WIN REGION

16 COUNTIES IN SOUTHEAST MI

Quarterly Labor Market Report

Report Contents

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. WIN produces a 16-county region report quarterly using data from all eleven occupation groups. A report focused on the city of Detroit is also produced quarterly, focusing on five occupation groups related to Detroit's labor market. County reports are produced annually and focus on five occupation groups chosen to reflect the labor market specific to the county.

This report analyzes data from the first quarter of 2020 in the 16-county WIN region and includes summative data for January, February, and March of 2020. All eleven occupation groups are analyzed for the WIN region.

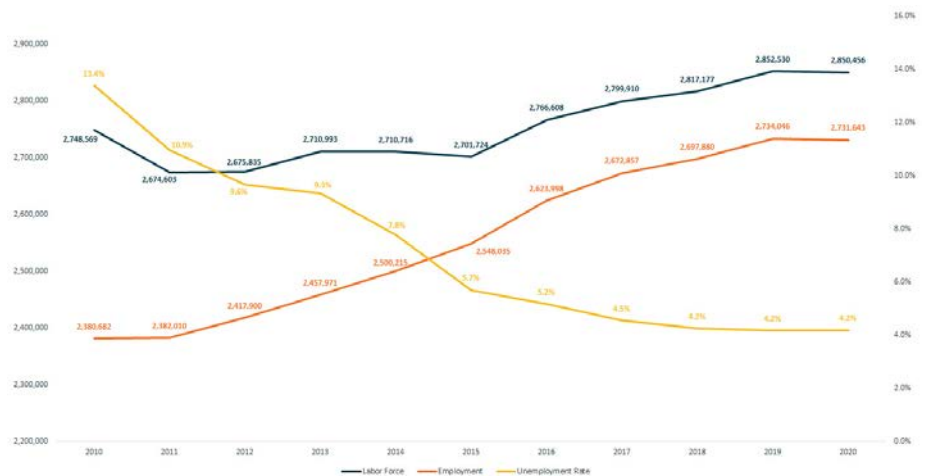For more information pertaining to the labor market in southeast Michigan, the custom occupation groups within this report, or any other workforce-related data projects, please visit www.WINintelligence.org or contact the data and research team directly at research@WINintelligence.org. For more information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

WIN WORKFORCE INTELLIGENCE NETWORK

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

During the first quarter of 2020, the labor force and employment figures both fell in southeast Michigan. March unemployment levels were measured before the Stay Home, Stay Safe order became active, so this report primarily reflects the labor market shortly before the COVID-19 crisis. A larger drop in employment than labor force caused the number of unemployed individuals to rise in the region, causing the quarterly unemployment rate to rise 0.6 percentage points to 4.2 percent in Q1 2020. Employer demand for many occupation groups analyzed by WIN fell during Q1 2020, however Agriculture, Construction, and Engineers and Designers each experienced posting increases. As additional 2020 data becomes available, employer demand will likely show dramatic shifts.

Annual Labor Market Information

The labor force in southeast Michigan declined from its 2019 peak, decreasing by 2,075 individuals between 2019 annual figures and the year-to-date (YTD) levels through January 2020. Employment fell by a similar amount, reporting 2,404 fewer workers between 2019 and YTD 2020. While the decrease in employment was slightly larger than the decrease in labor force, the unemployment rate changed little, remaining stable at 4.2 percent. This annual rate has held since 2018.

Annual Labor Force, Employment, Unemployment Rate
2010–2020

Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Employer Demand Overview

Data from the first quarter of 2020, including posting information from January, February, and March, showed slowing employer demand levels in southeast Michigan. There were 18,311 fewer postings during Q1 2020 than in Q4 2019, and nearly 30,000 fewer than Q1 2019. Though this is likely due in part to early effects of pandemic shutdown measures, it also reflects decreases during January and February as monthly postings have slowed steadily since the record high demand of Q3 2019.

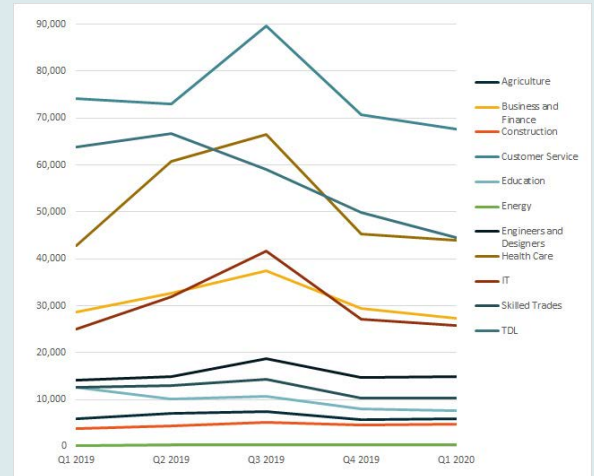**Quarterly Posting Analysis, WIN Region**
Q1 2020

Data: Emsi | Analysis: Workforce Intelligence Network

Employer demand sinks to 315,000 jobs posted during Q1 2020, reflecting both an overall pattern of slowing demand and the earliest results of COVID-19 shutdown measures.

During Q1 2020, there were 315,434 job postings, 18,311 fewer than the 333,745 postings made during Q4 2019 in the 16-county WIN region. Though postings are often lower in the first half of the year than the second, Q1 2020 demand levels were also 8.6 percent lower than in Q1 2019. Seasonal changes in job postings for each occupation group throughout 2019 and the first quarter of 2020 can be seen to the right, showing early divergences in the way different occupation groups are affected by the COVID-19 pandemic. Note that some of the consistent decline in TDL postings is related to improvement in duplicate posting removal methodology. For more information about quarterly job postings, see page 9.
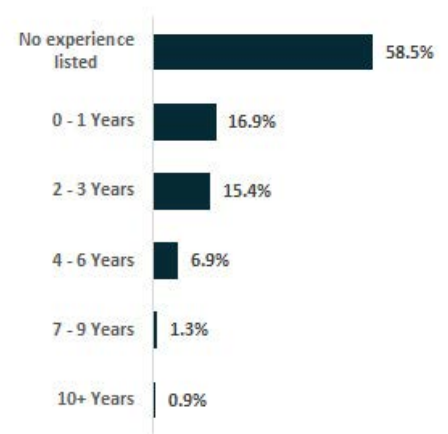
Posting Trends by Occupation Group
Q1 2020

Legend: Agriculture, Business and Finance, Construction, Customer Service, Education, Energy, Engineers and Designers, Health Care, IT, Skilled Trades, TDL

Job postings made by employers in southeast Michigan indicate that about 59 percent of job openings were available to workers with two years of experience or less.

Just over half, or 59 percent of all Q1 2020 job postings identified a preferred worker experience level, and nearly half (44.7 percent) of those sought candidates with zero to two years of experience. As ongoing safety measures, economic downturn, and recovery continue to reshape the labor market in coming months, employer willingness to hire and train inexperienced workers will benefit both recent grads and those looking to change industries alike. The proportion of entry-level postings requiring college degrees, about 41 percent, mirrors the requirement among postings for all experience levels. The Engineers and Designers, IT, and Business and Finance groups most frequently a bachelor's degree. For more information about in-demand education and experience levels, see each occupation group's section.

Experience Levels In-Demand
Q1 2020

Experience	Percent
No experience listed	58.5%
0 - 1 Years	16.9%
2 - 3 Years	15.4%
4 - 6 Years	6.9%
7 - 9 Years	1.3%
10+ Years	0.9%

Annual Labor Market Data

Data: Bureau of Labor Statistics

	2010 Annual	2011 Annual	2012 Annual	2013 Annual	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual	2019 Annual	2020 YTD	Change from 2019	Percent Change from 2019
Labor Force	2,748,569	2,674,603	2,675,835	2,710,993	2,710,716	2,701,724	2,766,608	2,799,910	2,817,177	2,852,530	2,850,456	-2,075	-0.1%
Employment	2,380,682	2,382,010	2,417,900	2,457,971	2,500,215	2,548,035	2,623,998	2,672,857	2,697,880	2,734,046	2,731,643	-2,404	-0.1%
Unemployment	367,888	292,593	257,935	253,021	210,500	153,690	142,610	127,053	119,297	118,484	118,813	329	0.3%
Unemployment Rate	13.4%	10.9%	9.6%	9.3%	7.8%	5.7%	5.2%	4.5%	4.2%	4.2%	4.2%	0.0%	na

During the first quarter of 2020, employment in the 16-county WIN region dropped by 19,618 workers.

Following a strong trend of growth in the labor force both quarterly through 2019 and annually since 2011, as well as consistently falling unemployment, the first quarter of 2020 showed beginning decline in the labor market. During Q1 2020, labor force figures were 0.1 percent smaller (1,515 individuals) than in Q4 2019, but 0.4 percent greater (11,689 individuals) than in Q1 2019. The decrease in labor force participants was joined by a 19,618-worker drop in employment compared to Q4 2019. The greater decline in employment than in labor force caused the unemployment rate to rise from 3.5 percent in Q4 2019 to 4.2 percent in Q1 2020. For more information about this year's unemployment rate and other labor market indicators, see page 4.

Data: Emsi | Analysis: Workforce Intelligence Network

Labor Force, Employment, and Unemployment

Through the first quarter of 2020, the labor market in southeast Michigan continued the relative stability shown each year since 2010. The labor force fell by 1,515 individuals (0.1 percent) between Q4 2019 and Q1 2020. Employment in the 16-county area dropped sharply from Q4 2019 to Q1 2020, by 19,618 workers. With employment decreasing at a faster rate than labor force, the unemployment rate rose this quarter: the quarterly unemployment rate increased by 0.6 percentage points between Q4 2019 and Q1 2020 to 4.2 percent.

Labor Force, Employment, Unemployment Rate
1990-2020
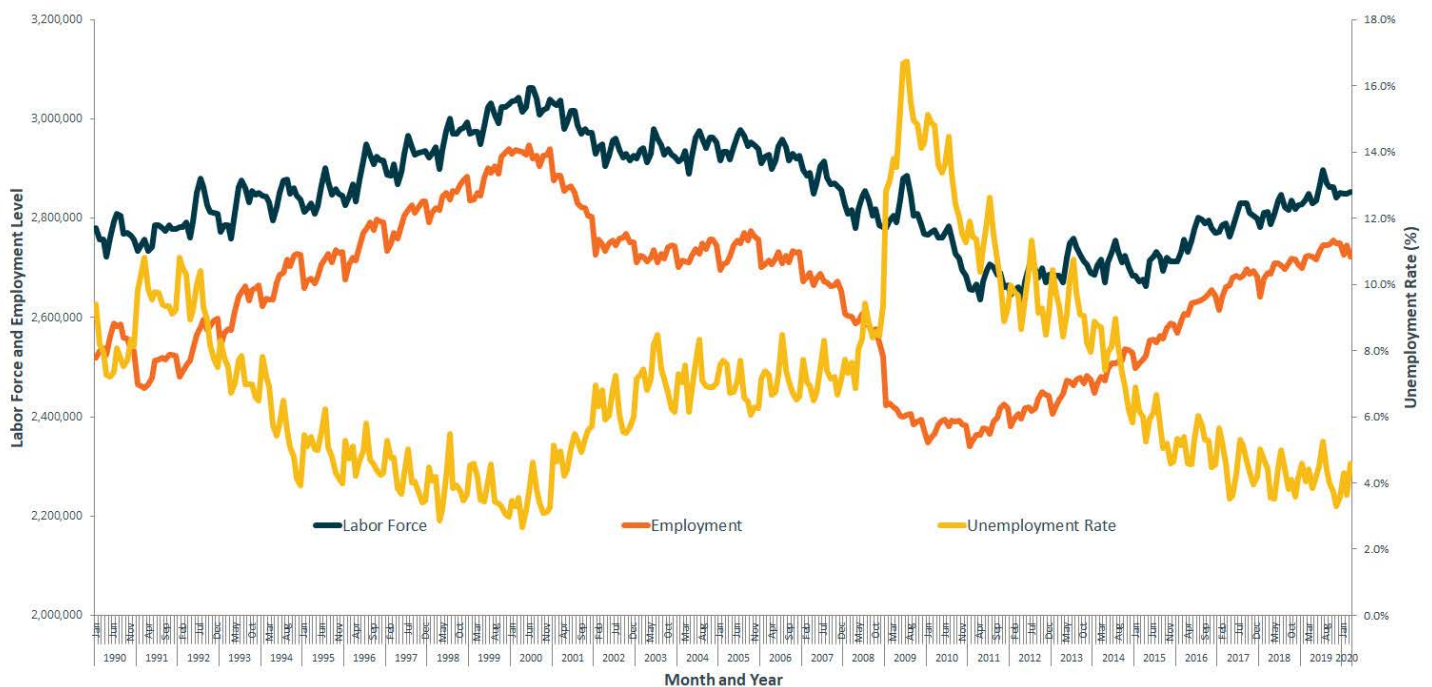
Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Labor Market Data
Q1 2019 - Q1 2020

	1st Quarter 2019	2nd Quarter 2019	3rd Quarter 2019	4th Quarter 2019	1st Quarter 2020	Change from 4th Quarter 2019	Percent Change from 4th Quarter 2019	Change from 1st Quarter 2019	Percent Change from 1st Quarter 2019
Labor Force	2,838,767	2,842,665	2,876,719	2,851,971	2,850,456	-1,515	-0.1%	11,689	0.4%
Employment	2,715,547	2,723,564	2,745,813	2,751,261	2,731,643	-19,618	-0.7%	16,096	0.6%
Unemployment	123,220	119,100	130,906	100,710	118,813	18,103	18.0%	-4,407	-3.6%
Unemployment Rate	4.3%	4.2%	4.6%	3.5%	4.2%	0.6%	na	-0.2%	na

Note: Monthly data averaged by quarter | Data: BLS

Population Demographics

According to data from the most recent Census Bureau 2018 ACS Five Year estimates, the population in southeast Michigan increased by nearly 0.3 percent between 2017 and 2018. During 2018, 5,740,079 people were living in the region. The sex of the populace was split almost evenly, with about 51 percent of the population identifying as female, and the other 49 percent identifying as male. The majority of the population identified as white (73 percent) with the second largest number of individuals identifying as black or African American (19 percent). The region as a whole is facing an aging population; 29.7 percent of population was over the age of 55, compared to 31.5 percent aged 24 or under.

5,740,079
People in the Region

0.3% Increase
from 2017

Population Race Demographics

- White, 72.9%
- Black or African American, 19.3%
- American Indian or Alaska Native, 0.3%
- Asian, 3.9%
- Native Hawaiian or Other Pacific Islander, 0.0%
- Other Race, 1.0%
- Two or More Races, 2.6%
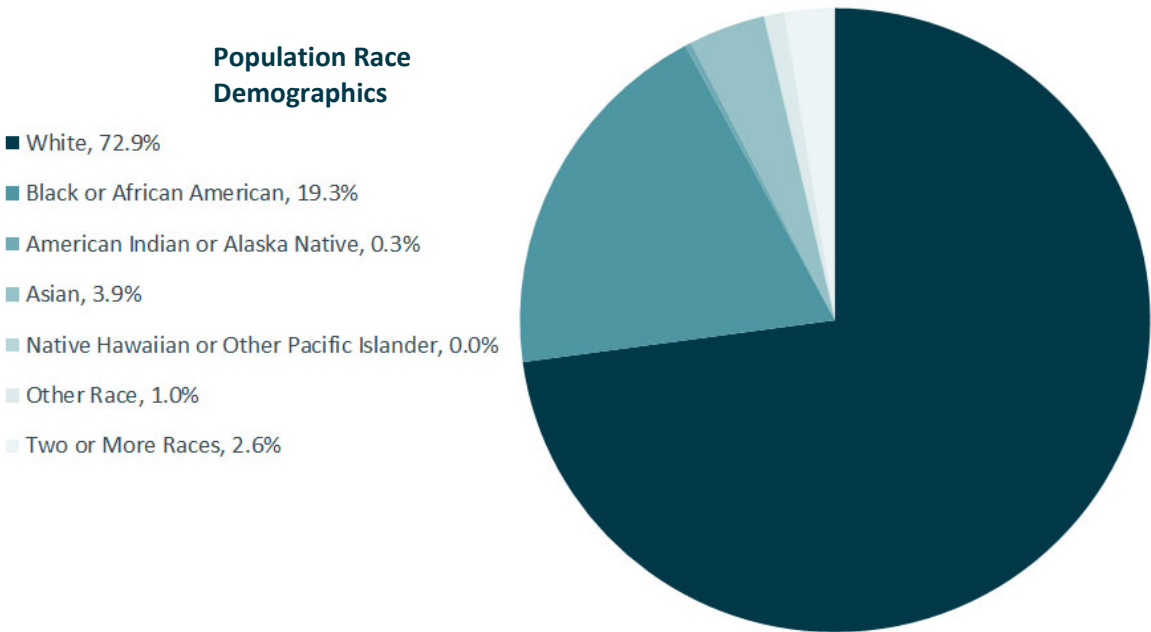
Population Gender Demographics

51% Females

49% Males

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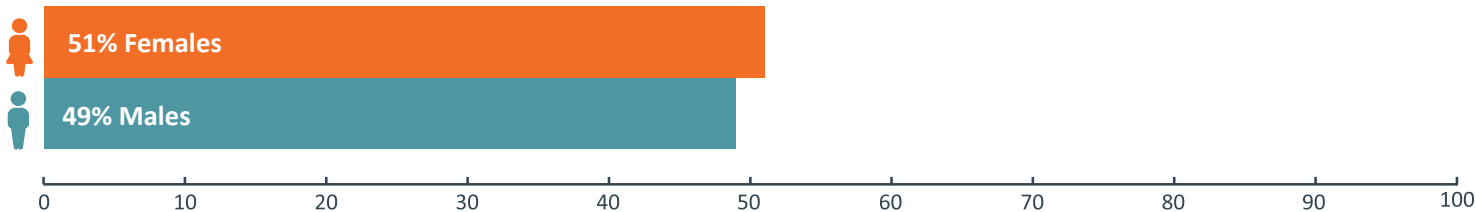
Population Age Demographics

| Age 14 and Under 18.1% | Age 15-24 13.4% | Age 25-54 38.8% | Age 55+ 29.7% |

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

Labor Market Demographics

During 2018, the most recent census year, there were about 2.85 million people in the labor force, meaning they were either working or looking for work, in southeast Michigan. Slightly less than half of the population, or about 2,650,327 individuals (46.2 percent), living in the region were actively working. The highest unemployment rates were seen in those aged 24 years old or younger. Males under the age of 19 face an unemployment rate of 24.5 percent. Black or African American job seekers also have a difficult time finding employment, facing an unemployment rate of 15.0 percent.

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

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

Current Workforce Demographics

While the Census Bureau data is lagged by about two years, Emsi uses predictive modeling to estimate workforce information for the previous year, allowing for more current analysis. In 2019, there were a total of 2,531,090 individuals working in southeast Michigan. A slight majority (51.1 percent or 1,293,170 workers) were male, while 48.9 percent (1,237,919 workers) of the workforce was female. Most of those working in the region were white, accounting for 73.4 percent of the workforce, while African American or black workers accounted for 16.3 percent of the workforce. Those identifying as having a Hispanic or Latino ethnicity accounted for 4.1 percent. Only 13.9 percent of workers were under the age of 25 compared to 22.6 percent over the age of 55, indicating an aging workforce in southeast Michigan.

Workforce Race and Ethnicity Demographics

- White, 73.4%
- Black or African American, 16.3%
- Hispanic or Latino, 4.1%
- Asian, 4.3%
- Two or More Races, 1.6%
- American Indian or Alaska Native, 0.3%
- Native Hawaiian or Other Pacific Islander, 0.04%
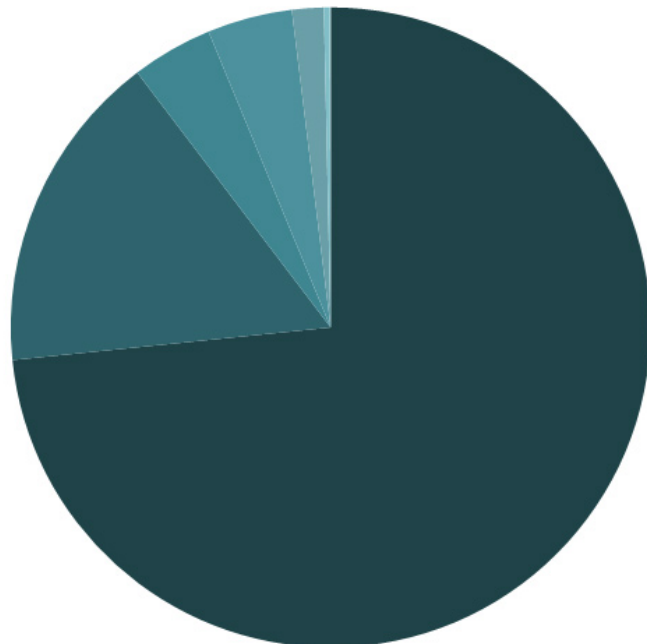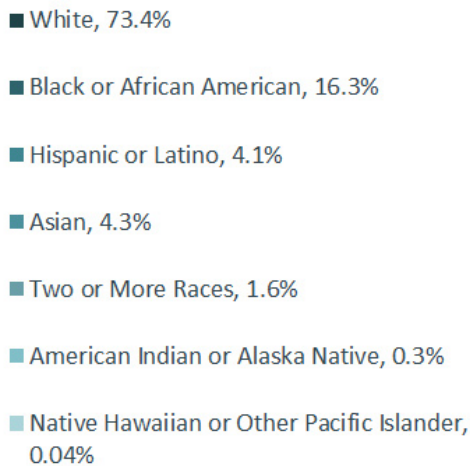
Workforce Gender Demographics

51% Males

49% Females

Workforce Age Demographics

Age 14-24
13.9%

Age 25-54
63.6%

Age 55+
22.6%

Data: Emsi | Analysis: Workforce Intelligence Network
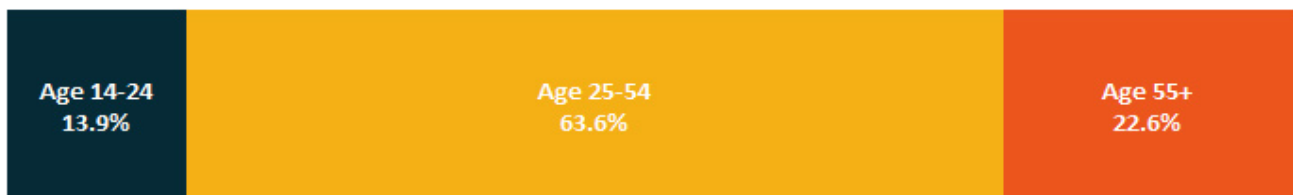
Regional Commuting Patterns

According to the most recent OnTheMap data set available from the Census Bureau, during 2017, the region's workforce consisted of 2,347,359 residents. 2,121,593 (90.4 percent) of the residents lived and worked within the 16-county region, while the remaining 225,766 residents (9.6 percent) traveled outside of the region for work. There were 2,315,590 workers employed in the region during 2015. Of those, 193,997 workers (8.4 percent) lived outside of the region's borders and commuted in. From this information, we can see that the southeast Michigan area is a net exporter of jobs, with more workers leaving the area for employment than inwardly commuting.

Where 16-County WIN Region Residents Work

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

Where 16-County WIN Region Workers Live

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

193,997 LIVE OUTSIDE OF THE 16 COUNTY WIN PARTNERSHIP AND COMMUTE IN

2,121,593 LIVE AND WORK IN THE 16 COUNTY WIN PARTNERSHIP

225,766 LIVE IN THE 16 COUNTY WIN PARTNERSHIP AND COMMUTE OUT

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

Top Posted Jobs
Q1 2020

Occupation	Postings
Heavy and Tractor-Trailer Truck Drivers	22,846
Registered Nurses	16,121
Retail Salespersons	10,004
First-Line Supervisors of Retail Sales Workers	9,596
Software Developers, Applications	7,270
Customer Service Representatives	5,970
Light Truck or Delivery Services Drivers	5,047
Mechanical Engineers	4,540
Childcare Workers	4,372
Computer Occupations, All Other	4,250
Industrial Engineers	4,212
First-Line Supervisors of Food Preparation and Serving Workers	4,021
First-Line Supervisors of Office and Administrative Support Workers	3,791
Combined Food Preparation and Serving Workers, Including Fast Food	3,725
Accountants and Auditors	3,632
Maintenance and Repair Workers, General	3,601
Stock Clerks and Order Fillers	3,311
Cashiers	2,991
General and Operations Managers	2,968
Sales Managers	2,961

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

Top Posted Jobs: Q1 2020

Despite an ongoing decline in postings, Heavy and Tractor-Trailer Truck Drivers remained the highest in-demand occupation into the first quarter of 2020, with 22,846 online job postings. Many of the other top-posted occupations are also similar to those in previous quarters. Of the top five overall in-demand occupations, two typically require a bachelor's degree for entry. Registered Nurses (16,121 postings) and Software Developers, Applications (7,270 postings) also offer higher wages than many top jobs. Customer service occupations round out the remaining top five posted jobs with Retail Salespersons (10,004 postings) and First-Line Supervisors of Retail Sales Workers (9,596 postings). Customer Service Representatives and Light Truck or Delivery Drivers were also in high demand during Q1 2020.

Data: Emsi | Analysis: Workforce Intelligence Network

Top Posted Entry-Level Jobs
Q1 2020

Job	Count
Registered Nurses	8,889
Heavy and Tractor-Trailer Truck Drivers	5,594
First-Line Supervisors of Retail Sales Workers	3,603
Software Developers, Applications	2,441
Customer Service Representatives	1,855
Retail Salespersons	1,684
Mechanical Engineers	1,371
First-Line Supervisors of Office and Administrative Support Workers	1,174
Computer Occupations, All Other	1,140
Industrial Engineers	1,116
Computer User Support Specialists	1,016
First-Line Supervisors of Food Preparation and Serving Workers	996
Accountants and Auditors	931
Computer Systems Analysts	852
Social and Human Service Assistants	792
Maintenance and Repair Workers, General	791
Medical Assistants	741
General and Operations Managers	722
Light Truck or Delivery Services Drivers	718
Management Analysts	704

Typical Entry Education
- No formal educational credential
- High school diploma or equivalent
- Some college, no degree
- Postsecondary nondegree award
- Bachelor's degree

**Top Posted Entry-Level Jobs:
Q1 2020**

Over a quarter of overall postings in the region, or 82,464 online job ads, were open to individuals with zero to two years of previous work experience. These entry-level jobs represent the top posted occupations for this experience level, and many reflect the overall top jobs. Seven of the top 20 occupations typically require candidates to have a bachelor's degree. Many applicants for these entry level occupations, regardless of education requirement, could benefit from taking some coursework to develop the skills requested in job postings.

Data: Emsi | Analysis: Workforce Intelligence Network

Employer Demand by City

Top In-Demand Qualifications

- Commercial Driver's License (CDL)
- Licensed Practical Nurse
- Certified Nursing Assistant
- Automotive Service Excellence (ASE) Certification
- Hazmat Endorsement
- Nurse Practitioner
- Certified Public Accountant
- Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP)
- Project Management Professional Certification
- ServSafe Certification

Top In-Demand Skills

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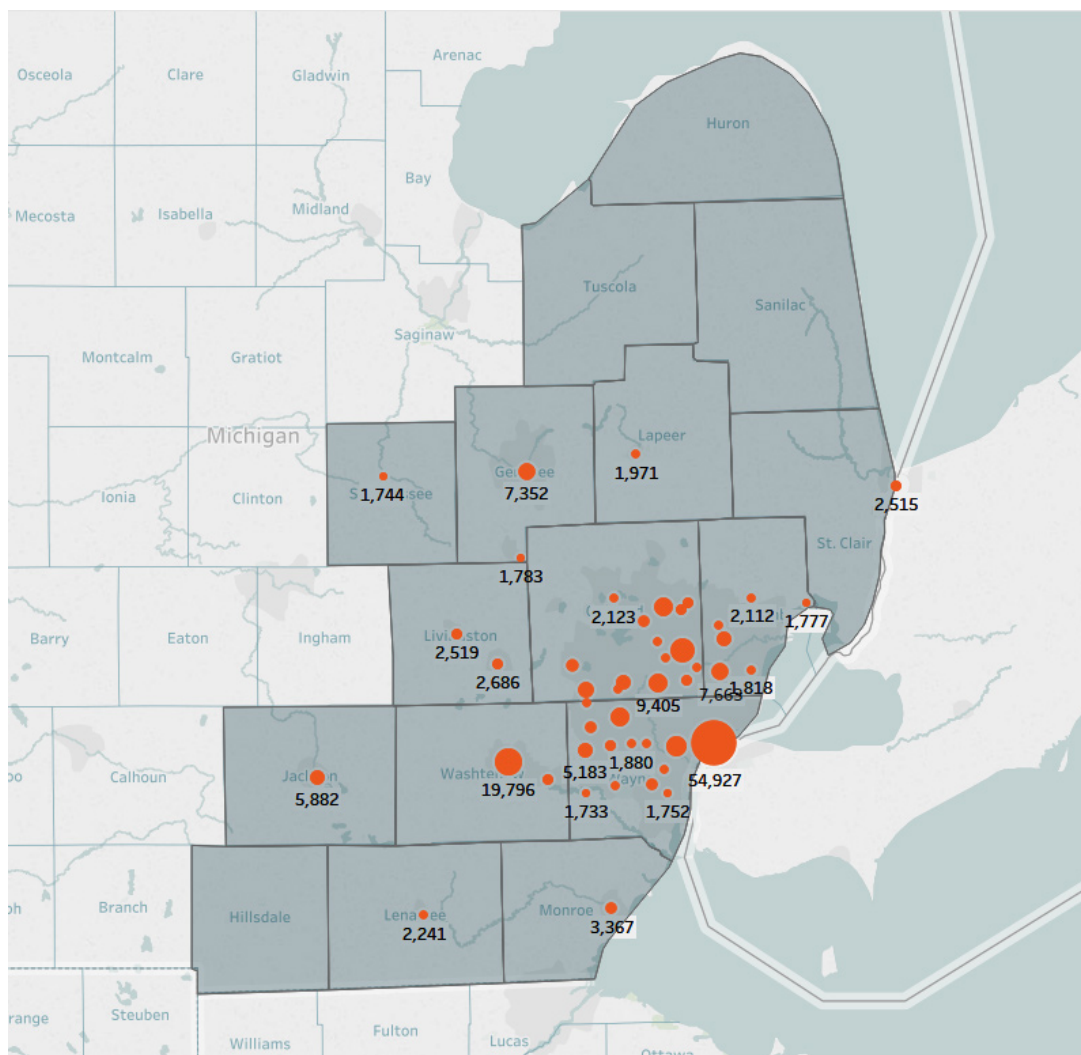- Restaurant Operation
- Selling Techniques
- Nursing
- Auditing
- Accounting
- Customer Experience
- Customer Satisfaction
- Cash Register
- Basic Life Support

Top Posting Employers*

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

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

Introduction

WIN's agriculture occupation group brings together occupations that require knowledge of the farming, livestock, the environment, and natural sciences. Occupations range from Farm Workers, to Environmental Engineers, to Meat Butchers, to Recreation Workers. There are approximately 10,700 openings for these positions each year in Southeast Michigan.

70,938
Agriculture Workers
0.2% Increase
from 2019

Employment Over Time
2001–2020

Worker Gender Demographics

35.0% Females

65.0% Males
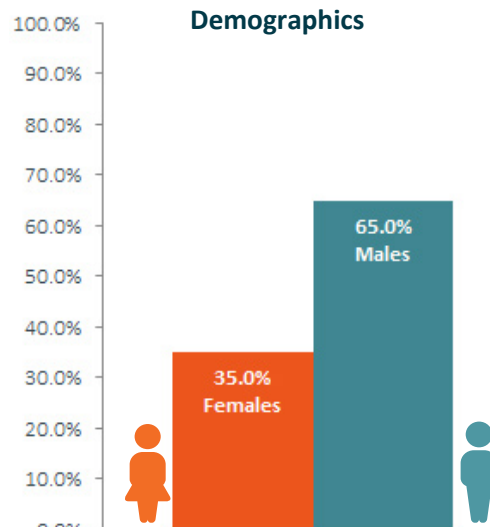
Agriculture Worker Demographics

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

Race and Ethnicity Demographics

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

Worker Age Demographics

Age 14-24 14.1%	Age 25-54 63.3%	Age 55+ 22.6%

Data: Emsi | Analysis: Workforce Intelligence Network
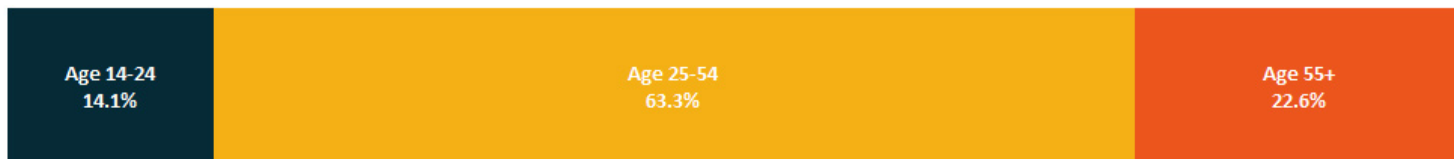
Agriculture
Top Posted Jobs
Q1 2020

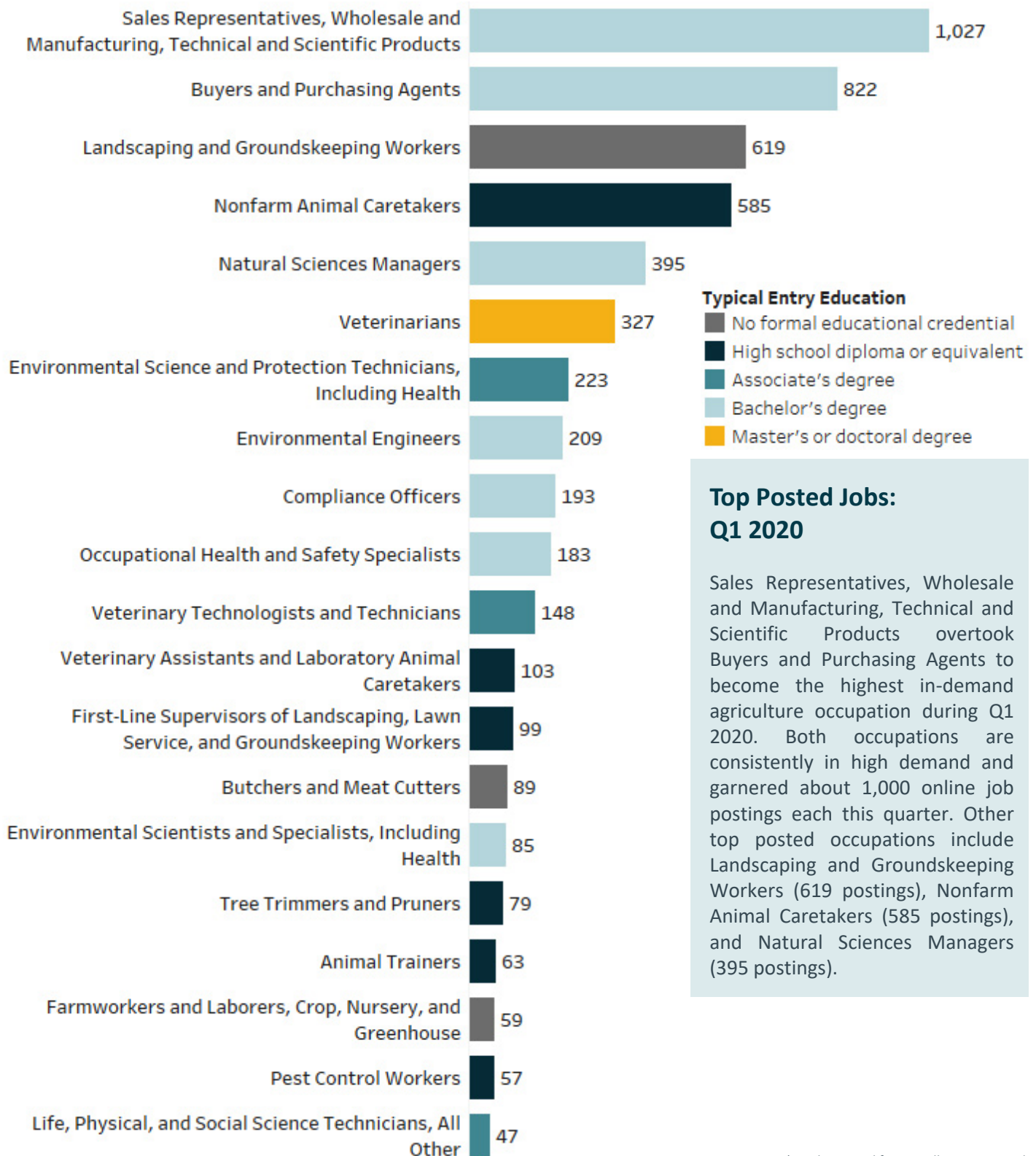| Occupation	Postings
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	1,027
Buyers and Purchasing Agents	822
Landscaping and Groundskeeping Workers	619
Nonfarm Animal Caretakers	585
Natural Sciences Managers	395
Veterinarians	327
Environmental Science and Protection Technicians, Including Health	223
Environmental Engineers	209
Compliance Officers	193
Occupational Health and Safety Specialists	183
Veterinary Technologists and Technicians	148
Veterinary Assistants and Laboratory Animal Caretakers	103
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	99
Butchers and Meat Cutters	89
Environmental Scientists and Specialists, Including Health	85
Tree Trimmers and Pruners	79
Animal Trainers	63
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	59
Pest Control Workers	57
Life, Physical, and Social Science Technicians, All Other	47

Typical Entry Education
- No formal educational credential
- High school diploma or equivalent
- Associate's degree
- Bachelor's degree
- Master's or doctoral degree

Top Posted Jobs: Q1 2020

Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products overtook Buyers and Purchasing Agents to become the highest in-demand agriculture occupation during Q1 2020. Both occupations are consistently in high demand and garnered about 1,000 online job postings each this quarter. Other top posted occupations include Landscaping and Groundskeeping Workers (619 postings), Nonfarm Animal Caretakers (585 postings), and Natural Sciences Managers (395 postings).

Data: Emsi | Analysis: Workforce Intelligence Network

Agriculture Wage Overview

Of the top posted agriculture-related jobs, seven of the ten offer median wages of more than $30 per hour according to the Bureau of Labor Statistics (BLS). The top posted job, Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products, offers median hourly earnings of $37.91, which translates to annual earnings of approximately $78,900. With such a broad array of skillsets represented, Agriculture wages tend to scale with education and experience needs.

Wage Overview for Top Posted Agriculture Jobs in Q1 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
53-7072	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	$22.97	$28.37	$37.91	$54.34	$71.74
13-1028	Buyers and Purchasing Agents	$19.95	$25.29	$33.25	$43.56	$54.85
53-7062	Landscaping and Groundskeeping Workers	$10.06	$11.39	$13.60	$16.25	$19.60
53-7063	Nonfarm Animal Caretakers	$9.36	$9.89	$10.79	$11.98	$13.57
53-7063	Natural Sciences Managers	$34.26	$40.84	$50.21	$64.86	$81.64
53-7072	Veterinarians	$29.95	$33.60	$39.56	$52.72	$91.15
13-1031	Environmental Science and Protection Technicians, Including Health	$14.57	$16.71	$22.19	$28.45	$33.37
13-1031	Environmental Engineers	$29.35	$35.47	$44.62	$56.00	$65.50
13-1031	Compliance Officers	$19.85	$26.72	$35.81	$44.51	$49.11
53-7063	Occupational Health and Safety Specialists	$21.70	$27.15	$35.34	$44.72	$52.99

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

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

In-Demand Foundational Skills
- Communications
- Management
- Sales
- Leadership
- Valid Driver's License

In-Demand Education Level*
- High School Diploma: 17.1%
- Associate Degree: 5.7%
- Bachelor's Degree: 35.5%
- Master's Degree: 7.9%

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

In-Demand Qualifications
- Certified Veterinary Technician
- Commercial Driver's License (CDL)
- Pesticide Applicator License
- Certified Arborist
- Certified Safety Professional

Employer Demand by City

Certified Veterinary Technician
Top Agriculture Certification

Top Posting Employers*

- Banfield Pet Hospital
- University of Michigan
- Petsmart, Inc.
- Oracle Corporation
- Care.com, Inc.
- Petco Inc
- The Davey Tree Expert Company
- VCA Inc.
- Brightview Companies, LLC
- Department of Labor

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

Job Postings by City

1. Detroit: 1,127 Postings
2. Ann Arbor: 681 Postings
3. Troy: 372 Postings
4. Auburn Hills: 178 Postings
5. Southfield: 176 Postings
6. Warren: 153 Postings
7. Livonia: 150 Postings
8. Novi: 136 Postings
9. Dearborn: 131 Postings
10. Flint: 127 Postings

Introduction

Jobs in the business and finance occupation group can be found in nearly every type of establishment throughout the region. These workers need strong mathematical and accounting abilities along with project management and planning skills. Workers in this occupation group are in high demand in the region, with 29,358 online postings reported for Q4 2019.
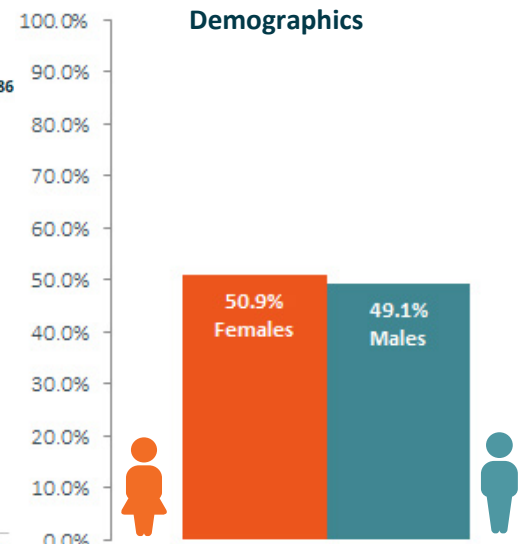
197,986
Business and Finance Workers
1.3% Increase from 2019

Employment Over Time
2001–2020

Worker Gender Demographics

50.9% Females
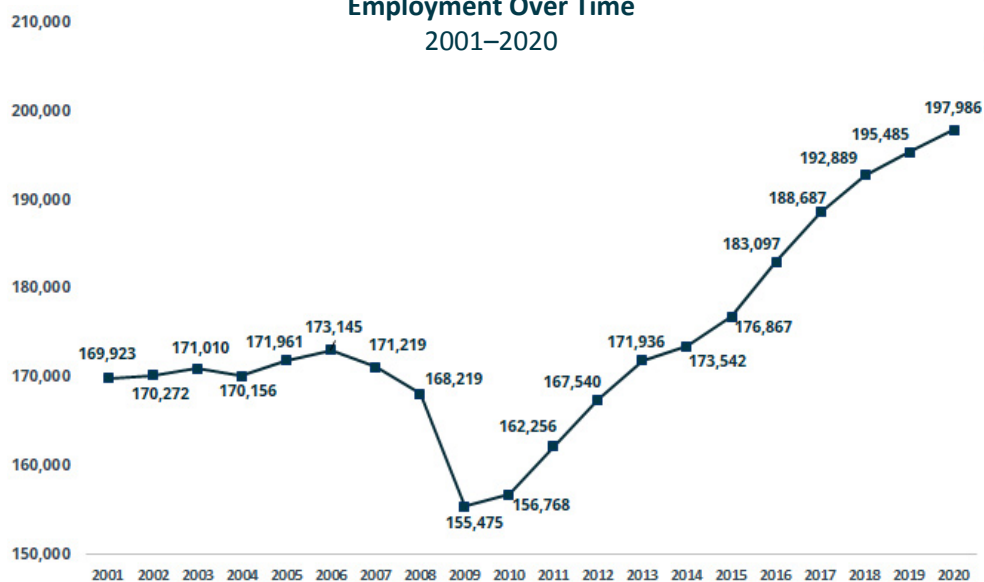
49.1% Males

Business and Finance Worker Demographics

According to the most recent Emsi data set available (2019), the business and finance occupation group is in some ways a relatively diverse occupation group with respect to its nearly 198,000 workers. Half the working population identify as female (50.9 percent), but 79.9 percent of workers identified as white, indicating much less diversity with respect to race than to gender. Only 5.2 percent of the working population in business and finance is under the age of 25, compared to 24.6 percent age 55 and older. In some ways this indicates an aging business and finance workforce, though it also reflects the consistent need for a bachelor's degree in these occupations.

Race and Ethnicity Demographics

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

Worker Age Demographics

Age 14-24
5.2%

Age 25-54
70.2%

Age 55+
24.6%

Data: Emsi | Analysis: Workforce Intelligence Network

**Business and Finance
Top Posted Jobs**
Q1 2020

Occupation	Postings
Accountants and Auditors	3,632
Marketing Managers	2,335
Management Analysts	2,191
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2,030
Insurance Sales Agents	2,012
Financial Managers	1,856
Market Research Analysts and Marketing Specialists	1,509
Securities, Commodities, and Financial Services Sales Agents	1,341
Business Operations Specialists, All Other	1,235
Human Resources Specialists	1,098
Public Relations Specialists	844
Buyers and Purchasing Agents	822
Financial Analysts	734
Training and Development Specialists	710
Sales Engineers	642
Loan Officers	598
Logisticians	492
Personal Financial Advisors	457
Public Relations and Fundraising Managers	424
Tax Preparers	419

Typical Entry Education
- High school diploma or equivalent
- Bachelor's degree

Top Posted Jobs: Q1 2020

Accountants and Auditors retained their spot as the top in-demand occupation through Q1 2020, with 3,632 postings. Marketing Managers (2,335 postings), Management Analysts (2,191 postings), and Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (2,030 postings) were also in high demand. Insurance Sales Agents, which require only a high school diploma for entry, rounded out the top five in-demand occupations with 2,012 postings.

Data: Emsi | Analysis: Workforce Intelligence Network

Business and Finance Wage Overview

Most business and finance related jobs offer high wages, providing a lucrative opportunity for job seekers willing to attain the necessary education. According to the Bureau of Labor Statistics (BLS), the top posted business and finance job, Accountants and Auditors, offers median hourly wages of $33.29, translating to annual earnings of approximately $69,200. All of the top business occupations offer median wages over $20 per hour, and most prefer a bachelor's degree for entry.

Wage Overview for Top Posted Business and Finance Jobs in Q1 2020

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

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

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

In-Demand Foundational Skills

- Communications
- Sales
- Management
- Leadership
- Customer Service

In-Demand Education Level*

- High School Diploma: 16.4%
- Associate Degree: 5.8%
- Bachelor's Degree: 56.4%
- Master's Degree: 13.6%

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

In-Demand Certifications

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

Employer Demand by City

56.4%

Of Business and Finance Occupations Require a Bachelor's Degree
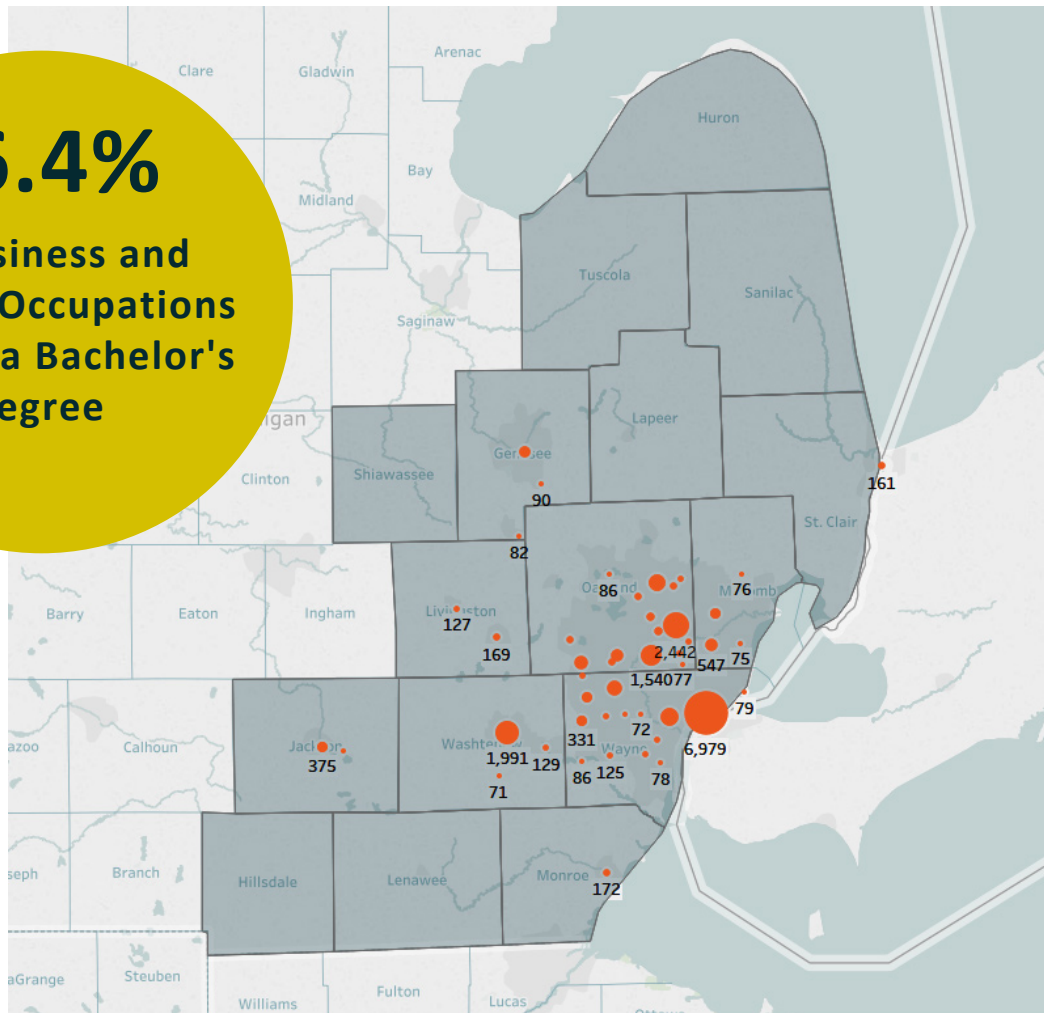
Top Posting Employers*

- H&R Block, Inc.
- Robert Half International Inc.
- National Agents Alliance
- Deloitte LLP
- Oracle Corporation
- Flagstar Bancorp, Inc.
- Allstate Corporation
- JPMorgan Chase & Co.
- Anthem, Inc.
- Bank of America Corporation

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

Job Postings by City

1. Detroit: 6,979 Postings
2. Troy: 2,442 Postings
3. Ann Arbor: 1,991 Postings
4. Southfield: 1,540 Postings
5. Dearborn: 1,162 Postings
6. Auburn Hills: 1,010 Postings
7. Livonia: 808 Postings
8. Novi: 670 Postings
9. Farmington Hills: 599 Postings
10. Warren: 547 Postings

Introduction

Jobs in the WIN construction occupation group are associated with the skilled trades, engineering, management, and planning. Many construction employers are slowly adopting online job search methods, so online job ads may not provide a complete picture of demand for these workers. Even so, it is an important and in-demand occupation group for southeast Michigan, with about 14,000 annual job openings and posting data provides a glimpse into employer needs.
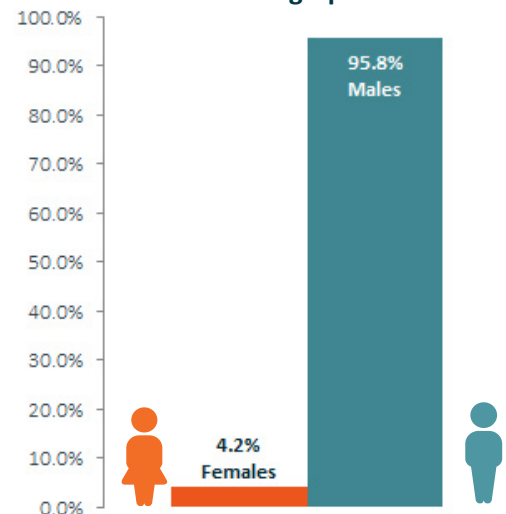
88,312
Construction Workers

1.8% Increase from 2019

Employment Over Time
2001–2020

Worker Gender Demographics

95.8% Males
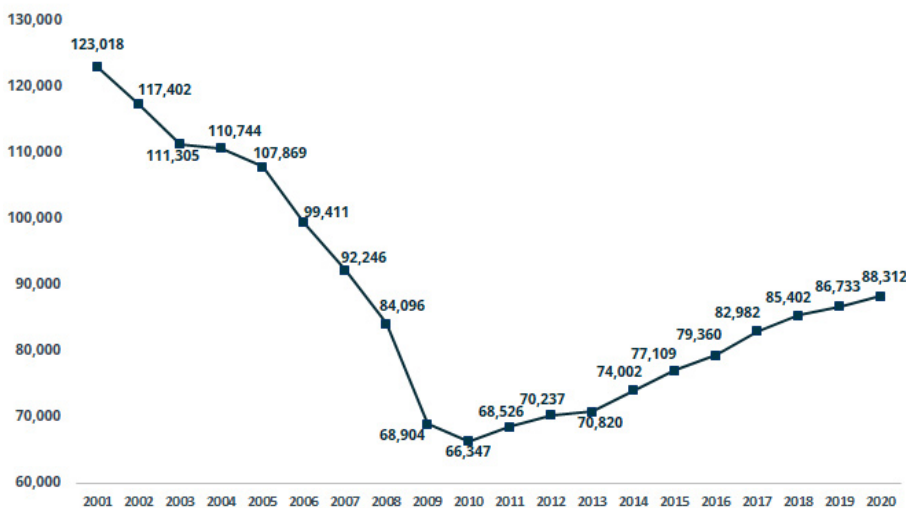
4.2% Females

Construction Worker Demographics

According to the most recent Emsi worker demographic data set available (2019), despite having over 88,000 workers, the workers in the construction occupation group are not very diverse. A large majority of workers are white males between the ages of 25 and 54. Only 4.2 percent of workers identified as female, and only 16 percent identified as race other than white. With just over ten percent of workers under the age of 25, this group has a slightly greater proportion of young workers than other groups.

Race and Ethnicity Demographics

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

Worker Age Demographics

Age 14-24 10.5%	Age 25-54 70.0%	Age 55+ 19.5%

Data: Emsi | Analysis: Workforce Intelligence Network

**Construction Top
Posted Jobs**
Q1 2020

Occupation	Postings
Construction Managers	909
Electricians	655
First-Line Supervisors of Construction Trades and Extraction Workers	614
Carpenters	448
Cost Estimators	387
Plumbers, Pipefitters, and Steamfitters	354
Construction Laborers	302
Construction and Building Inspectors	115
Painters, Construction and Maintenance	104
Cement Masons and Concrete Finishers	88
Highway Maintenance Workers	82
Surveyors	82
Roofers	73
Operating Engineers and Other Construction Equipment Operators	63
Sheet Metal Workers	58
Surveying and Mapping Technicians	32
Drywall and Ceiling Tile Installers	30
Carpet Installers	26
Glaziers	22
Structural Iron and Steel Workers	19

Typical Entry Education
- No formal educational credential
- High school diploma or equivalent
- Bachelor's degree

Top Posted Jobs: Q1 2020

Construction Managers remained the top-posted construction occupation during Q1 2020, with 909 postings. Other top posted jobs include Electricians (655 postings), First-Line Supervisors of Construction Trades and Extraction Workers (614 postings), Carpenters (448 postings), and Cost Estimators (387 postings).

Data: Emsi | Analysis: Workforce Intelligence Network

Construction Wage Overview

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

Wage Overview for Top Posted Construction Jobs in Q1 2020

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

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Subcontracting
- Construction Management
- Carpentry
- Project Schedules
- Estimators

In-Demand Foundational Skills

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

In-Demand Education Level*

- High School Diploma: 20.1%
- Associate Degree: 5.2%
- Bachelor's Degree: 20.9%
- 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)
- Journeyman Electrician
- Project Management Professional (PMP) Certification
- National Apprenticeship Certificate
- LEED Accredited Professional (AP)

Employer Demand by City

27.2%

Of Construction Postings Require Less Than 3 Years' Experience
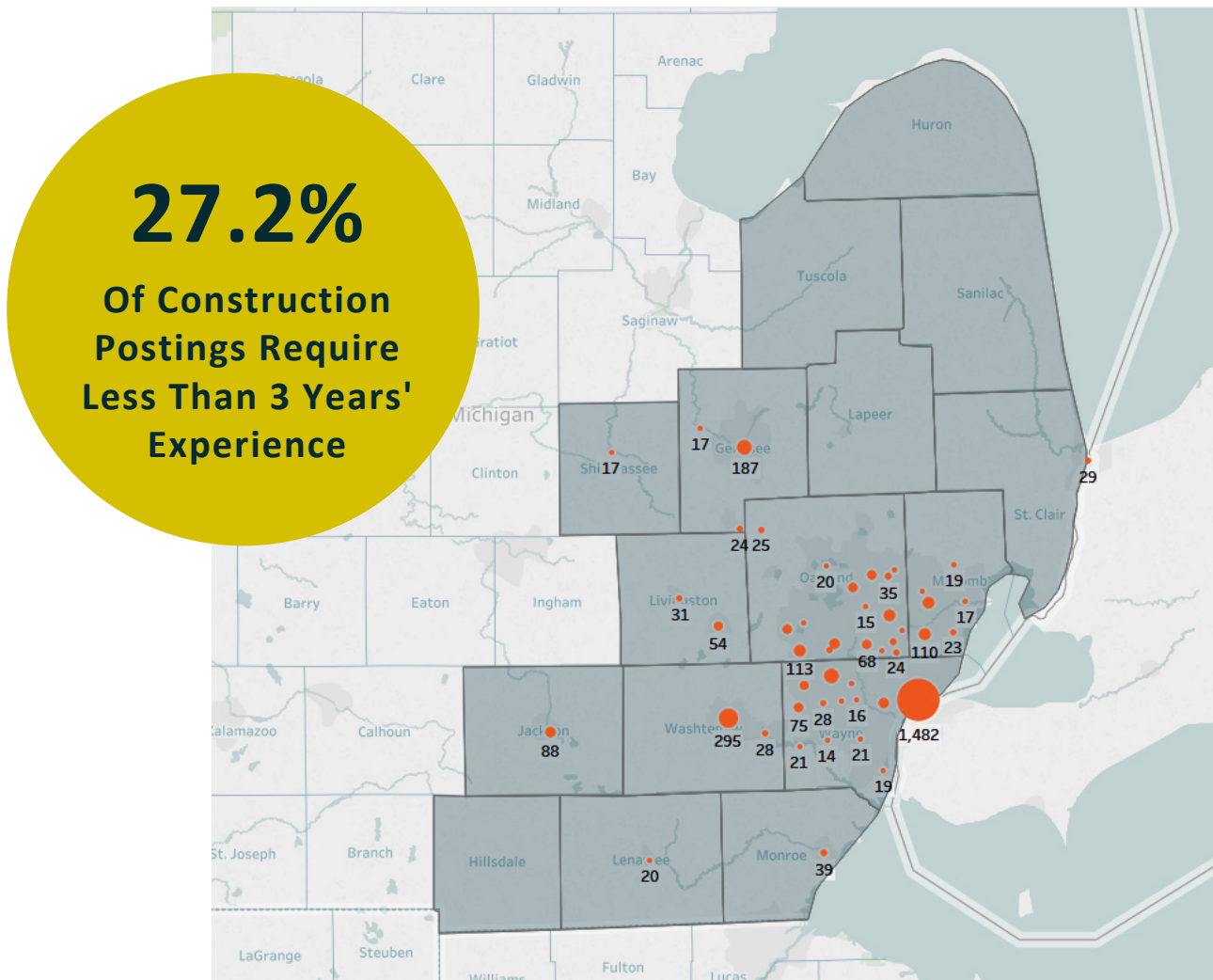
Top Posting Employers*

- Michael Page International, Inc.
- Thumbtack, Inc.
- Growing People and Companies
- Tradesmen International, LLC
- Army National Guard
- Aerotek, Inc.
- Walbridge Aldinger LLC
- Concrete Placement, Inc.
- HomeAdvisor, Inc.
- DTE Energy Company

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

Job Postings by City

1. Detroit: 1,482 Postings
2. Ann Arbor: 295 Postings
3. Flint: 187 Postings
4. Livonia: 171 Postings
5. Troy: 129 Postings
6. Novi: 113 Postings
7. Sterling Heights: 112 Postings
8. Warren: 110 Postings
9. Dearborn: 102 Postings
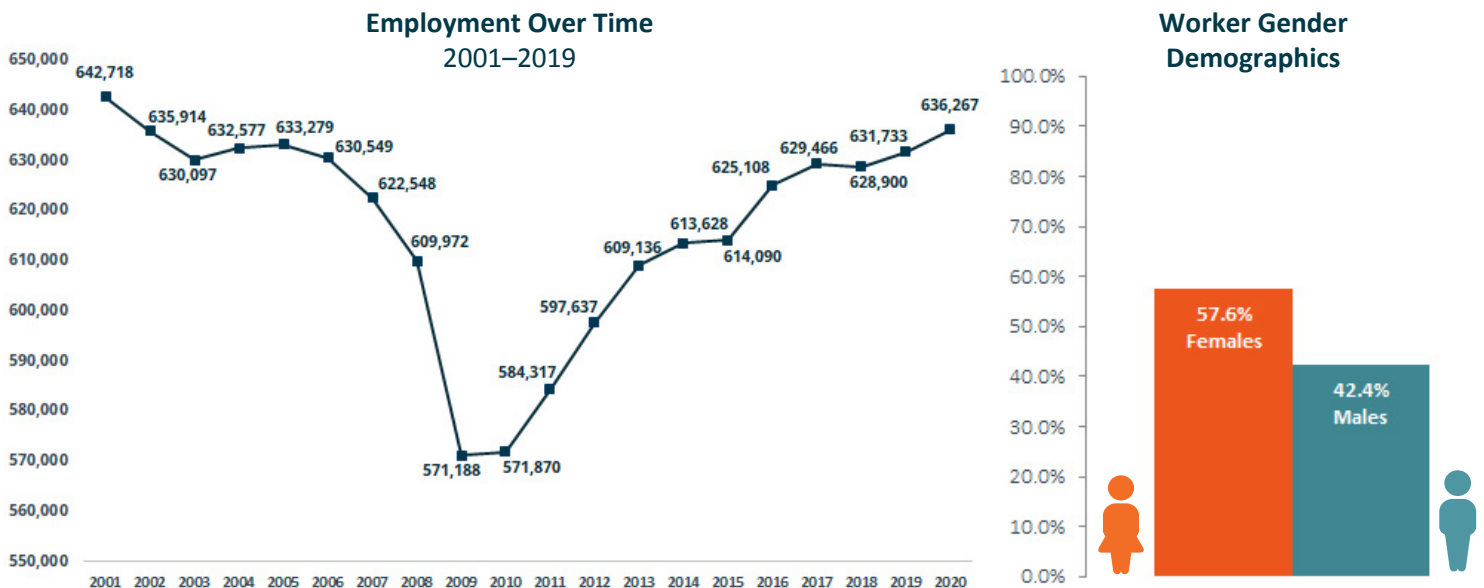10. Farmington Hills: 96 Postings

Introduction

The customer service group is the largest occupation group that WIN analyzes, both in terms of employment and online job postings. This group is very important to the region because it is often a leading indicator, being the first to grow when the economy expands and the first to contract in a downturn. As defined by WIN, this group encompasses all customer service occupations, with skills transferrable across the retail sector, the hotel industry, food and beverage service industry, call centers, and other areas.

636,267
Customer Service Workers
0.7% Increase from 2019

Employment Over Time 2001–2019

Year	Employment
2001	642,718
2002	635,914
2003	630,097
2003	632,577
2004	633,279
2006	630,549
2007	622,548
2008	609,972
2009	571,188
2010	571,870
2011	584,317
2012	597,637
2013	609,136
2014	613,628
2015	614,090
2016	625,108
2017	629,466
2018	628,900
2018	631,733
2020	636,267

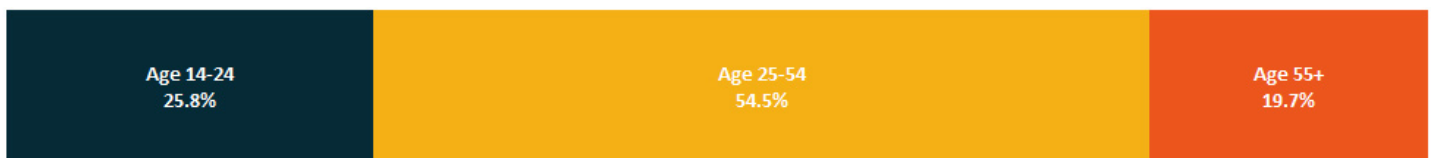### Worker Gender Demographics

57.6% Females

42.4% Males

Customer Service Worker Demographics

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

Race and Ethnicity Demographics
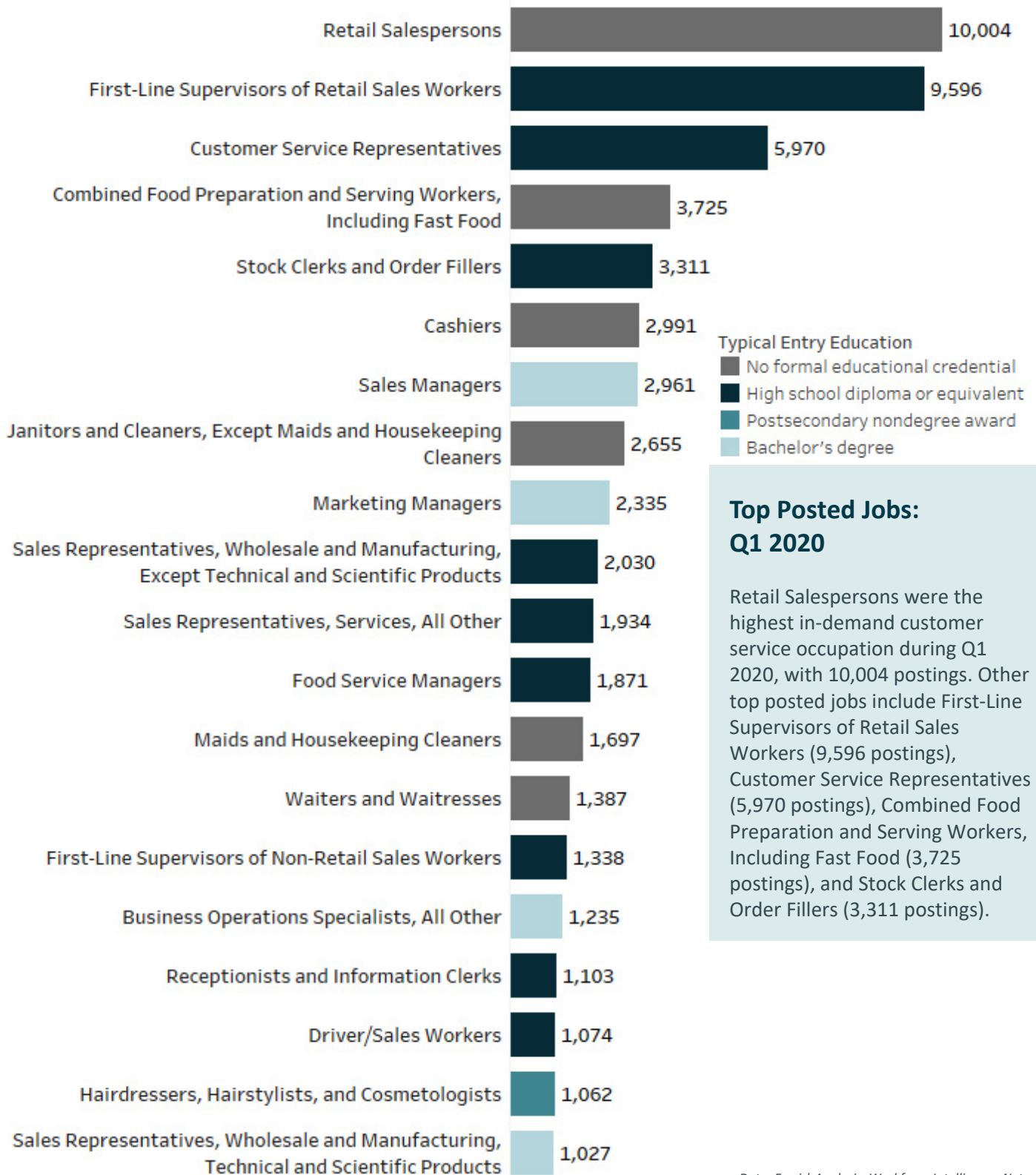
71.9% White | 17.9% Black or African American | 4.6% Hispanic or Latino

Worker Age Demographics

Age 14-24 25.8%	Age 25-54 54.5%	Age 55+ 19.7%

Data: Emsi | Analysis: Workforce Intelligence Network

**Customer Service
Top Posted Jobs**
Q1 2020

Occupation	Postings
Retail Salespersons	10,004
First-Line Supervisors of Retail Sales Workers	9,596
Customer Service Representatives	5,970
Combined Food Preparation and Serving Workers, Including Fast Food	3,725
Stock Clerks and Order Fillers	3,311
Cashiers	2,991
Sales Managers	2,961
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	2,655
Marketing Managers	2,335
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2,030
Sales Representatives, Services, All Other	1,934
Food Service Managers	1,871
Maids and Housekeeping Cleaners	1,697
Waiters and Waitresses	1,387
First-Line Supervisors of Non-Retail Sales Workers	1,338
Business Operations Specialists, All Other	1,235
Receptionists and Information Clerks	1,103
Driver/Sales Workers	1,074
Hairdressers, Hairstylists, and Cosmetologists	1,062
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	1,027

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

Top Posted Jobs: Q1 2020

Retail Salespersons were the highest in-demand customer service occupation during Q1 2020, with 10,004 postings. Other top posted jobs include First-Line Supervisors of Retail Sales Workers (9,596 postings), Customer Service Representatives (5,970 postings), Combined Food Preparation and Serving Workers, Including Fast Food (3,725 postings), and Stock Clerks and Order Fillers (3,311 postings).

Data: Emsi | Analysis: Workforce Intelligence Network

Customer Service Wage Overview

Despite being in high demand, most customer service-related occupations offer relatively low wages according to the Bureau of Labor Statistics (BLS). However, four of the top ten posted occupations report median wages over the state's median wage of $18.60 per hour, many of which are management roles requiring both education and experience. First-Line Supervisors of Retail Sales Workers earn a median hourly wage of $18.94 or an annual salary of about $39,400, and is a position open to top-posted job Retail Salespersons with interest in gaining additional experience and training.

Wage Overview for Top Posted Customer Service Jobs in Q1 2020

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

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

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

In-Demand Foundational Skills

- Sales
- Customer Service
- Management
- Communications
- Leadership

In-Demand Education Level*

- High School Diploma: 29.3%
- Associate Degree: 4.4%
- Bachelor's Degree: 16.3%
- Master's Degree: 2.3%

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

In-Demand Certifications

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

Employer Demand by City

29.3%

Of Customer Service Occupations Require A High School Diploma Or Equivalent
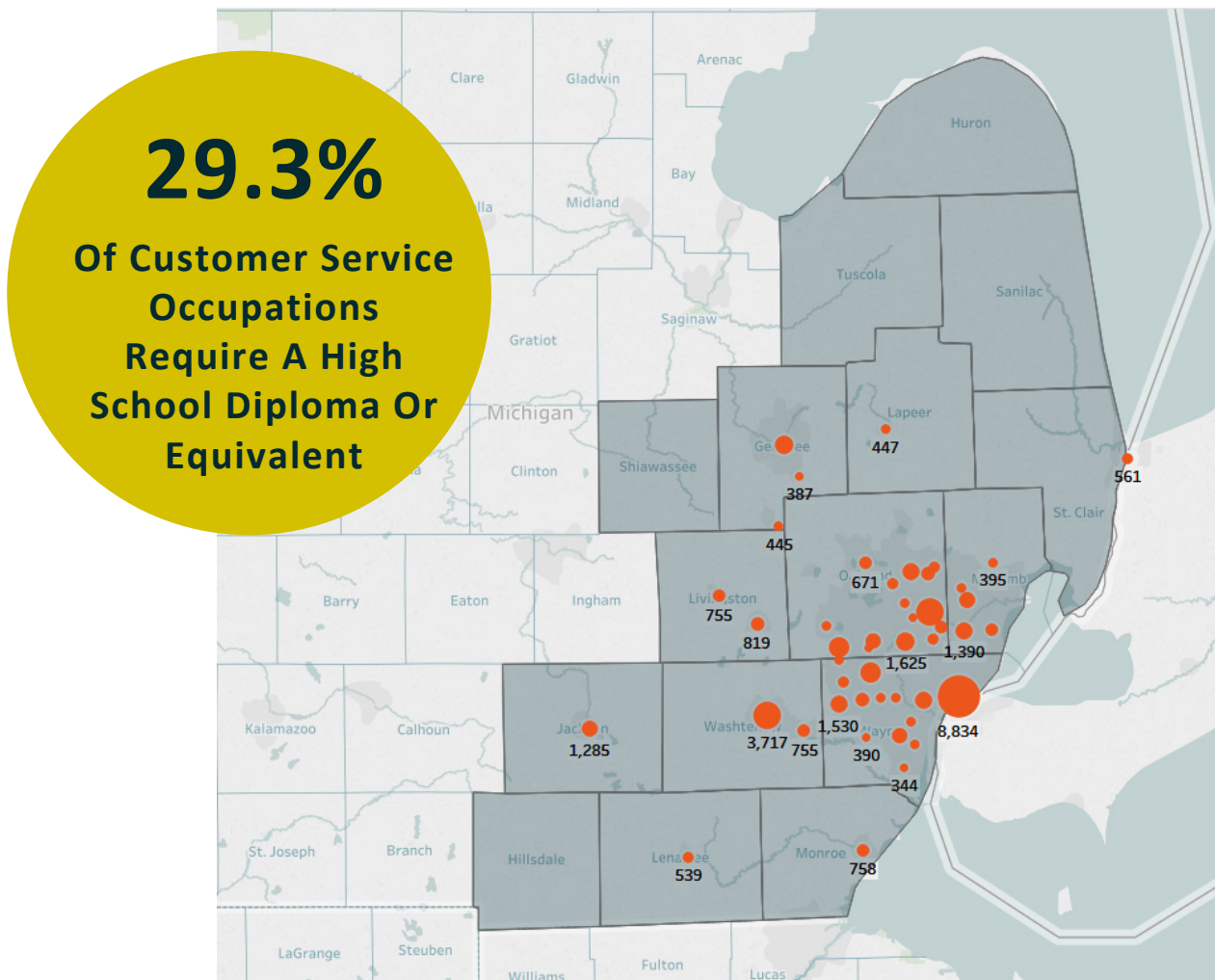
Top Posting Employers*

- Dollar General Corporation
- The Home Depot
- McDonald's Corporation
- CVS Health Corporation
- Taco Bell Corp
- Meijer, Inc.
- AutoZone, Inc.
- Shipt LLC
- Wal-Mart, Inc.
- The Kroger Co

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

Job Postings by City

1. Detroit: 8,834 Postings
2. Ann Arbor: 3,717 Postings
3. Troy: 3,682 Postings
4. Novi: 1,992 Postings
5. Livonia: 1,855 Postings
6. Flint: 1,702 Postings
7. Southfield: 1,625 Postings
8. Canton: 1,530 Postings
9. Auburn Hills: 1,517 Postings
10. Dearborn: 1,482 Postings

Introduction

Education-related jobs can be found both in the private and public sectors. Teachers and other education related workers are employed in public schools, private schools, and training institutions, and there are about 15,000 openings for these positions annually. Jobs in the education occupation group require a variety of skills and credentials dependent on the target age group and topic area for the educator. From elementary school teachers to college professors, educators are the backbone of training the future workforce.

129,901
Education Workers
416 Worker Decrease from 2019

Employment Over Time 2001–2019

Worker Gender Demographics

73.5% Females

26.5% Males
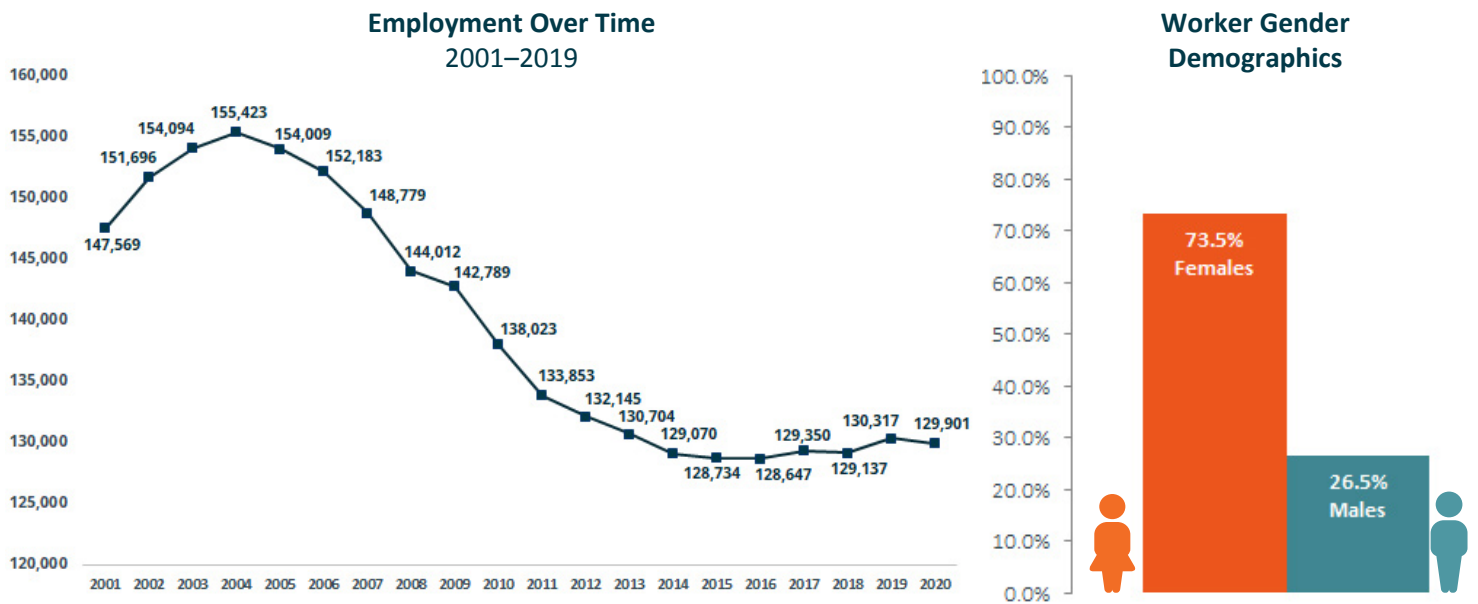
Education Worker Demographics

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

Race and Ethnicity Demographics

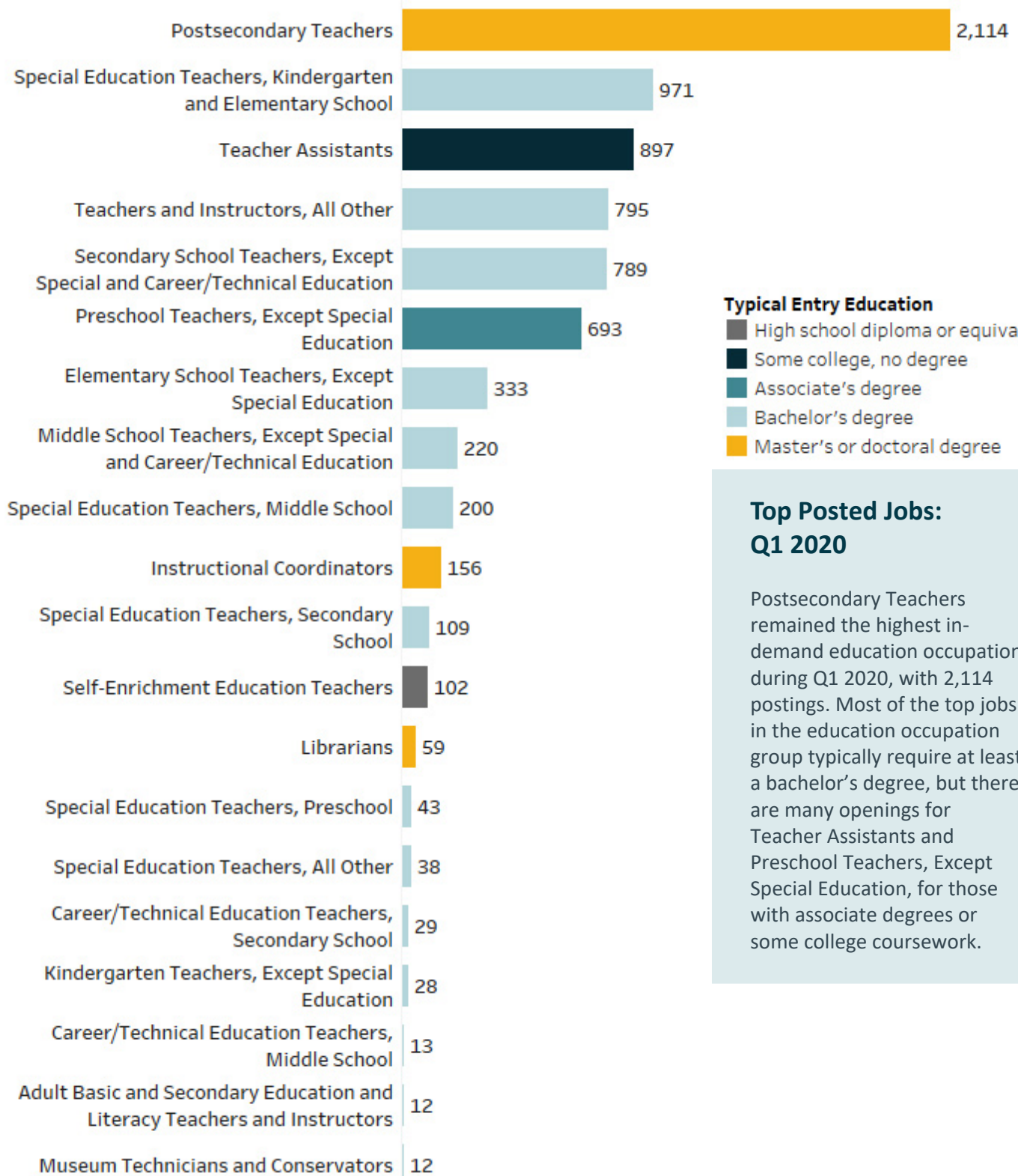**80.1% White | 10.9% Black or African-American | 4.6% Asian**

Worker Age Demographics

Age 14-24 9.7%	Age 25-54 64.4%	Age 55+ 25.9%

Data: Emsi | Analysis: Workforce Intelligence Network

**Education Top
Posted Jobs**
Q1 2020

Occupation	Postings
Postsecondary Teachers	2,114
Special Education Teachers, Kindergarten and Elementary School	971
Teacher Assistants	897
Teachers and Instructors, All Other	795
Secondary School Teachers, Except Special and Career/Technical Education	789
Preschool Teachers, Except Special Education	693
Elementary School Teachers, Except Special Education	333
Middle School Teachers, Except Special and Career/Technical Education	220
Special Education Teachers, Middle School	200
Instructional Coordinators	156
Special Education Teachers, Secondary School	109
Self-Enrichment Education Teachers	102
Librarians	59
Special Education Teachers, Preschool	43
Special Education Teachers, All Other	38
Career/Technical Education Teachers, Secondary School	29
Kindergarten Teachers, Except Special Education	28
Career/Technical Education Teachers, Middle School	13
Adult Basic and Secondary Education and Literacy Teachers and Instructors	12
Museum Technicians and Conservators	12

Typical Entry Education
- High school diploma or equivalent
- Some college, no degree
- Associate's degree
- Bachelor's degree
- Master's or doctoral degree

Top Posted Jobs: Q1 2020

Postsecondary Teachers remained the highest in-demand education occupation during Q1 2020, with 2,114 postings. Most of the top jobs in the education occupation group typically require at least a bachelor's degree, but there are many openings for Teacher Assistants and Preschool Teachers, Except Special Education, for those with associate degrees or some college coursework.

Data: Emsi | Analysis: Workforce Intelligence Network

Education Wage Overview

Many education-related jobs, particularly permanent positions that require teaching older students, offer competitive median wages with growth potential. These positions provide an excellent opportunity for job seekers willing to attain the necessary credentials and experience. According to the Bureau of Labor Statistics (BLS), six of the top ten posted education jobs offer median wages of over $30 per hour. The top posted job, Postsecondary Teachers, offers a median wage of $32.07 hourly, translating to annual earnings of about $66,700.

Wage Overview for Top Posted Education Jobs in Q1 2020

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

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Special Education
- Lesson Planning
- Child Development
- Cardiopulmonary Resuscitation (CPR)
- Preschool Education

In-Demand Foundational Skills

- Teaching
- Communications
- Leadership
- Research
- Mentorship

In-Demand Education Level*

- High School Diploma: 20.6%
- Associate Degree: 9.5%
- Bachelor's Degree: 34.4%
- Master's Degree: 12.5%

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

In-Demand Certifications

- NHA Certified
- Teaching English As A Foreign Language
- Math Endorsement
- Medical License
- Certificate in English Language Teaching to Adults (CELTA)

Employer Demand by City

Special Education and Lesson Planning: In-Demand Education Skills

Top Posting Employers*

- Ef Education First, Inc.
- Wayne County Schools
- University of Michigan
- Teach For America, Inc.
- VIPKID
- Soliant Health, Inc
- Kindercare Learning Centers
- Sunbelt Staffing, LLC
- Varsity Tutors LLC
- Fenton Area Public Schools

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

Job Postings by City

1. Detroit: 1,240 Postings
2. Ann Arbor: 624 Postings
3. Flint: 374 Postings
4. Dearborn: 280 Postings
5. Troy: 245 Postings
6. Warren: 206 Postings
7. Rochester: 187 Postings
8. Canton: 186 Postings
9. Ypsilanti: 166 Postings
10. Livonia: 146 Postings

Introduction

Energy-related occupations encompass jobs in engineering, science, mining, and extraction. Workers in this field have a range of skills all related to keeping businesses and homes powered. Energy companies employ workers in a variety of occupations, many of which are also included in other WIN occupation groups. Posting data referenced in this section pertain only to job postings from energy-related businesses, while employment and wage data apply for these workers in every industry.
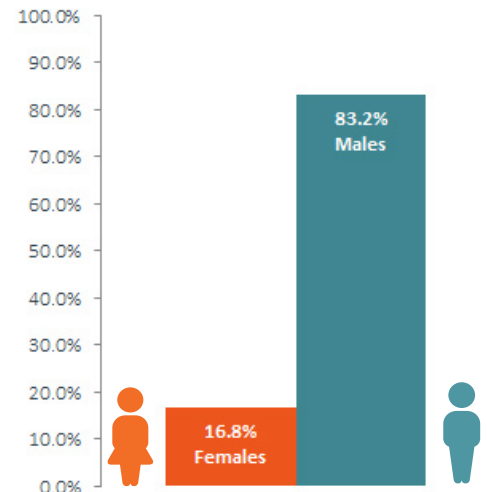
219,303
Energy Workers

1.8% Increase from 2019

Employment Over Time 2001–2019

Worker Gender Demographics

83.2% Males
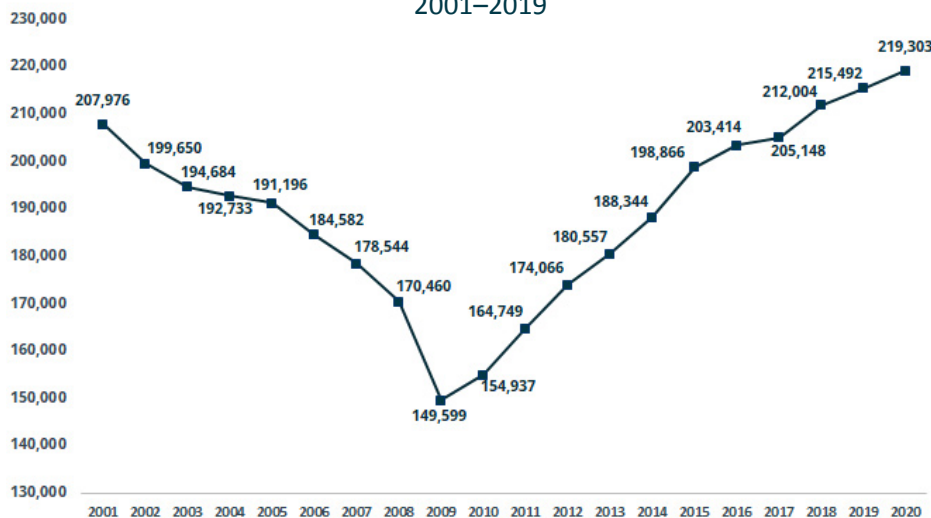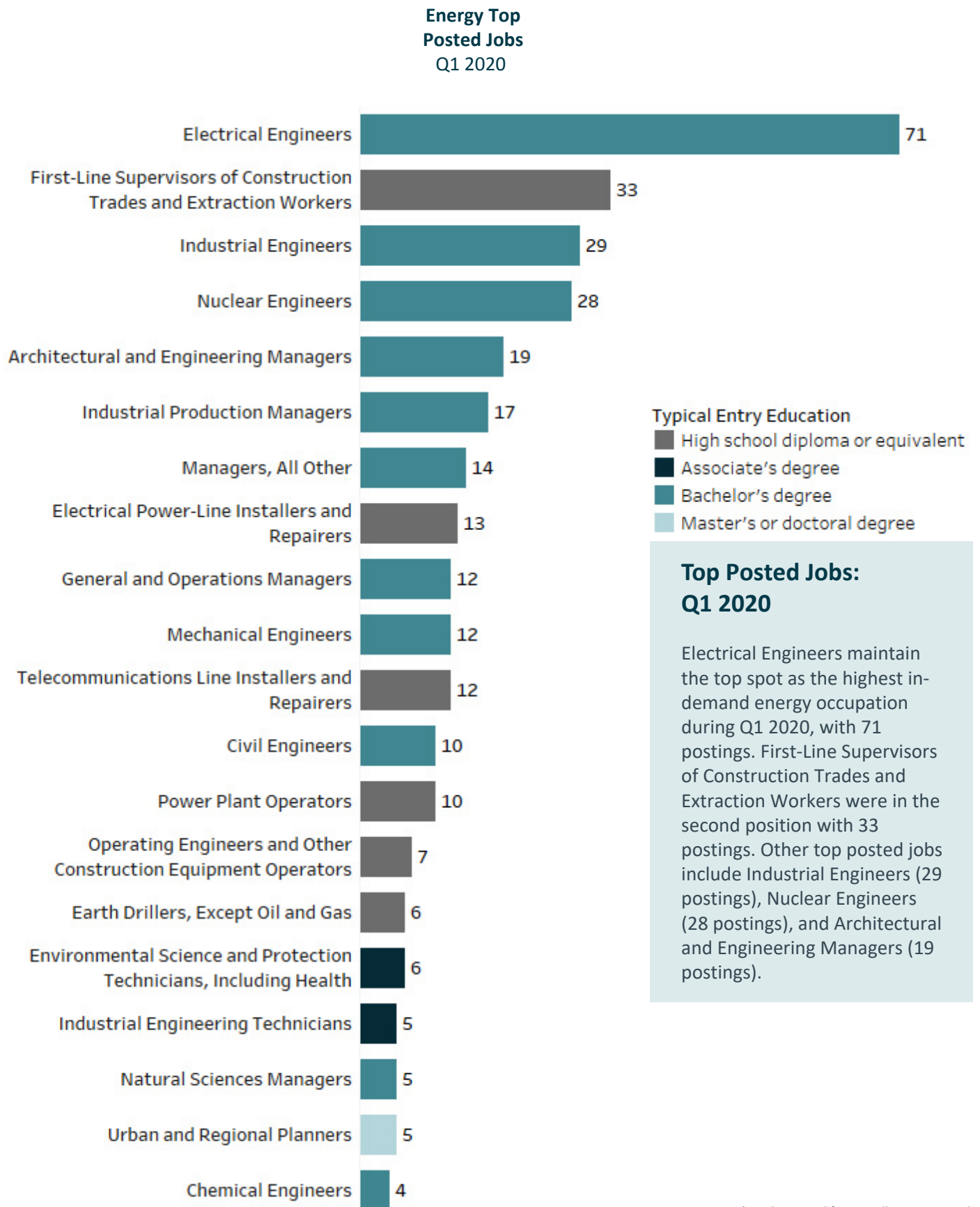
16.8% Females

Energy Worker Demographics

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

Race and Ethnicity Demographics

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

Worker Age Demographics

Age 14-24 5.4%	Age 25-54 70.3%	Age 55+ 24.3%

Data: Emsi | Analysis: Workforce Intelligence Network

**Energy Top
Posted Jobs**
Q1 2020

Occupation	Postings
Electrical Engineers	71
First-Line Supervisors of Construction Trades and Extraction Workers	33
Industrial Engineers	29
Nuclear Engineers	28
Architectural and Engineering Managers	19
Industrial Production Managers	17
Managers, All Other	14
Electrical Power-Line Installers and Repairers	13
General and Operations Managers	12
Mechanical Engineers	12
Telecommunications Line Installers and Repairers	12
Civil Engineers	10
Power Plant Operators	10
Operating Engineers and Other Construction Equipment Operators	7
Earth Drillers, Except Oil and Gas	6
Environmental Science and Protection Technicians, Including Health	6
Industrial Engineering Technicians	5
Natural Sciences Managers	5
Urban and Regional Planners	5
Chemical Engineers	4

Typical Entry Education
- High school diploma or equivalent
- Associate's degree
- Bachelor's degree
- Master's or doctoral degree

Top Posted Jobs: Q1 2020

Electrical Engineers maintain the top spot as the highest in-demand energy occupation during Q1 2020, with 71 postings. First-Line Supervisors of Construction Trades and Extraction Workers were in the second position with 33 postings. Other top posted jobs include Industrial Engineers (29 postings), Nuclear Engineers (28 postings), and Architectural and Engineering Managers (19 postings).

Data: Emsi | Analysis: Workforce Intelligence Network

Energy Wage Overview

The demand for engineers and highly specialized trades in the energy field create lucrative opportunities for job seekers willing to achieve the education or training related to these jobs. Each of the top ten energy occupations have median wages over $30 per hour. According to the Bureau of Labor Statistics (BLS), the top posted energy job, Electrical Engineers, offers a median hourly wage of $44.64, or annual earnings of approximately $93,000. Technician and construction-focused positions related to energy generally have shorter term educational requirements than engineers and pay somewhat higher than similar occupations in other industries.

Wage Overview for Top Posted Energy Jobs in Q1 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
13-1031	Electrical Engineers	$29.87	$35.92	$44.64	$54.53	$62.78
13-1031	First-Line Supervisors of Construction Trades and Extraction Workers	$19.20	$26.02	$32.93	$43.21	$51.41
53-7061	Industrial Engineers	$30.91	$36.28	$44.44	$53.69	$61.27
53-7063	Nuclear Engineers	$36.95	$42.98	$49.04	$55.95	$61.86
11-9041	Architectural and Engineering Managers	$46.09	$54.16	$64.15	$76.55	$91.66
53-7061	Industrial Production Managers	$35.47	$44.48	$56.39	$71.00	$87.37
53-7063	Managers, All Other	$29.66	$37.08	$48.57	$59.82	$73.99
13-1031	Electrical Power-Line Installers and Repairers	$20.63	$28.20	$36.14	$43.67	$52.02
53-7061	General and Operations Managers	$21.78	$33.71	$52.86	$82.24	$115.87
53-7063	Mechanical Engineers	$30.21	$35.72	$44.40	$54.95	$63.76

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Electrical Engineering
- Customer Satisfaction
- Corrective and Preventive Action (CAPA)
- Project Management
- Chemistry

In-Demand Foundational Skills

- Communications
- Management
- Problem Solving
- Operations
- Presentations

In-Demand Education Level*

- High School Diploma: 31.1%
- Associate Degree: 16.1%
- Bachelor's Degree: 61.5%
- Master's Degree: 20.8%

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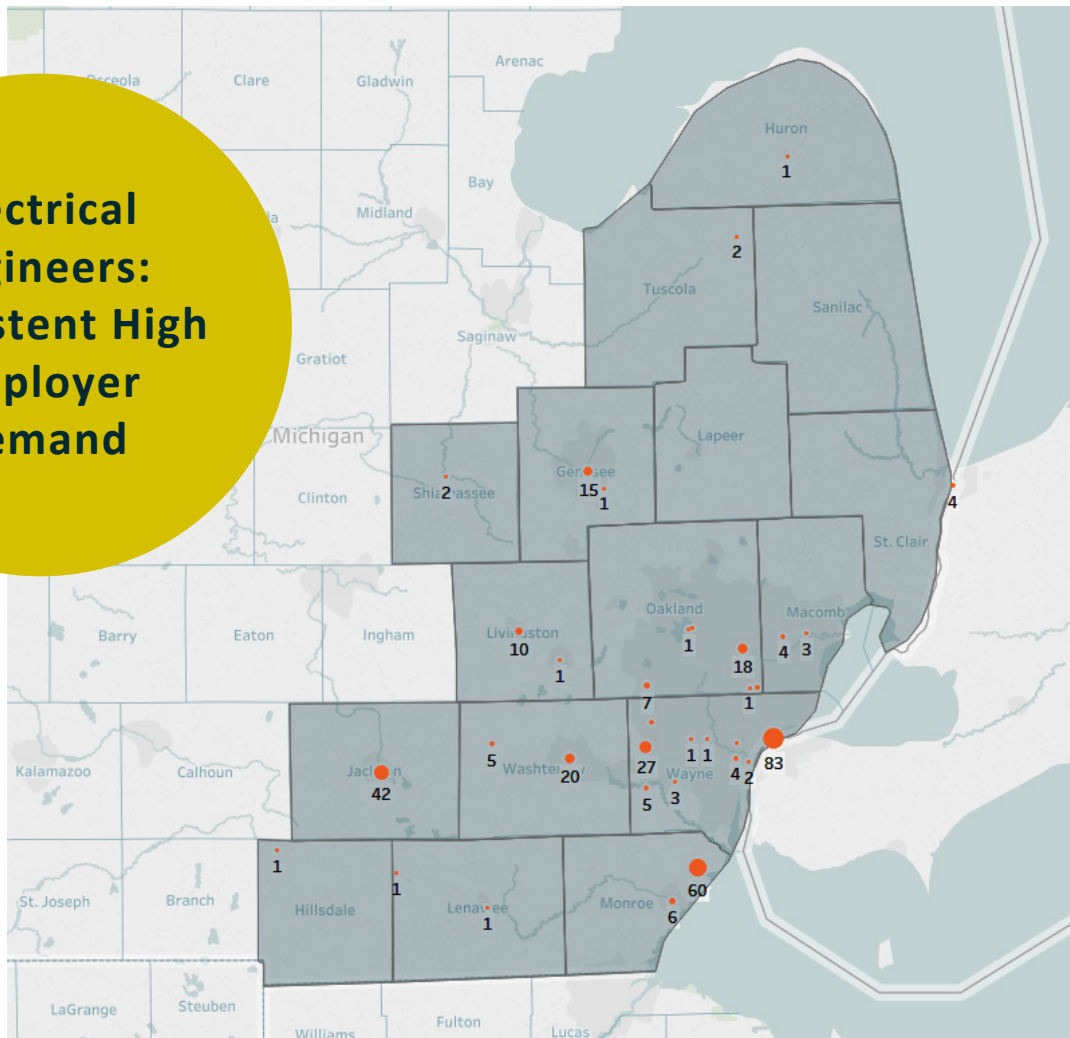
In-Demand Certifications

- Commercial Driver's License (CDL)
- Journeyman Lineman
- Operator Certification
- Tanker Endorsement
- Licensed Professional Engineer

Employer Demand by City

**Electrical Engineers: Consistent High Employer Demand**

Top Posting Employers*

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

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

Job Postings by City

1. Detroit: 83 Postings
2. Newport: 60 Postings
3. Jackson: 42 Postings
4. Canton: 27 Postings
5. Southfield: 20 Postings
6. Ann Arbor: 18 Postings
7. Flint: 15 Postings
8. Howell: 10 Postings
9. Clinton Township: 8 Postings
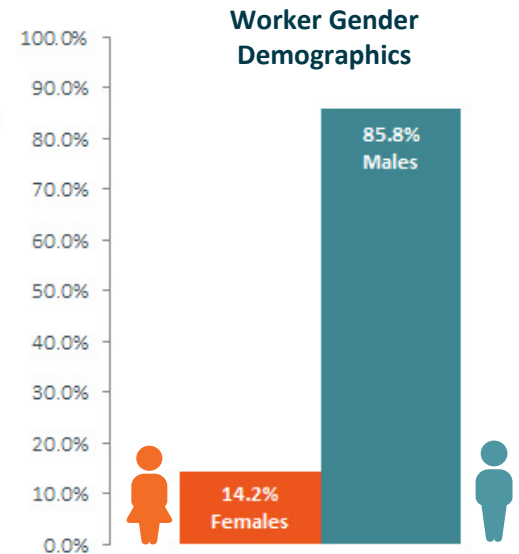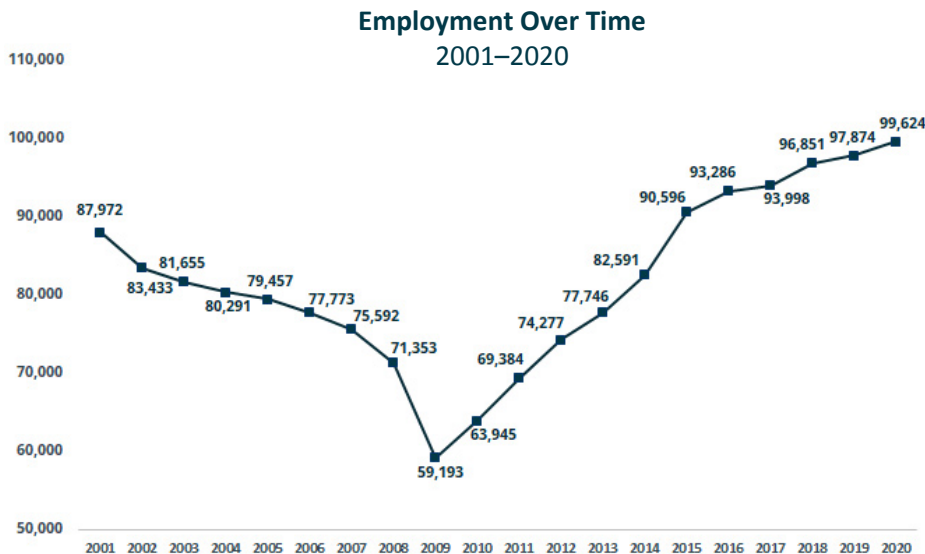10. Novi: 7 Postings
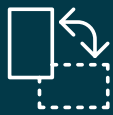
Introduction

Jobs in the manufacturing industry can range from assembly and production, to skilled trades and technicians, designers and engineers, and even computer-related occupations such as software development. Demand for engineers in the region has been consistent, and employment has been growing quickly. There are about 8,500 openings annually for engineers in southeast Michigan.

99,624
Engineering Workers
1.8% Increase from 2019

Employment Over Time
2001–2020

Year	Employment
2001	87,972
2002	83,433
2003	81,655
2004	80,291
2005	79,457
2006	77,773
2007	75,592
2008	71,353
2009	59,193
2010	63,945
2011	69,384
2012	74,277
2013	77,746
2014	82,591
2015	90,596
2016	93,286
2017	93,998
2018	96,851
2019	97,874
2020	99,624

Worker Gender Demographics

85.8% Males

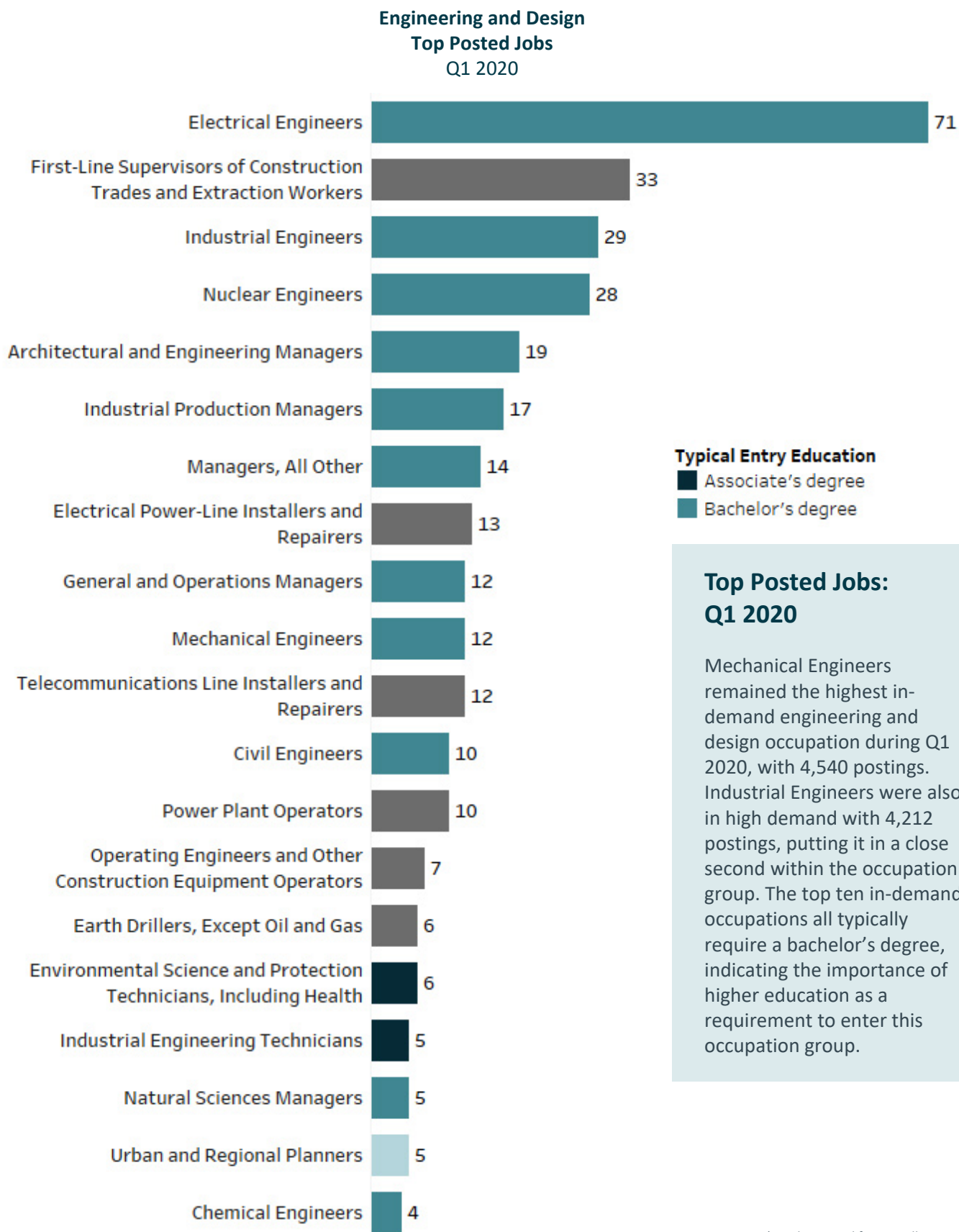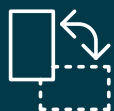14.2% Females

Engineering and Design Worker Demographics

According to the most recent Emsi data set available (2019), the nearly 100,000 workers in the engineering and design group are not particularly diverse. Just 5.4 percent of the related workforce is under 25, likely due to the consistently high educational requirements. Fourteen percent of current workers are female, and only 22 percent identify as a race other than white; as the labor force overall continues to change, this is one field that could benefit from seeking more diverse talent.
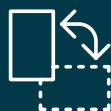
Race and Ethnicity Demographics

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

Worker Age Demographics

Age 14-24 5.4%	Age 25-54 70.3%	Age 55+ 24.3%

Data: Emsi | Analysis: Workforce Intelligence Network

**Engineering and Design
Top Posted Jobs**
Q1 2020

Occupation	Postings
Electrical Engineers	71
First-Line Supervisors of Construction Trades and Extraction Workers	33
Industrial Engineers	29
Nuclear Engineers	28
Architectural and Engineering Managers	19
Industrial Production Managers	17
Managers, All Other	14
Electrical Power-Line Installers and Repairers	13
General and Operations Managers	12
Mechanical Engineers	12
Telecommunications Line Installers and Repairers	12
Civil Engineers	10
Power Plant Operators	10
Operating Engineers and Other Construction Equipment Operators	7
Earth Drillers, Except Oil and Gas	6
Environmental Science and Protection Technicians, Including Health	6
Industrial Engineering Technicians	5
Natural Sciences Managers	5
Urban and Regional Planners	5
Chemical Engineers	4

Typical Entry Education
■ Associate's degree
■ Bachelor's degree

Top Posted Jobs: Q1 2020

Mechanical Engineers remained the highest in-demand engineering and design occupation during Q1 2020, with 4,540 postings. Industrial Engineers were also in high demand with 4,212 postings, putting it in a close second within the occupation group. The top ten in-demand occupations all typically require a bachelor's degree, indicating the importance of higher education as a requirement to enter this occupation group.

Data: Emsi | Analysis: Workforce Intelligence Network

Engineering and Design Wage Overview

Most engineering and design related jobs offer high wages, providing a lucrative opportunity to job seekers willing to meet the minimum education requirements related to these jobs. Median wages are near $40 per hour across the group, and the top posted engineering and design job, Mechanical Engineers, offers a median hourly wage of $44.40. This reflects an annual salary of approximately $92,000 according to the Bureau of Labor Statistics (BLS).

Wage Overview for Top Posted Engineering and Design Jobs in Q1 2020

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

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

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

In-Demand Foundational Skills

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

In-Demand Education Level*

- High School Diploma: 5.3%
- Associate Degree: 5.5%
- Bachelor's Degree: 66.6%
- 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
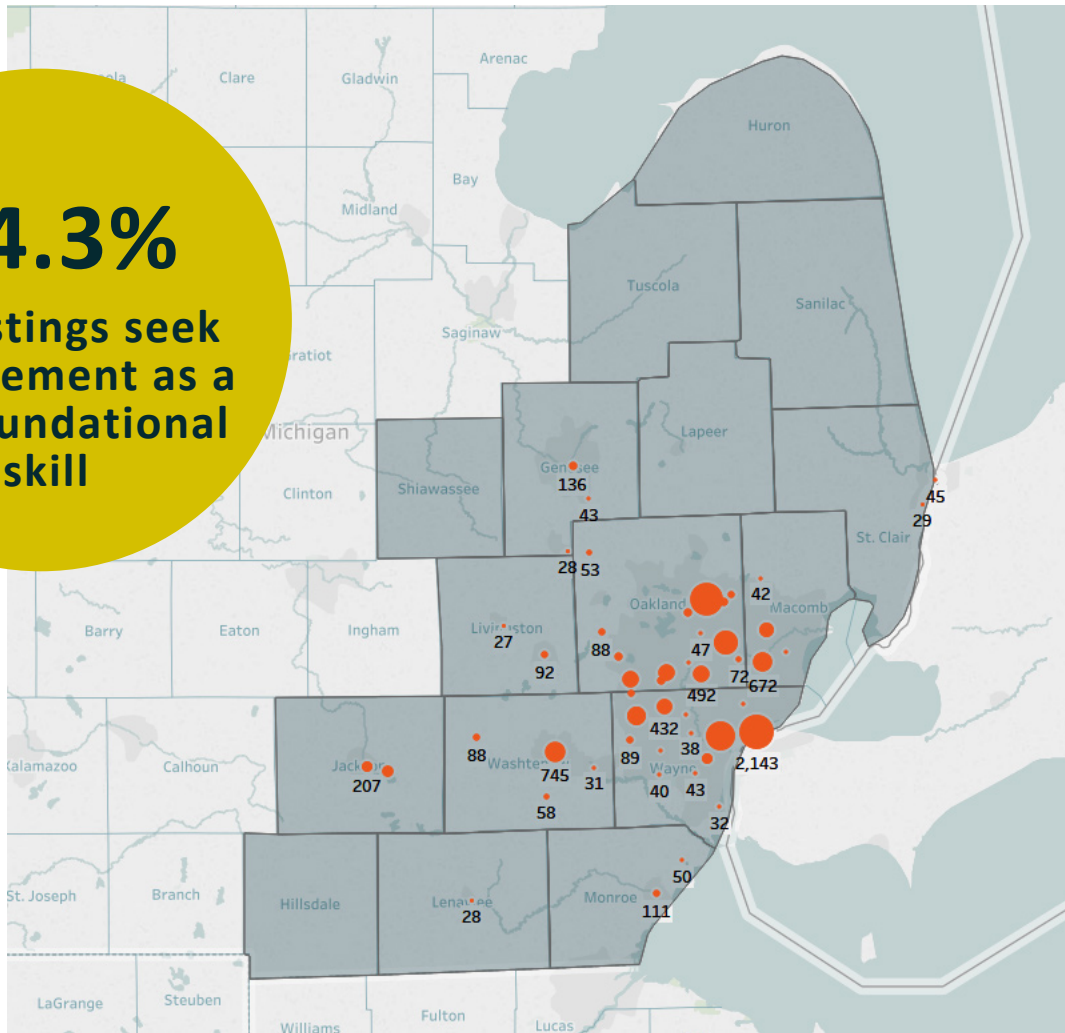
In-Demand Certifications

- Professional Engineer
- Six Sigma Green Belt Certification
- Licensed Professional Engineer
- Six Sigma Black Belt Certification
- Certified Quality Engineer
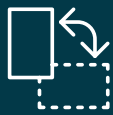
Employer Demand by City

24.3%

of postings seek management as a top foundational skill

Top Posting Employers*

- Ford Motor Company
- FCA US LLC
- General Motors Company
- Advantage Resourcing
- Gtech Services, Inc
- ALTAIR ENGINEERING, INC.
- Wilson, Jeff Chrysler Automobiles, Inc
- Growing People and Companies
- Cynet Systems Inc.
- Rivian Automotive, Inc

Job Postings by City

- Detroit: 2,143 Postings
- Auburn Hills: 1,943 Postings
- Dearborn: 1,519 Postings
- Troy: 1,038 Postings
- Ann Arbor: 745 Postings
- Warren: 672 Postings
- Plymouth: 631 Postings
- Novi: 527 Postings
- Farmington Hills: 518 Postings
- Southfield: 492 Postings

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

Introduction

WIN's health care occupation group includes jobs related to health care support and practitioners. Employment in this group has been consistently growing, more health care workers needed to care for Michigan's aging population and in response to regulatory and other changes. Registered nurses are routinely the most in-demand job in this group. Annually, there are about 23,600 job openings for these positions, and this is projected to continue increasing.
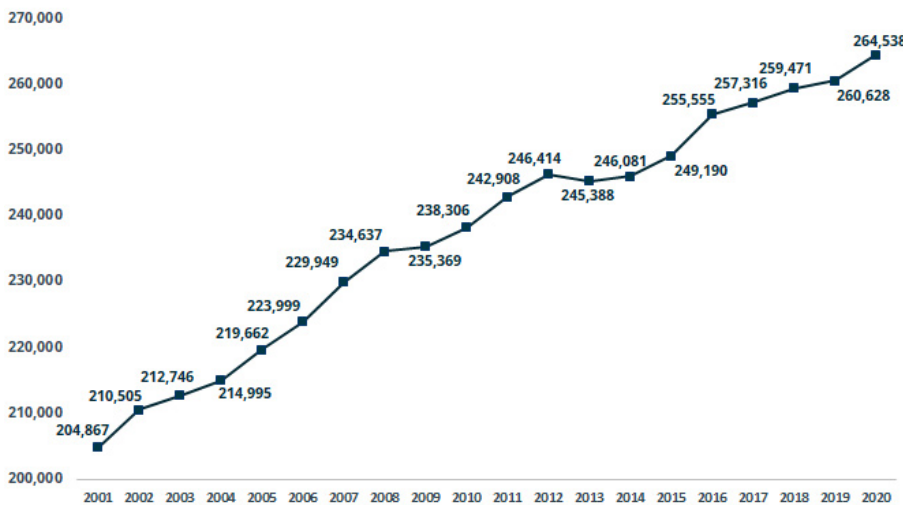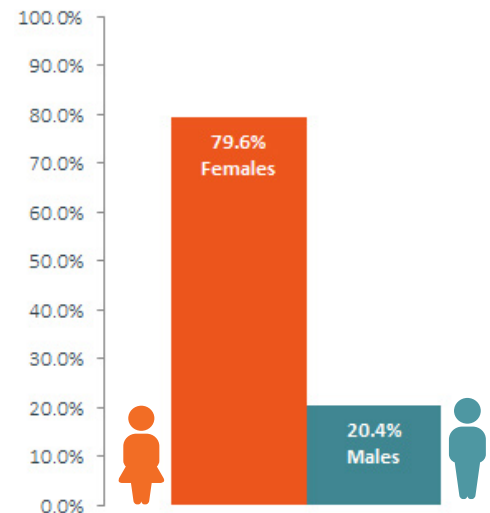
264,538
Health Care Workers
1.5% Increase from 2018

Employment Over Time
2001–2019

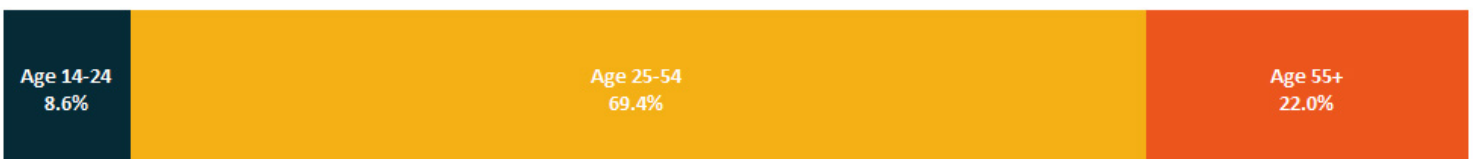**Worker Gender Demographics**

79.6% Females

20.4% Males

Health Care Worker Demographics

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

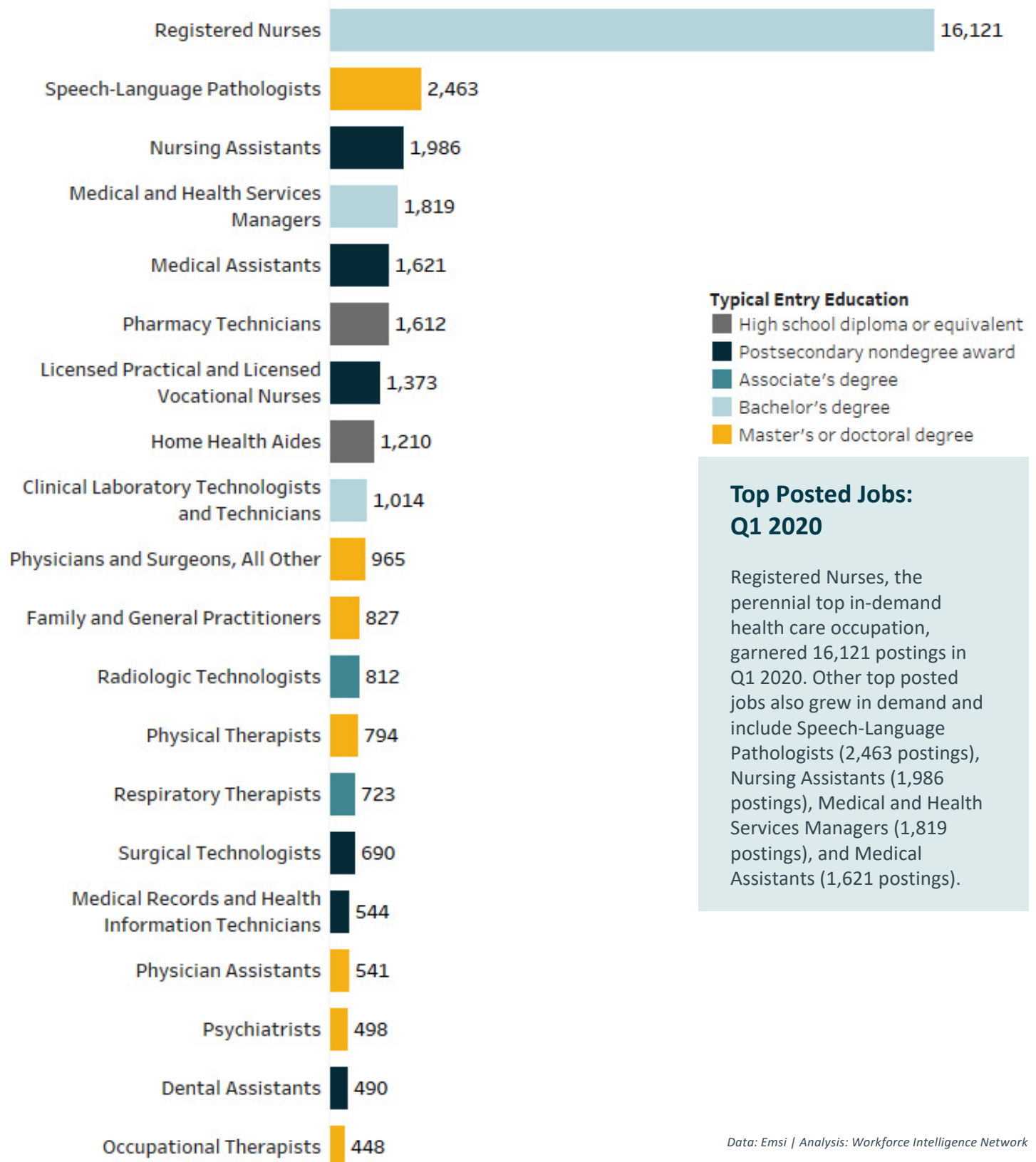**Race and Ethnicity Demographics**

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

Worker Age Demographics

Age 14-24 8.6%	Age 25-54 69.4%	Age 55+ 22.0%

Data: Emsi | Analysis: Workforce Intelligence Network

**Health Care Top
Posted Jobs**
Q1 2020

Occupation	Postings
Registered Nurses	16,121
Speech-Language Pathologists	2,463
Nursing Assistants	1,986
Medical and Health Services Managers	1,819
Medical Assistants	1,621
Pharmacy Technicians	1,612
Licensed Practical and Licensed Vocational Nurses	1,373
Home Health Aides	1,210
Clinical Laboratory Technologists and Technicians	1,014
Physicians and Surgeons, All Other	965
Family and General Practitioners	827
Radiologic Technologists	812
Physical Therapists	794
Respiratory Therapists	723
Surgical Technologists	690
Medical Records and Health Information Technicians	544
Physician Assistants	541
Psychiatrists	498
Dental Assistants	490
Occupational Therapists	448

Typical Entry Education
- High school diploma or equivalent
- Postsecondary nondegree award
- Associate's degree
- Bachelor's degree
- Master's or doctoral degree

Top Posted Jobs: Q1 2020

Registered Nurses, the perennial top in-demand health care occupation, garnered 16,121 postings in Q1 2020. Other top posted jobs also grew in demand and include Speech-Language Pathologists (2,463 postings), Nursing Assistants (1,986 postings), Medical and Health Services Managers (1,819 postings), and Medical Assistants (1,621 postings).

Data: Emsi | Analysis: Workforce Intelligence Network

Health Care Wage Overview

Wages in the high-demand health care field tend to scale with both education and experience. The health care occupation group offers a relatively broad array of entry requirements and a high volume of jobs are open to candidates with less than a bachelor's degree. However, most of the top-posted jobs that require less than a bachelor's degree pay under than the state's median wage of $18.60 per hour. Registered Nurses, the top posted health care job, offers a median hourly wage of $35.31 per hour or annual salary of about $73,500 according to the Bureau of Labor Statistics (BLS).

Wage Overview for Top Posted Health Care Jobs in Q1 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
53-7072	Registered Nurses	$26.81	$30.63	$35.31	$40.12	$46.97
53-7072	Speech-Language Pathologists	$27.02	$32.03	$37.71	$46.85	$65.81
53-7063	Nursing Assistants	$11.45	$12.91	$14.51	$16.65	$18.73
53-7063	Medical and Health Services Managers	$27.37	$34.18	$46.16	$62.33	$93.45
53-7063	Medical Assistants	$12.36	$13.55	$15.46	$18.06	$20.22
53-7071	Pharmacy Technicians	$10.48	$12.42	$15.56	$18.96	$23.12
53-7062	Licensed Practical and Licensed Vocational Nurses	$20.01	$22.06	$25.25	$28.32	$30.46
53-7061	Home Health Aides	$9.45	$9.91	$11.15	$13.01	$14.99
13-1031	Clinical Laboratory Technologists and Technicians	$13.01	$16.00	$23.24	$31.07	$36.60
53-7071	Physicians and Surgeons, All Other	$22.88	$29.46	$69.41	$107.50	$134.85

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

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

In-Demand Foundational Skills

- Communications
- Management
- Customer Service
- Leadership
- Operations

In-Demand Education Level*

- High School Diploma: 18.5%
- Associate Degree: 14.6%
- Bachelor's Degree: 17.5%
- Master's Degree: 8.6%

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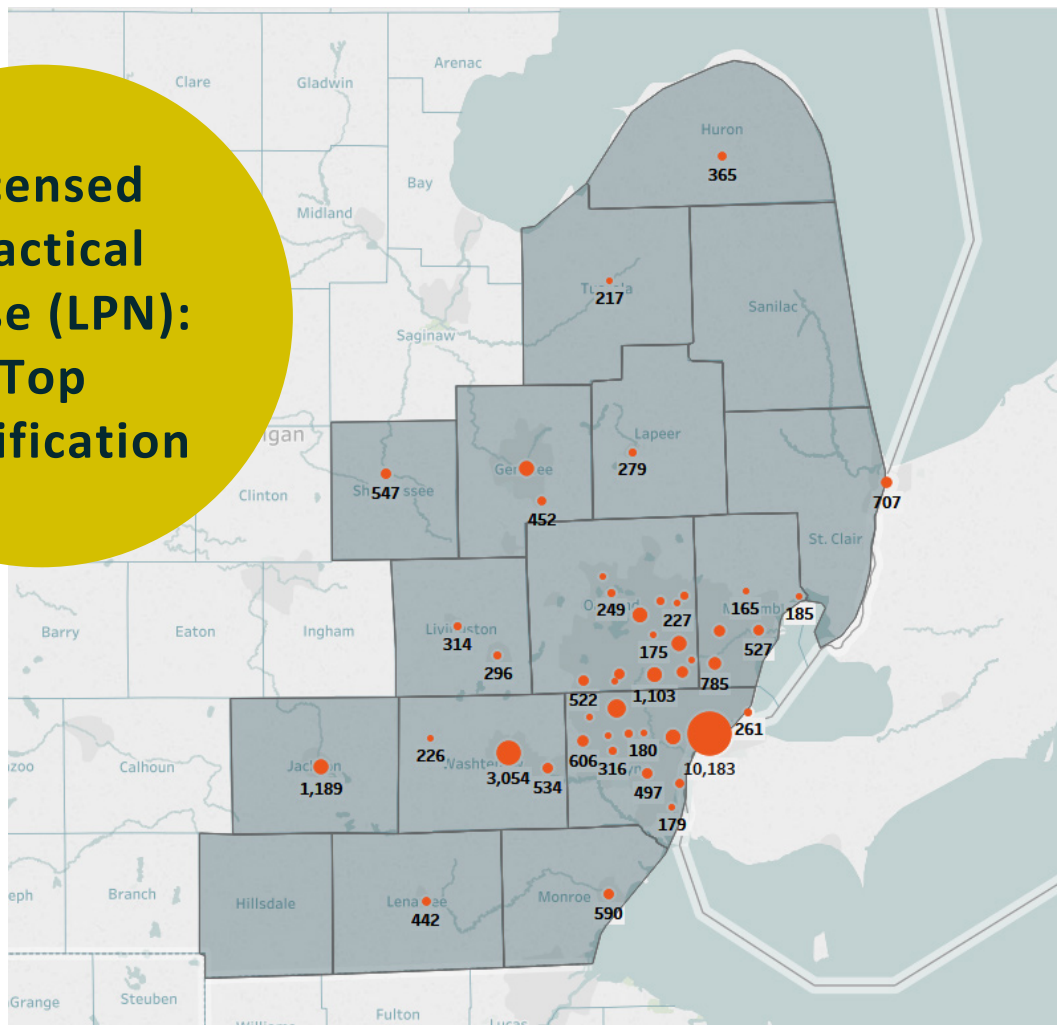
In-Demand Certifications

- Licensed Practical Nurse
- Certified Nursing Assistant
- Nurse Practitioner
- Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP)
- American Registry of Radiologic Technologists (ARRT) Certified

Employer Demand by City

Licensed Practical Nurse (LPN): Top Certification

Map values: Huron 365, 217, 547, 452, Lapeer 279, 707, 249, 227, 165, 185, 314, 175, 527, 296, 785, 522, 1,103, 261, 226, 180, 606, 316, 3,054, 534, 497, 10,183, 179, Jackson 1,189, 442, Monroe 590

Top Posting Employers*

- General Healthcare Resources, Inc.
- Henry Ford Health System
- Trinity Health Corporation
- Beaumont Health System
- Soliant Health, Inc
- Manor Care, Inc.
- Mercy Medical Center, Inc.
- Ascension Health
- Sunbelt Staffing, LLC
- Tenet Healthcare Corporation

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

Job Postings by City

1. Detroit: 10,183 Postings
2. Ann Arbor: 3,054 Postings
3. Livonia: 1,663 Postings
4. Flint: 1,233 Postings
5. Jackson: 1,189 Postings
6. Troy: 1,135 Postings
7. Southfield: 1,103 Postings
8. Pontiac: 1,100 Postings
9. Dearborn: 1,075 Postings
10. Warren: 785 Postings

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

86,500
IT Workers

1.5% Increase from 2019

Employment Over Time
2001–2020

Worker Gender Demographics
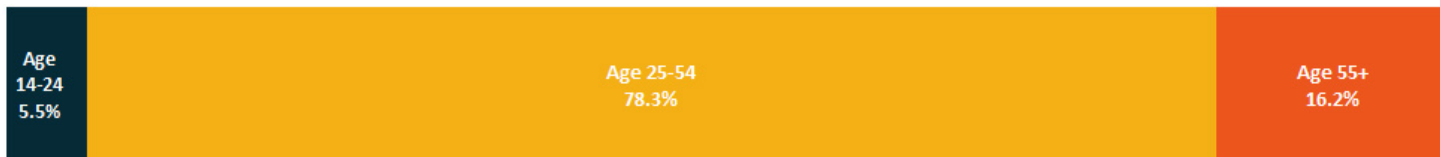

73.8% Males

26.2% Females
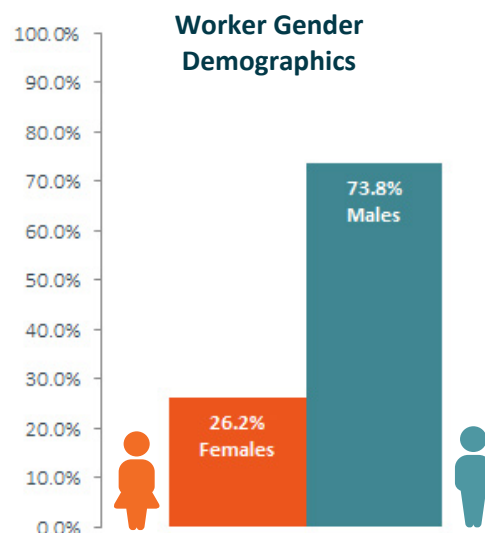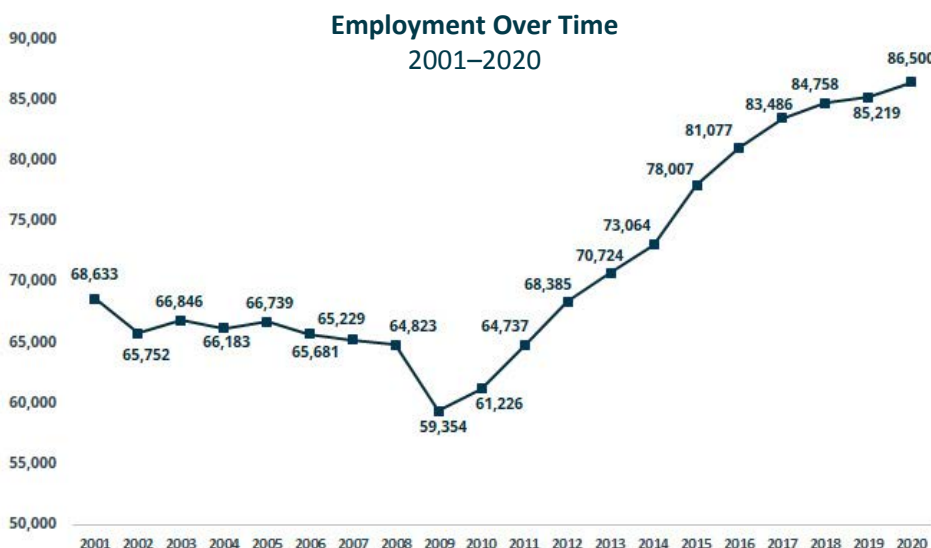
IT Worker Demographics

According to the most recent Emsi data set available (2019), despite having nearly 87,000 workers, the IT occupation group is not very diverse. A large majority of workers are white males between the ages of 25 and 54. Currently, 73.8 percent of the workers in IT in southeast Michigan identify as male, and 67.6 percent identify as white. 78.3 percent are between the ages of 25 and 54. There are a broad range of organizations providing specialized training resources for female and minority IT workers in the City of Detroit as well as throughout southeast Michigan. With the push to diversify the IT field, more opportunities are opening for women and minorities.
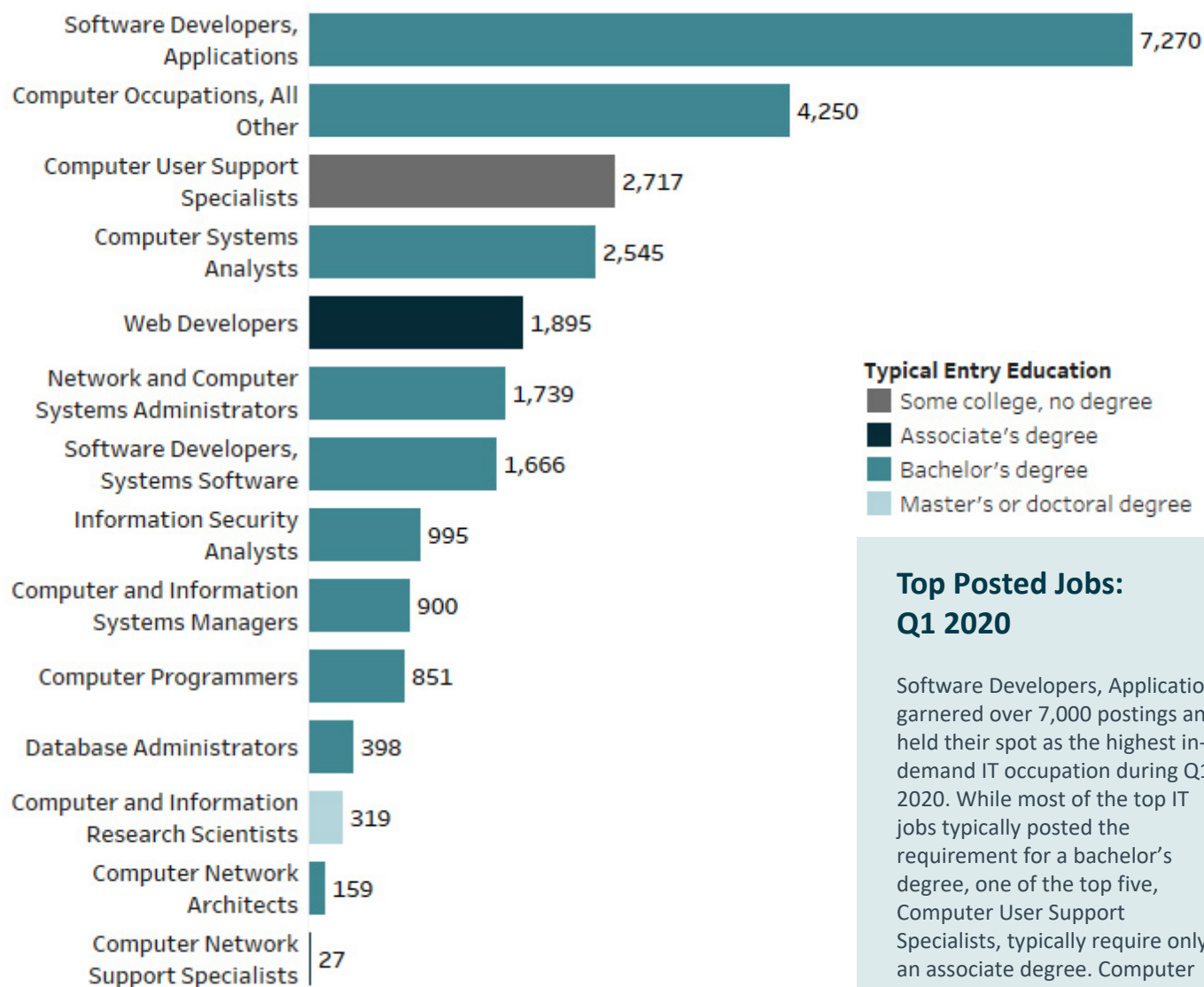
Race and Ethnicity Demographics

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

Worker Age Demographics

| Age 14-24 5.5% | Age 25-54 78.3% | Age 55+ 16.2% |

Data: Emsi | Analysis: Workforce Intelligence Network

**IT Top
Posted Jobs**
Q1 2020

Occupation	Posted Jobs
Software Developers, Applications	7,270
Computer Occupations, All Other	4,250
Computer User Support Specialists	2,717
Computer Systems Analysts	2,545
Web Developers	1,895
Network and Computer Systems Administrators	1,739
Software Developers, Systems Software	1,666
Information Security Analysts	995
Computer and Information Systems Managers	900
Computer Programmers	851
Database Administrators	398
Computer and Information Research Scientists	319
Computer Network Architects	159
Computer Network Support Specialists	27

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

Top Posted Jobs: Q1 2020

Software Developers, Applications garnered over 7,000 postings and held their spot as the highest in-demand IT occupation during Q1 2020. While most of the top IT jobs typically posted the requirement for a bachelor's degree, one of the top five, Computer User Support Specialists, typically require only an associate degree. Computer Occupations, All Other, Computer Systems Analysts, and Web Developers were also in demand in the region.

Data: Emsi | Analysis: Workforce Intelligence Network

IT Wage Overview

Most IT-related jobs offer high wages providing a lucrative opportunity to job seekers willing to meet the minimum education requirements related to these jobs. Software Developers, Applications, the top posted IT job in Q3 2019, offers a median hourly wage of $43.73 per hour or nearly $91,000 per year according to the Bureau of Labor Statistics (BLS). Even occupations requiring shorter-term training, such as Computer User Support Specialists and Web Developers, make over $20 per hour.

Wage Overview for Top Posted IT Jobs in Q1 2020

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

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

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

In-Demand Foundational Skills

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

In-Demand Education Level*

- High School Diploma: 4.6%
- Associate Degree: 5.7%
- Bachelor's Degree: 59.6%
- Master's Degree: 13.6%

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

In-Demand Certifications

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

Employer Demand by City

1,300
Jobs Added Through March 2020
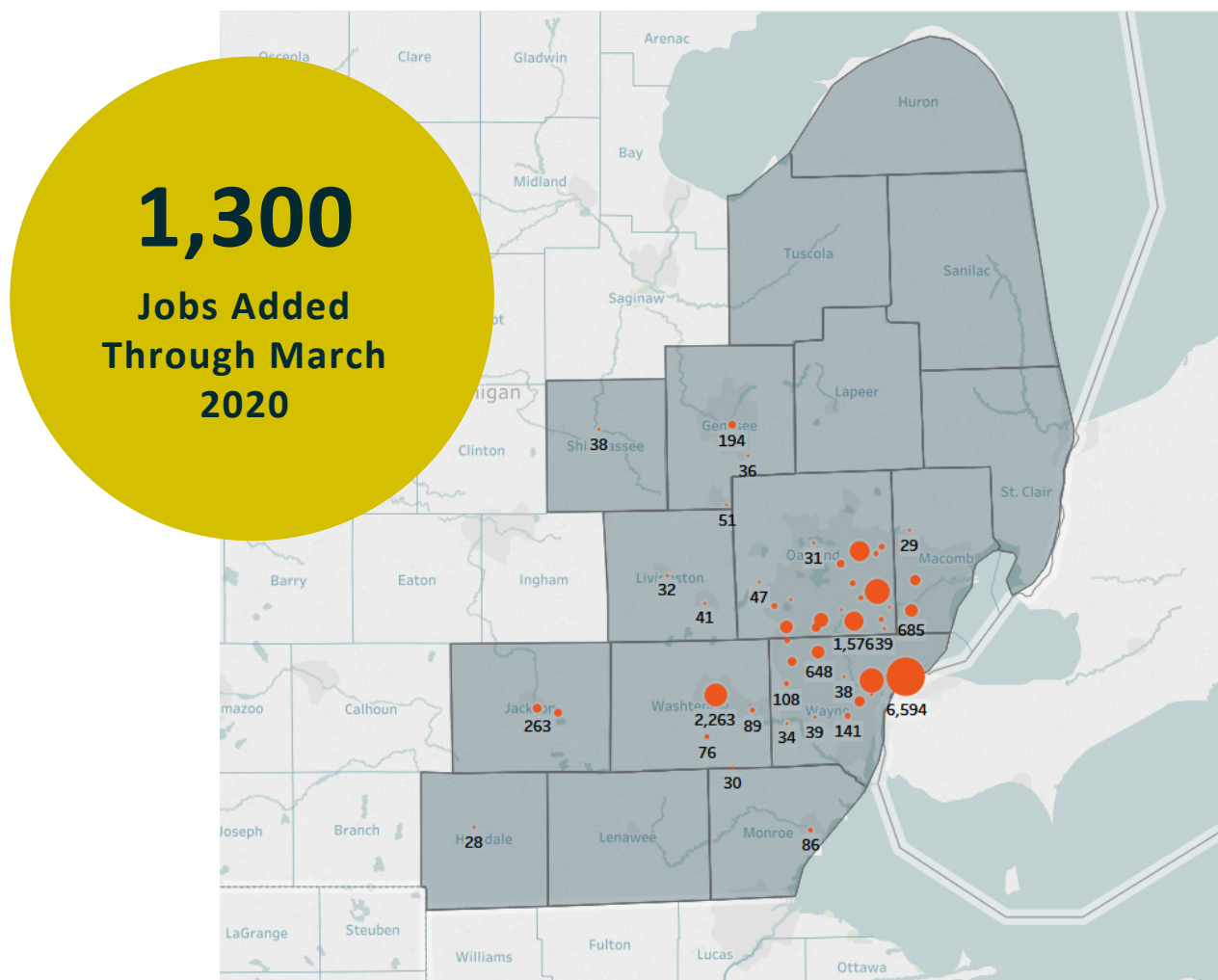
Top Posting Employers*

- Oracle Corporation
- Ford Motor Company
- Cynet Systems Inc.
- Teksystems, Inc.
- Revature
- Accenture PLC
- Deloitte LLP
- V2soft Inc.
- General Motors Company
- Fast Switch, Ltd.

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

Job Postings by City

1. Detroit: 6,594 Postings
2. Troy: 2,692 Postings
3. Dearborn: 2,547 Postings
4. Ann Arbor: 2,263 Postings
5. Auburn Hills: 1,696 Postings
6. Southfield: 1,576 Postings
7. Farmington Hills: 834 Postings
8. Novi: 695 Postings
9. Warren: 685 Postings
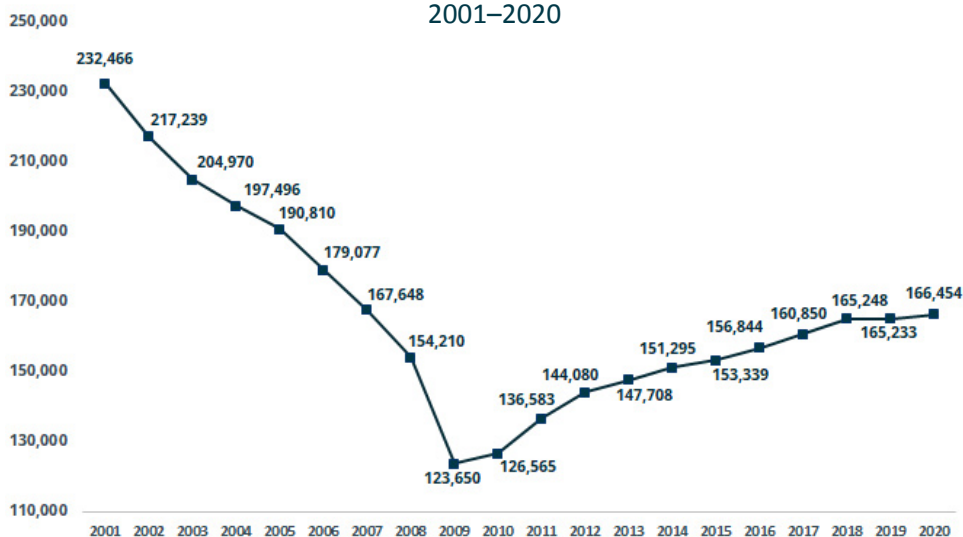10. Livonia: 648 Postings

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

NOTE: Skilled trades related to construction and assembly are not included in this cluster, as the focus is on advanced manufacturing only.
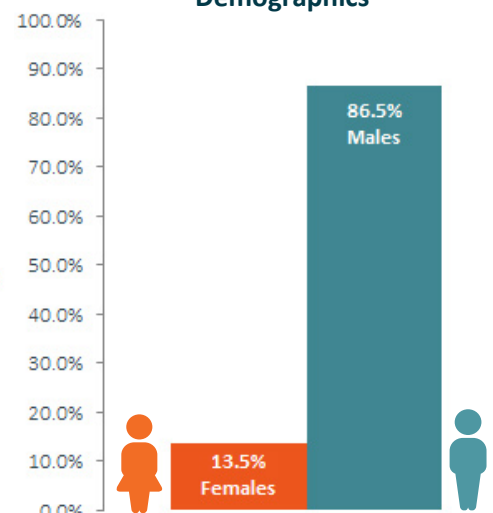
166,454
Skilled Trades Workers
0.7% Increase
from 2019

Employment Over Time
2001–2020

250,000
232,466
230,000
217,239
210,000
204,970
197,496
190,810
190,000
179,077
167,648
170,000
165,248 166,454
156,844 160,850 165,233
150,000
154,210 151,295
144,080
153,339
136,583 147,708
130,000
123,650 126,565
110,000

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Worker Gender Demographics

86.5% Males

13.5% Females

Skilled Trades Worker Demographics

According to the most recent Emsi data set available (2019), the skilled trades occupation group employs about 166,000 workers in southeast Michigan. A large majority of skilled trades workers are white males between the ages of 25 and 54. Additional outreach may be necessary in the near future, as at 26.9 percent, the group has a somewhat higher proportion than average of workers over age 55. This proportion continues to grow, as the 2020 level is one percentage point greater than that in 2019.

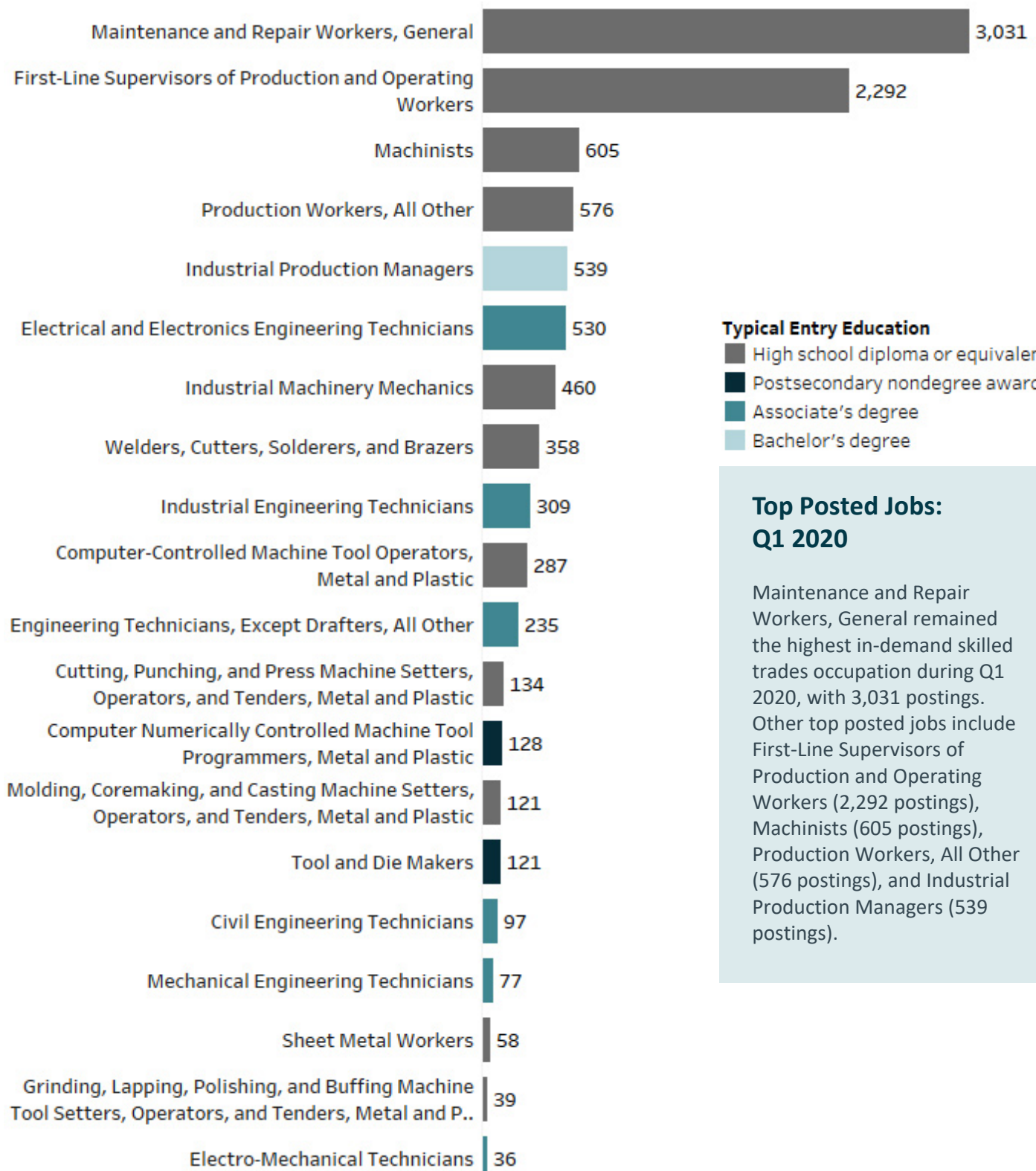### Race and Ethnicity Demographics

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

Worker Age Demographics

Age 14-24
6.6%

Age 25-54
66.5%

Age 55+
26.9%

Data: Emsi | Analysis: Workforce Intelligence Network

**Skilled Trades
Top Posted Jobs
Q1 2020**

Occupation	Postings
Maintenance and Repair Workers, General	3,031
First-Line Supervisors of Production and Operating Workers	2,292
Machinists	605
Production Workers, All Other	576
Industrial Production Managers	539
Electrical and Electronics Engineering Technicians	530
Industrial Machinery Mechanics	460
Welders, Cutters, Solderers, and Brazers	358
Industrial Engineering Technicians	309
Computer-Controlled Machine Tool Operators, Metal and Plastic	287
Engineering Technicians, Except Drafters, All Other	235
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	134
Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	128
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	121
Tool and Die Makers	121
Civil Engineering Technicians	97
Mechanical Engineering Technicians	77
Sheet Metal Workers	58
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and P..	39
Electro-Mechanical Technicians	36

Typical Entry Education
- High school diploma or equivalent
- Postsecondary nondegree award
- Associate's degree
- Bachelor's degree

Top Posted Jobs: Q1 2020

Maintenance and Repair Workers, General remained the highest in-demand skilled trades occupation during Q1 2020, with 3,031 postings. Other top posted jobs include First-Line Supervisors of Production and Operating Workers (2,292 postings), Machinists (605 postings), Production Workers, All Other (576 postings), and Industrial Production Managers (539 postings).

Data: Emsi | Analysis: Workforce Intelligence Network

Skilled Trades Wage Overview

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

Wage Overview for Top Posted Skilled Trades Jobs in Q1 2020

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

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Plumbing
- Machining
- Tooling
- HVAC
- Welding

In-Demand Foundational Skills

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

In-Demand Education Level*

- High School Diploma: 40.1%
- Associate Degree: 9.8%
- Bachelor's Degree: 15.4%
- Master's Degree: 1.7%

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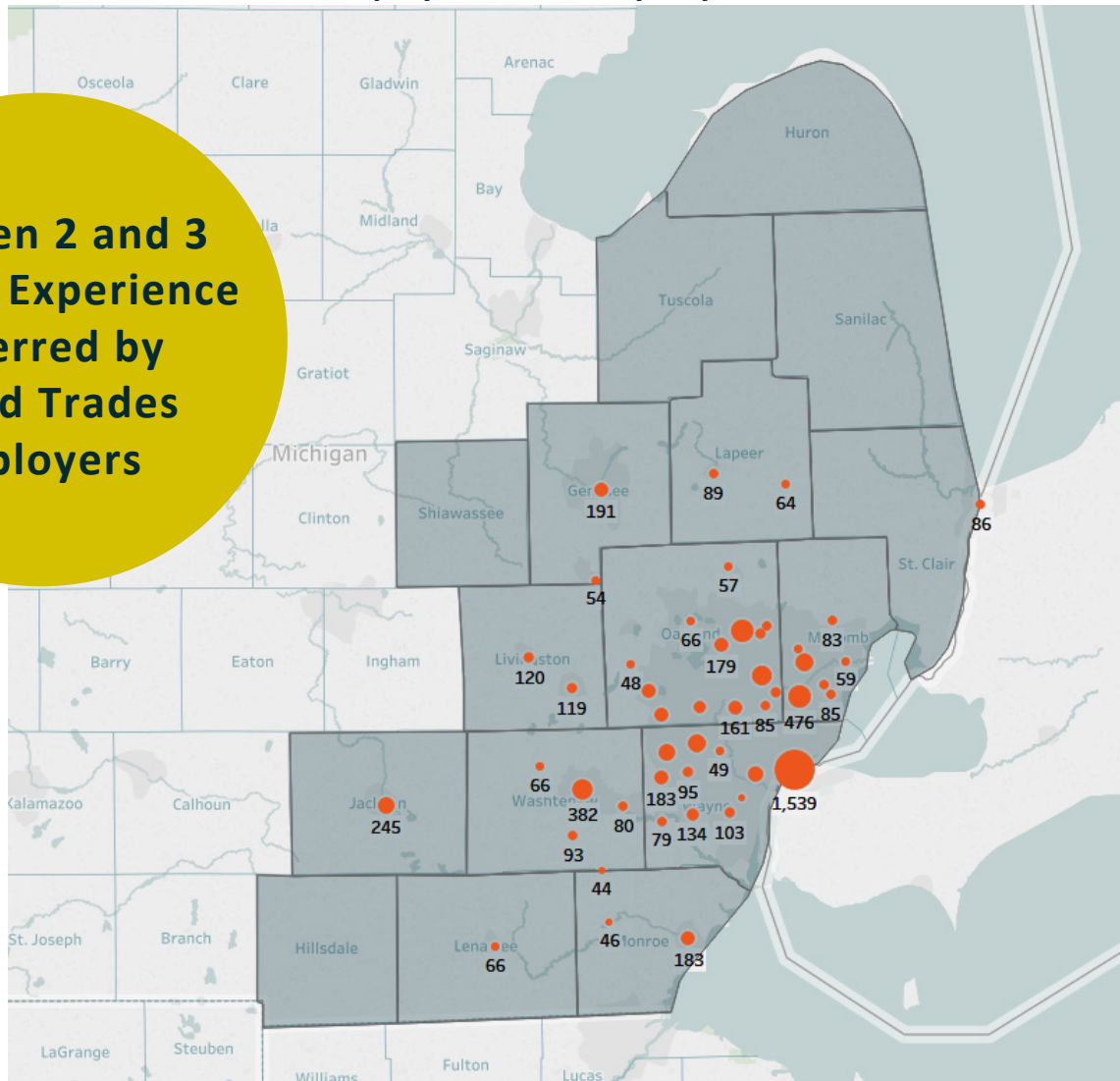
In-Demand Certifications

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

Employer Demand by City

Between 2 and 3 Years of Experience Preferred by Skilled Trades Employers

Top Posting Employers*

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

Job Postings by City

1. Detroit: 1,539 Postings
2. Warren: 476 Postings
3. Auburn Hills: 442 Postings
4. Ann Arbor: 382 Postings
5. Troy: 368 Postings
6. Livonia: 315 Postings
7. Sterling Heights: 295 Postings
8. Plymouth: 256 Postings
9. Jackson: 245 Postings
10. Dearborn: 218 Postings

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

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

295,216
TDL Workers

1.4% Increase from 2019

Employment Over Time
2001–2020

Worker Gender Demographics
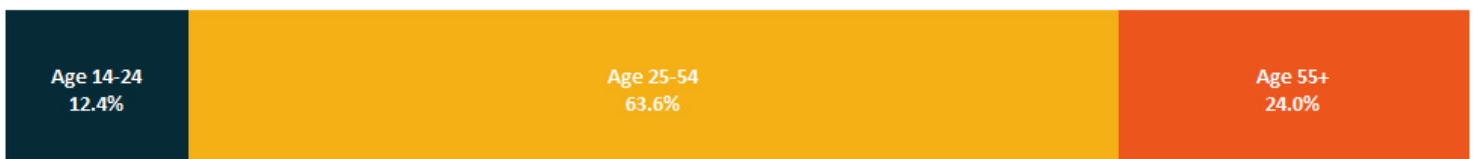

27.1% Females
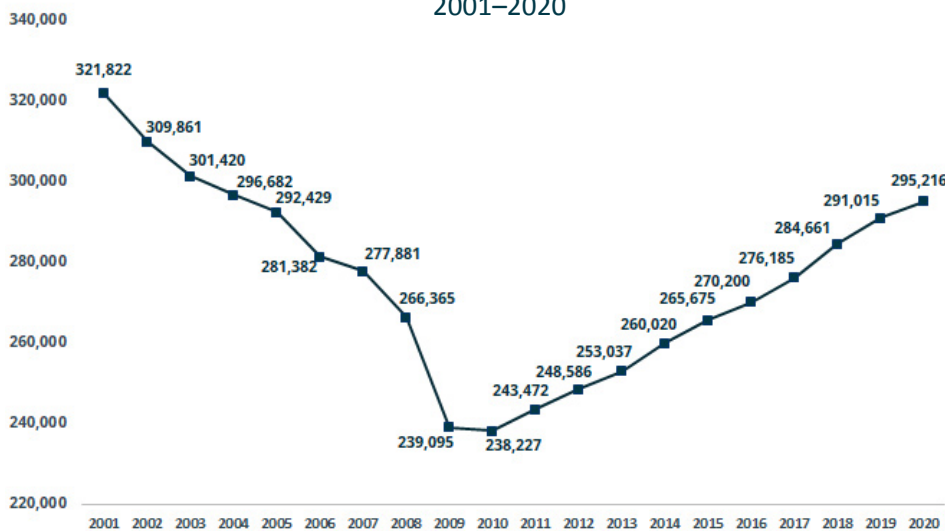
72.9% Males
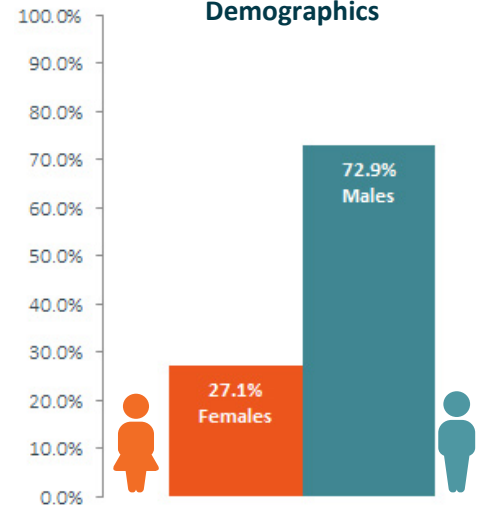
TDL Worker Demographics

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

Race and Ethnicity Demographics
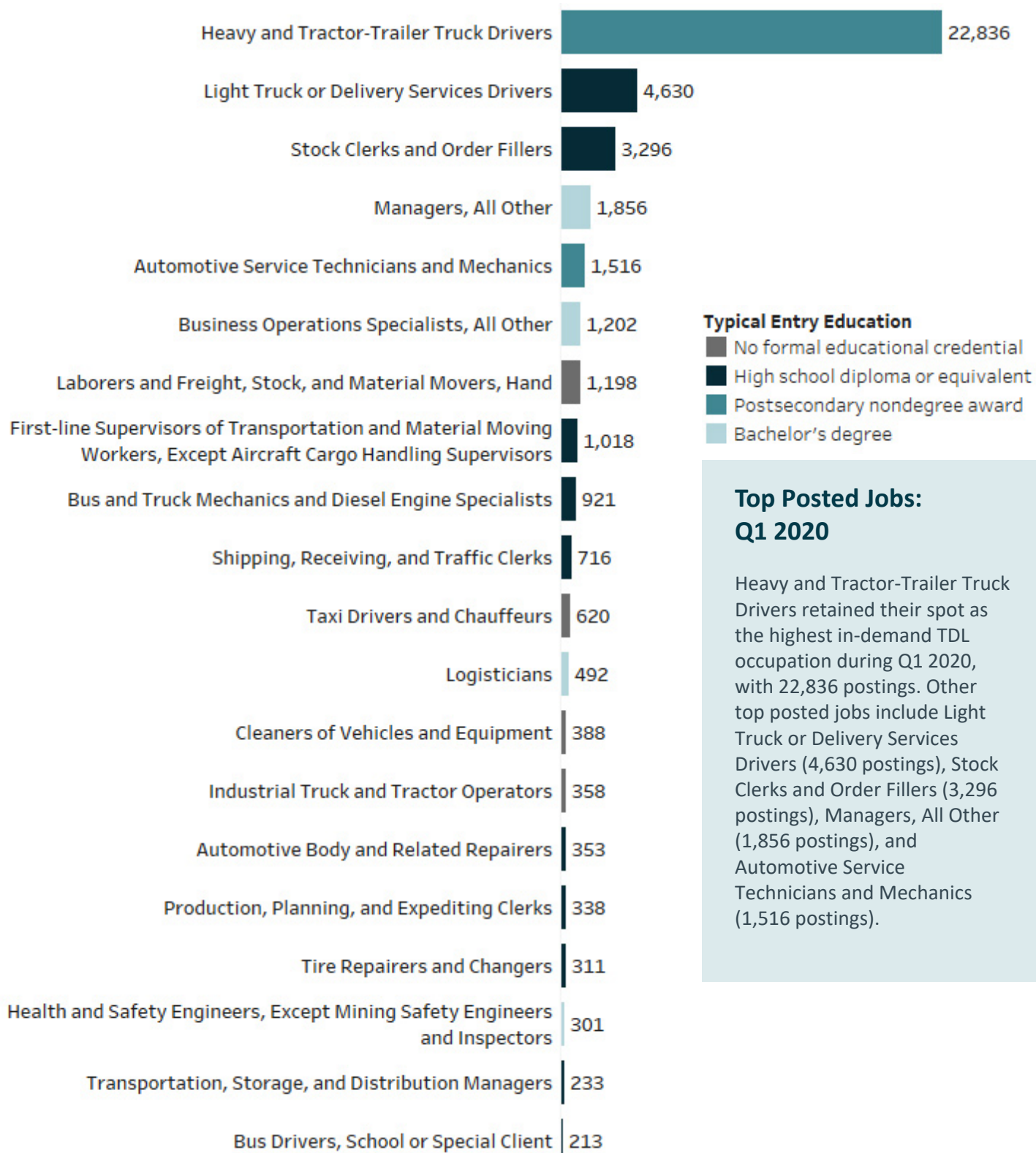
69.6% White | 21.2% Black or African American | 4.8% Hispanic or Latino

Worker Age Demographics

Age 14-24 12.4%	Age 25-54 63.6%	Age 55+ 24.0%

Data: Emsi | Analysis: Workforce Intelligence Network

TDL Top Posted Jobs
Q1 2020

Occupation	Postings
Heavy and Tractor-Trailer Truck Drivers	22,836
Light Truck or Delivery Services Drivers	4,630
Stock Clerks and Order Fillers	3,296
Managers, All Other	1,856
Automotive Service Technicians and Mechanics	1,516
Business Operations Specialists, All Other	1,202
Laborers and Freight, Stock, and Material Movers, Hand	1,198
First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	1,018
Bus and Truck Mechanics and Diesel Engine Specialists	921
Shipping, Receiving, and Traffic Clerks	716
Taxi Drivers and Chauffeurs	620
Logisticians	492
Cleaners of Vehicles and Equipment	388
Industrial Truck and Tractor Operators	358
Automotive Body and Related Repairers	353
Production, Planning, and Expediting Clerks	338
Tire Repairers and Changers	311
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	301
Transportation, Storage, and Distribution Managers	233
Bus Drivers, School or Special Client	213

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

Top Posted Jobs: Q1 2020

Heavy and Tractor-Trailer Truck Drivers retained their spot as the highest in-demand TDL occupation during Q1 2020, with 22,836 postings. Other top posted jobs include Light Truck or Delivery Services Drivers (4,630 postings), Stock Clerks and Order Fillers (3,296 postings), Managers, All Other (1,856 postings), and Automotive Service Technicians and Mechanics (1,516 postings).

Data: Emsi | Analysis: Workforce Intelligence Network

TDL Wage Overview

According to the Bureau of Labor Statistics (BLS), six of the top ten in-demand TDL occupations offer median wages over the state median wage of $18.60 per hour. Heavy and Tractor-Trailer Truck Drivers, the top posted TDL job, earn a median hourly wage of $19.71, or an annual salary of nearly $41,000. Logistics roles that require additional education, such as Business Operations Specialists, typically offer even higher wages.

Wage Overview for Top Posted TDL Jobs in Q1 2020

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

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills
- Flatbed Truck Operation
- Warehousing
- Merchandising
- Mechanics
- Dry Van Truck Operation

In-Demand Foundational Skills
- Customer Service
- Communications
- Valid Driver's License
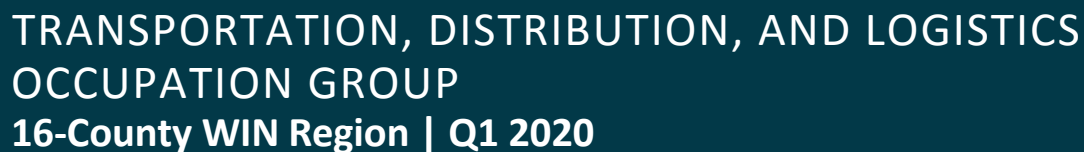- Management
- Operations

In-Demand Education Level*
- High School Diploma: 18.1%
- Associate Degree: 1.7%
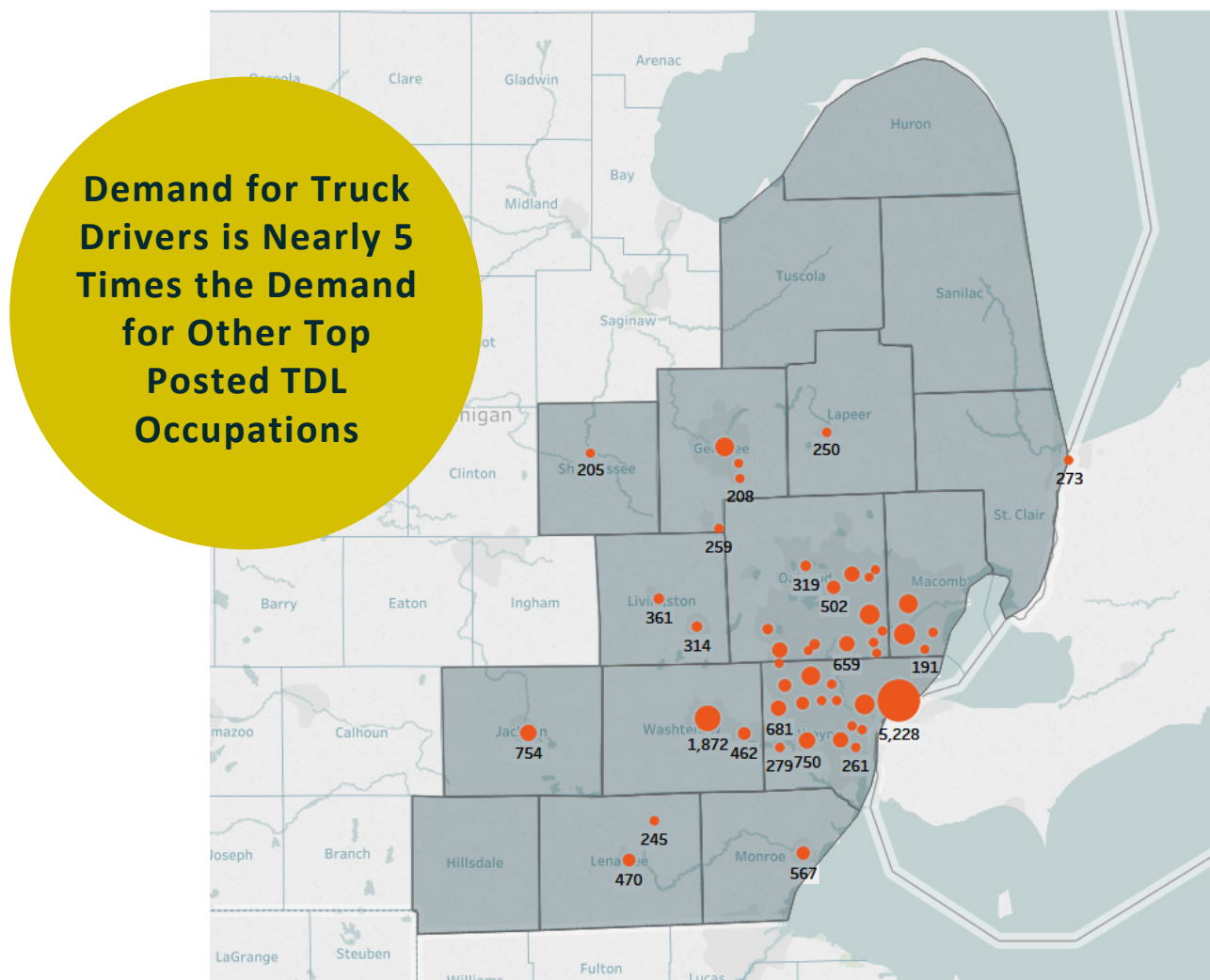- Bachelor's Degree: 7.6%
- Master's Degree: 1.6%

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

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

Employer Demand by City

Demand for Truck Drivers is Nearly 5 Times the Demand for Other Top Posted TDL Occupations

Shiawassee 205
208
259
250
273
319
502
361
314
659
191
Jackson 754
1,872 462
681
279 750 261
5,228
245
470
Monroe 567

Top Posting Employers*

- CRST International, Inc.
- C.R. England, Inc.
- U.S. Xpress, Inc.
- Roehl Transport, Inc.
- Decker Truck Line, Inc.
- Bolt Express, LLC
- Schneider National, Inc.
- Pegasus Transportation, Inc.
- Dart Transit Co Inc
- The Home Depot

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

Job Postings by City

1. Detroit: 5,228 Postings
2. Ann Arbor: 1,872 Postings
3. Warren: 1,255 Postings
4. Troy: 1,102 Postings
5. Dearborn: 1,078 Postings
6. Livonia: 1,064 Postings
7. Sterling Heights: 989 Postings
8. Flint: 960 Postings
9. Jackson: 754 Postings
10. Romulus: 750 Postings

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INTELLIGENCE
NETWORK