

Q1 2017  
January- March

# MONROE COUNTY

## WIN Labor Market Report



# Introduction: Monroe County

## About This Report

The Workforce Intelligence Network (WIN) partnership is a collaboration of 6 Michigan Works! Agencies (MWAs) and 10 community colleges across a 16 county region. The counties in the partnership include: Genesee, Hillsdale, Huron, Jackson, Lapeer, Lenawee, Livingston, Macomb, Monroe, Oakland, Saint Clair, Sanilac, Shiawassee, Tuscola, Washtenaw, and Wayne.

This report highlights labor market information for Monroe County with special sections devoted to 5 occupational groups. WIN's analysis of online job postings, a proxy for employer demand, is a pioneering method for tracking the health of the labor market.

Occupational groups include:

- Agriculture (page 6)
- Customer Service (page 11)
- Energy (page 16)
- Skilled Trades, Manufacturing (page 21)
- Transportation, Distribution, and Logistics (TDL) (page 26)

Data analyzed includes:

- |  |                                 |
|--|---------------------------------|
| • Employer demand                            | • Wages offered in job postings |
| • Top posting jobs                           | • Employment                    |
| • In-demand credentials, degrees, and skills | • Unemployment                  |
| • Educational attainment required            | • Labor force                   |



# Introduction: Monroe County

## 2016 Year in Review

Job postings in Monroe County demonstrated sharp year-over-year volatility. After an uneventful job posting decline between Q1 and Q2 of 2016 from 1,841 to 1,694 in Q3 there was an 88.6 percent increase which amounts to about 1,500 additional job postings, totaling to 3,196. The sharp rise in postings has since corrected between its peak in Q3 2016 and Q1 2017 standing at 2,494, a 22 percent decrease. Since Q4 2016, there has been an 18 percent decrease in overall job postings in Monroe County. Occupations specific job postings vary in demand. Agriculture sector job postings are typically very low although there has been growth overall in the last six years. Since Q1 2016, there has been a 24 percent increase, 6 more job postings. In the last three quarters, agriculture postings have remained close to flat (~30 postings). Customer Service job postings maintained its sixth consecutive quarterly increase. Since Q1 2016, job postings rose 80.4 percent. Job postings in the energy sector, while consistently volatile, saw the most dramatic increase between Q2 and Q3 2016 from 26 to 93, a difference of 67 or 257.7 percent, an unusual spike in energy postings. However, since Q1 last year, postings have only increased 33 percent from 45 to 60. Skilled trades and technicians job postings held the growing trend. Since Q1 2016, job demand grew nearly 19 percent from 101 to 120 in Q1 2017.

Monroe county's labor force increased by 0.4 percent since Q1 2016, an overall change in 335 individuals gained for a total of 77,100. Despite a decline during Q1 of last year, the bulk of the annual labor force growth happened between Q2 and Q4 2016. Year-over-year employment remained flat, however, since Q4 2016 there has been a 0.9 percent decrease, or a difference of 675 jobs. The current unemployment rate stands at 4.7 percent which has grown 0.4 percent since 2016.

## Key Findings for Q1 2017

### **The annual labor force in Monroe County is at its largest since 2010.**

The labor force has increased by 1,459 individuals (2%) since 2010, reaching 77,100 participants during Q1 2017.

### **Overall employer demand continues to decline after reaching a peak in Q3 2016.**

Job postings remain relatively high with nearly 2,500 postings during Q1 2017 despite the decrease. Many occupation groups experienced increases in postings despite the decline.

### **Truck Drivers remained the top in-demand occupation of Q1 2017.**

Despite a drop in the number of postings, heavy and tractor trailer truck drivers remained the top in-demand occupation for Monroe county, with 159 total postings. Retail salespersons and wholesale and manufacturing sales representatives were also highly sought after during Q1 2017.

### **Most occupation groups analyzed within this report reported increases in postings despite the drop in overall demand.**

While postings overall declined for Monroe county, the Agriculture, Customer Service, Energy, and Skilled Trades occupation groups all reported higher job postings than last quarter. Job postings in TDL continued to fall moving into 2017 while other occupations groups experienced greater employer demand.

### **Entry-level opportunities are available in Monroe County.**

Most job postings that indicated a desired experience level sought candidates with zero to five years of experience. Four of the occupation groups in this report showed that a majority of online job postings sought workers with zero to two years of previous experience, indicating the potential for easy entry into Agriculture, Customer Service, Skilled Trades, and TDL related occupations.

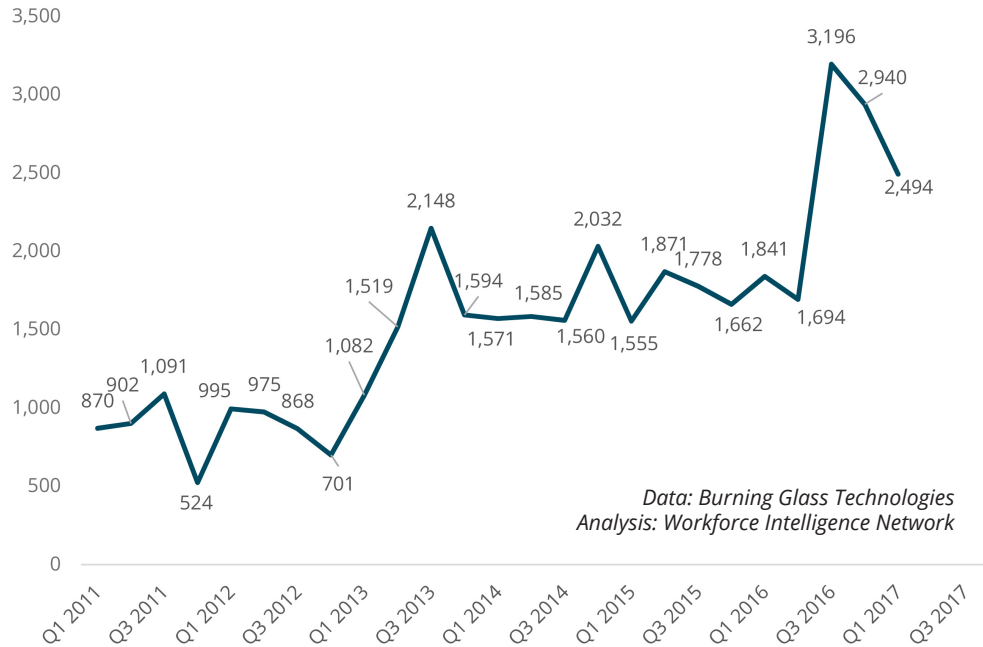


# Workforce and Employer Demand Indicators

## Postings over time

Employer demand fell in Monroe County between Q4 2016 and Q1 2017. Online job postings in the county fell 18 percent, from 2,940 postings in Q4 2016 to 2,494 in Q1 2017. Despite this drop, postings moving into 2017 remain high over the past six years.

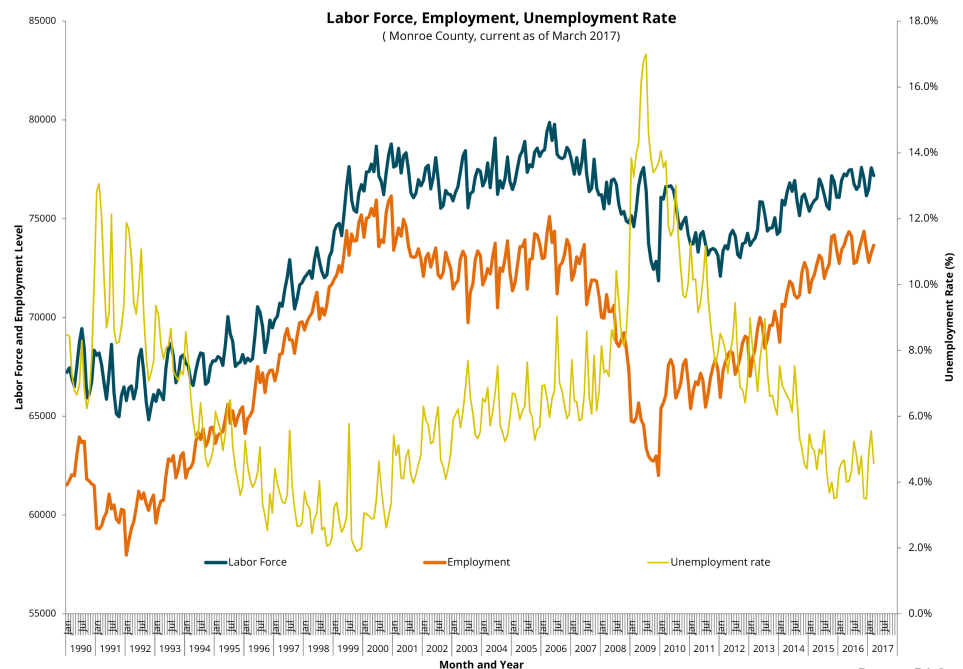
## WIN Region Online Job Postings



## Labor force/employment/unemployment

Despite the negative change in demand reflected in Q1 2017 job postings, the Monroe County labor force increased compared to Q4 2016 levels. Alongside more workers participating in the labor force, employment shrank by 675 workers, driving the quarterly unemployment rate up 1.1 percent, from 3.9 to 5 percent.

## Labor Force, Employment, Unemployment Rate Quarter 1 2017





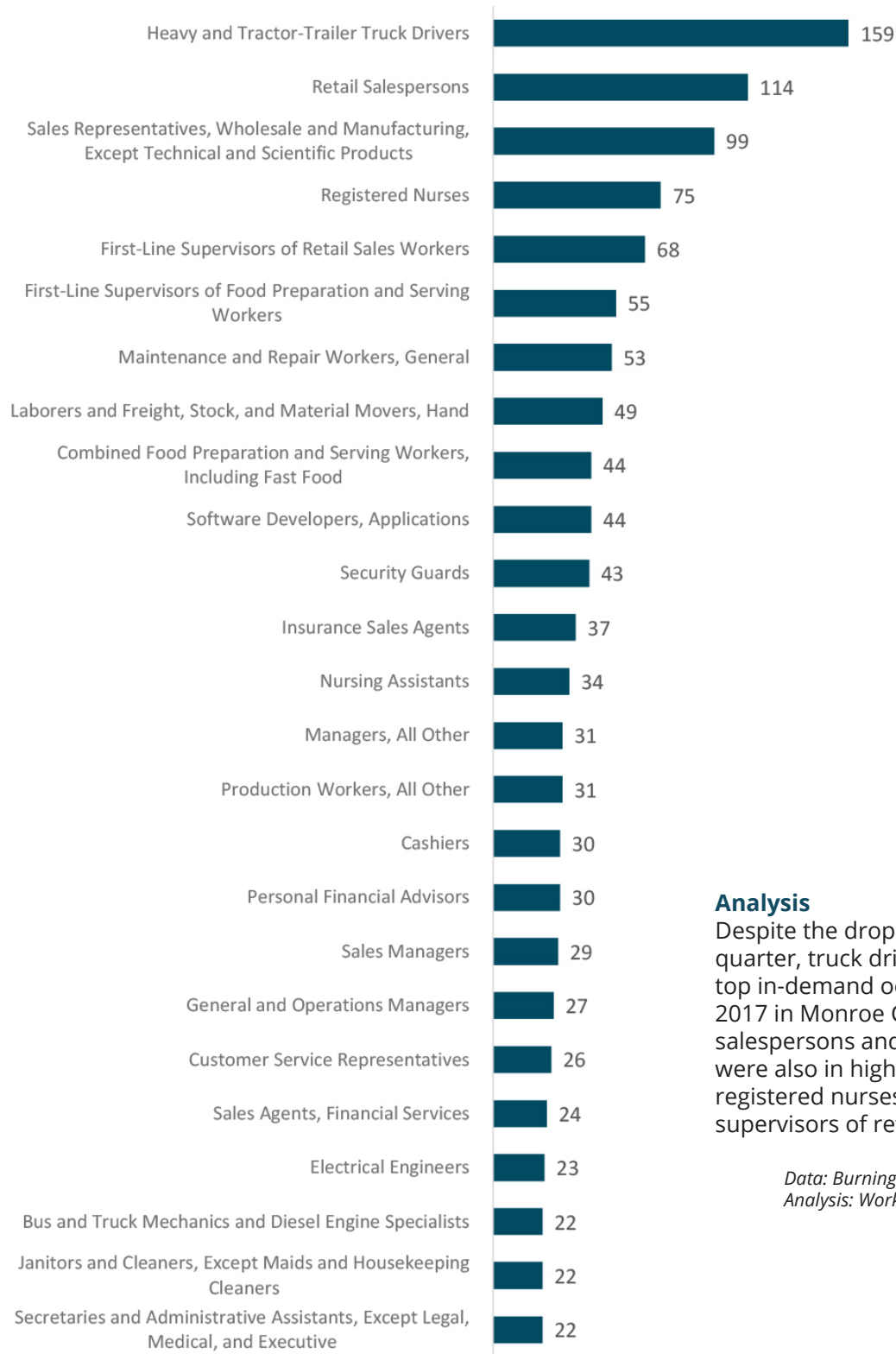


## Most in-demand: Heavy and Tractor-Trailer Truck Drivers

18%

decrease in employer demand

### Top Jobs Quarter 1 2017



#### Analysis

Despite the drop in TDL postings this quarter, truck drivers remained the top in-demand occupation during Q1 2017 in Monroe County. Retail salespersons and representatives were also in high demand, alongside registered nurses and first-line supervisors of retail workers.

Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



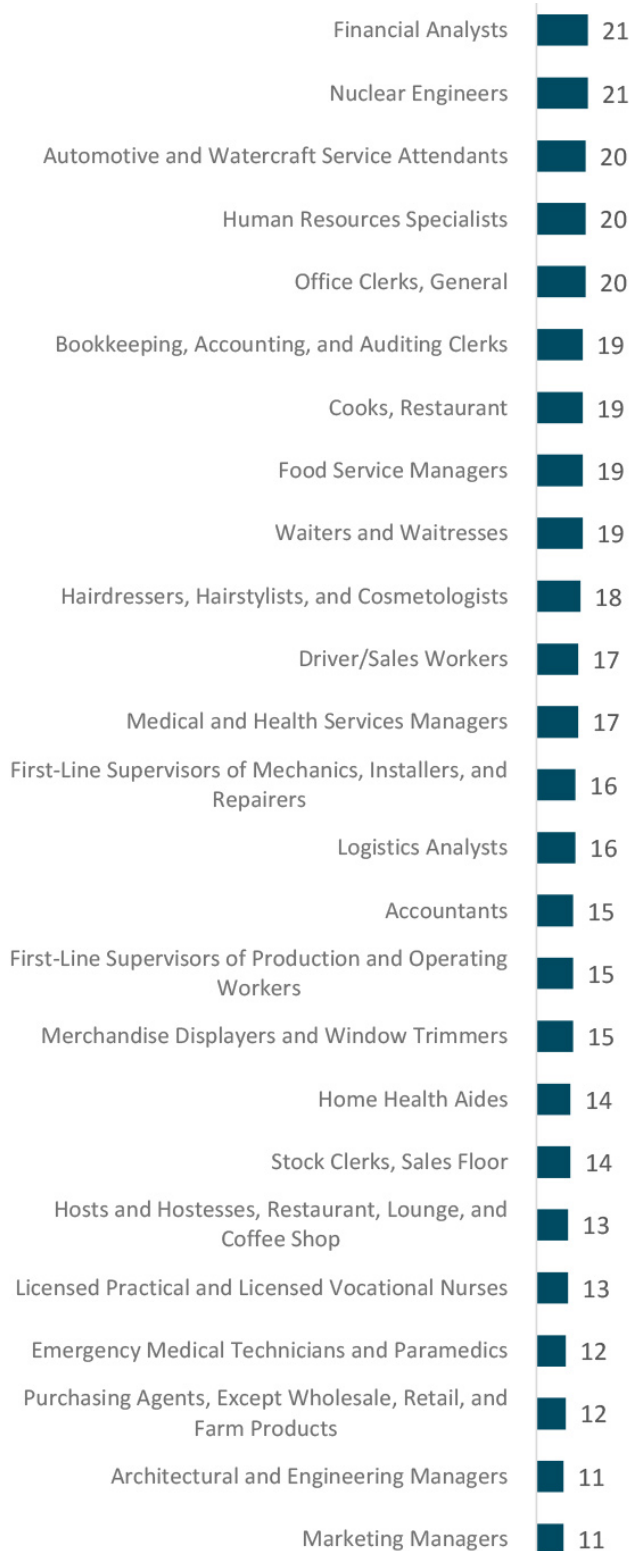
5.0% quarterly  
unemployment rate



73,239 workers in  
Monroe County

### Top Jobs

Quarter 1 2017



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

## Introduction

WIN's Agriculture 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, and recreation workers.

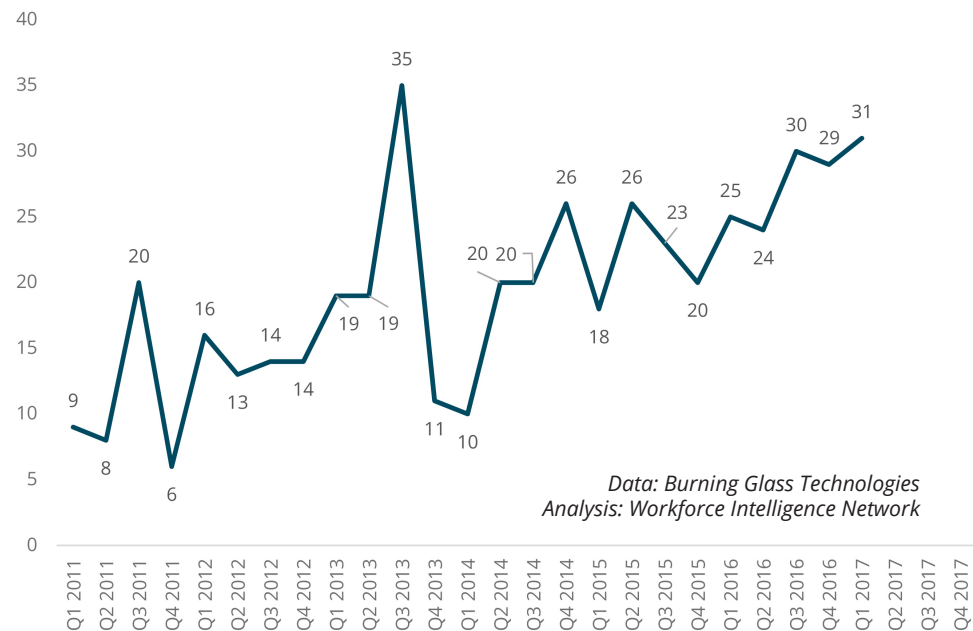
## Job Posting Analysis

Online job postings for Agriculture occupations are low compared to other occupation groups in Monroe County. For this reason and the seasonal nature of Agriculture work, posting levels appear quite volatile. Agriculture job postings were up to 31 postings during Q1 2017. Overall postings have been on an increasing trend despite the volatility of these jobs. Postings have nearly reached the previous high of 35 postings during 2013.

## Employment Analysis

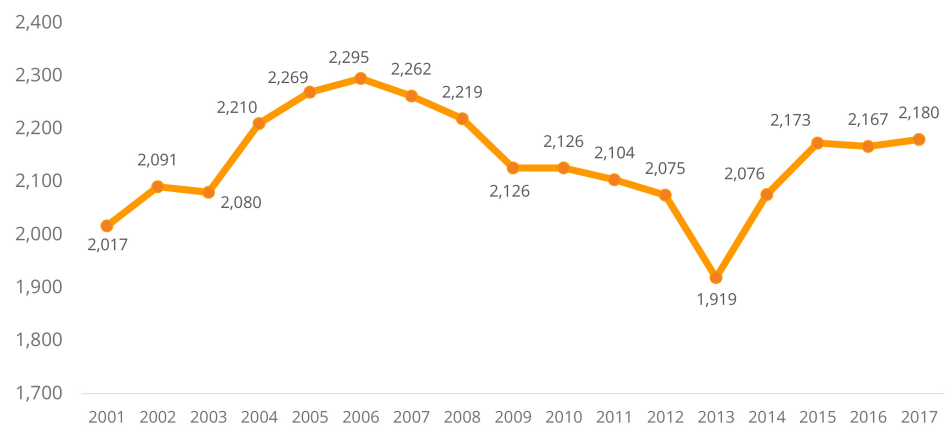
Employment in Agriculture occupations in Monroe County declined between 2006 and 2013, reaching a low of 1,919 employees that year. Employment in this occupation group, though, has grown each year since, with 2,180 Monroe County workers employed in Agriculture jobs in 2017.

## Online Job Postings



## Employment Over Time

Quarter 1 2017



Data: EMSI  
Analysis: Workforce Intelligence Network

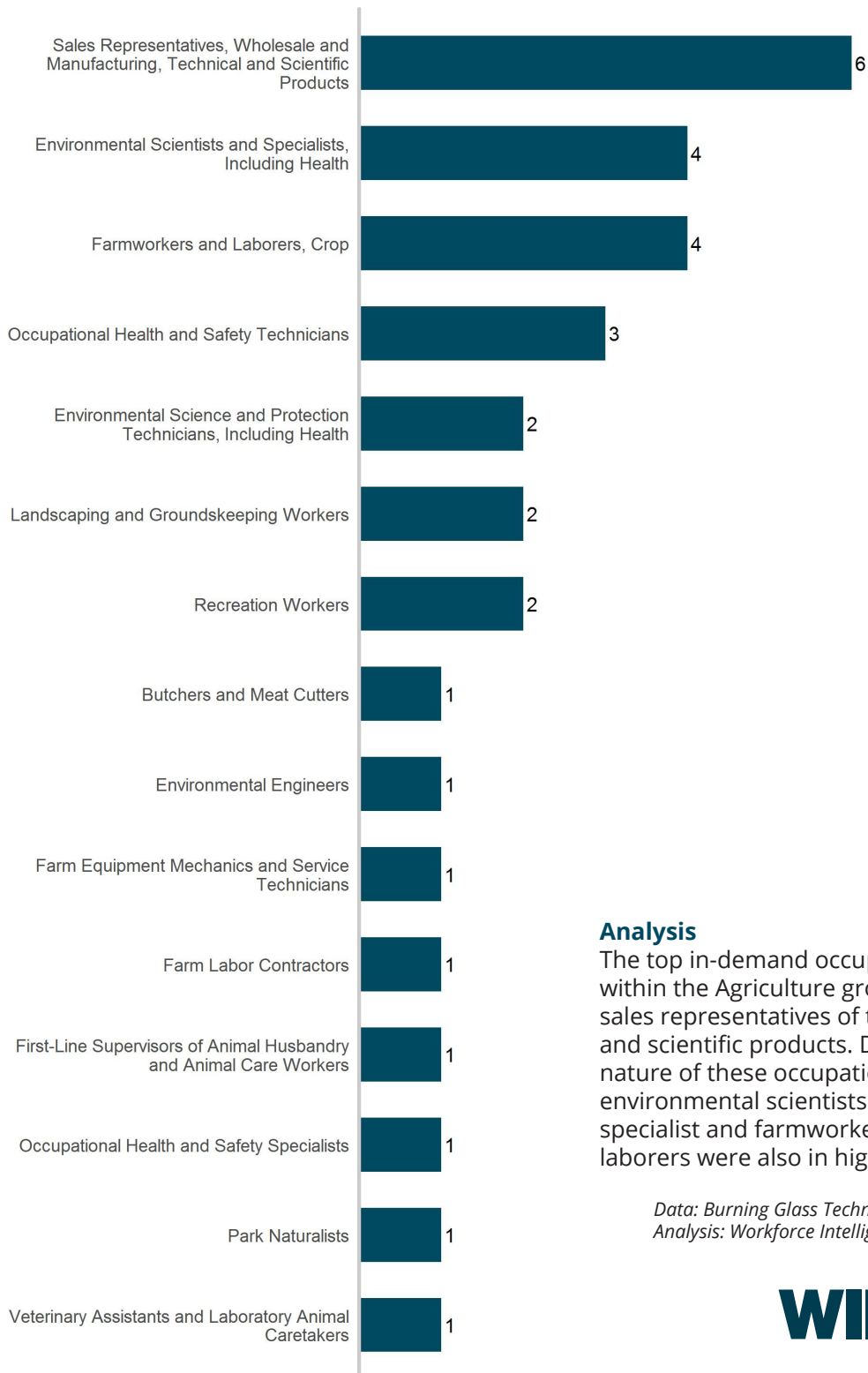


Now Hiring: 31 postings for  
Agriculture-related workers



2,180 Agriculture workers in  
Monroe County

**Agriculture  
Top Jobs**  
Quarter 1 2017



**Analysis**

The top in-demand occupation within the Agriculture group was sales representatives of technical and scientific products. Due to the nature of these occupations, environmental scientists and specialist and farmworkers and laborers were also in high demand.

Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



## Most in-demand: Technical and Scientific Sales Reps



## Education required: Bachelor's degree for technical occupations

### Agriculture Educational Attainment Required

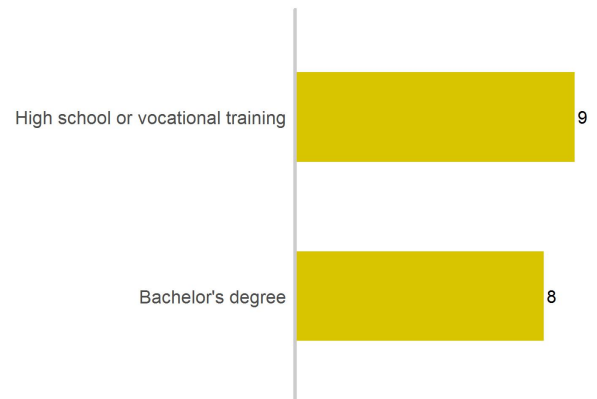
About half of Q1 2017 Agriculture job postings in Monroe County specified a desired education level for job candidates. Educational requirements for these occupations vary widely. Fifty-three percent (nine postings) required a bachelor's degree – these are postings for engineers, researchers, teachers, and technical sales representatives. Another 47 percent (eight postings) were open to candidates holding a bachelor's degree.

Though only fourteen Q1 postings specified a desired level of experience, most were open to applicants with less than five years of experience. Eight of these postings were open to entry level workers with less than 2 years of experience, allowing for workers to easily move into the Agriculture field.

### In-Demand Area of Study

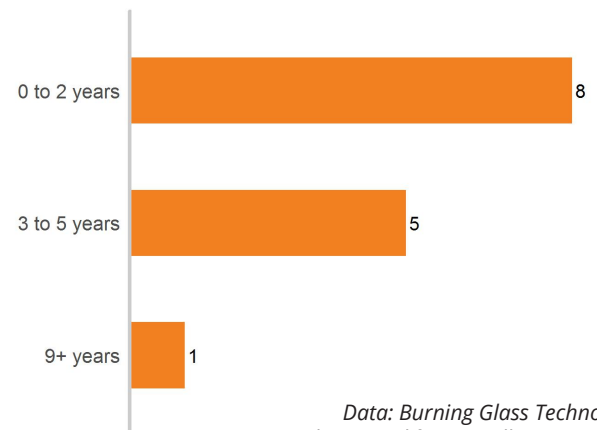
- Engineering, General
- Environmental Health

### Educational Attainment



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Experience Required



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Experience required:  
less than 2 years



Knowledge areas: Engineering,  
Environmental Health

### Agriculture In-Demand Skills

The demand for highly technical workers within the Agriculture group is reflected in the skills required in Q1 2017 job postings. In-demand workers in scientific sales, research, and engineering were expected to have knowledge of environmental compliance and experience with government regulations. Basic employability skills like communication and organizational skills ensure that Agriculture workers will succeed in the workplace.

#### Technical In-Demand Skills

- Microsoft Office, Computer Skills
- Inspection
- Data Acquisition
- Energy Consumption
- Environmental Compliance, Management, and Regulations

#### Foundational In-Demand Skills

- Communication Skills
- Problem Solving
- Leadership
- Mathematics
- Planning, Organizational Skills

#### Job Type\*

- Temporary: 29.0%
- Full-time: 80.6%
- Part-time: 12.9%

\*Total may be over 100% due to postings classified as both temporary and either part-time or full time

#### Certifications Required

- Certified Hazardous Materials Manager



## High wages for occupations requiring a bachelors degree



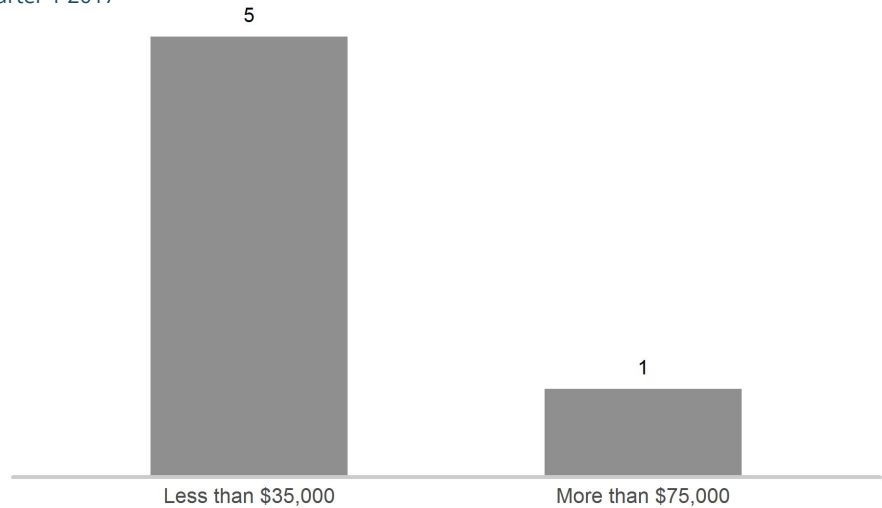
## In-demand certifications: Certified Hazardous Materials Manager

### Agriculture Wages

Wage data from Q1 2017 job postings provide an incomplete picture of salaries available for Agriculture workers in Monroe County. Only 6 job postings advertised salary data, with 5 offering less than \$35,000 per year. Wage data from the Bureau of Labor Statistics shows that the Agriculture occupations requiring the highest educational attainment – those like environmental engineers, environmental scientists and specialists, and scientific sales representatives – earn high median hourly wages. Environmental engineers earn \$43.05 an hour at the median, or nearly \$90,000 per year.

### Advertised Wages in Job Postings

Quarter 1 2017



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Wage Data from Bureau of Labor Statistics 2016

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$21.61	\$27.46	\$37.97	\$52.59	\$68.37
19-2041	Environmental Scientists and Specialists, Including Health	\$20.71	\$24.25	\$30.06	\$38.16	\$46.62
45-2092	Farmworkers and Laborers, Crop	\$9.14	\$10.05	\$12.85	\$16.06	\$18.93
29-9012	Occupational Health and Safety Technicians	\$14.30	\$17.65	\$22.02	\$25.45	\$30.14
19-4091	Environmental Science and Protection Technicians, Including Health	\$14.31	\$16.90	\$20.40	\$24.71	\$29.36
37-3011	Landscaping and Groundskeeping Workers	\$9.02	\$10.00	\$11.35	\$13.87	\$17.05
39-9032	Recreation Workers	\$8.56	\$9.01	\$10.07	\$12.43	\$15.44
51-3021	Butchers and Meat Cutters	\$8.97	\$10.25	\$13.48	\$17.71	\$22.09
17-2081	Environmental Engineers	\$26.22	\$34.95	\$43.05	\$52.25	\$61.21
49-3041	Farm Equipment Mechanics and Service Technicians	\$11.72	\$14.77	\$18.31	\$22.44	\$26.05

Data: EMSI, BLS  
Analysis: Workforce Intelligence Network



# Customer Service

## Introduction

The customer service group is the largest occupational 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. 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.

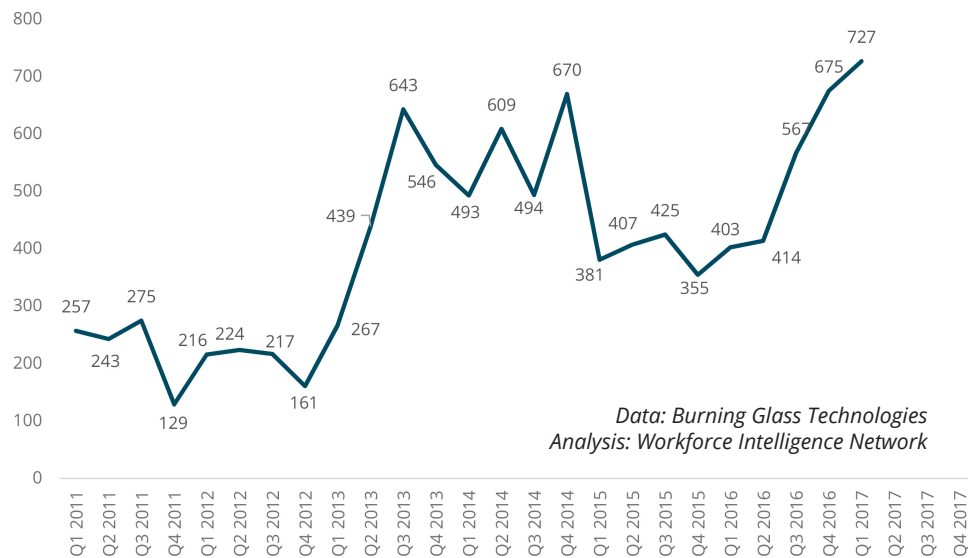
## Job Posting Analysis

During Q1 2017, online job postings related to Customer Service reached a new high with a total of 727 postings.. Postings increased during each quarter of 2016 to reach this new relative high. After the lull in postings during 2015, it appears the Customer Service group is ready to continue an increasing trend in postings.

## Employment Analysis

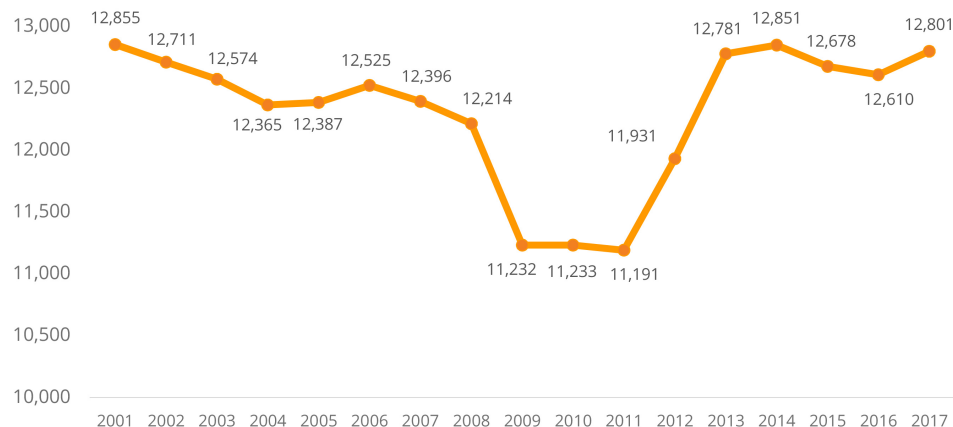
Like many other occupation groups in southeast Michigan and across the country, employment in the Customer Service occupations decreased during the Great Recession. In 2010, Customer Service employment had decreased 11,191 to employees. Nearly 12,800 Monroe County workers are currently employed in Customer Service jobs, indicating that employment has recovered from the recession.

### Online Job Postings



### Employment Over Time

Quarter 1 2017





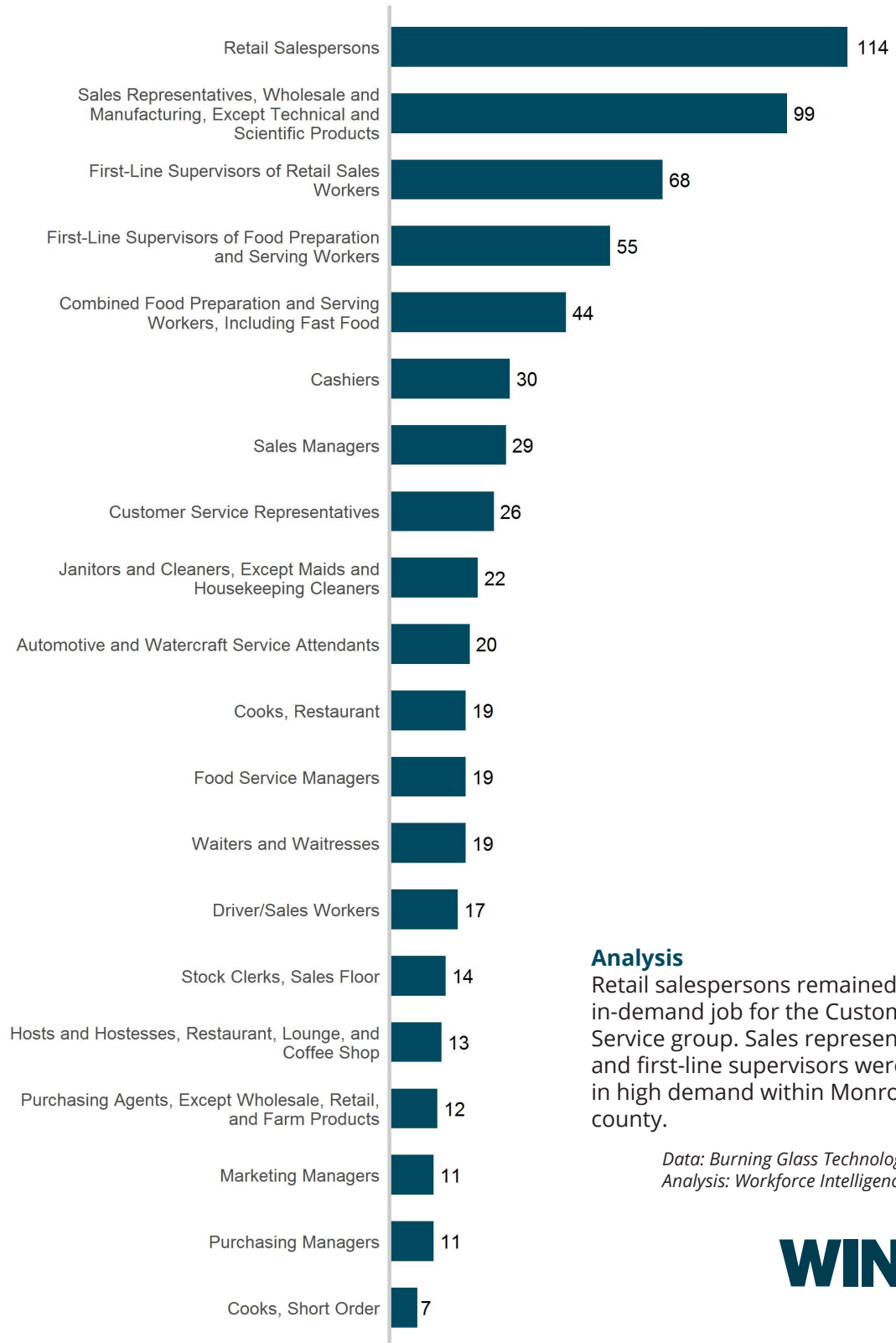


Now Hiring: 727 Customer  
Service job postings



Nearly 12,800  
Customer Service employees

**Customer Service  
Top Jobs**  
Quarter 1 2017



**Analysis**

Retail salespersons remained the top in-demand job for the Customer Service group. Sales representatives and first-line supervisors were also in high demand within Monroe county.

Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Education required:  
HS diploma and some training



Experience required:  
less than 2 years

### Customer Service Educational Attainment Required

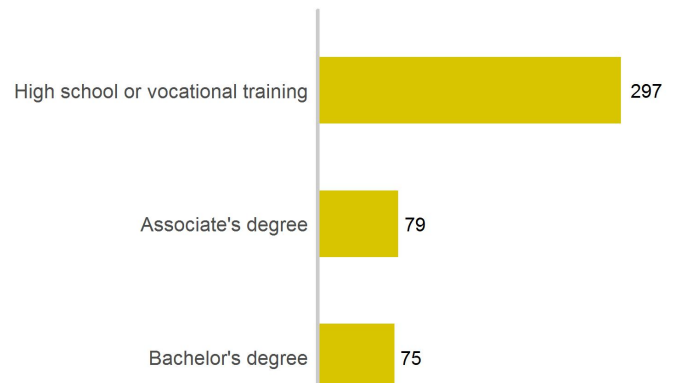
Of the Q1 2017 job postings that specified a requirement for education for Customer Service workers, 83 percent were available to workers with a high school diploma or an associate's degree. The remaining 17 percent of those postings preferred candidates with a bachelor's degree.

Many Customer Service jobs in southeast Michigan are entry-level positions. Seventy-seven percent of the Q1 2017 postings in this occupation group that specified a desired level of experience were open to entry level candidates with less than two years on the job. Job postings indicating more experience are likely for supervisory and management positions.

### In-Demand Area of Study

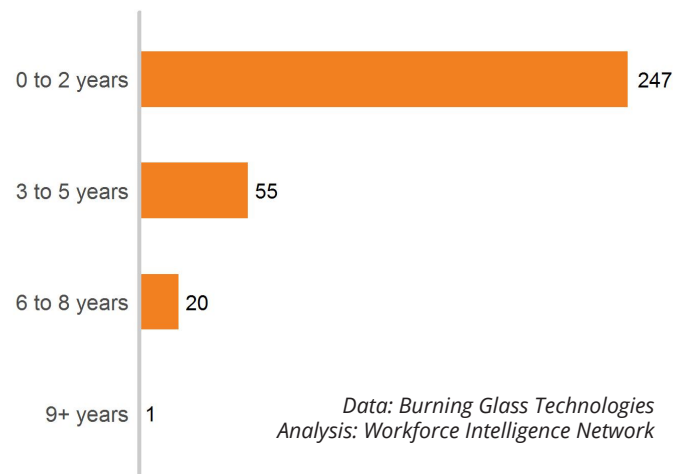
- Business Administration and Management, General
- Economics, General
- Marketing/Marketing Management, General
- Mechanical Engineering
- Electrical and Electronic Engineering Technologies/Technicians, Other

### Educational Attainment



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Experience Required



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



\$41,430 average advertised salary



Knowledge areas: Business Administration, Economics

### Customer Service In-Demand Skills

Customer Service job candidates in Monroe County are expected to have technical skills related to sales and providing customer service. Q1 2017 job postings desired candidates with experience in a retail setting and experience with store management and merchandising. In-demand employability skills like communication, organization, and problem solving ensure success in the Customer Service workplace.

#### Technical In-Demand Skills

- Customer Service
- Sales Experience (retail setting)
- Store Management, Supervisory Skills
- Merchandising
- Scheduling

#### Foundational In-Demand Skills

- Communication Skills
- Organizational Skills
- Writing
- Ability to Perform Physical Labor
- Problem Solving

#### Job Type

- Temporary: 3.3%
- Full-time: 45.5%
- Part-time: 12.5%

#### Certifications Required

- Investment Advisor
- Life and Health Insurance License
- Securities License
- Series 6
- Series 63



## In-Demand Skills: sales, experience in a retail setting



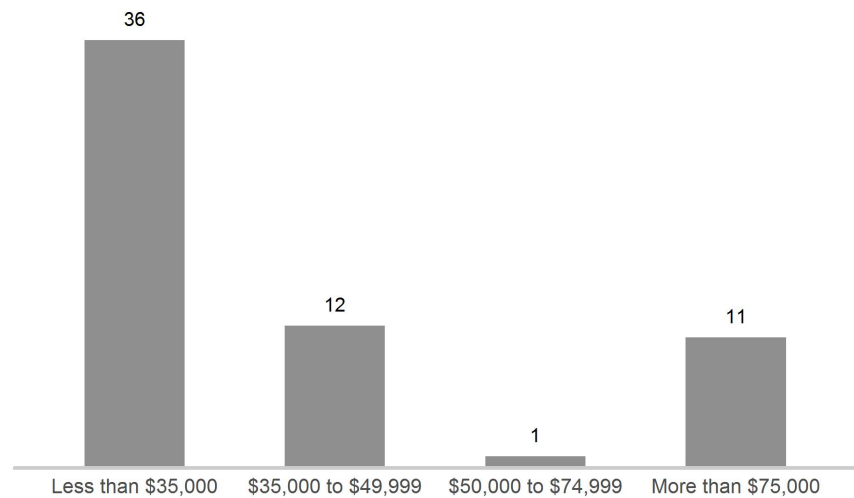
## In-demand certifications: Investment Advisor

### Customer Service Wages

The most in-demand Customer Service jobs in Monroe County offer a wide range of salaries; the distribution of salaries from Q1 job postings can be seen in the chart to the right. Most advertised salaries offered were less than \$35,000 per year. According to data from the Bureau of Labor Statistics, the highest paid occupations in the Customer Service group are sales managers, who can make over \$55.00 per hour at the median, or more than \$110,000 per year.

### Advertised Wages in Job Postings

Quarter 1 2017



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Wage Data from Bureau of Labor Statistics 2016

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
41-2031	Retail Salespersons	\$8.64	\$9.11	\$10.26	\$13.13	\$19.16
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$13.30	\$19.23	\$27.46	\$39.82	\$55.68
41-1011	First-Line Supervisors of Retail Sales Workers	\$11.67	\$14.26	\$17.90	\$22.82	\$29.40
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	\$9.38	\$11.00	\$14.55	\$19.66	\$25.31
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	\$8.40	\$8.64	\$9.05	\$9.71	\$11.67
41-2011	Cashiers	\$8.43	\$8.79	\$9.45	\$11.41	\$14.64
11-2022	Sales Managers	\$31.26	\$42.44	\$55.93	\$73.41	\$114.67
43-4051	Customer Service Representatives	\$9.51	\$11.67	\$15.11	\$19.70	\$25.82
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$8.81	\$9.64	\$11.63	\$15.00	\$18.70
53-6031	Automotive and Watercraft Service Attendants	\$8.55	\$8.97	\$9.81	\$11.58	\$13.37

Data: EMSI, BLS  
Analysis: Workforce Intelligence Network

## 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.

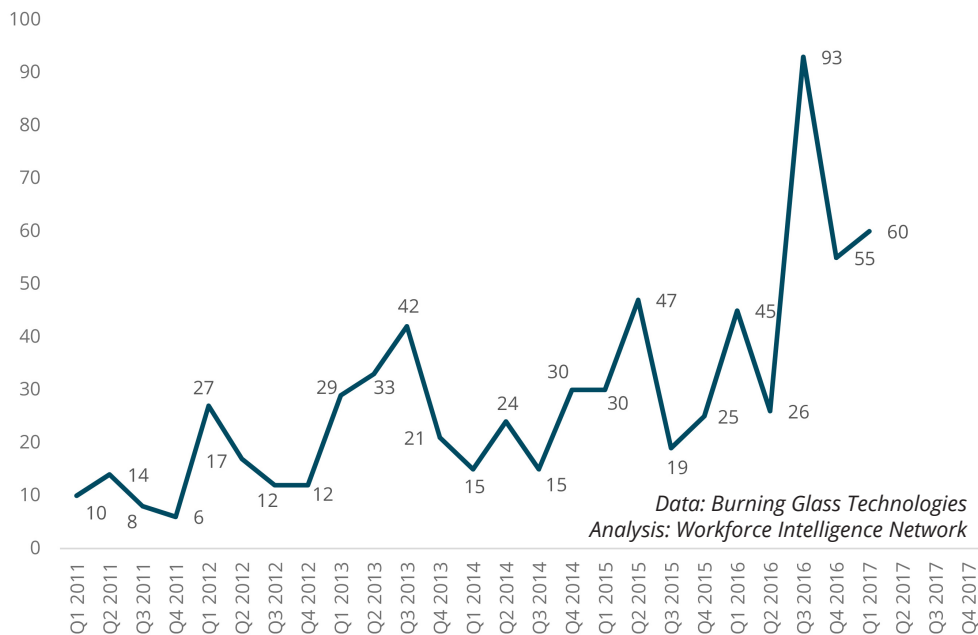
## Job Posting Analysis

Energy occupations were in high demand in Monroe County during Q1 2017. Online job postings for occupations in this group are generally low, compared to other occupation groups, and thus, appear volatile from quarter to quarter. Despite a large drop in postings after Q3 2016, postings have once again started rebounding reaching 60 postings during Q1 2017.

## Employment Analysis

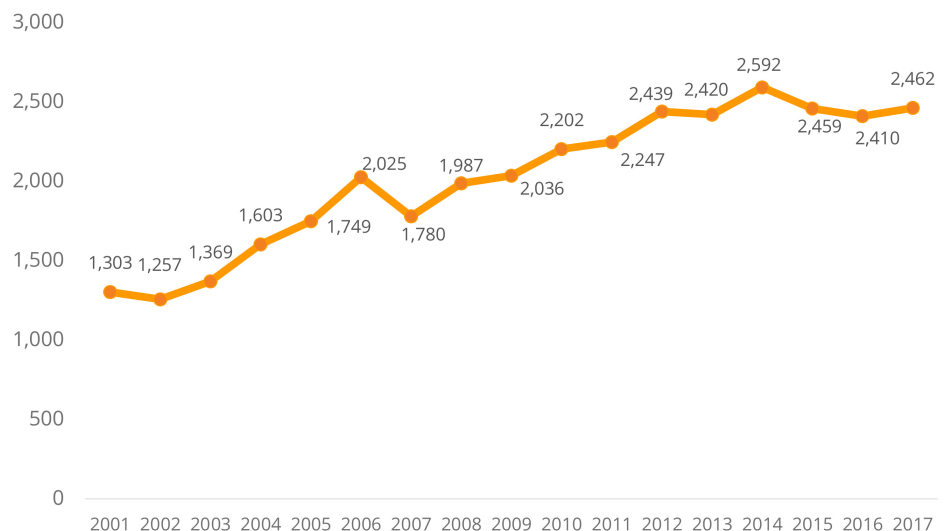
The data presented in the graph to the right represents Monroe County's total employment in the Energy industries (NAICS 2111, 2131, 2211, 2212, 2371), not just WIN-designated Energy occupations. In 2017, 2,462 workers are employed in these Energy industries in Monroe County. Unlike many other occupation groups and industries, employment in the energy industries in Monroe County did not decline substantially during the Great Recession. Instead, employment in Monroe County's energy industries has generally increased since 2001.

## Online Job Postings



## Employment Over Time

Quarter 1 2017



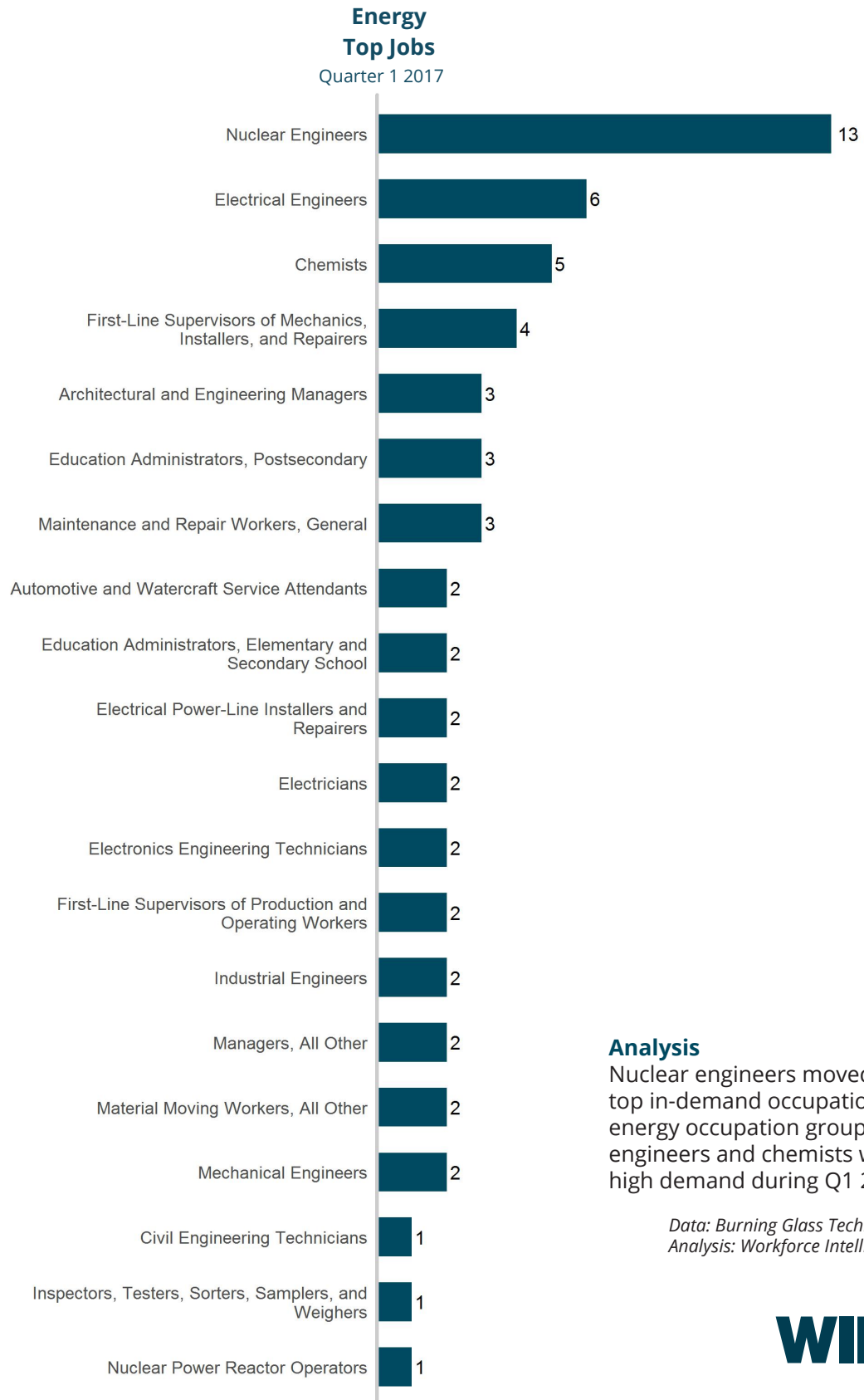
Data: EMSI  
Analysis: Workforce Intelligence Network



Now Hiring: 60 Energy-related  
job postings in Q1 2017



Nearly 2,500 Energy workers in  
Monroe County



#### Analysis

Nuclear engineers moved into the top in-demand occupation for the energy occupation group. Electrical engineers and chemists were also in high demand during Q1 2017.

Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Education required:  
Bachelor's degree



Experience required:  
3 or more years

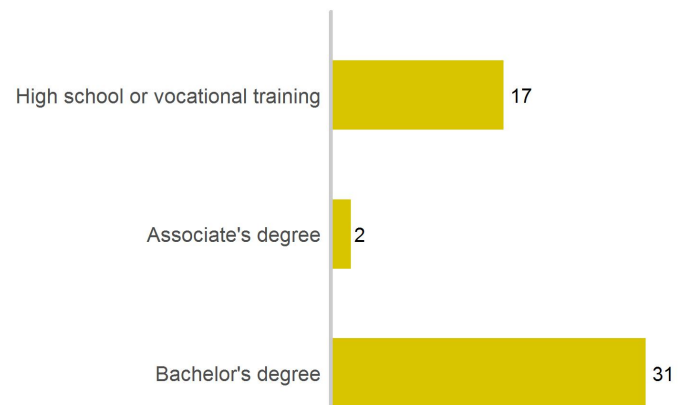
### Energy Educational Attainment Required

Most Energy positions open in Monroe County require a bachelor's degree. Eighty-three percent of Q1 2017 postings specified a required level of educational attainment; of those that did, 62 percent required candidates to hold a bachelor's degree. This occupation group also requires higher levels of experience than many other occupation groups in Monroe County. Of the Q1 2017 postings that specified a desired level of experience, 48 percent preferred workers with at least three years of experience in the Energy field. The remaining postings specifying desired experience were split relatively evenly among the other experience levels.

### In-Demand Area of Study

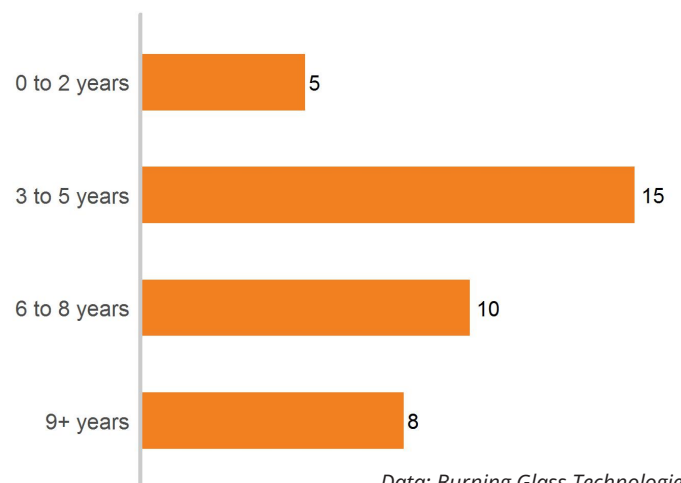
- Engineering, General
- Engineering Technology, General
- Electrical and Electronic Engineering Technologies/Technicians, Other
- Chemistry
- Environmental Health

### Educational Attainment



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Experience Required



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



## Certification In-Demand: Reactor Operator License



## Top Occupation in-demand: Nuclear Engineer

### Energy In-Demand Skills

The Energy group is one of the most technical of the WIN occupation groups analyzed in Monroe County. This high degree of technicality is reflected in the skills desired in Q1 2017 job postings. Energy professionals in Monroe County should have experience with nuclear energy and engineering support, as well as important project management skills. Baseline employability skills in this group include mathematics and research skills.

### Technical In-Demand Skills

- Budgeting
- Benchmarking
- Nuclear energy
- Repair
- Engineering Support

### Foundational In-Demand Skills

- Mathematics
- Planning
- Research
- Problem Solving
- Mentoring

### Job Type

- Temporary: data not available
- Full-time: 31.7%
- Part-time: data not available

### Certifications Required

- Reactor Operator License
- Basic Electricity Certificate
- Certified Energy Manager
- Electrical Certification (e.g. Electrical Installation Certification)
- Certified Information Systems Security Professional (CISSP)





## Skills in-demand: Budgeting, Nuclear Energy



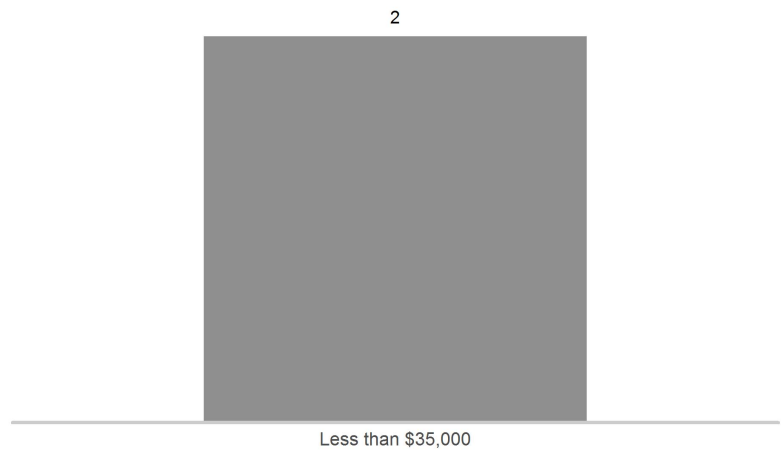
## Engineering Degrees in high demand

### Energy Wages

There is little data from Q1 2017 Energy job postings to analyze advertised wages, with only two postings containing salary data. Both postings offered salaries less than \$35,000 per year. Wage data from the Bureau of Labor Statistics show that the in-demand engineers in the Energy group earn high median hourly wages, some above \$50 per hour. The high educational requirements for these occupations is translated into high wages for other positions, like managers and repairers, too.

### Advertised Wages in Job Postings

Quarter 1 2017



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Wage Data from Bureau of Labor Statistics 2016

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
17-2161	Nuclear Engineers	\$35.82	\$43.43	\$51.21	\$57.24	\$63.82
17-2071	Electrical Engineers	\$28.97	\$34.90	\$42.69	\$50.55	\$60.05
19-2031	Chemists	\$21.74	\$26.18	\$34.34	\$45.24	\$60.48
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	\$18.99	\$24.16	\$31.33	\$39.79	\$47.58
11-9041	Architectural and Engineering Managers	\$40.65	\$49.46	\$60.17	\$72.35	\$85.16
11-9033	Education Administrators, Postsecondary	\$25.01	\$33.19	\$46.46	\$65.31	\$90.49
49-9071	Maintenance and Repair Workers, General	\$10.37	\$12.78	\$16.93	\$22.19	\$27.62
53-6031	Automotive and Watercraft Service Attendants	\$8.55	\$8.97	\$9.81	\$11.58	\$13.37
11-9032	Education Administrators, Elementary and Secondary School	\$29.86	\$39.32	\$46.72	\$53.99	\$59.56
49-9051	Electrical Power-Line Installers and Repairers	\$17.32	\$27.88	\$35.66	\$42.17	\$47.23

Data: EMSI, BLS  
Analysis: Workforce Intelligence Network



# Skilled Trades & Technicians (Manufacturing Focused)

## Introduction

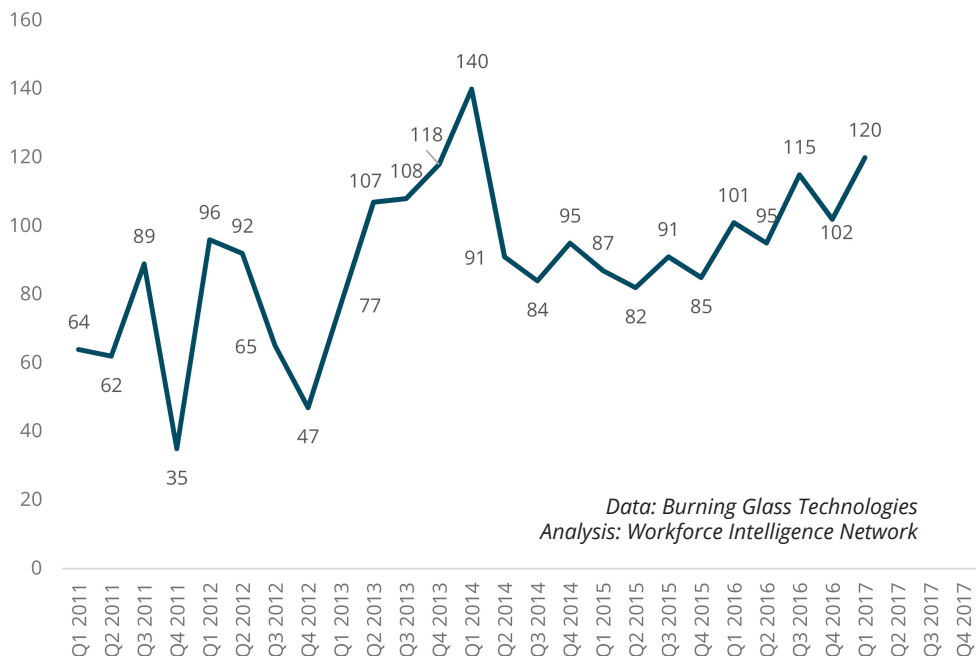
WIN's technicians/skilled trades category includes jobs related to advanced manufacturing. Southeast Michigan has more demand for skilled- trades labor, such as CNC machinists and welders, than almost anywhere else in the country.

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

## Job Posting Analysis

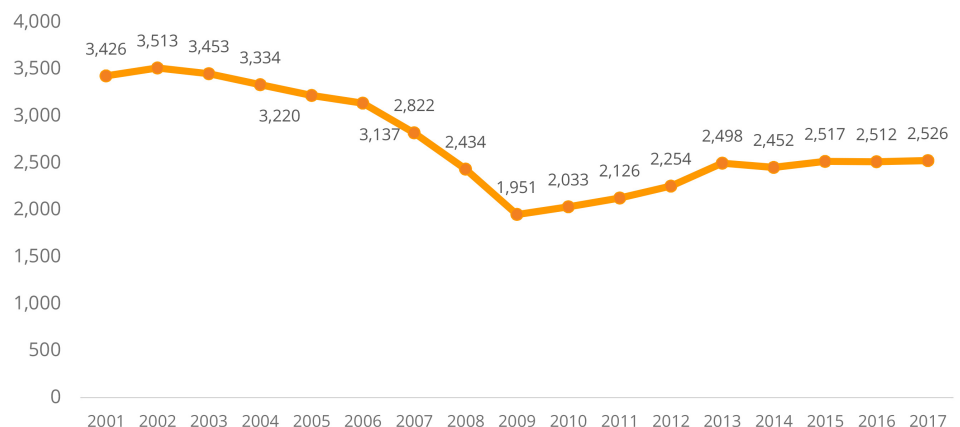
Online job postings for Skilled Trades workers in Monroe County increased 18 percent, from 102 postings in Q4 2016 to 120 in Q1 2017. Following a peak in demand at 140 job postings in Q1 2014, demand for Skilled Trades workers has been slowly increasing overall.

### Online Job Postings



### Employment Over Time

Quarter 1 2017



## Employment Analysis

Skilled labor employment within Monroe county during 2017 has experienced slow growth after a decline in 2014. Currently, there are 2,526 Skilled Trades employees in Monroe, an increase of 575 from the 2009 recession.

Data: EMSI  
Analysis: Workforce Intelligence Network



Full-time opportunities available  
for Skilled Trades workers

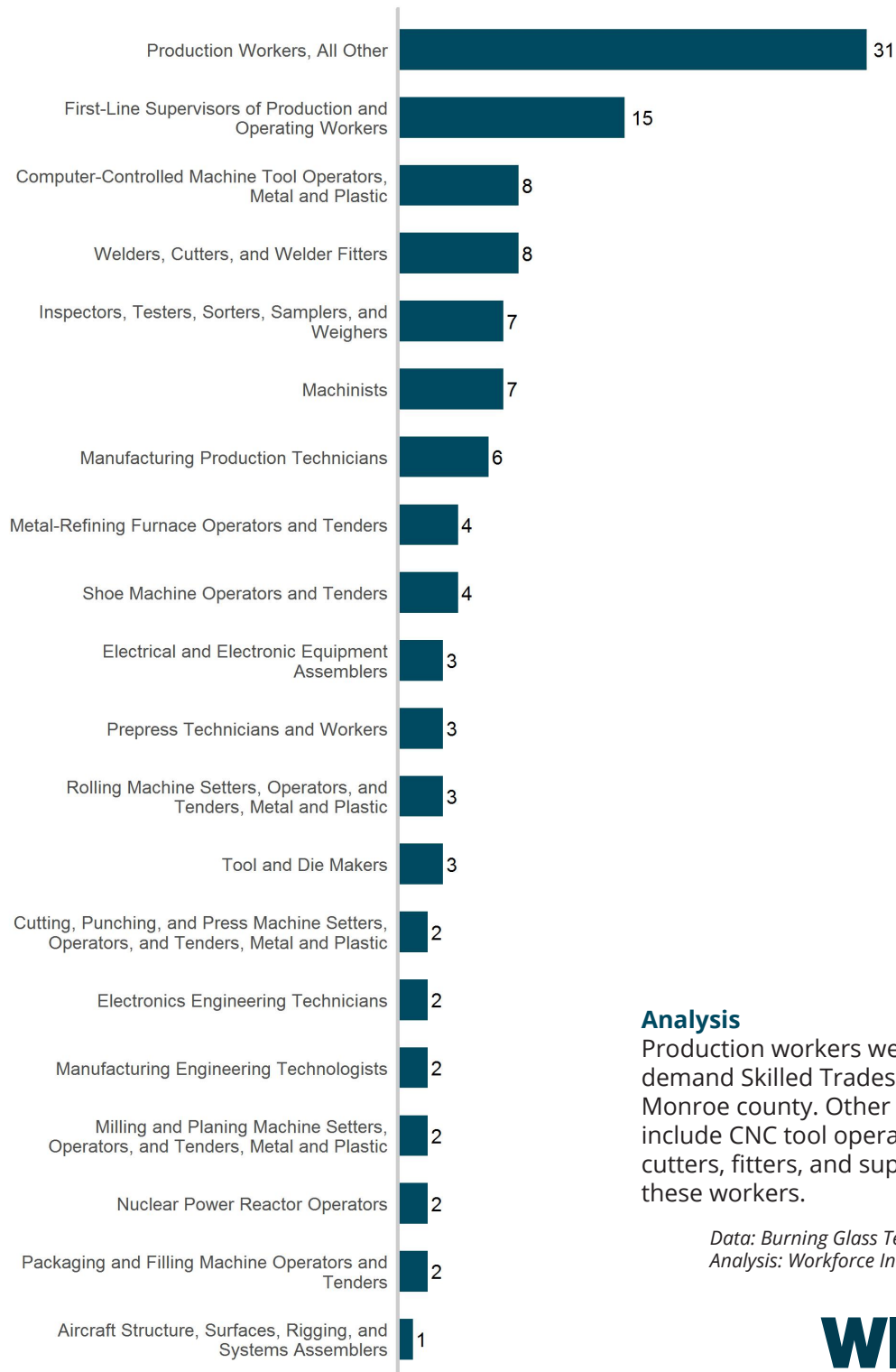


Certification in-demand:  
Certified Energy Manager

### Skilled Trades & Technicians

#### Top Jobs

Quarter 1 2017



#### Analysis

Production workers were the top in-demand Skilled Trades occupation in Monroe county. Other top jobs include CNC tool operators, welders, cutters, fitters, and supervisors of these workers.

Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Now Hiring: 120 Skilled Trades  
job postings

73%  
of job postings offer a  
salary of >\$35,000

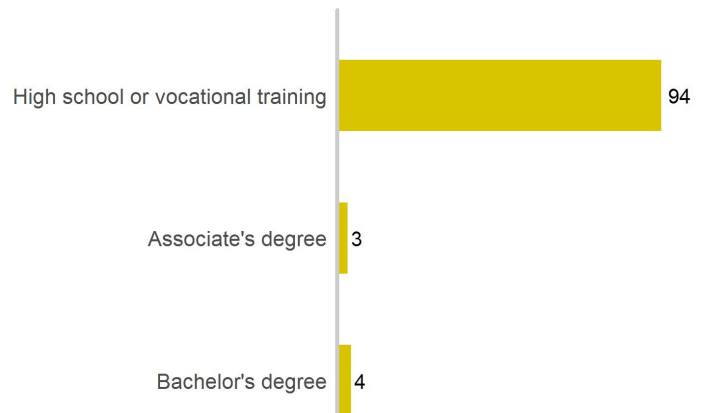
### Skilled Trades & Technicians Educational Attainment Required

Of the 120 postings for occupations related to skilled trades in Monroe County 84 percent (101 postings) expressed a desired level of education. 94 of these postings (93 percent) requested that the applicant have high school or vocational training. A desired experience level was expressed for 55 of the 120 job postings (46 percent) with 50 postings (91 percent) asking for zero to five years. Of these postings, 35 postings (64 percent) were looking for entry level workers with zero to two years of experience.

### In-Demand Area of Study

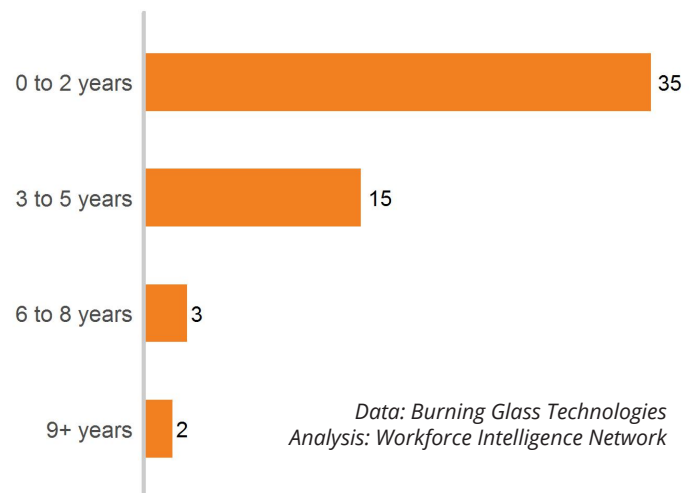
- Engineering, General
- Mechanical Engineering
- Business Administration and Management, General
- Chemistry
- Electrical and Electronic Engineering Technologies/Technicians, Other

### Educational Attainment



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Experience Required



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



2,526 Skilled Trades workers in  
Monroe County

93%

of Skilled Trades jobs posted  
require a high school diploma

### Skilled Trades & Technicians In-Demand Skills

The occupations in the Skilled Trades group require a wide array of high-level technical skills. Machinery, repair, inspection, and other traditional skills remain the most common in Skilled Trades job postings. Communication skills were also present in many of the Skilled labor job postings, including problem solving skills, planning, and quality assurance and control. Advanced technical skills such as mathematics do appear through the skills list most likely coinciding with the demand for procedural knowledge. Employers also look for troubleshooting, safety, and assessment skills when posting Skilled Trade jobs.

#### Technical In-Demand Skills

- Inspection, Repair
- Supervisory Skills, Scheduling
- Cleaning
- Machining
- Packaging

#### Foundational In-Demand Skills

- Communication
- Ability to Perform Physical Labor
- Writing
- Detail-Oriented
- Mathematics

#### Job Type

- Temporary: 13.3%
- Full-time: 72.5%
- Part-time: 1.7%

#### Certifications Required

- Certified Energy Manager
- IT Infrastructure Library
- Reactor Operator License
- SAP Certification
- Welding Certification (e.g. AWS Certified Welder)



## Skills in-demand: Inspection, Supervisory Skills



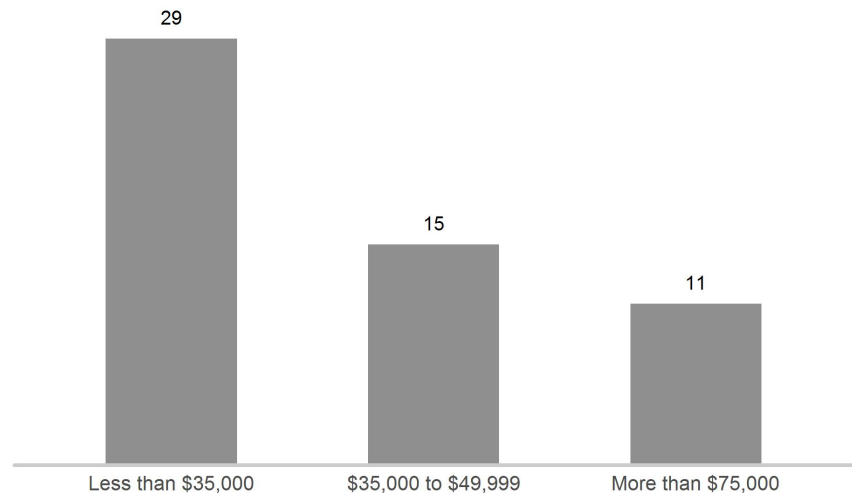
19% increase in employer demand

### Skilled Trades & Technicians Wages

Of the 120 postings related to skilled trades, 46 percent (55 postings) offered salary expectations, with 73 percent (29 postings) offering a salary of \$35,000 or less. There were 26 postings of the 37 (27 percent) that offered salaries between \$35,000 to \$74,999 per year. Manufacturing production technicians offered higher than average wages with median pay of over \$66,000 per year.

### Advertised Wages in Job Postings

Quarter 1 2017



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Wage Data from Bureau of Labor Statistics 2016

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
51-9199	Production Workers, All Other	\$10.77	\$13.64	\$16.54	\$18.93	\$24.89
51-1011	First-Line Supervisors of Production and Operating Workers	\$17.40	\$22.18	\$29.48	\$38.86	\$47.50
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$11.38	\$13.62	\$18.70	\$23.08	\$28.44
51-4121	Welders, Cutters, and Welder Fitters	\$12.73	\$15.15	\$17.87	\$22.25	\$28.27
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$9.81	\$11.55	\$15.46	\$21.68	\$28.32
51-4041	Machinists	\$12.71	\$15.79	\$19.49	\$24.55	\$29.91
17-3029	Manufacturing Production Technicians	\$20.49	\$26.65	\$31.91	\$36.96	\$44.69
51-4051	Metal-Refining Furnace Operators and Tenders	\$11.36	\$12.82	\$15.46	\$18.47	\$20.39
51-6042	Shoe Machine Operators and Tenders	Data Not Available	Data Not Available	Data Not Available	Data Not Available	Data Not Available
51-2022	Electrical and Electronic Equipment Assemblers	\$9.31	\$10.49	\$13.10	\$17.72	\$22.87

Data: EMSI, BLS  
Analysis: Workforce Intelligence Network

# Transportation, Distribution, and Logistics (TDL)

## 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 a consumer. Logistics workers range from materials movers to logistics analysts, coordinating and analyzing material and goods movement.

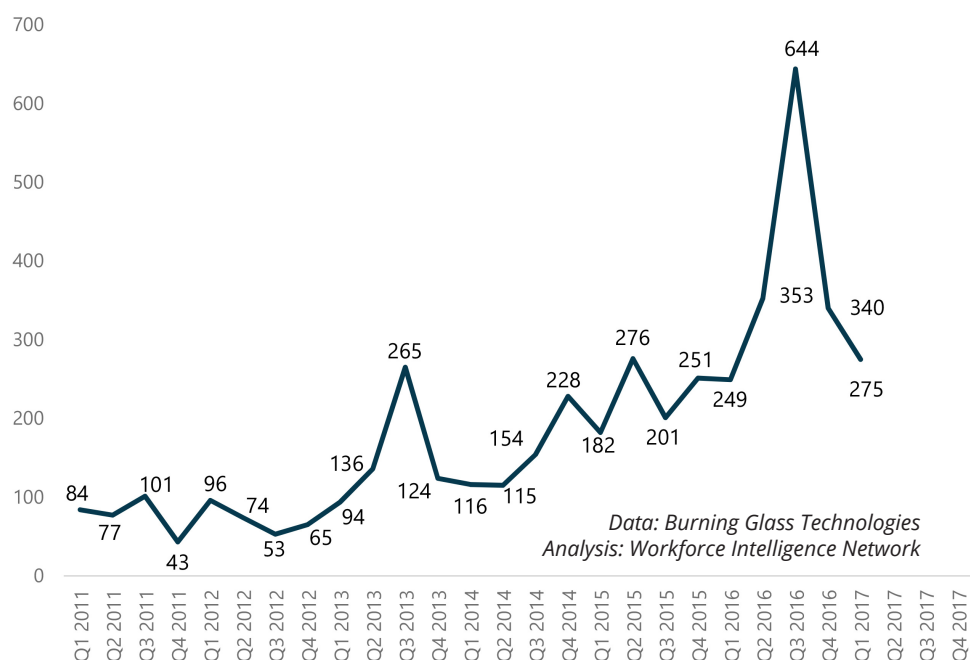
## Job Posting Analysis

Despite the large increase in TDL-related postings that occurred during Q3 2016, postings have been on the decline for the past two quarters. There were a total of 275 online job postings during Q1 2017, 19 percent less than the 340 postings last quarter. Demand is up 10 percent from 249 postings during Q1 2016.

## Employment Analysis

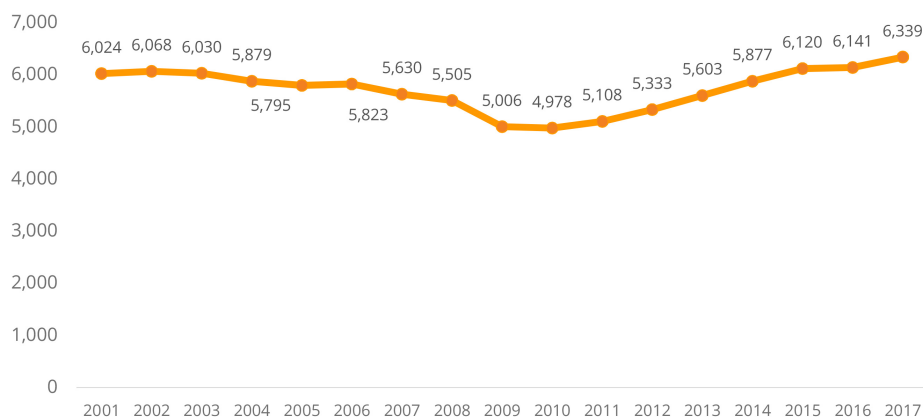
2017 marked a new high point in employment for the Transportation Job group in Monroe country after steady increases since 2009. There were a total of 6,339 workers within the occupation group a seventeen-year high point overall, and an increase of about 1,300 workers from the 2009 employment drop.

## Online Job Postings



## Employment Over Time

Quarter 1 2017



Data: EMSI  
Analysis: Workforce Intelligence Network



Now Hiring:  
275 TDL job postings

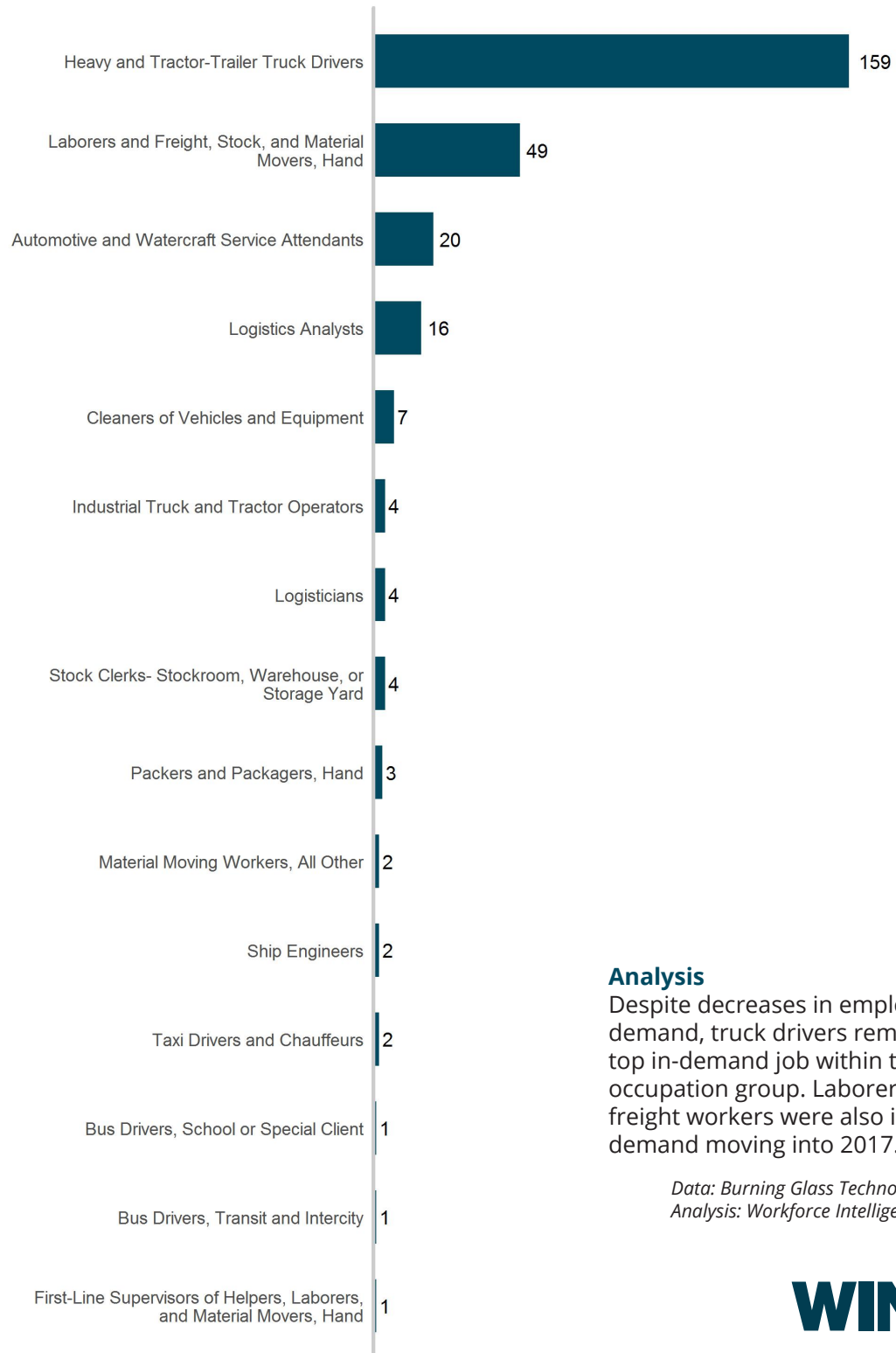


Most TDL job postings indicate full-time employment opportunities

## Transportation, Distribution, and Logistics (TDL)

### Top Jobs

Quarter 1 2017



### Analysis

Despite decreases in employer demand, truck drivers remained the top in-demand job within the TDL occupation group. Laborers and freight workers were also in high demand moving into 2017.

Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network





## Preferred Education: High-School/Vocational Training



## Skills desired: Inspection, repair, forklift operation

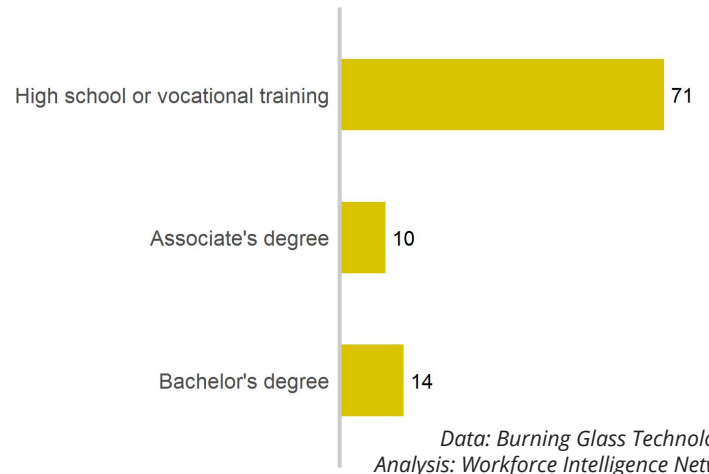
### Transportation, Distribution, and Logistics (TDL) Educational Attainment Required

Of the 271 postings for TDL group occupations, 58 percent (93 postings) indicated a desired experience level, 98 percent of which stated less than five years of experience, indicating that most online ads advertising experience were for entry-level positions. Employers of TDL related occupations in Monroe County most often prefer workers with a high school degree/equivalent or vocational training, with 71 of 95 online postings expressing these levels of educational attainment as a preferred or necessary qualification.

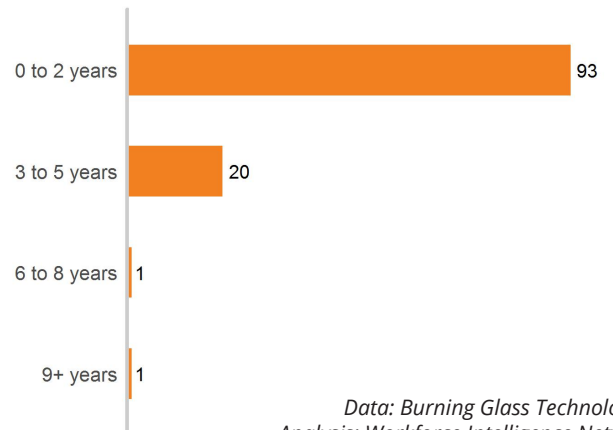
### In-Demand Area of Study

- Business Administration and Management
- Logistics, Materials and Supply Chain Management

### Educational Attainment



### Experience Required





## Area of Study: Logistics, Materials, Supply Chain Management



## Certification in-demand: CDL, Electrical certification

### Transportation, Distribution, and Logistics (TDL) In-Demand Skills

The occupations in the TDL group require a wide array of high-level technical skills. Repair, inspection, and truck driving skills remain the most common in TDL job postings. Management skills were also present in many of the Transportation postings focusing on logistics, supply chain management, purchasing, project management, and staff management. Advanced technical skills such as mathematics and analytics do appear through the skills list most likely coinciding with the demand for procedural knowledge. Employers also look for communication, safety, and assessment skills when posting Transportations jobs. These skills are imperative for this occupation group as detailed plans are key in cost saving techniques, and communication and safety knowledge bring about an optimal work environment when transporting goods or materials.

#### Technical In-Demand Skills

- Inspection/Repair
- Labeling
- Project Management
- SAP
- Purchasing

#### Foundational In-Demand Skills

- Ability to Perform Physical Labor
- Communication Skills
- Organizational Skills
- Computer Skills
- Planning

#### Job Type

- Temporary: 6.9%
- Full-time: 36.4%
- Part-time: 4%

#### Certifications Required

- CDL Class A
- Electrical Certification (e.g. Electrical Installation Certification)
- Forklift Operator Certification
- APICS (American Production and Inventory Control Society) Certification
- Basic Electricity Certificate



Average advertised salary:  
\$71,584 per year



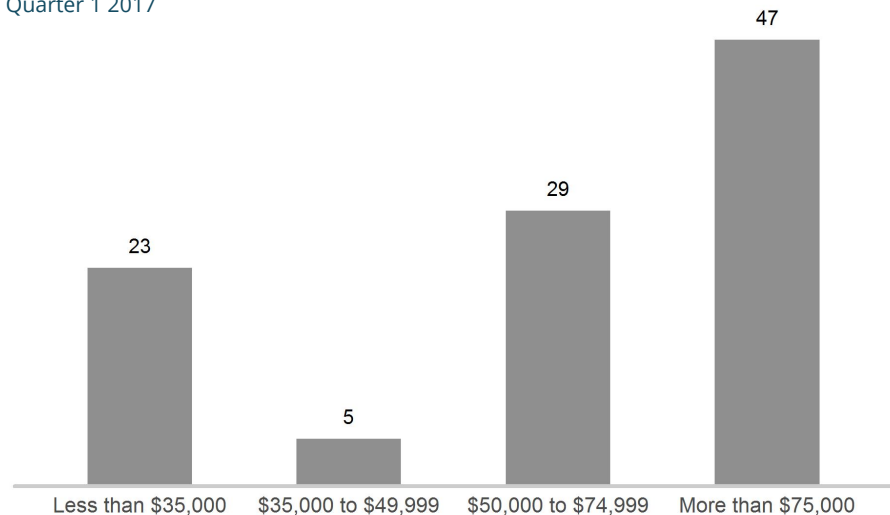
Skills in-demand:  
Inspection, SAP

### Transportation, Distribution, and Logistics (TDL) Wages

Of the 104 postings that gave wage information in the TDL group in Q1 2017, 12 (22%) were below \$35,000 per year. Seventy-three percent (76 postings) offered a salary range of \$50,000 and above. The mean advertised salary for that gave wage information in Monroe during Q1 2017 was \$71,584 per year.

### Advertised Wages in Job Postings

Quarter 1 2017



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Wage Data from Bureau of Labor Statistics 2016

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	\$13.21	\$15.77	\$19.06	\$23.52	\$28.79
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$9.33	\$10.65	\$13.16	\$16.63	\$20.86
53-6031	Automotive and Watercraft Service Attendants	\$8.55	\$8.97	\$9.81	\$11.58	\$13.37
13-1081	Logistics Analysts	\$23.56	\$30.80	\$40.71	\$48.65	\$56.46
53-7061	Cleaners of Vehicles and Equipment	\$8.79	\$9.21	\$10.03	\$12.33	\$15.26
53-7051	Industrial Truck and Tractor Operators	\$10.39	\$12.43	\$15.46	\$21.09	\$24.96
13-1081	Logisticians	\$23.56	\$30.80	\$40.71	\$48.65	\$56.46
43-5081	Stock Clerks- Stockroom, Warehouse, or Storage Yard	\$8.61	\$9.06	\$10.58	\$14.07	\$18.17
53-7064	Packers and Packagers, Hand	\$8.64	\$9.00	\$9.89	\$14.36	\$22.38
53-7199	Material Moving Workers, All Other	\$8.89	\$10.32	\$14.00	\$21.48	\$29.21

Data: EMSI, BLS  
Analysis: Workforce Intelligence Network

### Annual Labor Market Data

	2010 Annual	2011 Annual	2012 Annual	2013 Annual	2014 Annual	2015 Annual	2016 Annual	2017 Annual (Thru 1st Quarter)	Change from 2016	Percent Change from 2016
Labor Force	75,641	73,660	73,605	74,628	75,972	76,189	76,929	<b>77,100</b>	172	0.2%
Employment	66,771	66,681	67,904	69,075	71,302	72,742	73,587	<b>73,465</b>	-122	-0.2%
Unemployment	8,869	6,979	5,702	5,553	4,670	3,447	3,342	<b>3,635</b>	294	8.8%
Unemployment Rate	11.7%	9.5%	7.7%	7.4%	6.1%	4.5%	4.3%	<b>4.7%</b>	0.4%	na

*\*Note: Monthly data averaged by year*

Data: Bureau of Labor Statistics

### Quarterly Labor Market Data

	1st Quarter 2016	2nd Quarter 2016	3rd Quarter 2016	4th Quarter 2016	1st Quarter 2017	Change from 4th Quarter 2016	Percent Change from 4th Quarter 2016	One-Year Change from 1st Quarter 2016	One-Year Percent Change from 1st Quarter 2016
Labor Force	76,765	77,376	76,630	76,943	<b>77,100</b>	157	0.2%	335	0.4%
Employment	73,271	74,183	72,980	73,914	<b>73,239</b>	-675	-0.9%	-32	0.0%
Unemployment	3,494	3,194	3,650	3,029	<b>3,861</b>	833	27.5%	367	10.5%
Unemployment Rate	4.6%	4.1%	4.8%	3.9%	<b>5.0%</b>	1.1%	na	0.5%	na

*\*Note: Monthly data averaged by quarter*

Data: Bureau of Labor Statistics












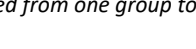
### Monthly Labor Market Data

	January 2016	February 2016	March 2016	April 2016	May 2016	June 2016	July 2016	August 2016	September 2016	October 2016	November 2016	December 2016	January 2017	February 2017	March 2017
Labor Force	76,082	76,945	77,268	77,179	77,462	77,488	76,762	76,477	76,652	77,594	77,072	76,163	76,540	77,579	77,182
Employment	72,733	73,418	73,662	74,085	74,346	74,117	72,737	72,796	73,408	73,877	74,362	73,504	72,787	73,273	73,657
Unemployment	3,349	3,527	3,606	3,094	3,116	3,371	4,025	3,681	3,244	3,717	2,710	2,659	3,753	4,306	3,525
Unemployment Rate	4.4%	4.6%	4.7%	4.0%	4.0%	4.4%	5.2%	4.8%	4.2%	4.8%	3.5%	3.5%	4.9%	5.6%	4.6%

*\* Note: Data shown for 15 most recently available months*

Data: Bureau of Labor Statistics

## Monroe County Job Posting Data by Occupation Group\* Over Time

	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Change Over Time	Annual Change Q1 2016-Q1 2017	Quarter Growth Q4 2016-Q1 2017
Total Postings	1,841	1,694	3,196	2,940	2,494		35.5%	47.2%
Agriculture	25	24	30	29	31		24.0%	29.2%
Business & finance	141	112	169	172	175		24.1%	56.3%
Construction	30	31	28	19	26		-13.3%	-16.1%
Customer service	403	414	567	675	727		80.4%	75.6%
Education	16	48	58	52	28		75.0%	-41.7%
Energy	45	26	93	55	60		33.3%	130.8%
Engineers & designers	107	76	187	123	95		-11.2%	25.0%
Health care	176	110	647	550	254		44.3%	130.9%
Information technology	47	70	95	101	106		125.5%	51.4%
Skilled trades & technicians	101	95	115	102	120		18.8%	26.3%
Transportation, distribution, and logistics	249	353	644	340	275		10.4%	-22.1%

*\*Note: Some overlap exists between groups, the occupational groups are not mutually exclusive. Thus, postings should not be added from one group to another but instead should be analyzed on their own.*

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