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About This Report

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

This report highlights labor market information and real-time job posting data for Macomb county. A workforce overview is provided within identifying key components of the area's labor market including labor force status, demographic, and commuting data. WIN's analysis of online job postings, a proxy for employer demand, is a pioneering method for tracking the health of the labor market. This data is used to provide a real-time demand overview, detailing posting related findings for both employers and job seekers. WIN's data and research team analyzes job posting data at the occupation level within eleven customized occupation groups built using specific Standard Occupational Classification (SOC) codes to provide more contextualized information. Occupation groups combine data for jobs with similar skillsets, educational attainment, and experience requirements, which provides a more in-depth snapshot of the current labor market when compared to traditional industry data based upon North American Industry Classification System (NAICS) codes. Occupation outlook sections utilize these metrics to identify and display the top in-demand jobs, their entry requirements, and their earning potential.

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

This report analyzes 2020 data for Macomb county. The Business and Finance, Engineers and Designers, Health Care, Information Technology (IT), and Skilled Trades occupation groups are analyzed for Macomb county.

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 Macomb County

The COVID-19 crisis has caused major shifts in the labor market this year. In 2020, the labor force fell by 12,908 individuals (2.9 percent) since 2019. Employment decreased by 43,420 workers (10.0 percent), while unemployment grew by more than double (30,512 workers) the 18,731 individuals recorded in 2019. The unemployment rate also rose in 2020, which trends with the shifts caused by the COVID-19. The unemployment rate rose 7.1 percentage points since 4.1 percent in 2019, for an annual unemployment rate of 11.2 percent. Monthly postings data has continued to show shifts in hiring and skills demanded, as the region continues recovery. The health care occupation group was heavily demanded in Macomb county, while Heavy and Tractor-Trailer Truck Drivers is the top demanded occupation this year, accounting for 8,110 postings in 2020.

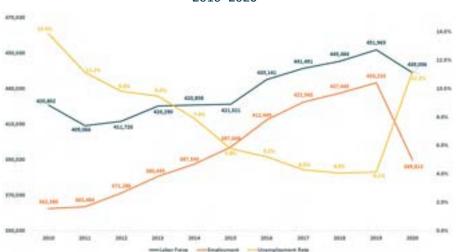
Annual Labor Market Information

The labor force in Macomb county has decreased in 2020, falling by 12,908 individuals since 2019. Employment decreased by 43,420 workers (10.0 percent) since 2019, while unemployment increased by 30,512 workers for a total of 49,243 unemployed workers in 2020. The unemployment rate dramatically increased in 2020 to 11.2 percent, a rise of 7.1 percentage points since 2019, which had a rate of 4.1 percent. During the height of the pandemic and shutdown measures in March 2020, the highest monthly unemployment rate occurred in April 2020, with an unemployment rate of 27.1 percent in Macomb county.

Quarterly Employer Demand Overview

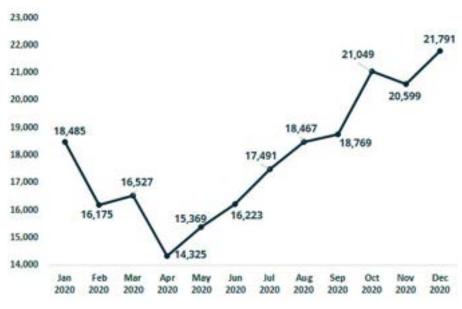
The fourth quarter of 2020 indicates that employer demand has increased since the end of Q3 2020. In Q4 2020, there were 31,439 unique postings in Macomb county, an increase of 815 postings from the 30,624 postings recorded in Q3. May had the lowest recorded postings in 2020 with 2,396 postings, a decrease of 1,039 postings (30.2 percent) since May 2019. The increase in the number of monthly online ads indicate employer demand for jobs has slowly began to increase into Q4 2020.

Annual Labor Force, Employment, Unemployment Rate 2010–2020



Data: BLS | Analysis: Workforce Intelligence Network

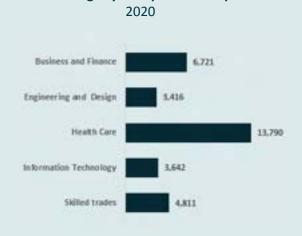
Monthly Posting Analysis Macomb County 2020



Data: Emsi | Analysis: Workforce Intelligence Network

Employer demand decreased by 12.6 percent, a loss of 13,097 job postings since 2019. Health Care is the top posting occupation group through 2020 with 13,790 postings.

During 2020, there were 90,744 job postings, 13,097 less than the 103,841 postings made during 2019 in Macomb county. October 2020 saw the highest demand with 21,049 postings since the shut down due to COVID-19, however, postings are up 7.6 percent since October 2019. The top posted job titles in 2020 include CDL-A Truck Drivers, Child Care Professionals, CDL Truck Drivers, Delivery Drivers, and Baby Sitters. For more information about in-demand job postings, see page 9.

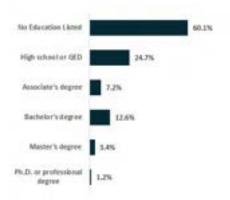


Postings by Occupation Group

Job postings made by employers in Macomb county indicate a high school diploma or equivalent remains the most in-demand minimum education level during 2020.

Of the 90,744 unique postings in Macomb county during 2020, 22,414 (24.7 percent) required a high school diploma or equivalent, while 17,991 postings (19.8 percent) required a college degree. An additional 4,182 postings (4.6 percent) required an advanced degree. The high demand for health care roles within Macomb, drives this high demand for workers with various skillsets.

Education Levels In-Demand 2020



Employment in Macomb county totaled 415,073 in Q4 2020, a decrease of 21,276 workers (4.9 percent) since Q4 2019.

The quarterly labor market has seen shifts following the outbreak of COVID-19. The first quarter of 2020 saw a slight decrease in the labor force and employment, while unemployment, and the unemployment rate rose 0.9 percentage points. The COVID-19 shutdown, which started in Q2 2020, caused the employment in Macomb to drop from 431,012 workers in Q1 to 321,026 workers in Q2, a decrease of 109,986 workers or 25.5 percent. Unemployment rose by 78,661 workers, more than triple the 19,853 workers recorded in Q1. Similarly, the unemployment rate rose in Q2, up from 4.4 percent in Q1 to 23.5 percent in Q2 2020. Since Q3 2020, the market has slowly begun to realign toward pre-pandemic levels, showing a decrease in unemployment and the unemployment rate through Q4 2020. For more information about this year's unemployment rate and other labor market indicators, see page 4.

Quarterly Labor Market Data

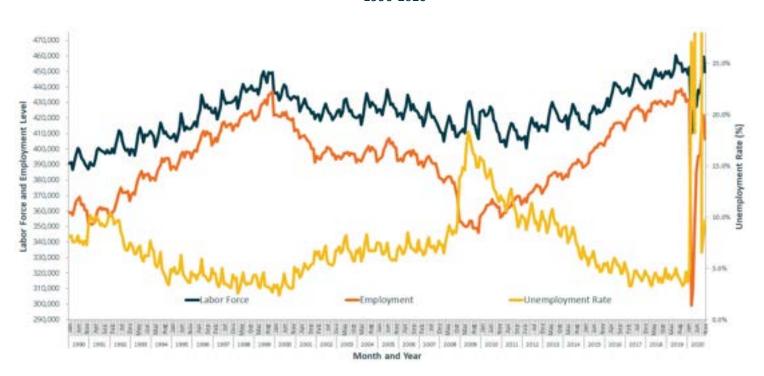
	Ath Quarter 2019	Six Coverter 2020	2nd Owerter 2000	3rd Chierter 3000	Ath Duerter 2000	Change from 3rd Counter 3030	Percent Change (rom 3nd Guerter 2020	Change from 4th Charter 2019	Persent Charge from 20s Guarter 2015
Labor Force	452,263	450,865	419,540	433,758	452,063	18,305	4.2%	-200	0.0%
Employment	436,349	431,012	321,026	392,142	415,073	22,931	5.8%	-21,276	4.9%
Unemployment	15,914	19,853	98,514	41,616	36,990	4,626	-11.1%	21,076	132.4%
Unemployment Rate	3.5%	4.4%	23.5%	9.6%	8.2%	-1.4N	ne	4.7%	ne

Note: Monthly data averaged by quarter | Data: BLS

Labor Force, Employment, and Unemployment

Following labor force fluctuations throughout 2020, labor force participation totaled 439,056 individuals, a decrease by 12,908 individuals since 2019. Employment is down to 389,813 workers in 2020, a decrease of 43,420 workers. Both unemployment and the unemployment rate increased, corresponding to measures taken to slow the spread of COVID-19. Unemployment dramatically rose this year, increasing to 49,423 workers, an increase of 30,512 workers since the 18,731 workers recorded in 2019. Similarly, the unemployment rate rose by 7.1 percentage points, increasing from 4.1 percent, for a 2020 unemployment rate of 11.2 percent.

Labor Force, Employment, Unemployment Rate 1990-2020



Data: BLS | Analysis: Workforce Intelligence Network

Annual Labor Market Data

	2010 Annual	2011 Acresel	2012 Annua	2013 Annua	2014 Annua	2015 Ahnua	2016 Annual	2017 Annual	2018 Annual	2019 Annual	2020 970	Change from 2008	Persent Change from 2019
Labor Force	420,802	409,066	411,720	420,290	420,858	421,321	485,141	441,491	445,484	481,965	439,056	-12,908	-2.9%
Employment	362,380	363,484	371,286	380,495	387,545	397,009	412,449	422,560	427,445	433,233	389,813	-43,420	-30.0%
Unemployment	58,423	45,581	40,433	39,795	33,313	24,313	22,692	18,931	16,038	18,711	49,243	10,512	162.9%
Unemployment Rate	13.9%	11.18	9.8%	9.5%	7.9%	5.8%	5.2%	4.3%	4.0%	4.1%	11.2%	7.3%	na

Data: Bureau of Labor Statistics

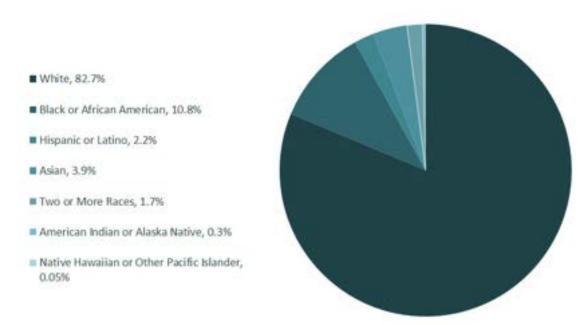
Population Demographics

According to data from the most recent Census Bureau 2019 ACS Five Year estimates, the population in Macomb county increased by 0.2 percent between 2018 and 2019. During 2019, 870,325 people were living in the region. The sex of the populace was split almost evenly, with about 51.3 percent of the population identifying as female, and the other 48.7 percent identifying as male. Majority of the population identified as white (81.0 percent) with the second largest number of individuals identifying as Black or African American (11.7 percent). Macomb county is facing an aging population; 30.8 percent of population was over the age of 54, compared to 29.5 percent under the age of 25.

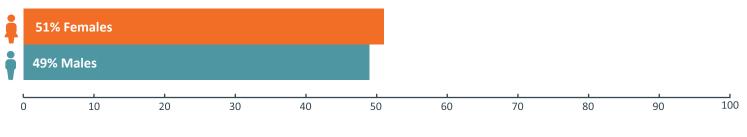


from 2018

Population Race Demographics



Population Gender Demographics



Population Age Demographics



Labor Market Demographics

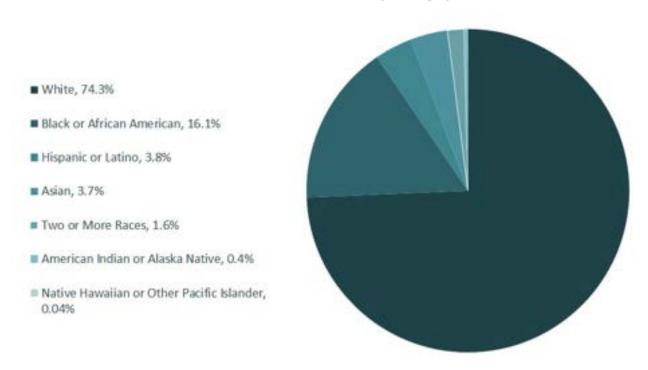
During 2019, the most recent census year, there were about 451,871 people in the labor force, meaning they were either working or looking for work, in Macomb county. Slightly less than half of the total population, or 427,598 individuals (49.1 percent), living in the county were actively working. The highest unemployment rates were seen in those aged 24 years old or younger. Males under the age of 25 face an unemployment rate of 30.1 percent, while females under the age of 25 reported an unemployment rate of 21.9 percent.

Civilian Labor Force by Demographic Group										
Demographic Group	Civilian Labor Force	Total Employment	Total Unemployment	Unemployment Rate						
Total Population 16 +	451,871	427,598	24,273	5.4%						
Sex										
Male 16+	238,603	225,033	13,570	5.7%						
16-19	9,967	7,985	1,982	19.9%						
20-24	22,979	20,631	2,348	10.2%						
25-54	152,458	145,434	7,024	4.6%						
55-64	41,714	39,937	1,777	4.3%						
65 Plus	11,485	11,046	439	3.8%						
Female 16+	213,268	202,565	10,703	5.0%						
16-19	9,398	8,040	1,358	14.4%						
20-24	21,598	19,984	1,614	7.5%						
25-54	135,569	129,380	6,189	4.6%						
55-64	37,170	35,907	1,263	3.4%						
65 Plus	9,533	9,254	279	2.9%						
Race				1100000						
White	368,230	350,639	17,307	4.7%						
Black / African	53,533	48,318	5,193	9.7%						
Native American	1,337	1,279	58	4.3%						
Asian	17,993	17,116	882	4.9%						
Native Hawaiian /	119	119	0	0.0%						
Some Other Race	2,430	2,220	209	8.6%						
Two or More Races	8,503	7,901	604	7.1%						
Ethnicity										
Hispanic	11,541	10,680	819	7.1%						

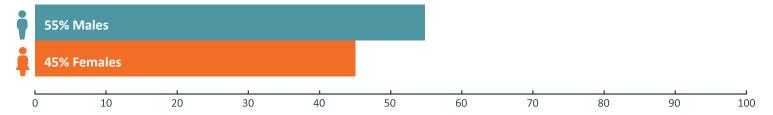
Current Workforce Demographics

In 2020, the workforce had a total of 337,392 individuals working in Macomb county. A slight majority, 54.7 percent (184,668 workers) were male, while 45.3 percent (152,725 workers) of the workforce was female. Most workers in the county identified as white, accounting for 74.3 percent of the workforce, while Black or African American workers totaled 16.1 percent of the workforce. Those identifying as having a Hispanic or Latino ethnicity accounted for 3.8 percent. Much of the workforce in Macomb county are between the ages of 25 through 54 (62.7 percent), while 23.9 percent of workers are 55 and older.

Workforce Race and Ethnicity Demographics



Workforce Gender Demographics



Workforce Age Demographics



Regional Commuting Patterns

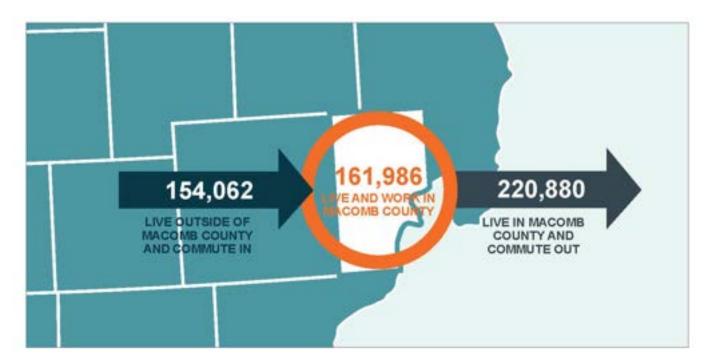
According to the most recent OnTheMap data set available from the Census Bureau, during 2018, the county's workforce consisted of 382,866 residents. There were 161,986 (42.3 percent) residents living and working within Macomb county, while the remaining 220,880 residents (57.7 percent) traveled outside of the county for work. There were 316,048 workers employed in the county during 2018. Of those, 154,062 workers (48.7 percent) lived outside of the county and commuted in. From this information, we can see that Macomb is a net exporter of jobs, with more workers leaving the area for employment than inwardly commuting, but it also has a high rate of both inbound and outbound commuting with nearby counties.

Where Macomb County Residents Work

Source: U.S. Census OnTheMap, 2018 Analysis: Workforce Intelligence Network

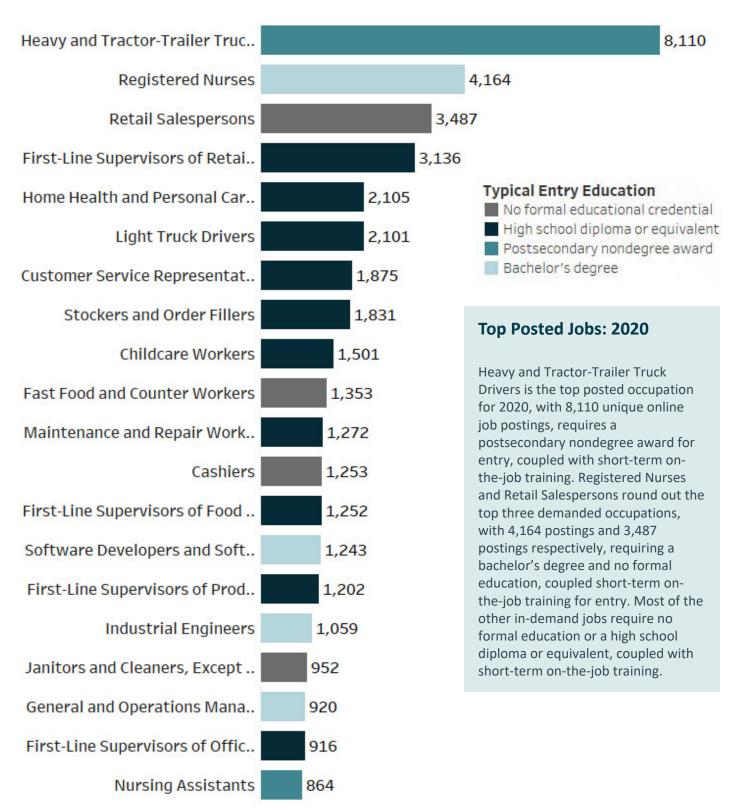
Where Macomb County Workers Live

Source: U.S. Census OnTheMap, 2018 Analysis: Workforce Intelligence Network



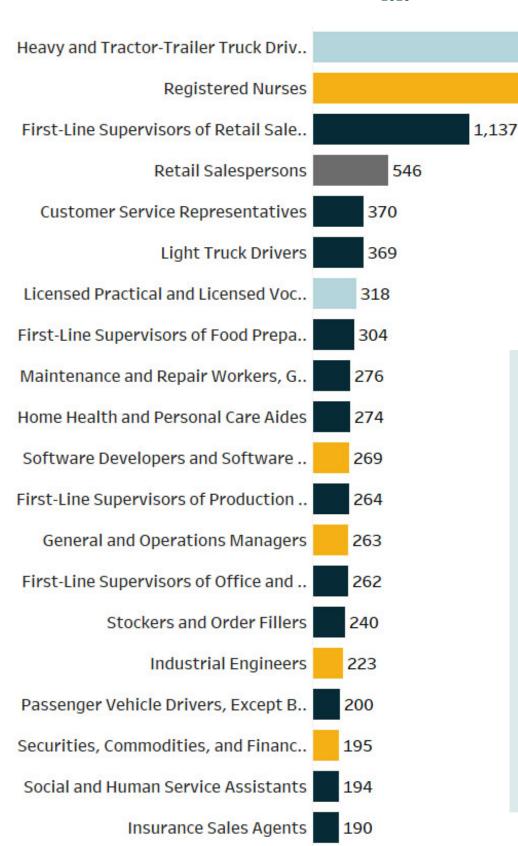
Data: U.S. Census OnTheMap, 2018 | Analysis: Workforce Intelligence Network

Top Posted Jobs 2020



2.559

Top Posted Entry-Level Jobs 2020



Top Posted Entry-Level Jobs: 2020

1.966

Typical Entry Education

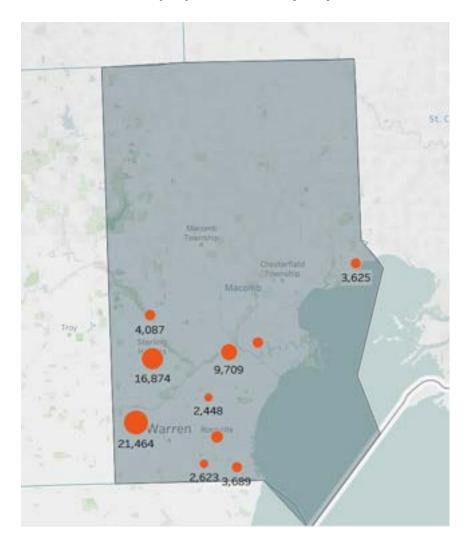
Bachelor's degree

No formal educational credential

High school diploma or equivalent
 Postsecondary nondegree award

Entry-level jobs, accounting for 23.1 percent of postings in Macomb county for 2020, usually require zero to two years of previous experience. Well over half of the top ten entry-level occupations require no formal education or a high school diploma or equivalent. Those who enter the workforce with a high school diploma or equivalent are heavily demanded among entry level occupations, accounting for 31.5 percent of entry-level postings. Heavy and Tractor-Trailer Truck Drivers were the top posted entry-level occupation with 2,559 postings requiring zero to two years of experience, followed by Registered Nurses with 1,966 postings.

Employer Demand by City



Top In-Demand Qualifications

- Commercial Driver's License (CDL)
- Certified Nursing Assistant
- Licensed Practical Nurse
- Automotive Service Excellence (ASE)
 Certification
- Licensed Vocational Nurses
- Hazmat Endorsement
- Certified Pharmacy Technician
- Transportation Worker Identification Credential (TWIC) Card
- Associates Degree In Nursing
- ServSafe Certification

Top In-Demand Skills

- Merchandising
- Restaurant Operation
- Nursing
- Warehousing
- Customer Experience
- Communications
- Customer Service
- Management
- Sales
- Operations

Top Posting Employers*

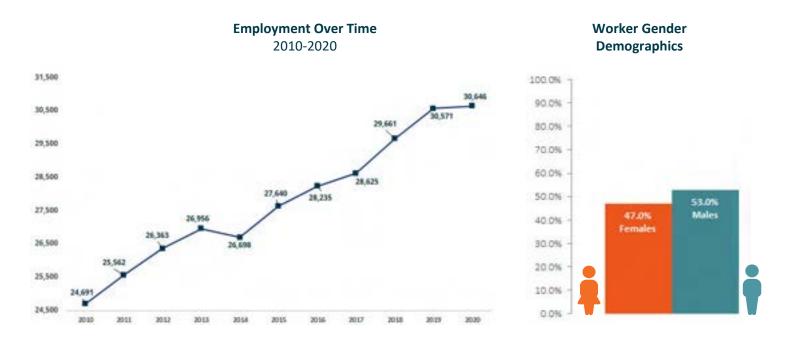
- General Motors Company
- Shipt, Inc.
- Henry Ford Health System
- Care.com, Inc.
- The Home Depot
- Amazon.com, Inc.
- McDonald's Corporation
- C.R. England, Inc.
- Ascension
- Taco Bell Corp

^{*}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/firm throughout the region. These workers need strong mathematical and accounting abilities along with project management and planning skills. Workers in this occupation group are in high demand in southeast Michigan, with about 21,000 job openings annually.





Business and Finance Worker Demographics

The business and finance occupation group is somewhat diverse in respect to its 30,646 workers. More than half the working population identify as male (53.0 percent), however 82.4 percent of workers identified as white, indicating much less diversity with respect to race than gender. Only 3.9 percent of the working population in business and finance is under the age of 25, compared to 28.2 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

82.4% White | 10.0% Black or African American | 2.6% Hispanic or Latino





Business and Finance Top Posted Jobs 2020



BUSINESS AND FINANCE OCCUPATION GROUP Macomb County | 2020

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 \$50.79, translating to annual earnings of approximately \$105,643. All the top business occupations offer median wages over \$20.00 per hour, and most prefer a bachelor's degree for entry.

Wage Overview for Top Posted Business and Finance Jobs in 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	\$21.89	\$33.27	\$50.79	\$78.36	\$111.44
41-3021	Insurance Sales Agents	\$13.46	\$16.02	\$23.34	\$37.76	\$58.90
13-2011	Accountants and Auditors	\$19.97	\$24.55	\$31.02	\$40.73	\$54.69
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$13.13	\$19.68	\$30.85	\$44.17	\$57.84
41-3031	Securities, Commodities, and Financial Services Sales Agents	\$13.27	\$15.62	\$21.62	\$36.04	\$62.22
11-2022	Sales Managers	\$34.09	\$48.93	\$64.08	\$78.83	\$120.40
11-9198	Personal Service Managers, All Other, Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	\$30.38	\$38.39	\$49.55	\$60.94	\$76.82
11-3031	Financial Managers	\$34.45	\$43.92	\$57.32	\$72.37	\$108.34
13-1071	Human Resources Specialists	\$16.07	\$20.65	\$27.42	\$36.32	\$46.96
11-2021	Marketing Managers	\$34.60	\$44.91	\$58.38	\$72.95	\$105.90

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Accounting
- Auditing
- Selling Techniques
- Customer Experience
- Financial Services

In-Demand Foundational Skills

- Sales
- Communications
- Management
- Customer Service
- Leadership

In-Demand Education Level*

High School Diploma: 25.0%Associate Degree: 7.0%Bachelor's Degree: 34.4%

• Master's Degree: 7.6%

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)
- Project Management Professional Certification
- Series 66 Uniform Investment Adviser: Combined State Laws License (Combined 63 And 65)

^{*}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



Top Posting Employers*

- H&R Block, Inc.
- **Virtual Vocations**
- General Motors Company
- Checkers Drive-In Restaurants, Inc.
- Intuit Inc.
- **General Dynamics Corporation**
- Assurance
- Domino's Pizza
- McDonald's Corporation
- **Independent Insurance Agents**

5. St. Clair Shores: 295 Postings

- 7. Eastpointe: 265 Postings
- 8. New Baltimore: 174 Postings
- 10. Mount Clemens: 171 Postings

Job Postings by City

1. Warren: 2,116 Postings

2. Sterling Heights: 1,675 Postings

3. Clinton Township: 494 Postings

4. Roseville: 420 Postings

6. Utica: 268 Postings

9. Fraser: 172 Postings

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

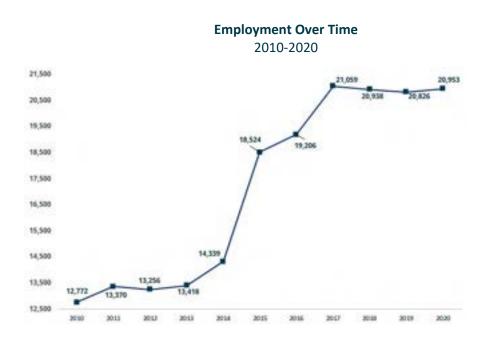
Introduction

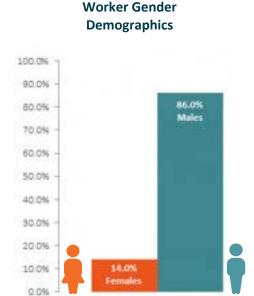
Jobs in the manufacturing industry can range from assembly and production, skilled trades and technicians, designers and engineers, and even computer-related occupations such as software development. Demand for engineers in the region has been consistent, and employment has been growing quickly. There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



20,953
Engineering and Design Workers

0.6% Increase from 2019





Engineering and Design Worker Demographics

According to 2020 Emsi data, the 20,953 workers in the engineering and design group are not particularly diverse. Just 4.7 percent of the related workforce is under 25, likely due to the consistently high educational requirements. Female workers account for 14.0 percent of the current workforce and only 22.2 percent identify as a race other than white; as the labor force overall continues to change, this field would benefit from seeking a more diverse talent pool.

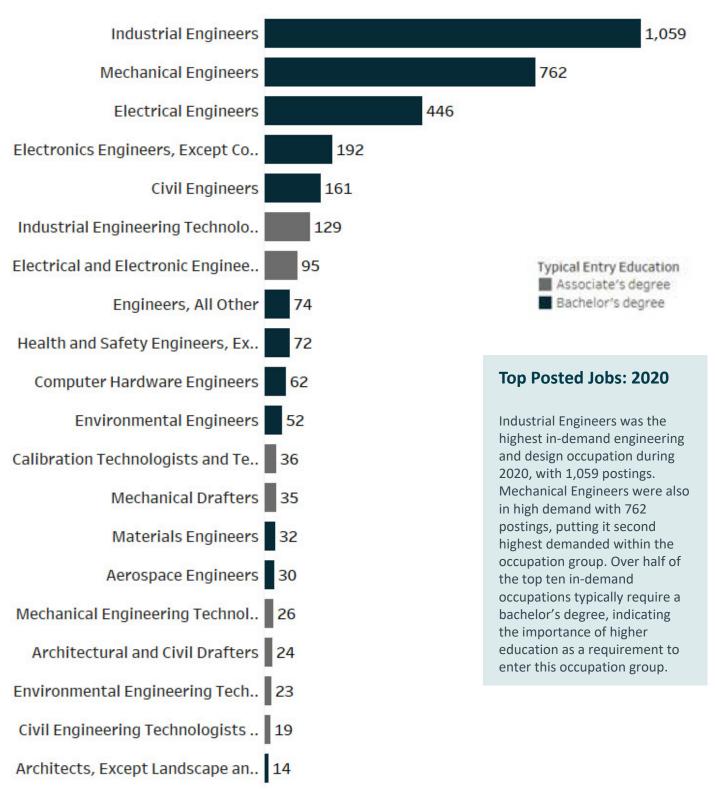
Race and Ethnicity Demographics

77.8% White | 9.2% Asian | 8.5% Black or African-American

Worker Age Demographics



Engineering and Designing Top Posted Jobs 2020



Engineering and Design Wage Overview

Most engineering and design related jobs offer high wages, providing a lucrative opportunity to job seekers willing to meet the minimum education requirements related to these jobs. The top posted engineering and design job, Industrial Engineers, offers a median hourly wage of \$44.94. This reflects an annual salary of approximately \$93,475.

Wage Overview for Top Posted Engineering and Design Jobs in 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2112	Industrial Engineers	\$30.95	\$36.59	\$44.94	\$54.19	\$61.44
17-2141	Mechanical Engineers	\$32.32	\$37.86	\$47.07	\$58.24	\$66.91
17-2071	Electrical Engineers	\$33.90	\$39.90	\$48.64	\$59.16	\$68.57
17-2072	Electronics Engineers, Except Computer	\$35.71	\$43.44	\$52.82	\$62.56	\$83.82
17-2051	Civil Engineers	\$28.92	\$33.94	\$40.73	\$49.47	\$60.30
17-3026	Industrial Engineering Technologists and Technicians	\$17.83	\$22.25	\$27.88	\$34.95	\$41.17
17-3023	Electrical and Electronic Engineering Technologists and Technicians	\$18.65	\$23.60	\$30.59	\$36.56	\$41.46
17-2199	Engineers, All Other	\$25.75	\$34.82	\$44.15	\$57.10	\$66.01
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	\$34.36	\$39.93	\$48.96	\$60.44	\$71,55
17-2061	Computer Hardware Engineers	\$21.50	\$29.37	\$45.44	\$59.46	\$69.65

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

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

In-Demand Foundational Skills

- Communications
- Problem Solving
- Management
- Leadership
- Integration

In-Demand Education Level*

High School Diploma: 11.0%
Associate Degree: 6.6%
Bachelor's Degree: 52.8%
Master's Degree: 13.1%

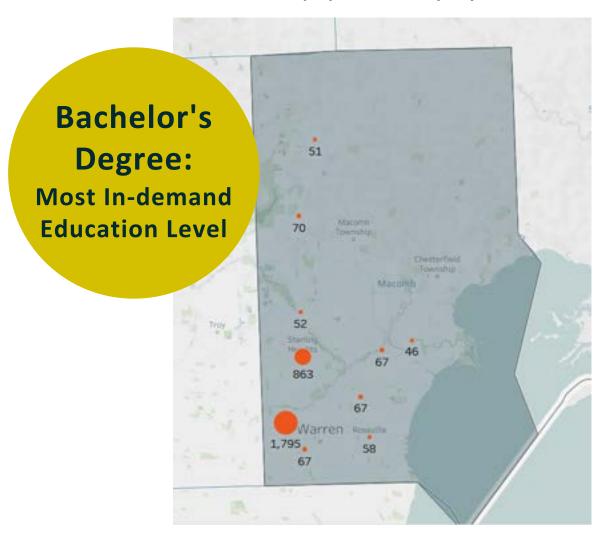
In-Demand Certifications

- Six Sigma Green Belt Certification
- Professional Engineer
- Six Sigma Black Belt Certification
- Licensed Professional Engineer
- Engineer in Training

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

ENGINEERS AND DESIGNERS OCCUPATION GROUP Macomb County | 2020

Employer Demand by City



Top Posting Employers*

- General Motors Company
- General Dynamics Corporation
- DCS Corporation
- Aerotek, Inc.
- Army National Guard
- Growing People and Companies
- Talascend, LLC
- Walton Corporation
- FCA US LLC
- BAE SYSTEMS PLC

Job Postings by City

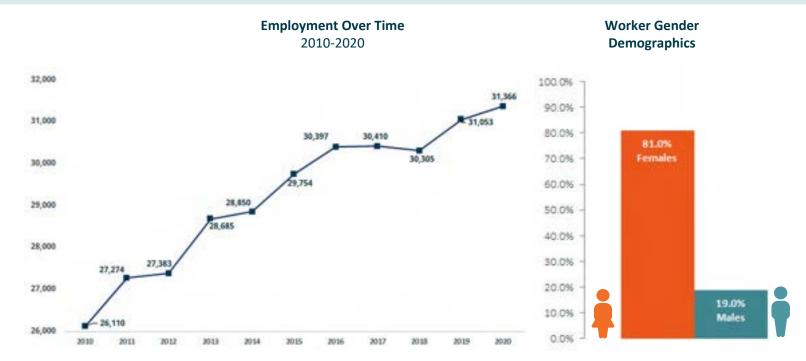
- 1. Warren: 1,795 Postings
- 2. Sterling Heights: 863 Postings
- 3. Washington: 70 Postings
- 4. Center Line: 67 Postings
- 5. Clinton Township: 67 Postings
- 6. Fraser: 67 Postings
- 7. Roseville: 58 Postings
- 8. Utica: 52 Postings
- 9. Romeo: 51 Postings
- 10. Mount Clemens: 46 Postings

^{*}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, with more health care workers needed to care for Michigan's aging population. Registered nurses are routinely the most in-demand job in this group. Annually, there are about 23,600 job openings for these positions across southeast Michigan, and this is projected to continue increasing.





Health Care Worker Demographics

According to 2020 Emsi data, the health care occupation group employed 31,366 workers in Macomb county, who are overwhelmingly female (81.0 percent) and between the ages of 25 and 54 (68.5 percent), although 22.7 percent of workers are over 54. The healthcare occupation group is primarily white in Macomb county, with 69.7 percent of workers identifying as white, 20.0 percent identifying as Black or African American, and 10.3 percent identifying otherwise.

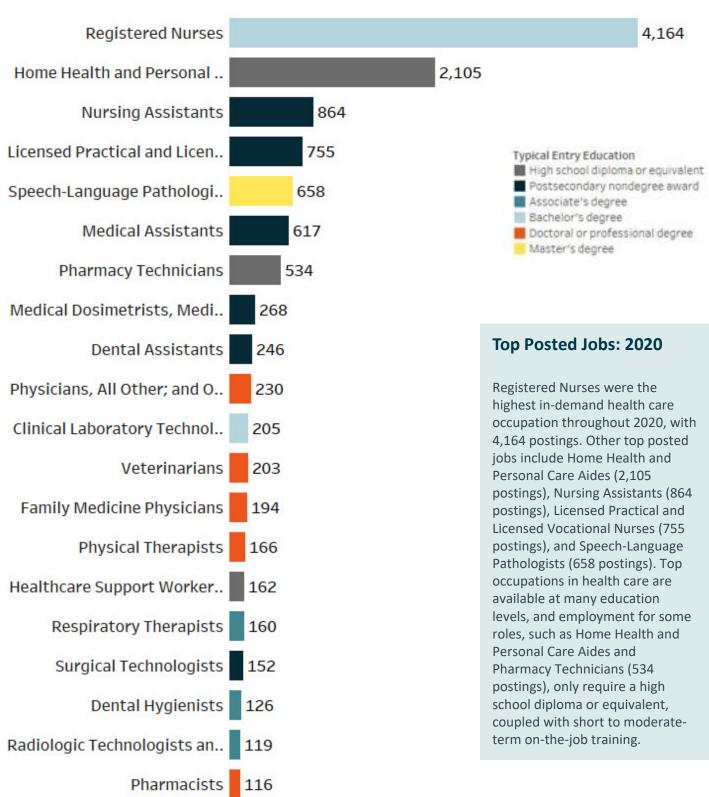
Race and Ethnicity Demographics

69.7% White | 20.0% Black or African American | 6.1% Asian

Worker Age Demographics



Health Care Top Posted Jobs 2020



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. Most of the top-posted jobs pay over \$15.00 per hour. Registered Nurses, the top posted health care job, offers a median hourly wage of \$32.99 per hour or annual salary of about \$68,619.

Wage Overview for Top Posted Health Care Jobs in 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
29-1141	Registered Nurses	\$24.68	\$28.38	\$32.99	\$38.08	\$43.47
31-1128	Home Health and Personal Care Aides	\$9.45	\$10.00	\$10.96	\$12.53	\$14.55
31-1131	Nursing Assistants	\$11.56	\$12.88	\$14.51	\$16.69	\$18.27
29-2061	Licensed Practical and Licensed Vocational Nurses	\$19.90	\$22.31	\$25.23	\$27.80	\$29.46
29-1127	Speech-Language Pathologists	\$23.51	\$29.79	\$35.68	\$44.19	\$63.56
31-9092	Medical Assistants	\$11.69	\$13.32	\$15.23	\$17.26	\$19.55
29-2052	Pharmacy Technicians	\$10.72	\$12.68	\$15.55	\$18.72	\$22.98
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	\$12.30	\$14.79	\$18.77	\$24.08	\$29.77
31-9091	Dental Assistants	\$12.39	\$14.67	\$17.44	\$20.38	\$23.59
29-1228	Physicians, All Other, and Ophthalmologists, Except Pediatric	\$22.03	\$25.20	\$29.53	\$93.07	\$102.43

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Nursing
- Basic Life Support
- Cardiopulmonary Resuscitation (CPR)
- Caregiving
- Home Care

In-Demand Foundational Skills

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

In-Demand Education Level*

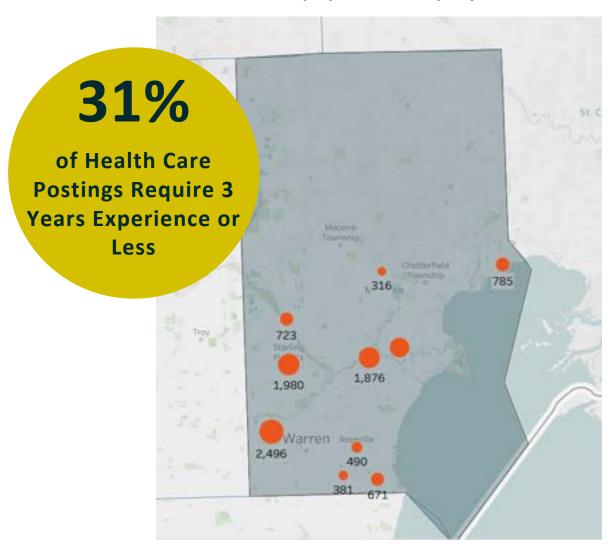
High School Diploma: 19.6%
Associate Degree: 20.8%
Bachelor's Degree: 6.4%
Master's Degree: 4.9%

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

In-Demand Certifications

- Certified Nursing Assistant
- Licensed Practical Nurse
- Licensed Vocational Nurses
- Associates Degree In Nursing
- Certificate Of Clinical Competence In Speech-Language Pathology (CCC-SLP)

Employer Demand by City



Top Posting Employers*

- Henry Ford Health System
- Ascension
- McLaren, Inc.
- HealthCare Employment Network
- Accountable Healthcare Staffing, Inc.
- Manor Care, Inc.
- Soliant Health, Inc
- Sunbelt Staffing, LLC
- CVS Health Corporation
- **Banfield Pet Hospital**

Job Postings by City

1. Warren: 2,496 Postings

2. Sterling Heights: 1,980 Postings

3. Clinton Township: 1,876 Postings

4. Mount Clemens: 1,638 Postings

5. New Baltimore: 785 Postings

6. Utica: 723 Postings

7. St. Clair Shores: 671 Postings

8. Roseville: 490 Postings

9. Eastpointe: 381 Postings

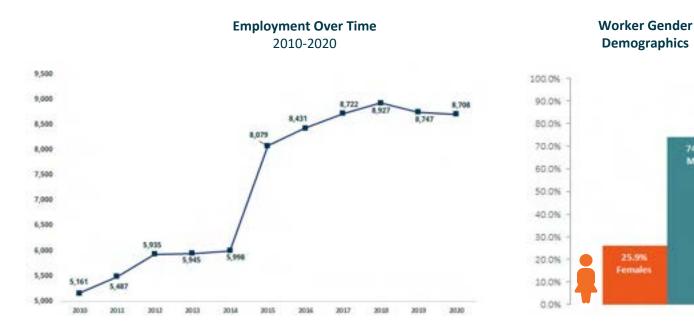
10. Macomb: 316 Postings

^{*}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.





Information Technology Worker Demographics

According to 2020 Emsi data, Macomb county has 8,708 IT workers. The workforce is not too diverse, with most workers identifying as white males (74.1 percent) between the ages of 25 and 54. Roughly 74.6 percent of the workforce are between the ages of 25 and 54. Workers aged 55 years and older account for 20.8 percent, while only 4.7 percent are 24 years old or younger. Around 72.9 percent of the workforce identify as white, with workers who identify as Asian, make up 12.2 percent of the workforce.

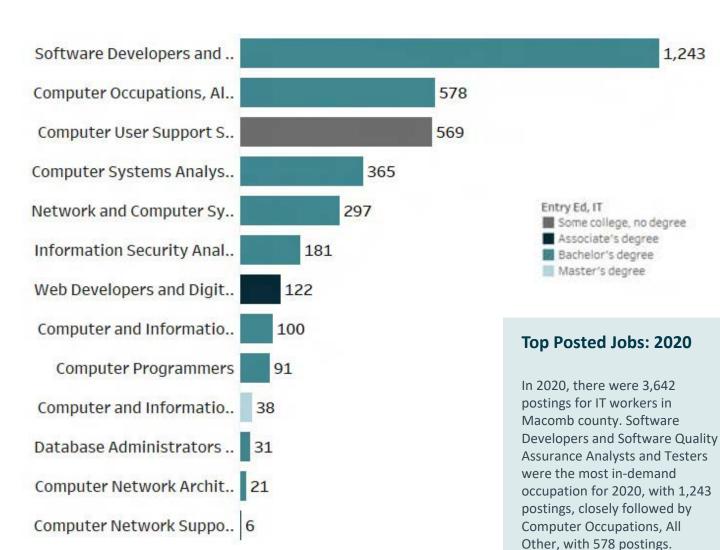
Race and Ethnicity Demographics

72.9% White | 12.2% Asian | 10.3% Black or African American

Worker Age Demographics



Top Posted Jobs2020



Computer User Support Specialists (569 postings) and Computer Systems Analysts (365 posting) were also high indemand occupations. Although the top IT jobs generally require a bachelor's degree, Computer User Support Specialists, typically require some college,

no degree.

Information Technology Wage Overview

In-demand IT occupations provide high wages, even for those at entry-level and with fewer credentials. Software Developers and Software Quality Assurance Analysts and Testers, the most in-demand occupation, offers a median hourly wage of \$45.17 per hour or almost \$93,954 per year. Computer and Information Systems Managers earn the highest median wage at \$62.24 per hour or nearly \$129,459 per year. Other occupations that have fewer qualifications, such as Computer User Support Specialists and Web Developers and Digital Interface Designers, make over \$20.00 per hour.

Wage Overview for Top Posted IT Jobs in 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	\$28.56	\$35.90	\$45.17	\$55.66	\$64.37
15-1299	Computer Occupations, All Other	\$19.41	\$26.72	\$37.07	\$48.77	\$59.79
15-1232	Computer User Support Specialists	\$13.86	\$16.54	\$21.45	\$28.27	\$35.39
15-1211	Computer Systems Analysts	\$25.97	\$32.89	\$41.36	\$51.38	\$61.77
15-1244	Network and Computer Systems Administrators	\$24.98	\$31.51	\$38.74	\$48.30	\$58.01
15-1212	Information Security Analysts	\$27.15	\$33.41	\$42.08	\$53.97	\$62.31
15-1257	Web Developers and Digital Interface Designers	\$17.75	\$23.42	\$32.12	\$42.02	\$48.62
11-3021	Computer and Information Systems Managers	\$39.97	\$49.82	\$62.24	\$75.53	\$93.16
15-1251	Computer Programmers	\$22.00	\$28.59	\$36.86	\$45.14	\$51.72
15-1221	Computer and Information Research Scientists	\$32.47	\$37.53	\$46.91	\$55.84	\$60.21

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Computer Science
- Software Engineering
- Software Development
- C++
- Java

In-Demand Foundational Skills

- Communications
- Management
- Troubleshooting
- Problem Solving
- Integration

In-Demand Education Level*

High School Diploma: 9.8%
Associate Degree: 4.9%
Bachelor's Degree: 51.9%
Master's Degree: 11.7%

In-Demand Certifications

- Certified Information Systems Security Professional
- Project Management Professional Certification
- CompTIA Security+
- Cisco Certified Network Associate
- GIAC Certifications

INFORMATION TECHNOLOGY OCCUPATION GROUP Macomb County | 2020

Employer Demand by City



Top Posting Employers*

- General Motors Company
- Computer Task Group, Incorporated
- General Dynamics Corporation
- DCS Corporation
- Virtual Vocations
- Revature
- Army National Guard
- Science Applications International Corporation
- BAE SYSTEMS PLC
- Booz Allen Hamilton Holding Corporation

Job Postings by City

- 1. Warren: 1,848 Postings
- 2. Sterling Heights: 1,076 Postings
- 3. Clinton Township: 140 Postings
- 4. Center Line: 73 Postings
- 5. Washington: 70 Postings
- 6. Utica: 48 Postings
- 7. Eastpointe: 47 Postings
- 8. Mount Clemens: 46 Postings
- 9. Fraser: 42 Postings
- 10. St. Clair Shores: 33 Postings

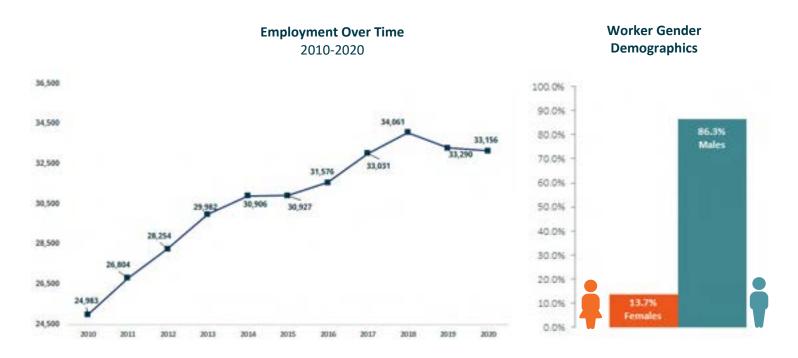
^{*}Employer names are listed as they appear in online job postings.

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.





Skilled Trades Worker Demographics

According to 2020 Emsi data, the skilled trades occupation group employed about 33,156 workers in Macomb county. Majority of skilled trades workers are white males (86.3 percent) between the ages of 25 and 54 (64.9 percent). Additional outreach will be necessary soon, due to the aging workforce, as 28.6 percent are 55 years of age or older.

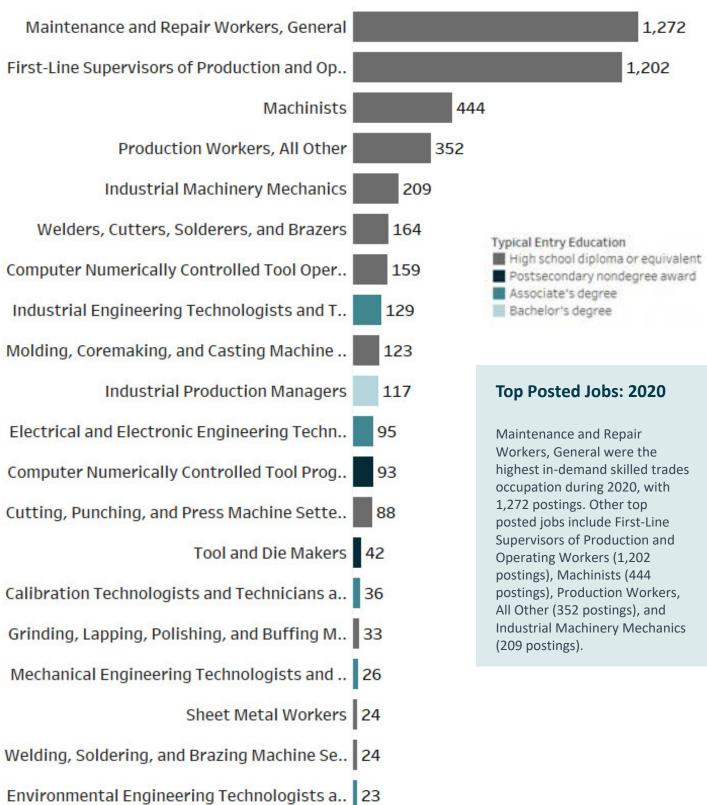
Race and Ethnicity Demographics

76.5% White | 15.2% Black or African American | 3.3% Hispanic or Latino

Worker Age Demographics



Skilled Trades Top Posted Jobs 2020



Skilled Trades Wage Overview

Most of the top ten in-demand skilled trades occupations have median wages above \$15.00 per hour, while the remaining top occupations have median wages above \$12.00 per hour. Maintenance and Repair Workers, General, the top posted skilled trades job in 2020, offers a median hourly wage of \$16.99, which translates to an annual salary of about \$35,339.

Wage Overview for Top Posted Skilled Trades Jobs in 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	\$11.14	\$13.61	\$16.99	\$22.54	\$28.00
51-1011	First-Line Supervisors of Production and Operating Workers	\$19.02	\$24.25	\$32.05	\$40.51	\$51.08
51-4041	Machinists	\$11.81	\$15.80	\$20.68	\$27.03	\$32.22
51-9199	Production Workers, All Other	\$9.54	\$10.52	\$12.90	\$17.25	\$22.60
49-9041	Industrial Machinery Mechanics	\$15.50	\$19.55	\$24.82	\$30.04	\$35.54
51-4121	Welders, Cutters, Solderers, and Brazers	\$13.13	\$15.80	\$19.19	\$23.43	\$29.04
51-9161	Computer Numerically Controlled Tool Operators	\$12.66	\$14.98	\$19.98	\$24.46	\$29.31
17-3026	Industrial Engineering Technologists and Technicians	\$17.83	\$22.25	\$27.88	\$34.95	\$41.17
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	\$9.73	\$10.71	\$12.95	\$15.99	\$18.74
11-3051	Industrial Production Managers	\$34.01	\$43.47	\$55.12	\$68.67	\$84.12

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Machining
- HVAC
- Tooling
- Plumbing
- Welding

In-Demand Education Level*

• Associate Degree: 8.0% • Bachelor's Degree: 10.0% • Master's Degree: 0.8%

• High School Diploma: 38.8%

In-Demand Certifications

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

In-Demand Foundational Skills

Communications

Operations

Management

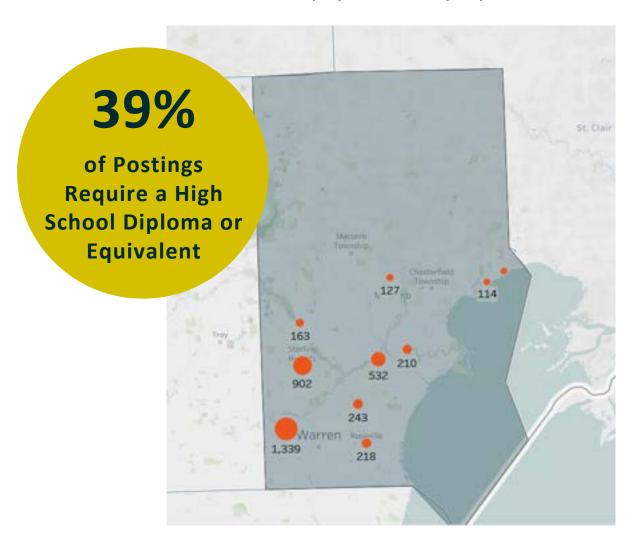
Troubleshooting

Problem Solving

• Automotive Service Excellence (ASE) Certification

^{*}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



Top Posting Employers*

- Nesco Resource
- McDonald's Corporation
- Aerotek, Inc.
- ManpowerGroup Global
- Sentech Services
- Resource Mfg
- AtWork Group
- Flex-N-Gate Corporation
- The Home Depot
- FCA US LLC

Job Postings by City

- 1. Warren: 1,339 Postings
- 2. Sterling Heights: 902 Postings
- 3. Clinton Township: 532 Postings
- 4. Fraser: 243 Postings
- 5. Roseville: 218 Postings
- 6. Mount Clemens: 210 Postings
- 7. Utica: 163 Postings
- 8. Macomb: 127 Postings
- 9. Chesterfield: 114 Postings
- 10. New Baltimore: 113 Postings

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

Website

www.WINintelligence.org

Email

info@WINintelligence.org

Phone

313.744.2946

Address

25363 Eureka Rd. Taylor, MI 48180

Facebook

@workforceintelligencenetwork

Twitter

@WIN-semich

