

Q1 2017
January - March

ST. CLAIR COUNTY

WIN Labor Market Report





Introduction: St. Clair County

About This Report

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

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

- Customer service (page 6)
- Energy (page 11)
- Health Care (page 16)
- Information technology (IT) (page 21)
- Skilled trades & technicians, Manufacturing Focused (page 26)

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

2016 Year in Review

Job postings in St. Clair County resumed year-over-year growth with three consecutive quarterly increases ushering in at first quarter of 2016. After a slight decline between Q3 and Q4 2016, growth resumed with a 6.2 percent increase in job postings overall from 2,163 in Q4 to 2,297 in Q1 2017. From Q1 2016 to Q1 2017, total job postings rose substantially by 30.5 percent, a 537 increase in postings. Occupation group specific job postings vary in demand. Skilled trades and technician job postings are typically very low although there has been growth overall in the past year alone. Since Q1 2016, there has been a 63.6 percent increase, while substantial this translates into only 42 job postings. Job demand in 2016 rose by a 90.9 percent between Q1 and Q3 (+66 job postings) to a total of 126, at peak, with the remainder of the year declining to 109 and staying almost perfectly flat into Q1 2017 at 108 postings. Customer service job postings saw the most significant increase between Q2 and Q4 2016, 42 percent. The quarterly transition between Q4 into Q1 2017 decreased nominally by 4.3 percent. Year over year, customer service job postings are up 28.2 percent. IT job postings are typically very low when compared to other occupation group analyzed within this report, though mostly stable. While postings since Q1 2016 have increased 55.2 percent, that is only an increase of 16 postings from 29 to 45 total. Health care job postings on the other hand demonstrated continuous quarterly growth except between Q1 and Q2. From Q1 2016 to Q1 2017, health care related job postings grew 54.5 percent, or 211 additional job postings totaling at 598. Energy job postings possess the greatest level of volatility in job postings while also representing the fewest job postings among any other occupation group examined here. Job postings between Q1 and Q4 are exactly flat at 12 total, with a slight dip between Q1 and Q3. Between Q4 2016 and Q1 2017, well out-performed the entirety of 2016 while began at 12 postings to 34 in Q1, a 183 percent increase, which only translates into 22 additional job postings.

St. Clair county's labor force grew 2 percent since Q1 2016 to a total of 75,315, adding 1,484 individuals, according to quarterly labor market data. Employment grew at 2 percent as well, adding 1,309 employed individuals to the market. Unemployment, year over year, remained very flat with only a 0.1 percent increase to 7 percent as of Q1 2017.

Key Findings for Q1 2017

St. Clair County employers are hiring.

Online job postings in the county were up 6.2 percent in Q1 2017 to 2,297 from 2,163 posted in Q4 2016. Quarter-to-quarter increases in employer demand helped grow employment in the county.

St. Clair County's unemployment rate is 7.0 percent.

Over 1,400 St. Clair workers joined the labor force in Q1 2017, increase 2.0 percent. Employment decreased 0.2 percent during the same period, meaning that the unemployment rate increased.

Health care occupations offer steady employment and high wages to St. Clair County workers.

Employment in the health care occupations continues to grow in St. Clair County. Some of the most in-demand health care jobs in St. Clair, like Registered Nurses, offer workers high wages after completing a two-year degree.

Customer service occupations employ over 14,000 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 550 online job postings for these occupations during Q1 2017. See page 6 for more details.

Number of IT positions grew 41% during Q1 2017.

The information technology profession experiencing dramatic growth in the number of postings in Q1 2017, increasing from 32 ads in Q4 2016 to 45 ads in Q1 2017. See page 21 for more details.

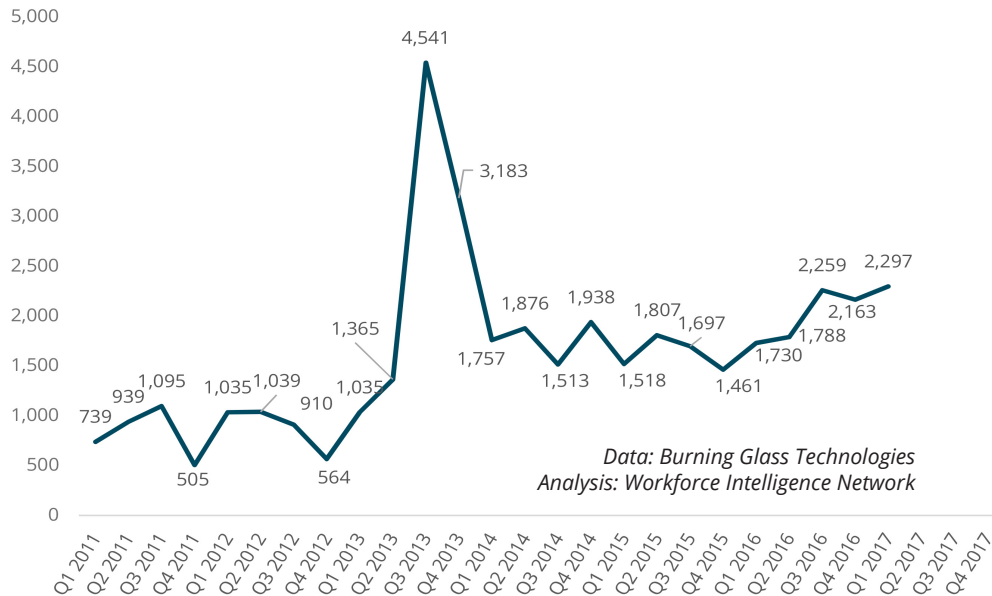


Workforce and Employer Demand Indicators

Postings over time

Employers in St. Clair County posted 2,297 online job ads between January and March 2017, up slightly over the 2,163 job ads seen in Q4 2016. St. Clair County experienced a growth of 32.7 percent in the number of online job ads compared to that of Q1 2016. In Q3 2013, St. Clair County experienced its largest spike in job ads (4,541 postings), with the current level of postings being approximately 50 percent of the peak.

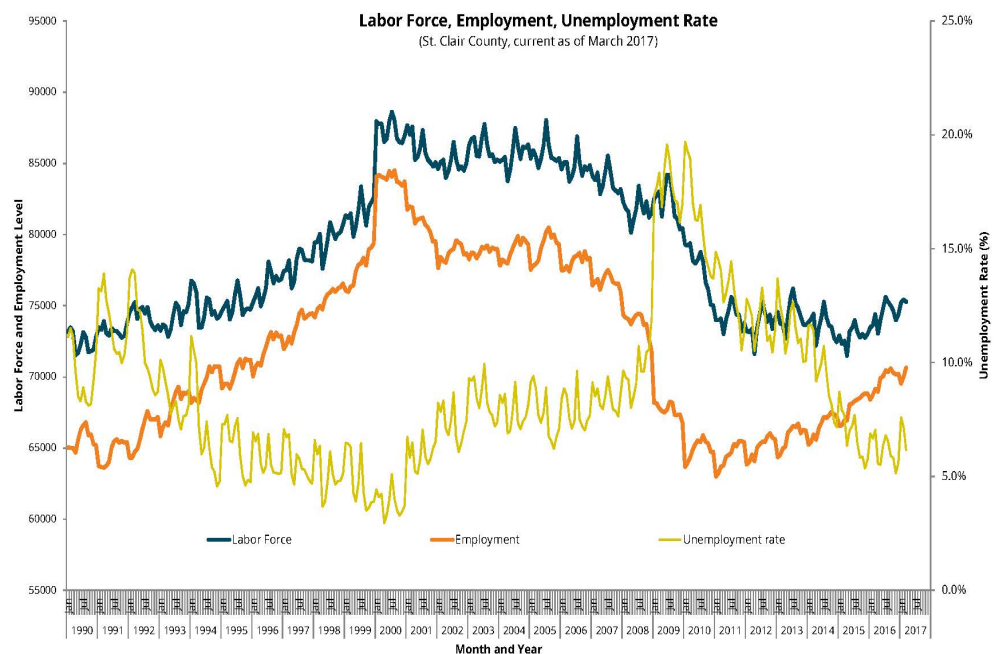
St. Clair County Online Job Postings



Labor force/employment/unemployment

Employment in St. Clair County grew by 0.8 percent between Q1 2016 and Q1 2017 (increasing to 70,331 individuals employed) in addition to the labor force expanding by 1.3 percent (965 working age individuals.) This means there are 75,315 prospective workers in St. Clair County, but only 70,331 individuals actively employed. When the labor force experiences greater increases than the employment level, the unemployment rate increases. The unemployment rate increased 4 percentage points between 2016 and 2017, from 6.2 percent in 2016 to 6.6 percent in 2017. Overall, the unemployment rate in the county has decreased from 16.4 percent in 2010 and employment has grown by over 4,000 jobs in the same time period.

Labor Force, Employment, Unemployment Rate Quarter 1 2017

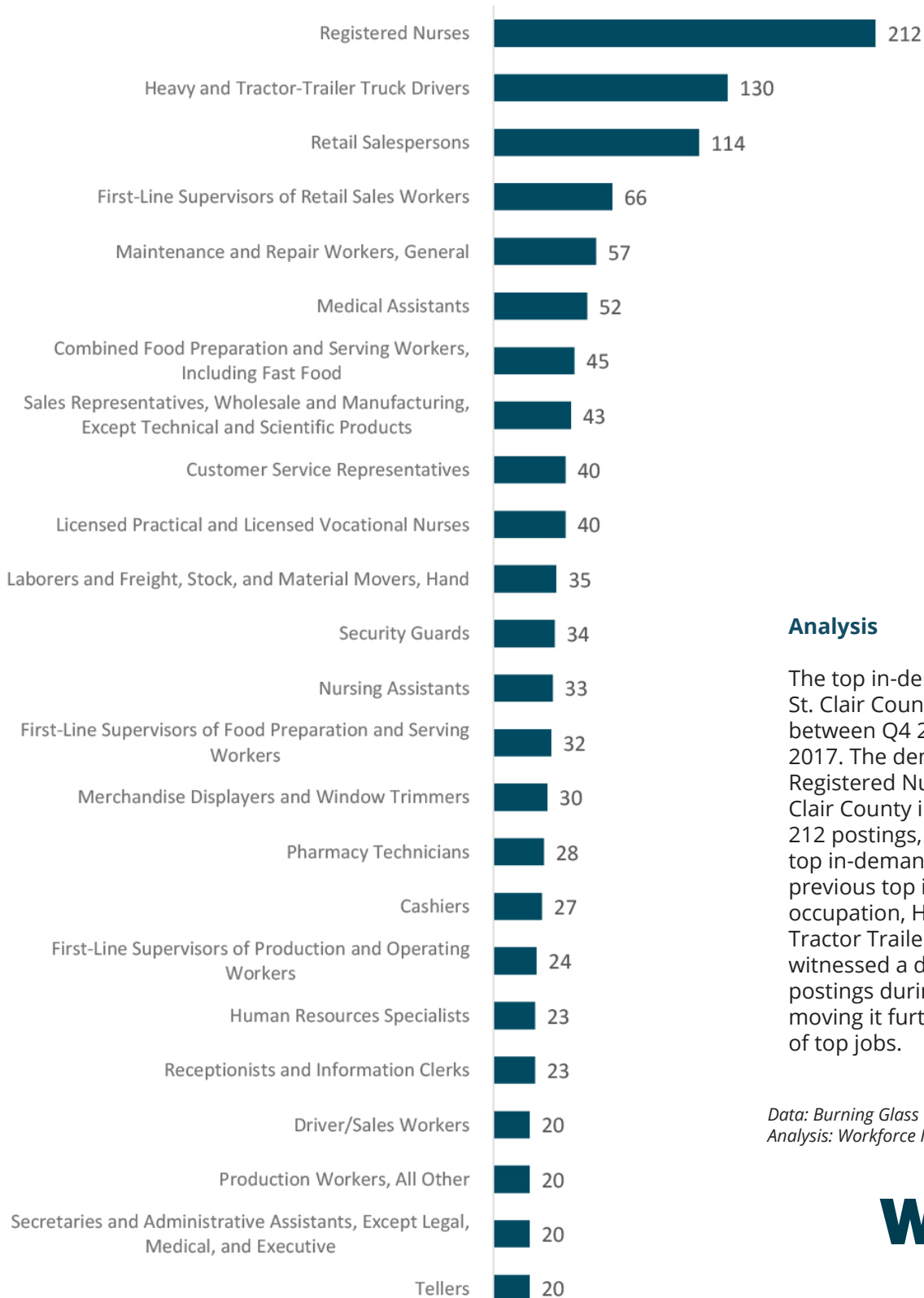




Most in-demand occupation:
Registered Nurses

6.6%
county unemployment rate

Top Jobs
Quarter 1, 2017



Analysis

The top in-demand jobs in St. Clair County changed between Q4 2016 and Q1 2017. The demand for Registered Nurses in St. Clair County increased to 212 postings, making it the top in-demand job. The previous top in-demand occupation, Heavy and Tractor Trailer Truck Drivers witnessed a drop in postings during Q1 2017, moving it further on the list of top jobs.

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

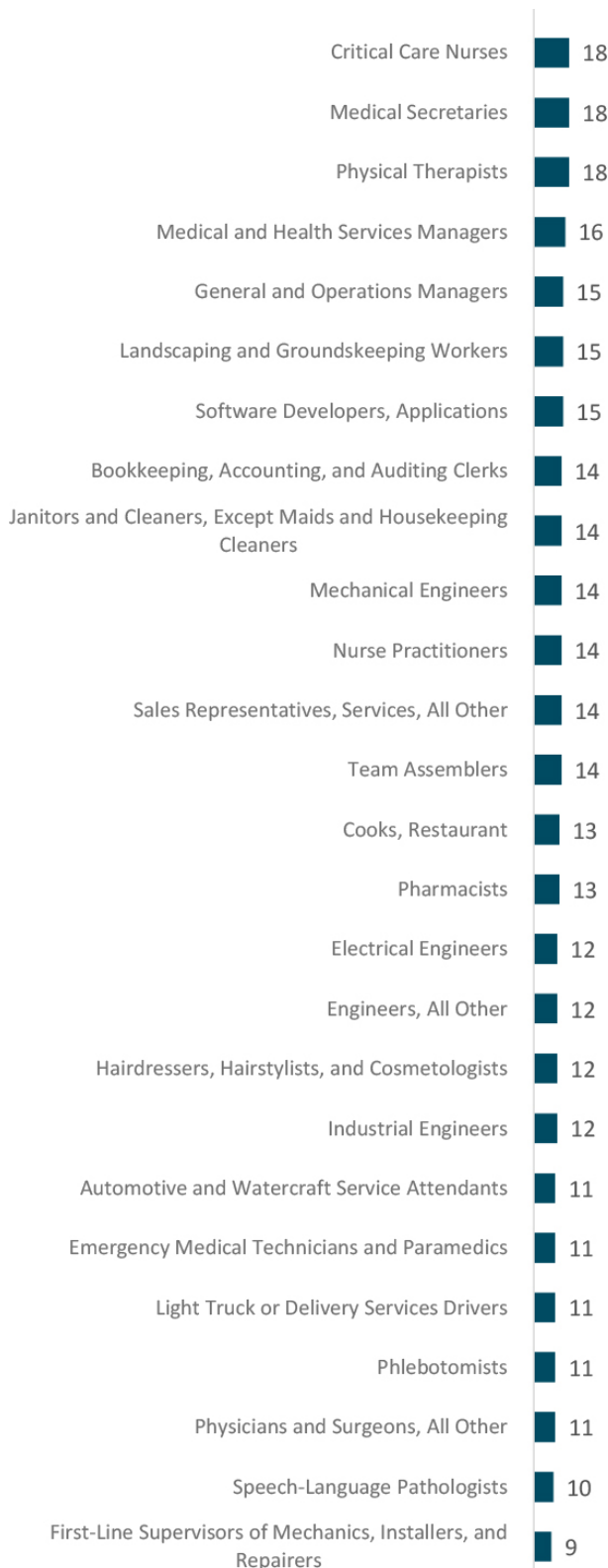


Employer Demand:
2,300 job postings



Demand for: Customer Service,
Skilled Trades, and IT workers

Top Jobs
Quarter 1, 2017



Data: Burning Glass Technologies
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.

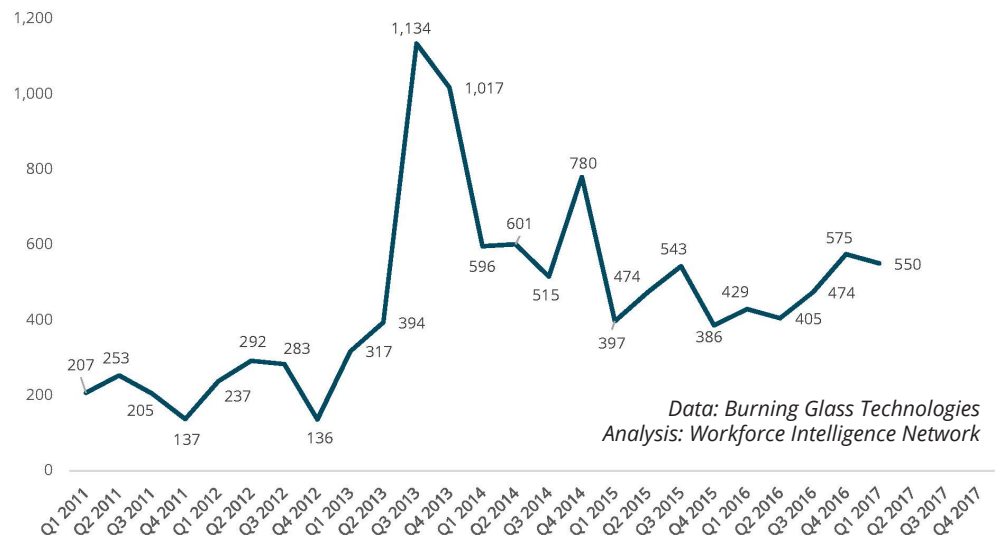
Job Posting Analysis

Online job postings for customer service occupations in St. Clair County are down 4.5 percent in Q1 2017 to 550 postings, from 575 in Q4 2016. 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.

Employment Analysis

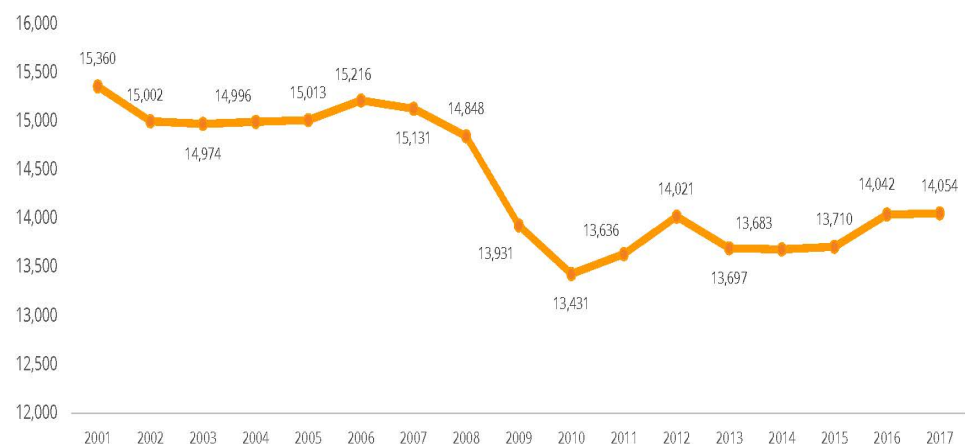
Employment in the customer service occupations in St. Clair County is around 14,054 in 2017. Pre-recession employment numbers hovered around 15,000 and dipped to 13,431 in 2010, at the lowest point. The 14,054 employees in 2017 represent a 4.6 percent increase over the 2010 low. Customer service employment, however, has not grown much since reaching the 14,000 marks again in 2012.

Online Job Postings



Employment Over Time

Quarter 1 2017



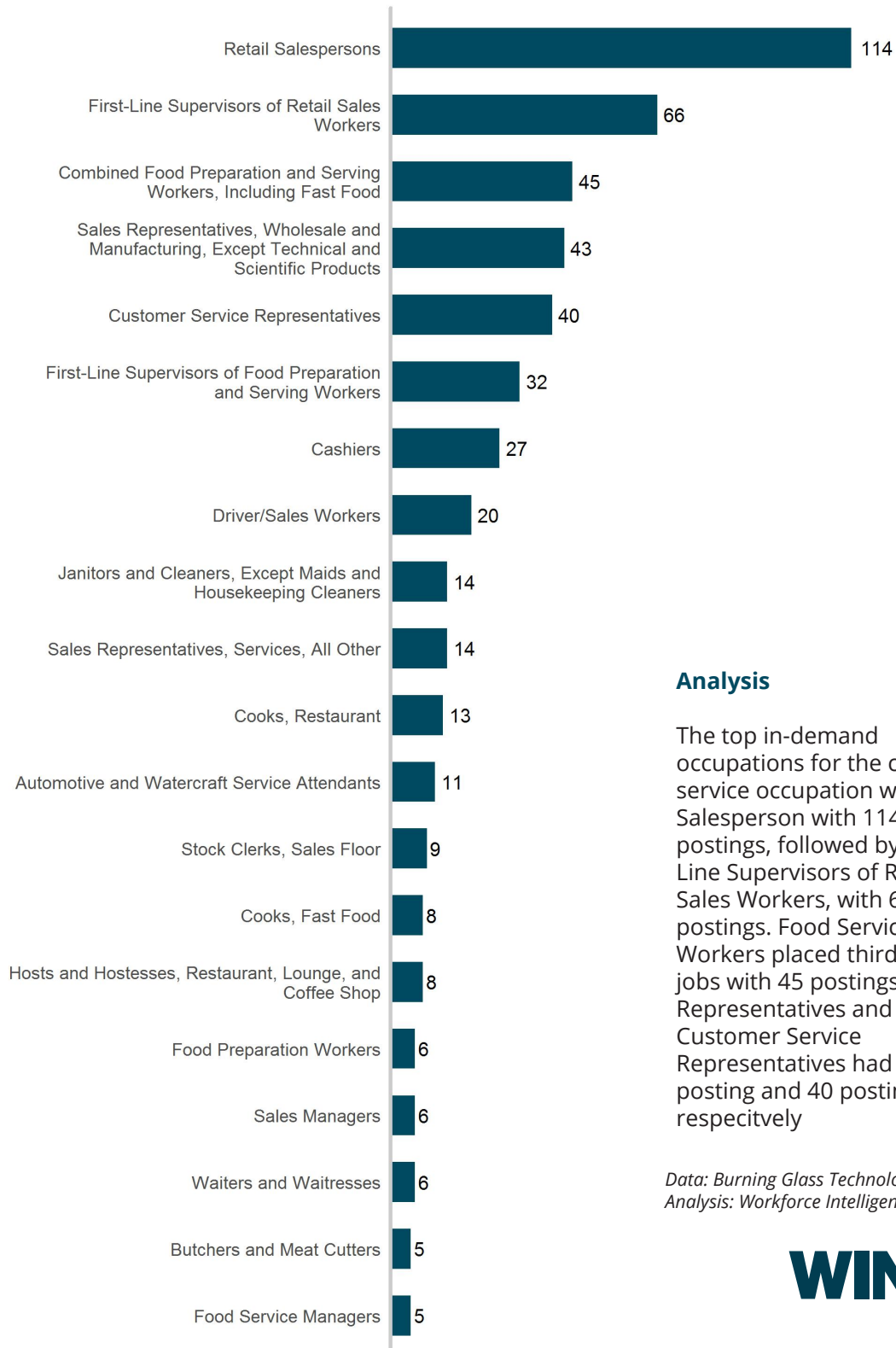


Now hiring: 550 Customer Service postings



In demand jobs: Salespersons, Customer Service Representatives

Customer Service Top Jobs Quarter 1 2017



Analysis

The top in-demand occupations for the customer service occupation was Retail Salesperson with 114 postings, followed by First-Line Supervisors of Retail Sales Workers, with 66 job postings. Food Service Workers placed third in top jobs with 45 postings. Sales Representatives and Customer Service Representatives had 43 posting and 40 postings respectively

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Experience in-demand:
less than 2 years



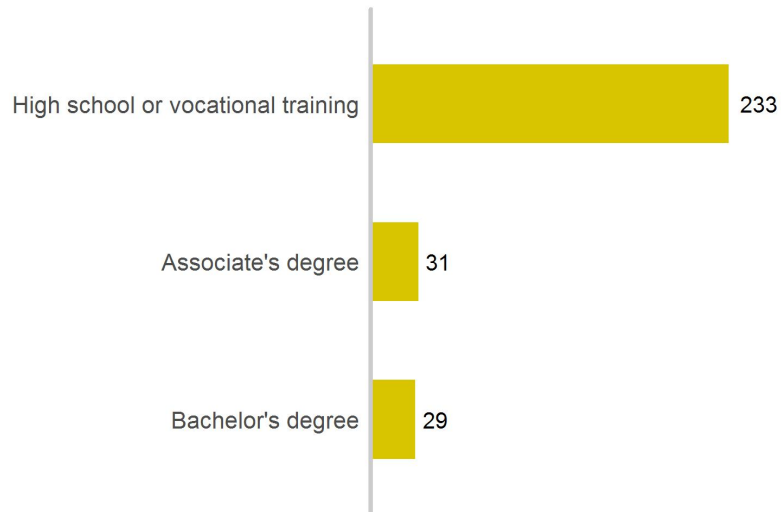
14,000 Customer Service
employees in St. Clair County

Customer Service Educational Attainment Required

Of the 550 online job ads posted for customer service occupations in St. Clair County, 293 specified a desired minimum level of educational attainment for job applicants. Most customer service jobs are available to workers with a high school diploma and/or some vocational training (233 postings). Twenty-nine 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, 180 customer service job postings specified the level of experience required for candidates. Again, most customer service jobs do not require extensive experience, with 145 ads open to applicants with 0 to 2 years of experience. The 7 job ads that required more than 6 years of experience are likely for occupations like sales managers.

Educational Attainment

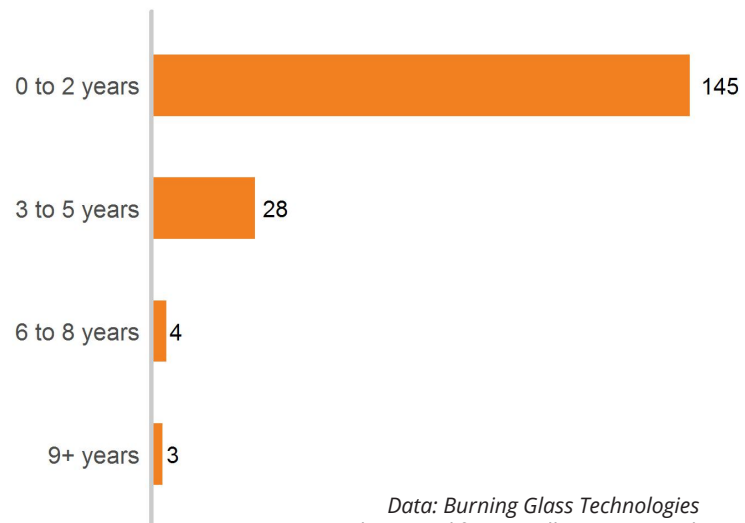


Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

In-Demand Area of Study

- Business Administration and Management
- Chemistry, Analytical Chemistry
- Chemical Engineering, Materials Science
- Culinary Arts, Chef Training
- Food Technology and Processing

Experience Required



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Education in-demand:
HS diploma

31%

of Customer Services postings
offer full-time positions

Customer Service In-Demand Skills

St. Clair County employers looking to hire customer service workers in Q1 2017 were focused on recruiting applicants with baseline skills that include communication, building effective relationships, and time management. More specialized skills and experiences desired included customer service in a retail setting, store management, merchandising, and meeting sales goals.

Technical In-Demand Skills

- Customer service, experience in a retail setting
- Product sales
- Store management, supervisory skills
- Merchandising
- Cash handling

Foundational In-Demand Skills

- Communication skills
- Organizational Skills
- Writing
- Computer skills (Microsoft Office)
- Building effective relationships

Job Type

- Temporary: 9.8%
- Full-Time: 30.9%
- Part-Time: 17.2%

Certifications Required

- CDL Class A
- ServSafe, Alcohol Server Certification
- Air Brake Certified
- Automotive Service Excellence (ASE) certification
- HVAC Technician certification (EPA 608)



Certifications in-demand: Serving Certifications & CDL



Mean advertised salary:
\$ 35,087

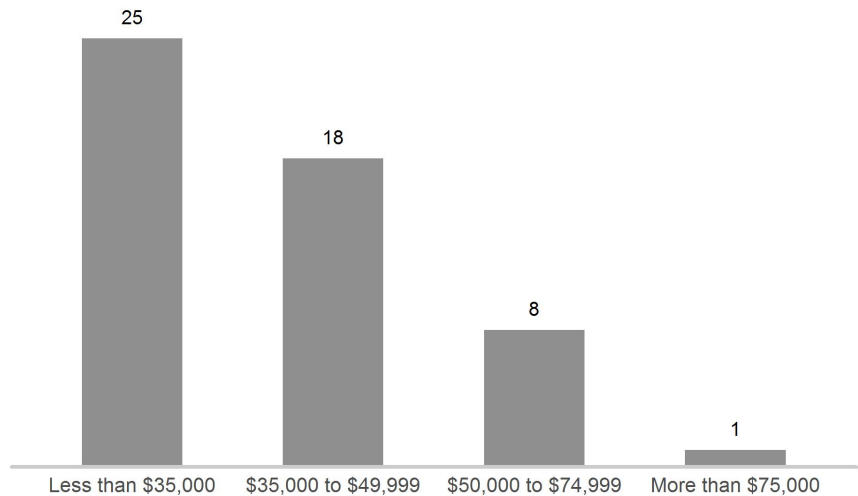
Customer Service Wages

Just 52 of the 550 (9 percent of postings) customer service jobs postings in St. Clair during Q1 2017 specified a salary range or hourly wage. The majority of those postings (25 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. Seven of the top 10 in-demand jobs in the group reported median wages less than \$17 per hour.

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	\$8.15	\$8.70	\$9.82	\$12.72	\$18.53
41-1011	First-Line Supervisors of Retail Sales Workers	\$11.36	\$14.05	\$17.93	\$23.18	\$29.04
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	\$8.15	\$8.49	\$9.06	\$9.65	\$11.76
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$11.42	\$16.91	\$25.12	\$37.88	\$53.63
43-4051	Customer Service Representatives	\$8.15	\$10.08	\$13.22	\$16.80	\$21.25
35-1012	First-Line Supervisors of Food Preparation and Serving Worker	\$8.15	\$9.63	\$12.89	\$17.77	\$22.35
41-2011	Cashiers	\$8.15	\$8.68	\$9.61	\$11.65	\$15.41
53-3031	Driver/Sales Workers	\$8.15	\$9.35	\$12.28	\$17.00	\$25.31
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$8.20	\$8.91	\$10.73	\$13.86	\$17.36
41-3099	Sales Representatives, Services, All Other	\$10.56	\$15.00	\$20.82	\$35.45	\$53.36

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.

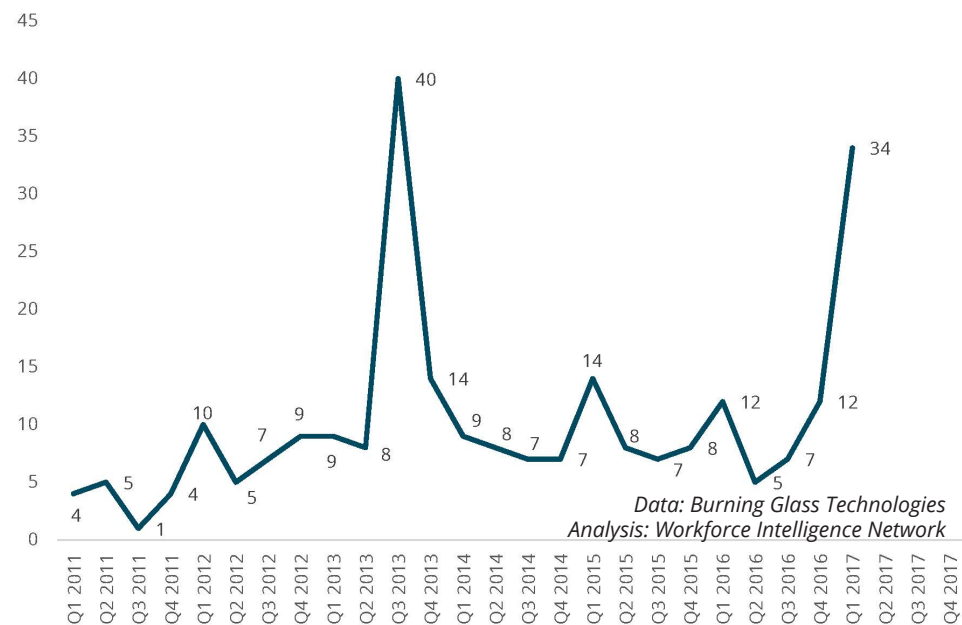
Job Posting Analysis

St. Clair County employers posted just 34 online job postings in the energy occupations during Q1 2017, up from 12 in Q4 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.

Employment Analysis

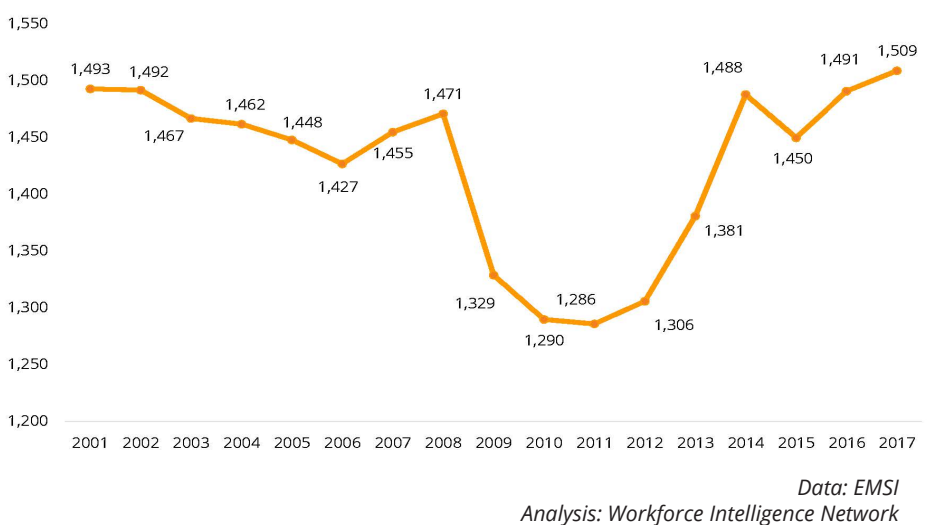
The data presented in the graph to the right represents St. Clair County's total employment in the energy industries (NAICS 2111, 2131, 2211, 2212, 2371), not just WIN-designated energy occupations. In 2017, 1,509 workers are employed in these energy industries in St. Clair County. Employment in these industries dipped slightly, losing about 200 jobs, during the Great Recession but recovered to 1,488 employees in 2014. Employment numbers have, however, increased both in 2016 and 2017.

Online Job Postings



Employment Over Time

Quarter 1 2017



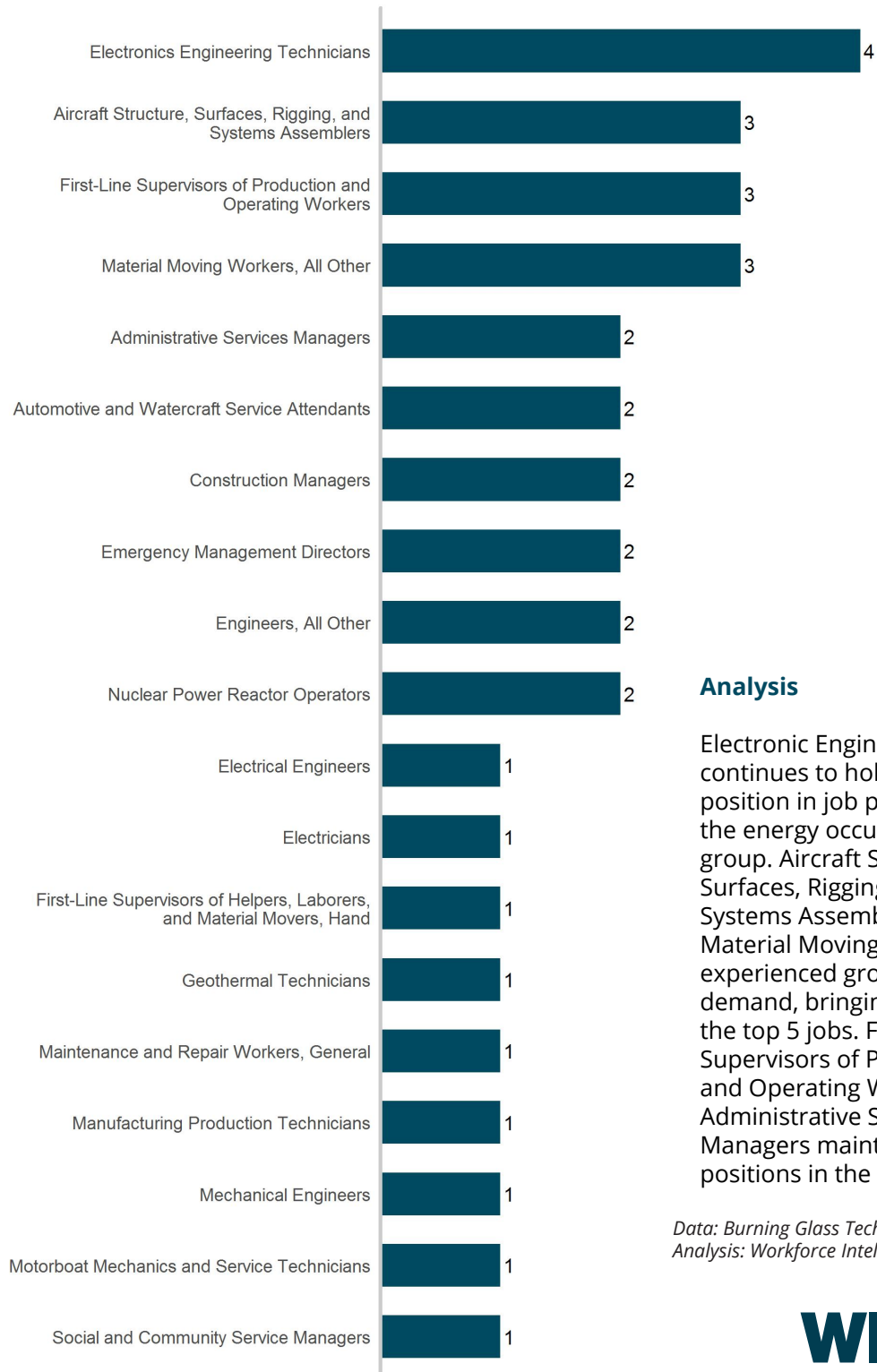


Now hiring:
34 energy job postings



1,509 employees in
energy related jobs

Energy Top Jobs Quarter 1 2017



Analysis

Electronic Engineering continues to hold the top position in job postings for the energy occupation group. Aircraft Structure, Surfaces, Rigging and Systems Assemblers, and Material Moving Workers experienced growth in demand, bringing them into the top 5 jobs. First-Line Supervisors of Production and Operating Workers and Administrative Service Managers maintained their positions in the top 5 jobs.

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Vocational Training needed for energy jobs



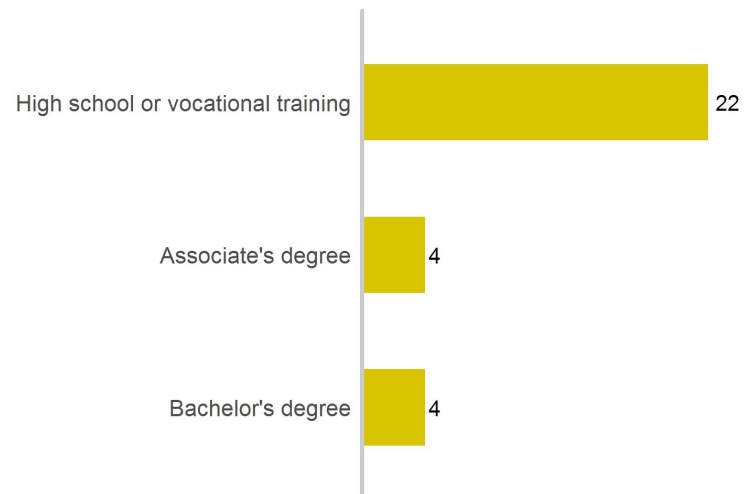
Top In-demand Job: Electronic Engineering Technician

Energy Educational Attainment Required

Data from Q1 2017 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 (22 postings). Three job postings this quarter sought candidates with a bachelor's degree, likely for the in-demand manager occupations.

Similar to the demand for applicants with vocational training or a high school diploma, most of the energy postings in St. Clair County during Q1 2017 were options for workers with less than 2 years of experience. Entry-level workers (8 postings) are able to secure a job as an Electrical Power-Line Installers and Repairers, and Maintenance and Repair Workers, if they are willing to undertake some short-term training or a degree program.

Educational Attainment

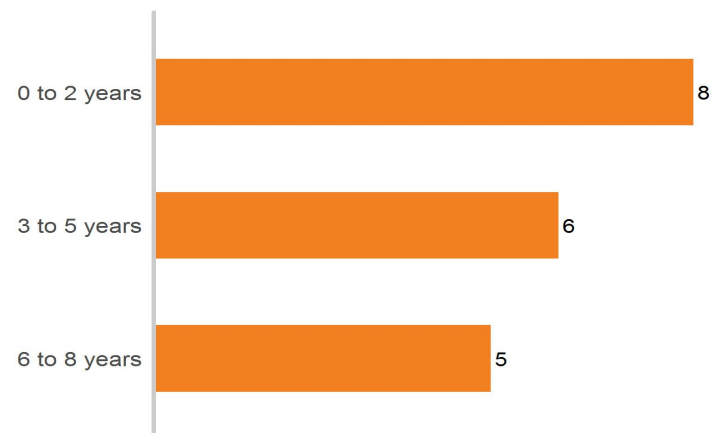


Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

In-Demand Area of Study

- Engineering, General
- Engineering Technology
- Chemistry
- Electrical and Electronic Engineering Technology
- Mechanical Engineering

Experience Required



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Experience required:
less than 5 years

75%

of Energy postings are
for full-time positions

Energy In-Demand Skills

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 2017 sought candidates with project management experience, and technical skills in financial analysis, litigation, and procurement.

Technical In-Demand Skills

- Supervisory Skills
- Repair and Calibration
- Scheduling and Budgeting
- Environmental Regulations
- SAP

Foundational In-Demand Skills

- Physical demand
- Communication skills
- Computer skills
- Organizational skills
- Planning, detail-oriented

Job Type

- Temporary: 25%
- Full-Time: 75%
- Part-Time: Data Not Available

Certifications Required

- Certified Energy manager
- Project Management Certification
- Basic Electricity Certificate
- Electrical Certification
- Professional Engineering License



In-demand skills:
Budgeting, Data Collection



Median Energy wages:
> \$25/hour

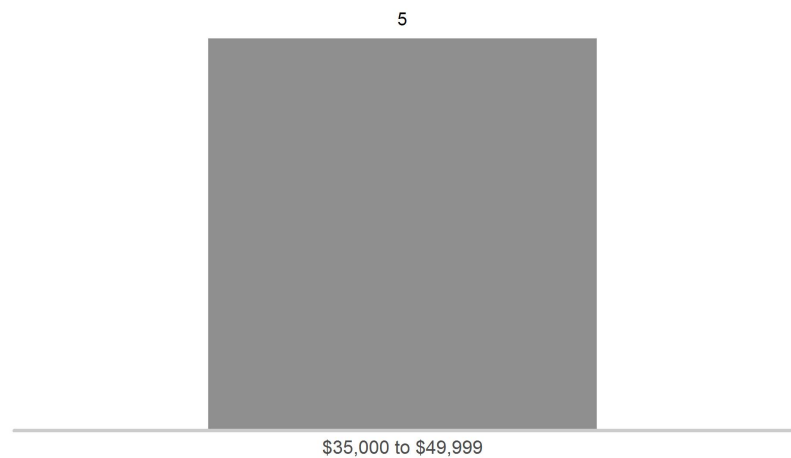
Energy Wages

Advertised Wages in Job Postings

Quarter 1 2017

Only five of the energy job postings from Q1 2017 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. Four of the top five occupations can expect wages greater than \$25 per hour, or \$52,000 annually, at the median.



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
17-3023	Electronics Engineering Technicians	\$12.66	\$15.23	\$19.45	\$26.35	\$31.64
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	Data Not Available	Data Not Available	Data Not Available	Data Not Available	Data Not Available
51-1011	First-Line Supervisors of Production and Operating Workers	\$15.71	\$20.11	\$27.37	\$35.62	\$43.56
53-7199	Material Moving Workers, All Other	Data Not Available	Data Not Available	Data Not Available	Data Not Available	Data Not Available
11-3011	Administrative Services Managers	\$21.44	\$28.33	\$34.84	\$43.10	\$56.94
53-6031	Automotive and Watercraft Service Attendants	\$8.15	\$8.71	\$9.64	\$11.12	\$13.15
11-9021	Construction Managers	\$27.81	\$30.96	\$36.90	\$46.84	\$67.99
11-9161	Emergency Management Directors	Data Not Available	Data Not Available	Data Not Available	Data Not Available	Data Not Available
17-2199	Engineers, All Other	\$18.15	\$31.98	\$41.13	\$50.94	\$62.56
51-8011	Nuclear Power Reactor Operators	Data Not Available	Data Not Available	Data Not Available	Data Not Available	Data Not Available

Data: EMSI, BLS
Analysis: Workforce Intelligence Network

Introduction

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

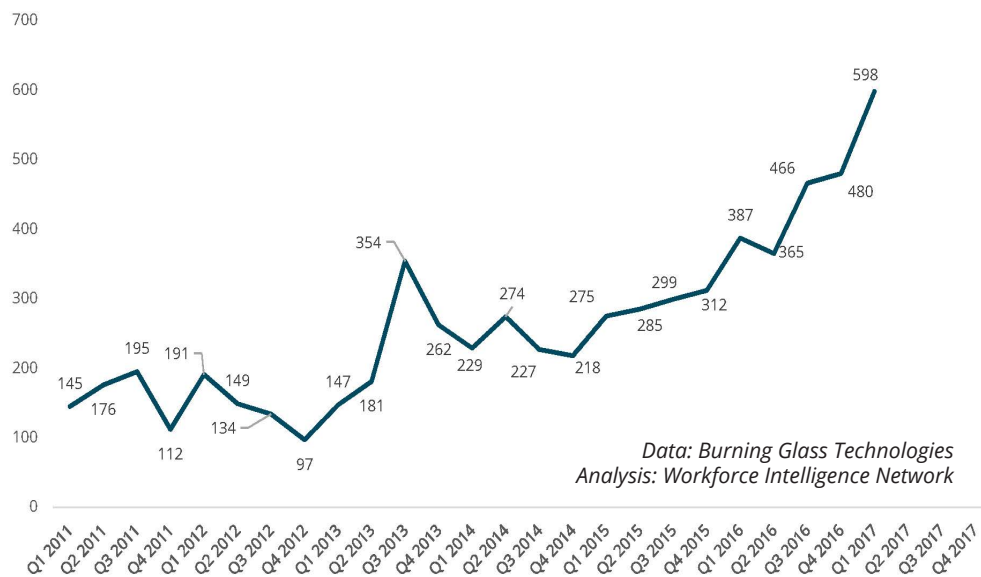
Job Posting Analysis

Along with customer service, health care is one of the largest occupation groups in St. Clair County. Employers in the county posted 598 online job postings for health care workers during Q1. This is a significant 24.5 percent increase from the 480 postings seen in Q4 2016. Overall, 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 Analysis

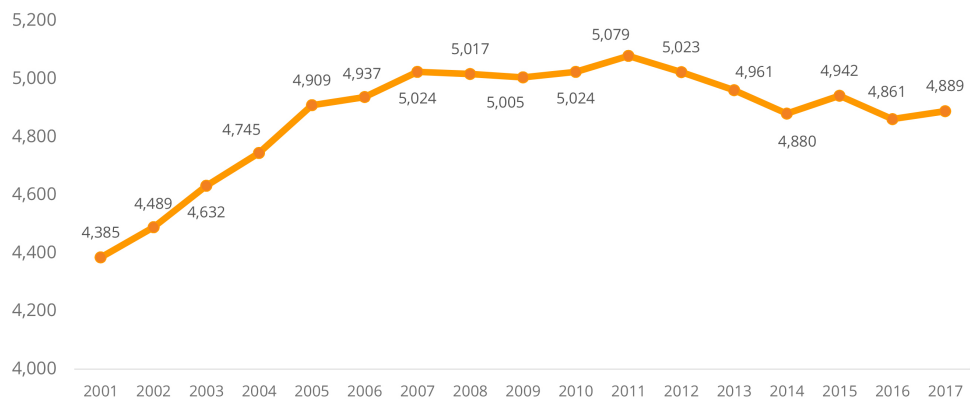
Health care occupations employed approximately 4,900 workers in St. Clair County during 2017. As employer demand, determined by online job ads, has grown steadily over the past 4 years, employment is approximately the same.

Online Job Postings



Employment Over Time

Quarter 1 2017



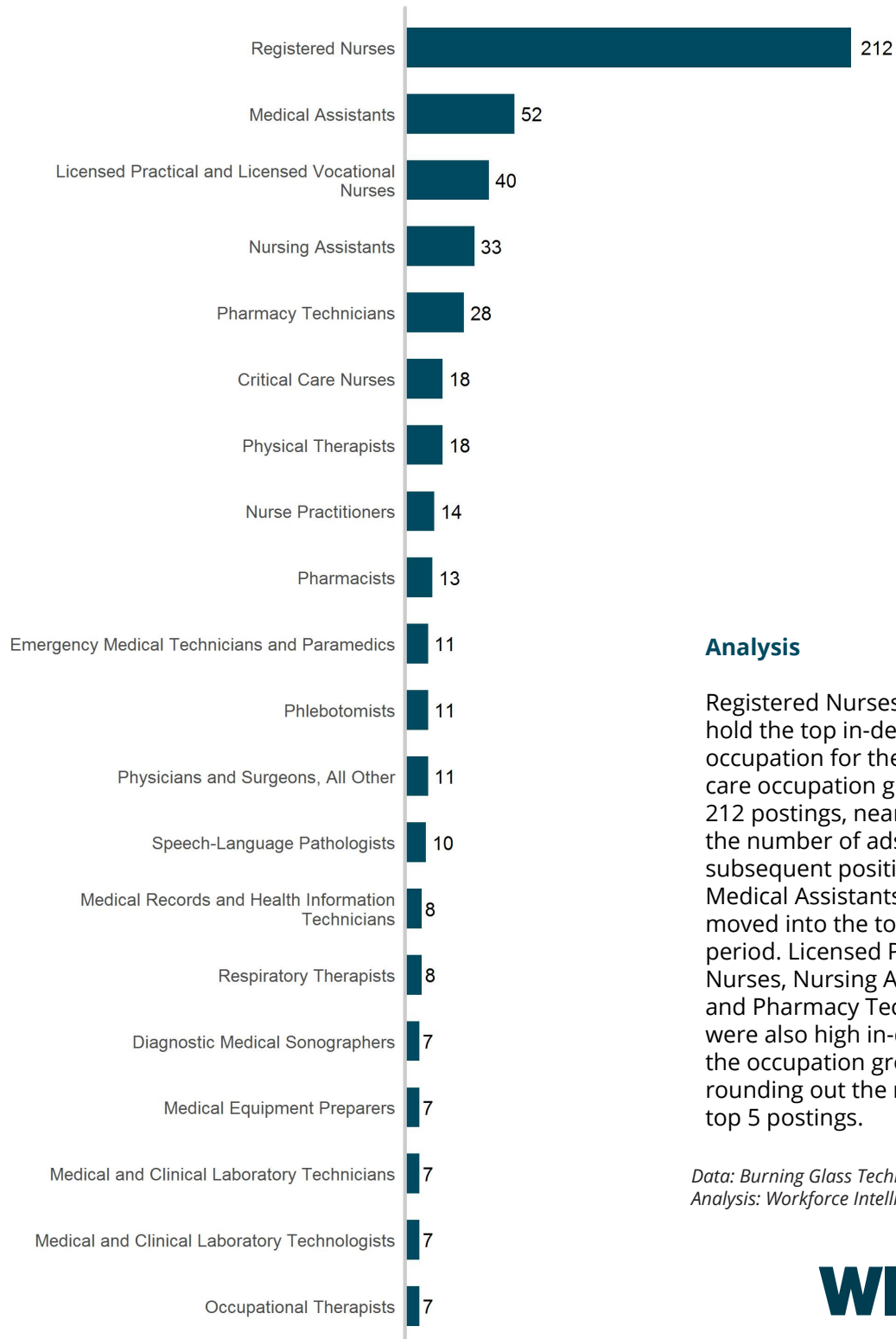


Now hiring:
600 health care job postings



4,900 health care workers
in St. Clair County

Health Care Top Jobs Quarter 1 2017



Analysis

Registered Nurses continue hold the top in-demand occupation for the health care occupation group with 212 postings, nearly 4 times the number of ads for the subsequent position of Medical Assistants, which moved into the top five this period. Licensed Practical Nurses, Nursing Assistants and Pharmacy Technicians were also high in-demand for the occupation group rounding out the rest of the top 5 postings.

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Short-term and vocational training required



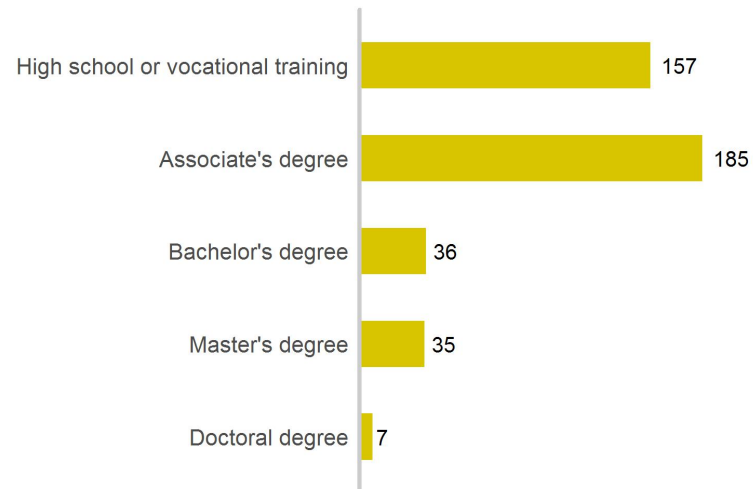
\$30/hr. wages for Registered Nurses

Health Care Educational Attainment Required

Because occupations like Registered Nurses and Medical Assistants are the most in-demand health care jobs in St. Clair County, most of Q1 job postings did not require more than some vocational training or an associate's degree. With this in mind, 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 (305 postings) can secure a job as a Medical Assistant or Registered Nurse if they are willing to undertake some short-term training or a degree program.

Educational Attainment

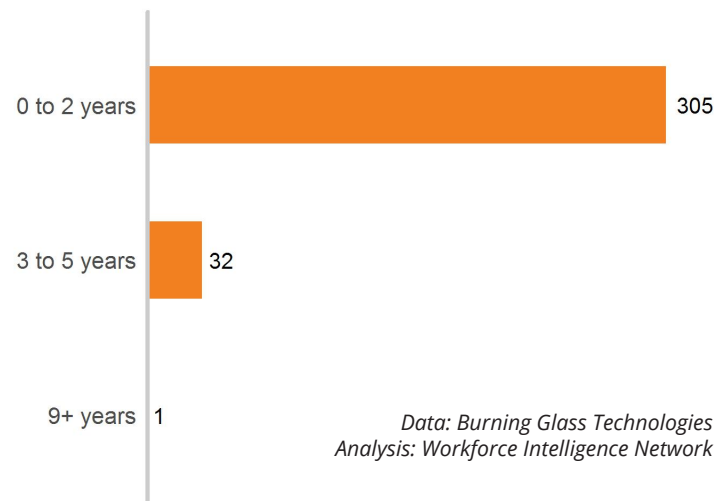


Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

In-Demand Area of Study

- Nursing Science
- Physical Therapy
- Biology/Biological Sciences
- Microbiology
- Occupational Therapy/Therapist

Experience Required



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Top in-demand jobs: Registered Nurses and Medical Assistants



\$51,960: mean advertised salaries

Health Care In-Demand Skills

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.

Technical In-Demand Skills

- Patient care, education, and instruction, & treatment planning
- Surgical services
- Critical care, neonatal intensive care unit (NICU)
- Post Anesthesia Care Unit (PACU)
- Advanced Cardiac Life Support

Foundational In-Demand Skills

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

Job Type

- Temporary: 4.71%
- Full-Time: 45.5%
- Part-Time: 9.0%

Certifications Required

- Registered Nurse (RN)
- American Heart Association
- Emergency Medical Technician (EMT)
- Certified Medical Assistant
- First Aid CPR/AED



Knowledge areas: Nursing,
Physical Therapy



Certifications in-demand:
RN, CNA, EMT

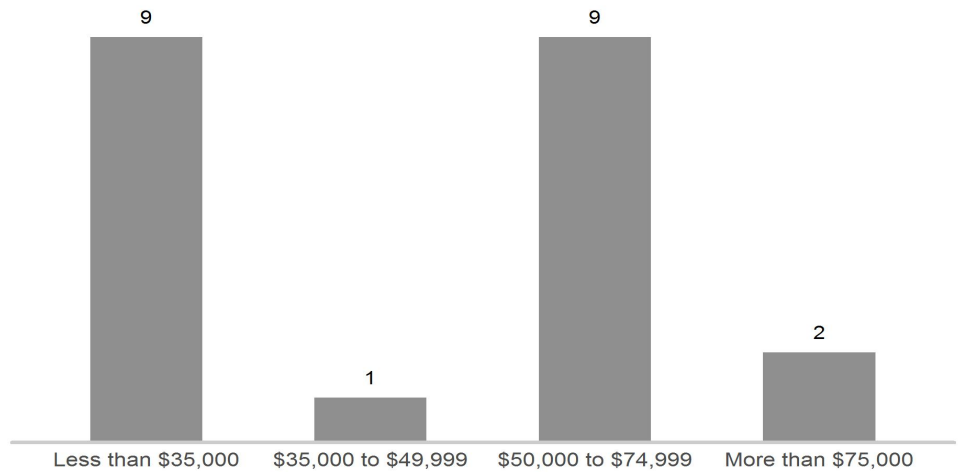
Health Care Wages

Only 21 of the 598 health care job postings for Q1 advertised a salary range. Of those that did, 9 jobs offered salaries between \$50,000 and \$75,000 a year, with another 2 advertising salaries over \$75,000.

Data from the Bureau of Labor Statistics show that a job in health care, like as a Registered Nurse, can pay over \$30 per hour at the median, or \$62,400 annually, for a position that generally requires just a two-year degree.

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
29-1141	Registered Nurses	\$23.56	\$27.60	\$31.48	\$36.03	\$51.50
31-9092	Medical Assistants	\$9.57	\$11.02	\$12.50	\$14.60	\$16.28
29-2061	Licensed Practical and Licensed Vocational Nurses	\$15.40	\$18.13	\$21.23	\$24.44	\$26.49
31-1014	Nursing Assistants	\$9.27	\$10.77	\$12.69	\$14.77	\$16.52
29-2052	Pharmacy Technicians	\$9.00	\$10.68	\$13.23	\$15.92	\$17.87
29-1141	Critical Care Nurses	\$23.56	\$27.60	\$31.48	\$36.03	\$51.50
29-1123	Physical Therapists	\$25.98	\$32.15	\$39.11	\$49.80	\$71.61
29-1171	Nurse Practitioners	\$32.81	\$36.29	\$40.60	\$46.88	\$52.21
29-1051	Pharmacists	\$44.98	\$48.92	\$54.05	\$60.01	\$67.38
29-2041	Emergency Medical Technicians and Paramedics	\$9.22	\$11.25	\$13.80	\$16.37	\$19.46

Data: EMSI, BLS
Analysis: Workforce Intelligence Network



Information Technology

Introduction

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.

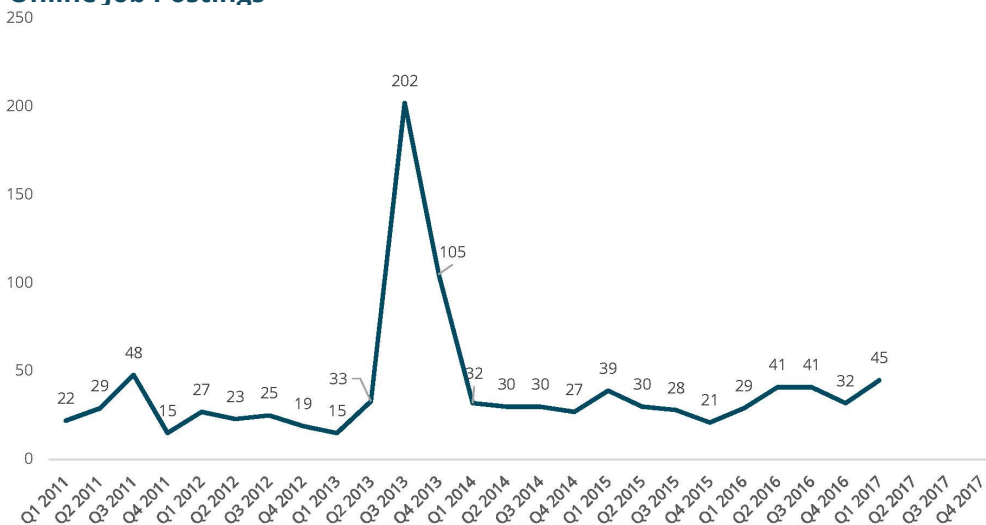
Job Posting Analysis

St. Clair County employers posted 45 online job ads for information technology (IT) workers during Q1 2017. This is a 41 percent increase from the 32 ads posted in Q4 2016 – quarterly postings for this occupation group have hovered between 20 and 40 since Q1 2014. The stagnation of job postings at low levels have affected employment in these IT occupations.

Employment Analysis

Only 639 St. Clair County workers are employed in information technology occupations in 2017. While employment in many of the county's other occupation groups has begun to recover post-recession, the 639 employee estimate for 2017 is similar to the 654 employed in 2010 at the trough of Great Recession employment. IT employment rebounded to 698 in 2012 but has been relatively constant the past 3 years.

Online Job Postings



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Employment Over Time

Quarter 1 2017



Data: EMSI
Analysis: Workforce Intelligence Network



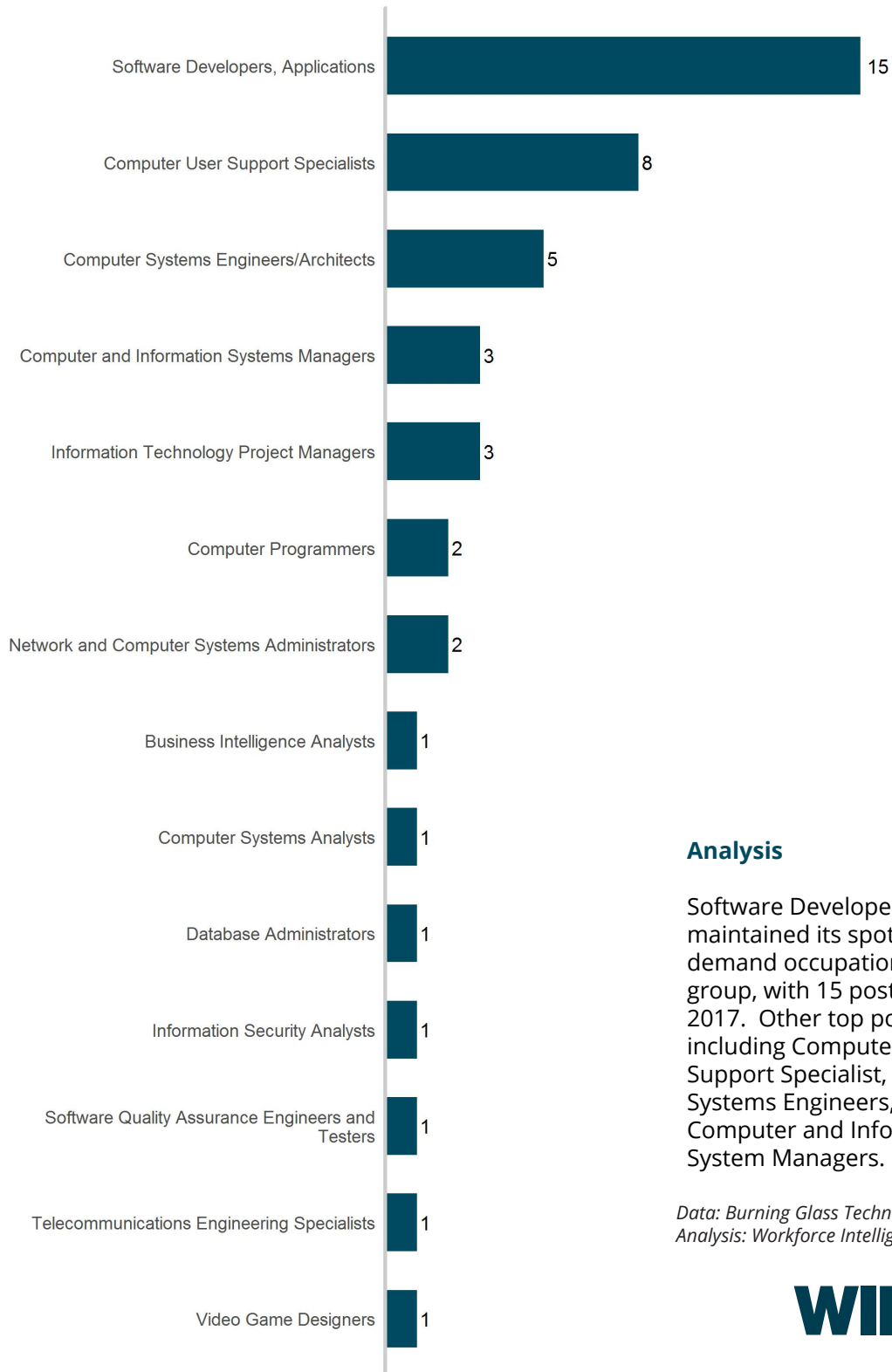
Now hiring: 45 online job
postings for IT workers



Nearly 640 IT workers in
St. Clair County

Information Technology Top Jobs

Quarter 1 2017



Analysis

Software Developers maintained its spot as top in-demand occupation for the IT group, with 15 postings in Q1 2017. Other top positions including Computer User Support Specialist, Computer Systems Engineers, and Computer and Information System Managers.

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Knowledge areas: Computer Science, Business, Engineering



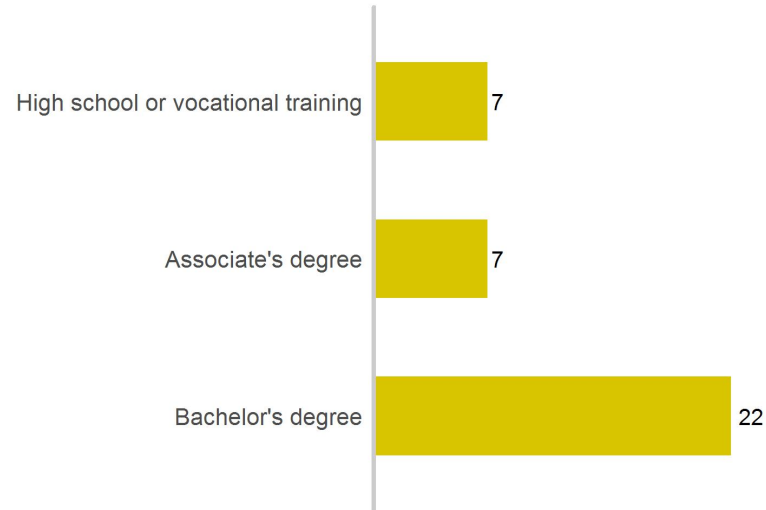
Median hourly IT Wage
< \$20 per hour

Information Technology Educational Attainment Required

Of the 45 online job ads posted for information technology occupations in St. Clair County, 36 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. Twenty-two of the Q1 2017 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 (14 postings).

The information technology jobs open in St. Clair County require more prior experience, according to job posting data. Eighteen of the 45 IT job postings from Q1 required 3 to 5 years of experience. Another large fraction of the postings, 10 of 45, were open to entry level workers with less than 2 years of experience.

Educational Attainment

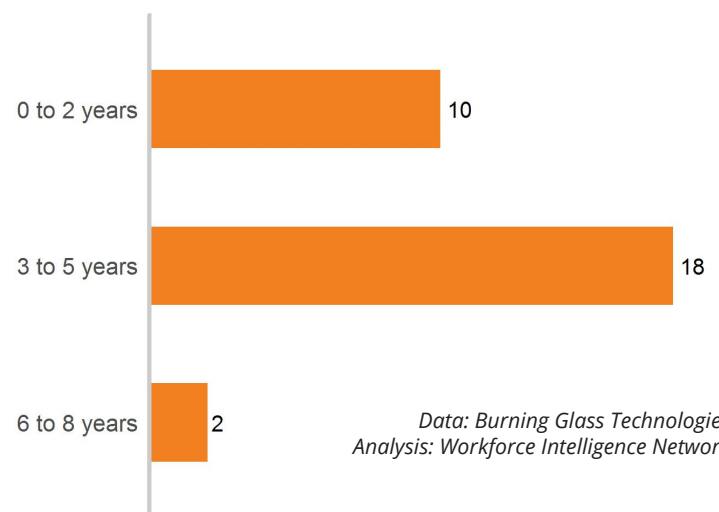


Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

In-Demand Area of Study

- Computer Science
- Business Administration and Management
- Engineering Technology, Engineering
- Management Information Systems
- Information Science

Experience Required



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



In-demand Skills: SQL, SQL Server



Education in-demand: Bachelor's Degree

Information Technology In-Demand Skills

St. Clair County employers looking to hire information technology workers during Q1 2017 sought foundational skills like those in communication and teamwork, basic computer skills, and research and writing skills. Many of the 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 the Q1 job postings also emphasized management skills like project management and business process and change management.

Technical In-Demand Skills

- SQL, SQL server
- Scheduling
- Programmable Logic Controller (PLC)
- Project management
- Customer service

Foundational In-Demand Skills

- Communication skills, teamwork, collaboration
- Troubleshooting, problem solving
- Writing
- Detail-oriented, organizational skills
- Computer Skills: Microsoft Excel, Microsoft Word

Job Type

- Temporary: 6.7%
- Full-Time: 62.2%
- Part-Time: 2.2%

Certifications Required

- Certified Information Security Manager (CISM)
- Certified Information Systems Auditor (CISA)
- Certified Information Systems Security Professional (CISSP)
- Certified A+ Technician
- Certified Teacher



Certifications in-demand: Information Security



Baseline skills: Communication, Troubleshooting

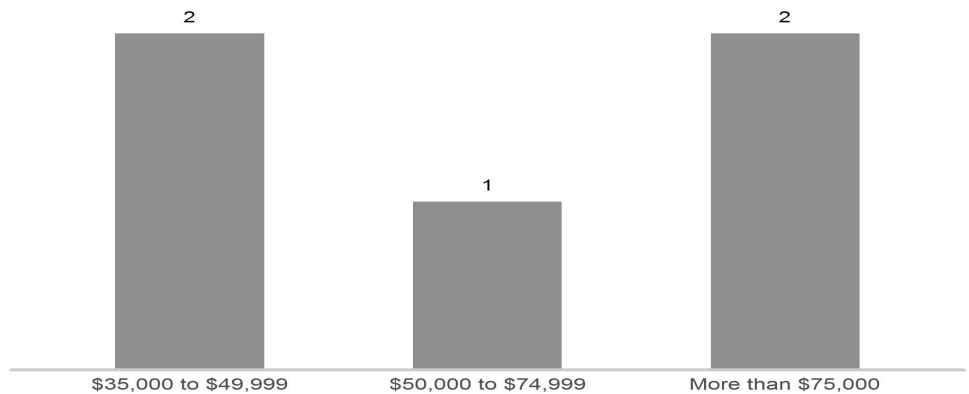
Information Technology Wages

Information technology occupations are some of the highest paying in southeast Michigan. Only 5 Q1 job ads posted a salary range, but of those that did a majority offered more than \$50,000 a year.

Bureau of Labor Statistics data confirm that IT occupations pay well: all the top in-demand IT jobs in St. Clair County offer wages over \$20 per hour, and 8 of the top 10 offer wages over \$30 per hour. These wages calculate to an annual salary of over \$62,000 a 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
15-1132	Software Developers, Applications	\$20.86	\$25.40	\$33.11	\$42.94	\$51.65
15-1151	Computer User Support Specialists	\$11.58	\$15.25	\$20.11	\$27.40	\$34.93
15-1199	Computer Systems Engineers/Architects	\$22.33	\$28.80	\$35.40	\$43.87	\$51.98
11-3021	Computer and Information Systems Managers	\$29.67	\$36.50	\$46.10	\$57.62	\$74.35
15-1199	Information Technology Project Managers	\$22.33	\$28.80	\$35.40	\$43.87	\$51.98
15-1131	Computer Programmers	\$23.22	\$28.16	\$32.41	\$40.23	\$48.15
15-1142	Network and Computer Systems Administrators	\$19.98	\$25.05	\$32.01	\$39.22	\$46.49
15-1199	Business Intelligence Analysts	\$22.33	\$28.80	\$35.40	\$43.87	\$51.98
15-1121	Computer Systems Analysts	\$19.30	\$26.50	\$34.17	\$43.22	\$52.11
15-1141	Database Administrators	\$19.88	\$26.22	\$35.69	\$45.08	\$54.18

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.

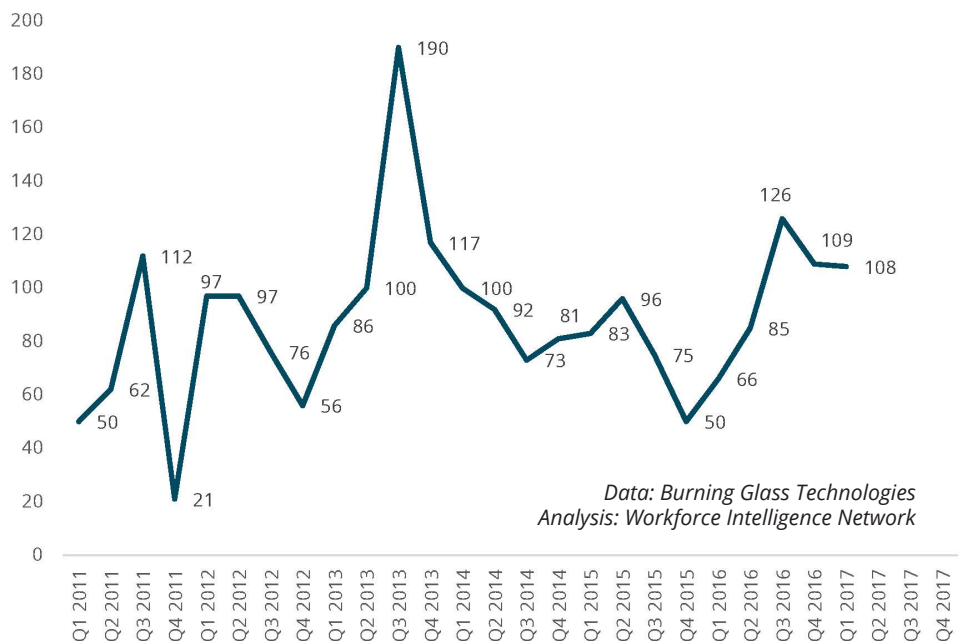
Job Posting Analysis

St. Clair County advanced manufacturing employers looking to hire skilled trades workers posted 108 online job ads during Q1 2017. This is a 1 percent decrease from the 109 job postings in St. Clair for this occupation group during Q4 2016. 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 Analysis

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 1,930 employees in 2009. In 2017, 2,900 St. Clair County workers were employed in skilled trades jobs, a 50 percent increase over the 2009 recession low and still a 0.5 percent increase over 2016's employment numbers.

Online Job Postings



Employment Over Time

Quarter 1 2017





Education in-demand: high school diploma & technical training

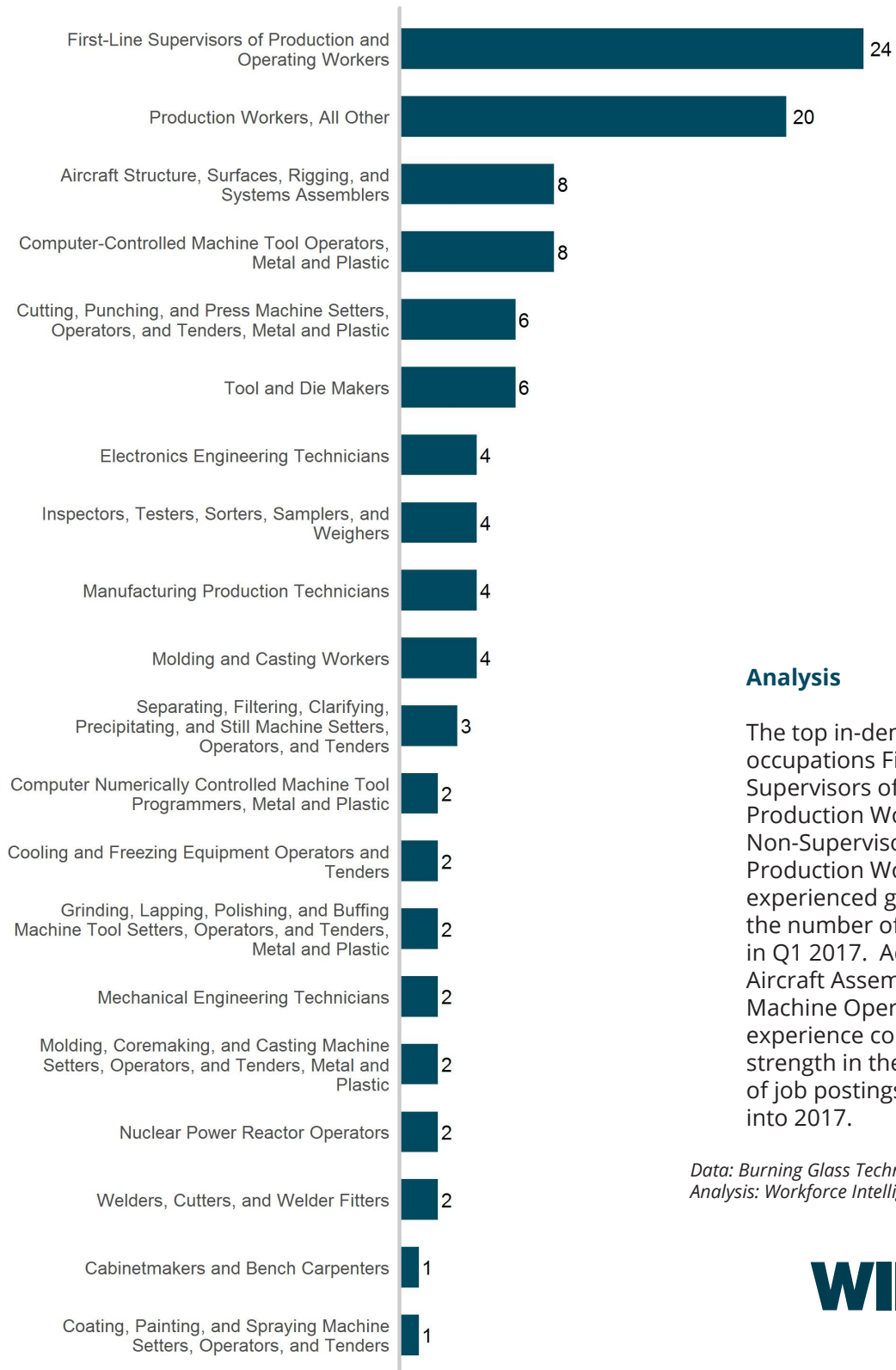


Now hiring:
108 online job postings

Skilled Trades & Technicians

Top Jobs

Quarter 1 2017



Analysis

The top in-demand occupations First-Line Supervisors of Production Workers and Non-Supervisor Production Worker both experienced growth in the number of postings in Q1 2017. Additionally, Aircraft Assemblers and Machine Operators experience consistent strength in the number of job postings moving into 2017.

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Experience required:
less than 5 years

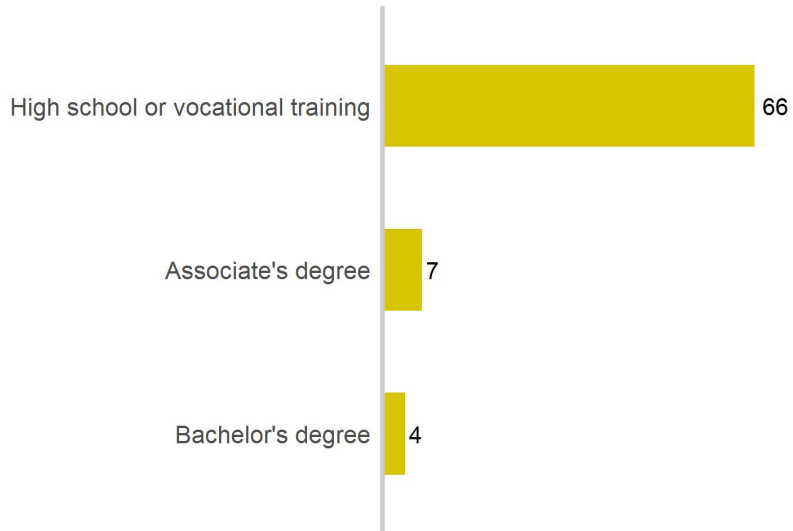
65%
of skilled trades postings
offer full-time work

Skilled Trades & Technicians Educational Attainment Required

Only 77 of the 108 Q1 2017 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 employers require training outside of high school but not all training results in a formal credential. Only 4 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 (55 postings during Q1). Again, those jobs requiring more experience, 6 years and beyond, are likely for some management occupations included in this group.

Educational Attainment

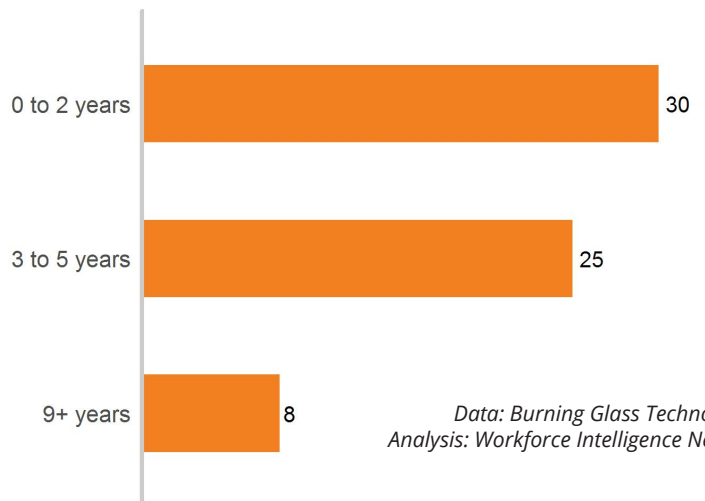


Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

In-Demand Area of Study

- Environmental Engineering

Experience Required



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Employment growth every
year since 2009



Mean advertised salary:
\$31,145

Skilled Trades & Technicians In-Demand Skills

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 2017 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 require some degree of physical demand.

Technical In-Demand Skills

- Inspection
- Supervisory Skills
- Repair and Machining
- Scheduling Budgeting
- Occupational, Health and Safety

Foundational In-Demand Skills

- Problem Solving
- Communication Skills
- Detail-Oriented, Organizational Skills
- Planning
- Physical Demand

Job Type

- Temporary: 14.8%
- Full-Time: 67.6%
- Part-Time: Data Not Available

Certifications Required

- Certified Energy Manager
- Certified Customs Specialist
- Forklift Operator Certification
- Professional Engineer
- Electrical Certification



Degree in-demand: Engineering



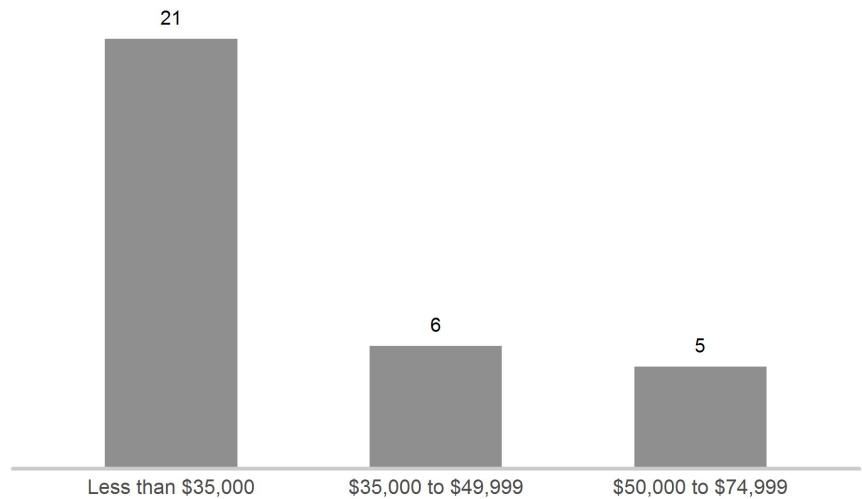
In-demand certification: Certified Energy Manager

Skilled Trades & Technicians Wages

Thirty-two of the 108 skilled trades job postings in St. Clair County during Q1 2017 specified a wage or salary range. The majority of those (21 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.

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
51-1011	First-Line Supervisors of Production and Operating Workers	\$15.71	\$20.11	\$27.37	\$35.62	\$43.56
51-9199	Production Workers, All Other	\$9.54	\$12.89	\$15.20	\$16.94	\$20.01
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$10.05	\$12.45	\$18.25	\$20.85	\$24.92
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	\$8.97	\$10.51	\$13.27	\$17.06	\$23.42
51-4111	Tool and Die Makers	\$14.16	\$17.83	\$22.68	\$29.08	\$31.99
17-3023	Electronics Engineering Technicians	\$12.66	\$15.23	\$19.45	\$26.35	\$31.64
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$8.73	\$10.27	\$13.84	\$20.43	\$25.46
17-3029	Manufacturing Production Technicians	\$14.65	\$19.99	\$27.51	\$33.07	\$42.70
51-9195	Molding and Casting Workers	\$10.99	\$12.72	\$15.12	\$17.08	\$18.26

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	77,674	74,208	73,736	74,355	73,651	72,884	74,351	75,315	965	1.3%
Employment	64,934	64,509	65,066	65,800	66,589	67,907	69,771	70,331	559	0.8%
Unemployment	12,741	9,699	8,670	8,555	7,062	4,977	4,579	4,985	405	8.8%
Unemployment Rate	16.4%	13.1%	11.8%	11.5%	9.6%	6.8%	6.2%	6.6%	0.5%	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	73,831	73,943	75,296	74,332	75,315	983	1.3%	1,484	2.0%
Employment	68,756	69,641	70,464	70,224	70,065	-159	-0.2%	1,309	1.9%
Unemployment	5,075	4,303	4,832	4,107	5,250	1,143	27.8%	175	3.4%
Unemployment Rate	6.9%	5.8%	6.4%	5.5%	7.0%	1.4%	na	0.1%	na

**Note: Monthly data averaged by quarter*

Data: Bureau of Labor Statistics












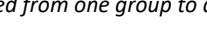
Monthly Labor Market Data

	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	73,455	73,637	74,400	73,039	74,002	74,789	75,601	75,267	75,021	74,625	73,985	74,385	75,249	75,412	75,284
Employment	68,396	68,721	69,150	68,971	69,916	70,035	70,450	70,347	70,595	70,284	70,179	70,210	69,534	70,013	70,648
Unemployment	5,059	4,916	5,250	4,068	4,086	4,754	5,151	4,920	4,426	4,341	3,806	4,175	5,715	5,399	4,636
Unemployment Rate	6.9%	6.7%	7.1%	5.6%	5.5%	6.4%	6.8%	6.5%	5.9%	5.8%	5.1%	5.6%	7.6%	7.2%	6.2%

** 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 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	1,730	1,788	2,259	2,163	2,297		32.8%	28.5%
Agriculture	40	33	20	20	42		5.0%	27.3%
Business & finance	68	72	89	115	74		8.8%	2.8%
Construction	8	16	24	11	15		87.5%	-6.3%
Customer service	429	405	474	575	550		28.2%	35.8%
Education	22	13	49	8	17		-22.7%	30.8%
Energy	12	5	7	12	34		183.3%	580.0%
Engineers & designers	56	59	70	86	79		41.1%	33.9%
Health care	387	365	466	480	598		54.5%	63.8%
Information technology	29	41	41	32	45		55.2%	9.8%
Skilled trades & technicians	66	85	126	109	108		63.6%	27.1%
Transportation, distribution, and logistics	212	305	463	234	200		-5.7%	-34.4%

**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.*

Website

www.winintelligence.org

Email

info@win-semich.org

Phone

313.744.2946

Address

**440 E. Congress St., 4th Floor
Detroit, MI 48226**

Facebook

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

Twitter

[@win-semich](https://twitter.com/win-semich)