

#### **Report Contents**

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

#### **Occupation Groups**

- 11 Business and Finance
- 14 Energy
- 17 Health Care
- 20 Information Technology
- 23 Skilled Trades and Technicians

#### **About This Report**

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

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

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

This report analyzes data from the first quarter of 2020 in the City of Detroit and includes comparison analysis to the fourth quarter of 2019. For the City of Detroit, the business and finance, energy, health care, information technology, and skilled trades and technician's occupation groups are analyzed.

For more information pertaining to the labor market in southeast Michigan, the custom occupation groups within this report, or any other workforce-related data projects, please visit www.WINintelligence.org or contact the data and research team directly at research@WINintelligence.org. For more information about jobseeker resources and our partners, please visit www.micareertraining.org.



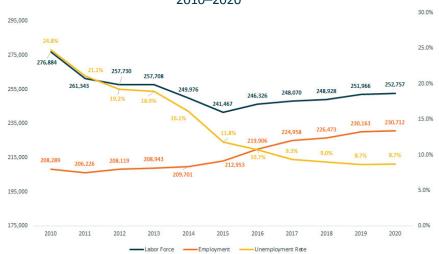
#### State of the Labor Market in the City of Detroit

During the first quarter of 2020 year-to-date (YTD), the labor force and employment has increased since annual 2019 by 0.3 percent and 0.2 percent respectively. The first quarter labor force numbers are a slight increase since Q4 2019, by 2,315 workers or 0.9 percent. The Q2 2020 labor market report will better show the impact of COVID-19 on Detroit's workforce. This quarter, the labor force increased by 0.9 percent, a 2,315-worker rise from Q4 2019. Comparatively, employment in Detroit decreased by 0.4 percent, or a 948 worker drop in employment compared to Q4 2019. In Q1 2020, the unemployment rate grew by 1.2 percentage points to 8.7 percent, compared to the 7.5 percent reported in Q4 2019. Employer demand for health care workers is still on the rise among the five key groups analyzed for the city, with 10,183 job postings during Q1 2020. Registered Nurses have remained the top demanded occupation, accounting for 5,875 postings in Q1.

## Annual Labor Market Information

The labor force in Detroit continues to grow, increasing by 791 individuals between 2019 annual figures and the 2020 YTD levels through March 2020. Employment increased by 549 workers between 2019 and YTD 2020. Despite the employment, decrease in unemployment rate has remained the same since annual 2019. The 2019 annual unemployment rate of 8.7 percent remained constant into Q1 2020, while unemployment slightly grew from 21,804 to 22,046 in YTD 2020, a 242-worker increase since annual 2019.

### Annual Labor Force, Employment, Unemployment Rate 2010–2020

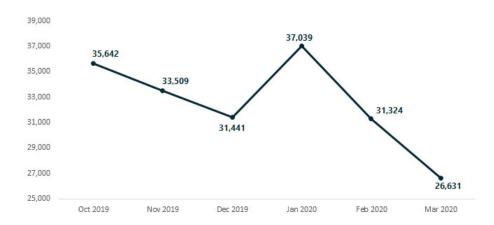


Data: BLS | Analysis: Workforce Intelligence Network

## **Quarterly Employer Demand Overview**

Data obtained YTD for the first quarter of 2020 indicates that employer demand has decreased since the end of Q4 2019. In Q1 2020, there were 54,927 unique postings in the city of Detroit, a decrease of 850 postings since Q4 2019. Monthly posting data indicate a steady decrease in postings during the beginning of 2020, which is typical during Q1 from year to year.

#### Monthly Posting Analysis, Detroit Q1 2020



Data: Emsi | Analysis: Workforce Intelligence Network

# QUARTERLY WORKFORCE INDICATORS City of Detroit | Key Findings for Q1 2020

Employer demand declines by 1.5 percent, a loss of 850 job postings since Q4 2019. Health Care remains the top postings occupation group through Q1 2020 with 10,183 postings.

During Q1 2020, there were 54,927 job postings, 850 less of the 55,777 postings made during Q4 2019 in the city of Detroit. The top posted job titles this quarter include Registered Nurses, Truck Drivers, Travel Nurses-Medical/Surgical, Software Engineers, and Sales Representatives. There are 7,198 more postings in Q1 2020 than in Q1 2019. Energy employers posted 22.5 percent, or 33 more advertisements in Q1 2020 than Q1 2019, with top job Electrical Engineers accounting for 30.1 percent of the new postings. For more information about quarterly job postings, see page 8.

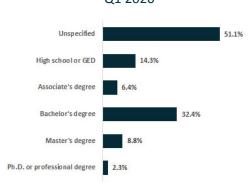
**Top 5 Posting Occupation Groups**O1 2020



Job postings made by employers in the city of Detroit indicate a bachelor's degree remains the most in-demand minimum education level during Q1 2020.

Of the 54,927 unique postings in the city of Detroit during Q1 2020, 21,313 (38.8 percent) required a college degree. An additional 6,078 postings (11.1 percent) required an advanced degree. The high demand for business and finance and information technology roles within the city, drives this high demand for college education.

#### Education Levels In-Demand Q1 2020



Quarterly Labor Market Data

	1st Quarter 2019	2nd Quarter 2019		4th Quarter 2019	1st Quarter 2020	Change from 4th Quarter 2019	Percent Change from 4th Quarter 2019	Change from 1st Quarter 2019	Percent Change from 1st Quarter 2019
Labor Force	251,305	249,998	256,121	250,442	252,757	2,315	0.9%	1,453	0.6%
Employment	229,300	228,255	231,435	231,660	230,712	-948	-0.4%	1,412	0.6%
Unemployment	22,005	21,743	24,686	18,782	22,046	3,264	17.4%	41	0.2%
Unemployment Rate	8.8%	8.7%	9.6%	7.5%	8.7%	1.2%	na	0.0%	na

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

#### Employment in the City of Detroit decreased in Q1 2020 by 948 workers.

Following growth fluctuations in the labor force through 2019, during the first quarter, participation increased slightly. During Q1 2020, labor force figures were up 2,315 individuals from 250,442 reported in Q4, or a 0.9 percent increase. Despite this growth in the labor force during Q1 2020, employment decreased by 948 workers, a decline of 0.4 percent. As a result of the employment drop and the growth in the labor force, unemployment for the city of Detroit rose by 3,264 workers, a 17.4 percent increase since Q4 2019. Through these shifts since Q4 2019, the unemployment rate has remained constant at 8.7 percent in to Q1 2020. For more information about this year's unemployment rate and other labor market indicators, see page 4.

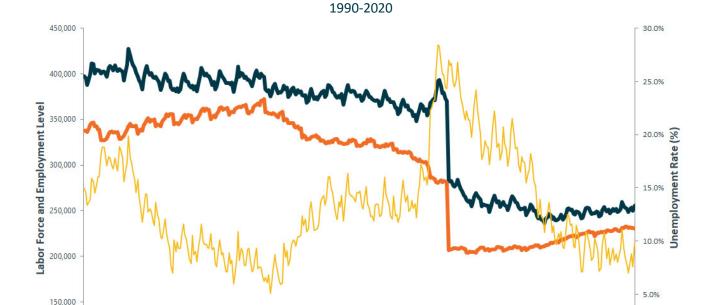
abor Force

100,000

#### Labor Force, Employment, and Unemployment

The labor force in the city of Detroit has been growing steadily year over year since 2015, though there is still fluctuation between quarters since 2010. The labor force recorded an increase of 2,315 individuals from 250,442 individuals in Q4 2019 to 252,757 individuals in Q1 2020, or 0.9 percent. Employment in Detroit has been on the rise since 2011, although Q1 2020 saw a decrease of 948 workers from 231,660 in Q4 2019 to 230,712 workers in Q1 2020. Meanwhile, the number of unemployed individuals for the city of Detroit grew by 3,264 workers, or 17.4 percent, between Q4 2019 and Q1 2020. The unemployment rate increased by 1.2 percentage points, leading to a Q1 2020 unemployment rate of 8.7 percent, up from 7.5 percent in Q4 2019.

Labor Force, Employment, Unemployment Rate



Data: BLS | Analysis: Workforce Intelligence Network

Unemployment Rate

#### Annual Labor Market Data 2010 - 2020

Employment

| 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 | 2020 |

	2010 Annual	2011 Annual	2012 Annual	2013 Annual	2014 Annual	2015 Annual	2016 Annual	2017 Annual	2018 Annual	2019 Annual	2020 YTD	Change from 2019	Percent Change from 2019
Labor Force	276,884	261,343	257,730	257,708	249,976	241,467	246,326	248,070	248,928	251,966	252,757	791	0.3%
Employment	208,289	206,226	208,119	208,943	209,701	212,953	219,906	224,958	226,473	230,163	230,712	549	0.2%
Unemployment	68,596	55,117	49,611	48,765	40,275	28,514	26,420	23,112	22,454	21,804	22,046	242	1.1%
Unemployment Rate	24.8%	21.1%	19.2%	18.9%	16.1%	11.8%	10.7%	9.3%	9.0%	8.7%	8.7%	0.1%	na

Data: Bureau of Labor Statistics

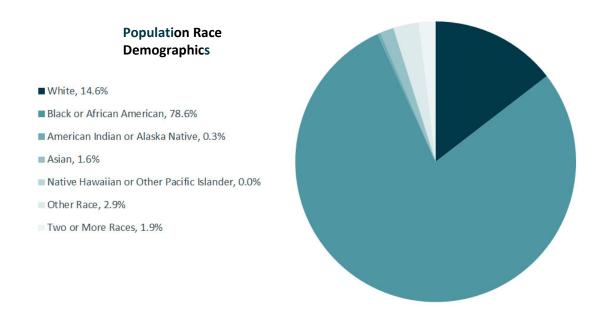
#### **Population Demographics**

According to the data from the Census Bureaus' most recent 2018 ACS Five Year estimates, during 2018, 677,155 people were living in the city of Detroit. The sex of the populace was split almost evenly, with about 52.7 percent of the population identifying as female, and the other 47.3 percent identifying as male. Much of the population identified as black or African American (78.6 percent) with the second largest number of individuals identifying as white (14.6 percent). The city skews younger than the surrounding region; 25.7 percent of population was over the age of 55, compared to 35.8 percent under the age of 25. The city of Detroit also has a strong middle aged population between the ages of 25-54, accounting for 38.4 percent of the total population.

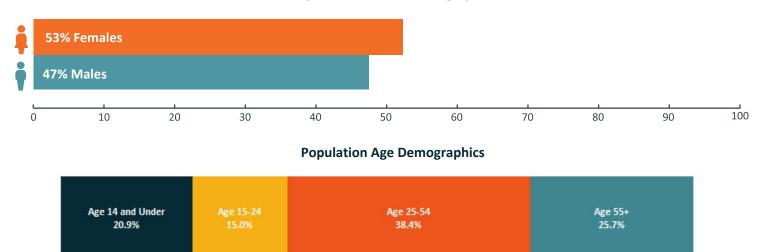


**677,155** People in the City

0.4% Decrease from 2017



#### **Population Gender Demographics**



#### **Labor Market Demographics**

During 2018, the most recent census year, there were about 526,251 people in the labor force, either working or looking for work, in the city of Detroit. Resident employment in the city totals 234,658 workers or just under half, 44.6 percent, of the total labor force in Detroit. The highest unemployment rates in 2018 were seen in those aged 24 years old or younger, accounting for an unemployment rate of 70.4 percent for males and 64.3 percent for females. Overall, males in the city of Detroit have a higher unemployment rate than females, with 19.0 percent and 15.8 percent respectively, for 2018. Black or African American job seekers have a difficult time finding employment, facing an unemployment rate of 19.3 percent. Native American job seekers also face difficulty, with an unemployment rate of 17.8 percent.

Civilian Labor Force by Demographic Group										
	Civilian Labor	Total	Total	Unemployment						
Demographic Group	Force	Employment	Unemployment	Rate						
Total Population 16 +	526,251	234,659	49,168	9.3%						
Sex										
Male 16+	134,962	109,259	25,703	19.0%						
16-19	6,355	3,754	2,601	40.9%						
20-24	18,082	12,753	5,329	29.5%						
25-54	89,364	74,153	15,211	17.0%						
55-64	16,547	14,501	2,046	12.4%						
65 Plus	4,614	4,098	516	11.2%						
Female 16+	148,865	125,400	23,465	15.8%						
16-19	6,815	4,060	2,755	40.4%						
20-24	20,699	15,759	4,940	23.9%						
25-54	96,439	82,638	13,801	14.3%						
55-64	19,487	17,995	1,492	7.7%						
65 Plus	5,425	4,948	477	8.8%						
Race	**									
White	5,370,103	4,828,166	541,937	10.1%						
Black / African	28,650,491	23,112,106	5,538,385	19.3%						
Native American	107,624	88,430	19,194	17.8%						
Asian	579,850	524,423	55,427	9.6%						
Native Hawaiian /	12,155	12,155	0	0.0%						
Some Other Race	1,205,360	1,076,920	128,440	10.7%						
Two or More Races	646,555	537,037	109,519	16.9%						
Ethnicity										
Hispanic	3,080,238	2,750,581	329,658	10.7%						

#### **Regional Commuting Patterns**

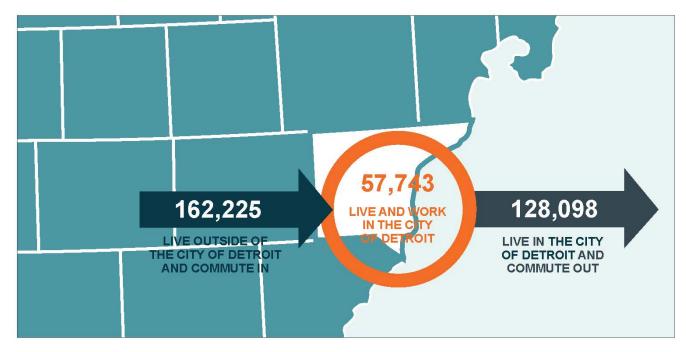
According to the most recent OnTheMap data set available from the Census Bureau, during 2017, the city's workforce consisted of 185,841 residents. 57,743 (31.1 percent) of the residents lived and worked within Detroit's city limits, while the remaining 128,098 residents (68.9 percent) traveled outside of the region for work. There were 219,968 workers employed in the city during 2017. Of those, 162,225 workers (68.9 percent) lived outside of the city's borders and commuted in. Thus, Detroit is a net importer of jobs, with more workers commuting into the area for employment than leaving. However, the city has a much higher percentage of both inbound and outbound commuters than many areas.

# Where City of Detroit Residents Work 60.0% 52.4% 50.0% 23.9% 20.0% 10.6% 2.7% 1.7% 1.6% 1.2% 0.8% 0.4% 0.4% 0.0% 4.4% 0.0% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4% 4.4%

Source: U.S. Census OnTheMap, 2017 Analysis: Workforce Intelligence Network

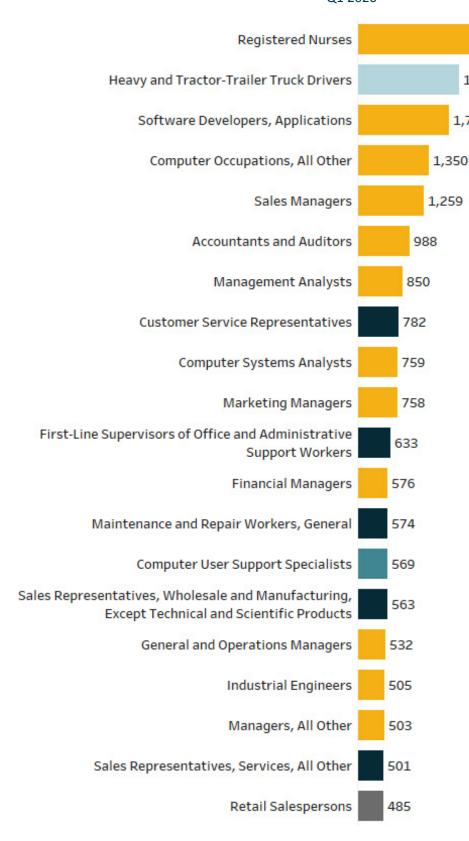


Source: U.S. Census OnTheMap, 2017 Analysis: Workforce Intelligence Network



5,875

#### Top Posted Jobs Q1 2020



## Top Posted Jobs: Q1 2020

Bachelor's degree

Typical Entry Education

Some college, no degree

No formal educational credential

High school diploma or equivalent

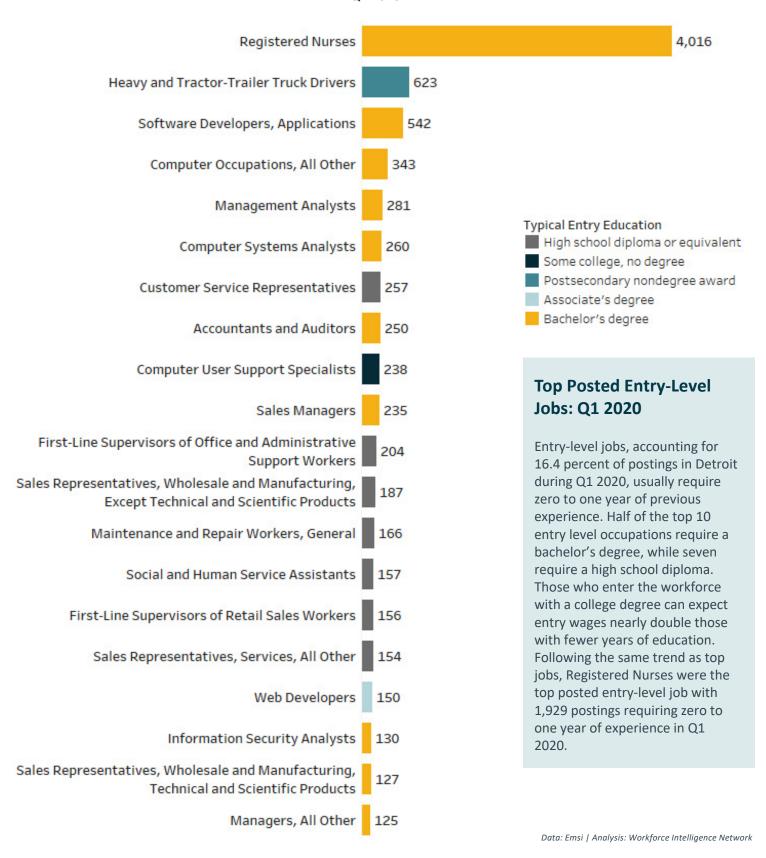
Postsecondary nondegree award

1,913

1,728

Registered Nurses has remained the highest in-demand occupation during Q1 2020, with 5,875 unique online job postings. Always a high-demand occupation, nurses have remained the highest since Q4 2018. Heavy and Tractor-Trailer Truck Drivers are the second largest occupation with 1,913 unique postings and must have a postsecondary nondegree award to enter, as well as short-term on-the-job training. Software Developers, Applications round the top three occupations in Q1 2020. A bachelor's degree is required for over half of the top 20 jobs in the city. Other indemand jobs that also typically require a four-year degree include Computer Occupations, All Other and Sales Managers.

#### Top Posted Entry-Level Jobs Q1 2020



# REAL-TIME DEMAND OVERVIEW City of Detroit | Employer Demand Highlights | Q1 2020



#### **Top Posting Employers\***

- General Healthcare Resources, Inc.
- Deloitte LLP
- Henry Ford Health System
- Tenet Healthcare Corporation
- Accenture PLC
- Family of Companies
- Quicken Loans Inc.
- General Motors Company
- Soliant Health, Inc
- City of Detroit

- Growing People and Companies
- DTE Energy Company
- Amazon.com, Inc.
- Wayne State University
- Ascension Health
- Anthem, Inc.
- Ford Motor Company
- Treva Corporation
- Ernst & Young LLP
- Delaware North Companies Sportservice, Inc.



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

- Basic Life Support
- Accounting
- Auditing
- Selling Techniques
- Nursing
- Customer Relationship Management
- Agile Software Development
- Project Management
- Automation
- Computer Science

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

- Communications
- Management
- Leadership
- Sales
- Customer Service
- Operations
- Problem Solving
- Presentations
- Detail Oriented
- Research



#### **Top In-Demand Qualifications**

- Commercial Driver's License (CDL)
- Certified Public Accountant
- Project Management Professional Certification
- Licensed Practical Nurse
- Certified Information Systems Security Professional
- Nurse Practitioner
- Certified Nursing Assistant
- Certified Information System Auditor (CISA)
- American Registry of Radiologic Technologists (ARRT) Certified
- Professional Engineer

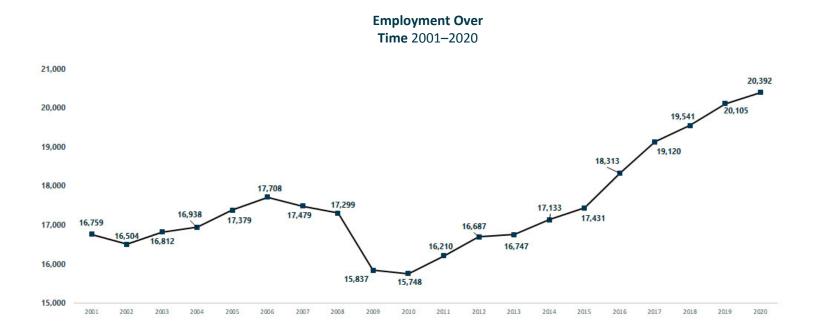


<sup>\*</sup>Employer names are listed as they appear in online job postings.

#### Introduction

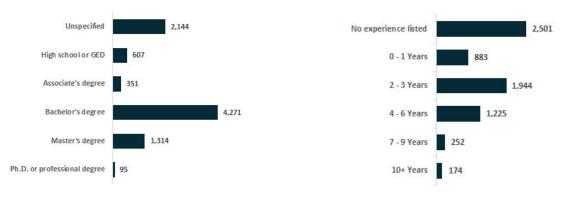
Jobs in the business and finance occupation group can be found in nearly every type of establishment throughout the region. These workers need strong mathematical and accounting abilities along with project management and planning skills. Workers in this occupation group are in high demand in Detroit, with 6,979 online postings reported for Q1 2020.



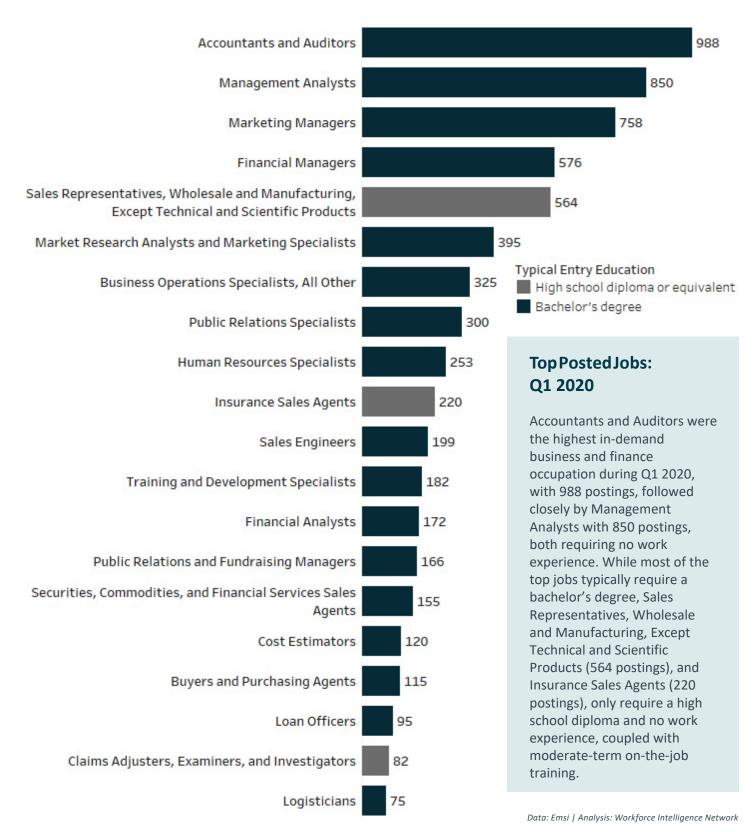


#### **Business and Finance Education and Experience**

The business and finance occupation group offer great job opportunities for active job seekers. A bachelor's degree is the most in-demand education level in Q1 2020, with 4,271 postings. A master's degree is the second most in-demand education level with 1,314 postings, while 2,144 postings do not specify any education level. Many business and finance occupation postings were open to workers with two to three years of experience, included in 1,944 postings. Workers with four to six years of experience are also heavily in-demand with 1,225 postings. Although 2,501 postings do not request any specific experience level, 883 postings requested workers with zero to one year of experience.



#### **Business and Finance Top Posted Jobs** Q1 2020



## BUSINESS AND FINANCE OCCUPATION GROUP City of Detroit | Q1 2020

#### **Business and Finance Wage Overview**

Most business and finance related jobs offer high wages, making for a lucrative opportunity for job seekers willing to attain the necessary education. The top posted business and finance job, Accountants and Auditors, offers median hourly wages of \$36.06, translating to annual earnings of approximately \$75,005. Additional experience may lead to a role as a Marketing or Financial Manager, opening the door to median wages around \$66.44 hourly, or about \$138,195 annually. Entry level occupations also see high median wages of \$33.48, earning about \$69,638 annually.

#### Wage Overview for Top Posted Business and Finance Jobs in Q1 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
13-2011	Accountants and Auditors	\$23.39	\$28.55	\$36.06	\$47.12	\$64.32
13-1111	Management Analysts	\$25.89	\$32.39	\$42.44	\$57.24	\$81.01
11-2021	Marketing Managers	\$40.99	\$51.08	\$66.44	\$83.53	\$130.69
11-3031	Financial Managers	\$38.92	\$48.18	\$62.86	\$80.29	\$119.80
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$15.95	\$22.38	\$33.48	\$48.44	\$62.29
13-1161	Market Research Analysts and Marketing Specialists	\$17.20	\$24.77	\$33.74	\$47.36	\$60.74
13-1199	Business Operations Specialists, All Other	\$18.48	\$24.89	\$34.23	\$47.91	\$60.68
27-3031	Public Relations Specialists	\$15.53	\$20.94	\$28.49	\$36.96	\$47.01
13-1071	Human Resources Specialists	\$17.66	\$22.37	\$29.44	\$38.64	\$50.23
41-3021	Insurance Sales Agents	\$13.56	\$18.10	\$23.88	\$36.85	\$59.00

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

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

- Accounting
- Auditing
- Financial Statements
- Business Development
- Selling Techniques

#### **Top Posting Employers\***

- Deloitte LLP
- Ernst & Young LLP
- Family of Companies
- General Motors Company
- Rgp

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

- Communications
- Management
- Sales
- Leadership
- Presentations

#### \*Employer names are listed as they appear in online job postings.

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

High School Diploma: 8.7%
Associate Degree: 5.0%
Bachelor's Degree: 61.2%
Master's Degree: 18.8%

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

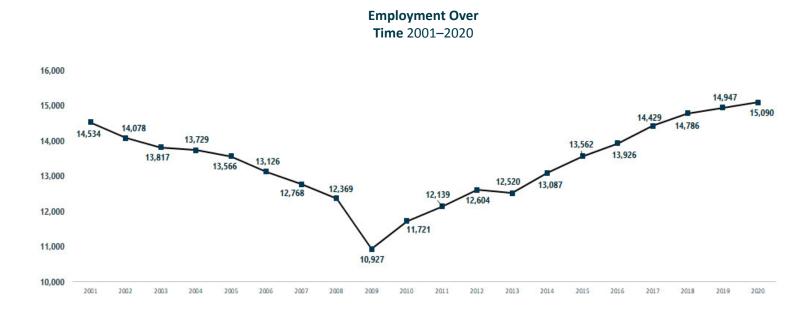
#### **In-Demand Certifications**

- Certified Public Accountant
- Certified Internal Auditor
- Certified Information System Auditor (CISA)
- Chartered Financial Analyst
- Project Management Professional Certification

#### Introduction

Energy-related occupations encompass jobs in engineering, science, mining, and extraction. Workers in this field have a range of skills all related to keeping businesses and homes powered. Energy companies employ workers in a variety of occupations, many of which are also included in other WIN occupation groups. Data referenced in this section pertain only to job postings from energy-related businesses.



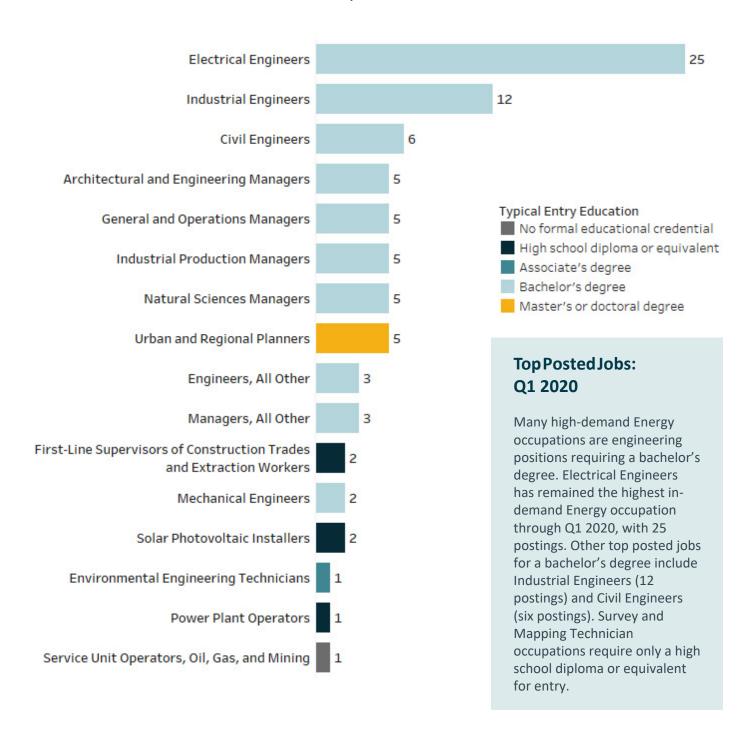


#### **Energy Education and Experience**

The energy occupation group is critical to the energy industry, requiring a specialized workforce with specific skills. A bachelor's degree is the most in-demand education level in Q1 2020, with 64 postings. A master's degree is the second most in-demand education level with 25 postings, while eight postings does not specify any education level. Many energy occupation postings were open to workers with two to three years of experience, included in 32 postings. Workers with four to six years of experience are also heavily in-demand, with 26 postings. Although 13 posting do not request any specific experience level, two postings requested workers with zero to one year of experience.



#### Energy Top Posted Jobs Q1 2020



#### **Energy Wage Overview**

The high demand for engineers and managers in the energy field creates lucrative opportunities for job seekers willing to obtain the additional educational necessary for these jobs. The top posted energy job, Electrical Engineers, offers a median hourly wage of \$43.87, or annual earnings of approximately \$87,740. Construction and technician focused positions generally have shorter educational requirements than engineers and pay higher median wages than similar occupations in other industries.

#### Wage Overview for Top Posted Energy Jobs in Q1 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2071	Electrical Engineers	\$29.64	\$35.52	\$43.87	\$53.50	\$61.68
17-2112	Industrial Engineers	\$30.45	\$36.02	\$44.09	\$53.07	\$60.28
17-2051	Civil Engineers	\$24.25	\$28.41	\$34.32	\$42.87	\$54.05
11-1021	General and Operations Managers	\$22.86	\$36.39	\$55.95	\$85.26	\$120.39
11-3051	Industrial Production Managers	\$35.48	\$44.62	\$56.00	\$69.87	\$86.51
11-9041	Architectural and Engineering Managers	\$45.46	\$53.65	\$63.36	\$75.23	\$89.89
11-9121	Natural Sciences Managers	\$40.37	\$45.12	\$53.83	\$68.43	\$83.13
19-3051	Urban and Regional Planners	\$24.68	\$30.66	\$36.34	\$40.77	\$47.12
11-9199	Managers, All Other	\$31.52	\$39.60	\$51.05	\$61.61	\$76.49
17-2199	Engineers, All Other	\$23.54	\$33.49	\$43.53	\$55.18	\$63.16

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

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

- Electrical Engineering
- Strategic Business Unit
- Electrical Systems
- Power Engineering
- Power Distribution

#### **Top Posting Employers\***

- DTE Energy Company
- Elevate Energy
- Osmose Utilities Services, Inc.
- Black Hills Corporation
- Eog Resources, Inc.

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

- Management
- Communications
- Problem Solving
- Interpersonal Communications
- Organizational Skills

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

High School Diploma: 13.3%
Associate Degree: 6.0%
Bachelor's Degree: 77.1%
Master's Degree: 30.1%

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

- Licensed Professional Engineer
- Six Sigma Black Belt Certification
- Certified Energy Manager
- Professional Engineer
- LEED Accredited Professional (AP)

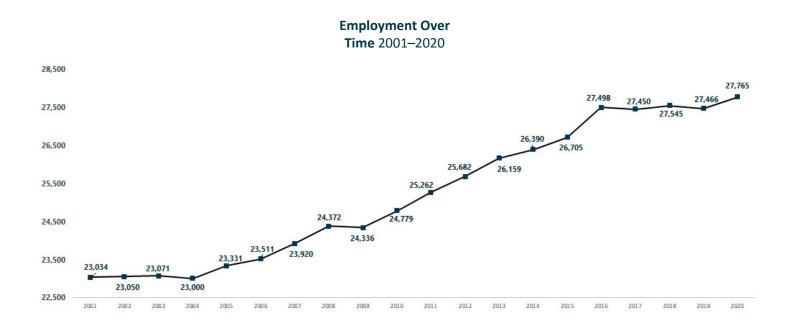
<sup>\*</sup>Employer names are listed as they appear in online job postings.

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

#### Introduction

WIN's health care occupation group includes jobs related to health care support and practitioners. Employment in this group has been consistently growing, more health care workers needed to care for Michigan's aging population and in response to regulatory and other changes. Registered nurses are routinely the most in-demand job in this group.





#### **Health Care Education and Experience**

The health care occupation group offers great job opportunities for active job seekers at all experience levels. A bachelor's degree is the most in-demand education level in Q1 2020, with 1,475 postings. An associate's degree is the second most in-demand education level with 1,621 postings, while 6,878 postings do not specify any education level. Many health care occupation postings were open to workers with two to three years of experience, included in 3,082 postings. Workers with zero to one year of experience are also heavily in-demand with 2,646 postings, while 4,177 posting do not require any specific experience level.



Data: Emsi | Analysis: Workforce Intelligence Network

#### Health Care Top Posted Jobs Q1 2020



#### **Health Care Wage Overview**

Wages in health care are generally on the higher end of the pay scale with education, training, and experience being needed for most top jobs. Although this group offers a broad array of occupations requiring higher education, there are several jobs open to those with a high school diploma or equivalent or a postsecondary nondegree award, that pay more than the region's median wage of \$18.60 per hour. Registered Nurses, the top posted health care job in Q1 2020, offers a median hourly wage of \$36.27 or an annual salary of nearly \$72,540.

#### Wage Overview for Top Posted Health Care Jobs in Q1 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
29-1141	Registered Nurses	\$27.40	\$31.54	\$36.27	\$40.82	\$47.96
11-9111	Medical and Health Services Managers	\$28.35	\$36.06	\$47.71	\$65.01	\$103.03
29-1069	Physicians and Surgeons, All Other	\$22.67	\$27.07	\$63.43	\$101.97	\$131.87
29-1127	Speech-Language Pathologists	\$27.40	\$32.47	\$37.96	\$47.01	\$67.49
29-2018	Clinical Laboratory Technologists and Technicians	\$14.77	\$17.92	\$25.79	\$32.74	\$37.93
31-9092	Medical Assistants	\$12.59	\$13.74	\$15.55	\$18.27	\$20.43
29-2034	Radiologic Technologists	\$20.02	\$23.78	\$28.51	\$33.46	\$38.21
29-1062	Family and General Practitioners	\$42.94	\$57.58	\$89.12	\$101.10	\$161.53
29-1126	Respiratory Therapists	\$21.77	\$25.11	\$28.46	\$31.45	\$35.85
29-2055	Surgical Technologists	\$14.77	\$17.49	\$21.33	\$25.04	\$29.52

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

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

- Basic Life Support
- Nursing
- Advanced Cardiovascular Life Support (ACLS)
- Intensive Care Unit
- Pediatrics

#### **Top Posting Employers\***

- General Healthcare Resources, Inc.
- Henry Ford Health System
- Tenet Healthcare Corporation
- Ascension Health
- Treva Corporation

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

- Communications
- Management
- Leadership
- Scheduling
- Teaching

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

High School Diploma: 8.0%
Associate Degree: 9.5%
Bachelor's Degree: 15.9%
Master's Degree: 6.1%

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

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

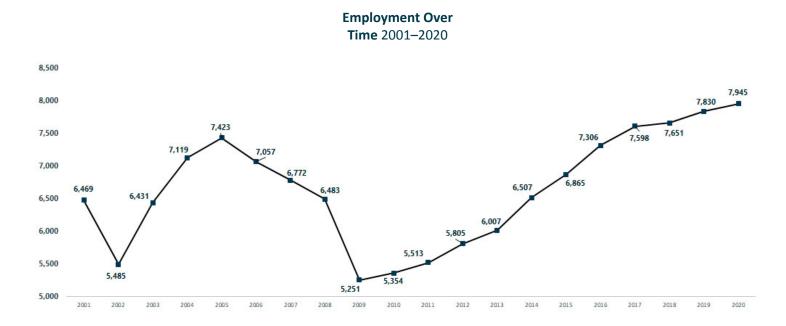
- Licensed Practical Nurse
- Nurse Practitioner
- Certified Nursing Assistant
- American Registry of Radiologic Technologists (ARRT) Certified
- Associates Degree in Nursing

<sup>\*</sup>Employer names are listed as they appear in online job postings.

#### Introduction

Information Technology (IT) jobs include occupations that are associated with entry-level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services. While the information technology group does not currently employ as many individuals as the other groups here, it is quickly growing.





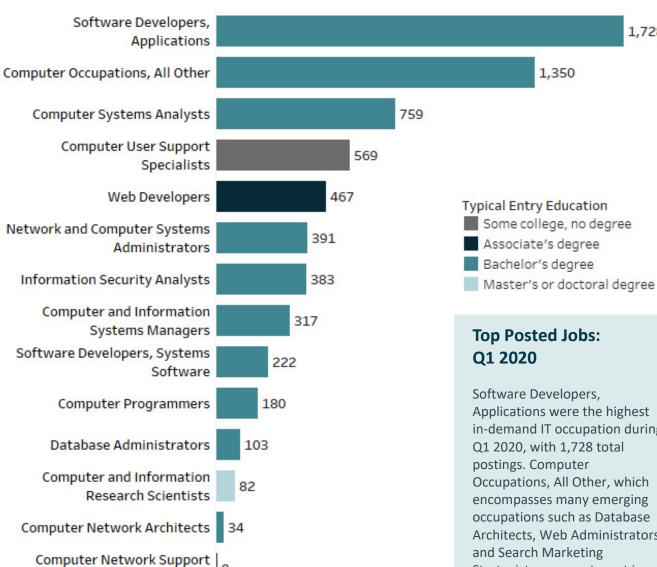
#### **Information Technology Education and Experience**

The information technology occupation group offer great job opportunities for active job seekers with 6,694 postings in Q1 2020. A bachelor's degree is the most in-demand education level in Q1, with 3,786 postings. A master's degree is the second most in-demand education level with 787 postings, while 2,427 postings do not specify any education level. Many IT occupation postings were open to workers with two to three years of experience, included in 1,852 postings. Workers with four to six years of experience are also heavily in-demand with 1,196 postings. Although 1,983 posting do not request any specific experience level, 1,128 postings requested workers with zero to one year of experience.



1,728

IT **Top Posted Jobs** Q1 2020



Specialists

## **Top Posted Jobs:**

Software Developers, Applications were the highest in-demand IT occupation during Q1 2020, with 1,728 total postings. Computer Occupations, All Other, which encompasses many emerging occupations such as Database Architects, Web Administrators, and Search Marketing Strategists, was next most indemand with 1,350 total postings. While most of the top jobs typically post requirements for a bachelor's degree, Web Developers (467 postings) typically require an associate degree while Computer User Support Specialists (569 postings) prefer some college education, but no degree.

#### **Information Technology Wage Overview**

Most IT related jobs offer high wages, making for a lucrative opportunity for job seekers willing to obtain the additional education related to these jobs. Software Developers, Applications, the top posted IT job in Q1 2020, offers a median hourly wage of \$45.16 or an annual salary of over \$90,120. Computer User Support Specialists which require some college, no degree offers median wages around 23.39, averaging to \$46,700 annually.

#### Wage Overview for Top Posted IT Jobs in Q1 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
15-1132	Software Developers, Applications	\$29.41	\$35.96	\$45.16	\$56.14	\$64.72
15-1199	Computer Occupations, All Other	\$20.65	\$28.34	\$38.72	\$50.19	\$61.37
15-1121	Computer Systems Analysts	\$26.53	\$32.91	\$40.78	\$51.16	\$62.84
15-1151	Computer User Support Specialists	\$14.01	\$17.51	\$23.39	\$30.39	\$38.98
15-1134	Web Developers	\$20.28	\$27.41	\$35.42	\$45.02	\$51.62
15-1142	Network and Computer Systems Administrators	\$25.98	\$32.51	\$39.95	\$50.22	\$60.31
15-1122	Information Security Analysts	\$30.35	\$35.61	\$45.37	\$57.93	\$66.67
11-3021	Computer and Information Systems Managers	\$42.22	\$53.37	\$65.90	\$80.70	\$100.82
15-1133	Software Developers, Systems Software	\$23.77	\$34.47	\$44.58	\$54.06	\$63.76
15-1131	Computer Programmers	\$24.41	\$32.00	\$38.76	\$46.75	\$53.80

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

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

- Agile Software Development
- Java
- SQL
- Computer Science
- Automation

#### **Top Posting Employers\***

- Deloitte LLP
- Accenture PLC
- Quicken Loans Inc.
- Family of Companies
- Strategic Staffing Solutions, Inc.

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

- Communications
- Management
- Leadership
- Problem Solving
- Troubleshooting

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

High School Diploma: 4.2%
Associate Degree: 5.9%
Bachelor's Degree: 57.4%
Master's Degree: 11.9%

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

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

<sup>\*</sup>Employer names are listed as they appear in online job postings.

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

#### Introduction

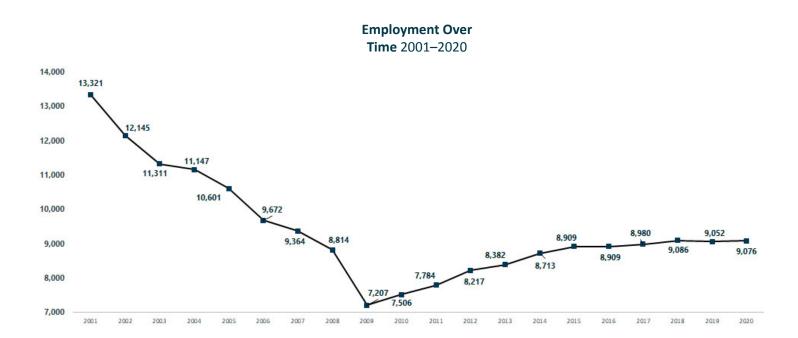
WIN's technicians/skilled trades category includes jobs related to advanced manufacturing. Southeast Michigan has more demand for skilled-trades labor, such as CNC machinists and welders, than almost anywhere else in the country.

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



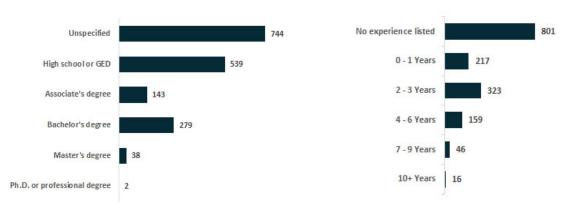
9,076
Skilled Trades
Workers

0.3% Increase from 2019

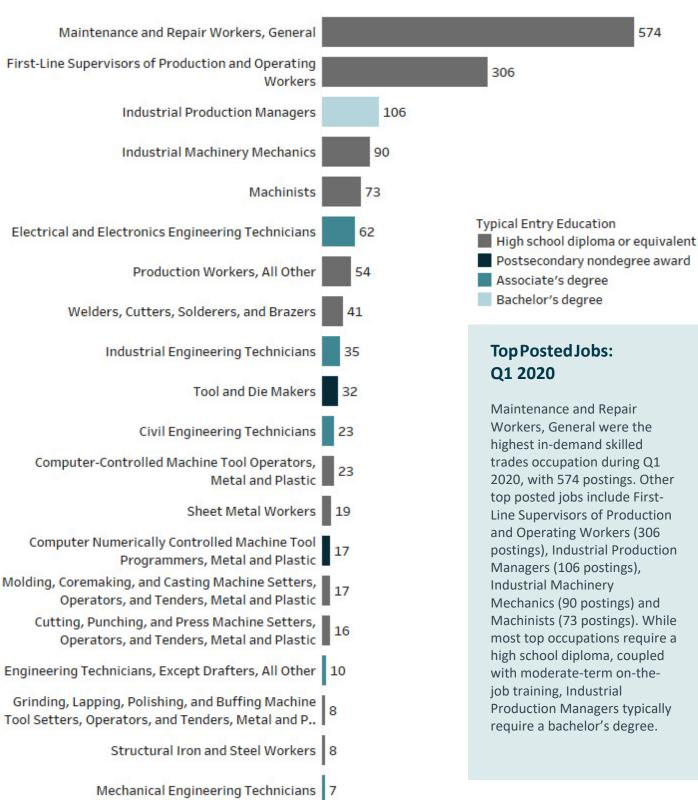


#### **Skilled Trades Education and Experience**

The skilled trades occupation group offers great job opportunities for active job seekers in southeast Michigan. A high school diploma or equivalent is the most in-demand education level in Q1 2020, with 539 postings. A bachelor's degree is the second most in-demand education level with 279 postings, while 744 postings do not specify any education level. Many skilled trades occupation postings were open to workers with two to three years of experience, included in 323 postings. Workers with zero to one year of experience are also heavily in-demand with 217 postings, while 801 postings do not require any specific experience level.



#### Skilled Trades Top Posted Jobs Q1 2020



#### **Skilled Trades Wage Overview**

Over half of the top ten in-demand skilled trades occupation have median wages above \$20 per hour. Maintenance and Repair Workers, General, the top posted skilled trades job in Q1 2020, offers a median hourly wage of \$17.36, which translates to an annual salary of about \$34,700. The third top occupation, Industrial Production Managers, requires an additional five years or more of work experience and earn \$56.00 hourly or roughly \$111,700 annually.

#### Wage Overview for Top Posted Skilled Trades Jobs in Q1 2020

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
49-9071	Maintenance and Repair Workers, General	\$11.03	\$13.54	\$17.36	\$23.08	\$28.94
51-1011	First-Line Supervisors of Production and Operating Workers	\$18.91	\$24.42	\$32.28	\$41.38	\$51.10
11-3051	Industrial Production Managers	\$35.48	\$44.62	\$56.00	\$69.87	\$86.51
49-9041	Industrial Machinery Mechanics	\$15.50	\$19.81	\$25.30	\$31.45	\$37.41
51-4041	Machinists	\$11.34	\$15.31	\$20.00	\$25.99	\$30.17
17-3023	Electrical and Electronics Engineering Technicians	\$16.83	\$22.31	\$30.18	\$35.04	\$39.07
51-9199	Production Workers, All Other	\$9.25	\$10.50	\$14.71	\$20.60	\$31.69
51-4121	Welders, Cutters, Solderers, and Brazers	\$13.45	\$16.07	\$19.14	\$23.80	\$29.44
17-3026	Industrial Engineering Technicians	\$16.75	\$20.86	\$26.39	\$33.35	\$38.89
51-4111	Tool and Die Makers	\$15.14	\$19.77	\$26.28	\$31.69	\$36.01

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

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

- Plumbing
- HVAC
- Preventive Maintenance
- Carpentry
- Painting

#### **Top Posting Employers\***

- Fieldco
- E. W. Grobbel Sons, Inc.
- City of Detroit
- Wilson, Jeff Chrysler Automobiles, Inc
- Textron Inc.

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

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

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

High School Diploma: 34.5%
Associate Degree: 9.2%
Bachelor's Degree: 17.9%
Master's Degree: 2.4%

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

- HVAC Certification
- Commercial Driver's License (CDL)
- EPA 608 Technician Certification
- National Apprenticeship Certificate
- CFC Refrigeration Certification

<sup>\*</sup>Employer names are listed as they appear in online job postings.

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

Website

www.WINintelligence.org

**Email** 

info@WINintelligence.org

Phone

313.744.2946

Address

25363 Eureka Rd. Taylor, MI 48180

Facebook

@workforceintelligencenetwork

Twitter

@WIN-semich

