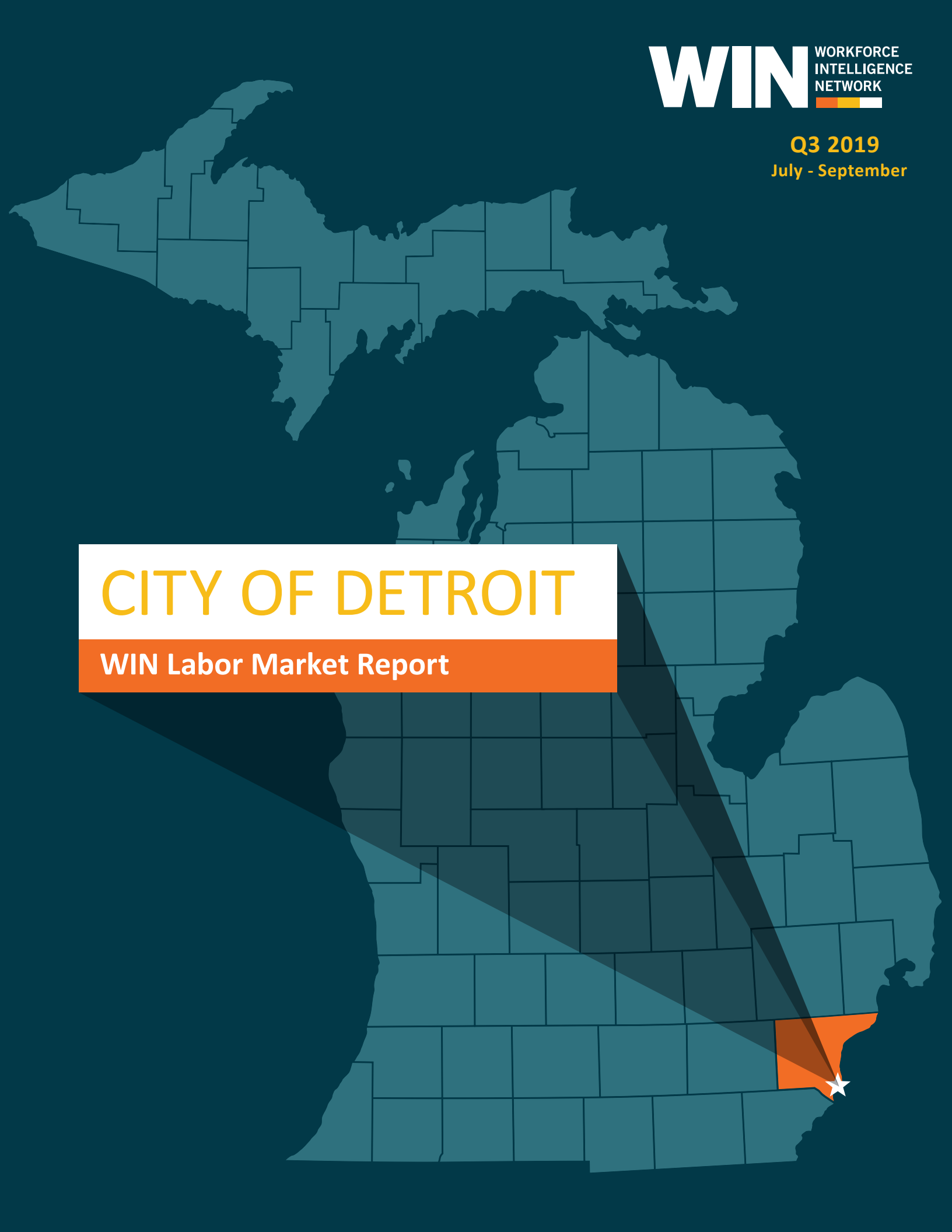


Q3 2019
July - September

CITY OF DETROIT

WIN Labor Market Report





INTRODUCTION

City of Detroit | Q3 2019

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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 online job postings, a proxy for employer demand, is a pioneering method for tracking the health of the labor market. This data is used to provide a real-time demand overview, detailing posting related findings for both employers and job seekers. WIN's data and research team analyzes job posting data at the occupation level within eleven customized occupation groups built using specific Standard Occupational Classification (SOC) codes to provide more contextualized information. Occupation groups combine data for jobs with similar skillsets, educational attainment, and experience requirements, which provides a more in-depth snapshot of the current labor market when compared to traditional industry data based upon North American Industry Classification System (NAICS) codes. Occupation outlook sections utilize these metrics to identify and display the top in-demand jobs, their entry requirements, and their earning potential. WIN produces a 16-county region report quarterly using data from all eleven occupation groups. A report focused on the city of Detroit is also produced quarterly, focusing on five occupation groups related to Detroit's labor market. County reports are produced annually and focus on five occupation groups chosen to reflect the labor market specific to the county.

This report analyzes data from the third quarter of 2019 in the City of Detroit and includes comparison analysis to the second quarter of 2019. For the City of Detroit, the business and finance, energy, health care, IT, and skilled trades 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.



ANNUAL STATE OF THE LABOR MARKET

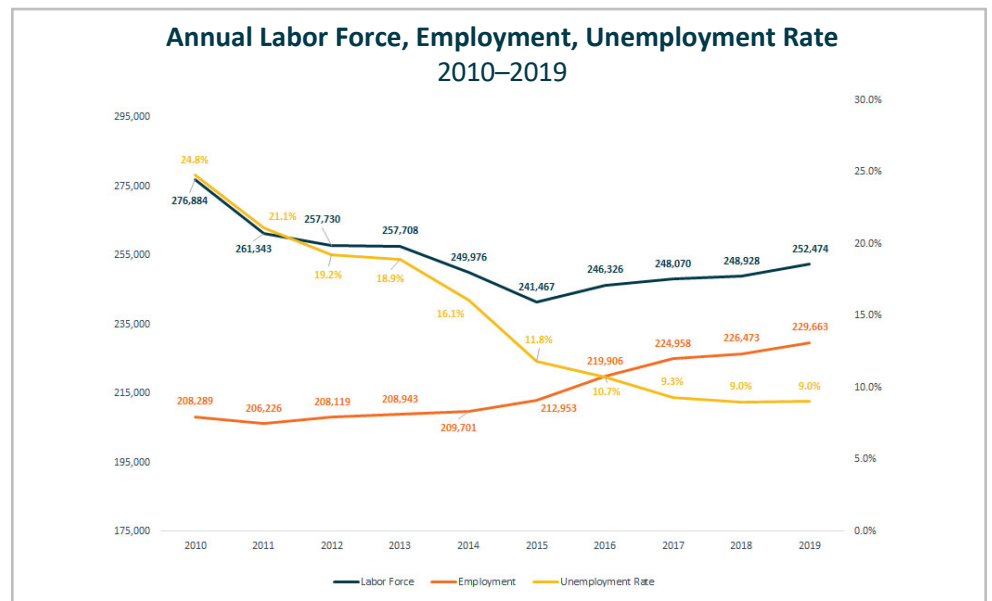
City of Detroit | Q3 2019

State of the Labor Market in the City of Detroit

During the third quarter of 2019, the labor force and employment figures in Detroit has increased, up this quarter since Q2 2019, continuing the steady growth seen throughout last year. This quarter, as compared to Q2 2019, the labor force increased by 2.4 percent, comparatively, employment in Detroit has also increased by 1.4 percent. The quarterly unemployment rate in Q3 increased by 0.9 percentage points from the 8.7 percent recorded in Q2 2019. This increase could indicate that discouraged workers are re-entering the workforce due to the increase in job postings this quarter. Employer demand for health care workers is still on the rise among the five key groups analyzed for the city, with 15,162 job postings during Q3 2019. The business and finance and skills trades occupation groups also offer great job opportunities for active job seekers. Many business and finance occupation postings were open to workers with two or fewer years of experience, including 2,698 postings in Q3 2019. Skilled trades postings advertised 690 opportunities for those with a high school diploma and a willingness to undertake training.

Annual Labor Market Information

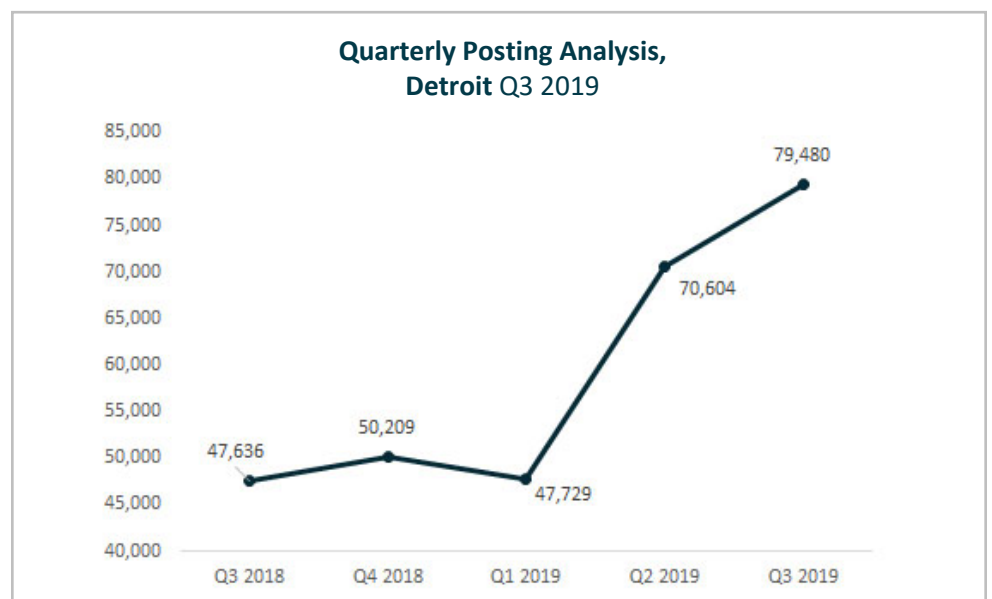
Continuing a ten-year high, the annual labor force in the city of Detroit increased by 3,547 individuals between 2018 and YTD 2019. Similarly, employment also grew annually between 2018 and YTD 2019 by 3,190 workers. While the YTD employment and labor force both saw an increase through Q3 2019, the annual unemployment rate in the city of Detroit has remained constant, from an annual 2018 rate of 9.0 percent to a YTD 2019 rate of 9.0 percent.



Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Employer Demand Overview

Data obtained year to date (YTD) for the third quarter of 2019 indicate that employer demand has remained strong, since the end of Q2 2019. There were 79,480 unique postings in the city of Detroit. Demand in Q3 2019 increased by 8,876 postings from the 70,604 unique postings reported during Q2 2019. The increase in the number of ads indicate supply and demand for jobs and workers, has remained strong into the fourth quarter of 2019.



Data: Emsi | Analysis: Workforce Intelligence Network



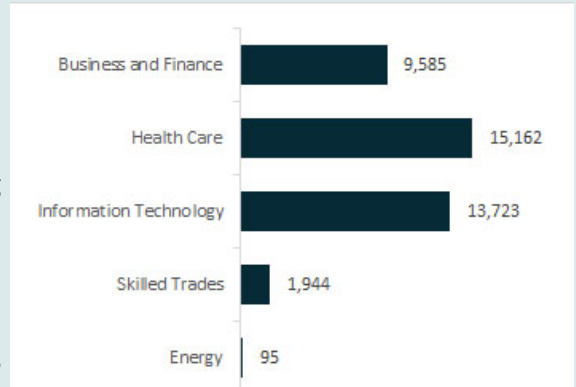
QUARTERLY WORKFORCE INDICATORS

City of Detroit | Key Findings for Q3 2019

The health care occupation group experienced strong growth through Q2 2019 and has continued the trend into Q3 2019.

Employers seeking health care workers showed sustained demand growth during Q2 2019 and into Q3 2019, resulting in a Q3 2019 total of 15,162 ads. This remains the highest-posting occupation group in the third quarter of 2019. Registered Nurses have also remained by far, the most in-demand job during Q3. Other major occupation groups such as business and finance and information technology (IT) also showed strong growth this quarter, with 9,585 and 13,723 job postings respectively. Accountants and Auditors and Software Developers, Applications come in a close second and third for the top 3 occupations demanded for Q3 2019. Health care educational requirements vary from a high school diploma or certification for technician and assistant positions, to bachelor's degrees for occupations such as nurses, and advanced degrees for physician roles. For more information about each occupation group, see page 17.

Postings by Occupation Group Q3 2019

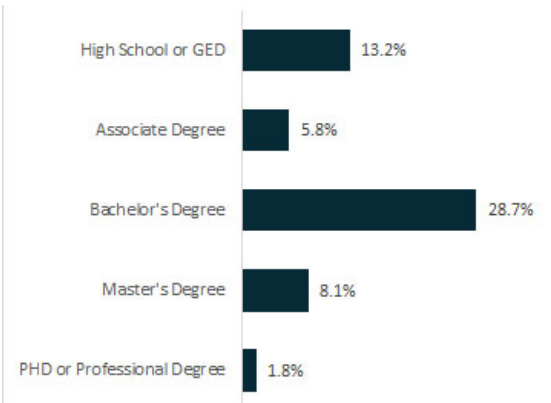


Data: Emsi | Analysis: Workforce Intelligence Network

A bachelor's degree is the most in-demand educational credential for all openings in the city, specified in 28.7 percent of job postings.

Of the 79,480 unique postings in the city of Detroit during Q3 2019, 27,409 (34.5 percent) required a college degree. An additional 7,874 postings (9.9 percent) required an advanced degree. This is significantly higher than across southeast Michigan as a whole: regionwide, 22.7 percent of postings require a bachelor's degree while 7.2 percent post requirements for advanced education. The high demand for business and technology roles within the city limits drives this high demand for college education.

Education Levels In-Demand Q3 2019



Data: Emsi | Analysis: Workforce Intelligence Network

Detroit's unemployment rate in Q3 2019 has increased by 0.9 percentage points to 9.6 percent. In Q2 2019, it was recorded at 8.7 percent.

In Q3 2019, unemployment has increased by 2,943 workers since Q2 2019. The annual unemployment rate for both 2018 and YTD 2019 has remained the same, reported at 9 percent. The quarterly changes in the unemployment rates between Q2 2019 and Q3 2019 are common. For more information about this quarter's unemployment rate and other labor market indicators, see page 4.

Annual Labor Market Data

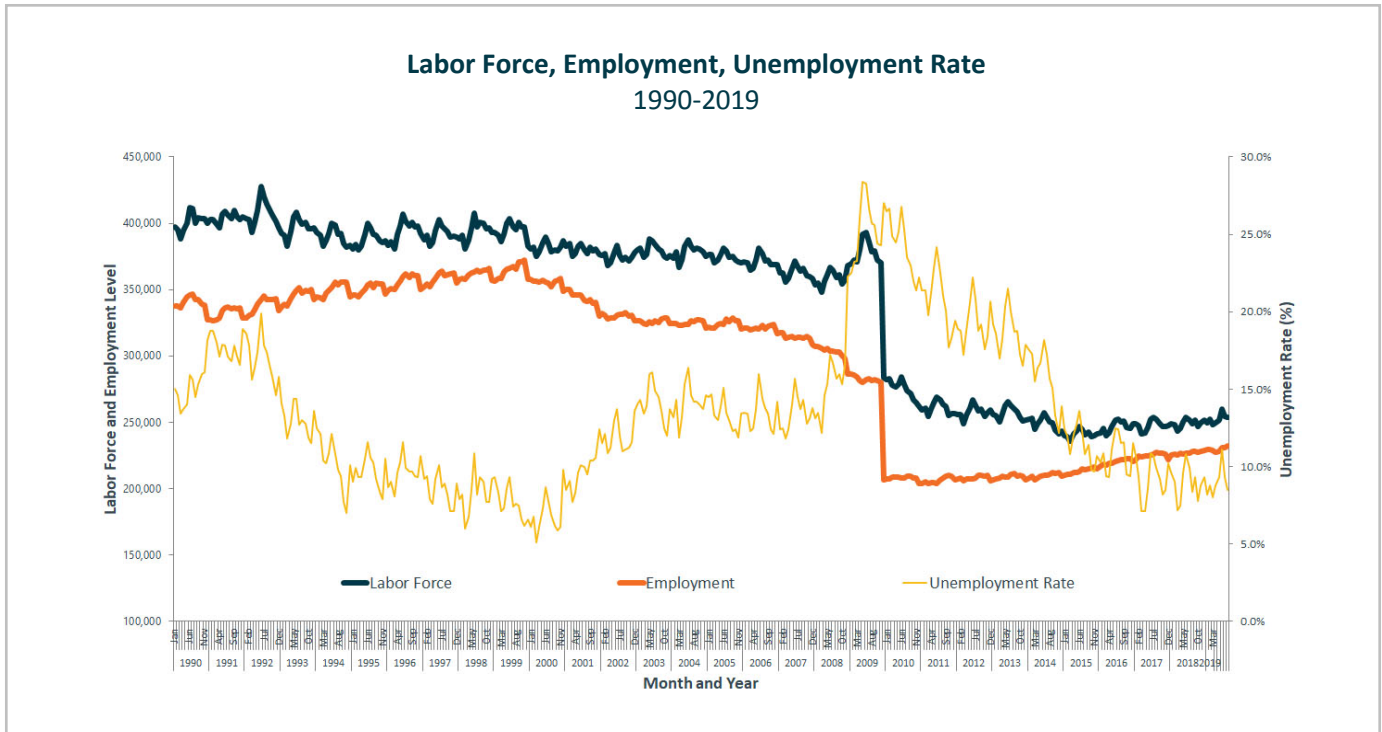
	3rd Quarter 2018	3rd Quarter 2019	Change from 3rd Quarter 2018	Percent Change from 3rd Quarter 2018
Labor Force	251,559	256,121	4,562	1.8%
Employment	227,137	231,435	4,298	1.9%
Unemployment	24,422	24,686	264	1.1%
Unemployment Rate	9.7%	9.6%	-0.1%	na

Note: Monthly data averaged by quarter | Data: BLS



WORKFORCE OVERVIEW

City of Detroit | Labor Market Information Q3 2019



Quarterly Labor Market Data

Q3 2018 - Q3 2019

	3rd Quarter 2018	4th Quarter 2018	1st Quarter 2019	2nd Quarter 2019	3rd Quarter 2019	Change from 2nd Quarter 2019	Percent Change from 2nd Quarter 2019	Change from 3rd Quarter 2018	Percent Change from 3rd Quarter 2018
Labor Force	251,559	249,595	251,305	249,998	256,121	6,123	2.4%	4,562	1.8%
Employment	227,137	228,010	229,300	228,255	231,435	3,180	1.4%	4,298	1.9%
Unemployment	24,422	21,585	22,005	21,743	24,686	2,943	13.5%	264	1.1%
Unemployment Rate	9.7%	8.6%	8.8%	8.7%	9.6%	0.9%	na	-0.1%	na

Note: Monthly data averaged by quarter | Data: BLS

Labor Force, Employment, and Unemployment

The labor market in the City of Detroit has been growing steadily year over year since 2010, though there is still fluctuation between quarters. The labor force change from Q2 2019 to Q3 2019 is an increase of 6,123 workers. Quarterly employment in the city also increased from Q2 2019, by 3,180 workers. With the labor force and employment showing strong growth into the fourth quarter of 2019. The quarterly unemployment rate increased by 0.9 percentage points, recorded from 8.7 percent in Q2 2019 to 9.6 percent YTD in Q3 2019.



WORKFORCE OVERVIEW

City of Detroit | 2017 Annual Population Demographics

Population Demographics

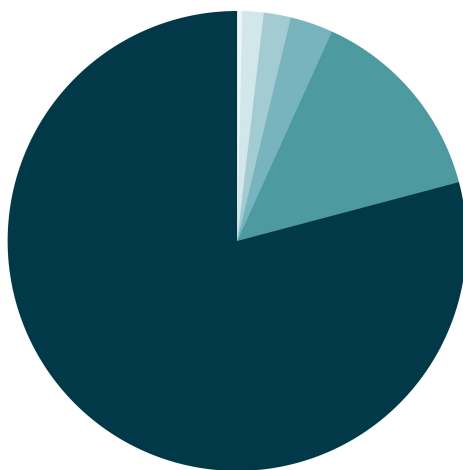
According to the data from the most recent Census Bureau 2017 ACS Five Year estimates, during 2017, 679,865 people were living in the city of Detroit. The sex of the populace was split almost evenly, with about 52.7 percent of the population identifying as female, and the other 47.3 percent identifying as male. The majority of the population identified as black or African American (79.1 percent) with the second largest number of individuals identifying as white (14.1 percent). The city skews younger than the surrounding region; 25.6 percent of population was over the age of 55, compared to 36.2 percent under the age of 25.



679,865
People in the City
0.5% Decrease
from 2016

Population Race Demographics

- Black or African American, 79.12%
- White, 14.10%
- Other Race, 3.02%
- Two or More Races, 1.90%
- Asian, 1.50%
- American Indian or Alaska Native, 0.34%
- Native Hawaiian or Other Pacific Islander, 0.02%



Population Gender Demographics

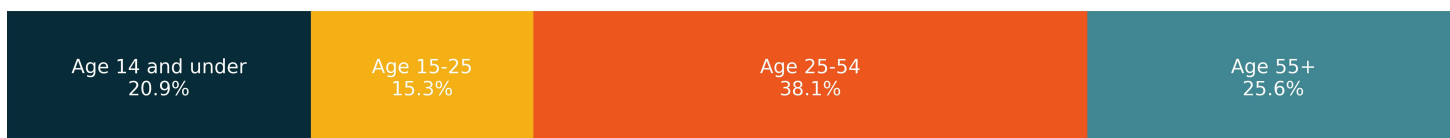


53% Females

47% Males

0 10 20 30 40 50 60 70 80 90 100

Population Age Demographics





WORKFORCE OVERVIEW

City of Detroit | 2017 Annual Labor Force Demographics

2017 Labor Force, Employment, and Unemployment Demographics

Civilian Labor Force by Demographic Group				
Demographic Group	Civilian Labor Force	Total Employment	Total Unemployment	Unemployment Rate
Total Population 16 +	282,932	226,452	56,021	19.8%
Sex				
Male 16+	134,071	105,228	28,843	21.5%
16-19	6,195	3,477	2,718	43.9%
20-24	18,941	12,774	6,167	32.6%
25-54	87,974	70,883	17,091	19.4%
55-64	16,483	14,061	2,422	14.7%
65 Plus	4,478	4,033	445	9.9%
Female 16+	148,661	121,396	27,265	18.3%
16-19	6,807	3,645	3,162	46.5%
20-24	21,075	15,344	5,731	27.2%
25-54	95,409	79,377	16,032	16.8%
55-64	19,995	18,070	1,925	9.6%
65 Plus	5,375	4,960	415	7.7%
Race				
White	41,426	36,593	4,805	11.6%
Black / African American	223,934	174,962	48,594	21.7%
Native American	883	666	216	24.5%
Asian	4,138	3,657	476	11.5%
Native Hawaiian / Pacific Islander	68	68	0	0.0%
Some Other Race	8,465	7,218	1,244	14.7%
Two or More Races	4,035	3,227	815	20.2%
Ethnicity				
Hispanic	20,100	17,138	2,955	14.7%

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

Labor Market Demographics

During 2017, the most recent census year, there were about 283,000 people in the labor force, meaning they were either working or looking for work, in the city of Detroit. The 282,932 individuals (41.6 percent) participating in the labor force make up a little under half of those living in the city. The highest unemployment rates were seen in those aged 24 years old or younger. Females under the age of 19 face an unemployment rate of 46.5 percent. Native American job seekers also have a difficult time finding employment, facing an unemployment rate of 24.5 percent.



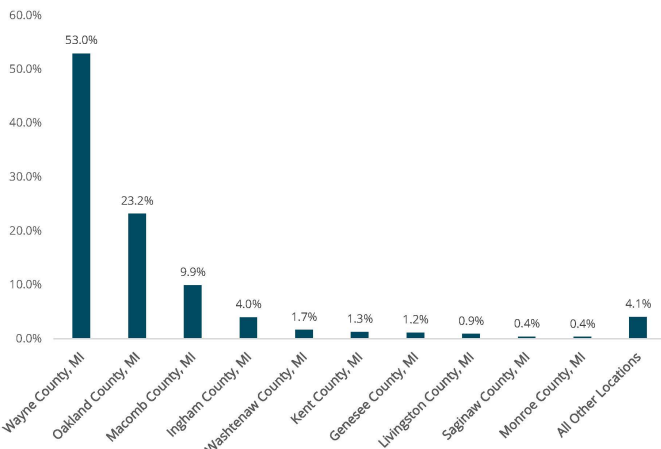
WORKFORCE OVERVIEW

City of Detroit | 2015 Regional Commuting Patterns

Regional Commuting Patterns

According to the most recent OnTheMap data set available from the Census Bureau, during 2015, the city's workforce consisted of 177,431 residents. 58,730 (33.1 percent) of the residents lived and worked within Detroit's city limits, while the remaining 118,701 residents (65.9 percent) traveled outside of the region for work. There were 234,493 workers employed in the city during 2015. Of those, 175,763 workers (75.0 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.

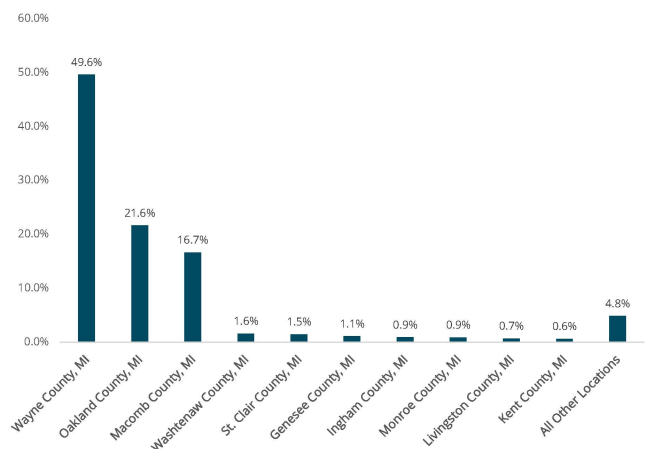
Where City of Detroit Residents Work



Source: U.S. Census OnTheMap, 2015
Analysis: Workforce Intelligence Network

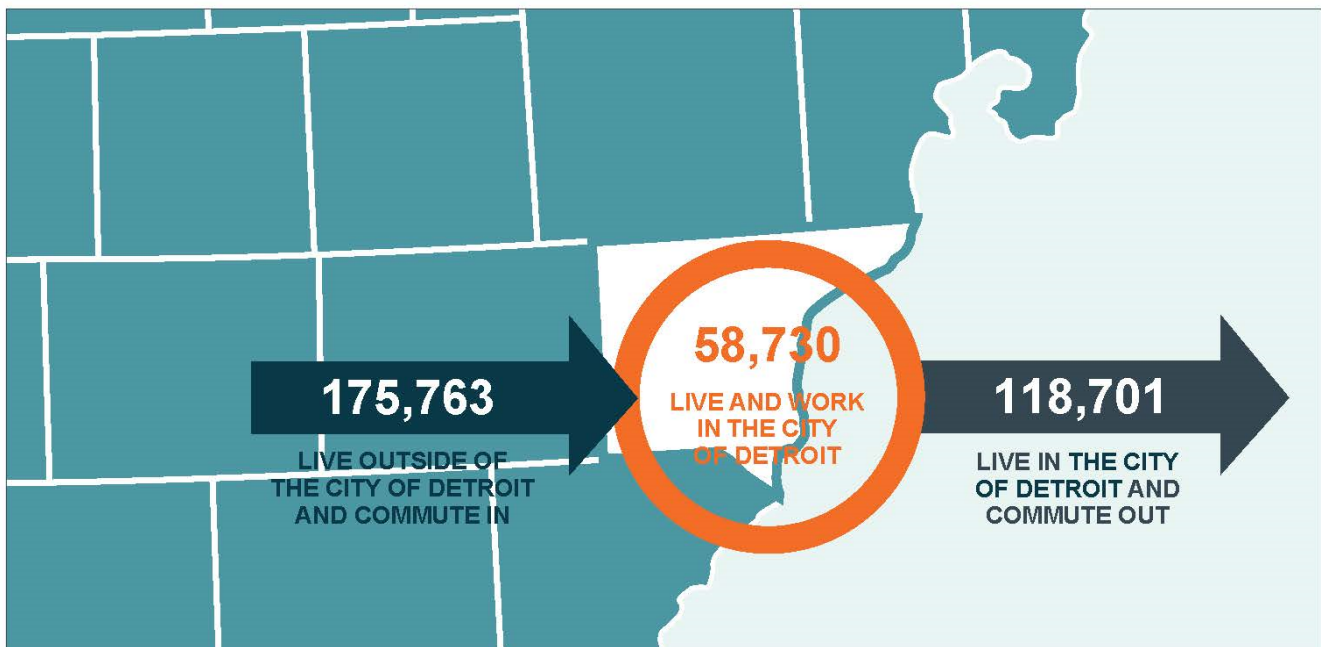
Data: U.S. Census OnTheMap, 2015
Analysis: Workforce Intelligence Network

Where City of Detroit Workers Live



Source: U.S. Census OnTheMap, 2015
Analysis: Workforce Intelligence Network

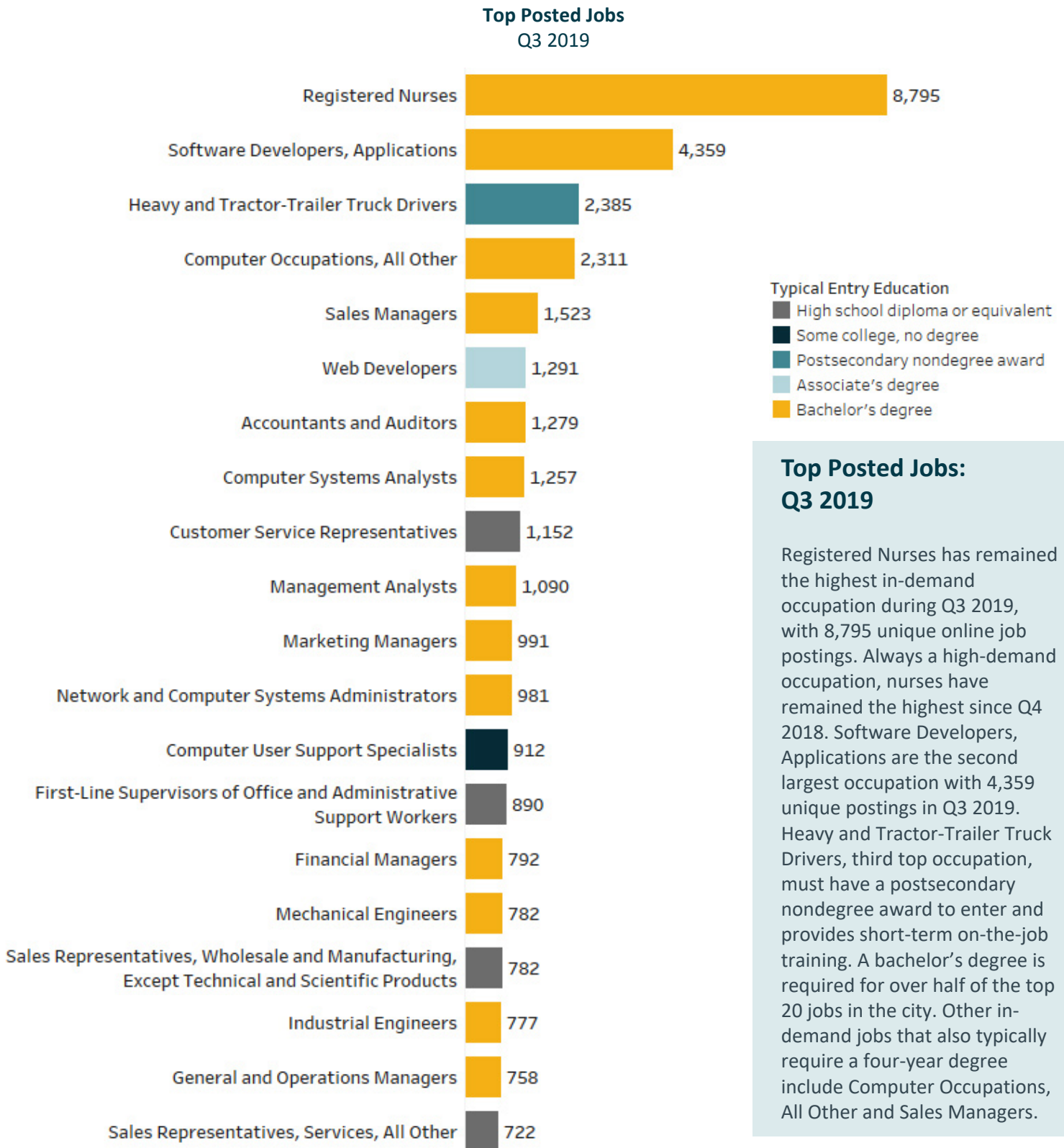
Data: U.S. Census OnTheMap, 2015
Analysis: Workforce Intelligence Network





REAL-TIME DEMAND OVERVIEW

City of Detroit | Top Posted Jobs | Q3 2019

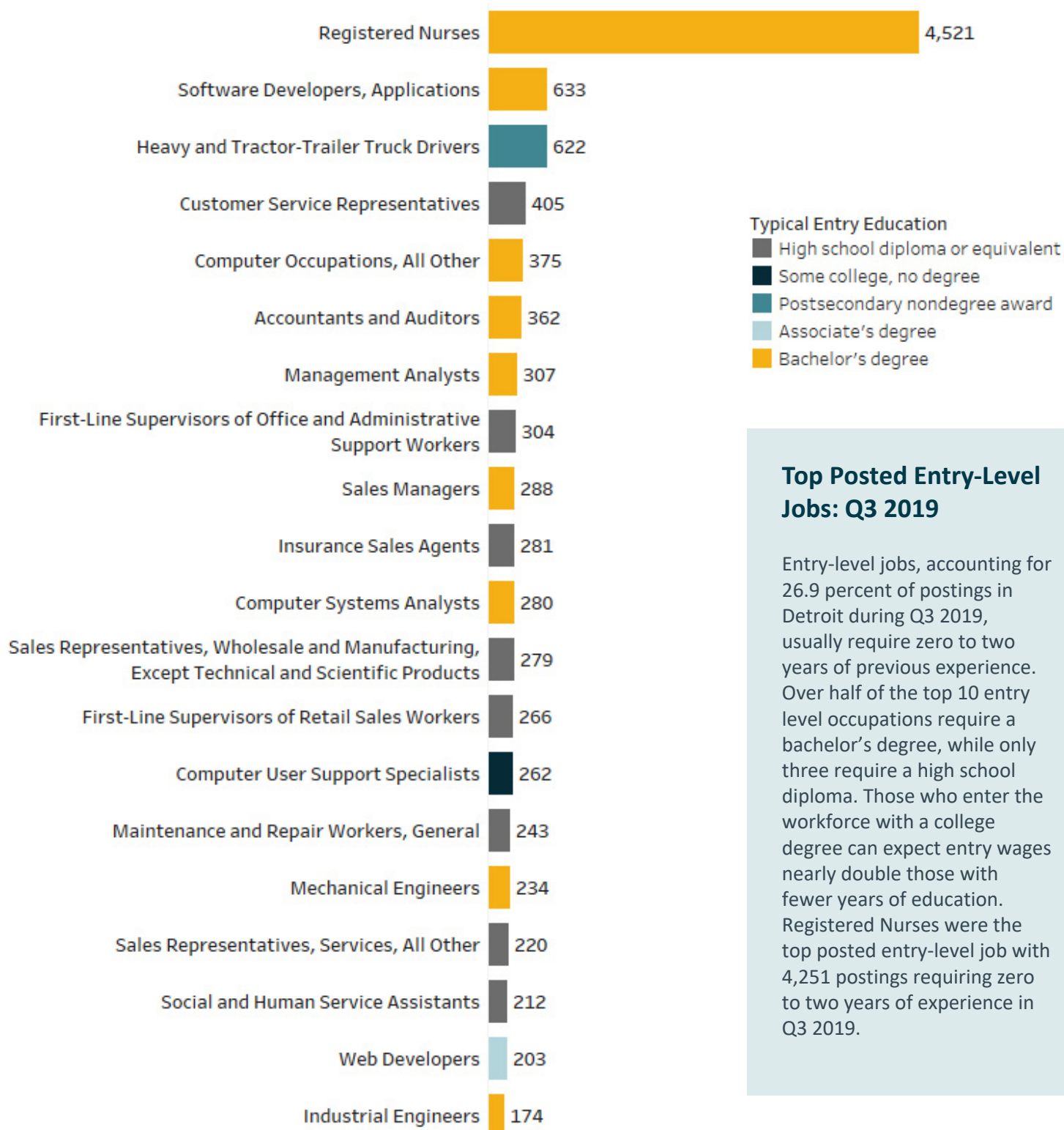




REAL-TIME DEMAND OVERVIEW

City of Detroit | Top Posted Entry-Level Jobs | Q3 2019

Top Posted Entry-Level Jobs Q3 2019





REAL-TIME DEMAND OVERVIEW

City of Detroit | Skills and Certifications | Q3 2019

Top Posting Employers*

- General Healthcare Resources, Inc.
- Henry Ford Health System
- Deloitte LLP
- Tenet Healthcare Corporation
- Ascension Health
- Quicken Loans Inc.
- Wayne County Schools
- Efinancialcareers, Inc.,
- Pricewaterhousecoopers LLP
- Ford Motor Company
- Anthem, Inc.
- Soliant Health, Inc
- General Motors Company
- Fenton Area Public Schools
- City of Detroit

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

Top In-Demand Skills

- Microsoft Access
- Nursing
- Accounting
- Basic Life Support
- Auditing
- Selling Techniques
- Customer Relationship Management
- Agile Software Development
- Restaurant Operation
- Business Development

Top In-Demand Qualifications

- Commercial Driver's License (CDL)
- Bachelor of Science in Nursing (BSN)
- Master of Business Administration (MBA)
- Certified Public Accountant
- Licensed Practical Nurse
- Nurse Practitioner
- Certified Nursing Assistant
- Certified Information Systems Security Professional
- Project Management Professional Certification
- Advanced Practice Registered Nurse



BUSINESS AND FINANCE OCCUPATION GROUP

City of Detroit | Q3 2019

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.



20,871
Business Workers

9.9% Increase
from Q1 2019

Employment Over
Time 2001–2019



Top Job Posting Employers*

- Deloitte LLP
- Assurance
- Pricewaterhousecoopers LLP
- Quicken Loans Inc.
- Ernst & Young LLP
- Anthem, Inc.
- General Motors Company
- Rgp
- Efinancialcareers, Inc.,
- DTE Energy Company

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

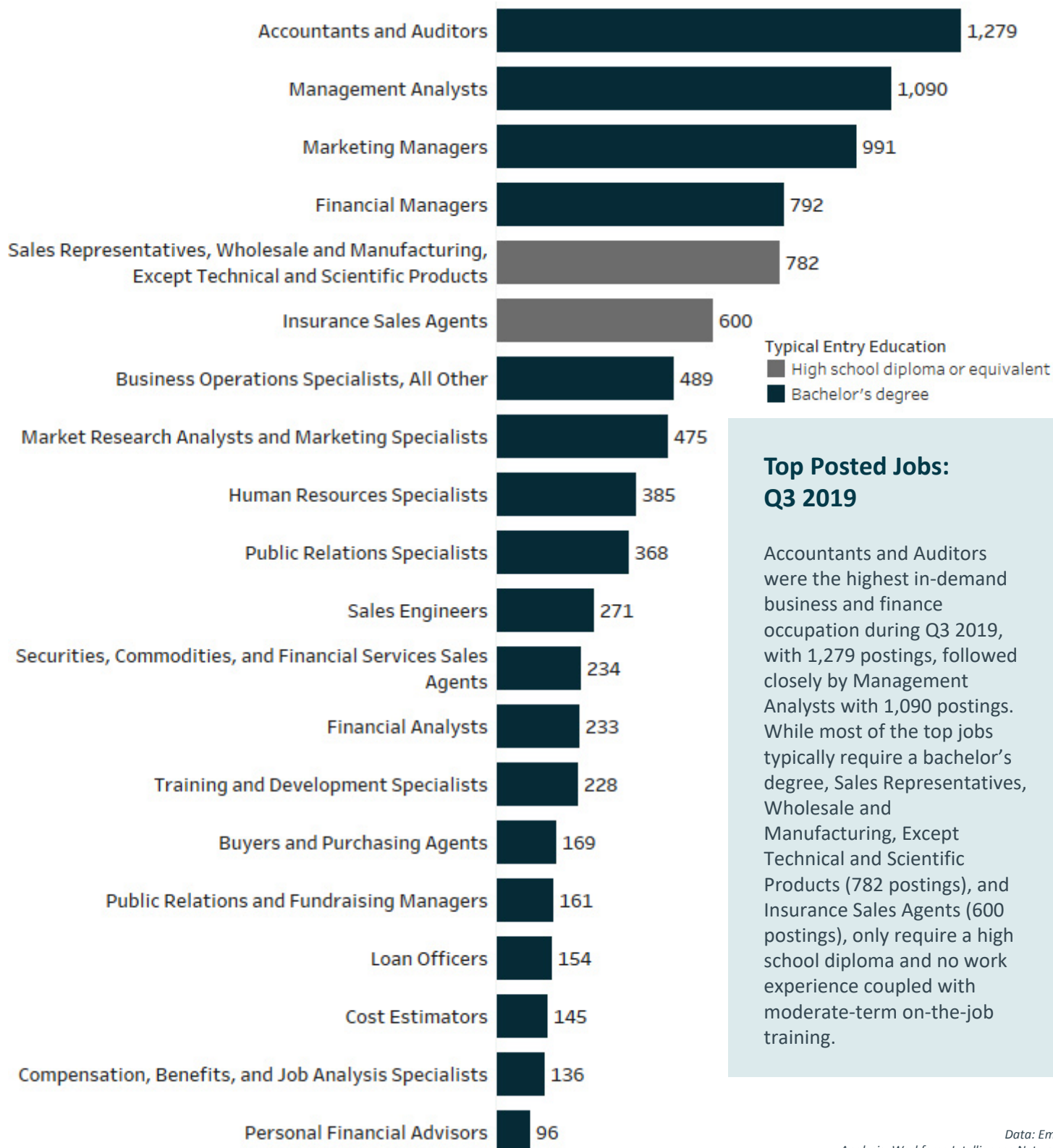


9,585 Business and Finance Postings:
1,241 More Than Q2 2019



Accounting and Management
Skills in High Demand

Business and Finance Top Posted Jobs Q3 2019



Top Posted Jobs: Q3 2019

Accountants and Auditors were the highest in-demand business and finance occupation during Q3 2019, with 1,279 postings, followed closely by Management Analysts with 1,090 postings. While most of the top jobs typically require a bachelor's degree, Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (782 postings), and Insurance Sales Agents (600 postings), only require a high school diploma and no work experience coupled with moderate-term on-the-job training.



High Earning Potential for Marketing Managers



MBA: In-Demand Business and Finance Certification

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 \$35.99, translating to annual earnings of approximately \$71,980. Additional experience may lead to a role as a Marketing or Financial Manager, opening the door to median wages around \$65.39 hourly, or about \$130,780 annually.

Wage Overview for Top Posted Business and Finance Jobs Q3 2019

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
13-2011	Accountants and Auditors	\$23.02	\$28.26	\$35.99	\$47.39	\$65.17
13-1111	Management Analysts	\$23.75	\$30.34	\$41.51	\$58.36	\$84.77
11-2021	Marketing Managers	\$38.96	\$49.33	\$65.39	\$82.43	\$128.97
11-3031	Financial Managers	\$38.44	\$47.82	\$62.79	\$80.43	\$120.25
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$15.59	\$21.96	\$33.16	\$48.30	\$62.47
41-3021	Insurance Sales Agents	\$13.09	\$17.80	\$23.95	\$37.70	\$60.93
13-1199	Business Operations Specialists, All Other	\$18.42	\$24.86	\$34.25	\$48.02	\$60.92
13-1161	Market Research Analysts and Marketing Specialists	\$16.84	\$24.44	\$33.62	\$47.39	\$61.03
13-1071	Human Resources Specialists	\$17.53	\$22.28	\$29.43	\$38.72	\$50.47
27-3031	Public Relations Specialists	\$15.36	\$20.79	\$28.44	\$37.05	\$47.34

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Accounting
- Auditing
- Microsoft Access
- Selling Techniques
- Business Development

In-Demand Foundational Skills

- Management
- Sales
- Leadership
- Communications
- Operations

In-Demand Education Level*

- High School Diploma: 7.5%
- Associate Degree: 4.5%
- Bachelor's Degree: 53.7%
- Master's Degree: 16.5%

*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

- Master of Business Administration (MBA)
- Certified Public Accountant
- Certified Internal Auditor
- Certified Information System Auditor (CISA)
- Series 7 General Securities Representative License (Stockbroker)



ENERGY OCCUPATION GROUP

City of Detroit | Q3 2019

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.



15,866
Energy Workers
0.4% Decrease from
Q2 2019

Employment Over
Time 2001–2019



Top Posting Employers*

- DTE Energy Company
- Exelon Corporation
- Black Hills Corporation
- CMS Energy Corporation
- Duke Energy Corporation
- Osmose Utilities Services, Inc.
- Aegion Corporation

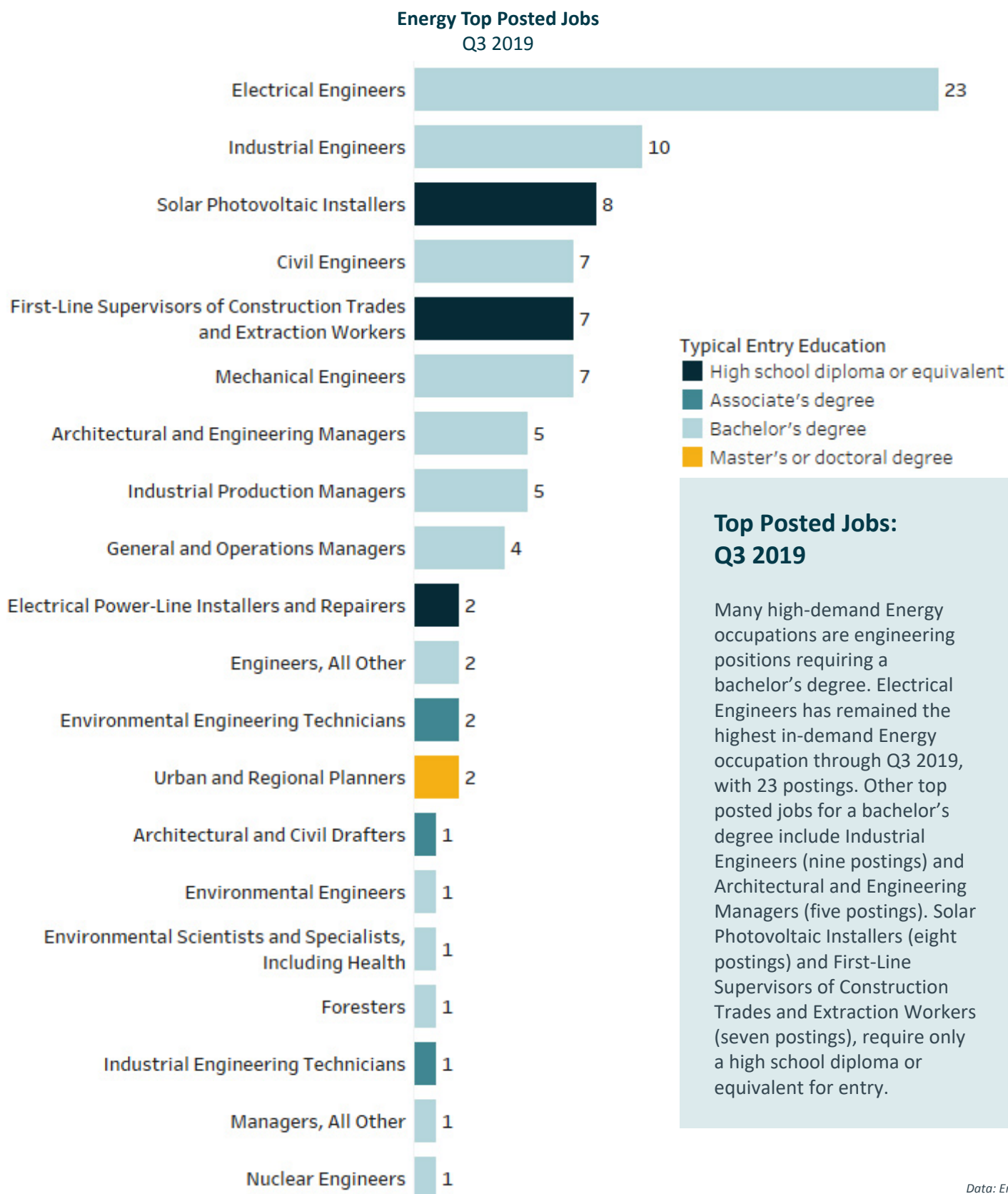
*Employer names are listed as they appear in online job postings.



95 Energy Postings:
32 More Than in Q2 2019



Bachelors Degree Required
for Most Energy Jobs





Industrial Engineers: In-Demand Entry Level Job



Master of Business Administration (MBA): Most In-Demand Energy Certification

Energy Wage Overview

The high demand for engineers and managers in the energy field creates lucrative opportunities for job seekers willing to overcome the educational barriers related to these jobs. The top posted energy job, Electrical Engineers, offers a median hourly wage of \$43.85, or annual earnings of approximately \$87,700. Construction and technician focused positions generally have shorter educational requirements than engineers and pay higher median wages, \$31.98, than similar occupations in other industries.

Wage Overview for Top Posted Energy Jobs in Q3 2019

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2071	Electrical Engineers	\$29.57	\$35.47	\$43.85	\$53.50	\$61.70
17-2112	Industrial Engineers	\$30.44	\$36.01	\$44.09	\$53.07	\$60.29
47-2231	Solar Photovoltaic Installers	Insf. Data	Insf. Data	Insf. Data	Insf. Data	Insf. Data
17-2051	Civil Engineers	\$24.01	\$28.31	\$34.45	\$43.44	\$55.49
17-2141	Mechanical Engineers	\$29.74	\$35.17	\$43.69	\$54.01	\$62.49
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$17.10	\$24.32	\$31.98	\$43.57	\$52.04
11-3051	Industrial Production Managers	\$35.12	\$44.37	\$55.85	\$69.76	\$86.42
11-9041	Architectural and Engineering Managers	\$45.43	\$53.63	\$63.35	\$75.24	\$89.91
11-1021	General and Operations Managers	\$22.56	\$36.05	\$55.71	\$85.03	\$120.18
17-2199	Engineers, All Other	\$23.37	\$33.40	\$43.57	\$55.35	\$63.48

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Customer Satisfaction
- Electrical Engineering
- Corporate Services
- Distributed Computing
- Electrical Systems

In-Demand Foundational Skills

- Management
- Operations
- Problem Solving
- Leadership
- Interpersonal Skills

In-Demand Education Level*

- High School Diploma: 27.4%
- Associate Degree: 17.9%
- Bachelor's Degree: 55.8%
- Master's Degree: 12.6%

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

In-Demand Certifications

- Master of Business Administration (MBA)
- Professional Engineer
- Licensed Professional Engineer
- Six Sigma Black Belt Certification
- Commercial Driver's License (CDL)



HEALTH CARE OCCUPATION GROUP

City of Detroit | Q3 2019

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.



28,549
Health Care Workers
18 Worker Increase from
Q1 2019

Employment Over Time
2001–2019



Top Posting Employers*

- General Healthcare Resources, Inc.
- Henry Ford Health System
- Ascension Health
- Tenet Healthcare Corporation
- William Beaumont Hospital
- Soliant Health, Inc
- Vhs Sinai-Grace Hospital, Inc
- On Time Solutions Inc
- Tenet
- Harper University Hospital

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

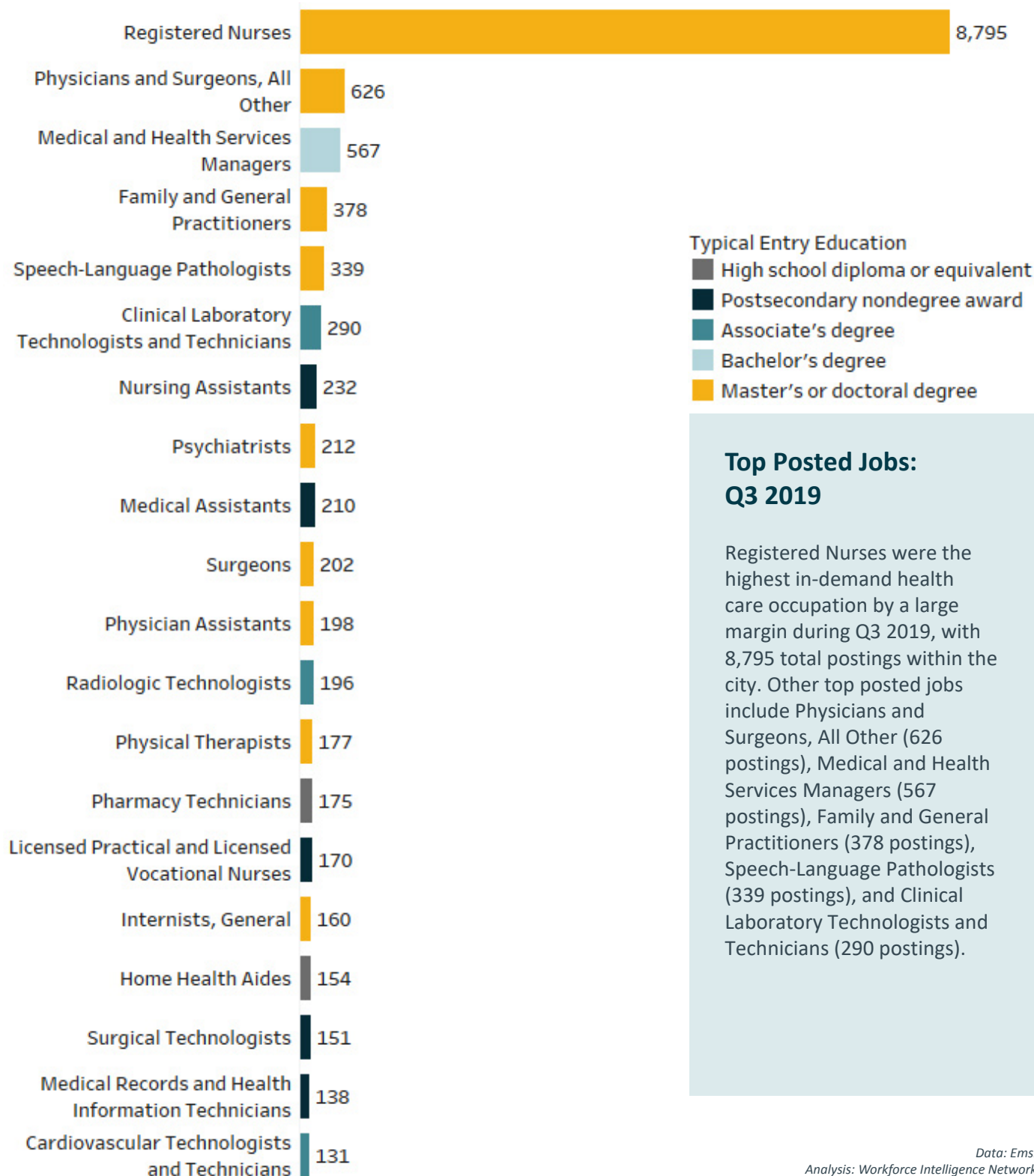


15,162 Health Care Postings:
167 More Than Q2 2019



Bachelor's Degree Required for
High Paying Health Care Jobs

Health Care Top Posted Jobs
Q3 2019





High Earning Potential for Surgeons



LPN: Most In-Demand Health Care Certification

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 a number of 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 \$17.81 per hour. Registered Nurses, the top posted health care job in Q3 2019, offers a median hourly wage of \$36.25 or an annual salary of nearly \$72,500.

Wage Overview for Top Posted Health Care Jobs in Q3 2019

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
29-1141	Registered Nurses	\$27.34	\$31.49	\$36.25	\$40.81	\$47.98
29-1069	Physicians and Surgeons, All Other	\$22.66	\$27.15	\$63.77	\$102.46	\$132.57
11-9111	Medical and Health Services Managers	\$27.64	\$35.46	\$47.29	\$64.68	\$102.72
29-1062	Family and General Practitioners	\$42.38	\$57.25	\$89.15	\$102.09	\$163.57
29-1127	Speech-Language Pathologists	\$27.08	\$32.21	\$37.85	\$47.06	\$67.80
29-2018	Clinical Laboratory Technologists and Technicians	\$14.77	\$17.92	\$25.79	\$32.74	\$37.94
31-1014	Nursing Assistants	\$11.43	\$12.97	\$14.52	\$16.57	\$18.66
29-1066	Psychiatrists	\$69.01	\$75.89	\$94.31	\$115.59	\$190.53
31-9092	Medical Assistants	\$12.59	\$13.74	\$15.55	\$18.28	\$20.44
29-1067	Surgeons	\$34.94	\$111.06	\$135.02	\$142.60	\$235.32

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

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

In-Demand Foundational Skills

- Leadership
- Management
- Teaching
- Customer Service
- Communications

In-Demand Education Level*

- High School Diploma: 7.1%
- Associate Degree: 9.2%
- Bachelor's Degree: 12.9%
- Master's Degree: 7.1%

*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

- Bachelor of Science in Nursing (BSN)
- Licensed Practical Nurse
- Nurse Practitioner
- Certified Nursing Assistant
- Advanced Practice Registered Nurse



INFORMATION TECHNOLOGY (IT) OCCUPATION GROUP

City of Detroit | Q3 2019

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.



8,059
IT Workers
449 Worker Increase
from Q1 2019

Employment Over Time
2001–2019



Top Posting Employers*

- Deloitte LLP
- Efinancialcareers, Inc.,
- Quicken Loans Inc.
- Leidos Holdings, Inc.
- Pricewaterhousecoopers LLP
- Strategic Staffing Solutions, Inc.
- ACCENTURE, INC.
- Anthem, Inc.
- Amazon.com, Inc.
- Ford Motor Company

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

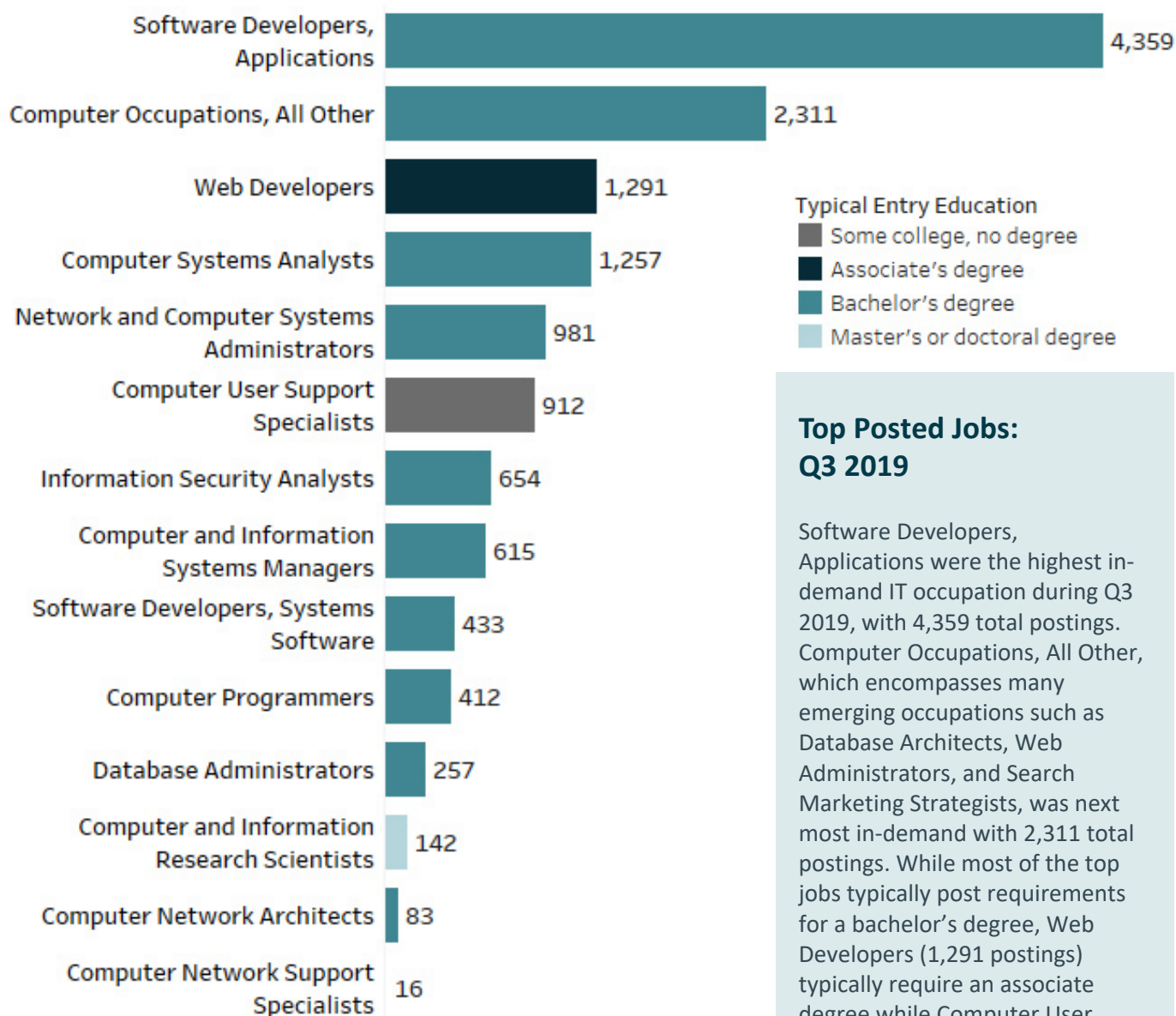


Professional Services and Mortgage Lending Companies are Top IT Employers



Bachelors Degree Required for Most IT Jobs

Information Technology Top Posted Jobs
Q3 2019



Top Posted Jobs: Q3 2019

Software Developers, Applications were the highest in-demand IT occupation during Q3 2019, with 4,359 total postings. Computer Occupations, All Other, which encompasses many emerging occupations such as Database Architects, Web Administrators, and Search Marketing Strategists, was next most in-demand with 2,311 total postings. While most of the top jobs typically post requirements for a bachelor's degree, Web Developers (1,291 postings) typically require an associate degree while Computer User Support Specialists (912 postings) prefer some college education, but no degree.



High Earning Potential for Software Developers, Applications



Certified Information Systems Security Professional: Most In-Demand IT Certification

IT Wage Overview

Most IT related jobs offer high wages, making for a lucrative opportunity for job seekers willing to overcome the educational barriers related to these jobs. Software Developers, Applications, the top posted IT job in Q3 2019, offers a median hourly wage of \$45.10 or an annual salary of over \$90,200.

Wage Overview for Top Posted IT Jobs in Q3 2019

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
15-1132	Software Developers, Applications	\$29.21	\$35.81	\$45.10	\$56.16	\$64.84
15-1199	Computer Occupations, All Other	\$20.17	\$27.94	\$38.51	\$50.14	\$61.50
15-1134	Web Developers	\$11.74	\$21.39	\$32.41	\$43.48	\$51.40
15-1121	Computer Systems Analysts	\$26.21	\$32.70	\$40.73	\$51.25	\$63.14
15-1142	Network and Computer Systems Administrators	\$25.80	\$32.38	\$39.91	\$50.24	\$60.40
15-1151	Computer User Support Specialists	\$13.92	\$17.44	\$23.37	\$30.44	\$39.13
15-1122	Information Security Analysts	\$30.38	\$35.65	\$45.42	\$58.00	\$66.75
11-3021	Computer and Information Systems Managers	\$41.73	\$53.03	\$65.80	\$80.72	\$101.02
15-1133	Software Developers, Systems Software	\$23.42	\$34.18	\$44.46	\$54.05	\$63.90
15-1131	Computer Programmers	\$22.44	\$30.38	\$38.07	\$46.51	\$54.15

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Java
- Agile Software Development
- SQL
- Software Development
- Software Engineering

In-Demand Foundational Skills

- Management
- Innovation
- Leadership
- Communications
- Operations

In-Demand Education Level*

- High School Diploma: 3.2%
- Associate Degree: 3.0%
- Bachelor's Degree: 36.0%
- Master's Degree: 8.4%

*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 Information Systems Security Professional
- Certified Information System Auditor (CISA)
- Project Management Professional Certification
- Certified Information Security Manager
- Master of Business Administration (MBA)



SKILLED TRADES AND TECHNICIANS (MANUFACTURING) OCCUPATION GROUP City of Detroit | Q3 2019

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.



9,275
Trade Workers
0.1% Decrease from
Q2 2019

Employment Over Time
2001–2019



Top Posting Employers*

- Flex-N-Gate Corporation
- E. W. Grobbel Sons, Inc.
- FCA US LLC
- Fieldco
- Kelly Services, Inc.
- DTE Energy Company
- Ilitch Holdings, Inc.
- Express Services Inc
- Malace & Associates, Inc.
- Quicken Loans Inc.

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

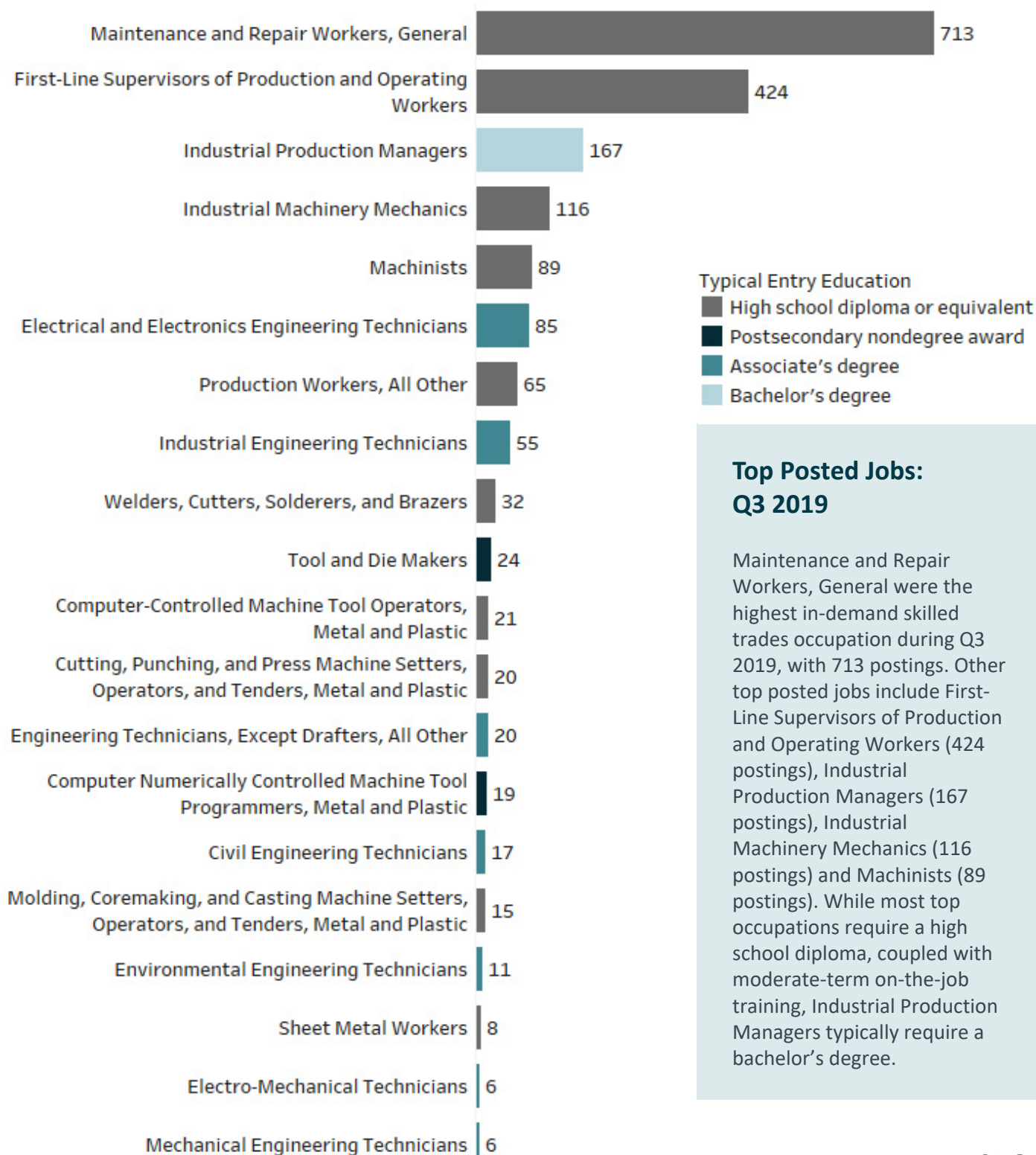


1,944 Skilled Trades Postings:
327 More Than Q2 2019



Vocational Training Required
for Most Skilled Trades Jobs

Skilled Trades and Technicians Top Posted Jobs Q3 2019





High Earning Potential for Industrial Production Managers



Commercial Driver's License (CDL): In-Demand Skilled Trades Certification

Skilled Trades and Technicians Wage Overview

Six 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 Q3 2019, offers a median hourly wage of \$17.35, 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 \$55.85 hourly or roughly \$111,700 annually.

Wage Overview for Top Posted Skilled Trades and Technicians Jobs in Q3 2019

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	\$11.00	\$13.52	\$17.35	\$23.08	\$28.96
51-1011	First-Line Supervisors of Production and Operating Workers	\$18.70	\$24.24	\$32.16	\$41.32	\$51.11
11-3051	Industrial Production Managers	\$35.12	\$44.37	\$55.85	\$69.76	\$86.42
49-9041	Industrial Machinery Mechanics	\$15.45	\$19.77	\$25.28	\$31.44	\$37.42
51-4041	Machinists	\$11.30	\$15.27	\$19.99	\$25.99	\$30.20
17-3023	Electrical and Electronics Engineering Technicians	\$16.71	\$22.22	\$30.14	\$35.05	\$39.11
51-9199	Production Workers, All Other	\$9.25	\$10.36	\$14.58	\$20.58	\$31.97
17-3026	Industrial Engineering Technicians	\$16.75	\$20.86	\$26.38	\$33.34	\$38.89
51-4121	Welders, Cutters, Solderers, and Brazers	\$13.31	\$15.96	\$19.10	\$23.83	\$29.57
51-4111	Tool and Die Makers	\$15.13	\$19.77	\$26.28	\$31.69	\$36.01

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Plumbing
- HVAC
- Mechanics
- Preventive Maintenance
- Auditing

In-Demand Foundational Skills

- Management
- Operations
- Troubleshooting
- Communications
- Leadership

In-Demand Education Level*

- High School Diploma: 35.5%
- Associate Degree: 9.7%
- Bachelor's Degree: 17.9%
- Master's Degree: 2.7%

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

In-Demand Certifications

- Commercial Driver's License (CDL)
- HVAC Certification
- Automotive Service Excellence (ASE) Certification
- EPA 608 Technician Certification
- Six Sigma Black Belt Certification

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