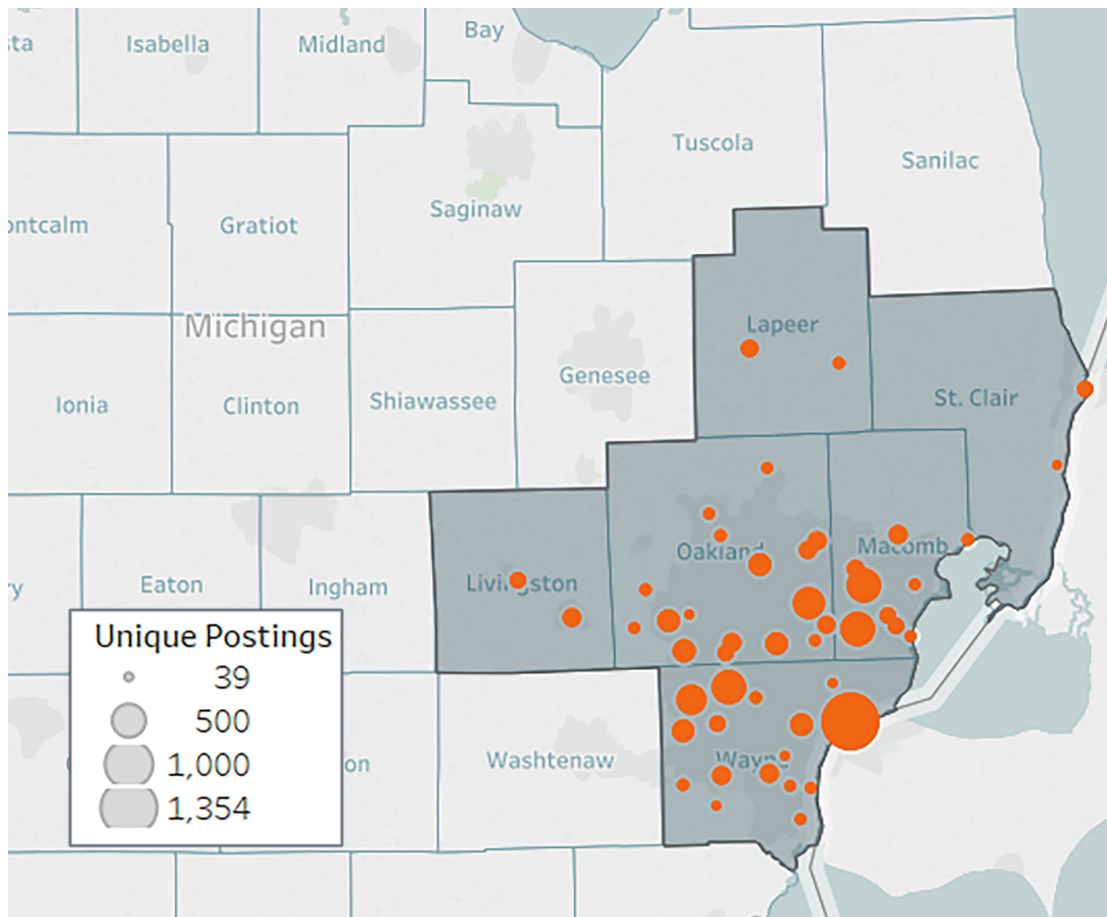
- Certified Quality Engineer
- (American Society for Quality) ASQ Certified
- Certified Broadcast Radio Engineer
- Certified Welder
- Certified Quality Manager



Maintenance and Repair Workers: In-Demand Entry-Level Occupation



Machining Skills are in High Demand



Map based on Longitude (generated) and Latitude (generated). Color shows sum of Postings/hiring intensity. Size shows sum of Unique Postings (Jan 2017–Dec 2017). Details are shown for City.

Top Job Posting Employers

- McDonald's Corporation
- Aerotek, Inc.
- Kelly Services, Inc.
- Express Services Inc
- Michigan Works Service Center, Alpena C
- Sentech Services
- Start
- Nesco Resource
- Trillium Staffing
- The Home Depot Inc

Top Job Posting Cities

1. Detroit, MI: 8,631 Postings
2. Auburn Heights, MI: 6,134 Postings
3. Warren, MI: 2,334 Postings
4. Livonia, MI: 2,262 Postings
5. Sterling Heights, MI 4,286 Postings

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Facebook

[@workforceintelligencenetwork](https://www.facebook.com/workforceintelligencenetwork)

Twitter

[@WIN-semich](https://twitter.com/WIN-semich)