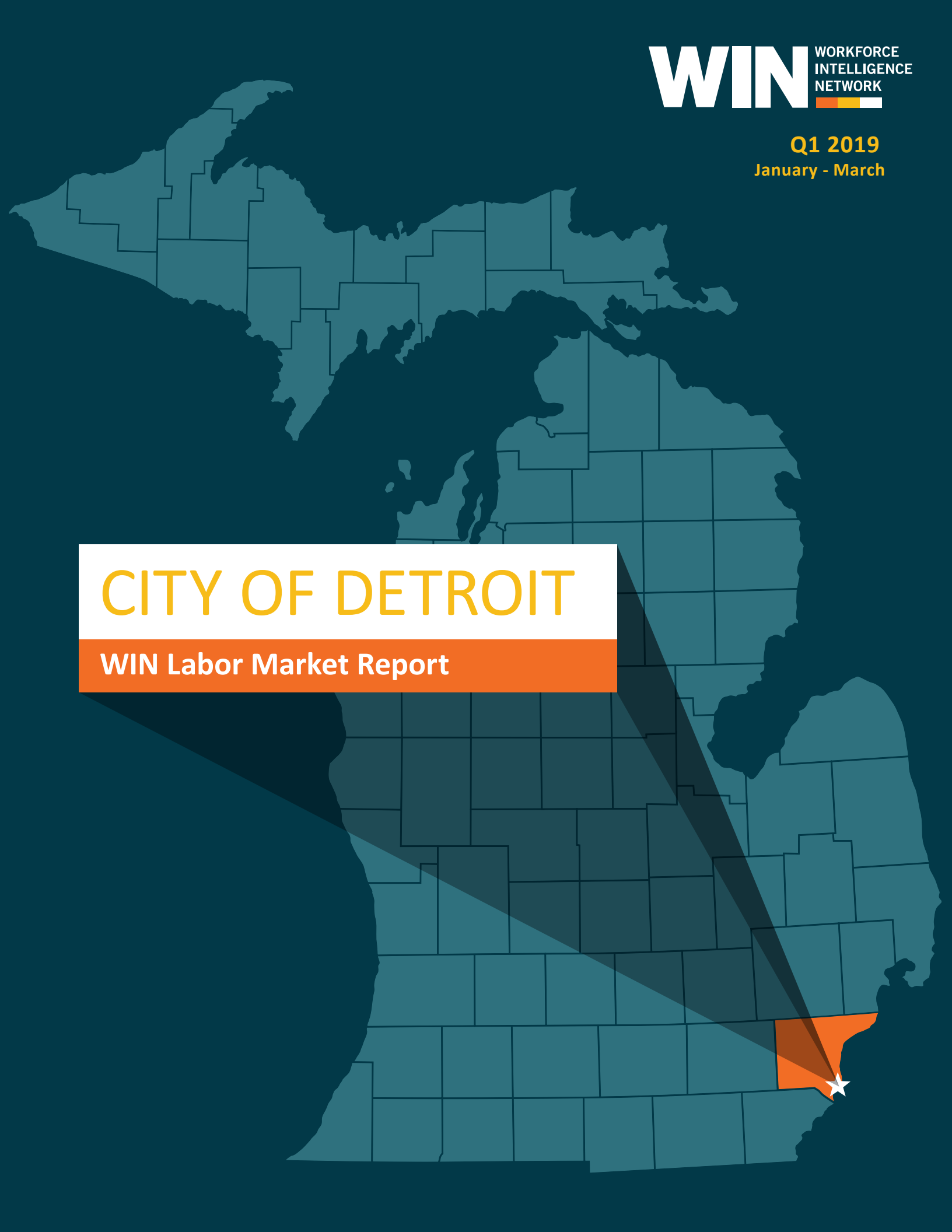


**Q1 2019**  
January - March

# CITY OF DETROIT

WIN Labor Market Report





# INTRODUCTION

## City of Detroit | Q1 2019

### 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 six Michigan Works! Agencies (MWAs) and ten 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 first quarter of 2019 in the city of Detroit and includes comparison analysis to the fourth quarter of 2018. 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](http://www.WINintelligence.org) or contact the data and research team directly at [research@WINintelligence.org](mailto:research@WINintelligence.org).



# ANNUAL STATE OF THE LABOR MARKET

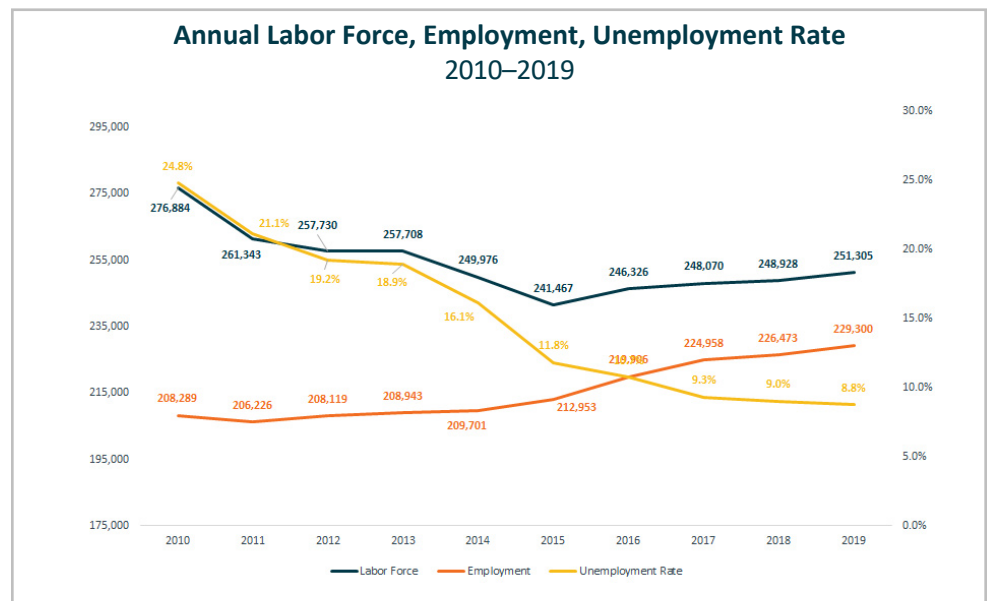
## City of Detroit | Q1 2019

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

Over the first quarter of 2019, the labor force and employment figures in Detroit rose slightly, continuing the steady growth seen throughout last year. This quarter, compared to Q4 2018, the labor force grew by 0.7 percent. Since labor force grew slightly more quickly than employment, this caused the quarterly unemployment rate to increase by 0.2 percentage points from the 8.6 percent recorded in Q4 2018. Despite the increase, this represents an improvement over the annual unemployment rate of 9.3 percent during 2017. Employer demand for health care workers is on the rise this quarter. The health care occupation group reported the highest demand among the five key groups analyzed for the city, with 8,014 job postings during Q1 2019. The business and finance and skilled trades occupation groups also offer great job opportunities for job seekers. Many business and finance occupation postings were open to workers with two or fewer years of experience, including 1,764 postings in Q1 2019. Skilled trades postings advertised 530 opportunities for those with a high school diploma and a willingness to undertake training.

### Annual Labor Market Information

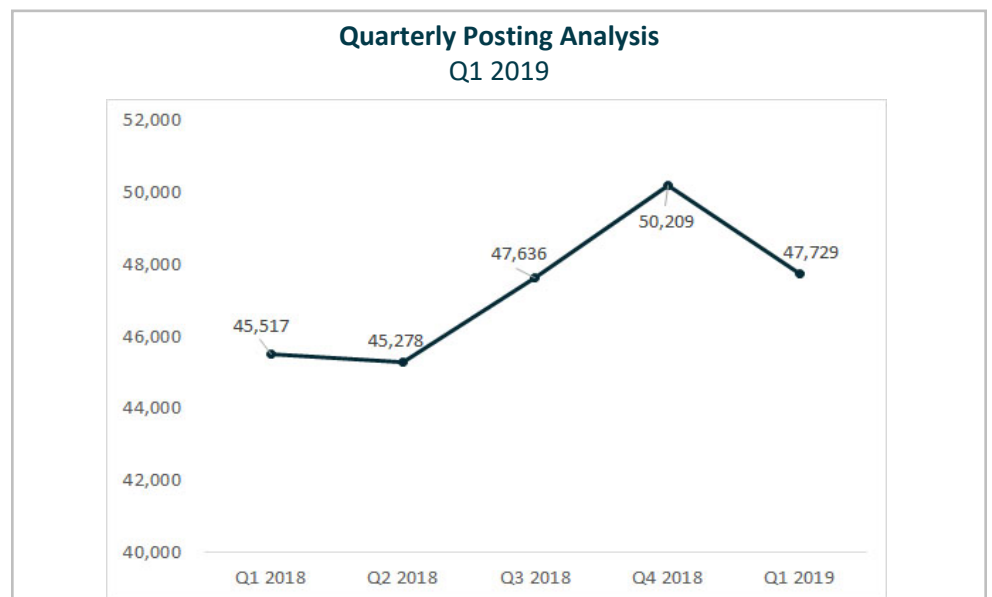
The labor force in the city of Detroit increased by 858 individuals between 2017 and 2018, marking the fifth year of growth. Employment also grew by 1,516 workers between 2017 and 2018 annual values. The employment and labor force both continued to increase into the year-to-date (YTD) values for the first quarter of 2019. The unemployment rate in the city of Detroit also decreased slightly from an annual rate of 9.0 percent in 2018 to a YTD 2019 rate of 8.8 percent.



Data: BLS | Analysis: Workforce Intelligence Network

### Quarterly Employer Demand Overview

Data obtained year to date (YTD) for the first quarter of 2019 indicated that employer demand has remained strong, experiencing only a small decrease in job advertisements since the end of 2018. There were 47,729 unique postings in the city of Detroit. Demand in Q1 2019 decreased by 2,480 postings from the 50,209 unique postings reported during Q4 2018. While there has been a slight decrease between Q4 2018 and Q1 2019 ads, supply and demand for jobs has remained strong into the first quarter of 2019.



Data: Emsi | Analysis: Workforce Intelligence Network



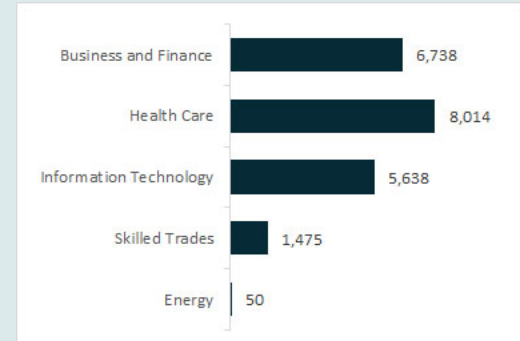
## QUARTERLY WORKFORCE INDICATORS

### City of Detroit | Key Findings for Q1 2019

#### The health care occupation group experienced strong growth through 2018 and has continued the trend into Q1 2019.

Employers seeking health care workers showed sustained demand growth during 2018 and into 2019, resulting in a Q1 2019 total of 8,014 ads. This remains the highest-posting occupation group in the first quarter of 2019. Registered Nurses have also remained by far the most in-demand job during Q1. Other major occupation groups such as business and finance and information technology (IT) also showed strong growth this quarter, with 6,738 and 5,638 ads respectively. Heavy tractor-trailer truck drivers and software developers come in a close second and third for the top 3 occupations demanded for Q1 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. Many jobs listed in the business and finance and IT occupations follow the same trend that most positions usually require a bachelor's degree, although there are still positions available requiring a high school diploma or an certification. For more information about each occupation group, see page 17.

#### Postings by Occupation Group Q1 2019

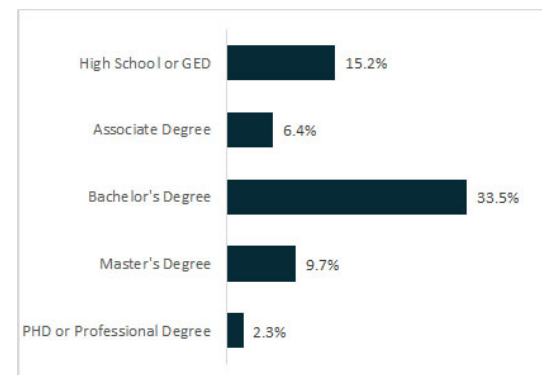


Data: Emsi | Analysis: Workforce Intelligence Network

#### A bachelor's degree is the most in-demand educational credential for all openings in the city, specified in 33.5 percent of job postings.

Of the 47,729 total postings in the city of Detroit during Q1 2019, 19,060 (39.9 percent) required a college degree. An additional 5,715 postings (12.0 percent) required an advanced degree. This is significantly higher than across southeast Michigan as a whole: regionwide, 24.0 percent of postings require a bachelor's degree while 7.4 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 Q1 2019



Data: Emsi | Analysis: Workforce Intelligence Network

#### Detroit's quarterly unemployment rate increased by 0.2 percentage points between the Q4 2018 rate of 8.6 percent and YTD 2019 rate of 8.8 percent.

So far in Q1 2019, unemployment has increased by 420 workers compared to Q4 2018, and the unemployment rate has risen slightly. It is not uncommon for unemployment to rise slightly in the first quarter, and Q1 2019 still represents a 0.8 percentage point decrease in unemployment rate over Q1 2018. For more information about this quarter's unemployment rate and other labor market indicators, see page 4.

#### Quarterly Labor Market Data

	4th Quarter 2018	1st Quarter 2019	Change from 4th Quarter 2018	Percent Change from 4th Quarter 2018
Labor Force	249,595	251,305	1,710	0.7%
Employment	228,010	229,300	1,290	0.6%
Unemployment	21,585	22,005	420	1.9%
Unemployment Rate	8.6%	8.8%	0.1%	na

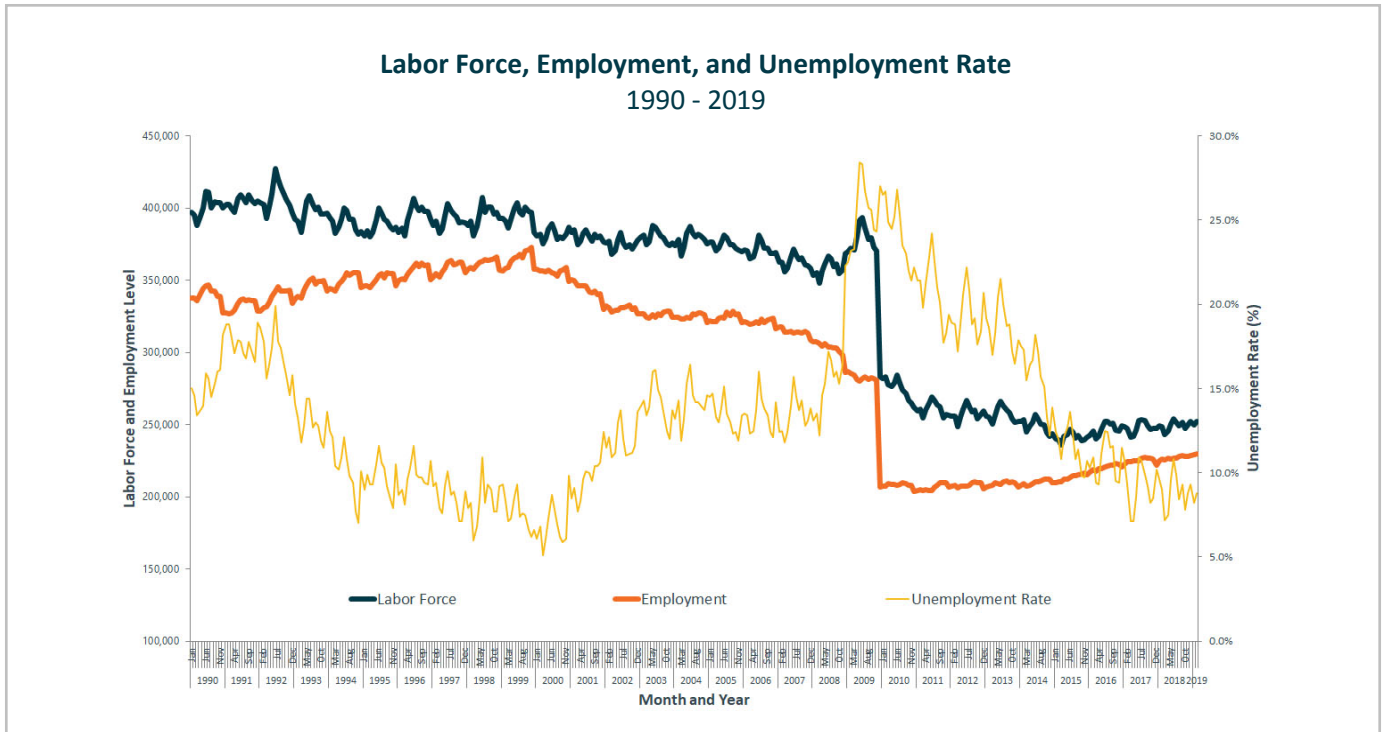
Note: Monthly data averaged by quarter | Data: BLS





# WORKFORCE OVERVIEW

## City of Detroit | Labor Market Information Q1 2019



Data: BLS | Analysis: Workforce Intelligence Network

### Quarterly Labor Market Data

#### Q1 2018 - Q1 2019

	1st Quarter 2018	2nd Quarter 2018	3rd Quarter 2018	4th Quarter 2018	1st Quarter 2019	Change from 4th Quarter 2018	Percent Change from 4th Quarter 2018	Change from 1st Quarter 2018	Percent Change from 1st Quarter 2018
Labor Force	248,211	246,345	251,559	249,595	251,305	1,710	0.7%	3,093	1.2%
Employment	224,416	226,331	227,137	228,010	229,300	1,290	0.6%	4,884	2.2%
Unemployment	23,796	20,014	24,422	21,585	22,005	420	1.9%	-1,791	-7.5%
Unemployment Rate	9.6%	8.1%	9.7%	8.6%	8.8%	0.1%	na	-0.8%	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 variation between quarters. The labor force change from Q4 2018 to Q1 2019 is an increase of 1,710 workers. Quarterly employment in the city is also higher than Q4 2018 levels by 1,290 workers. With the labor force growing at a slightly faster rate than employment this quarter, the unemployment rate rose slightly this quarter in response to the change. The quarterly unemployment rate increased by 0.2 percentage points, from 8.6 percent in Q4 2018 to 8.8 percent in Q1 2019.



# WORKFORCE OVERVIEW

## City of Detroit | 2017 Annual Population Demographics

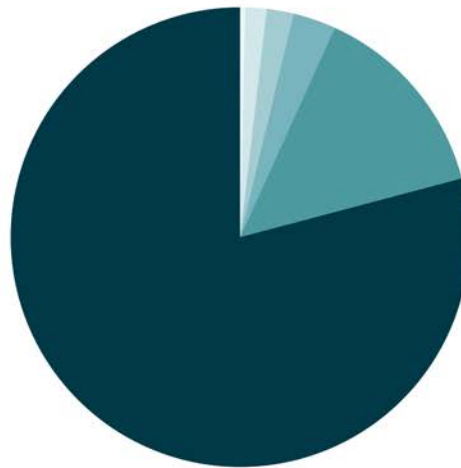
### Population Demographics

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



### Population Gender Demographics



53% Females



47% Males



### 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
<b>Total Population 16 +</b>	282,932	226,452	56,021	19.8%
<b>Sex</b>				
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%
<b>Race</b>				
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%
<b>Ethnicity</b>				
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.



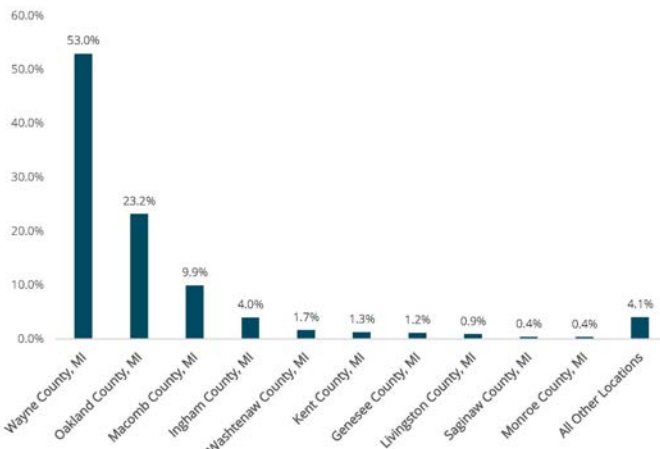
# WORKFORCE OVERVIEW

## 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.

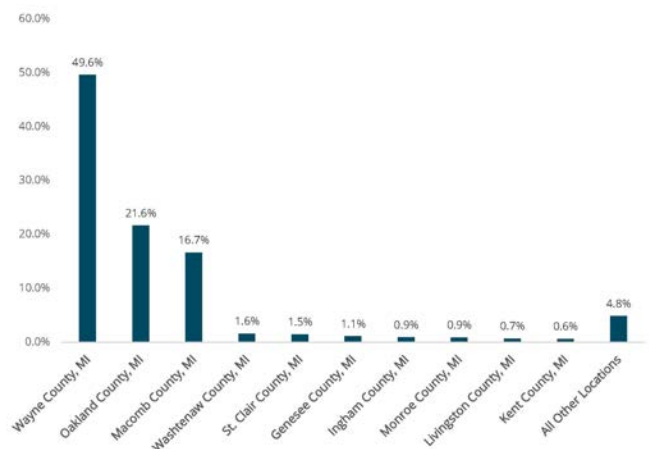
**Where City of Detroit Residents Work**



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

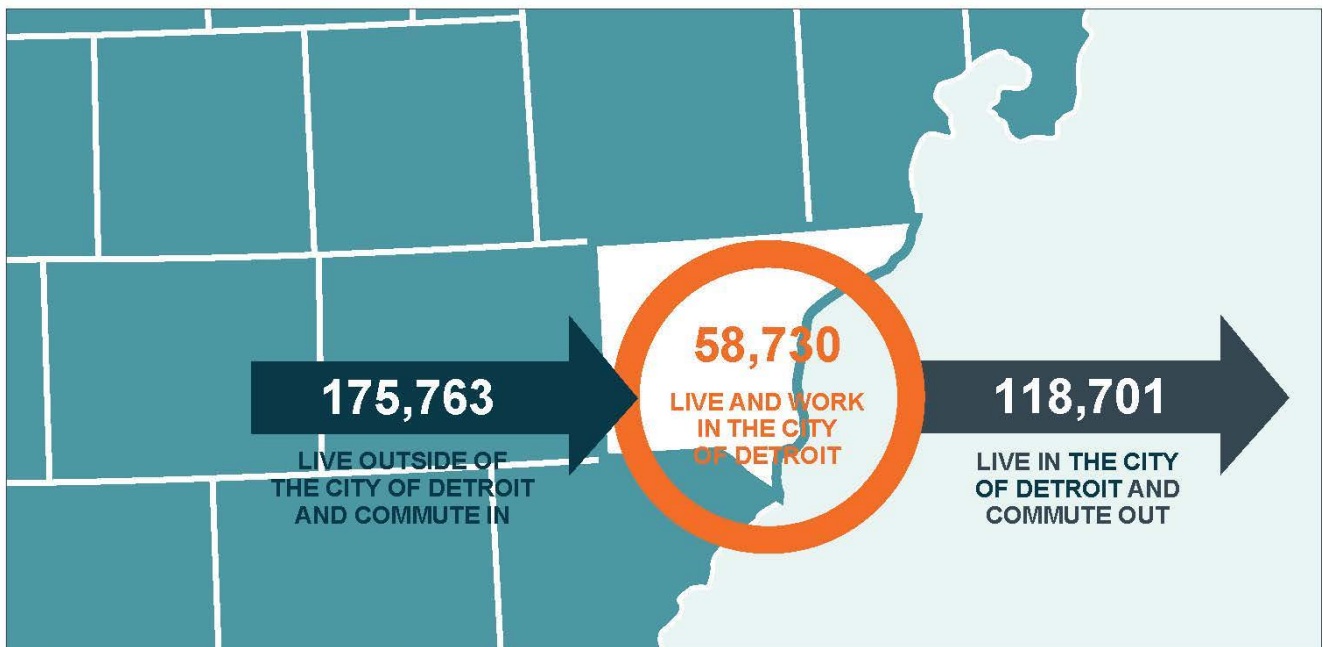
Data: U.S. Census OnTheMap, 2015  
Analysis: Workforce Intelligence Network

**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

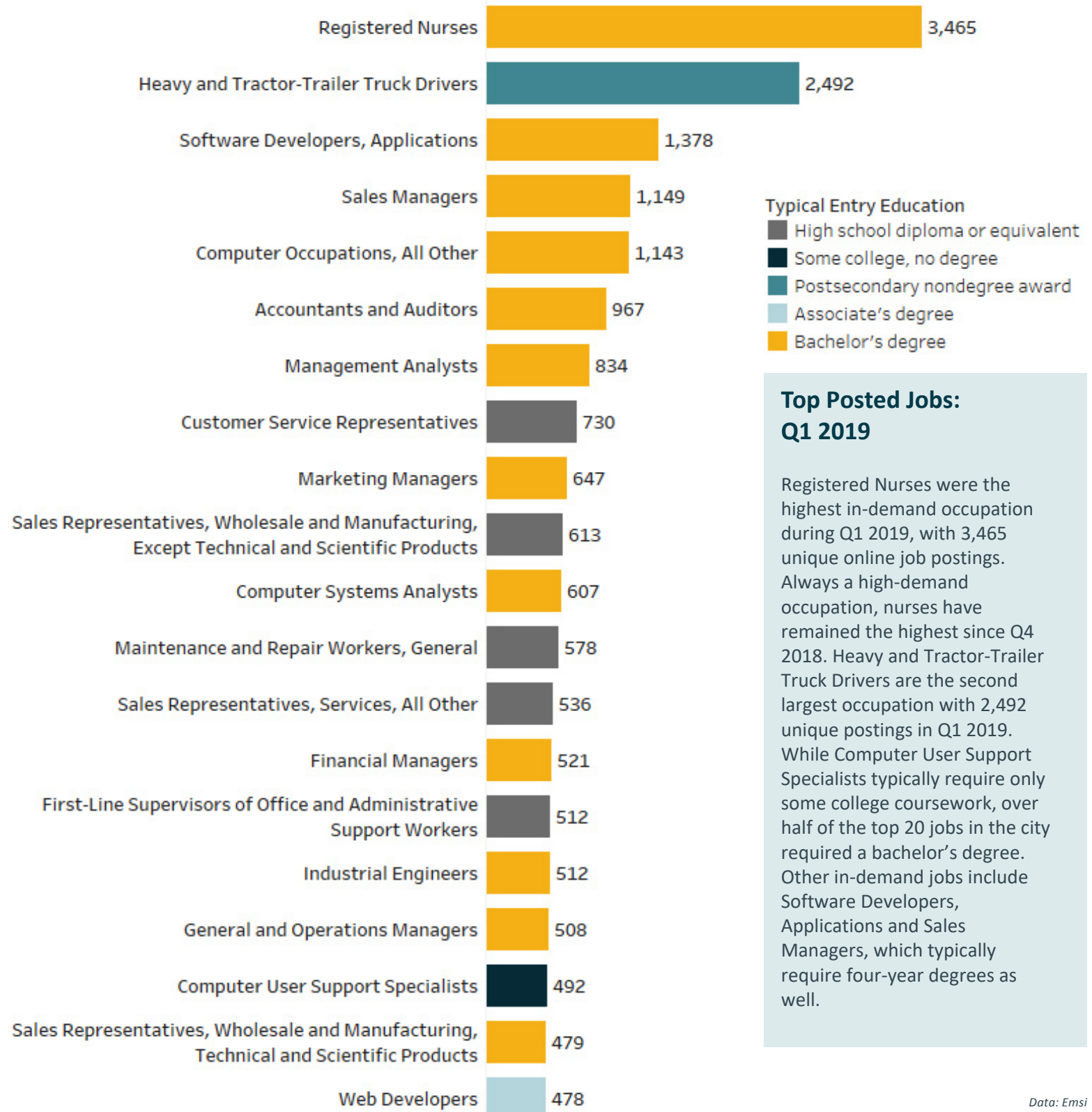




## REAL-TIME DEMAND OVERVIEW

### City of Detroit | Top Posted Jobs | Q1 2019

#### Top Posted Jobs Q1 2019



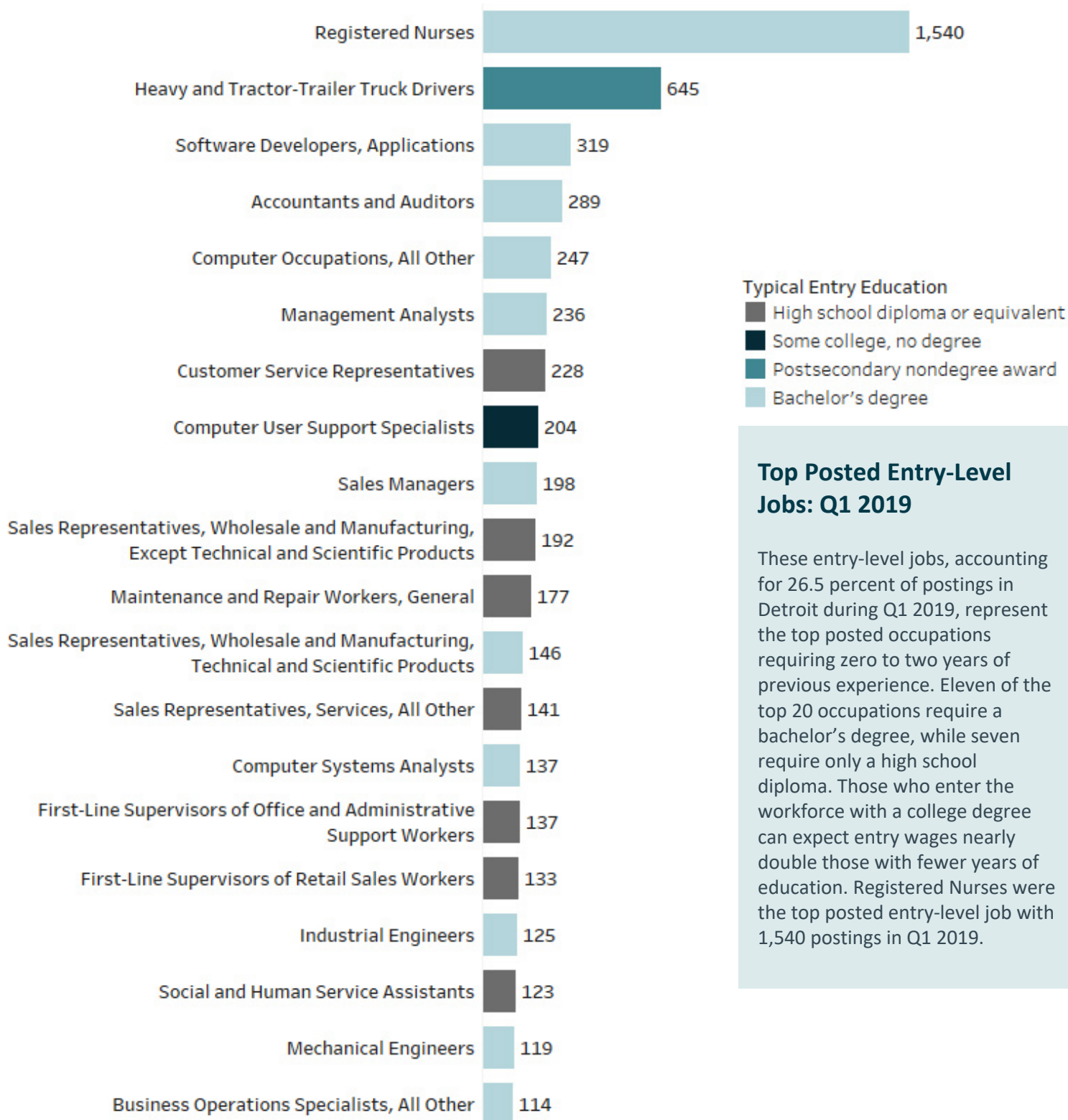




## REAL-TIME DEMAND OVERVIEW

### City of Detroit | Top Posted Entry-Level Jobs | Q1 2019

Top Posted Entry-Level Jobs  
Q1 2019







## REAL-TIME DEMAND OVERVIEW

### City of Detroit | Skills and Certifications | Q1 2019

#### Top Posting Employers\*

- Henry Ford Health System
- Deloitte LLP
- Tenet Healthcare Corporation
- General Healthcare Resources, Inc.
- Quicken Loans Inc.
- Ascension Health
- Wayne State University
- Soliant Health, Inc
- Marriott International, Inc.
- City of Detroit
- Wayne Reese
- Anthem, Inc.
- Ilitch Holdings, Inc.
- Ally Financial Inc.
- MGM Resorts International

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

#### Top In-Demand Skills

- Nursing
- Accounting
- Selling Techniques
- Customer Satisfaction
- Business Development
- Auditing
- Basic Life Support
- Agile Software Development
- SQL
- Strategic Planning

#### Top In-Demand Qualifications

- Advanced Life Support
- Advanced Practice Registered Nurse
- American Medical Technologists
- American Registry of Radiologic Technologists (ARRT) Certified
- Associate of Science in Nursing
- Certified Case Manager
- Certified Coding Specialist
- Certified Compensation Professional
- Certified Information Security Manager
- Certified Information System Auditor (CISA)



## BUSINESS AND FINANCE OCCUPATION GROUP

### City of Detroit | Q1 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.

**17,751**  
Business Workers  
1.5% Increase  
from 2018

Employment Over Time  
2001–2019



#### Top Job Posting Employers\*

- Deloitte LLP
- Quicken Loans Inc.
- Ernst & Young LLP
- General Motors Company
- Pricewaterhousecoopers LLP
- Rgp
- Kpmg LLP
- Anthem, Inc.
- Ally Financial Inc.
- Robert Half International Inc.

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

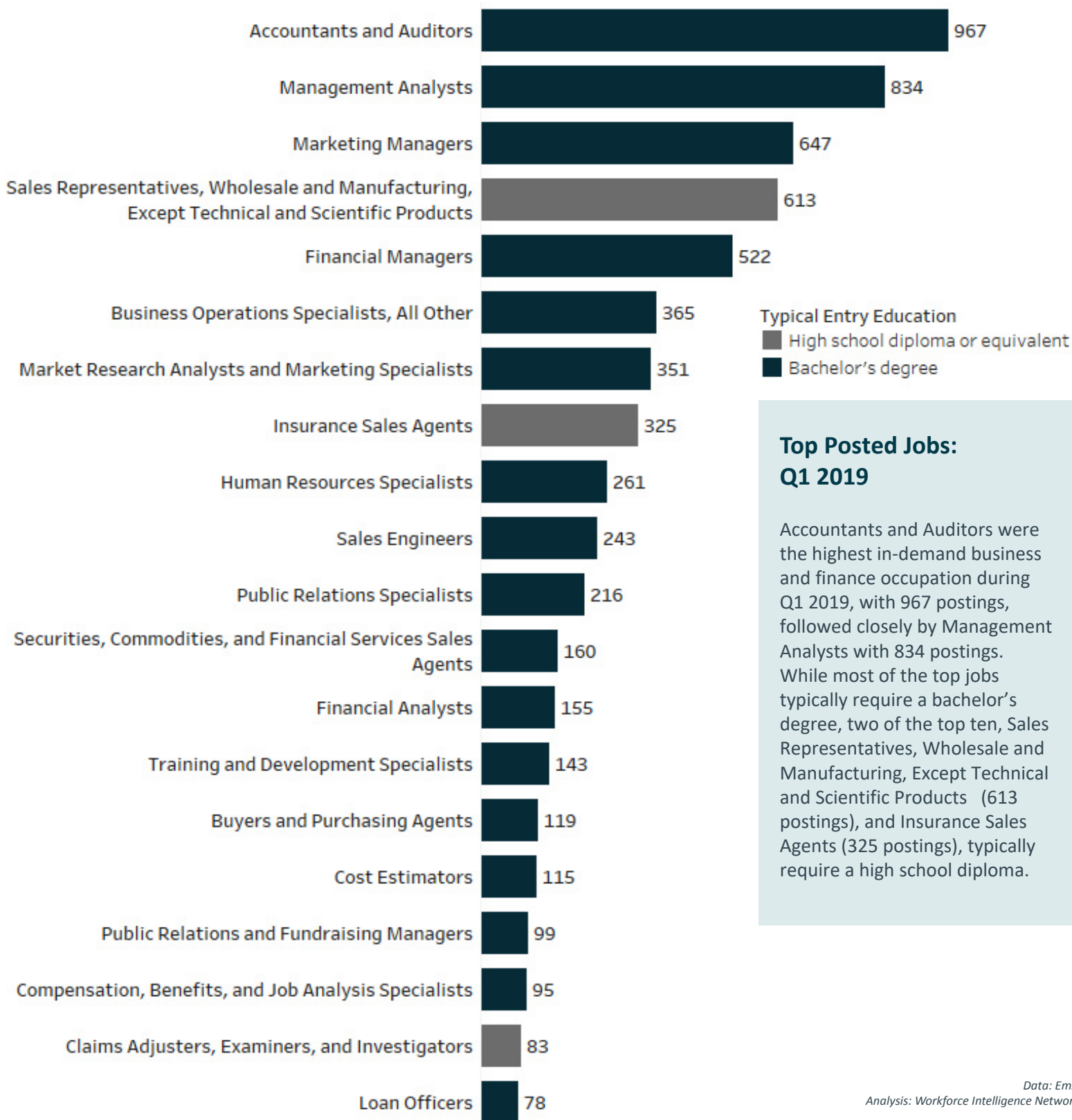


6,738 Business and Finance  
Postings: 725 Fewer Than Q4 2018



Accounting and Management  
Skills in High Demand

Business and Finance Top Posted Jobs  
Q1 2019





## High Earning Potential for Marketing and Financial Managers



## Actuarial Exams: 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. According to the Bureau of Labor Statistics (BLS), the top posted business and finance job, Accountants and Auditors, offers median hourly wages of \$33.80, translating to annual earnings of approximately \$70,000. Additional experience may lead to a role as a Marketing or Financial Manager, opening the door to wages around \$100 hourly, or about \$192,000 annually.

**Wage Overview for Top Posted Business and Finance Jobs Q1 2019**

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
13-2011	Accountants and Auditors	\$21.46	\$26.94	\$33.80	\$42.95	\$54.35
13-1111	Management Analysts	\$25.37	\$31.46	\$40.20	\$57.34	\$79.95
11-2021	Marketing Managers	\$36.71	\$51.91	\$68.44	\$83.53	\$114.18
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$15.81	\$21.87	\$30.84	\$45.62	\$59.58
11-3031	Financial Managers	\$33.71	\$43.10	\$58.57	\$79.00	\$106.22
13-1199	Business Operations Specialists, All Other	\$19.28	\$24.08	\$33.37	\$45.62	\$56.76
13-1161	Market Research Analysts and Marketing Specialists	\$21.14	\$27.19	\$36.56	\$51.55	\$62.87
41-3021	Insurance Sales Agents	\$10.98	\$16.50	\$23.38	\$36.33	\$67.41
13-1071	Human Resources Specialists	\$18.39	\$23.15	\$30.09	\$39.89	\$55.21
41-9031	Sales Engineers	\$27.21	\$34.39	\$43.79	\$56.31	\$74.46

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

#### In-Demand Technical Skills

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

#### In-Demand Foundational Skills

- Management
- Communications
- Sales
- Leadership
- Operations

#### In-Demand Education Level\*

- High School Diploma: 7.1%
- Associate Degree: 3.8%
- Bachelor's Degree: 57.8%
- Master's Degree: 18.7%

\*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

- Actuarial Exams
- ASNT Non-Destructive Tester
- Certification in Control Self-Assessment
- Certified Coding Specialist
- Certified Compensation Professional



## ENERGY OCCUPATION GROUP

### City of Detroit | Q1 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.



**14,619**  
Energy Workers

1.1% Increase  
from 2018

Employment Over Time  
2001–2019



#### Top Posting Employers\*

- DTE Energy Company
- Schlumberger Limited

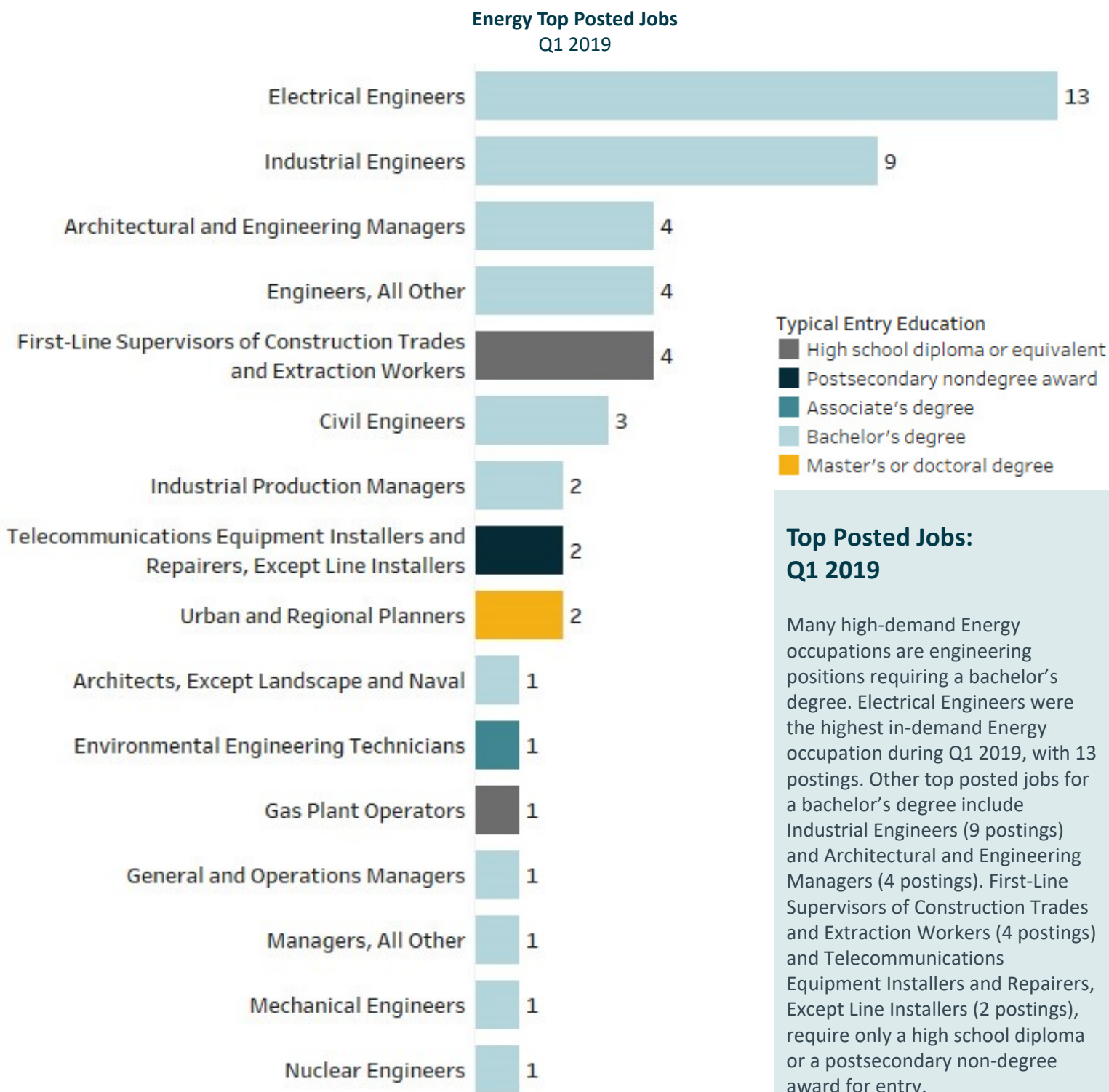
*\*Employer names are listed as they appear in online job postings.*



50 Energy Postings:  
19 Fewer Than in Q4 2018



Bachelors Degree Required  
for Most Energy Jobs







## Industrial Engineers: In-Demand Entry Level Job



## Associates in Rural Development: 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. According to the Bureau of Labor Statistics (BLS), the top posted energy job, Electrical Engineers, offers a median hourly wage of \$43.21, or annual earnings of approximately \$90,000. Technician and construction-focused positions generally have shorter educational requirements than engineers and pay somewhat higher than similar occupations in other industries

**Wage Overview for Top Posted Energy Jobs in Q1 2019**

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2071	Electrical Engineers	\$30.71	\$35.62	\$43.21	\$51.05	\$62.44
17-2112	Industrial Engineers	\$31.05	\$35.88	\$43.40	\$50.89	\$59.59
11-9041	Architectural and Engineering Managers	\$43.14	\$52.32	\$65.21	\$78.55	\$96.13
17-2199	Engineers, All Other	\$25.46	\$38.42	\$48.76	\$59.44	\$69.02
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$20.25	\$26.80	\$33.03	\$40.26	\$48.83
17-2051	Civil Engineers	\$25.30	\$30.98	\$38.58	\$51.56	\$70.56
11-3051	Industrial Production Managers	\$34.69	\$45.41	\$57.68	\$72.03	\$86.87
19-3051	Urban and Regional Planners	\$17.20	\$21.19	\$27.61	\$34.38	\$39.45
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	\$17.72	\$21.72	\$31.93	\$38.51	\$44.83
11-1021	General and Operations Managers	\$27.07	\$37.71	\$53.47	\$78.32	\$104.28

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

#### In-Demand Technical Skills

- Customer Satisfaction
- Corporate Social Responsibility
- Continuous Improvement Process
- Corporate Services
- Electrical Engineering

#### In-Demand Foundational Skills

- Management
- Operations
- Problem Solving
- Communications
- Leadership

#### In-Demand Education Level\*

- High School Diploma: 28.0%
- Associate Degree: 18.0%
- Bachelor's Degree: 84.0%
- Master's Degree: 14.0%

#### In-Demand Certifications

- Associates in Rural Development
- Commercial Driver's License (CDL)
- PMI Certified
- Professional Engineer

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



## HEALTH CARE OCCUPATION GROUP

### City of Detroit | Q1 2019

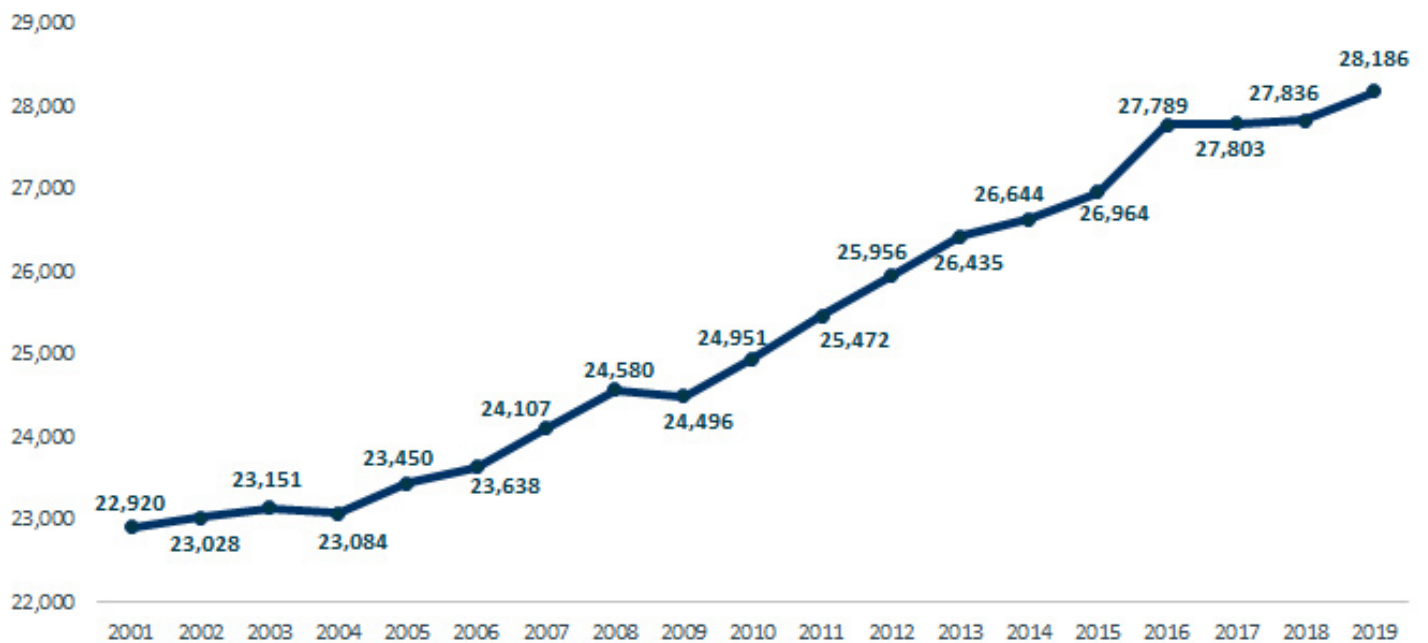
#### Introduction

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.



**28,186**  
Health Care Workers  
1.2% Increase  
from 2018

Employment Over Time  
2001–2019



#### Top Posting Employers\*

- Henry Ford Health System
- General Healthcare Resources, Inc.
- Tenet Healthcare Corporation
- Ascension Health
- Soliant Health, Inc
- Tenet
- Sunbelt Staffing, LLC
- Aureus Medical Management Services L.L.C.
- Supplemental Healthcare
- HealthCare Employment Network

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

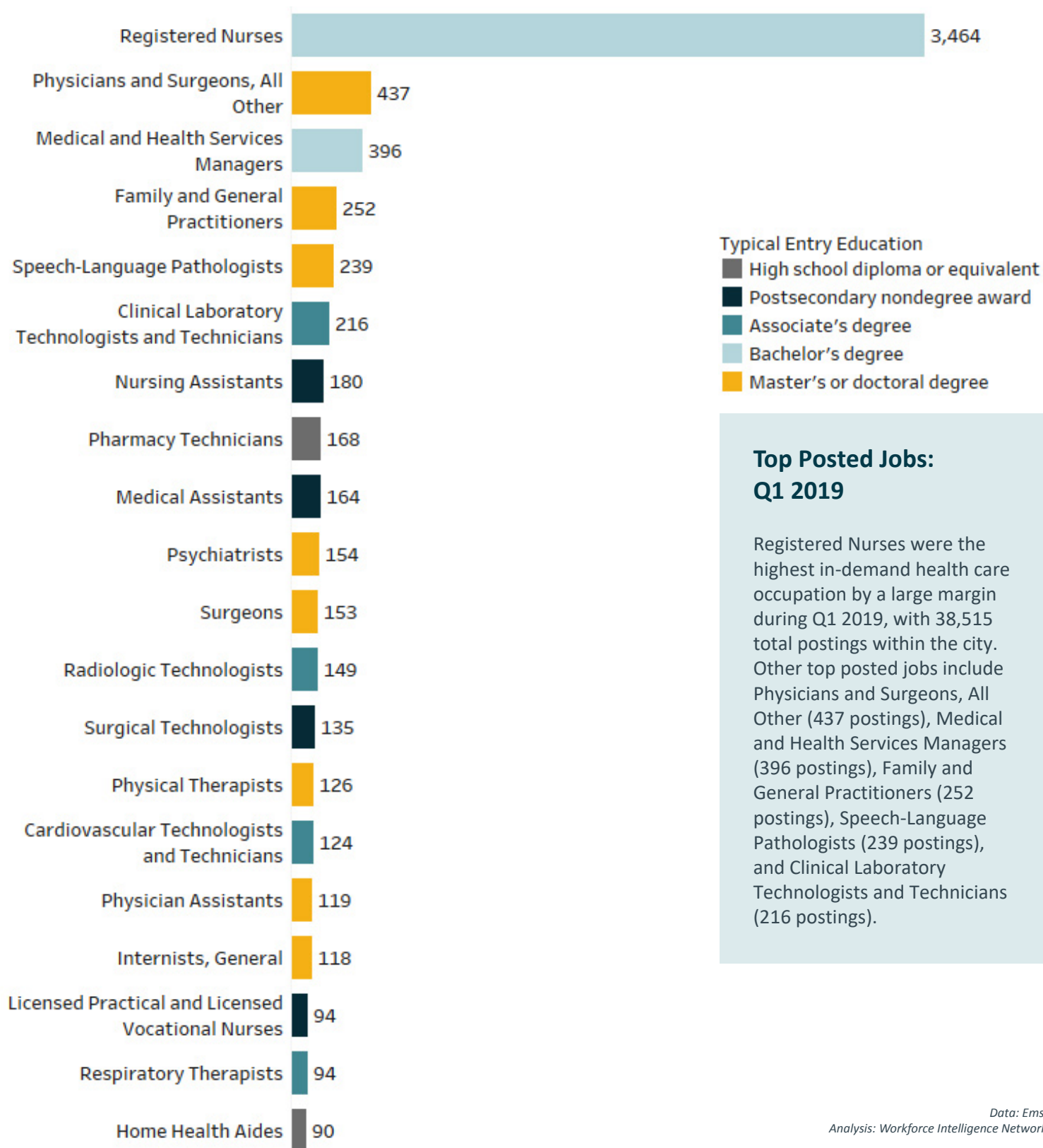


8,014 Health Care Postings:  
954 More Than Q4 2018



Bachelor's Degree Required for  
High Paying Health Care Jobs

Health Care Top Posted Jobs  
Q1 2019





## High Earning Potential for Physicians and Surgeons, All Other



## Advanced Life Support: Most In-Demand Health Care Certification

### Health Care Wage Overview

Wages in the high-demand health care field scale with education and experience, though the group does boast a relatively broad array of entry requirements and high volume of jobs open to those with less than a bachelor's that pay more than the region's median wage of \$17.81 per hour. Registered Nurses, the top posted health care job in Q1 2019, offers a median hourly wage of \$34.01 or an annual salary of nearly \$71,000 according to the Bureau of Labor Statistics (BLS).

**Wage Overview for Top Posted Health Care Jobs in Q1 2019**

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
29-1141	Registered Nurses	\$25.64	\$29.35	\$34.01	\$38.11	\$44.13
29-1069	Physicians and Surgeons, All Other	\$20.99	\$24.28	\$28.83	\$95.78	\$100.67
11-9111	Medical and Health Services Managers	\$31.61	\$40.65	\$52.91	\$75.00	\$101.28
29-1062	Family and General Practitioners	\$51.02	\$60.33	\$90.09	\$104.65	\$161.60
29-1127	Speech-Language Pathologists	\$26.49	\$31.76	\$36.36	\$42.77	\$48.33
29-2031	Clinical Laboratory Technologists and Technicians	\$13.53	\$16.70	\$23.85	\$31.60	\$36.40
31-1014	Nursing Assistants	\$10.33	\$12.21	\$13.92	\$15.97	\$18.19
29-2052	Pharmacy Technicians	\$9.95	\$11.59	\$14.61	\$17.60	\$20.11
31-9092	Medical Assistants	\$11.43	\$12.86	\$14.43	\$16.74	\$18.60
29-1066	Psychiatrists	\$83.25	\$89.65	\$100.00	\$120.70	\$201.70

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

#### In-Demand Technical Skills

- Nursing
- Basic Life Support
- Advanced Cardiovascular Life Support (ACLS)
- Nursing Care
- Cardiopulmonary Resuscitation (CPR)

#### In-Demand Foundational Skills

- Management
- Leadership
- Communications
- Teaching
- Research

#### In-Demand Education Level\*

- High School Diploma: 10.4%
- Associate Degree: 12.8%
- Bachelor's Degree: 18.9%
- Master's Degree: 8.3%

\*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

- Advanced Life Support
- Advanced Practice Registered Nurse
- American Association of Nurse Practitioners (AANP) Certified
- American Medical Technologists
- American Registry of Radiologic Technologists (ARRT) Certified



# INFORMATION TECHNOLOGY (IT) OCCUPATION GROUP

## City of Detroit | Q1 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.



**7,339**  
IT Workers  
1.7% Increase  
from 2018

Employment Over Time  
2001–2019



### Top Posting Employers\*

- Deloitte LLP
- Quicken Loans Inc.
- Strategic Staffing Solutions, Inc.
- Ally Financial Inc.
- Avanade Inc.
- Anthem, Inc.
- ACCENTURE, INC.
- Cybercoders, Inc.
- Amazon.com, Inc.
- General Motors Company

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



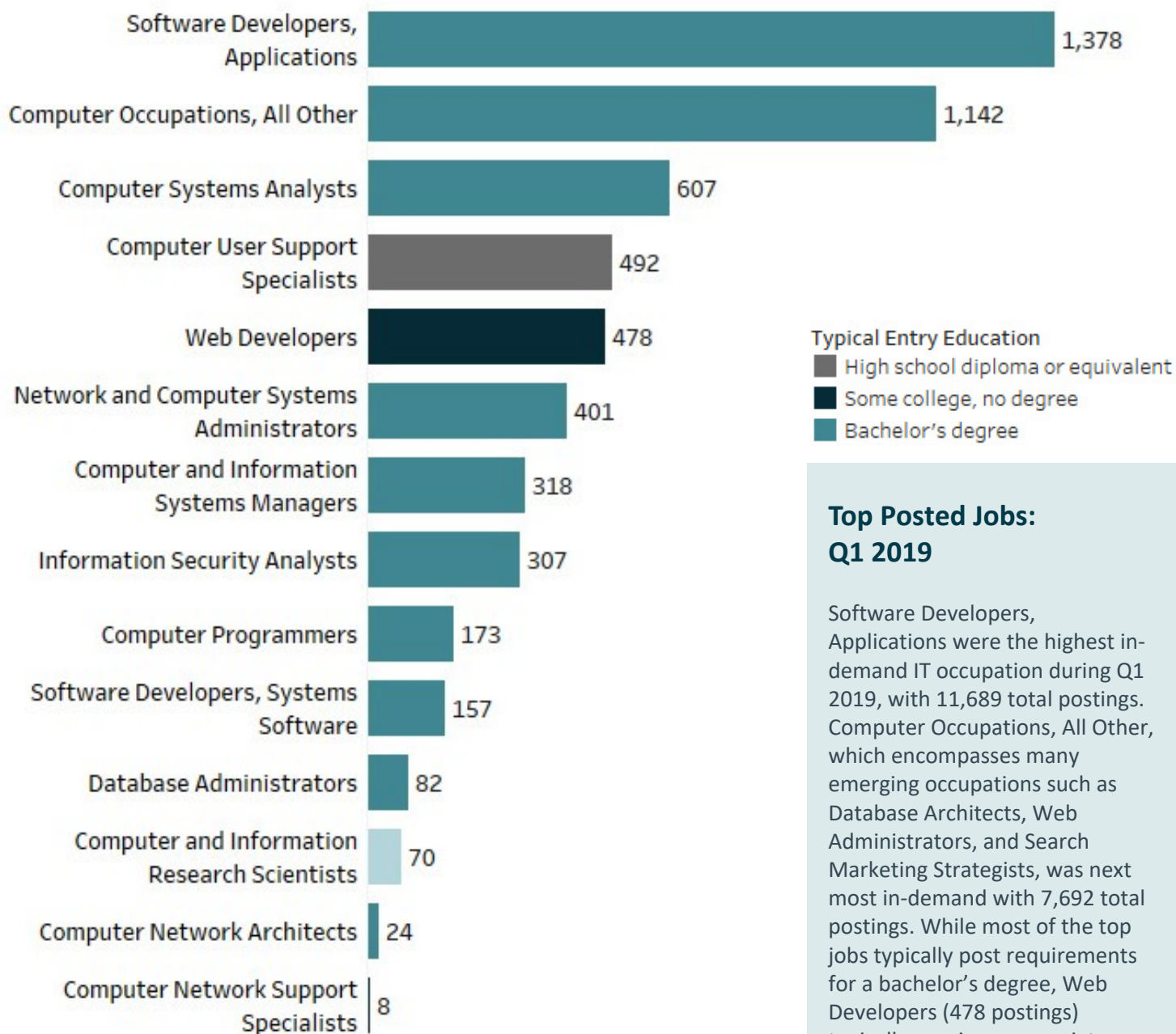


## Professional Services and Mortgage Lending Companies are Top IT Employers



## Bachelors Degree Required for Most IT Jobs

Information Technology Top Posted Jobs  
Q1 2019



### Top Posted Jobs: Q1 2019

Software Developers, Applications were the highest in-demand IT occupation during Q1 2019, with 11,689 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 7,692 total postings. While most of the top jobs typically post requirements for a bachelor's degree, Web Developers (478 postings) typically require an associate degree while Computer User Support Specialists (492 postings) prefer some college education, but no degree.





## High Earning Potential for Software Developers, Applications



## Associate Certified Electronics Technician: 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 Q1 2019, offers a median hourly wage of \$44.69 or an annual salary of over \$92,000 according to the Bureau of Labor Statistics (BLS).

**Wage Overview for Top Posted IT Jobs in Q1 2019**

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
15-1132	Software Developers, Applications	\$29.13	\$35.52	\$44.69	\$56.11	\$67.21
15-1199	Computer Occupations, All Other	\$23.05	\$29.01	\$40.37	\$51.07	\$59.44
15-1121	Computer Systems Analysts	\$25.14	\$30.29	\$39.19	\$49.11	\$60.87
15-1151	Computer User Support Specialists	\$12.89	\$16.61	\$22.66	\$29.55	\$37.82
15-1134	Web Developers	\$21.08	\$25.12	\$29.89	\$39.47	\$48.12
15-1142	Network and Computer Systems Administrators	\$25.06	\$29.89	\$36.50	\$44.89	\$52.34
11-3021	Computer and Information Systems Managers	\$41.71	\$50.74	\$62.00	\$76.34	\$94.80
15-1122	Information Security Analysts	\$30.88	\$37.02	\$47.82	\$58.60	\$67.97
15-1131	Computer Programmers	\$22.04	\$27.30	\$34.19	\$42.88	\$53.75
15-1133	Software Developers, Systems Software	\$25.77	\$33.21	\$42.37	\$48.97	\$58.52

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

#### In-Demand Technical Skills

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

#### In-Demand Foundational Skills

- Management
- Communications
- Information Technology
- Integration
- Leadership

#### In-Demand Education Level\*

- High School Diploma: 3.9%
- Associate Degree: 3.7%
- Bachelor's Degree: 54.5%
- Master's Degree: 13.8%

\*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

- Associate Certified Electronics Technician
- Certificate of Cloud Security Knowledge
- Certification in Control Self-Assessment
- Certified Coding Specialist
- Certified Compensation Professional



# SKILLED TRADES AND TECHNICIANS (MANUFACTURING) OCCUPATION GROUP City of Detroit | Q1 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.

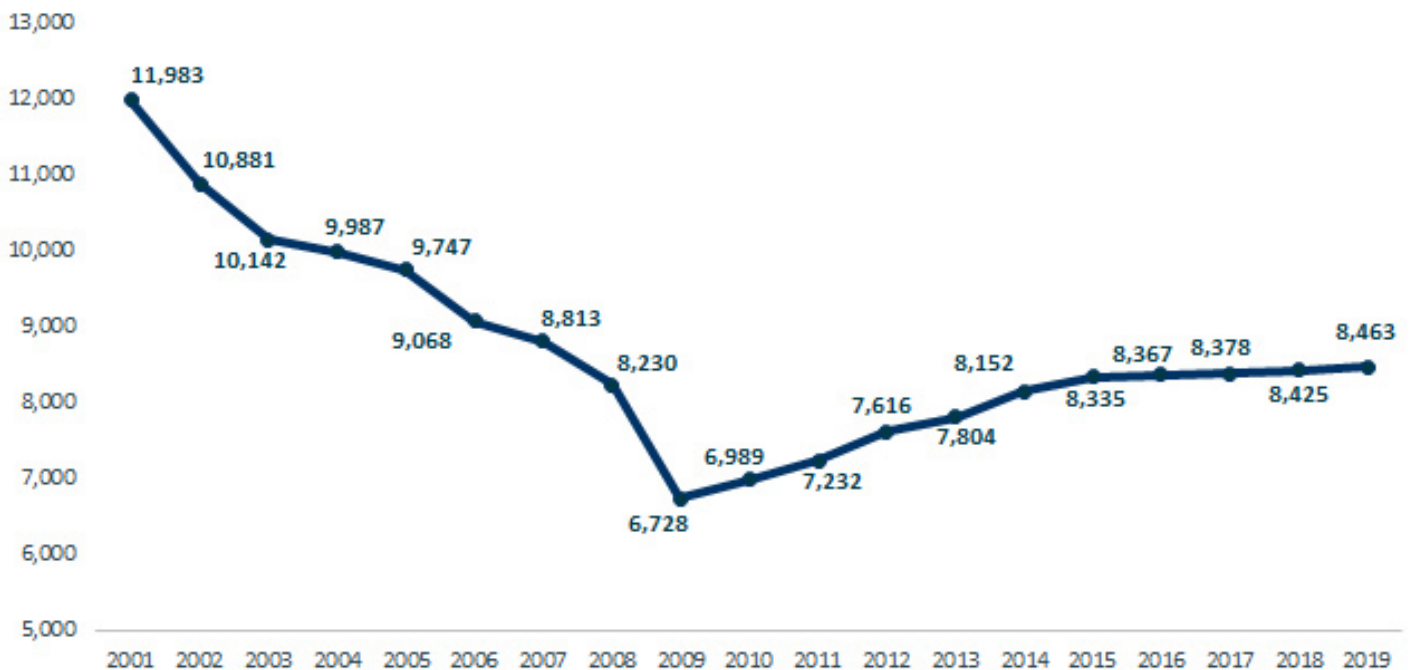
NOTE: Skilled trades related to construction and assembly are not included in this cluster, as the focus is on advanced manufacturing only.



**8,463**  
**Trade Workers**

0.5% Increase  
from 2018

**Employment Over Time**  
2001–2019



## Top Posting Employers\*

- Flex-N-Gate Corporation
- FCA US LLC
- E. W. Grobbel Sons, Inc.
- McDonald's Corporation
- Aerotek, Inc.
- Kelly Services, Inc.
- Textron Inc.
- Express Services Inc
- Tranor Industries, L.L.C.
- Quicken Loans Inc.

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



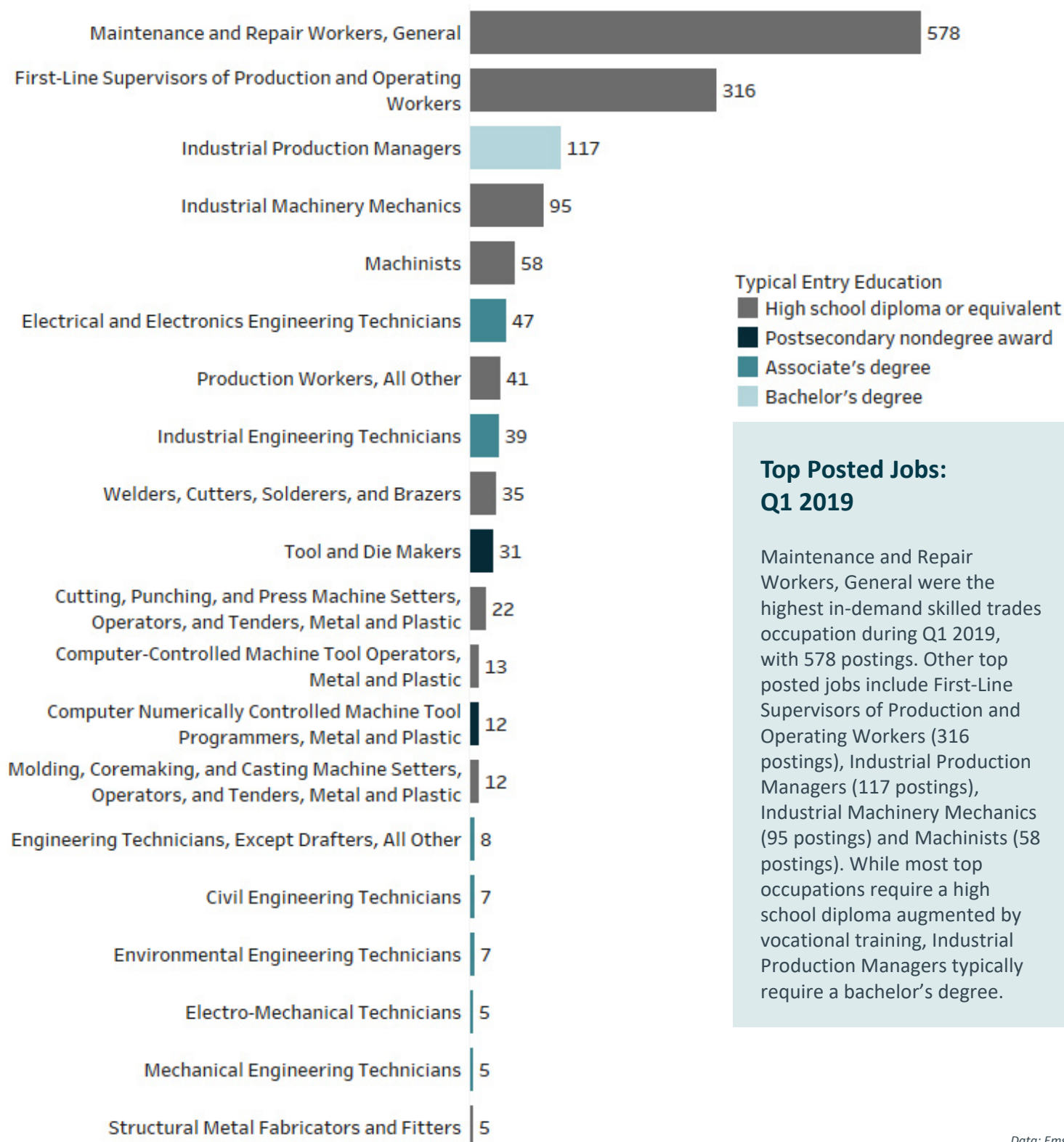
1,475 Skilled Trades Postings:  
165 Fewer Than Q4 2018



Vocational Training Required  
for Most Skilled Trades Jobs

### Skilled Trades and Technicians Top Posted Jobs

Q1 2019





## High Earning Potential for Industrial Production Managers



## In-Demand Skilled Trades Certification: American Society for Quality (ASQ) Certified

### Skilled Trades and Technicians Wage Overview

Six of the top ten in-demand skilled trades occupation have median wages above \$20 per hour according to the Bureau of Labor Statistics (BLS). Maintenance and Repair Workers, General, the top posted skilled trades job in Q1 2019, offers a median hourly wage of \$18.34, which translates to an annual salary of about \$38,000. Third top occupation Industrial Production Managers require additional experience and earn \$57.68 hourly, or roughly \$120,000 annually.

**Wage Overview for Top Posted Skilled Trades and Technicians Jobs in Q1 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	\$10.42	\$13.26	\$18.34	\$24.24	\$29.67
51-1011	First-Line Supervisors of Production and Operating Workers	\$18.72	\$24.90	\$33.85	\$44.08	\$53.73
11-3051	Industrial Production Managers	\$34.69	\$45.41	\$57.68	\$72.03	\$86.87
49-9041	Industrial Machinery Mechanics	\$17.49	\$22.51	\$28.48	\$34.43	\$37.95
51-4041	Machinists	\$10.95	\$13.68	\$18.16	\$23.35	\$28.76
17-3023	Electrical and Electronics Engineering Technicians	\$16.28	\$22.01	\$29.77	\$35.28	\$40.15
51-9199	Production Workers, All Other	\$11.04	\$15.66	\$17.86	\$20.61	\$24.00
17-3026	Industrial Engineering Technicians	\$15.60	\$18.36	\$26.84	\$35.95	\$42.32
51-4121	Welders, Cutters, Solderers, and Brazers	\$12.67	\$15.42	\$18.75	\$24.00	\$33.56
51-4111	Tool and Die Makers	\$18.35	\$23.93	\$30.33	\$35.72	\$38.61

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

#### In-Demand Technical Skills

- Plumbing
- HVAC
- Preventive Maintenance
- Continuous Improvement Process
- Painting

#### In-Demand Foundational Skills

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

#### In-Demand Education Level\*

- High School Diploma: 35.9%
- Associate Degree: 8.5%
- Bachelor's Degree: 18.0%
- Master's Degree: 2.5%

\*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

- American Society for Quality (ASQ) Certified
- Advanced Practice Registered Nurse
- Alliance of Information and Referral Systems (AIRS) Certified
- ASNT Non-Destructive Tester
- Associate of Science in Nursing

Website

[www.WINintelligence.org](http://www.WINintelligence.org)

Email

[info@WINintelligence.org](mailto:info@WINintelligence.org)

Phone

313.744.2946

Address

25363 Eureka Rd.  
Taylor, MI 48180

Facebook

[@workforceintelligencenetwork](https://www.facebook.com/workforceintelligencenetwork)

Twitter

[@WINSEMICH](https://twitter.com/WINSEMICH)