WIN
WORKFORCE INTELLIGENCE NETWORK

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LABOR MARKET REPORT
WASHTENAW COUNTY

January – December 2023

WIN WORKFORCE INTELLIGENCE NETWORK

About This Report

The Workforce Intelligence Network for Southeast Michigan (WIN) is a workforce collaborative comprised of seven Michigan Works! Agencies (MWAs) and ten community colleges in a 19-county region representing approximately 63% of the total labor force 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.

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 WIN region report using data from all eleven occupation groups. A city of Detroit report 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 Washtenaw 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. The data is used to provide real-time demand and job posting information for both employers and job seekers. This report analyzes the 2023 labor market information from Washtenaw County for the Business and Finance, Engineering and Design, 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.

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ANNUAL STATE OF THE LABOR MARKET

State of the Labor Market in Washtenaw County

The uncertainty that the coronavirus pandemic once brought to labor markets all but dissipated in 2023. Over the course of CY2023, both the labor force and employment increased by 8,086 individuals (4.1 percent) and 7,946 workers (4.2 percent) respectively, while unemployment increased by 140 workers. The unemployment rate recovered in 2023, decreasing 0.1 percentage points from 3.4 percent in 2022 to 3.3 percent in 2023. Registered Nurses top the list as the most demanded occupation in 2023, accounting for 4,131 job postings. The occupation group continues to be heavily demanded in Washtenaw County.

Annual Labor Market Information

The labor force in Washtenaw County increased in 2023, gaining 8,086 individuals (4.1 percent) from the prior year. Employment increased by 7,946 workers (4.2 percent) over the same period, while unemployment increased by 140 workers (2.1percent) for a total of 6,856 unemployed workers in 2023. The unemployment rate decreased in 2023 to 3.3 percent, a fall of 3.2 percentage points since the 6.5 percent spike in 2020. The unemployment rate hasn't quite recovered to pre-pandemic levels, currently lagging the 2019 low of 2.9 percent.

Annual Labor Force, Employment, Unemployment Rate 2013-2023

Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Employer Demand Overview

The fourth quarter of 2023 shows that employer demand has decreased since the end of Q3 2023. In Q4 2023, there was a monthly average of 11,166 unique postings per month in Washtenaw County, a decrease of 3,898 monthly postings from the 15,064 monthly average recorded in Q3. The second quarter had the highest recorded postings in 2023 with 18,425 average monthly postings, an increase of 2,292 postings (14.2 percent) since Q1 2023. The steady increase into summer months, followed by a decline after Q2, is a possible indication that employer demand peaked with the summer season.

Quarterly Posting Analysis Washtenaw County 2023

ANNUAL WORKFORCE INDICATORS

Key Findings

21% Employer demand decreased by 21.0 percent, a loss of 19,908 job postings since 2022

High School Diploma

Most in-demand minimum education level during 2023
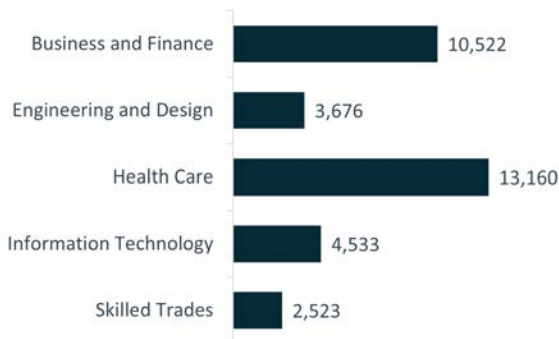
In Q4 2023, employment totaled

203,918

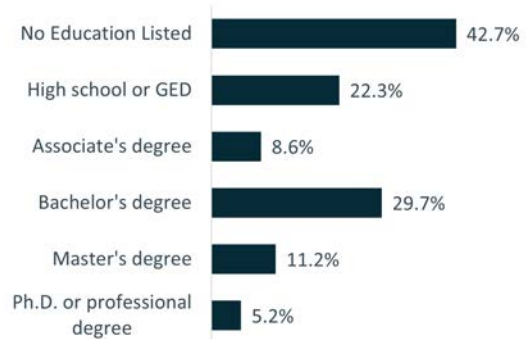an increase of 13,028 workers (6.8 percent) since Q4 2022.

During 2023, there were 74,490 job postings, 19,908 fewer than the 94,398 postings made during 2022 in Washtenaw County. The second quarter saw the highest demand for the year with 18,425 average monthly postings, a 14.2 percent increase since Q1 2023. The top posted job occupations in 2023 include Registered Nurses, Retail Salespersons, Software Developers, First-Line Supervisors of Retail Sales Workers, and Fast Food and Counter Workers. For more information about in-demand job postings, see page 7.

Of the 74,490 unique postings in Washtenaw County during 2023, there were 16,596 (22.3 percent) which required a High School diploma or equivalent, while 28,556 postings (38.3 percent) required a College degree. An additional 12,196 postings (16.4 percent) required an advanced degree. The high demand for Health Care jobs within the county drives this high demand for workers with various skill sets.

Top 5 Posting Occupation Groups
2023

Occupation Group	Postings
Business and Finance	10,522
Engineering and Design	3,676
Health Care	13,160
Information Technology	4,533
Skilled Trades	2,523

Education Levels In-Demand
2023

Education Level	Percent
No Education Listed	42.7%
High school or GED	22.3%
Associate's degree	8.6%
Bachelor's degree	29.7%
Master's degree	11.2%
Ph.D. or professional degree	5.2%

The quarterly labor market shifts that were observed during the height of the coronavirus pandemic have further stabilized in 2023. Through all four quarters of 2023, there were improvements in total labor force, as well as in each of three quarters for total employment. As such, the labor force peaked in Q4 with 209,882 individuals while employment topped out at 203,918 workers. Unemployment and the unemployment rate were inconsistent during the same period, with the unemployment rate hovering between 2.8 and 3.8 percent for most of the year. The market continued to realign toward pre-pandemic levels during Q4, showing a decrease in total unemployment to 5,964 workers and resulting in a 1.0 percent fall in the unemployment rate from Q3. The unemployment rate at the end of Q4 2023 was 2.8 percent. For more information about this year's unemployment rate and other labor market indicators, refer to page 4.

Quarterly Labor Market Data

	4th Quarter 2022	1st Quarter 2023	2nd Quarter 2023	3rd Quarter 2023	4th Quarter 2023	Change from 3rd Quarter 2023	Percent Change from 3rd Quarter 2023	Change from 4th Quarter 2022	Percent Change from 4th Quarter 2022
Labor Force	197,034	199,277	204,476	205,150	209,882	4,732	2.3%	12,848	6.5%
Employment	190,890	192,271	197,736	197,434	203,918	6,484	3.3%	13,028	6.8%
Unemployment	6,143	7,006	6,740	7,716	5,964	-1,752	-22.7%	-180	-2.9%
Unemployment Rate	3.1%	3.5%	3.3%	3.8%	2.8%	-0.9%	na	-0.3%	na

Note: Monthly data averaged by quarter Data: Bureau of Labor Statistics Data: Lightcast | Analysis: Workforce Intelligence Network

LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Following labor force fluctuations throughout 2023, labor force participation totaled 204,696 individuals, an increase of 8,086 individuals since 2022. Employment improved to 197,840 workers in 2023, an increase of 7,946 workers. Unemployment increased during 2023, although this increase was disproportionate to the labor force gains, resulting in a decrease in the unemployment rate. Unemployment increased to 6,856 workers, down by 6,095 workers since the high of 12,951 workers recorded in 2020. As a result of the increased labor force, the unemployment rate still declined by 0.1 percentage points for a 2023 unemployment rate of 3.3 percent.

Annual Labor Market Data
2013-2023

	2013 Annual	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual	2019 Annual	2020 Annual	2021 Annual	2022 Annual	2023 Annual	Change from 2022 to 2023	Percent Change from 2022 to 2023
Labor Force	183,727	186,899	188,110	191,376	193,566	194,621	196,084	199,946	189,363	196,610	204,696	8,086	4.1%
Employment	173,018	177,797	181,123	184,359	186,598	188,693	190,366	186,995	181,455	189,894	197,840	7,946	4.2%
Unemployment	10,709	9,102	6,988	7,017	6,968	5,928	5,718	12,951	7,908	6,717	6,856	140	2.1%
Unemployment Rate	5.8%	4.9%	3.7%	3.7%	3.6%	3.0%	2.9%	6.5%	4.2%	3.4%	3.3%	-0.1%	na

Data: Bureau of Labor Statistics

CENSUS 2022 LABOR FORCE DEMOGRAPHICS

During 2022, the most recent census year, there were about 197,953 people in the labor force, meaning that these individuals were either working or seeking employment in Washtenaw County. Slightly over half of the population, 188,675 individuals (51.0 percent) living in the region were actively working. The highest unemployment rates were seen in those age 24 years old or younger. Males under the age of 25 face an unemployment rate of 23.2 percent, while females under the age of 25 report an unemployment rate of 19.5 percent. Black or African American job seekers also have a difficult time finding employment, facing an unemployment rate of 11.0 percent.

Civilian Labor Force by Demographic Group				
Demographic Group	**Civilian Labor Force**	**Total Employment**	**Total Unemployment**	**Unemployment Rate**
Total Population 16 +	197,953	188,675	9,278	4.7%
Sex				
Male 16+	104,146	99,055	5,091	4.9%
16-19	5,062	4,287	775	15.3%
20-24	14,466	13,321	1,145	7.9%
25-54	62,621	60,121	2,500	4.0%
55-64	15,797	15,239	558	3.5%
65 Plus	6,200	6,087	113	1.8%
Female 16+	93,807	89,620	4,187	4.5%
16-19	6,018	5,228	790	13.1%
20-24	15,849	14,839	1,010	6.4%
25-54	52,689	50,736	1,953	3.7%
55-64	13,801	13,528	273	2.0%
65 Plus	5,450	5,289	161	3.0%
Race				
White	142,170	136,768	5,402	3.8%
Black / African American	22,863	20,349	2,515	11.0%
Native American	416	401	15	3.6%
Asian	18,061	17,501	560	3.1%
Native Hawaiian / Pacific Islander	97	97	0	0.0%
Some Other Race	3,213	3,004	209	6.5%
Two or More Races	11,346	10,756	590	5.2%
Ethnicity				
Hispanic	9,886	9,332	554	5.6%

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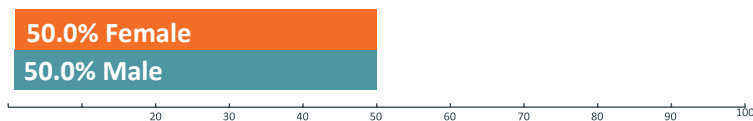
POPULATION DEMOGRAPHICS

2022 Census Population

According to data from the most recent Census Bureau 2022 ACS Five-Year estimates, the population in Washtenaw County decreased by about 0.6 percent between 2021 and 2022. During 2022, there were 370,231 people living in the county. The gender of the populace was split evenly, with 50.0 percent of the population identifying as female and the other 50.0 percent identifying as male. A majority of the population identified as White (70.8 percent) with the second largest number of individuals identifying as Black or African American (11.6 percent). The region is facing an aging populace; with 26.1 percent of the population over the age of 54, compared to 36.7 percent under the age of 25.
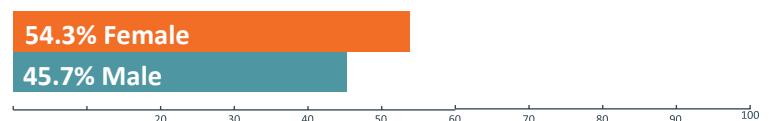
2023 Current Workforce

In 2023, the workforce had a total of 230,076 individuals working in Washtenaw County. A slight majority, 54.3 percent (123,302 workers) were female, while 45.7 percent (103,841 workers) of the workforce was male. Most workers in the county identified as White, accounting for 73.4 percent of the workforce, while Black or African American workers totaled 11.4 percent of the workforce. Those identifying as Asian ethnicity accounted for 6.8 percent. A significant concentration of the workforce in Washtenaw County is between the age of 25 and 54 (63.6 percent), while 21.2 percent of workers are 55 and older.

Population Gender Demographics

50.0% Female
50.0% Male

Workforce Gender Demographics

54.3% Female
45.7% Male

Population Race Demographics

- White, 70.8%
- Black or African American, 11.6%
- Hispanic or Latino, 5.1%
- Asian, 9.2%
- Two or More Races, 6.7%
- American Indian or Alaska Native, 0.2%
- Native Hawaiian or Other Pacific Islander, 0.00%
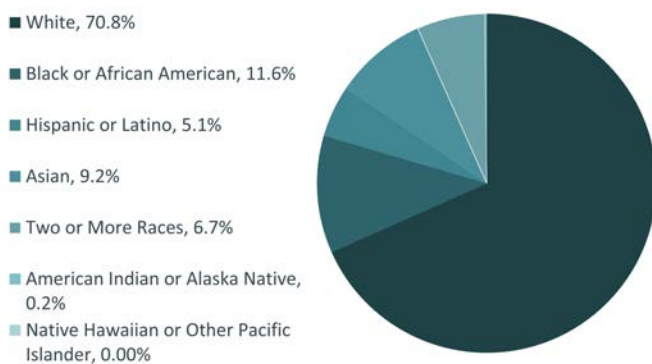
Workforce Race and Ethnicity Demographics

- White, 73.4%
- Black or African American, 11.4%
- Hispanic or Latino, 5.3%
- Asian, 6.8%
- Two or More Races, 2.9%
- American Indian or Alaska Native, 0.3%
- Native Hawaiian or Other Pacific Islander, 0.03%
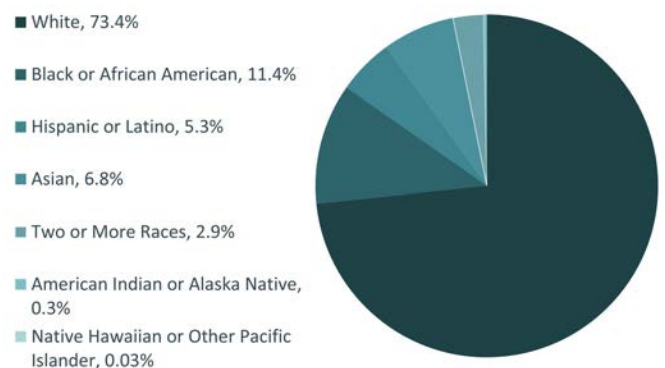
Population Age Demographics

Age 14 and Under 14.9%	Age 14-24 21.8%	Age 25-54 37.2%	Age 55+ 26.1%

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

Workforce Age Demographics

Age 14-24 15.2%	Age 25-54 63.6%	Age 55+ 21.2%

Data: Lightcast | Analysis: Workforce Intelligence Network

REGIONAL COMMUTING PATTERNS

According to the most recent OnTheMap data set available from the Census Bureau, during 2021, Washtenaw County's workforce consisted of 139,516 residents. There were 76,701 (55.0 percent) residents living and working in Washtenaw County, while the remaining 62,815 residents (45.0 percent) traveled outside of the County for work. There were 177,338 workers employed in the County during 2021. Of those, 100,637 workers (56.7 percent) lived outside of the County borders and commuted in for work. Based upon this information, it can be concluded that Washtenaw County is a net importer of jobs, with more workers commuting into the area for employment than leaving.

Where Washtenaw County Residents Work
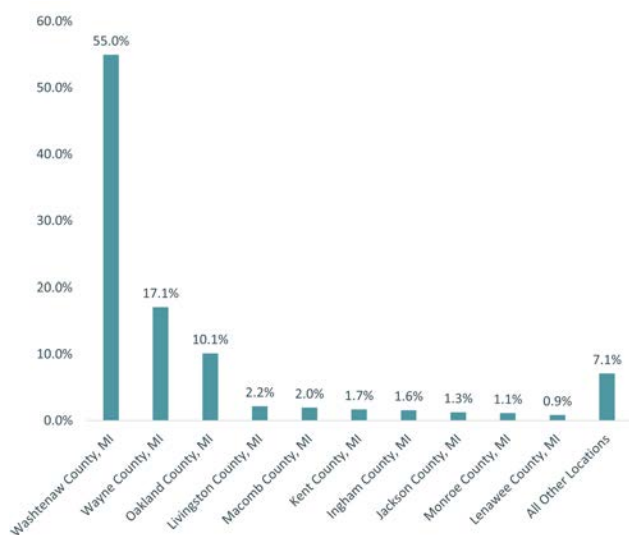
Where Washtenaw County Workers Live
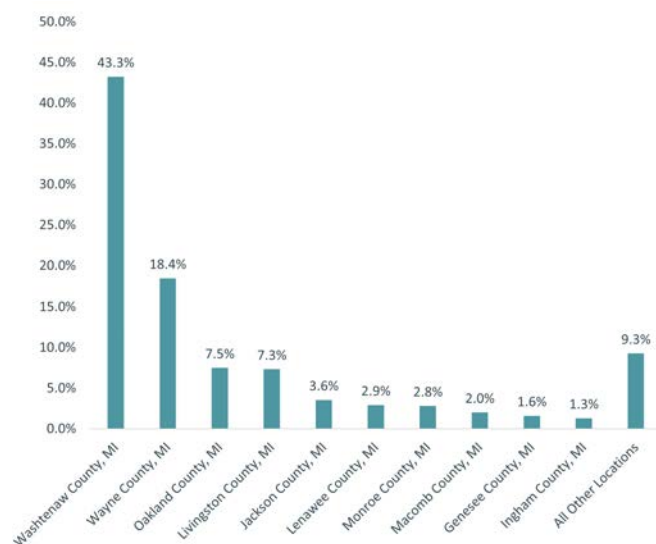
Job Postings by City

1. Ann Arbor: 54,205 Postings
2. Ypsilanti: 9,882 Postings
3. Saline: 3,108 Postings
4. Chelsea: 2,739 Postings
5. Dexter: 2,560 Postings
6. Whitmore Lake: 1,240 Postings
7. Manchester: 488 Postings
8. Willis: 172 Postings
9. Bridgewater: 35 Postings
10. Salem: 31 Postings
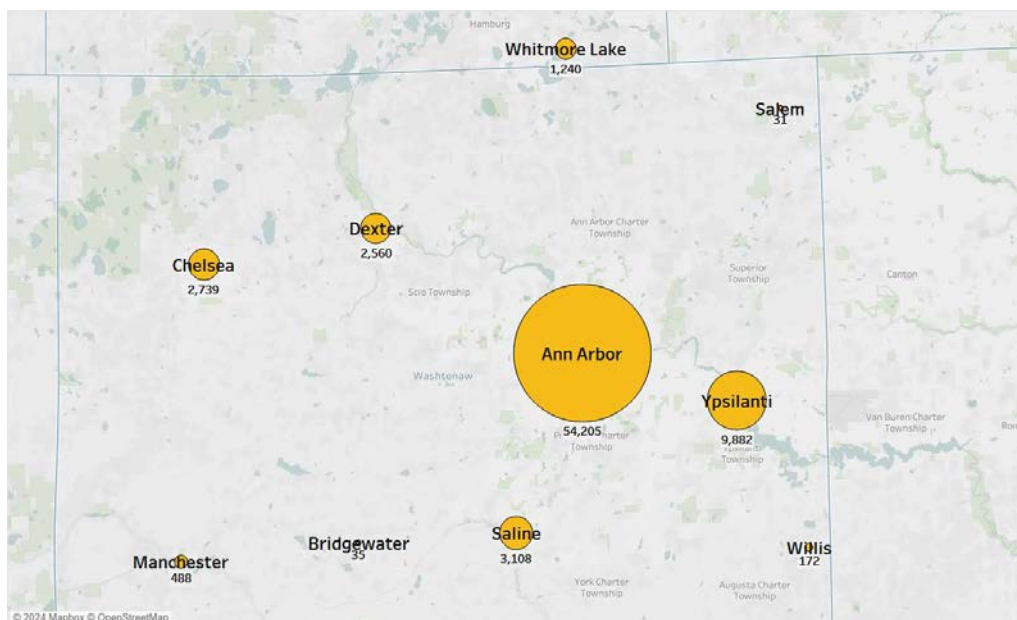
TOP POSTED JOBS

Top Posted Jobs: 2023

Registered Nurses is the top posted occupation for 2023 with 4,131 unique online job postings, and requires a Bachelor's degree for entry. Retail Salespersons (2,146 postings) and Software Developers (1,566 postings) round out the top three demanded occupations, requiring no formal educational credential and Bachelor's degree, respectively. Among the top 10 in-demand jobs, less than half require a High School diploma or equivalent, while half require some level of on-the-job training.

Top Posted Entry-Level Jobs: 2023

Entry-level jobs, which usually require zero to two years of previous experience, account for 27.6 percent of postings in Washtenaw County. More than half of the top ten entry-level occupations require 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 31.7 percent of entry-level postings. Registered Nurses were the top posted entry-level occupation with 2,041 postings, followed by First-Line Supervisors of Retail Sales Workers with 568 postings.

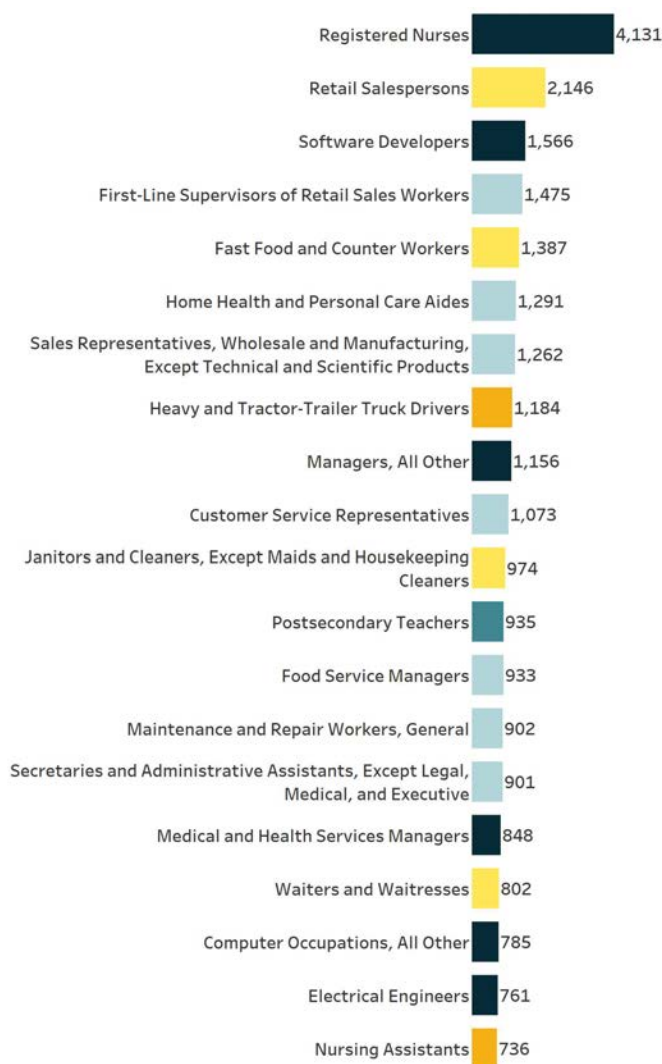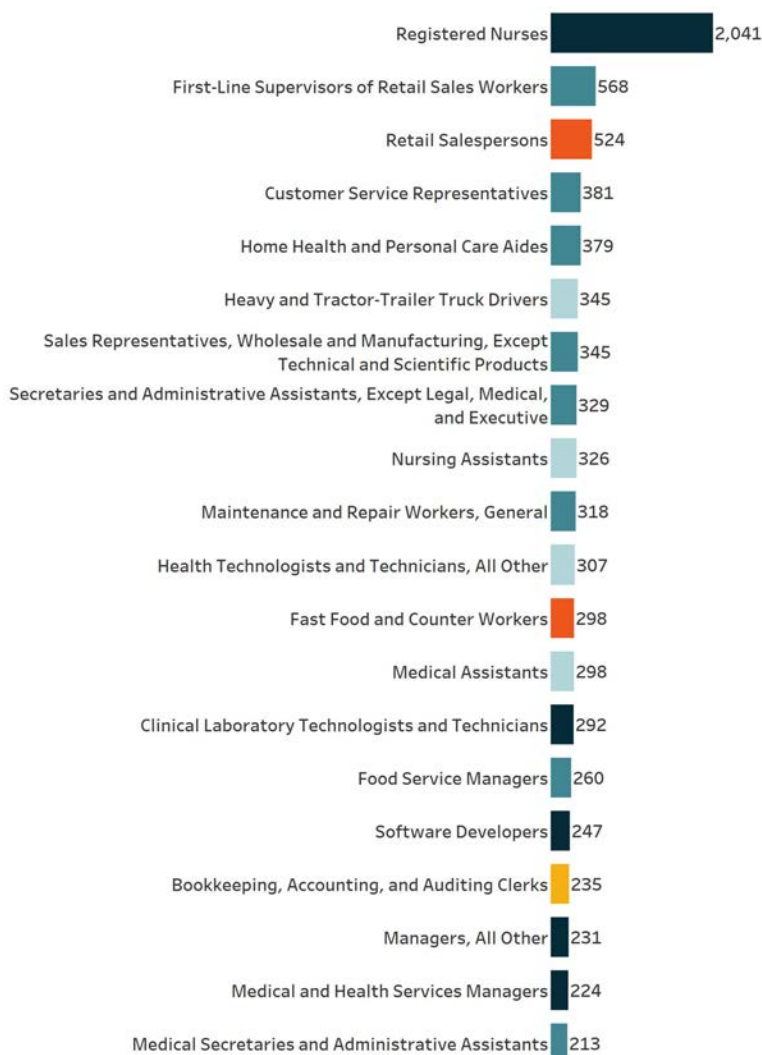| Occupation	Postings
Registered Nurses	4,131
Retail Salespersons	2,146
Software Developers	1,566
First-Line Supervisors of Retail Sales Workers	1,475
Fast Food and Counter Workers	1,387
Home Health and Personal Care Aides	1,291
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1,262
Heavy and Tractor-Trailer Truck Drivers	1,184
Managers, All Other	1,156
Customer Service Representatives	1,073
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	974
Postsecondary Teachers	935
Food Service Managers	933
Maintenance and Repair Workers, General	902
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	901
Medical and Health Services Managers	848
Waiters and Waitresses	802
Computer Occupations, All Other	785
Electrical Engineers	761
Nursing Assistants	736

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

| Occupation	Postings
Registered Nurses	2,041
First-Line Supervisors of Retail Sales Workers	568
Retail Salespersons	524
Customer Service Representatives	381
Home Health and Personal Care Aides	379
Heavy and Tractor-Trailer Truck Drivers	345
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	345
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	329
Nursing Assistants	326
Maintenance and Repair Workers, General	318
Health Technologists and Technicians, All Other	307
Fast Food and Counter Workers	298
Medical Assistants	298
Clinical Laboratory Technologists and Technicians	292
Food Service Managers	260
Software Developers	247
Bookkeeping, Accounting, and Auditing Clerks	235
Managers, All Other	231
Medical and Health Services Managers	224
Medical Secretaries and Administrative Assistants	213

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

BUSINESS AND FINANCE OCCUPATION GROUP

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.

Employment Over Time
2013-2023
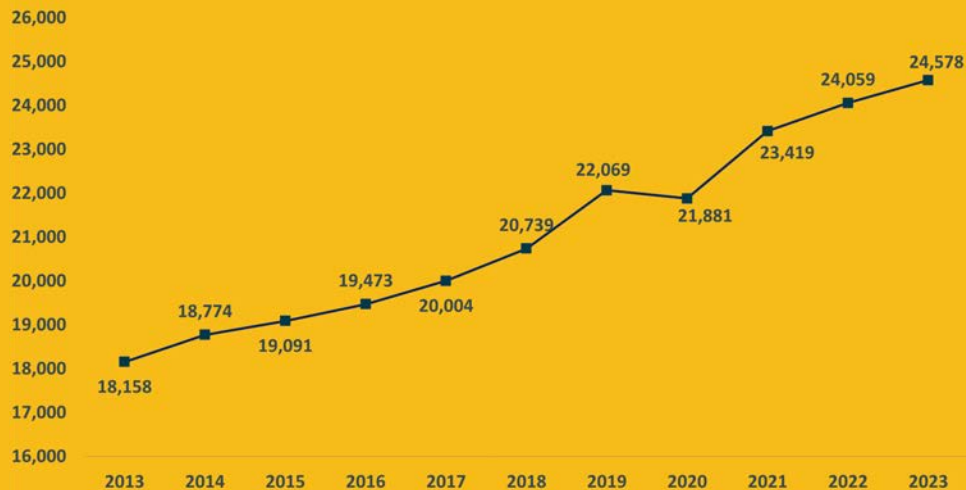
24,578 Business and Finance Workers

2.1% Increase from 2022

Business and Finance Worker Demographics

In 2023, there were 24,578 workers in the Business and Finance occupation group. This group is primarily made up of males (50.6 percent) between the age of 25 and 54 (71.9 percent), with 49.4 percent of workers identifying as female and just 19.3 percent identifying as a racial minority. Also of note was that 5.1 percent of the workers in the occupation group were under the age of 25, compared to the 23.1 percent 55 years of age or older.

Worker Gender Demographics

49.4% Female

50.6% Male
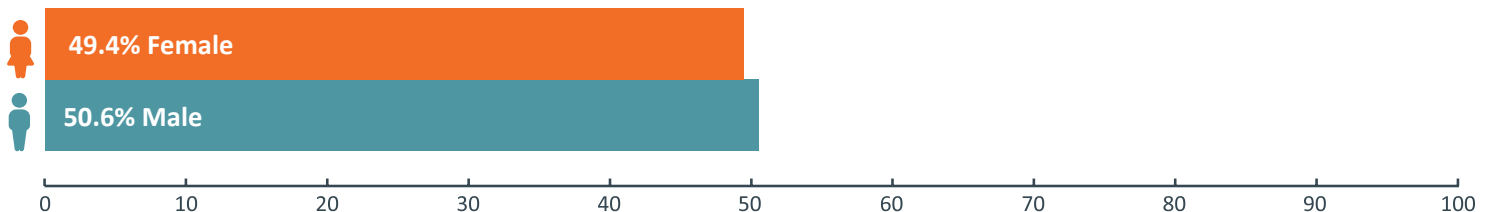
Race and Ethnicity Demographics

80.7% White | 7.6% Black or African-American | 5.7% Asian

Worker Age Demographics

Age 14-24 5.1%	Age 25-54 71.9%	Age 55+ 23.1%

Data: Lightcast | Analysis: Workforce Intelligence Network

BUSINESS AND FINANCE OCCUPATION GROUP

Top Posted Jobs

In 2023, there were a total of 10,522 job postings for Business and Finance workers, with Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products as t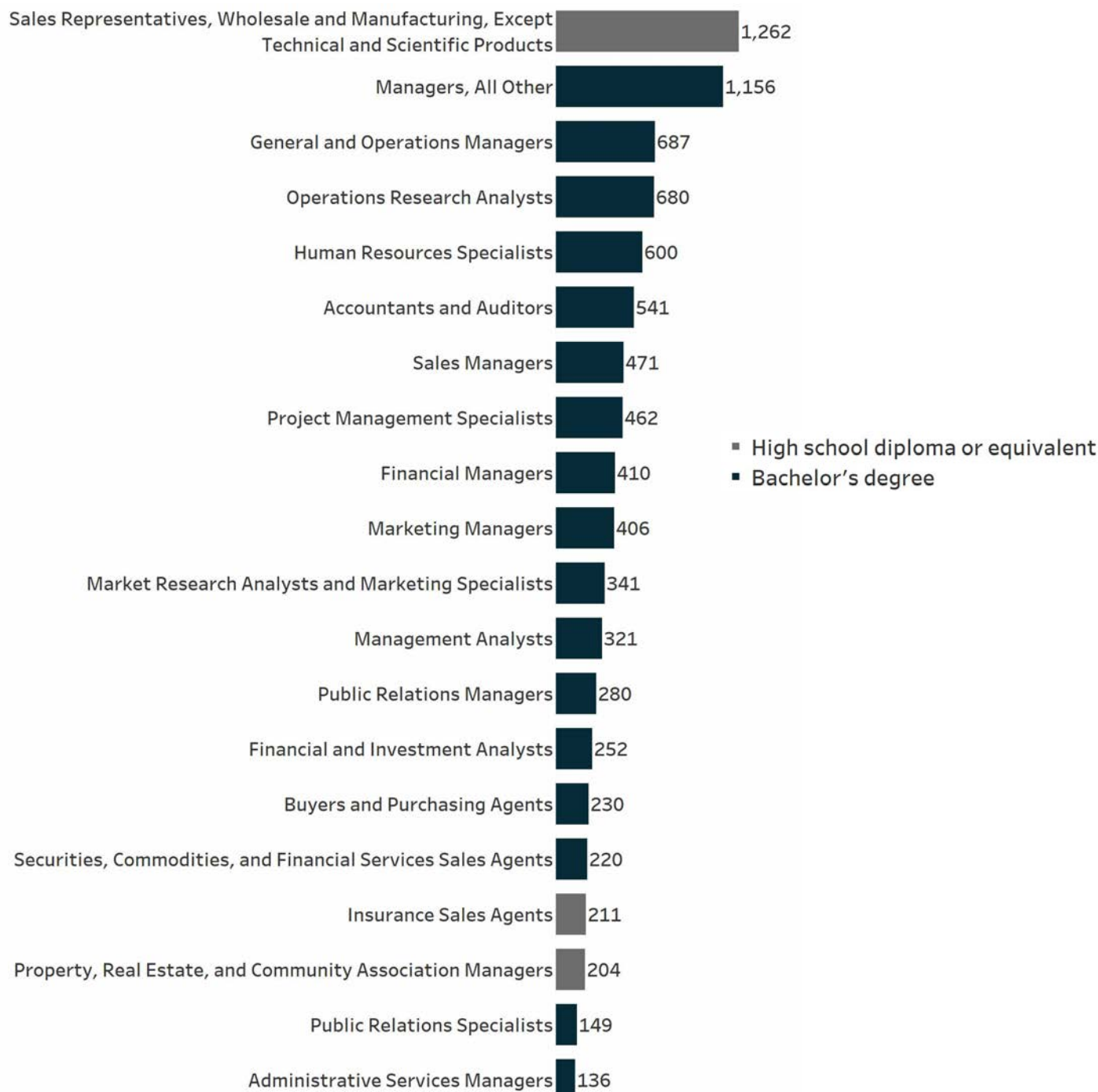he most sought-after occupation by Business and Finance industry employers with 1,262 postings. Managers, All Other was in the second position with 1,156 postings. Other top posted jobs include General and Operations Managers (687 postings), Operations Research Analysts (680 postings), and Human Resources Specialists (600 postings).

Occupation	Postings
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1,262
Managers, All Other	1,156
General and Operations Managers	687
Operations Research Analysts	680
Human Resources Specialists	600
Accountants and Auditors	541
Sales Managers	471
Project Management Specialists	462
Financial Managers	410
Marketing Managers	406
Market Research Analysts and Marketing Specialists	341
Management Analysts	321
Public Relations Managers	280
Financial and Investment Analysts	252
Buyers and Purchasing Agents	230
Securities, Commodities, and Financial Services Sales Agents	220
Insurance Sales Agents	211
Property, Real Estate, and Community Association Managers	204
Public Relations Specialists	149
Administrative Services Managers	136

- High school diploma or equivalent
- Bachelor's degree

BUSINESS AND FINANCE OCCUPATION GROUP

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 Business and Finance occupation group offers a relatively broad array of entry requirements, though a majority of jobs require a Bachelor's degree. At least half of the top jobs pay over $39.77 per hour. Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products, the top posted Business and Finance job, offers a median hourly wage of $32.63 per hour or an annual salary of about $67,870.

Wage Overview for Top Posted Business and Finance Jobs in 2023

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	$18.92	$23.30	$32.63	$47.58	$64.53
11-9199	Managers, All Other	$32.38	$49.22	$60.96	$72.76	$83.15
11-1021	General and Operations Managers	$22.44	$31.34	$50.18	$79.04	$115.00
15-2031	Operations Research Analysts	$29.83	$38.13	$39.62	$48.39	$71.80
13-1071	Human Resources Specialists	$22.09	$26.65	$31.62	$40.51	$50.69
13-2011	Accountants and Auditors	$24.32	$28.40	$35.09	$44.74	$57.15
11-2022	Sales Managers	$33.90	$47.12	$64.34	$82.66	$108.36
13-1082	Project Management Specialists	$26.59	$31.88	$39.77	$50.28	$63.87
11-3031	Financial Managers	$39.54	$48.66	$63.05	$80.14	$107.83
11-2021	Marketing Managers	$38.92	$48.61	$62.75	$78.39	$97.97

In-Demand Technical Skills

- Marketing
- Project Management
- Accounting
- Finance
- Auditing

In-Demand Foundational Skills

- Communication
- Management
- Leadership
- Customer Service
- Operations

In-Demand Certifications

- Master Of Business Administration (MBA)
- Certified Public Accountant
- Project Management Professional Certification
- Security Clearance
- Enrolled Agent (EA)

In-Demand Education Level*

- High school or GED: 12.9%
- Associate degree: 6.5%
- Bachelor's degree: 59.5%
- Master's degree: 18.1%

*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

- University Of Michigan
- Deloitte
- Black & Veatch
- KLA
- Clarivate Analytics
- Robert Half
- XPO Logistics
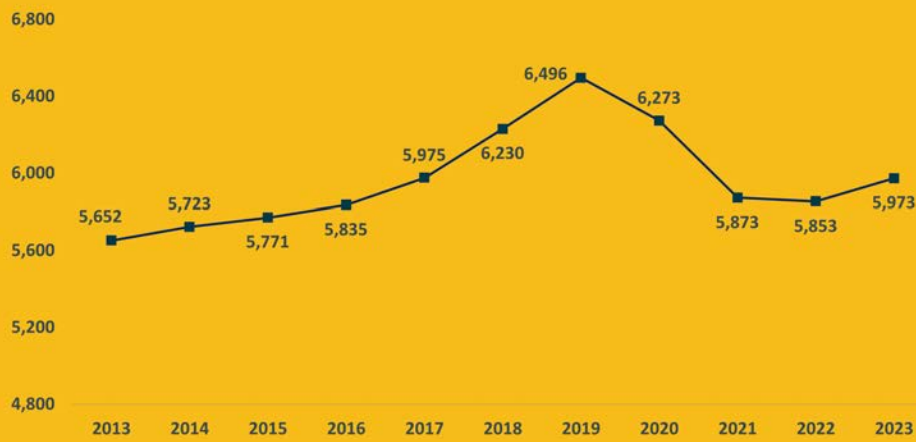- Nsf International
- Thomson Reuters
- Domino's Pizza

Job Postings by City

1. Ann Arbor: 8,744 Postings
2. Ypsilanti: 870 Postings
3. Saline: 290 Postings
4. Dexter: 260 Postings
5. Chelsea: 134 Postings
6. Manchester: 108 Postings
7. Whitmore Lake: 89 Postings
8. Willis: 15 Postings
9. Bridgewater: 7 Postings
10. Salem: 3 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.

Employment Over Time
2013-2023

Year	Value
2013	5,652
2014	5,723
2015	5,771
2016	5,835
2017	5,975
2018	6,230
2019	6,496
2020	6,273
2021	5,873
2022	5,853
2023	5,973

5,973 Engineers and Designers Workers

2.0% Increase from 2022

Engineers and Designers Worker Demographics

According to 2023 Lightcast data, the 5,973 workers in the Engineering and Design group are only somewhat diverse. Just 5.8 percent of the related workforce is under 25, likely due to the consistently high educational requirements. Female workers account for 17.0 percent of the current workforce and only 20.8 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.

Worker Gender Demographics

17.0% Female

83.0% Male

0   10   20   30   40   50   60   70   80   90   100
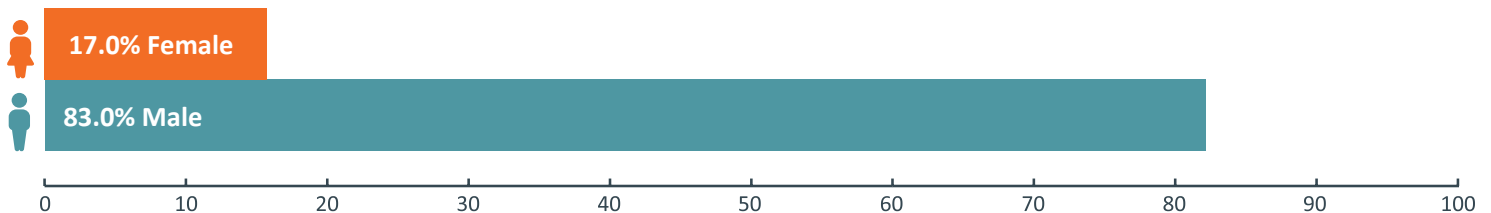
Race and Ethnicity Demographics

79.2% White | 10.8% Asian | 4.7% Black or African-American

Worker Age Demographics

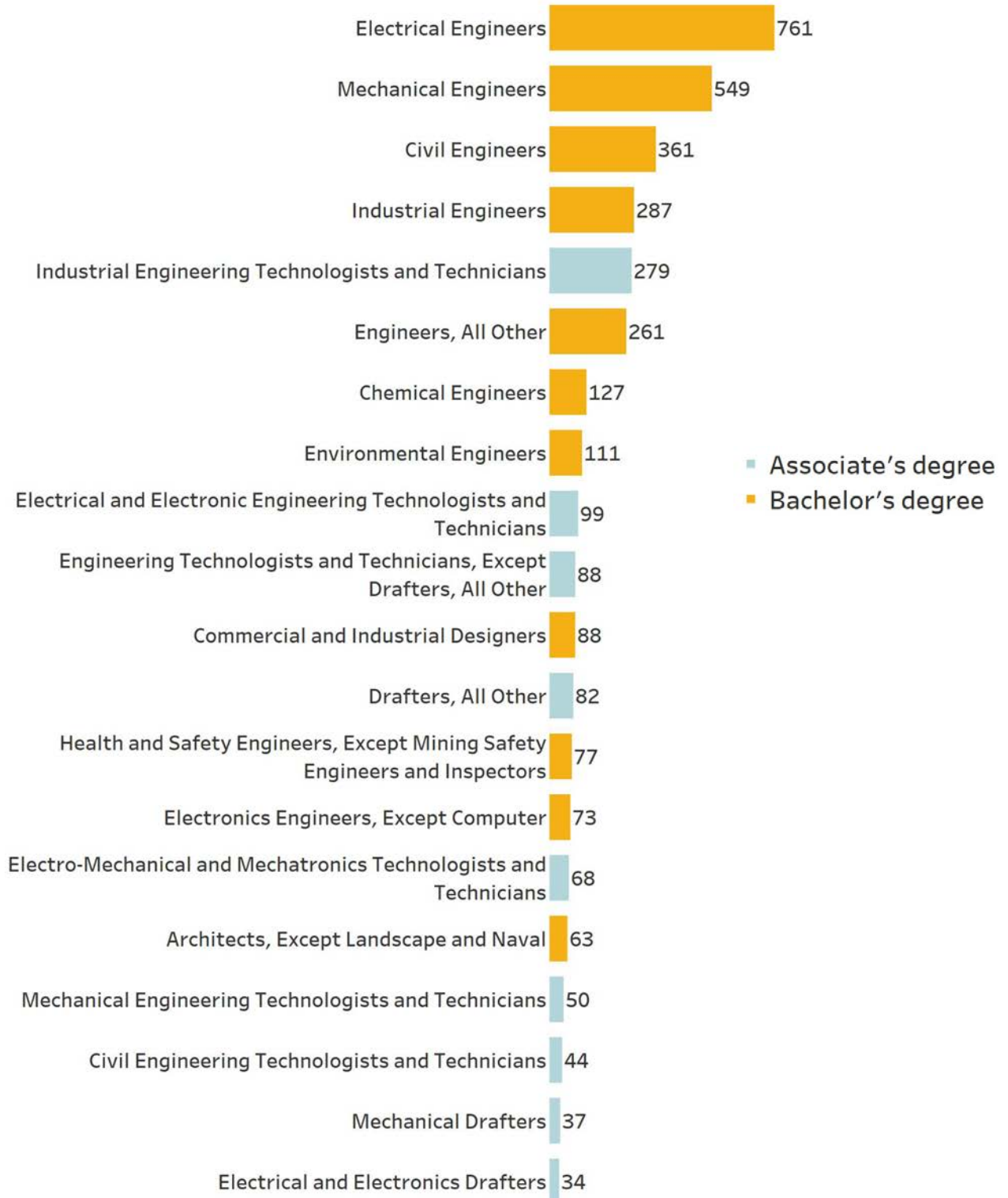| Age 14-24 5.8% | Age 25-54 72.6% | Age 55+ 21.4% |

Data: Lightcast | Analysis: Workforce Intelligence Network

ENGINEERS AND DESIGNERS OCCUPATION GROUP

Top Posted Jobs

In 2023, there were a total of 3,676 job postings for Engineering and Design workers, with Electrical Engineers as the most sought-after occupation by Engineering and Design industry employers with 761 postings. Mechanical Engineers was in the second position with 549 postings. Other top posted jobs include Civil Engineers (361 postings), Industrial Engineers (287 postings), and Industrial Engineering Technologists and Technicians (279 postings). 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.

Occupation	Postings
Electrical Engineers	761
Mechanical Engineers	549
Civil Engineers	361
Industrial Engineers	287
Industrial Engineering Technologists and Technicians	279
Engineers, All Other	261
Chemical Engineers	127
Environmental Engineers	111
Electrical and Electronic Engineering Technologists and Technicians	99
Engineering Technologists and Technicians, Except Drafters, All Other	88
Commercial and Industrial Designers	88
Drafters, All Other	82
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	77
Electronics Engineers, Except Computer	73
Electro-Mechanical and Mechatronics Technologists and Technicians	68
Architects, Except Landscape and Naval	63
Mechanical Engineering Technologists and Technicians	50
Civil Engineering Technologists and Technicians	44
Mechanical Drafters	37
Electrical and Electronics Drafters	34

Legend:
- Associate's degree
- Bachelor's degree

ENGINEERS AND DESIGNERS OCCUPATION GROUP

Wage Overview

Wages in the Engineering and Design field tend to scale with both education and experience. The Engineering and Design occupation group offers a broad array of entry requirements, though a majority of jobs require a Bachelor's degree. At least half of the top jobs pay over $41.17 per hour. Electrical Engineers, the top posted Engineering and Design job, offers a median hourly wage of $48.08 per hour or an annual salary of about $100,006.

Wage Overview for Top Posted Engineers and Designers Jobs in 2023

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2071	Electrical Engineers	$30.15	$38.65	$48.08	$60.00	$63.52
17-2141	Mechanical Engineers	$30.03	$38.14	$47.39	$59.74	$64.38
17-2051	Civil Engineers	$29.60	$31.25	$38.07	$51.02	$64.69
17-2112	Industrial Engineers	$31.17	$37.82	$46.43	$51.47	$62.52
17-3026	Industrial Engineering Technologists and Technicians	$19.15	$21.43	$24.78	$33.63	$40.43
17-2199	Engineers, All Other	$28.95	$34.71	$45.86	$60.13	$67.00
17-2041	Chemical Engineers	$24.55	$28.30	$46.33	$61.76	$68.62
17-2081	Environmental Engineers	$24.43	$32.56	$41.17	$49.91	$64.24
17-3023	Electrical and Electronic Engineering Technologists and Technicians	$17.59	$23.79	$31.91	$42.03	$50.76
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	$20.67	$28.99	$38.81	$57.19	$57.19

In-Demand Technical Skills

- Electrical Engineering
- Mechanical Engineering
- Project Management
- AutoCAD
- Computer-Aided Design

In-Demand Foundational Skills

- Communication
- Management
- Writing
- Problem Solving
- Research

In-Demand Certifications

- Professional Engineer (PE) License
- Engineer in Training
- Top Secret-Sensitive Compartmented Information (TS/SCI Clearance)
- LEED Accredited Professional (AP)
- Security Clearance

In-Demand Education Level*

- High school or GED: 7.6%
- Associate degree: 8.7%
- Bachelor's degree: 63.0%
- Master's degree: 21.3%

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

- Black & Veatch
- Barr Engineering Co.
- Actalent
- KLA
- University Of Michigan
- Hyundai America Technical Center
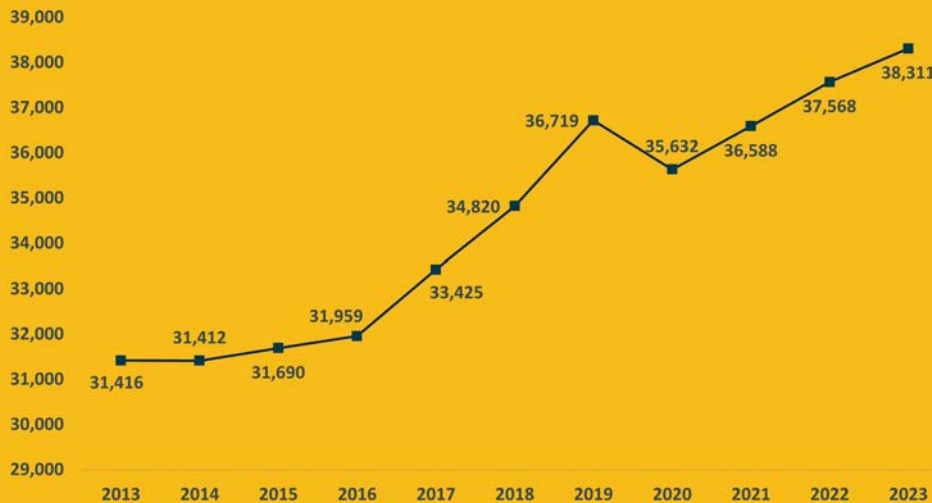- HDR
- CDM Smith
- Tetra Tech
- Power Engineers

Job Postings by City

1. Ann Arbor: 2,732 Postings
2. Dexter: 406 Postings
3. Ypsilanti: 183 Postings
4. Saline: 139 Postings
5. Chelsea: 122 Postings
6. Whitmore Lake: 58 Postings
7. Manchester: 29 Postings
8. Bridgewater: 5 Postings
9. Salem: 1 Postings
10. Willis: 1 Postings

HEALTH CARE OCCUPATION GROUP

WIN's health care occupation group includes jobs related to healthcare support and practitioners. Employment in this group has been consistently growing, with more Healthcare 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.

Employment Over Time
2013-2023

Year	Employment
2013	31,416
2014	31,412
2015	31,690
2016	31,959
2017	33,425
2018	34,820
2019	36,719
2020	35,632
2021	36,588
2022	37,568
2023	38,311

38,311 Health Care Workers

1.9% Increase from 2022

Health Care Worker Demographics

In 2023, there were 38,311 workers in the Health Care occupation group. This group is primarily made up of females (77.6 percent) between the age of 25 and 54 (68.9 percent), with 22.4 percent of workers identifying as male and 33.5 percent identifying as a racial minority. Also of note was that 11.7 percent of the workers in the occupation group were under the age of 25, compared to the 19.4 percent 55 years of age or older.

Worker Gender Demographics

77.6% Females

22.4% Male
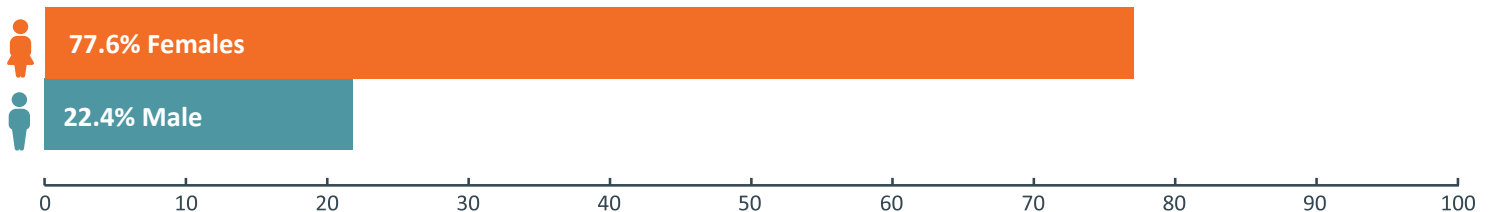
Race and Ethnicity Demographics

66.5% White | 16.2% Black or African-American | 9.1% Asian

Worker Age Demographics

Age 14-24	Age 25-54	Age 55+
11.7%	68.9%	19.4%

Data: Lightcast | Analysis: Workforce Intelligence Network
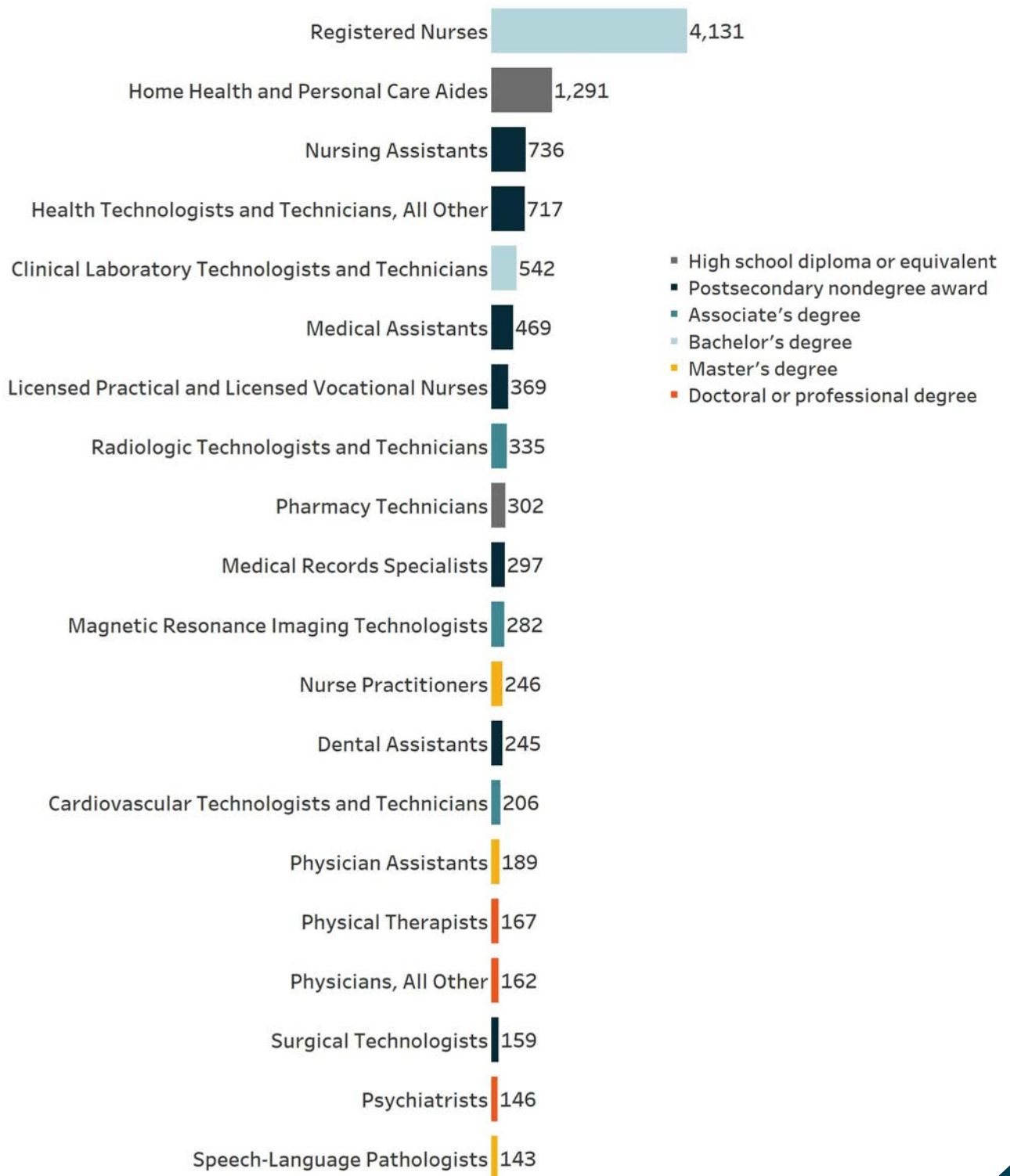
HEALTH CARE OCCUPATION GROUP

Top Posted Jobs

In 2023, there were a total of 13,160 job postings for Health Care workers, with Registered Nurses as the most sought-after occupation by Health Care industry employers with 4,131 postings. Home Health and Personal Care Aides was in the second position with 1,291 postings. Other top posted jobs include Nursing Assistants (736 postings), Health Technologists and Technicians, All Other (717 postings), and Clinical Laboratory Technologists and Technicians (542 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 (302 postings), only require a high school diploma or equivalent, coupled with short to moderate-term on-the-job training.

Occupation	Postings
Registered Nurses	4,131
Home Health and Personal Care Aides	1,291
Nursing Assistants	736
Health Technologists and Technicians, All Other	717
Clinical Laboratory Technologists and Technicians	542
Medical Assistants	469
Licensed Practical and Licensed Vocational Nurses	369
Radiologic Technologists and Technicians	335
Pharmacy Technicians	302
Medical Records Specialists	297
Magnetic Resonance Imaging Technologists	282
Nurse Practitioners	246
Dental Assistants	245
Cardiovascular Technologists and Technicians	206
Physician Assistants	189
Physical Therapists	167
Physicians, All Other	162
Surgical Technologists	159
Psychiatrists	146
Speech-Language Pathologists	143

Legend:
- High school diploma or equivalent
- Postsecondary nondegree award
- Associate's degree
- Bachelor's degree
- Master's degree
- Doctoral or professional degree

HEALTH CARE OCCUPATION GROUP

Wage Overview

Wages in the 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. At least half of the top jobs pay over $21.76 per hour. Registered Nurses, the top posted Health Care job, offers a median hourly wage of $37.99 per hour or an annual salary of about $79,019.

Wage Overview for Top Posted Health Care Jobs in 2023

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
29-1141	Registered Nurses	$32.37	$37.99	$37.99	$48.52	$48.52
31-1128	Home Health and Personal Care Aides	$10.69	$12.58	$13.46	$15.38	$17.49
31-1131	Nursing Assistants	$15.94	$17.30	$17.74	$18.73	$21.72
29-2099	Health Technologists and Technicians, All Other	$17.30	$17.66	$21.76	$29.40	$35.46
29-2018	Clinical Laboratory Technologists and Technicians	$15.98	$17.85	$28.47	$37.45	$39.44
31-9092	Medical Assistants	$16.91	$17.86	$18.55	$21.77	$21.77
29-2061	Licensed Practical and Licensed Vocational Nurses	$23.09	$26.33	$28.25	$30.20	$31.22
29-2034	Radiologic Technologists and Technicians	$28.79	$29.58	$37.00	$37.65	$40.38
29-2052	Pharmacy Technicians	$14.06	$17.75	$19.10	$22.76	$23.10
29-2072	Medical Records Specialists	$17.35	$19.21	$23.28	$29.26	$31.84

In-Demand Technical Skills

- Nursing
- Nursing Care
- Medical Records
- Clinical Practices
- Patient Assistance

In-Demand Foundational Skills

- Communication
- Management
- Customer Service
- Leadership
- Interpersonal Communications

In-Demand Certifications

- Registered Nurse (RN)
- Basic Life Support (BLS) Certification
- Advanced Cardiovascular Life Support (ACLS) Certification
- Licensed Practical Nurse (LPN)
- Certified Nursing Assistant (CAN)

In-Demand Education Level*

- High school or GED: 24.2%
- Associate degree: 17.8%
- Bachelor's degree: 18.3%
- Master's degree: 9.2%

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

- Trinity Health
- University Of Michigan
- Beaumont Health
- ProMedica
- Aramark
- United States Department of Veterans Affairs
- Saint Joseph Mercy Health System
- Affordable Housing
- Healthcare Employment Network
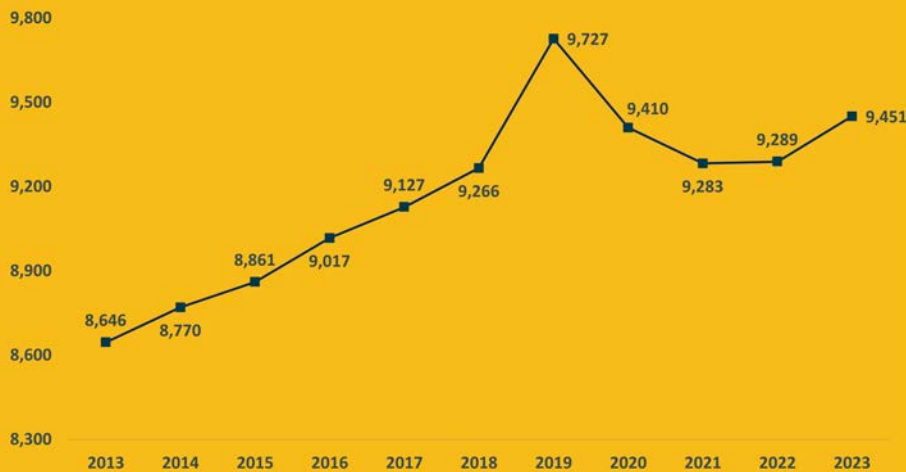- Aya Healthcare

Job Postings by City

1. Ann Arbor: 9,419 Postings
2. Ypsilanti: 1,872 Postings
3. Chelsea: 946 Postings
4. Saline: 365 Postings
5. Whitmore Lake: 195 Postings
6. Dexter: 165 Postings
7. Willis: 85 Postings
8. Manchester: 70 Postings
9. Whittaker: 19 Postings
10. Bridgewater: 12 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.

**Employment Over Time
2013-2023**

Year	Value
2013	8,646
2014	8,770
2015	8,861
2016	9,017
2017	9,127
2018	9,266
2019	9,727
2020	9,410
2021	9,283
2022	9,289
2023	9,451

9,451 Information Technology Workers

1.7% Increase from 2022

Information Technology Worker Demographics

According to 2023 Lightcast data, the 9,451 workers in the Information Technology group are somewhat diverse. A total of 6.8 percent of the related workforce is under 25. Female workers account for 25.7 percent of the current workforce and only 28.7 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.

Worker Gender Demographics

25.7% Females
74.3% Male
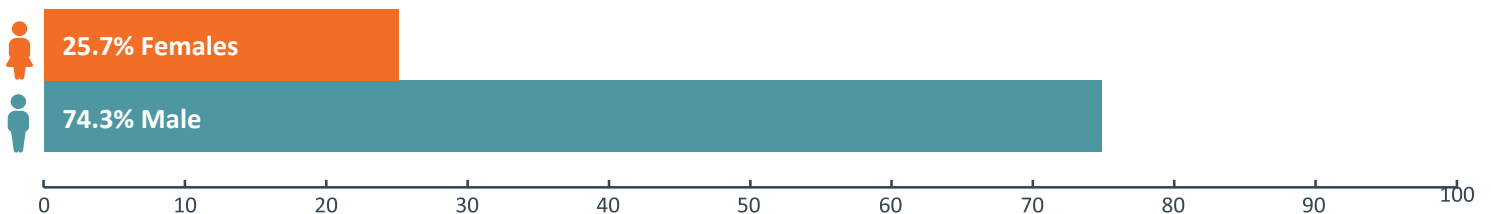
Race and Ethnicity Demographics

71.3% White | 17.0% Asian | 6.0% Black or African-American

Worker Age Demographics

Age 14-24 6.8%	Age 25-54 79.0%	Age 55+ 14.2%

Data: Lightcast | Analysis: Workforce Intelligence Network
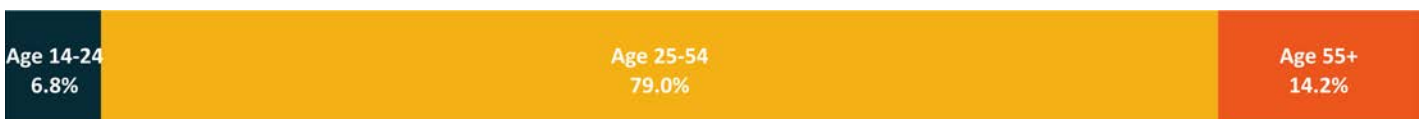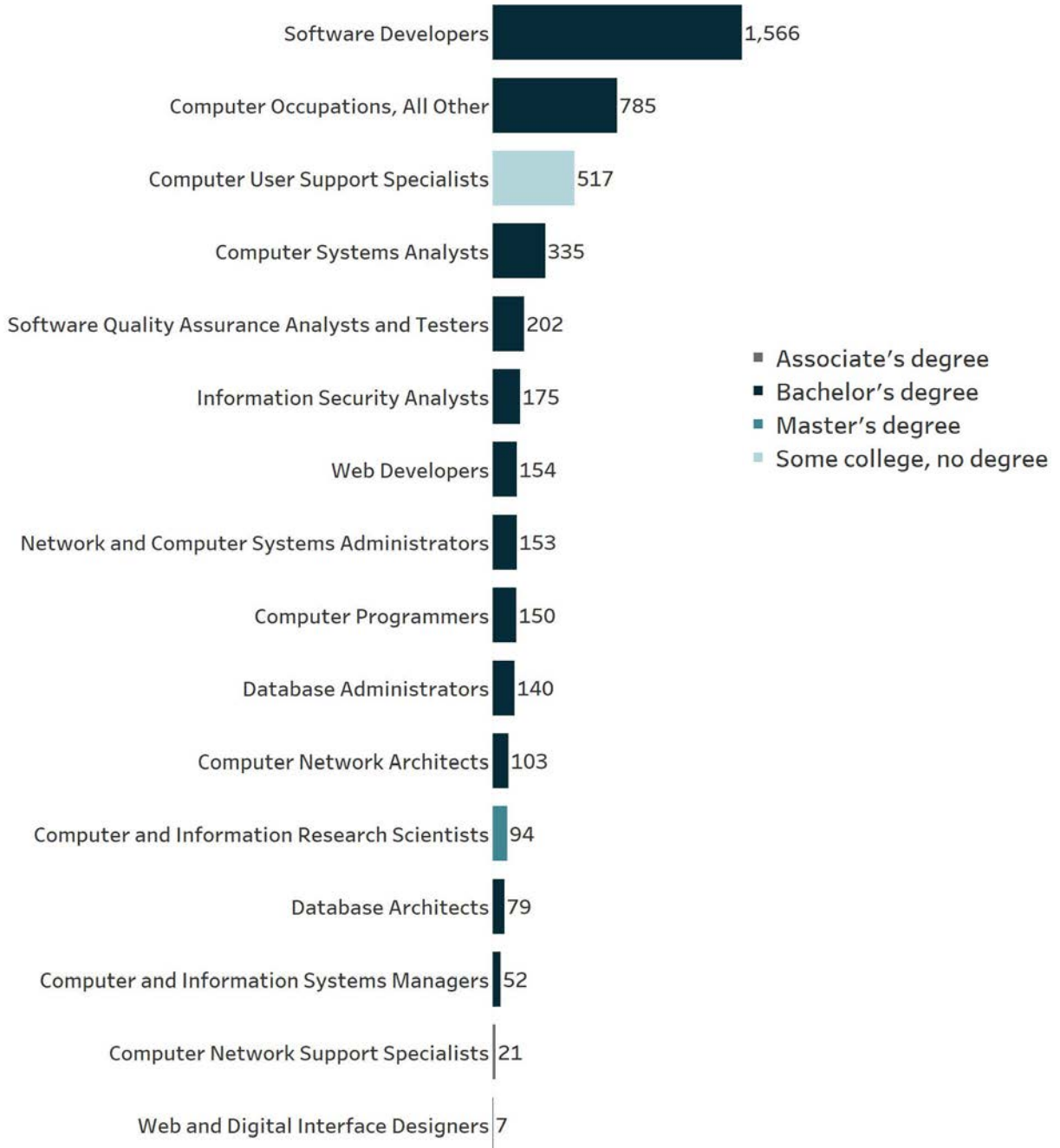
INFORMATION TECHNOLOGY OCCUPATION GROUP

Top Posted Jobs

In 2023, there were a total of 4,533 job postings for Information Technology workers, with Software Developers as the most sought-after occupation by Information Technology industry employers with 1,566 postings. Computer Occupations, All Other was in the second position with 785 postings. Other top posted jobs include Computer User Support Specialists (517 postings), Computer Systems Analysts (335 postings), and Software Quality Assurance Analysts and Testers (202 postings). Although the top IT jobs generally require a bachelor's degree, Computer User Support Specialists, typically require some college, no degree.

Occupation	Postings
Software Developers	1,566
Computer Occupations, All Other	785
Computer User Support Specialists	517
Computer Systems Analysts	335
Software Quality Assurance Analysts and Testers	202
Information Security Analysts	175
Web Developers	154
Network and Computer Systems Administrators	153
Computer Programmers	150
Database Administrators	140
Computer Network Architects	103
Computer and Information Research Scientists	94
Database Architects	79
Computer and Information Systems Managers	52
Computer Network Support Specialists	21
Web and Digital Interface Designers	7

Legend:
- Associate's degree
- Bachelor's degree
- Master's degree
- Some college, no degree

INFORMATION TECHNOLOGY OCCUPATION GROUP

Wage Overview

Wages in the Information Technology field tend to scale with both education and experience. The Information Technology occupation group offers a relatively broad array of entry requirements, though a majority of jobs require a Bachelor's degree. At least half of the top jobs pay over $41.52 per hour. Software Developers, the top posted Information Technology job, offers a median hourly wage of $49.99 per hour or an annual salary of about $103,979.

Wage Overview for Top Posted Information Technology Jobs in 2023

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
15-1252	Software Developers	$30.56	$39.52	$49.99	$62.86	$78.75
15-1299	Computer Occupations, All Other	$21.91	$31.83	$42.03	$59.90	$66.01
15-1232	Computer User Support Specialists	$14.00	$19.15	$24.80	$31.58	$40.66
15-1211	Computer Systems Analysts	$31.72	$38.40	$44.23	$51.99	$64.75
15-1253	Software Quality Assurance Analysts and Testers	$30.27	$36.72	$39.96	$48.27	$54.06
15-1212	Information Security Analysts	$22.88	$29.50	$41.27	$58.95	$76.02
15-1254	Web Developers	$27.64	$39.18	$41.92	$51.46	$63.24
15-1244	Network and Computer Systems Administrators	$30.21	$34.42	$41.52	$50.95	$57.67
15-1251	Computer Programmers	$19.55	$33.18	$41.94	$52.04	$76.78
15-1242	Database Administrators	$29.08	$31.83	$41.05	$50.57	$58.07

In-Demand Technical Skills

- Computer Science
- Python (Programming Language)
- Software Engineering
- Project Management
- Software Development

In-Demand Foundational Skills

- Communication
- Management
- Troubleshooting (Problem Solving)
- Research
- Problem Solving

In-Demand Certifications

- Security Clearance
- Top Secret-Sensitive Compartmented Information (TS/SCI Clearance)
- Certified Information Systems Security Professional
- Top Secret Clearance
- CompTIA Security+

In-Demand Education Level*

- High school or GED: 4.0%
- Associate degree: 6.2%
- Bachelor's degree: 63.0%
- Master's degree: 22.0%

*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

- University Of Michigan
- KLA
- Deloitte
- Maxar Technologies
- TEKsystems
- Domino's Pizza
- Allegis Group
- Hyundai America Technical Center
- Cisco
- Clarivate Analytics

Job Postings by City

1. Ann Arbor: 3,933 Postings
2. Ypsilanti: 277 Postings
3. Dexter: 147 Postings
4. Saline: 88 Postings
5. Chelsea: 62 Postings
6. Manchester: 13 Postings
7. Whitmore Lake: 11 Postings
8. Bridgewater: 1 Postings
9. Whittaker: 1 Postings

SKILLED TRADES AND TECHNICIANS OCCUPATION GROUP

WIN's Skilled Trades and Technicians group 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 on an annual basis.

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

## Employment Over Time 2013-2023
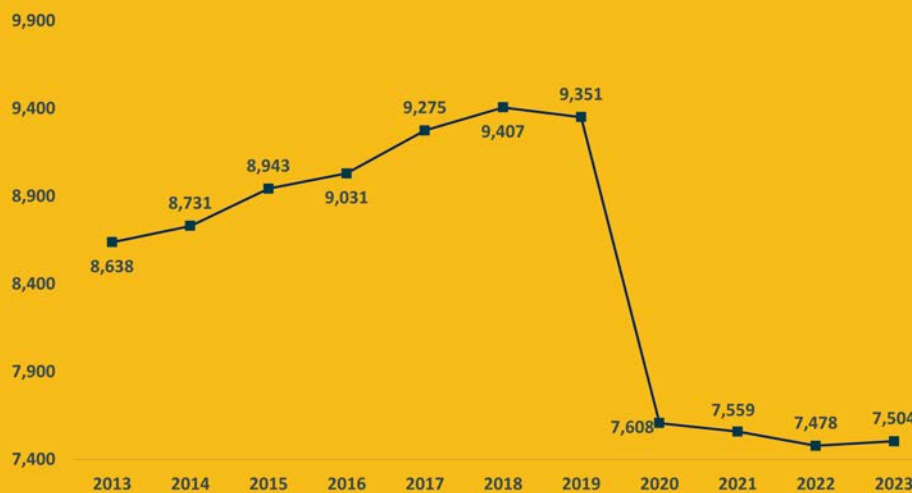
7,504 Skilled Trades Workers

0.3% Decrease from 2022

Skilled Trades Worker Demographics

According to 2023 Lightcast data, the 7,504 workers in the Skilled Trades group are not particularly diverse. Just 6.7 percent of the related workforce is under 25. Female workers account for 13.7 percent of the current workforce and only 19.6 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.

Worker Gender Demographics

13.7% Female

86.3% Male
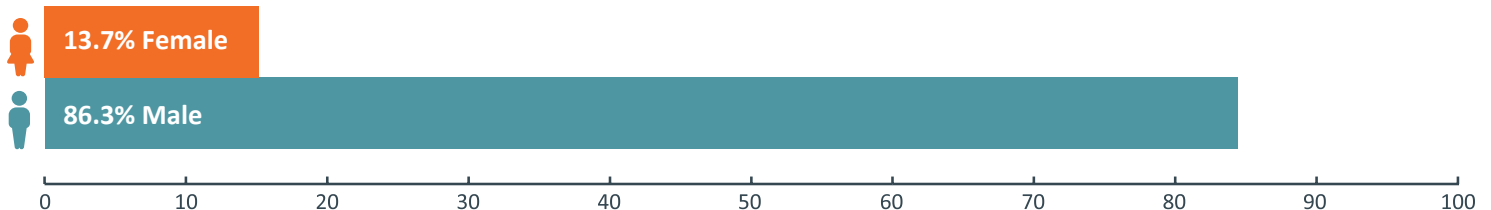
Race and Ethnicity Demographics

80.4% White | 8.6% Black or African-American | 5.3% Hispanic or Latino

Worker Age Demographics

Age 14-24
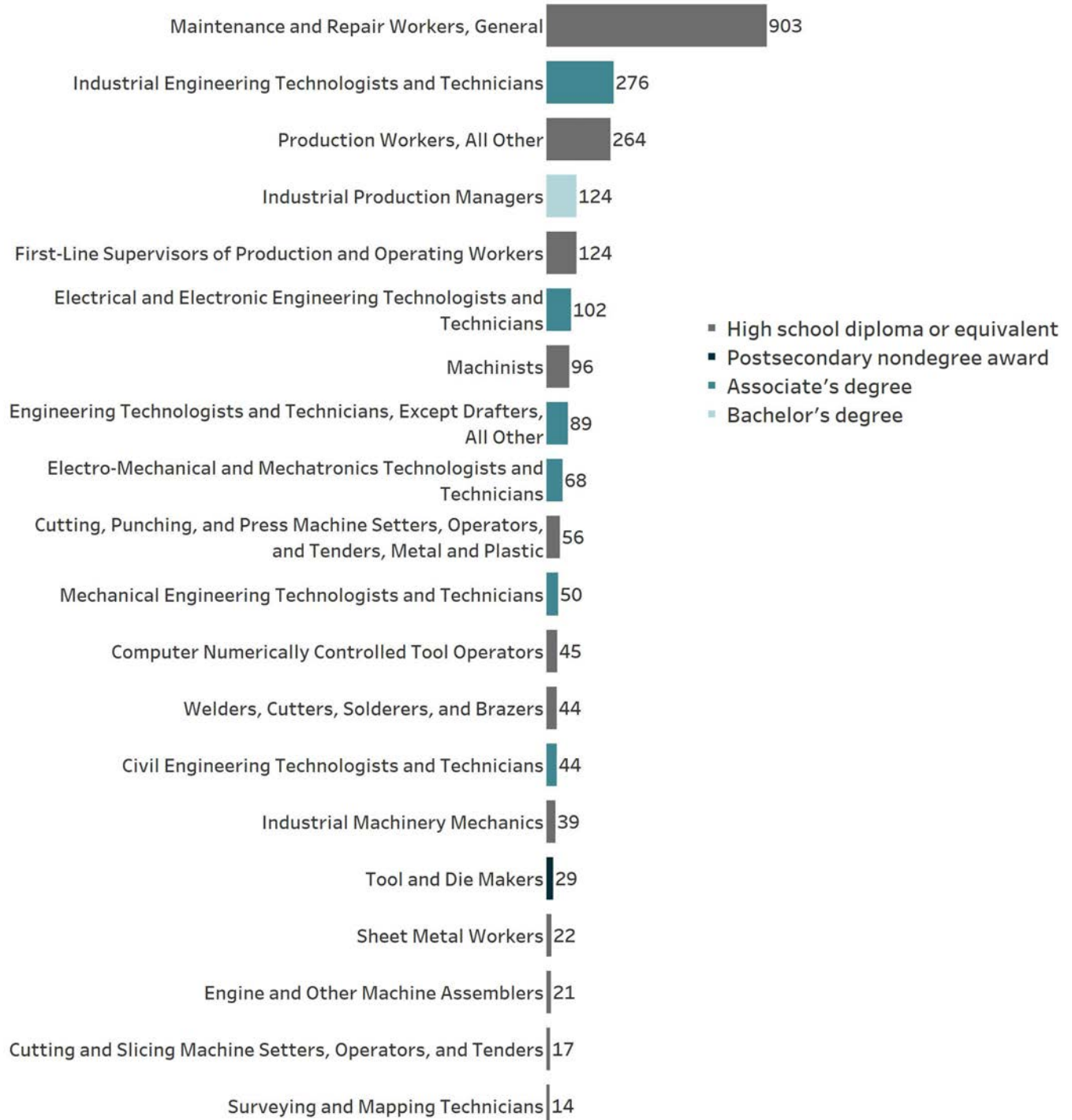6.7%

Age 25-54
65.8%

Age 55+
27.6%

Data: Lightcast | Analysis: Workforce Intelligence Network

SKILLED TRADES AND TECHNICIANS OCCUPATION GROUP

Top Posted Jobs

In 2023, there were a total of 2,523 job postings for Skilled Trades workers, with Maintenance and Repair Workers, General as the most sought-after occupation by Skilled Trades industry employers with 903 postings. Industrial Engineering Technologists and Technicians was in the second position with 276 postings. Other top posted jobs include Production Workers, All Other (264 postings), Industrial Production Managers (124 postings), and First-Line Supervisors of Production and Operating Workers (124 postings).

Occupation	Postings
Maintenance and Repair Workers, General	903
Industrial Engineering Technologists and Technicians	276
Production Workers, All Other	264
Industrial Production Managers	124
First-Line Supervisors of Production and Operating Workers	124
Electrical and Electronic Engineering Technologists and Technicians	102
Machinists	96
Engineering Technologists and Technicians, Except Drafters, All Other	89
Electro-Mechanical and Mechatronics Technologists and Technicians	68
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	56
Mechanical Engineering Technologists and Technicians	50
Computer Numerically Controlled Tool Operators	45
Welders, Cutters, Solderers, and Brazers	44
Civil Engineering Technologists and Technicians	44
Industrial Machinery Mechanics	39
Tool and Die Makers	29
Sheet Metal Workers	22
Engine and Other Machine Assemblers	21
Cutting and Slicing Machine Setters, Operators, and Tenders	17
Surveying and Mapping Technicians	14

Legend:
- High school diploma or equivalent
- Postsecondary nondegree award
- Associate's degree
- Bachelor's degree

SKILLED TRADES AND TECHNICIANS OCCUPATION GROUP

Wage Overview

Wages in the Skilled Trades field do not necessarily scale with education or experience as seen in other occupations. The Skilled Trades occupation group offers a broad array of entry requirements, though a majority of jobs require a High School diploma or equivalent. At least half of the top jobs pay over $24.78 per hour. Maintenance and Repair Workers, General, the top posted Skilled Trades job, offers a median hourly wage of $22.06 per hour or an annual salary of about $45,885.

Wage Overview for Top Posted Skilled Trades Jobs in 2023

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	$14.19	$17.27	$22.06	$25.72	$31.11
17-3026	Industrial Engineering Technologists and Technicians	$19.15	$21.43	$24.78	$33.63	$40.43
51-9199	Production Workers, All Other	$14.68	$15.00	$16.67	$17.07	$22.94
11-3051	Industrial Production Managers	$35.83	$45.68	$50.74	$65.03	$79.93
51-1011	First-Line Supervisors of Production and Operating Workers	$21.08	$24.23	$30.66	$37.94	$47.50
17-3023	Electrical and Electronic Engineering Technologists and Technicians	$17.59	$23.79	$31.91	$42.03	$50.76
51-4041	Machinists	$17.51	$19.71	$22.99	$30.30	$31.50
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	$20.67	$28.99	$38.81	$57.19	$57.19
17-3024	Electro-Mechanical and Mechatronics Technologists and Technicians	$18.72	$22.46	$25.36	$34.33	$36.81
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	$17.22	$17.41	$18.16	$22.51	$33.41

In-Demand Technical Skills

- Plumbing
- HVAC
- Hand Tools
- Machining
- Preventive Maintenance

In-Demand Foundational Skills

- Communication
- Customer Service
- Troubleshooting (Problem Solving)
- Management
- Operations

In-Demand Certifications

- Commercial Driver's License (CDL)
- Forklift Certification
- CDL Class B License
- Automotive Service Excellence (ASE) Certification
- Cardiopulmonary Resuscitation (CPR) Certification

In-Demand Education Level*

- High school or GED: 39.3%
- Associate degree: 12.1%
- Bachelor's degree: 11.8%
- Master's degree: 2.3%

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

Top Posting Employers

- University Of Michigan
- Black & Veatch
- Aerotek
- Sheridan
- ManpowerGroup
- Orchid Orthopedic Solutions
- Orchid Orthopedics
- City Of Ann Arbor
- Mmi Engineered Solutions
- Express Employment Professionals

Job Postings by City

1. Ann Arbor: 1,427 Postings
2. Saline: 284 Postings
3. Ypsilanti: 269 Postings
4. Dexter: 216 Postings
5. Chelsea: 178 Postings
6. Whitmore Lake: 109 Postings
7. Manchester: 26 Postings
8. Salem: 6 Postings
9. Willis: 5 Postings
10. Whittaker: 3 Postings

MAGMA
Michigan Alliance for Greater Mobility Advancement

INDUSTRYINFINITY

MIAPPRENTICESHIP

HCA
HEALTH CAREERS ALLIANCE
FOR SOUTHEAST MICHIGAN

ADVANCE MICHIGAN
CENTER FOR APPRENTICESHIP INNOVATION

EV Jobs Academy

MiREACH

MiLEAP

WIN
WORKFORCE INTELLIGENCE NETWORK