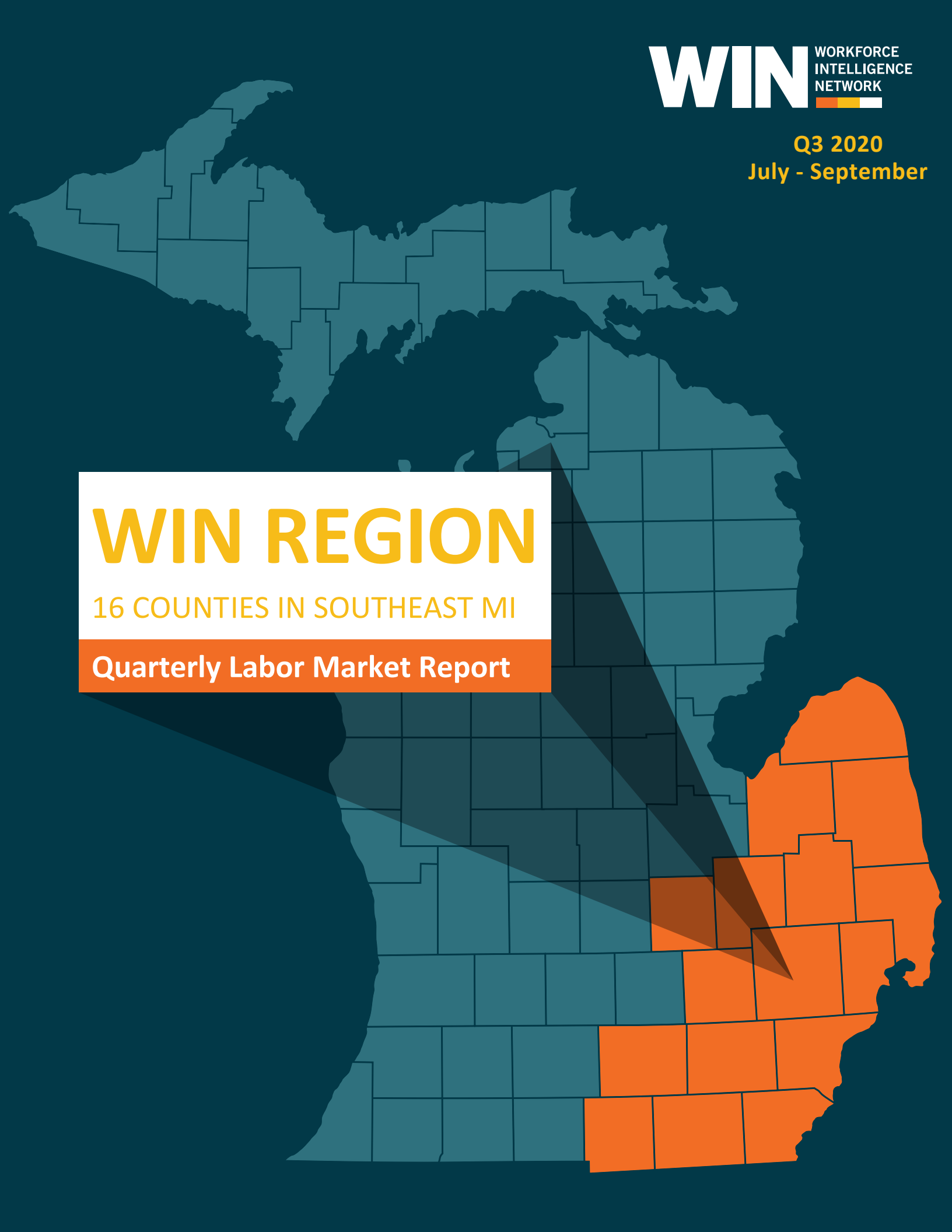


Q3 2020
July - September

WIN REGION

16 COUNTIES IN SOUTHEAST MI

Quarterly Labor Market Report





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About This Report

The Workforce Intelligence Network for Southeast Michigan (WIN) partnership is a collaboration of six Michigan Works! Agencies (MWAs) and 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 third quarter of 2020 in the 16-county WIN region and includes summative data for July, August, and September of 2020. All eleven occupation groups are analyzed for the WIN region.

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



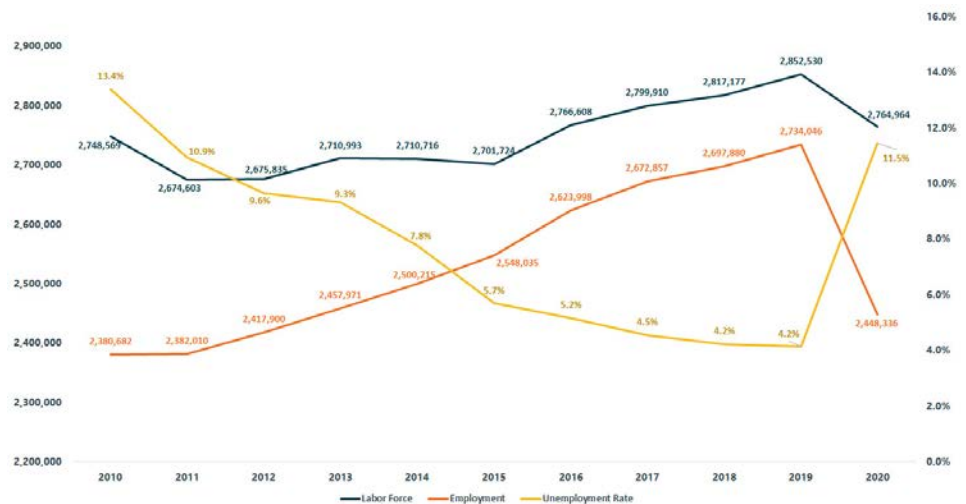
State of the Labor Market in the 16-County WIN Region

During the third quarter of 2020, the labor force and employment figures both increased in southeast Michigan. Major shifts in the labor market due to the COVID-19 crisis are tracked in this quarter's report, and gradual reopening and hiring trend shifts are visible through monthly data. The labor force and employment both rose this quarter in the region, causing the unemployment rate to drop by 11.6 percentage points, to 9.6 percent in Q3 2020. Employer demand for each occupation group analyzed by WIN has gradually gained upward momentum during Q3 2020. Almost all of the occupation groups have seen employer demand increase this quarter.

Annual Labor Market Information

The labor force in southeast Michigan continues to decline from its 2019 peak, decreasing by 87,566 individuals between 2019 annual figures and the year-to-date (YTD) levels through September 2020. Employment fell by an even greater amount, reporting 285,711 fewer workers between 2019 and YTD 2020. The YTD unemployment rate rose to 11.5 percent as of September 2020. However, due to swings in month-to-month employment levels in 2020, both temporary and permanent, examining data over shorter timeframes may be more instructive as the pandemic response continues to evolve.

Annual Labor Force, Employment, Unemployment Rate
2010–2020

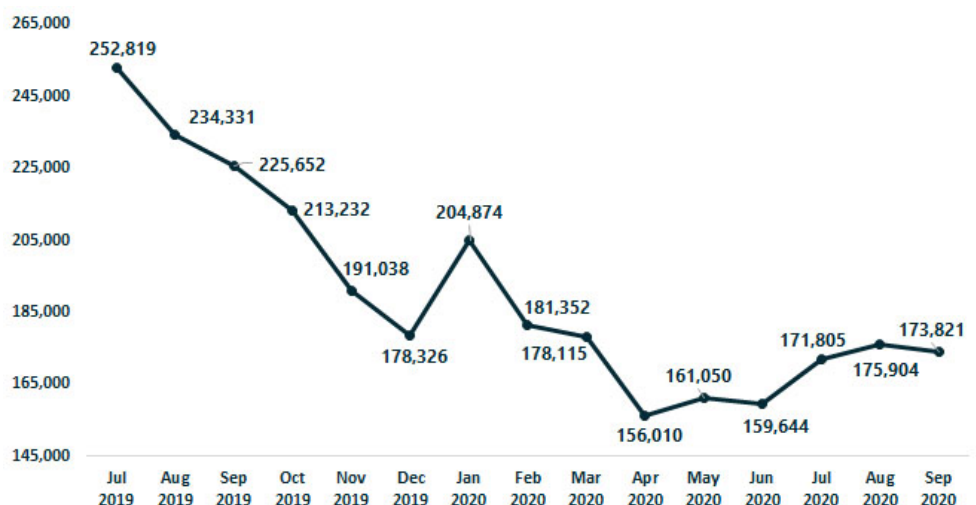


Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Employer Demand Overview

Data from the third quarter of 2020, including posting information from July, August, and September, showed an increased in employer demand levels in southeast Michigan, showing strong recovery as a response to the COVID-19 pandemic. There were 36,204 more postings (13.7 percent) during Q3 2020 than in Q2 2020, however, Q3 has had 131,730 fewer postings than Q3 2019. Monthly demand suggests that levels are stabilizing to suit the needs of employers reopening; however, the dramatic fall in postings occurring between March and April 2020 is yet to be fully recovered.

Monthly Posting Analysis, WIN Region
Q3 2019–Q3 2020



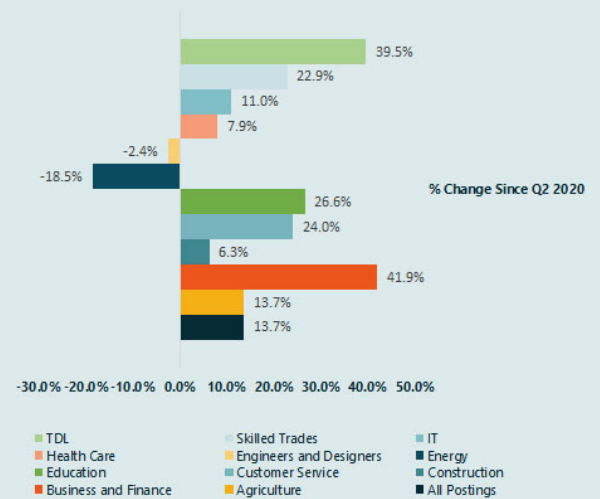
Data: Emsi | Analysis: Workforce Intelligence Network



Employer demand increased to 300,332 jobs posted during Q3 2020, reflecting both an overall pattern of growing demand and the recovery from COVID-19 shutdown measures.

During Q3 2020, there were 300,332 job postings, 36,204 more (13.7 percent) than the 264,128 postings made during Q2 2020 in the 16-county WIN region. Almost all of the occupation groups this quarter have seen an increase in postings, with the exception of the energy and engineers and designers occupation groups, which saw a decrease of 18.5 and 2.4 percent respectively, since Q2 2020. For more information about quarterly job postings, see page 9.

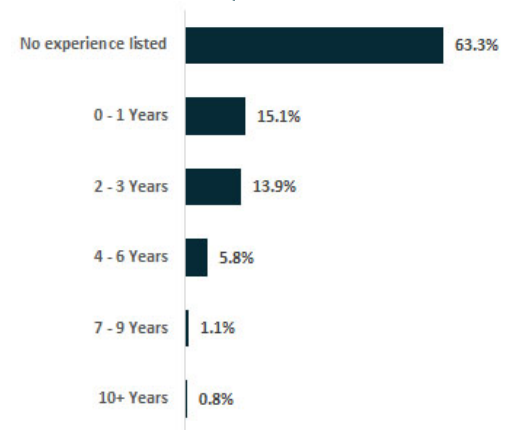
Posting Trends by Occupation Group Q3 2020



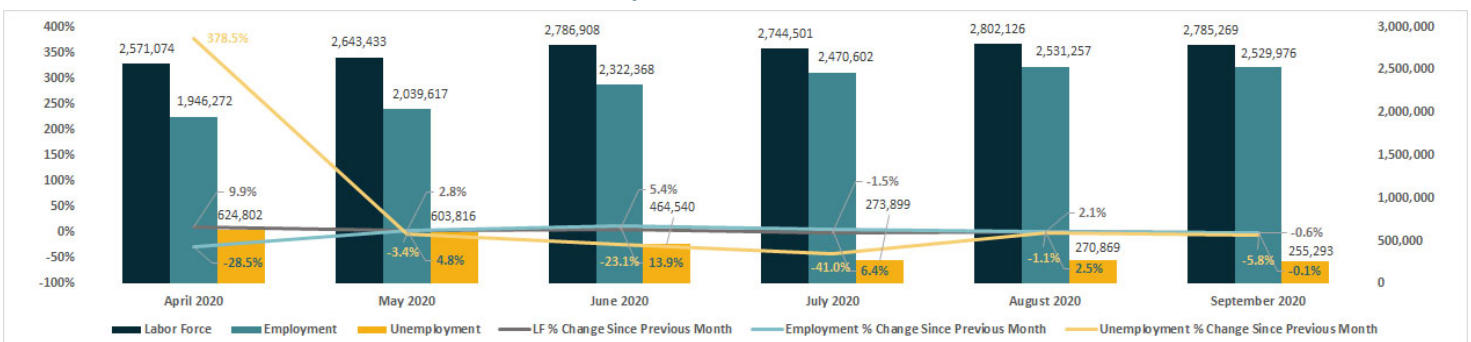
Transportation, Distribution, and Logistics occupations saw the greatest demand in postings in Q3 2020, with 15,460 postings, an increase of 39.5 percent.

Heavy and Tractor Trailer Truck Drivers is the top requested occupation this quarter and has retained this spot since Q2 2020. While most occupation groups this quarter required postsecondary education, TDL jobs typically require a high school diploma. Many postings this quarter were open to entry level workers, accounting for 15.1 percent in southeast Michigan.

Experience Levels In-Demand Q3 2020



Monthly Labor Market Data



Data: Bureau of Labor Statistics

Quarterly employment data for Q3 2020 in the 16-county WIN region indicates a gain of 407,859 jobs, or 19.4 percent, since Q2 2020.

The labor market in southeast Michigan is showing strong Q3 growth in both the labor force and employment since Q2 2020. During Q3 2020, labor force figures were 4.1 percent higher (110,160 individuals) and employment is 19.4 percent higher (407,859 individuals) than in Q2 2020. The unemployment rate has seen a sharp decline to 9.6 percent in Q3 2020, a 11.6 percentage point decrease since Q2 2020, which was recorded at 21.2 percent. For more information about this year's unemployment rate and other labor market indicators, see page 4.

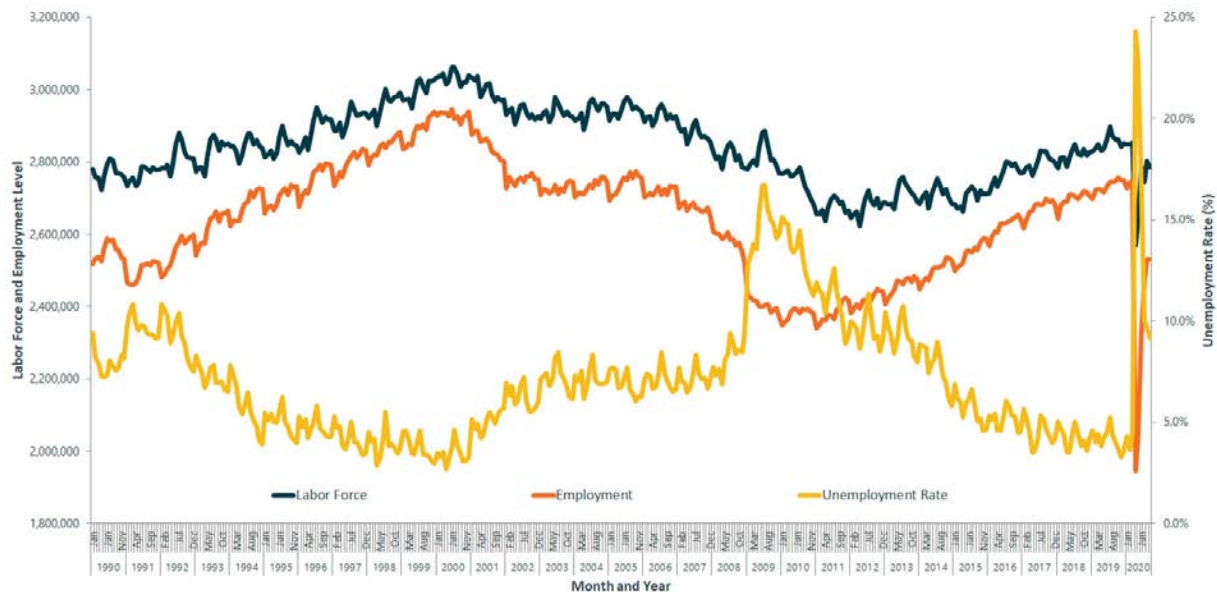
Data: Emsi | Analysis: Workforce Intelligence Network



Labor Force, Employment, and Unemployment

Throughout the third quarter of 2020, the labor market in southeast Michigan saw strong growth, making several gains in employment and labor force numbers. While not yet returned to pre-pandemic levels, this was the biggest quarterly gain in employment since 2010. Between 2019 and YTD 2020, the labor force is down by 87,566 individuals (3.1 percent) between TYD 2020 and 2019, while employment in the 16-county area dropped by 285,711 workers (10.5 percent). With employment decreasing at a faster rate than labor force, the unemployment rate rose this quarter, recorded at 11.5 percent, the quarterly unemployment rate increasing by 7.3 percentage points since 4.2 percent recorded in 2019.

Labor Force, Employment, Unemployment Rate 1990-2020



Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Labor Market Data Q3 2019 - Q3 2020

	3rd Quarter 2019	4th Quarter 2019	1st Quarter 2020	2nd Quarter 2020	3rd Quarter 2020	Change from 2nd Quarter 2020	Percent Change from 2nd Quarter 2020	Change from 3rd Quarter 2019	Percent Change from 3rd Quarter 2019
Labor Force	2,876,719	2,851,971	2,850,456	2,667,138	2,777,299	110,160	4.1%	-99,420	-3.5%
Employment	2,745,813	2,751,261	2,731,643	2,102,752	2,510,612	407,859	19.4%	-235,201	-8.6%
Unemployment	130,906	100,710	118,813	564,386	266,687	-297,699	-52.7%	135,781	103.7%
Unemployment Rate	4.6%	3.5%	4.2%	21.2%	9.6%	-11.6%	n/a	5.1%	n/a

Note: Monthly data averaged by quarter | Data: BLS

Annual Labor Market Data 2010 - 2020

	2010 Annual	2011 Annual	2012 Annual	2013 Annual	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual	2019 Annual	2020 YTD	Change from 2019	Percent Change from 2019
Labor Force	2,748,569	2,674,603	2,675,835	2,710,993	2,710,716	2,701,724	2,766,608	2,799,910	2,817,177	2,852,530	2,764,964	-87,566	-3.1%
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	2,448,336	-285,711	-10.5%
Unemployment	367,888	292,593	257,935	253,021	210,500	153,690	142,610	127,053	119,297	118,484	316,629	198,145	167.2%
Unemployment Rate	13.4%	10.9%	9.6%	9.3%	7.8%	5.7%	5.2%	4.5%	4.2%	4.2%	11.5%	7.3%	n/a

Note: Monthly data averaged by year | Data: BLS

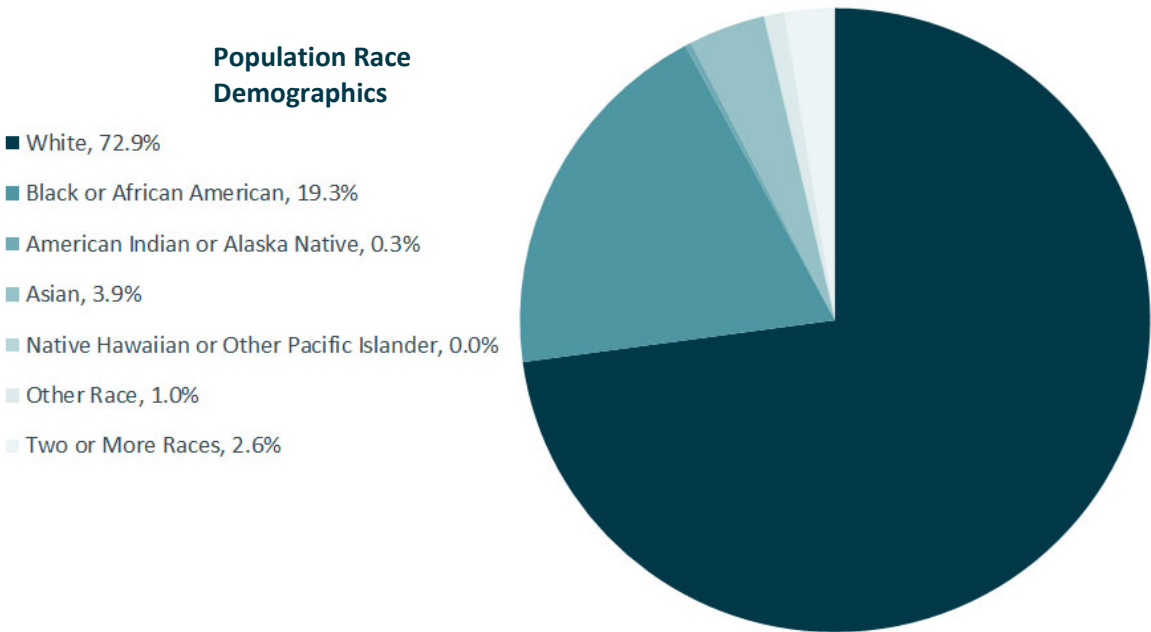


Population Demographics

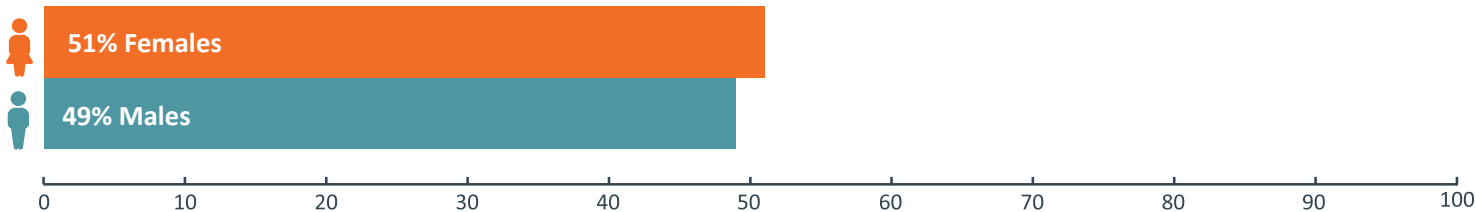
According to data from the most recent Census Bureau 2018 ACS Five Year estimates, the population in southeast Michigan increased by nearly 0.3 percent between 2017 and 2018. During 2018, 5,740,079 people were living in the region. The sex of the populace was split almost evenly, with about 51 percent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



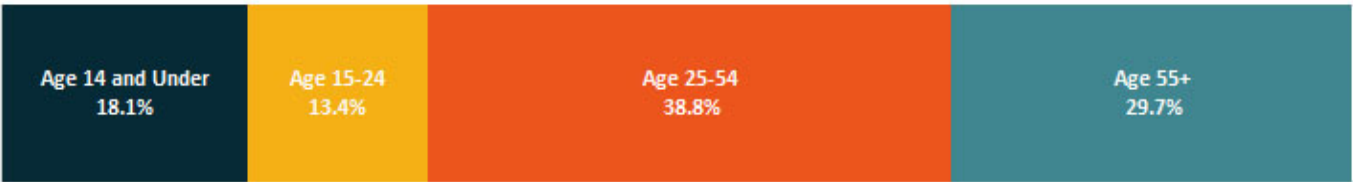
Population Race Demographics



Population Gender Demographics



Population Age Demographics



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.

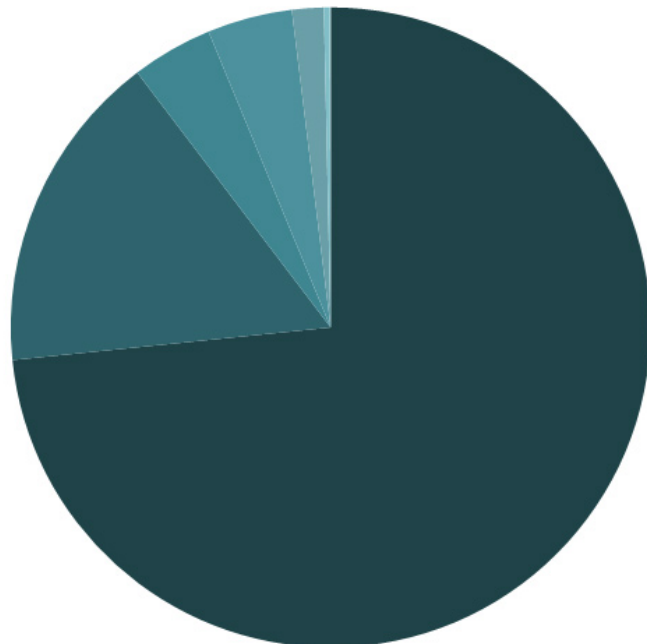
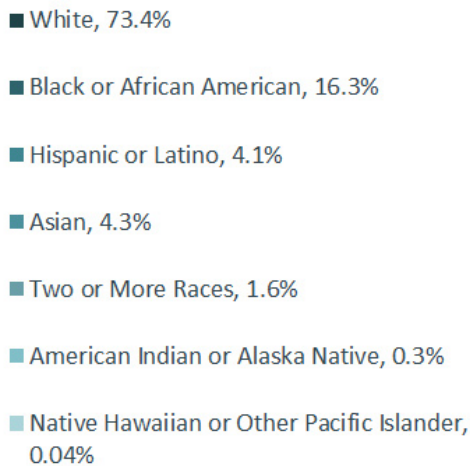
Civilian Labor Force by Demographic Group				
Demographic Group	Civilian Labor Force	Total Employment	Total Unemployment	Unemployment Rate
Total Population 16 +	2,848,717	2,650,105	198,612	7.0%
Sex				
Male 16+	1,489,883	1,382,915	106,968	7.2%
16-19	62,691	48,704	13,987	22.3%
20-24	152,604	131,923	20,681	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%



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



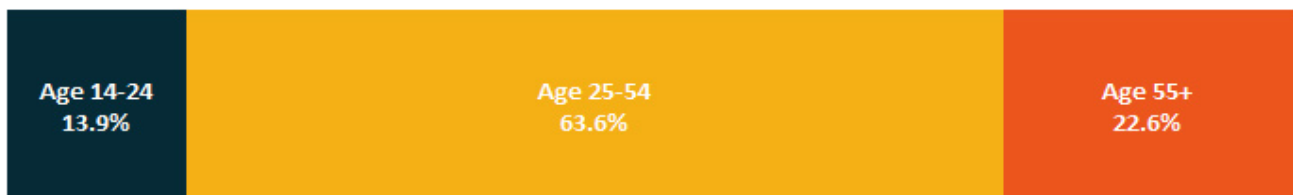
Workforce Gender Demographics



51% Males
49% Females



Workforce Age Demographics

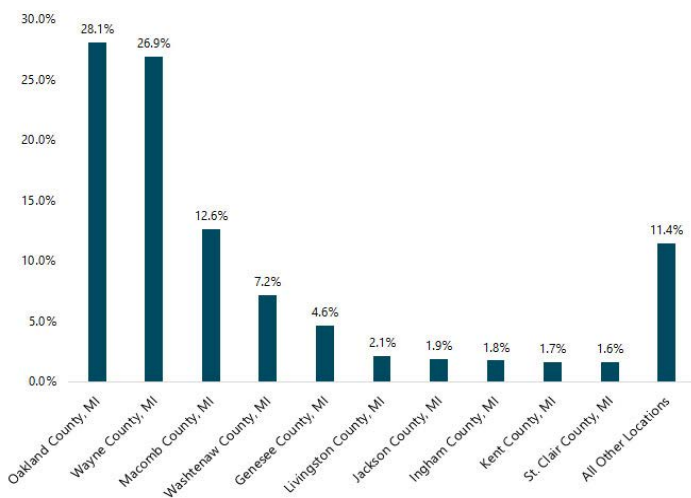




Regional Commuting Patterns

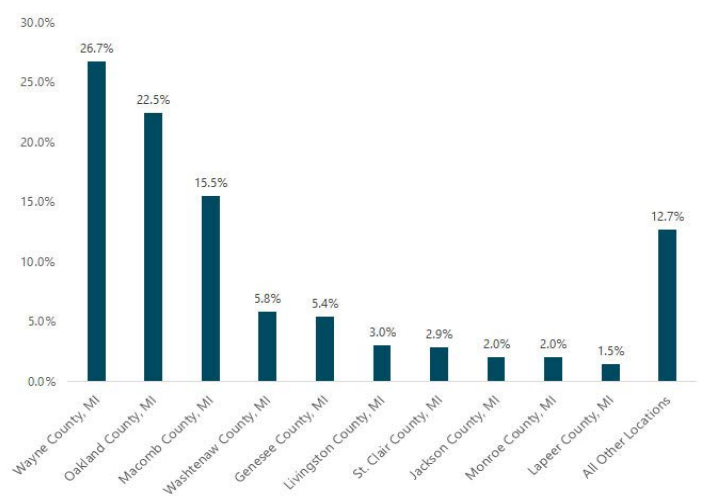
According to the most recent OnTheMap data set available from the Census Bureau, during 2017, the region's workforce consisted of 2,347,359 residents. 2,121,593 (90.4 percent) of the residents lived and worked within the 16-county region, while the remaining 225,766 residents (9.6 percent) traveled outside 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

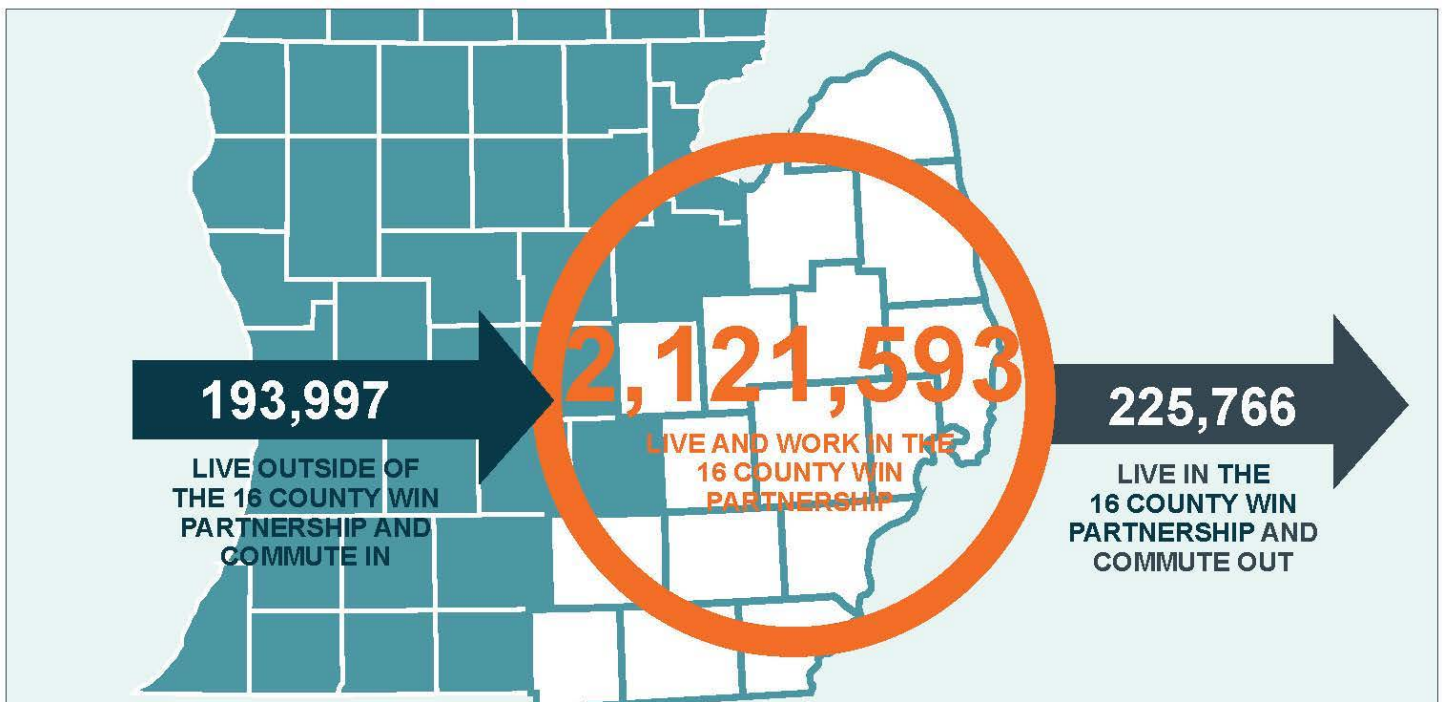


Source: U.S. Census OnTheMap, 2017
Analysis: Workforce Intelligence Network

Where 16-County WIN Region Workers Live



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

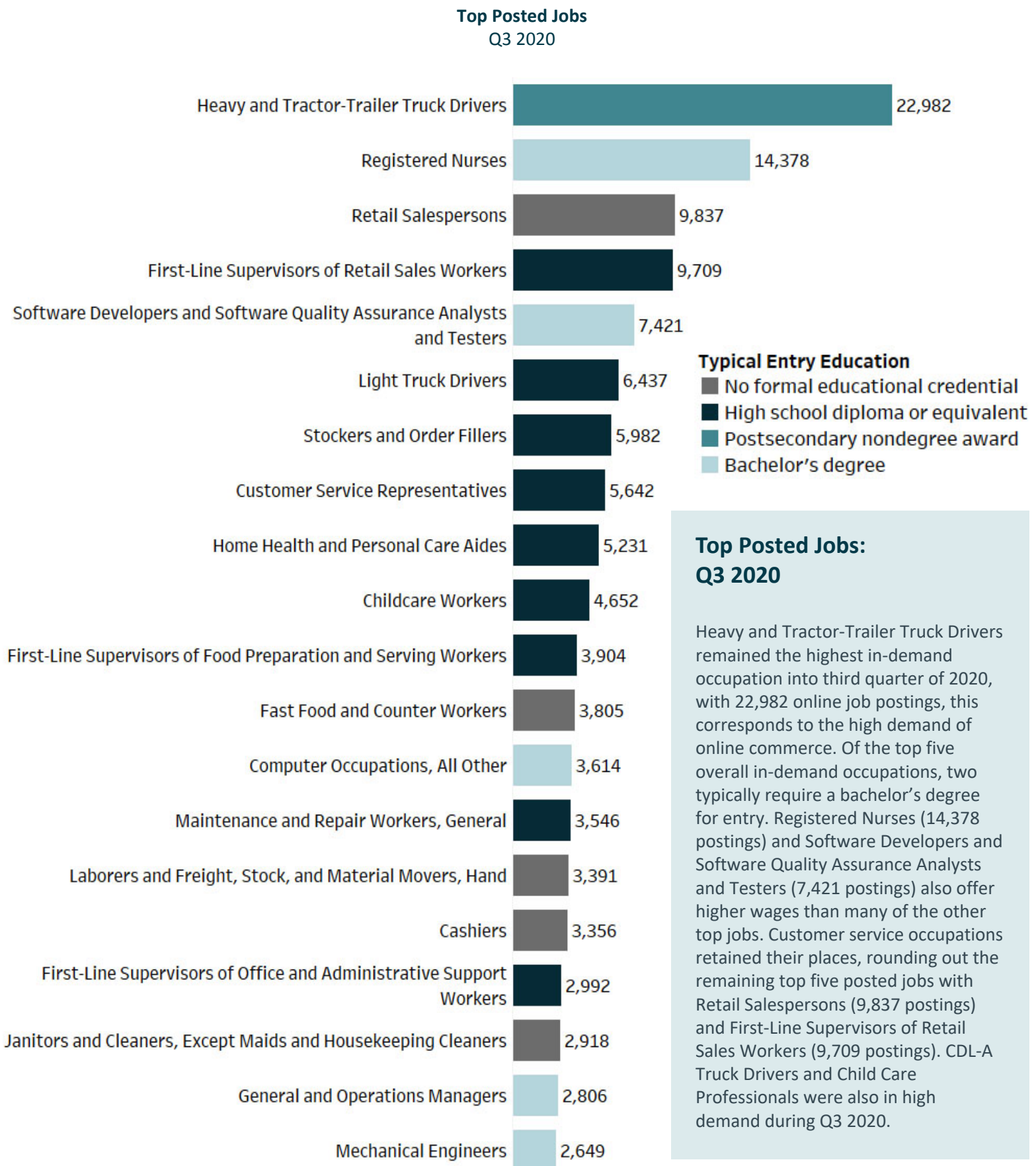


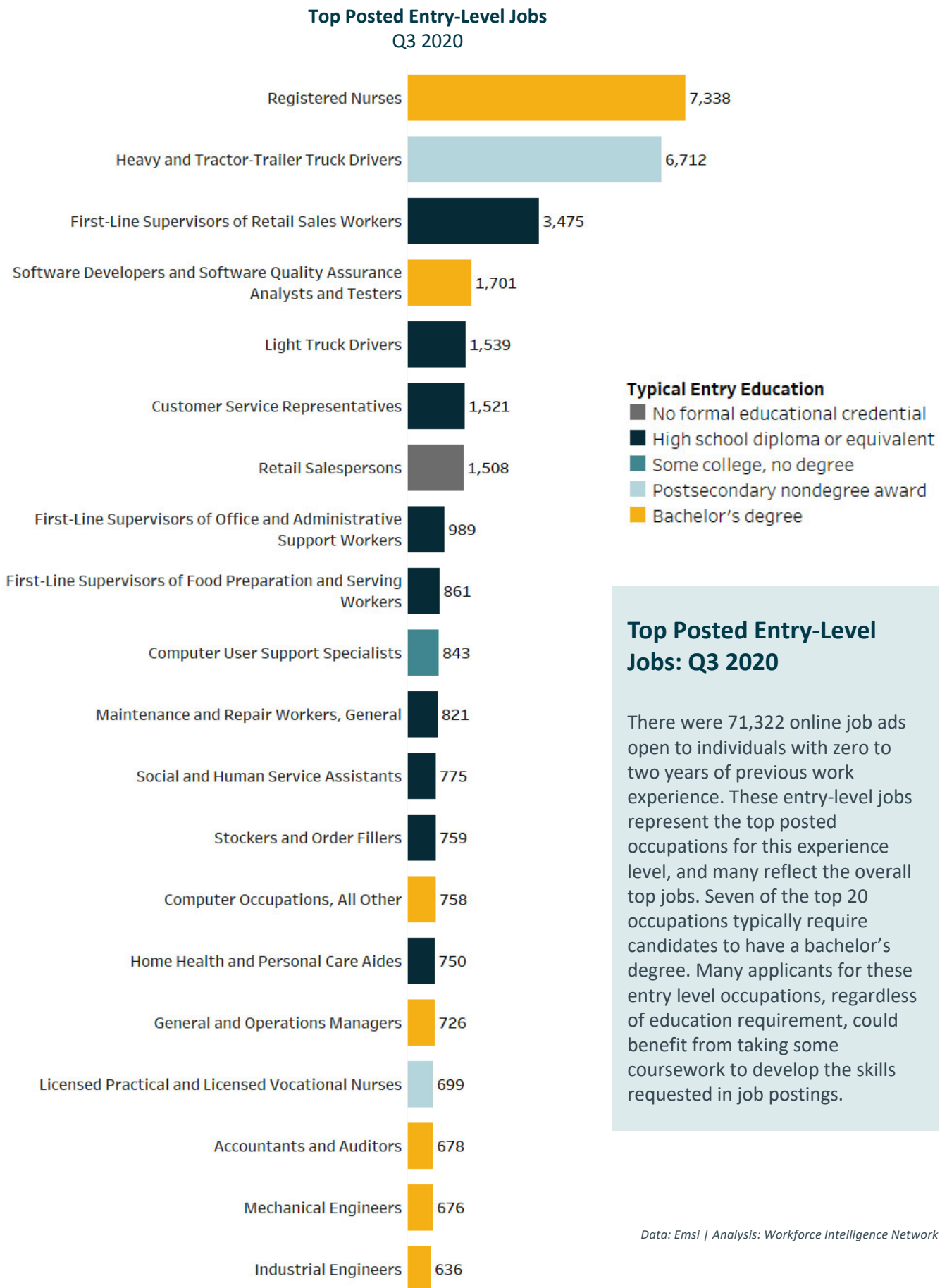


REAL-TIME DEMAND OVERVIEW

16-County WIN Region | Top Posted Jobs | Q3 2020

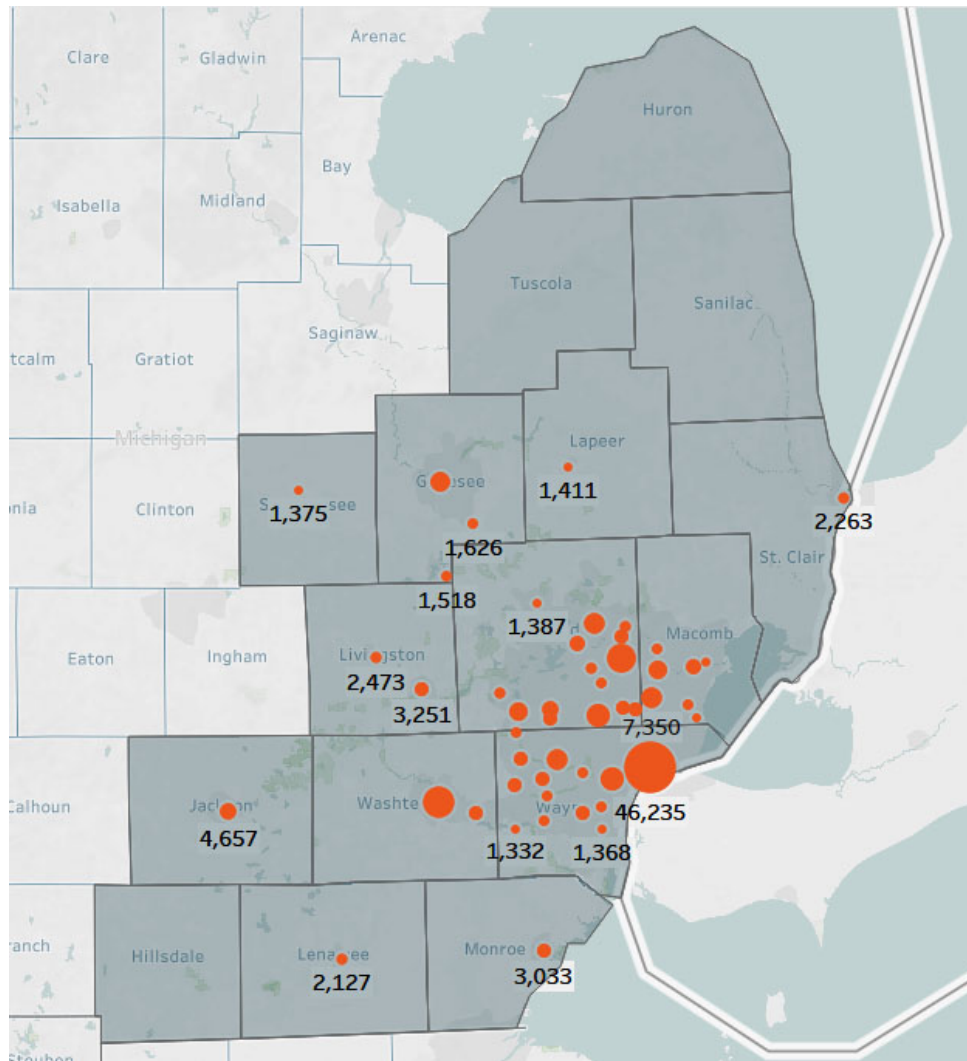
9







Employer Demand by City



Top In-Demand Qualifications

- Commercial Driver's License (CDL)
- Certified Nursing Assistant
- Licensed Practical Nurse
- Bachelor of Science in Nursing (BSN)
- Bachelor of Science in Business
- Automotive Service Excellence (ASE) Certification
- Nurse Practitioner
- CDL Class B License
- Hazmat Endorsement
- Certified Pharmacy Technician

Top In-Demand Skills

- Merchandising
- Restaurant Operation
- Nursing
- Warehousing
- Selling Techniques
- Communications
- Customer Service
- Management
- Sales
- Leadership

Top Posting Employers*

- Amazon.com, Inc.
- Henry Ford Health System
- Shipt, Inc.
- The Home Depot
- General Healthcare Resources, Inc.
- University of Michigan
- AutoZone, Inc.
- Dollar General Corporation
- Kelly Services, Inc.
- McDonald's Corporation

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



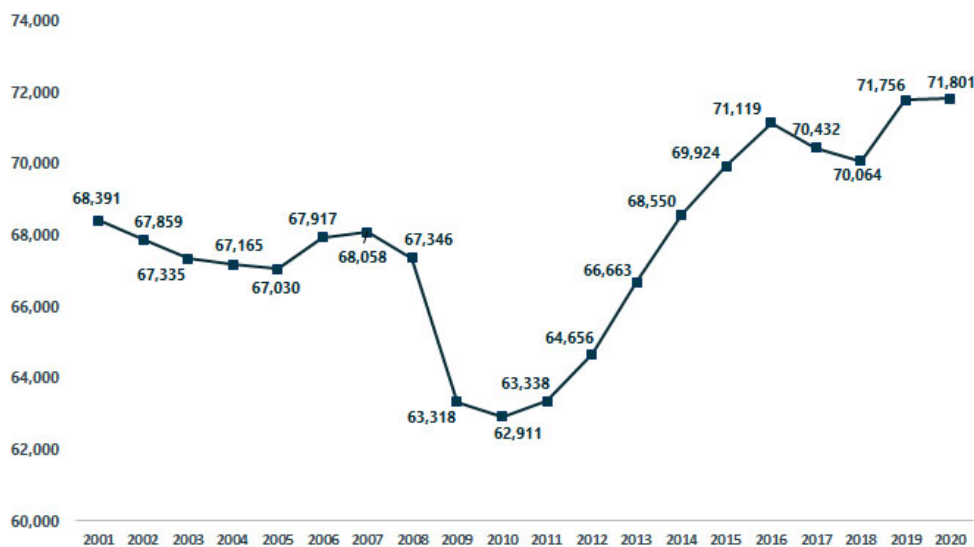
Introduction

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.

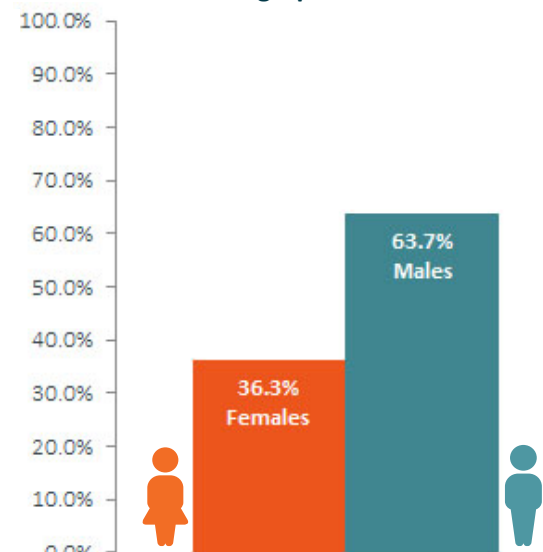


71,801
Agriculture Workers
0.1% Increase
from 2019

Employment Over Time
2001–2020



Worker Gender Demographics



Agriculture Worker Demographics

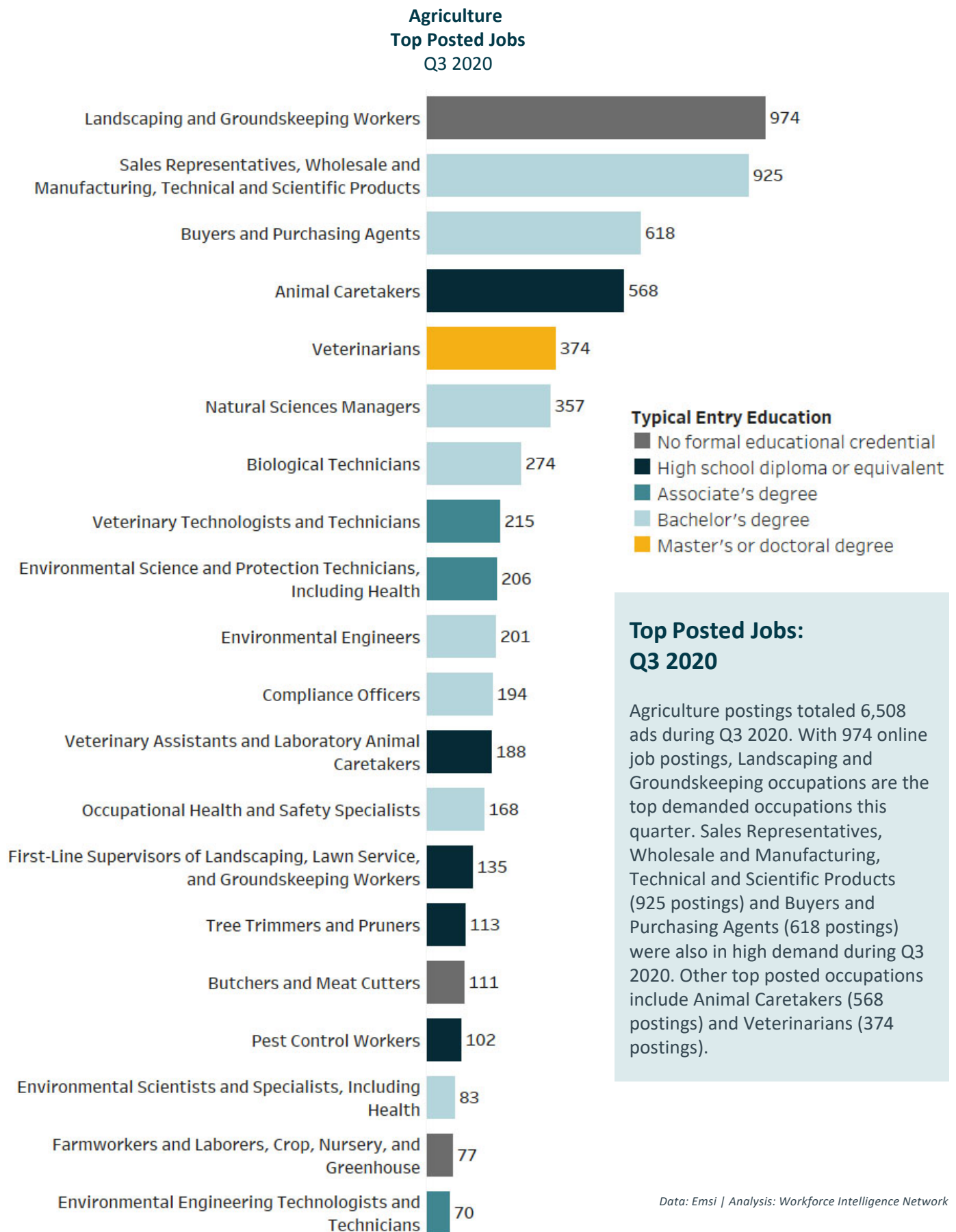
According to Emsi data (2020), the 71,801 workers in agriculture occupations are not very diverse. A large majority of workers are white males between the ages of 25 and 54. Only 36.3 percent of agriculture workers identify as women. Only 14.0 percent of workers were under the age of 25, compared to 22.1 percent of workers are age 55 or older.

Race and Ethnicity Demographics

75.9% White | **12.2% Black or African American** | **6.8% Hispanic or Latino**

Worker Age Demographics







Agriculture Wage Overview

Of the top posted agriculture-related jobs, half of the ten offer median wages of more than \$30 per hour according to the Bureau of Labor Statistics (BLS). The top posted job, Landscaping and Groundskeeping Workers, offers median hourly earnings of \$14.28, which translates to annual earnings of approximately \$29,702. 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 Q3 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
37-3011	Landscaping and Groundskeeping Workers	\$10.59	\$12.01	\$14.28	\$17.42	\$20.49
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$26.66	\$33.95	\$49.04	\$63.30	\$78.41
13-1028	Buyers and Purchasing Agents	\$19.96	\$25.44	\$33.42	\$44.12	\$55.51
39-2021	Animal Caretakers	\$9.71	\$10.43	\$11.47	\$13.07	\$16.05
29-1131	Veterinarians	\$30.73	\$34.97	\$41.48	\$52.56	\$64.41
11-9121	Natural Sciences Managers	\$36.20	\$42.01	\$51.59	\$67.29	\$85.06
19-4021	Biological Technicians	\$15.25	\$16.97	\$19.74	\$24.52	\$29.12
29-2056	Veterinary Technologists and Technicians	\$13.80	\$15.50	\$17.78	\$20.51	\$23.82
19-4042	Environmental Science and Protection Technicians, Including Health	\$14.76	\$16.64	\$20.91	\$27.38	\$32.22
17-2081	Environmental Engineers	\$28.01	\$34.28	\$43.69	\$56.34	\$66.17

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Landscaping
- Purchasing
- Selling Techniques
- Mowing
- Pharmaceuticals

In-Demand Foundational Skills

- Communications
- Management
- Sales
- Valid Driver's License
- Customer Service

In-Demand Education Level*

- High School Diploma: 18.7%
- Associate Degree: 5.0%
- Bachelor's Degree: 28.8%
- Master's Degree: 6.2%

In-Demand Qualifications

- Doctor Of Veterinary Medicine (DVM/VMD)
- Certified Veterinary Technician
- Commercial Driver's License (CDL)
- Pesticide Applicator License
- Bachelor of Science in Business

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



Job Postings by City

1. Detroit: 1,240 Postings
2. Ann Arbor: 809 Postings
3. Troy: 326 Postings
4. Southfield: 231 Postings
5. Warren: 172 Postings
6. Auburn Hills: 156 Postings
7. Livonia: 152 Postings
8. Flint: 145 Postings
9. Novi: 134 Postings
10. Dearborn: 124 Postings

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



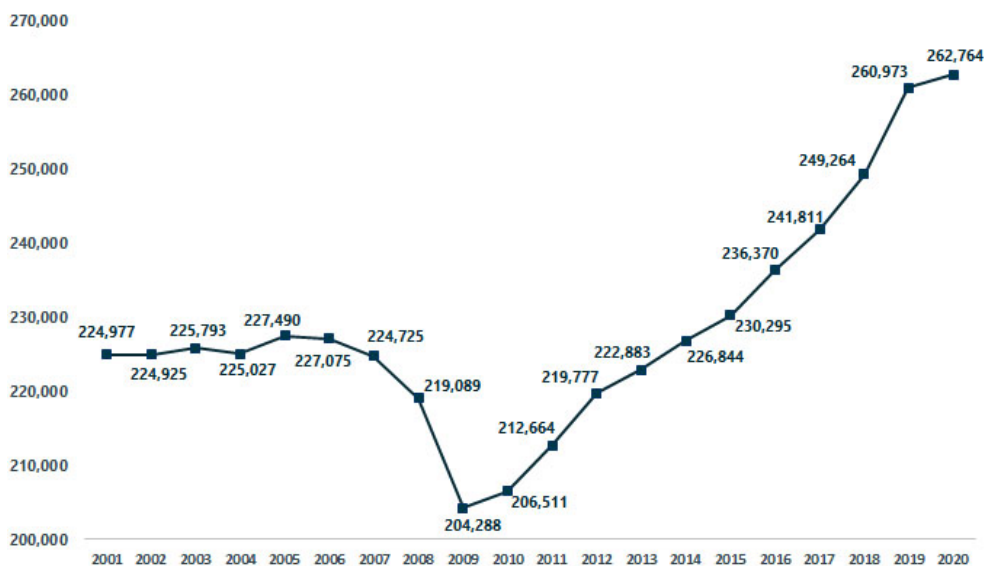
Introduction

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

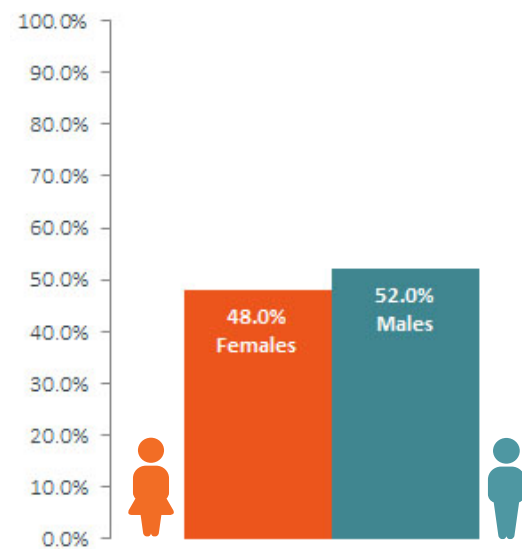


262,764
**Business and
Finance Workers**
0.7% Increase from
2019

Employment Over Time
2001–2020



**Worker Gender
Demographics**



Business and Finance Worker Demographics

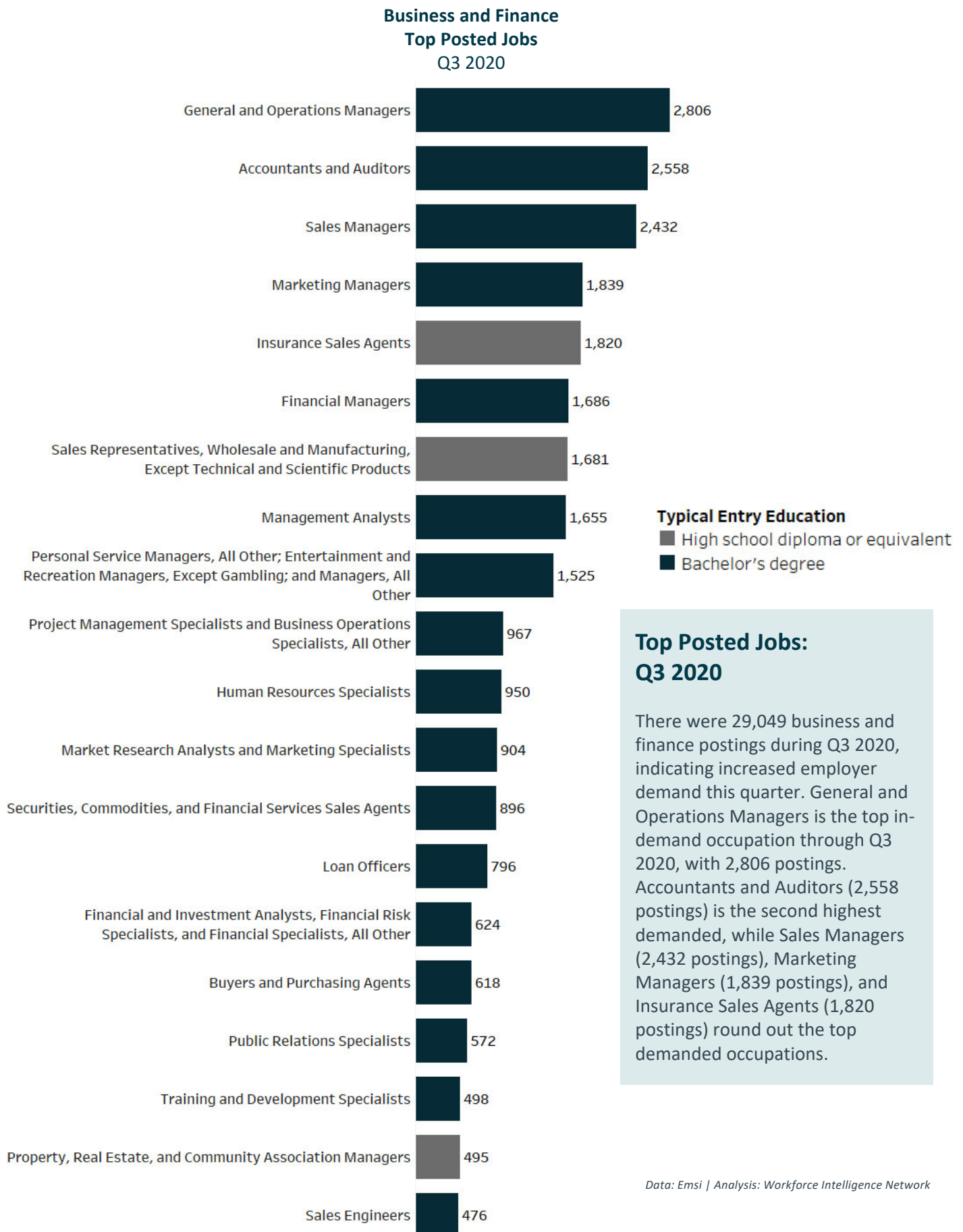
The business and finance occupation group is in some ways a relatively diverse occupation group with respect to its nearly 262,764 workers. Almost half the working population identify as female (48.0 percent), however 80.6 percent of workers identified as white, indicating much less diversity with respect to race than gender. Only 4.6 percent of the working population in business and finance is under the age of 25, compared to 25.0 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

80.6% White | **10.8% Black or African American** | **4.2% Asian**

Worker Age Demographics







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. The top posted business and finance job, General and Operations Managers, offers median hourly wages of \$51.18, translating to annual earnings of approximately \$106,454. All of the top business occupations offer median wages over \$25 per hour, and most prefer a bachelor's degree for entry.

Wage Overview for Top Posted Business and Finance Jobs in Q3 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
11-1021	General and Operations Managers	\$22.16	\$33.03	\$51.18	\$80.19	\$114.61
13-2011	Accountants and Auditors	\$21.56	\$26.35	\$33.71	\$44.11	\$58.20
11-2022	Sales Managers	\$35.37	\$50.33	\$66.75	\$83.07	\$120.34
11-2021	Marketing Managers	\$37.09	\$48.32	\$62.84	\$79.05	\$110.64
41-3021	Insurance Sales Agents	\$15.24	\$18.50	\$26.39	\$41.58	\$64.66
11-3031	Financial Managers	\$36.44	\$46.26	\$61.33	\$78.73	\$112.83
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$14.42	\$20.75	\$32.26	\$47.31	\$62.94
13-1111	Management Analysts	\$25.78	\$32.28	\$41.20	\$53.73	\$75.87
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	\$30.65	\$38.61	\$50.40	\$62.41	\$78.02
13-1198	Project Management Specialists and Business Operations Specialists, All Other	\$19.28	\$25.57	\$34.76	\$47.22	\$59.34

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

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

In-Demand Foundational Skills

- Communications
- Sales
- Management
- Customer Service
- Leadership

In-Demand Education Level*

- High School Diploma: 16.2%
- Associate Degree: 5.8%
- Bachelor's Degree: 48.1%
- 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

- Bachelor of Science in Business
- Certified Public Accountant
- Series 7 General Securities Representative License (Stockbroker)
- Bachelor of Science in Business Administration
- Project Management Professional Certification

[illegible]

Job Postings by City

1. Detroit: 7,197 Postings
2. Troy: 2,748 Postings
3. Ann Arbor: 1,873 Postings
4. Southfield: 1,593 Postings
5. Dearborn: 955 Postings
6. Auburn Hills: 842 Postings
7. Livonia: 792 Postings
8. Novi: 692 Postings
9. Warren: 607 Postings
10. Farmington Hills: 580 Postings

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



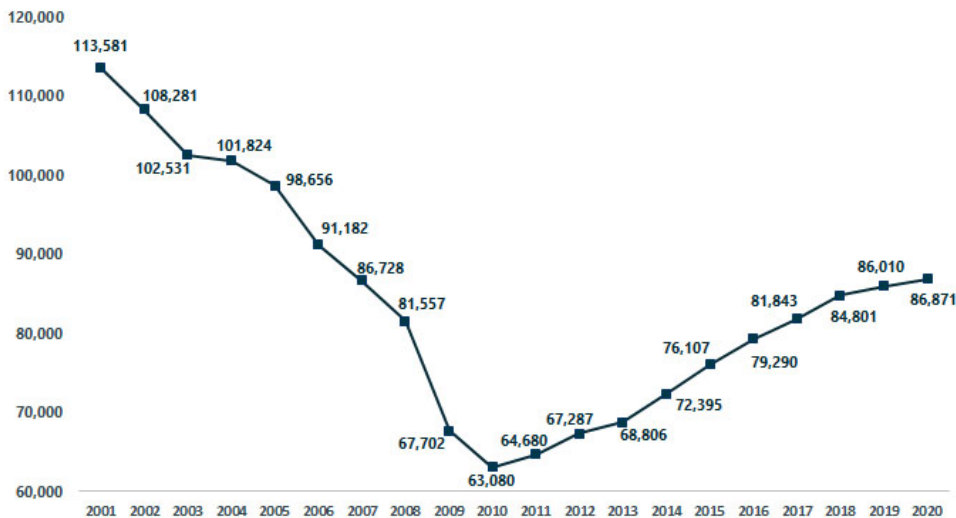
Introduction

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.

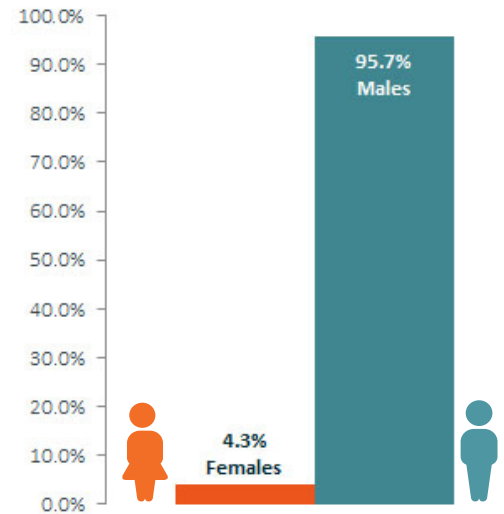


86,871
Construction Workers
1.0% Increase
from 2019

Employment Over Time
2001–2020



Worker Gender Demographics



Construction Worker Demographics

The construction occupation group is not very diverse, despite having over 86,871 workers. A large majority of workers are white males between the ages of 25 and 54. Only 4.3 percent of workers identified as female, while 16.6 percent identified as a race other than white. There is 10.7 percent of workers under the age of 25, while workers aged 55+ accounted for 19.6 percent.

Race and Ethnicity Demographics

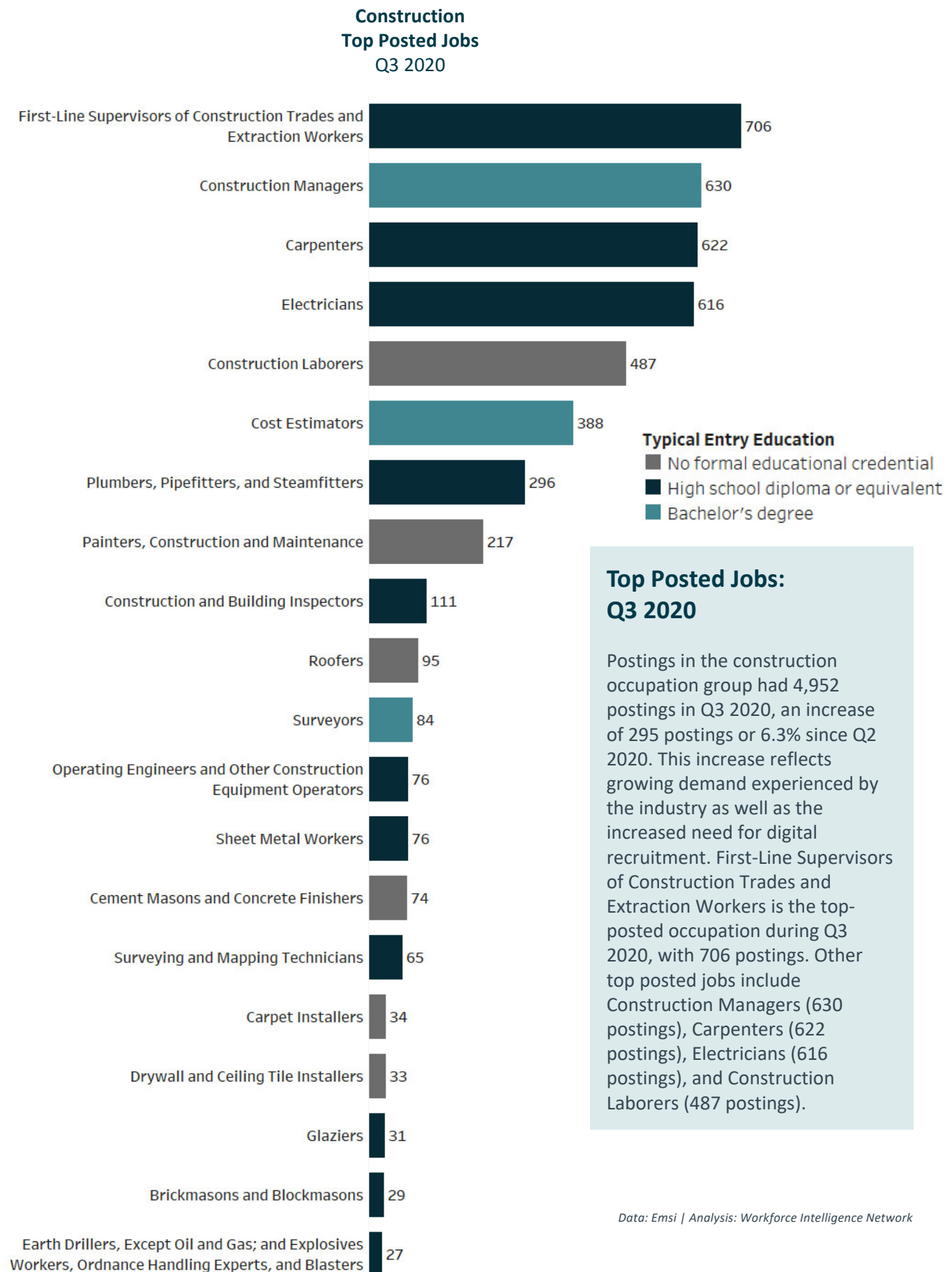
83.4% White | **7.2% Black or African American** | **7.0% Hispanic or Latino**

Worker Age Demographics

Age 14-24
10.7%

Age 25-54
69.7%

Age 55+
19.6%





Construction Wage Overview

The top posted construction job, First-Line Supervisors of Construction Trades and Extraction Workers offers a median wage of \$34.77 per hour or \$72,322 per year. Those working in apprentice-able occupations can also anticipate high wage potential, such as Plumbers, Pipefitters, and Steamfitters, which report a median wage of \$34.44 per hour or \$71,800 annually.

Wage Overview for Top Posted Construction Jobs in Q3 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$20.44	\$26.97	\$34.77	\$44.10	\$51.67
11-9021	Construction Managers	\$31.07	\$37.18	\$49.23	\$62.61	\$79.81
47-2031	Carpenters	\$15.01	\$18.15	\$25.87	\$32.74	\$37.51
47-2111	Electricians	\$17.70	\$24.18	\$32.65	\$38.75	\$47.53
47-2061	Construction Laborers	\$12.83	\$15.08	\$19.36	\$24.60	\$29.41
13-1051	Cost Estimators	\$17.26	\$22.81	\$30.56	\$40.80	\$50.66
47-2152	Plumbers, Pipefitters, and Steamfitters	\$16.12	\$25.24	\$34.44	\$40.30	\$46.39
47-2141	Painters, Construction and Maintenance	\$12.99	\$15.44	\$19.05	\$24.45	\$29.76
47-4011	Construction and Building Inspectors	\$13.65	\$19.32	\$27.33	\$32.84	\$37.57
47-2181	Roofers	\$16.01	\$19.16	\$24.46	\$32.35	\$38.16

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Carpentry
- Subcontracting
- Construction Management
- Plumbing
- Painting

In-Demand Foundational Skills

- Construction
- Valid Driver's License
- Communications
- Android (Operating System)
- Management

In-Demand Education Level*

- High School Diploma: 19.5%
- Associate Degree: 3.8%
- Bachelor's Degree: 14.0%
- Master's Degree: 1.2%

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

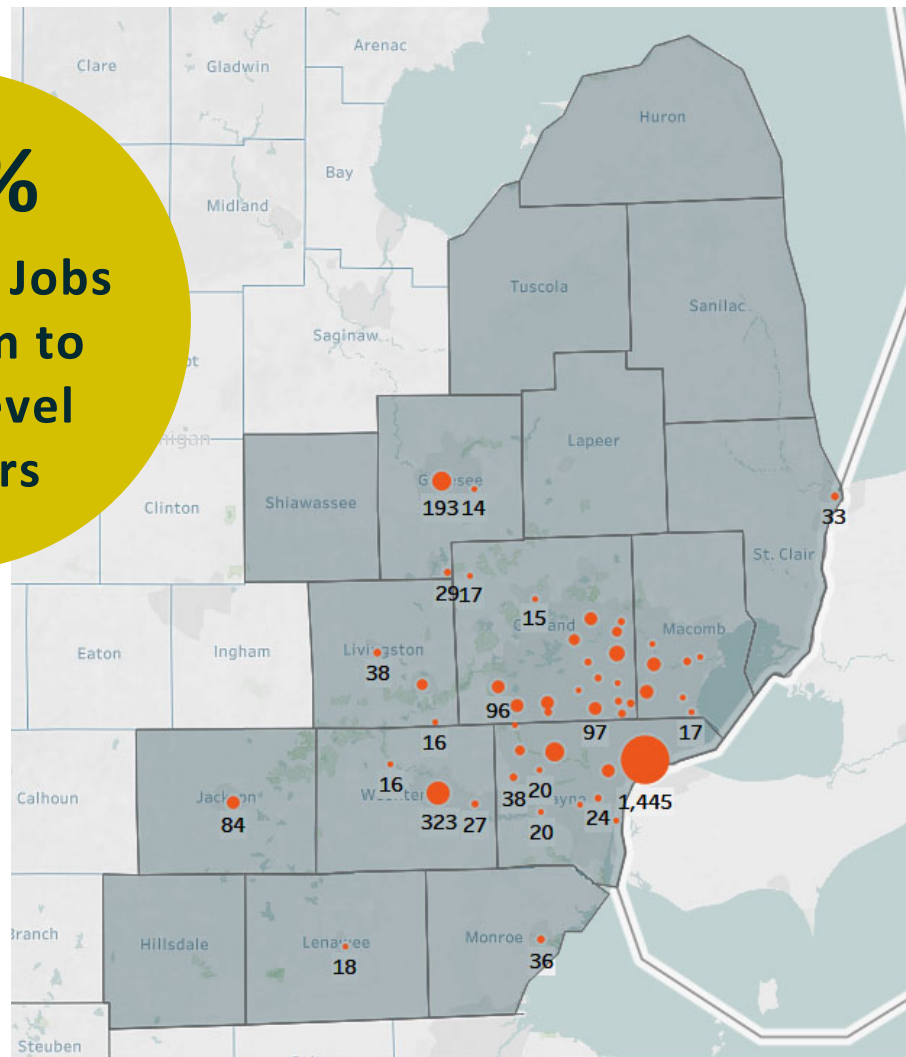
In-Demand Certifications

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



Employer Demand by City

9.9%
of Posted Jobs
Are Open to
Entry-Level
Workers



Top Posting Employers*

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

Job Postings by City

1. Detroit: 1,445 Postings
2. Ann Arbor: 323 Postings
3. Livonia: 215 Postings
4. Flint: 193 Postings
5. Troy: 143 Postings
6. Sterling Heights: 123 Postings
7. Warren: 109 Postings
8. Dearborn: 102 Postings
9. Southfield: 97 Postings
10. Wixom: 96 Postings

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



Introduction

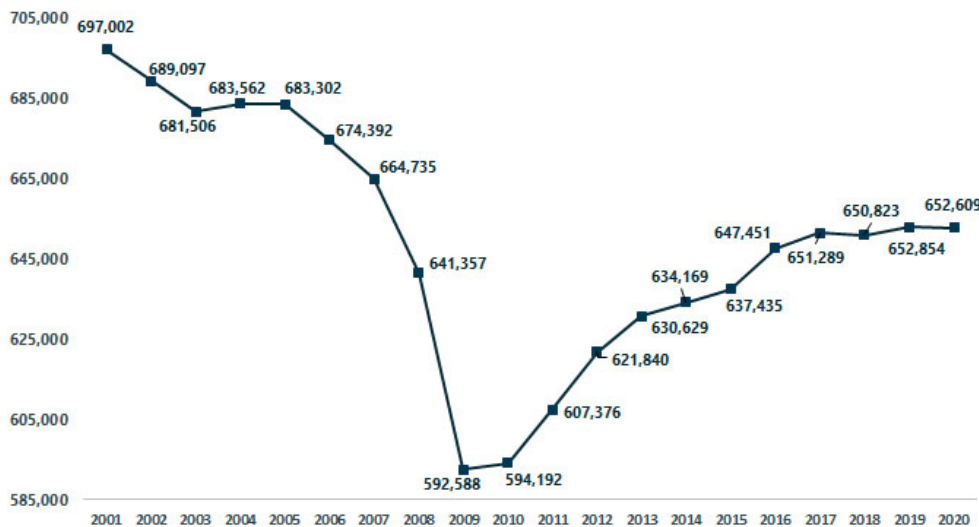
The customer service group is the largest occupation group that WIN analyzes, both in terms of employment and online job postings. This group is very important to the region because it is often a leading indicator, being the first to grow when the economy expands and the first to contract in a downturn.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



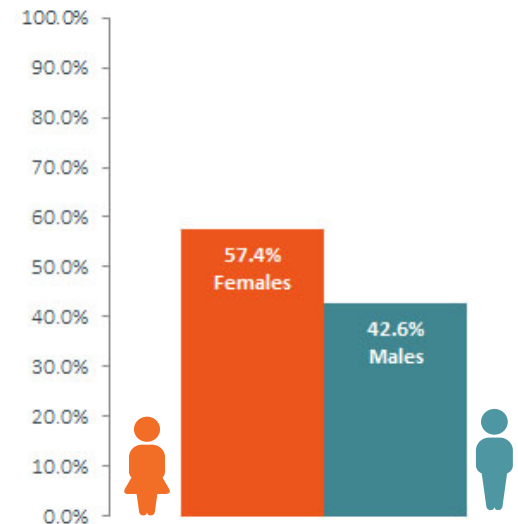
652,609
Customer Service
Workers

A decrease of 245
workers from 2019

Employment Over Time
2001–2019



Worker Gender Demographics



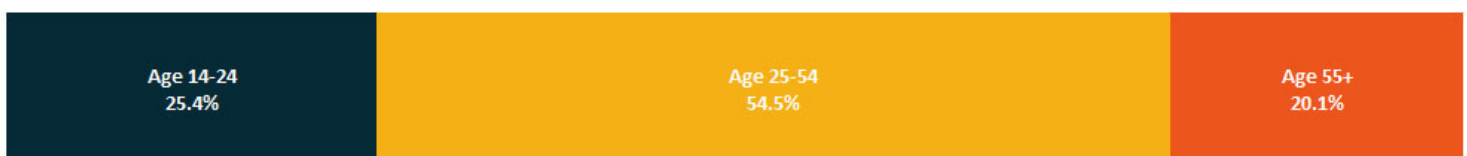
Customer Service Worker Demographics

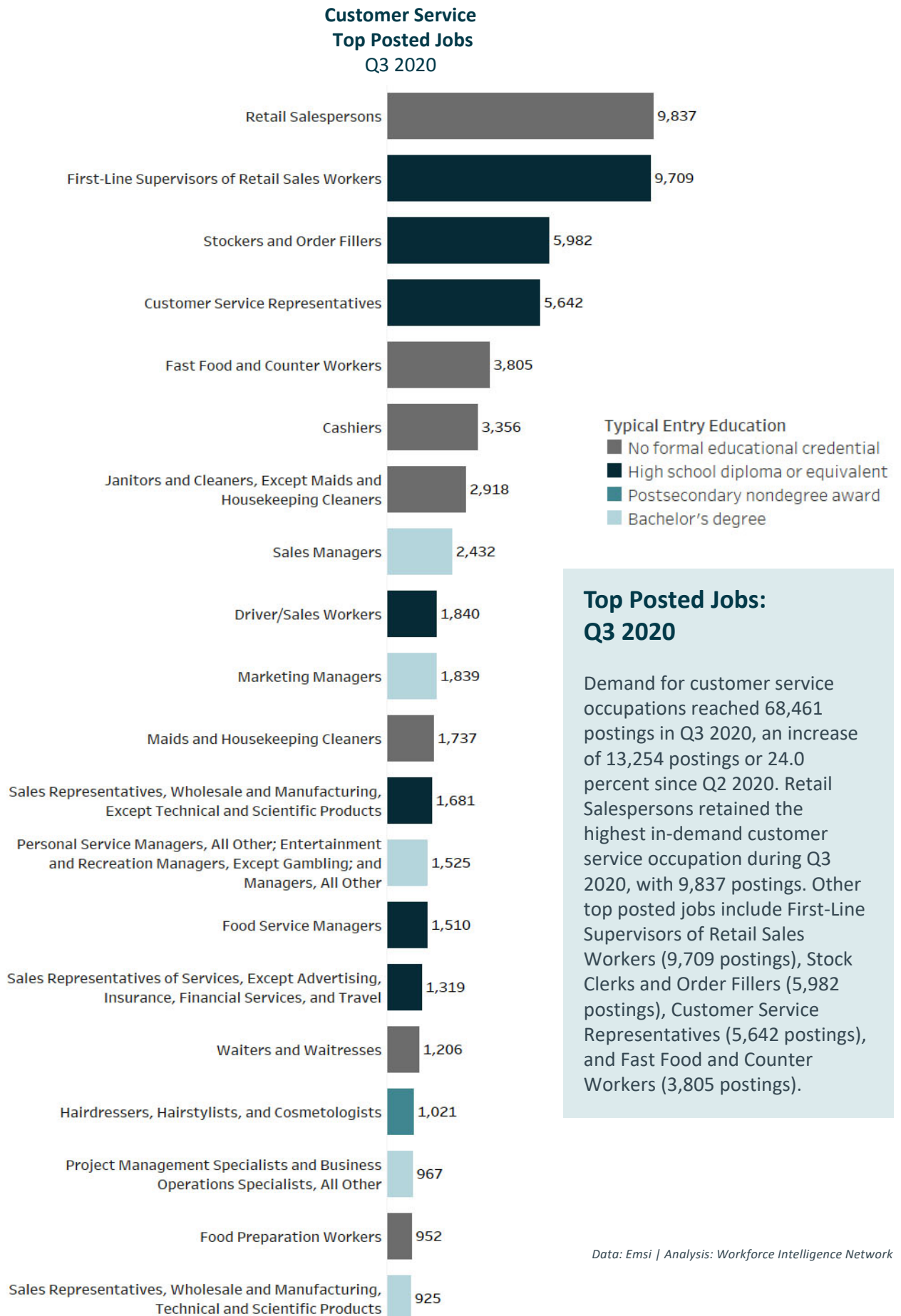
In Q3 2020, there were 652,609 workers in the customer service occupation group, an increase of over 15,000 workers since Q2,2020. During Q3 2020, 57.4 percent of workers identified as female, while 28.3 percent of workers in customer service identified as a racial minority. A quarter of the customer service workers (25.4 percent) were under the age of 24, as compared to the 55 and older age group which was 20.1 percent.

Race and Ethnicity Demographics

71.7% White | **17.9% Black or African American** | **4.7% Hispanic or Latino**

Worker Age Demographics







Customer Service Wage Overview

Despite being in high demand, most customer service-related occupations offer relatively low wages. However, two 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. The top posted occupation this quarter, Retail Salespersons earn a median hourly wage of \$11.97. With interest in gaining additional experience and training, workers can transition to managerial positions such as First-Line Supervisors of Retail Sales Workers, which has a median wage of \$18.57 per hour or \$38,626 annually.

Wage Overview for Top Posted Customer Service Jobs in Q3 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
41-2031	Retail Salespersons	\$9.68	\$10.50	\$11.97	\$14.91	\$21.50
41-1011	First-Line Supervisors of Retail Sales Workers	\$12.16	\$14.71	\$18.57	\$25.21	\$33.45
53-7065	Stockers and Order Fillers	\$9.95	\$11.00	\$12.74	\$15.92	\$20.66
43-4051	Customer Service Representatives	\$11.30	\$13.43	\$16.76	\$21.83	\$29.14
35-3023	Fast Food and Counter Workers	\$9.69	\$9.94	\$10.53	\$11.68	\$12.83
41-2011	Cashiers	\$9.66	\$10.06	\$10.97	\$12.15	\$14.56
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$9.90	\$10.72	\$12.29	\$15.68	\$19.13
11-2022	Sales Managers	\$35.37	\$50.33	\$66.75	\$83.07	\$120.34
53-3031	Driver/Sales Workers	\$9.80	\$10.16	\$12.63	\$20.35	\$24.82
11-2021	Marketing Managers	\$37.09	\$48.32	\$62.84	\$79.05	\$110.64

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Merchandising
- Selling Techniques
- Cash Register
- Cash Handling
- Restaurant Operation

In-Demand Foundational Skills

- Sales
- Customer Service
- Communications
- Management
- Leadership

In-Demand Education Level*

- High School Diploma: 34.0%
- Associate Degree: 3.8%
- Bachelor's Degree: 13.4%
- 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

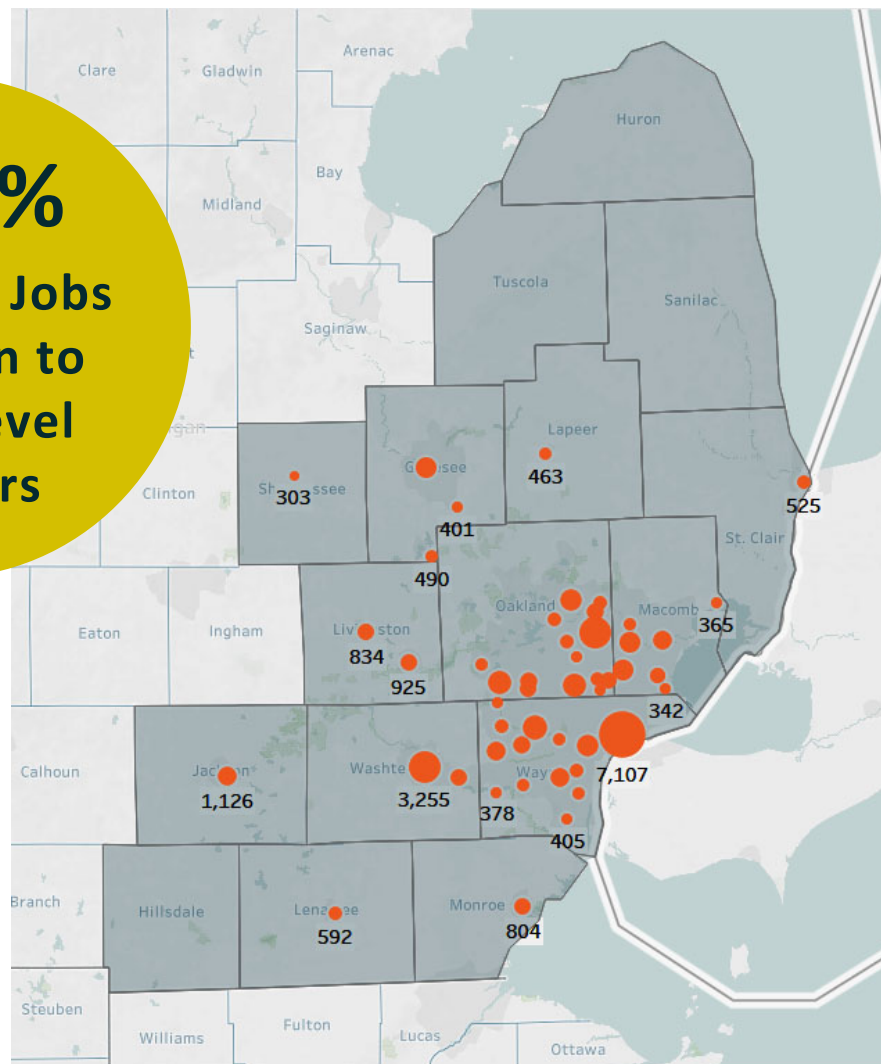
In-Demand Certifications

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



Employer Demand by City

15.0%
of Posted Jobs
Are Open to
Entry-Level
Workers



Top Posting Employers*

- Dollar General Corporation
- Amazon.com, Inc.
- AutoZone, Inc.
- The Home Depot
- The Kroger Co
- Wal-Mart, Inc.
- CVS Health Corporation
- Dollar Tree, Inc.
- Shipt, Inc.
- Lowe's Companies, Inc.

Job Postings by City

1. Detroit: 7,107 Postings
2. Troy: 3,279 Postings
3. Ann Arbor: 3,255 Postings
4. Livonia: 1,895 Postings
5. Novi: 1,823 Postings
6. Southfield: 1,724 Postings
7. Auburn Hills: 1,499 Postings
8. Dearborn: 1,467 Postings
9. Flint: 1,430 Postings
10. Warren: 1,394 Postings

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



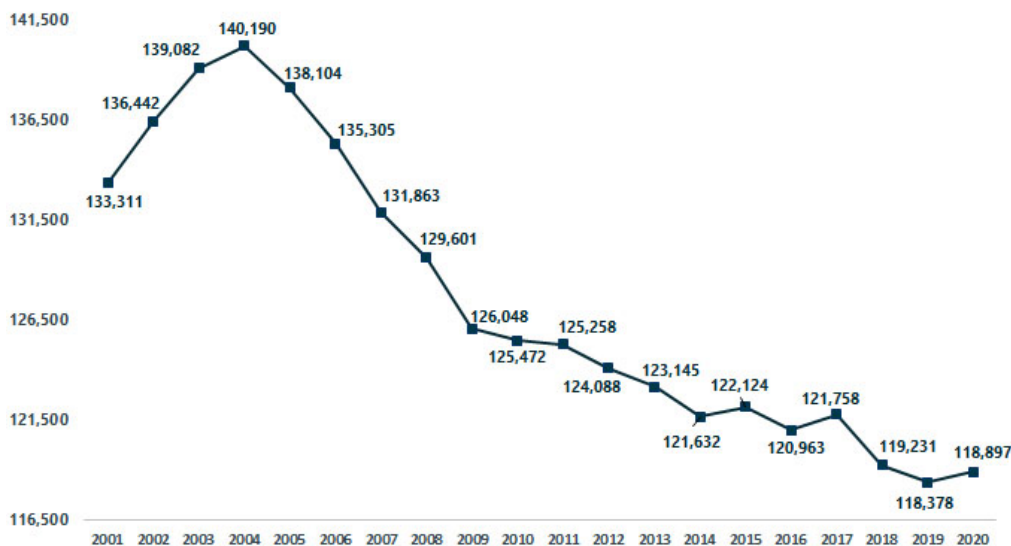
Introduction

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

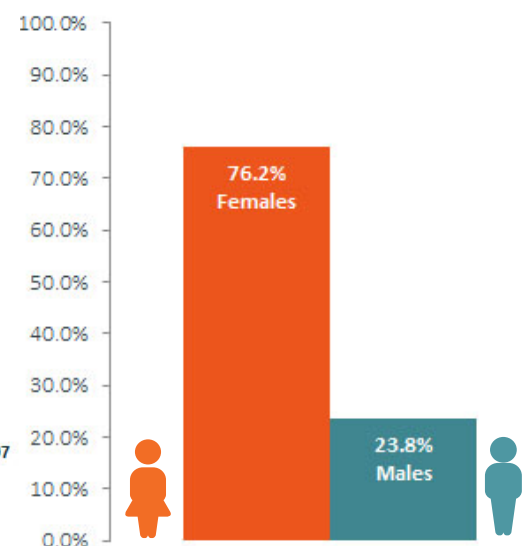


118,897
Education Workers
0.4% Increase from
2019

Employment Over Time
2001–2019



Worker Gender Demographics



Education Worker Demographics

Due to many schools shifting to distance learning and providing online classes, employment decreased by 11,004 or 8.5 percent since Q2 2020, for a total of 118,897 workers in YTD 2020. This occupation group is composed primarily of white females between the ages of 25 and 54. Only 23.8 percent of workers are males, and only 19.2 percent of workers identify as a racial minority.

Race and Ethnicity Demographics

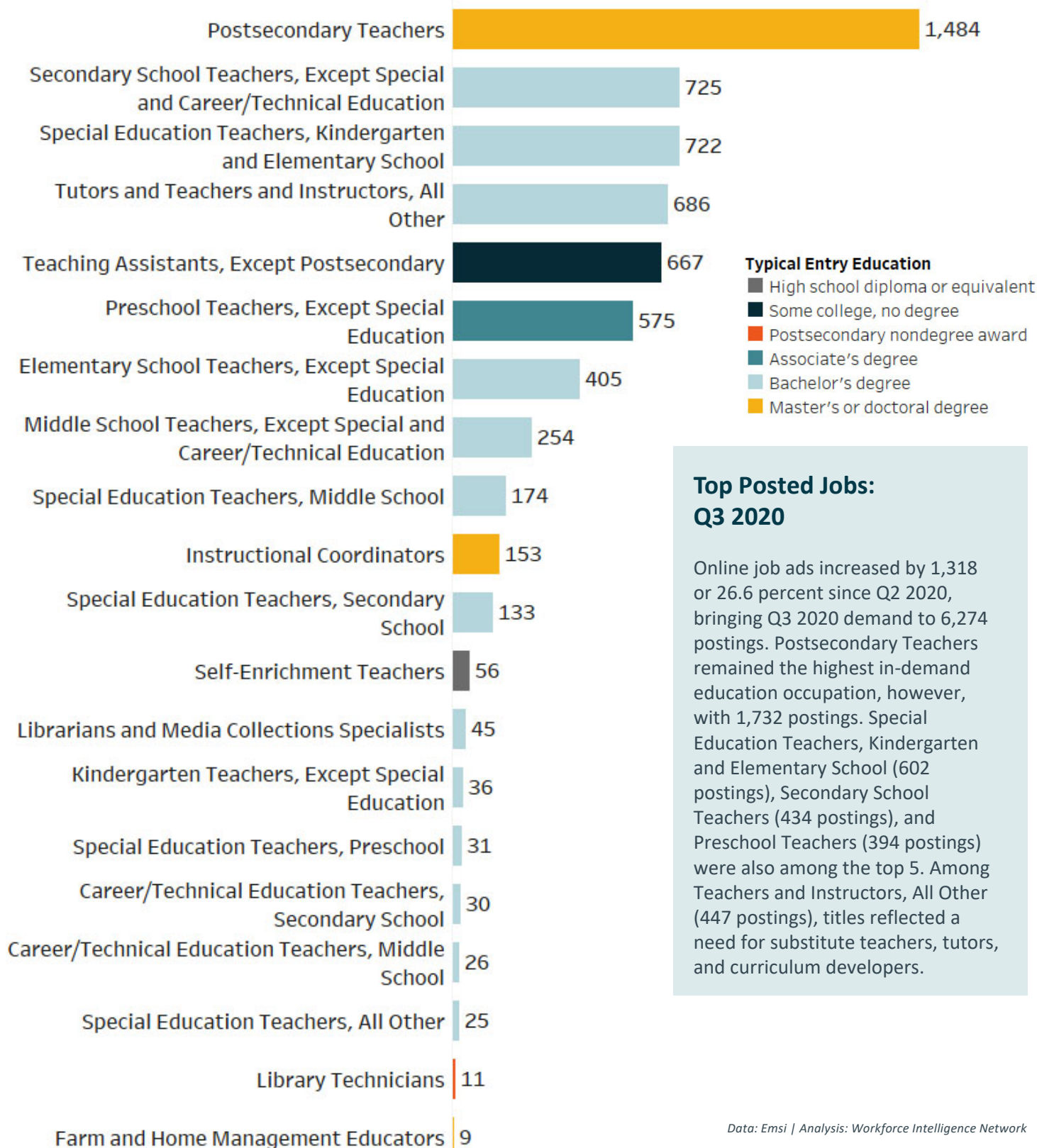
80.8% White | 11.0% Black or African-American | 3.8% Asian

Worker Age Demographics





Education Top Posted Jobs Q3 2020





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. Seven 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 \$39.46 hourly, translating to annual earnings of about \$82,077.

Wage Overview for Top Posted Education Jobs in Q3 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
25-1099	Postsecondary Teachers	\$16.59	\$24.26	\$39.46	\$56.69	\$74.38
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	\$19.79	\$23.65	\$30.71	\$38.91	\$45.68
25-2052	Special Education Teachers, Kindergarten and Elementary School	\$20.92	\$25.16	\$31.23	\$41.07	\$48.00
25-3097	Tutors and Teachers and Instructors, All Other	\$10.54	\$12.58	\$19.85	\$30.28	\$41.36
25-9045	Teaching Assistants, Except Postsecondary	\$9.88	\$11.29	\$13.35	\$15.53	\$18.49
25-2011	Preschool Teachers, Except Special Education	\$10.06	\$11.26	\$14.33	\$20.52	\$27.26
25-2021	Elementary School Teachers, Except Special Education	\$19.47	\$24.22	\$34.44	\$43.74	\$51.92
25-2022	Middle School Teachers, Except Special and Career/Technical Education	\$19.83	\$23.88	\$32.07	\$39.79	\$46.37
25-2057	Special Education Teachers, Middle School	\$23.77	\$26.63	\$32.07	\$40.42	\$46.32
25-9031	Instructional Coordinators	\$19.03	\$23.92	\$32.41	\$42.70	\$51.10

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Special Education
- Mathematics
- Lesson Planning
- Individualized Education Programs (IEP)
- Child Development

In-Demand Foundational Skills

- Teaching
- Communications
- Leadership
- Research
- Planning

In-Demand Education Level*

- High School Diploma: 18.5%
- Associate Degree: 8.3%
- Bachelor's Degree: 27.1%
- Master's Degree: 11.8%

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

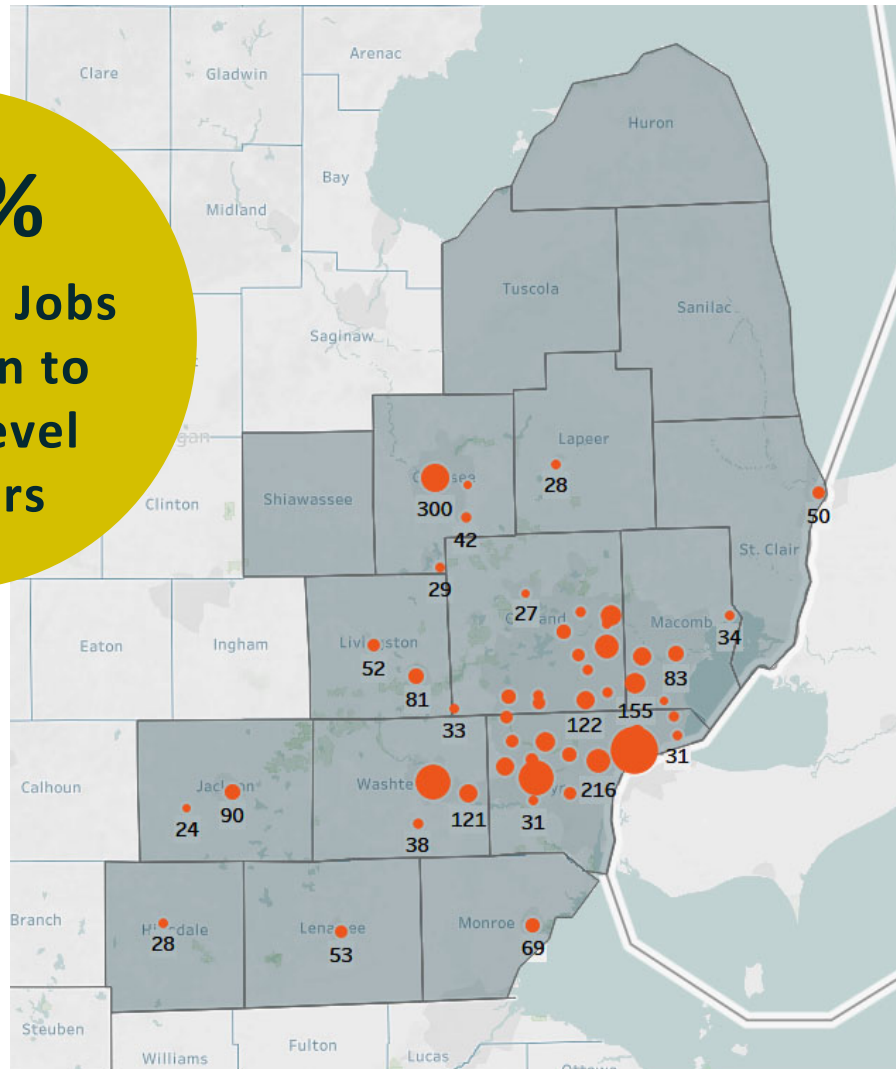
In-Demand Certifications

- NHA Certified
- Teaching English As A Foreign Language
- Math Endorsement
- Medical License
- Science Endorsement



Employer Demand by City

6.6%
of Posted Jobs
Are Open to
Entry-Level
Workers



Top Posting Employers*

- Wayne RESA
- Sunbelt Staffing, LLC
- Soliant Health, Inc
- University of Michigan
- KinderCare Learning Centers
- Procare Therapy , Inc.
- Care.com, Inc.
- Wayne County Schools
- K12 Services Inc
- Oakland University

Job Postings by City

1. Detroit: 849 Postings
2. Ann Arbor: 471 Postings
3. Wayne: 458 Postings
4. Flint: 300 Postings
5. Dearborn: 216 Postings
6. Troy: 207 Postings
7. Rochester: 165 Postings
8. Warren: 155 Postings
9. Livonia: 138 Postings
10. Southfield: 122 Postings

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



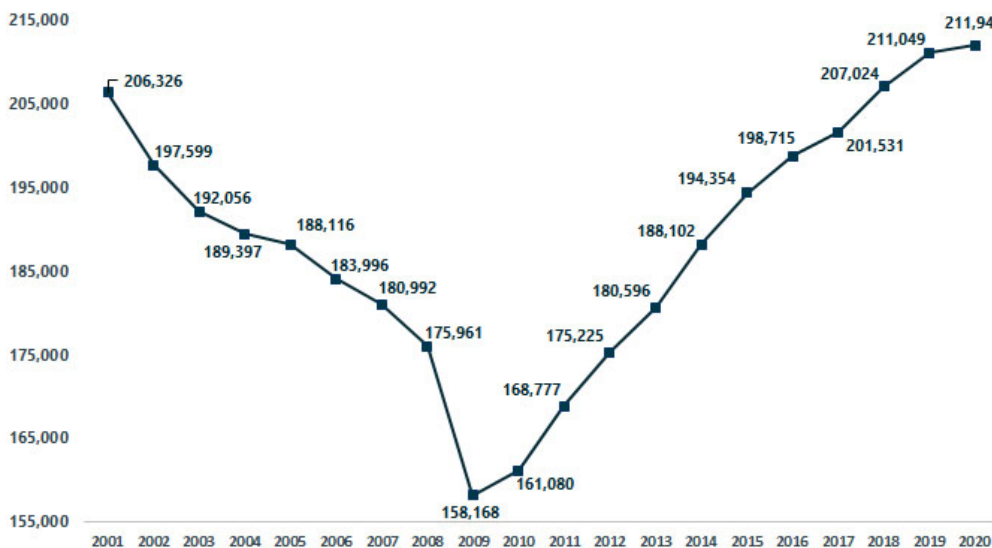
Introduction

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

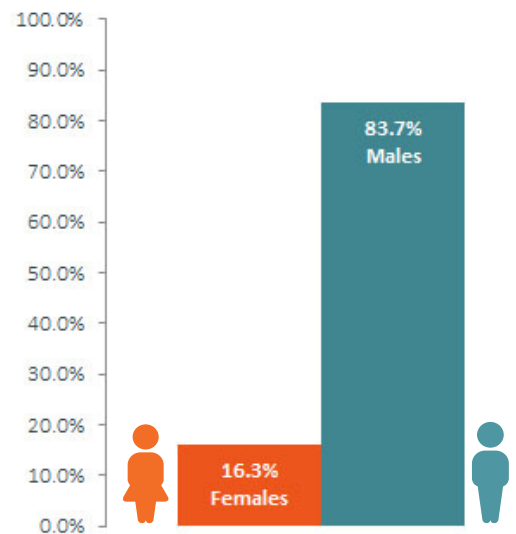


211,945
Energy Workers
0.4% Increase from
2019

Employment Over Time
2001–2019



Worker Gender Demographics



Energy Worker Demographics

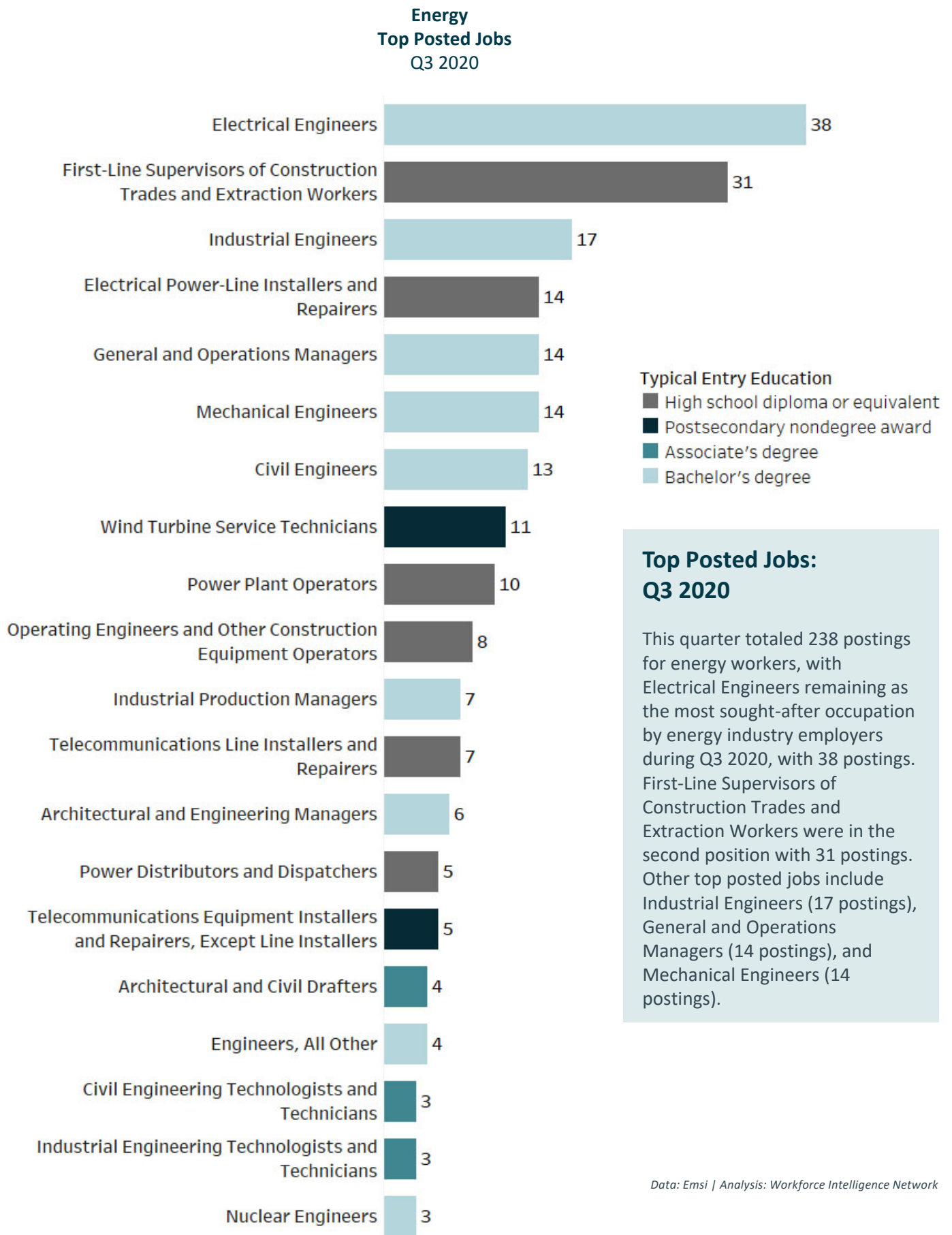
For Q3 2020, there were 211,945 workers in the energy occupation group. This group is primarily made up of white males between the ages of 25 and 54, with 16.3 percent of workers identifying as female and just 21.1 percent identifying as a racial minority. Year-to-date 2020, 5.3 percent of the workers in the occupation group are under the age of 25 compared to the 24.5 percent 55 years of age or older.

Race and Ethnicity Demographics

78.9% White | 9.9% Black or African American | 6.5% Asian

Worker Age Demographics







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 requirements related to these jobs. Each of the top ten energy occupations have median wages over \$25 per hour. The top posted energy job, Electrical Engineers, offers a median hourly wage of \$44.80, or annual earnings of approximately \$93,184. 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 Q3 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2071	Electrical Engineers	\$31.31	\$36.89	\$44.80	\$54.12	\$63.09
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$20.44	\$26.97	\$34.77	\$44.10	\$51.67
17-2112	Industrial Engineers	\$31.07	\$36.68	\$45.08	\$54.42	\$61.97
11-1021	General and Operations Managers	\$22.16	\$33.03	\$51.18	\$80.19	\$114.61
17-2141	Mechanical Engineers	\$30.84	\$36.25	\$45.24	\$56.11	\$64.85
49-9051	Electrical Power-Line Installers and Repairers	\$17.96	\$25.62	\$37.24	\$44.40	\$49.87
17-2051	Civil Engineers	\$25.66	\$30.30	\$36.85	\$45.22	\$55.24
49-9081	Wind Turbine Service Technicians	\$19.89	\$22.40	\$26.69	\$33.00	\$40.39
51-8013	Power Plant Operators	\$30.81	\$35.21	\$41.01	\$48.05	\$57.38
47-2073	Operating Engineers and Other Construction Equipment Operators	\$20.36	\$23.69	\$27.64	\$31.82	\$37.84

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Electric Power Distribution
- Corrective And Preventive Action (CAPA)
- Project Management
- Electrical Engineering
- Engineering Design Process

In-Demand Foundational Skills

- Communications
- Operations
- Management
- Planning
- Problem Solving

In-Demand Education Level*

- High School Diploma: 32.4%
- Associate Degree: 14.3%
- Bachelor's Degree: 43.7%
- Master's Degree: 16.0%

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

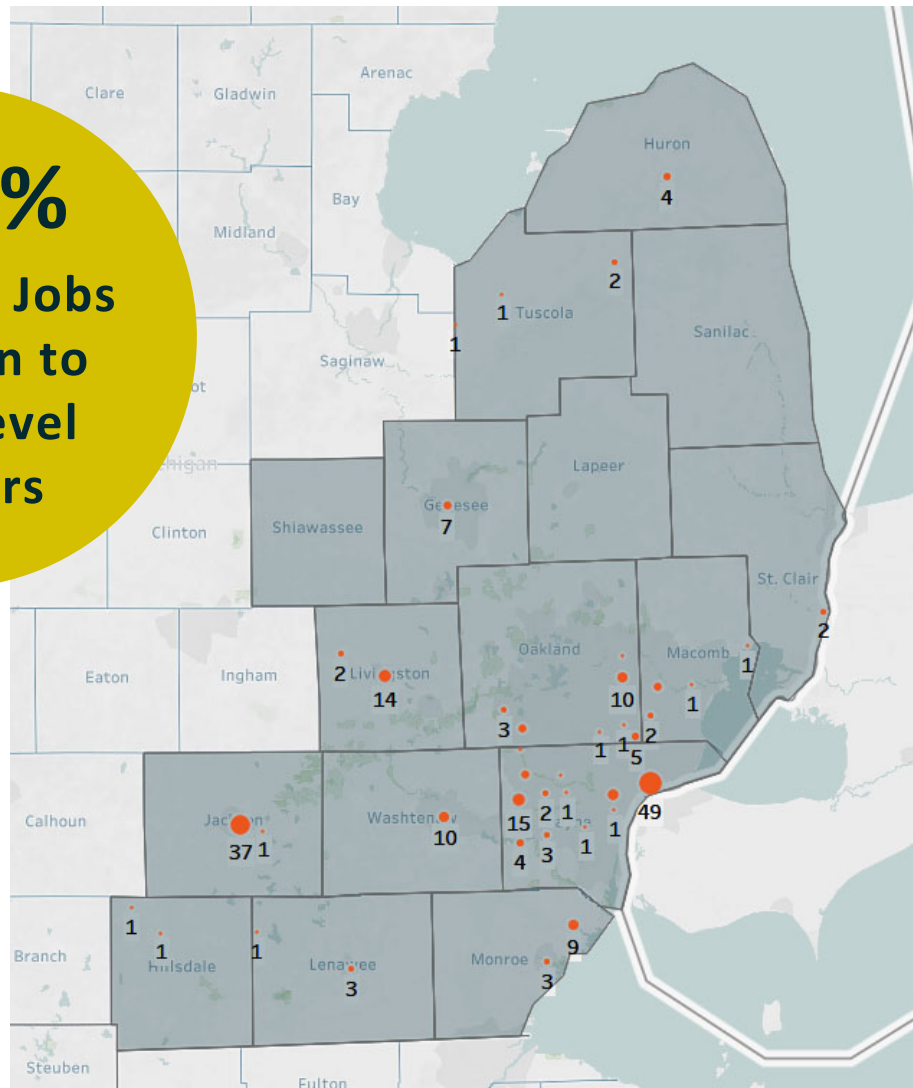
In-Demand Certifications

- Commercial Driver's License (CDL)
- Journeyman Lineman
- CDL Class B License
- Certified Information Privacy Professional
- CFC Refrigeration Certification



Employer Demand by City

11.8%
of Posted Jobs
Are Open to
Entry-Level
Workers



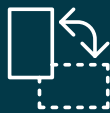
Top Posting Employers*

- DTE Energy Company
- CMS Energy Corporation
- Henkels & McCoy, Inc.
- Lg Electronics
- Service Electric Company
- Aegion Corporation
- Itc Holdings Corp.
- ROYAL DUTCH SHELL PLC
- Duke Energy Corporation
- Cavo Broadband Communications, LLC

Job Postings by City

1. Detroit: 49 Postings
2. Jackson: 37 Postings
3. Canton: 15 Postings
4. Howell: 14 Postings
5. Dearborn: 11 Postings
6. Ann Arbor: 10 Postings
7. Troy: 10 Postings
8. Newport: 9 Postings
9. Flint: 7 Postings
10. Plymouth: 7 Postings

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



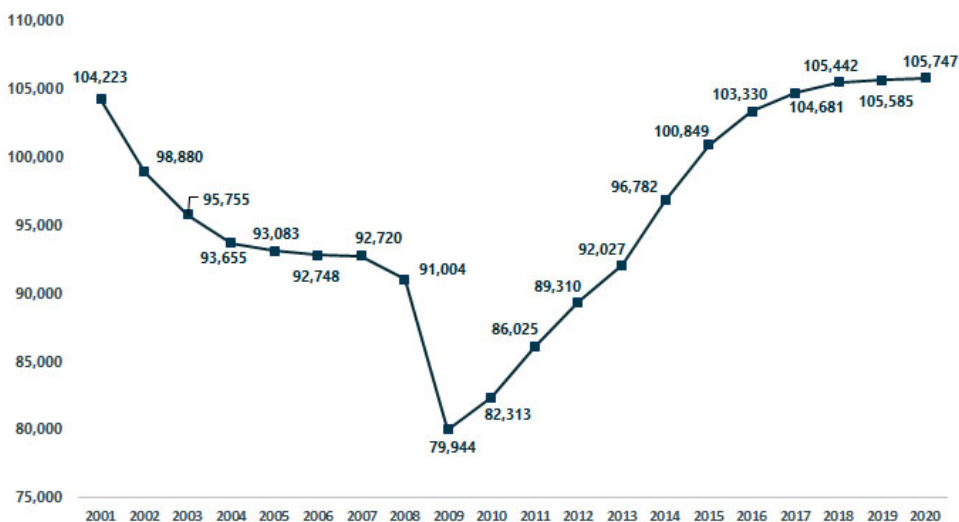
Introduction

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.

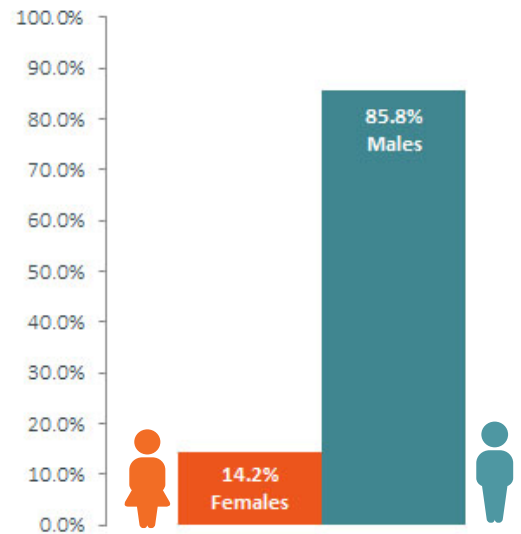


105,747
Engineering Workers
0.2% Increase from 2019

Employment Over Time
2001–2020



Worker Gender Demographics



Engineering and Design Worker Demographics

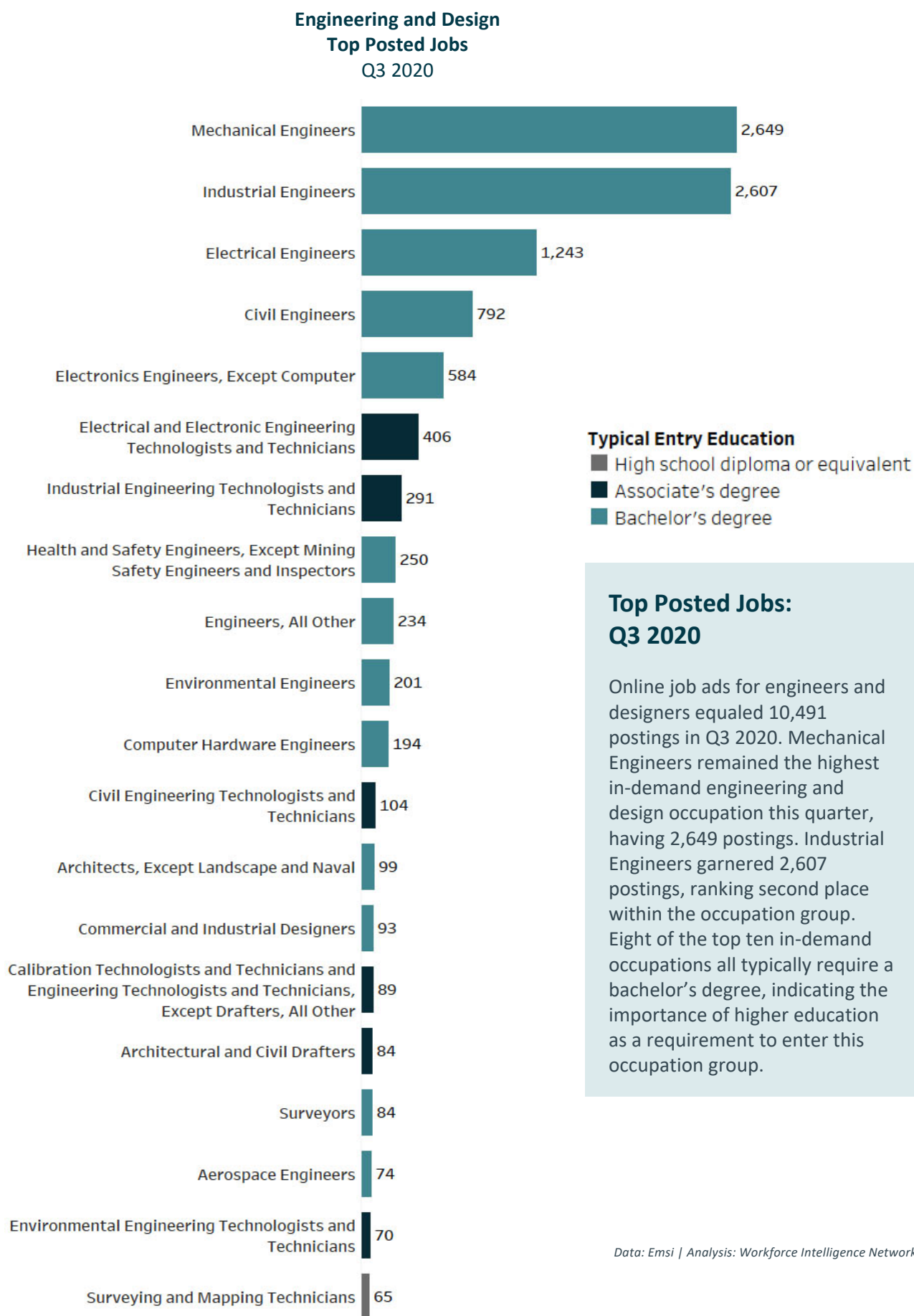
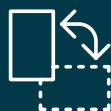
During Q3 2020, there were 105,747 workers in the engineering and design group. Majority of the workforce (69.4 percent) are between the ages of 25-54, likely due to consistently high educational requirements. This group is heavily dominated by white males, with the female workers totaling just 14.2 percent of current. Minority engineering and designing workers equal 22.4 percent of the workforce.

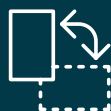
Race and Ethnicity Demographics

77.6% White | 10.1% Asian | 7.8% Black or African American

Worker Age Demographics







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 required for these jobs. Median wages are above \$27 per hour across the group, and the top posted engineering and design job, Mechanical Engineers, offers a median hourly wage of \$45.24, equating to an annual salary of approximately \$94,099.

Wage Overview for Top Posted Engineering and Design Jobs in Q3 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2141	Mechanical Engineers	\$30.84	\$36.25	\$45.24	\$56.11	\$64.85
17-2112	Industrial Engineers	\$31.07	\$36.68	\$45.08	\$54.42	\$61.97
17-2071	Electrical Engineers	\$31.31	\$36.89	\$44.80	\$54.12	\$63.09
17-2051	Civil Engineers	\$25.66	\$30.30	\$36.85	\$45.22	\$55.24
17-2072	Electronics Engineers, Except Computer	\$33.96	\$41.28	\$50.98	\$60.97	\$81.44
17-3023	Electrical and Electronic Engineering Technologists and Technicians	\$17.81	\$22.13	\$28.62	\$34.73	\$39.69
17-3026	Industrial Engineering Technologists and Technicians	\$17.81	\$22.10	\$27.89	\$35.08	\$41.49
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	\$33.12	\$38.77	\$47.93	\$58.29	\$68.70
17-2199	Engineers, All Other	\$24.98	\$33.85	\$43.09	\$55.63	\$64.46
17-2081	Environmental Engineers	\$28.01	\$34.28	\$43.69	\$56.34	\$66.17

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

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

In-Demand Foundational Skills

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

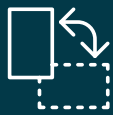
In-Demand Education Level*

- High School Diploma: 8.5%
- Associate Degree: 7.4%
- Bachelor's Degree: 57.4%
- Master's Degree: 12.8%

*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

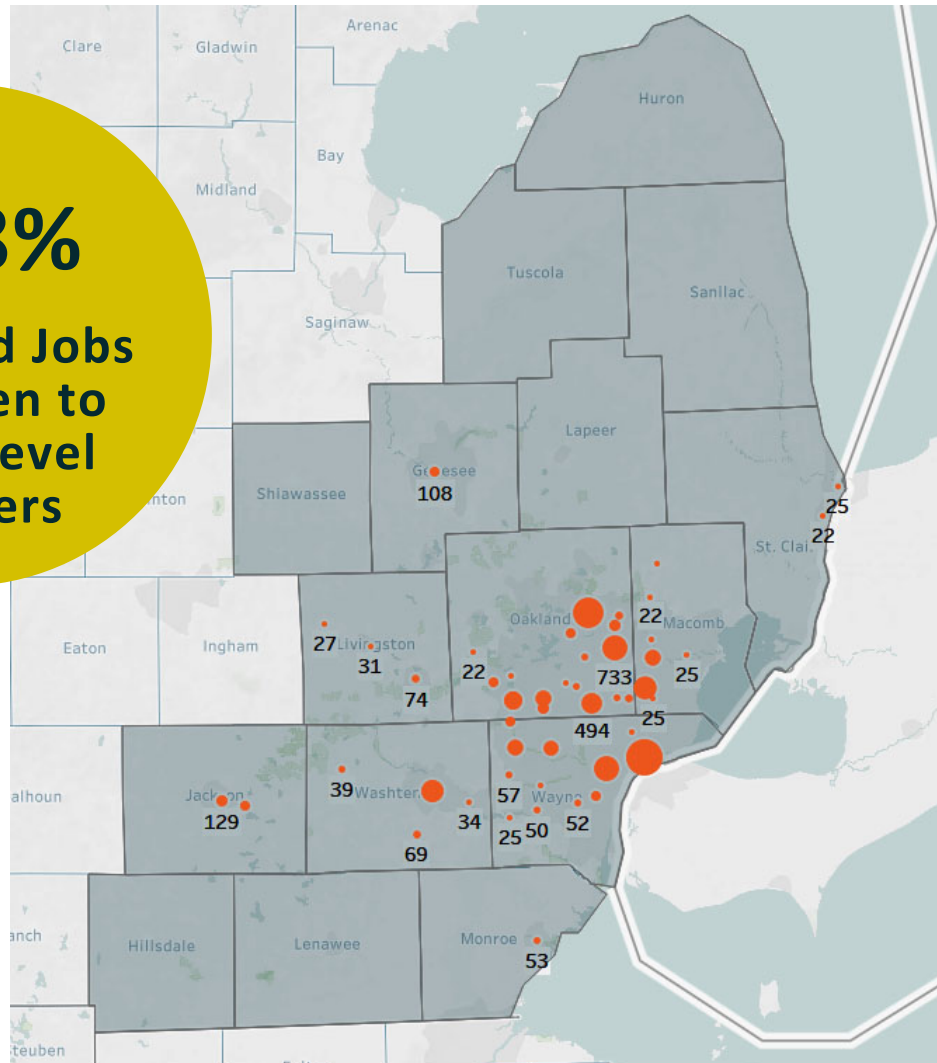
- Professional Engineer
- Licensed Professional Engineer
- Six Sigma Green Belt Certification
- Engineer in Training
- (American Society For Quality) ASQ Certified



Employer Demand by City

12.8%

**of Posted Jobs
Are Open to
Entry-Level
Workers**



Top Posting Employers*

- Kelly Services, Inc.
- General Motors Company
- Cynet Systems Inc.
- Gtech Services, Inc
- Growing People and Companies
- Aerotek, Inc.
- ALTAIR ENGINEERING, INC.
- Ford Motor Company
- FCA US LLC
- Advantage Resourcing

Job Postings by City

- Detroit: 1,584 Postings
- Auburn Hills: 1,098 Postings
- Troy: 733 Postings
- Dearborn: 699 Postings
- Warren: 617 Postings
- Ann Arbor: 587 Postings
- Southfield: 494 Postings
- Novi: 399 Postings
- Farmington Hills: 334 Postings
- Plymouth: 311 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.

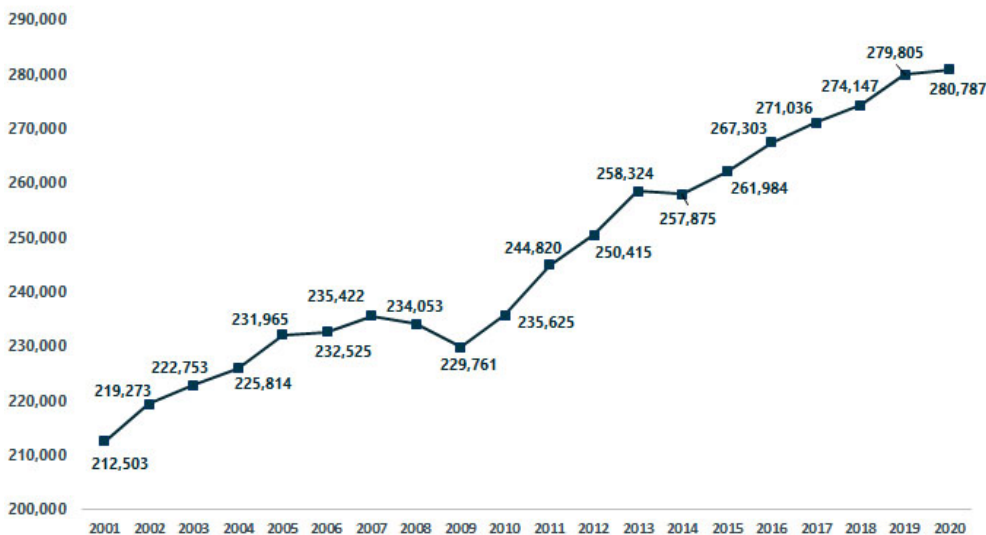


280,787

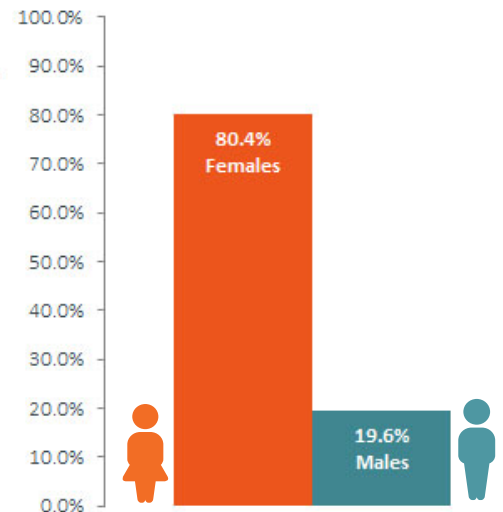
Health Care Workers

0.4% Increase from 2019

Employment Over Time 2001–2019



Worker Gender Demographics



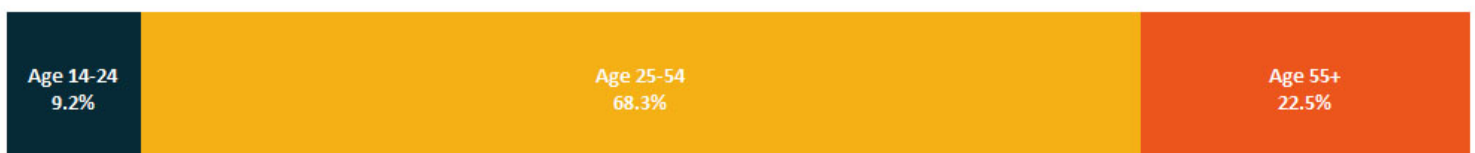
Health Care Worker Demographics

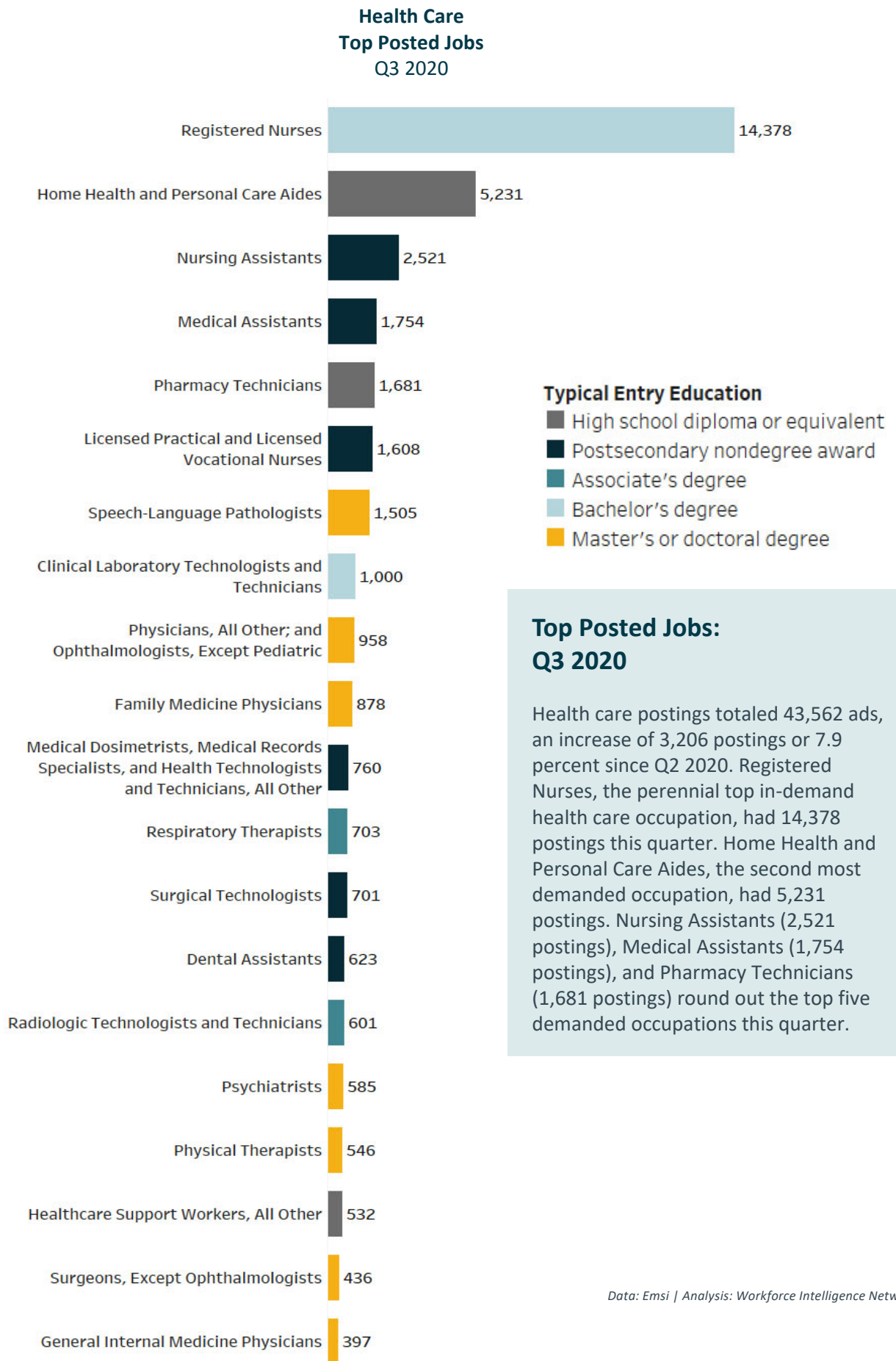
The health care occupation group employs around 280,787 workers, who are overwhelmingly female (80.4 percent) and between the ages of 25 and 54 (68.3 percent), although 22.5 percent of workers are 55 years of age or older. The racial composition of this group is somewhat more diverse than others, with 69.1 percent of workers identifying as white, 20.7 percent identifying as Black or African American, and 10.5 percent identifying otherwise.

Race and Ethnicity Demographics

67.3% White | 22.2% Black or African American | 5.7% Asian

Worker Age Demographics







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. Licensed Practical and Licensed Vocational Nurses earn a median hourly wage of \$25.90 per hour or annual salary of about \$53,872.

Wage Overview for Top Posted Health Care Jobs in Q3 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
29-1141	Registered Nurses	\$27.15	\$31.03	\$35.98	\$41.69	\$47.92
31-1128	Home Health and Personal Care Aides	\$9.91	\$10.58	\$11.70	\$13.38	\$15.65
31-1131	Nursing Assistants	\$12.09	\$13.43	\$15.22	\$17.49	\$19.25
31-9092	Medical Assistants	\$12.86	\$14.22	\$16.30	\$18.53	\$20.84
29-2052	Pharmacy Technicians	\$11.06	\$13.06	\$16.19	\$19.65	\$23.69
29-2061	Licensed Practical and Licensed Vocational Nurses	\$20.35	\$22.77	\$25.90	\$28.58	\$30.51
29-1127	Speech-Language Pathologists	\$25.42	\$31.43	\$37.53	\$46.44	\$62.90
29-2018	Clinical Laboratory Technologists and Technicians	\$14.20	\$17.35	\$25.77	\$33.17	\$37.77
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	\$24.88	\$28.03	\$45.98	\$102.77	\$116.32
29-1215	Family Medicine Physicians	\$47.78	\$58.37	\$88.39	\$106.26	\$153.42

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

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

In-Demand Foundational Skills

- Communications
- Customer Service
- Management
- Compassion
- Leadership

In-Demand Education Level*

- High School Diploma: 19.6%
- Associate Degree: 11.8%
- Bachelor's Degree: 12.8%
- Master's Degree: 5.5%

In-Demand Certifications

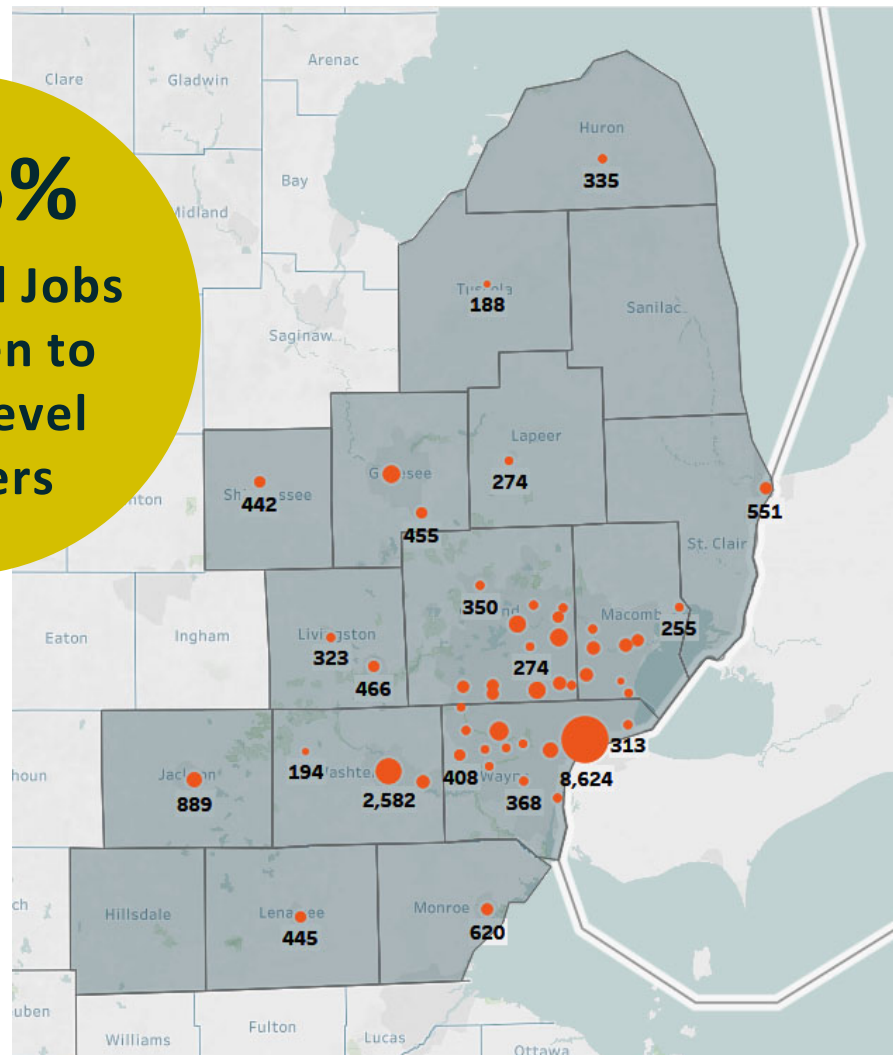
- Certified Nursing Assistant
- Licensed Practical Nurse
- Bachelor of Science in Nursing (BSN)
- Nurse Practitioner
- Certified Pharmacy Technician

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



Employer Demand by City

19.5%
of Posted Jobs
Are Open to
Entry-Level
Workers



Top Posting Employers*

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

Job Postings by City

1. Detroit: 8,624 Postings
2. Ann Arbor: 2,582 Postings
3. Livonia: 1,346 Postings
4. Flint: 1,274 Postings
5. Troy: 1,181 Postings
6. Southfield: 1,116 Postings
7. Pontiac: 1,101 Postings
8. Dearborn: 929 Postings
9. Jackson: 889 Postings
10. Warren: 754 Postings

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

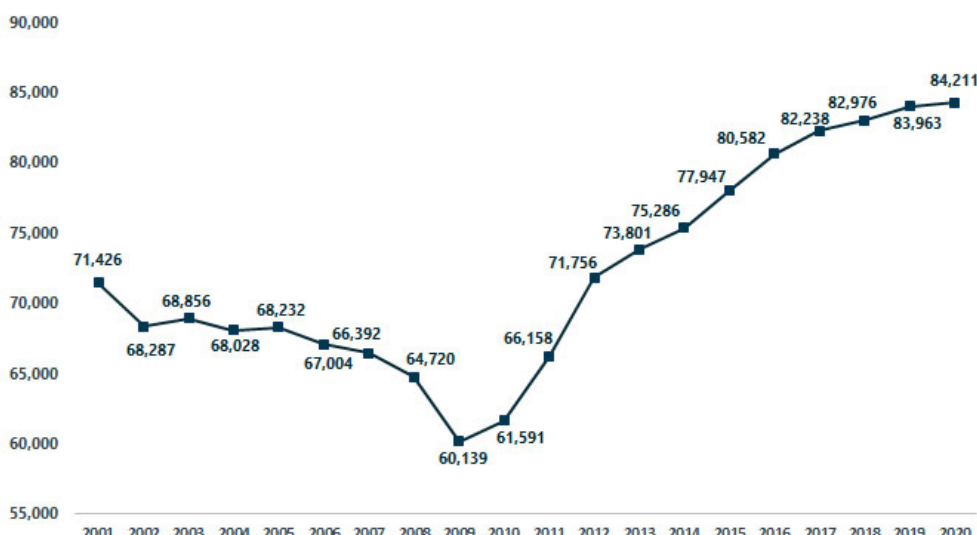


84,211

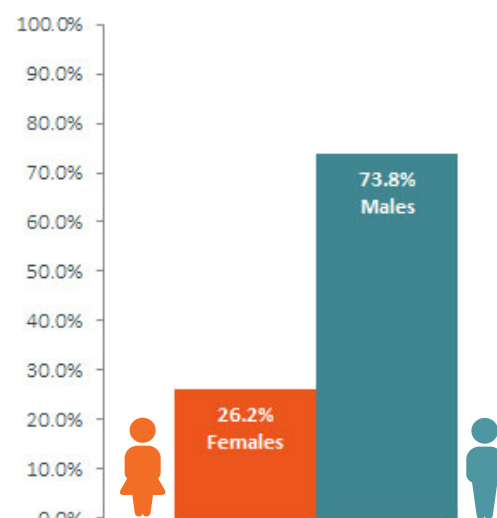
IT Workers

0.3% Increase
from 2019

Employment Over Time
2001–2020



Worker Gender Demographics



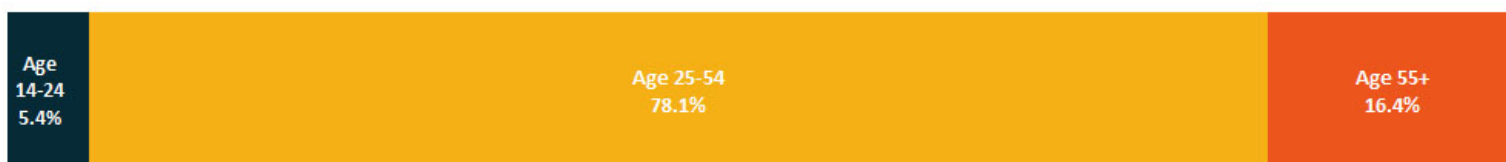
IT Worker Demographics

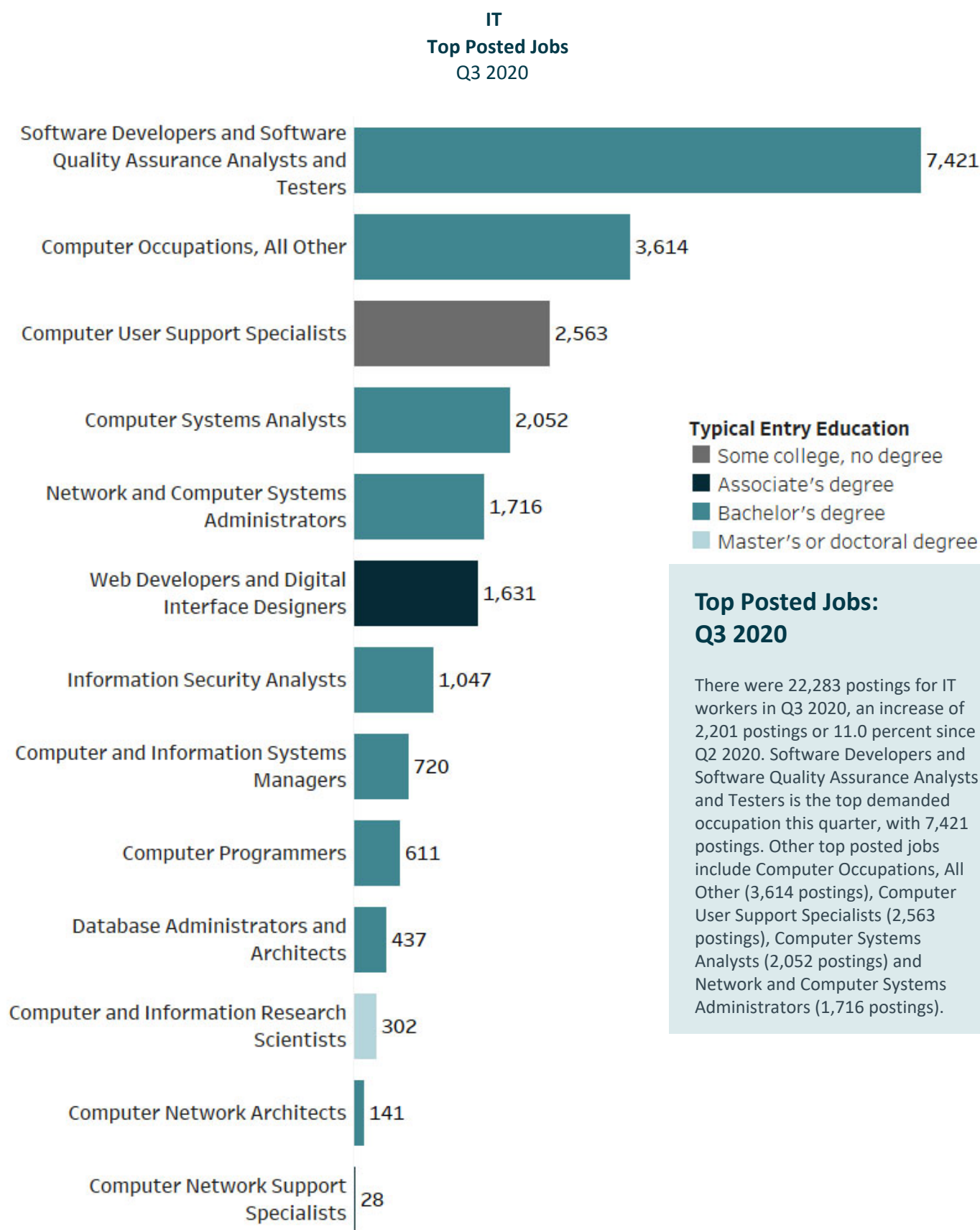
In Q3 2020, the IT occupation group had 84,211 workers YTD. A large majority of workers are white males between the ages of 25 and 54 (78.4 percent). Currently, 73.8 percent of the workers in IT in southeast Michigan identify as male, and 67.4 percent identify as white. There are a broad range of organizations providing specialized training resources for female and minority IT workers in the City of Detroit as well as throughout southeast Michigan. With the push to diversify the IT field, more opportunities are opening for women and minorities.

Race and Ethnicity Demographics

67.4% White | 18.4% Black or African American | 10.0% Asian

Worker Age Demographics







IT Wage Overview

Most IT-related jobs offer high wages providing a lucrative opportunity to job seekers willing to meet the minimum education requirements for these jobs. Software Developers and Software Quality Assurance Analysts and Testers, the top posted IT job, earn a median hourly wage of \$44.29 per hour or nearly \$92,123 per year. Occupations requiring shorter-term training, such as Computer User Support Specialists and Web Developers and Digital Interface Designers, make over \$20 per hour.

Wage Overview for Top Posted IT Jobs in Q3 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	\$27.95	\$35.15	\$44.29	\$54.72	\$63.53
15-1299	Computer Occupations, All Other	\$19.55	\$25.57	\$35.71	\$47.80	\$59.21
15-1232	Computer User Support Specialists	\$13.87	\$17.00	\$22.14	\$29.04	\$36.10
15-1211	Computer Systems Analysts	\$26.16	\$32.91	\$41.37	\$51.40	\$61.70
15-1244	Network and Computer Systems Administrators	\$25.43	\$31.54	\$38.84	\$48.25	\$57.95
15-1257	Web Developers and Digital Interface Designers	\$17.55	\$23.14	\$31.73	\$42.34	\$50.19
15-1212	Information Security Analysts	\$27.97	\$34.29	\$43.36	\$55.54	\$64.49
11-3021	Computer and Information Systems Managers	\$40.29	\$50.11	\$62.80	\$76.92	\$94.63
15-1251	Computer Programmers	\$20.59	\$27.13	\$35.92	\$44.51	\$51.34
15-1245	Database Administrators and Architects	\$24.93	\$31.15	\$43.02	\$54.38	\$62.72

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

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

In-Demand Foundational Skills

- Communications
- Management
- Troubleshooting
- Problem Solving
- Leadership

In-Demand Education Level*

- High School Diploma: 5.0%
- Associate Degree: 3.4%
- Bachelor's Degree: 50.5%
- Master's Degree: 11.7%

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

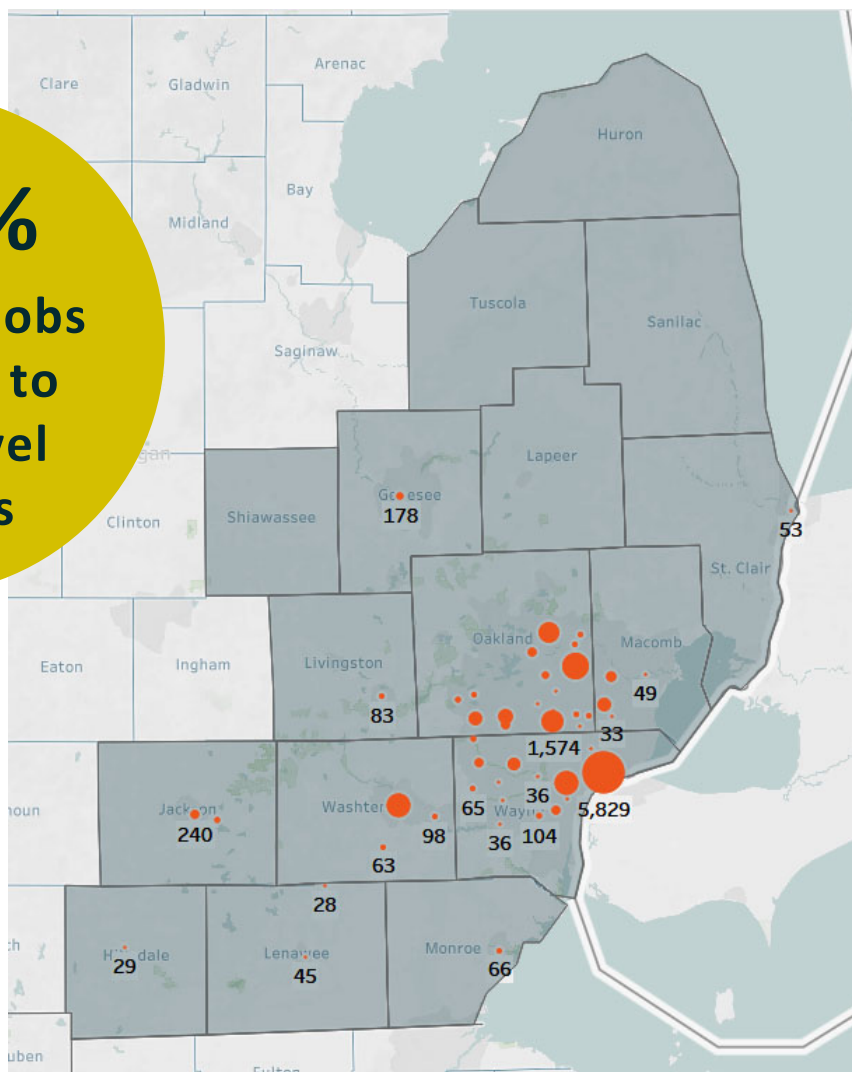
In-Demand Certifications

- Certified Information Systems Security Professional
- Project Management Professional Certification
- Cisco Certified Network Associate
- Microsoft Certified Systems Engineer
- Microsoft Certified Professional



Employer Demand by City

11.4%
of Posted Jobs
Are Open to
Entry-Level
Workers



Top Posting Employers*

- Oracle Corporation
- Cynet Systems Inc.
- Teksystems, Inc.
- General Motors Company
- Kelly Services, Inc.
- Humana Inc.
- Strategic Staffing Solutions, Inc.
- V2soft Inc.
- Quicken Loans Inc.
- Amazon.com, Inc.

Job Postings by City

1. Detroit: 5,829 Postings
2. Troy: 2,312 Postings
3. Ann Arbor: 1,889 Postings
4. Dearborn: 1,860 Postings
5. Southfield: 1,574 Postings
6. Auburn Hills: 1,384 Postings
7. Farmington Hills: 722 Postings
8. Warren: 603 Postings
9. Novi: 562 Postings
10. Livonia: 518 Postings

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



Introduction

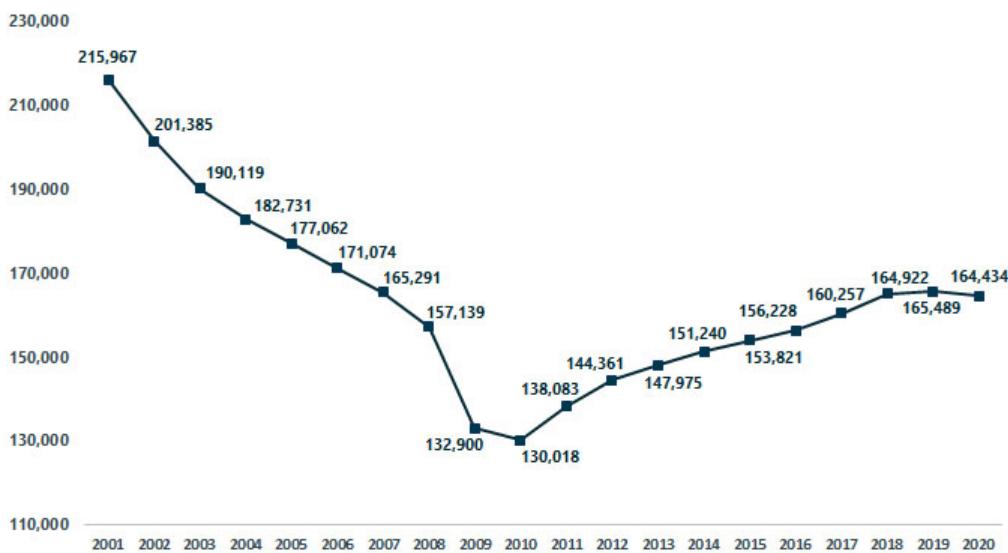
WIN's technicians/skilled trades category includes jobs related to advanced manufacturing. Southeast Michigan has more demand for skilled- trades labor, such as CNC machinists and welders, than almost anywhere else in the country. There are about 21,000 openings for these workers annually.

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

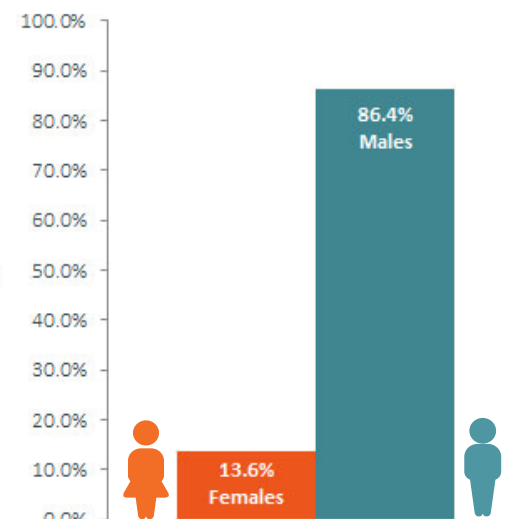
164,434 Skilled Trades Workers

0.6% Decrease
from 2019

Employment Over Time
2001–2020



**Worker Gender
Demographics**



Skilled Trades Worker Demographics

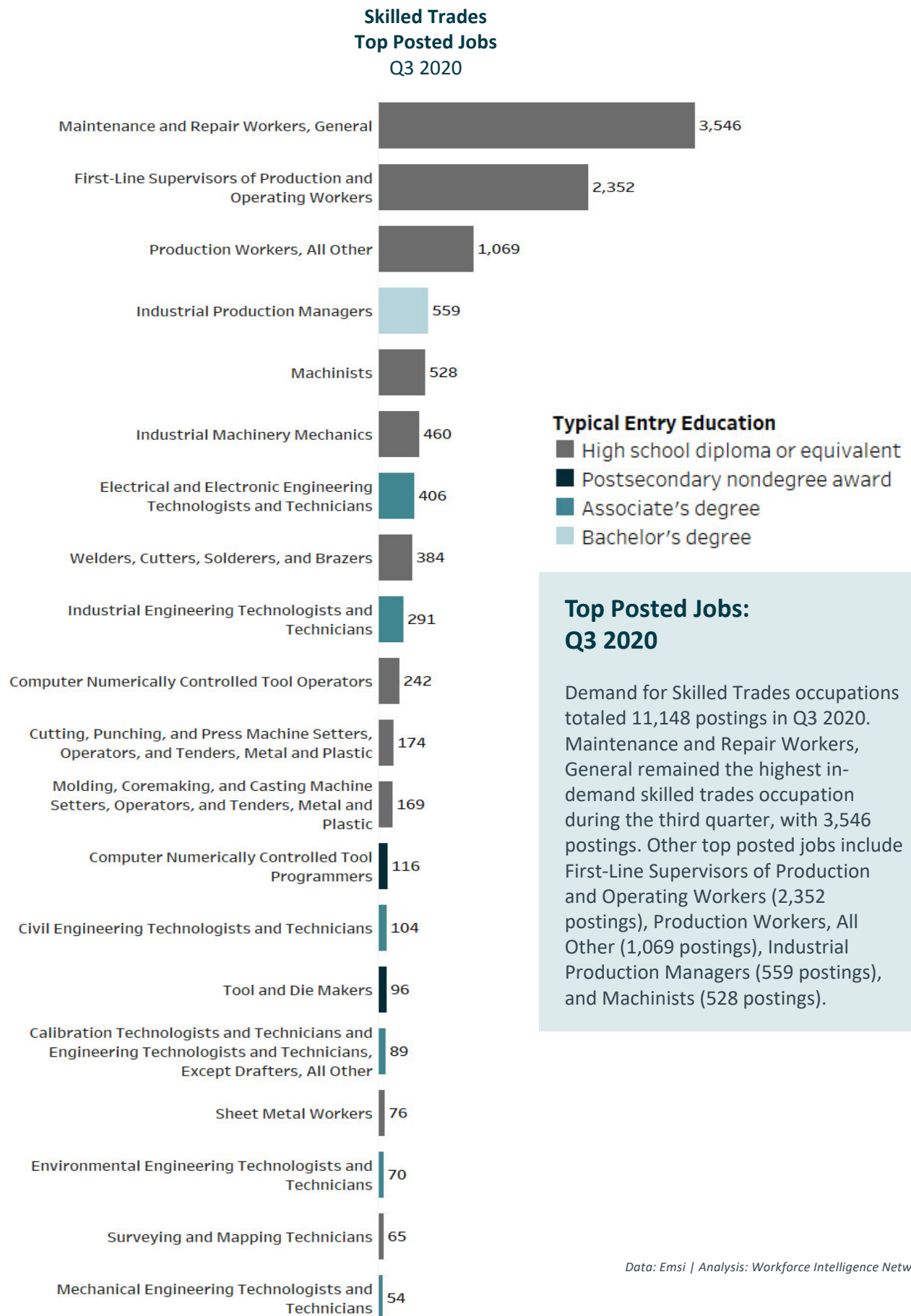
The skilled trades occupation group employed 164,434 workers in southeast Michigan in Q3 2020. A large majority of skilled trades workers are white males between the ages of 25 and 54. The 55 and older age group, which accounts for 27.2 percent of the workforce, shows a slightly higher than normal retiring population for this industry.

Race and Ethnicity Demographics

77.2% White | 13.9% Black or African American | 4.3% Hispanic or Latino

Worker Age Demographics







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. Management and technician roles requiring additional education and training earn even more. Maintenance and Repair Workers, General, the top posted skilled trades job in Q3 2020, offers a median hourly wage of \$17.63. This translates to an annual salary of about \$36,670.

Wage Overview for Top Posted Skilled Trades Jobs in Q3 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
49-9071	Maintenance and Repair Workers, General	\$11.21	\$13.82	\$17.63	\$23.38	\$29.28
51-1011	First-Line Supervisors of Production and Operating Workers	\$19.11	\$24.22	\$32.14	\$40.99	\$51.24
51-9199	Production Workers, All Other	\$9.81	\$11.38	\$13.94	\$18.80	\$24.48
11-3051	Industrial Production Managers	\$34.73	\$44.06	\$56.18	\$70.30	\$85.86
51-4041	Machinists	\$12.42	\$16.13	\$20.77	\$27.06	\$32.66
49-9041	Industrial Machinery Mechanics	\$16.15	\$20.13	\$25.61	\$31.28	\$36.95
17-3023	Electrical and Electronic Engineering Technologists and Technicians	\$17.81	\$22.13	\$28.62	\$34.73	\$39.69
51-4121	Welders, Cutters, Solderers, and Brazers	\$13.43	\$15.91	\$19.31	\$23.78	\$29.49
17-3026	Industrial Engineering Technologists and Technicians	\$17.81	\$22.10	\$27.89	\$35.08	\$41.49
51-9161	Computer Numerically Controlled Tool Operators	\$12.44	\$14.67	\$19.37	\$24.32	\$29.18

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Plumbing
- HVAC
- Painting
- Machining
- Preventive Maintenance

In-Demand Foundational Skills

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

In-Demand Education Level*

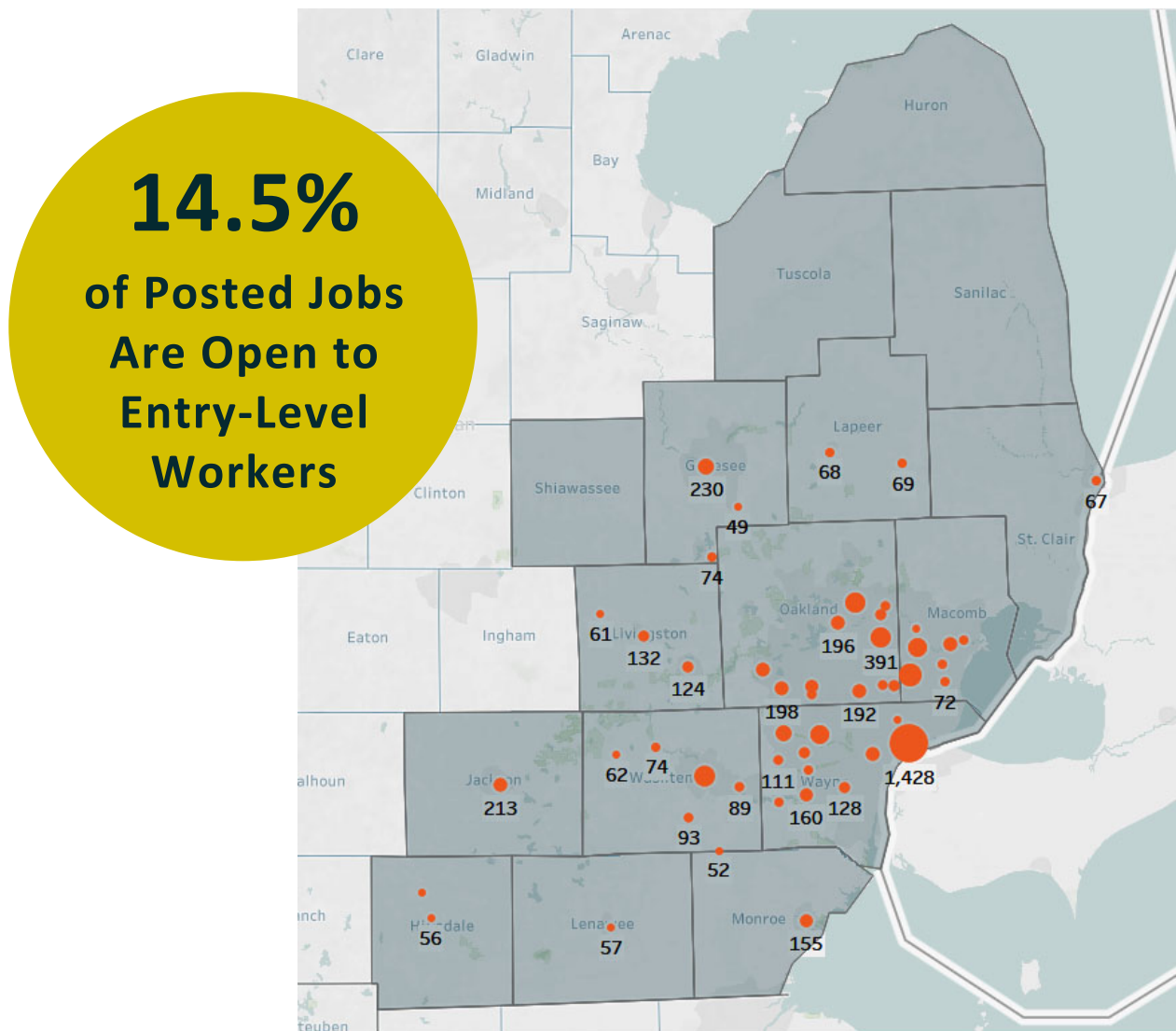
- High School Diploma: 39.5%
- Associate Degree: 7.3%
- Bachelor's Degree: 12.3%
- Master's Degree: 1.2%

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

In-Demand Certifications

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

Employer Demand by City



Top Posting Employers*

- McDonald's Corporation
- Kelly Services, Inc.
- Aerotek, Inc.
- Express Employment Professionals
- Crete Carrier Corporation
- Nesco Resource
- Sentech Services
- The Home Depot
- Shipt, Inc.
- Flex-N-Gate Corporation

Job Postings by City

1. Detroit: 1,385 Postings
2. Warren: 434 Postings
3. Ann Arbor: 399 Postings
4. Troy: 301 Postings
5. Auburn Hills: 291 Postings
6. Sterling Heights: 288 Postings
7. Livonia: 272 Postings
8. Plymouth: 213 Postings
9. Flint: 205 Postings
10. Jackson: 195 Postings

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



TRANSPORTATION, DISTRIBUTION, AND LOGISTICS OCCUPATION GROUP 16-County WIN Region | Q3 2020

12

Introduction

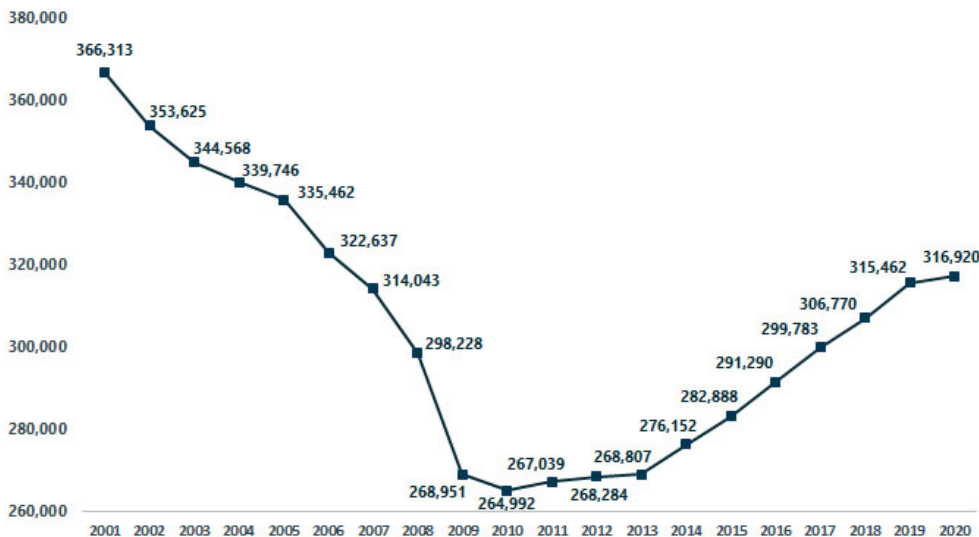
Transportation, distribution, and logistics (TDL) workers help move materials in an efficient manner, whether it is from one company to another or directly to consumers. Logistics workers range from materials movers to logistics analysts, coordinating and analyzing material and goods movement. For all TDL workers, there are over 37,000 job openings annually in Southeast Michigan.



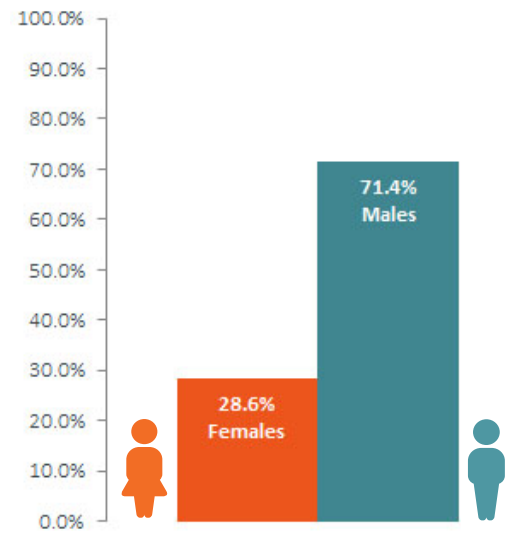
316,920
TDL Workers

0.5% Increase from
2019

Employment Over Time
2001–2020



Worker Gender Demographics



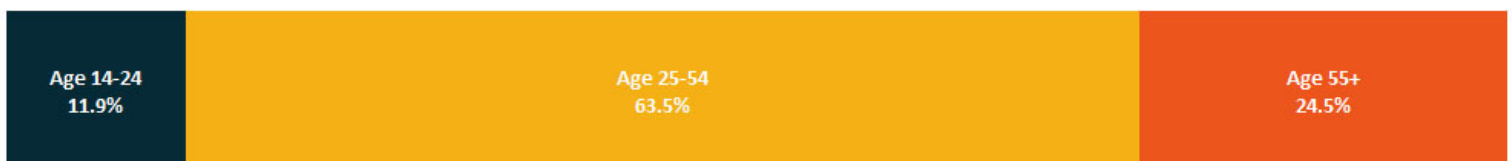
TDL Worker Demographics

The TDL occupation group has a large workforce, employing 316,920 individuals YTD 2020. These workers are 71.4 percent male and 69.6 percent white. Majority, or 63.5 percent of the workforce are between the ages of 25 through 54 years of age.

Race and Ethnicity Demographics

69.6% White | 21.1% Black or African American | 4.7% Hispanic or Latino

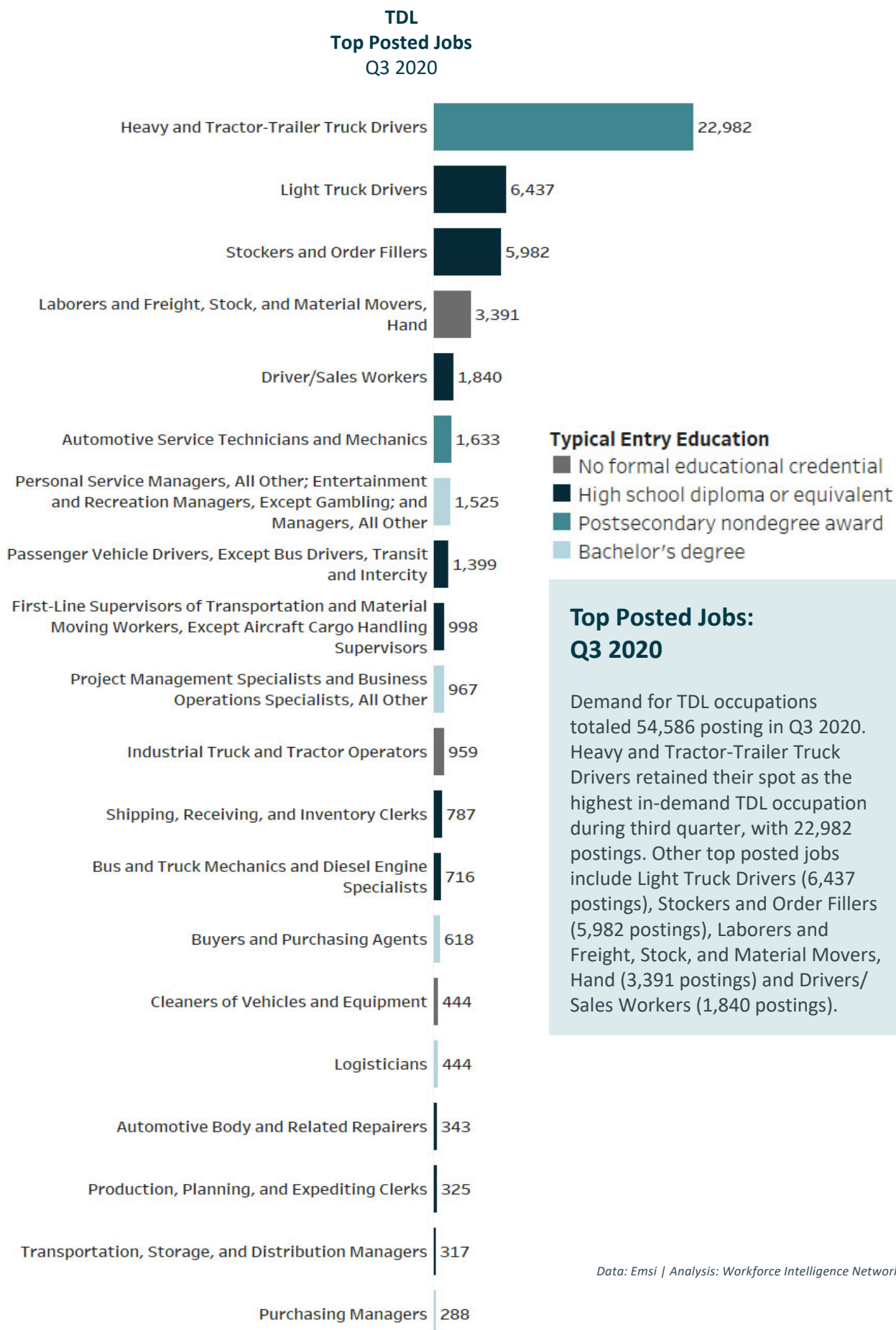
Worker Age Demographics





TRANSPORTATION, DISTRIBUTION, AND LOGISTICS OCCUPATION GROUP 16-County WIN Region | Q3 2020

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TDL Wage Overview

Half 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 this quarter, earn a median hourly wage of \$20.05, or an annual salary of nearly \$41,704. Logistics roles that require additional education, such as Business Operations Specialists, typically offer even higher wages.

Wage Overview for Top Posted TDL Jobs in Q3 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$12.82	\$15.58	\$20.05	\$24.64	\$29.59
53-3033	Light Truck Drivers	\$10.11	\$11.52	\$15.92	\$22.99	\$30.75
53-7065	Stockers and Order Fillers	\$9.95	\$11.00	\$12.74	\$15.92	\$20.66
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$10.51	\$12.27	\$14.95	\$18.39	\$22.16
53-3031	Driver/Sales Workers	\$9.80	\$10.16	\$12.63	\$20.35	\$24.82
49-3023	Automotive Service Technicians and Mechanics	\$10.69	\$13.34	\$20.75	\$28.61	\$34.62
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	\$30.65	\$38.61	\$50.40	\$62.41	\$78.02
53-3058	Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	\$10.38	\$12.46	\$15.84	\$18.25	\$20.12
53-1047	First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	\$16.22	\$20.20	\$25.34	\$33.66	\$41.11
13-1198	Project Management Specialists and Business Operations Specialists, All Other	\$19.28	\$25.57	\$34.76	\$47.22	\$59.34

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

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

In-Demand Foundational Skills

- Valid Driver's License
- Customer Service
- Communications
- Management
- Good Driving Record

In-Demand Education Level*

- High School Diploma: 20.6%
- Associate Degree: 2.6%
- Bachelor's Degree: 6.4%
- Master's Degree: 1.3%

In-Demand Certifications

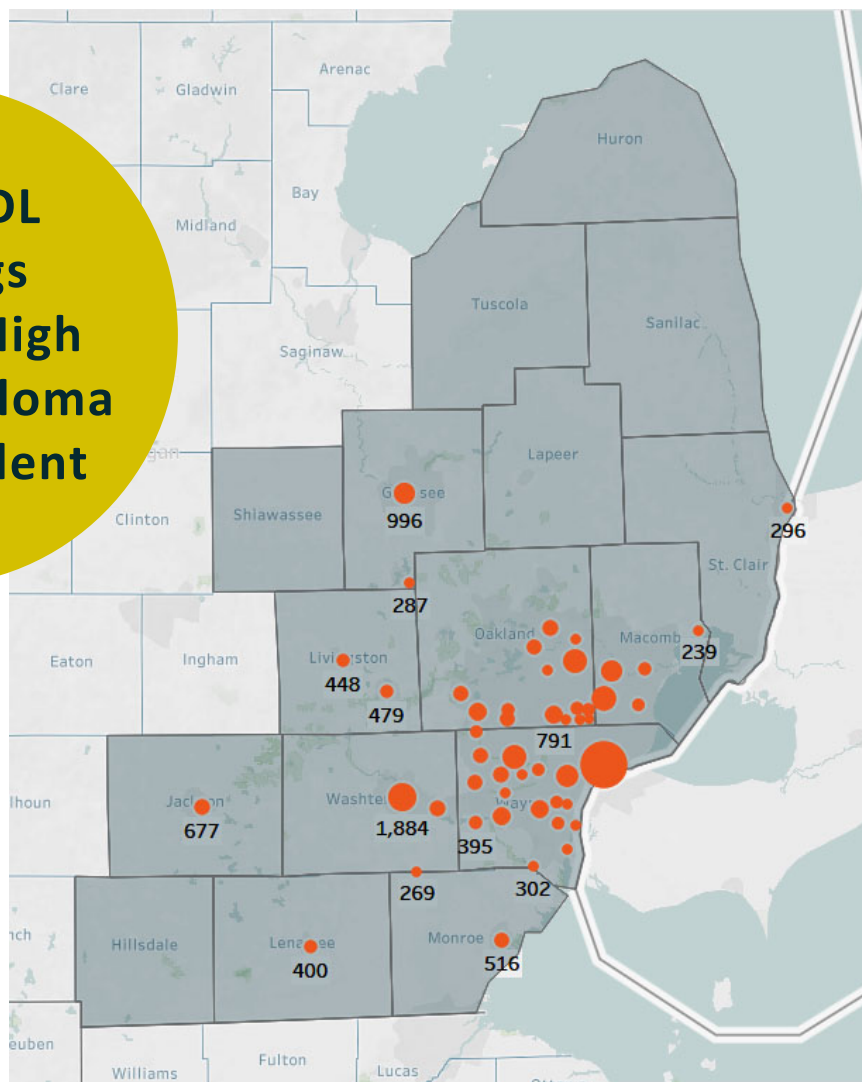
- Commercial Driver's License (CDL)
- Hazmat Endorsement
- Transportation Worker Identification Credential (TWIC) Card
- CDL Class B License
- Tanker Endorsement

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



Employer Demand by City

**Most TDL
Postings
Require High
School Diploma
or Equivalent**



Top Posting Employers*

- Amazon.com, Inc.
- C.R. England, Inc.
- USA Truck, Inc.
- Doordash
- U.S. Xpress, Inc.
- Roehl Transport, Inc.
- Marten Transport, Ltd.
- Shipt, Inc.
- CRST International, Inc.
- Maverick Transportation, LLC

Job Postings by City

1. Detroit: 5,296 Postings
2. Ann Arbor: 1,884 Postings
3. Warren: 1,424 Postings
4. Troy: 1,325 Postings
5. Livonia: 1,233 Postings
6. Dearborn: 1,130 Postings
7. Sterling Heights: 1,051 Postings
8. Flint: 996 Postings
9. Romulus: 810 Postings
10. Southfield: 791 Postings

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

Website

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Phone

313.744.2946

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Taylor, MI 48180

Facebook

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

Twitter

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