

**Q4 2018**  
October–December

# WASHTENAW COUNTY

WIN Labor Market Report





# INTRODUCTION

## Washtenaw County | Q4 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 Washtenaw County. 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.

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 fourth quarter of 2018 in Washtenaw county and includes summative data for October, November, and December of 2018. The Washtenaw report focuses on analyzing the Customer Service, Energy, Health Care, Information Technology, and Skilled Trades occupation groups.

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](http://www.WINintelligence.org) or contact the data and research team directly at [research@WINintelligence.org](mailto:research@WINintelligence.org).



# ANNUAL STATE OF THE LABOR MARKET

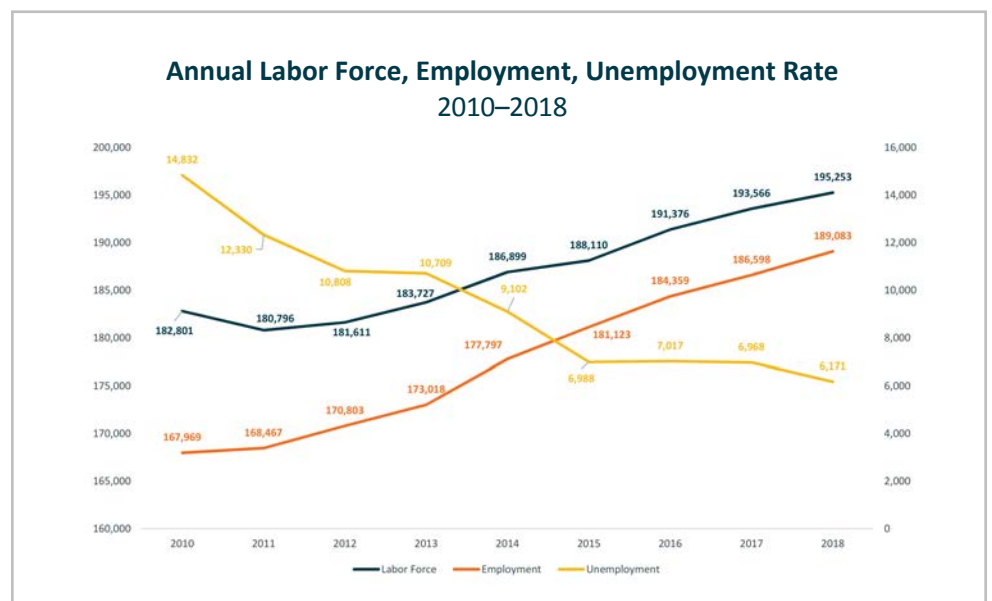
## Washtenaw County | Q4 2018

### State of the Labor Market in Washtenaw County

During 2018, both the labor force and employment figures increased in Washtenaw County. With this simultaneous increase in both labor force and employment, the number of unemployed individuals decreased in the county. This has caused the unemployment rate to drop from the 3.6 percent annual rate in 2017 to a 2018 annual rate of 3.2 percent. Employer demand for most occupation groups also increased during Q4 2018. The health care occupation group reported the highest demand with nearly 4,000 job postings during the quarter. Other occupation groups also offer great job opportunities for active job seekers: business and finance related postings grew by 33 percent from Q3 2018, and 25 percent of postings were open to entry-level applicants.

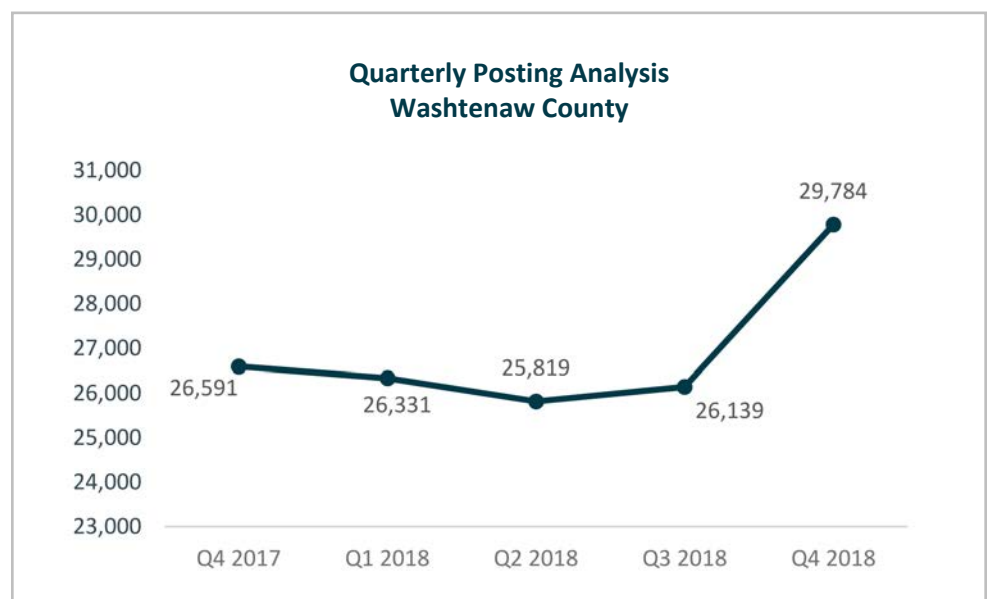
### Annual Labor Market Information

Moving into a ten-year high, the labor force in Washtenaw County increased by 1,687 individuals between 2017 and 2018. Employment increased by 2,485 workers between 2017 and 2018. With employment increasing at a greater rate than the labor force, the unemployment rate fell by 0.4 percentage points from the 3.6 percent annual unemployment rate of 2017 to a 2018 annual rate of 3.2 percent in Washtenaw County.



### Quarterly Employer Demand Overview

Data from the fourth quarter of 2018, including posting information from October, November, and December showed employer demand continue to grow in Washtenaw County. There were 3,645 more postings during Q4 2018 compared to the 26,331 postings made during Q4 2017 for a total of 29,784 postings during Q4 2018. Postings spiked during Q4 2018 in Washtenaw County, reaching a 2 year high in total number of online job postings. Moving into 2019, postings may drop during the first two quarters, but could reach even higher postings during the second half of the year.



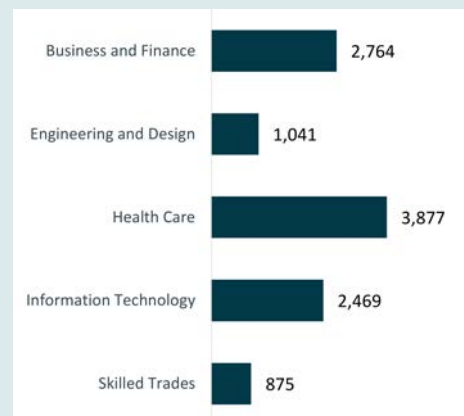


## QUARTERLY WORKFORCE INDICATORS Washtenaw County | Key Findings for Q4 2018

### Employer demand surges to nearly 30,000 postings during Q4 2018, with most occupation groups analyzed by WIN experiencing increases in online job postings between Q3 and Q4 2018.

During Q4 2018, there were 29,784 jobs posted, 3,645 more than the 26,139 jobs posted during Q3 2018 in Washtenaw County. Most of the occupation groups analyzed by WIN experienced an increase during the fourth quarter of 2018. The business and finance, engineering and design, health care, and IT groups each increased in postings between Q3 2018 and Q4 2018. Online job postings made by employers in the business and finance occupation group were up by 33 percent from the previous quarter (Q3 2018). This level of online job postings is the highest since Q3 2017 when there were 27,292 posting made. For more information about quarterly job postings, see page 2.

#### Postings by Occupation Group Q4 2018

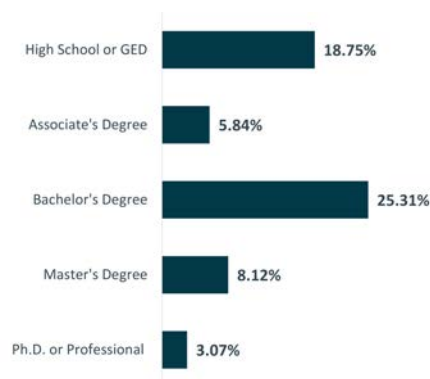


Data: Emsi | Analysis: Workforce Intelligence Network

### Job postings made by employers in Washtenaw County indicate a bachelor's degree as the most in-demand minimum education level during Q4 2018.

Over a quarter (25.3 percent) of the 29,784 jobs posted in Washtenaw County indicated the need for candidates with a bachelor's degree. Another 19 percent of these postings were looking for applicants with a high school diploma or equivalent. Higher education attainment tends to lead to more lucrative opportunities, but many entry level opportunities exist for each educational attainment level. As only 61 percent of job postings identified a minimum education level, educational requirements may vary somewhat across all open jobs in the county.

#### Education Levels In-Demand Q4 2018



Data: Emsi | Analysis: Workforce Intelligence Network

### Washtenaw's unemployment rate is currently at 2.8 percent, down 0.5 percentage points from Q3 2018.

As of Q4 2018, employment increased by 1.8 percent since Q3 2018, while the labor force grew by 1.2 percent. The growth in employment being greater than the growth in labor force caused the quarterly unemployment rate to fall from 3.3 percent in Q3 2018 to 2.8 percent in Q4 2018 as more people found work. During November 2018, in particular, unemployment fell to its lowest 2018 monthly rate of 2.6 percent. For more information about this quarter's unemployment rate and other labor market indicators, see page 4.

#### Quarterly Labor Market Data

	3rd Quarter 2018	4th Quarter 2018	Change from 3rd Quarter 2018	Percent Change from 3rd Quarter 2018
Labor Force	194,204	196,623	2,419	1.2%
Employment	187,828	191,187	3,359	1.8%
Unemployment	6,376	5,436	-940	-14.7%
Unemployment Rate	3.3%	2.8%	-0.5%	na

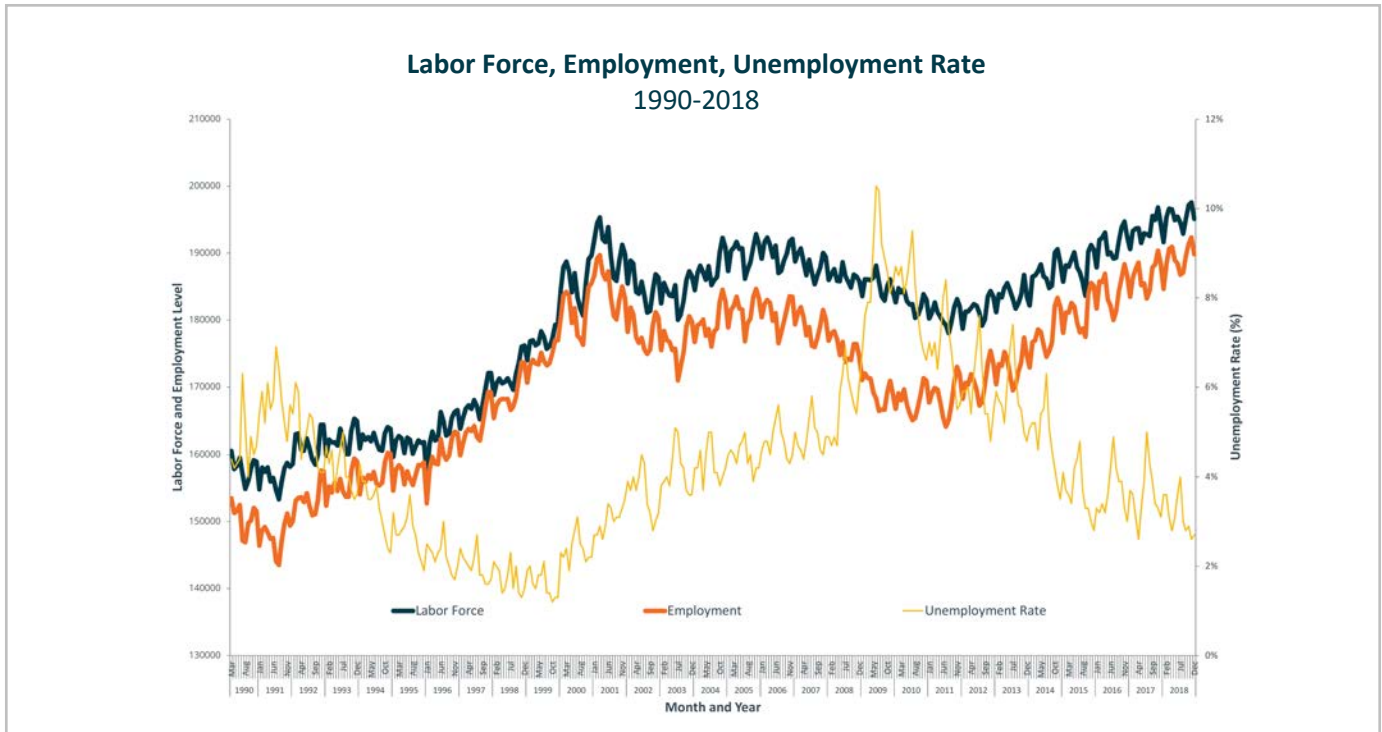
Note: Monthly data averaged by quarter | Data: BLS





# WORKFORCE OVERVIEW

## Washtenaw County | Labor Market Information Q4 2018



### Quarterly Labor Market Data Q4 2017 - Q4 2018

	4th Quarter 2017	1st Quarter 2018	2nd Quarter 2018	3rd Quarter 2018	4th Quarter 2018	Change from 3rd Quarter 2018	Percent Change from 3rd Quarter 2018	Change from 4th Quarter 2017	Percent Change from 4th Quarter 2017
Labor Force	75,440	75,027	75,156	75,453	75,674	221	0.3%	234	0.3%
Employment	72,061	70,651	71,983	72,115	72,271	157	0.2%	211	0.3%
Unemployment	3,379	4,376	3,173	3,338	3,402	64	1.9%	23	0.7%
Unemployment Rate	4.5%	5.8%	4.2%	4.4%	4.5%	0.1%	na	0.0%	na

Note: Monthly data averaged by quarter | Data: BLS

## Labor Force, Employment, and Unemployment

The labor market in Washtenaw County has experienced relative stability since 2010. The labor force increased by 2,419 workers (1.2 percent) between Q3 2018 and Q4 2018. During the same period, employment in the county increased at a higher rate, by 3,359 workers (1.8 percent). With employment increasing more quickly than the labor force, the unemployment rate decreased this quarter: the quarterly unemployment rate dropped by 0.5 percentage points between Q3 2018 and Q4 2018 to 2.8 percent.



# WORKFORCE OVERVIEW

## Washtenaw County | 2017 Annual Population Demographics

### Population Demographics

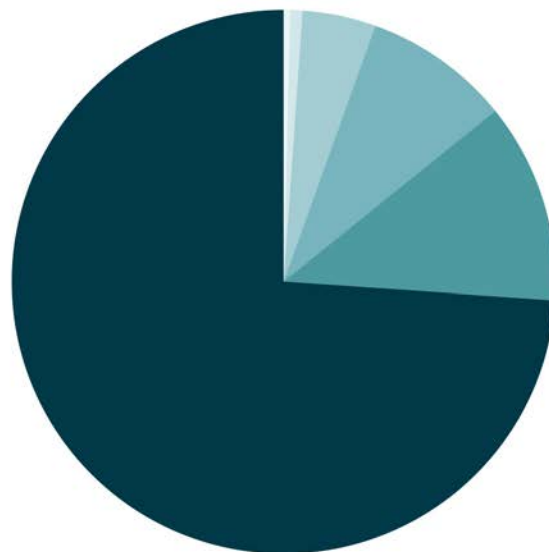
According to the data from the most recent Census Bureau 2017 ACS Five Year estimates, the population in Washtenaw County increased by nearly 1 percent between 2016 and 2017. During 2017, 361,519 people were living in the region. The sex of the populace was split almost evenly, with about 51 percent of the population identifying as female, and the other 49 percent identifying as male. The majority of the population identified as white (74 percent) with the second largest number of individuals identifying as black or African American (12 percent). The age of the population is split almost evenly, with 38 percent of population identifying as under the age of 25, another 38 percent identifying as 25 to 54 years old, and 24 percent reporting in as 55 years or older.



**361,519**  
People in the Region  
1.0% Increase  
from 2016

### Population Race Demographics

- White, 73.92%
- Black or African American, 11.89%
- Asian, 8.71%
- Two or More Races, 4.37%
- Other Race, 0.73%
- American Indian or Alaska Native, 0.34%
- Native Hawaiian or Other Pacific Islander, 0.04%



### Population Gender Demographics

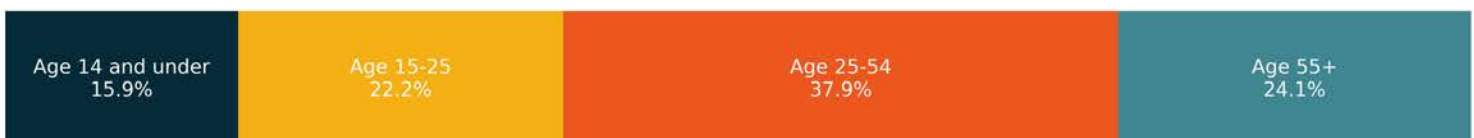


51% Females

49% Males



### Population Age Demographics





# WORKFORCE OVERVIEW

## Washtenaw County | 2017 Annual Labor Force Demographics

### 2017 Labor Force, Employment, and Unemployment Demographics

Civilian Labor Force by Demographic Group				
Demographic Group	Civilian Labor Force	Total Employment	Total Unemployment	Unemployment Rate
<b>Total Population 16 +</b>	194,554	184,046	10,506	5.4%
<b>Sex</b>				
<b>Male 16+</b>	102,087	96,289	5,798	5.7%
16-19	5,741	4,690	1,051	18.3%
20-24	15,848	14,392	1,456	9.2%
25-54	60,452	57,952	2,500	4.1%
55-64	14,500	13,929	571	3.9%
65 Plus	5,546	5,326	220	4.0%
<b>Female 16+</b>	92,311	87,630	4,681	5.1%
16-19	6,060	5,073	987	16.3%
20-24	15,817	14,718	1,099	6.9%
25-54	52,442	50,533	1,909	3.6%
55-64	13,940	13,426	514	3.7%
65 Plus	4,052	3,880	172	4.2%
<b>Race</b>				
<b>White</b>	148,000	141,221	6,660	4.5%
<b>Black / African American</b>	22,014	19,668	2,311	10.5%
<b>Native American</b>	614	568	46	7.5%
<b>Asian</b>	16,089	15,465	611	3.8%
<b>Native Hawaiian / Pacific Islander</b>	104	75	29	27.9%
<b>Some Other Race</b>	1,329	1,229	98	7.4%
<b>Two or More Races</b>	6,366	5,694	662	10.4%
<b>Ethnicity</b>				
<b>Hispanic</b>	8,312	7,778	532	6.4%

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

### Labor Market Demographics

During 2017, the most recent census year, there were about 194,554 million people in the labor force, meaning they were either working or looking for work, in Washtenaw County. Slightly more than half of the population of 361,519 individuals (53.8 percent) living in the county 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 18.3 percent. Native Hawaiian/ Pacific Islander job seekers also have a difficult time finding employment, facing an unemployment rate of 27.9 percent.



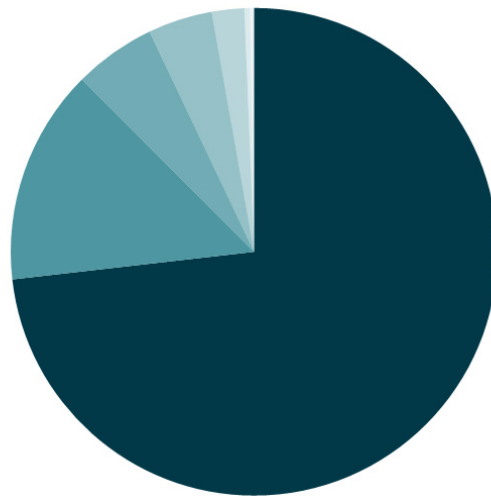
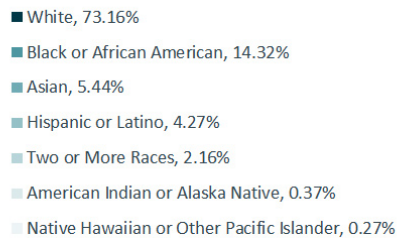
## WORKFORCE OVERVIEW

### Washtenaw County | 2018 Annual Working Population Demographics

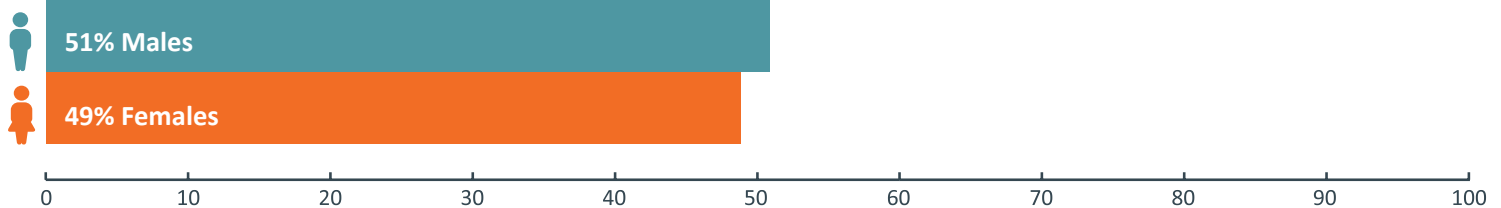
#### Current Workforce Demographics

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 2018, there were a total of 229,570 individuals working in Washtenaw County. A slight majority (51 percent or 116,794 workers) were male, while 49 percent (112,777 workers) of the workforce was female. Most of those working in the county were white, accounting for 73.2 percent of the workforce, while African American or black workers accounted for 14.3 percent of the workforce. Those identifying as having a Hispanic or Latino ethnicity accounted for 4.3 percent. Eighty-three percent of the workforce was 25 years or older. Only 17 percent of those under the age of 25 were working, indicating an aging workforce in Washtenaw County.

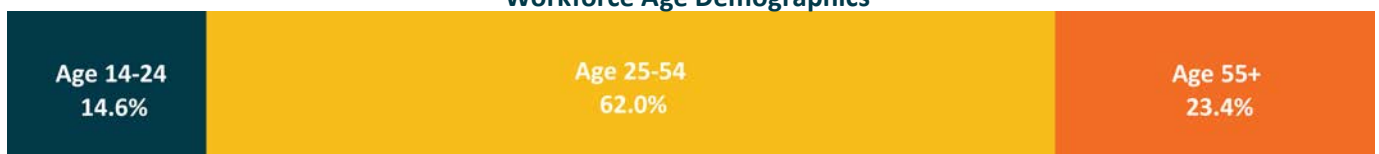
#### Workforce Race and Ethnicity Demographics



#### Workforce Gender Demographics



#### Workforce Age Demographics





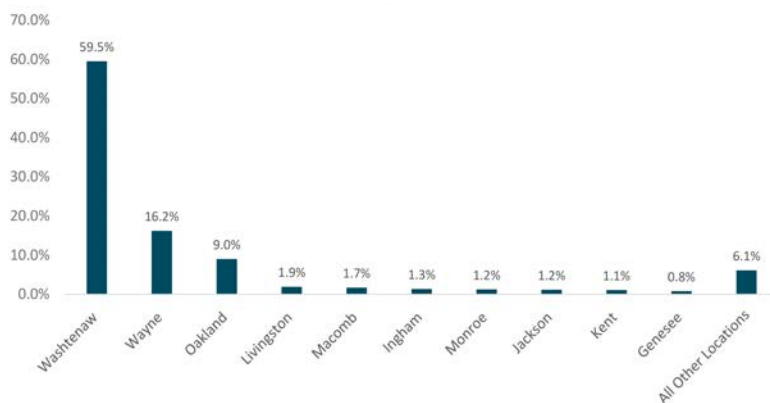
# WORKFORCE OVERVIEW

## Washtenaw County | 2015 Regional Commuting Patterns

### Regional Commuting Patterns

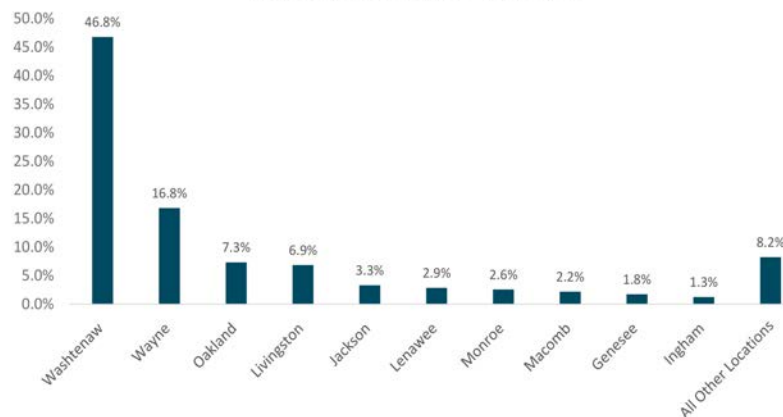
According to the most recent OnTheMap data set available from the Census Bureau, during 2015, the counties workforce consisted of 147,981 residents. 88,031 (59.5 percent) of the residents lived and worked within the county, while the remaining 59,950 residents (40.5 percent) traveled outside of the region for work. There were 188,301 workers employed in the region during 2015. Of those, 100,270 workers (53.2 percent) lived outside of the region's borders and commuted in. From this information, we can see that the Washtenaw County is a net importer of jobs, with more workers entering the county for employment than outwardly commuting.

Where Washtenaw County Residents Work

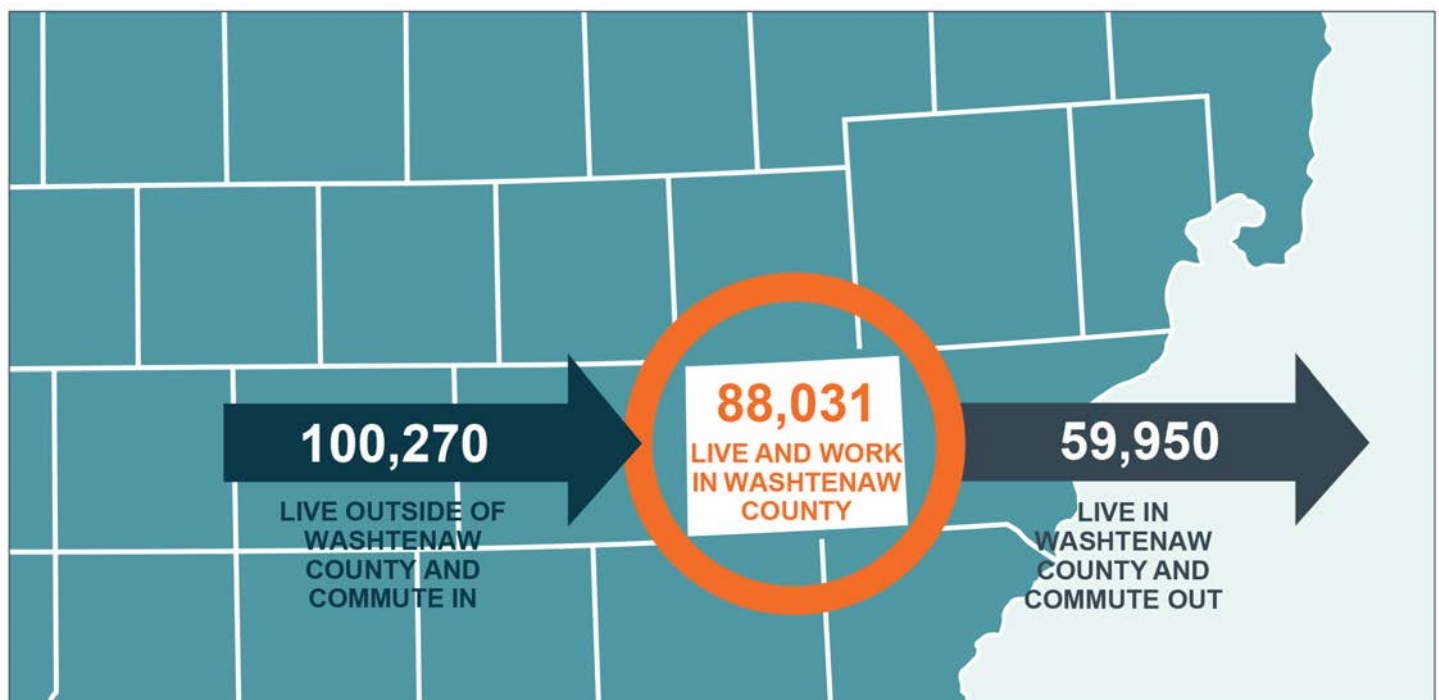


Data: U.S. Census OnTheMap, 2015  
Analysis: Workforce Intelligence Network

Where Washtenaw Region Workers Live



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

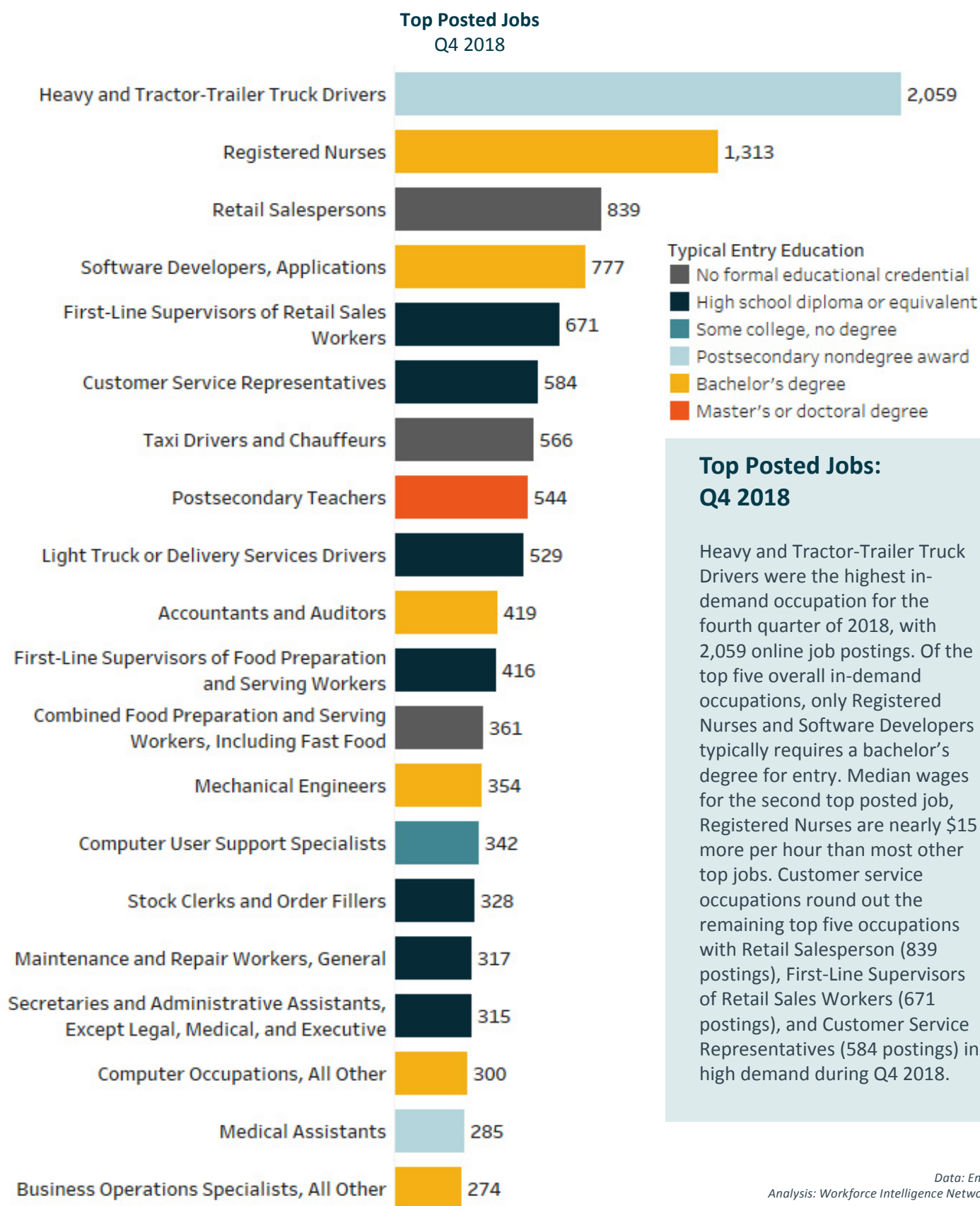






## REAL-TIME DEMAND OVERVIEW

### Washtenaw County | Top Posted Jobs | Q4 2018

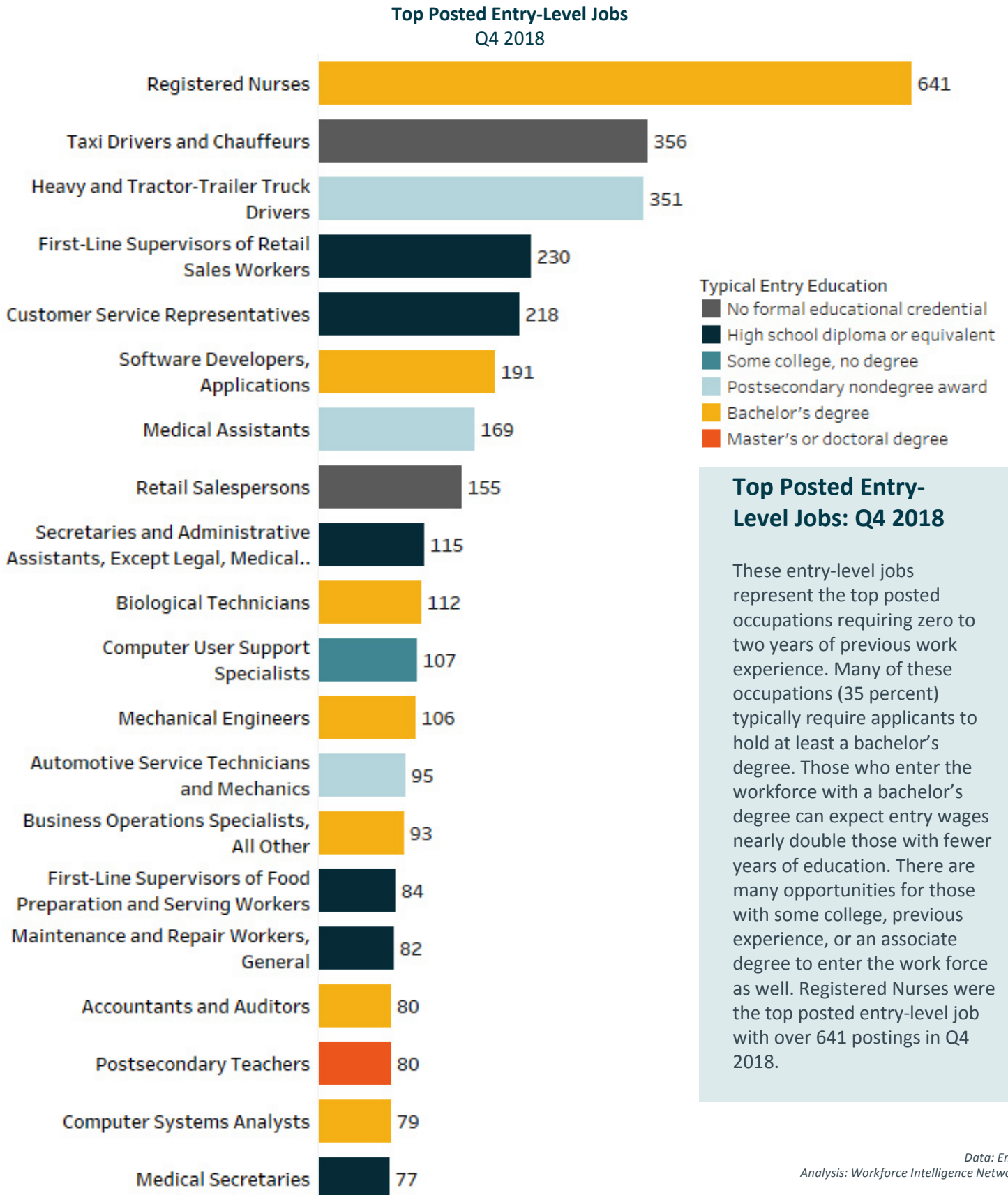






## REAL-TIME DEMAND OVERVIEW

### Washtenaw County | Top Posted Entry-Level Jobs | Q4 2018

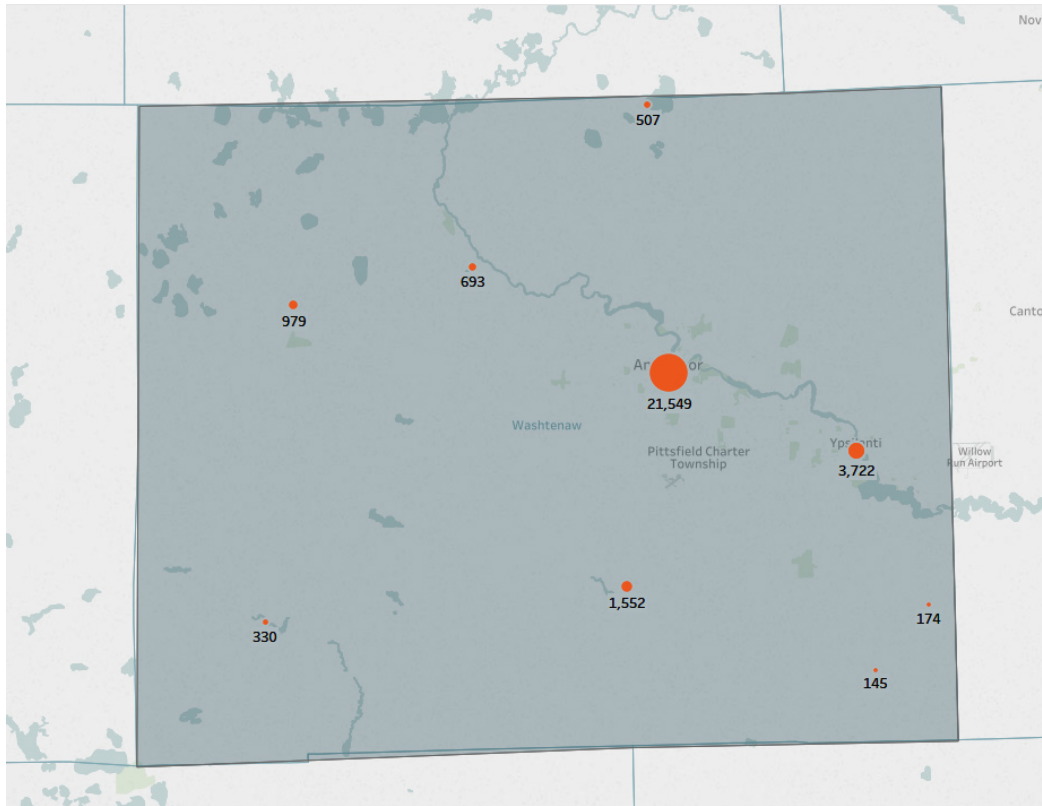




## REAL-TIME DEMAND OVERVIEW

### Washtenaw County | Job Postings by City | Q4 2018

#### Job Postings by City Q4 2018



Map based on Longitude (generated) and Latitude (generated). Size shows sum of Unique Postings (Oct 2018–Dec 2018). Details are shown for City.

#### Top In-Demand Qualifications

- Commercial Driver's License (CDL)
- Certified Nursing Assistant
- Licensed Practical Nurse
- Certified Public Accountant
- Advanced Practice Registered Nurse
- Nurse Practitioner
- American Registry of Radiologic Technologists (ARRT) Certified
- Patient Care Technician
- National Council Licensure Examination
- Radiologic Technologist

#### Top In-Demand Skills

- Fair Labor Standards Act
- Restaurant Operation
- Nursing
- Selling Techniques
- Merchandising
- Accounting
- Food Services
- Customer Experience
- Strategic Planning
- Agile Software Development

#### Top Posting Employers\*

- University of Michigan
- Trinity Health Corporation
- Regents of The University of Michigan
- Uber Technologies, Inc.
- Virtual Vocations
- Eastern Michigan University
- Domino's Pizza
- ManpowerGroup Global
- Aramark Corporation
- Endevis, L.L.C

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



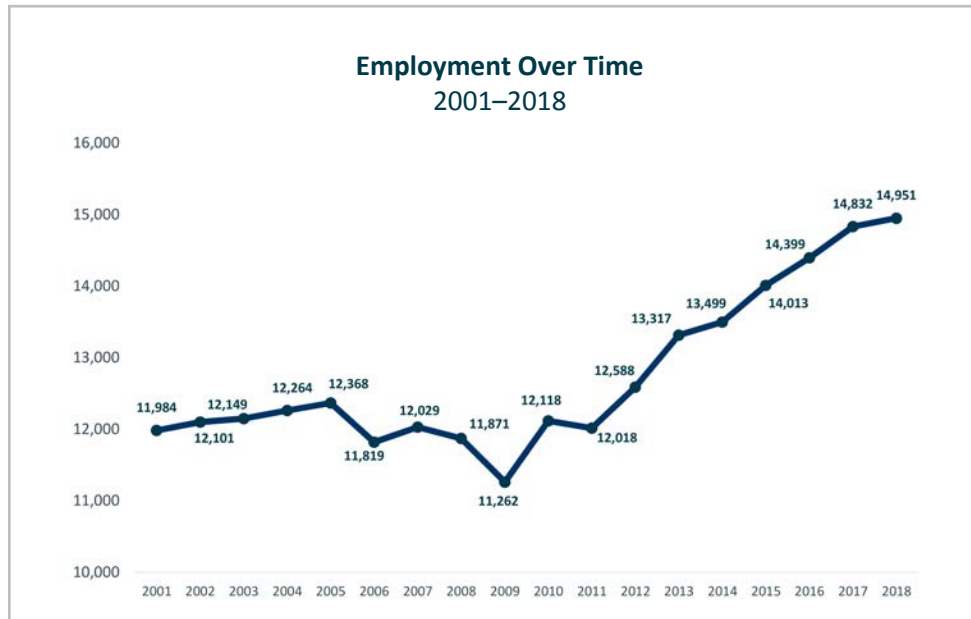
## BUSINESS AND FINANCE OCCUPATION GROUP Washtenaw County| Q4 2018

### Introduction

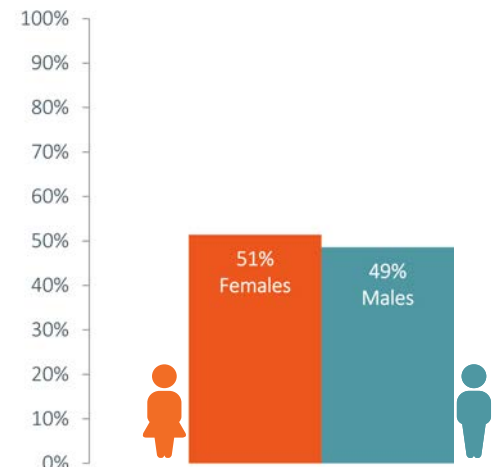
Jobs in the business and finance occupation group can be found in nearly every type of establishment/firm throughout the region. These workers need strong mathematical and accounting abilities along with project management and planning skills. Workers in this occupation group are in high demand in southeast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



**14,951**  
**Business Workers**  
0.8% Increase  
from 2017



### Worker Gender Demographics



### Business and Finance Worker Demographics

According to the most recent Emsi data set available (2018), the business and finance occupation group is a relatively diverse occupation group with respect to its nearly 15,000 workers. Slightly over half the working population identify as female (51 percent). In addition, only 80 percent of workers are white, so the field may offer opportunity for minority workers. Only six 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

**80.2% White** | **9.7% Black or African American** | **5.1% Asian**

#### Worker Age Demographics





2,764 Business and Finance Postings:  
679 More than in Q3 2018



Bachelor's Degree Required for  
Most Business and Finance Jobs

Business and Finance Top Posted Jobs  
Q4 2018





## High Earning Potential for Marketing Managers



## CPA: In-Demand Business and Finance Certification

### Business and Finance Wage Overview

Most business and finance related jobs offer high wages, providing a lucrative opportunity for job seekers willing to attain the necessary education. According to the Bureau of Labor Statistics (BLS), the top posted business and finance job, Accountants and Auditors, offers median hourly wages of \$33.92, translating to annual earnings of approximately \$71,000.

**Wage Overview for Top Posted Business and Finance Jobs in Q4 2018**

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
13-2011	Accountants and Auditors	\$20.21	\$25.98	\$33.92	\$44.94	\$57.86
13-1199	Business Operations Specialists, All Other	\$17.85	\$22.99	\$30.32	\$39.92	\$50.71
11-2021	Marketing Managers	\$31.45	\$36.60	\$50.05	\$71.87	\$89.67
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$15.47	\$20.05	\$29.06	\$47.21	\$63.18
13-1161	Market Research Analysts and Marketing Specialists	\$18.87	\$25.26	\$30.26	\$37.99	\$50.20
27-3031	Public Relations Specialists	\$15.98	\$20.75	\$28.72	\$37.60	\$46.08
41-3021	Insurance Sales Agents	\$13.30	\$15.95	\$19.43	\$33.02	\$46.51
13-1111	Management Analysts	\$25.19	\$28.35	\$34.30	\$41.98	\$52.12
11-3031	Financial Managers	\$28.05	\$39.54	\$55.52	\$71.00	\$89.40
41-3031	Securities, Commodities, and Financial Services Sales Agents	\$16.45	\$18.64	\$43.86	\$55.74	\$62.51

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

#### In-Demand Technical Skills

- Accounting
- Auditing
- Tax Return
- Selling Techniques
- Agile Software Development

#### In-Demand Foundational Skills

- Management
- Communications
- Sales
- Research
- Problem Solving

#### In-Demand Education Level\*

- High School Diploma: 7.5%
- Associate Degree: 3.5%
- Bachelor's Degree: 43.8%
- Master's Degree: 13.4%

\*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

- Certified Public Accountant (CPA)
- Commercial Driver's License (CDL)
- Series 7 General Securities Representative License (Stockbroker)
- Certified Financial Planner
- Certified Internal Auditor

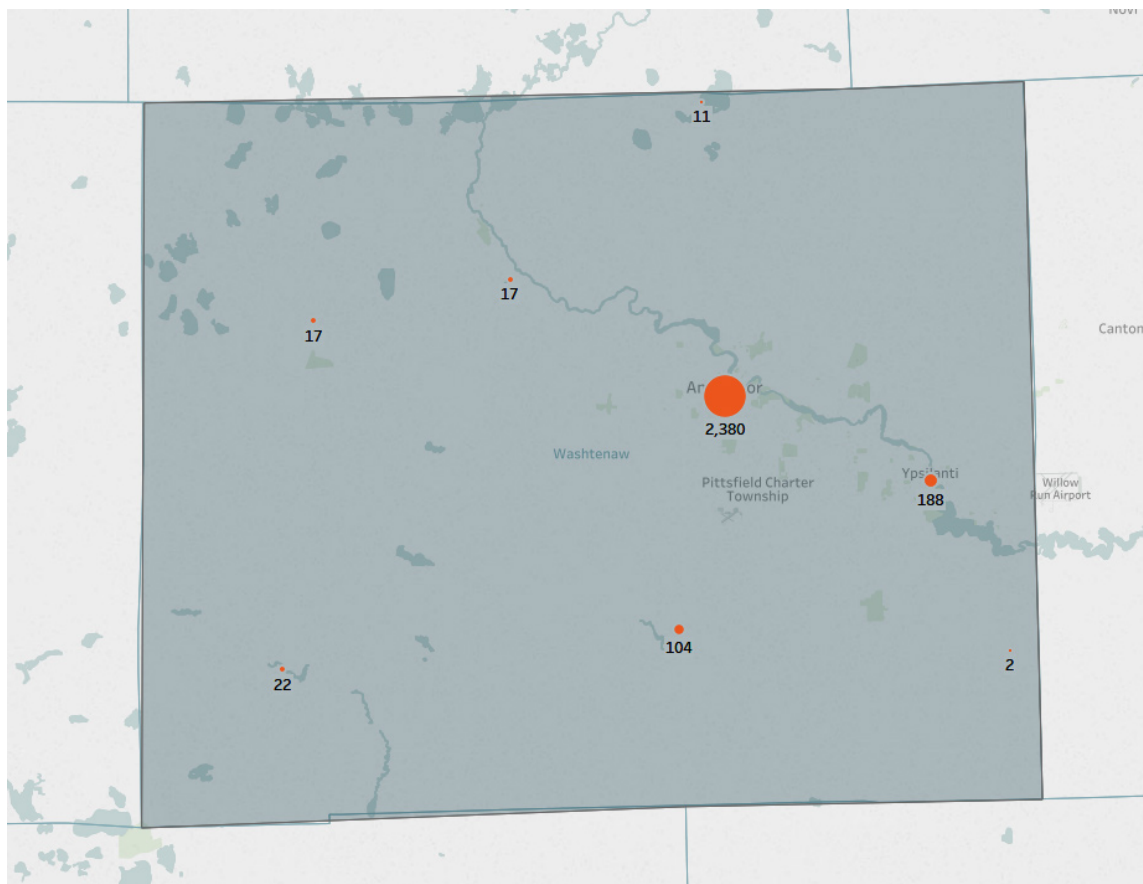




Banks and Major Corporations  
Seeking Business and Finance Workers



Accounting and Management  
Skills are in High Demand



Map based on Longitude (generated) and Latitude (generated).  
Size shows sum of Unique Postings (Oct 2018–Dec 2018). Details are shown for City.

### Top Posting Employers\*

- University of Michigan
- Intuit Inc.
- Virtual Vocations
- Endevis, L.L.c
- PNC
- Amcor Limited
- Bank of America Corporation
- Domino's Pizza
- Nsf International
- Google Inc.

### Job Postings by City

1. Ann Arbor, MI: 2,380 Postings
2. Ypsilanti, MI: 188 Postings
3. Saline, MI: 104 Postings
4. Manchester, MI: 22 Postings
5. Chelsea, MI: 17 Postings

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





# ENGINEERING AND DESIGN OCCUPATION GROUP

## Washtenaw County | Q4 2018

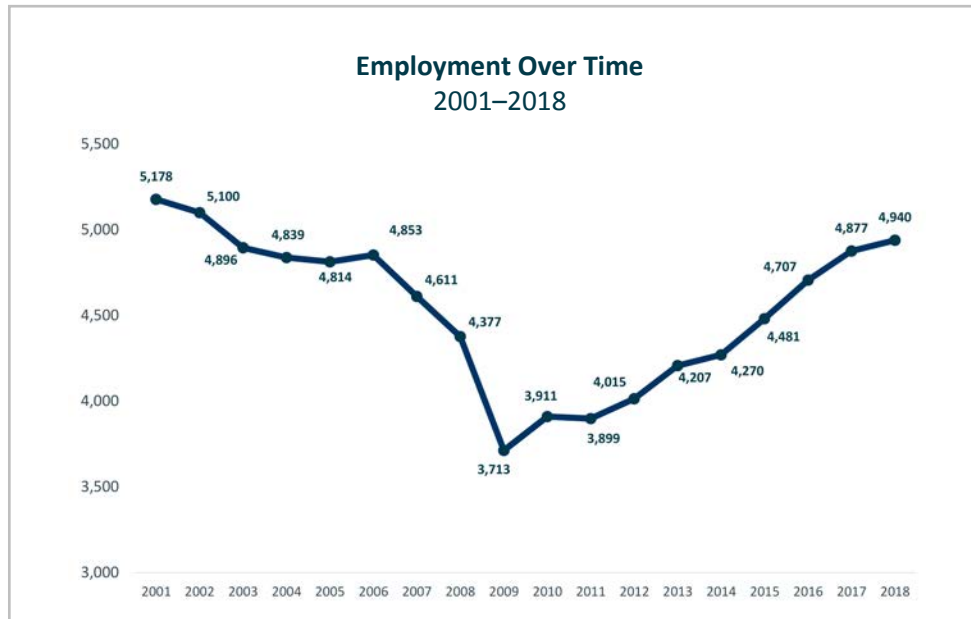
### Introduction

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

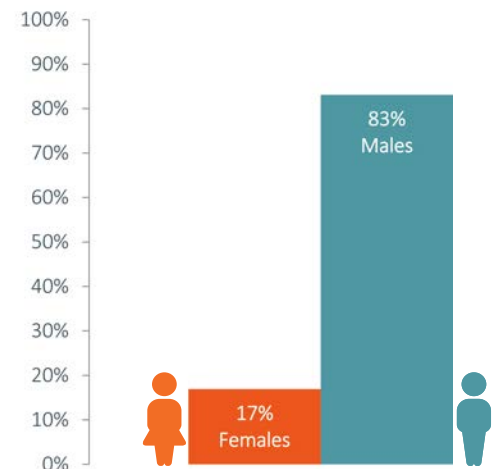


**4,940**  
Engineering Workers

1.3% Increase  
from 2017



### Worker Gender Demographics



### Engineering and Design Worker Demographics

According to the most recent Emsi data set available (2018), the nearly 4,940 workers in the Engineers and Designers group are not particularly diverse. Under six percent of the workforce is under 25, likely due to the consistently high educational requirements. Seventeen percent of current workers are female, and only 18 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

**81.9% White** | **4.6% Black or African American** | **9.5% Asian**

#### Worker Age Demographics

Age 14-24  
5.7%



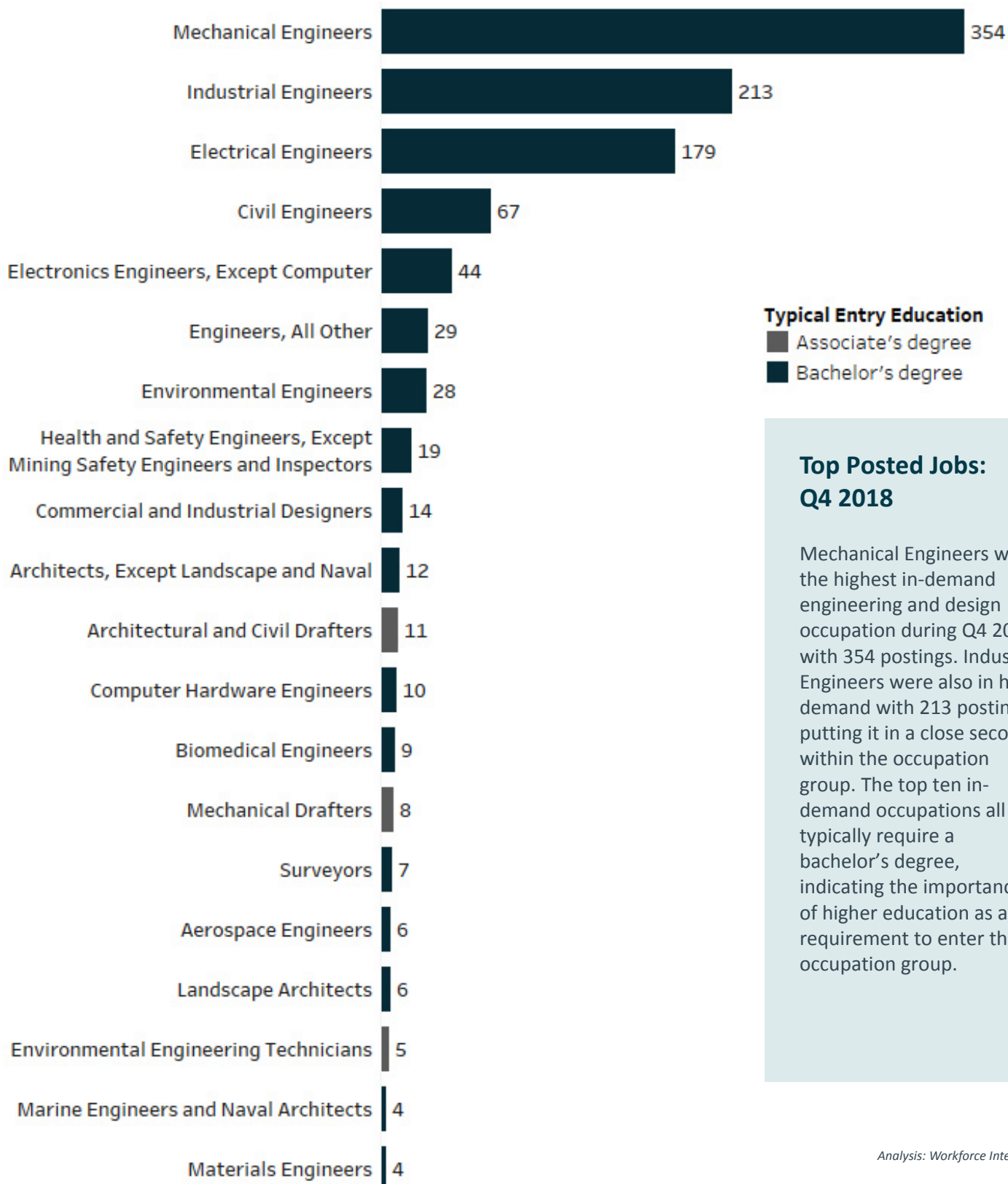


1,041 Engineering and Design Postings:  
68 More than in Q3 2018



Bachelor's Degree Required for Most  
Engineering and Design Jobs

Engineering and Design Top Posted Jobs  
Q4 2018



### Top Posted Jobs: Q4 2018

Mechanical Engineers were the highest in-demand engineering and design occupation during Q4 2018, with 354 postings. Industrial Engineers were also in high demand with 213 postings, putting it in a close second within the occupation group. The top ten in-demand occupations all typically require a bachelor's degree, indicating the importance of higher education as a requirement to enter this occupation group.



## High Earning Potential for Electronics Engineers, Except Computer



## Professional Engineer: Most In-Demand Engineering and Design Certification

### Engineering and Design Wage Overview

Most engineering and design related jobs offer high wages, providing a lucrative opportunity to job seekers willing to meet the minimum education requirements related to these jobs. The top posted engineering and design job, Mechanical Engineers, offers a median hourly wage of \$39.89, or an annual salary of approximately \$83,000 according to the Bureau of Labor Statistics (BLS).

**Wage Overview for Top Posted Engineering and Design Jobs in Q4 2018**

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2141	Mechanical Engineers	\$26.10	\$32.45	\$39.89	\$48.95	\$58.19
17-2112	Industrial Engineers	\$32.23	\$36.17	\$44.01	\$54.20	\$62.65
17-2071	Electrical Engineers	\$25.82	\$32.13	\$40.46	\$52.62	\$60.23
17-2051	Civil Engineers	\$25.22	\$32.79	\$39.82	\$53.74	\$61.19
17-2072	Electronics Engineers, Except Computer	\$30.62	\$38.27	\$45.22	\$54.64	\$63.65
17-2199	Engineers, All Other	\$15.41	\$27.17	\$37.21	\$49.58	\$60.42
17-2081	Environmental Engineers	\$28.09	\$33.89	\$42.86	\$52.25	\$58.59
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	\$24.65	\$29.63	\$38.37	\$48.16	\$55.50
27-1021	Commercial and Industrial Designers	\$17.11	\$20.45	\$27.80	\$34.40	\$40.05
17-1011	Architects, Except Landscape and Naval	\$21.40	\$28.00	\$35.66	\$42.85	\$50.39

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

#### In-Demand Technical Skills

- Electrical Engineering
- Mechanical Engineering
- Engineering Mathematics
- Engineering Education
- Computer-Aided Design

#### In-Demand Foundational Skills

- Management
- Communications
- Leadership
- Problem Solving
- Research

#### In-Demand Education Level\*

- High School Diploma: 3.1%
- Associate Degree: 4.9%
- Bachelor's Degree: 65.5%
- Master's Degree: 13.1%

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

#### In-Demand Certifications

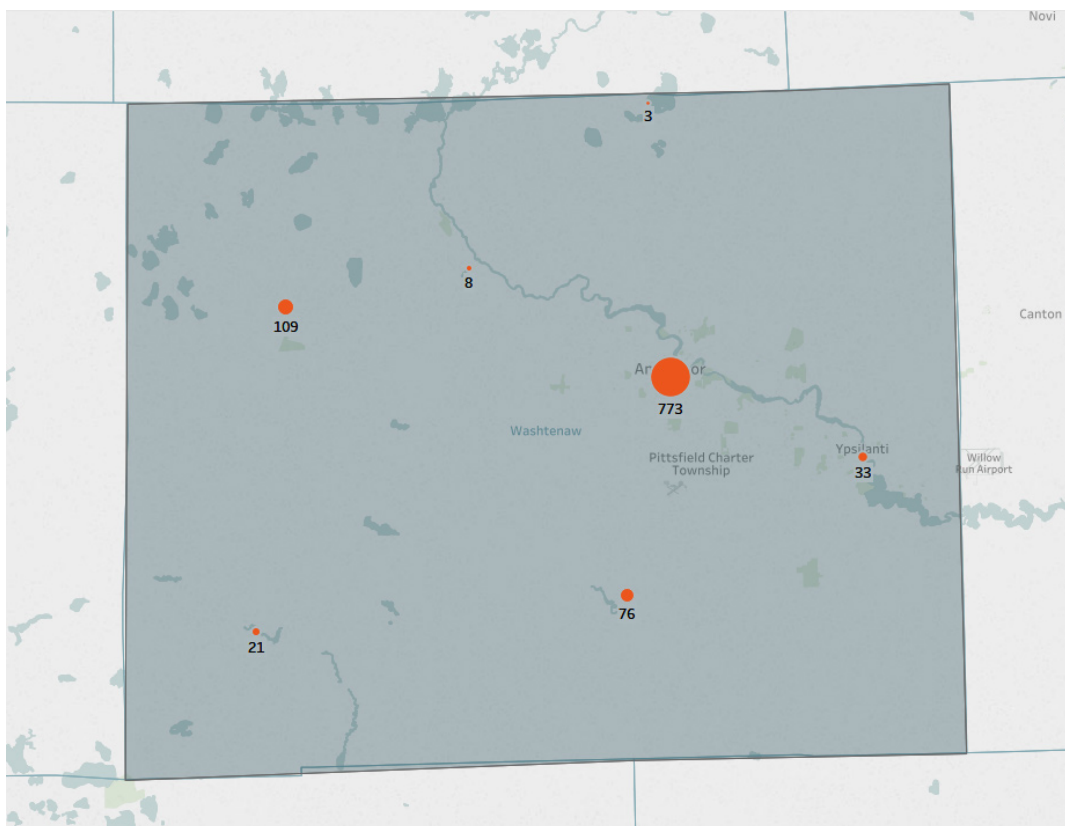
- Professional Engineer
- Licensed Professional Engineer
- Certified Compensation Professional
- Cisco Configuration Professional
- Project Management Professional (PMP) Certification



## Automakers and Manufactures are Top Employers of Engineers



## Mathematical Skills are in High Demand



Map based on Longitude (generated) and Latitude (generated).  
Size shows sum of Unique Postings (Oct 2018–Dec 2018). Details are shown for City.

### Top Posting Employers\*

- HDR Engineering, Inc.
- University of Michigan
- Black & Veatch Corporation
- Endevis, L.L.c
- FCA US LLC
- Barr Engineering Co.
- Power Engineers, Incorporated
- Gtech Services, Inc
- Toyota Motor Corporation
- Amcor Limited

### Top Postings by City

1. Ann Arbor, MI: 773 Postings
2. Chelsea, MI: 109 Postings
3. Saline, MI: 76 Postings
4. Ypsilanti, MI: 33 Postings
5. Manchester, MI: 21 Postings

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



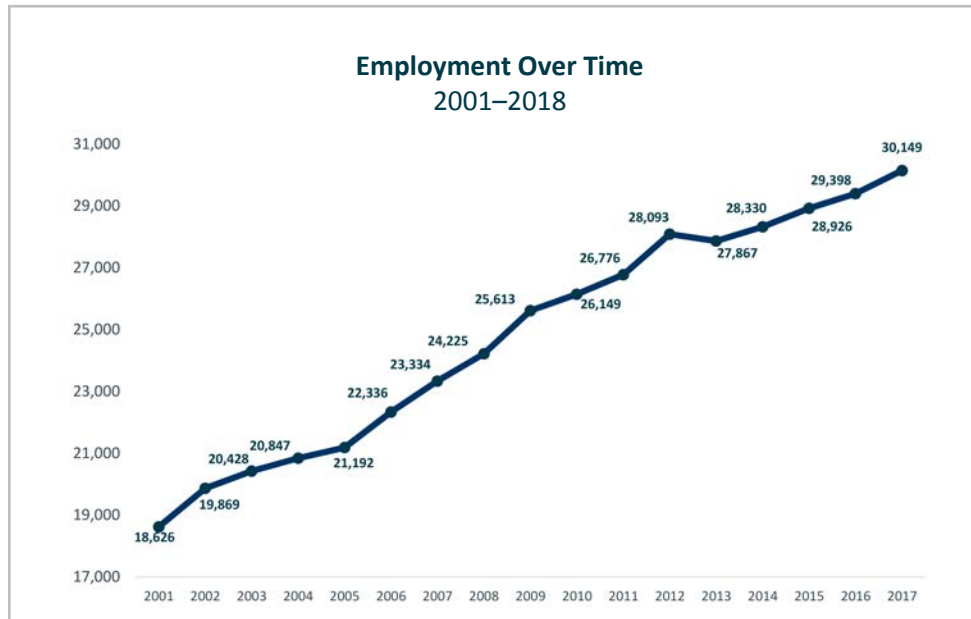
## HEALTH CARE OCCUPATION GROUP Washtenaw County | Q4 2018

### Introduction

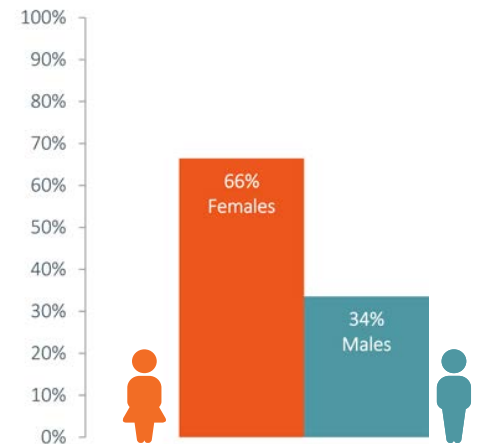
WIN's health care occupation group includes jobs related to health care support and practitioners. Employment in this group has been consistently growing, more health care workers needed to care for Michigan's aging population and in response to regulatory and other changes. Registered nurses are routinely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



**30,149**  
**Health Care Workers**  
2.6% Decrease  
from 2017



### Worker Gender Demographics



### Health Care Worker Demographics

According to the most recent Emsi data set available (2018), the Health Care occupation group employs around 30,368 workers, who are primarily female (66 percent) and between the ages of 25 and 54 (68 percent), although 24 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, 19 percent identifying as black or African American, and 13 percent identifying otherwise.

#### Race and Ethnicity Demographics

**68.5% White** | **18.7% Black or African American** | **5.1% Asian**

#### Worker Age Demographics



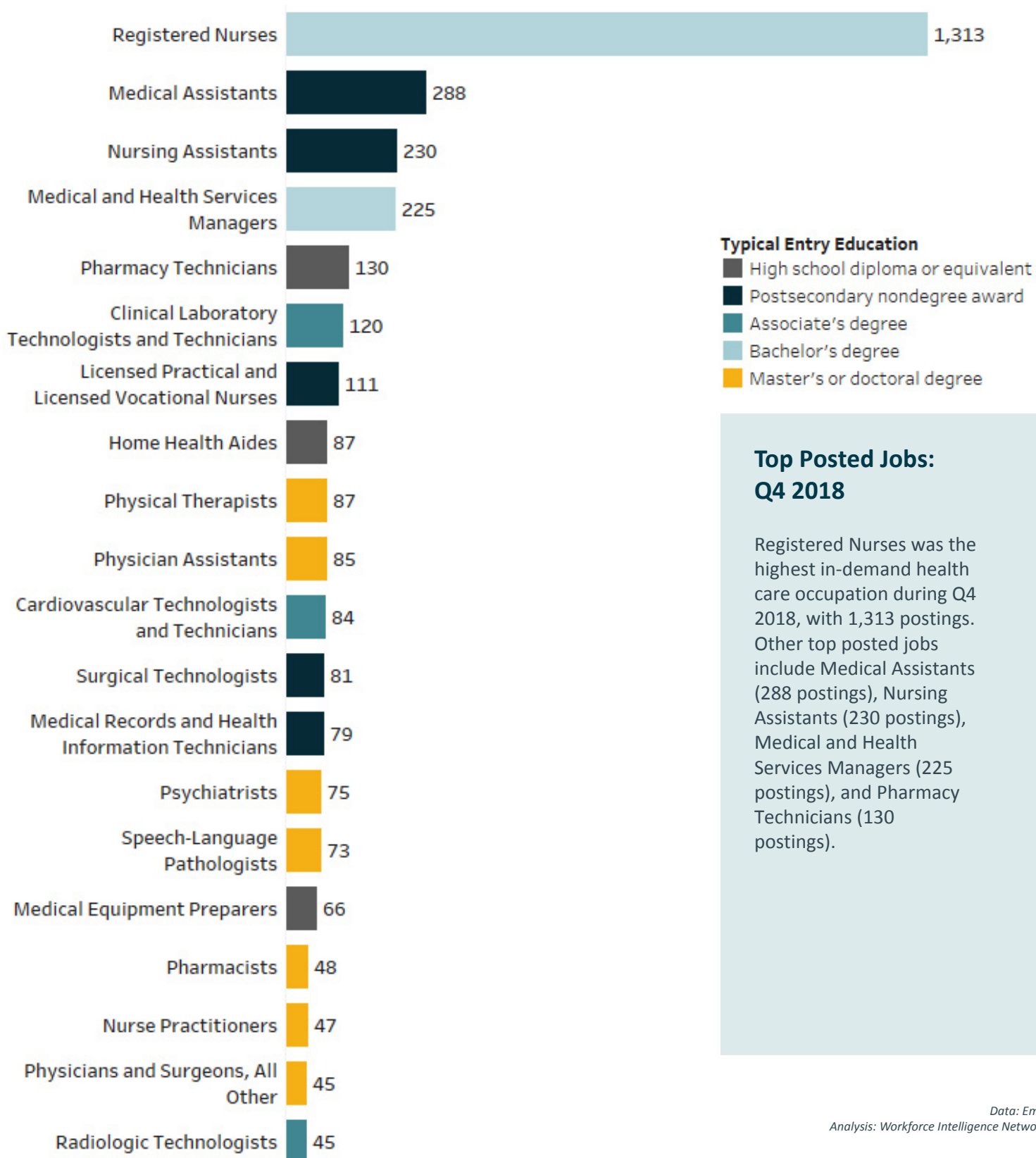


3,877 Health Care Postings:  
660 More than in Q3 2018



Bachelor's Degree Required for  
High Paying Health Care Jobs

Health Care Top Posted Jobs  
Q4 2018







## High Earning Potential for Medical and Health Services Managers



## Licensed Practical Nurse: Most In-Demand Health Care Certification

### Health Care Wage Overview

Wages in the high-demand health care field tend to scale with both education and experience. The health care occupation group offers a relatively broad array of entry requirements and a high volume of jobs are open to candidates with less than a bachelor's degree. These jobs that require less than a bachelor's degree pay more than the median wage southeast Michigan of \$17.81 per hour. Registered Nurses, the top posted health care job in Q4 2018, offers a median hourly wage of \$35.65 per hour or annual salary of approximately \$74,000 according to the Bureau of Labor Statistics (BLS).

**Wage Overview for Top Posted Health Care Jobs in Q4 2018**

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
29-1141	Registered Nurses	\$26.20	\$29.77	\$35.65	\$41.63	\$47.53
31-9092	Medical Assistants	\$12.20	\$14.54	\$16.09	\$18.54	\$20.42
31-1014	Nursing Assistants	\$11.97	\$13.65	\$15.00	\$17.31	\$19.52
11-9111	Medical and Health Services Managers	\$27.59	\$33.48	\$46.05	\$61.32	\$86.86
29-2052	Pharmacy Technicians	\$10.31	\$12.01	\$15.83	\$19.15	\$22.44
29-2018	Clinical Laboratory Technologists and Technicians	\$15.41	\$22.73	\$32.02	\$44.16	\$69.42
29-2061	Licensed Practical and Licensed Vocational Nurses	\$18.90	\$21.94	\$25.33	\$28.20	\$30.02
29-1123	Physical Therapists	\$26.38	\$32.41	\$40.20	\$46.90	\$57.83
31-1011	Home Health Aides	\$9.20	\$9.68	\$10.87	\$12.22	\$17.31
29-1071	Physician Assistants	\$30.18	\$39.78	\$48.20	\$57.02	\$65.52

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

#### In-Demand Technical Skills

- Nursing
- Fair Labor Standards Act
- Nursing Care
- Collective Bargaining
- Surgeries

#### In-Demand Foundational Skills

- Research
- Management
- Leadership
- Communications
- Problem Solving

#### In-Demand Education Level\*

- High School Diploma: 20.3%
- Associate Degree: 17.1%
- Bachelor's Degree: 23.1%
- Master's Degree: 10.6%

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

#### In-Demand Certifications

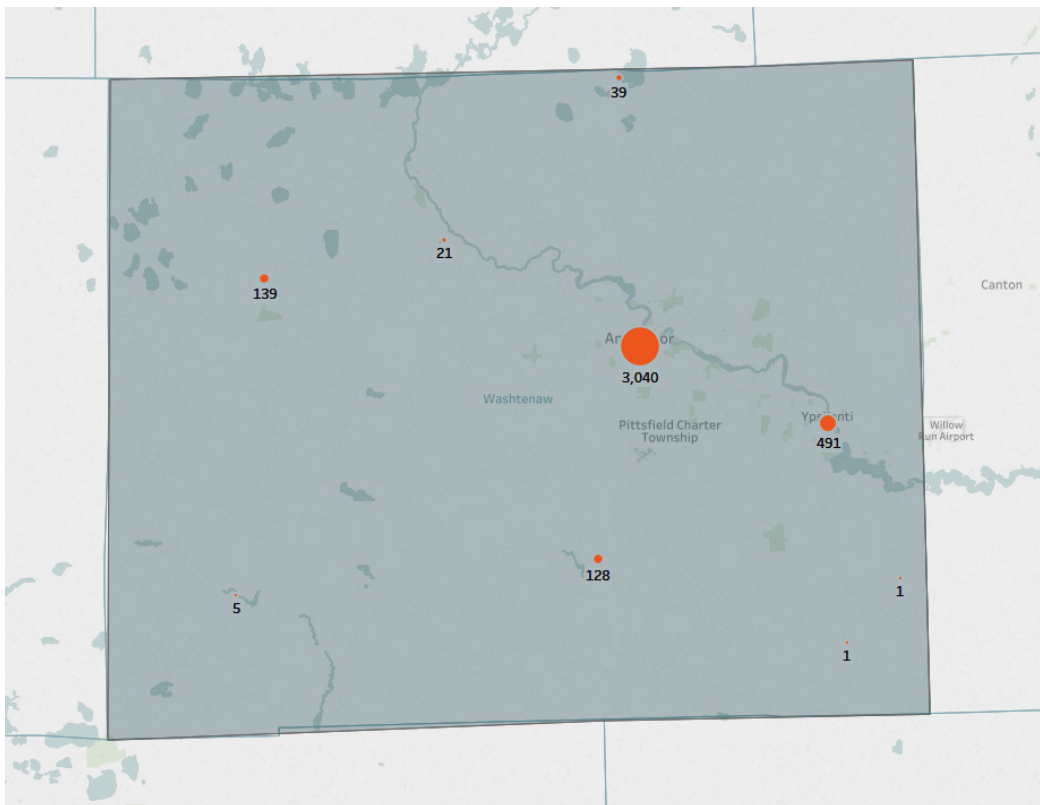
- Certified Nursing Assistant
- Licensed Practical Nurse
- Advanced Practice Registered Nurse
- Nurse Practitioner
- Patient Care Technician



## Hospitals and Pharmacies were Top Employers of Health Care Workers



## Nursing and Management Skills are in High Demand



Map based on Longitude (generated) and Latitude (generated).  
Size shows sum of Unique Postings (Oct 2018–Dec 2018). Details are shown for City.

### Top Posting Employers\*

- University of Michigan
- Trinity Health Corporation
- Aureus Medical Management Services L.L.C.
- Veterans Health Administration
- Mercy Medical Center, Inc.
- Michigan Sports Medicine
- Regents of The University of Michigan
- Manor Care, Inc.
- Iha Health Services Corporation
- Sunbelt Staffing, LLC

### Job Postings by City

1. Ann Arbor, MI: 3,040 Postings
2. Ypsilanti, MI: 491 Postings
3. Chelsea, MI: 139 Postings
4. Saline, MI: 128 Postings
5. Whitmore Lake, MI: 39 Postings

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



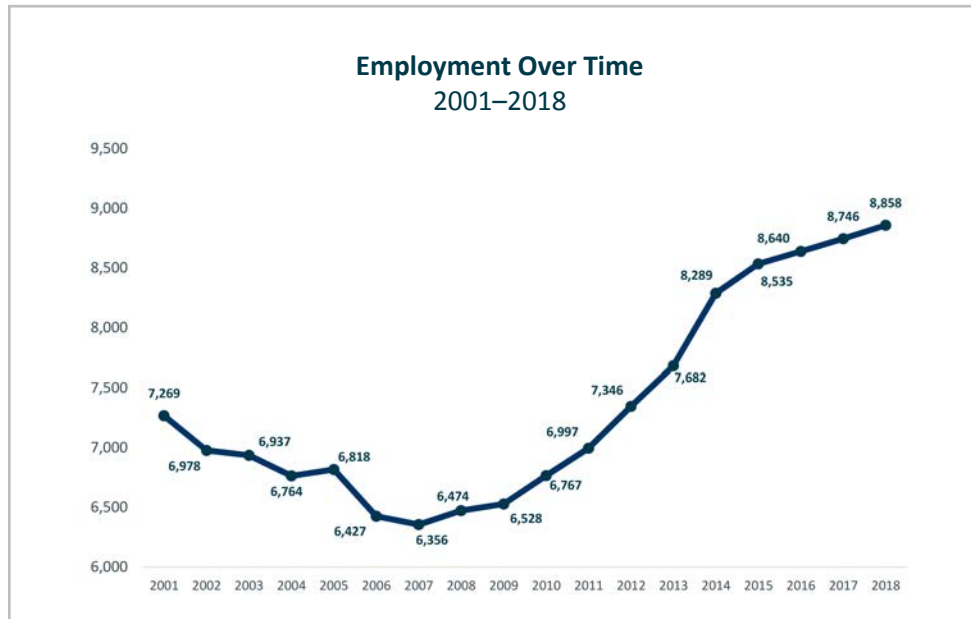
# INFORMATION TECHNOLOGY (IT) OCCUPATION GROUP

## Washtenaw County | Q4 2018

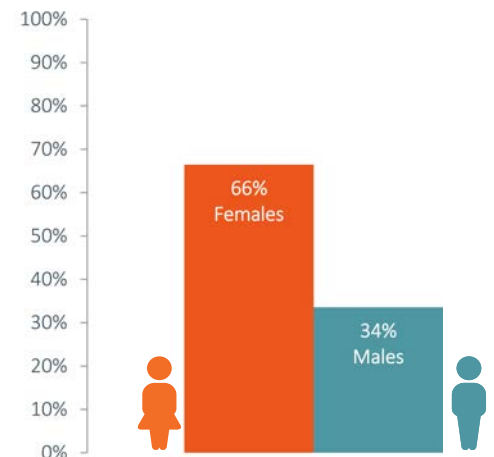
### Introduction

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.

**8,858**  
IT Workers  
1.3% Increase  
from 2017



### Worker Gender Demographics



### IT Worker Demographics

According to the most recent Emsi data set available (2018), despite having nearly 9,000 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, 77 percent of workers identify as male, and 74 percent identify as white. There are a broad range of organizations providing specialized training resources for female and minority IT workers in Washtenaw County and throughout southeast Michigan. With the push to diversify the IT field, more opportunities are opening for women and minorities.

### Race and Ethnicity Demographics

**73.7% White** | **7.5% Black or African American** | **14.1% Asian**

### Worker Age Demographics



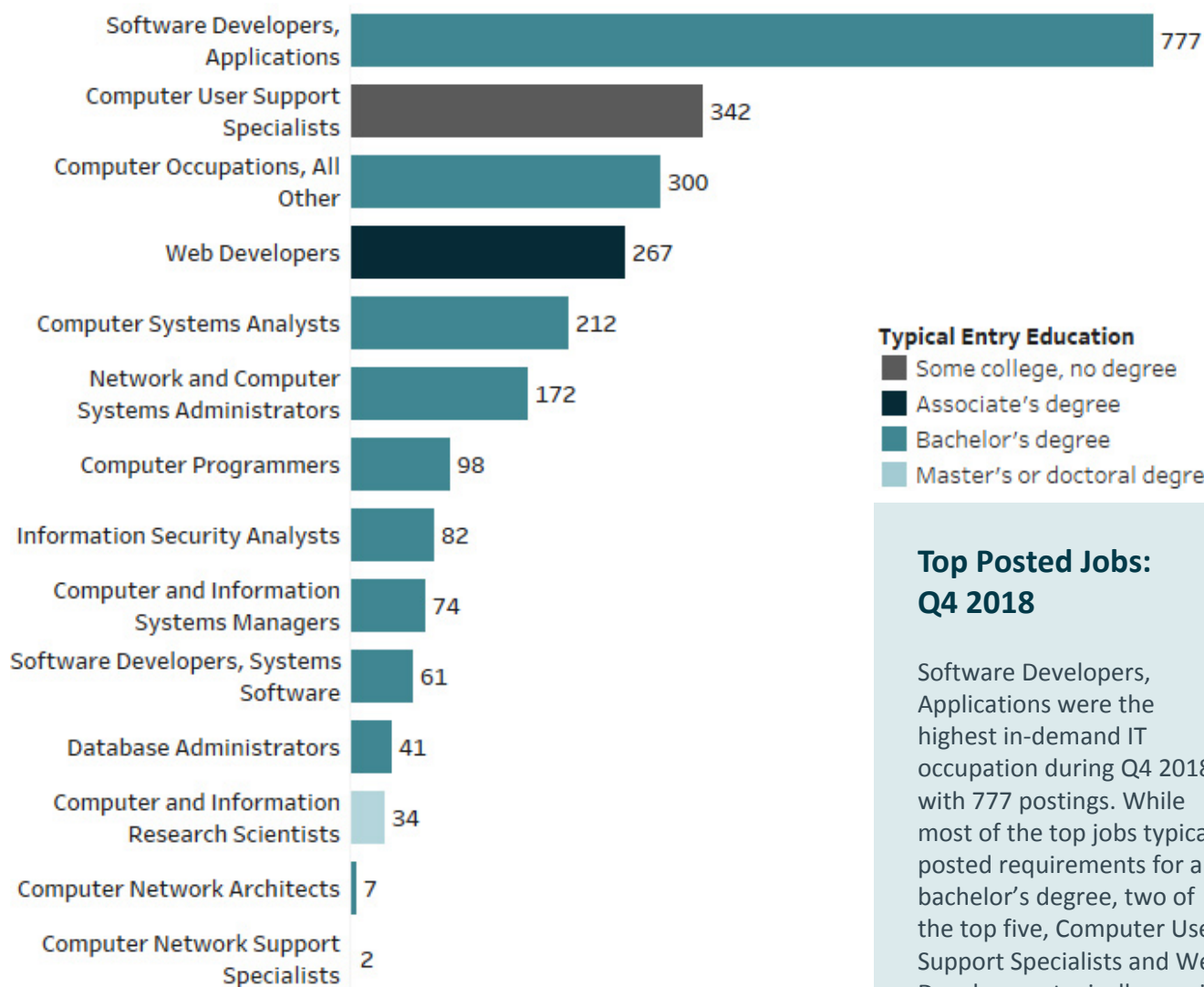


2,469 IT Postings:  
261 More than in Q3 2018



Bachelors Degree  
Required for Most IT Jobs

### Information Technology Top Posted Jobs Q4 2018



### Top Posted Jobs: Q4 2018

Software Developers, Applications were the highest in-demand IT occupation during Q4 2018, with 777 postings. While most of the top jobs typically posted requirements for a bachelor's degree, two of the top five, Computer User Support Specialists and Web Developers, typically require only an associate degree.



## High Earning Potential for Computer and Information System Managers



## Microsoft Certified Professional: Most In-Demand IT Certification

### IT Wage Overview

Most IT-related jobs offer high wages providing a lucrative opportunity to job seekers willing to meet the minimum education requirements related to these jobs. Software Developers, Applications, the top posted IT job in Q4 2018, offers a median hourly wage of \$45.42 per hour or nearly \$94,500 per year according to the Bureau of Labor Statistics (BLS).

**Wage Overview for Top Posted IT Jobs in Q4 2018**

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
15-1132	Software Developers, Applications	\$26.82	\$32.94	\$45.42	\$58.11	\$71.50
15-1151	Computer User Support Specialists	\$10.49	\$14.91	\$22.82	\$29.40	\$36.50
15-1199	Computer Occupations, All Other	\$20.69	\$26.70	\$37.94	\$49.27	\$65.11
15-1134	Web Developers	\$15.80	\$20.69	\$27.59	\$36.36	\$46.48
15-1121	Computer Systems Analysts	\$26.47	\$32.53	\$39.44	\$46.36	\$51.19
15-1142	Network and Computer Systems Administrators	\$22.41	\$28.10	\$34.49	\$41.29	\$48.49
15-1131	Computer Programmers	\$16.59	\$23.80	\$36.74	\$46.13	\$53.93
15-1122	Information Security Analysts	\$27.96	\$35.98	\$47.96	\$61.25	\$73.87
11-3021	Computer and Information Systems Managers	\$37.93	\$48.31	\$60.86	\$76.04	\$96.78
15-1133	Software Developers, Systems Software	\$28.32	\$36.59	\$47.19	\$58.38	\$65.55

*Data: Emsi, BLS | Analysis: Workforce Intelligence Network*

#### In-Demand Technical Skills

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

#### In-Demand Foundational Skills

- Management
- Communications
- Research
- Problem Solving
- Information Technology

#### In-Demand Education Level\*

- High School Diploma: 4.2%
- Associate Degree: 3.5%
- Bachelor's Degree: 55.4%
- Master's Degree: 12.3%

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

#### In-Demand Certifications

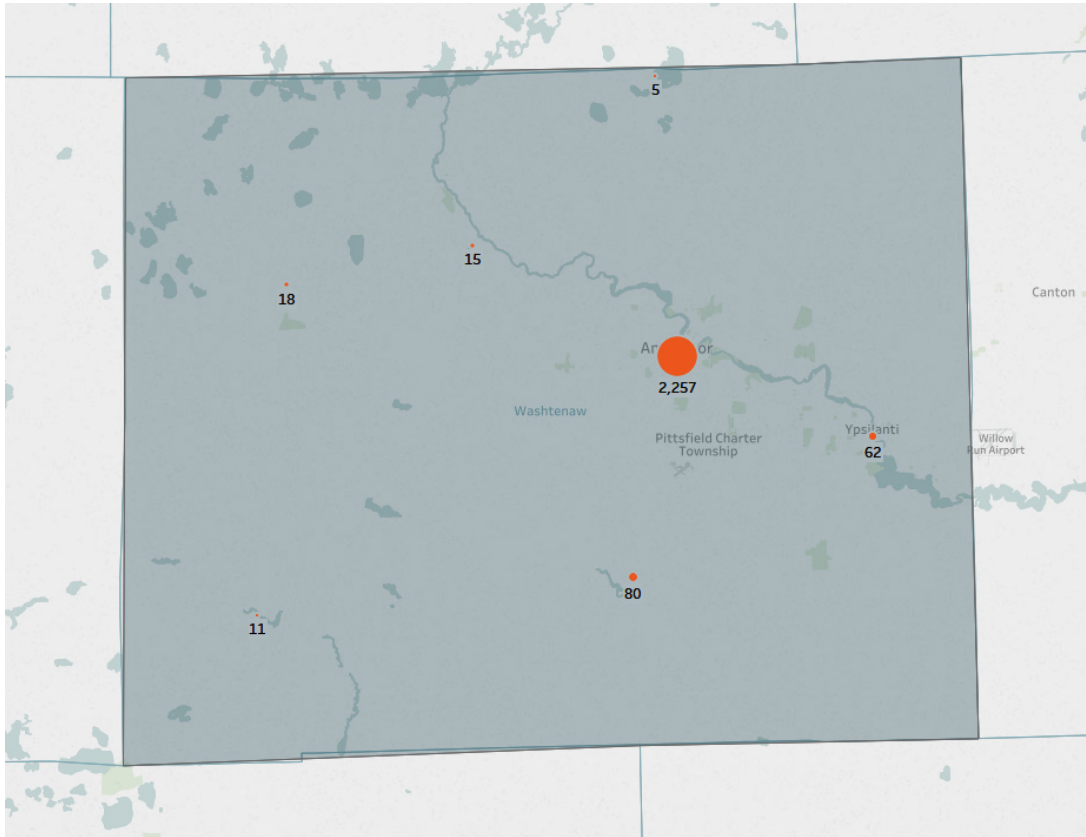
- Microsoft Certified Professional
- Certified Information Systems Security Professional
- Cisco Certified Network Associate
- Certified Information Security Manager
- CompTIA Network+



## Tech Companies are Top Employers of IT Workers



## Programming Language Skills are in High Demand



Map based on Longitude (generated) and Latitude (generated).  
Size shows sum of Unique Postings Oct 2018–Dec 2018. Details are shown for City.

### Top Posting Employers\*

- University of Michigan
- Virtual Vocations
- Domino's Pizza
- Cybercoders, Inc.
- Teksystems, Inc.
- Esterel Technologies, Inc.
- Nexient, LLC
- Stout Systems Development Inc
- Td Ameritrade Holding Corporation
- Proquest

### Job Postings by City

1. Ann Arbor, MI: 2,257 Postings
2. Saline, MI: 80 Postings
3. Ypsilanti, MI: 62 Postings
4. Chelsea, MI: 18 Postings
5. Dexter, MI: 15 Postings

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



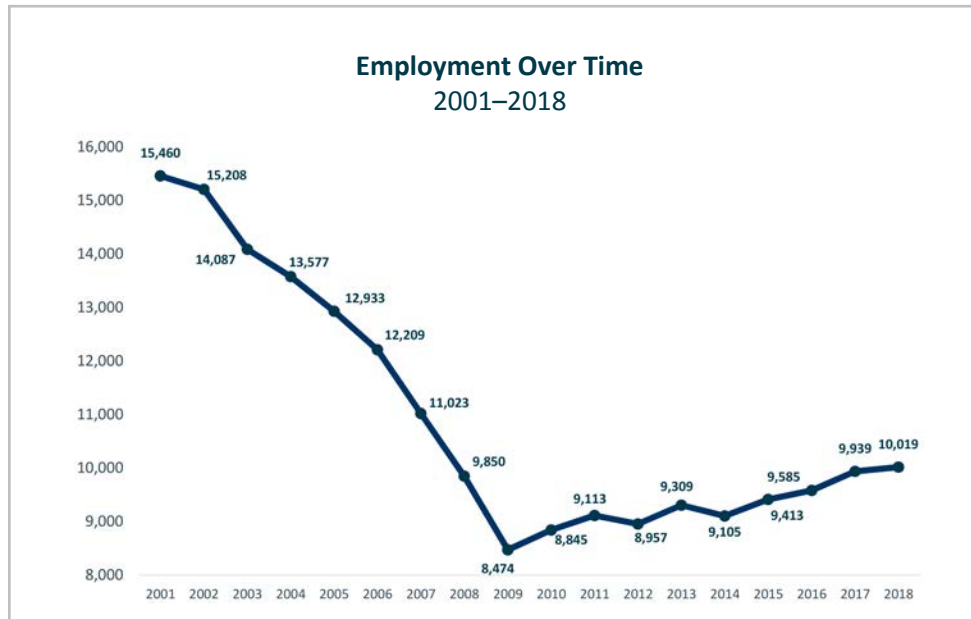


# SKILLED TRADES AND TECHNICIANS (MANUFACTURING) OCCUPATION GROUP Washtenaw County | Q4 2018

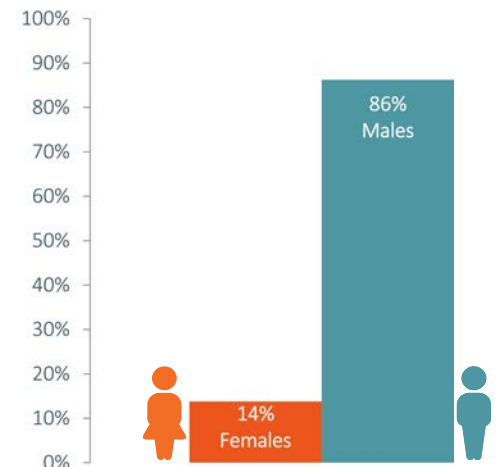
## Introduction

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.



## Worker Gender Demographics



## Skilled Trades and Technicians Worker Demographics

According to the most recent Emsi data set available (2018), the Skilled Trades occupation group employs about 10,000 workers in Washtenaw County. 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 24.4 percent, the group has a somewhat higher proportion than average of workers over age 55.

### Race and Ethnicity Demographics

**77.7% White | 13.0% Black or African American | 2.9% Asian**

### Worker Age Demographics





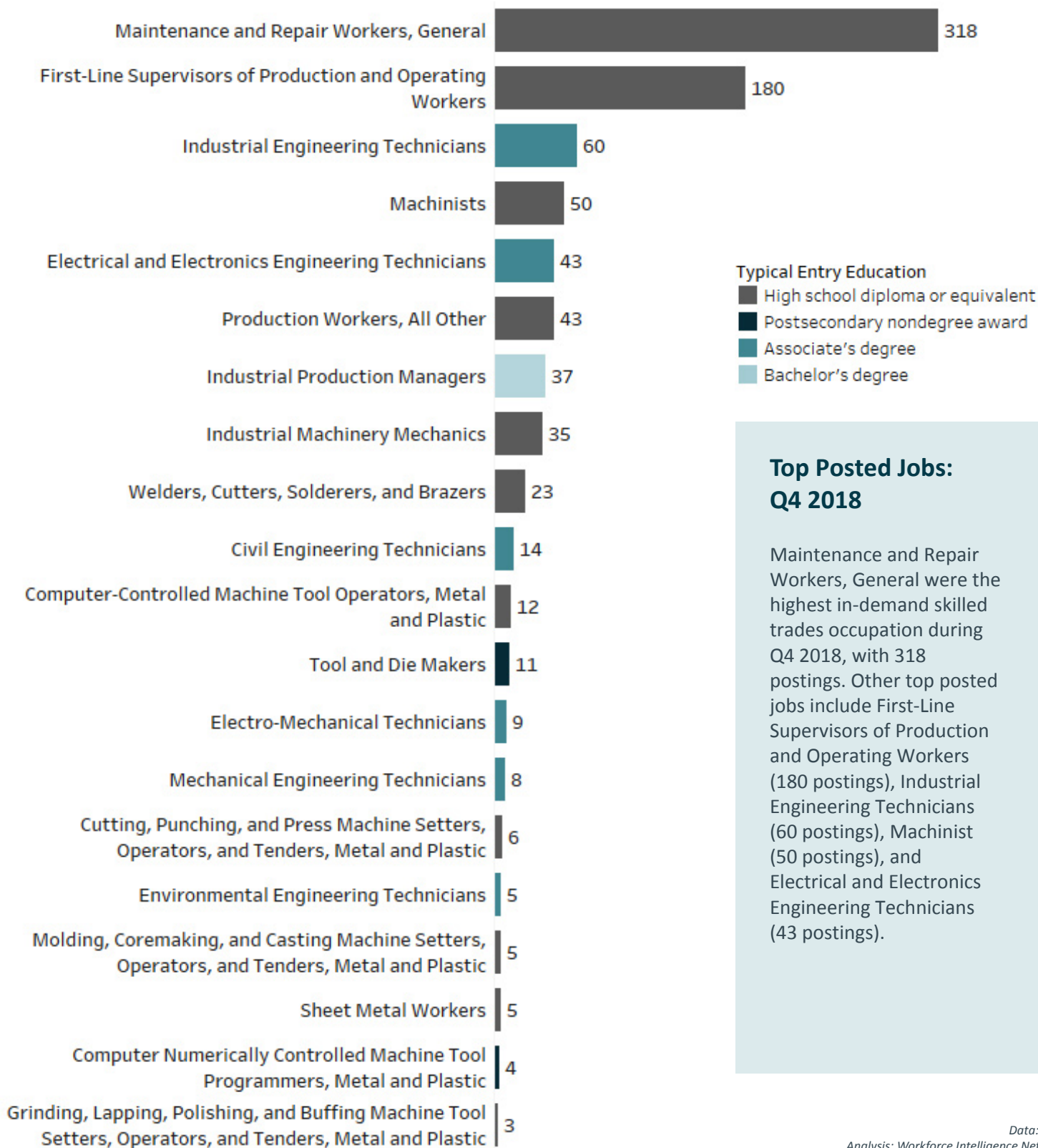
875 Skilled Trades Postings:  
14 Fewer than in Q3 2018



Vocational Training Required  
for Most Skilled Trades Jobs

### Skilled Trades and Technicians Top Posted Jobs

Q4 2018



### Top Posted Jobs: Q4 2018

Maintenance and Repair Workers, General were the highest in-demand skilled trades occupation during Q4 2018, with 318 postings. Other top posted jobs include First-Line Supervisors of Production and Operating Workers (180 postings), Industrial Engineering Technicians (60 postings), Machinist (50 postings), and Electrical and Electronics Engineering Technicians (43 postings).



## High Earning Potential for Industrial Production Manager



## In-Demand Skilled Trades Certification: Certified Quality Engineer

### Skilled Trades and Technicians Wage Overview

Seven of the top ten in-demand skilled trades occupations 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 Q4 2018, offers a median hourly wage of \$17.00, which translates to an annual salary of nearly \$35,000.

**Wage Overview for Top Posted Skilled Trades and Technicians Jobs in Q4 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	\$9.34	\$11.25	\$17.00	\$23.63	\$29.29
51-1011	First-Line Supervisors of Production and Operating Workers	\$18.25	\$23.90	\$32.09	\$39.92	\$48.02
17-3026	Industrial Engineering Technicians	\$17.73	\$21.66	\$25.72	\$29.67	\$34.96
51-4041	Machinists	\$15.80	\$18.03	\$22.24	\$27.35	\$30.83
17-3023	Electrical and Electronics Engineering Technicians	\$14.70	\$19.23	\$27.37	\$32.37	\$42.96
51-9199	Production Workers, All Other	\$8.90	\$9.59	\$11.58	\$13.48	\$20.16
11-3051	Industrial Production Managers	\$37.79	\$50.21	\$65.62	\$78.14	\$91.99
49-9041	Industrial Machinery Mechanics	\$14.47	\$18.02	\$23.56	\$28.23	\$32.88
51-4121	Welders, Cutters, Solderers, and Brazers	\$13.31	\$15.69	\$17.25	\$18.80	\$21.27
17-3022	Civil Engineering Technicians	\$20.32	\$24.00	\$27.16	\$29.54	\$31.20

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

#### In-Demand Technical Skills

- HVAC
- Plumbing
- Continuous Improvement Process
- Painting
- Carpentry

#### In-Demand Foundational Skills

- Management
- Operations
- Troubleshooting
- Communications
- Leadership

#### In-Demand Education Level\*

- High School Diploma: 39.1%
- Associate Degree: 11.8%
- Bachelor's Degree: 12.5%
- Master's Degree: 1.8%

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

#### In-Demand Certifications

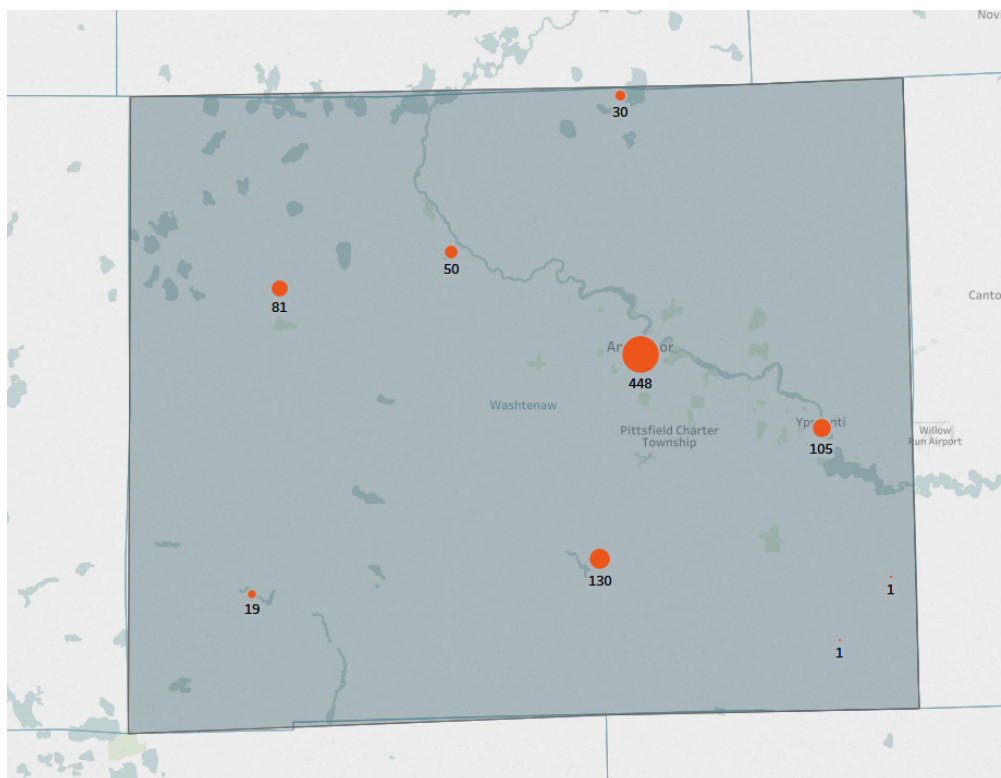
- Certified Quality Engineer
- Commercial Driver's License (CDL)
- American Society for Quality (ASQ) Certified
- Quality Certification
- Certified Quality Auditor



## Staffing Agencies and Manufacturers: Top Employers of Skilled Trades Workers



## HVAC and Management Skills are in High Demand



Map based on Longitude (generated) and Latitude (generated).  
Size shows sum of Unique Postings (Oct 2018–Dec 2018). Details are shown for City.

### Top Posting Employers\*

- Endevis, L.L.c
- McDonald's Corporation
- Aerotek, Inc.
- University of Michigan
- ManpowerGroup Global
- Windsor Mold USA Inc.
- Express Services Inc
- Aramark Corporation
- Phoenix Services, LLC
- Kelly Services, Inc.

### Job Postings by City

1. Ann Arbor, MI: 448 Postings
2. Saline, MI: 130 Postings
3. Ypsilanti, MI: 105 Postings
4. Chelsea, MI: 81 Postings
5. Dexter, MI: 50 Postings

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

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