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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 Monroe county. 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 Monroe county and includes summative data for October, November, and December of 2018. The Monroe report focuses on analyzing the Agriculture, Customer Service, Energy, Information Technology, and Skilled Trades and Technicians occupation groups.

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.

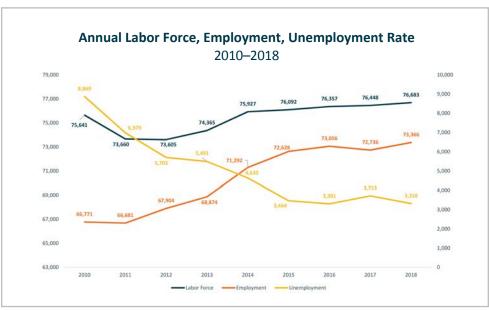


State of the Labor Market in the Monroe County

In the last quarter of 2018, the labor force figures minimally increased in Monroe county while employment also rose. With this simultaneous uptick 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 4.9 percent annual rate in 2017 to an annual rate of 4.3 percent in 2018. Employer demand for most occupation groups also increased during Q4 2018. The transportation, distribution and logistics occupation group reported the highest demand with over 3,500 job postings during the quarter. Other occupation groups also offer great job opportunities for active job seekers: customer service occupations had 1,775 postings in Q4 2018, and 16.7 percent of postings were open to entry-level applicants.

Annual Labor Market Information

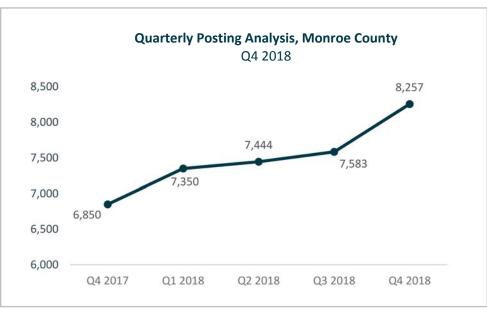
Remaining relatively steady around 76,000 individuals since 2014, the labor force in this county increased by just 235 individuals between 2017 and 2018. Employment increased by 16,519 workers between recent years. With employment increasing by more than the labor force, the unemployment rate fell by 0.6 percentage points from the annual 4.9 percent rate in 2017 to the annual 2018 rate of 4.3 percent in Monroe county.



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 throughout Monroe county over the year. There were 1,537 more postings during Q4 2018 compared to the 6,850 postings made during Q4 2017 for a total of 8,257 postings.

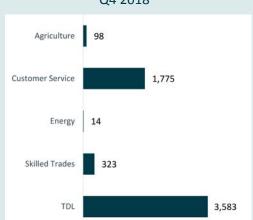


Data: Emsi | Analysis: Workforce Intelligence Network

Employer demand surges to 8,387 postings during Q4 2018, with most occupation groups analyzed by WIN experiencing increases in online job postings between Q3 and Q4 2018.

During Q4 2018, there were 8,387 jobs posted, 796 more than the 7,591 jobs posted during Q3 2018 in Monroe county. Most of the occupation groups analyzed by WIN experienced an increase during the fourth quarter of 2018. The agriculture, customer service, TDL, energy and skilled trades occupation groups each saw increases. Online job postings made by employers in the customer service occupation group were up by 28.6 percent from the previous quarter (Q3 2018). For more information about quarterly job postings, see page 2.

Postings by Occupation Group Q4 2018

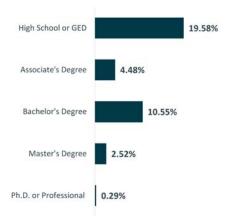


Data: Emsi | Analysis: Workforce Intelligence Network

Job postings made by employers in Monroe county indicate a high school diploma as the most in-demand minimum education level during Q4 2018.

Nearly a fifth (19.3 percent) of the 8,387 jobs posted in Monroe county indicated the need for candidates with a high school diploma, reflecting the high numbers of TDL and Customer Service occupations represented in the top jobs. Another 10.6 percent of all postings were looking for applicants with a bachelor's degree. Higher educational attainment tends to lead to more lucrative opportunities, but many entry level opportunities exist in all occupation groups. Only 37 percent of job postings identified a minimum education level, so these figures may vary slightly across all openings in the county.

Education Levels In-Demand Q4 2018



Data: Emsi | Analysis: Workforce Intelligence Network

Monroe county's fourth quarter unemployment rate is currently at 4.0 percent, down 0.3 percentage points from 2017.

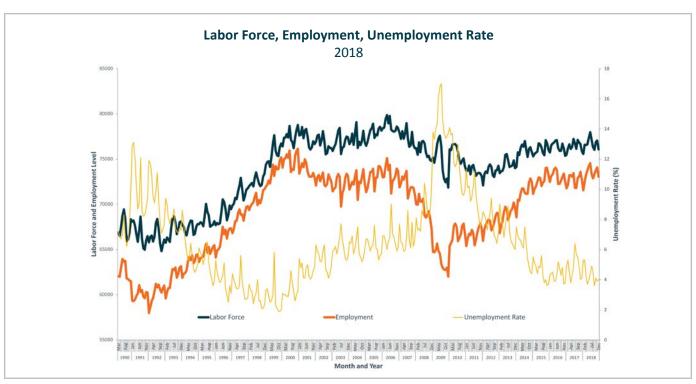
As of Q4 2018, employment declined from Q3 2018 levels while the labor force has grown. The growth in labor force participants combined with an increase in the employed caused the quarterly unemployment rate to drop from 4.3 percent in Q3 2018 to 4.0 percent in Q4 2018. During July 2018, in particular, the unemployment spiked, hitting a peak of 4.9 percent. For more information about this quarter's unemployment rate and other labor market indicators, see page

Quarterly Labor Market Data

	3rd Quarter 2018	4th Quarter 2018	Change from 3rd Quarter 2018	Percent Change from 3rd Quarter 2018
Labor Force	76,495	76,676	181	0.2%
Employment	73,173	73,631	459	0.6%
Unemployment	3,322	3,045	-277	-8.3%
Unemployment Rate	4.3%	4.0%	-0.4%	na

Note: Monthly data average by quarter | Data: BLS

WORKFORCE OVERVIEW Monroe County | Labor Market Information Q4 2018



 ${\it Data: BLS \mid Analysis: Workforce\ Intelligence\ Network}$

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	76,449	76,077	77,325	76,495	76,676	181	0.2%	227	0.3%
Employment	73,139	72,030	74,200	73,173	73,631	459	0.6%	492	0.7%
Unemployment	3,310	4,047	3,125	3,322	3,045	-277	-8.3%	-266	-8.0%
Unemployment Rate	4.3%	5.3%	4.0%	4.3%	4.0%	-0.4%	na	-0.4%	na

Note: Monthly data averaged by quarter | Data: BLS

Labor Force, Employment, and Unemployment

The labor market in Monroe county has experienced relative stability since 2010. The labor force increased by 181 workers (0.2 percent) between Q3 2018 and Q4 2018. Employment in Monroe county also rose by 459 workers (0.6 percent) from Q3 2018 to Q4 2018. With employment increasing by more than the labor force, the unemployment rate decreased this quarter: the quarterly unemployment rate was down by 0.3 percentage points between Q3 2018 and Q4 2018 to 4 percent.

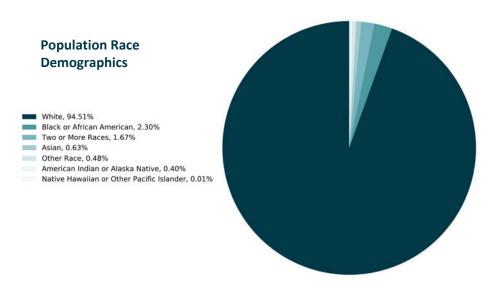
Population Demographics

According to the data from the most recent Census Bureau 2017 ACS Five Year estimates, the population in Monroe county remained stable between 2016 and 2017. During 2017, 149,619 people were living in the region. The sex of the populace was split almost evenly, with about 51 percent of the population identifying as female, and the other 49 percent identifying as male. The majority of the population identified as white (94.5 percent) with the second largest number of individuals identifying as black or African American (2.3 percent). The county has a fairly evenly distributed age range; 31.5 percent of population was over the age of 55, compared to 30.5 percent under the age of 24.

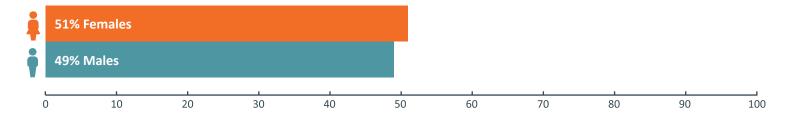


149,619
People in the Region

0.2% Decrease from 2016



Population Gender Demographics



Population Age Demographics



2017 Labor Force, Employment, and Unemployment Demographics

	Civilian Labor Fo	orce by Demogra	aphic Group	
	Civilian Labor	Total	Total	Unemployment
Demographic Group	Force	Employment	Unemployment	Rate
Total Population 16 +	73,583	69,226	4,341	5.9%
Sex				
Male 16+	39,407	37,081	2,326	5.9%
16-19	1,798	1,344	454	25.3%
20-24	4,060	3,682	378	9.3%
25-54	24,993	23,812	1,181	4.7%
55-64	7,019	6,784	235	3.3%
65 Plus	1,537	1,459	078	5.1%
Female 16+	34,135	32,124	2,011	5.9%
16-19	1,576	1,376	200	12.7%
20-24	3,457	3,018	439	12.7%
25-54	21,473	20,380	1,093	5.1%
55-64	6,379	6,184	195	3.1%
65 Plus	1,250	1,166	084	6.7%
Race				
White	70,138	65,985	4,068	5.8%
Black / African		, and the second		
American	1,513	1,389	126	8.3%
Native American	298	267	31	10.4%
Asian	564	549	15	2.7%
Native Hawaiian /				
Pacific Islander	3	3	0	0.0%
Some Other Race	300	300	0	0.0%
Two or More Races	825	742	83	10.1%
Ethnicity				
Hispanic	2,456	2,289	167	6.8%

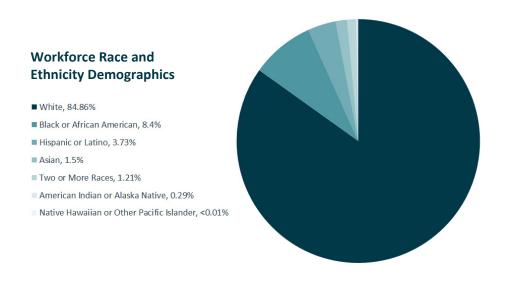
Data: American Community Survey 5-Year Estimates | Analysis: Workforce Intelligence Network

Labor Market Demographics

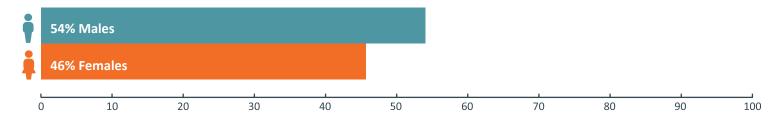
During 2017, the most recent census year, there were about 73,583 people in the labor force, meaning they were either working or looking for work, in Monroe county. More than half of the population of 149,619 individuals (60.8 percent) living in the region were participating in the labor force. The highest unemployment rates were seen in those aged 24 years old or younger. Males under the age of 19 face an unemployment rate of 25.2 percent. Native American job seekers also have a difficult time finding employment, facing an unemployment rate of 10.4 percent.

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 41,862 individuals working in Monroe county. A slight majority (54 percent or 22,513 workers) were male, while 46 percent (19,348 workers) of the workforce was female. Most of those working in the region were white, accounting for 84.9 percent of the workforce, while African American or black workers accounted for 8.4 percent of the workforce. Those identifying as having a Hispanic or Latino ethnicity accounted for 3.7 percent. Eighty-five percent of the workforce was 25 years or older. Only 15 percent of those under the age of 25 were working, indicating an aging workforce in Monroe county.



Workforce Gender Demographics

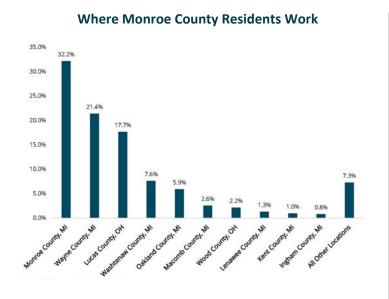


Workforce Age Demographics

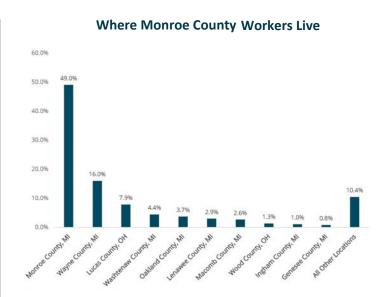


Regional Commuting Patterns

According to the most recent OnTheMap data set available from the Census Bureau, during 2015, Monroe County's workforce consisted of 63,703 residents. 20,497 (32.2 percent) of the residents lived and worked within Monroe County, while the remaining 43,206 residents (67.8 percent) traveled outside of the county for work. There were 41,827 workers employed in the region during 2015. Of those, 21,330 workers (50.8 percent) lived outside of the region's borders and commuted in. From this information, we can see that Monroe county is a net exporter of jobs, with more leaving the area for employment than inwardly commuting.



Data: U.S. Census OnTheMap, 2015

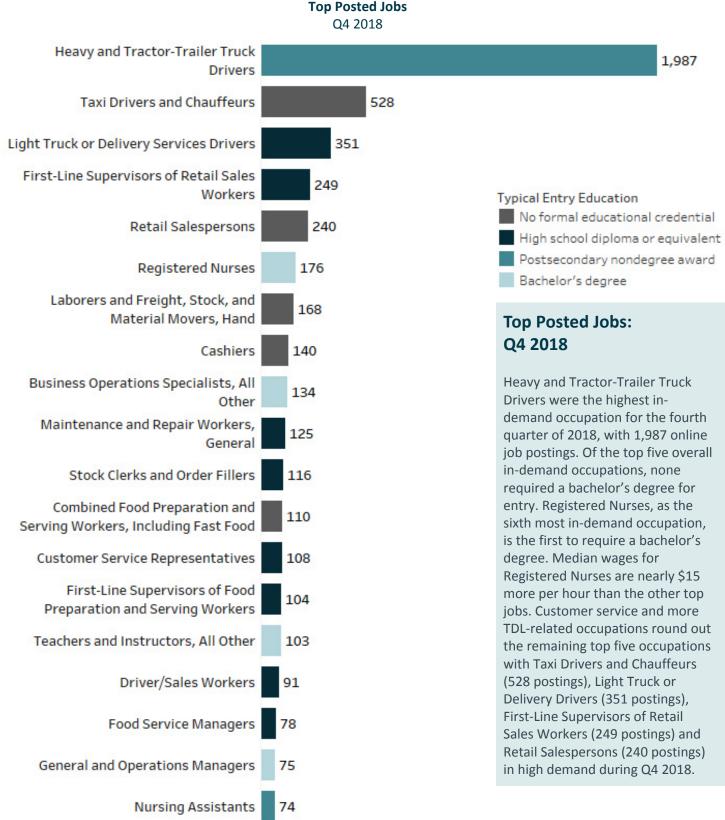


Data: U.S. Census OnTheMap, 2015 Analysis: Workforce Intelligence Network



REAL-TIME DEMAND OVERVIEW Monroe County | Top Posted Jobs | Q4 2018

Industrial Engineers

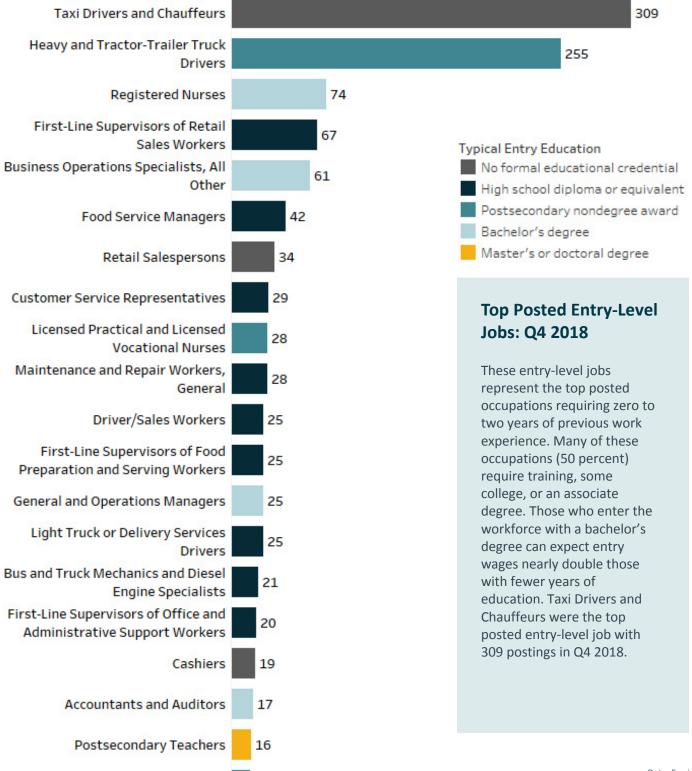


REAL-TIME DEMAND OVERVIEW Monroe County | Top Posted Entry-Level Jobs | Q4 2018

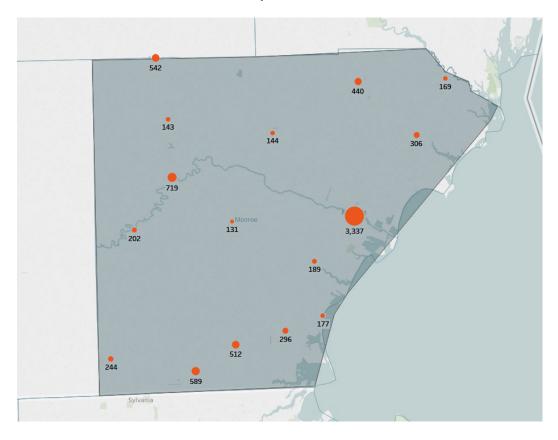
Nursing Assistants

15





Job Postings by City Q4 2018



Map based on Longitude (generated) and Latitude (generated). Size shows sum of Unique Postings (Oct 2018–Dec 2018). Details are shown for City.

Top In-Demand Qualifications

- Commercial Driver's License
 (CDL)
- Licensed Practical Nurse
- Certified Nursing Assistant
- Neonatal Nurse Practitioner
- Licensed Vocational Nurses
- Transportation Worker Identification Credential (TWIC) Card
- Nurse Practitioner
- Patient Care Technician
- Radiologic Technologist
- Advanced Practice Registered Nurse

Top In-Demand Skills

- Merchandising
- Customer Service
- Sales
- Communications
- Operations
- Leadership
- WrittenCommunication
- Hospitality
- Innovation
- Research

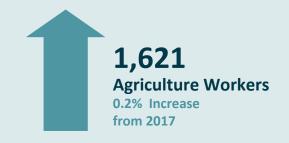
Top Posting Employers*

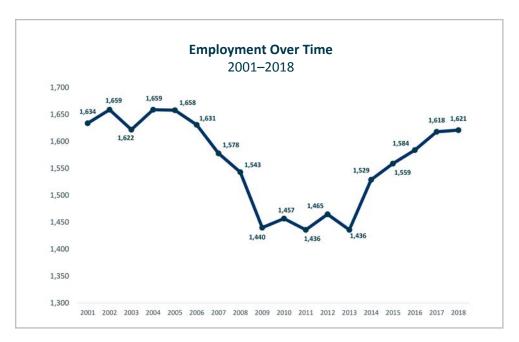
- Uber Technologies, Inc.
- Shipt LLC
- CRST International, Inc.
- Lyft, Inc.
- USA Truck, Inc.
- J.B. Hunt Transport Services, Inc.
- Tri-National, Inc.
- Roehl Transport, Inc.
- Pilot Flying J
- The Kroger Co
- McDonald's Corporation

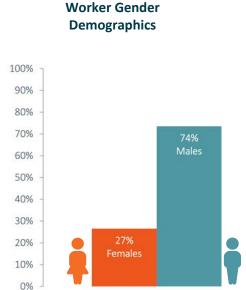
^{*}Employer names are listed as they appear in online job postings.

Introduction

WIN's agriculture occupation group brings together occupations that require knowledge of the farming, livestock, the environment, and natural sciences. Occupations range from Farm Workers, to Environmental Engineers, to Meat Butchers, to Recreation Workers.







Agriculture Worker Demographics

According to the most recent Emsi data set available (2018), the 70,050 workers in the agriculture occupation group are not very diverse. A large majority of workers are white males between the ages of 25 and 54. Only 33 percent of agriculture workers identify as women, and only 15 percent of workers were under the age of 24.

Race and Ethnicity Demographics

83.2% White | 4.8% Black or African American | 1.2% Asian

Worker Age Demographics

Age 14-24 14.7% Age 25-54 Age 55+ 24.0%

22



98 Agriculture Postings in Q4 2018

Water and Wastewater Treatment Plant and

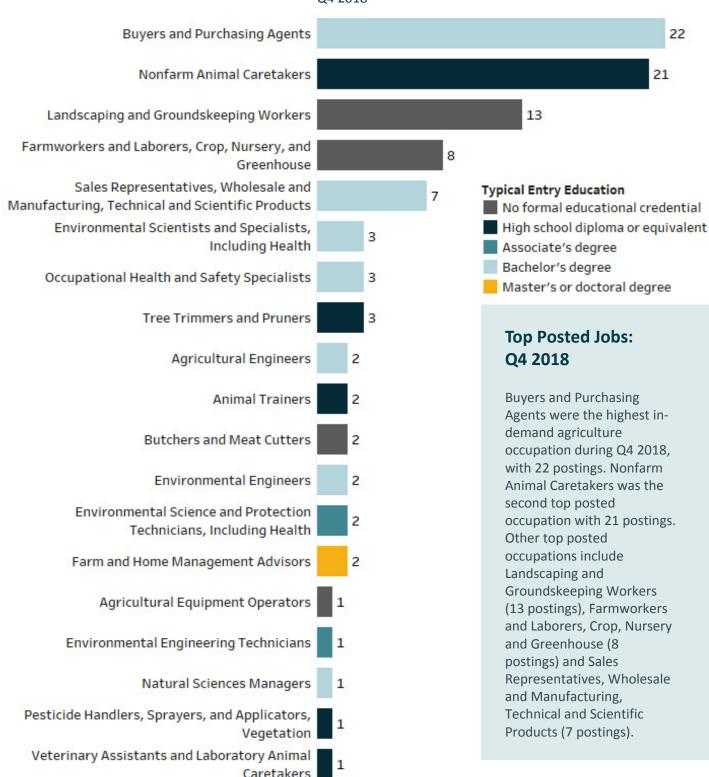
System Operators



Bachelor's Degree Required for **Top Agriculture Jobs**

Agriculture Top Posted Jobs







High Earning Potential for Environmental Engineers



In-Demand Agriculture Certification: Associate of Science in Nursing

Agriculture Wage Overview

Of the top posted agriculture-related jobs, four of the top ten offer median wages of over \$30 per hour according to the Bureau of Labor Statistics (BLS). The top posted job, Buyers and Purchasing Agents, offers median hourly earnings of \$27.81, which translates to annual earnings of approximately \$57,845.

Wage Overview for Top Posted Agriculture Jobs in Q4 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
13-1028	Buyers and Purchasing Agents	\$14.78	\$19.88	\$27.81	\$35.82	\$44.80
39-2021	Nonfarm Animal Caretakers	\$8.97	\$9.08	\$9.29	\$10.49	\$11.74
37-3011	Landscaping and Groundskeeping Workers	\$9.24	\$9.90	\$11.80	\$14.47	\$17.74
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	\$9.48	\$10.61	\$12.99	\$15.77	\$16.09
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$21.43	\$28.04	\$35.99	\$51.31	\$69.46
19-2041	Environmental Scientists and Specialists, Including Health	Data Not Available	Data Not Available	Data Not Available	Data Not Available	Data Not Available
29-9011	Occupational Health and Safety Specialists	\$19.43	\$23.70	\$29.23	\$34.78	\$44.60
37-3013	Tree Trimmers and Pruners	\$10.55	\$12.72	\$15.80	\$19.13	\$22.19
17-2021	Agricultural Engineers	Data Not Available	Data Not Available	Data Not Available	Data Not Available	Data Not Available
17-2081	Environmental Engineers	\$28.78	\$33.22	\$40.64	\$48.74	\$58.11

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Foundational Skills

Management

Leadership

Customer Service Communications

Sales

In-Demand Technical Skills

- Purchasing
- Supply Chain Management
- Strategic Business Unit
- Restaurant Operation
- Stamping (Metalworking)

In-Demand Certifications

- Associate of Science in Nursing
- Certified Hazardous Materials Manager
- Certified Indoor Environmentalist
- Commercial Driver's License (CDL)
- Master of Business Administration (MBA)

In-Demand Education Level*

High School Diploma: 19.4%Associate Degree: 5.1%Bachelor's Degree: 24.5%

Bachelor's Degree: 24.5%Master's Degree: 7.1%%

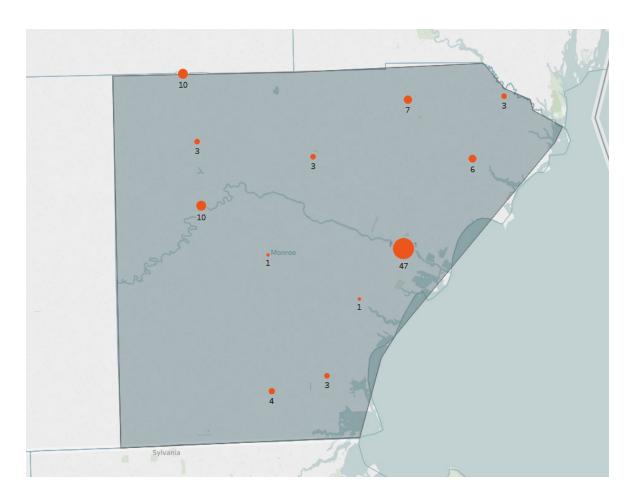
*Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent



Pet Care Services are Top Employers of Agriculture Workers



Purchasing Skills are in High Demand



Map based on Longitude (generated) and Latitude (generated). Size shows sum of Unique Postings (Oct 2018–Dec 2018). Details are shown for City.

Top Job Posting Employers*

- Rover Inc
- Tenneco Inc.
- Petsmart, Inc.
- City of Grand Rapids
- State Farm Insurance
- FCA US LLC
- Clinton Huron Metropolitan Authority Inc
- Wilbur-Ellis Company
- SAP SE
- DTE Energy Company

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

Job Postings by City

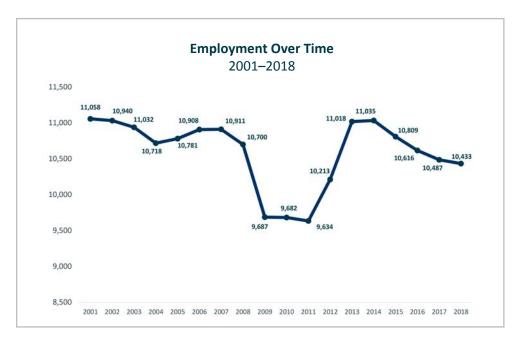
- 1. Monroe, MI: 47 postings
- 2. Dundee, MI: 10 postings
- 3. Milan, MI: 10 postings
- 4. Carleton, MI: 7 postings
- 5. Newport, MI: 6 postings

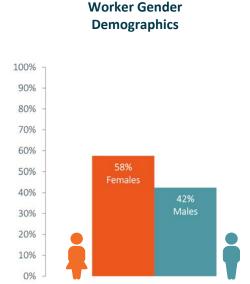
CUSTOMER SERVICE OCCUPATION GROUP Monroe County | Q4 2018

Introduction

The customer service group is the largest occupation group that WIN analyzes, both in terms of employment and online job postings. This group is of very high importance to the region because it is the first to grow when the economy expands and the first to contract in a downturn: it is often a leading indicator. The large number of postings for this occupation group are due in part to the relatively high worker turnover. As defined by WIN, this group encompasses all customer service occupations, with skills transferrable across the retail sector, the hotel industry, food and beverage service industry, call centers, and other areas. These skills are also transferrable to public-facing positions in many other occupation groups.







Customer Service Worker Demographics

According to the most recent Emsi data set available (2018), having over 10,400 workers, the customer service occupation group is more diverse than other occupation groups. During 2017, 58 percent of workers identified as female. Fourteen percent of workers in customer service were identified as a racial minority. Over a quarter of the workforce (28 percent) was under the age of 24, a much higher percentage than in other occupation groups.

Race and Ethnicity Demographics

85.7% White | 7.5% Black or African American | 1.4% Asian

Worker Age Demographics





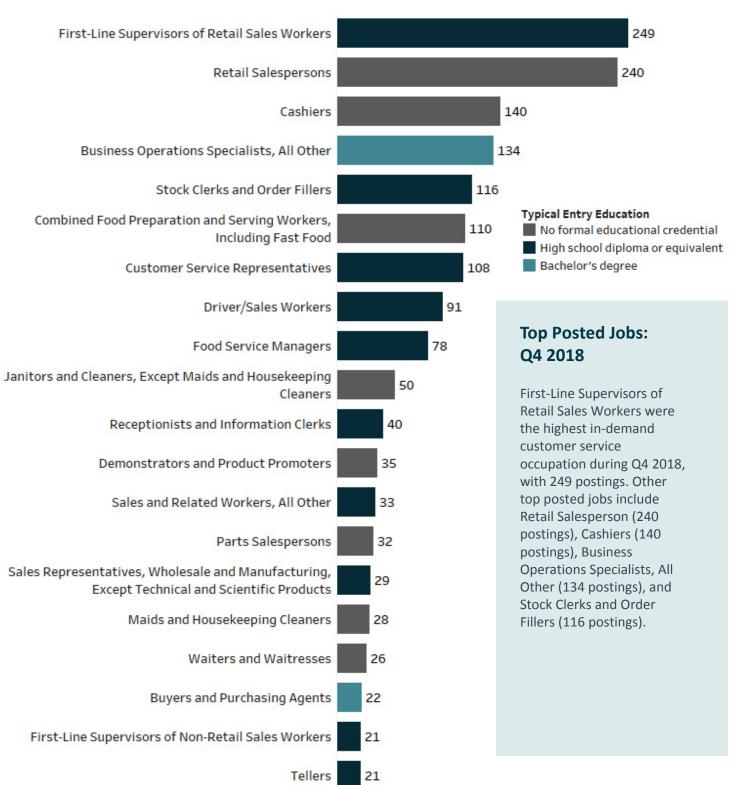


1,775 Customer Service Postings in Q4 2018

High School Diploma Required for Most Customer Service Jobs

Customer Service Top Posted Jobs

Q4 2018





High Earning Potential for Food Service Managers



Activity Assistant Certified: In-Demand Customer Service Certification

Customer Service Wage Overview

Despite being in high demand, most customer service related occupations offer relatively low wages according to the Bureau of Labor Statistics (BLS). Only three of the top ten posted occupations report median wages over \$15 per hour. The top posted job, First-Line Supervisors of Retail Sales Workers, offers a median hourly wage of \$18.01 or an annual salary of nearly \$37,460.

Wage Overview for Top Posted Customer Service Jobs in Q4 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
41-1011	First-Line Supervisors of Retail Sales Workers	\$10.65	\$12.95	\$18.01	\$24.44	\$29.91
41-2031	Retail Salespersons	\$9.04	\$9.25	\$9.96	\$11.84	\$19.76
41-2011	Cashiers	\$9.01	\$9.18	\$9.57	\$11.34	\$14.43
13-1199	Business Operations Specialists, All Other	\$13.63	\$16.66	\$25.32	\$42.36	\$56.92
43-5081	Stock Clerks and Order Fillers	\$9.14	\$9.51	\$11.38	\$14.86	\$18.15
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	\$9.00	\$9.15	\$9.45	\$10.12	\$11.69
43-4051	Customer Service Representatives	\$9.17	\$9.77	\$13.67	\$20.66	\$27.24
53-3031	Driver/Sales Workers	\$8.98	\$9.11	\$9.34	\$10.39	\$14.84
11-9051	Food Service Managers	\$24.33	\$26.04	\$28.46	\$32.69	\$50.55
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$9.18	\$9.68	\$11.86	\$14.11	\$16.59

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Merchandising
- Restaurant Operation
- Cash Register
- Customer Experience
- Selling Techniques

In-Demand Education Level*

High School Diploma: 31.0%
Associate Degree: 2.2%
Bachelor's Degree: 7.4%
Master's Degree: 1.9%

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

In-Demand Foundational Skills

- Customer Service
- Sales
- Management
- Communications
- Operations

In-Demand Certifications

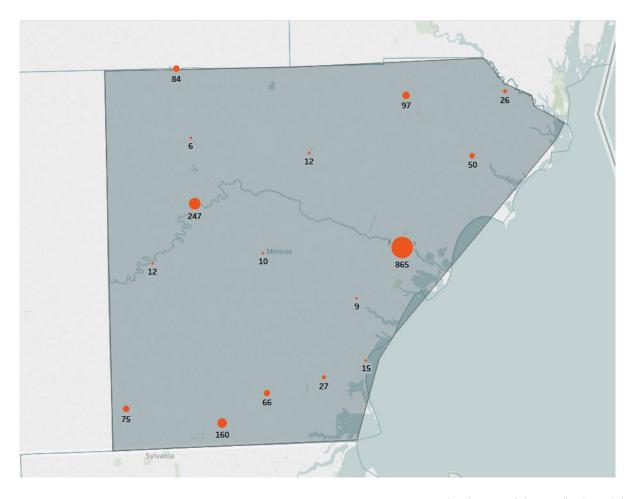
- Activity Assistant Certified
- Advanced Practice Registered Nurse
- Associate of Science In Nursing
- Certified Benefits Professional
- Certified Nursing Assistant



Retail Stores and Restaurants in Need of Customer Service Workers



Merchandising Skills are in High Demand



Map based on Longitude (generated) and Latitude (generated). Size shows sum of Unique Postings (Oct 2018–Dec 2018). Details are shown for City.

Top Posting Employers*

- Shipt LLC
- Pilot Flying J
- The Kroger Co
- Cabela's Incorporated
- Dollar General Corporation
- H&R Block, Inc.
- McDonald's Corporation
- Walgreens Boots Alliance, Inc.
- Autozone, Inc.
- O'Reilly Automotive, Inc

Job Postings by City

1. Monroe, MI: 865 postings

2. Dundee, MI: 247 postings

3. Lambertville, MI: 160 postings

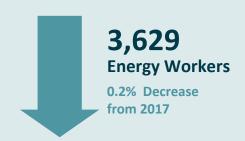
4. Carleton, MI: 97 postings

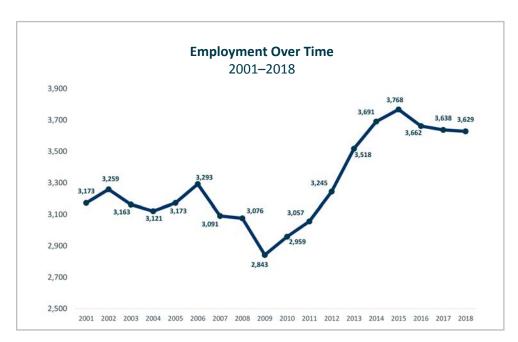
5. Milan, MI: 84 postings

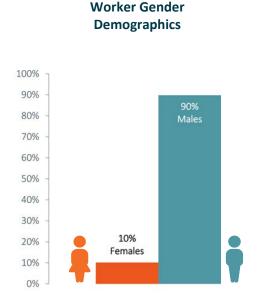
^{*}Employer names are listed as they appear in online job postings.

Introduction

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



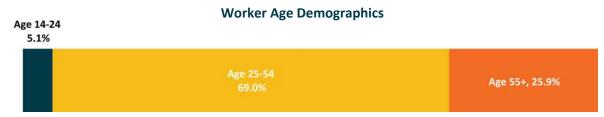




Energy Worker Demographics

According to the most recent Emsi data set available (2018), the over 3,600 workers in the energy occupation group are primarily white males between the ages of twenty-five and fifty-four, with 90 percent of workers identifying as male and just ten percent identifying as a racial minority. Only five percent of the workers in the occupation group are under the age of 24, indicating that the energy field faces a particular threat from the region's aging workforce.

Race and Ethnicity Demographics 89.5% White | 5.4% Black or African American | 1.9% Asian



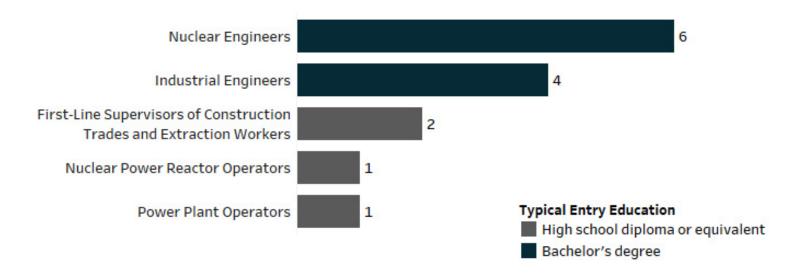






Bachelor's Degree Required for Engineering Energy Jobs

Energy Top Posted Jobs Q4 2018



Top Posted Jobs: Q4 2018

Nuclear Engineers took the top spot as highest in-demand energy occupation during Q4 2018, with six postings. Industrial Engineers held the second spot with four postings. Other top posted jobs include First-Line Supervisors of Construction Trades and Extraction Workers (2 postings), Nuclear Power Reactor Operators (1 posting) and Power Plant Operators (1 posting).



High Earning Potential for Nuclear Engineers



Management Skills are in High Demand

Energy Wage Overview

The high demand for engineers in the energy field creates lucrative opportunities for job seekers willing to achieve the minimum educational requirements related to these jobs. According to the Bureau of Labor Statistics (BLS), the top posted energy job, Nuclear Engineers, offers a median hourly wage of \$44.15, or annual earnings of approximately \$92,000. Technician and construction-focused positions generally have shorter term educational requirements than engineers and pay somewhat higher than similar occupations in other industries.

Wage Overview for Top Posted Energy Jobs in Q4 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2161	Nuclear Engineers	\$33.79	\$38.62	\$44.15	\$48.82	\$58.28
17-2112	Industrial Engineers	\$28.21	\$32.34	\$35.84	\$39.54	\$48.62
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$22.09	\$29.64	\$42.02	\$48.33	\$54.53
51-8011	Nuclear Power Reactor Operators	\$30.43	\$36.51	\$43.49	\$53.19	\$65.45
51-8013	Power Plant Operators	\$22.04	\$29.11	\$36.67	\$45.68	\$55.40

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Customer Satisfaction
- Corporate Social Responsibility
- Radiation Protection
- Continuous Improvement Process
- Corporate Services

In-Demand Education Level*

• No Education Levels Posted

In-Demand Certifications

In-Demand Foundational Skills

• Management

Operations

Construction

SpreadsheetsLeadership

No Certifications Posted

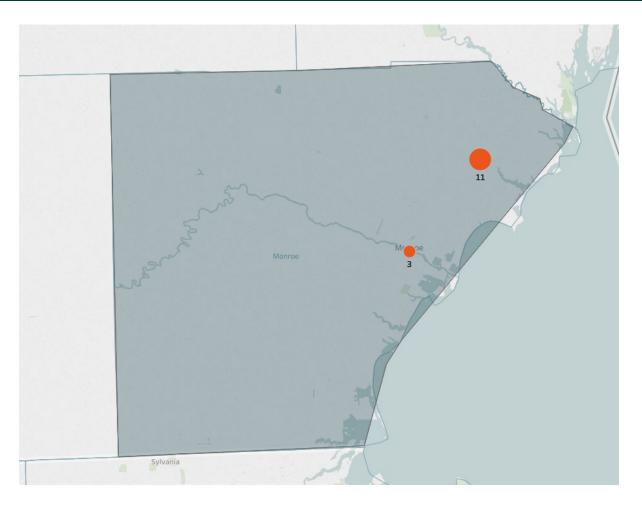
^{*}Not all job postings indicate the required educational attainment level, therefore the percentages found here may not add up to 100 percent



DTE Energy: Top Employer



Engineering Skills are in High Demand



Map based on Longitude (generated) and Latitude (generated). Size shows sum of Unique Postings (Oct 2018–Dec 2018). Details are shown for City.

Top Posting Employers*

• DTE Energy Company

Job Postings by City

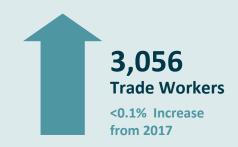
Newport, MI: 11 Postings
 Monroe, MI: 3 Postings

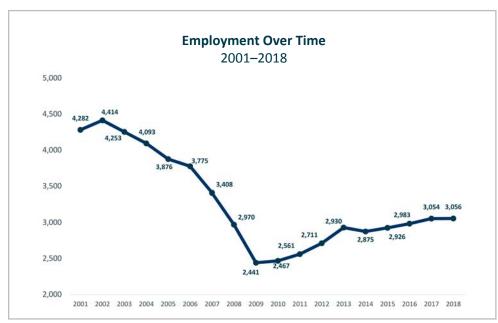
^{*}Employer names are listed as they appear in online job postings.

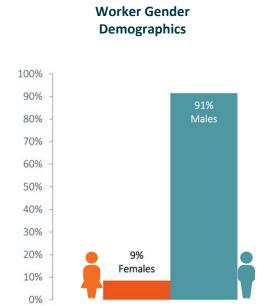
Introduction

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.







Skilled Trades and Technicians Worker Demographics

According to the most recent Emsi data set available (2018), the Skilled Trades occupation group employs about 3,000 workers in Monroe county. 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 24.9 percent, the group has a somewhat higher proportion than average of workers over age 55.

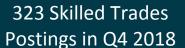
Race and Ethnicity Demographics

89.1% White | 5.5% Black or African American | 1.0% Asian

Worker Age Demographics







Welding, Soldering, and Brazing Machine

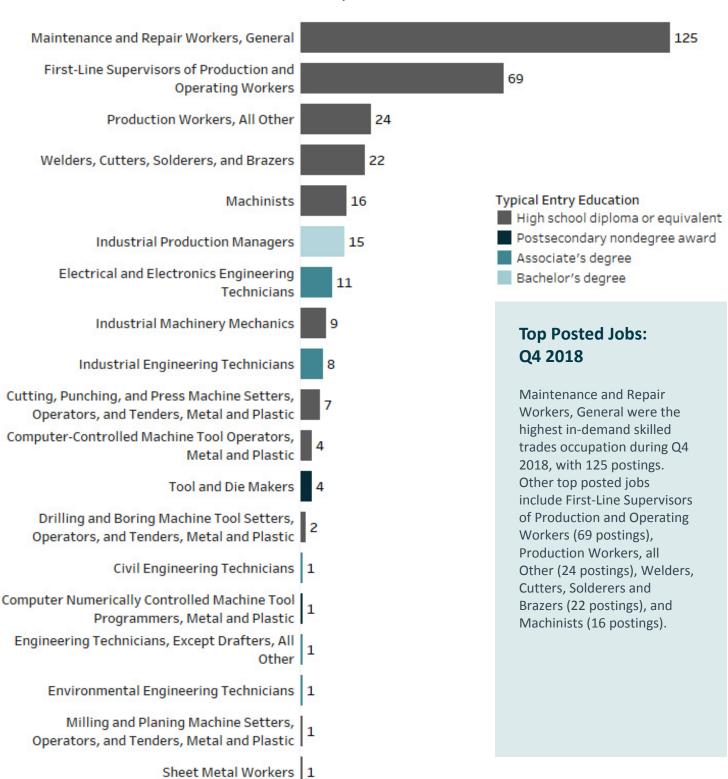
Setters, Operators, and Tenders



Vocational Training Required for Most Skilled Trades Jobs

Skilled Trades Top Posted Jobs

Q4 2018





High Earning Potential for Industrial Production Manager



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

Skilled Trades and Technicians Wage Overview

Four 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 \$13.99, which translates to an annual salary of nearly \$30,000.

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	\$9.30	\$10.66	\$13.99	\$19.48	\$23.88
51-1011	First-Line Supervisors of Production and Operating Workers	\$19.58	\$24.74	\$31.42	\$42.80	\$55.05
51-9199	Production Workers, All Other	\$10.91	\$13.16	\$17.85	\$24.35	\$38.07
51-4121	Welders, Cutters, Solderers, and Brazers	\$12.03	\$13.62	\$16.27	\$19.40	\$24.34
51-4041	Machinists	\$11.78	\$14.07	\$19.00	\$24.30	\$31.49
11-3051	Industrial Production Managers	\$33.17	\$39.56	\$52.17	\$68.70	\$80.87
17-3023	Electrical and Electronics Engineering Technicians	\$15.27	\$18.40	\$23.07	\$26.12	\$31.21
49-9041	Industrial Machinery Mechanics	\$15.77	\$19.77	\$25.52	\$31.59	\$37.07
17-3026	Industrial Engineering Technicians	\$15.67	\$18.07	\$21.54	\$25.66	\$32.15
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	\$10.16	\$11.45	\$13.88	\$18.91	\$27.51

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Continuous Improvement Process
- Fabrication
- Restaurant Operation
- HVAC
- Oil and Gas

In-Demand Education Level*

High School Diploma: 32.2%
Associate Degree: 3.7%
Bachelor's Degree: 14.5%
Master's Degree: 1.5%

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

In-Demand Foundational Skills

- Management
- Operations
- Troubleshooting (Problem Solving)
- Communications
- Leadership

In-Demand Certifications

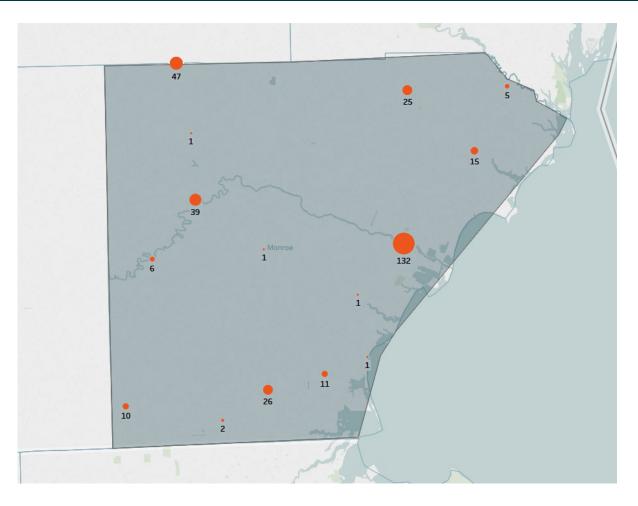
- American Society for Quality (ASQ)
 Certified
- Advanced Practice Registered Nurse
- Certified First Responder
- Certified Quality Engineer
- Certified Welder



Staffing Agencies and Manufacturers: Top Employers of Skilled Trades Workers



Management Skills are in High Demand



Map based on Longitude (generated) and Latitude (generated). Size shows sum of Unique Postings Oct 2018–Dec 2018). Details are shown for City.

Top Posting Employers*

- Express Services Inc
- McDonald's Corporation
- Guardian Industries Corp.
- Yanfeng US Automotive Interior Systems II LLC
- Shipt LLC
- ManpowerGroup Global
- Premier Industries, Inc
- Aerotek, Inc.
- Jaytec, LLC
- Advance Temporary Services Inc

Job Postings by City

1. Monroe, MI: 132 postings

2. Milan, MI: 47 postings

3. Dundee, MI: 39 postings

4. Temperance, MI: 26 postings

5. Carleton, MI: 25 postings

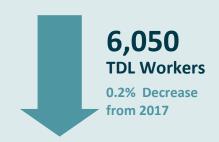
^{*}Employer names are listed as they appear in online job postings.

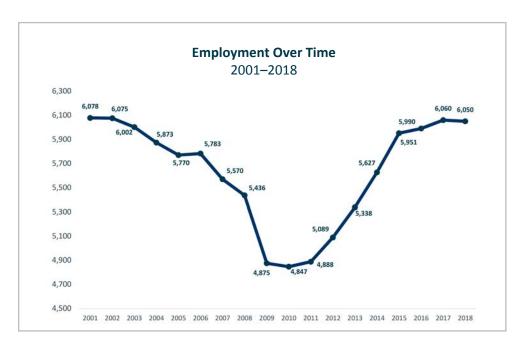


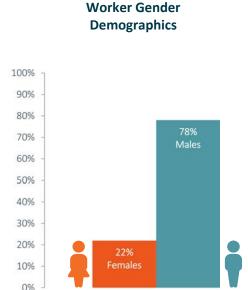
TRANSPORTATION, DISTRIBUTION, AND LOGISTICS (TDL) OCCUPATION GROUP Monroe County | Q4 2018

Introduction

Transportation, distribution, and logistics (TDL) workers help move materials in an efficient manner, whether it is from one company to another or directly to consumers. Logistics workers range from materials movers to logistics analysts, coordinating and analyzing material and goods movement.







TDL Worker Demographics

According to the most recent Emsi data set available (2018), the TDL occupation group has a large workforce, employing 6,050 individuals. These workers are 78 percent male and 81 percent white. Only 14 percent of the workers in this occupation group are under the age of 24, indicating an aging TDL workforce.

Race and Ethnicity Demographics

81.5% White | 11.4% Black or African American | 1.0% Asian

Worker Age Demographics

Age 14-24 Age 25-54 Age 55+
14.7% 63.4% 22.0%

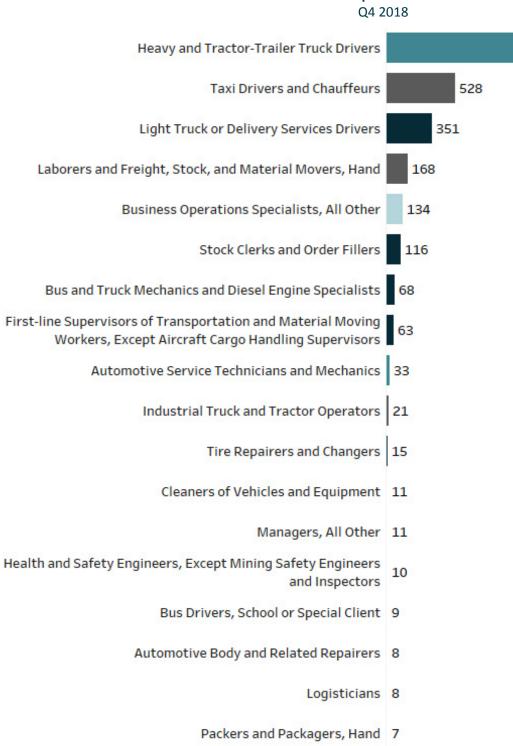


3,583 TDL Postings in Q4 2018



High School Diploma Required for Most TDL Jobs





Production, Planning, and Expediting Clerks 6

Dispatchers, Except Police, Fire, and Ambulance 5

Typical Entry Education

No formal educational credential
High school diploma or equivalent

1,987

- Postsecondary nondegree award
- Bachelor's degree

Top Posted Jobs: Q4 2018

Heavy and Tractor-Trailer Truck Drivers were the highest in-demand TDL occupation during Q4 2018, with 1,987 postings. Other top posted jobs include Taxi Drivers and Chauffeurs (528 postings), Light Truck or Delivery Services Drivers (351 postings), Laborers and Freight, Stock, and Material Movers, Hand (168 postings), and **Business Operations** Specialists, All Other (134 postings).



High Earning Potential for Business Operations Specialists, All Other



Certified Benefits Professional: Most In-Demand TDL Certification

TDL Wage Overview

According to the Bureau of Labor Statistics (BLS), only two of the top ten in-demand TDL occupations offer median wages of more than \$20 per hour. Heavy and Tractor-Trailer Truck Drivers, the top posted TDL job in Q4 2018, offers a median hourly wage of \$18.04, or an annual salary of nearly \$38,000. Logistics roles that require additional education, such as Business Operations Specialists, typically offer even higher wages.

Wage Overview for Top Posted TDL Jobs in Q4 2018

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$11.34	\$15.56	\$18.04	\$21.08	\$23.86
53-3041	Taxi Drivers and Chauffeurs	\$9.45	\$10.14	\$12.04	\$13.84	\$16.17
53-3033	Light Truck or Delivery Services Drivers	\$9.08	\$9.35	\$11.11	\$16.13	\$18.40
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$9.55	\$11.31	\$13.72	\$16.90	\$20.21
13-1199	Business Operations Specialists, All Other	\$13.63	\$16.66	\$25.32	\$42.36	\$56.92
43-5081	Stock Clerks and Order Fillers	\$9.14	\$9.51	\$11.38	\$14.86	\$18.15
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$13.74	\$15.84	\$18.95	\$24.70	\$29.21
53-1048	First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	\$15.49	\$19.89	\$24.61	\$30.18	\$36.74
49-3023	Automotive Service Technicians and Mechanics	\$9.98	\$12.75	\$15.60	\$19.51	\$27.85
53-7051	Industrial Truck and Tractor Operators	\$11.32	\$13.72	\$16.85	\$20.14	\$25.18

Data: Emsi, BLS | Analysis: Workforce Intelligence Network

In-Demand Technical Skills

- Truckload Shipping
- Warehousing
- Capital Markets
- Network Routing
- Food Services

In-Demand Education Level*

High School Diploma: 7.6%Associate Degree: 0.36%Bachelor's Degree: 1.9%

Master's Degree: 0.44%

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

In-Demand Foundational Skills

- Android (Operating System)
- Apple IPhone
- Management
- Unloading
- Driving

In-Demand Certifications

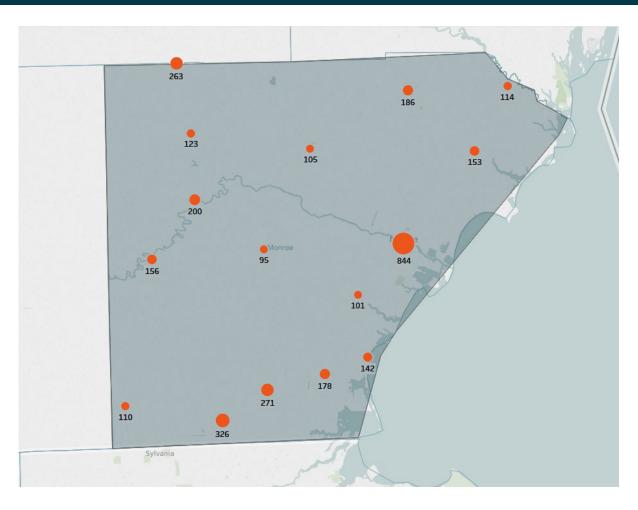
- Certified Benefits Professional
- Certified Fitness Trainer
- Certified Indoor Environmentalist
- Certified Pharmacy Technician
- Certified Safety Professional



Rideshare Companies and Trucking Fleets are the Top Employers of TDL Workers



Warehousing Skills are in High Demand



Map based on Longitude (generated) and Latitude (generated). Size shows sum of Unique Postings (Oct 2018–Dec 2018). Details are shown for City.

Top Posting Employers*

- Uber Technologies, Inc.
- CRST International, Inc.
- Lyft, Inc.
- USA Truck, Inc.
- J.B. Hunt Transport Services, Inc.
- Tri-National, Inc.
- Roehl Transport, Inc.
- U. S. Xpress, Inc.
- C.R. England, Inc.
- Fedex Corporation

Job Postings by City

1. Monroe, MI: 844 postings

2. Lambertville, MI: 326 postings

3. Temperance, MI: 271 postings

4. Milan, MI: 263 postings

5. Samaria, MI: 214 postings

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

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