GENESEE COUNTY & SHIAWASSEE COUNTY

WIN Labor Market Report

Report Contents

Occupation Groups

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 both Genesee and Shiawassee counties. 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 fourth quarter of 2018 in Genesee and Shiawassee counties combined and includes summative data for October, November, and December of 2018. For Genesee and Shiawassee counties, the Business and Finance, Engineers and Designers, Health Care, Information Technology, and Skilled Trades and Technicians 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.

WIN
WORKFORCE
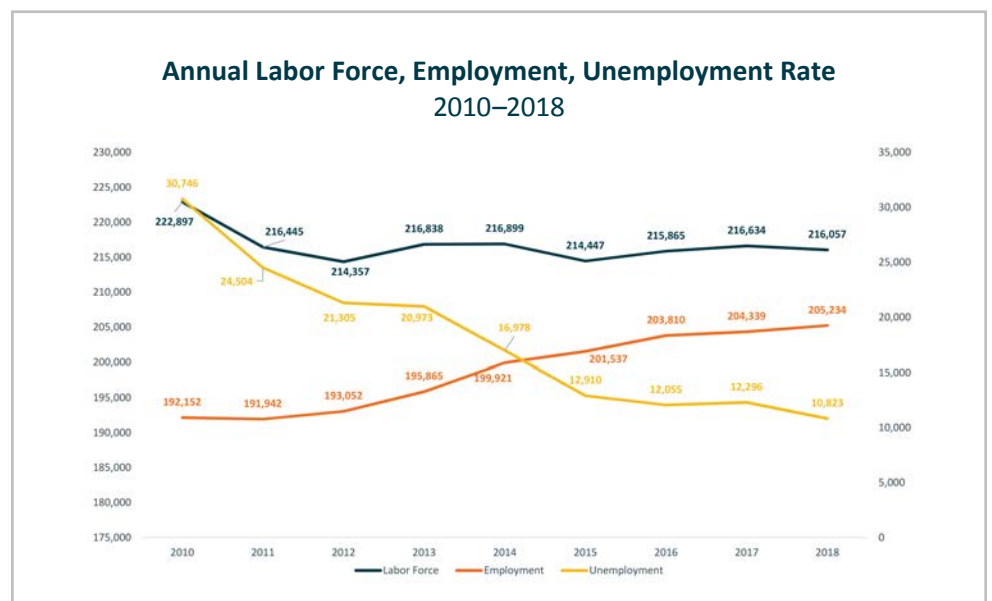INTELLIGENCE
NETWORK

ANNUAL STATE OF THE LABOR MARKET
Genesee and Shiawassee Counties | Q4 2018

State of the Labor Market in the Genesee and Shiawassee Counties

Over the course of 2018, the labor force figures decreased in Genesee and Shiawassee Counties while employment increased. With this simultaneous increase in both labor force and employment, the number of unemployed individuals decreased in the region. This has caused the unemployment rate to drop from the 5.7 percent annual rate in 2017 to an annual rate of 5.0 percent in 2018. Employer demand grew by nearly 1,500 postings between Q3 2018 and Q4 2018 and continued to be dominated by TDL and customer service occupations. Among the groups analyzed in this report, Health Care occupations reported the highest demand with 2,661 postings. Business and Finance occupations saw the greatest increase in postings between Q3 and Q4 2018, growing 21 percent between quarters. These occupations often present entry level opportunities to those who complete the educational requirements.

Annual Labor Market Information

Remaining relatively steady around 216,000 individuals since 2011, the labor force in these counties decreased by just 578 individuals between 2017 and 2018. Employment increased by 895 workers between 2017 and 2018. With a larger portion of the labor force able to find work, the unemployment rate fell by 0.7 percentage points from the annual figures in 2017 to an annual rate of 5.0 percent in Genesee and Shiawassee counties during 2018.

Annual Labor Force, Employment, Unemployment Rate 2010–2018

Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Employer Demand Overview

Data from the fourth quarter of 2018, including posting information from October, November, and December, showed employer demand continue to grow within Genesee and Shiawassee Counties. There were 19,007 total postings in Q4 2018, 2,300 more postings than during Q4 2017. While demand continues to ebb and flow throughout the year, both job postings and employment figures have been stronger in 2018 than the same quarters during 2017.

Quarterly Posting Analysis, Genesee and Shiawassee Counties
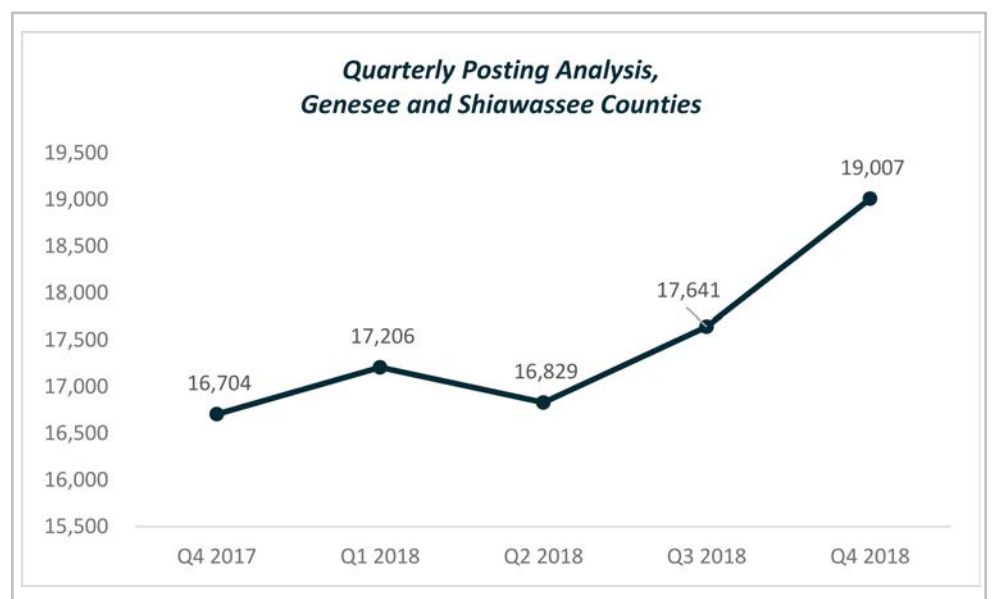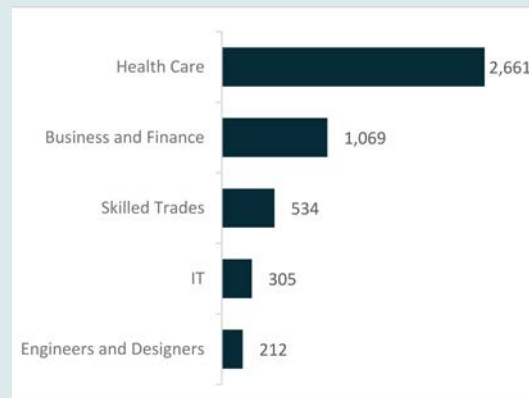
Data: Emsi | Analysis: Workforce Intelligence Network

QUARTERLY WORKFORCE INDICATORS
Genesee and Shiawassee Counties | Key Findings for Q4 2018

Employer demand surges to 19,007 postings during Q4 2018, with key occupation groups analyzed by WIN experiencing increases in online job postings between Q3 and Q4 2018.

During Q4 2018, there were 19,007 jobs posted, 1,379 more than the 17,628 jobs posted during Q3 2018 in Genesee and Shiawassee Counties. Many of the occupation groups analyzed by WIN, including those key groups highlighted in this report, experienced an increase during the fourth quarter of 2018. Postings in the business and finance, health care, and IT groups each increased by nine percent or more. This level of online job postings is also 2,300 greater than during Q4 2017. For more information about quarterly job postings, see page 2.

Postings by Occupation Group
Q4 2018

Health Care	2,661
Business and Finance	1,069
Skilled Trades	534
IT	305
Engineers and Designers	212

Data: Emsi | Analysis: Workforce Intelligence Network

The unemployment rate in Genesee and Shiawassee Counties is currently at 4.2 percent, down 0.5 percentage points from Q3 2018.

Compared to Q3 2018, employment grew into Q4 2018, while the labor force fell. The drop in labor force participants combined with the increase in workers caused the quarterly unemployment rate to fall from 4.7 percent in Q3 2018 to 4.2 percent in Q4 2018 as more people successfully found work. During July 2018, in particular, unemployment spiked, hitting a peak of 6.0 percent, then remained low for the rest of the year. For more information about this quarter's unemployment rate and other labor market indicators, see page 4.

Quarterly Labor Market Data

	4th Quarter 2018	Change from 3rd Quarter 2018	Percent Change from 3rd Quarter 2018
Labor Force	214,707	-270	-0.1%
Employment	205,718	941	0.5%
Unemployment	8,989	-1,212	-11.9%
Unemployment Rate	4.2%	-0.6%	na

Note: Monthly data average by quarter | Data: BLS

Job postings made in Genesee and Shiawassee counties indicate a high school diploma as the most in-demand minimum education level during Q4 2018.

Nearly a quarter (24.9 percent) of the 19,007 jobs posted in the two counties indicated the need for candidates with a high school diploma or equivalent, reflecting the high numbers of TDL and Customer Service occupations represented in the top jobs. Another 19 percent indicated a preference for a bachelor's degree or higher. Higher education attainment tends to lead to more lucrative positions, but entry level opportunities exist for all education levels in each occupation group. As just over half (51 percent) of job postings identified a minimum education level, education requirements may vary somewhat across all job openings in the area.

Education Levels In-Demand
Q4 2018
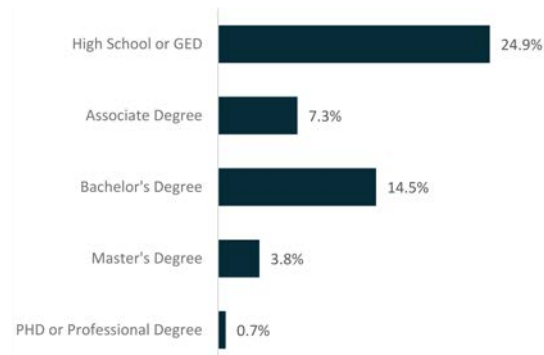
High School or GED	24.9%
Associate Degree	7.3%
Bachelor's Degree	14.5%
Master's Degree	3.8%
PHD or Professional Degree	0.7%

Data: Emsi | Analysis: Workforce Intelligence Network

WORKFORCE OVERVIEW
Genesee and Shiawassee Counties | Labor Market Information Q4 2018

Labor Force, Employment, Unemployment Rate
2018
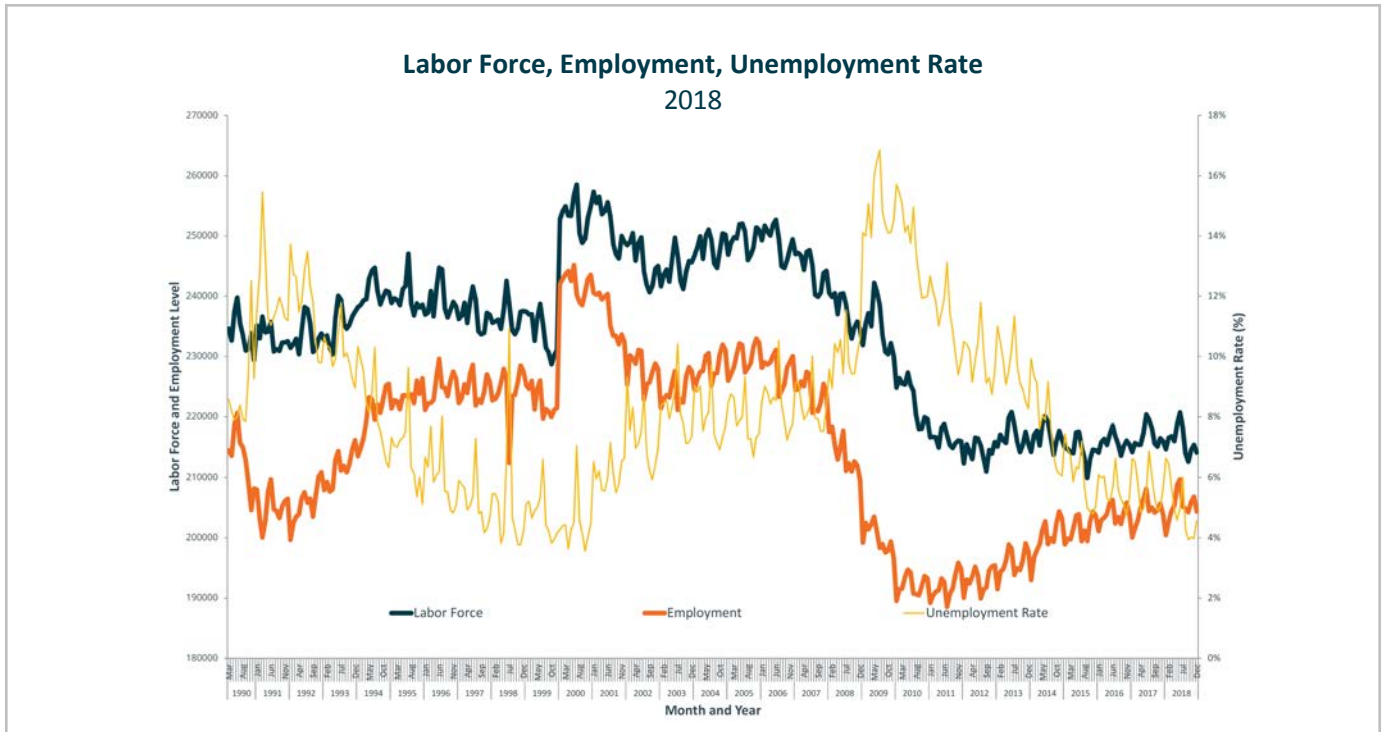
Data: BLS | Analysis: Workforce Intelligence Network

Quarterly Labor Market Data

	4th Quarter 2017	1st Quarter 2018	2nd Quarter 2018	3rd Quarter 2018	4th Quarter 2018	Change from 3rd Quarter 2018	Percent Change from 3rd Quarter 2018	Change from 4th Quarter 2017	Percent Change from 4th Quarter 2017
Labor Force	215,883	215,648	218,501	214,977	214,707	-270	-0.1%	-1,176	-0.5%
Employment	204,706	201,531	207,939	204,776	205,718	941	0.5%	1,011	0.5%
Unemployment	11,177	14,118	10,562	10,201	8,989	-1,212	-11.9%	-2,188	-19.6%
Unemployment Rate	5.2%	6.5%	4.8%	4.7%	4.2%	-0.6%	na	-1.0%	na

Note: Monthly data averaged by quarter | Data: BLS

Labor Force, Employment, and Unemployment

The labor market in Genesee and Shiawassee Counties has experienced relative stability since 2010. The labor force decreased by 270 workers (-0.1 percent) between Q3 2018 and Q4 2018. Employment in the two counties as increased from Q3 2018, by 941 workers (+0.5 percent). With employment increasing while the labor force fell, the unemployment rate decreased this quarter: the quarterly unemployment rate decreased by 0.5 percentage points between Q3 2018 and Q4 2018 to 4.2 percent.

WORKFORCE OVERVIEW
Genesee and Shiawassee Counties | 2017 Annual Population Demographics

Population Demographics

According to the data from the most recent Census Bureau 2017 ACS Five Year estimates, the population in in Genesee and Shiawassee counties dipped by about half a percent between 2016 and 2017. During 2017, 479,498 people were living in the region. The sex of the populace was split almost evenly, with about 52 percent of the population identifying as female, and the other 48 percent identifying as male. The majority of the population identified as white (78 percent) with the second largest number of individuals identifying as black or African American (17 percent). The region as a whole may face a decline in experienced workers in the future; 30.3 percent of population was over the age of 55, while another 32 percent of the population is under the age of 24.

479,498
People in the Region
0.5% Decrease
from 2016

Population Race Demographics

- White, 78.02%
- Black or African American, 17.22%
- Two or More Races, 2.95%
- Asian, 0.96%
- Other Race, 0.46%
- American Indian or Alaska Native, 0.36%
- Native Hawaiian or Other Pacific Islander, 0.04%
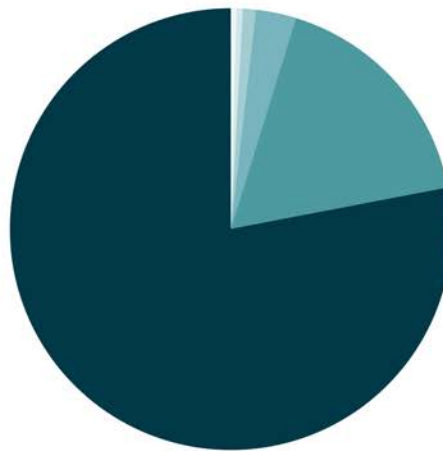
Population Gender Demographics

52% Females

48% Males

| 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

Population Age Demographics

| Age 14 and under 18.8% | Age 15-25 13.2% | Age 25-54 37.6% | Age 55+ 30.3% |

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

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 +	220,329	197,649	22,568	10.2%
Sex				
Male 16+	112,057	99,728	12,329	11.0%
16-19	5,279	3,849	1,430	27.1%
20-24	11,809	9,245	2,564	21.7%
25-54	73,204	66,066	7,138	9.8%
55-64	17,279	16,283	996	5.8%
65 Plus	4,486	4,285	201	4.5%
Female 16+	108,200	97,977	10,223	9.4%
16-19	5,352	4,020	1,332	24.9%
20-24	11,822	9,820	2,002	16.9%
25-54	69,778	63,813	5,965	8.5%
55-64	17,349	16,565	784	4.5%
65 Plus	3,899	3,759	140	3.6%
Race				
White	178,965	165,082	13,848	7.7%
Black / African American	33,467	25,635	7,833	23.4%
Native American	659	559	100	15.2%
Asian	2,185	2,027	155	7.1%
Native Hawaiian / Pacific Islander	113	99	14	12.4%
Some Other Race	956	927	27	2.8%
Two or More Races	4,102	3,483	620	15.1%
Ethnicity				
Hispanic	6,936	6,066	834	12.0%

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

Labor Market Demographics

During 2017, the most recent census year, there were about 220,329 people in the labor force, meaning they were either working or looking for work, in Genesee and Shiawassee Counties. Slightly less than half of the population, or 220,329 individuals (45.9 percent), living in the region were participating in the labor force. The highest unemployment rates were seen in those aged 24 years old or younger. Males under the age of 19 face an unemployment rate of 27.1 percent. Black or African American job seekers also have a difficult time finding employment, facing an unemployment rate of 23.4 percent.

WORKFORCE OVERVIEW
Genesee and Shiawassee Counties |
2018 Annual Working Population Demographics

Current Workforce Demographics

While the Census Bureau data is lagged by about two years, Emsi uses predictive modeling to estimate workforce information for the previous year, allowing for more current analysis. During 2018, there were a total of 165,969 individuals working in Genesee and Shiawassee counties. A slight majority (52 percent or 86,999 workers) were female, while 48 percent (78,970 workers) of the workforce was male. Most of those working in the region were white, accounting for 79 percent of the workforce, while African American or black workers accounted for 14 percent of the workforce. Those identifying as having a Hispanic or Latino ethnicity accounted for three percent. Eighty-six percent of the workforce was 25 years or older. Only 14 percent of workers were under the age of 25, indicating an aging workforce in Genesee Shiawassee counties.

Workforce Race and Ethnicity Demographics

- White, 78.8%
- Black or African American, 14.2%
- Hispanic or Latino, 3.4%
- Asian, 1.7%
- Two or More Races, 1.4%
- American Indian or Alaska Native, 0.4%
- Native Hawaiian or Other Pacific Islander, 0.0%
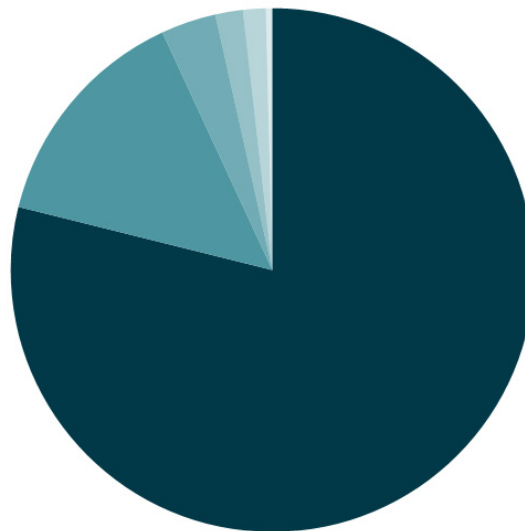
Workforce Gender Demographics

48% Males

52% Females

0   10   20   30   40   50   60   70   80   90   100

Workforce Age Demographics

Age 14-24, 14.2%

Age 25-54 63.2%

Age 55+ 22.5%

Data: Emsi | Analysis: Workforce Intelligence Network

WORKFORCE OVERVIEW
Genesee and Shiawassee Counties | 2015 Regional Commuting Patterns

Regional Commuting Patterns

According to the most recent OnTheMap data set available from the Census Bureau, during 2015, the region's workforce consisted of 171,301 residents. 86,267 (50.4 percent) of the residents lived and worked within the two-county region, while the remaining 85,040 residents (49.6 percent) traveled outside of the region for work. There were 141,771 workers employed in the region during 2015. Of those, 55,504 workers (39.2 percent) lived outside of the region's borders and commuted in. From this information, we can see that Genesee and Shiawassee counties are a net exporter of jobs, with more workers leaving the area for employment than inwardly commuting.

Where Genesee and Shiawassee Counties Residents Work

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

Where Genesee and Shiawassee Counties Workers Live

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

55,504 — LIVE OUTSIDE OF GENESEE AND SHIAWASSEE COUNTIES AND COMMUTE IN

86,267 — LIVE AND WORK IN GENESEE AND SHIAWASSEE COUNTIES

85,040 — LIVE IN GENESEE AND SHIAWASSEE COUNTIES AND COMMUTE OUT

REAL-TIME DEMAND OVERVIEW
Genesee and Shiawassee Counties | Top Posted Jobs | Q4 2018

Top Posted Jobs
Q4 2018

Job Title	Postings
Heavy and Tractor-Trailer Truck Drivers	2,811
First-Line Supervisors of Retail Sales Workers	1,251
Retail Salespersons	832
Registered Nurses	690
Light Truck or Delivery Services Drivers	550
Customer Service Representatives	447
Taxi Drivers and Chauffeurs	361
Combined Food Preparation and Serving Workers, Including Fast Food	312
First-Line Supervisors of Food Preparation and Serving Workers	309
Cashiers	280
Stock Clerks and Order Fillers	234
Business Operations Specialists, All Other	224
Maintenance and Repair Workers, General	217
Speech-Language Pathologists	216
Teachers and Instructors, All Other	215
Postsecondary Teachers	191
First-Line Supervisors of Office and Administrative Support Workers	174
General and Operations Managers	161
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	158
Nursing Assistants	157

Typical Entry Education
- No formal educational credential
- High school diploma or equivalent
- Postsecondary nondegree award
- Bachelor's degree
- Master's or doctoral degree

Top Posted Jobs: Q4 2018

Heavy and Tractor-Trailer Truck Drivers were the highest in-demand occupation for the fourth quarter of 2018, with 2,811 unique online job postings. Of the top five overall in-demand occupations, only Registered Nurses (690 postings) must typically hold a bachelor's degree for entry. Median wages for Registered Nurses are nearly $15 more per hour than the other top jobs. Customer service and more TDL-related occupations round out the remaining top five occupations with First-Line Supervisors of Retail Sales Workers (1,251 postings), Retail Salespersons (832 postings), and Light Truck or Delivery Drivers (550 postings) in high demand during Q4 2018.

REAL-TIME DEMAND OVERVIEW
Genesee and Shiawassee Counties | Top Posted Entry-Level Jobs | Q4 2018

Top Posted Entry-Level Jobs
Q4 2018

Occupation	Postings
Taxi Drivers and Chauffeurs	318
Heavy and Tractor-Trailer Truck Drivers	301
Registered Nurses	301
First-Line Supervisors of Retail Sales Workers	284
Licensed Practical and Licensed Vocational Nurses	91
Business Operations Specialists, All Other	87
Customer Service Representatives	87
Retail Salespersons	81
First-Line Supervisors of Food Preparation and Serving Workers	64
Social and Human Service Assistants	58
Postsecondary Teachers	57
Automotive Service Technicians and Mechanics	53
First-Line Supervisors of Office and Administrative Support Workers	53
Medical Assistants	50
First-Line Supervisors of Production and Operating Workers	49
General and Operations Managers	42
Medical Secretaries	41
Nursing Assistants	41
Food Service Managers	39
Stock Clerks and Order Fillers	39

Typical Entry Education
- No formal educational credential
- High school diploma or equivalent
- Postsecondary nondegree award
- Bachelor's degree
- Master's or doctoral degree

Top Posted Entry-Level Jobs: Q4 2018

These entry-level jobs represent the top posted occupations requiring zero to two years of previous work experience. Many of these occupations (14 of the top 20) require training, some college, or an associate degree. Though only four of the top 20 occupations require a college degree, those who enter the workforce with a bachelor's degree can expect entry wages nearly double those with fewer years of education. Taxi Drivers and Chauffeurs were the top posted entry-level job with 318 postings in Q4 2018.
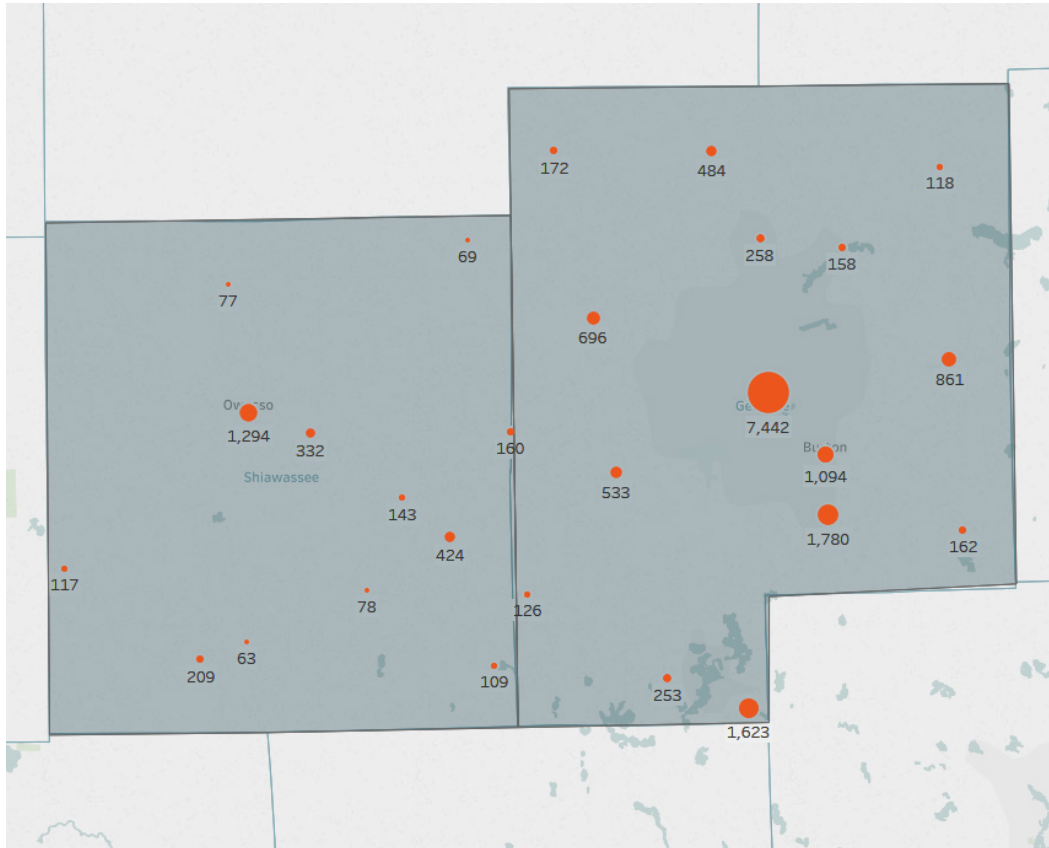
REAL-TIME DEMAND OVERVIEW
Genesee and Shiawassee Counties | Job Postings by City | Q4 2018

Job Postings by City
Q4 2018

Map based on Longitude (generated) and Latitude (generated). Size shows sum of Unique Postings.

Top In-Demand Qualifications

- Commercial Driver's License (CDL)
- Licensed Practical Nurse
- Certified Nursing Assistant
- Nurse Practitioner
- Certified Medical Assistant
- Patient Care Technician
- Licensed Vocational Nurses
- CompTIA Security+
- Certified Pharmacy Technician
- Certified Dialysis Nurse

Top In-Demand Skills

- Merchandising
- Restaurant Operation
- Nursing
- Selling Techniques
- Cash Register
- Customer Experience
- Deliver Orders
- Customer Satisfaction
- Food Services
- Purchasing

Top Posting Employers*

- Shipt LLC
- CRST International, Inc.
- McDonald's Corporation
- Uber Technologies, Inc.
- Sunbelt Staffing, LLC
- Dollar General Corporation
- The Home Depot Inc
- J.B. Hunt Transport Services, Inc.
- McLaren, Inc.
- C.R. England, Inc.

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

BUSINESS AND FINANCE OCCUPATION GROUP
## Genesee and Shiawassee Counties | Q4 2018

Introduction

Jobs in the business and finance occupation group can be found in nearly every type of firm throughout the region. These workers need strong mathematical and accounting abilities along with project management and planning skills. Workers in this occupation group are in high demand both in Genesee and Shiawassee counties and across southeast Michigan.

9,721
Business Workers
1.1% Decrease
from 2017

Employment Over Time
2001–2018

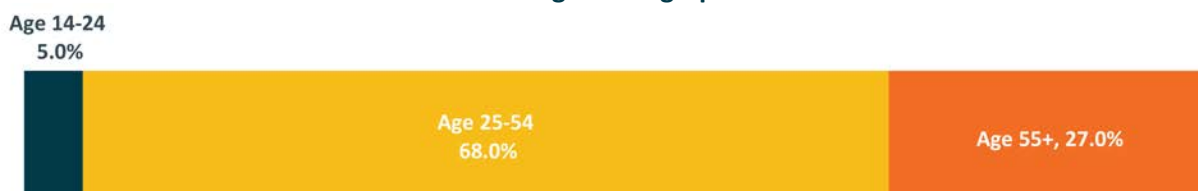### Worker Gender Demographics

49% Females   51% Males
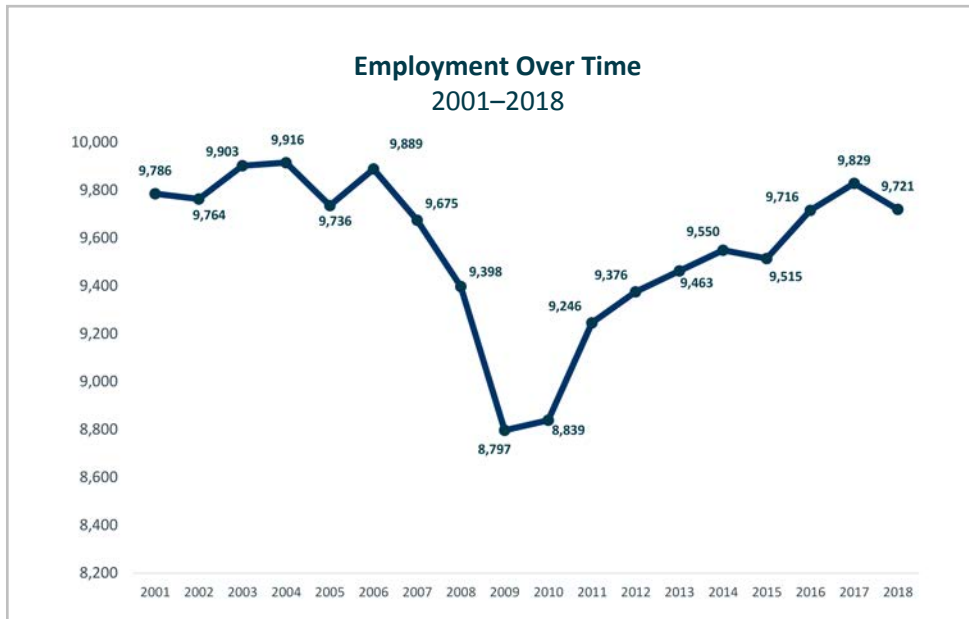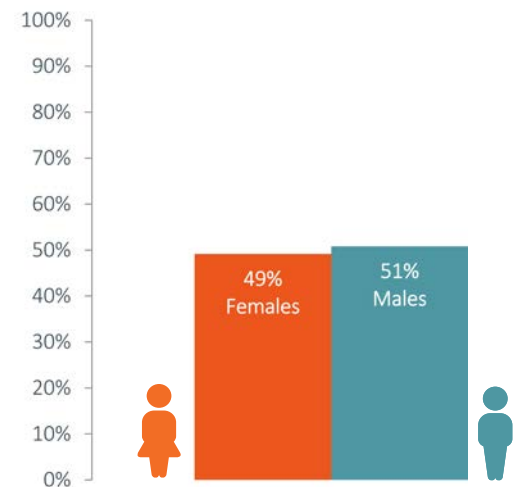
Business and Finance Worker Demographics

According to the most recent Emsi data set available (2018), the business and finance occupation group is in some ways a relatively diverse occupation group with respect to its 9,700 workers. About half the working population identify as female (49 percent). However, 86 percent of workers are white, so the field may offer opportunity for minority workers. Only five percent of the working population is under the age of 25, indicating a large aging population of business and finance workers.

Race and Ethnicity Demographics
85.9% White | 9.0% Black or African American | 1.5% Asian
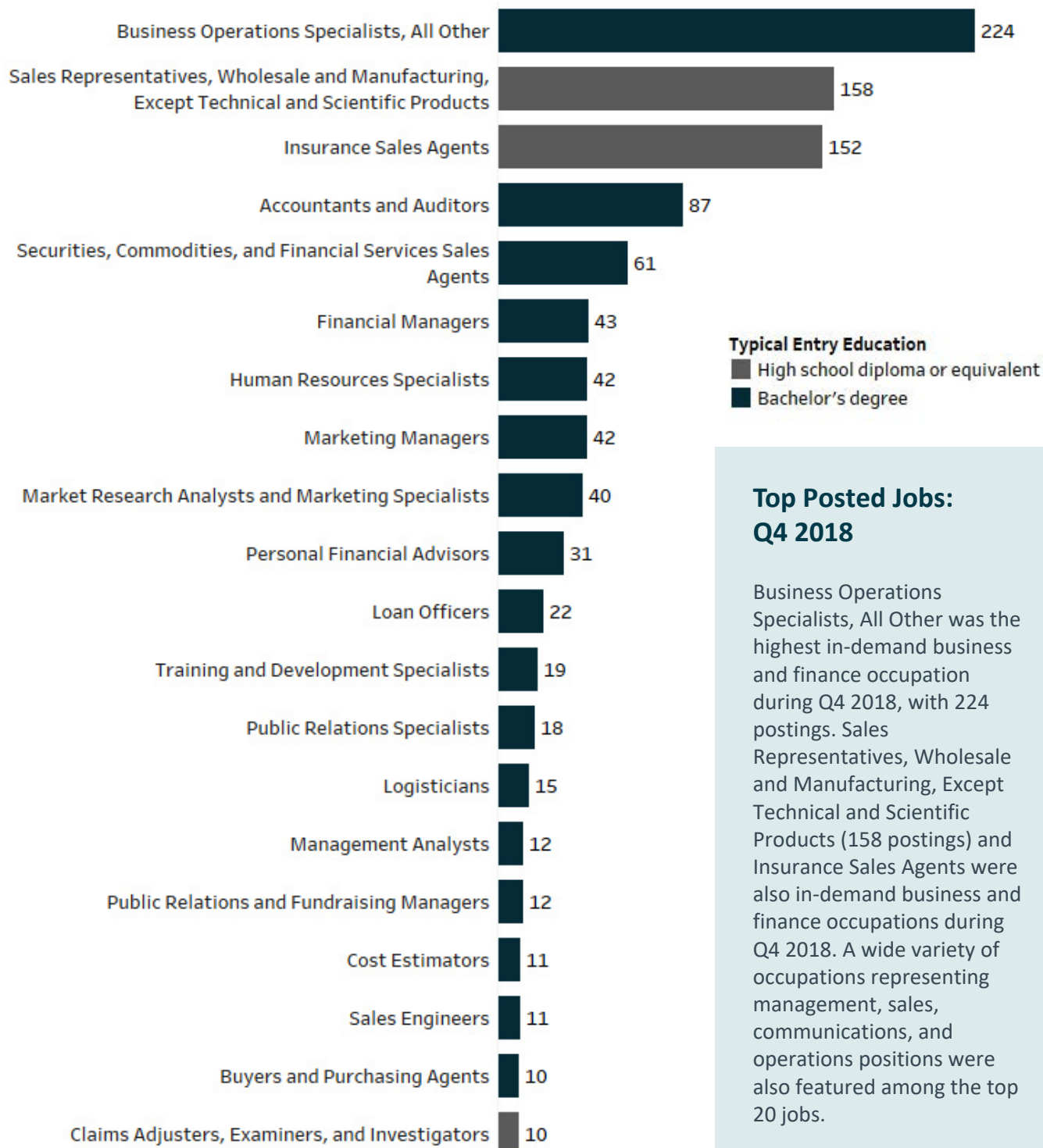
Worker Age Demographics

Age 14-24 5.0%   Age 25-54 68.0%   Age 55+, 27.0%

Data: Emsi | Analysis: Workforce Intelligence Network

Business and Finance Top Posted Jobs
Q4 2018

Occupation	Postings
Business Operations Specialists, All Other	224
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	158
Insurance Sales Agents	152
Accountants and Auditors	87
Securities, Commodities, and Financial Services Sales Agents	61
Financial Managers	43
Human Resources Specialists	42
Marketing Managers	42
Market Research Analysts and Marketing Specialists	40
Personal Financial Advisors	31
Loan Officers	22
Training and Development Specialists	19
Public Relations Specialists	18
Logisticians	15
Management Analysts	12
Public Relations and Fundraising Managers	12
Cost Estimators	11
Sales Engineers	11
Buyers and Purchasing Agents	10
Claims Adjusters, Examiners, and Investigators	10

Typical Entry Education
High school diploma or equivalent
Bachelor's degree

**Top Posted Jobs:
Q4 2018**

Business Operations Specialists, All Other was the highest in-demand business and finance occupation during Q4 2018, with 224 postings. Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (158 postings) and Insurance Sales Agents were also in-demand business and finance occupations during Q4 2018. A wide variety of occupations representing management, sales, communications, and operations positions were also featured among the top 20 jobs.

High Earning Potential
for Marketing Managers

Certified Financial Planner:
In-Demand Business and Finance Certification

Business and Finance Wage Overview

Most business and finance related jobs offer high wages, providing 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, Business Operations Specialists, All Other, offers median hourly wages of $28.05, translating to annual earnings of approximately $58,000. Marketing and Financial Managers, also among the top five, each earn over $45 hourly.

Wage Overview for Top Posted Business and Finance Jobs in Q4 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
13-1199	Business Operations Specialists, All Other	$15.65	$21.00	$28.05	$37.13	$46.31
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	$13.18	$18.25	$26.74	$42.52	$56.78
41-3021	Insurance Sales Agents	$15.27	$20.01	$24.52	$33.38	$52.10
13-2011	Accountants and Auditors	$9.42	$20.61	$25.03	$33.56	$44.54
41-3031	Securities, Commodities, and Financial Services Sales Agents	$17.38	$19.89	$28.31	$42.55	$71.86
11-3031	Financial Managers	$23.99	$34.57	$46.37	$63.78	$80.23
11-2021	Marketing Managers	$24.25	$30.29	$49.35	$60.33	$75.88
13-1071	Human Resources Specialists	$14.63	$20.13	$25.70	$32.52	$39.68
13-1161	Market Research Analysts and Marketing Specialists	$13.16	$17.15	$24.15	$33.14	$45.88
13-2052	Personal Financial Advisors	$12.22	$23.61	$34.18	$56.55	$74.69

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills
- Accounting
- Selling Techniques
- Customer Experience
- Business Development
- Insurance Sales

In-Demand Foundational Skills
- Sales
- Management
- Communications
- Customer Service
- Operations

In-Demand Education Level*
- High School Diploma: 19.6%
- Associate Degree: 4.9%
- Bachelor's Degree: 31.5%
- Master's Degree: 4.8%

*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 Financial Planner
- Series 7 General Securities Representative License (Stockbroker)
- Series 6 Investment Company and Variable Contracts License (Mutual Funds/Variable Annuities)
- Registered Investment Advisor
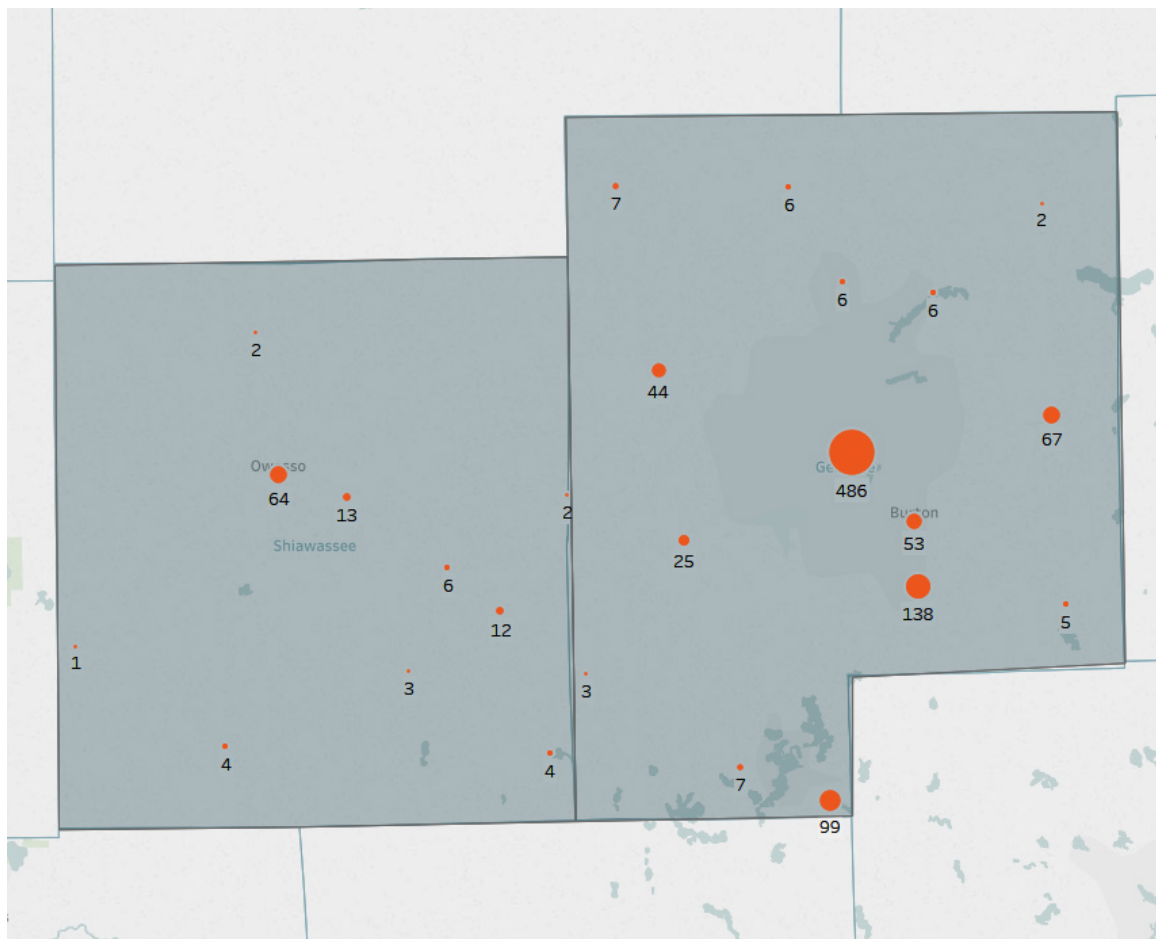- Series 65 Uniform Registered Investment Adviser Law License (RIA)

Banks and Energy Companies Seeking Business and Finance Workers

Accounting and Sales Skills are in High Demand

Map based on Longitude (generated) and Latitude (generated).
Size shows sum of Unique Postings. Details are shown for City.

Top Job Posting Employers*

- Flint Group Incorporated
- Huntington Bancshares Incorporated
- Brenner Oil Company
- H&R Block, Inc.
- McLaren, Inc.
- JPMorgan Chase & Co.
- Bankers Life & Casualty Company
- Charter Communications, Inc.
- Maritz Travel Company
- State Farm Insurance

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

Job Postings by City

1. Flint, MI: 486 Postings
2. Grand Blanc, MI: 138 Postings
3. Fenton, MI: 99 Postings
4. Davison, MI: 67 Postings
5. Owosso, MI: 64 Postings

ENGINEERING AND DESIGN OCCUPATION GROUP
## Genesee and Shiawassee Counties | Q4 2018

Introduction

Jobs in the manufacturing industry can range from assembly and production, to skilled trades and technicians, designers and engineers, and even computer-related occupations such as software development. Demand for engineers in the region has been consistent, and employment has been growing quickly.

2,052
Engineering Workers

10 Worker Increase from 2017

Employment Over Time
2001–2018

Worker Gender Demographics

85% Males

15% Females
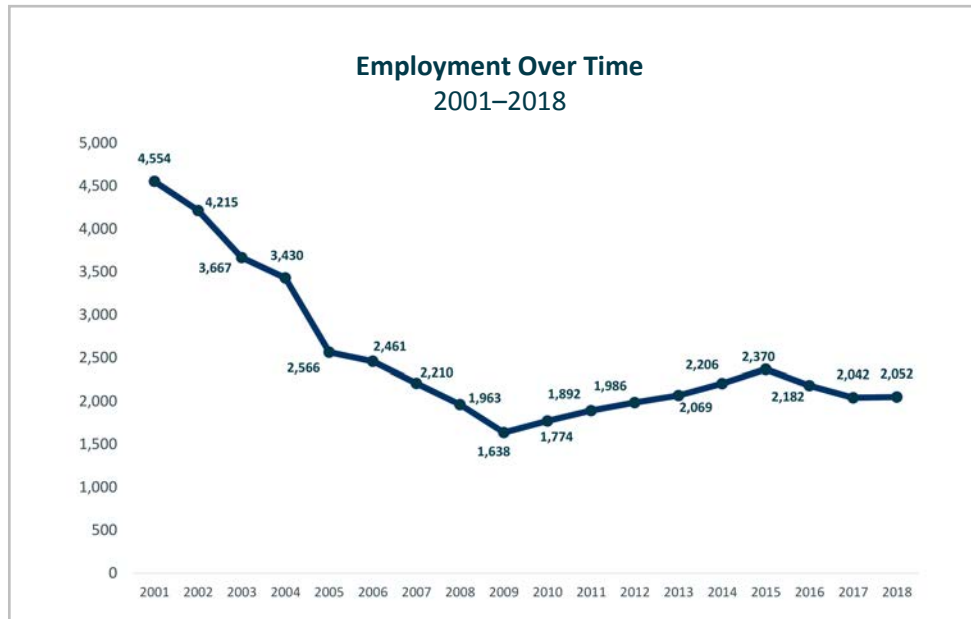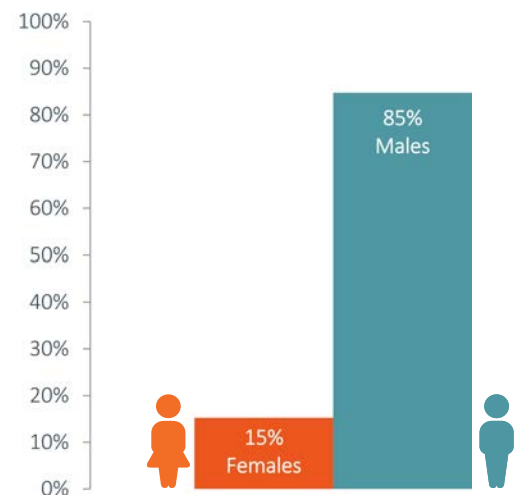
Engineering and Design Worker Demographics

According to the most recent Emsi data set available (2018), the 2,000 workers in the Engineers and Designers group are not particularly diverse. Just six percent of the workforce is under 25, likely due to the consistently high educational requirements. Fifteen percent of current workers are female, and only 14 percent identify as a race other than white; as the labor force overall continues to change, this is one field that could benefit from seeking more diverse talent.

Race and Ethnicity Demographics
85.7% White | 6.3% Black or African American | 4.2% Asian

Worker Age Demographics

Age 14-24
5.9%

Age 25-54
68.9%

Age 55+
25.0%

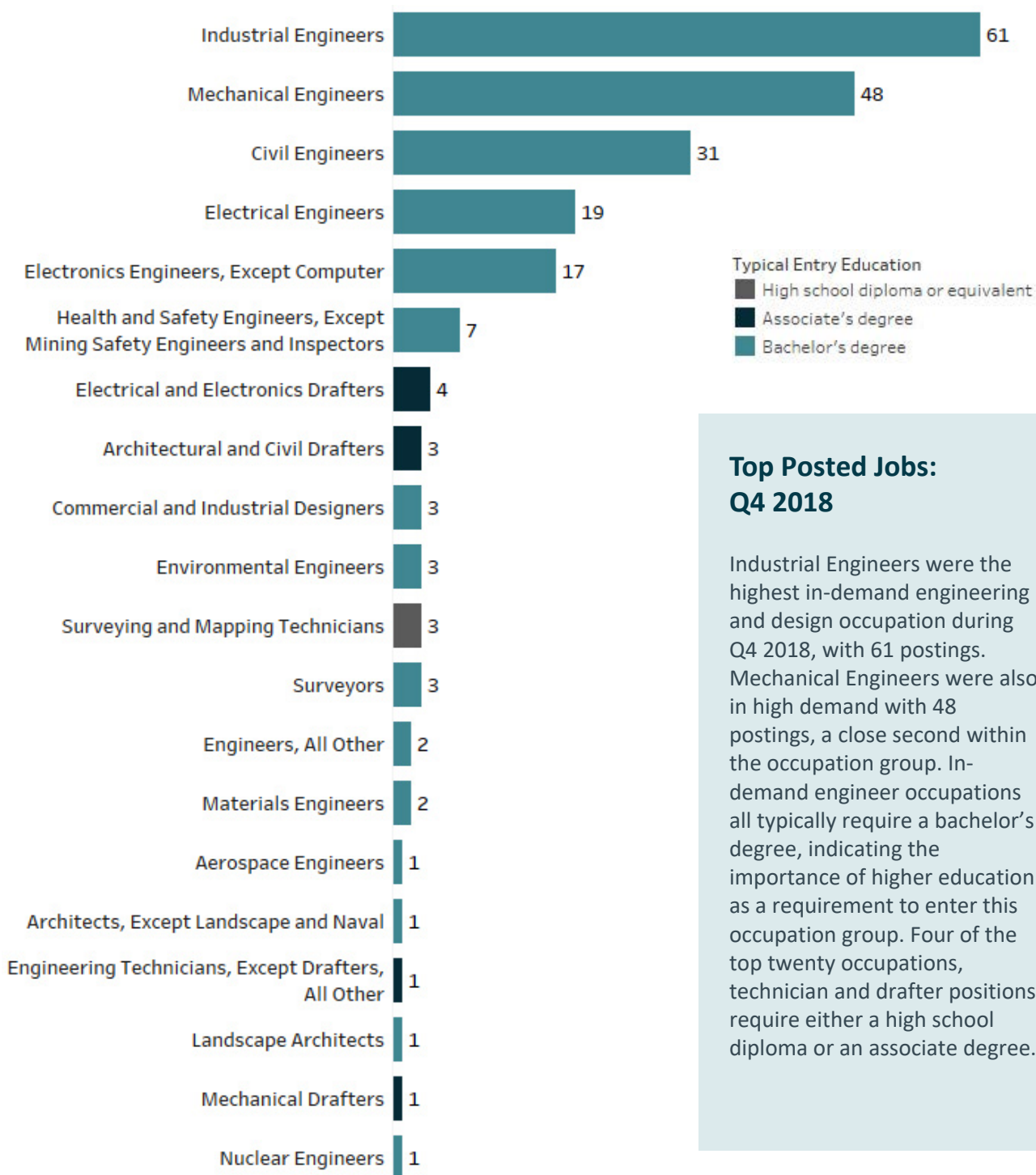*Data: Emsi | Analysis: Workforce Intelligence Network*

212 Engineering and Design Postings: 17 Fewer than in Q3 2018

Bachelor's Degree Required for Most Engineering and Design Jobs

Engineering and Design Top Posted Jobs
Q4 2018

Job Title	Postings
Industrial Engineers	61
Mechanical Engineers	48
Civil Engineers	31
Electrical Engineers	19
Electronics Engineers, Except Computer	17
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	7
Electrical and Electronics Drafters	4
Architectural and Civil Drafters	3
Commercial and Industrial Designers	3
Environmental Engineers	3
Surveying and Mapping Technicians	3
Surveyors	3
Engineers, All Other	2
Materials Engineers	2
Aerospace Engineers	1
Architects, Except Landscape and Naval	1
Engineering Technicians, Except Drafters, All Other	1
Landscape Architects	1
Mechanical Drafters	1
Nuclear Engineers	1

Typical Entry Education
- High school diploma or equivalent
- Associate's degree
- Bachelor's degree

Top Posted Jobs: Q4 2018

Industrial Engineers were the highest in-demand engineering and design occupation during Q4 2018, with 61 postings. Mechanical Engineers were also in high demand with 48 postings, a close second within the occupation group. In-demand engineer occupations all typically require a bachelor's degree, indicating the importance of higher education as a requirement to enter this occupation group. Four of the top twenty occupations, technician and drafter positions, require either a high school diploma or an associate degree.

Data: Emsi
Analysis: Workforce Intelligence Network

High Earning Potential for Electrical Engineers

Professional Engineer: Most In-Demand Engineering and Design Certification

Engineering and Design Wage Overview

Most engineering and design related jobs offer high wages, providing a lucrative opportunity to job seekers willing to meet the minimum education requirements related to these jobs. The top posted engineering and design job, Industrial Engineers, offers a median hourly wage of $43.55, or an annual salary of approximately $90,500 according to the Bureau of Labor Statistics (BLS). Drafting occupations, which require shorter term education and training, also offer wages over $20 per hour.

Wage Overview for Top Posted Engineering and Design Jobs in Q4 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2112	Industrial Engineers	$30.30	$35.64	$43.55	$52.45	$59.93
17-2141	Mechanical Engineers	$21.76	$27.44	$36.23	$46.84	$55.77
17-2051	Civil Engineers	$20.62	$25.21	$33.32	$37.46	$43.47
17-2071	Electrical Engineers	$32.66	$38.75	$47.56	$56.26	$62.23
17-2072	Electronics Engineers, Except Computer	$21.84	$28.55	$35.74	$42.74	$51.13
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	$24.14	$30.13	$41.33	$51.31	$60.67
17-3012	Electrical and Electronics Drafters	$13.98	$17.91	$22.74	$27.50	$31.54
17-1022	Surveyors	$13.08	$17.67	$23.30	$28.39	$33.09
17-2081	Environmental Engineers	$25.60	$32.92	$41.71	$51.53	$60.39
17-3011	Architectural and Civil Drafters	$12.74	$16.52	$20.19	$24.52	$28.18

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills
- Mechanical Engineering
- AutoCAD
- Civil Engineering
- Continuous Improvement Process
- Debugging

In-Demand Foundational Skills
- Management
- Communications
- Operations
- Research
- Leadership

In-Demand Education Level*
- High School Diploma: 9.9%
- Associate Degree: 8.5%
- Bachelor's Degree: 61.3%
- Master's Degree: 9.9%

Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent
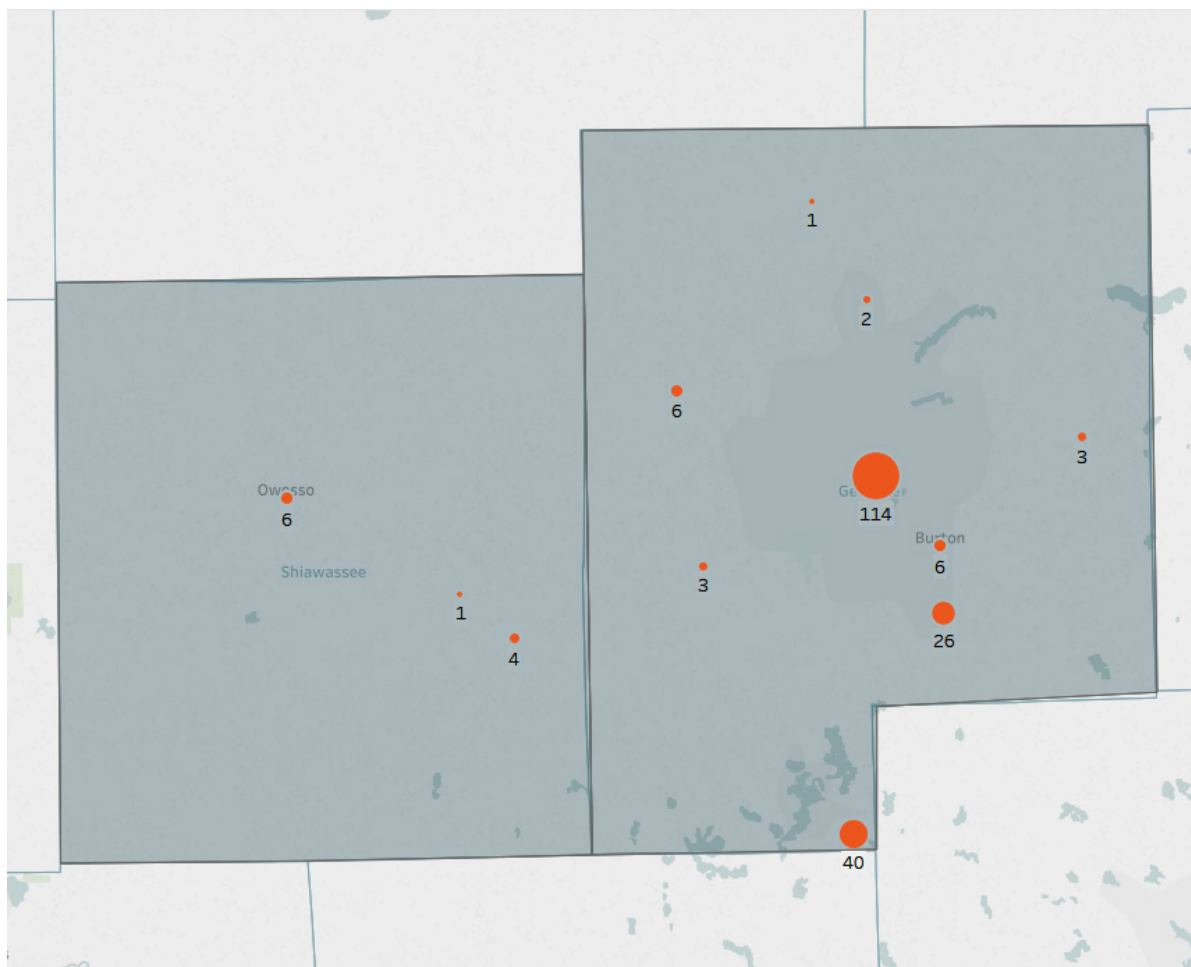
In-Demand Certifications
- Licensed Professional Engineer
- Professional Engineer
- Certified Hazardous Materials Manager
- Certified Personnel Consultant
- Certified Photogrammetrist

Staffing Companies and Manufactures are Top Engineering Employers

AutoCAD and Operations Skills are in High Demand

Map based on Longitude (generated) and Latitude (generated).
Size shows sum of Unique Postings. Details are shown for City.

Top Posting Employers*

- Job Juncture, Inc
- Laird Technologies, Inc.
- Cybercoders, Inc.
- Lear Corporation
- Aerotek, Inc.
- Stantec Inc.
- Wade Trim Group, Inc.
- RANDSTAD HOLDING nv
- Miller Industries, Inc.
- Kelly Services, Inc.

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

Job Postings by City

1. Flint, MI: 114 Postings
2. Fenton, MI: 40 Postings
3. Grand Blanc, MI: 26 Postings
4. Burton, MI: 6 Postings
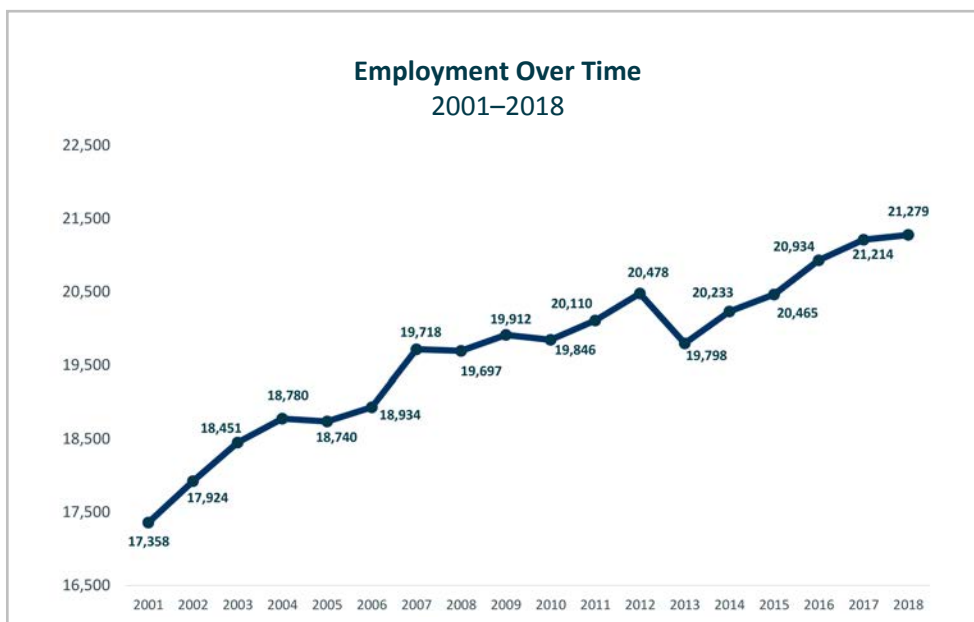5. Flushing, MI: 6 Postings

HEALTH CARE OCCUPATION GROUP
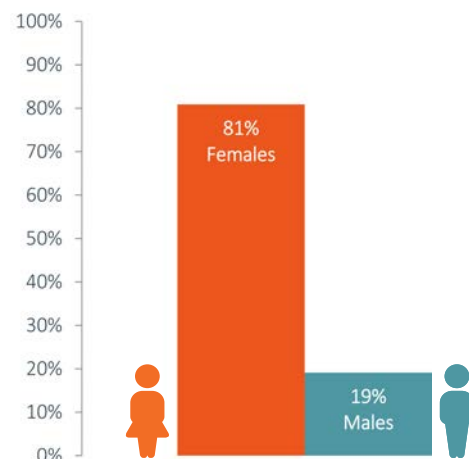## Genesee and Shiawassee Counties | Q4 2018

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.

21,279
Health Care Workers
0.3% Increase from 2017

Employment Over Time
2001–2018

Year	Value
2001	17,358
2002	17,924
2003	18,451
2004	18,780
2005	18,740
2006	18,934
2007	19,718
2008	19,697
2009	19,912
2010	19,846
2011	20,110
2012	20,478
2013	19,798
2014	20,233
2015	20,465
2016	20,934
2017	21,214
2018	21,279

Worker Gender Demographics

81% Females

19% Males

Health Care Worker Demographics

According to the most recent Emsi data set available (2018), the Health Care occupation group employs around 21,000 workers, who are primarily female (81 percent) and between the ages of 25 and 54 (72 percent), although 17 percent of workers are over 55. The group has a similar proportion of racial minorities as the workforce as a whole, with 75 percent of workers identifying as white, 18 percent identifying as black or African American, and seven percent identifying otherwise.

Race and Ethnicity Demographics
75.4% White | 17.9% Black or African American | 2.8% Asian

Worker Age Demographics
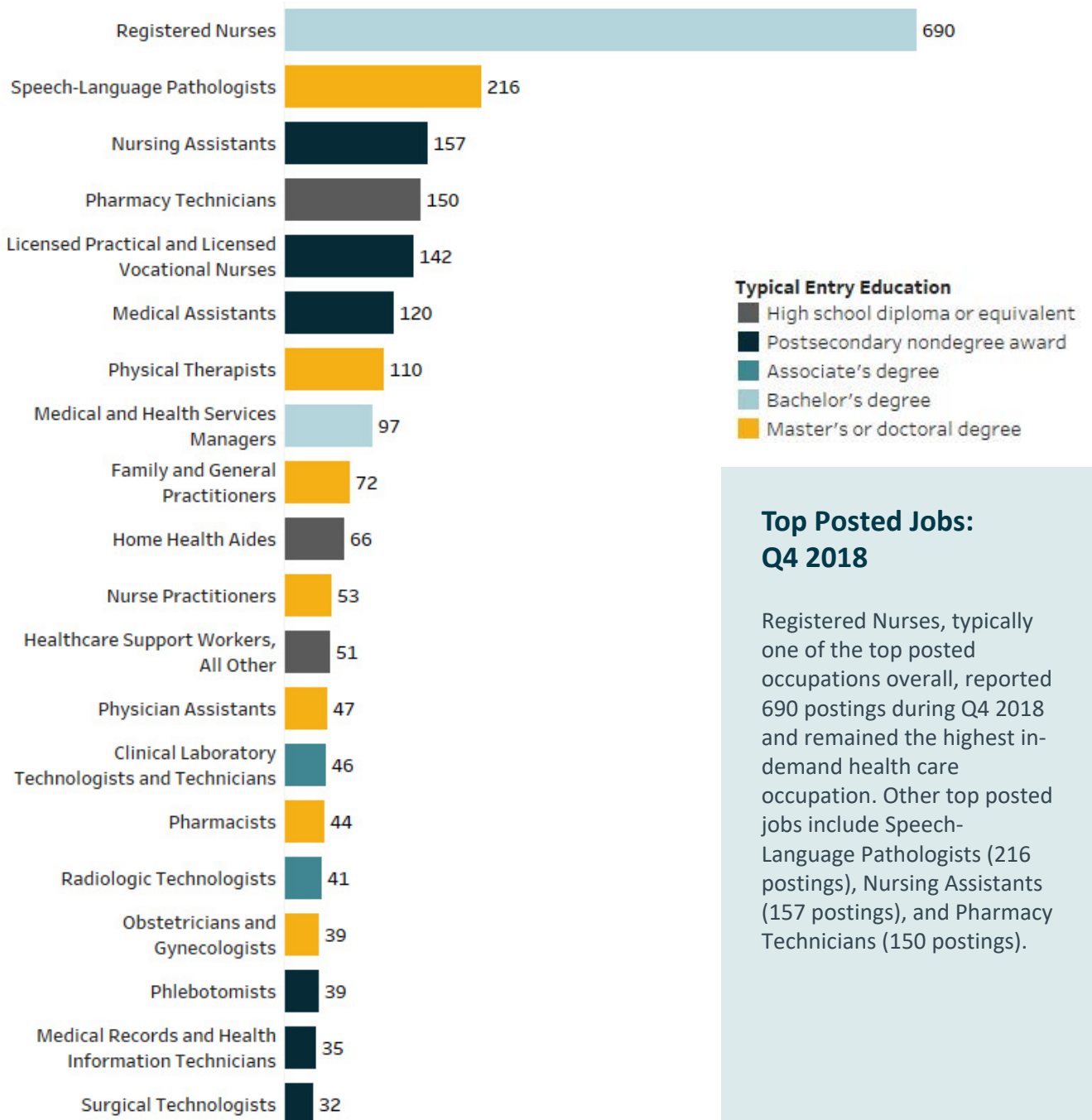
Age 14-24	Age 25-54	Age 55+
7.1%	72.4%	20.5%

Data: Emsi | Analysis: Workforce Intelligence Network

**2,661 Health Care Postings:
230 More Than in Q3 2018**

**Bachelor's Degree Required for
High Paying Health Care Jobs**

Health Care Top Posted Jobs
Q4 2018

Occupation	Postings
Registered Nurses	690
Speech-Language Pathologists	216
Nursing Assistants	157
Pharmacy Technicians	150
Licensed Practical and Licensed Vocational Nurses	142
Medical Assistants	120
Physical Therapists	110
Medical and Health Services Managers	97
Family and General Practitioners	72
Home Health Aides	66
Nurse Practitioners	53
Healthcare Support Workers, All Other	51
Physician Assistants	47
Clinical Laboratory Technologists and Technicians	46
Pharmacists	44
Radiologic Technologists	41
Obstetricians and Gynecologists	39
Phlebotomists	39
Medical Records and Health Information Technicians	35
Surgical Technologists	32

Typical Entry Education
- High school diploma or equivalent
- Postsecondary nondegree award
- Associate's degree
- Bachelor's degree
- Master's or doctoral degree

**Top Posted Jobs:
Q4 2018**

Registered Nurses, typically one of the top posted occupations overall, reported 690 postings during Q4 2018 and remained the highest in-demand health care occupation. Other top posted jobs include Speech-Language Pathologists (216 postings), Nursing Assistants (157 postings), and Pharmacy Technicians (150 postings).

*Data: Emsi
Analysis: Workforce Intelligence Network*

Health Care Wage Overview

Wages in the high-demand health care field tend to scale with both education and experience. The health care occupation group offers a relatively broad array of entry requirements and a high volume of jobs are open to candidates with less than a bachelor's degree. These jobs that require less than a bachelor's degree pay more than the region's median wage of $17.81 per hour. Registered Nurses, the top posted occupation, offers a median hourly wage of $35.26 per hour or annual salary of over $70,000, according to the Bureau of Labor Statistics (BLS).

Wage Overview for Top Posted Health Care Jobs in Q4 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
29-1141	Registered Nurses	$30.05	$32.05	$35.26	$38.43	$44.61
29-1127	Speech-Language Pathologists	$26.42	$32.03	$36.78	$42.81	$47.33
31-1014	Nursing Assistants	$10.01	$11.28	$13.25	$15.18	$17.47
29-2052	Pharmacy Technicians	$9.27	$10.03	$12.18	$15.53	$18.30
29-2061	Licensed Practical and Licensed Vocational Nurses	$18.84	$20.65	$23.24	$26.60	$29.21
31-9092	Medical Assistants	$10.00	$11.40	$13.92	$16.78	$18.90
29-1123	Physical Therapists	$28.78	$32.97	$39.45	$46.30	$56.50
11-9111	Medical and Health Services Managers	$25.48	$38.61	$47.23	$62.40	$96.70
29-1062	Family and General Practitioners	$34.62	$51.60	$79.36	$100.00	$161.23
31-1011	Home Health Aides	$9.04	$9.30	$10.09	$11.39	$12.94

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills
- Nursing
- Health Sciences
- Rehabilitations
- Basic Life Support
- Nursing Care

In-Demand Foundational Skills
- Management
- Communications
- Customer Service
- Cardiopulmonary Resuscitation
- Operations

In-Demand Education Level*
- High School Diploma: 25.1%
- Associate Degree: 20.4%
- Bachelor's Degree: 20.4%
- Master's Degree: 8.6%

Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent
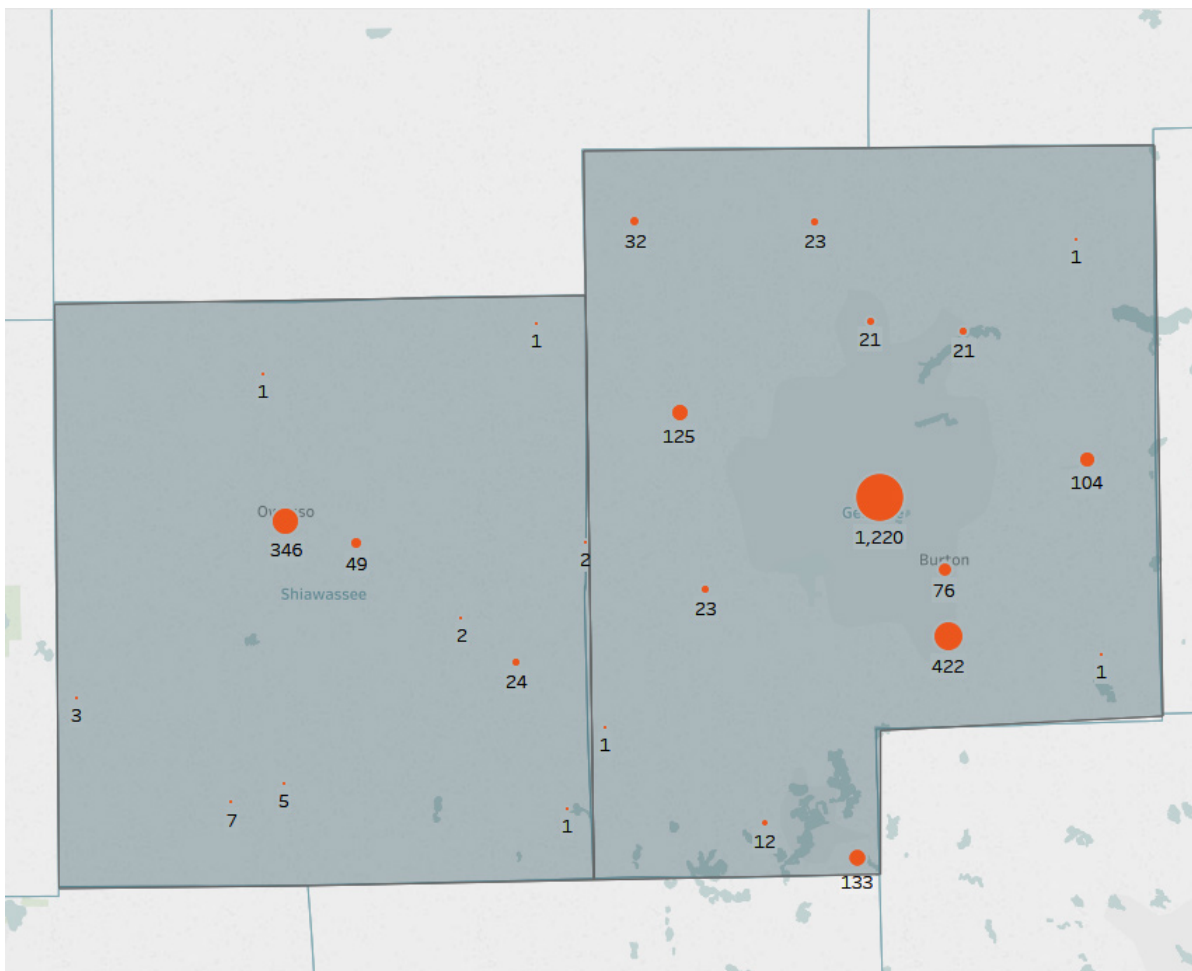
In-Demand Certifications
- Licensed Practical Nurse
- Certified Nursing Assistant
- Nurse Practitioner
- Patient Care Technician
- Certified Medical Assistant

Hospitals and Pharmacies were Top Employers of Health Care Workers

Nursing and Management Skills are in High Demand

Map based on Longitude (generated) and Latitude (generated). Size shows sum of Unique Postings. Details are shown for City.

Top Posting Employers*

- McLaren, Inc.
- Davita Inc.
- Sunbelt Staffing, LLC
- Ascension Health
- Manor Care, Inc.
- Memorial Healthcare Center
- Comphealth Associates, Inc
- Soliant Health, Inc
- Fresenius Medical Care
- McLaren Health Care Corporation

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

Job Postings by City

1. Flint, MI: 1,220 Postings
2. Grand Blanc, MI: 422 Postings
3. Owosso, MI: 346 Postings
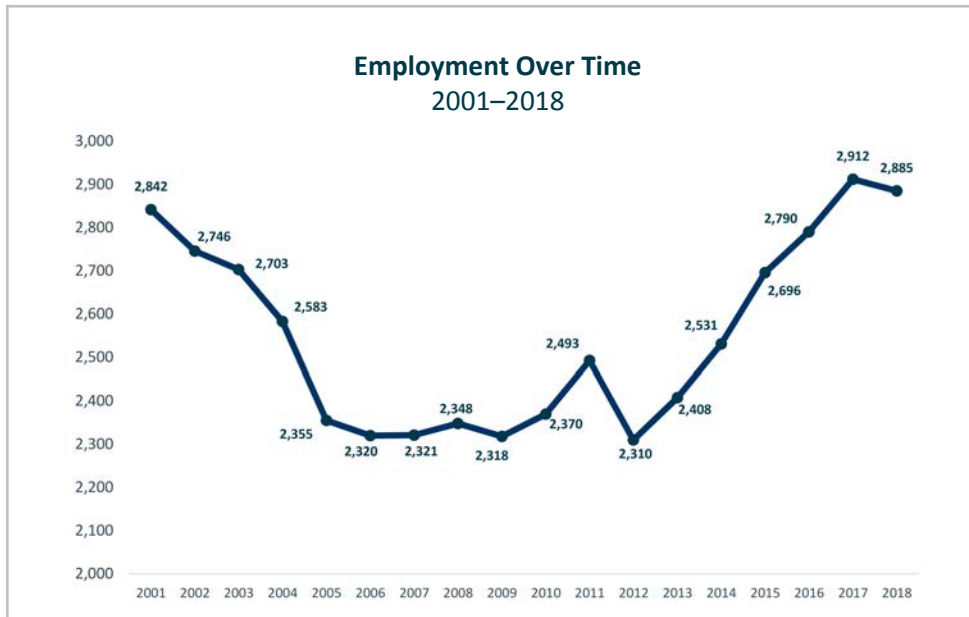4. Fenton, MI: 133 Postings
5. Flushing, MI: 125 Postings

INFORMATION TECHNOLOGY (IT) OCCUPATION GROUP
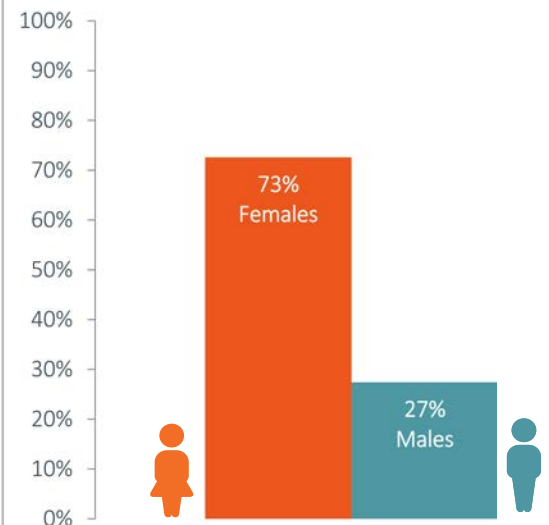## Genesee and Shiawassee Counties | Q4 2018

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.

2,885
IT Workers
0.9% Decrease from 2017

Employment Over Time
2001–2018

Employment data points: 2001: 2,842 | 2002: 2,746 | 2003: 2,703 | 2004: 2,583 | 2005: 2,355 | 2006: 2,320 | 2007: 2,321 | 2008: 2,348 | 2009: 2,318 | 2010: 2,370 | 2011: 2,493 | 2012: 2,310 | 2013: 2,408 | 2014: 2,531 | 2015: 2,696 | 2016: 2,790 | 2017: 2,912 | 2018: 2,885

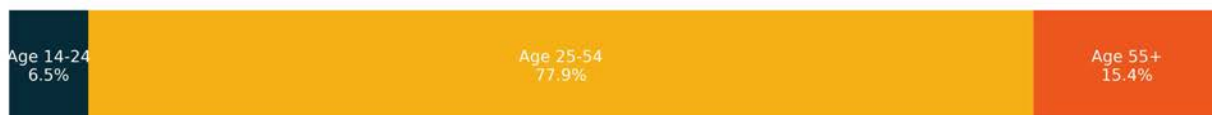### Worker Gender Demographics

73% Females

27% Males

IT Worker Demographics

According to the most recent Emsi data set available (2018), the nearly 3,000 workers in the IT occupation group are not very diverse. A large majority of workers are white males between the ages of 25 and 54. Currently, 73 percent of workers identify as male, and 79 percent identify as white. There are a broad range of organizations providing specialized training resources for female and minority IT workers throughout southeast Michigan. With the push to diversify the IT field, more opportunities are opening for women and minorities.

Race and Ethnicity Demographics
78.8% White | 10.9% Black or African American | 6.0% Asian
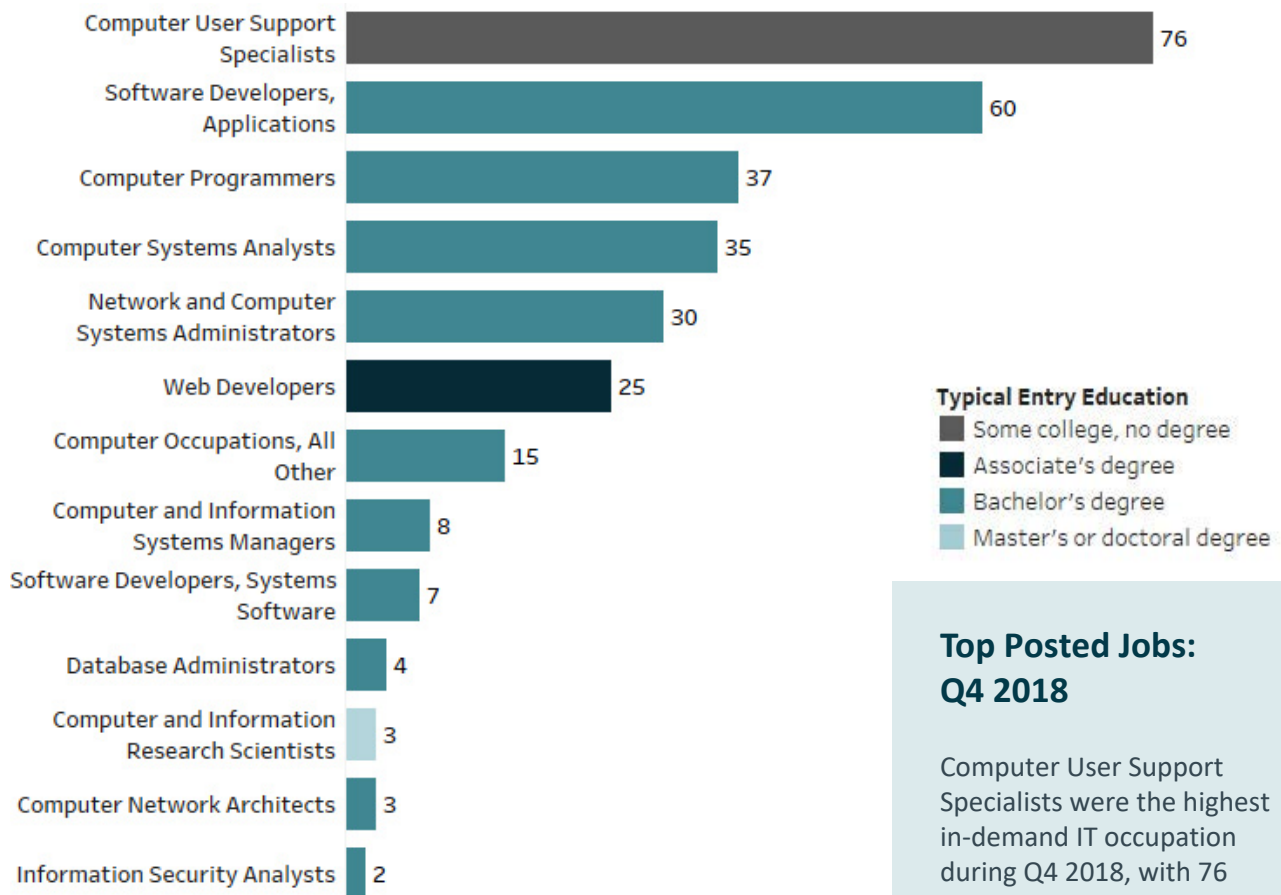
Worker Age Demographics

Age 14-24: 6.5%   Age 25-54: 77.9%   Age 55+: 15.4%

Data: Emsi | Analysis: Workforce Intelligence Network

305 IT Postings:
30 More than in Q3 2018

Bachelors Degree
Required for Most IT Jobs

Information Technology Top Posted Jobs
Q4 2018

Occupation	Postings
Computer User Support Specialists	76
Software Developers, Applications	60
Computer Programmers	37
Computer Systems Analysts	35
Network and Computer Systems Administrators	30
Web Developers	25
Computer Occupations, All Other	15
Computer and Information Systems Managers	8
Software Developers, Systems Software	7
Database Administrators	4
Computer and Information Research Scientists	3
Computer Network Architects	3
Information Security Analysts	2

Typical Entry Education
- Some college, no degree
- Associate's degree
- Bachelor's degree
- Master's or doctoral degree

Top Posted Jobs:
Q4 2018

Computer User Support Specialists were the highest in-demand IT occupation during Q4 2018, with 76 postings. While most of the top jobs typically posted requirements for a bachelor's degree, this top occupation typically requires only an associate degree. Software Developers, Applications and Computer Programmers were also in high demand.

High Earning Potential for Computer and Information System Managers

Cisco Certified Network Professional: Most In-Demand IT Certification

IT Wage Overview

Most IT-related jobs offer high wages providing a lucrative opportunity to job seekers willing to meet the minimum education requirements related to these jobs. Computer User Support Specialists, the top posted IT job in Q4 2018, offers a median hourly wage of $18.83 per hour or about $40,000 per year according to the Bureau of Labor Statistics (BLS). Occupations requiring a bachelor's degree offer even greater wages; Software Developers, Applications, earn $40.82 at the median.

Wage Overview for Top Posted IT Jobs in Q4 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
15-1151	Computer User Support Specialists	$11.15	$14.16	$18.83	$25.18	$32.73
15-1132	Software Developers, Applications	$25.65	$32.35	$40.82	$48.52	$57.29
15-1131	Computer Programmers	$20.45	$24.99	$31.59	$37.87	$43.99
15-1121	Computer Systems Analysts	$21.37	$24.53	$31.10	$39.75	$47.45
15-1142	Network and Computer Systems Administrators	$23.18	$26.79	$32.34	$39.12	$45.84
15-1134	Web Developers	$14.51	$16.77	$22.05	$28.10	$35.08
15-1199	Computer Occupations, All Other	$11.96	$20.03	$26.91	$35.79	$43.95
11-3021	Computer and Information Systems Managers	$30.51	$34.45	$43.06	$53.34	$72.15
15-1133	Software Developers, Systems Software	$24.51	$30.52	$35.72	$40.15	$47.40
15-1141	Database Administrators	$21.18	$25.84	$34.77	$44.77	$50.91

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- SQL
- Software Engineering
- C++
- JavaScript
- Java

In-Demand Foundational Skills

- Management
- Communications
- Problem Solving
- Written Communication
- Operations

In-Demand Education Level*

- High School Diploma: 9.8%
- Associate Degree: 10.2%
- Bachelor's Degree: 60.7%
- Master's Degree: 14.1%

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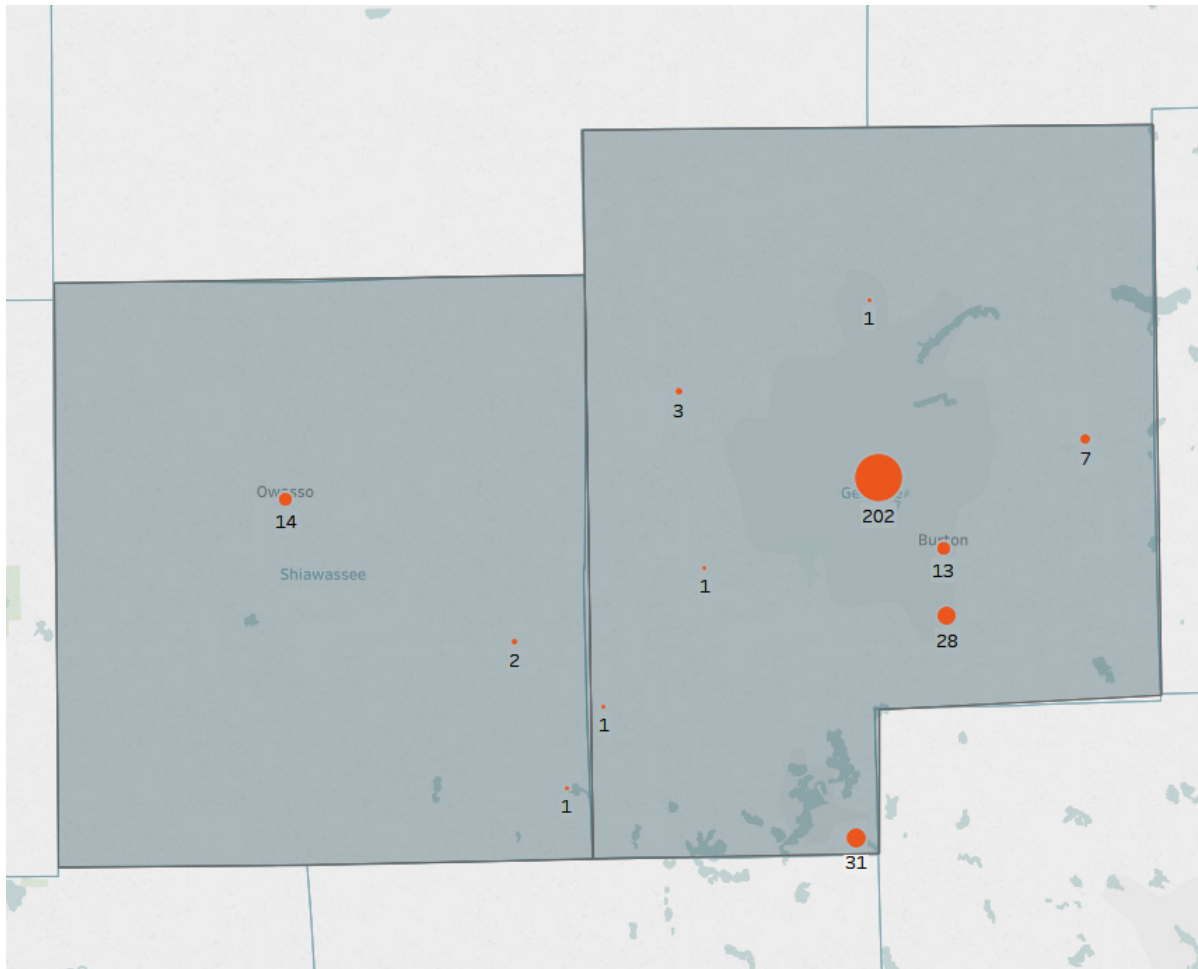
In-Demand Certifications

- Cisco Certified Network Professional
- Microsoft Certified Professional
- Cisco Certified Network Associate
- Certified Information Systems Security Professional
- Certified Personnel Consultant

Flint Employers Seek Greatest Number of IT Workers

Programming Language Skills are in High Demand

Map based on Longitude (generated) and Latitude (generated).
Size shows sum of Unique Postings. Details are shown for City.

Top Posting Employers*

- Renature, Inc.
- Appcast, Inc
- Atos
- Job Juncture, Inc
- Maritz Travel Company
- Robert Half International Inc.
- Teksystems, Inc.
- Stout Systems Development Inc
- Avanade Inc.
- Diplomat Pharmacy, Inc.

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

Job Postings by City

1. Flint, MI: 202 Postings
2. Fenton, MI: 31 Postings
3. Grand Blanc, MI: 28 Postings
4. Owosso, MI: 14 Postings
5. Burton, MI: 13 Postings

SKILLED TRADES AND TECHNICIANS (MANUFACTURING) OCCUPATION GROUP
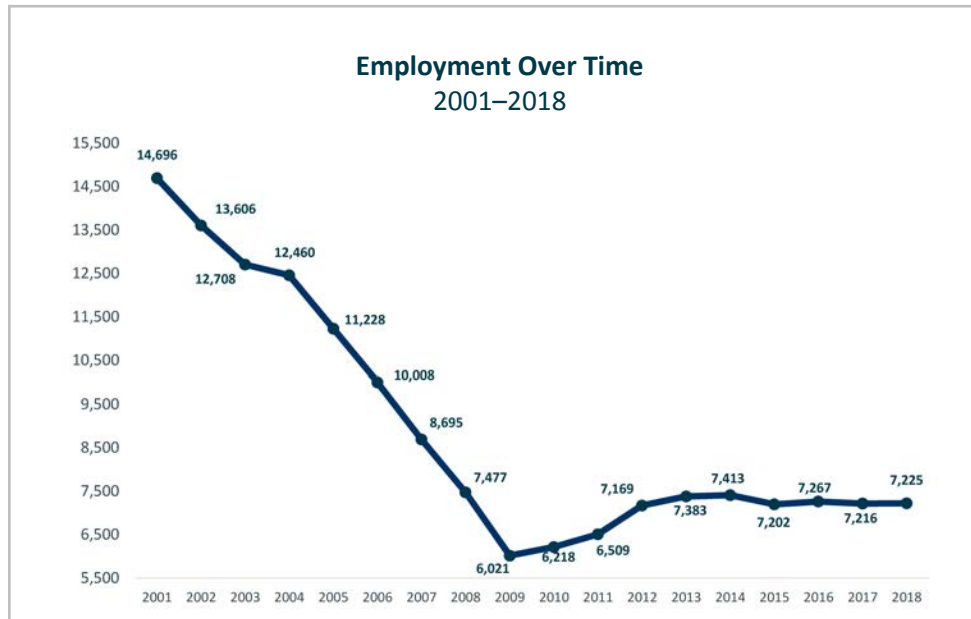## Genesee and Shiawassee Counties | Q4 2018

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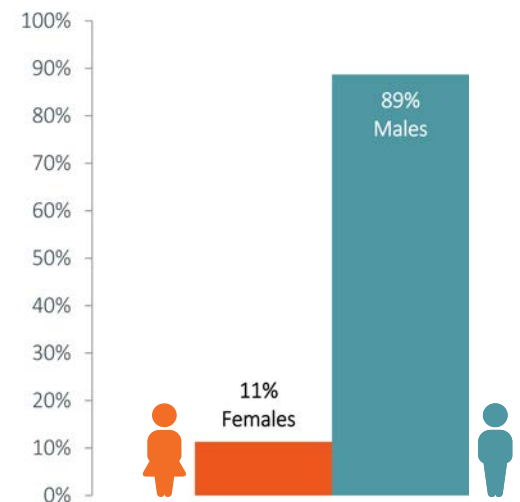
NOTE: Skilled trades related to construction and assembly are not included in this cluster, as the focus is on advanced manufacturing only.

7,225
Trade Workers
9 Worker Increase from 2017

Employment Over Time
2001–2018

Year	Employment
2001	14,696
2002	13,606
2003	12,708
2004	12,460
2005	11,228
2006	10,008
2007	8,695
2008	7,477
2009	6,021
2010	6,218
2011	6,509
2012	7,169
2013	7,383
2014	7,413
2015	7,202
2016	7,267
2017	7,216
2018	7,225

Worker Gender Demographics

89% Males

11% Females

Skilled Trades and Technicians Worker Demographics

According to the most recent Emsi data set available (2018), the Skilled Trades occupation group employs about 7,300 workers in Genesee and Shiawassee counties. A majority of workers are white males between the ages of 25 and 54. Additional outreach may be necessary in the near future, as at 27.1 percent, the group has a somewhat higher proportion than average of workers over age 55.

Race and Ethnicity Demographics

84.0% White | 10.4% Black or African American | 1.1% Asian

Worker Age Demographics

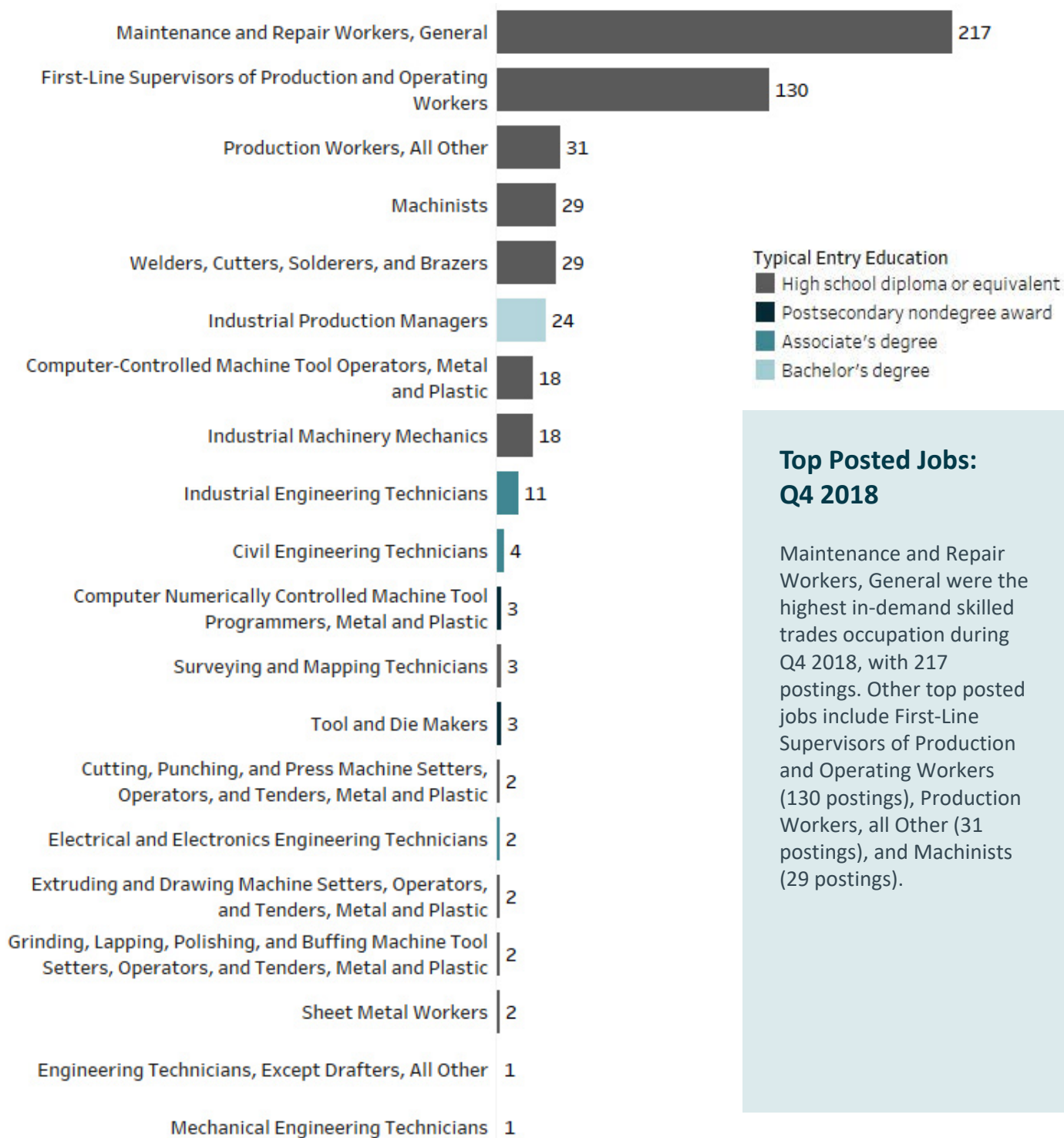Age 14-24
6.7%

Age 25-54
66.2%

Age 55+
27.1%

Data: Emsi | Analysis: Workforce Intelligence Network

534 Skilled Trades Postings:
1 Fewer than in Q3 2018

Vocational Training Required
for Most Skilled Trades Jobs

Skilled Trades and Technicians Top Posted Jobs
Q4 2018

Occupation	Postings
Maintenance and Repair Workers, General	217
First-Line Supervisors of Production and Operating Workers	130
Production Workers, All Other	31
Machinists	29
Welders, Cutters, Solderers, and Brazers	29
Industrial Production Managers	24
Computer-Controlled Machine Tool Operators, Metal and Plastic	18
Industrial Machinery Mechanics	18
Industrial Engineering Technicians	11
Civil Engineering Technicians	4
Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	3
Surveying and Mapping Technicians	3
Tool and Die Makers	3
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	2
Electrical and Electronics Engineering Technicians	2
Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	2
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	2
Sheet Metal Workers	2
Engineering Technicians, Except Drafters, All Other	1
Mechanical Engineering Technicians	1

Typical Entry Education
- High school diploma or equivalent
- Postsecondary nondegree award
- Associate's degree
- Bachelor's degree

Top Posted Jobs:
Q4 2018

Maintenance and Repair Workers, General were the highest in-demand skilled trades occupation during Q4 2018, with 217 postings. Other top posted jobs include First-Line Supervisors of Production and Operating Workers (130 postings), Production Workers, all Other (31 postings), and Machinists (29 postings).

Data: Emsi
Analysis: Workforce Intelligence Network

Skilled Trades and Technicians Wage Overview

Half of the top ten in-demand skilled trades occupations 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 Q4 2018, offers a median hourly wage of $15.35, which translates to an annual salary of about $32,000. Supervisory roles and those requiring more specialized skillsets offer promise to skilled trades workers. Industrial Machinery Mechanics earn $27.12 at the median.

Wage Overview for Top Posted Skilled Trades and Technicians Jobs in Q4 2018

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	$9.29	$11.03	$15.35	$19.61	$24.25
51-1011	First-Line Supervisors of Production and Operating Workers	$15.65	$20.88	$29.39	$38.02	$46.36
51-9199	Production Workers, All Other	$10.33	$13.25	$22.34	$26.49	$34.93
51-4041	Machinists	$11.16	$13.22	$16.99	$22.01	$27.59
51-4121	Welders, Cutters, Solderers, and Brazers	$11.82	$13.93	$16.22	$18.62	$22.21
11-3051	Industrial Production Managers	$29.84	$37.75	$49.94	$65.59	$80.91
49-9041	Industrial Machinery Mechanics	$19.05	$23.34	$27.12	$30.21	$35.59
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	$10.76	$14.88	$17.85	$21.72	$24.66
17-3026	Industrial Engineering Technicians	$14.31	$18.17	$22.31	$27.42	$33.70
17-3022	Civil Engineering Technicians	$13.33	$17.56	$22.34	$25.58	$29.34

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills
- HVAC
- Oil and Gas
- Continuous Improvement Process
- Plumbing
- Machining

In-Demand Foundational Skills
- Management
- Operations
- Communications
- Troubleshooting (Problem Solving)
- Cleanliness

In-Demand Education Level*
- High School Diploma: 41.0%
- Associate Degree: 7.7%
- Bachelor's Degree: 12.0%
- Master's Degree: 0.6%

Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent
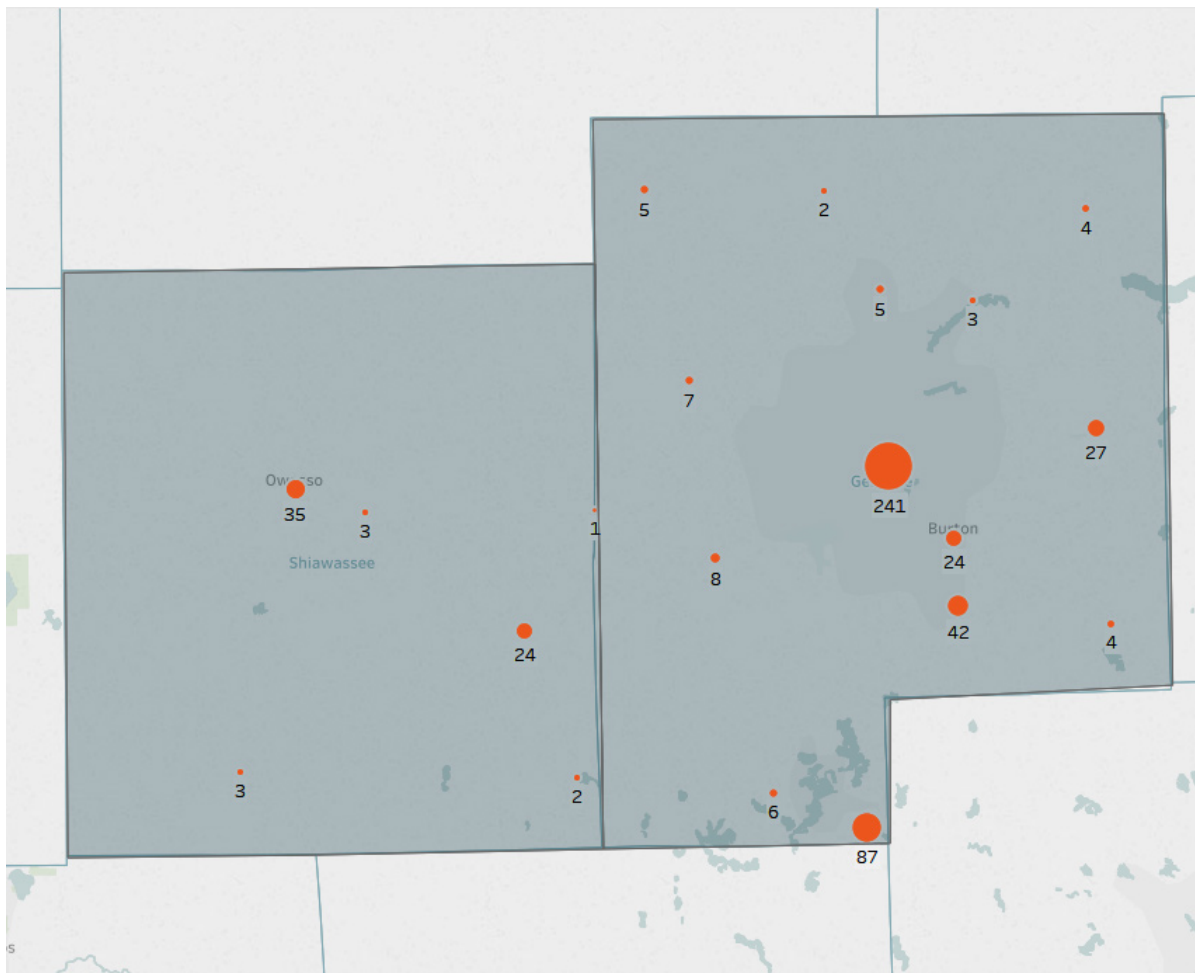
In-Demand Certifications
- Commercial Driver's License (CDL)
- Certified Photogrammetrist
- Certified Quality Engineer
- (American Society for Quality) ASQ Certified
- Certified Control Systems Technician

Staffing Agencies and Manufacturers: Top Employers of Skilled Trades Workers

HVAC, Oil and Gas, and Management Skills are in High Demand

Map based on Longitude (generated) and Latitude (generated).
Size shows sum of Unique Postings. Details are shown for City.

Top Posting Employers*

- McDonald's Corporation
- General Motors Company
- Kelly Services, Inc.
- Terex Corporation
- Cornerstone Staffing Solutions, Inc.
- The Home Depot Inc
- Gst Michigan Works
- Trillium Staffing
- Aramark Corporation
- Qualified Staffing Inc

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

Job Postings by City

1. Flint, MI: 241 Postings
2. Fenton, MI: 87 Postings
3. Grand Blanc, MI: 42 Postings
4. Owosso, MI: 35 Postings
5. Davison, MI: 27 Postings

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