

WIN

WORKFORCE
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LABOR MARKET REPORT OAKLAND COUNTY

January - December 2021

INTRODUCTION

Oakland 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 Oakland 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 2021 labor market information from Oakland County for the Business and Finance, Health Care, Information Technology (IT), Skilled Trades, and Transportation, Distribution, and Logistics (TDL) 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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State of the Labor Market in Oakland County

The COVID-19 crisis continued to cause major shifts in the labor market this year. In 2021, the labor force declined by 6,020 individuals (0.9 percent) while employment increased by 28,775 individuals (4.9 percent) from 2020. Unemployment went down by 34,796 workers and the unemployment rate recovered significantly, decreasing 5.3 percentage points from 8.7 percent in 2020 to 3.3 percent in 2021. Monthly postings data shows shifts in hiring and skills demanded as the region continues its recovery. Retail Salespersons tops the list as the most demanded occupation in 2021, accounting for 9,605 job postings followed closely by Registered Nurse with 9,125 postings. The health care and information technology occupation groups continue to be heavily demanded in Oakland County.

Annual Labor Market Information

The labor force in Oakland County dropped in 2021, decreasing by 6,020 individuals (0.9 percent) from the prior year. Employment increased by 28,775 workers (4.9 percent) over the same period, while unemployment decreased by 34,796 workers (61.9 percent) for a total of 21,441 unemployed workers in 2021. The unemployment rate decreased in 2021 to 3.3 percent, a fall of 5.3 percentage points since the 8.7 percent spike in 2020. During the height of the pandemic and shutdown measures in March 2020, the highest monthly unemployment rate occurred in April 2020, with an unemployment rate of 19.5 percent in Oakland 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 206,584 unique postings in Oakland County, an increase of 2,472 postings from the 204,112 postings recorded in Q3. October had the highest recorded postings in 2021 with 70,809 postings, an increase of 23,448 postings (49.5 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 Oakland County 2021



Key Findings

21%

Employer demand increased by 21.5 percent, a gain of 47,887 job postings since 2020.

High School Diploma

Most in-demand minimum education level during 2020.

In Q4 2021, employment totaled

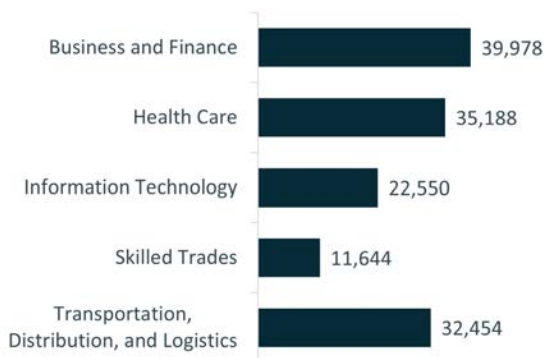
636,217

an increase of 4,704 workers (0.7 percent) since Q4 2020

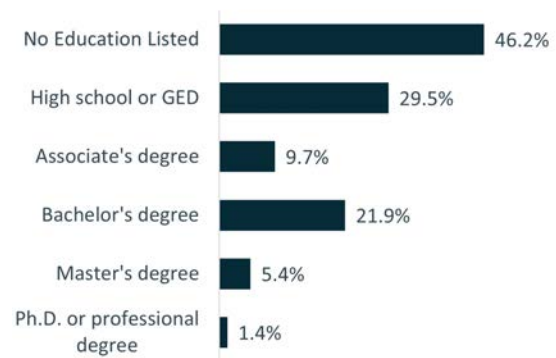
During 2021, there were 270,466 job postings, 47,887 more than the 222,579 postings made during 2020 in Oakland County. October 2021 saw the highest demand for the year with 70,809 postings, a 49.5 percent increase since January 2021. The top posted job titles in 2021 include Customer Service Representatives, Delivery Drivers, Medical Assistants, Maintenance Technicians, and Administrative Assistants. For more information about in-demand job postings, see page 7.

Of the 270,466 unique postings in Oakland County during 2021, 79,747 (29.5 percent) required a high school diploma or equivalent, while 85,383 postings (31.6 percent) required a college degree. An additional 18,329 postings (6.8 percent) required an advanced degree. The high demand for transportation jobs within the county drives this demand for workers with various skill sets.

Top 5 Posting Occupation Groups 2021



Education Levels In-Demand 2021



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 3.1 percentage points to an annual high of 3.6 percent. The labor force and employment numbers peaked in Q4 with a high of 656,968 individuals and 636,217 workers respectively, and unemployment decreased to 20,751 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 3.2 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	676,741	629,933	635,070	651,570	656,968	5,398	0.8%	-19,773	-2.9%
Employment	631,513	607,189	614,519	629,850	636,217	6,367	1.0%	4,704	0.7%
Unemployment	45,228	22,744	20,551	21,719	20,751	-968	-4.5%	-24,477	-54.1%
Unemployment Rate	6.7%	3.6%	3.2%	3.3%	3.2%	-0.2%	na	-3.5%	na

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

Data: Emsi | Analysis: Workforce Intelligence Network

LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Following labor force fluctuations throughout 2021, labor force participation totaled 649,405 individuals, a decrease of 6,020 individuals since 2020. Employment is up to 621,944 workers in 2021, an increase of 28,775 workers. Both unemployment and the unemployment rate decreased, corresponding with the economic recovery. Unemployment decreased to 21,441 workers, down by 34,796 workers since the high of 56,237 workers recorded in 2020. Similarly, the unemployment rate declined by 5.3 percentage points for a 2021 unemployment rate of 3.3 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	Percent Change from 2020 to 2021
Labor Force	610,881	616,205	628,635	630,196	632,577	651,936	662,752	670,738	679,762	649,405	643,385	-6,020	-0.9%
Employment	552,660	565,454	579,614	589,208	602,606	624,840	639,968	648,277	657,019	593,168	621,944	28,775	4.9%
Unemployment	58,221	50,751	49,021	40,988	29,971	27,097	22,784	22,462	22,743	56,237	21,441	-34,796	-61.9%
Unemployment Rate	9.5%	8.2%	7.8%	6.5%	4.7%	4.2%	3.4%	3.3%	3.3%	8.7%	3.3%	-5.3%	na

Data: Bureau of Labor Statistics

CENSUS 2020 LABOR FORCE DEMOGRAPHICS

During 2020, the most recent census year, there were about 678,315 individuals in the labor force, meaning they were either working or looking for work, in Oakland County. Slightly more than half of the population, 646,707 individuals (51.5 percent) living in the county were actively working. The highest unemployment rates were seen in those aged 24 years old or younger. Males under the age of 25 face an unemployment rate of 26.0 percent, compared to females under the age of 25 reporting an unemployment rate of 21.0 percent.

Civilian Labor Force by Demographic Group				
Demographic Group	Civilian Labor Force	Total Employment	Total Unemployment	Unemployment Rate
Total Population 16 +	678,315	646,707	31,608	4.7%
Sex				
Male 16+	361,729	344,515	17,214	4.8%
16-19	12,955	10,938	2,017	15.6%
20-24	31,415	28,139	3,276	10.4%
25-54	227,594	218,985	8,609	3.8%
55-64	65,250	63,151	2,099	3.2%
65 Plus	24,515	23,302	1,213	4.9%
Female 16+	316,586	302,192	14,394	4.5%
16-19	13,181	11,686	1,495	11.3%
20-24	28,236	25,520	2,716	9.6%
25-54	197,414	189,982	7,432	3.8%
55-64	59,417	57,557	1,860	3.1%
65 Plus	18,338	17,447	891	4.9%
Race				
White	508,085	487,762	20,323	4.0%
Black / African American	88,249	81,101	7,148	8.1%
Native American	1,552	1,445	107	6.9%
Asian	53,610	51,841	1,769	3.3%
Native Hawaiian / Pacific	208	208	0	0.0%
Some Other Race	5,367	4,814	553	10.3%
Two or More Races	21,941	20,098	1,843	8.4%
Ethnicity				
Hispanic	27,272	25,336	1,936	7.1%

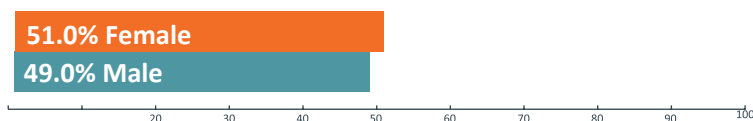
Data: American Community Survey 5-Year Estimates | Analysis: Workforce Intelligence Network

POPULATION DEMOGRAPHICS

2020 Census Population

According to data from the most recent Census Bureau 2020 ACS Five Year estimates, the population in Oakland County increased by about 0.2 percent between 2019 and 2020. During 2020, 1,255,340 people were living in the county. The sex of the populace was split almost evenly, with about 51.0 percent of the population identifying as female, and the other 49.0 percent identifying as male. Majority of the population identified as white (73.8 percent) with the second largest number of individuals identifying as Black or African American (13.3 percent). The region is facing an aging population; 31.1 percent of population was over the age of 54, compared to 29.1 percent under the age of 25.

Population Gender Demographics



Population Race Demographics



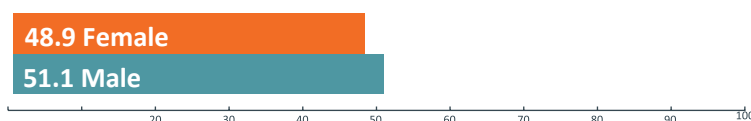
Population Age Demographics



2021 Current Workforce

In 2021, the workforce had a total of 691,180 individuals working in Oakland County. A slight majority, 51.1 percent (355,181 workers) were male, while 48.9 percent (339,813 workers) of the workforce was female. Most workers in the county identified as white, accounting for 72.2 percent of the workforce, while Black or African American workers totaled 16.3 percent of the workforce. Those identifying as having a Hispanic or Latino ethnicity accounted for 4.2 percent. Much of the workforce in Oakland County are between the ages of 25 through 54 (64.7 percent), while 22.9 percent of workers are 55 and older.

Workforce Gender Demographics



Workforce Race and Ethnicity Demographics

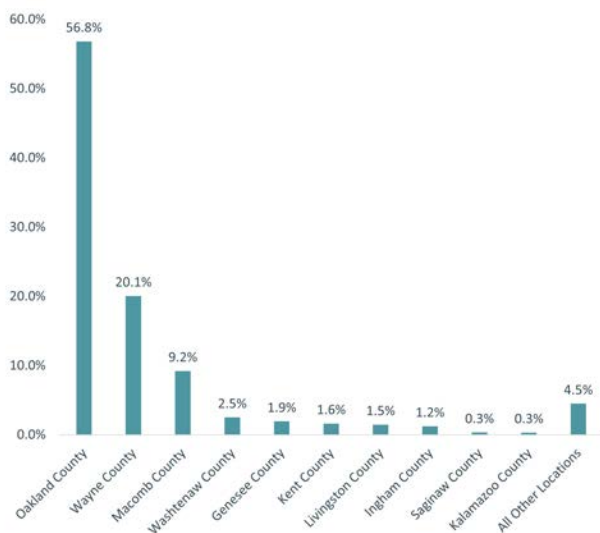


Workforce Age Demographics

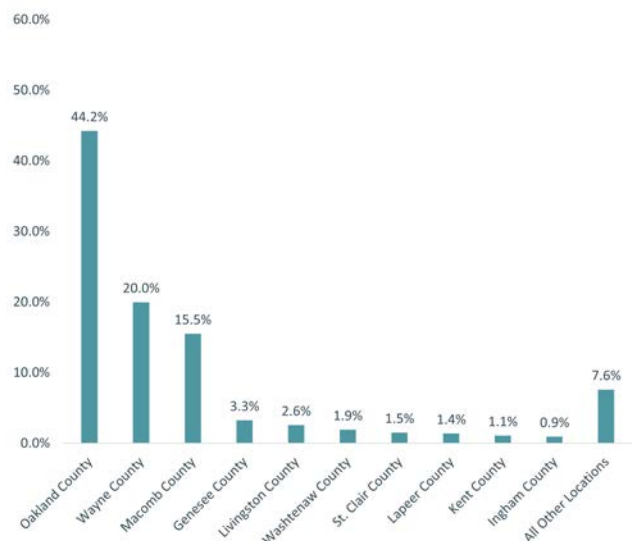


According to the most recent OnTheMap data set available from the Census Bureau, during 2019, Oakland County's workforce consisted of 568,442 residents. There were 323,035 (56.8 percent) residents living and working within the county, while the remaining 245,407 residents (43.2 percent) traveled outside of the county for work. There were 730,192 workers employed in the county during 2019. Of those, 407,157 workers (55.8 percent) lived outside of the county's borders and commuted in. From this information, we can see that Oakland is a net importer of jobs, with more workers entering the area for employment than outwardly commuting.

Where Oakland County Residents Work



Where Oakland County Workers Live



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

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

Job Postings by City

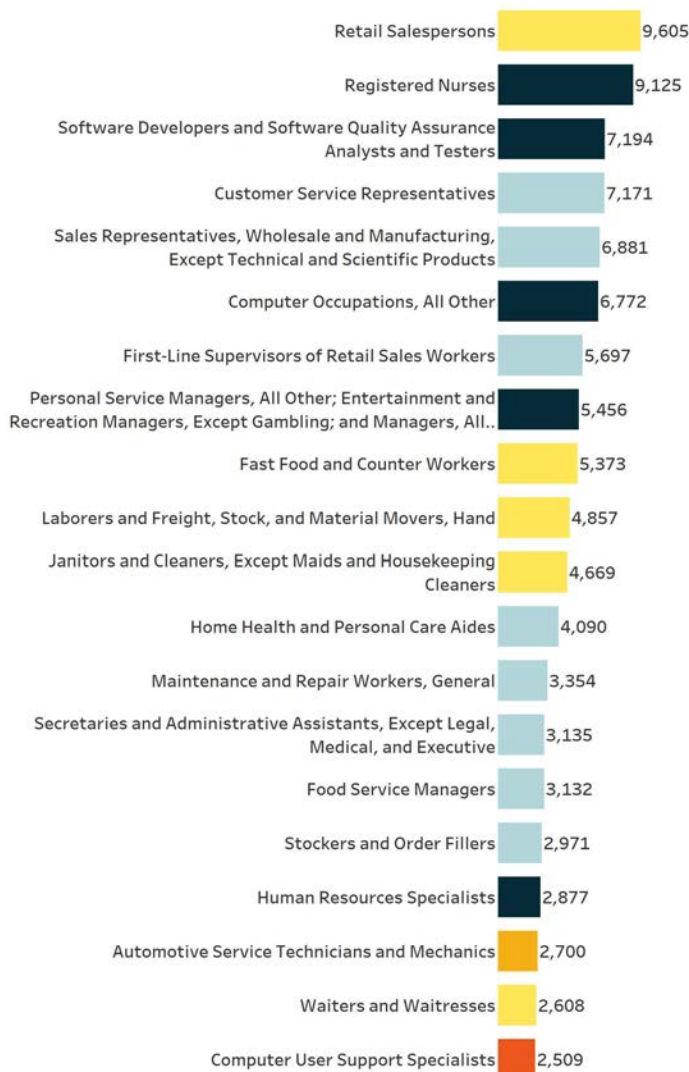
1. Troy: 43,951 Postings
2. Southfield: 32,261 Postings
3. Novi: 24,469 Postings
4. Farmington: 23,101 Postings
5. Auburn Hills: 22,068 Postings
6. Rochester: 17,466 Postings
7. Pontiac: 15,278 Postings
8. Royal Oak: 10,763 Postings
9. Bloomfield Hills: 9,407 Postings
10. Madison Heights: 9,166 Postings



TOP POSTED JOBS

Top Posted Jobs: 2021

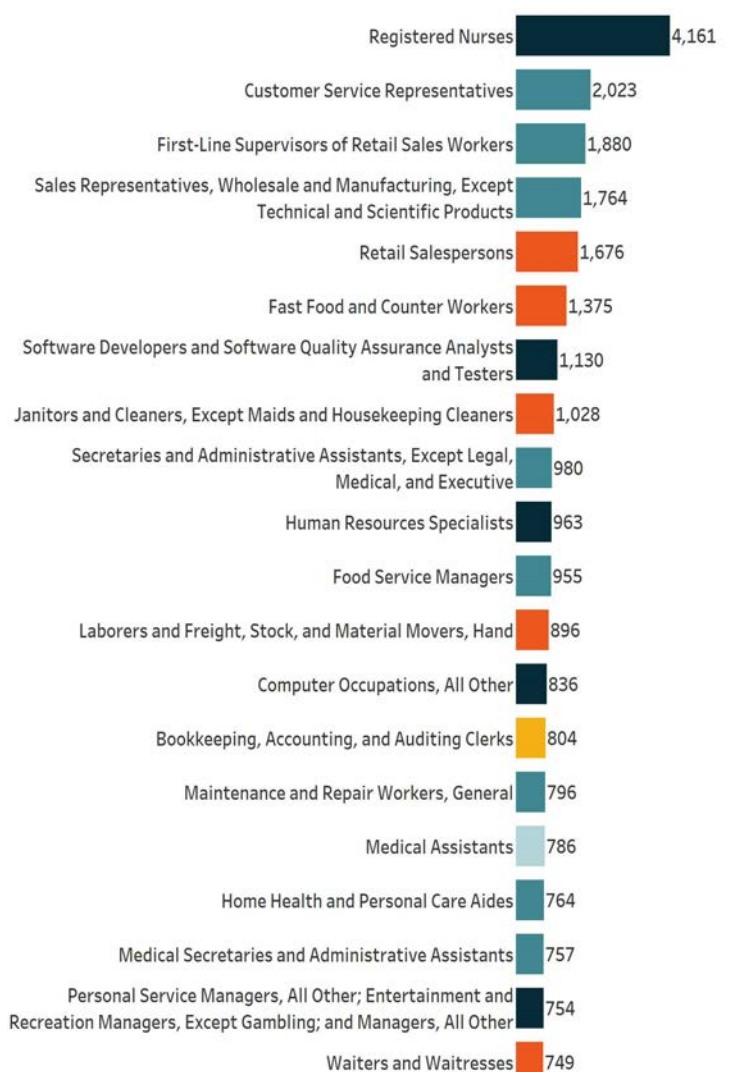
Retail Salespersons is the top posted occupation for 2021, with 9,605 unique online job postings, and requires a high school diploma or equivalent. Registered Nurses (9,125 postings) and Software Developers and Software Quality Assurance Analysts and Testers (7,194 postings) round out the top three demanded occupations, requiring a bachelor's degree for both. Most of the other in-demand jobs require no formal education or a high school diploma or equivalent, coupled with short-term on-the-job training.



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

Top Posted Entry-Level Jobs: 2021

Entry-level jobs, which usually require zero to two years of previous experience, account for 23.0 percent of postings in Oakland 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 39.6 percent of entry-level postings. Registered Nurses was the top posted entry-level occupation with 4,161 postings followed by Customer Service Representatives with 2,023 postings.

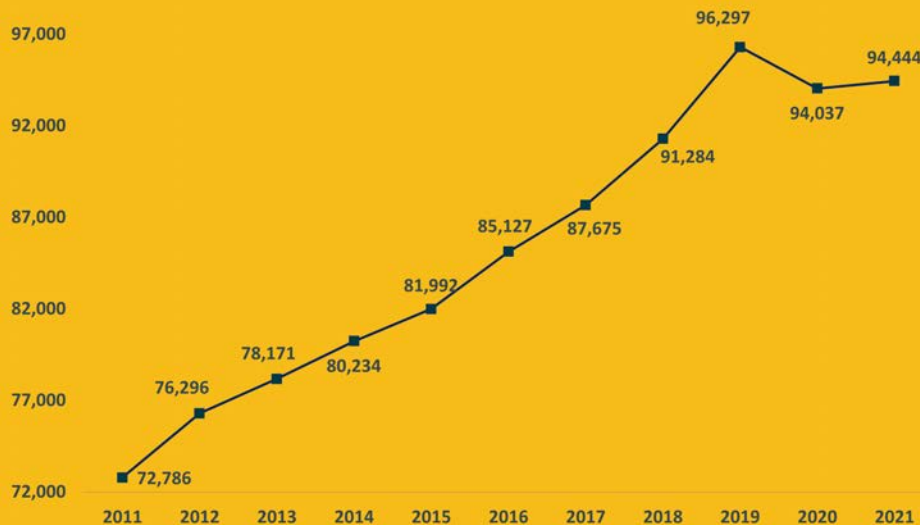


- Bachelor's degree
- High school diploma or equivalent
- No formal educational credential
- Postsecondary nondegree award
- Some college, no degree

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
2011-2021



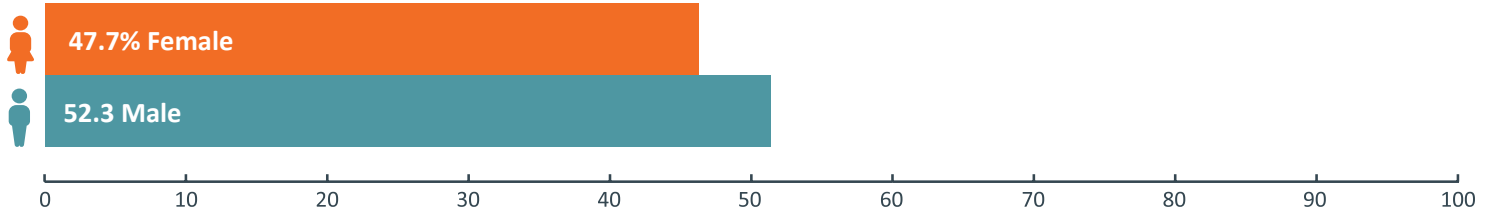
**94,444 Business
and Finance
Workers**
0.4% Increase
from 2020



Business and Finance Worker Demographics

The business and finance occupation group is somewhat diverse in respect to its 94,444 workers. More than half the working population identify as male (52.3 percent), however, 79.5 percent of workers identified as white, indicating much less diversity with respect to race than gender. Only 4.5 percent of the working population in business and finance is under the age of 25, compared to 24.4 percent who are age 55 and older. In some ways, this indicates an aging business and finance workforce, though it also reflects the consistent need for a bachelor's degree in these occupations.

Worker Gender Demographics



Race and Ethnicity Demographics

79.5% White | **11.1% Black or African-American** | **5.1% Asian**

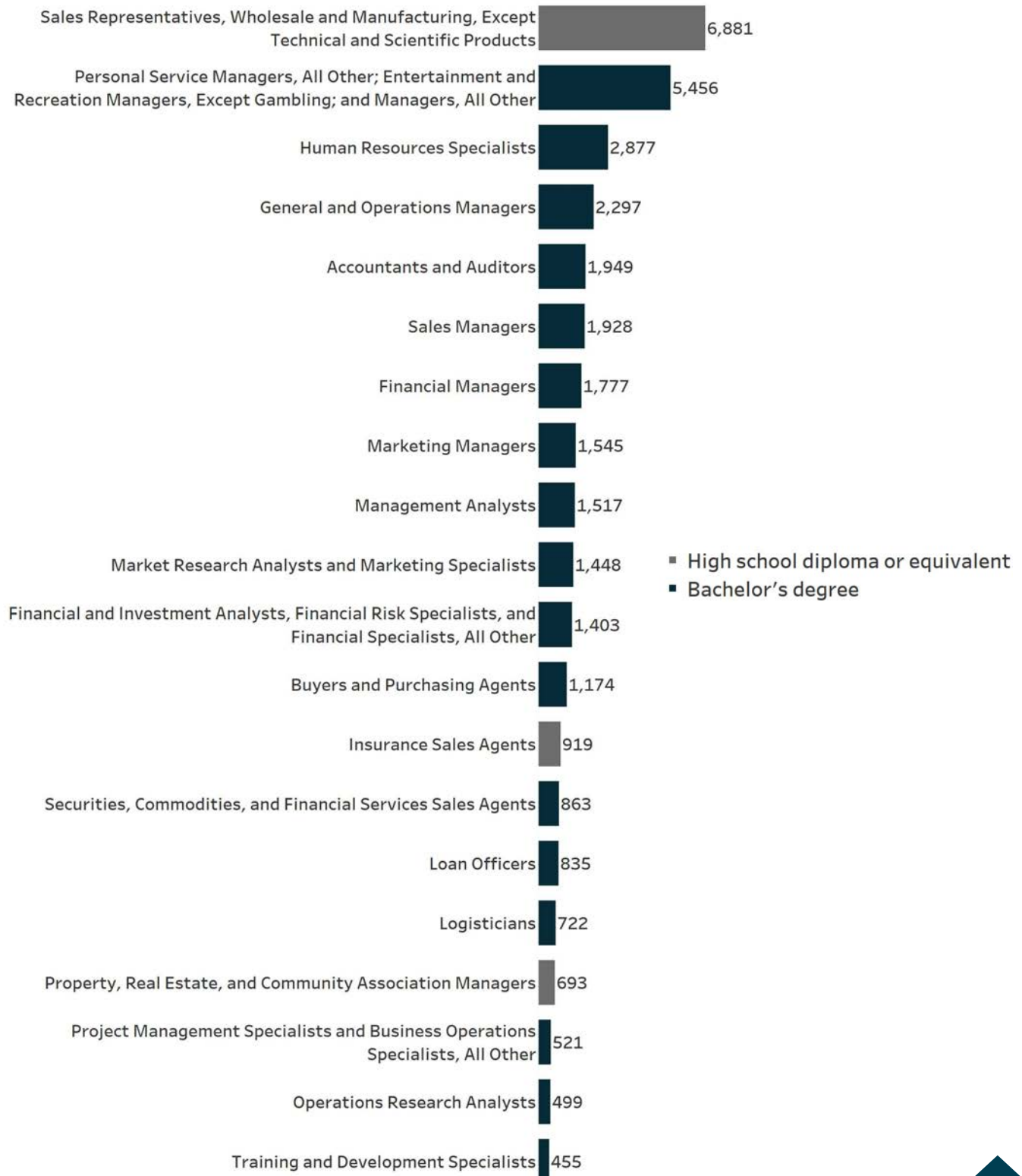
Worker Age Demographics



BUSINESS AND FINANCE OCCUPATION GROUP

Top Posted Jobs

There were 39,978 business and finance postings during 2021. Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products is the top in-demand occupation with 6,881 postings. Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other (5,456 postings) is the second-highest demanded, while Human Resources Specialists (2,877 postings), General and Operations Managers (2,297 postings), and Accountants and Auditors (1,949 postings) round out the top demanded occupations.



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 top posted business and finance job, Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products, offers a median hourly wage of \$35.84, translating to annual earnings of approximately \$74,551. All the top business occupations offer median wages over \$35.00 per hour, and most prefer a bachelor's degree for entry.

Wage Overview for Top Posted Business and Finance Jobs in 2021

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	\$15.22	\$22.52	\$35.84	\$52.62	\$69.79
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	\$30.03	\$41.58	\$55.69	\$70.04	\$89.83
13-1071	Human Resources Specialists	\$17.55	\$22.51	\$29.91	\$39.34	\$50.63
11-1021	General and Operations Managers	\$21.87	\$33.62	\$54.30	\$84.43	\$116.78
13-2011	Accountants and Auditors	\$22.08	\$27.08	\$34.28	\$44.73	\$59.38
11-2022	Sales Managers	\$39.99	\$55.16	\$71.02	\$88.08	\$132.75
11-3031	Financial Managers	\$40.30	\$50.40	\$64.62	\$81.45	\$124.90
11-2021	Marketing Managers	\$36.05	\$49.97	\$65.27	\$81.13	\$114.86
13-1111	Management Analysts	\$28.36	\$34.87	\$43.09	\$53.99	\$67.51
13-1161	Market Research Analysts and Marketing Specialists	\$18.46	\$24.69	\$33.75	\$48.51	\$61.56

In-Demand Technical Skills

- Accounting
- Finance
- Auditing
- Forecasting
- Customer Relationship Management

In-Demand Foundational Skills

- Communications
- Sales
- Management
- Customer Service
- Leadership

In-Demand Certifications

- Certified Public Accountant
- Project Management Professional (PMP)
- Series 7 General Securities Representative License
- Series 6 Investment Company And Variable Contracts License
- Certified Internal Auditor

In-Demand Education Level*

- High School Diploma: 17.5%
- Associate Degree: 6.1%
- Bachelor's Degree: 49.1%
- Master's Degree: 9.3%

**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

- Robert Half
- Kelly Services
- Humana
- Comerica
- Flagstar Bank
- Chrysler
- State Farm
- Beaumont Health
- Ventec
- JPMorgan Chase

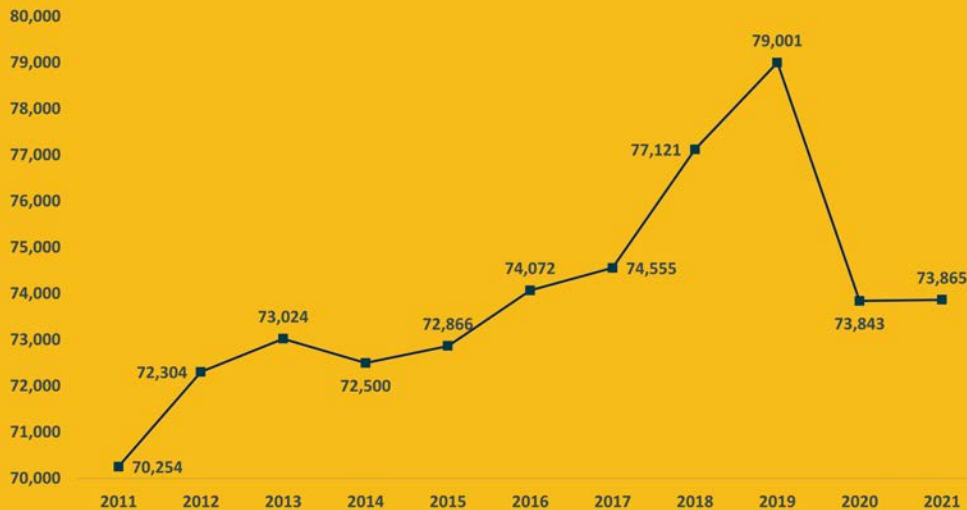
Job Postings by City

- Troy: 9,258 Postings
- Southfield: 6,488 Postings
- Auburn Hills: 3,985 Postings
- Farmington: 3,904 Postings
- Novi: 3,473 Postings
- Rochester: 1,757 Postings
- Pontiac: 1,443 Postings
- Bloomfield Hills: 1,243 Postings
- Royal Oak: 1,098 Postings
- Wixom: 973 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.

Employment Over Time
2011-2021



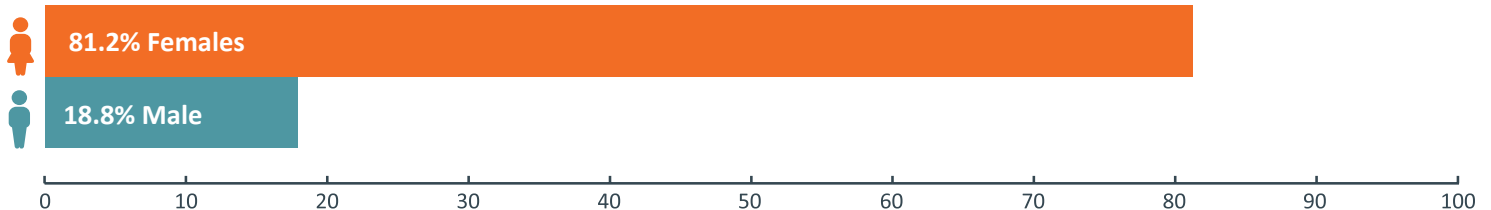
**73,865 Health
Care Workers**
**0.03% Increase
from 2020**



Health Care Worker Demographics

According to 2021 Emsi data, the health care occupation group employed 73,865 workers in Oakland County, who are overwhelmingly female (81.2 percent) and between the ages of 25 and 54 (68.1 percent), although 22.7 percent of workers are over 54. The healthcare occupation group is primarily white in Oakland County, with 65.8 percent of workers identifying as white, 23.4 percent identifying as Black or African American, and 10.5 percent identifying otherwise.

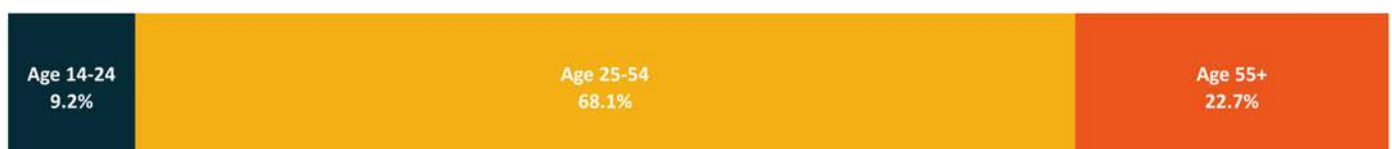
Worker Gender Demographics



Race and Ethnicity Demographics

65.8% White | **23.4% Black or African-American** | **6.0% Asian**

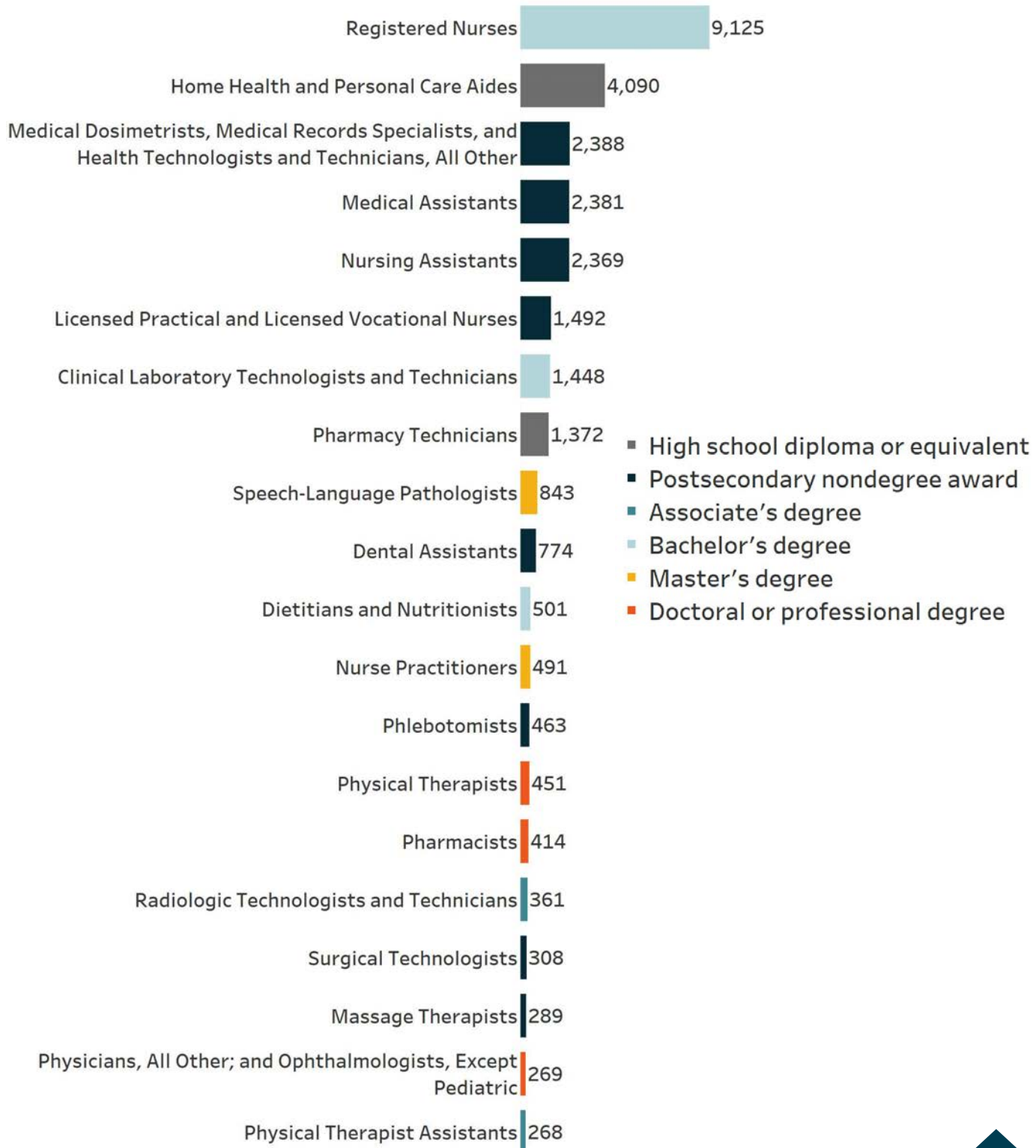
Worker Age Demographics



HEALTH CARE OCCUPATION GROUP

Top Posted Jobs

Registered Nurses was the highest in-demand health care occupation throughout 2021, with 9,125 postings. Other top posted jobs include Home Health and Personal Care Aides (4,090 postings), Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other (2,388 postings), Medical Assistants (2,381 postings), and Nursing Assistants (2,369 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 (1,372 postings), only require a high school diploma or equivalent, coupled with short to moderate-term on-the-job training.



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 \$36.60 per hour or an annual salary of about \$76,118.

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	\$27.47	\$31.08	\$36.60	\$42.48	\$48.77
31-1128	Home Health and Personal Care Aides	\$9.96	\$10.75	\$11.75	\$13.58	\$15.65
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	\$13.93	\$16.65	\$20.75	\$27.85	\$34.63
31-9092	Medical Assistants	\$13.73	\$15.46	\$17.71	\$19.71	\$22.52
31-1131	Nursing Assistants	\$12.57	\$13.78	\$15.59	\$17.94	\$19.50
29-2061	Licensed Practical and Licensed Vocational Nurses	\$21.47	\$24.73	\$27.70	\$30.38	\$32.20
29-2018	Clinical Laboratory Technologists and Technicians	\$14.82	\$17.86	\$26.97	\$34.27	\$38.63
29-2052	Pharmacy Technicians	\$11.80	\$14.14	\$17.29	\$20.34	\$23.88
29-1127	Speech-Language Pathologists	\$23.27	\$32.12	\$38.16	\$46.73	\$54.01
31-9091	Dental Assistants	\$13.92	\$16.07	\$18.81	\$21.89	\$25.67

In-Demand Technical Skills

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

In-Demand Foundational Skills

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

In-Demand Certifications

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

In-Demand Education Level*

- High School Diploma: 32.5%
- Associate Degree: 29.2%
- Bachelor's Degree: 11.3%
- Master's Degree: 5.5%

**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

- Ascension
- Beaumont Health
- Henry Ford Health System
- Trinity Health
- CVS Health
- McLaren Health Care
- DMC Huron Valley-Sinai Hospital
- Sunbelt Staffing
- Tenet Healthcare
- HCR ManorCare

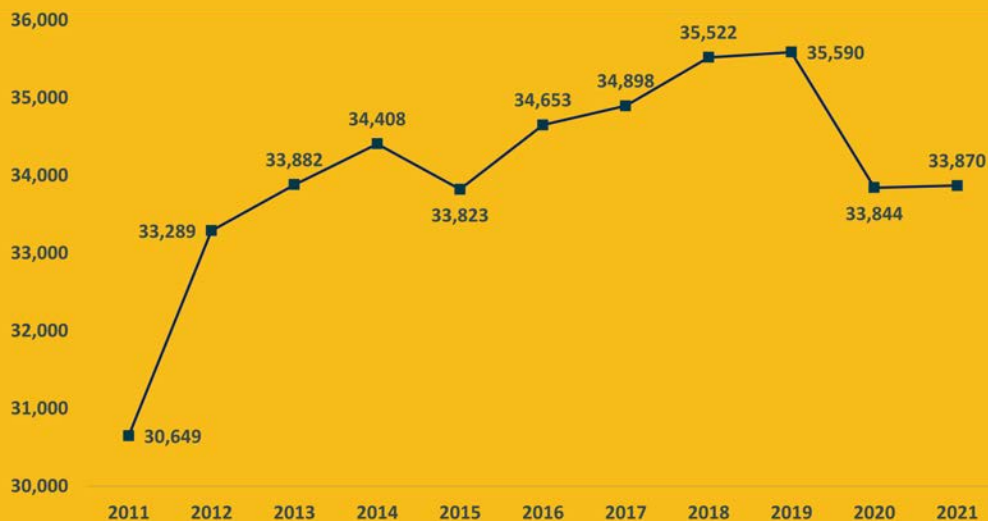
Job Postings by City

1. Southfield: 4,820 Postings
2. Pontiac: 3,889 Postings
3. Troy: 3,805 Postings
4. Rochester: 2,987 Postings
5. Novi: 2,862 Postings
6. Farmington: 2,749 Postings
7. Royal Oak: 2,723 Postings
8. West Bloomfield: 1,655 Postings
9. Bloomfield Hills: 1,178 Postings
10. Commerce Township: 1,066 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
2011-2021



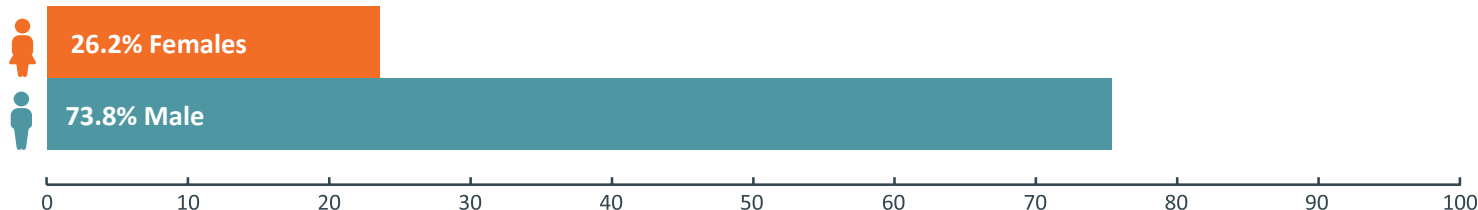
**33,870 Information
Technology
Workers**
**0.1% Increase from
2020**



Information Technology Worker Demographics

According to 2021 Emsi data, Oakland County has 33,870 IT workers. The workforce is not too diverse, with most workers identifying as male (73.8 percent) between the ages of 25 and 54 (79.3 percent). About 62.4 percent of the workforce identify as white, with workers who identify as Asian, make up 23.6 percent of the workforce. Workers aged 55 years and older account for 15.9 percent, while only 4.7 percent are 24 years old or younger.

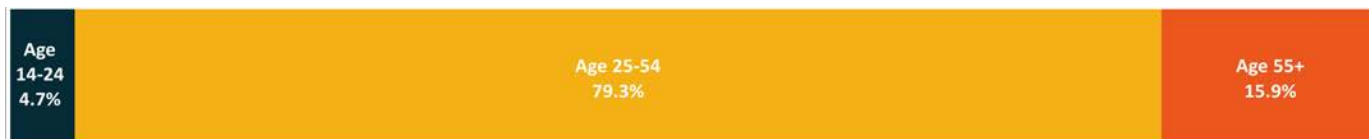
Worker Gender Demographics



Race and Ethnicity Demographics

62.4% White | 23.6% Asian | 10.0% Black or African-American

Worker Age Demographics

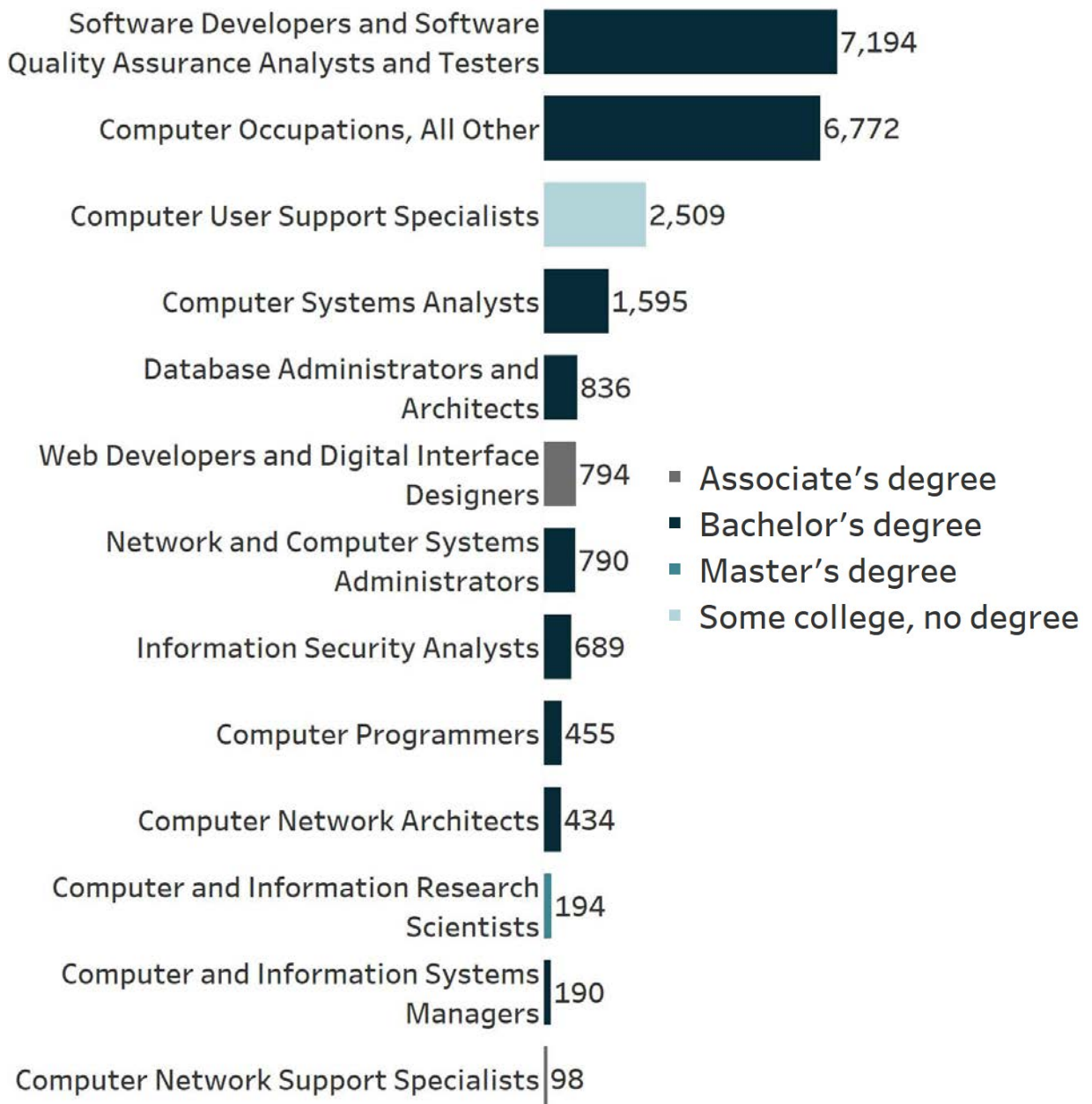


Data: Emsi | Analysis: Workforce Intelligence Network

INFORMATION TECHNOLOGY OCCUPATION GROUP

Top Posted Jobs

In 2021, there were 22,550 postings for IT workers in Oakland County. Software Developers and Software Quality Assurance Analysts and Testers were the most in-demand occupation with 7,194 postings, closely followed by Computer Occupations, All Other, with 6,772 postings. Computer User Support Specialists (2,509 postings), Computer Systems Analysts (1,595 postings), and Database Administrators and Architects (836 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 \$44.63 per hour or almost \$92,836 per year. Computer and Information Systems Managers earn the highest median wage at \$65.58 per hour or nearly \$136,407 per year. Other occupations that have fewer qualifications, such as Computer User Support Specialists and Web Developers and Digital Interface Designers, make over \$19.00 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	\$27.61	\$35.21	\$44.63	\$55.39	\$64.50
15-1299	Computer Occupations, All Other	\$20.50	\$28.32	\$39.35	\$50.58	\$61.20
15-1232	Computer User Support Specialists	\$14.52	\$16.74	\$19.97	\$27.43	\$34.43
15-1211	Computer Systems Analysts	\$29.96	\$36.51	\$45.90	\$57.47	\$69.38
15-1245	Database Administrators and Architects	\$25.89	\$31.74	\$44.87	\$56.86	\$64.81
15-1257	Web Developers and Digital Interface Designers	\$17.80	\$25.21	\$34.78	\$43.73	\$52.98
15-1244	Network and Computer Systems Administrators	\$25.99	\$32.80	\$40.01	\$48.98	\$58.48
15-1212	Information Security Analysts	\$28.30	\$36.25	\$46.34	\$57.29	\$66.58
15-1251	Computer Programmers	\$20.45	\$24.42	\$34.67	\$45.53	\$56.20
15-1241	Computer Network Architects	\$28.83	\$42.13	\$55.04	\$66.23	\$78.03

In-Demand Technical Skills

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

In-Demand Foundational Skills

- Communications
- Management
- Problem Solving
- Troubleshooting
- Leadership

In-Demand Certifications

- Project Management Professional
- Certified Information Systems Security Professional
- Cisco Certified Network Associate
- Microsoft Certified Professional
- CompTIA Network+

In-Demand Education Level*

- High School Diploma: 77.0%
- Associate Degree: 4.7%
- Bachelor's Degree: 46.7%
- Master's Degree: 14.3%

**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

- Humana
- General Motors
- Robert Half
- Chrysler
- United Wholesale Mortgage
- Comerica
- V2Soft
- Randstad
- TEKsystems
- Cynet Systems

Job Postings by City

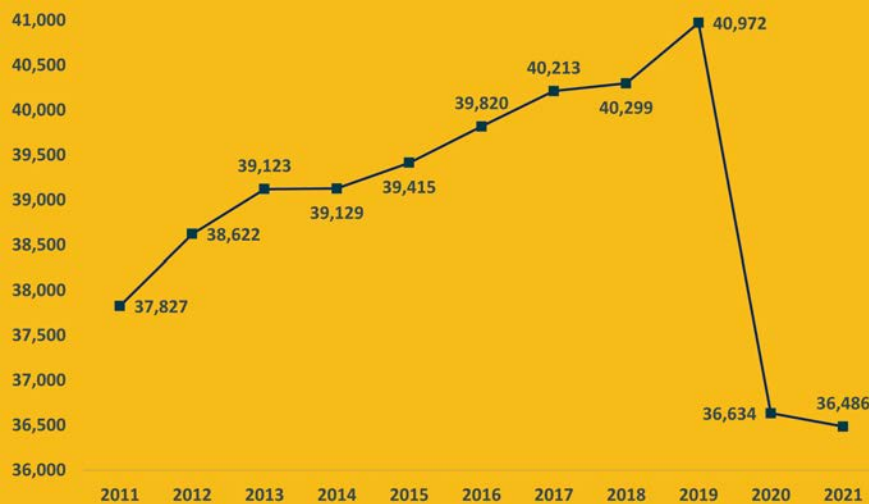
- Troy: 5,238 Postings
- Auburn Hills: 4,096 Postings
- Southfield: 4,091 Postings
- Farmington: 2,723 Postings
- Novi: 1,833 Postings
- Pontiac: 1,016 Postings
- Rochester: 569 Postings
- Milford: 479 Postings
- Wixom: 398 Postings
- Bloomfield Hills: 335 Postings

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.

Employment Over Time
2011-2021

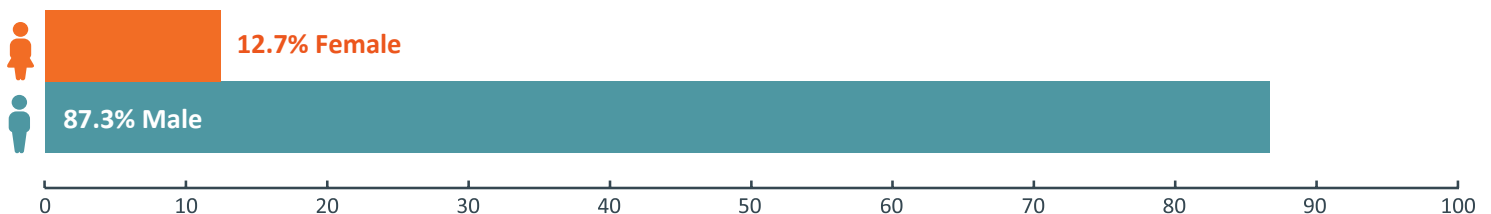


**36,486 Skilled
Trades Workers**
0.4% Decrease
from 2020

Skilled Trades Worker Demographics

According to 2021 Emsi data, the skilled trades occupation group employed about 36,486 workers in Oakland County. The majority of skilled trades workers are male (87.3 percent) between the ages of 25 and 54 (66.1 percent). Due to the aging workforce, additional outreach will be necessary as 27.7 percent are 55 years of age or older.

Worker Gender Demographics



Race and Ethnicity Demographics

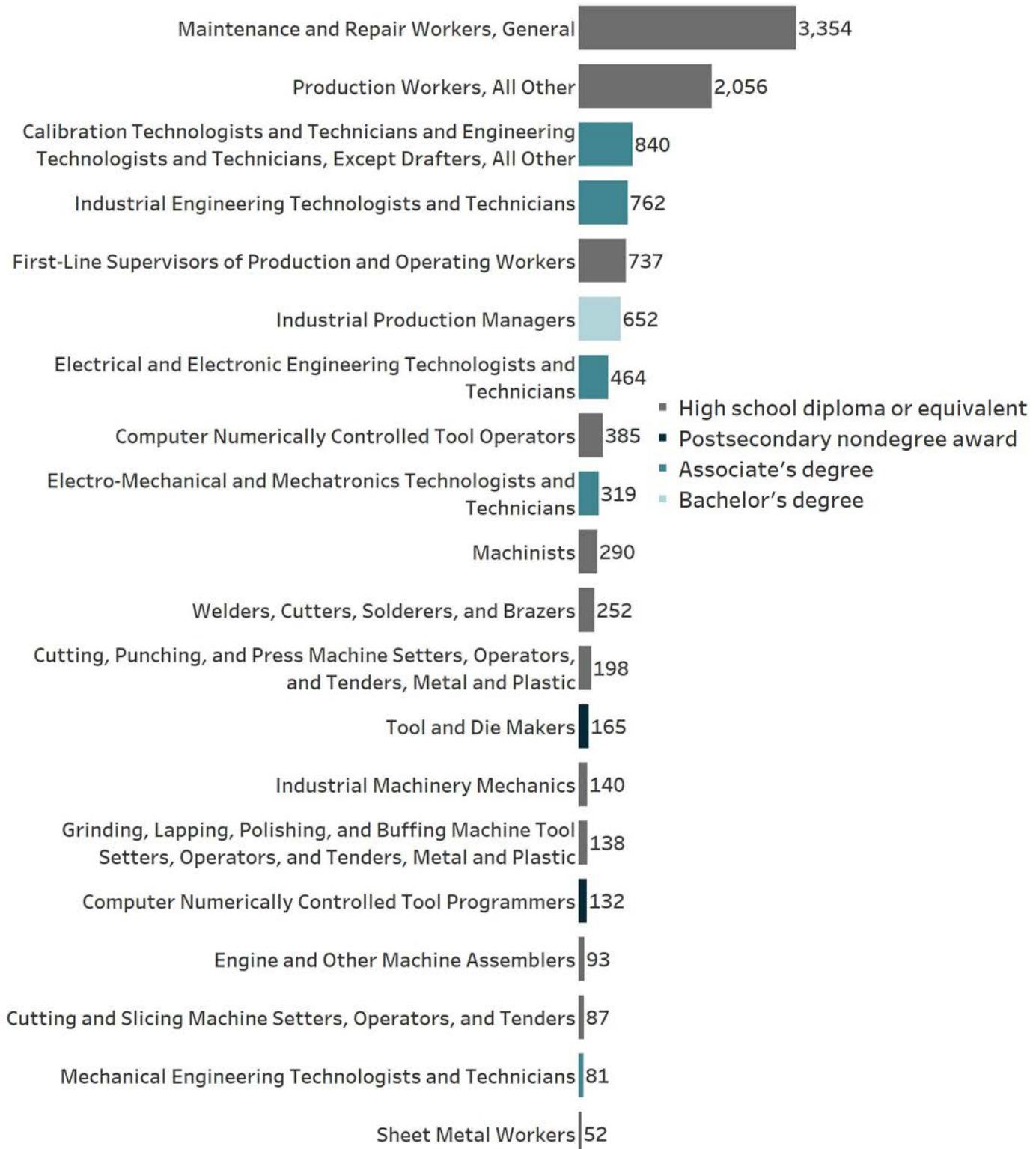
77.8% White | 12.4 Black or African-American | 4.5% Hispanic or Latino

Worker Age Demographics



SKILLED TRADES AND TECHNICIANS OCCUPATION GROUP

Maintenance and Repair Workers, General was the highest in-demand skilled trades occupation during 2021, with 3,354 postings. Other top posted jobs include Production Workers, All Other (2,056 postings), Calibration Technologists and Technicians and Engineering Technologists and Technicians, Except Drafters, All Other (840 postings), Industrial Engineering Technologists and Technicians (762 postings), and First-Line Supervisors of Production and Operating Workers (737 postings).



SKILLED TRADES AND TECHNICIANS OCCUPATION GROUP

Wage Overview

All the top ten in-demand skilled trades occupations have median wages above \$15.00 per hour. Maintenance and Repair Workers, General, the top posted skilled trades job in 2021, offers a median hourly wage of \$19.45, which translates to an annual salary of about \$40,448. With additional training and experience, occupations such as Industrial Production Managers earn a median wage of \$59.73 or \$124,238 annually.

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	\$13.10	\$15.91	\$19.45	\$25.63	\$31.75
51-9199	Production Workers, All Other	\$11.74	\$13.20	\$15.84	\$20.66	\$27.33
17-3098	Calibration Technologists and Technicians and Engineering Technologists and Technicians, Except Drafters, All Other	\$17.81	\$24.06	\$35.59	\$44.53	\$52.54
17-3026	Industrial Engineering Technologists and Technicians	\$20.70	\$25.02	\$30.46	\$37.92	\$45.15
51-1011	First-Line Supervisors of Production and Operating Workers	\$20.86	\$26.49	\$34.81	\$44.49	\$56.08
11-3051	Industrial Production Managers	\$35.86	\$46.54	\$59.73	\$75.46	\$93.86
17-3023	Electrical and Electronic Engineering Technologists and Technicians	\$19.57	\$24.62	\$30.74	\$35.44	\$40.04
51-9161	Computer Numerically Controlled Tool Operators	\$13.97	\$16.34	\$21.73	\$28.76	\$33.17
17-3024	Electro-Mechanical and Mechatronics Technologists and Technicians	\$18.19	\$21.34	\$25.31	\$33.26	\$38.82
51-4041	Machinists	\$15.06	\$18.81	\$23.93	\$30.03	\$35.34

In-Demand Technical Skills

- Plumbing
- HVAC
- Machine Operation
- Machinery
- Machining

In-Demand Foundational Skills

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

In-Demand Certifications

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

In-Demand Education Level*

- High School Diploma: 40.2%
- Associate Degree: 11.8%
- Bachelor's Degree: 10.6%
- Master's Degree: 1.7%

**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

- Aerotek
- Sentech Services
- Nesco Resource
- General Motors
- ManpowerGroup
- Randstad
- Edward Rose & Sons
- Kelly Services
- McDonald's
- The Salvation Army

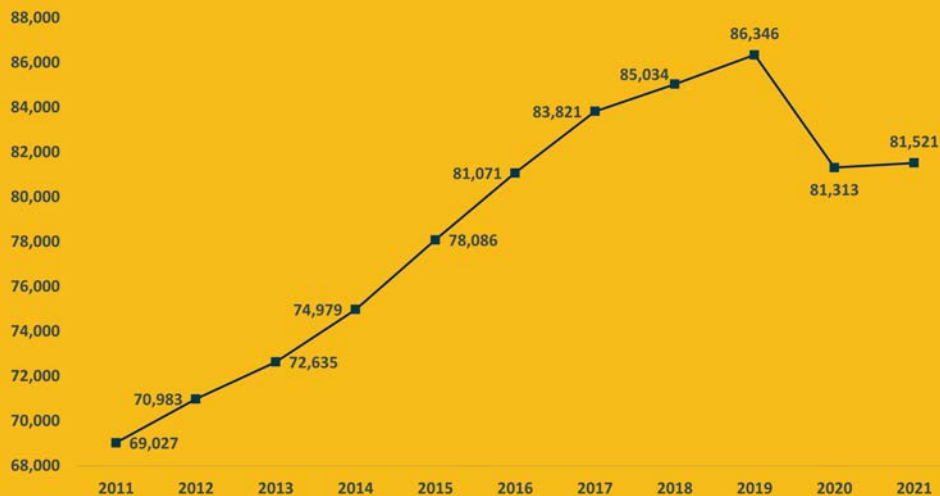
Job Postings by City

1. Troy: 1,550 Postings
2. Auburn Hills: 1,523 Postings
3. Novi: 1,013 Postings
4. Pontiac: 940 Postings
5. Farmington: 874 Postings
6. Southfield: 812 Postings
7. Wixom: 797 Postings
8. Rochester: 755 Postings
9. Madison Heights: 611 Postings
10. Royal Oak: 329 Postings

TRANSPORTATION, DISTRIBUTION, AND LOGISTICS OCCUPATION GROUP

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

Employment Over Time
2011-2021



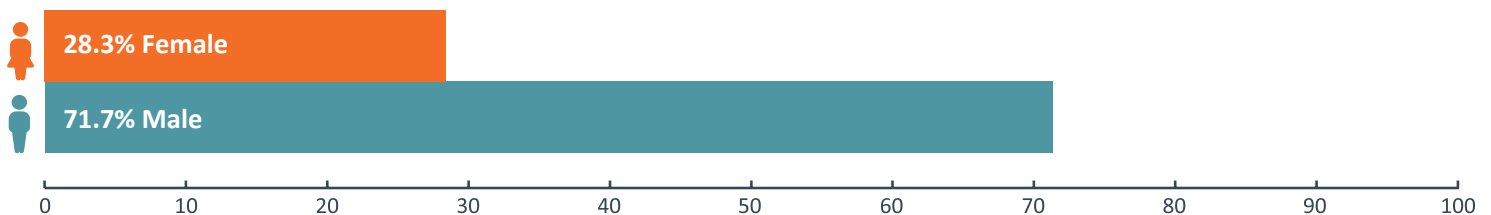
81,521 TDL Workers
0.3% Increase from 2020



TDL Worker Demographics

The TDL occupation group has a large workforce, employing 81,521 individuals in 2021. These workers are 71.7 percent male and 69.7 percent white. The majority, or 64.1 percent of the workforce are between the ages of 25 through 54 years of age.

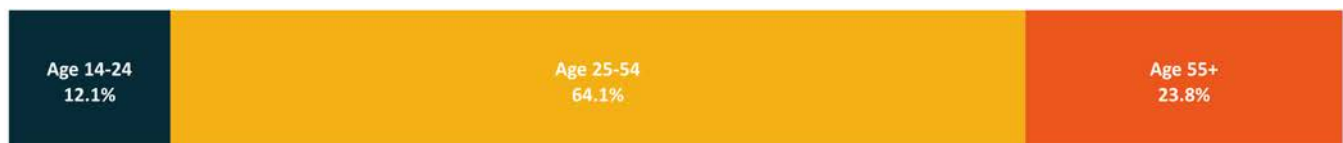
Worker Gender Demographics



Race and Ethnicity Demographics

69.7% White | 20.1% Black or African-American | 4.8% Hispanic or Latino

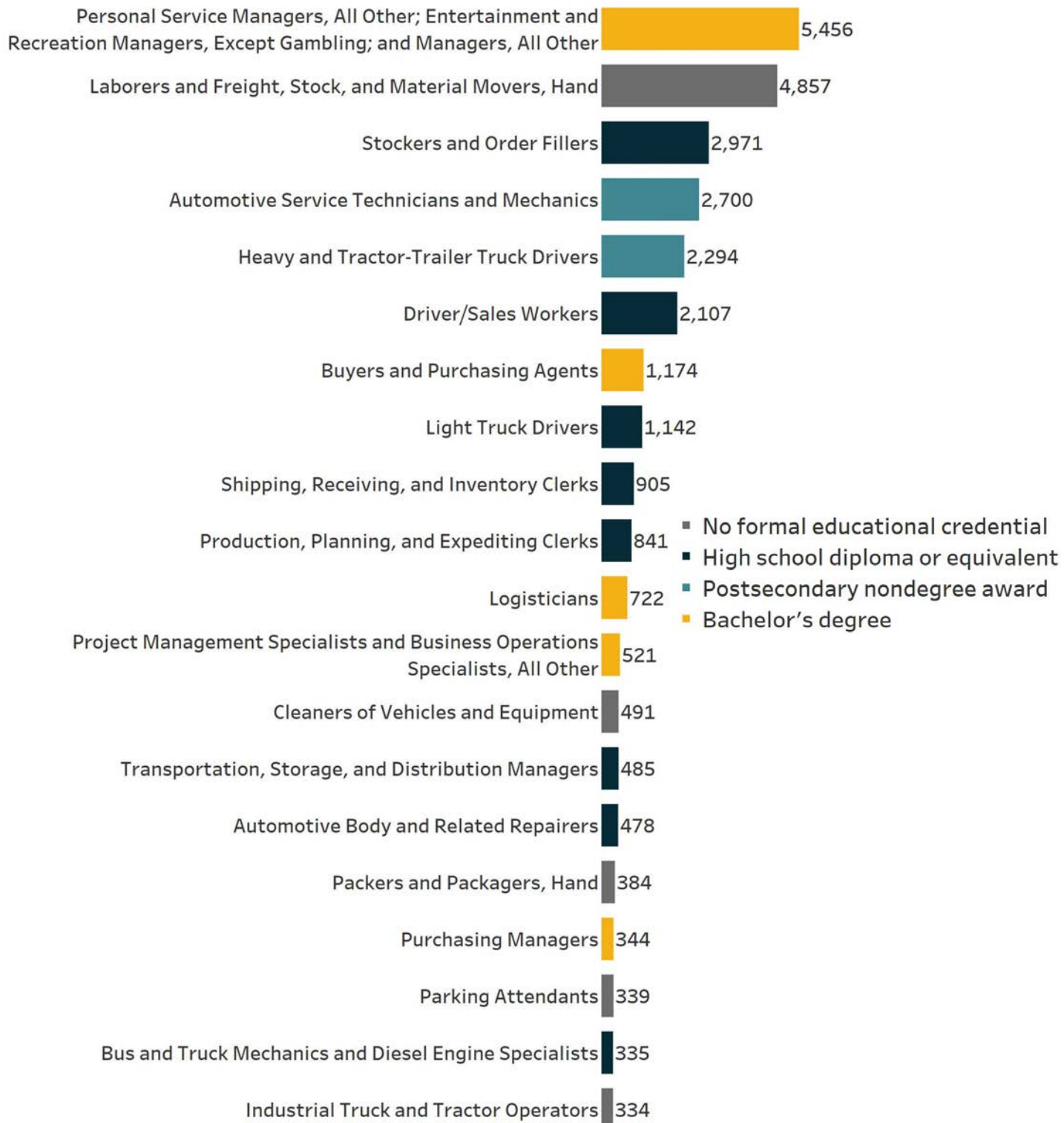
Worker Age Demographics



TRANSPORTATION, DISTRIBUTION, AND LOGISTICS OCCUPATION GROUP

Top Posted Jobs

Demand for TDL occupations totaled 32,454 postings in 2021. Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other was the highest in-demand TDL occupation, with 5,456 postings. Other top posted jobs include Laborers and Freight, Stock, and Material Movers, Hand (4,857 postings), Stockers and Order Fillers (2,971 postings), Automotive Service Technicians and Mechanics (2,700 postings), and Heavy and Tractor-Trailer Truck Drivers (2,294 postings).



TRANSPORTATION, DISTRIBUTION, AND LOGISTICS OCCUPATION GROUP

Wage Overview

All the top ten in-demand TDL occupations offer median wages above \$15.00 per hour. Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other, the top posted TDL job, pays a median hourly wage of \$55.69, or an annual salary of nearly \$115,833. Roles that require additional education and experience, such as Buyers and Purchasing Agents, typically offer wages over \$30.00 per hour.

Wage Overview for Top Posted TDL Jobs in 2021

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	\$30.03	\$41.58	\$55.69	\$70.04	\$89.83
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$12.12	\$14.00	\$16.40	\$20.40	\$25.06
53-7065	Stockers and Order Fillers	\$11.41	\$12.90	\$15.48	\$19.94	\$28.74
49-3023	Automotive Service Technicians and Mechanics	\$11.36	\$14.08	\$22.35	\$30.38	\$38.56
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$14.33	\$17.89	\$22.72	\$27.13	\$32.00
53-3031	Driver/Sales Workers	\$10.77	\$11.72	\$15.23	\$22.57	\$26.46
13-1028	Buyers and Purchasing Agents	\$20.97	\$26.47	\$34.39	\$45.43	\$55.64
53-3033	Light Truck Drivers	\$11.27	\$13.05	\$18.91	\$27.21	\$36.74
43-5071	Shipping, Receiving, and Inventory Clerks	\$13.06	\$14.81	\$17.74	\$21.24	\$26.54
43-5061	Production, Planning, and Expediting Clerks	\$16.57	\$22.15	\$28.56	\$34.36	\$39.70

In-Demand Technical Skills

- Warehousing
- Merchandising
- Purchasing
- Palletizing
- Forklift Truck

In-Demand Foundational Skills

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

In-Demand Certifications

- Commercial Driver's License (CDL)
- Project Management Professional
- Automotive Service Excellence (ASE) Certification
- CDL Class B License
- Certified Forklift Operator

In-Demand Education Level*

- High School Diploma: 30.9%
- Associate Degree: 5.2%
- Bachelor's Degree: 18.5%
- Master's Degree: 4.2%

**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

- Amazon
- Chrysler
- Kroger
- The Home Depot
- General Motors
- UPS
- Kelly Services
- Adecco
- FedEx
- Aerotek

Job Postings by City

1. Troy: 4,526 Postings
2. Auburn Hills: 3,167 Postings
3. Novi: 3,091 Postings
4. Southfield: 2,854 Postings
5. Farmington: 2,689 Postings
6. Pontiac: 1,979 Postings
7. Rochester: 1,866 Postings
8. Madison Heights: 1,442 Postings
9. Wixom: 1,329 Postings
10. Royal Oak: 1,069 Postings

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