WIN
WORKFORCE
INTELLIGENCE
NETWORK

Q2 2018
April - June

SOUTHEAST MICHIGAN
16-COUNTY WIN REGION

WIN Labor Market Report

INTRODUCTION
16-County WIN Region | Q2 2018

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Occupation Groups

About This Report

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

This report highlights labor market information and real-time job posting data for the entire 16-county region of southeast Michigan. A workforce overview is provided within identifying key components of the area's labor market including labor force status, demographic, and commuting data. WIN's analysis of online job postings, a proxy for employer demand, is a pioneering method for tracking the health of the labor market. This data is used to provide a real-time demand overview, detailing posting related findings for both employers and job seekers. WIN's data and research team analyzes job posting data at the occupation level within eleven customized occupation groups built using specific Standard Occupational Classification (SOC) codes to provide more contextualized information. Occupation groups combine data for jobs with similar skillsets, educational attainment, and experience requirements, which provides a more 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 second quarter of 2018 in the 16-county WIN region and includes summative data for April, May, and June 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.

WIN WORKFORCE INTELLIGENCE NETWORK
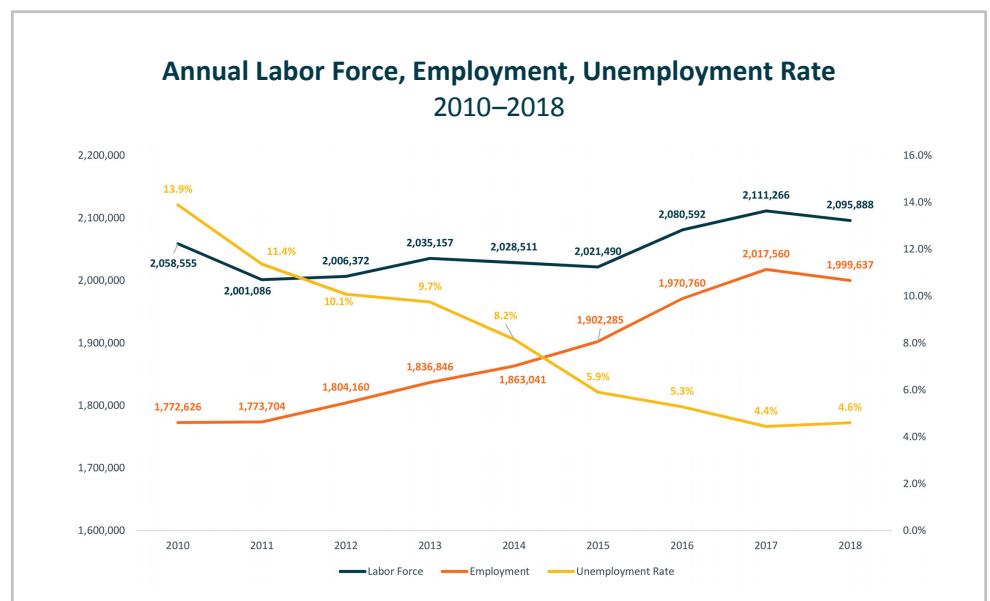
ANNUAL STATE OF THE LABOR MARKET
16-County WIN Region | Q2 2018

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

Thus far in 2018, the labor force figures decreased in southeast Michigan while employment increased. With this simultaneous drop in labor force and increase in employment, the number of unemployed individuals decreased in the region. This has caused the unemployment rate to drop from the annual rate of 4.5 percent in 2017 to the current year to date (YTD) rate of 4.3 percent as of Q2 2018. Employer demand for most occupation groups also increased during Q2 2018. The customer service occupation group reported the highest demand with over 70,000 job postings during the quarter. Other occupation groups also offer great job opportunities for active job seekers: education postings grew by 27 percent from Q1 2018, and 24 percent of postings were open to entry-level applicants.
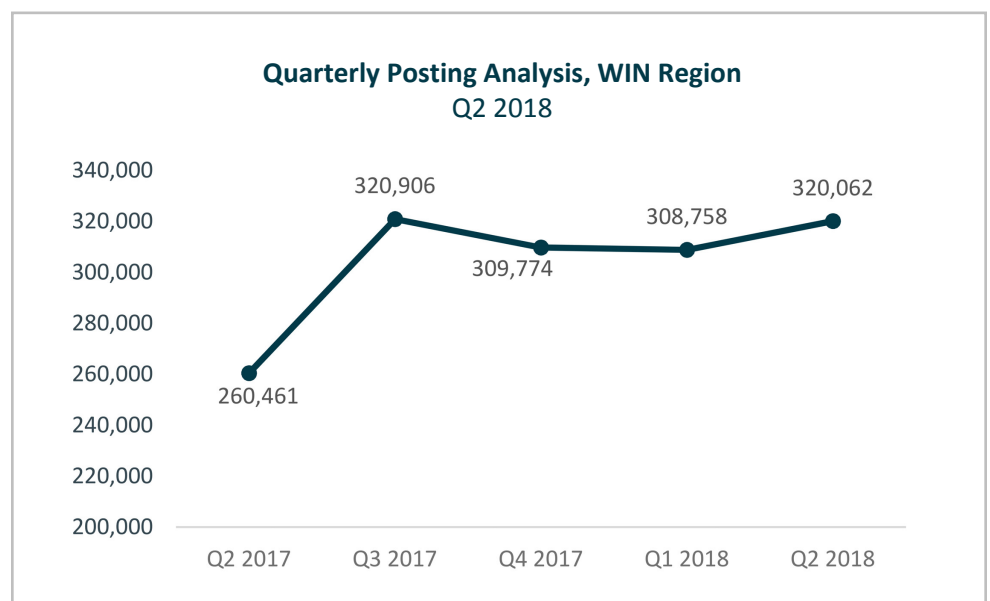
Annual Labor Market Information

Moving away from a ten-year high, the labor force in southeast Michigan dropped by 3,154 individuals between 2017 and 2018. Meanwhile, annual average employment increased by 2,342 workers between 2017 and YTD 2018. With employment increasing while the labor force fell, the unemployment rate fell by 0.2 percentage points from the annual rate of 4.5 percent during 2017 to a current YTD rate of 4.3 percent in the 16-county WIN partnership region.

Annual Labor Force, Employment, Unemployment Rate
2010–2018

Labor Force: 2,058,555 / 2,001,086 / 2,006,372 / 2,035,157 / 2,028,511 / 2,021,490 / 2,080,592 / 2,111,266 / 2,095,888

Employment: 1,772,626 / 1,773,704 / 1,804,160 / 1,836,846 / 1,863,041 / 1,902,285 / 1,970,760 / 2,017,560 / 1,999,637

Unemployment Rate: 13.9% / 11.4% / 10.1% / 9.7% / 8.2% / 5.9% / 5.3% / 4.4% / 4.6%

Legend: Labor Force — Employment — Unemployment Rate

Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Employer Demand Overview

Data from the second quarter of 2018, including posting information from April, May, and June, indicated strong employer demand throughout southeast Michigan. There were 59,601 more postings during Q2 2018 compared to the 260,461 postings made during Q2 2017 for a total of 320,062 postings. Typically, the first half of the year tends to report lower postings than the second half.

Quarterly Posting Analysis, WIN Region
Q2 2018

Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018
260,461	320,906	309,774	308,758	320,062

Data: Emsi | Analysis: Workforce Intelligence Network

QUARTERLY WORKFORCE INDICATORS
16-County WIN Region | Key Findings for Q2 2018

Employer demand surges to 320,000 postings during Q2 2018, with most occupation groups experiencing increases in online job postings between Q1 and Q2 2018.

During Q2 2018, there were 320,062 postings, 11,304 more postings than the 308,758 during Q1 2018. Most of the occupation groups analyzed by WIN experienced an increase during the second quarter of 2018. The customer service group increased by over 4,000 postings. Online job postings from employers in the education occupation group were up by 27 percent from the previous quarter. This level of posting is the highest since Q3 2017 where there were 320,906 posting made. For more information about quarterly job postings, see page 2.

Soft skills including management abilities and communication are in high demand from employers representing all occupation groups analyzed by WIN.

Of the 320,062 job openings posted during Q2 2018, 27 percent indicated management as a necessary soft skill. Technical skills are a lot more underrepresented in postings, with many postings not listing required skills sets or mentioning skills in the job description. Merchandising was the top technical skill in-demand across postings, with six percent of postings (19,964 postings) mentioning applicants needing this skill. Communication skills were also found in 19 percent of the postings during the quarter, highlighting the importance of soft skills to employers.

Southeast Michigan's unemployment rate is currently at 4.0 percent, down 0.7 percentage points from Q1 2018.

After a decline in labor force and employment numbers during Q1 2018, both figures grew moving into Q2 2018. The greater growth in employment when compared to the growth of labor force participants caused the unemployment rate to drop as more workers found work. For more information about this quarter's unemployment rate and other labor market indicators, see page XX.

A Commercial Driver's License (CDL) was the most in-demand certification in Southeast Michigan during Q2 2018.

As a requirement for the top posted occupation, Heavy and Tractor-Trailer Truck Drivers, there were over 23,000 postings looking for applicants holding this certification. While most TDL occupation require this certification due to the nature of transportation jobs, many other occupation groups listed CDL as a required or preferred certification.

WORKFORCE OVERVIEW
16-County WIN Region | Labor Market Information Q2 2018

Labor Force, Employment, Unemployment Rate
2018
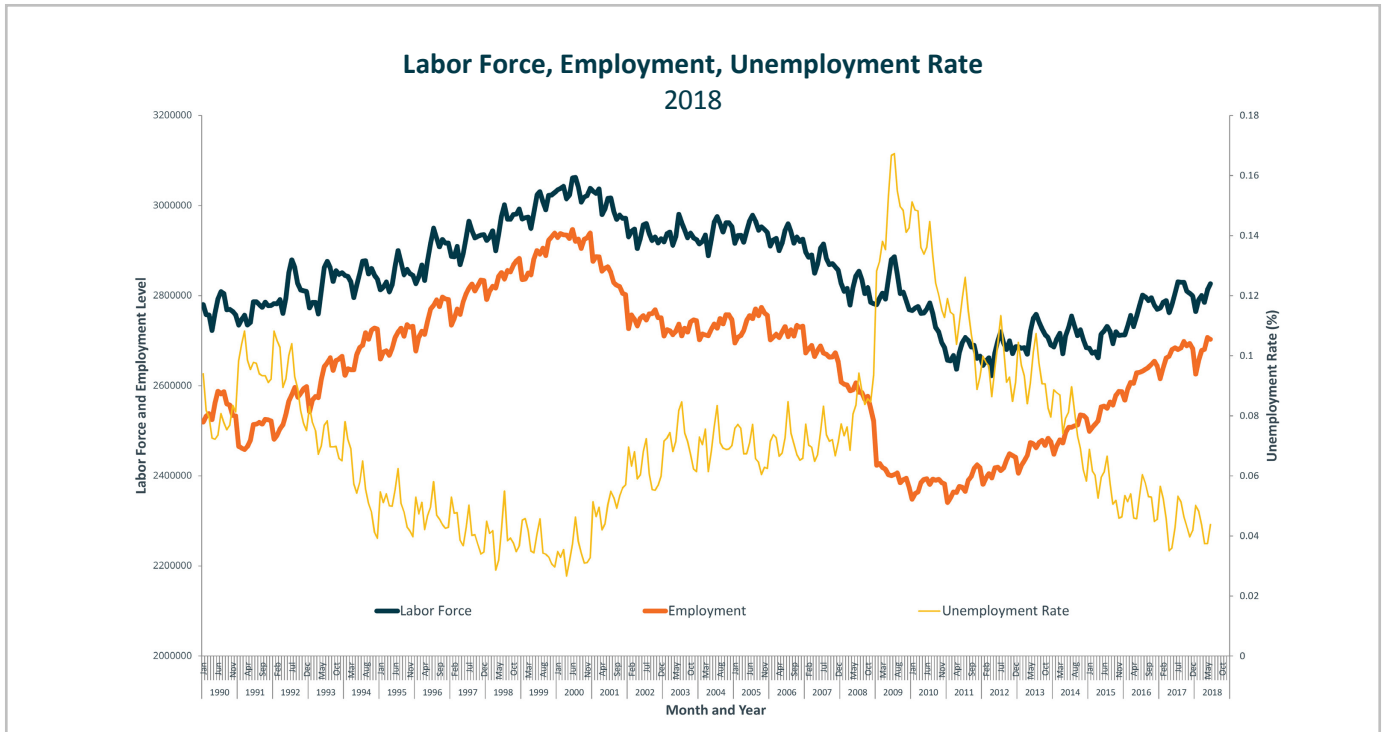
Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Labor Market Data

	2nd Quarter 2017	3rd Quarter 2017	4th Quarter 2017	1st Quarter 2018	2nd Quarter 2018	Change from 1st Quarter 2018	Percent Change from 1st Quarter 2018	Change from 2nd Quarter 2017	Percent Change from 2nd Quarter 2017
Labor Force	2,782,418	2,830,220	2,804,807	2,785,285	2,808,226	22,941	0.8%	25,808	0.9%
Employment	2,676,711	2,682,186	2,688,208	2,653,392	2,697,006	43,614	1.6%	20,295	0.8%
Unemployment	105,708	148,034	116,598	131,893	111,220	-20,673	-15.7%	5,512	5.2%
Unemployment Rate	3.8%	5.2%	4.2%	4.7%	4.0%	-0.8%	na	0.2%	na

Note: Monthly data averaged by quarter | Data: BLS

Labor Force, Employment, and Unemployment

increased by 22,941 workers (+0.8 percent) between Q1 2018 and Q2 2018. Employment in the 16-county area has also increased from Q1 2018, by 43,614 workers (+ 1.3 percent). With employment increasing more than the labor force, the unemployment rate dropped this quarter: the quarterly unemployment rate decreased by 0.8 percentage points between Q1 2018 and Q2 2018 to 4.0 percent.

WORKFORCE OVERVIEW
16-County WIN Region | 2016 Annual Population Demographics
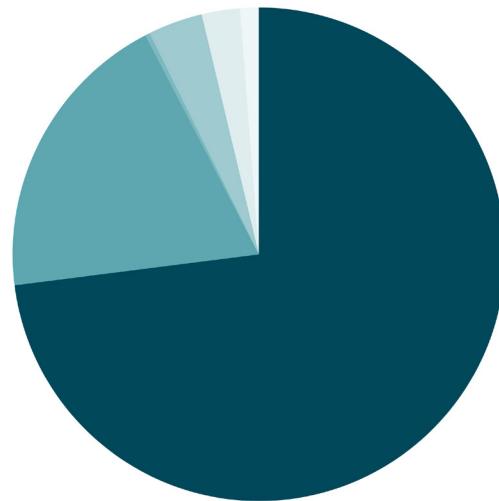
Population Demographics

According to the data from the most recent Census Bureau 2016 ACS Five Year estimates, the population in southeast Michigan increased by nearly eight percent between 2015 and 2016. During 2016, 5,718,624 people were living in the region. The sex of the populace was split almost evenly, with about 51 percent of the population identifying as female, and the other 49 percent identifying as male. The majority of the population identified as white (73 percent) with the second largest number of individuals identifying as black or African American (19 percent). The region as a whole is facing an aging population; 28.5 percent of population was over the age of 55, compared to 19.6 percent under the age of 24.

5,718,624
People in the Region

7.8% Increase
from 2015

Population Race Demographics

- White, 73.17%
- Black or African American, 19.43%
- American Indian and Alaska Native, 0.31%
- Asian, 3.58%
- Native Hawaiian and Other Pacific Islander, 0.02%
- Two or More Races, 2.50%
- Other Race, 1.23%

Population Gender Demographics

51% Females

49% Males

0   10   20   30   40   50   60   70   80   90   100

Population Age Demographics

Age 14 and under 18.5%	Age 15-24 13.7%	Age 25-54, 39.3%	Age 55+ 28.5%

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

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 +	2,822,432	2,564,812	256,226	9.1%
Sex				
Male 16+	1,466,095	1,328,701	137,394	9.4%
16-19	62,698	45,222	17,476	27.9%
20-24	152,202	126,579	25,623	16.8%
25-54	948,482	872,646	75,836	8.0%
55-64	239,002	223,928	15,074	6.3%
65 Plus	63,711	60,326	3,385	5.3%
Female 16+	1,355,127	1,236,663	118,464	8.7%
16-19	64,404	49,213	15,191	23.6%
20-24	146,785	125,503	21,282	14.5%
25-54	864,129	796,223	67,906	7.9%
55-64	224,912	213,334	11,578	5.1%
65 Plus	54,897	52,390	2,507	4.6%
Race				
White	2,134,972	1,987,586	146,411	6.9%
Black / African American	500,327	407,215	93,156	18.6%
Native American	8,322	7,304	1,017	12.2%
Asian	102,813	97,439	5,413	5.3%
Native Hawaiian / Pacific Islander	762	676	060	7.9%
Some Other Race	25,794	23,080	2,690	10.4%
Two or More Races	49,861	43,027	6,739	13.5%
Ethnicity				
Hispanic	104,921	93,396	11,421	10.9%

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

Labor Market Demographics

During 2016, the most recent census year, there were about 2.82 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 (49.4 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 27.9 percent. Black or African American job seekers also have a difficult time finding employment, facing an unemployment rate of 18.4 percent.
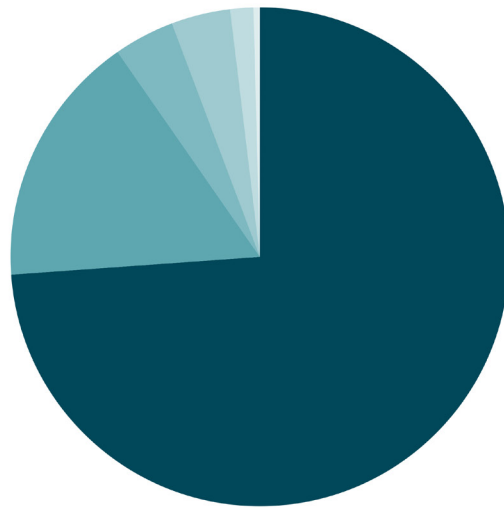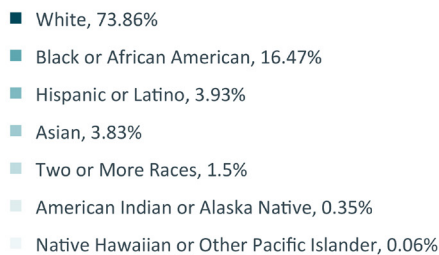
WORKFORCE OVERVIEW
16-County WIN Region | 2017 Annual Working Population Demographics

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 2,497,500 individuals working in southeast Michigan. A slight majority (51 percent or 1,277,391 workers) were male, while 49 percent (1,220,110 workers) of the workforce was female. Most of those working in the region were white, accounting for 73.95 percent of the workforce, while African American or black workers accounted for 16.5 percent of the workforce. Those identifying as having a Hispanic or Latino ethnicity accounted for 3.9 percent. Eighty-six percent of the workforce was 25 years or older. Only fourteen percent of those under the age of 25 were working, indicating an aging workforce in southeast Michigan.

Workforce Race and Ethnicity Demographics

- White, 73.86%
- Black or African American, 16.47%
- Hispanic or Latino, 3.93%
- Asian, 3.83%
- Two or More Races, 1.5%
- American Indian or Alaska Native, 0.35%
- Native Hawaiian or Other Pacific Islander, 0.06%

Workforce Gender Demographics

51% Males

49% Females

| 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
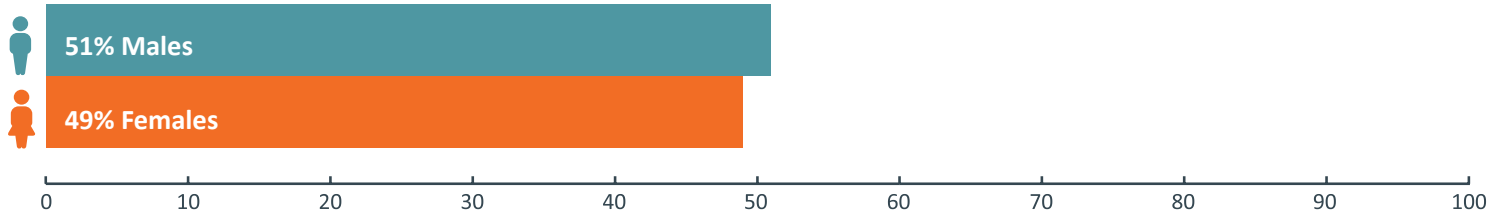
Workforce Age Demographics

| Age 14-24 14.0% | Age 25-54 64.3% | Age 55+ 21.8% |

Data: Emsi | Analysis: Workforce Intelligence Network
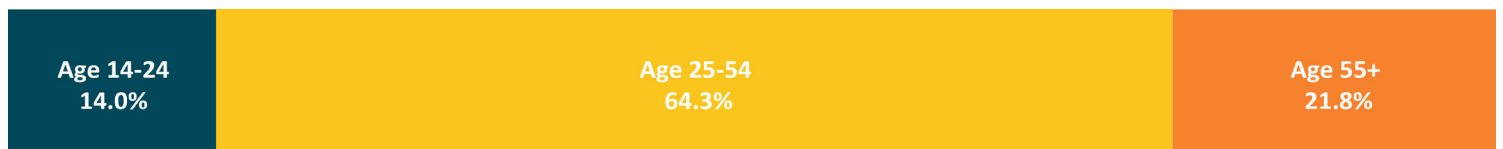
WORKFORCE OVERVIEW
16-County WIN Region | 2015 Regional Commuting Patterns

Regional Commuting Patterns

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

Where 16-County WIN Region Residents Work

Oakland 27.9%, Wayne 27.4%, Macomb 12.4%, Washtenaw 7.6%, Genesee 4.8%, Livingston 2.1%, Jackson 1.9%, Ingham 1.9%, St. Clair 1.6%, Monroe 1.5%, All Other Locations 11.0%
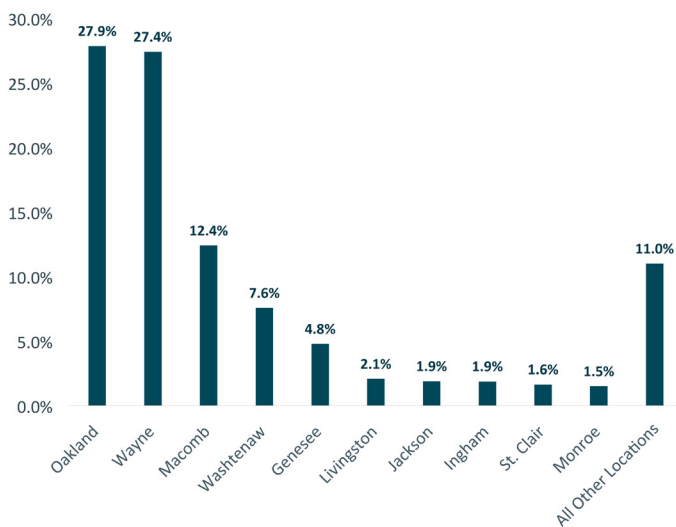
Data: U.S. Census OnTheMap, 2015
Analysis: Workforce Intelligence Network

Where 16-County WIN Region Workers Live
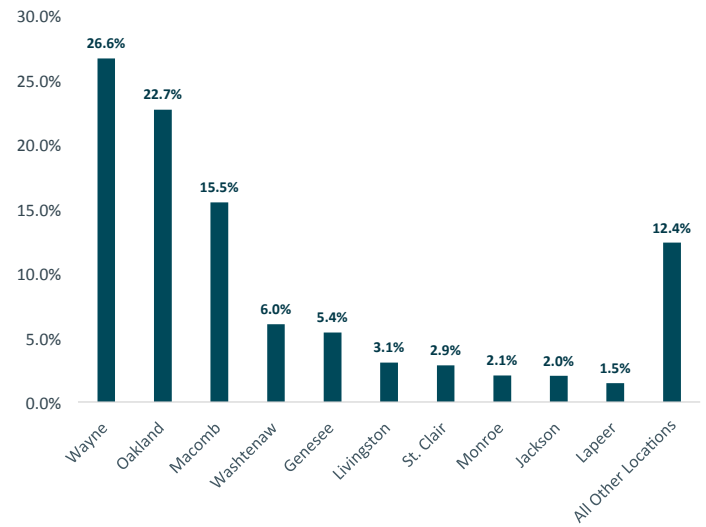
Wayne 26.6%, Oakland 22.7%, Macomb 15.5%, Washtenaw 6.0%, Genesee 5.4%, Livingston 3.1%, St. Clair 2.9%, Monroe 2.1%, Jackson 2.0%, Lapeer 1.5%, All Other Locations 12.4%

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

181,436 — Live Outside of the 16 County WIN Partnership and Commute In

2,088,193 — Live and Work in the 16 County WIN Partnership

207,707 — Live in the 16 County WIN Partnership and Commute Out

REAL-TIME DEMAND OVERVIEW
16-County WIN Region | Top Posted Jobs | Q2 2018

Top Posted Jobs
Q2 2018

Occupation	Postings
Heavy and Tractor-Trailer Truck Drivers	36,537
Registered Nurses	10,629
First-Line Supervisors of Retail Sales Workers	10,071
Retail Salespersons	9,176
Customer Service Representatives	6,344
Software Developers, Applications	5,912
Postsecondary Teachers	5,039
Industrial Engineers	4,943
Light Truck or Delivery Services Drivers	4,870
Business Operations Specialists, All Other	4,624
Computer Occupations, All Other	4,527
Mechanical Engineers	4,478
Childcare Workers	4,090
Maintenance and Repair Workers, General	3,668
Stock Clerks and Order Fillers	3,452
First-Line Supervisors of Office and Administrative Support Workers	3,387
First-Line Supervisors of Food Preparation and Serving Workers	3,219
Sales Managers	3,162
Combined Food Preparation and Serving Workers, Including Fast Food	3,011
Accountants and Auditors	2,853

Top Posted Jobs: Q2 2018

Heavy and Tractor-Trailer Truck Drivers were the highest in-demand occupation for a second quarter of 2018, with 36,537 online job postings. Of the top five overall in-demand occupations, only Registered Nurses typically requires a bachelor's degree for entry. Median wages for Registered Nurses are nearly $15 more per hour than the other top jobs. Customer service related occupations round out the remain top five occupations with First-Line Supervisors of Retail Sales Workers (10,071 postings), Retail Salespersons (9,176 postings), and Customer Service Representatives (6,344 postings) in high demand during Q2 2018.

Data: Emsi
Analysis: Workforce Intelligence Network

REAL-TIME DEMAND OVERVIEW
16-County WIN Region | Top Posted Entry-Level Jobs | Q2 2018

Top Posted Entry-Level Jobs
Q2 2018

| Occupation	Postings
Heavy and Tractor-Trailer Truck Drivers	13,013
Registered Nurses	5,516
First-Line Supervisors of Retail Sales Workers	3,161
Customer Service Representatives	1,708
Retail Salespersons	1,419
Software Developers, Applications	1,385
Business Operations Specialists, All Other	1,217
Mechanical Engineers	1,045
First-Line Supervisors of Office and Administrative Support Workers	1,020
Industrial Engineers	1,004
Computer Occupations, All Other	972
Computer User Support Specialists	930
Maintenance and Repair Workers, General	835
Postsecondary Teachers	828
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	702
First-Line Supervisors of Production and Operating Workers	701
First-Line Supervisors of Food Preparation and Serving Workers	669
General and Operations Managers	663
Accountants and Auditors	660
Social and Human Service Assistants	653

Top Posted Entry-Level Jobs: Q2 2018

These entry-level jobs represent the top posted occupations requiring zero to two years of previous work experience. Many of these occupations (40 percent) require training, some college, or an associate degree. Those who enter the workforce with a bachelor's 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 13,000 postings in Q2 2018.

Data: Emsi
Analysis: Workforce Intelligence Network

REAL-TIME DEMAND OVERVIEW
16-County WIN Region | Job Postings by City | Q2 2018

Job Postings by City
Q2 2018
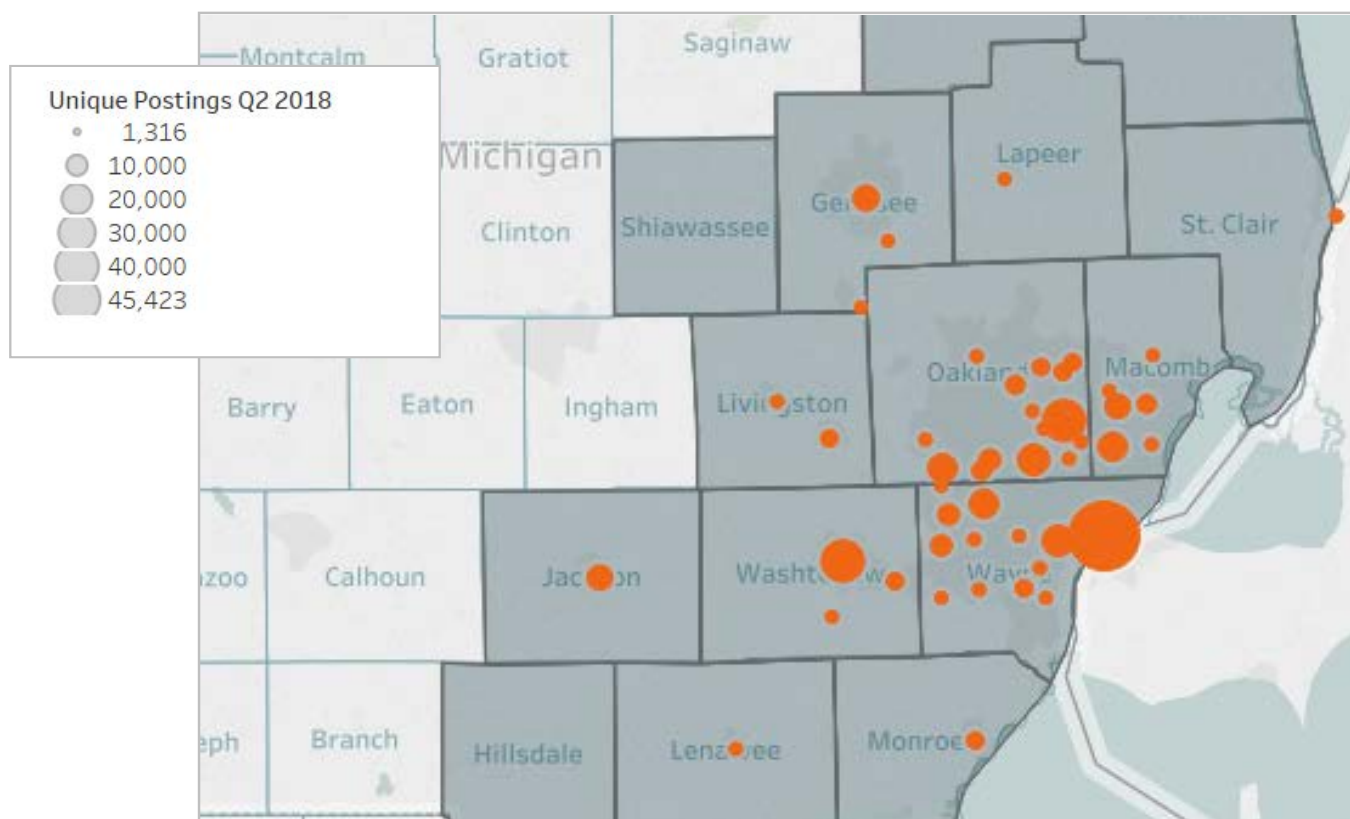
Unique Postings Q2 2018
- 1,316
- 10,000
- 20,000
- 30,000
- 40,000
- 45,423

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

Top In-Demand Qualifications

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

Top In-Demand Skills

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

Top Posting Employers*

- CRST International, Inc.
- University of Michigan
- Henry Ford Health System
- The Home Depot Inc
- Lyft, Inc.
- C.R. England, Inc.
- Tutree, Inc.
- William Beaumont Hospital
- McDonald's Corporation
- Dollar General Corporation

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

AGRICULTURE OCCUPATION GROUP
## 16-County WIN Region | Q2 2018

Introduction

WIN's agriculture occupation group brings together occupations that require knowledge of the farming, livestock, the environment, and natural sciences. Occupations range from Farm Workers, to Environmental Engineers, to Meat Butchers, to Recreation Workers.
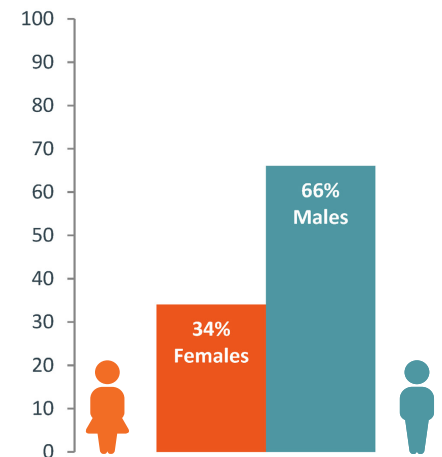
70,379
Agriculture Workers
0.5% Increase
from 2017

Employment Over Time
2001–2017

Population
Gender Demographics

66% Males
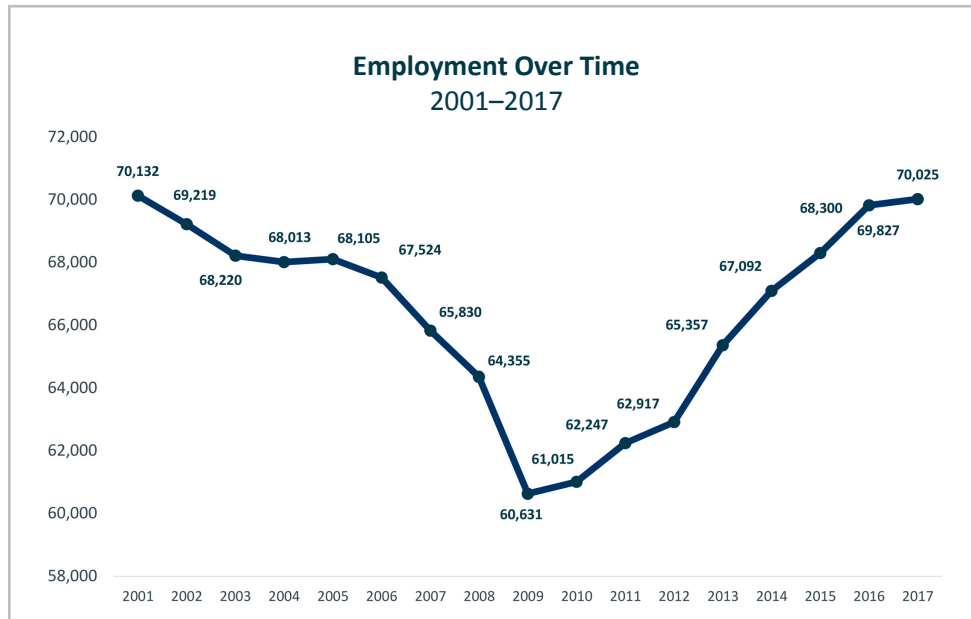
34% Females

Agriculture Worker Demographics

According to the most recent Emsi data set available (2017), the 70,050 workers in the agriculture occupation group is not very diverse. A large majority of workers are white males between the ages of 25 and 54. Only 33 percent of agriculture workers identify as women, and only 15 percent of workers were under the age of 24.

Race and Ethnicity Demographics
77.0% White | 11.8% Black or African American | 3.5% Asian

Population Age Demographic

Age 14-24, 14.5%

Age 25-54 64.2%	Age 55+, 21.3%

Data: Emsi | Analysis: Workforce Intelligence Network
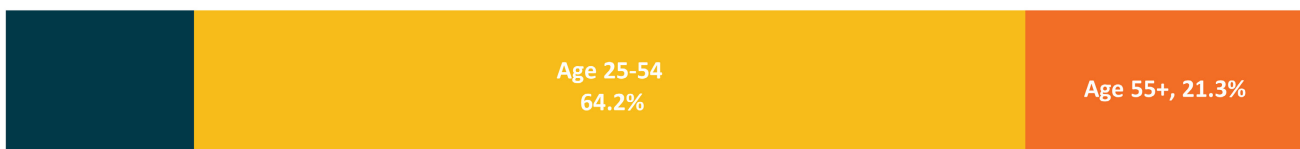
**5,643 Agriculture Postings
296 more than Q1 2018**

**Bachelors Degree Required
for Most Agriculture Jobs**

Agriculture Top Posted Jobs
Q2 2018

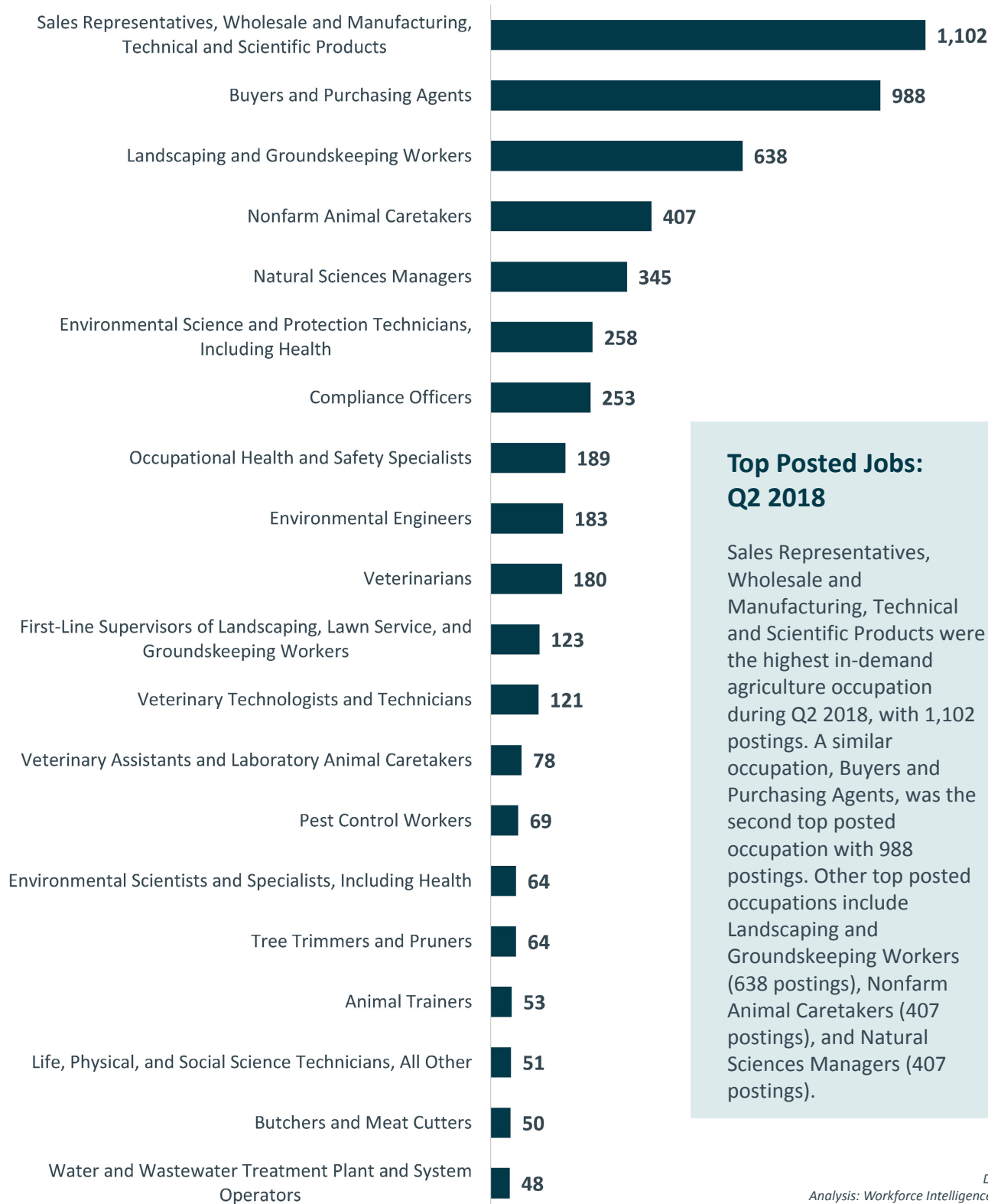| Job	Postings
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	1,102
Buyers and Purchasing Agents	988
Landscaping and Groundskeeping Workers	638
Nonfarm Animal Caretakers	407
Natural Sciences Managers	345
Environmental Science and Protection Technicians, Including Health	258
Compliance Officers	253
Occupational Health and Safety Specialists	189
Environmental Engineers	183
Veterinarians	180
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	123
Veterinary Technologists and Technicians	121
Veterinary Assistants and Laboratory Animal Caretakers	78
Pest Control Workers	69
Environmental Scientists and Specialists, Including Health	64
Tree Trimmers and Pruners	64
Animal Trainers	53
Life, Physical, and Social Science Technicians, All Other	51
Butchers and Meat Cutters	50
Water and Wastewater Treatment Plant and System Operators	48

**Top Posted Jobs:
Q2 2018**

Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products were the highest in-demand agriculture occupation during Q2 2018, with 1,102 postings. A similar occupation, Buyers and Purchasing Agents, was the second top posted occupation with 988 postings. Other top posted occupations include Landscaping and Groundskeeping Workers (638 postings), Nonfarm Animal Caretakers (407 postings), and Natural Sciences Managers (407 postings).

High Earning Potential for Natural Science Managers

Vet Tech: Most In-Demand Agriculture Certification

Agriculture Wage Overview

Of the top posted agriculture-related jobs, seven of the ten offer median wages of over $30 per hour according to the Bureau of Labor Statistics (BLS). The top posted job, Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products offer median hourly earnings of $39.25, which translates to annual earnings of approximately $68,536.

Wage Overview for Top Posted Agriculture Jobs in Q2 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	$23.29	$28.38	$39.25	$54.91	$72.03
13-1028	Buyers and Purchasing Agents	$17.98	$23.85	$32.23	$43.82	$56.95
37-3011	Landscaping and Groundskeeping Workers	$9.56	$10.70	$12.87	$15.46	$18.97
39-2021	Nonfarm Animal Caretakers	$9.10	$9.48	$10.45	$11.75	$14.67
11-9121	Natural Sciences Managers	$33.29	$39.28	$48.54	$66.53	$85.48
19-4091	Environmental Science and Protection Technicians, Including Health	$14.16	$16.50	$21.63	$27.93	$32.78
13-1041	Compliance Officers	$21.46	$27.49	$37.51	$42.72	$48.80
29-9011	Occupational Health and Safety Specialists	$24.87	$29.94	$37.26	$46.05	$54.61
17-2081	Environmental Engineers	$28.94	$35.10	$44.64	$55.76	$65.11
29-1131	Veterinarians	$28.65	$33.12	$39.16	$50.41	$67.26

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills
- Purchasing
- Landscaping
- Selling Techniques
- Procurement
- Mowing

In-Demand Foundational Skills
- Management
- Communications
- Sales
- Operations
- Leadership

In-Demand Education Level*
- High School Diploma: 19.9%
- Associate Degree: 4.2%
- Bachelor's Degree: 36.9%
- Master's Degree: 8.4%

*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent
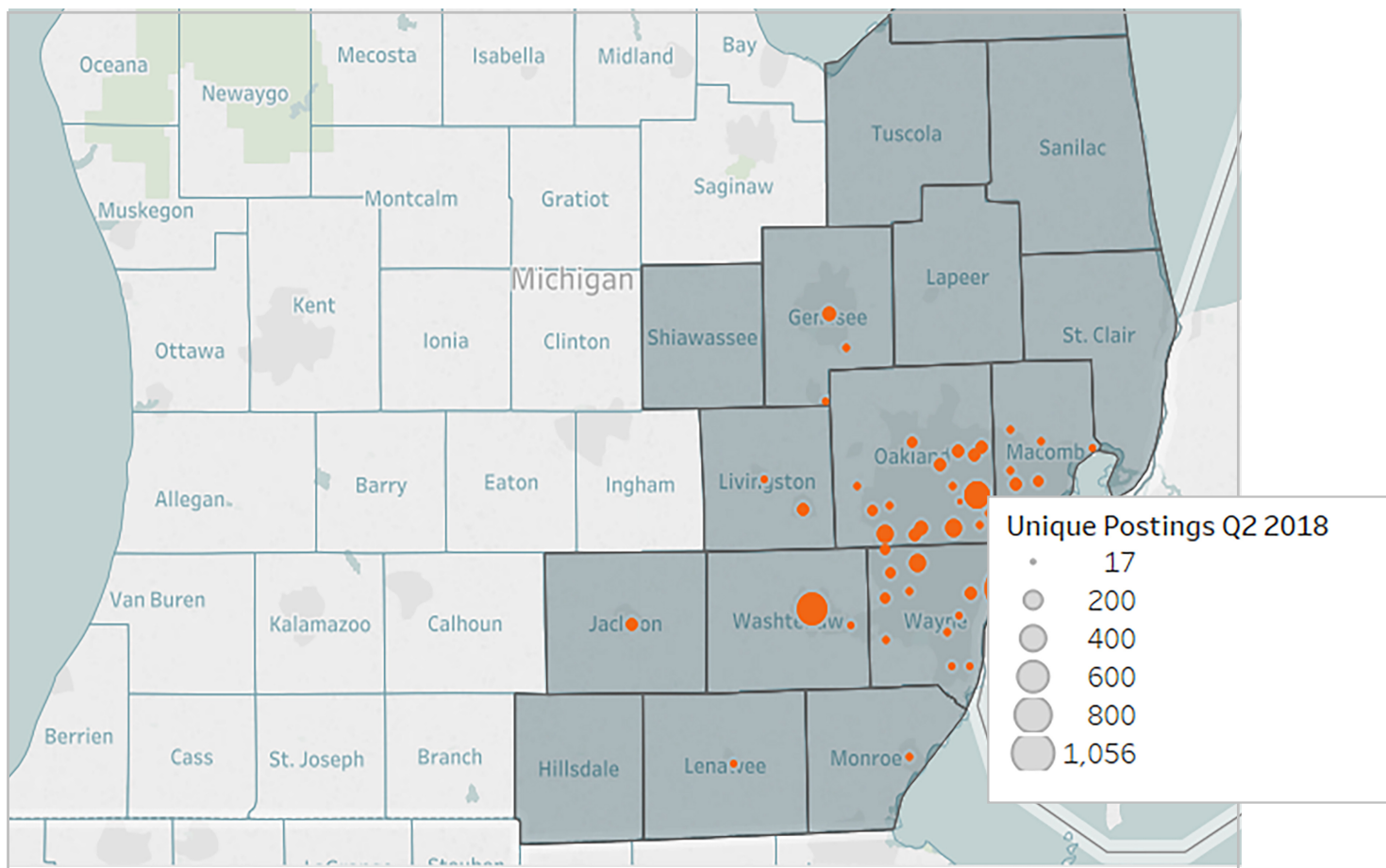
In-Demand Certifications
- Commercial Driver's License (CDL)
- Certified Veterinary Technician
- Certified Safety Professional
- Certified Hazardous Materials Manager
- Professional Engineer

Veterinarian Hospitals are Top Employers of the Agriculture-related Workers

Landscaping Skills are in High Demand

Unique Postings Q2 2018

·	17
○	200
○	400
○	600
○	800
○	1,056

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

Top Posting Employers*

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

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

Job Postings by City

1. Detroit, MI: 1,056 Postings
2. Ann Arbor, MI: 529 Postings
3. Troy, MI: 373 Postings
4. Auburn Heights, MI: 194 Postings
5. Novi, MI: 179 Postings
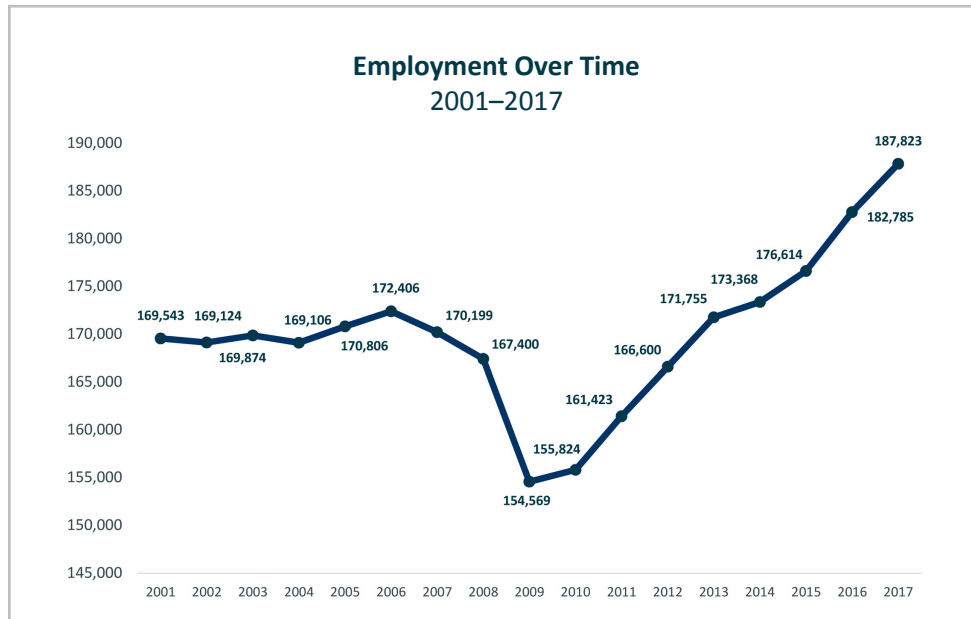
BUSINESS AND FINANCE OCCUPATION GROUP
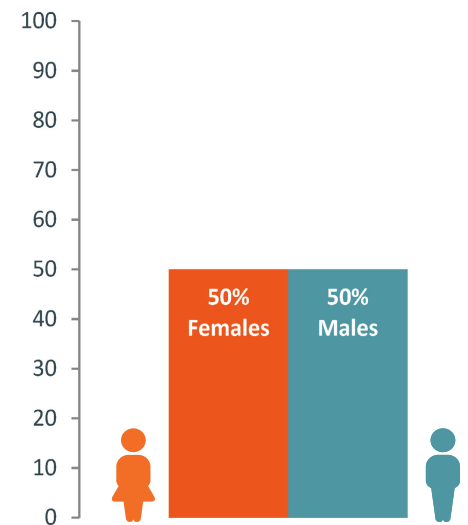## 16-County WIN Region | Q2 2018

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.

188,664
Business Workers

0.4% Increase
from 2017

Employment Over Time
2001–2017

190,000
185,000
180,000
175,000
170,000
165,000
160,000
155,000
150,000
145,000

169,543 169,124 169,874 169,106 170,806 172,406 170,199 167,400 154,569 155,824 161,423 166,600 171,755 173,368 176,614 182,785 187,823

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Population Gender Demographics

100
90
80
70
60
50
40
30
20
10
0

50% Females   **50% Males**

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 180,000 workers. Half the working population identify as female (50 percent). In addition, only, 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

80.6% White | 11.2% Black or African American | 4.2% Asian

Population Age Demographics

Age 14-24, 5.2%

Age 25-54 71.6%

Age 55+, 23.2%

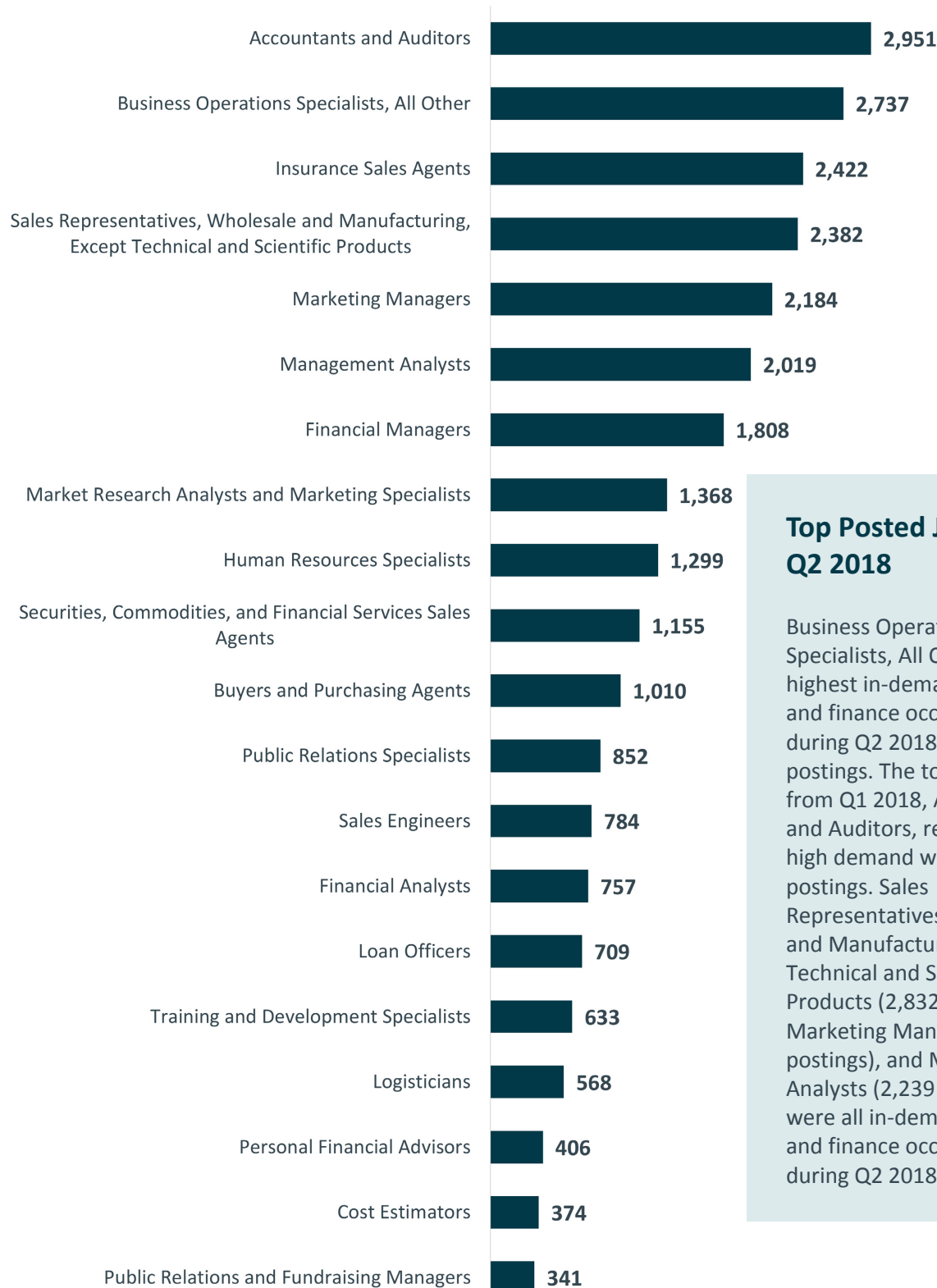*Data: Emsi | Analysis: Workforce Intelligence Network*

**30,024 Business and Finance Postings
1,541 fewer than Q1 2018**

**Bachelor's Degree Required for
Most Business and Finance Jobs**

Business and Finance Top Posted Jobs
Q2 2018

Job	Postings
Accountants and Auditors	2,951
Business Operations Specialists, All Other	2,737
Insurance Sales Agents	2,422
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2,382
Marketing Managers	2,184
Management Analysts	2,019
Financial Managers	1,808
Market Research Analysts and Marketing Specialists	1,368
Human Resources Specialists	1,299
Securities, Commodities, and Financial Services Sales Agents	1,155
Buyers and Purchasing Agents	1,010
Public Relations Specialists	852
Sales Engineers	784
Financial Analysts	757
Loan Officers	709
Training and Development Specialists	633
Logisticians	568
Personal Financial Advisors	406
Cost Estimators	374
Public Relations and Fundraising Managers	341

**Top Posted Jobs:
Q2 2018**

Business Operations Specialists, All Other was the highest in-demand business and finance occupation during Q2 2018, with 4,626 postings. The top posted job from Q1 2018, Accountants and Auditors, remained in high demand with 2,852 postings. Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (2,832 postings), Marketing Managers (2,832 postings), and Management Analysts (2,239 postings) were all in-demand business and finance occupations during Q2 2018.

*Data: Emsi
Analysis: Workforce Intelligence Network*

**High Earning Potential
for Financial Managers**

**Certified Public Accountant:
In-Demand Business and Finance 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, Business Operations Specialists, All Other, offers median hourly wages of $32.82, translating to annual earnings of approximately $68,000.

Wage Overview for Top Posted Business and Finance Jobs in Q2 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
13-1199	Business Operations Specialists, All Other	$18.15	$23.65	$32.82	$44.80	$56.35
13-2011	Accountants and Auditors	$20.85	$25.73	$33.62	$44.98	$58.85
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	$14.18	$20.63	$30.26	$45.55	$61.32
11-2021	Marketing Managers	$34.49	$45.08	$61.73	$79.70	$111.92
13-1111	Management Analysts	$24.93	$30.81	$40.48	$55.70	$78.71
11-3031	Financial Managers	$34.04	$43.17	$57.57	$76.57	$106.27
13-1161	Market Research Analysts and Marketing Specialists	$16.53	$22.78	$31.48	$43.44	$57.66
13-1071	Human Resources Specialists	$17.82	$22.43	$29.29	$38.11	$49.12
41-3021	Insurance Sales Agents	$14.37	$18.86	$26.97	$44.02	$68.09
41-3031	Securities, Commodities, and Financial Services Sales Agents	$15.68	$18.28	$25.19	$40.97	$73.24

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills
- Accounting
- Selling Techniques
- Auditing
- Business Development
- Purchasing

In-Demand Foundational Skills
- Management
- Sales
- Communications
- Operations
- Customer Service

In-Demand Education Level*
- High School Diploma: 12.4%
- Associate Degree: 4.1%
- Bachelor's Degree: 49.0%
- Master's Degree: 11.7%

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

Health Organizations and Major Corporations Seeking Business and Finance Workers

Accounting and Development Skills are in High Demand
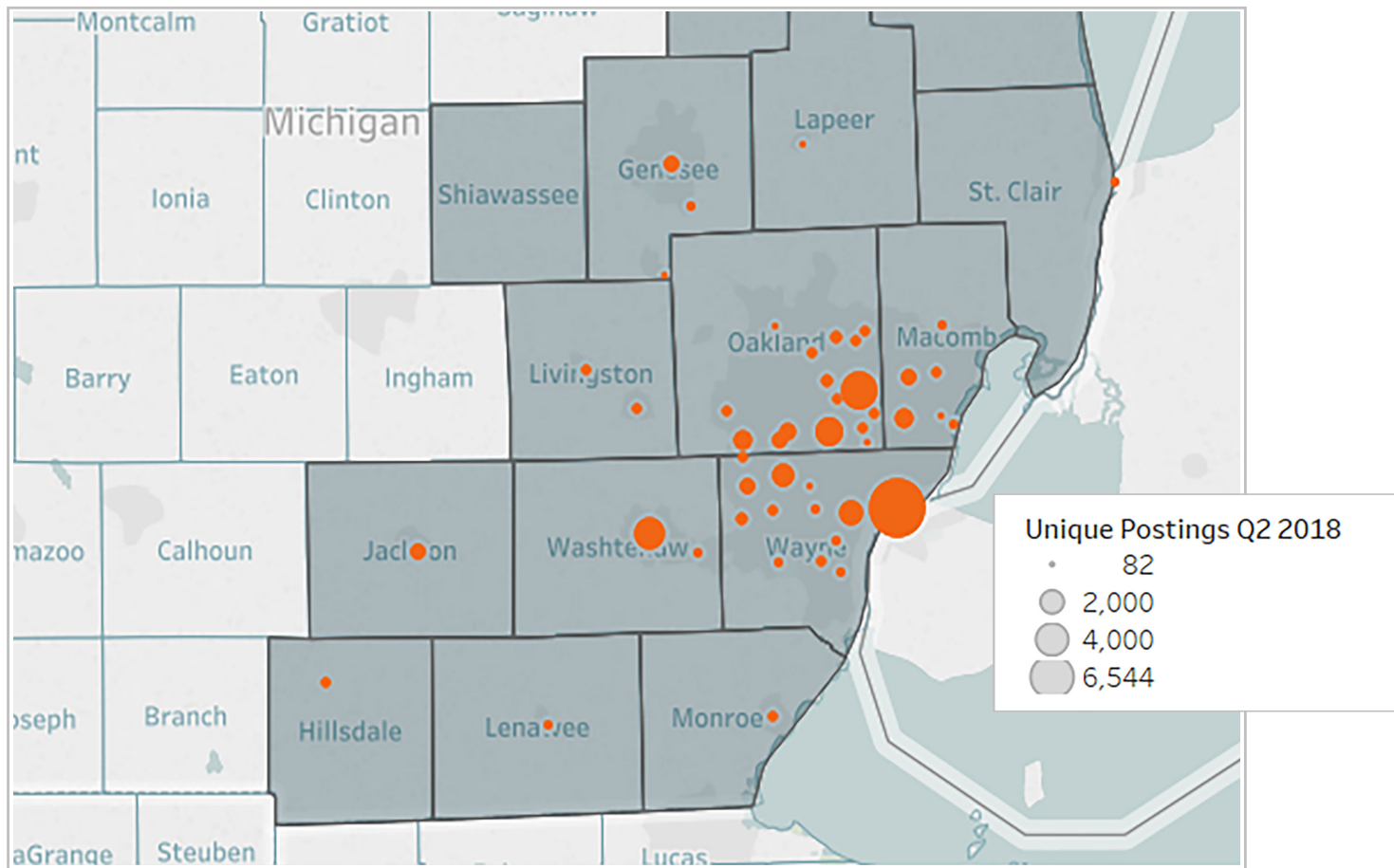
Unique Postings Q2 2018
· 82
○ 2,000
○ 4,000
○ 6,544

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

Top Job Posting Employers*

- Anthem, Inc.
- Robert Half International Inc.
- H&R Block, Inc.
- Oracle Corporation
- Huntington Bancshares Incorporated
- Deloitte LLP
- Bank of America Corporation
- University of Michigan
- Comerica Incorporated
- JPMorgan Chase & Co.

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

Job Postings by City

1. Detroit, MI: 6,544 Postings
2. Troy, MI: 2,684 Postings
3. Ann Arbor, MI: 1,919 Postings
4. Southfield, MI: 1,558 Postings
5. Auburn Heights, MI: 1,180 Postings

CONSTRUCTION OCCUPATION GROUP
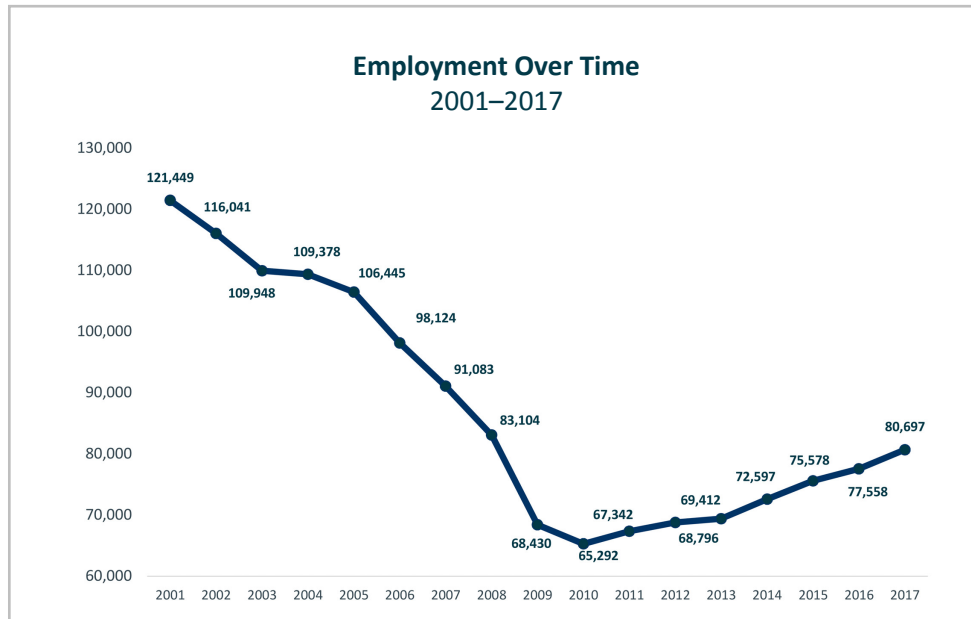## 16-County WIN Region | Q2 2018

Introduction

Jobs in the WIN construction occupation group are associated with the skilled trades, engineering, management, and planning. Many construction employers are slowly adopting online job search methods, so online job ads may not provide a complete picture of demand for these workers. Even so, it is an important and in-demand occupation group for southeast Michigan and posting data provides a glimpse into employer needs.
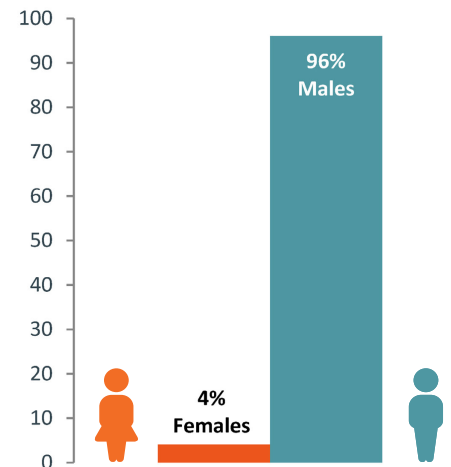
81,473
Construction Workers
1.0% Increase
from 2017

Employment Over Time
2001–2017

Year	Value
2001	121,449
2002	116,041
2003	109,948
2004	109,378
2005	106,445
2006	98,124
2007	91,083
2008	83,104
2009	68,430
2010	65,292
2011	67,342
2012	68,796
2013	69,412
2014	72,597
2015	75,578
2016	77,558
2017	80,697

Population Gender Demographics

96% Males
**4% Females**

Construction Worker Demographics

According to the most recent Emsi worker demographic data set available (2017), despite having over 80,000 workers, the construction occupation group is not very diverse. A large majority of workers are white males between the ages of twenty-five and fifty-four. Only four percent of workers identified as female, and only 16 percent identified as a racial minority.

Race and Ethnicity Demographics

84.3% White | 7.1% Black or African American | 0.6% Asian

Population Age Demographics

Age 14-24, 9.7%

Age 25-54 72.1%

Age 55+, 18.1%

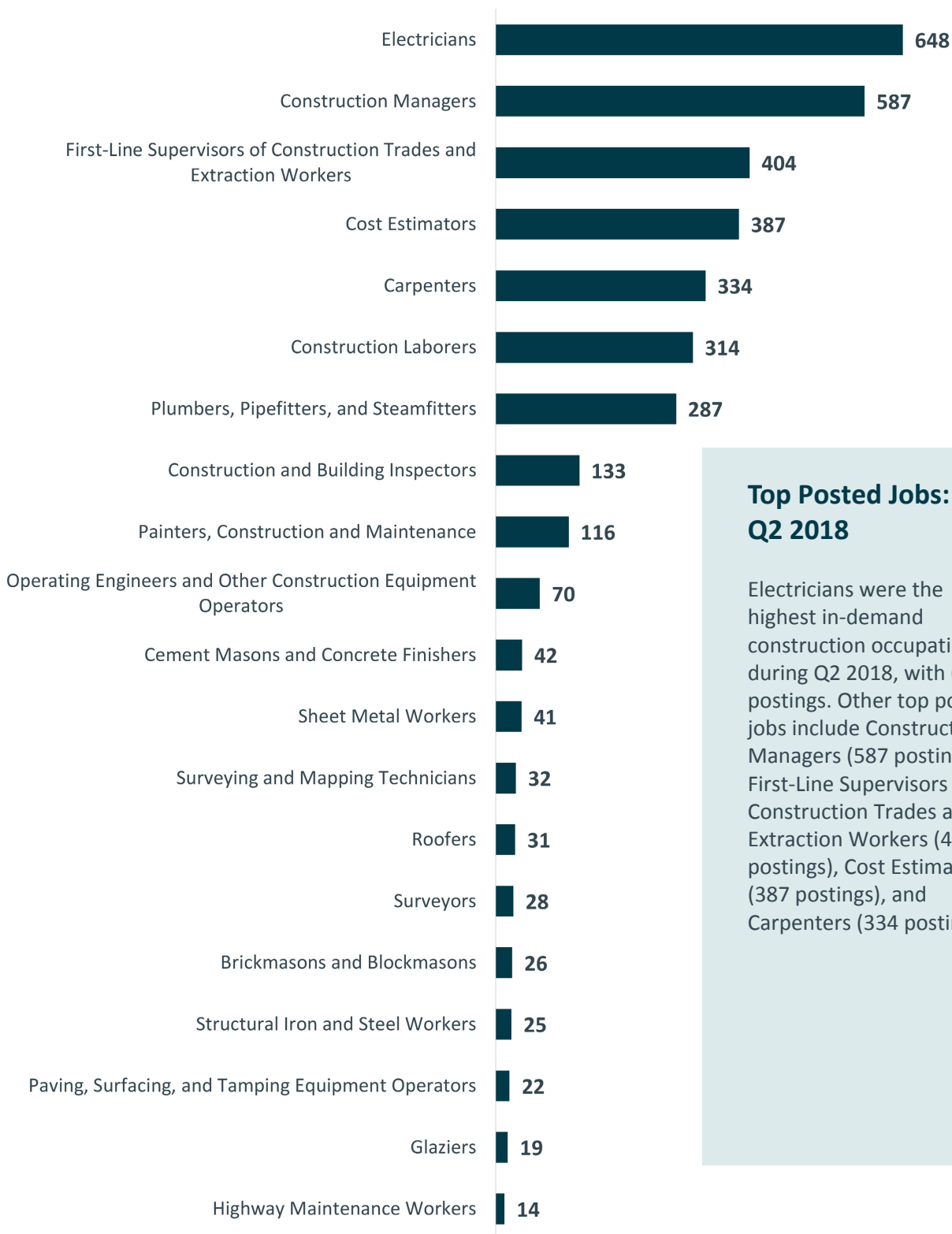*Data: Emsi | Analysis: Workforce Intelligence Network*
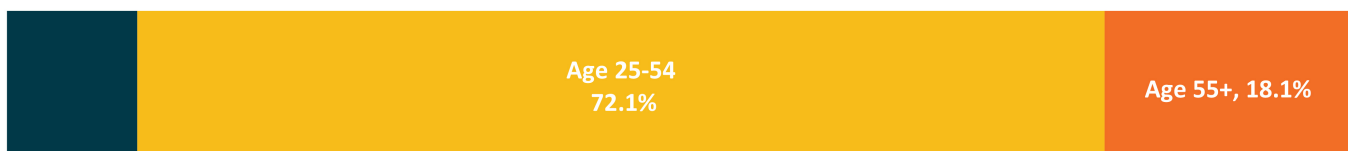
3,694 Construction Postings
181 more than Q1 2018

Vocational Training Required
for Most Construction Jobs

Construction Top Posted Jobs
Q2 2018

Job	Postings
Electricians	648
Construction Managers	587
First-Line Supervisors of Construction Trades and Extraction Workers	404
Cost Estimators	387
Carpenters	334
Construction Laborers	314
Plumbers, Pipefitters, and Steamfitters	287
Construction and Building Inspectors	133
Painters, Construction and Maintenance	116
Operating Engineers and Other Construction Equipment Operators	70
Cement Masons and Concrete Finishers	42
Sheet Metal Workers	41
Surveying and Mapping Technicians	32
Roofers	31
Surveyors	28
Brickmasons and Blockmasons	26
Structural Iron and Steel Workers	25
Paving, Surfacing, and Tamping Equipment Operators	22
Glaziers	19
Highway Maintenance Workers	14

Top Posted Jobs: Q2 2018

Electricians were the highest in-demand construction occupation during Q2 2018, with 648 postings. Other top posted jobs include Construction Managers (587 postings), First-Line Supervisors of Construction Trades and Extraction Workers (404 postings), Cost Estimators (387 postings), and Carpenters (334 postings).

Data: Emsi
Analysis: Workforce Intelligence Network

Construction Wage Overview

The top posted construction job, Electricians, offers median annual salary of about $63,000 per year. According to the Bureau of Labor Statistics (BLS), those working in management positions or working in apprentice-able occupations can expect higher wage potential, such as Construction Managers reporting a median wage of $44.79 per hour or $93,000 annually.

Wage Overview for Top Posted Construction Jobs in Q2 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
47-2111	Electricians	$14.31	$19.65	$30.51	$37.18	$42.16
11-9021	Construction Managers	$26.53	$34.46	$44.79	$58.03	$75.84
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	$20.92	$25.72	$31.87	$41.41	$50.48
13-1051	Cost Estimators	$16.66	$22.99	$31.63	$41.39	$49.96
47-2031	Carpenters	$14.26	$18.14	$25.03	$32.27	$37.55
47-2061	Construction Laborers	$11.79	$14.42	$18.80	$24.46	$29.26
47-2152	Plumbers, Pipefitters, and Steamfitters	$18.59	$26.53	$33.42	$37.63	$41.15
47-4011	Construction and Building Inspectors	$15.98	$21.02	$27.78	$33.26	$38.06
47-2141	Painters, Construction and Maintenance	$10.50	$15.65	$18.94	$25.09	$29.63
47-2073	Operating Engineers and Other Construction Equipment Operators	$17.41	$20.58	$25.72	$29.97	$34.13

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills
- Construction Management
- Subcontracting
- Carpentry
- Blueprinting
- Electrical Wirings

In-Demand Foundational Skills
- Construction
- Management
- Operations
- Communications
- Problem Solving

In-Demand Education Level*
- High School Diploma: 25.8%
- Associate Degree: 6.1%
- Bachelor's Degree: 18.8%
- Master's Degree: 1.9%

Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent
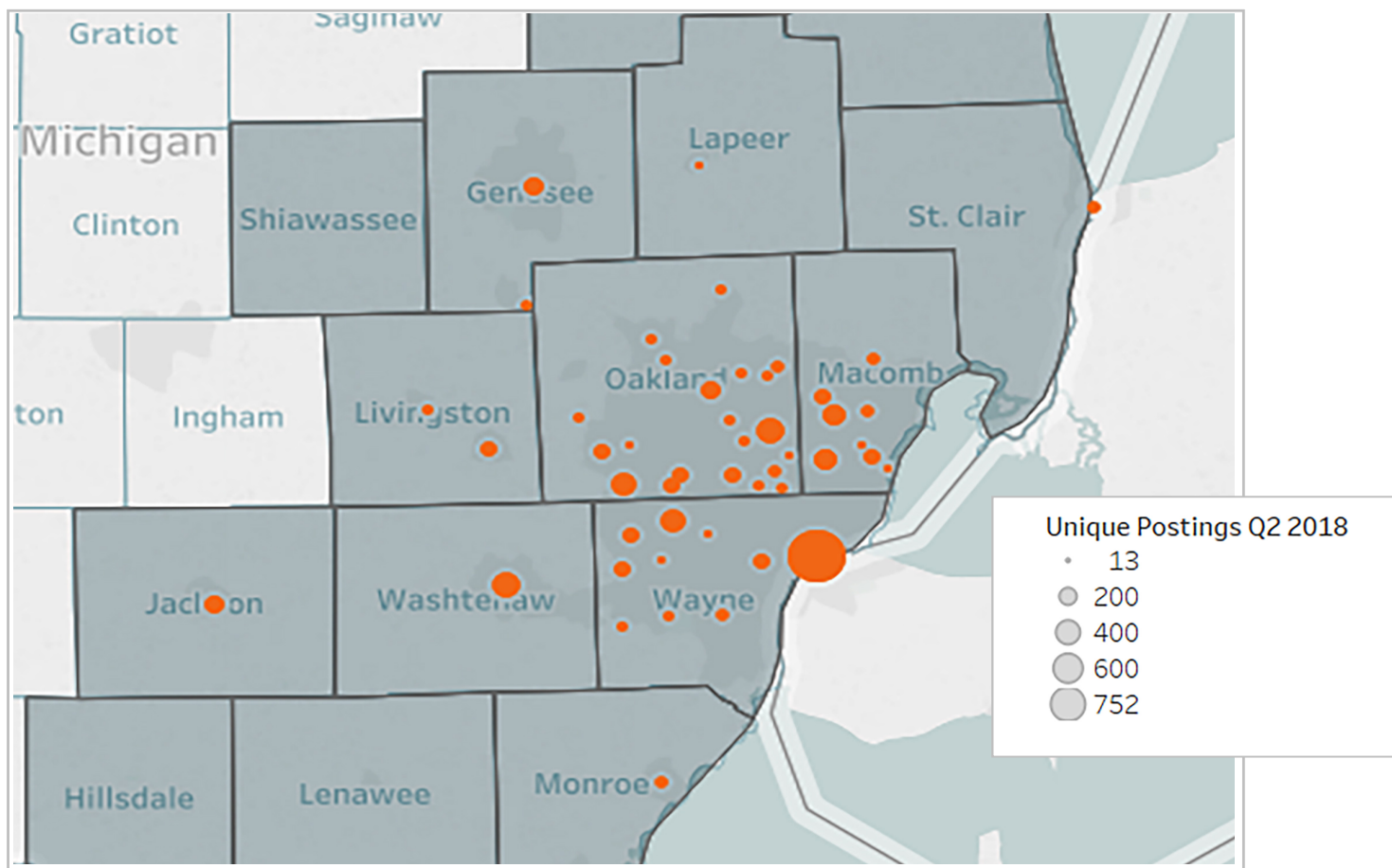
In-Demand Certifications
- Commercial Driver's License (CDL)
- Professional Engineer
- Certified Welding Inspector
- Operator Certification
- Project Management Professional (PMP) Certification

Detroit Employers Posted the Largest Share of Construction Jobs

Construction Management Skills are in High Demand

Unique Postings Q2 2018
· 13
○ 200
○ 400
○ 600
○ 752

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

Top Posting Employers*

- Tradesmen International, Inc
- Cybercoders, Inc.
- Trueblue, Inc.
- Trillium Staffing
- Aerotek, Inc.
- MICHAEL PAGE INTERNATIONAL HOLDINGS LIMITED
- Walbridge Aldinger LLC
- City of Detroit
- TEC Group Inc
- Industrial Contracting, Inc.

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

Job Postings by City

1. Detroit, MI: 752 Postings
2. Ann Arbor, MI: 186 Postings
3. Troy, MI: 170 Postings
4. Novi, MI: 138 Postings
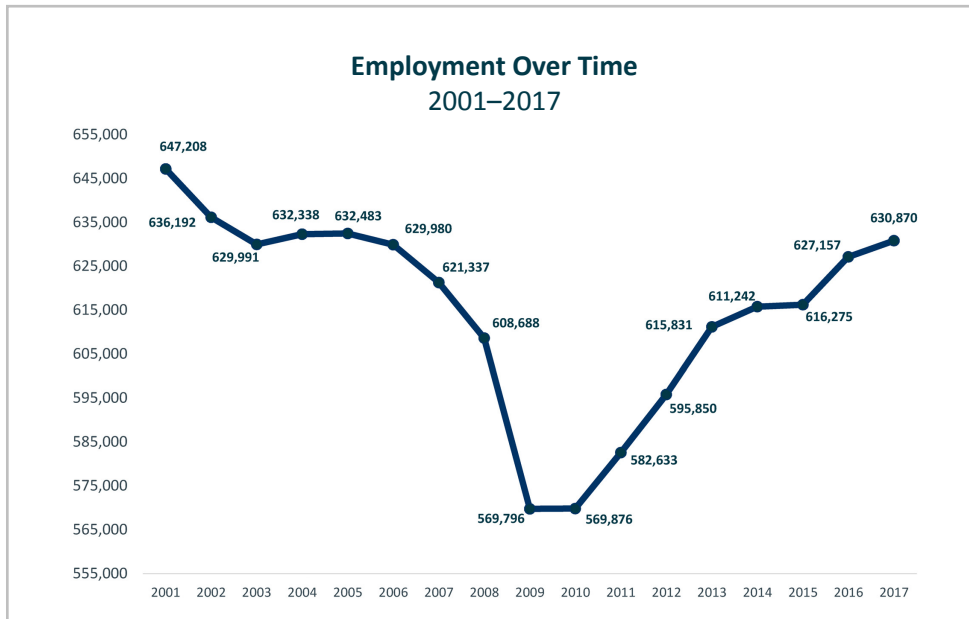5. Livonia, MI: 133 Postings

CUSTOMER SERVICE OCCUPATION GROUP
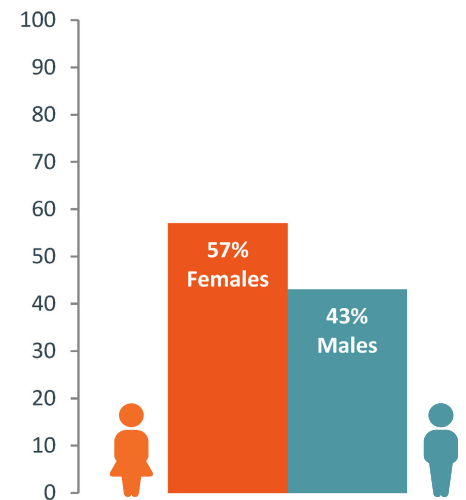## 16-County WIN Region | Q2 2018

Introduction

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

630,629
Service Workers
>0.1% Decrease
from 2017

Employment Over Time
2001–2017

647,208
636,192
632,338
632,483
629,991
629,980
621,337
608,688
569,796
569,876
582,633
595,850
615,831
611,242
616,275
627,157
630,870

Population Gender Demographics

57% Females

43% Males

Customer Service Worker Demographics

According to the most recent Emsi data set available (2017), having over 630,000 workers, the customer service occupation group is more diverse than other occupation groups. During 2017, 57 percent of workers identified as female. Twenty-seven percent of workers in customer service were identified as a racial minority. A quarter of the workforce (25 percent) was under the age of 24, a much higher percentage than in other occupation groups.

Race and Ethnicity Demographics

72.9% White | 17.6% Black or African American | 2.9% Asian

Population Age Demographics

Age 14-24, 25.9%	Age 25-54 55.4%	Age 55+, 18.7%

**70,910 Customer Service Postings
4,224 more than Q1 2018**

**High School Diploma Required
for Most Customer Service Jobs**

Customer Service Top Posted Jobs
Q2 2018

Job	Postings
First-Line Supervisors of Retail Sales Workers	10,073
Retail Salespersons	9,178
Customer Service Representatives	6,349
Business Operations Specialists, All Other	4,626
Stock Clerks and Order Fillers	3,454
Sales Managers	3,163
Combined Food Preparation and Serving Workers, Including Fast Food	3,015
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2,832
Cashiers	2,605
Marketing Managers	2,239
Sales Representatives, Services, All Other	2,202
First-Line Supervisors of Non-Retail Sales Workers	1,956
Food Service Managers	1,925
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1,889
Maids and Housekeeping Cleaners	1,703
Driver/Sales Workers	1,666
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	1,102
Waiters and Waitresses	1,064
Demonstrators and Product Promoters	1,053
Buyers and Purchasing Agents	988

Top Posted Jobs: Q2 2018

First-Line Supervisors of Retail Sales Workers were the highest in-demand customer service occupation during Q2 2018, with 10,073 postings. Other top posted jobs include Retail Salesperson (9,178 postings), Customer Service Representatives (6,349 postings), Business Operations Specialists, All Other (4,626 postings), and Stock Clerks and Order Fillers (3,454 postings).

*Data: Emsi
Analysis: Workforce Intelligence Network*

High Earning Potential
for Sales Managers

CDL: In-Demand
Customer Service Certification

Customer Service Wage Overview

Despite having high demand, most customer service related occupations offer relatively low wages according to the Bureau of Labor Statistics (BLS). However, six of the top ten posted occupations report median wages over $15 per hour. The top posted job, First-Line Supervisors of Retail Sales Workers, offer median annual earnings of nearly $39,500.

Wage Overview for Top Posted Customer Service Jobs in Q2 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
41-1011	First-Line Supervisors of Retail Sales Workers	$11.99	$14.63	$18.97	$25.41	$33.81
41-2031	Retail Salespersons	$9.05	$9.45	$10.55	$13.63	$18.83
43-4051	Customer Service Representatives	$9.89	$12.03	$15.57	$20.37	$26.87
13-1199	Business Operations Specialists, All Other	$18.15	$23.65	$32.82	$44.80	$56.35
43-5081	Stock Clerks and Order Fillers	$9.16	$9.66	$11.24	$14.97	$18.84
11-2022	Sales Managers	$35.00	$47.23	$62.67	$79.08	$116.96
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	$9.00	$9.21	$9.52	$10.23	$12.19
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	$14.18	$20.63	$30.26	$45.55	$61.32
41-2011	Cashiers	$9.03	$9.23	$9.82	$11.60	$14.47
11-2021	Marketing Managers	$34.49	$45.08	$61.73	$79.70	$111.92

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills
- Merchandising
- Selling Techniques
- Restaurant Operation
- Customer Experience/ Customer Satisfaction
- Sales Management

In-Demand Foundational Skills
- Sales
- Customer Service
- Management
- Communications
- Operations

In-Demand Education Level*
- High School Diploma: 31.5%
- Associate Degree: 3.4%
- Bachelor's Degree: 16.0%
- Master's Degree: 2.4%

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

In-Demand Certifications
- Commercial Driver's License (CDL)
- Transportation Worker Identification Credential (TWIC) Card
- Series 7 General Securities Representative License (Stockbroker)
- Certified Forensic Interviewer
- Certified Safety Professional

Brick and Mortar stores looking to fill Customer Service positions

Merchandising Skills are in High Demand
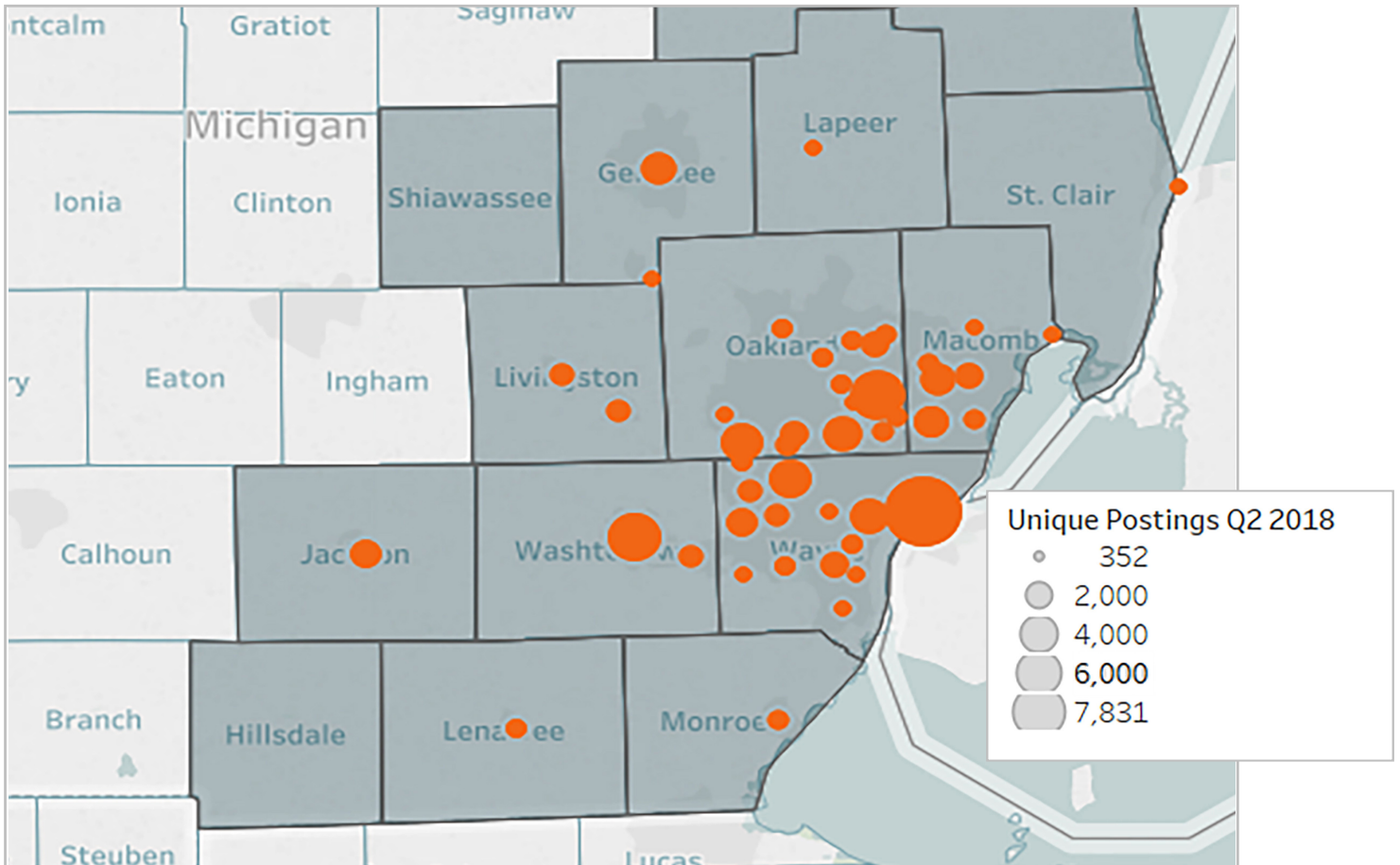
Map based on Longitude (generated) and Latitude (generated).
Size shows sum of Unique Postings (Apr 2018–Jun 2018). Details are shown for City.

Top Posting Employers*

- Dollar General Corporation
- The Home Depot Inc
- McDonald's Corporation
- CVS Health Corporation
- Autozone, Inc.
- The Kroger Co
- H&R Block, Inc.
- Meijer, Inc.
- Great Clips, Inc.
- O'Reilly Automotive, Inc.

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

Job Postings by City

1. Detroit, MI: 7,831 Postings
2. Troy, MI: 3,900 Postings
3. Ann Arbor, MI: 3,681 Postings
4. Novi, MI: 2,320 Postings
5. Livonia, MI: 2,131 Postings

EDUCATION OCCUPATION GROUP
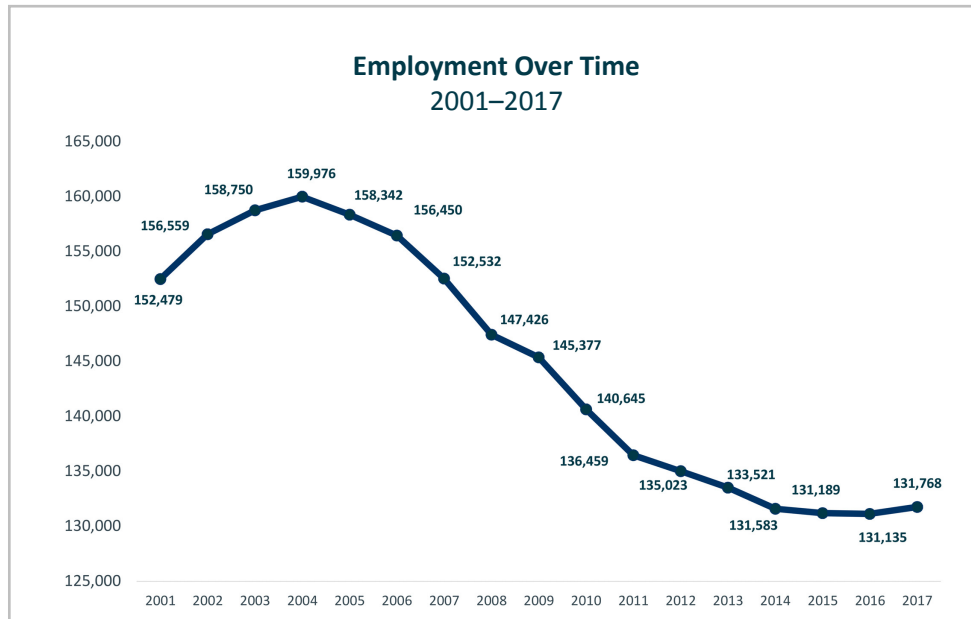## 16-County WIN Region | Q2 2018

Introduction

Education-related jobs can be found both in the private and public sectors. Teachers and other education related workers are employed in public schools, private schools, and training institutions. Jobs in the education occupation group require a variety of skills and credentials dependent on the target age group and topic area for the educator. From elementary school teachers to college professors, educators are the backbone of training the future workforce.
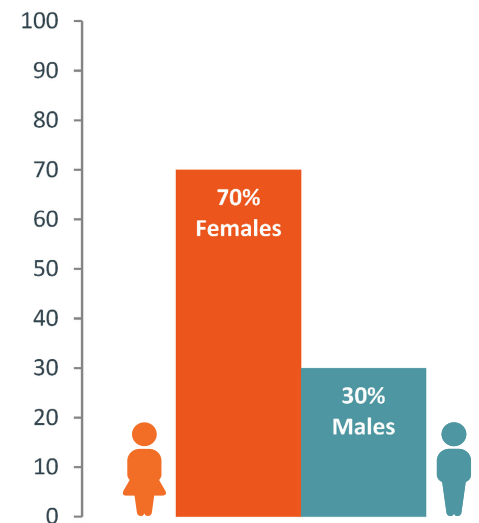
132,036
Education Workers

0.3% Increase
from 2017

Employment Over Time
2001–2017

165,000
160,000
155,000
150,000
145,000
140,000
135,000
130,000
125,000

152,479
156,559
158,750
159,976
158,342
156,450
152,532
147,426
145,377
140,645
136,459
135,023
131,583
133,521
131,189
131,135
131,768

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Population
Gender Demographics

100
90
80
70
60
50
40
30
20
10
0

70% Females

30% Males

Education Worker Demographics

According to the most recent Emsi data set available (2017), among its 130,000 workers, the education occupation group is composed primarily of white females between the ages of twenty-five and fifty-four. Only 30 percent of workers are males, and only 20 percent of workers are of a minority race.

Race and Ethnicity Demographics

79.6% White | 12.2% Black or African American | 3.6% Asian

Age 14-24, 9.3%

Population Age Demographics

Age 25-54 71.6%

Age 55+, 26.3%
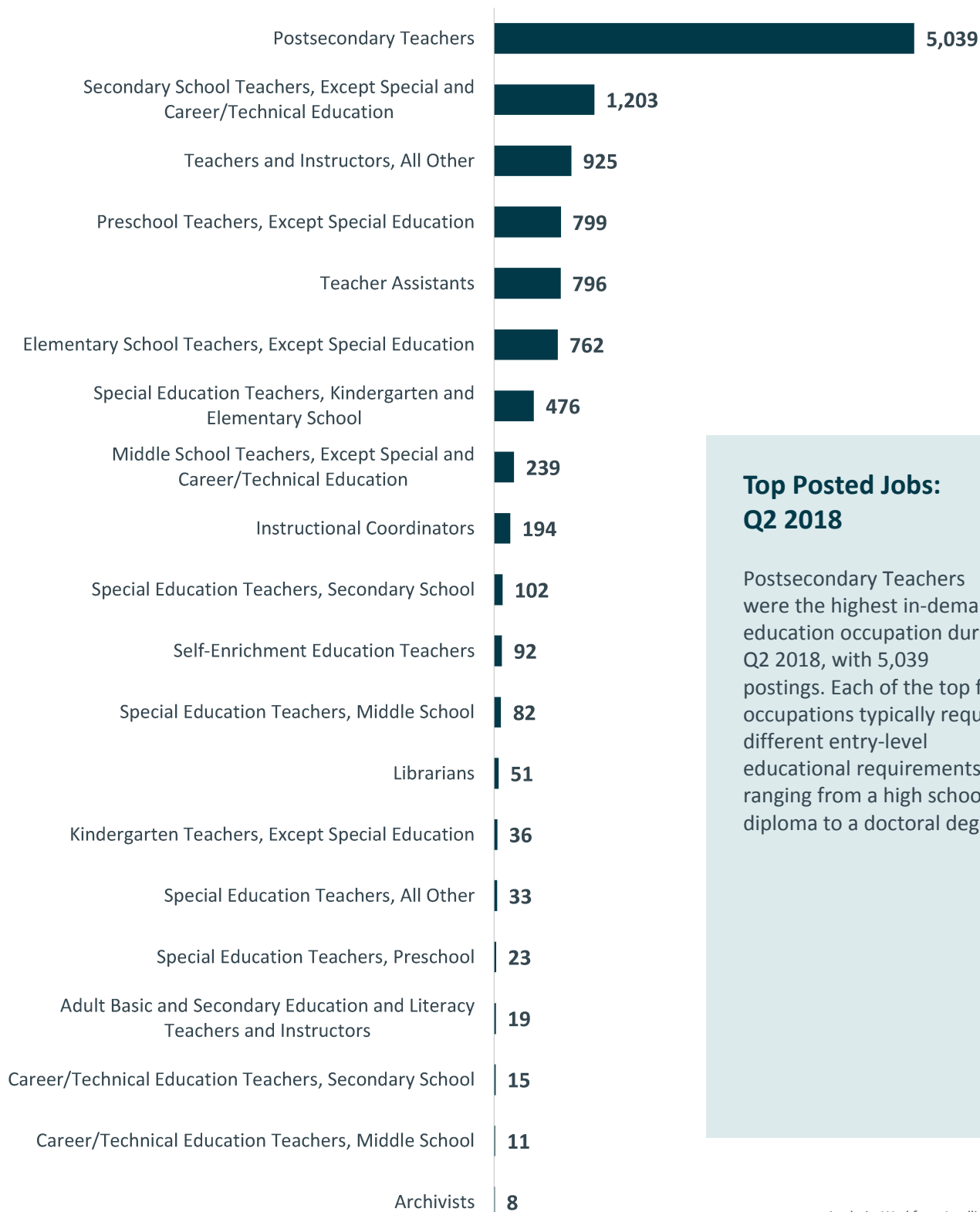
Data: Emsi | Analysis: Workforce Intelligence Network

10,932 Education Postings
2,299 more than Q1 2018

Bachelor's Degree Required
for Most Education Jobs

Education Top Posted Jobs
Q2 2018

Job Title	Postings
Postsecondary Teachers	5,039
Secondary School Teachers, Except Special and Career/Technical Education	1,203
Teachers and Instructors, All Other	925
Preschool Teachers, Except Special Education	799
Teacher Assistants	796
Elementary School Teachers, Except Special Education	762
Special Education Teachers, Kindergarten and Elementary School	476
Middle School Teachers, Except Special and Career/Technical Education	239
Instructional Coordinators	194
Special Education Teachers, Secondary School	102
Self-Enrichment Education Teachers	92
Special Education Teachers, Middle School	82
Librarians	51
Kindergarten Teachers, Except Special Education	36
Special Education Teachers, All Other	33
Special Education Teachers, Preschool	23
Adult Basic and Secondary Education and Literacy Teachers and Instructors	19
Career/Technical Education Teachers, Secondary School	15
Career/Technical Education Teachers, Middle School	11
Archivists	8

**Top Posted Jobs:
Q2 2018**

Postsecondary Teachers were the highest in-demand education occupation during Q2 2018, with 5,039 postings. Each of the top five occupations typically require different entry-level educational requirements, ranging from a high school diploma to a doctoral degree.

Data: Emsi
Analysis: Workforce Intelligence Network

High Earning Potential for Postsecondary Teachers

National Council Licensure Examination: In-Demand Education Certification

Education Wage Overview

Many education related jobs, particularly permanent positions teaching older students, offer competitive median wages with growth potential. This can provide an excellent opportunity for job seekers willing to overcome the educational barriers and attain the necessary credentials and experience. According to the Bureau of Labor Statistics (BLS), six of the ten top posted education jobs offer median wages of over $30 per hour. The top posted job, Postsecondary Teachers, offers a median wage of $33.12 hourly, translating to annual earnings of nearly $69,000.

Wage Overview for Top Posted Education Jobs in Q2 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
25-1099	Postsecondary Teachers	$14.21	$21.43	$33.11	$48.75	$63.10
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	$17.94	$23.21	$31.77	$39.32	$46.41
25-3097	Teachers and Instructors, All Other	$9.82	$11.86	$18.97	$28.75	$37.98
25-2011	Preschool Teachers, Except Special Education	$9.71	$10.89	$13.61	$19.02	$24.91
25-9041	Teacher Assistants	$9.29	$10.19	$12.15	$14.82	$17.90
25-2021	Elementary School Teachers, Except Special Education	$17.41	$21.92	$30.92	$39.19	$46.71
25-2052	Special Education Teachers, Kindergarten and Elementary School	$18.34	$24.50	$31.73	$38.46	$45.29
25-2022	Middle School Teachers, Except Special and Career/Technical Education	$18.12	$23.06	$31.37	$38.92	$45.49
25-9031	Instructional Coordinators	$16.04	$20.40	$28.66	$37.18	$44.62
25-2054	Special Education Teachers, Secondary School	$20.11	$24.29	$32.94	$41.77	$48.60

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills
- Lesson Planning
- Curriculum Development
- Language Arts
- Child Development
- Sociology

In-Demand Foundational Skills
- Teaching
- Chinese Language
- Innovation
- Mentorship
- Writing

In-Demand Education Level*
- High School Diploma: 20.7%
- Associate Degree: 14.3%
- Bachelor's Degree: 38.3%
- 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
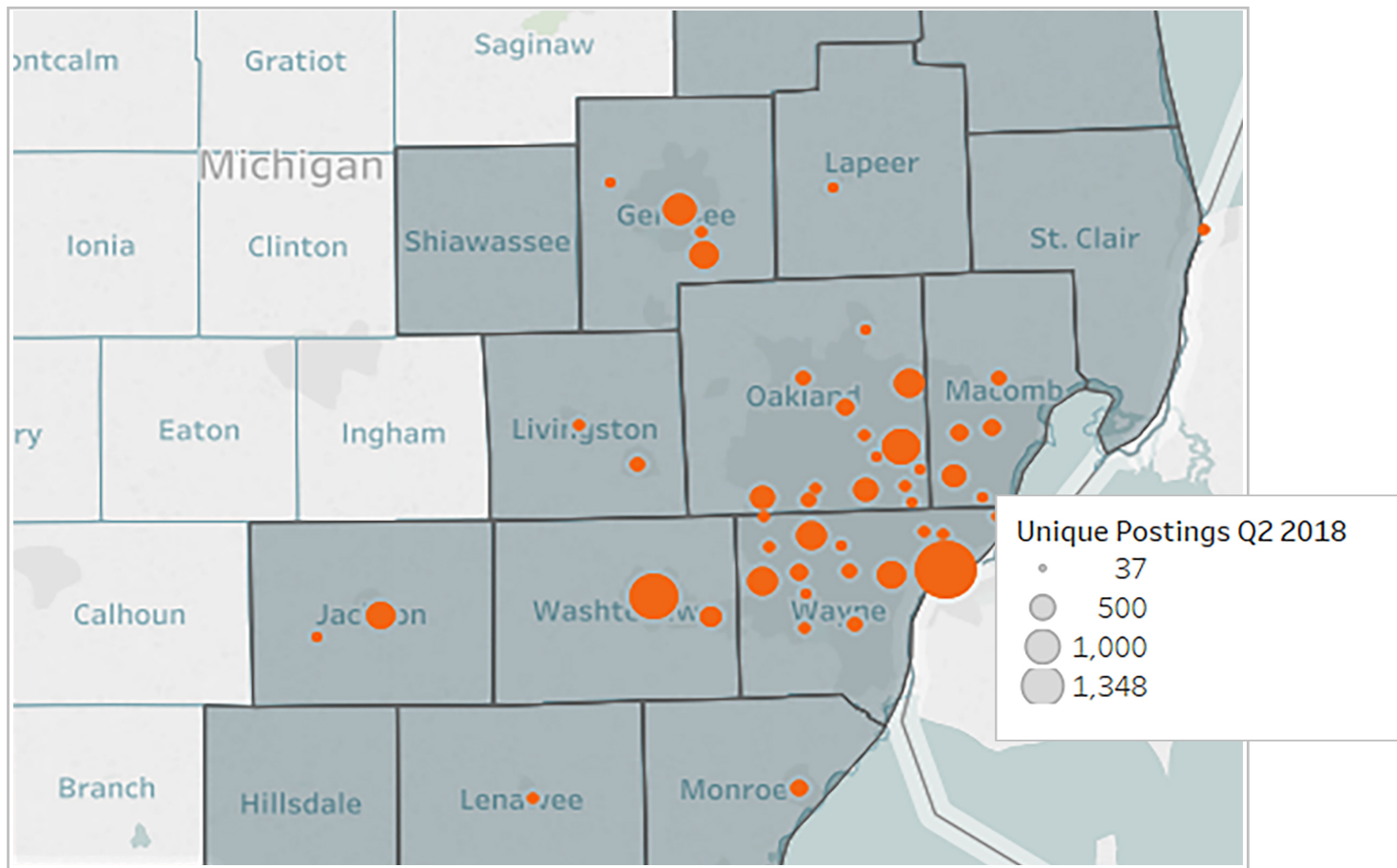
In-Demand Certifications
- National Council Licensure Examination
- Certified Medical Administrative Assistant
- Nurse Practitioner
- Licensed Practical Nurse
- Commercial Driver's License (CDL)

Child Care Organizations are Top Employers of Education Workers

Lesson Planning and Language Skills are in High Demand

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

Top Posting Employers*

- Tutree, Inc.
- Qt Kids Inc
- Learning Care Group, Inc.
- Soliant Health, Inc
- University of Michigan
- Sprout
- Kids & Company Ltd
- Sunbelt Staffing, LLC
- National Heritage Academies, Inc.
- VIP Kidz LLC

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

Job Postings by City

1. Detroit, MI: 1,348 Postings
2. Ann Arbor, MI: 830 Postings
3. Troy, MI: 510 Postings
4. Flint, MI: 386 Postings
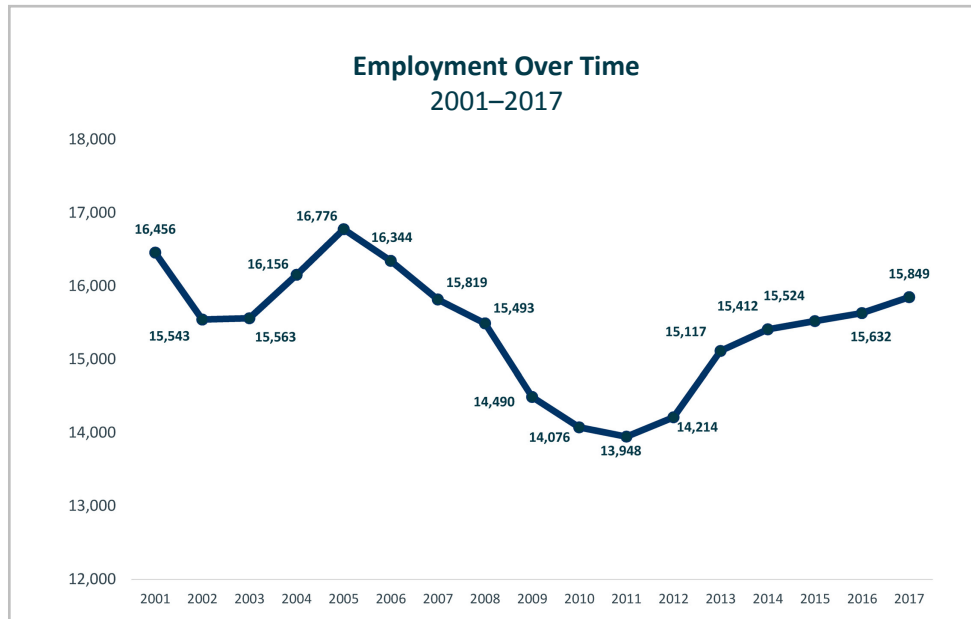5. Canton, MI: 377 Postings

ENERGY OCCUPATION GROUP
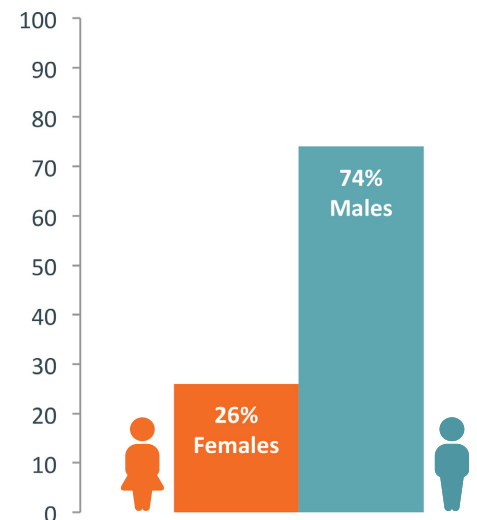## 16-County WIN Region | Q2 2018

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.

15,898
Energy Workers

0.3% Increase from 2017

Employment Over Time
2001–2017

Year	Value
2001	16,456
2002	15,543
2003	15,563
2004	16,156
2005	16,776
2006	16,344
2007	15,819
2008	15,493
2009	14,490
2010	14,076
2011	13,948
2012	14,214
2013	15,117
2014	15,412
2015	15,524
2016	15,632
2017	15,849

Population Gender Demographics

74% Males

26% Females

Energy Worker Demographics

According to the most recent Emsi data set available (2017), The over 15,000 workers in the energy occupation group are primarily white males between the ages of twenty-five and fifty-four, with 26 percent of workers identifying as female and just 17 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

82.6% White | 11.0% Black or African American | 2.1% Asian

Population Age Demographics

Age 14-24, 5.3%

Age 25-54 68.1%

Age 55+, 26.7%

Data: Emsi | Analysis: Workforce Intelligence Network

**239 Energy Postings
Only 53 fewer than Q1 2018**

**Bachelors Degree Required
for Most Energy Jobs**

Energy Top Posted Jobs
Q2 2018

Job	Postings
Electrical Engineers	34
Industrial Engineers	34
Mechanical Engineers	25
Architectural and Engineering Managers	16
Civil Engineers	13
Nuclear Engineers	13
General and Operations Managers	12
Managers, All Other	10
First-Line Supervisors of Construction Trades and Extraction Workers	9
Environmental Engineers	7
Engineers, All Other	7
Nuclear Technicians	6
Telecommunications Line Installers and Repairers	6
Telecommunications Equipment Installers and Repairers, Except Line Installers	5
Petroleum Engineers	4
Mechanical Drafters	4
Engineering Technicians, Except Drafters, All Other	4
Environmental Science and Protection Technicians, Including Health	4
Electrical Power-Line Installers and Repairers	3
Power Plant Operators	3

Top Posted Jobs: Q2 2018

Electrical Engineers and Industrial Engineers shared the top spot as highest in-demand Energy occupations during Q2 2018, with 34 postings for each occupation. Other top posted jobs include Mechanical Engineers (25 postings), Architectural and Engineering Managers (16 postings), and Civil Engineers (13 postings).

*Data: Emsi
Analysis: Workforce Intelligence Network*

High Earning Potential for General and Operations Managers

PMI/PMP Certification: Most In-Demand Energy Certification

Energy Wage Overview

The high demand for engineers in the energy field creates lucrative opportunities for job seekers willing to achieve the minimum educational requirements related to these jobs. According to the Bureau of Labor Statistics (BLS), one of the top posted energy job, Electrical Engineers, offers a median hourly wage of $42.69, or annual earnings of approximately $89,000. The other, Industrial Engineers, offers a median hourly wage of $44.19, or annual earnings of approximately $92,000. 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 Jobs in Q2 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2071	Electrical Engineers	$28.54	$34.50	$42.69	$51.70	$62.00
17-2112	Industrial Engineers	$30.25	$35.68	$44.19	$53.65	$61.98
17-2141	Mechanical Engineers	$29.26	$35.40	$44.22	$54.56	$63.26
11-9041	Architectural and Engineering Managers	$43.56	$52.47	$63.21	$75.85	$89.61
17-2161	Nuclear Engineers	$34.14	$41.02	$48.40	$56.24	$63.63
11-1021	General and Operations Managers	$24.24	$34.98	$52.38	$80.19	$112.07
17-2051	Civil Engineers	$25.61	$29.92	$36.68	$45.85	$55.99
11-9199	Managers, All Other	$30.24	$38.27	$48.95	$61.61	$76.44
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	$20.92	$25.72	$31.87	$41.41	$50.48
17-2081	Environmental Engineers	$28.94	$35.10	$44.64	$55.76	$65.11

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills
- Electrical Engineering
- Engineering Design Process
- Mechanical Engineering
- Systems Design
- Customer Satisfaction

In-Demand Foundational Skills
- Operations
- Management
- Communications
- Leadership
- Research

In-Demand Education Level*
- High School Diploma: 16.3%
- Associate Degree: 8.3%
- Bachelor's Degree: 50.7%
- Master's Degree: 12.7%

Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent
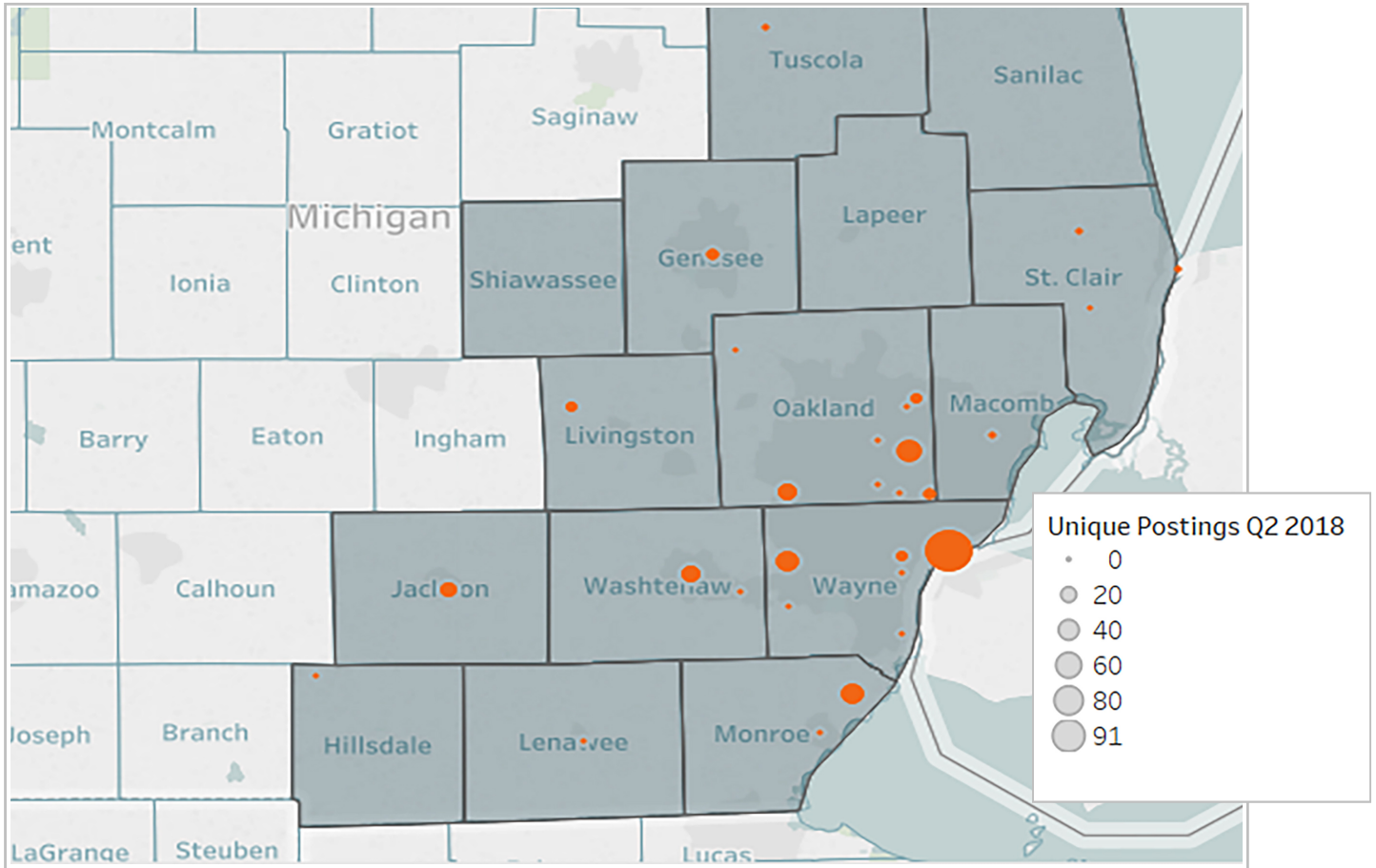
In-Demand Certifications
- PMI/PMP Certified
- Professional Engineer
- Certification in Clinical Cytogenetics
- Licensed Professional Engineer

Utility and Electronic Companies: Top Employers

Engineering Skills are in High Demand

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

Top Posting Employers*

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

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

Job Postings by City

1. Detroit, MI: 91 Postings
2. Troy, MI: 25 Postings
3. Newport, MI: 21 Postings
4. Canton, MI: 19 Postings
5. Novi, MI: 14 Postings

ENGINEERING AND DESIGN OCCUPATION GROUP
## 16-County WIN Region | Q2 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.
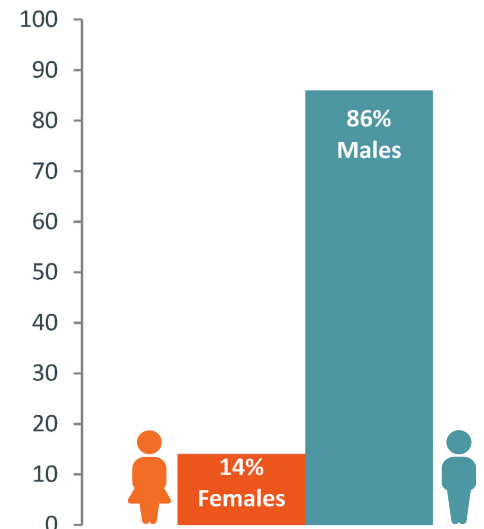
96,749
Engineering Workers

1.1% Increase from 2017

Employment Over Time
2001–2017

Population Gender Demographics

86% Males

14% Females
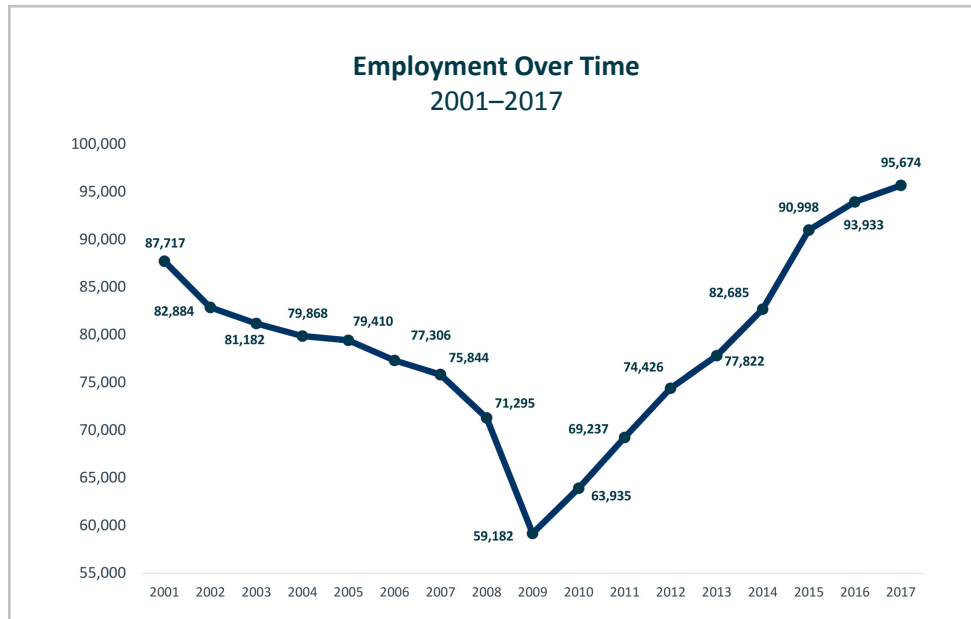
Engineering and Design Worker Demographics

According to the most recent Emsi data set available (2017), the nearly 92,602 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. Fourteen percent of current workers are female, and only 11 percent identify as a race other than white; as the labor force overall continues to change, this is one field that could benefit from seeking more diverse talent.

Race and Ethnicity Demographics

79.4% White | 7.7% Black or African American | 9.1% Asian

Population Age Demographics

Age 14-24, 5.5%

Age 25-54 71.2%

Age 55+, 23.3%

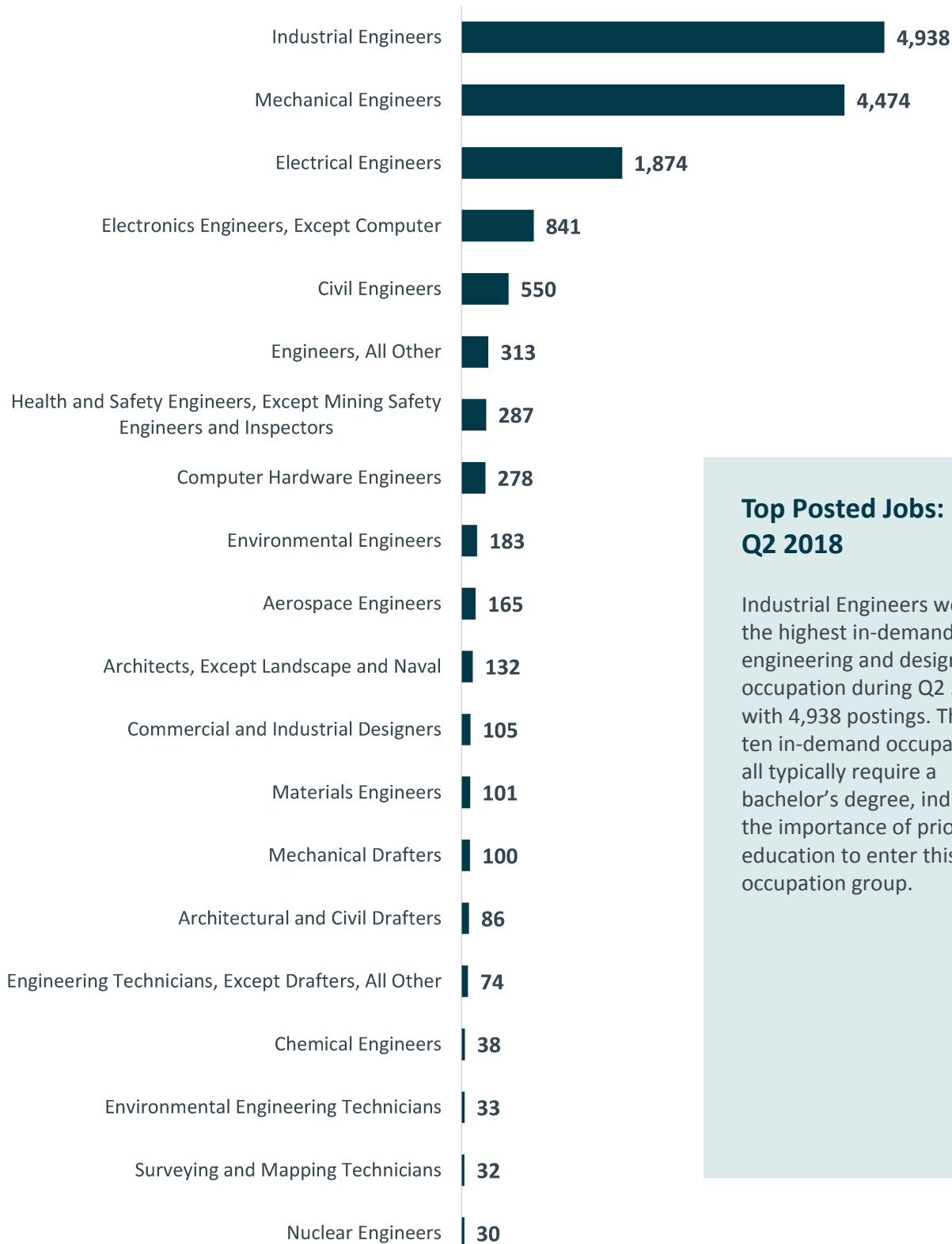*Data: Emsi | Analysis: Workforce Intelligence Network*

**14,761 Engineering and Design Postings
490 more than Q1 2018**

**Bachelor's Degree Required for Most
Engineers and Designers Jobs**

Engineering and Design Top Posted Jobs
Q2 2018

Job	Postings
Industrial Engineers	4,938
Mechanical Engineers	4,474
Electrical Engineers	1,874
Electronics Engineers, Except Computer	841
Civil Engineers	550
Engineers, All Other	313
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	287
Computer Hardware Engineers	278
Environmental Engineers	183
Aerospace Engineers	165
Architects, Except Landscape and Naval	132
Commercial and Industrial Designers	105
Materials Engineers	101
Mechanical Drafters	100
Architectural and Civil Drafters	86
Engineering Technicians, Except Drafters, All Other	74
Chemical Engineers	38
Environmental Engineering Technicians	33
Surveying and Mapping Technicians	32
Nuclear Engineers	30

**Top Posted Jobs:
Q2 2018**

Industrial Engineers were the highest in-demand engineering and design occupation during Q2 2018, with 4,938 postings. The top ten in-demand occupations all typically require a bachelor's degree, indicating the importance of prior education to enter this occupation group.

*Data: Emsi
Analysis: Workforce Intelligence Network*

High Earning Potential for Engineers, All Other

Professional Engineer: Most In-Demand Engineering and Design Certification

Engineering and Design Wage Overview

Most engineering and design related jobs offer high wages, making for a lucrative opportunity for job seekers willing to overcome the educational barriers related to these jobs. The top posted engineering and design job, Industrial Engineers, offers a median hourly wage of $44.19, or an annual salary of approximately $92,000 according to the Bureau of Labor Statistics (BLS).

Wage Overview for Top Posted Engineering and Design Jobs in Q2 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2112	Industrial Engineers	$30.25	$35.68	$44.19	$53.65	$61.98
17-2141	Mechanical Engineers	$29.26	$35.40	$44.22	$54.56	$63.26
17-2071	Electrical Engineers	$28.54	$34.50	$42.69	$51.70	$62.00
17-2072	Electronics Engineers, Except Computer	$27.97	$33.64	$41.01	$48.55	$57.76
17-2051	Civil Engineers	$25.61	$29.92	$36.68	$45.85	$55.99
17-2199	Engineers, All Other	$23.88	$35.24	$45.47	$56.67	$67.10
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	$26.38	$28.80	$34.36	$50.47	$61.00
17-2061	Computer Hardware Engineers	$19.55	$28.47	$43.49	$56.15	$64.50
17-2081	Environmental Engineers	$28.94	$35.10	$44.64	$55.76	$65.11
17-2011	Aerospace Engineers	$22.82	$32.02	$37.54	$48.93	$59.82

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills
- Mechanical Engineering
- Electrical Engineering
- Computer-Aided Design (CAD)
- Prototype (Manufacturing)
- Automation

In-Demand Foundational Skills
- Management
- Communications
- Operations
- Problem Solving
- Leadership

In-Demand Education Level*
- High School Diploma: 4.6%
- Associate Degree: 6.0%
- Bachelor's Degree: 69.3%
- Master's Degree: 16.5%

Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent
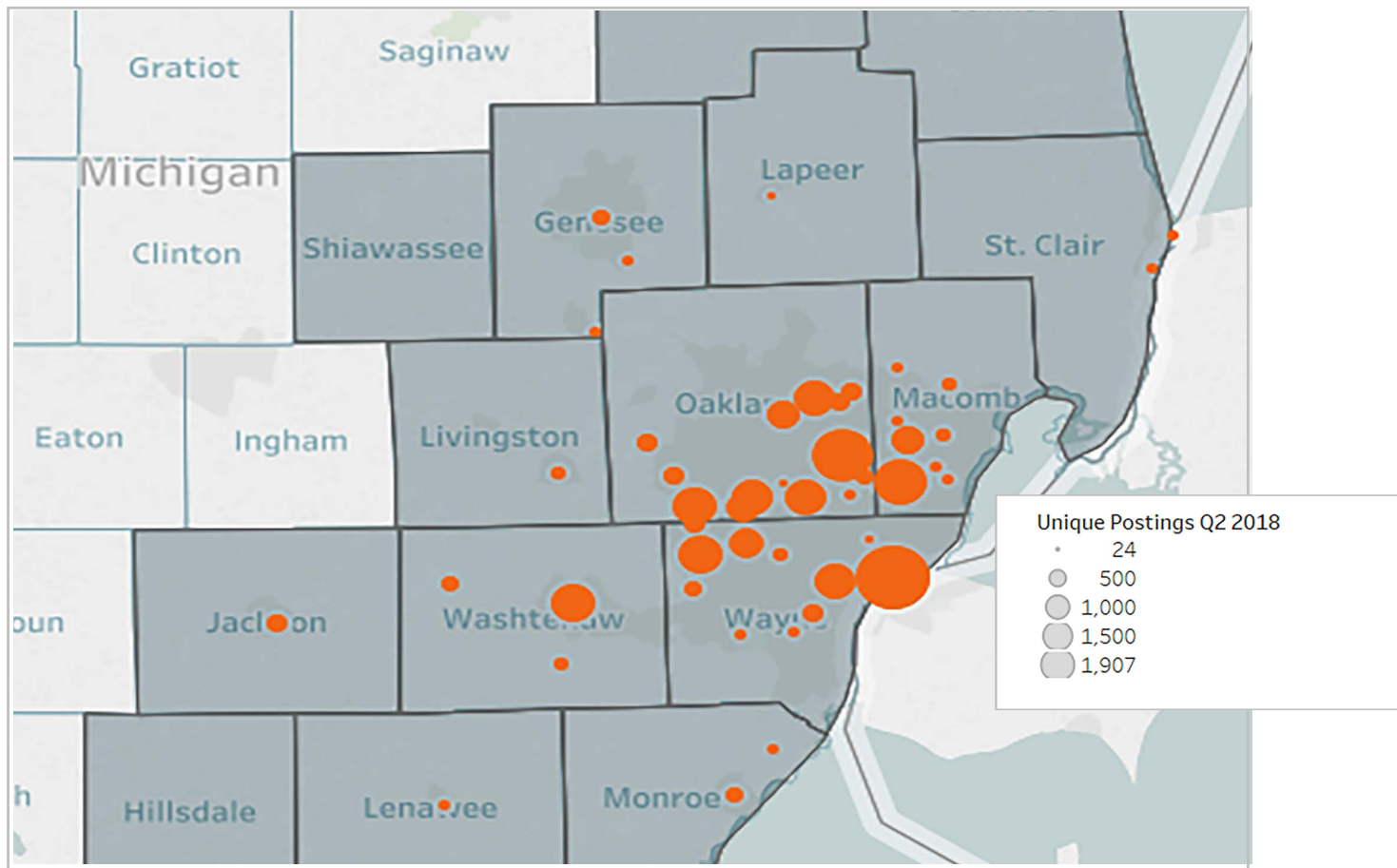
In-Demand Certifications
- Professional Engineer
- Certified Quality Engineer
- American Society for Quality (ASQ) Certified
- Licensed Professional Engineer
- Certified Quality Auditor

Automakers and Manufactures are Top Engineering Employers

CAD Skills are in High Demand

Unique Postings Q2 2018
- 24
- 500
- 1,000
- 1,500
- 1,907

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

Top Posting Employers*

- General Motors Company
- Michigan Works Service Center, Alpena
- ALTAIR ENGINEERING, INC.
- FCA US LLC
- Cybercoders, Inc.
- Gtech Services, Inc
- Ford Motor Company
- Trillium Staffing
- Endevis, L.L.c
- Aerotek, Inc.

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

Job Postings by City

1. Detroit, MI: 1,907 Postings
2. Auburn Heights, MI: 1,663 Postings
3. Troy, MI: 1,271 Postings
4. Warren, MI: 956 Postings
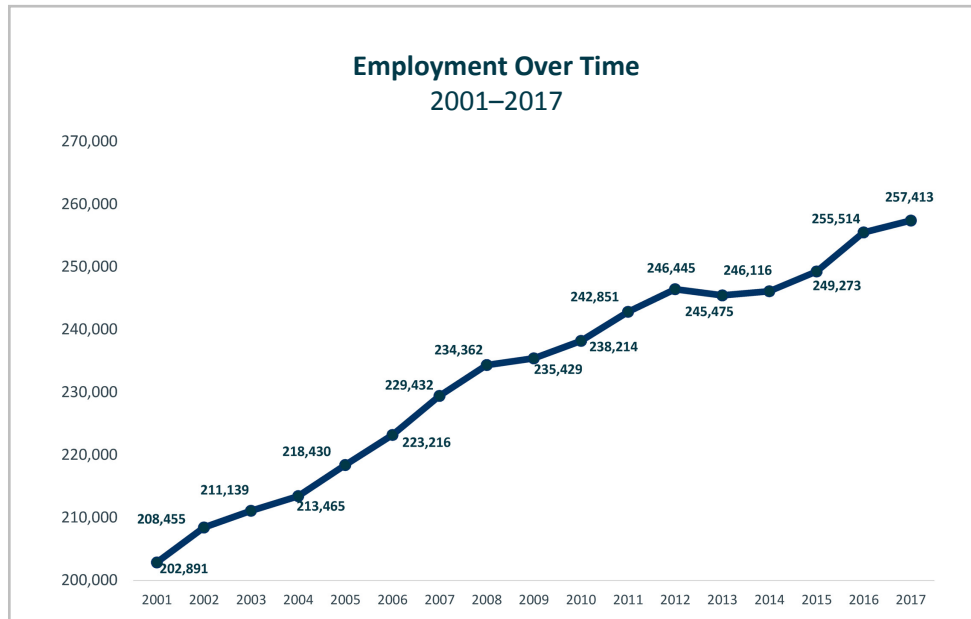5. Plymouth, MI: 660 Postings

HEALTH CARE OCCUPATION GROUP
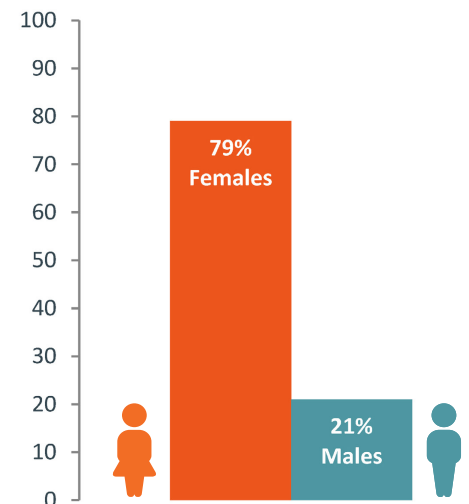## 16-County WIN Region | Q2 2018

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.

258,550
Health Care Workers

0.4% Increase from 2017

Employment Over Time
2001–2017

Year	Employment
2001	202,891
2002	208,455
2003	211,139
2004	213,465
2005	218,430
2006	223,216
2007	229,432
2008	234,362
2009	235,429
2010	238,214
2011	242,851
2012	246,445
2013	245,475
2014	246,116
2015	249,273
2016	255,514
2017	257,413

Population Gender Demographics

79% Females

21% Males

Health Care Worker Demographics

According to the most recent Emsi data set available (2017), the Health Care occupation group employs around 244,937 workers, who are primarily female (79 percent) and between the ages of 25 and 54 (70 percent), although 21 percent of workers are over 55. The group has a similar proportion of racial minorities as the workforce as a whole, with 70 percent of workers identifying as white, 20 percent identifying as black or African American, and ten percent identifying otherwise.

Race and Ethnicity Demographics

70.1% White | 20.0% Black or African American | 5.4% Asian
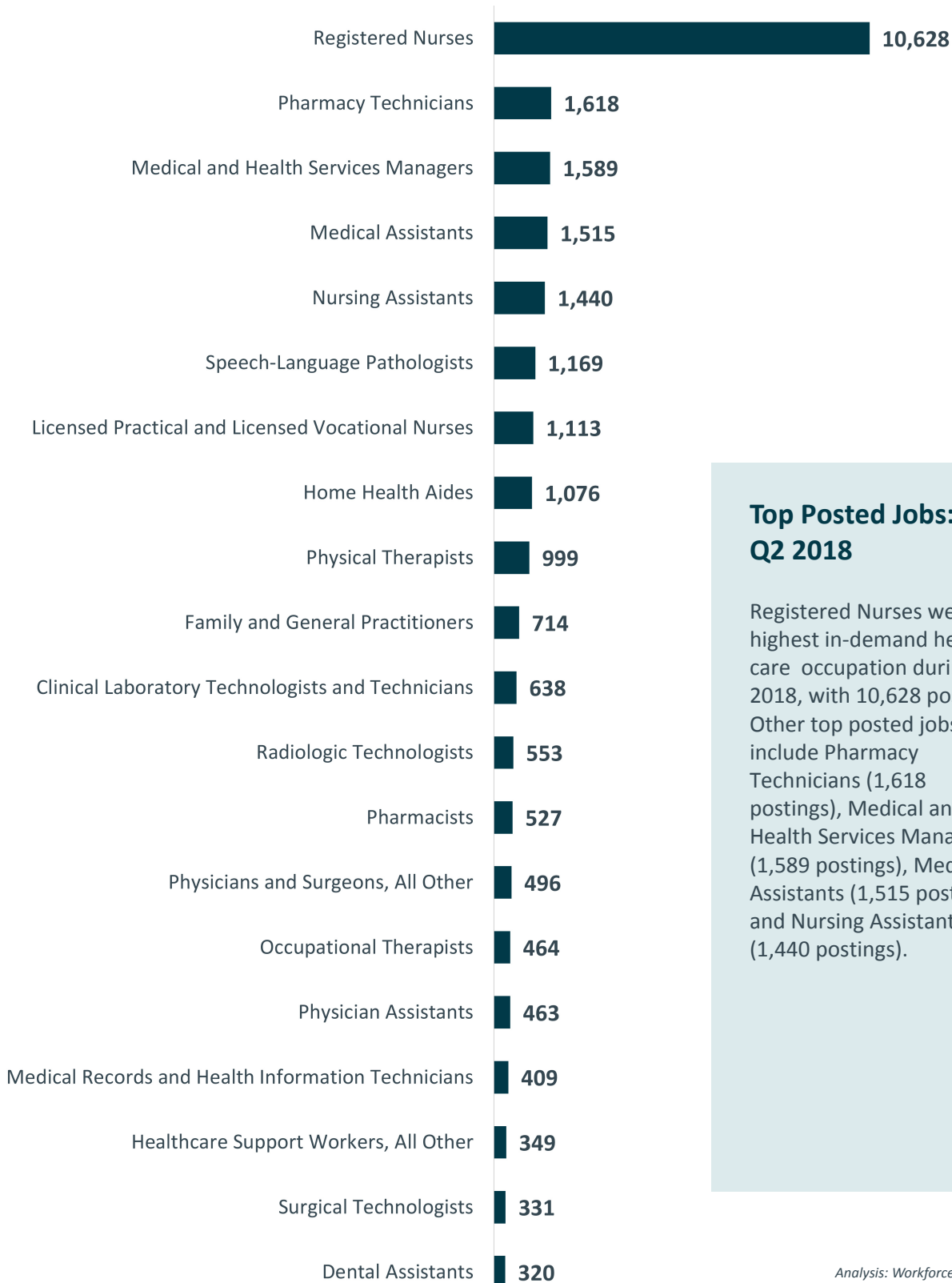
Population Age Demographics

Age 14-24, 7.9%

Age 25-54 70.3%

Age 55+, 21.8%

Data: Emsi | Analysis: Workforce Intelligence Network
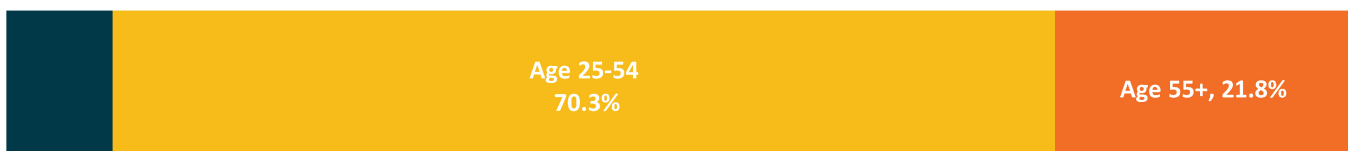
31,772 Health Care Postings:
881 less than Q1 2018

Bachelor's Degree Required for
High Earning Health Care Jobs

Health Care Top Posted Jobs
Q2 2018

Job	Postings
Registered Nurses	10,628
Pharmacy Technicians	1,618
Medical and Health Services Managers	1,589
Medical Assistants	1,515
Nursing Assistants	1,440
Speech-Language Pathologists	1,169
Licensed Practical and Licensed Vocational Nurses	1,113
Home Health Aides	1,076
Physical Therapists	999
Family and General Practitioners	714
Clinical Laboratory Technologists and Technicians	638
Radiologic Technologists	553
Pharmacists	527
Physicians and Surgeons, All Other	496
Occupational Therapists	464
Physician Assistants	463
Medical Records and Health Information Technicians	409
Healthcare Support Workers, All Other	349
Surgical Technologists	331
Dental Assistants	320

Top Posted Jobs:
Q2 2018

Registered Nurses were the highest in-demand health care occupation during Q2 2018, with 10,628 postings. Other top posted jobs include Pharmacy Technicians (1,618 postings), Medical and Health Services Managers (1,589 postings), Medical Assistants (1,515 postings), and Nursing Assistants (1,440 postings).

High Earning Potential for General Practitioners

Licensed Practical Nurse: 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 Q2 2018, offers a median annual salary of nearly $70,000 according to the Bureau of Labor Statistics (BLS).

Wage Overview for Top Posted Health Care Jobs in Q2 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
29-1141	Registered Nurses	$25.71	$29.35	$34.08	$38.66	$45.10
29-2052	Pharmacy Technicians	$10.03	$11.80	$14.90	$18.06	$21.21
11-9111	Medical and Health Services Managers	$27.72	$35.11	$46.91	$62.72	$90.59
31-9092	Medical Assistants	$11.66	$12.94	$14.74	$17.13	$19.22
31-1014	Nursing Assistants	$10.66	$12.32	$14.03	$16.01	$18.26
29-1127	Speech-Language Pathologists	$26.09	$30.98	$37.75	$45.44	$53.59
29-2061	Licensed Practical and Licensed Vocational Nurses	$19.86	$21.89	$24.94	$28.11	$30.23
31-1011	Home Health Aides	$9.11	$9.52	$10.61	$12.22	$14.30
29-1123	Physical Therapists	$29.60	$35.49	$42.51	$48.78	$60.27
29-1062	Family and General Practitioners	$36.11	$54.01	$83.00	$103.17	$154.83

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills
- Nursing
- Basic Life Support
- Intensive Care Unit
- Acute Care
- Rehabilitations

In-Demand Foundational Skills
- Management
- Communications
- Leadership
- Operations
- Research

In-Demand Education Level*
- High School Diploma: 19.8%
- Associate Degree: 11.4%
- Bachelor's Degree: 23.3%
- Master's Degree: 9.2%

Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent
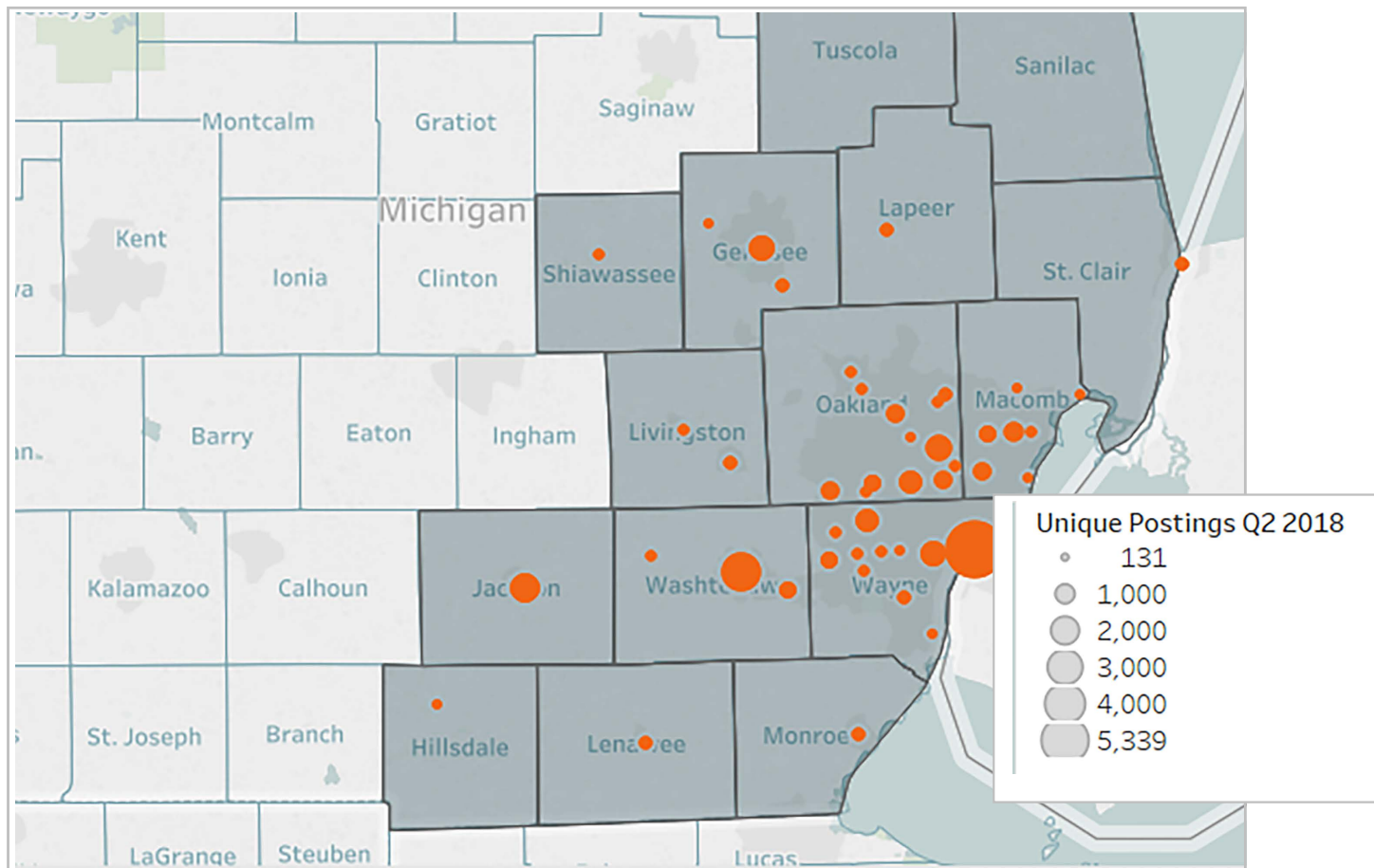
In-Demand Certifications
- Licensed Practical Nurse (LPN)
- Certified Nursing Assistant (CNA)
- Critical Care Registered Nurse (CCRN)
- Nurse Practitioner
- CNOR Certification

Hospitals and Pharmacies were Top Employers of Health Care Workers During Q2 2018

Nursing and Management Skills are in High Demand

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

Top Posting Employers*

- Henry Ford Health System
- William Beaumont Hospital
- HealthCare Employment Network
- University of Michigan
- Cross Country Healthcare, Inc.
- CVS Health Corporation
- Sunbelt Staffing, LLC
- Trinity Health Corporation
- Manor Care, Inc.
- HealthTrust Workforce Solutions

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

Job Postings by City

1. Detroit, MI: 5,339 Postings
2. Ann Arbor, MI: 2,423 Postings
3. Jackson, MI: 1,365 Postings
4. Troy, MI: 1,078 Postings
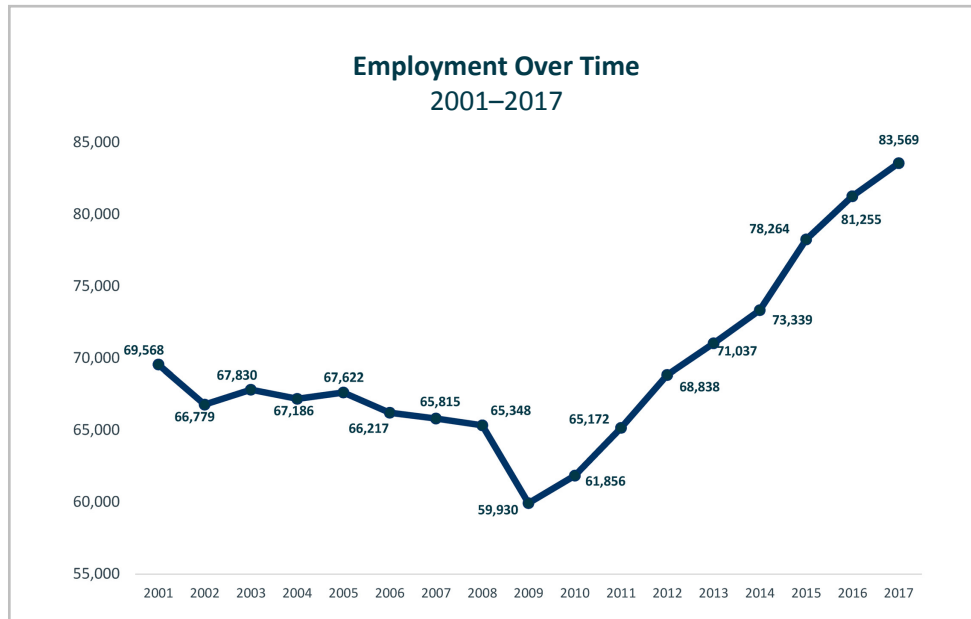5. Flint, MI: 1,022 Postings

INFORMATION TECHNOLOGY (IT) OCCUPATION GROUP
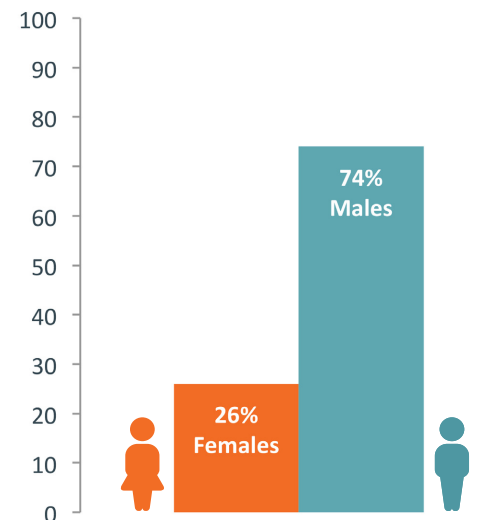## 16-County WIN Region | Q2 2018

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.

83,756
IT Workers
0.2% Increase from 2017

Employment Over Time
2001–2017

69,568
66,779
67,830
67,186
67,622
66,217
65,815
65,348
59,930
61,856
65,172
68,838
71,037
73,339
78,264
81,255
83,569

Population Gender Demographics

74% Males
26% Females

IT Worker Demographics

According to the most recent Emsi data set available (2017), despite having over 80,000 workers, the IT occupation group is not very diverse. A large majority of workers are white males between the ages of twenty-five and fifty-four. Currently, 74 percent of workers identify as male, and 69 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
68.6% White | 10.5% Black or African American | 17.1% Asian

Population Age Demographics

Age 14-24
5.7%

Age 25-54
79.0%

Age 55+
15.4%

Data: Emsi | Analysis: Workforce Intelligence Network
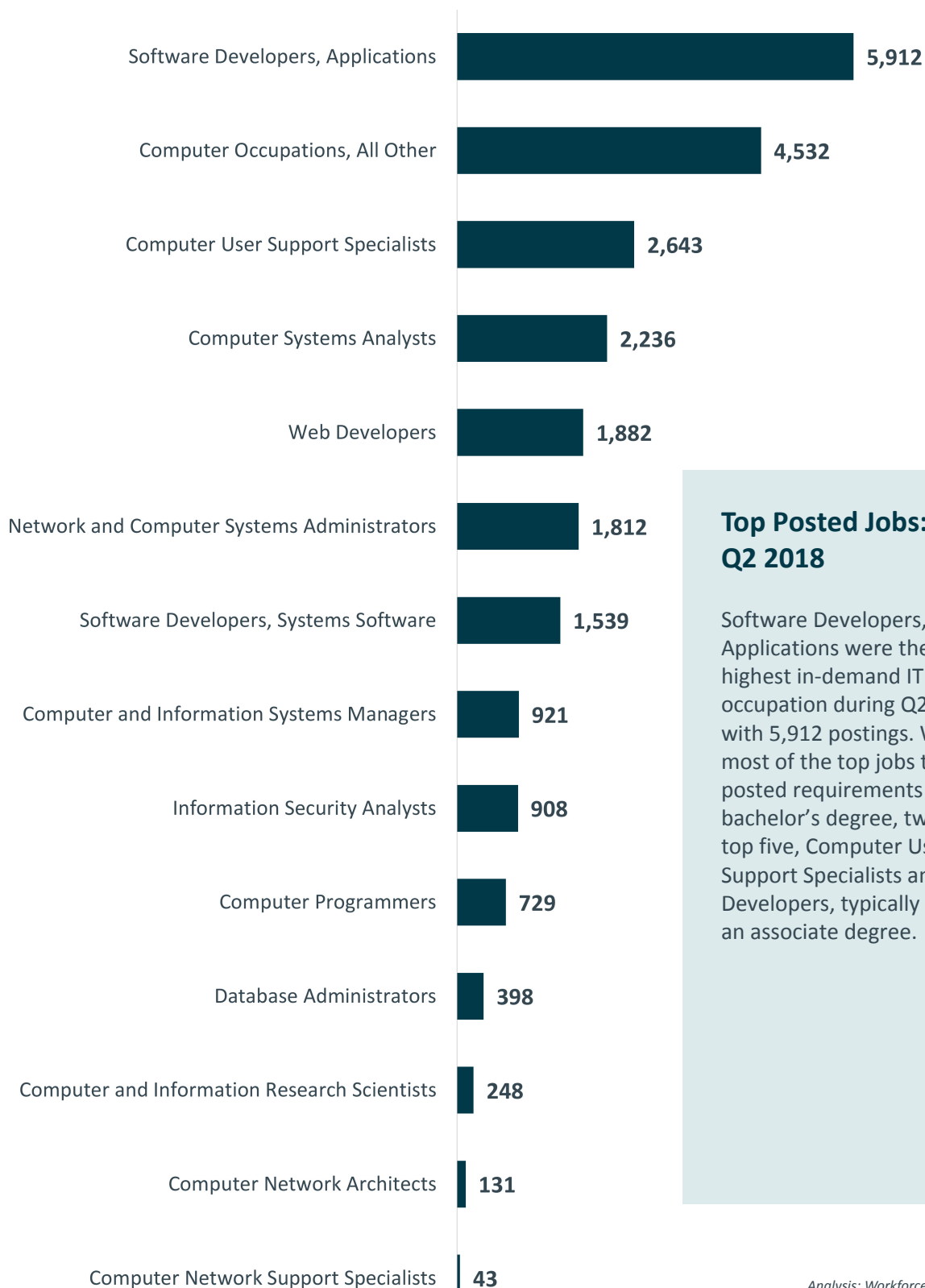
23,927 IT Openings
691 More than Q1 2018

Bachelors Degree
Required for Most IT Jobs

Information Technology Top Posted Jobs
Q2 2018

Job Title	Postings
Software Developers, Applications	**5,912**
Computer Occupations, All Other	**4,532**
Computer User Support Specialists	**2,643**
Computer Systems Analysts	**2,236**
Web Developers	**1,882**
Network and Computer Systems Administrators	**1,812**
Software Developers, Systems Software	**1,539**
Computer and Information Systems Managers	**921**
Information Security Analysts	**908**
Computer Programmers	**729**
Database Administrators	**398**
Computer and Information Research Scientists	**248**
Computer Network Architects	**131**
Computer Network Support Specialists	**43**

Top Posted Jobs: Q2 2018

Software Developers, Applications were the highest in-demand IT occupation during Q2 2018, with 5,912 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 an associate degree.

Data: Emsi
Analysis: Workforce Intelligence Network

High Earning Potential for Computer and Information System Managers

CISSP: Most In-Demand IT Certification

IT Wage Overview

Most IT related jobs offer high wages, 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 Q2 2018, offers a median annual salary of nearly $88,000 according to the Bureau of Labor Statistics (BLS).

Wage Overview for Top Posted IT Jobs in Q2 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
15-1132	Software Developers, Applications	$27.76	$34.79	$44.12	$54.83	$64.22
15-1199	Computer Occupations, All Other	$20.42	$26.19	$37.17	$49.25	$59.86
15-1151	Computer User Support Specialists	$13.66	$17.20	$23.20	$29.92	$38.36
15-1121	Computer Systems Analysts	$25.08	$31.51	$40.83	$49.89	$60.33
15-1134	Web Developers	$18.48	$24.09	$30.98	$40.53	$48.09
15-1142	Network and Computer Systems Administrators	$24.97	$30.58	$38.30	$47.36	$56.17
15-1133	Software Developers, Systems Software	$24.74	$32.96	$42.69	$52.62	$62.72
11-3021	Computer and Information Systems Managers	$40.08	$50.17	$62.17	$76.51	$95.29
15-1122	Information Security Analysts	$28.47	$34.30	$45.39	$57.07	$67.00
15-1131	Computer Programmers	$21.30	$27.52	$34.77	$42.51	$49.80

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills
- Software Development
- SQL
- Java
- Agile Software Development
- Software Engineering

In-Demand Foundational Skills
- Management
- Communications
- Operations
- Integration
- Information Technology

In-Demand Education Level*
- High School Diploma: 4.2%
- Associate Degree: 3.6%
- Bachelor's Degree: 54.7%
- Master's Degree: 13.8%

Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent
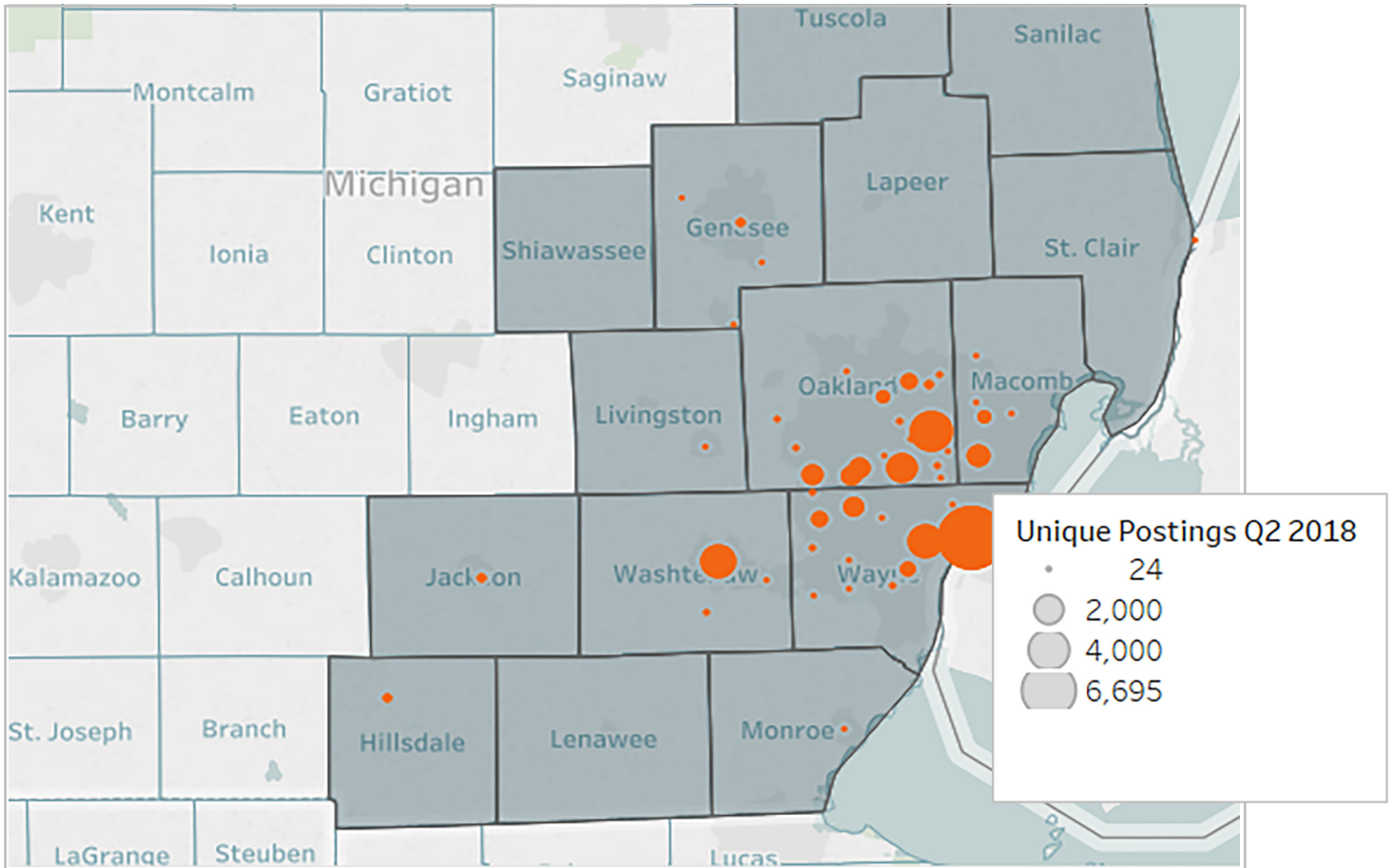
In-Demand Certifications
- Certified Information Systems Security Professional (CISSP)
- Certified Information Security Manager
- Cisco Certified Network Associate
- Certified Ethical Hacker
- Microsoft Certified Systems Engineer

Automotive and Tech Companies are Top Employers of IT Workers

Development Skills are in High Demand

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

Top Posting Employers*

- Oracle Corporation
- ACCENTURE, INC.
- General Motors Company
- Teksystems, Inc.
- Anthem, Inc.
- Ford Motor Company
- Msx International, Inc.
- Quicken Loans Inc.
- Deloitte LLP
- Fast Switch, Ltd.

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

Job Postings by City

1. Detroit, MI: 6,695 Postings
2. Troy, MI: 2,710 Postings
3. Dearborn, MI: 1,866 Postings
4. Ann Arbor, MI: 1,829 Postings
5. Southfield, MI: 1,420 Postings

SKILLED TRADES AND TECHNICIANS (MANUFACTURING) OCCUPATION GROUP
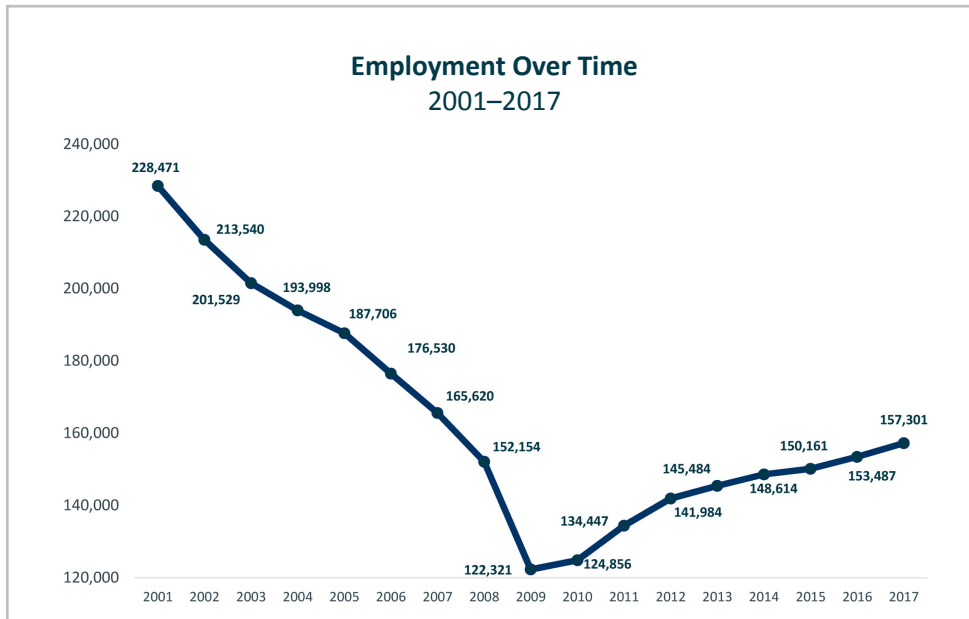## 16-County WIN Region | Q2 2018

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.
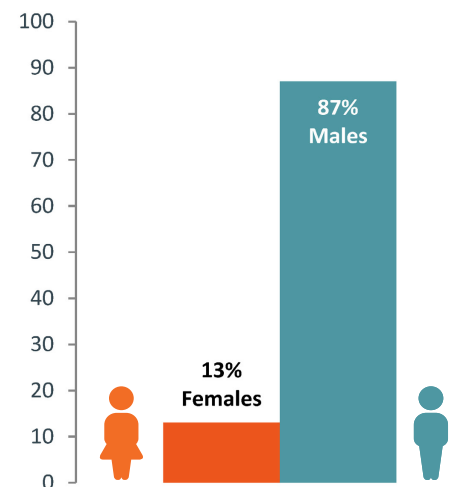
158,144
Trade Workers

0.5% Increase from 2017

Employment Over Time 2001–2017

2001: 228,471
2002: 213,540
2003: 201,529
2004: 193,998
2005: 187,706
2006: 176,530
2007: 165,620
2008: 152,154
2009: 122,321
2010: 124,856
2011: 134,447
2012: 141,984
2013: 145,484
2014: 148,614
2015: 150,161
2016: 153,487
2017: 157,301

Population Gender Demographics

87% Males
13% Females

Skilled Trades and Technicians Worker Demographics

According to the most recent Emsi data set available (2017), the Skilled Trades occupation group employs about 158,000 workers in southeast Michigan. A majority of workers are white males between the ages of twenty-five and fifty-four. Additional outreach may be necessary in the near future, as at 25.6 percent, the group has a somewhat higher proportion than average of workers over age 55.

Race and Ethnicity Demographics

79.0% White | 12.9% Black or African American | 2.7% Asian

Population Age Demographics

Age 14-24, 6.8%

Age 25-54 67.6%

Age 55+, 25.6%

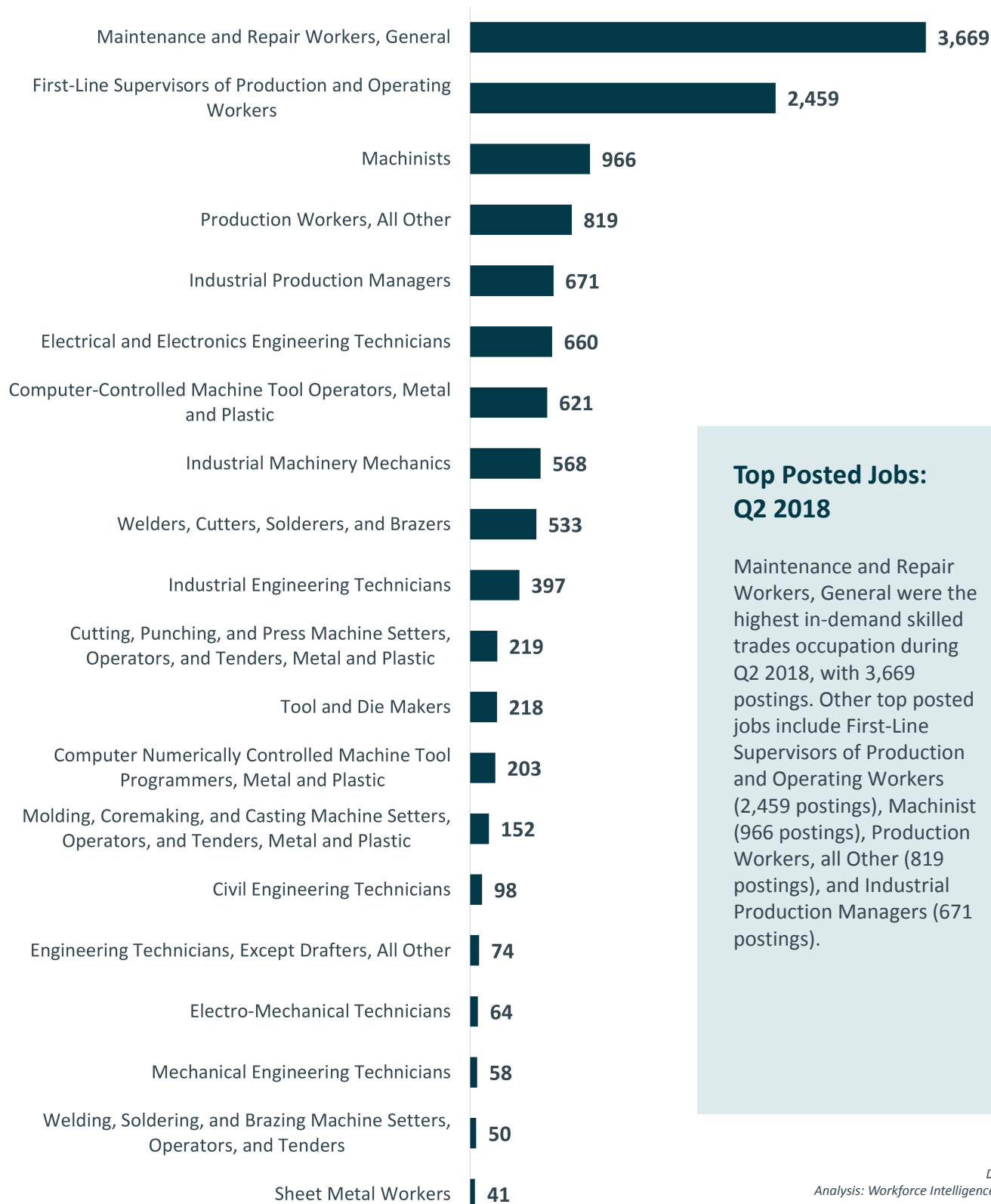*Data: Emsi | Analysis: Workforce Intelligence Network*

12,947 Skilled Trades Postings: 1,005 Fewer than Q1 2018

Vocational Training Required for Most Skilled Trades Jobs

Skilled Trades and Technicians Top Posted Jobs
Q2 2018

Occupation	Postings
Maintenance and Repair Workers, General	3,669
First-Line Supervisors of Production and Operating Workers	2,459
Machinists	966
Production Workers, All Other	819
Industrial Production Managers	671
Electrical and Electronics Engineering Technicians	660
Computer-Controlled Machine Tool Operators, Metal and Plastic	621
Industrial Machinery Mechanics	568
Welders, Cutters, Solderers, and Brazers	533
Industrial Engineering Technicians	397
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	219
Tool and Die Makers	218
Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	203
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	152
Civil Engineering Technicians	98
Engineering Technicians, Except Drafters, All Other	74
Electro-Mechanical Technicians	64
Mechanical Engineering Technicians	58
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	50
Sheet Metal Workers	41

Top Posted Jobs: Q2 2018

Maintenance and Repair Workers, General were the highest in-demand skilled trades occupation during Q2 2018, with 3,669 postings. Other top posted jobs include First-Line Supervisors of Production and Operating Workers (2,459 postings), Machinist (966 postings), Production Workers, all Other (819 postings), and Industrial Production Managers (671 postings).

Skilled Trades and Technicians 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 Q2 2018, offers a median hourly wage of $17.05, which translates to an annual salary of nearly $35,000.

Wage Overview for Top Posted Skilled Trades and Technicians Jobs in Q2 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	$10.33	$12.85	$17.05	$22.85	$28.69
51-1011	First-Line Supervisors of Production and Operating Workers	$18.52	$23.71	$31.57	$41.26	$51.13
51-4041	Machinists	$12.22	$15.25	$19.88	$25.16	$29.74
51-9199	Production Workers, All Other	$10.31	$14.40	$17.81	$21.60	$26.84
11-3051	Industrial Production Managers	$34.74	$43.94	$56.33	$71.28	$87.31
17-3023	Electrical and Electronics Engineering Technicians	$16.82	$21.70	$29.01	$34.76	$40.42
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	$12.31	$14.48	$19.11	$23.87	$28.44
49-9041	Industrial Machinery Mechanics	$16.30	$20.57	$26.21	$32.11	$37.54
51-4121	Welders, Cutters, Solderers, and Brazers	$13.07	$15.43	$18.51	$22.74	$27.84
17-3026	Industrial Engineering Technicians	$16.73	$20.00	$25.35	$32.29	$38.93

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills
- Machining
- Lathe Experience
- HVAC
- Tooling
- Mill Experience

In-Demand Foundational Skills
- Management
- Operations
- Communications
- Troubleshooting (Problem Solving)
- Leadership

In-Demand Education Level*
- High School Diploma: 40.9%
- Associate Degree: 9.6%
- Bachelor's Degree: 13.0%
- Master's Degree: 1.5%

Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent
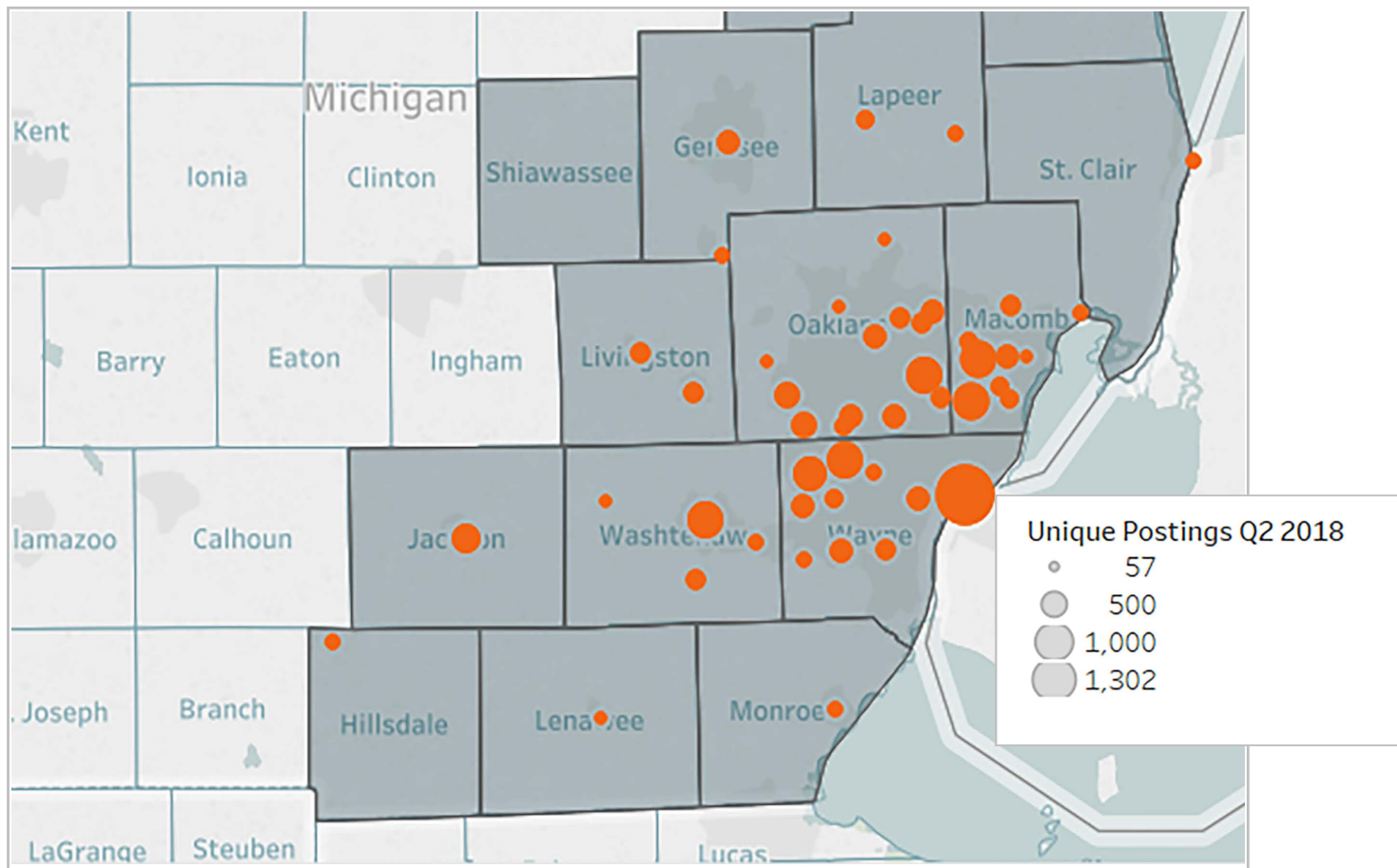
In-Demand Certifications
- Commercial Driver's License (CDL)
- Certified Quality Engineer
- American Society for Quality (ASQ) Certified
- Certified Broadcast Radio Engineer
- Certified Welder

Staffing Agencies and Brick and Mortar Stores: Top Employers of Skilled Trades Workers

Machining and Management Skills are in High Demand

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

Top Posting Employers*

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

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

Job Postings by City

1. Detroit, MI: 1,302 Postings
2. Sterling Heights, MI: 521 Postings
3. Warren, MI: 496 Postings
4. Troy, MI: 483 Postings
5. Livonia, MI: 460 Postings

TRANSPORTATION, DISTRIBUTION, AND LOGISTICS (TDL) OCCUPATION GROUP
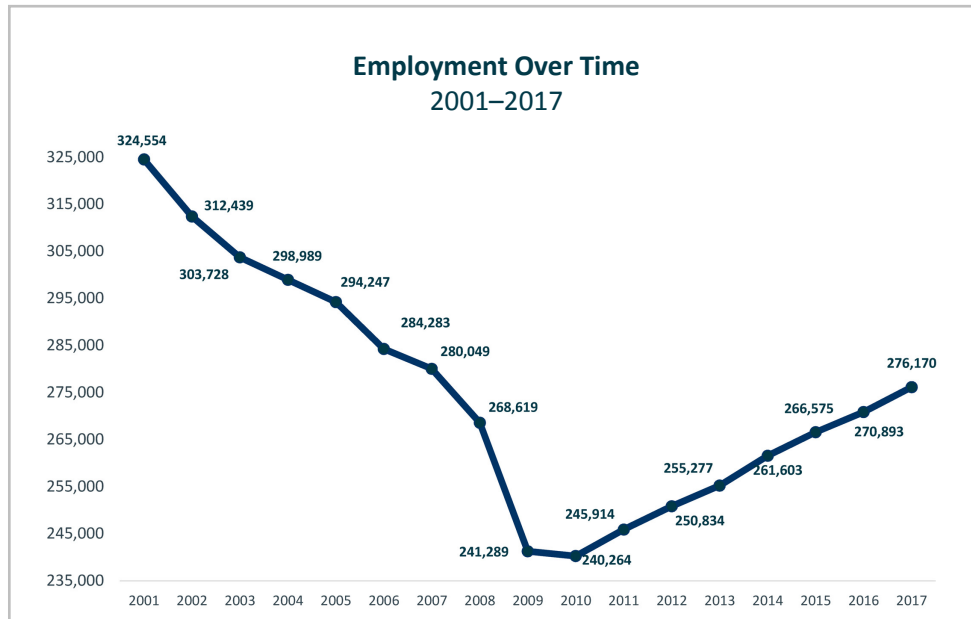## 16-County WIN Region | Q2 2018

Introduction

Transportation, distribution, and logistics (TDL) workers help move materials in an efficient manner, whether it is from one company to another or directly to consumers. Logistics workers range from materials movers to logistics analysts, coordinating and analyzing material and goods movement.
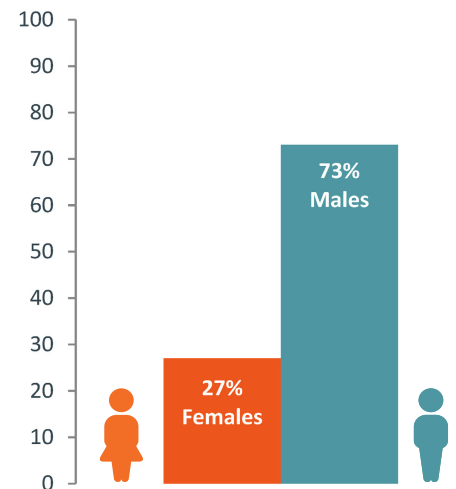
277,591
TDL Workers

0.5% Increase from 2017

Employment Over Time
2001–2017

- 2001: 324,554
- 2002: 312,439
- 2003: 303,728
- 2003: 298,989
- 2004: 294,247
- 2005: 284,283
- 2006: 280,049
- 2007: 268,619
- 2008: 241,289
- 2010: 240,264
- 2011: 245,914
- 2012: 250,834
- 2013: 255,277
- 2013: 261,603
- 2014: 266,575
- 2015: 270,893
- 2017: 276,170

Population Gender Demographics

73% Males

27% Females

TDL Worker Demographics

According to the most recent Emsi data set available (2017), the TDL occupation group has a large workforce, employing 275,000 individuals. These workers are 73 percent male and 71 percent white. Only twelve percent of the workers in this occupation group are under the age of 24, indicating an aging TDL workforce.

Race and Ethnicity Demographics

71.3% White | 20.2% Black or African American | 2.2% Asian
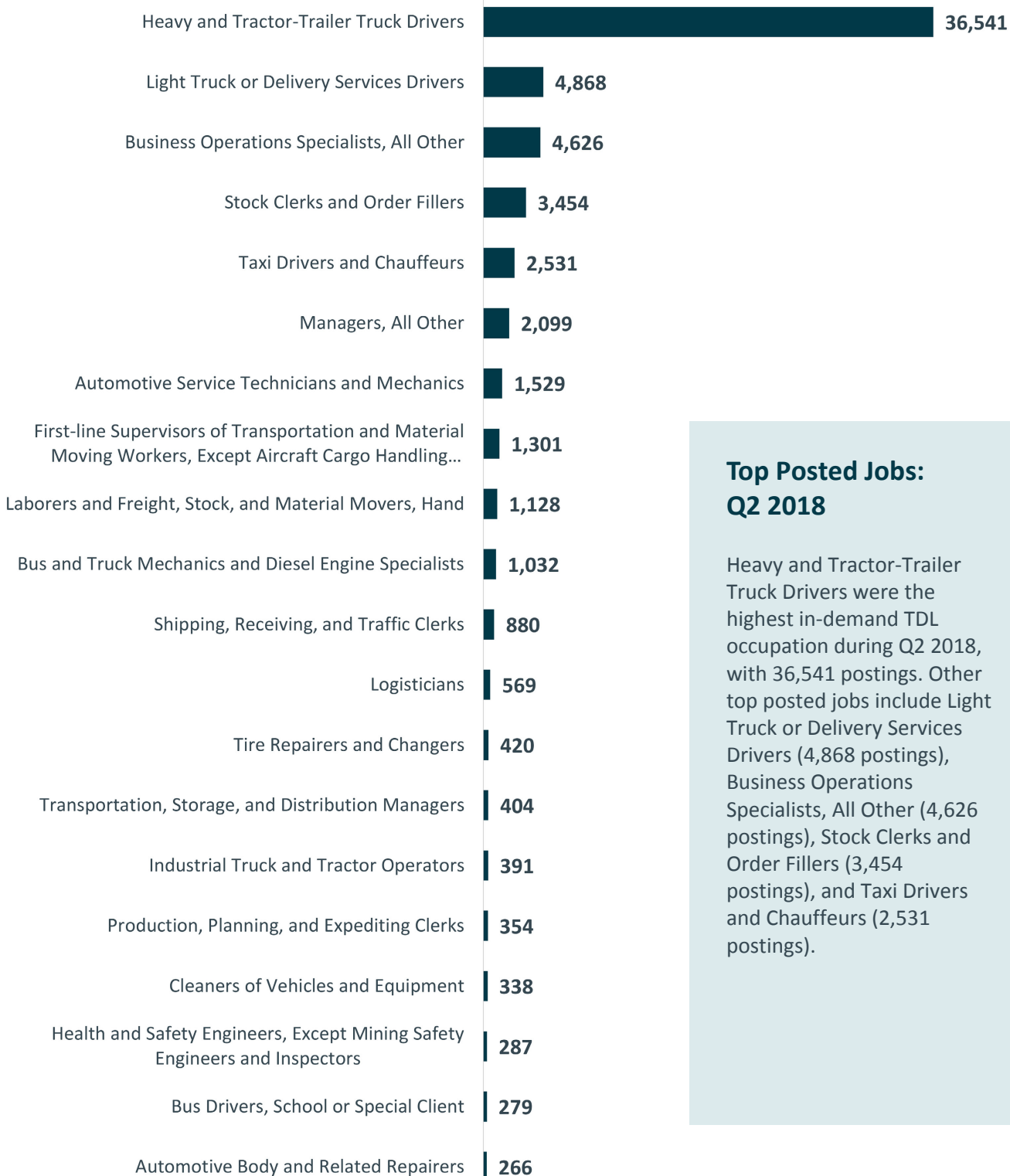
Population Age Demographics

Age 14-24, 12.8%

Age 25-54 64.3%

Age 55+, 22.9%

Data: Emsi | Analysis: Workforce Intelligence Network
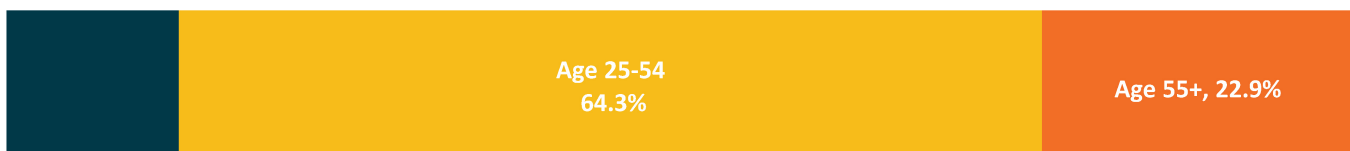
**64,677 TDL Postings
935 More than Q1 2018**

**High School Diploma
Required for Most TDL Jobs**

TDL Top Posted Jobs
Q2 2018

Job	Postings
Heavy and Tractor-Trailer Truck Drivers	36,541
Light Truck or Delivery Services Drivers	4,868
Business Operations Specialists, All Other	4,626
Stock Clerks and Order Fillers	3,454
Taxi Drivers and Chauffeurs	2,531
Managers, All Other	2,099
Automotive Service Technicians and Mechanics	1,529
First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling…	1,301
Laborers and Freight, Stock, and Material Movers, Hand	1,128
Bus and Truck Mechanics and Diesel Engine Specialists	1,032
Shipping, Receiving, and Traffic Clerks	880
Logisticians	569
Tire Repairers and Changers	420
Transportation, Storage, and Distribution Managers	404
Industrial Truck and Tractor Operators	391
Production, Planning, and Expediting Clerks	354
Cleaners of Vehicles and Equipment	338
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	287
Bus Drivers, School or Special Client	279
Automotive Body and Related Repairers	266

**Top Posted Jobs:
Q2 2018**

Heavy and Tractor-Trailer Truck Drivers were the highest in-demand TDL occupation during Q2 2018, with 36,541 postings. Other top posted jobs include Light Truck or Delivery Services Drivers (4,868 postings), Business Operations Specialists, All Other (4,626 postings), Stock Clerks and Order Fillers (3,454 postings), and Taxi Drivers and Chauffeurs (2,531 postings).

TDL Wage Overview

According to the Bureau of Labor Statistics (BLS), half of the top ten in-demand TDL occupations offer median wages of more than $20 per hour. Heavy and Tractor-Trailer Truck Drivers, the top posted TDL job in Q2 2018, offers a median hourly wage of $19.11, or an annual salary of nearly $40,000. Logistics roles that require additional education, such as Business Operations Specialists, typically offer even higher wages.

Wage Overview for Top Posted TDL Jobs in Q2 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
53-3032	Heavy and Tractor-Trailer Truck Drivers	$12.72	$15.41	$19.11	$23.55	$28.46
53-3033	Light Truck or Delivery Services Drivers	$9.53	$11.34	$15.76	$21.70	$28.35
13-1199	Business Operations Specialists, All Other	$18.15	$23.65	$32.82	$44.80	$56.35
43-5081	Stock Clerks and Order Fillers	$9.16	$9.66	$11.24	$14.97	$18.84
53-3041	Taxi Drivers and Chauffeurs	$9.11	$9.51	$10.80	$13.15	$16.74
11-9199	Managers, All Other	$30.24	$38.27	$48.95	$61.61	$76.44
49-3023	Automotive Service Technicians and Mechanics	$9.76	$12.64	$20.16	$27.77	$33.10
53-1048	First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	$14.95	$19.41	$25.72	$34.01	$40.95
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	$9.58	$10.97	$13.52	$17.11	$20.72
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	$15.18	$18.01	$21.71	$26.12	$31.10

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills
- Purchasing
- Warehousing
- Merchandising
- Forklift Truck
- Mechanics

In-Demand Foundational Skills
- Management
- Operations
- Customer Service
- Communications
- Sales

In-Demand Education Level*
- High School Diploma: 12.7%
- Associate Degree: 1.0%
- Bachelor's Degree: 5.3%
- Master's Degree: 1.1%

Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent
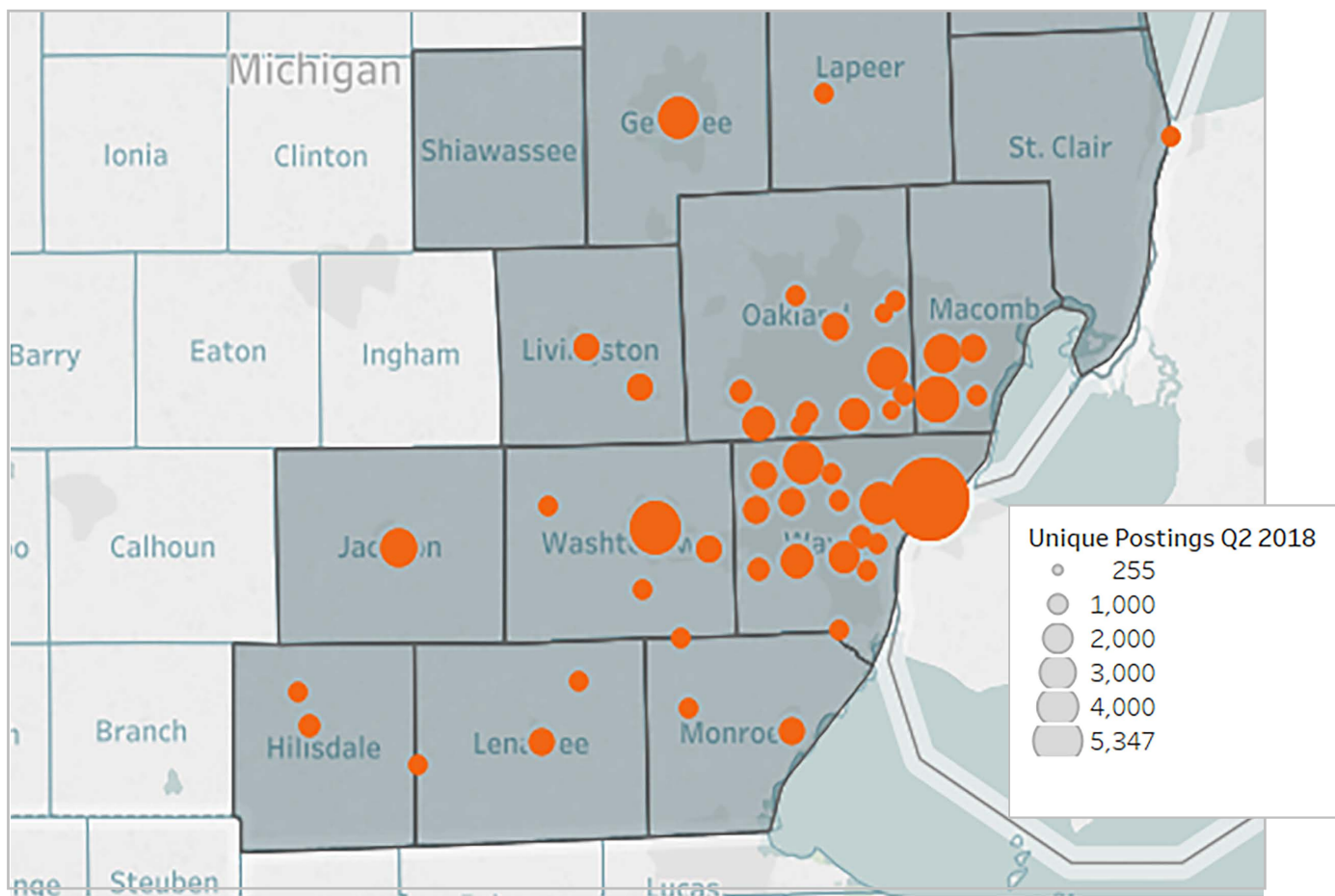
In-Demand Certifications
- Commercial Driver's License (CDL)
- Transportation Worker Identification Credential (TWIC) Card
- PMI Certified
- Certified Safety Professional
- Professional Engineer

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

Warehousing Skills are in High Demand

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

Top Posting Employers*

- CRST International, Inc.
- Lyft, Inc.
- C.R. England, Inc.
- Roehl Transport, Inc.
- USA Truck, Inc.
- McLane Company, Inc.
- Heartland Express, Inc.
- U. S. Xpress, Inc.
- Schneider National, Inc.
- Barr-Nunn Transportation, Inc.

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

Job Postings by City

- Detroit, MI: 5,347 Postings
- Ann Arbor, MI: 2,150 Postings
- Warren, MI: 1,604 Postings
- Livonia, MI: 1,404 Postings
- Flint, MI: 1,316 Postings

WIN WORKFORCE INTELLIGENCE NETWORK