# WORKFORCE INTELLIGENCE NETWORK

Research. Engagement. Solutions

# LABOR MARKET REPORT WAYNE COUNTY

January - December 2021

# INTRODUCTION

Wayne County **2021** 



#### **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 19-county region in Michigan. The counties in the WIN partnership include Clinton, Eaton, Genesee, Hillsdale, Huron, Ingham, Jackson, Lapeer, Lenawee, Livingston, Macomb, Monroe, Oakland, St. Clair, Sanilac, Shiawassee, Tuscola, Washtenaw, and Wayne, along with the City of Detroit.

The WIN 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, entry-level requirements, and earning potential.

WIN produces a quarterly 19-county region report 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 the Detroit 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 highlights labor market information and real-time job posting data for Wayne County, including a workforce overview that identifies key components of the area's labor market such as 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 labor market's health. This data is used to provide real-time demand and job posting information for both employers and job seekers. This report analyzes the 2021 labor market information from Washtenaw County for the Energy, Engineers and Designers, Health Care, Information Technology (IT), and Skilled Trades occupation groups.

For more information about the southeast Michigan labor market, custom occupation groups, and 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.

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### ANNUAL STATE OF THE LABOR MARKET

#### State of the Labor Market in Wayne County

The COVID-19 crisis continued to cause major shifts in the labor market this year. In 2021, the labor force declined by 19,256 individuals (2.4 percent) while employment increased by 39,464 individuals (5.7 percent) from 2020. Unemployment went down by 58,720 workers and the unemployment rate recovered significantly, decreasing 7.3 percentage points from 13.0 percent in 2020 to 5.7 percent in 2021. Monthly postings data shows shifts in hiring and skills demanded as the region continues its recovery. Registered Nurses tops the list as the most demanded occupation in 2021, accounting for 13,796 job postings followed closely by Software Developers and Software Quality Assurance Analysts and Testers with 11,610 postings. The health care and information technology occupation groups continue to be heavily demanded in Wayne County.

#### **Annual Labor Market Information**

The labor force in Wayne County dropped in 2021, decreasing by 19,256 individuals (2.4 percent) from the prior year. Employment increased by 39,464 workers (5.7 percent) over the same period, while unemployment decreased by 58,720 workers (57.2 percent) for a total of 43,995 unemployed workers in 2021. The unemployment rate decreased in 2021 to 5.7 percent, a fall of 7.3 percentage points since the 13.7 percent spike in 2020. 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 2011–2021

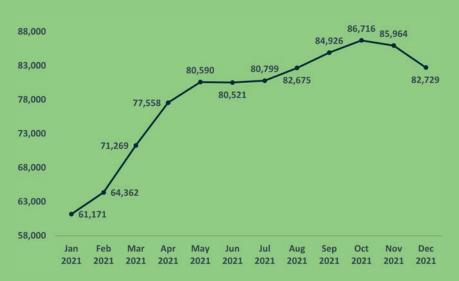


Data: BLS | Analysis: Workforce Intelligence Network

# **Quarterly Employer Demand Overview**

The fourth quarter of 2021 shows that employer demand has increased since the end of Q3 2021. In Q4 2021, there were 255,409 unique postings in Wayne County, an increase of 7,009 postings from the 248,400 postings recorded in Q3. October had the highest recorded postings in 2021 with 86,716 postings, an increase of 25,545 postings (41.8 percent) since January 2021. The steady increase in the number of online ads is a good indication that employer demand continues to be strong throughout the year.

# Monthly Posting Analysis Wayne County 2021



### ANNUAL WORKFORCE INDICATORS

### **Key Findings**

18%

Employer demand increased by 18.0 percent, a gain of 51,250 job postings since 2020.

#### **High School Diploma**

Most in-demand minimum education level during 2020.

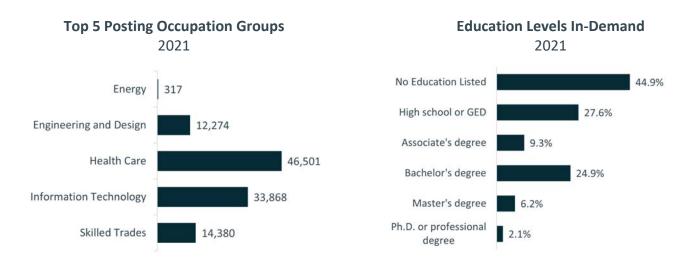
In Q4 2021, employment totaled

750,225

an increase of 19,515 workers (2.7 percent) since Q4 2020

During 2021, there were 336,580 job postings, 51,250 more than the 285,330 postings made during 2020 in Wayne County. October 2021 saw the highest demand for the year with 86,716 postings, a 41.8 percent increase since January 2021. The top posted job titles in 2021 include CDL-A Truck Drivers, Maintenance Technicians, Customer Service Representatives, Registered Nurses, and Delivery Drivers. For more information about in-demand job postings, see page 7.

Of the 336,580 unique postings in Wayne County during 2021, 92,862 (27.6 percent) required a high school diploma or equivalent, while 114,922 postings (34.1 percent) required a college degree. An additional 27,718 postings (2.2 percent) required an advanced degree. The high demand for transportation and health care jobs within the county drives this demand for workers with various skill sets.



The quarterly labor market shifts that were seen in 2020, following the outbreak of COVID-19, have remained fairly flat in 2021. The first quarter of 2021 saw an initial decrease in the labor force, employment, unemployment, and the unemployment rate fell 5.1 percentage points to an annual high of 5.9 percent. The labor force and employment numbers peaked in Q4 with a high of 792,603 individuals and 750,225 workers respectively, and unemployment decreased to 42,379 workers. The market continued to realign toward pre-pandemic levels, showing a decrease in unemployment and the unemployment rate through Q4 2021. The unemployment rate at the end of Q4 2021 was 5.3 percent. For more information about this year's unemployment rate and other labor market indicators, see page 4.

#### **Quarterly Labor Market Data**

	4th Quarter 2020	1st Quarter 2021	2nd Quarter 2021	3rd Quarter 2021	4th Quarter 2021	Change from 3rd Quarter 2021	Percent Change from 3rd Quarter 2021	Change from 4th Quarter 2020	Percent Change from 4th Quarter 2020
Labor Force	820,898	754,899	756,760	779,940	792,603	12,663	1.6%	-28,295	-3.4%
Employment	730,710	710,311	713,611	734,076	750,225	16,149	2.2%	19,515	2.7%
Unemployment	90,188	44,588	43,149	45,864	42,379	-3,485	-7.6%	-47,810	-53.0%
Unemployment Rate	11.0%	5.9%	5.7%	5.9%	5.3%	-0.5%	na	-5.6%	na

# LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Following labor force fluctuations throughout 2021, labor force participation totaled 771,050 individuals, a decrease of 19,256 individuals since 2020. Employment is up to 727,056 workers in 2021, an increase of 39,464 workers. Both unemployment and the unemployment rate decreased, corresponding with the economic recovery. Unemployment decreased to 43,995 workers, down by 58,720 workers since the high of 102,715 workers recorded in 2020. Similarly, the unemployment rate declined by 7.3 percentage points for a 2021 unemployment rate of 5.7 percent.

#### Annual Labor Market Data 2011-2021

	2011 Annual	2012 Annual	2013 Annual	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual	2019 Annual	2020 Annual	2021 Annual	Change from 2020 to 2021	( hange from
Labor Force	774,443	771,845	776,560	768,439	758,684	778,434	789,089	794,466	805,527	790,306	771,050	-19,256	-2.4%
Employment	674,177	681,453	687,300	694,244	706,075	729,654	746,415	752,926	765,190	687,591	727,056	39,464	5.7%
Unemployment	100,266	90,392	89,260	74,195	52,609	48,780	42,673	41,540	40,337	102,715	43,995	-58,720	-57.2%
Unemployment Rate	12.9%	11.7%	11.5%	9.7%	6.9%	6.3%	5.4%	5.2%	5.0%	13.0%	5.7%	-7.3%	na

Data: Bureau of Labor Statistics

### **CENSUS 2020 LABOR FORCE DEMOGRAPHICS**

During 2020, the most recent census year, there were about 820,931 people in the labor force, either working or looking for work in Wayne County. Resident employment in the city totals 747,847 workers or just under half, 42.7 percent, of the total population in Wayne County. The highest unemployment rates in 2020 were seen in those aged 24 years old or younger, accounting for an unemployment rate of 45.2 percent for males and 38.1 percent for females. Overall, males in the county have a higher unemployment rate than females, with 9.5 percent and 8.2 percent respectively, for 2020. Black or African American job seekers have a difficult time finding employment, facing unemployment rate of 14.4 percent. Native American job seekers also face difficulty, with an unemployment rate of 10.6 percent.

Civilian Labor Force by Demographic Group										
	Civilian Labor	Total	Total	Unemployment						
Demographic Group	Force	Employment	Unemployment	Rate						
Total Population 16 +	820,931	747,847	73,084	8.9%						
Sex										
Male 16+	417,100	377,320	39,780	9.5%						
16-19	15,913	11,487	4,426	27.8%						
20-24	41,239	34,057	7,182	17.4%						
25-54	272,878	250,471	22,407	8.2%						
55-64	67,886	63,238	4,648	6.8%						
65 Plus	19,184	18,067	1,117	5.8%						
Female 16+	403,831	370,527	33,304	8.2%						
16-19	16,867	13,054	3,813	22.6%						
20-24	42,044	35,521	6,523	15.5%						
25-54	258,732	239,392	19,340	7.5%						
55-64	66,185	63,249	2,936	4.4%						
65 Plus	20,003	19,311	692	3.5%						
Race										
White	454,988	429,964	25,024	5.5%						
Black / African	294,508	252,099	42,409	14.4%						
Native American	2,616	2,339	277	10.6%						
Asian	30,389	28,839	1,550	5.1%						
Native Hawaiian /	208	208	0	0.0%						
Some Other Race	15,855	14,650	1,205	7.6%						
Two or More Races	22,792	20,217	2,576	11.3%						
Ethnicity										
Hispanic	46,329	42,437	3,892	8.4%						

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

### **POPULATION DEMOGRAPHICS**

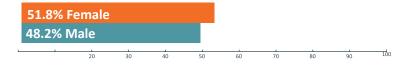
#### **2020 Census Population**

According to the data from the Census Bureaus' most recent 2020 ACS Five Year estimates, during 2020, 1,753,059 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 (52.3 percent) with the second largest number of individuals identifying as Black or African American (38.3 percent). The city skews younger than the surrounding region; 28.7 percent of population was over the age of 54, compared to 32.4 percent under the age of 25. Wayne County also has a strong middle-aged population between the ages of 25-54, accounting for 38.9 percent of the total population.

#### **2021 Current Workforce**

In 2021, the workforce had a total of 678,659 individuals working in Wayne County. A slight majority, 51.7 percent (355,116 workers) were male, while 48.3 percent (331,741 workers) of the workforce was female. Most workers in the county identified as white, accounting for 66.0 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 4.9 percent. Much of the workforce in Wayne County are between the ages of 25 through 54 (64.9 percent), while 23.1 percent of workers are 55 and older.

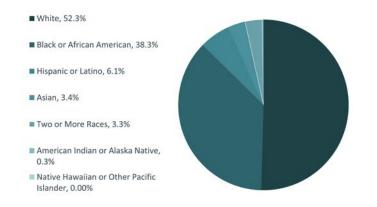
#### **Population Gender Demographics**



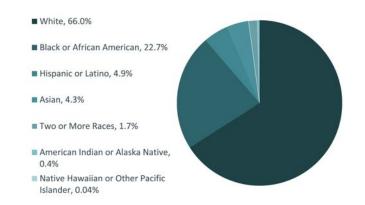
#### **Workforce Gender Demographics**



#### **Population Race Demographics**



#### **Workforce Race and Ethnicity Demographics**



#### **Population Age Demographics**



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

#### Workforce Age Demographics

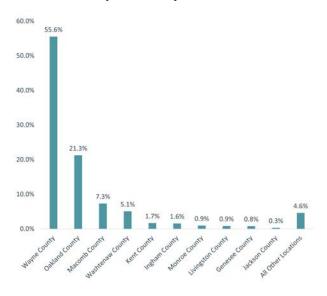


Data: Emsi | Analysis: Workforce Intelligence Network

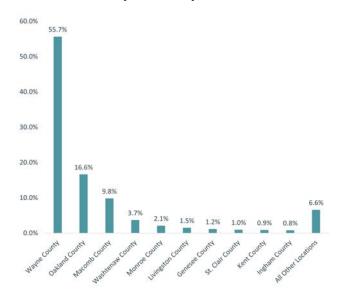
## **REGIONAL COMMUTING PATTERNS**

According to the most recent OnTheMap data set available from the Census Bureau, during 2019, the county's workforce consisted of 686,214 residents. There were 381,292 (55.6 percent) residents living and working within the county, while the remaining 304,922 residents (44.4 percent) traveled outside of the county for work. There were 684,832 workers employed in the county during 2019. Of those, 303,540 workers (44.3 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, 2019
Analysis: Workforce Intelligence Network

Source: U.S. Census OnTheMap, 2019
Analysis: Workforce Intelligence Networ

#### **Job Postings by City**

1. Detroit: 147,582 Postings

2. Dearborn: 32,970 Postings

3. Livonia: 29,372 Postings

4. Plymouth: 14,181 Postings

5. Canton: 12,292 Postings

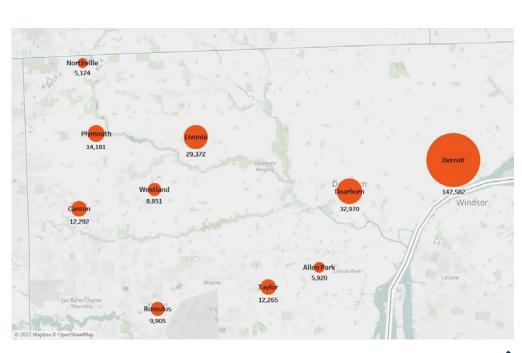
6. Taylor: 12,265 Postings

7. Romulus: 9,905 Postings

8. Westland: 8,851 Postings

9. Allen Park: 5,920 Postings

10. Northville: 5,124 Postings



### **TOP POSTED JOBS**

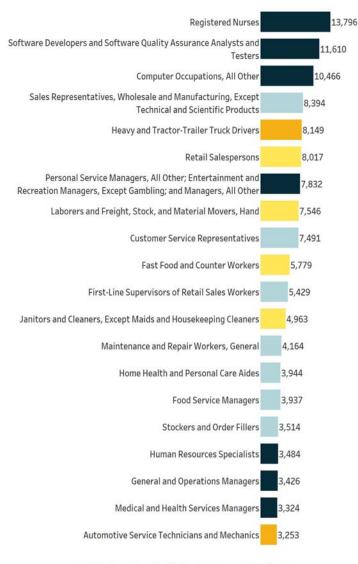
postings.

**Top Posted Jobs: 2021** 

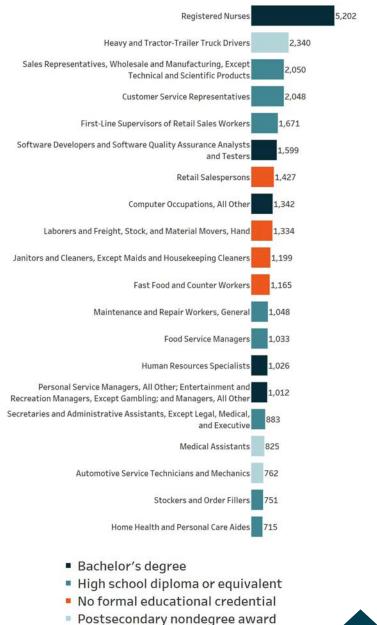
Registered Nurses is the top posted occupation for 2021, with 13,796 unique online job postings, requires a bachelor's degree for entry. Software Developers (11,610 postings) and Software Quality Assurance Analysts and Testers and Computer Occupations, All Other (10,466 postings) round out the top three demanded occupations, both requiring a bachelor's degree, for entry. Half of the other in-demand jobs require no formal education or a high school diploma or equivalent, coupled with short-term to moderate-term on-the-job training.

Entry-level jobs, which usually require zero to two years of previous experience, account for 21.9 percent of postings in Wayne County. 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 38.4 percent of entry-level postings. Registered Nurses were the top posted entry-level occupation with 5,202 postings followed by Heavy and Tractor-Trailer Truck Drivers with 2,340

**Top Posted Entry-Level Jobs: 2021** 

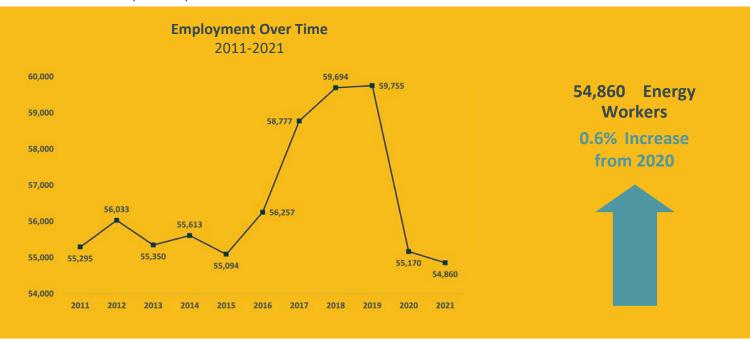


- High school diploma or equivalent
- Postsecondary nondegree award
- Bachelor's degree
- No formal educational credential



### **ENERGY OCCUPATION GROUP**

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 pertains only to job postings from energy-related businesses, while employment and wage data apply for these workers in every industry.



#### **Energy Worker Demographics**

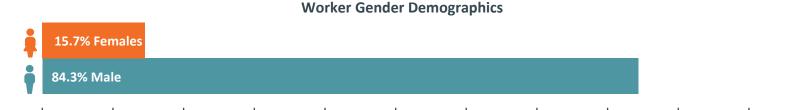
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20

30

In 2021, there were 54,860 workers in the energy occupation group. This group is primarily made up of males (84.3 percent) between the ages of 25 and 54 (70.1 percent), with 15.7 percent of workers identifying as female and just 25.5 percent identifying as a racial minority. In 2021, 5.1 percent of the workers in the occupation group are under the age of 25 compared to the 24.8 percent 55 years of age or older.



### Race and Ethnicity Demographics

50

60

40

74.5% White | 14.1% Black or African-American | 5.9% Asian

#### **Worker Age Demographics**



80

90

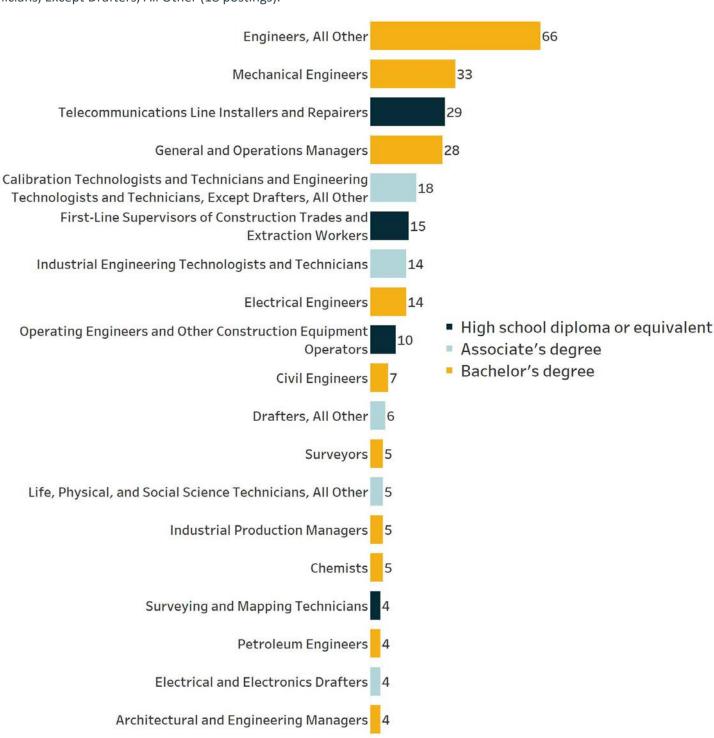
70

100

### **ENERGY OCCUPATION GROUP**

#### **Top Posted Jobs**

This year totaled 317 postings for energy workers, with Engineers, All Other as the most sought-after occupation by energy industry employers during 2021, with 66 postings. Mechanical Engineers was in the second position with 33 postings. Other top posted jobs include Telecommunications Line Installers and Repairers (29 postings), General and Operations Managers (28 postings), and Calibration Technologists and Technicians and Engineering Technologists and Technicians, Except Drafters, All Other (18 postings).



Chemical Engineers 3

### **ENERGY OCCUPATION GROUP**

#### **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 has median wages over \$22.00 per hour. The top posted energy job, Engineers, All Other, offers a median hourly wage of \$42.30, or annual earnings of approximately \$87,981. 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 2021

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2199	Engineers, All Other	\$25.34	\$33.88	\$42.30	\$56.16	\$66.54
17-2141	Mechanical Engineers	\$31.70	\$36.46	\$44.62	\$55.34	\$64.32
49-9052	Telecommunications Line Installers and Repairers	\$14.98	\$16.83	\$19.62	\$23.53	\$28.02
11-1021	General and Operations Managers	\$21.98	\$33.80	\$54.58	\$84.87	\$117.38
17-3098	Calibration Technologists and Technicians and Engineering Technologists and Technicians, Except Drafters, All Other	\$17.75	\$23.97	\$35.47	\$44.37	\$52.36
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$22.93	\$29.74	\$37.80	\$46.64	\$53.59
17-2071	Electrical Engineers	\$31.08	\$37.14	\$45.65	\$55.50	\$64.39
17-3026	Industrial Engineering Technologists and Technicians	\$19.41	\$23.47	\$28.57	\$35.57	\$42.35
47-2073	Operating Engineers and Other Construction Equipment Operators	\$22.88	\$26.74	\$29.89	\$33.66	\$40.22
17-2051	Civil Engineers	\$24.96	\$29.03	\$34.97	\$42.49	\$49.94

#### **In-Demand Technical Skills**

- Customer Satisfaction
- Natural Gas
- Process Improvement
- Strategic Business Unit
- Engineering Design Process

#### **In-Demand Foundational Skills**

- Management
- Planning
- Communications
- Problem Solving
- Presentations

#### **In-Demand Certifications**

- Professional Engineer
- Commercial Driver's License (CDL)
- Licensed Professional Engineer
- Certified Welding Inspector
- Engineer in Training

#### **In-Demand Education Level\***

High School Diploma: 30.3%
Associate Degree: 11.0%
Bachelor's Degree: 46.4%
Master's Degree: 23.7%

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

#### **Top Posting Employers**

- DTE Energy
- Henkels & McCoy
- Verita Telecommunications Corp
- Consumers Energy
- Crossfire
- InfraSource
- Underground Contractors
- United States Sugar Corp
- Dunamis Clean Energy Partners
- Exelon

#### **Job Postings by City**

Detroit: 199 Postings
 Canton: 25 Postings
 River Rouge: 16 Postings
 Northville: 15 Postings

5. Plymouth: 15 Postings

6. Livonia: 13 Postings

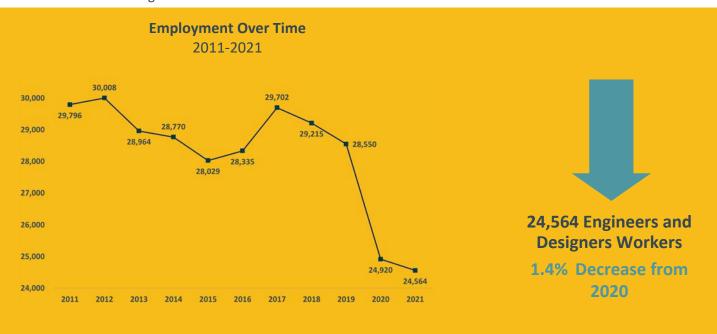
7. Dearborn: 10 Postings8. Melvindale: 10 Postings

9. Hamtramck: 6 Postings

10. Belleville: 5 Postings

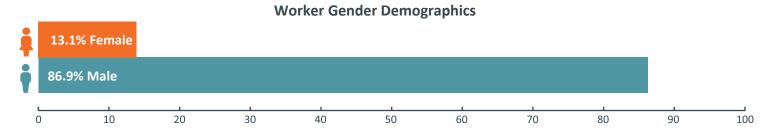
# ENGINEERS AND DESIGNERS OCCUPATION GROUP

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.



#### **Engineers and Designers Worker Demographics**

According to 2021 Emsi data, the 24,564 workers in the engineering and design group are not particularly diverse. Just 5.0 percent of the related workforce is under 25, likely due to the consistently high educational requirements. Female workers account for 13.1 percent of the current workforce and only 24.0 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**

76.0% White | 9.6% Asian | 9.5% Black or African-American

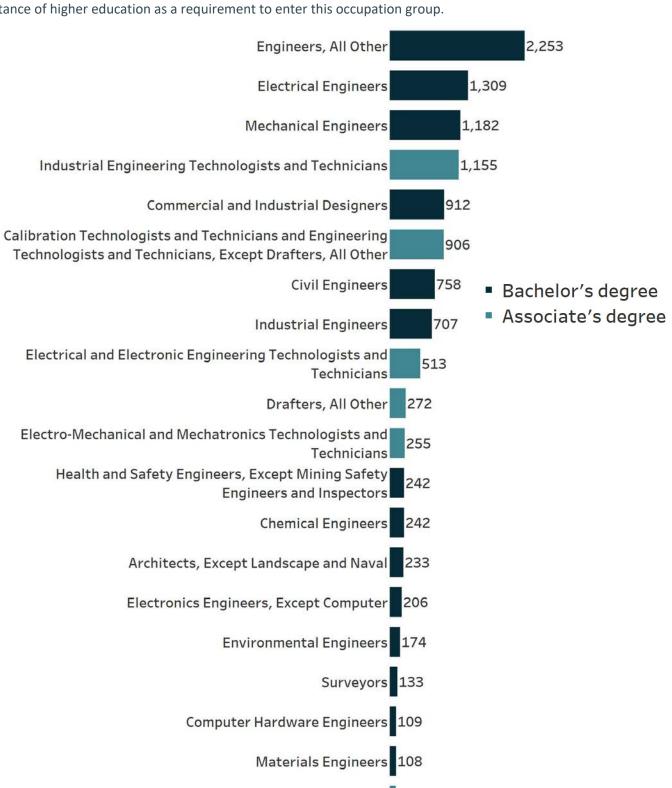
#### **Worker Age Demographics**



# ENGINEERS AND DESIGNERS OCCUPATION GROUP

#### **Top Posted Jobs**

Engineers, All Other was the highest in-demand engineering and design occupation during 2021, with 2,253 postings. Electrical Engineers were also in high demand with 1,309 postings, making it the second highest demanded within the occupation group. Over half of the top ten in-demand occupations typically require a bachelor's degree, indicating the importance of higher education as a requirement to enter this occupation group.



Electrical and Electronics Drafters 103

# **ENGINEERS AND DESIGNERS OCCUPATION GROUP**

#### **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, Engineers, All Other, offers a median hourly wage of \$42.30. This reflects an annual salary of approximately \$87,981.

#### Wage Overview for Top Posted Engineers and Designers Jobs in 2021

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2199	Engineers, All Other	\$25.34	\$33.88	\$42.30	\$56.16	\$66.54
17-2071	Electrical Engineers	\$31.08	\$37.14	\$45.65	\$55.50	\$64.39
17-2141	Mechanical Engineers	\$31.70	\$36.46	\$44.62	\$55.34	\$64.32
17-3026	Industrial Engineering Technologists and Technicians	\$19.41	\$23.47	\$28.57	\$35.57	\$42.35
27-1021	Commercial and Industrial Designers	\$25.23	\$30.57	\$41.61	\$48.51	\$56.33
17-3098	Calibration Technologists and Technicians and Engineering Technologists and Technicians, Except Drafters, All Other	\$17.75	\$23.97	\$35.47	\$44.37	\$52.36
17-2051	Civil Engineers	\$24.96	\$29.03	\$34.97	\$42.49	\$49.94
17-2112	Industrial Engineers	\$31.89	\$37.84	\$46.45	\$55.98	\$63.31
17-3023	Electrical and Electronic Engineering Technologists and Technicians	\$19.52	\$24.56	\$30.67	\$35.34	\$39.93
17-3019	Drafters, All Other	\$20.64	\$26.28	\$28.46	\$30.65	\$31.99

#### **In-Demand Technical Skills**

- **Electrical Engineering**
- Mechanical Engineering
- New Product Development
- Automation
- Tooling

#### In-Demand Education Level\*

High School Diploma: 14.9% Associate Degree: 9.0% ■ Bachelor's Degree: 45.7% 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 Foundational Skills**

- Communications
- Management
- **Problem Solving**
- **Troubleshooting**
- **Operations**

#### **Top Posting Employers**

- Ford
- **GPAC**
- **Advantage Resourcing**
- Epitec
- **General Motors**
- Aerotek
- **Ronin Staffing**
- **DTE Energy**
- **Bartech Group**
- **Optimal Group**

#### **In-Demand Certifications**

- **Licensed Professional Engineer**
- Automotive Service Excellence (ASE) Certification
- Commercial Driver's License (CDL)
- Six Sigma Black Belt Certification
- LEED Accredited Professional (AP)

#### **Job Postings by City**

1. Detroit: 4,643 Postings 2. Dearborn: 2,470 Postings

3. Plymouth: 1,551 Postings

4. Livonia: 850 Postings

5. Allen Park: 521 Postings

6. Northville: 240 Postings

7. Romulus: 232 Postings

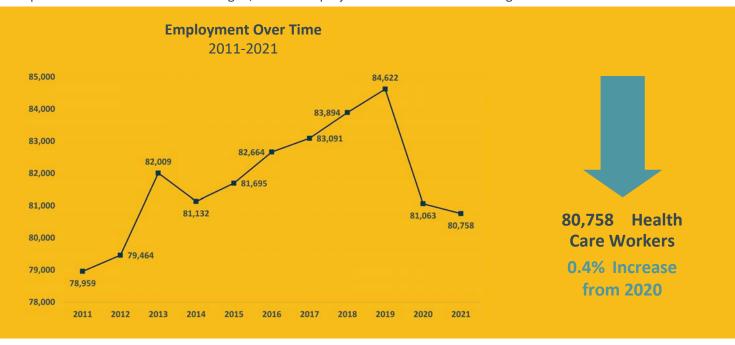
8. Canton: 224 Postings

9. Taylor: 218 Postings

10. Highland Park: 187 Postings

# HEALTH CARE OCCUPATION GROUP

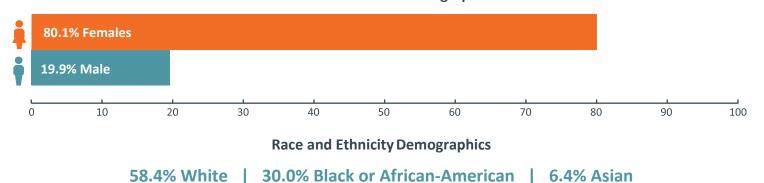
WIN's health care occupation group includes jobs related to health care support and practitioners. Employment in this group has been consistently growing, with more health care workers needed to care for Michigan's aging population. Registered nurses are routinely the most in-demand job in this group. 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 2021 Emsi data, the health care occupation group employed 80,758 workers in Wayne County, who are overwhelmingly female (80.1 percent) and between the ages of 25 and 54 (69.3 percent), although 23.2 percent of workers are over 54. The healthcare occupation group is primarily white in Wayne County (58.4 percent) with 30.0 percent identifying as Black or African American, and 11.5 percent identifying otherwise.

#### **Worker Gender Demographics**



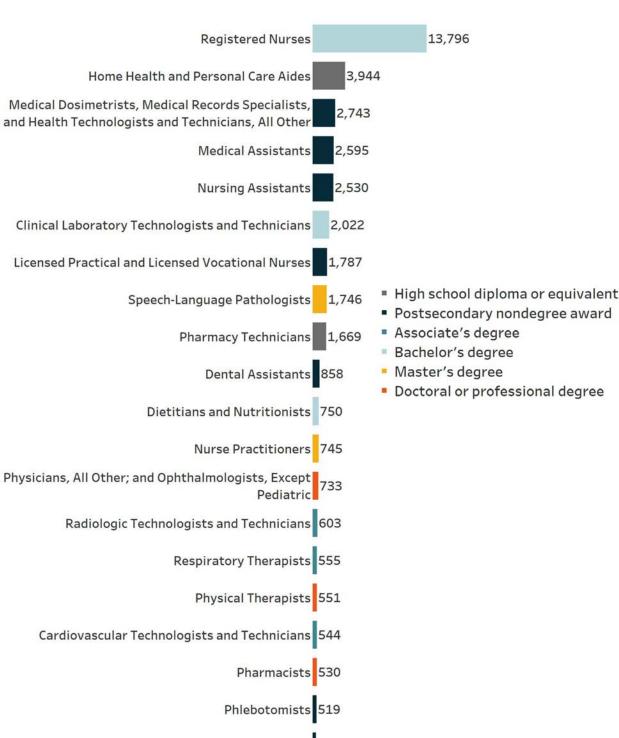
#### Worker Age Demographics



# HEALTH CARE OCCUPATION GROUP

#### **Top Posted Jobs**

Registered Nurses were by far the highest in-demand health care occupation throughout 2021, with 13,796 postings. Other top posted jobs include Home Health and Personal Care Aides (3,944 postings), Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other (2,743 postings), Medical Assistants (2,595 postings), and Nursing Assistants (2,530 postings). Top occupations in health care are available at many education levels, and employment for some roles, such as Home Health and Personal Care Aides and Pharmacy Technicians (1,669 postings), only require a high school diploma or equivalent, coupled with short to moderate-term on-the-job training.



Surgical Technologists 432

# HEALTH CARE OCCUPATION GROUP

#### **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 \$37.16 per hour or an annual salary of about \$77,286.

#### Wage Overview for Top Posted Health Care Jobs in 2021

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
29-1141	Registered Nurses	\$27.89	\$31.56	\$37.16	\$43.13	\$49.52
31-1128	Home Health and Personal Care Aides	\$10.67	\$11.28	\$12.34	\$14.25	\$16.42
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	\$14.56	\$17.40	\$21.69	\$29.11	\$36.20
31-9092	Medical Assistants	\$13.63	\$15.35	\$17.59	\$19.57	\$22.36
31-1131	Nursing Assistants	\$12.54	\$13.75	\$15.55	\$17.90	\$19.45
29-2018	Clinical Laboratory Technologists and Technicians	\$15.10	\$18.19	\$27.47	\$34.91	\$39.34
29-2061	Licensed Practical and Licensed Vocational Nurses	\$20.97	\$24.16	\$27.06	\$29.69	\$31.44
29-1127	Speech-Language Pathologists	\$23.61	\$32.62	\$38.73	\$47.42	\$54.82
29-2052	Pharmacy Technicians	\$11.64	\$13.95	\$17.05	\$20.06	\$23.55
31-9091	Dental Assistants	\$12.95	\$14.95	\$17.50	\$20.37	\$23.89

#### **In-Demand Technical Skills**

- Nursing
- Basic Life Support
- Nursing Care
- Cardiopulmonary Resuscitation (CPR)
- Medical Records

#### In-Demand Education Level\*

High School Diploma: 27.8%
Associate Degree: 26.4%
Bachelor's Degree: 12.0%
Master's Degree: 7.2%

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

#### **In-Demand Foundational Skills**

- Communications
- Leadership
- Customer Service
- Management
- Teaching

#### **Top Posting Employers**

- Henry Ford Health System
- Beaumont Health
- Tenet Healthcare
- Ascension
- Trinity Health
- Soliant Health
- Garden City Hospital
- DMC Sinai-Grace Hospital
- CVS Health
- Aya Healthcare

#### **In-Demand Certifications**

- Certified Nursing Assistant
- Licensed Practical Nurse
- Patient Care Technician
- Certified Medical Assistant
- Certified Pharmacy Technician

#### **Job Postings by City**

1. Detroit: 20,629 Postings

2. Livonia: 4,112 Postings

3. Dearborn: 4,022 Postings

4. Taylor: 1,768 Postings

5. Grosse Pointe: 1,669 Postings

6. Canton: 1,492 Postings

7. Garden City: 1,437

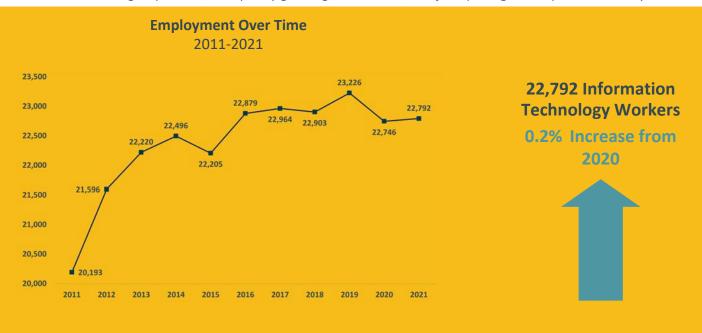
8. Wyandotte: 1,339 Postings

9. Westland: 1,268 Postings

10. Trenton: 1,021 Postings

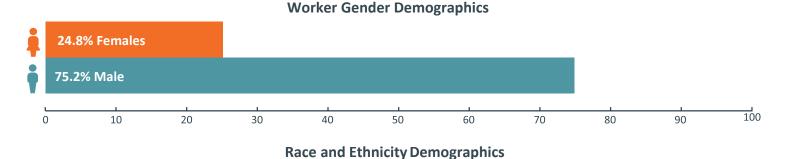
# INFORMATION TECHNOLOGY OCCUPATION GROUP

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 2021 Emsi data, Wayne County has 22,792 IT workers. The workforce is not too diverse, with most workers identifying as male (75.2 percent) between the ages of 25 and 54 (77.3 percent). Workers aged 55 years and older account for 17.8 percent, while only 4.9 percent are 24 years old or younger. Around 66.5 percent of the workforce identify as white, with workers who identify as Asian making up 16.1 percent of the workforce.



66.5% White | 16.1% Asian | 12.8% Black or African-American

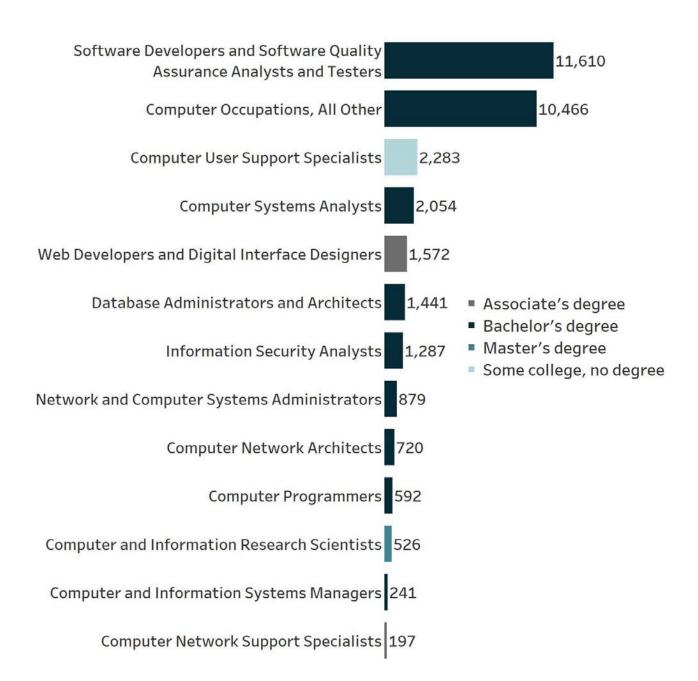
#### **Worker Age Demographics**



# INFORMATION TECHNOLOGY OCCUPATION GROUP

#### **Top Posted Jobs**

In 2021, there were 33,868 postings for IT workers in Wayne County. Software Developers and Software Quality Assurance Analysts and Testers was the most in-demand occupation for 2021, with 11,610 postings, closely followed by Computer Occupations, All Other, with 10,466 postings. Computer User Support Specialists (2,283 postings) and Computer Systems Analysts (2,054 postings) 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 OCCUPATION GROUP

#### **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 \$47.79 per hour or almost \$99,403 per year. Computer and Information Systems Managers earn the highest median wage at \$70.56 per hour or nearly \$146,773 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 Information Technology Jobs in 2021

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	\$29.56	\$37.70	\$47.79	\$59.31	\$69.06
15-1299	Computer Occupations, All Other	\$21.40	\$29.55	\$41.06	\$52.79	\$63.87
15-1232	Computer User Support Specialists	\$15.23	\$17. <mark>5</mark> 5	\$20.96	\$28.77	\$36.13
15-1211	Computer Systems Analysts	\$31.79	\$38.73	\$48.70	\$60.98	\$73.61
15-1257	Web Developers and Digital Interface Designers	\$18.67	\$26.40	\$36.43	\$45.87	\$55.56
15-1245	Database Administrators and Architects	\$27.09	\$33.21	\$46.93	\$59.49	\$67.84
15-1212	Information Security Analysts	\$29.74	\$38.09	\$48.70	\$60.22	\$69.97
15-1244	Network and Computer Systems Administrators	\$27.31	\$34.41	\$42.03	\$51.47	\$61.43
15-1241	Computer Network Architects	\$30.18	\$44.09	\$57.61	\$69.34	\$81.68
15-1251	Computer Programmers	\$22.21	\$26.53	\$37.64	\$49.46	\$61.04

#### **In-Demand Technical Skills**

- Agile Methodology
- Computer Science
- Java (Programming Language)
- SQL (Programming Language)
- Software Engineering

#### **In-Demand Education Level\***

High School Diploma: 4.4%
Associate Degree: 4.6%
Bachelor's Degree: 51.5%
Master's Degree: 12.7%

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

#### **In-Demand Foundational Skills**

- Communications
- Management
- Leadership
- Problem Solving
- Troubleshooting

#### **Top Posting Employers**

- Deloitte
- Epitec
- Ford
- General Motors
- TEKsystems
- Accenture
- General Dynamics
- Fast Switch, Ltd.
- Anthem
- Stefanini

#### **In-Demand Certifications**

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

#### **Job Postings by City**

1. Detroit: 19,791 Postings

2. Dearborn: 7.652 Postings

3. Livonia: 1,757 Postings

4. Plymouth: 1,398 Postings

5. Allen Park: 944 Postings

6. Taylor: 694 Postings

7. Northville: 257 Postings

8. Canton: 205 Postings

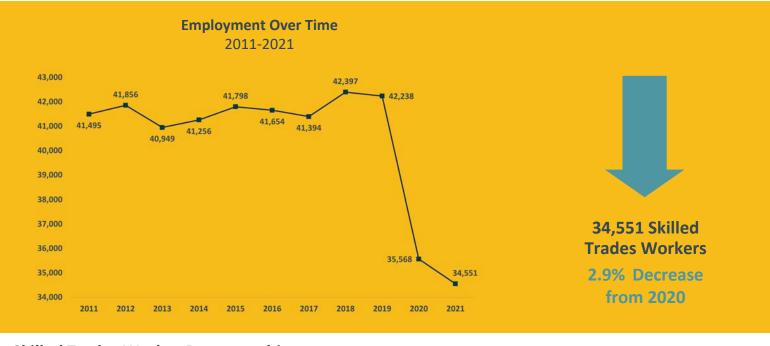
9. Dearborn Heights: 190 Postings

10. Romulus: 150 Postings

# SKILLED TRADES AND TECHNICIANS OCCUPATION GROUP

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.

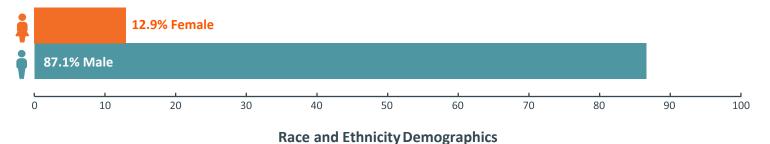
NOTE: Skilled trades related to construction and assembly are not included in this cluster, as the focus is on advanced manufacturing only.



#### **Skilled Trades Worker Demographics**

According to 2021 Emsi data, the skilled trades occupation group employed about 34,551 workers in Wayne County. The majority of skilled trades workers are male (87.1 percent) between the ages of 25 and 54 (66.9 percent). Due to the aging workforce, additional outreach will be necessary as 27.5 percent are 55 years of age or older.

#### **Worker Gender Demographics**



69.9% White | 20.0% Black or African-American | 5.7% Hispanic or Latino

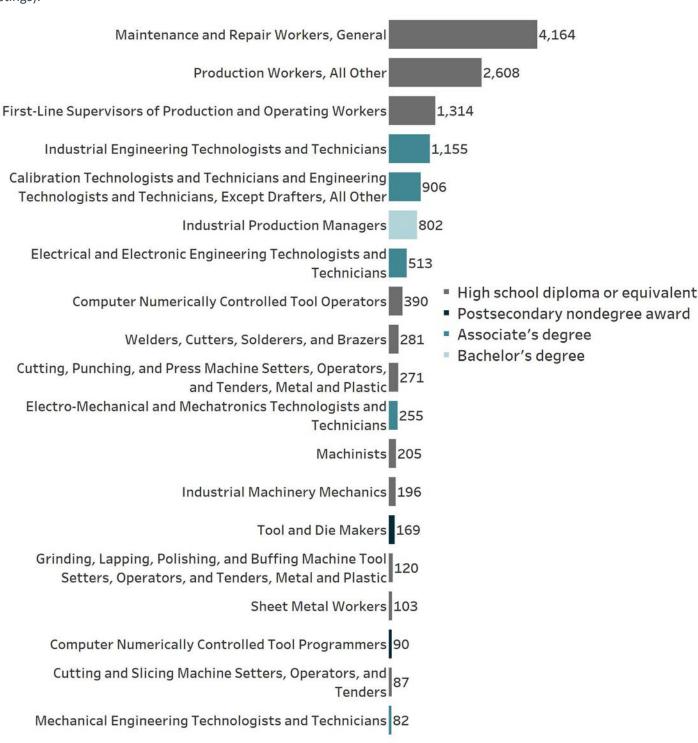
#### **Worker Age Demographics**



# SKILLED TRADES AND TECHNICIANS OCCUPATION GROUP

#### **Top Posted Jobs**

Maintenance and Repair Workers, General was the highest in-demand skilled trades occupation during 2021, with 4,164 postings. Other top posted jobs include Production Workers, All Other (2,608 postings), First-Line Supervisors of Production and Operating Workers (1,314 postings), Industrial Engineering Technologists and Technicians (1,155 postings), and Calibration Technologists and Technicians and Engineering Technologists and Technicians, Except Drafters, All Other (906 postings).



Engine and Other Machine Assemblers 82

# SKILLED TRADES AND TECHNICIANS OCCUPATION GROUP

#### Wage Overview

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 \$13.00 per hour. Maintenance and Repair Workers, General, the top posted skilled trades job in 2021, offers a median hourly wage of \$18.90, which translates to an annual salary of about \$39,317.

#### Wage Overview for Top Posted Skilled Trades Jobs in 2021

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	\$12.73	\$15.45	\$18.90	\$24.90	\$30.85
51-9199	Production Workers, All Other	\$10.06	\$11.31	\$13.57	\$17.70	\$23.41
51-1011	First-Line Supervisors of Production and Operating Workers	\$19.65	\$24.95	\$32.79	\$41.90	\$52.82
17-3026	Industrial Engineering Technologists and Technicians	\$19.41	\$23.47	\$28.57	\$35.57	\$42.35
17-3098	Calibration Technologists and Technicians and Engineering Technologists and Technicians, Except Drafters, All Other	\$17.75	\$23.97	\$35.47	\$44.37	\$52.36
11-3051	Industrial Production Managers	\$34.06	\$44.21	\$56.74	\$71.69	\$89.16
17-3023	Electrical and Electronic Engineering Technologists and Technicians	\$19.52	\$24.56	\$30.67	\$35.34	\$39.93
51-9161	Computer Numerically Controlled Tool Operators	\$12.71	\$14.87	\$19.77	\$26.17	\$30.18
51-4121	Welders, Cutters, Solderers, and Brazers	\$13.61	\$16.41	\$19.96	\$24.13	\$29.73
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	\$13.47	\$16.11	\$19.43	\$27.09	\$30.90

#### **In-Demand Technical Skills**

- Plumbing
- Machinery
- HVAC
- Machine Operation
- Painting

#### In-Demand Education Level\*

High School Diploma: 44.5%
Associate Degree: 12.9%
Bachelor's Degree: 12.2%
Master's Degree: 1.6%

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

#### **In-Demand Foundational Skills**

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

#### **Top Posting Employers**

- Aerotek
- Sentech Services
- Kelly Services
- ManpowerGroup
- Yanfeng Automotive Interiors
- GPAC
- Adecco
- AJM PACKAGING CORPORATION
- Nesco Resource
- ResourceMFG

#### **In-Demand Certifications**

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

#### **Job Postings by City**

1. Detroit: 4,782 Postings

2. Livonia: 1,558 Postings

3. Plymouth: 1,230 Postings

4. Dearborn: 784 Postings

5. Canton: 668 Postings

6. Romulus: 666 Postings

7. Taylor: 615 Postings

8. Westland: 580 Postings

9. Highland Park: 402 Postings

10. Belleville: 369 Postings

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