



# ST. CLAIR COUNTY

## WIN Quarterly Report



# Introduction: St. Clair County

## Introduction to geography and report

The Workforce Intelligence Network (WIN) partnership is a collaboration of Michigan Works! Agencies (MWAs) and community colleges across a 16 county region in Michigan. The counties in the 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. Prosperity Region 6 includes: St. Clair, Genesee, Shiawassee, Huron, Lapeer, Tuscola, and Sanilac counties.

This report highlights labor market information and real-time job posting data for St. Clair 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:

- Skilled trades (page 7)
- Customer service (formerly retail & hospitality) (page 12)
- Information technology (page 17)
- Health care (page 22)
- Energy (page 27)

Data analyzed includes:

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



# Introduction: St. Clair County

## Key findings

### 1. St. Clair County employers are hiring.

Online job postings in the county were up 12% in Q1 2016 to 1,730 from 1,461 posted in Q4 2015. Quarter-to-quarter increases in employer demand help to slowly grow employment in the county. (See page 4 for details).

### 2. St. Clair County's unemployment rate is at 7.1%, the lowest Q1 rate since before 2003.

Over 1,600 St. Clair workers joined the labor force in Q1 2016, an increase of 2.2%. Employment grew just 1.2% during the same period, meaning that the unemployment rate increased but is lower than other Q1 rates over the past 13 or more years. (See page 4 for details).

### 3. Health Care occupations offer steady employment and high wages to St. Clair County workers.

Employment in the Health Care occupations continues to grow slowly but steadily in St. Clair County. Some of the most in-demand Health Care jobs in the county, like registered nurses, offer workers high wages after completing a two-year degree. (See page 22 for details).

### 4. Customer Service occupations employ over 30,000 St. Clair County workers.

Along with large employment numbers, St. Clair County employers are also posting large numbers of job ads for Customer Service workers. There were 429 online job postings for these occupations during Q1 2016. (See page 12 for details).

### 5. The demand for Skilled Trades workers in advanced manufacturing in St. Clair County continues to grow.

St. Clair County employers posted 66 online job ads for Skilled Trades workers during Q1 2016, up from 50 in Q4 2015. Many of the most in-demand Skilled Trades jobs in the county offer median wages greater than \$17 per hour, according to the Bureau of Labor Statistics. (See page 7 for details).

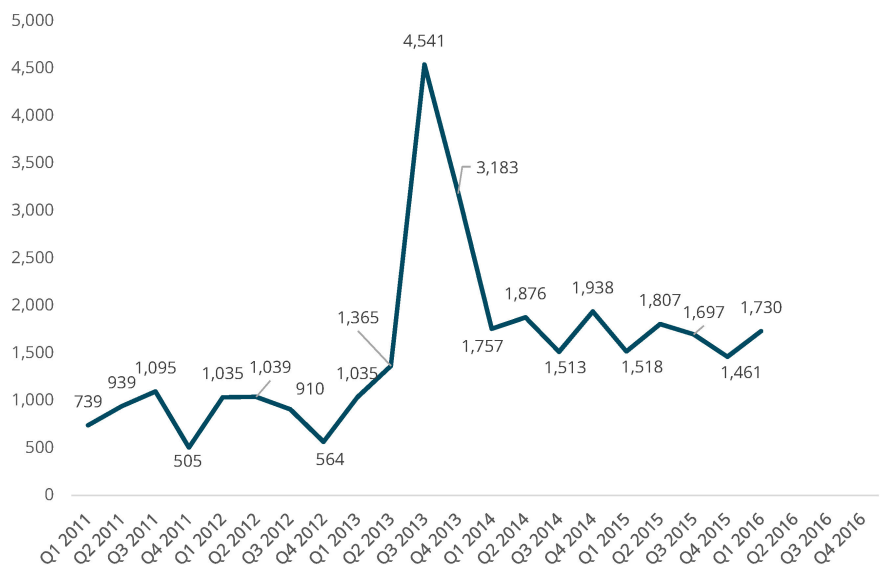


# Executive Summary

## Postings Over Time

Online job postings by St. Clair County employers during Q1 2016 were up 12% over Q1 2015 numbers. Employers in the county posted 1,730 online job ads between January and March 2016. This number is also slightly higher than the 2015 average of 1,620 postings per quarter. Employer demand, approximated by these online postings, has leveled off around this quarterly average after a spike at 4,541 online job postings in Q3 2013.

## Total Online Job Postings Q1 2011 - Q1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

## Labor Force, Employment, & Unemployment

St. Clair County's labor force grew by 1,616 workers from Q4 2015 to Q1 2016, a 2.2% increase to 72,823 workers in the market during Q1. Employment between quarters grew 1.2% in St. Clair County with 68,601 workers employed during Q1. With labor force numbers growing faster than employment 5,222 St. Clair County workers were unemployed during Q1 2016, an unemployment rate of 7.1% for the quarter. The unemployment rate for 2016 to-date is also at 7.1%, the same as 2015's annual rate. Overall, the unemployment rate in the county has decreased from 16.4% in 2010 and employment has grown by almost 4,000 jobs in the same time period.

## Labor Force, Employment, Unemployment Rate

January 2008 - March 2016



Data: BLS  
Analysis: Workforce Intelligence Network



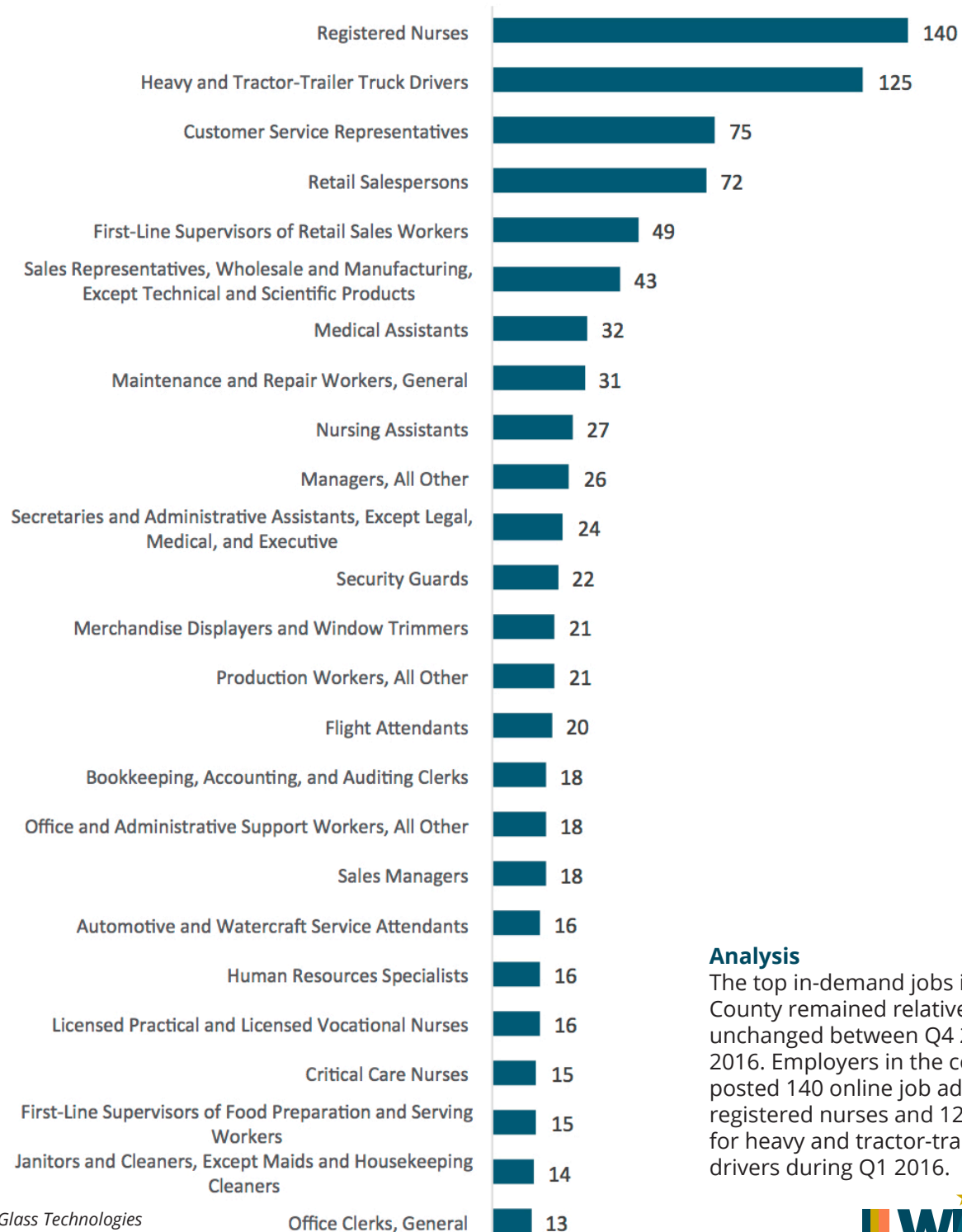


Most in-demand:  
registered nurses

7.1%  
unemployment  
rate

### Top Jobs In Demand

Quarter 1 2016



### Analysis

The top in-demand jobs in St. Clair County remained relatively unchanged between Q4 2015 and Q1 2016. Employers in the county posted 140 online job ads for registered nurses and 125 postings for heavy and tractor-trailer truck drivers during Q1 2016.



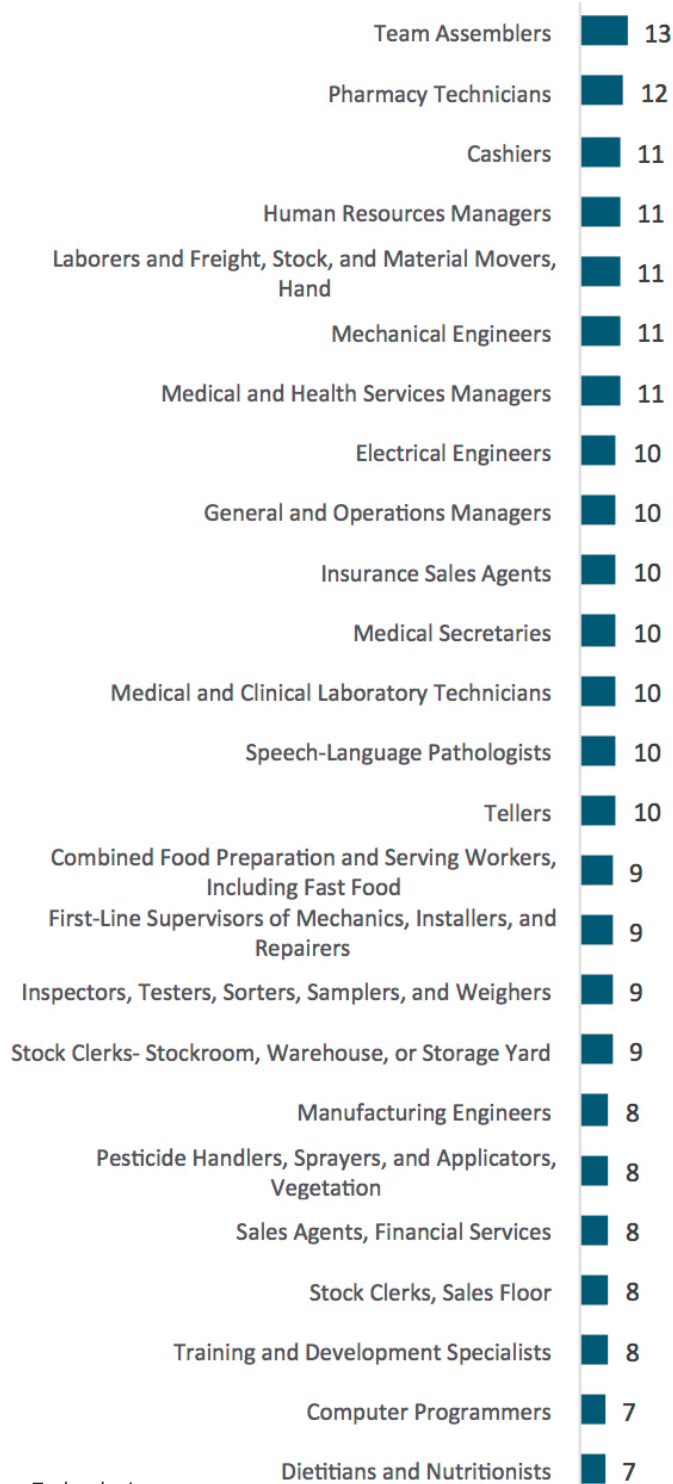
Now hiring:  
1,700 job postings



Demand for: customer service,  
retail sales, wholesale

### Top Jobs In Demand

Quarter 1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



# Skilled Trades & Technicians (Manufacturing Focused)

## Introduction

### Skilled Trades & Technicians

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.

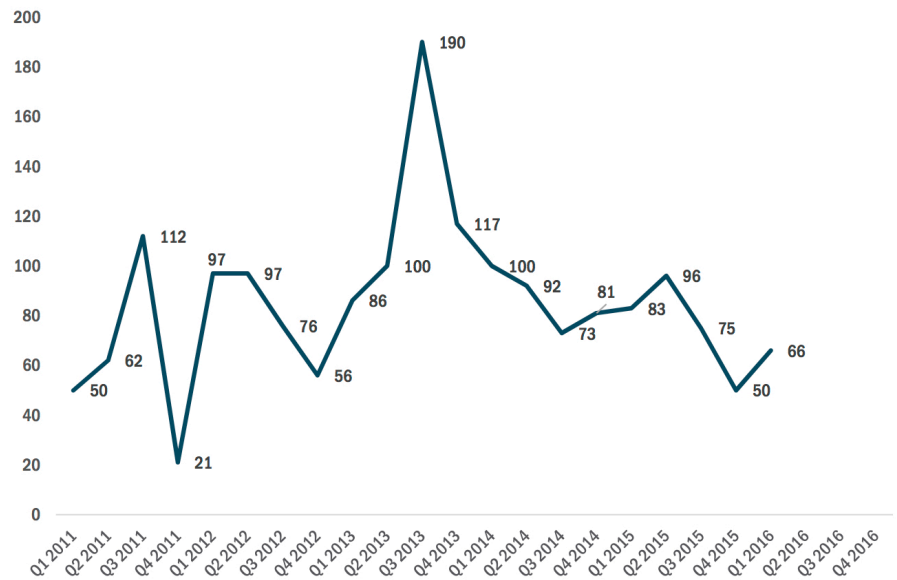
### Postings Over Time

St. Clair County advanced manufacturing employers looking to hire Skilled Trades workers posted 66 online job ads during Q1 2016. This is a 32% increase over the 50 job postings in St. Clair for this occupation group during Q4 2015. A year ago, though, St. Clair employers posted 83 online job ads for these workers, indicating more hiring. Generally, employer demand for Skilled Trades workers in St. Clair County has leveled off between 50 and 100 postings per quarter since a spike at 190 postings in Q3 2013.

### Employment Over Time

As job postings for Skilled Trades occupations in St. Clair County tend to be quite volatile quarter-to-quarter, employment has steadily grown each year since the low at 1,944 employees in 2009. In 2016, 2,861 St. Clair County workers are employed in Skilled Trades jobs, a 47% increase over the 2009 recession low and still a 2% increase over 2015's employment numbers.

### Online Job Postings



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Employment Over Time



Data: EMSI, BLS  
Analysis: Workforce Intelligence Network



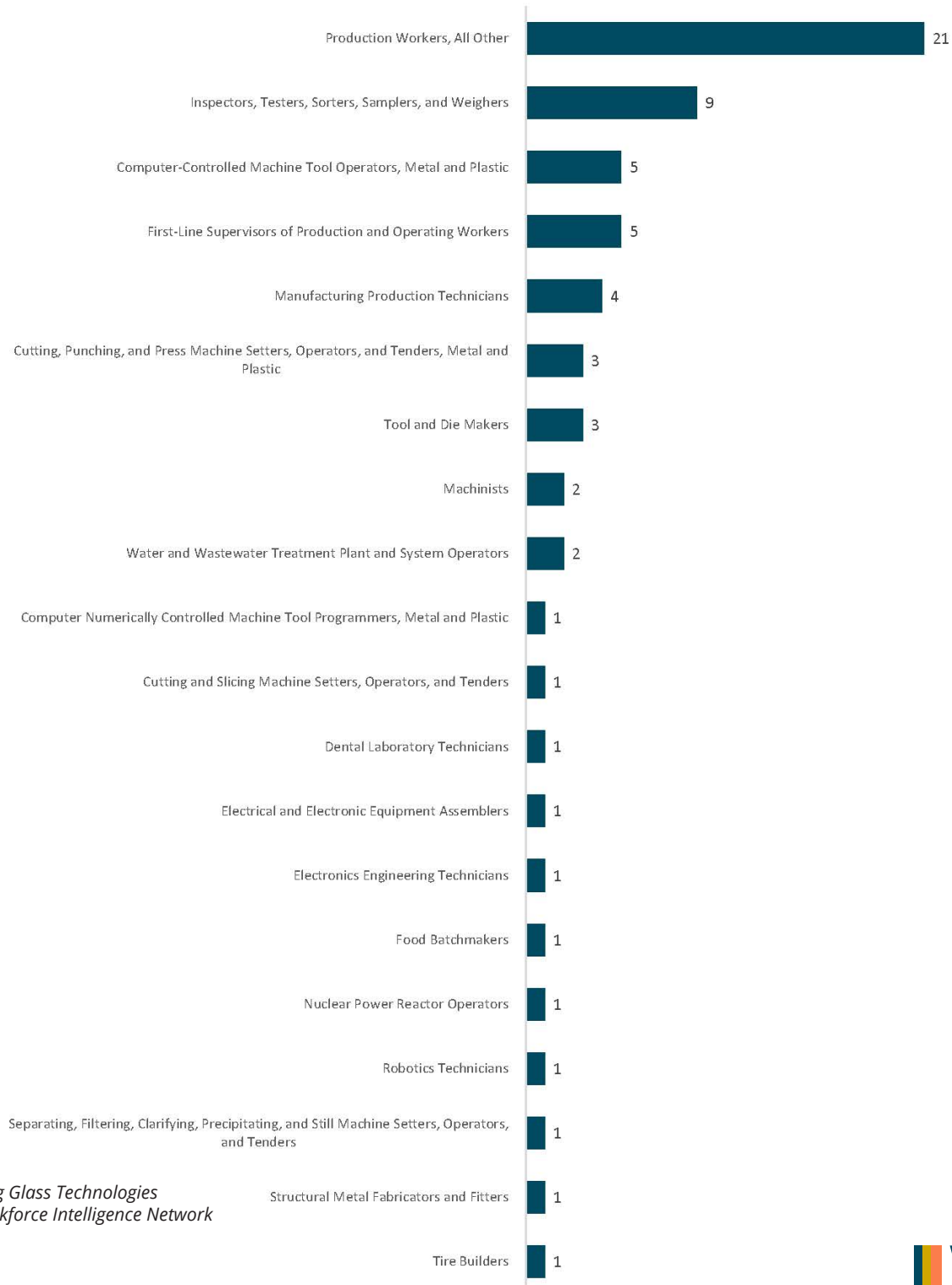
Now hiring:  
66 online job postings



Education required:  
HS diploma & training

### Skilled Trades & Technicians Top Jobs

Quarter 1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Experience required:  
less than 5 years

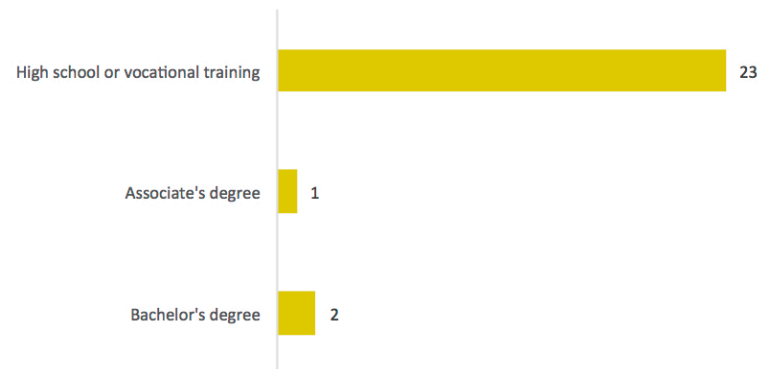
56%  
ads for full-time positions

### Skilled Trades & Technicians Educational Attainment & Experience Required

Only 25 of the 66 Q1 Skilled Trades job postings specified a desired level of educational attainment. The distribution of these requirements can be seen in the graph to the right: almost all jobs are attainable with a high school diploma and/or some vocational training. Most employer require training outside of high school but not all training results in a formal credential. Only 2 postings explicitly requested that applicants hold a bachelor's degree – these postings tend to be for management roles within the Skilled Trades occupations.

A similar number of job ads specified a desired experience level for Skilled Trades workers. The data show that most Skilled Trades jobs available in St. Clair County are within reach for workers with less than 5 years of experience (23 postings during Q1). Again, those jobs requiring more experience, 6 years and beyond, are likely for some management occupations included in this group.

### Minimum Educational Attainment Required Q1 2016

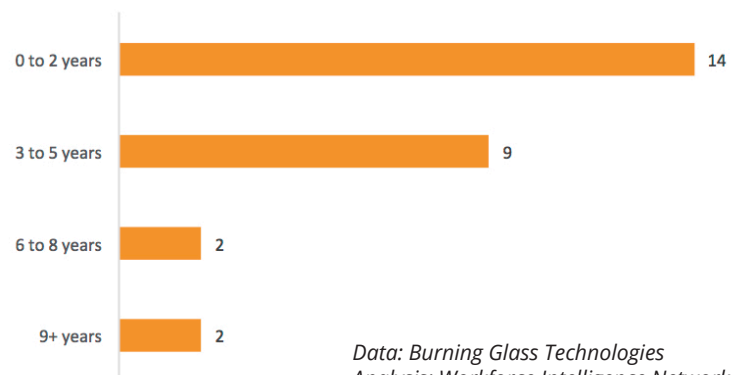


Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Areas of Study in-Demand Q1 2016

- Analytical chemistry
- Chemistry
- Mechanical engineering

### Experience Required Q1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



employment growth every  
year since 2009

\$17

median hourly earnings  
in Skilled Trades

### Skilled Trades & Technicians in-Demand Skills Q1 2016

The occupations in the Skilled Trades group require a wide array of technical skills, like computer numerical control (CNC), along with more foundational skills. Job postings in the Skilled Trades occupation group for Q1 2016 listed required knowledge or experience in inspection, repair, and scheduling. Employers are also seeking foundational skills in mathematics, and a demonstrated ability to solve problems and communicate well from their job candidates. Many Skilled Trades jobs also require some degree of physical demand.

#### in-Demand Technical Skills

- Inspection
- Repair
- Scheduling
- Computer Numerical Control (CNC)
- Mathematics

#### In-Demand Foundational Skills

- Communication Skills
- Problem Solving & Troubleshooting
- Organizational Skills
- Physical Demand
- Computer Skills (Microsoft Office)

#### Job Type

- Temporary: 4.5%
- Full-time: 56.1%
- Part-time: 3.0%

#### Certifications In-Demand

- Electrical certification (e.g. installation)
- Master Electrician License
- Professional Engineer License
- Tool and die certification
- U.S. Department of Labor certification



In-demand skills:  
CNC, tool and die



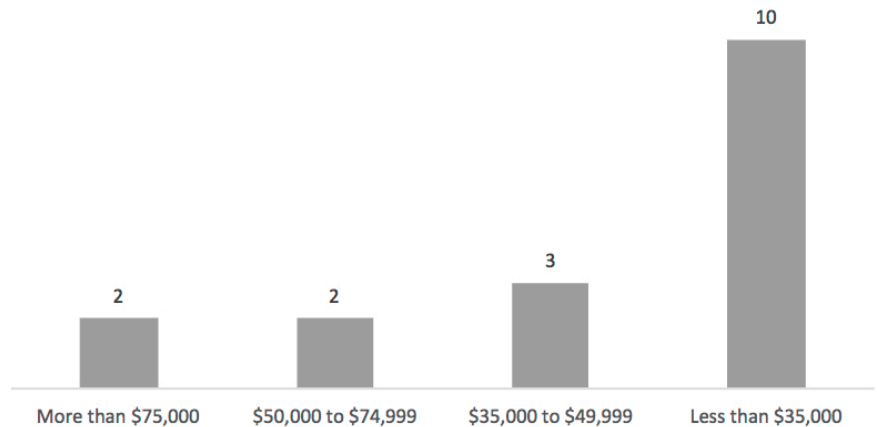
Mean advertised salary:  
\$37,433

## Skilled Trades & Technicians Wages

Seventeen of the 66 Skilled Trades job postings in St. Clair County during Q1 2016 specified a wage or salary range. The majority of those (10 postings) offered wages that amount to less than \$35,000 a year, or less than \$17 per hour. The Skilled Trades occupations tend to be some of the lowest paying in southeast Michigan and across the country. Wage data from the Bureau of Labor Statistics show a slightly rosier story: only three of the top in-demand Skilled Trades occupations for St. Clair workers make less than \$17 per hour at the median. The highest paid occupations in the group are in management, like first-line supervisors of production workers, and engineering, like manufacturing production technicians, roles.

## Advertised Salaries

Quarter 1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

## Wage Data from Bureau of Labor Statistics 2015

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
51-9199	Production Workers, All Other	\$9.37	\$12.66	\$14.93	\$16.65	\$19.66
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$8.72	\$10.26	\$13.84	\$20.43	\$25.45
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$10.05	\$12.45	\$18.25	\$20.85	\$24.92
51-1011	First-Line Supervisors of Production and Operating Workers	\$14.86	\$19.02	\$25.89	\$33.69	\$41.20
17-3029	Manufacturing Production Technicians	\$14.66	\$20.00	\$27.52	\$33.08	\$42.71
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	\$8.80	\$10.31	\$13.02	\$16.75	\$22.99
51-4111	Tool and Die Makers	\$14.16	\$17.83	\$22.68	\$29.08	\$32.00
51-4041	Machinists	\$10.45	\$13.31	\$17.28	\$23.00	\$27.28
51-8031	Water and Wastewater Treatment Plant and System Operators	\$15.83	\$18.68	\$21.86	\$24.67	\$26.35
51-4012	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	\$13.82	\$16.16	\$20.53	\$25.10	\$29.77

Data: EMSI, BLS  
Analysis: Workforce Intelligence Network



## Introduction

### Customer Service

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.

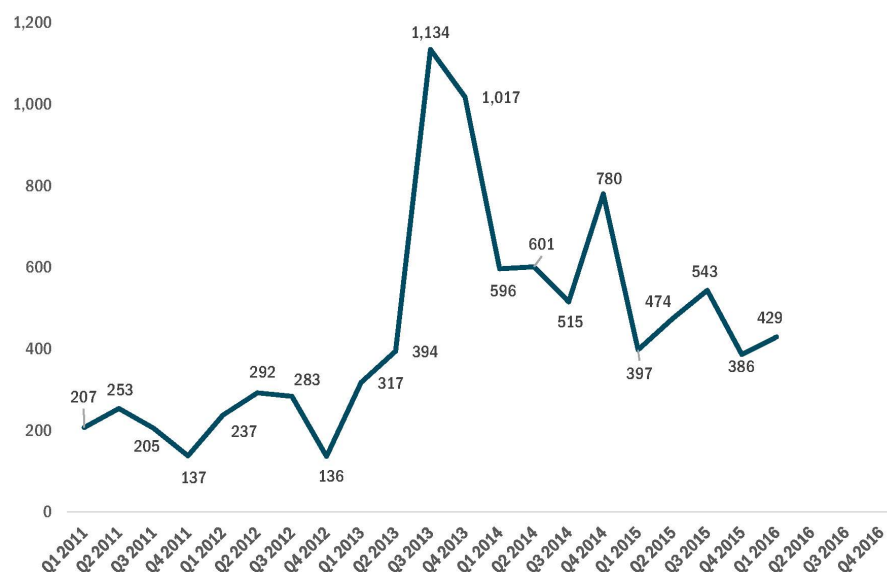
### Postings Over Time

Online job postings for Customer Service occupations in St. Clair County increased 11% between Q4 2015 and Q1 2016, from 386 to 429 postings. The number of postings that St. Clair area employers post for Customer Service workers fluctuates each quarter, but postings have trended downward since a peak in demand in Q3 2013 at 1,134 postings. Postings are typically highest in Q4, so the increase in Q1 2016 postings over Q4 2015 numbers may indicate a trend toward higher postings and growth in employment.

### Employment Over Time

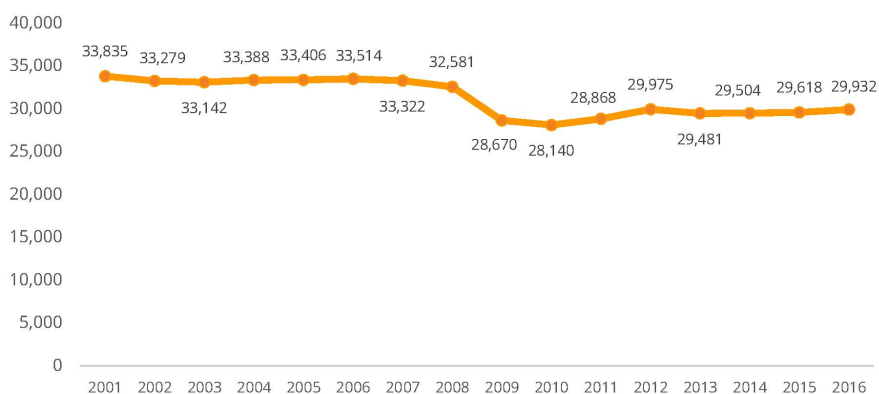
Employment in the Customer Service occupations in St. Clair County is around 29,932 in 2016. Pre-recession employment numbers hovered around 33,000 and dipped to 28,140 in 2010, at the lowest point. The 29,932 employees in 2016 represent a 6% increase over the 2010 low. Customer Service employment, however, has not grown much since reaching the 29,000 mark again in 2012.

### Online Job Postings



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Employment Over Time



Data: EMSI, BLS  
Analysis: Workforce Intelligence Network



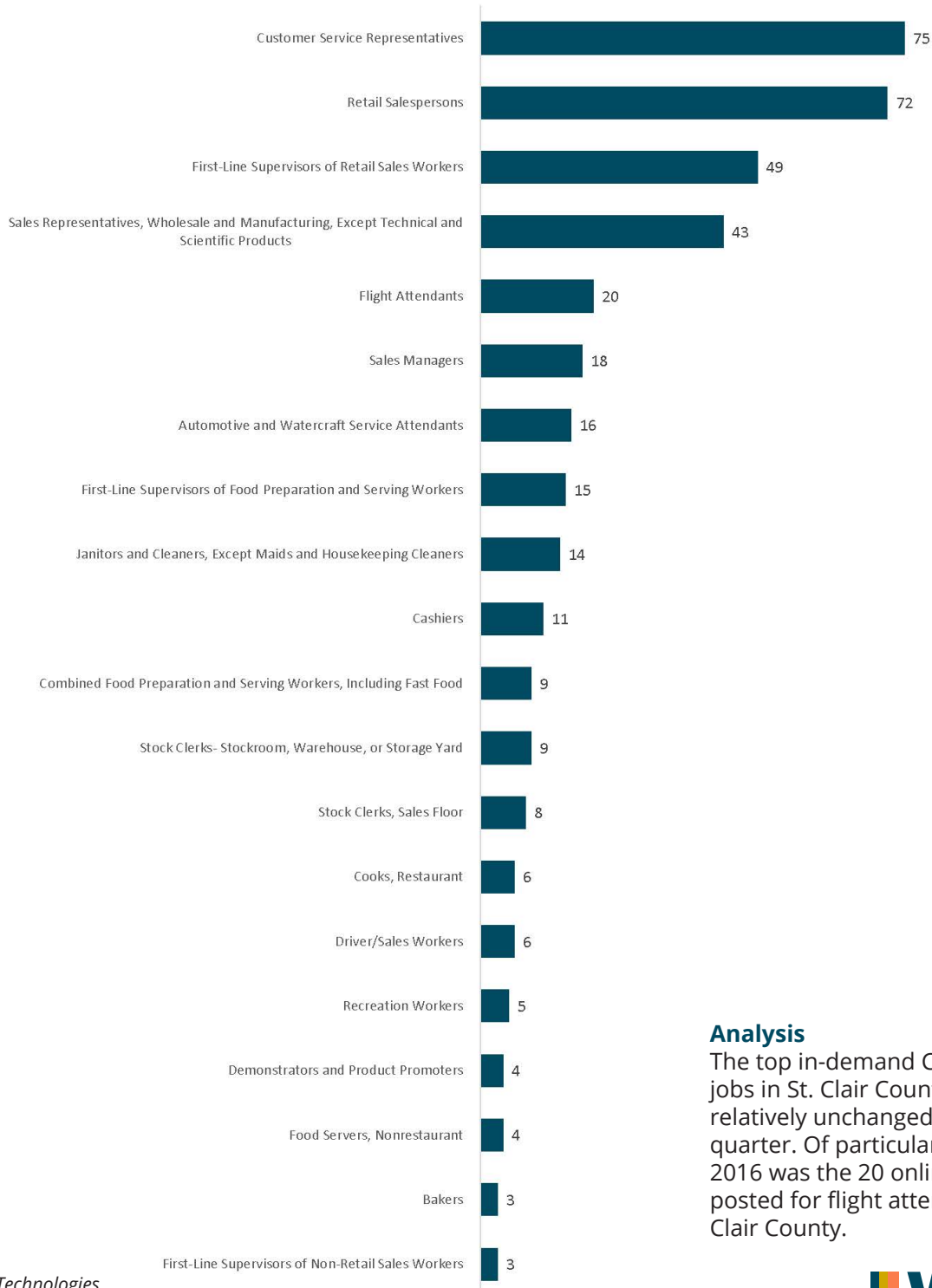


Now hiring:  
429 Customer Service job ads



Education required:  
HS diploma

### Customer Service Top Jobs Quarter 1 2016



#### Analysis

The top in-demand Customer Service jobs in St. Clair County remain relatively unchanged from quarter to quarter. Of particular note during Q1 2016 was the 20 online job ads posted for flight attendants in St. Clair County.



Experience required:  
less than 2 years

30,000

Customer Service employees  
in St. Clair County

### Customer Service Educational Attainment & Experience Required

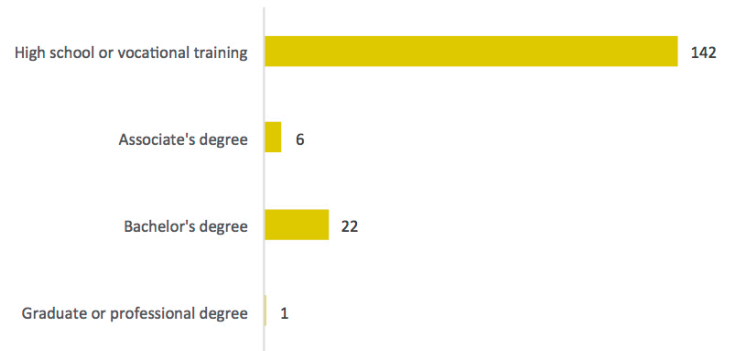
Of the 429 online job ads posted for Customer Service occupations in St. Clair County, 171 specified a desired minimum level of educational attainment for job applicants. Most Customer Service group jobs are available to workers with a high school diploma and/or some vocational training (142 postings). Twenty-two job postings required a bachelor's degree – in the Customer Service group, these are likely for managerial roles and higher-level sales representative jobs that may require knowledge of technical products.

Similarly, 148 Customer Service job postings specified the level of experience required for candidates. Again, most Customer Service jobs do not require extensive experience, with 115 ads open to applicants with 0 to 2 years of experience. The 10 job ads that required more than 6 years of experience are likely for occupations like sales managers.

### Areas of Study in-Demand Q1 2016

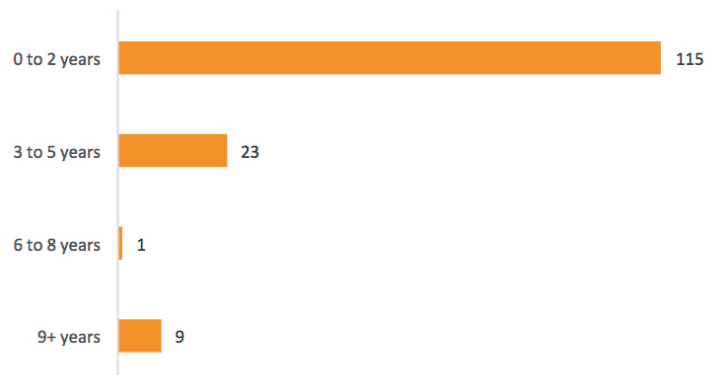
- Business administration and management
- Engineering
- Chemistry
- Computer science
- Food technology and processing

### Minimum Educational Attainment Required Q1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Experience Required Q1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Now hiring:  
flight attendants

36%

online job postings for  
full-time positions

### Customer Service in-Demand Skills Q1 2016

St. Clair County employers looking to hire Customer Service workers in Q1 2016 were focused on recruiting for baseline skills that include communication, building effective relationships, and time management. More specialized skills and experiences being sought included previous experience with customer service in a retail setting, store management, merchandising, and meeting sales goals.

#### In-Demand Technical Skills

- Customer service, experience in a retail setting
- Sales
- Store management
- Merchandising
- Sales goals and data entry

#### In-Demand Foundational Skills

- Communication skills
- Computer skills (Microsoft Office)
- Building effective relationships
- Physical demand
- Time management

#### Job Type

- Temporary: 6.5%
- Full-time: 35.9%
- Part-time: 13.9%

#### In-Demand Certifications

- ServSafe
- Automotive Service Excellence (ASE) certification
- Alcohol server certification
- Commercial Driver's License (CDL)
- Registered Dietitian (RD)



## In-demand: serving & alcohol certifications



## In-demand: Commercial Driver's License

### Customer Service Wages

Forty-four of the 66 Customer Service jobs postings in St. Clair during Q1 2016 specified a salary range or hourly wage. The majority of those postings (30 ads) stated wages that equate to annual earnings less than \$35,000, or wages less than \$17 per hour. Wage data from the Bureau of Labor Statistics confirms the trend from the postings. Six of the top 10 in-demand jobs in the group have median wages less than \$17 per hour.

### Advertised Salaries Quarter 1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Wage Data from Bureau of Labor Statistics 2015

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
43-4051	Customer Service Representatives	\$8.16	\$10.09	\$13.24	\$16.82	\$21.28
41-2031	Retail Salespersons	\$8.15	\$8.70	\$9.82	\$12.72	\$18.53
41-1011	First-Line Supervisors of Retail Sales Workers	\$10.82	\$13.37	\$17.07	\$22.08	\$27.65
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$10.89	\$16.13	\$23.96	\$36.13	\$51.15
53-2031	Flight Attendants	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
11-2022	Sales Managers	\$26.59	\$35.71	\$49.02	\$66.03	\$102.24
53-6031	Automotive and Watercraft Service Attendants	\$8.15	\$8.69	\$9.60	\$11.03	\$13.00
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	\$8.15	\$9.58	\$12.73	\$17.45	\$21.88
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$8.22	\$8.93	\$10.76	\$13.91	\$17.42
41-2011	Cashiers	\$8.15	\$8.64	\$9.48	\$11.35	\$14.79

Data: EMSI, BLS  
Analysis: Workforce Intelligence Network

# Information Technology (IT)

## Introduction

### Information Technology (IT)

Information technology jobs include occupations that are associated with entry level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services. While the information technology group does not currently meet the employment levels of the others, it is quickly growing.

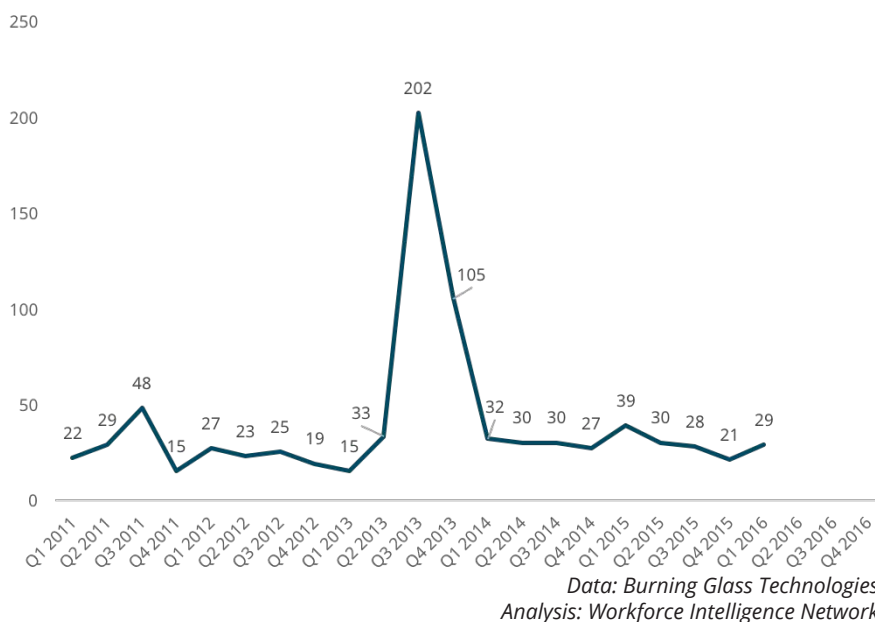
### Postings Over Time

St. Clair County employers posted 29 online job ads for Information Technology (IT) workers during Q1 2016. This is a negligible increase from the 21 ads posted in Q4 2015 – quarterly postings for this occupation group have hovered between 20 and 30 since Q1 2014. The stagnation of job postings at low levels have affected employment in these IT occupations.

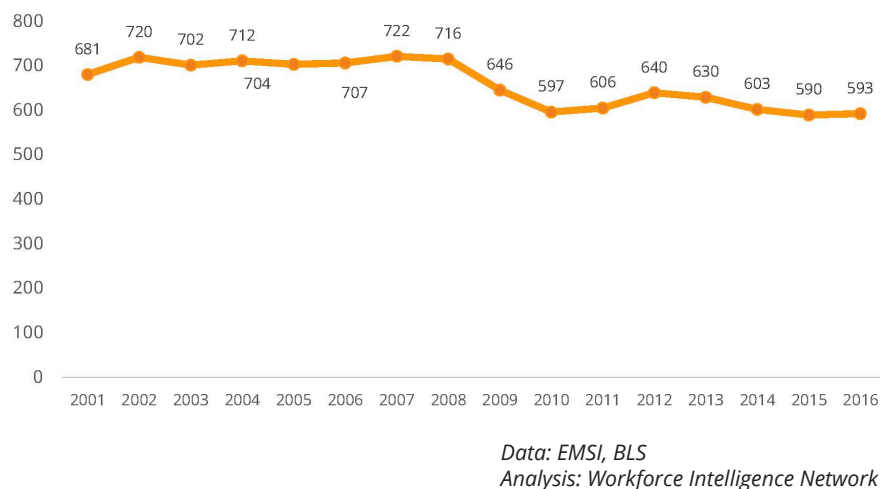
### Employment Over Time

Only 593 St. Clair County workers are employed in Information Technology occupations in 2016. While employment in many of the county's other occupation groups has begun to recover post-recession, the 593 employee estimate for 2016 is similar to the 597 employed in 2010 at the trough of Great Recession employment. IT employment rebounded to 640 in 2012 but has decreased every year since, save for the negligible addition of 3 jobs from 2015 to 2016.

### Online Job Postings



### Employment Over Time



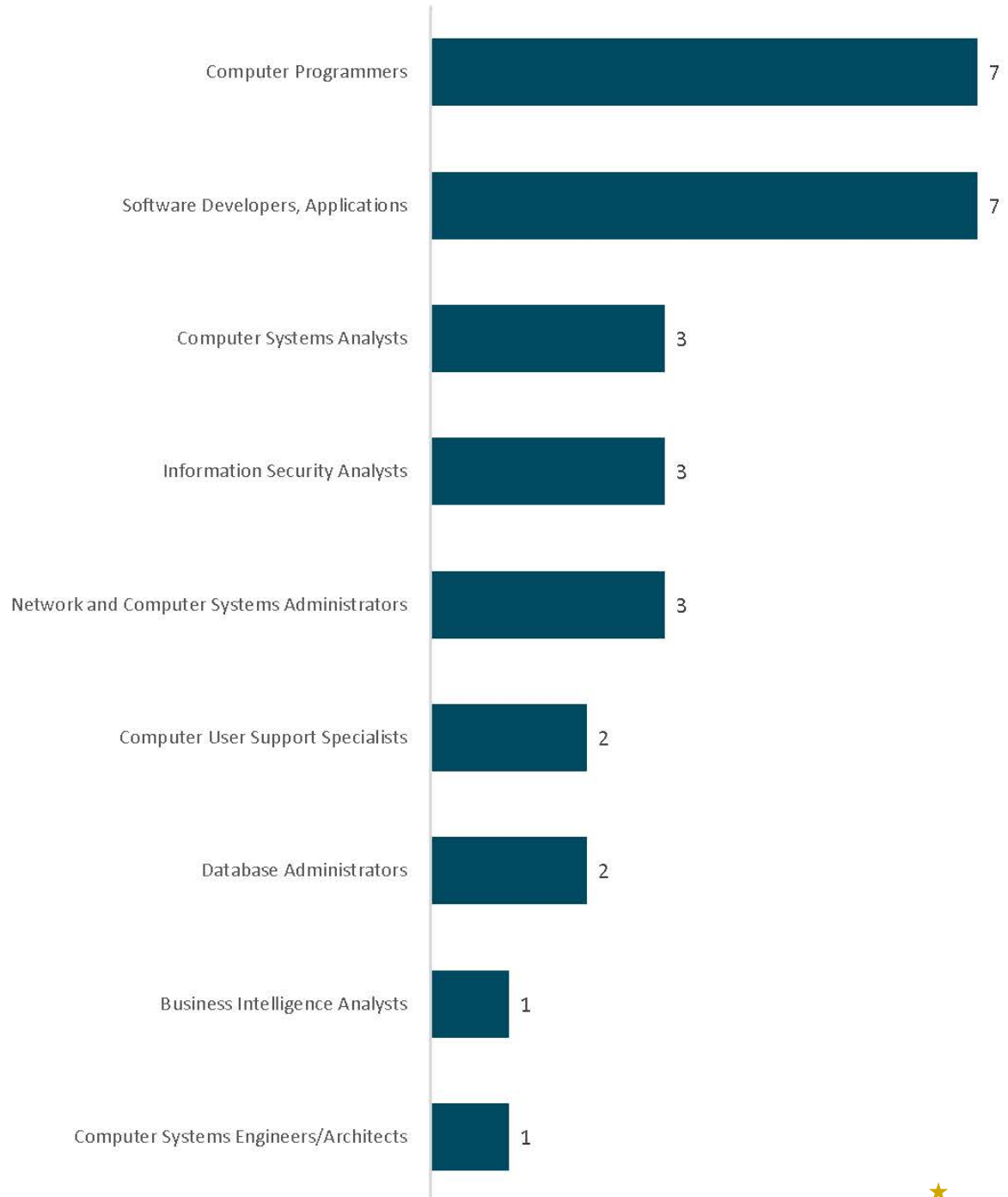


27 IT postings per  
quarter on average



Employment in IT  
occupations declining

**Information Technology (IT)**  
**Top Jobs**  
Quarter 1 2016





Advertised salaries:  
over \$75,000

29

Information Technology  
job ads

### Information Technology (IT) Educational Attainment & Experience Required

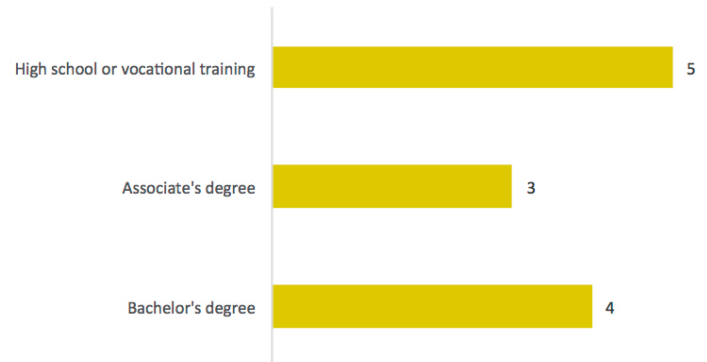
Of the 29 online job ads posted for Information Technology occupations in St. Clair County, just 12 specified a desired minimum level of educational attainment for job applicants. Traditionally, employers looking to hire for some of the most in-demand IT occupations, like software developers, seek candidates with a bachelor's degree. Four Q1 2016 job ads required a bachelor's degree. Many other IT jobs are within reach for applicants willing to undertake some vocational training or complete an associate's degree.

The Information Technology jobs open in St. Clair County require more prior experience, according to job posting data. Sixteen of the 29 IT job postings from Q1 2016 required 3 to 5 years of experience. Another large fraction of the postings, 5 of 29, were open to entry level workers with less than 2 years of experience.

### Areas of Study in-Demand Q1 2016

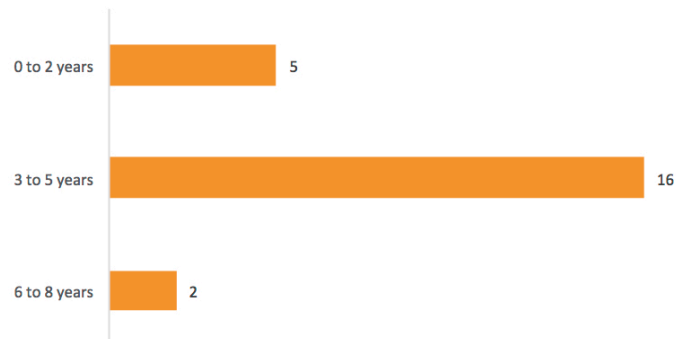
- Computer science
- Management information systems
- Information science
- Health professions and related programs
- Business administration and management

### Minimum Educational Attainment Required Q1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Experience Required Q1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



In-demand skills: project management, business process

> \$30  
median hourly wages

### Information Technology (IT) in-Demand Skills Q1 2016

St. Clair County employers looking to hire Information Technology workers during Q1 2016 sought foundational skills like those in communication and teamwork, basic computer skills, and research and writing skills. Many of the most in-demand IT jobs in St. Clair County also require good customer service skills. These basic skills should be paired with more technical or specialized skills like providing technical support. Many of Q1's job postings also emphasized management skills like project management and business process and change management.

#### In-Demand Technical Skills

- Project management
- Robotics
- Experience in the materials handling industry
- Technical support
- Business process, change management

#### In-Demand Foundational Skills

- Communication skills, teamwork, collaboration
- Computer Skills: Microsoft Office
- Research
- Writing
- Customer service

#### Job Type

- Temporary: 3.4%
- Full-time: 51.7%
- Part-time: 6.9%

#### Certifications In-Demand

- Certified A+ Technician
- American Registry of Radiologic Technologists (ARRT)





In-demand:  
project management skills



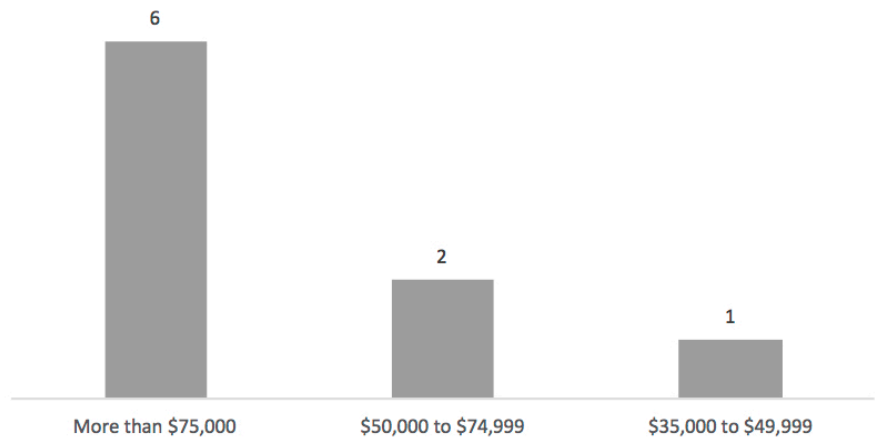
Education required:  
bachelor's degree

### Information Technology (IT) Wages

Information Technology occupations are some of the highest paying in southeast Michigan. Only 9 Q1 job ads posted a salary range, but of those that did, 6 offered more than \$75,000 a year. Of the postings that specified earnings, none advertised a salary less than \$35,000 per year. Bureau of Labor Statistics data confirm that IT occupations pay well: all of the top in-demand IT jobs in St. Clair County offer wages over \$20 per hour, and 8 of the top 9 offer wages over \$30 per hour. These wages calculate to an annual salary of over \$62,000 a year.

### Advertised Salaries

Quarter 1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Wage Data from Bureau of Labor Statistics 2015

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
15-1131	Computer Programmers	\$23.22	\$28.15	\$32.40	\$40.22	\$48.14
15-1132	Software Developers, Applications	\$20.87	\$25.41	\$33.12	\$42.96	\$51.68
15-1121	Computer Systems Analysts	\$19.30	\$26.50	\$34.17	\$43.21	\$52.10
15-1122	Information Security Analysts	\$22.32	\$25.51	\$36.22	\$44.19	\$51.02
15-1142	Network and Computer Systems Administrators	\$19.87	\$24.91	\$31.83	\$39.01	\$46.23
15-1151	Computer User Support Specialists	\$11.71	\$15.41	\$20.32	\$27.69	\$35.29
15-1141	Database Administrators	\$19.73	\$26.02	\$35.41	\$44.73	\$53.76
15-1199	Business Intelligence Analysts	\$22.99	\$29.66	\$36.46	\$45.18	\$53.54
15-1199	Computer Systems Engineers/Architects	\$22.99	\$29.66	\$36.46	\$45.18	\$53.54

Data: EMSI, BLS  
Analysis: Workforce Intelligence Network

## Introduction

### Health Care

WIN's health care occupation group includes jobs related to health care support and practitioners. Employment in this group has been consistently growing, more health care workers needed to care for Michigan's aging population and in response to regulatory and other changes. Registered nurses are routinely the most in-demand job in this group.

### Postings Over Time

Along with Customer Service, Health Care is one of the largest occupation groups in St. Clair County. Employers in the county posted 387 online job postings for Health Care workers during Q1 2016. This is a 24% increase over the 312 postings seen in Q4 2015. Employer demand in the Health Care occupations continues to grow in St. Clair County, like in much of southeast Michigan. Increased demand is correlated with growth in employment for these types of workers.

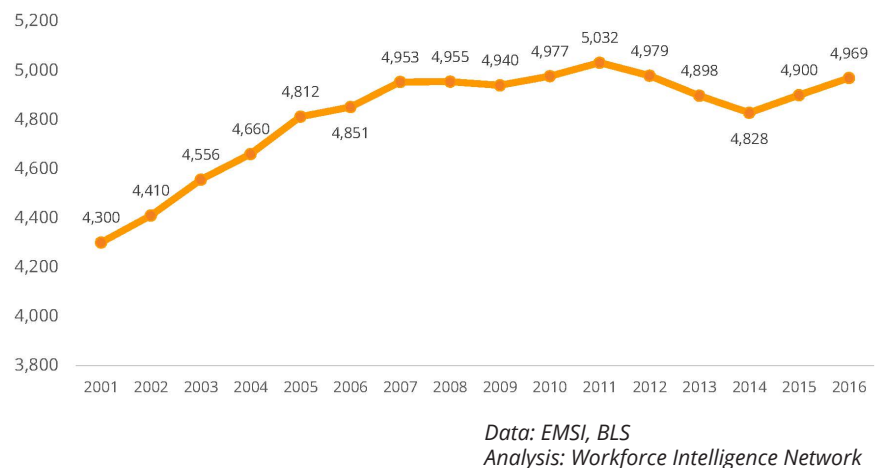
### Employment Over Time

Health Care occupations employed 4,900 workers in St. Clair County during 2015; estimates for 2016 have grown to 4,969. As employer demand, determined by online job ads, has grown steadily over the past 5 years, so has employment.

### Online Job Postings



### Employment Over Time



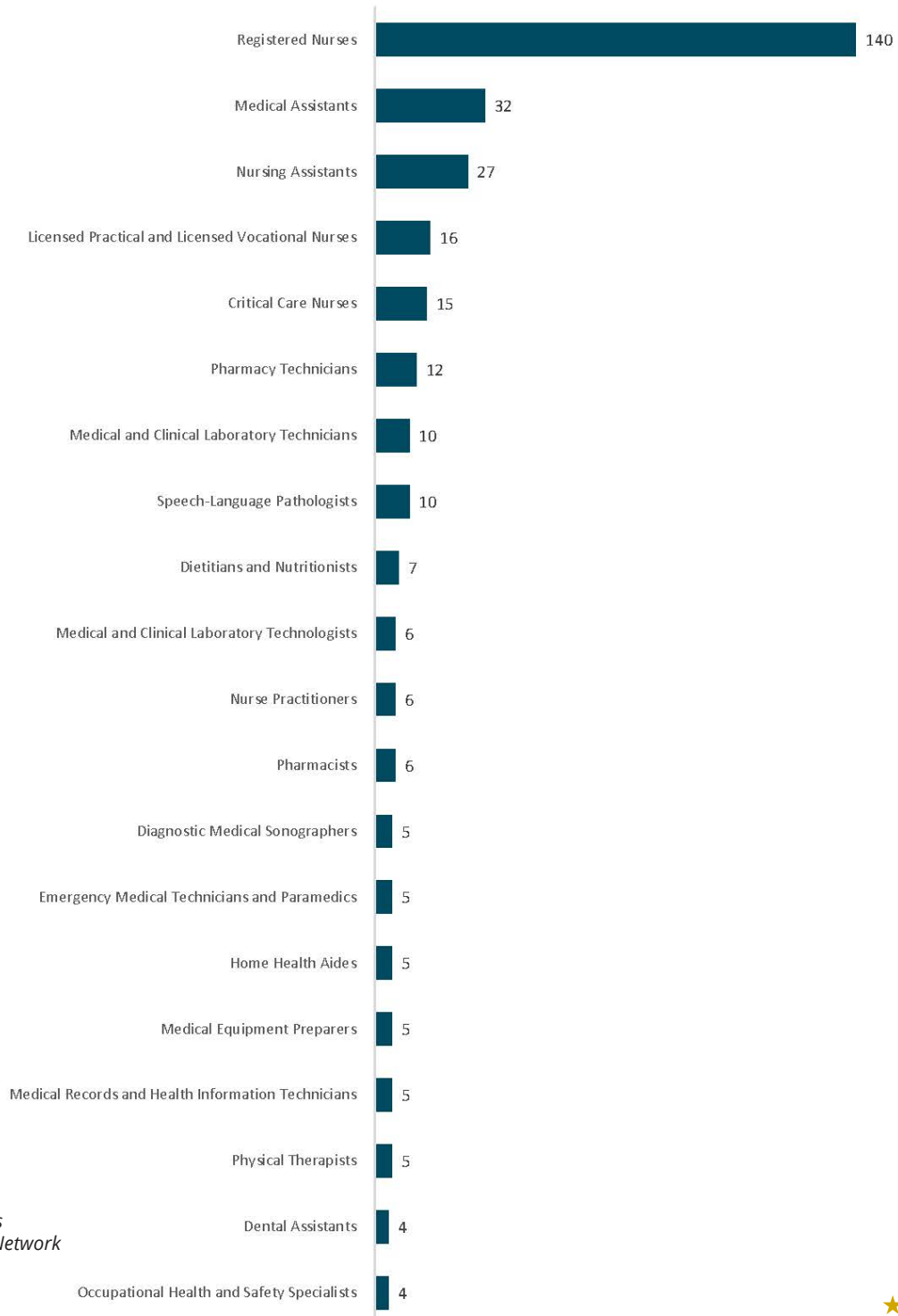


Now hiring:  
387 Health Care job postings



4,900 Health Care workers  
in St. Clair County

**Health Care  
Top Jobs**  
Quarter 1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Education required:  
2-year, associate's degree

24%

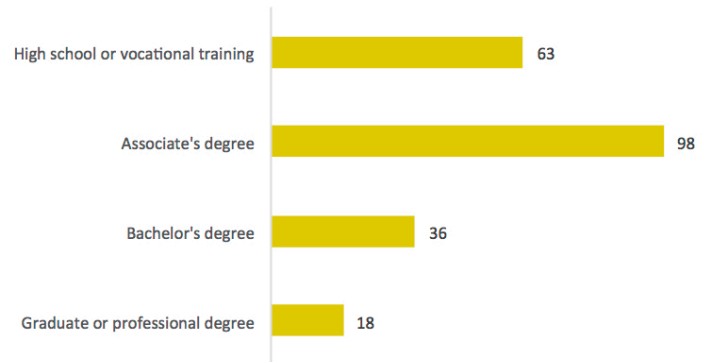
increase in employer demand  
between Q4 and Q1

### Health Care Educational Attainment & Experience Required

Because occupations like registered nurses and medical assistants are the most in-demand Health Care jobs in St. Clair County, most of Q1 2016 job postings did not require more than some vocational training or an associate's degree. With this in mind, though, a large number of Health Care professions are available to workers with higher education (a bachelor's or graduate degree) and offer higher wages.

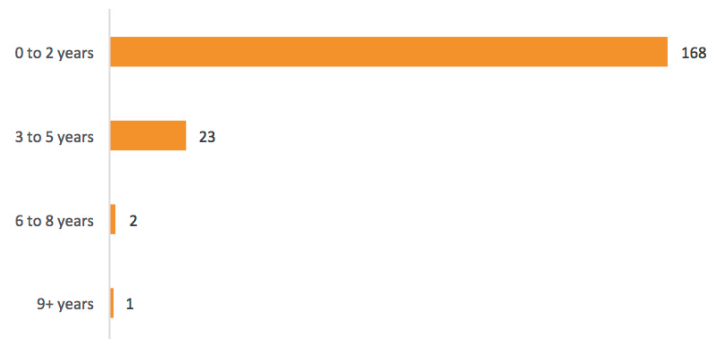
Similar to the demand for applicants with vocational training or an associate's degree, most of the Health Care postings in St. Clair County during Q1 were options for workers with less than 2 years of experience. Entry-level workers (168 postings) are able to secure a job as a medical assistant or registered nurse if they are willing to undertake some short-term training or a degree program.

### Minimum Educational Attainment Required Q1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Experience Required Q1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Areas of Study in-Demand Q1 2016

- Nursing science
- Radiologic technology/science
- Audiology and speech-language pathology
- Biology/biological sciences
- Computer science



Experience required:  
less than 2 years

\$35/hour  
median wage for RNs

### Health Care in-Demand Skills Q1 2016

St. Clair County workers looking to find a job in the Health Care occupations are expected to have good communication skills, problem solving and decision-making skills, and demonstrated organizational and supervisory ability as a prerequisite for employment. Beyond these foundational skills, Health Care employers are seeking job candidates who have experience with specific types of patient care, including neonatal intensive and surgical services, along with skills in patient education and record filing.

#### In-Demand Technical Skills

- Patient care, education, and instruction
- Critical care, neonatal intensive care unit (NICU)
- Record filing
- Cardiopulmonary resuscitation (CPR)
- Surgical services

#### In-Demand Foundational Skills

- Communication skills
- Problem solving and decision making
- Clerical duties and organizational skills
- Quality assurance and control
- Supervisory skills

#### Job Type

- Temporary: 2.1%
- Full-time: 34.9%
- Part-time: 9.8%

#### In-Demand Certifications

- Registered nurse (RN)
- Certified nursing assistant (CNA)
- Emergency medical technician (EMT)
- Basic cardiac life support technician
- Certified medical assistant



Mean advertised salary:  
\$63,067

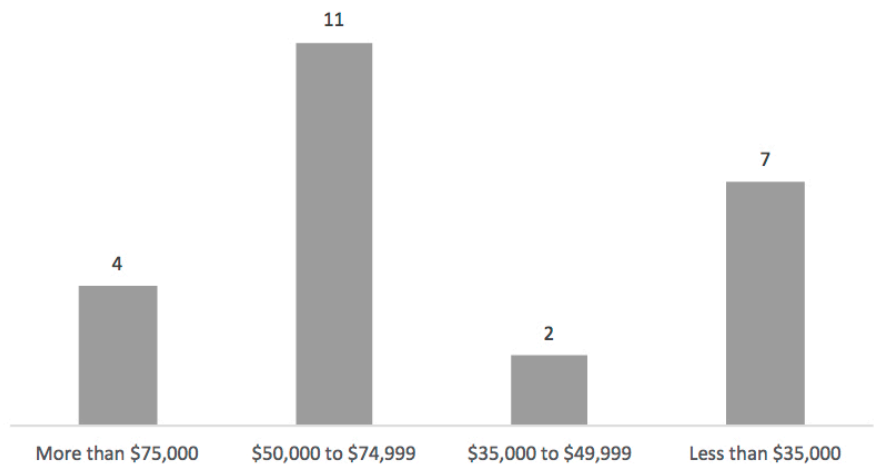


Knowledge areas:  
nursing, speech pathology

## Health Care Wages

Only 24 of the 387 Health Care job postings for Q1 advertised a salary range. Of those that did, 7 offered wages that would amount to a salary of less than \$35,000 a year. Eleven job postings from this quarter offered salaries between \$50,000 and \$75,000 a year. Data from the Bureau of Labor Statistics show that a job in Health Care, like as a registered nurse, can pay \$35 per hour at the median, over \$72,000, for a position that generally requires just a two-year degree.

## Advertised Salaries Quarter 1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

## Wage Data from Bureau of Labor Statistics 2015

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
29-1141	Registered Nurses	\$22.77	\$26.68	\$30.43	\$34.82	\$49.77
31-9092	Medical Assistants	\$9.65	\$11.11	\$12.61	\$14.72	\$16.42
31-1014	Nursing Assistants	\$8.88	\$10.31	\$12.15	\$14.15	\$15.82
29-2061	Licensed Practical and Licensed Vocational Nurses	\$15.22	\$17.92	\$20.98	\$24.15	\$26.18
29-1141	Critical Care Nurses	\$22.77	\$26.68	\$30.43	\$34.82	\$49.77
29-2052	Pharmacy Technicians	\$8.33	\$9.88	\$12.24	\$14.73	\$16.54
29-2012	Medical and Clinical Laboratory Technicians	\$10.61	\$12.13	\$14.64	\$18.86	\$24.61
29-1127	Speech-Language Pathologists	\$23.75	\$28.44	\$33.69	\$45.82	\$80.05
29-1031	Dietitians and Nutritionists	\$18.35	\$21.26	\$23.85	\$26.36	\$30.89
29-2011	Medical and Clinical Laboratory Technologists	\$19.33	\$22.37	\$24.79	\$27.62	\$31.88

Data: EMSI, BLS  
Analysis: Workforce Intelligence Network

## Introduction

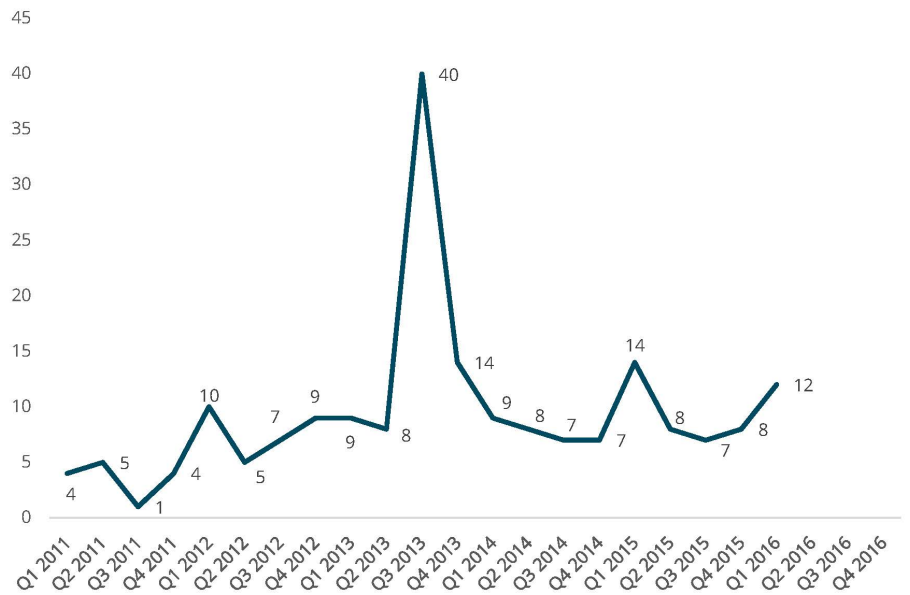
### Energy

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.

### Postings Over Time

St. Clair County employers posted just 12 online job postings in the Energy occupations during Q1 2016. Employer demand for these occupations is generally small, with few postings each quarter. The highest number of postings since the beginning of WIN analysis was 40 ads in Q3 2013.

### Online Job Postings

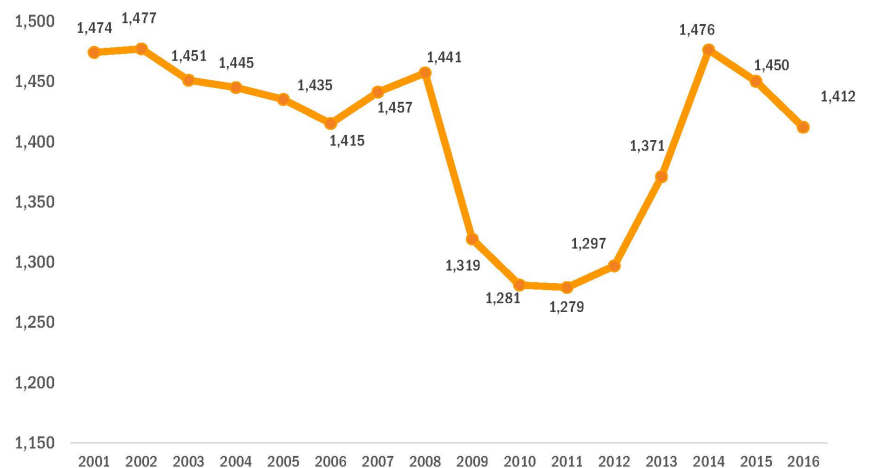


Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Employment Over Time

The data presented in the graph to the right represents St. Clair County's total employment in the Energy industries (NAICS 2111, 2131, 2211, 2212, 2371), not just WIN-designated Energy occupations. In 2016, 1,412 workers are employed in these Energy industries in St. Clair County. Employment in these industries dipped slightly, losing about 200 jobs, during the Great Recession but recovered to 1,476 employees in 2014. Employment numbers have, however, decreased both in 2015 and 2016.

### Employment Over Time



Data: EMSI, BLS  
Analysis: Workforce Intelligence Network

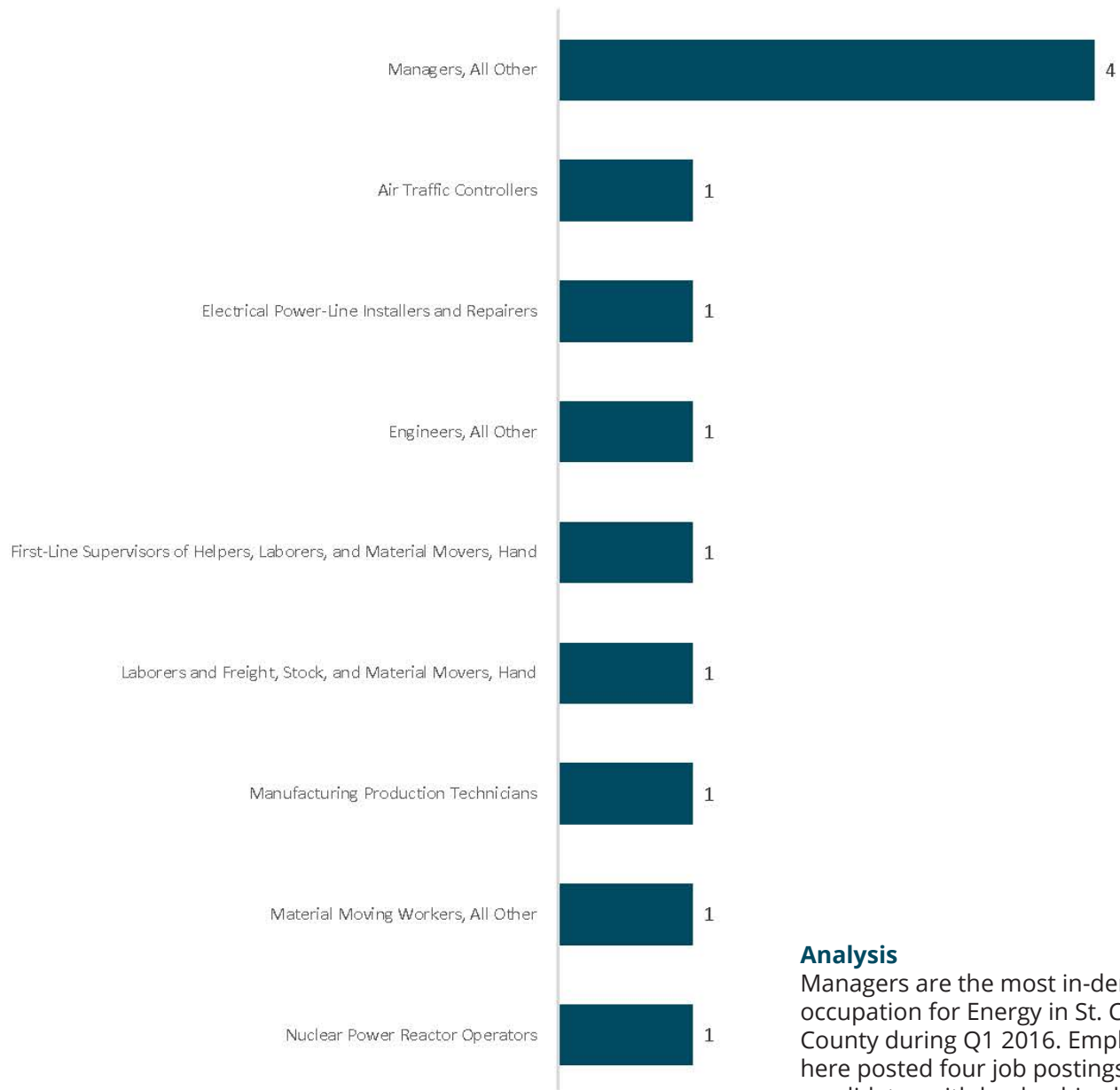


Now hiring:  
12 Energy job postings



Stable employment in  
Energy industry

**Energy  
Top Jobs**  
Quarter 1 2016



**Analysis**

Managers are the most in-demand occupation for Energy in St. Clair County during Q1 2016. Employers here posted four job postings for candidates with leadership skills and experience. Other in-demand Energy occupations include air traffic controllers, electrical power-line installers and repairers, and engineers.

Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network





Education required:  
high school diploma

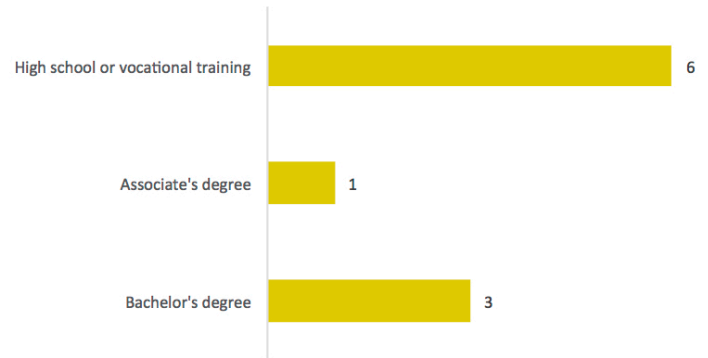
1,400

employment in Energy  
occupations

### Energy Educational Attainment & Experience Required

Data from Q1 2016 online job postings show that most Energy jobs open in St. Clair County are available to workers with a high school diploma and some vocational training (six postings). Three job postings this quarter sought candidates with a bachelor's degree, likely for the in-demand manager occupations. Most job postings were targeted at applicants with less than 5 years of experience, too.

### Minimum Educational Attainment Required Q1 2016

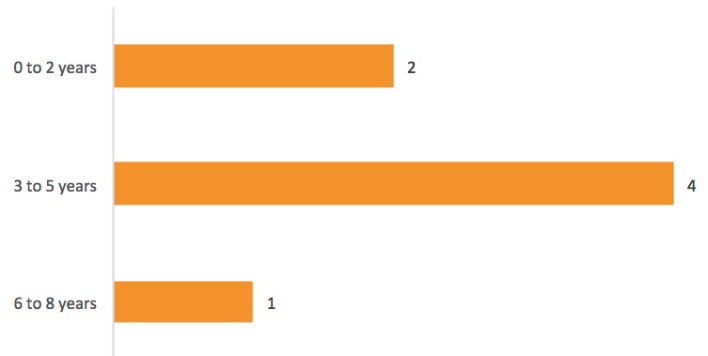


Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Areas of Study in-Demand Q1 2016

- Electrical & electronic engineering technicians
- Engineering (general)
- Mechanical engineering

### Experience Required Q1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Experience required:  
less than 5 years

17%  
ads for temporary positions

### Energy in-Demand Skills Q1 2016

Baseline, employability skills for Energy occupations in St. Clair County include writing, computer skills, organizational skills, and supervisory experience. Employers looking to hire workers for Energy occupations during Q1 2016 sought candidates with project management experience, and technical skills in financial analysis, litigation, and procurement.

#### In-Demand Technical Skills

- Project and contract management, budgeting
- Financial analysis
- Labor relations
- Litigation
- Procurement, supply chain knowledge

#### In-Demand Foundational Skills

- Problem solving
- Writing
- Computer skills
- Organizational skills
- Supervisory skills: project management, conflict management, communication

#### Job Type

- Temporary: 16.7%
- Full-time: 41.7%
- Part-time: data not available

#### Certifications In-Demand

- American Society of Mechanical Engineers (ASME) certified
- Electrical certification (e.g. electrical installation certification)
- Elevator journeyman
- Professional Engineering license



In-demand skills:  
financial analysis, litigation



Median Energy wages:  
> \$20/hour

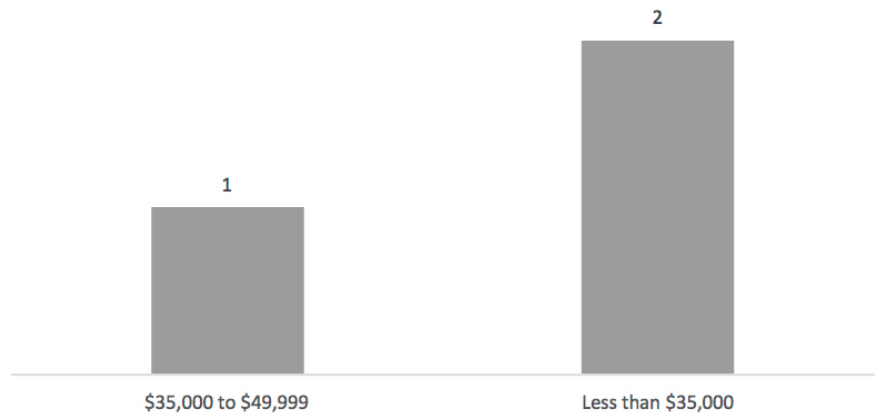
## Energy

### Wages

Only three of the Energy job postings from Q1 2016 advertised a wage or salary range. In the absence of this data, wage data from the Bureau of Labor Statistics show that many of the in-demand Energy occupations in St. Clair County pay high wages. Five of the top nine occupations can expect wages greater than \$20 per hour, at the median..

## Advertised Salaries

Quarter 1 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

## Wage Data from Bureau of Labor Statistics 2015

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
11-9199	Managers, All Other	\$25.47	\$32.65	\$42.86	\$52.09	\$63.60
53-2021	Air Traffic Controllers	Data Not Available	Data Not Available	Data Not Available	Data Not Available	Data Not Available
49-9051	Electrical Power-Line Installers and Repairers	\$19.38	\$26.09	\$31.23	\$34.55	\$38.27
17-2199	Engineers, All Other	\$18.17	\$32.00	\$41.16	\$50.97	\$62.59
53-1021	First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	\$11.55	\$14.82	\$19.23	\$27.61	\$32.99
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$8.16	\$9.55	\$11.83	\$14.68	\$17.86
17-3029	Manufacturing Production Technicians	\$14.66	\$20.00	\$27.52	\$33.08	\$42.71
53-7199	Material Moving Workers, All Other	Data Not Available	Data Not Available	Data Not Available	Data Not Available	Data Not Available
51-8011	Nuclear Power Reactor Operators	\$27.47	\$31.09	\$37.70	\$42.61	\$46.88

Data: EMSI, BLS  
Analysis: Workforce Intelligence Network

### Annual Labor Market Data

	2010 Annual	2011 Annual	2012 Annual	2013 Annual	2014 Annual	2015 Annual	2016 to- date	Change from 2015	Percent Change from 2015
Labor Force	77,674	74,208	73,465	73,970	73,080	72,335	<b>73,823</b>	1,488	2.1%
Employment	64,934	64,509	64,841	65,398	65,980	67,169	<b>68,601</b>	1,432	2.1%
Unemployment	12,741	9,699	8,624	8,572	7,101	5,166	<b>5,222</b>	56	1.1%
Unemployment Rate	16.4%	13.1%	11.7%	11.6%	9.7%	7.1%	<b>7.1%</b>	-0.1%	na

*\*Note: Monthly data averaged by year*

Data: Bureau of Labor Statistics

### Quarterly Labor Market Data

	1st Quarter 2015	2nd Quarter 2015	3rd Quarter 2015	4th Quarter 2015	1st Quarter 2016	Change from 4th Quarter 2015	Percent Change from 4th Quarter 2015
Labor Force	72,053	72,280	72,799	72,207	<b>73,823</b>	1,616	2.2%
Employment	66,081	67,150	67,687	67,757	<b>68,601</b>	844	1.2%
Unemployment	5,972	5,130	5,112	4,450	<b>5,222</b>	772	17.3%
Unemployment Rate	8.3%	7.1%	7.0%	6.2%	<b>7.1%</b>	0.9%	na

*\*Note: Monthly data averaged by quarter*

Data: Bureau of Labor Statistics










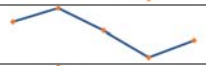

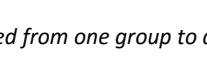
### Monthly Labor Market Data

	January 2015	February 2015	March 2015	April 2015	May 2015	June 2015	July 2015	August 2015	September 2015	October 2015	November 2015	December 2015	January 2016	February 2016	March 2016
Labor Force	72,369	71,867	71,922	71,044	72,809	72,987	73,584	72,761	72,052	72,378	71,747	72,496	73,230	73,660	74,579
Employment	65,936	66,056	66,250	66,392	67,404	67,654	67,642	67,801	67,618	67,741	67,679	67,850	67,926	68,575	69,301
Unemployment	6,433	5,811	5,672	4,652	5,405	5,333	5,942	4,960	4,434	4,637	4,068	4,646	5,304	5,085	5,278
Unemployment Rate	8.9%	8.1%	7.9%	6.5%	7.4%	7.3%	8.1%	6.8%	6.2%	6.4%	5.7%	6.4%	7.2%	6.9%	7.1%

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

Data: Bureau of Labor Statistics

## St. Clair County Job Posting Data by Occupation Group\* Over Time

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Change Over Time	Annual Change Q1 2015-Q1 2016	Quarter Growth Q4 2015-Q1 2016
Total Postings	1,518	1,807	1,697	1,461	1,730		14.0%	18.4%
Agriculture	36	27	23	14	40		11.1%	185.7%
Business & finance	80	43	79	45	68		-15.0%	51.1%
Construction	19	22	12	4	8		-57.9%	100.0%
Customer service	397	474	543	386	429		8.1%	11.1%
Education	14	22	24	15	22		57.1%	46.7%
Energy	14	8	7	8	12		-14.3%	50.0%
Engineers & designers	50	63	41	50	56		12.0%	12.0%
Health care	275	285	299	312	387		40.7%	24.0%
Information technology	39	30	28	21	29		-25.6%	38.1%
Skilled trades & technicians	83	96	75	50	66		-20.5%	32.0%
Transportation, distribution, and logistics	135	238	167	158	212		57.0%	34.2%

*\*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.*

## Total Job Postings: WIN Partnership

	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Share of Q1 2016 Total	Change Over Time	Annual Change Q1 2015-Q1 2016	Quarter Growth Q4 2015-Q1 2016
WIN-Region Total	116,397	129,794	140,225	126,959	143,199	100.0%		23.0%	12.8%
Detroit	27,360	27,742	30,426	27,966	29,296	20.5%		7.1%	4.8%
Genesee & Shiawassee	4,322	5,071	5,465	4,721	5,711	4.0%		32.1%	21.0%
Hillsdale & Lenawee	1,167	1,495	1,467	1,580	1,678	1.2%		43.8%	6.2%
Jackson	2,262	2,415	2,373	2,099	2,557	1.8%		13.0%	21.8%
Livingston	1,912	2,151	2,274	2,048	2,472	1.7%		29.3%	20.7%
Macomb	12,003	13,586	14,136	12,658	14,754	10.3%		22.9%	16.6%
Monroe	1,555	1,871	1,778	1,662	1,841	1.3%		18.4%	10.8%
Oakland	34,691	40,219	44,474	39,030	45,418	31.7%		30.9%	16.4%
St. Clair	1,518	1,807	1,697	1,461	1,730	1.2%		14.0%	18.4%
Thumb Area	1,079	1,208	1,199	1,561	1,673	1.2%		55.1%	7.2%
Washtenaw	10,421	11,192	11,812	10,540	11,951	8.3%		14.7%	13.4%
Wayne	47,379	50,930	55,824	51,993	55,886	39.0%		18.0%	7.5%
Outer Wayne	20,019	23,188	25,398	24,027	26,590	18.6%		32.8%	10.7%
Prosperity Region 6	6,919	8,086	8,361	7,743	9,114	6.4%		31.7%	17.7%
Prosperity Region 9	17,317	19,124	19,704	17,929	20,499	14.3%		18.4%	14.3%
Prosperity Region 10	94,073	104,735	114,434	103,681	116,058	81.0%		23.4%	11.9%

Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

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