

Report Contents

- 2 State of the Labor Market
- 3 Key Findings
- 4 Workforce Overview
- 9 Real-Time Demand Overview

Occupation Groups

- 12 Energy
- 16 Engineers and Designers
- 20 Health Care
- 24 Information Technology
- 28 Skilled Trades and Technicians

About This Report

The Workforce Intelligence Network for Southeast Michigan (WIN) partnership is a collaboration of 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 Wayne 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 in Wayne county. The Energy, Engineers and Designers, Health Care, Information Technology (IT), and Skilled Trades occupation groups are analyzed for Wayne 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.



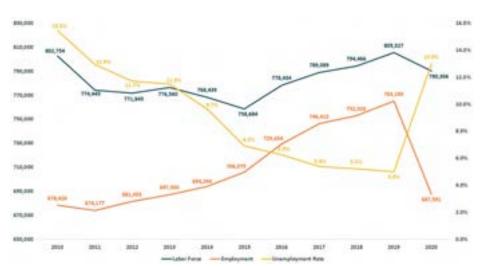
State of the Labor Market in Wayne County

The COVID-19 crisis has caused major shifts in the labor market this year. During 2020, the labor force and employment in Wayne county decreased. In 2020, the labor force declined by 15,220 individuals (1.9 percent) since 2019. Employment decreased by 77,599 workers (10.1 percent), while unemployment grew by more than double (62,378 workers) the 40,337 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 8.0 percentage points since 5.0 percent in 2019, for an annual unemployment rate of 13.0 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 Wayne county, while Registered Nurses is the top demanded occupation this year, accounting for 20,648 postings in 2020.

Annual Labor Market Information

The labor force in Wayne county has decreased in 2020, declining by 15,220 individuals since 2019. Employment decreased by 77,599 workers (10.1 percent) since 2019, while unemployment increased by 62,378 workers for a total of 102,715 unemployed workers in 2020. The unemployment rate dramatically increased in 2020 to 13.0 percent, a rise of 8.0 percentage points since 2019, which had a rate of 5.0 percent. During the height of the pandemic and shutdown measures in March 2020, the highest monthly unemployment rate occurred in May 2020, with an unemployment rate of 26.5 percent in Wayne county.

Annual Labor Force, Employment, Unemployment Rate 2010–2020

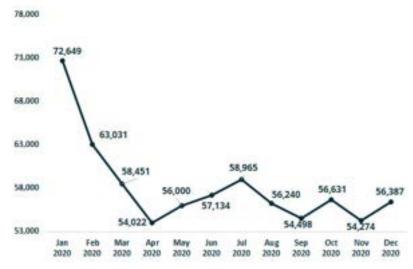


Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Employer Demand Overview

The fourth quarter of 2020 indicates that employer demand has decreased since the end of Q3 2020. In Q4 2020, there were 94,944 unique postings in Wayne county, a decrease of 4,781 postings from the 99,725 postings recorded in Q3. April had the lowest recorded postings in 2020 with 54,022 postings, a decrease of 14,752 postings (21.4 percent) since April 2019. The increase in the number of monthly online ads indicate employer demand for jobs has slowly began to increase into Q4 2020.

Monthly Posting Analysis Wayne County 2020

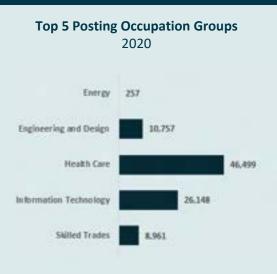


Data: Emsi | Analysis: Workforce Intelligence Network

QUARTERLY WORKFORCE INDICATORS Wayne County | 2020 Key Findings

Employer demand decreased by 22.4 percent, a loss of 82,158 job postings since 2019. Health Care is the top posting occupation group through 2020 with 46,499 postings.

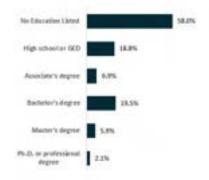
During 2020, there were 285,330 job postings, 82,158 less than the 367,488 postings made during 2019 in Wayne county. July 2020 saw the highest demand with 58,965 postings since the shut down due to COVID-19, however, postings are still down 37.1 percent since July 2019. The top posted job titles in 2020 include CDL-A Truck Drivers, ICU Registered Nurses, CDL Truck Drivers, Delivery Drivers, and Emergency Room Travel Registered Nurses. For more information about in-demand job postings, see page 9.



Job postings made by employers in Wayne county indicate a bachelor's degree remains the most in-demand minimum education level during 2020.

Of the 285,330 unique postings in Wayne county during 2020, 53,578 (18.8 percent) required a high school diploma or equivalent, while 75,370 postings (26.4 percent) required a college degree. An additional 23,017 postings (8.1 percent) required an advanced degree. The high demand for health care roles within the county, drives this high demand for workers with various skillsets.

Education Levels In-Demand 2020



Employment in Wayne county totaled 730,710 in Q4 2020, a decrease of 39,458 workers (5.1 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 increase in the labor force and decrease in employment, while unemployment and the unemployment rate also rose 0.7 percentage points. The COVID-19 shutdown, which started in Q2 2020, caused the employment in Wayne county to drop from 767,643 workers in Q1 to 566,366 workers in Q2, a decrease of 201,277 workers or 26.2 percent. Unemployment rose by 140,423 workers, more than triple the 40,817 workers recorded in Q1. Similarly, the unemployment rate rose in Q2, up from 5.0 percent in Q1 to 24.2 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

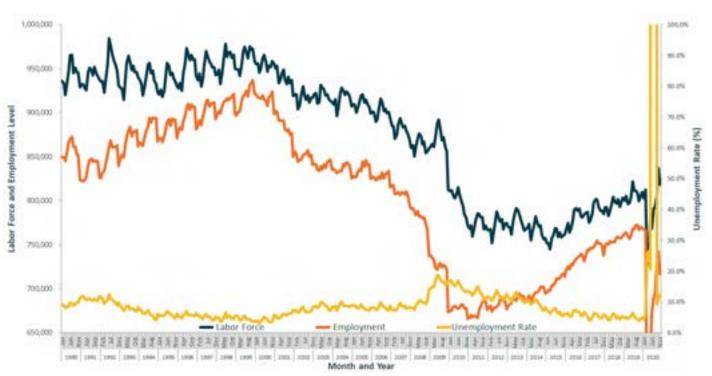
	Ath Quarter 2009	Die Guarter 2000	2nd Guerter 2020	3rd Quarter 2020	4th Counter 2000	Charge from 3rd Quarter 2020	Persent Change from 3rd Guerter 2001	Charge from 4th Guarter 2018	Persent Change from 4th Quarter 2029
Labor Force	804,915	809,462	747,606	784,260	820,898	36,639	4.7%	15,984	2.0%
Employment	770,168	767,643	566,366	685,645	730,710	45,065	6.6%	-39,458	-5.1%
Shamployment	14,747	40,817	181,240	98,614	90,188	-8,426	4.5%	55,442	159.6%
Unemployment Nate	4.3%	5.0%	24.2%	12.6%	11.0%	-1.6%	10	6.7%	74

Note: Monthly data averaged by quarter Data: Bureau of Labor Statistics

Labor Force, Employment, and Unemployment

Following labor force fluctuations throughout 2020, labor force participation totaled 790,306 individuals, a decrease by 15,220 individuals since 2019. Employment is down to 687,591 workers in 2020, a decrease of 77,599 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 102,715 workers, an increase of 62,378 workers since the 40,337 workers recorded in 2019. Similarly, the unemployment rate rose by 8.0 percent, increasing from 5.0 percentage points, for a 2020 unemployment rate of 13.0 percent.

Labor Force, Employment, Unemployment Rate 1990-2020



Data: BLS | Analysis: Workforce Intelligence Network

Annual Labor Market Data

	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	802,754	774,443	771,845	776,560	768,439	758,684	778,434	789,089	794,466	805,527	790,306	-15,220	-1.9%
Employment	678,426	674,177	681,453	687,300	694,244	706,075	729,654	746,415	752,926	765,190	687,591	-77,599	-10.1%
Unemployment	124,328	100,266	90,392	89,260	74,195	52,609	48,780	42,673	41,540	40,337	102,715	62,378	154.6%
Unemployment Rate	15.5%	12.9%	11.7%	11.5%	9.7%	6.9%	6.3%	5.4%	5.2%	5.0%	13.0%	8.0%	na

Data: Bureau of Labor Statistics

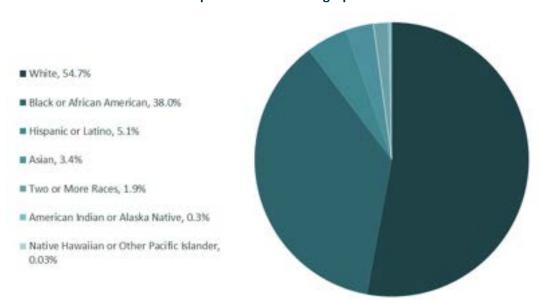
Population Demographics

According to the data from the Census Bureaus' most recent 2019 ACS Five Year estimates, during 2019, 1,757,299 people were living in Wayne county. The sex of the populace was split almost evenly, with 51.8 percent of the population identifying as female, and the other 48.2 percent identifying as male. A little over half of the population identified as white (53.1 percent) with the second largest number of individuals identifying as Black or African American (38.7 percent). The city skews younger than the surrounding region; 28.4 percent of population was over the age of 54, compared to 32.7 percent under the age of 25. Wayne county also has a strong middle-aged population between the ages of 25-54, accounting for 35.5 percent of the total population.

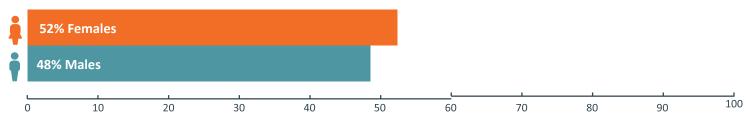


0.2% Decrease from 2018

Population Race Demographics



Population Gender Demographics



Population Age Demographics



Labor Market Demographics

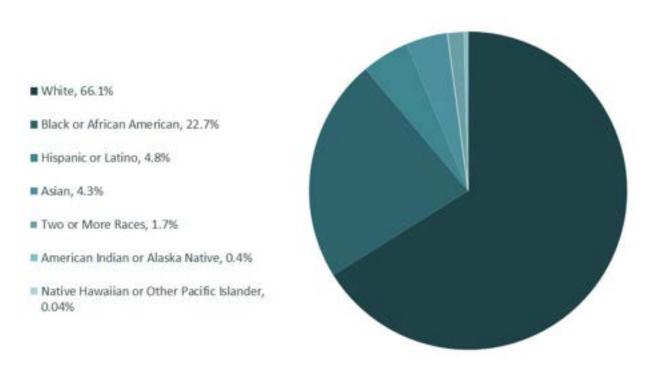
During 2019, the most recent census year, there were about 819,620 people in the labor force, either working or looking for work in Wayne county. Resident employment in the city totals 744,194 workers or just under half, 43.3 percent, of the total population in Wayne county. The highest unemployment rates in 2019 were seen in those aged 24 years old or younger, accounting for an unemployment rate of 43.8 percent for males and 39.0 percent for females. Overall, males in the county have a higher unemployment rate than females, with 9.7 percent and 8.7 percent respectively, for 2019. Black or African American job seekers have a difficult time finding employment, facing an unemployment rate of 15.6 percent. Native American job seekers also face difficulty, with an unemployment rate of 11.3 percent.

Civilian Labor Force by Demographic Group										
Demographic Group	Civilian Labor Force	Total Employment	Total Unemployment	Unemployment Rate						
Total Population 16 +	819,620	744,194	75,426	9.2%						
Sex										
Male 16+	418,631	378,178	40,453	9.7%						
16-19	16,609	12,131	4,478	27.0%						
20-24	43,211	35,949	7,262	16.8%						
25-54	273,084	249,066	24,018	8.8%						
55-64	67,506	63,677	3,829	5.7%						
65 Plus	18,221	17,355	866	4.8%						
Female 16+	400,989	366,016	34,973	8.7%						
16-19	16,534	12,554	3,980	24.1%						
20-24	43,282	36,822	6,460	14.9%						
25-54	259,047	238,225	20,822	8.0%						
55-64	64,838	61,947	2,891	4.5%						
65 Plus	17,288	16,468	820	4.7%						
Race										
White	460,484	436,208	23,945	5.2%						
Black / African	297,692	251,326	46,440	15.6%						
Native American	2,750	2,440	311	11.3%						
Asian	29,020	27,194	1,799	6.2%						
Native Hawaiian /	249	223	0	0.0%						
Some Other Race	14,643	13,433	1,215	8.3%						
Two or More Races	14,992	13,286	1,694	11.3%						
Ethnicity										
Hispanic	44,657	40,859	3,796	8.5%						

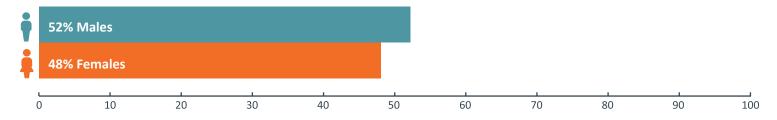
Current Workforce Demographics

In 2020, the workforce had a total of 720,292 individuals working in Wayne county. A slight majority, 51.5 percent (370,904 workers) were male, while 48.5 percent (349,388 workers) of the workforce was female. Most workers in the county identified as white, accounting for 66.1 percent of the workforce, while Black or African American workers totaled 22.7 percent of the workforce. Those identifying as having a Hispanic or Latino ethnicity accounted for 4.8 percent. Much of the workforce in Wayne county are between the ages of 25 through 54 (64.7 percent), while 23.0 percent of workers are 55 and older.

Workforce Race and Ethnicity Demographics



Workforce Gender Demographics



Workforce Age Demographics



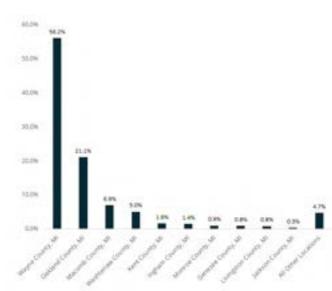
Regional Commuting Patterns

According to the most recent OnTheMap data set available from the Census Bureau, during 2018, the county's workforce consisted of 680,766 residents. There were 382,347 (56.2 percent) residents living and working within the county, while the remaining 289,419 residents (43.8 percent) traveled outside of the county for work. There were 689,268 workers employed in the county during 2018. Of those, 306,921 workers (44.5 percent) lived outside of the county's borders and commuted in. We can see that Wayne county is, by a small margin, a net importer of jobs with more workers commuting into the area for employment than leaving.

Where Wayne County Residents Work



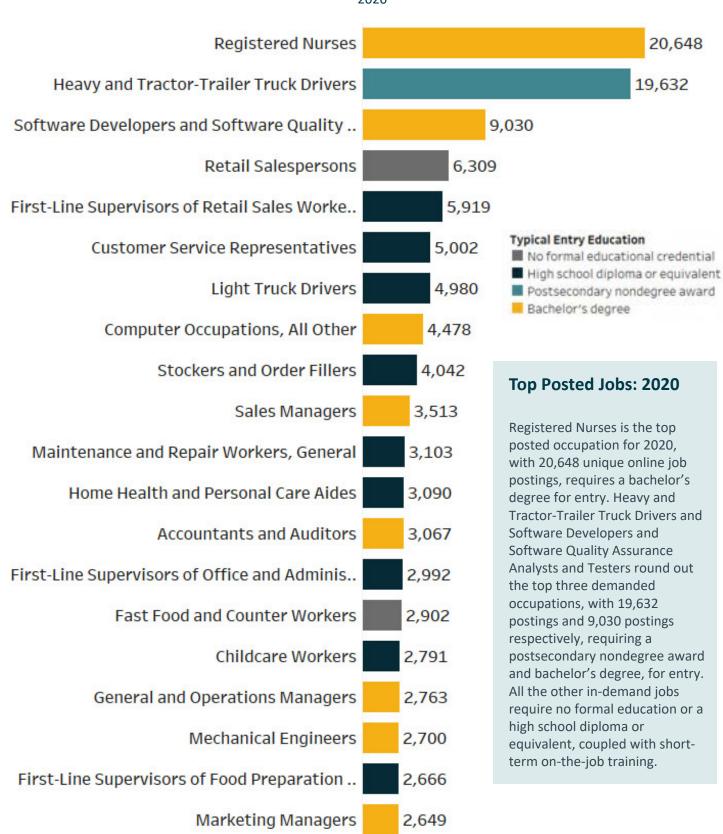
Where Wayne County Workers Live



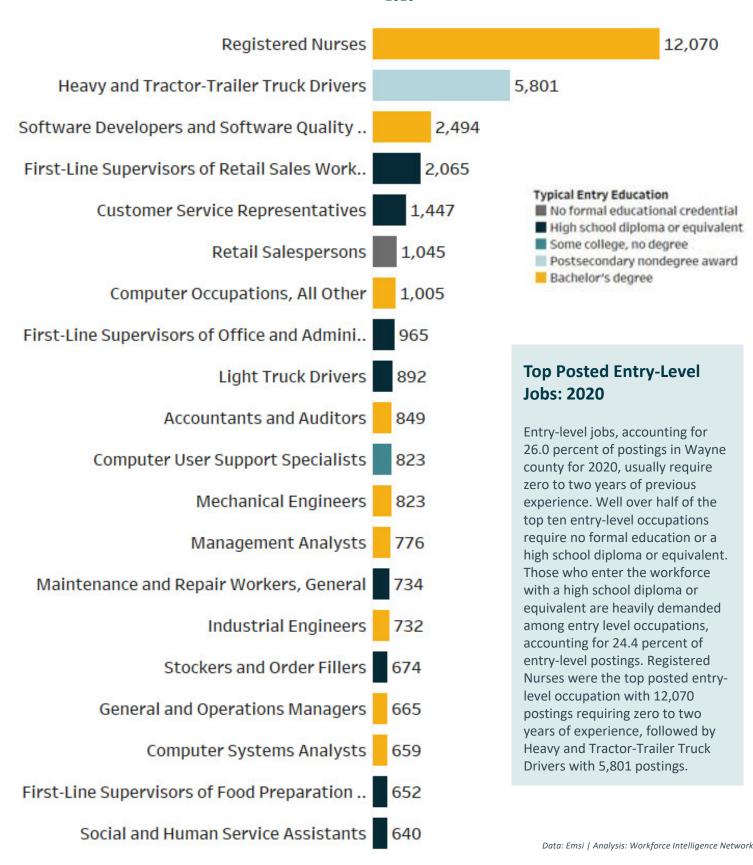
Source: U.S. Census OnTheMap, 2018 Analysis: Workforce Intelligence Network



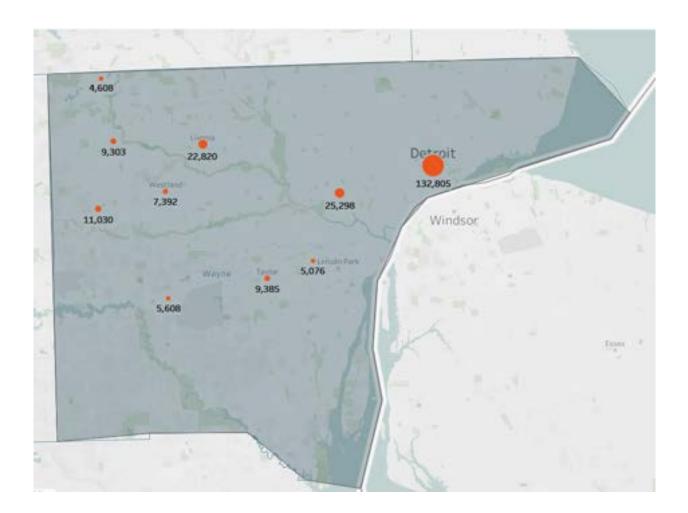
Top Posted Jobs 2020



Top Posted Entry-Level Jobs 2020



Employer Demand by City



Top In-Demand Qualifications

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

Top In-Demand Skills

- Basic Life Support
- Nursing
- Advanced Cardiovascular Life Support (ACLS)
- Auditing
- Selling Techniques
- Communications
- Management
- Customer Service
- Sales
- Leadership

Top Posting Employers*

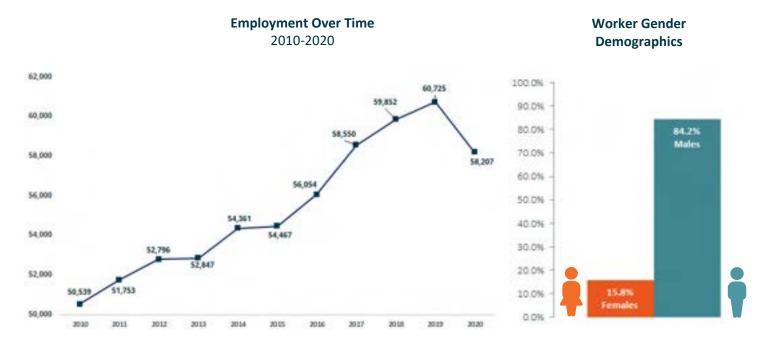
- General Healthcare Resources, Inc.
- Ford Motor Company
- Mercy Medical Center, Inc.
- Henry Ford Health System
- Beaumont Health System
- Anthem, Inc.
- Deloitte LLP
- Tenet Healthcare Corporation
- Shipt, Inc.
- Accenture PLC

^{*}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.





Energy Worker Demographics

In 2020, there were 58,207 workers in the energy occupation group. This group is primarily made up of white males (84.2 percent) between the ages of 25 and 54 (70.2 percent), with 15.8 percent of workers identifying as female and just 25.5 percent identifying as a racial minority. In 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.

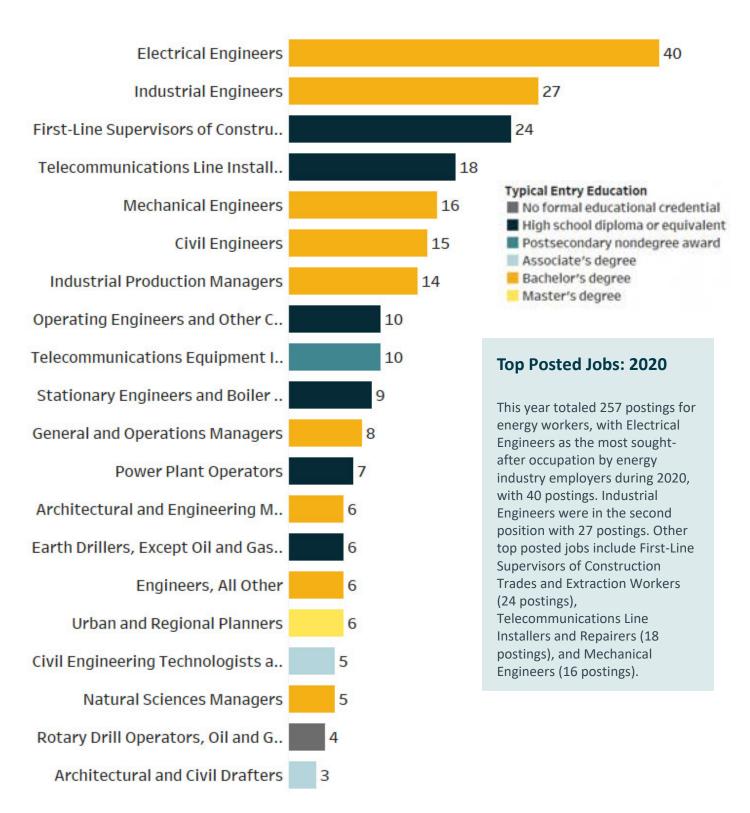
Race and Ethnicity Demographics

74.5% White | 13.9% Black or African American | 3.7% Hispanic or Latino

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 obtain the education or training requirements related to these jobs. Each of the top ten energy occupations have median wages over \$18.00 per hour. The top posted energy job, Electrical Engineers, offers a median hourly wage of \$44.33, or annual earnings of approximately \$92,206. 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 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2071	Electrical Engineers	\$30.89	\$36.36	\$44.33	\$53.91	\$62.48
17-2112	Industrial Engineers	\$30.79	\$36.40	\$44.70	\$53.90	\$61.12
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$20.62	\$27.73	\$35.63	\$45.32	\$52.52
49-9052	Telecommunications Line Installers and Repairers	\$12.87	\$14.91	\$18.22	\$22.93	\$28.75
17-2141	Mechanical Engineers	\$30.67	\$35.93	\$44.66	\$55.26	\$63.49
17-2051	Civil Engineers	\$24.79	\$29.10	\$34.92	\$42.41	\$51.69
11-3051	Industrial Production Managers	\$34.71	\$44.36	\$56.24	\$70.07	\$85.84
47-2073	Operating Engineers and Other Construction Equipment Operators	\$21.67	\$25.56	\$29.00	\$32.80	\$38.92
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	\$16.72	\$21.28	\$26.09	\$29.42	\$36.38
51-8021	Stationary Engineers and Boiler Operators	\$24.99	\$28.71	\$32.75	\$36.21	\$38.30

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Requirements Management
- Electrical Engineering
- Customer Satisfaction
- Personal Protective Equipment
- Auditing

In-Demand Foundational Skills

- Management
- Communications
- Planning
- Problem Solving
- Operations

In-Demand Education Level*

High School Diploma: 34.2%
Associate Degree: 12.5%
Bachelor's Degree: 48.2%
Master's Degree: 19.1%

In-Demand Certifications

- Commercial Driver's License (CDL)
- Operator Certification
- Tanker Endorsement
- Professional Engineer
- CFC Refrigeration 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*

- DTE Energy Company
- Henkels & McCoy, Inc.
- Service Electric Company
- Cavo Broadband Communications, LLC
- CMS Energy Corporation
- Elevate Energy
- National Grid Corporate Services LLC
- Osmose Utilities Services, Inc.
- Mears Group, Inc.
- McDermott International, Inc.

Job Postings by City

1. Detroit: 134 Postings

2. Canton: 53 Postings

3. Dearborn: 19 Postings

4. Plymouth: 14 Postings

5. Belleville: 10 Postings

6. Romulus: 7 Postings

7. Melvindale: 5 Postings

8. Garden City: 3 Postings

9. Livonia: 3 Postings

10. Northville: 2 Postings

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

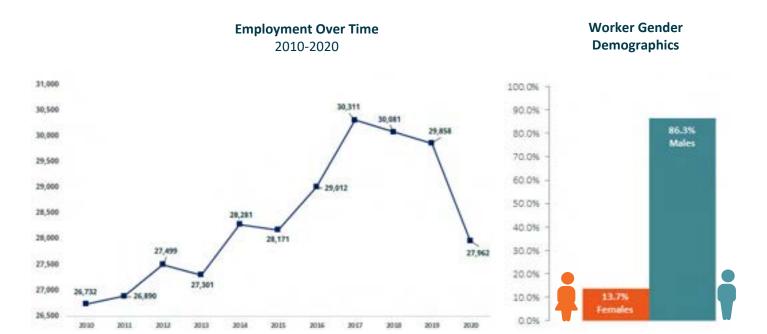
Introduction

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.



27,962
Engineering and Design Workers

6.3% Decrease from 2019



Engineering and Design Worker Demographics

According to 2020 Emsi data, the 27,962 workers in the engineering and design group are not particularly diverse. Just 5.1 percent of the related workforce is under 25, likely due to the consistently high educational requirements. Female workers account for 13.7 percent of the current workforce and only 24.2 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.

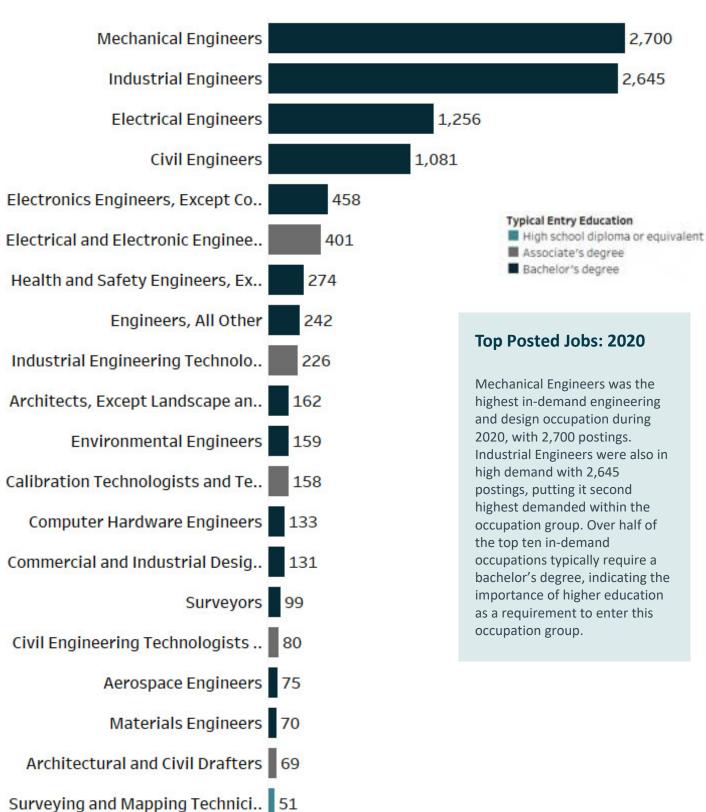
Race and Ethnicity Demographics

75.8% White | 10.0% Asian | 9.3% 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, Mechanical Engineers, offers a median hourly wage of \$44.66. This reflects an annual salary of approximately \$92,893.

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
17-2141	Mechanical Engineers	\$30.67	\$35.93	\$44.66	\$55.26	\$63.49
17-2112	Industrial Engineers	\$30.79	\$36.40	\$44.70	\$53.90	\$61.12
17-2071	Electrical Engineers	\$30.89	\$36.36	\$44.33	\$53.91	\$62.48
17-2051	Civil Engineers	\$24.79	\$29.10	\$34.92	\$42.41	\$51.69
17-2072	Electronics Engineers, Except Computer	\$34.43	\$41.88	\$50.92	\$60.31	\$80.82
17-3023	Electrical and Electronic Engineering Technologists and Technicians	\$17.54	\$22.19	\$28.76	\$34.38	\$38.98
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	\$33.44	\$38.87	\$47.65	\$58.82	\$69.63
17-2199	Engineers, All Other	\$24.98	\$33.79	\$42.83	\$55.39	\$64.03
17-3026	Industrial Engineering Technologists and Technicians	\$17.56	\$21.93	\$27.47	\$34.44	\$40.57
17-1011	Architects, Except Landscape and Naval	\$23.34	\$28.53	\$36.22	\$45.52	\$55.90

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

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

In-Demand Foundational Skills

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

In-Demand Education Level*

• High School Diploma: 8.7% • Associate Degree: 6.6% • Bachelor's Degree: 53.6%

• Master's Degree: 14.5%

In-Demand Certifications

- Professional Engineer
- Licensed Professional Engineer
- LEED Accredited Professional (AP)
- Six Sigma Green Belt Certification
- 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

Employer Demand by City



Top Posting Employers*

- Ford Motor Company
- **Growing People and Companies**
- Advantage Resourcing
- Rivian Automotive, Inc
- Gtech Services, Inc
- Jacobs Engineering Group Inc.
- Kelly Services, Inc.
- Aerotek, Inc.
- ALTAIR ENGINEERING, INC.
- Roush Industries, Inc.

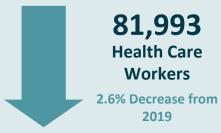
Job Postings by City

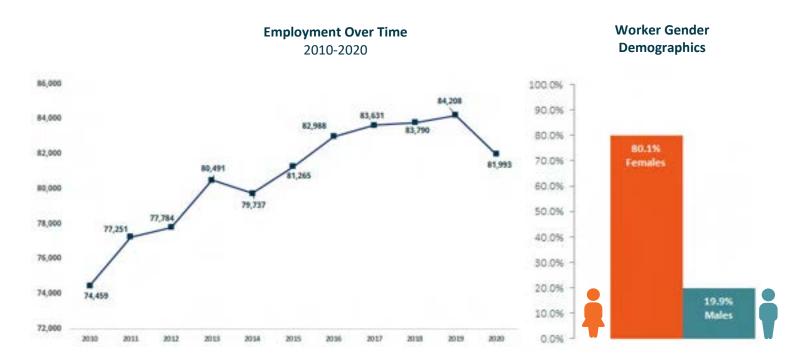
- 1. Detroit: 4,653 Postings
- 2. Dearborn: 2,337 Postings
- 3. Plymouth: 1,181 Postings
- 4. Livonia: 818 Postings
- 5. Allen Park: 350 Postings
- 6. Northville: 227 Postings
- 7. Canton: 180 Postings
- 8. Taylor: 134 Postings
- 9. Romulus: 131 Postings
- 10. Highland Park: 79 Postings

^{*}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 81,993 workers in Wayne county, who are overwhelmingly female (80.1 percent) and between the ages of 25 and 54 (69.5 percent), although 22.9 percent of workers are over 54. The healthcare occupation group is primarily white in Wayne county, with 58.4 percent of workers identifying as white, 30.1 percent identifying as Black or African American, and 11.5 percent identifying otherwise.

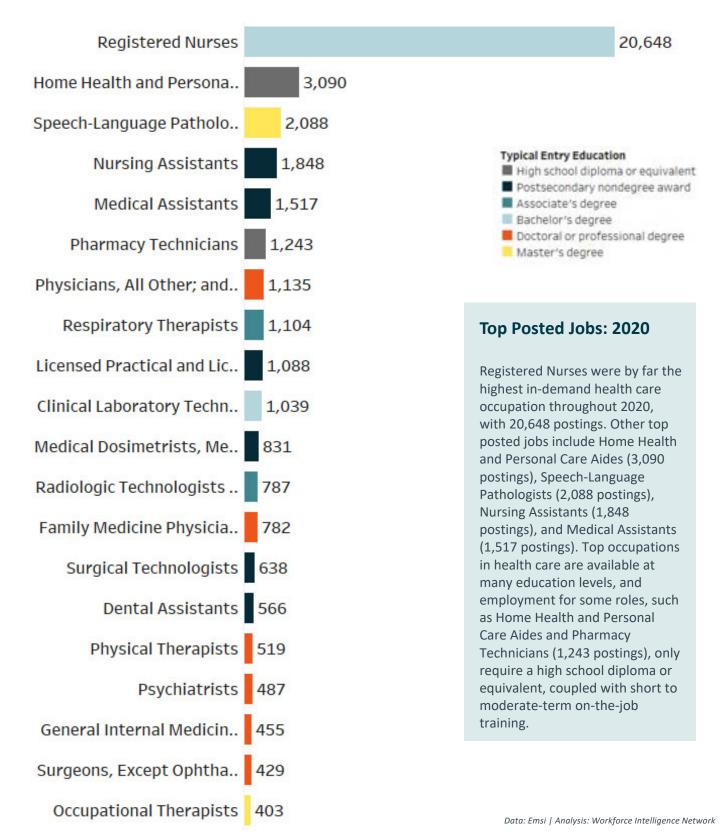
Race and Ethnicity Demographics

58.4% White | 30.1% Black or African American | 6.5% 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 \$37.14 per hour or annual salary of about \$77,251.

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	\$27.78	\$31.95	\$37.14	\$42.87	\$48.93
31-1128	Home Health and Personal Care Aides	\$10.51	\$11,16	\$12.30	\$14.15	\$16.52
29-1127	Speech-Language Pathologists	\$25.35	\$32.12	\$38.48	\$47.66	\$68.55
31-1131	Nursing Assistants	\$12.07	\$13.45	\$15.15	\$17.43	\$19.08
31-9092	Medical Assistants	\$13.31	\$14.65	\$16.75	\$18.97	\$21.48
29-2052	Pharmacy Technicians	\$11.49	\$13.59	\$16.67	\$20.06	\$24.63
29-1228	Physicians, All Other, and Ophthalmologists, Except Pediatric	\$25.25	\$27.87	\$32.60	\$102.90	\$113.28
29-1126	Respiratory Therapists	\$22.14	\$25.50	\$29.06	\$32.61	\$37.58
29-2061	Licensed Practical and Licensed Vocational Nurses	\$20.52	\$23.01	\$26.01	\$28.67	\$30.36
29-2018	Clinical Laboratory Technologists and Technicians	\$14.80	\$18.04	\$26.81	\$34.26	\$38.65

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

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

In-Demand Foundational Skills

- Communications
- Customer Service
- Management
- Leadership
- Compassion

In-Demand Education Level*

High School Diploma: 14.7%
Associate Degree: 18.4%
Bachelor's Degree: 7.6%
Master's Degree: 5.7%

In-Demand Certifications

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

^{*}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*

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

Job Postings by City

1. Detroit: 25,157 Postings

2. Livonia: 4,390 Postings

3. Dearborn: 2,962 Postings

4. Canton: 1,407 Postings

5. Taylor: 1,271 Postings

6. Wyandotte: 1,103 Postings

7. Grosse Point: 957 Postings

8. Plymouth: 918 Postings

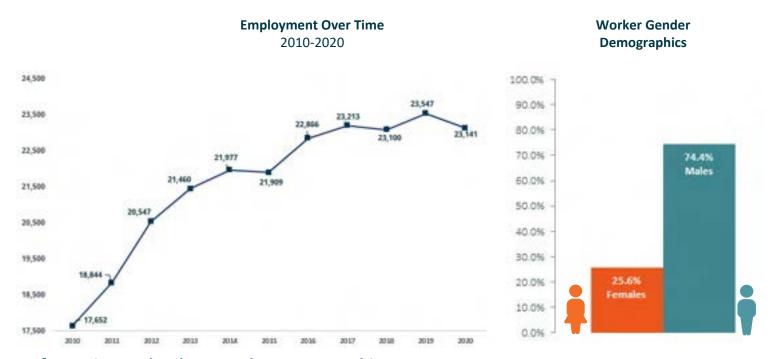
9. Wayne: 883 Postings

10. Westland: 789 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 annually.





Information Technology Worker Demographics

According to 2020 Emsi data, Wayne county has 23,141 IT workers. The workforce is not too diverse, with most workers identifying as white males (74.4 percent) between the ages of 25 and 54. Roughly 77.2 percent of the workforce are between the ages of 25 and 54. Workers aged 55 years and older account for 17.6 percent, while only 5.3 percent are 24 years old or younger. Around 66.6 percent of the workforce identify as white, with workers who identify as Black or African American make up 12.8 percent of the workforce.

Race and Ethnicity Demographics

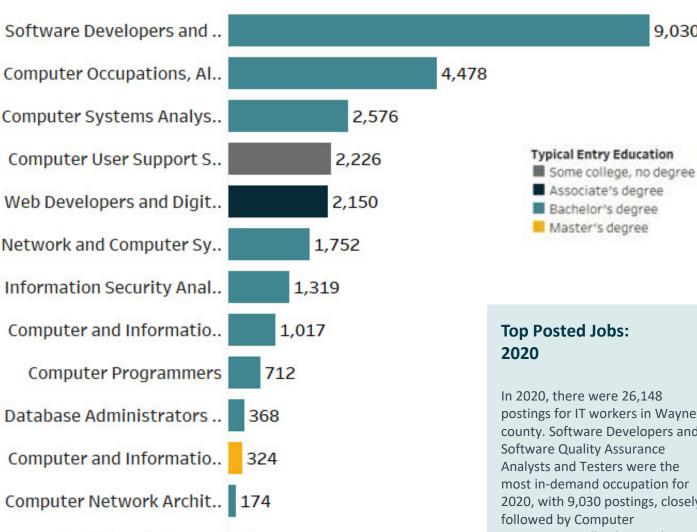
66.6% White | 16.0% Asian | 12.8% Black or African American

Worker Age Demographics



9.030

Information Technology Top Posted Jobs 2020



Computer Network Suppo.. 22

In 2020, there were 26,148 postings for IT workers in Wayne county. Software Developers and Software Quality Assurance Analysts and Testers were the most in-demand occupation for 2020, with 9,030 postings, closely followed by Computer Occupations, All Other, with 4,478 postings. Computer Systems Analysts (2,576 postings) and Computer User Support Specialists (2,226 posting) were also high in-demand 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 \$46.13 per hour or almost \$95,950 per year. Computer and Information Systems Managers earn the highest median wage at \$66.48 per hour or nearly \$138,278 per year. Other occupations that have fewer qualifications, such as Computer User Support Specialists and Web Developers and Digital Interface Designers, make over \$22.00 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	\$29.17	\$36.67	\$46.13	\$56.85	\$65.75
15-1299	Computer Occupations, All Other	\$19.89	\$27.38	\$37.98	\$49.96	\$61.24
15-1211	Computer Systems Analysts	\$27.19	\$34.42	\$43.30	\$53.79	\$64.65
15-1232	Computer User Support Specialists	\$14.58	\$17.40	\$22.57	\$29.76	\$37.24
15-1257	Web Developers and Digital Interface Designers	\$19.07	\$25.14	\$34.50	\$45.11	\$52.26
15-1244	Network and Computer Systems Administrators	\$26.38	\$33.26	\$40.91	\$51.00	\$61.24
15-1212	Information Security Analysts	\$28.39	\$34.94	\$43.99	\$56.44	\$65.12
11-3021	Computer and Information Systems Managers	\$42.69	\$53.20	\$66.48	\$80.67	\$99.49
15-1251	Computer Programmers	\$22.72	\$29.52	\$38.05	\$46.61	\$53.40
15-1245	Database Administrators and Architects	\$26.93	\$33.31	\$45.68	\$56.87	\$65.01

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Agile Methodology
- Java
- Computer Science
- SQI
- Software Engineering

In-Demand Foundational Skills

- Communications
- Management
- Problem Solving
- Leadership
- Troubleshooting

In-Demand Education Level*

High School Diploma: 4.0%
Associate Degree: 3.7%
Bachelor's Degree: 43.8%
Master's Degree: 10.8%

In-Demand Certifications

- Certified Information Systems Security Professional
- Project Management Professional Certification
- Certified Information System Auditor (CISA)
- Certified Information Security Manager
- Microsoft Certified Professional

^{*}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*

- Deloitte LLP
- Ford Motor Company
- Teksystems, Inc.
- Accenture PLC
- Quicken Loans Inc.
- General Motors Company
- Amazon.com, Inc.
- Anthem, Inc.
- Strategic Staffing Solutions, Inc.
- Ciber, Inc.

Job Postings by City

- 1. Detroit: 15,723 Postings
- 2. Dearborn: 5,436 Postings
- 3. Livonia: 1,375 Postings
- 4. Plymouth: 857 Postings
- 5. Allen Park: 806 Postings
- 6. Taylor: 327 Postings
- 7. Northville: 291 Postings
- 8. Canton: 204 Postings
- 9. Dearborn Heights: 154 Postings
- 10. Romulus: 109 Postings

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

Introduction

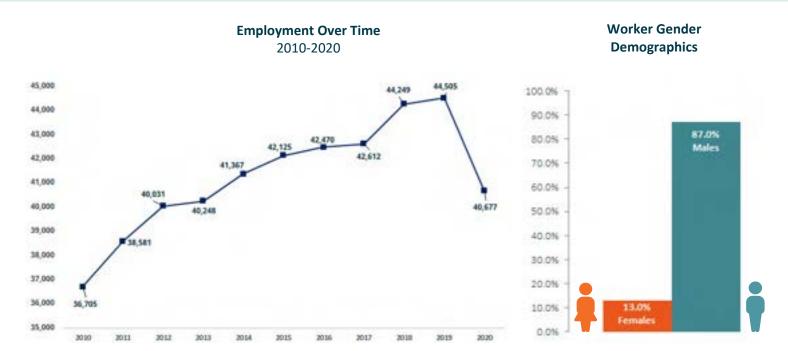
WIN's technicians/skilled trades category includes jobs related to advanced manufacturing. Southeast Michigan has more demand for skilled-trades labor, such as CNC machinists and welders, than almost anywhere else in the country. There are about 21,000 openings for these workers annually.

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



40,677
Skilled Trades
Workers

8.6% Decrease from 2019



Skilled Trades Worker Demographics

According to 2020 Emsi data, the skilled trades occupation group employed about 40,677 workers in Wayne county. Majority of skilled trades workers are white males (87.0 percent) between the ages of 25 and 54 (67.0 percent). Additional outreach will be necessary soon, due to the aging workforce, as 27.5 percent are 55 years of age or older.

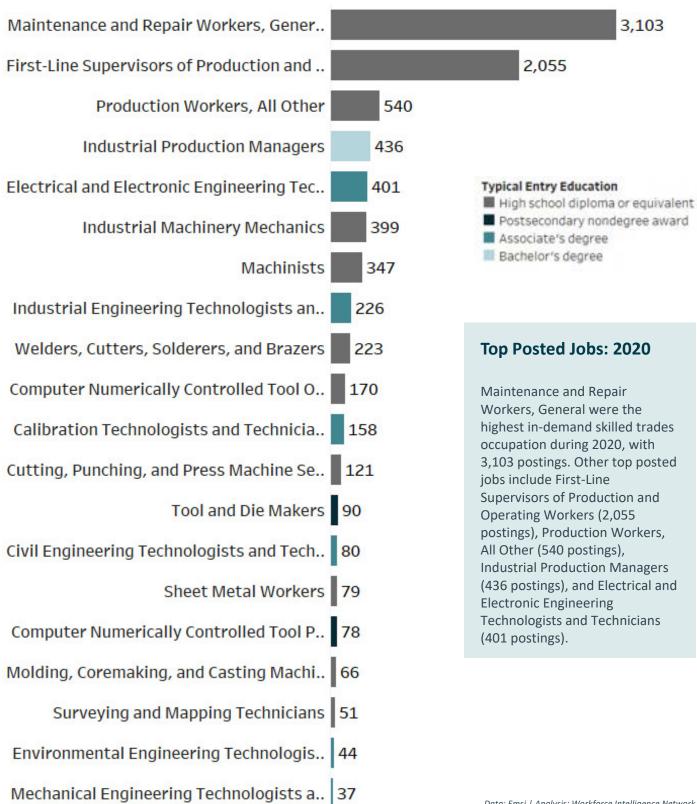
Race and Ethnicity Demographics

70.5% White | 19.4% Black or African American | 5.4% Hispanic or Latino

Worker Age Demographics



Skilled Trades Top Posted Jobs 2020



Skilled Trades Wage Overview

Over half of the top ten in-demand skilled trades occupations have median wages above \$20.00 per hour, while the remaining top occupations have 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 \$18.00, which translates to an annual salary of about \$37,440.

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	\$11.81	\$14.42	\$18.00	\$23.88	\$29.67
51-1011	First-Line Supervisors of Production and Operating Workers	\$19.26	\$24.55	\$32.45	\$41.02	\$51.72
51-9199	Production Workers, All Other	\$9.50	\$10.48	\$12.84	\$17.18	\$22.51
11-3051	Industrial Production Managers	\$34.71	\$44.36	\$56.24	\$70.07	\$85.84
17-3023	Electrical and Electronic Engineering Technologists and Technicians	\$17.54	\$22.19	\$28.76	\$34.38	\$38.98
49-9041	Industrial Machinery Mechanics	\$15.97	\$20.15	\$25.58	\$30.96	\$36.63
51-4041	Machinists	\$11.64	\$15.57	\$20.39	\$26.64	\$31.76
17-3026	Industrial Engineering Technologists and Technicians	\$17.56	\$21.93	\$27.47	\$34.44	\$40.57
51-4121	Welders, Cutters, Solderers, and Brazers	\$13.39	\$16.12	\$19.59	\$23.91	\$29.64
51-9161	Computer Numerically Controlled Tool Operators	\$12.40	\$14.67	\$19.57	\$23.96	\$28.70

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Plumbing
- HVAC
- Preventive Maintenance
- Painting
- Carpentry

In-Demand Foundational Skills

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

In-Demand Education Level*

• High School Diploma: 38.2% • Associate Degree: 11.6% • Bachelor's Degree: 12.1%

• Master's Degree: 1.2%

In-Demand Certifications

- Commercial Driver's License (CDL)
- HVAC Certification
- EPA 608 Technician Certification
- Automotive Service Excellence (ASE) Certification
- National Apprenticeship Certificate

*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*

- McDonald's Corporation
- Kelly Services, Inc.
- The Home Depot
- Aerotek, Inc.
- Jacobs Engineering Group Inc.
- Sentech Services
- Nesco Resource
- DTE Energy Company
- Cbre Group, Inc.
- Ford Motor Company

Job Postings by City

1. Detroit: 3,849 Postings

2. Livonia: 868 Postings

3. Plymouth: 609 Postings

4. Dearborn: 483 Postings

5. Romulus: 397 Postings

6. Canton: 372 Postings

7. Taylor: 314 Postings

8. Westland: 266 Postings

9. Belleville: 228 Postings

10. Wayne: 163 Postings

^{*}Employer 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

