

Q2 2016

MACOMB COUNTY

WIN Quarterly Report



Introduction: Macomb 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 Macomb County with special sections devoted to five 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 Trade & Technicians (manufacturing focused) (page 6)
- Engineers and Designers (page 11)
- Information Technology (IT) (page 16)
- Health Care (page 21)
- Business and Finance (page 26)

Data analyzed includes:

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



Introduction: Macomb County

Key Findings: State of the Labor Market

Macomb County's labor market continues to gain strength.

After reaching a new high in employment in Q2 2016, employment has continued to grow in the second quarter. The labor force has also seen some growth in the area, with both factors putting downward pressure on the unemployment rate, causing it to fall beneath 5%.

Majority of occupation groups saw decrease in Online Job Postings.

Most of the Macomb County Occupation groups saw a decrease in online job postings in Q2 2016. The largest drop in postings was seen in the Business and Finance group with a drop in online job ads of 20%. The IT group was the only group to experience growth, with online job postings increasing by about 15%.

Truck drivers and registered nurses were the most in-demand occupations.

Recently, truck drivers and registered nurses witnessed increases in demand, overtaking retail salespersons as the top in-demand job within the county. A larger push for truck drivers has been seen lately throughout the country and could reflect a reason why truck drivers moved into the most in-demand position.

The IT occupation group has the highest advertised average salary within the county.

The average advertised salary for the IT group was \$74,775 during Q2 2016. This is 120% greater than the state's median earnings of \$34,000. Additionally, software developers and computer systems engineers and architects saw postings increase. This could explain the increase in average salary as higher skilled IT are more in-demand. See page 26 for more details.

A majority of employers look for 3-5 years of experience in job applicants.

Within the occupation groups analyzed in this report a majority of postings were looking for 3-5 years of experience. The only group not to share this characteristic was Health Care, which sought out those with 0-2 years of experience, showing a willingness to hire at the entry level within the Health Care field.



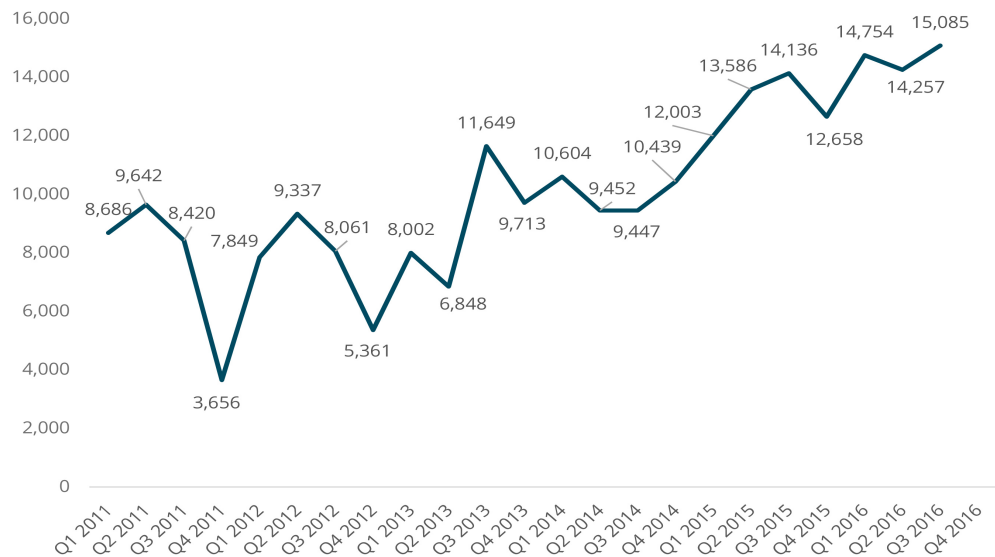
Executive Summary

Postings Over Time

In Q3 2016, Macomb hit a new high for total online job postings. Macomb experienced an increase of 6% (828 postings) in job postings.

Total Online Job Postings

2008 - June 2016



Source: Burning Glass Technologies
Analysis: Workforce Intelligence Network

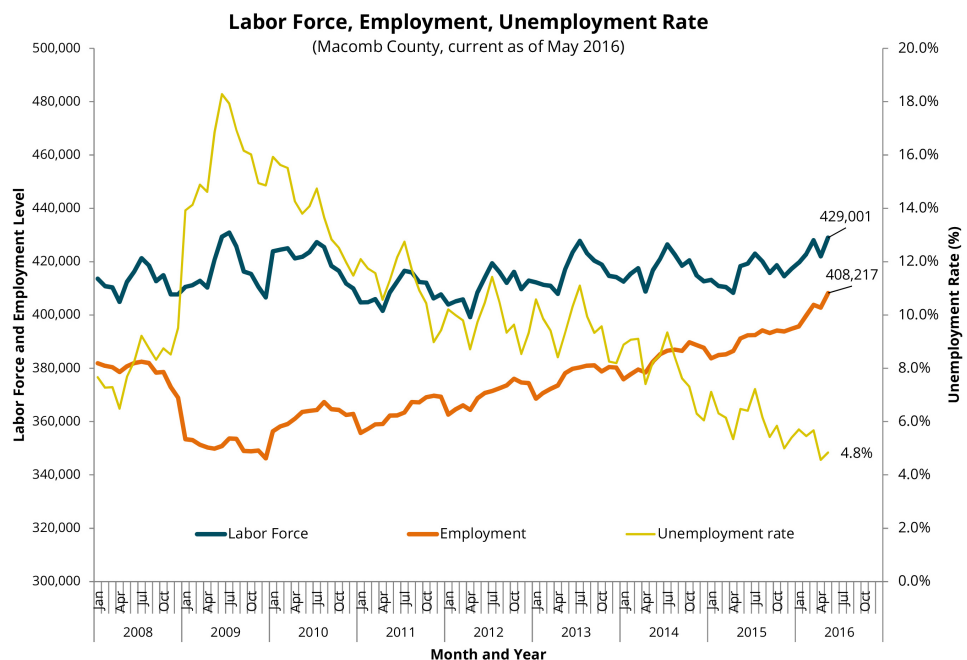
Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Labor Force, Employment, & Unemployment

The labor force in Macomb County increased by 1,963 individuals (+0.5%) to 426,507 in Q2 2016. Employment also increased by 1.4% to 405,478. Since employment increased by more than the labor force, unemployment fell 0.9 percentage points to 4.7%. Labor force growth and employment growth are both encouraging signs pointing to the health of Macomb's economy. Q2 2016 marks a new record level of employment in Macomb County since postings data began being recorded in 2011.

Labor Force, Employment, Unemployment Rate

2008 - May 2016



Data: BLS
Analysis: Workforce Intelligence Network

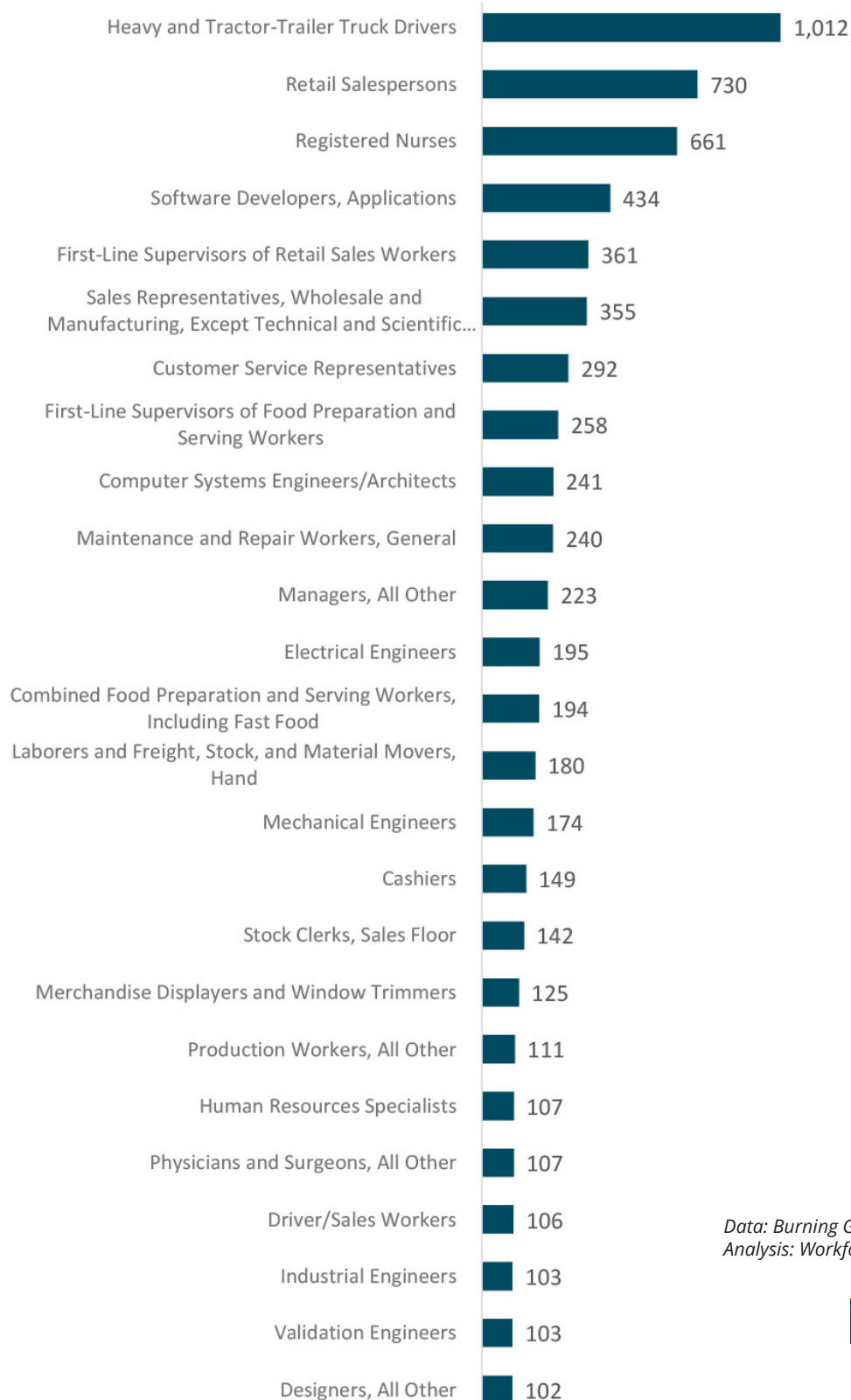


15,085 total job postings

5.8% increase in
online postings

Top Jobs In Demand

Quarter 3 2016



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Truck drivers most in-demand



Unemployment fell to 4.5%

Top Jobs In Demand

Quarter 3 2016

First-Line Supervisors of Production and Operating Workers	102
Medical Assistants	99
Cooks, Restaurant	97
Engineers, All Other	96
Medical and Health Services Managers	94
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	92
Nursing Assistants	90
Automotive and Watercraft Service Attendants	89
Inspectors, Testers, Sorters, Samplers, and Weighers	86
Medical Records and Health Information Technicians	84
Architectural and Engineering Managers	81
Sales Agents, Financial Services	80
Management Analysts	79
Demonstrators and Product Promoters	78
Food Service Managers	78
Licensed Practical and Licensed Vocational Nurses	77
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	76
Machinists	75
Light Truck or Delivery Services Drivers	73
Teacher Assistants	72
Office Clerks, General	71
Bookkeeping, Accounting, and Auditing Clerks	70
Commercial and Industrial Designers	66
Pharmacy Technicians	66
Critical Care Nurses	65

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.

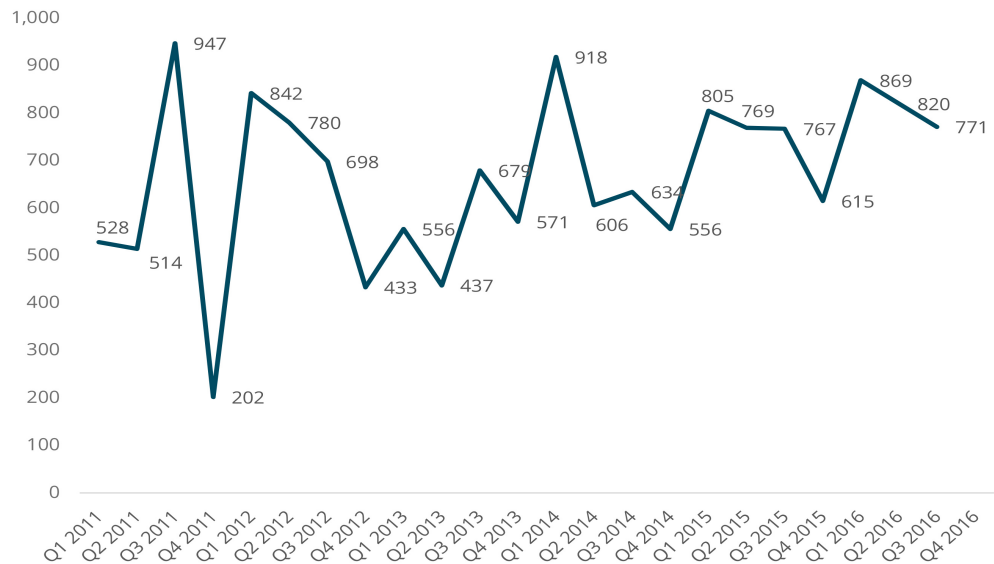
Postings Over Time

Online job postings for occupations related to Skilled Trades were down 6% to 771 during Q3 2016, compared to 820 during Q2 2016. Posting declines between Q1 and Q3 seem to be a regular trend over the past 5 years and most likely occur due to natural churning of the labor market.

Employment Over Time

Employment for Skilled Trades and Technicians increased for a sixth consecutive year as 2016 began. During 2016, this occupation group employed 25,900 individuals in Macomb County, a 2.8% rise compared to 2015. Employment has now surpassed 2008 levels, but remains well below early 2000 levels.

Online Job Postings



Source: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Employment Over Time



Data: EMSI, BLS
Analysis: Workforce Intelligence Network



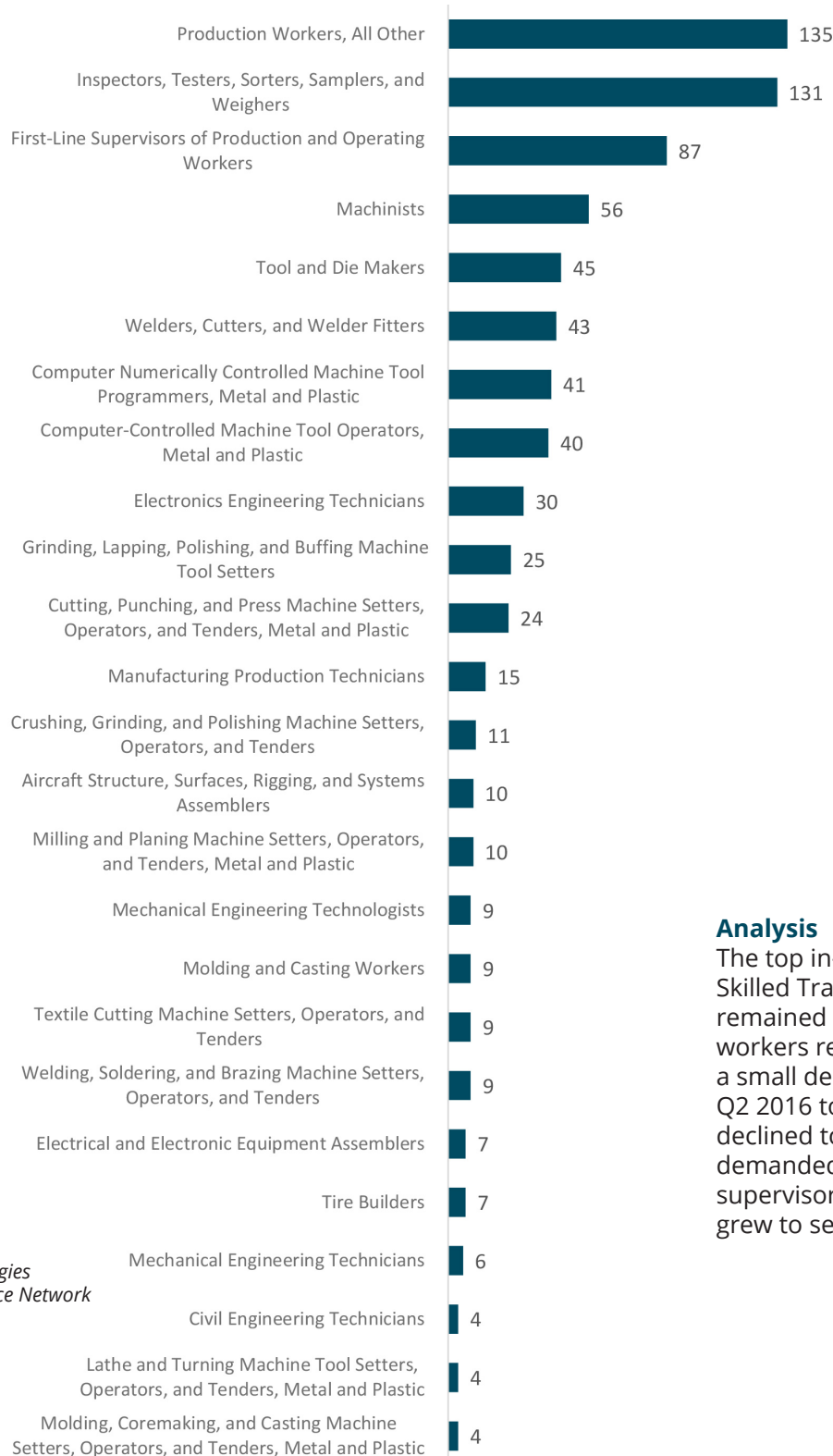
Postings decreased by 6%



Production Workers
maintained top in-demand job

Skilled Trades & Technicians Top Jobs

Quarter 2 2016



Analysis

The top in-demand jobs for the Skilled Trade occupation group remained the same, with Production workers retaining its top spot, after a small decrease in jobs ads from Q2 2016 to Q3 2016. Inspectors declined to the second most demanded job, while first line supervisors of production workers grew to second in Q3 2016.

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Desired Education: High-School/Vocational training

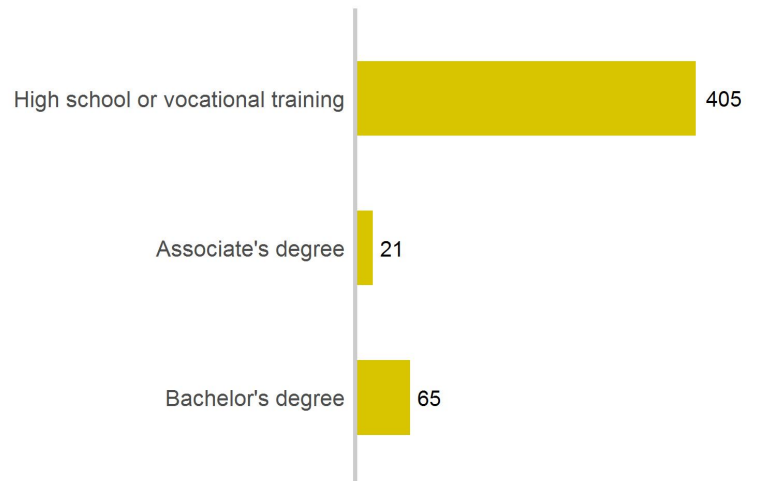
0-5 Years of experience highly sought

Skilled Trades & Technicians Educational Attainment & Experience Required

Of online job postings that provided educational attainment requirements, an overwhelming proportion (53%) indicated a high school diploma or vocational training as sufficient for openings in the Skilled Trades. Most often, employers want Skilled Trades workers with either previous experience or training relevant to the position prior to hiring. Another 65 postings indicated a Bachelor's degree as a requirement, most likely for supervisor/management positions.

Meanwhile, nearly all of the postings providing experience needs indicated that five or fewer years would suffice. The "3-5 years" category had the highest frequency of postings, indicating the availability of entry-level positions.

Minimum Educational Attainment Required Q3 2016

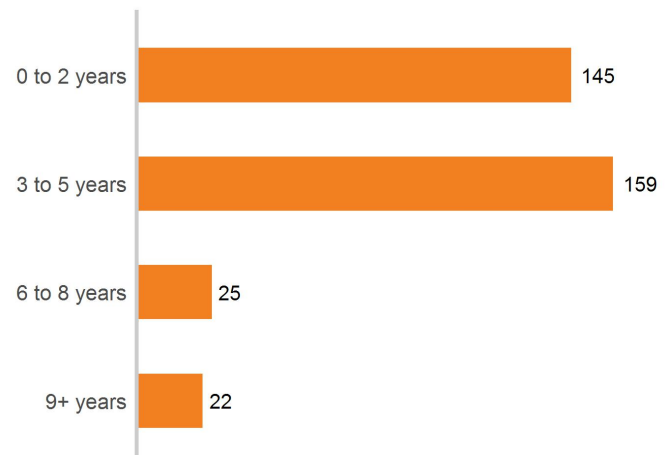


Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Areas of Study in-Demand Q2 2016

- Electrical and Electronic Engineering
- Mechanical Engineering
- Engineering, general
- Business Administration and Management
- Automotive engineering technology

Experience Required Q3 2016



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Average Salary 5% more than
states average

Skills desired: mechanical,
management, communication

Skilled Trades & Technicians in-Demand Skills Q3 2016

The occupations in the Skilled Trades group require a wide array of high-level technical skills. Machinery, welding, repair, inspection, and other traditional skills remain the most common in Skilled Trades job postings. Management skills were also present in some of the Skilled Labor postings including supervisory skills, scheduling, operations management, human resource management, and leadership. Advanced technical skills such as mathematics do appear through the skills list most likely coinciding with the demand for procedural knowledge. Employers also look for communication, safety, and assessment skills when posting Skilled Trade jobs. These skills are imperative for Skilled Trades so that collaboration can be fostered in a safe and flowing environment.

Technical in-Demand Skills

- Machine Inspection and Repair
- Computer Numerical Control (CNC)
- Repair
- Machining/ Welding
- Lathes

Foundational In-Demand Skills

- Communications
- Problem Solving/ Troubleshooting
- Mathematics
- Planning/ Supervisory Skills
- Detailed-Oriented/Organizational Skills

Job Type

- Temporary: 7%
- Full-time: 67%
- Part-time: 1.8%

Certifications In-Demand

- Security Clearance
- Forklift Operator Certification
- Welding Certification
- Programming Certification
- Tool and Die



Area of study demanded:
Engineering/Business

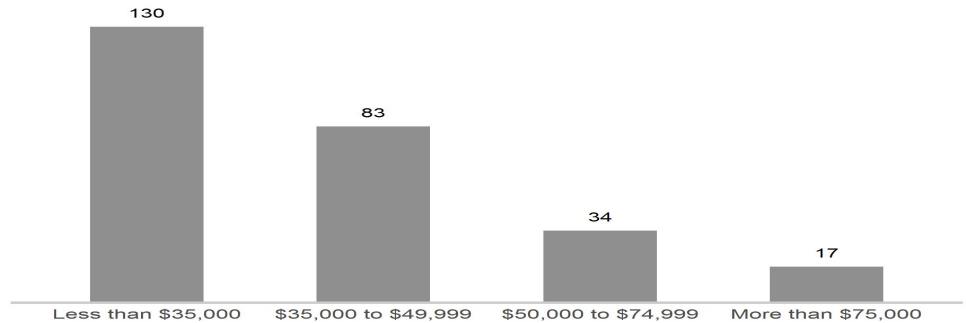


67% Full-time jobs available

Skilled Trades & Technicians Wages

The majority of advertised salaries in the Skilled Trades group in Q3 2016 were below \$35,000 a year. The average advertised salary for this occupation group in Macomb during Q3 2016 was \$39,211. This is 5% more than the state's median earnings for all workers, \$34,000.

Advertised Salaries Quarter 3 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	\$9.94	\$13.44	\$15.85	\$17.67	\$20.86
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$9.57	\$11.26	\$15.17	\$22.40	\$27.91
51-1011	First-Line Supervisors of Production and Operating Workers	\$16.34	\$20.91	\$28.46	\$37.04	\$45.29
51-4041	Machinists	\$10.86	\$13.84	\$17.96	\$23.91	\$28.37
51-4111	Tool and Die Makers	\$15.55	\$19.58	\$24.91	\$31.93	\$35.13
51-4121	Welders, Cutters, and Welder Fitters	\$11.56	\$14.05	\$16.66	\$20.51	\$26.23
51-4012	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	\$14.41	\$16.85	\$21.42	\$26.19	\$31.06
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$10.69	\$13.23	\$19.40	\$22.17	\$26.49
17-3023	Electronics Engineering Technicians	\$13.71	\$16.50	\$21.07	\$28.54	\$34.26
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$9.91	\$12.40	\$15.91	\$19.66	\$22.64

Data: EMSI, BLS
Analysis: Workforce Intelligence Network

Engineers & Designers (Manufacturing Focused)

Introduction

Engineers & Designers

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

Postings Over Time

Macomb County witnessed a decline in job postings moving into Q3 2016 within the Engineering & Design occupation group. Postings fell to 1,108 online job ads from 1,181 in Q2 2016 dropping 7%. Although postings fell, Q3 2016 marks the sixth consecutive quarter of online job postings above 1,000.

Employment Over Time

Employment of Engineers and Designers continued to rise following the substantial jump between 2014 and 2015. This occupation group now employs over 18,000 individuals in Macomb County, a level that surpasses early 2000 highs. The high demand for these occupations in the region should lead to steady employment growth in years to come.

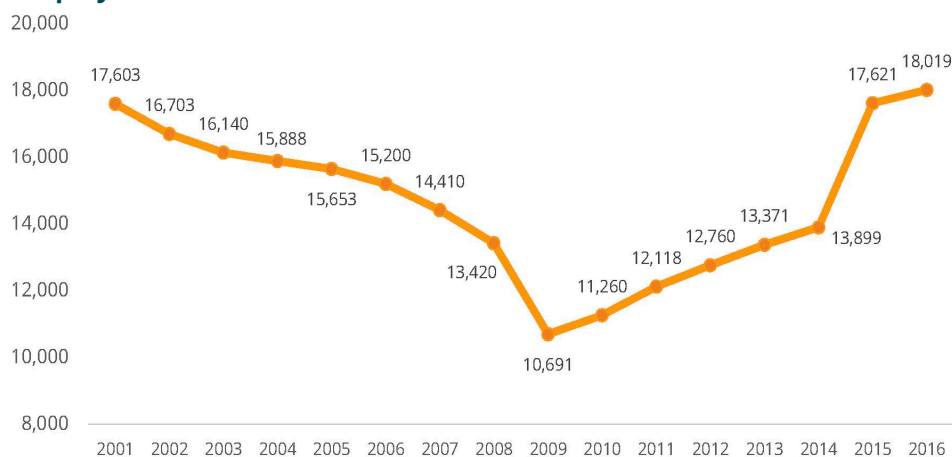
Online Job Postings



Source: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Employment Over Time



Data: EMSI, BLS
Analysis: Workforce Intelligence Network

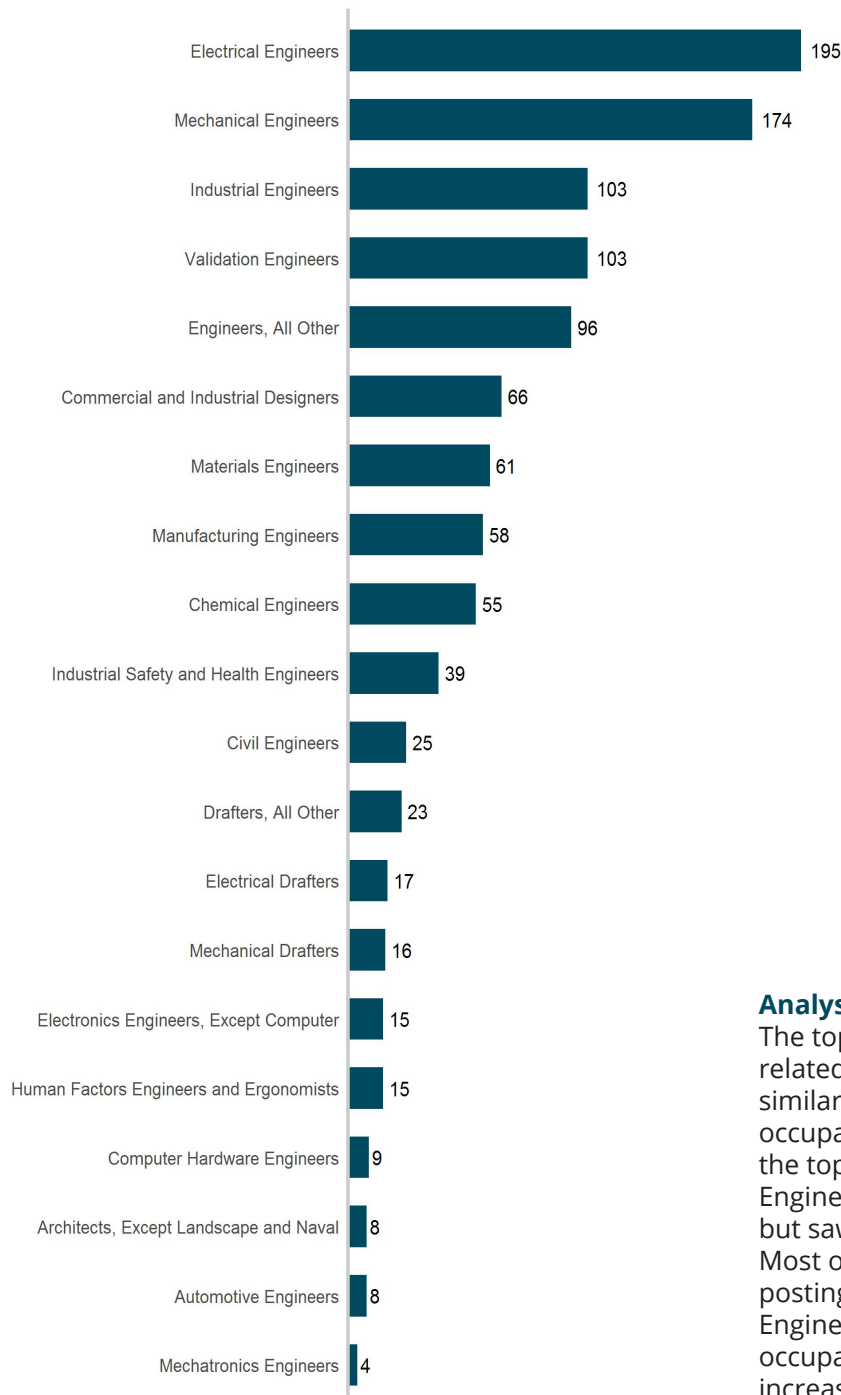


Postings fell 7%.



3-5 years of experience most desired

Engineers & Designers Top Jobs Quarter 3 2016



Analysis

The top in-demand occupations related to Engineering remained similar to the previous quarter with occupations shifting positions within the top five spots. Electrical Engineers remained in the top spot, but saw a decrease in postings. Most occupations saw decreases in postings as well, with Validation Engineers being one of the few top occupations to experience an increase.



Preferred Min Education: Bachelor's Degree

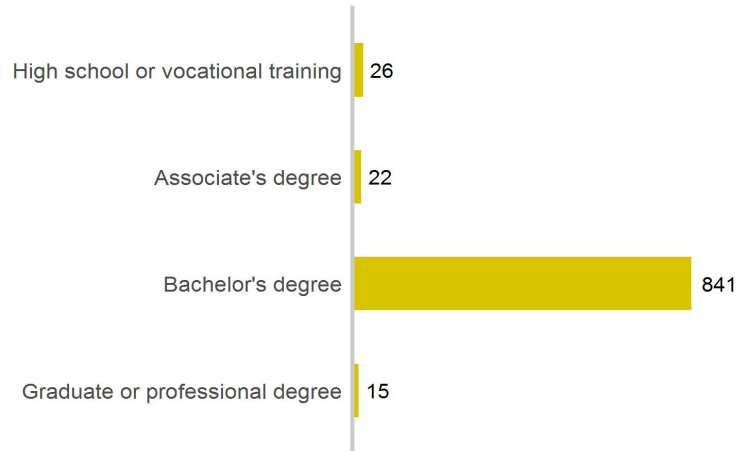
Majority of advertised salaries
were over \$75,000

Engineers & Designers Educational Attainment & Experience Required

Nearly all (76%) of postings providing minimum education requirements asked that applicants have a Bachelor's degree.

A majority of employers in Macomb County seeking Engineers and Designers prefer applicants with some previous experience, mostly in the three to five-year range. The roughly 240 postings preferring candidates with 6+ years of experience are most likely management positions. Opportunities for recently graduated engineers do exist in Macomb County – over 180 online ads required two years or less experience.

Minimum Educational Attainment Required Q3 2016

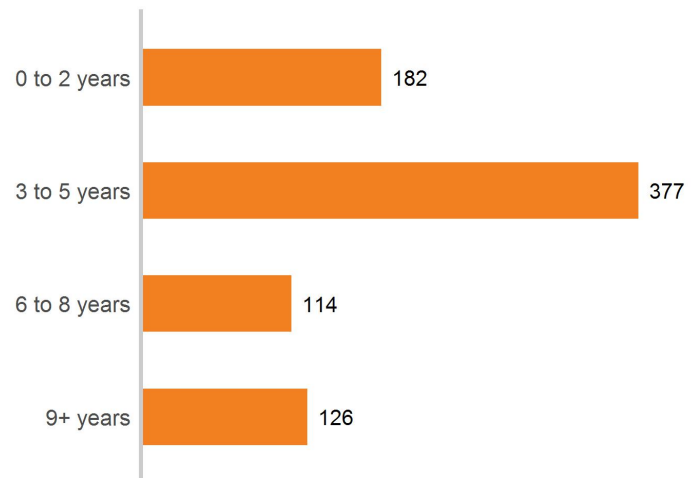


Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Areas of Study in-Demand Q3 2016

- Engineering, general
- Electrical and Electronic Engineering Technologies/Technicians, other
- Mechanical Engineering
- Computer Science
- Aerospace, Aeronautical and Astronautical Engineering

Experience Required Q3 2016



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Skills desired: Validation and
Manufacturing Process

Engineering Degrees
highly sought

Engineers & Designers in-Demand Skills Q3 2016

The most often advertised baseline and specialized skills for Engineers and Designers demonstrate that Macomb County employers seek workers with well-rounded foundational skills along with expertise for a specific specialized skill. In addition to having expertise in whatever their degree may have been in, Engineers and Designers need to also have strong communication, problem solving, and writing skills.

Technical in-Demand Skills

- Validation
- Microsoft Excel
- Electrical Engineering
- Mechanical Engineering
- Manufacturing Process

Foundational In-Demand Skills

- Communication
- Mathematics
- Writing
- Problem Solving
- Multi-tasking

Job Type

- Temporary: 4.3%
- Full-time: 43%
- Part-time: N.A.

Certifications In-Demand

- Six Sigma Green Belt
- Six Sigma Black Belt
- Security Clearance
- Certified Safety Professional
- Auditor Certification



561 Full Time Job Postings Available



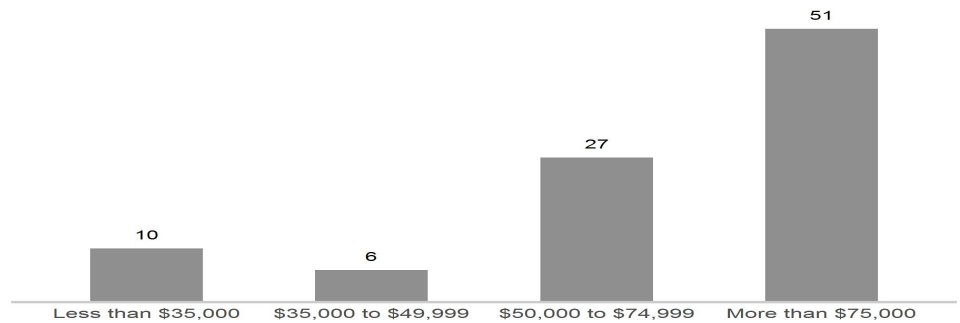
Desired Certification:
Six Sigma Green Belt

Engineers & Designers Wages

There are 94 job postings, 83% of postings providing salary information offered wages above \$50,000 annually while a majority offered more than \$75,000. The high wages offered reflect the high demand and high levels of education necessary for these occupations – the mean average of all advertised salaries was over \$70,000.

All of the top occupations in this group offer over \$30 per hour at the median level while half offer over \$40 per hour.

Advertised Salaries Quarter 3 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
17-2071	Electrical Engineers	\$26.23	\$31.59	\$38.94	\$45.43	\$54.27
17-2141	Mechanical Engineers	\$28.93	\$35.72	\$43.13	\$51.96	\$58.13
17-2199	Validation Engineers	\$19.79	\$34.86	\$44.84	\$55.52	\$68.19
17-2112	Industrial Engineers	\$26.40	\$32.78	\$40.15	\$46.89	\$55.44
17-2199	Engineers, All Other	\$19.79	\$34.86	\$44.84	\$55.52	\$68.19
27-1021	Commercial and Industrial Designers	\$24.99	\$30.84	\$37.09	\$41.87	\$45.16
17-2131	Materials Engineers	\$24.88	\$30.63	\$38.20	\$47.94	\$58.54
17-2041	Chemical Engineers	\$23.70	\$27.59	\$33.06	\$39.07	\$44.32
17-2199	Manufacturing Engineers	\$19.79	\$34.86	\$44.84	\$55.52	\$68.19
17-2051	Civil Engineers	\$21.61	\$26.65	\$32.07	\$36.39	\$43.49

Data: EMSI, BLS
Analysis: Workforce Intelligence Network

Information Technology (IT)

Introduction

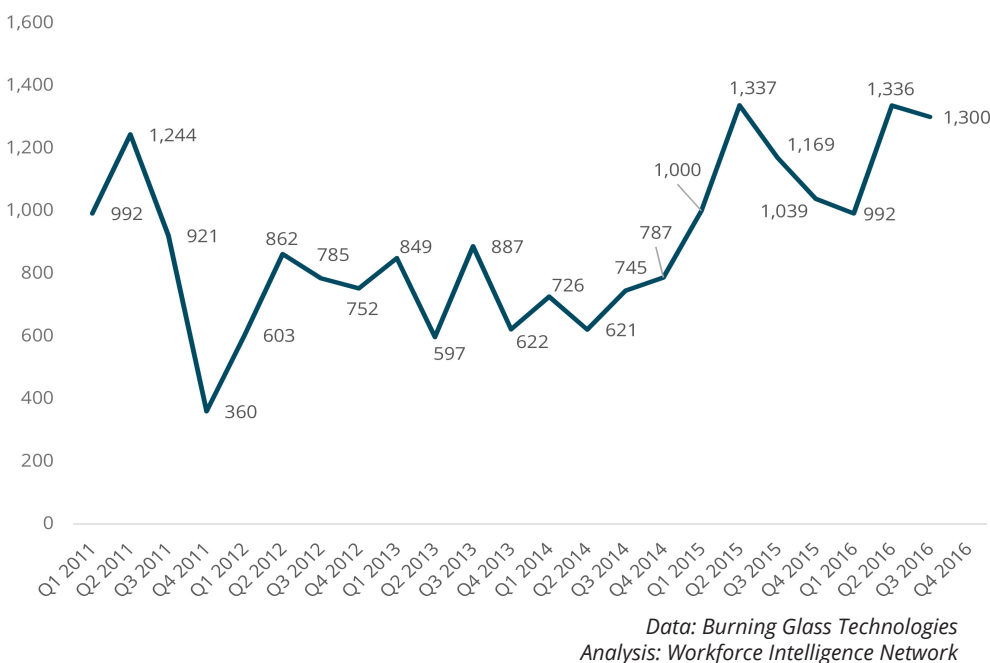
Information Technology (IT)

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

Online job postings for occupations related to IT were down 3% to 1,300 postings during Q3 2016, compared to 1,336 postings in Q2 2016.

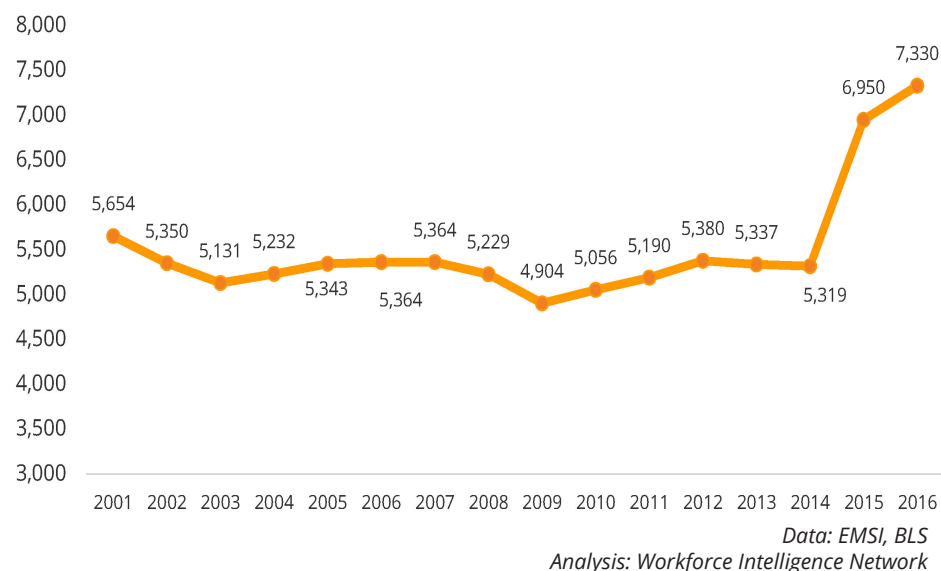
Online Job Postings



Employment Over Time

Employment for IT occupations in Macomb County continued its impressive growth into 2016 following over a decade of relatively flat change. The over 7,300 workers in these jobs is a record level of employment in the region. With high demand, the IT occupation group should continue to expand in Macomb County.

Employment Over Time



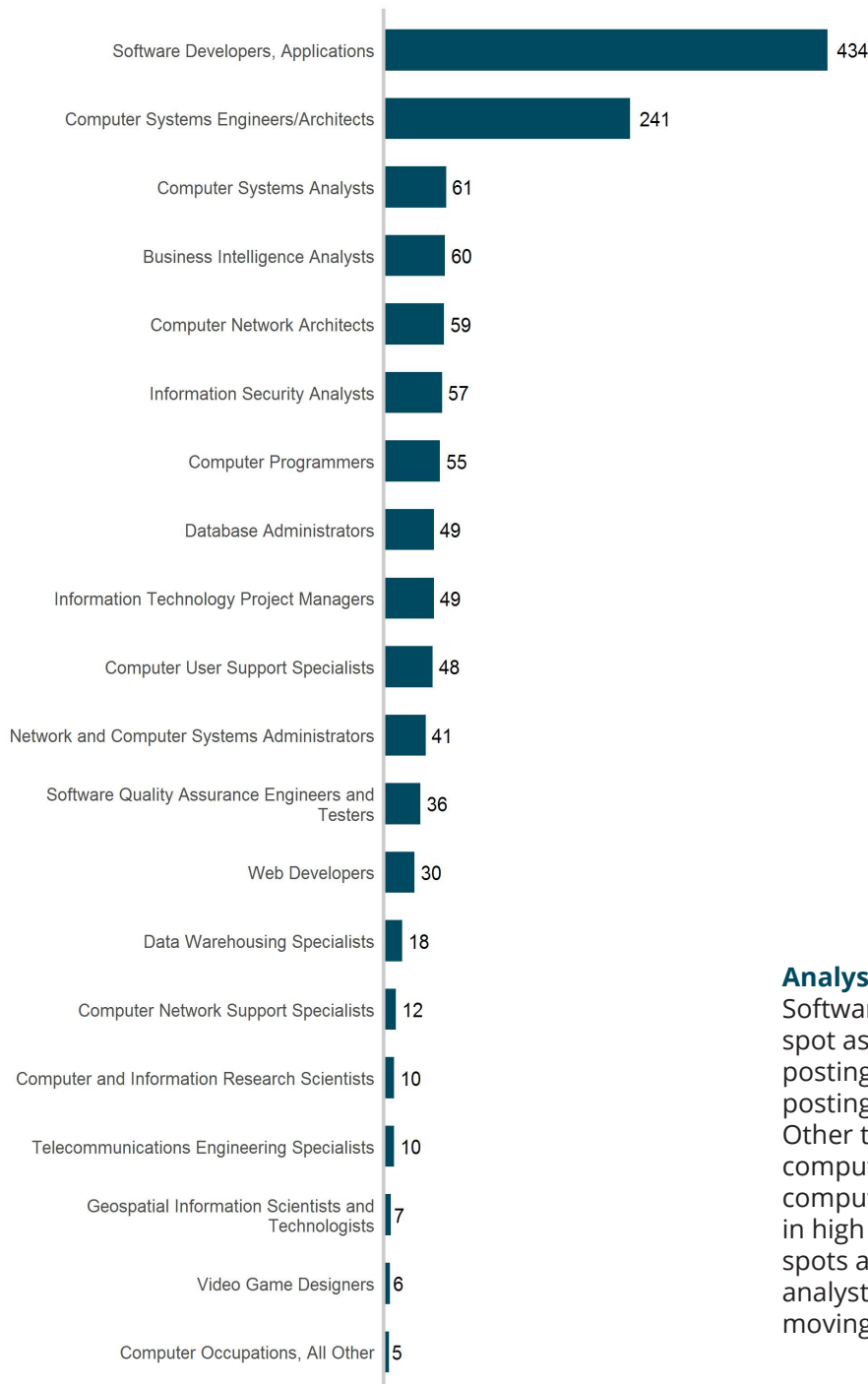


Job postings
decreased by 3%



Bachelor's degree
highly sought

Information Technology (IT) Top Jobs Quarter 3 2016



Analysis

Software developers maintained its spot as top IT occupation group posting, seeing an decrease of 66 postings moving into Q3 2016. Other top positions including computer systems engineers, and computer systems analyst all were in high demand, maintaining top spots as well. Business Intelligence analysts saw an increase in postings moving it within the top five.



Most desired experience:
3-5 years

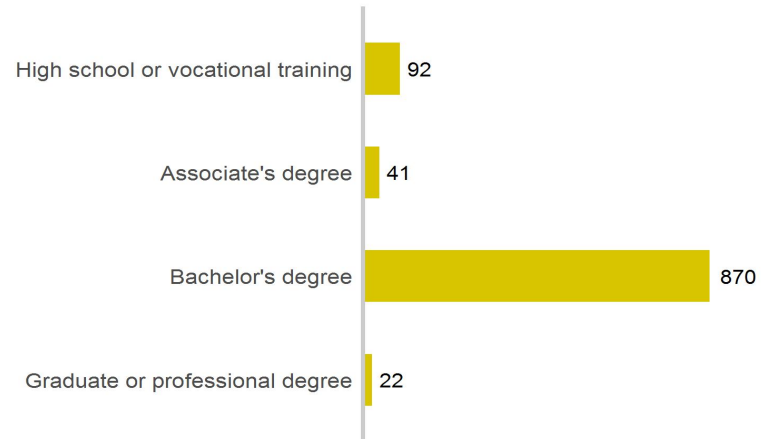
Advertised average salary:
\$69,900

Information Technology (IT) Educational Attainment & Experience Required

Sixty-seven percent of online postings that provided minimum education requirements asked that prospective candidates have a Bachelor's degree. While most IT occupations require a Bachelor's or more advanced degrees, opportunities do exist for candidates – particularly those with Associate's degrees in areas like web development.

In postings that advertised a preferred level of experience, employers most often sought candidates with three to five years of experience. Opportunities do exist for IT workers with less experience, with about 146 online ads asking for zero to two years of experience.

Minimum Educational Attainment Required Q3 2016

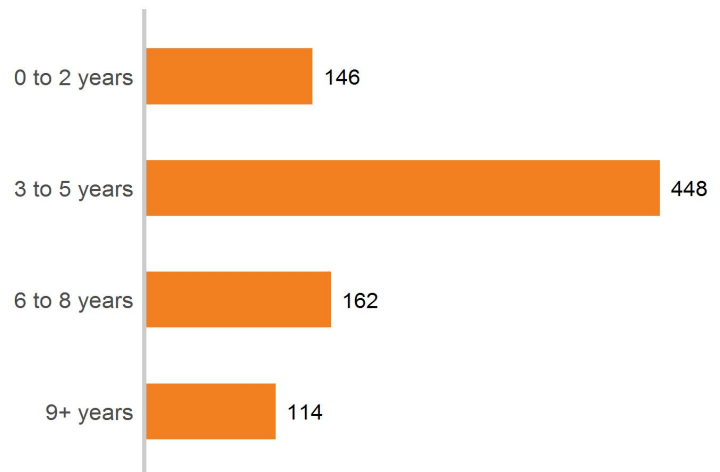


Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Areas of Study in-Demand Q3 2016

- Engineering, general
- Electrical and Electronic Engineering Technologies/Technicians
- Computer Engineering
- Mechanical Engineering
- Computer Science

Experience Required Q3 2016



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Most Desired Certification: Security Clearance

Area of Study: Engineering & Computer Science

Information Technology (IT) in-Demand Skills Q3 2016

The most often advertised baseline and specialized skills for IT occupations demonstrate that Macomb County employers seek workers with well-rounded foundational skills along with expertise of a specific IT skill, most often a computer language. In addition to knowing languages like SQL or JAVA, IT workers must also possess foundational skills such as communication, writing, and problem solving.

Technical in-Demand Skills

- Software Development/Engineering
- Electrical Engineering
- Validation
- Project Management
- Computer/ Systems Engineering

Foundational In-Demand Skills

- Communication
- Writing
- Problem Solving
- Microsoft Office
- Project Management

Job Type

- Temporary: 4%
- Full-time: 47%
- Part-time: 2.7%

Certifications In-Demand

- Security Clearance
- Six Sigma Green Belt
- Security+
- Six Sigma Black Belt
- Project Management Certification (e.g. PMP)



Communication and Engineering Skills Desired

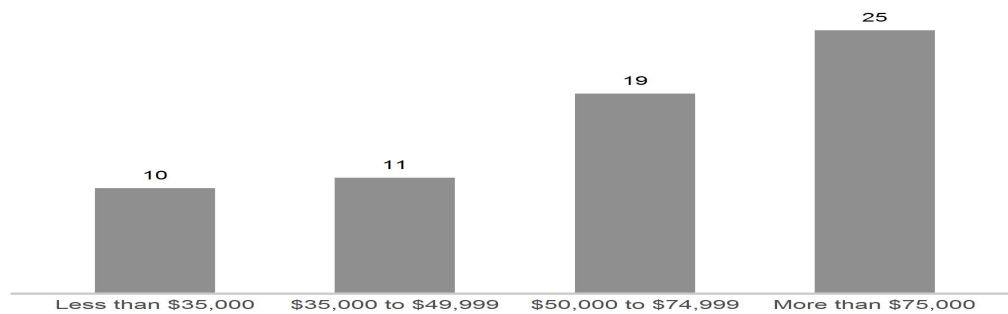


Highest Median Wage: Computer Network Architect

Information Technology (IT) Wages

95% of job postings within the IT occupation group did not advertise salary information, leaving only 65 of 1,300 postings to divulge salary information. The majority of advertised salaries (25 postings) were above \$75,000 a year. The average advertised salary for this occupation group during Q3 2016 was \$70,747. This is 120% more than the state's median earnings for all workers, \$34,000.

Advertised Salaries Quarter 3 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
15-1132	Software Developers, Applications	\$22.42	\$27.30	\$35.58	\$46.15	\$55.52
15-1199	Computer Systems Engineers/Architects	\$24.20	\$31.22	\$38.36	\$47.54	\$56.34
15-1121	Computer Systems Analysts	\$20.55	\$28.21	\$36.38	\$46.01	\$55.47
15-1151	Computer User Support Specialists	\$11.98	\$15.78	\$20.80	\$28.34	\$36.13
15-1142	Network and Computer Systems Administrators	\$20.75	\$26.01	\$33.24	\$40.72	\$48.27
15-1199	Software Quality Assurance Engineers and Testers	\$24.20	\$31.22	\$38.36	\$47.54	\$56.34
15-1141	Database Administrators	\$20.54	\$27.09	\$36.87	\$46.57	\$55.97
15-1131	Computer Programmers	\$24.83	\$30.10	\$34.64	\$43.01	\$51.48
15-1199	Information Technology Project Managers	\$24.20	\$31.22	\$38.36	\$47.54	\$56.34
15-1143	Computer Network Architects	\$26.67	\$35.45	\$47.15	\$54.68	\$64.50

Data: EMSI, BLS
Analysis: Workforce Intelligence Network

Introduction

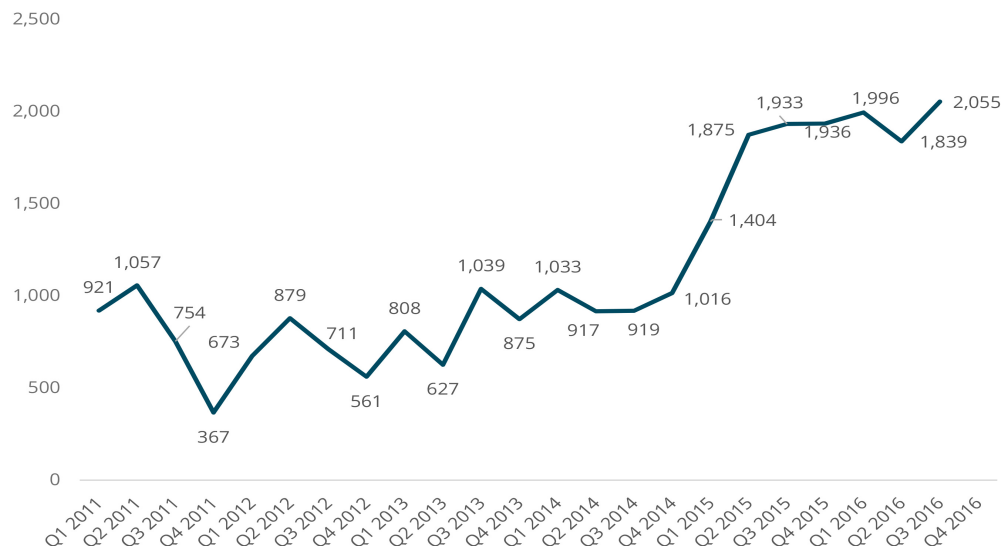
Health Care

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

Macomb County witnessed a decline in job postings moving into Q3 2016 within the Health Care occupation group. Postings rose to 2,055 online job ads from 1,839 in Q2 2016 increasing 12%.

Online Job Postings



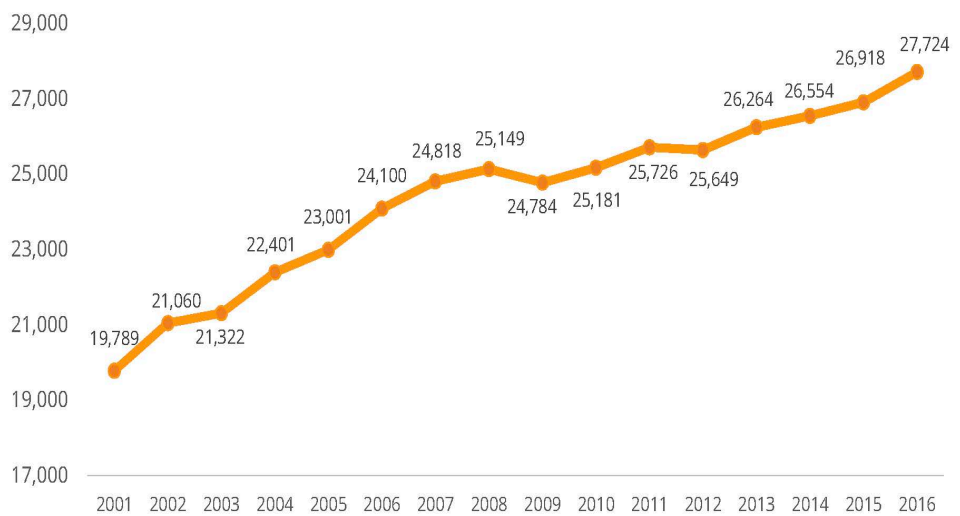
Source: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Employment Over Time

The increase in employer demand evident in Health Care postings during 2015 has resulted in an employment jump of 800 individuals (+3.0%). Unlike other occupation groups, Health Care employment was not severely cut during the Great Recession. Employment in this group has increased in all but two years since 2001.

Employment Over Time



Data: EMSI, BLS
Analysis: Workforce Intelligence Network

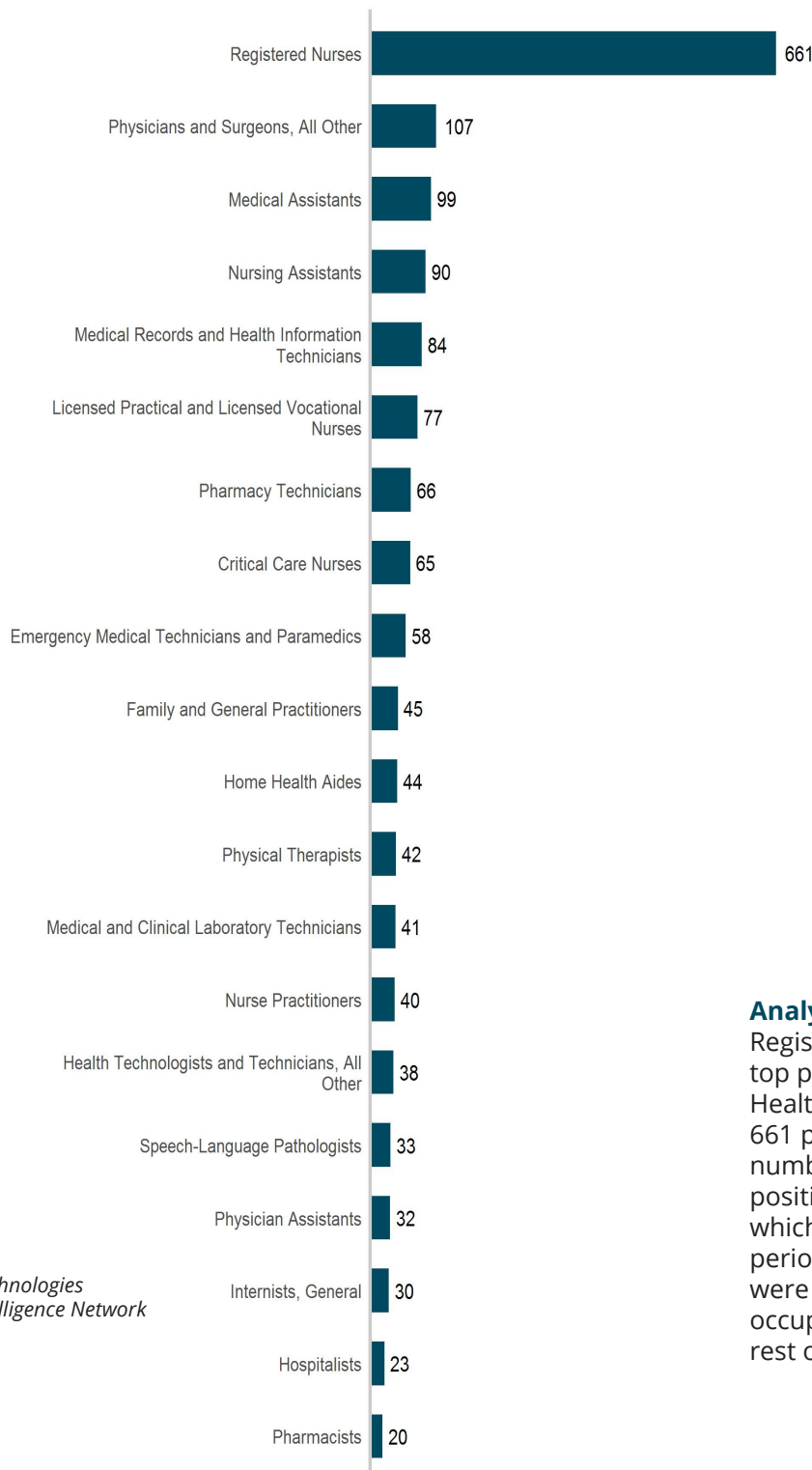


Postings rose by 11.7%



Increase in registered nurse postings

Health Care Top Jobs Quarter 3 2016



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Analysis

Registered nurses continue to hold the top position in job postings for the Health Care occupation group with 661 postings, nearly 5 times the number of ads for the subsequent position of Physicians and Surgeons, which moved into the top five this period. Assistants and technicians were also high in-demand for the occupation group rounding out the rest of the top 5 postings.



Entry Level Experience highly sought

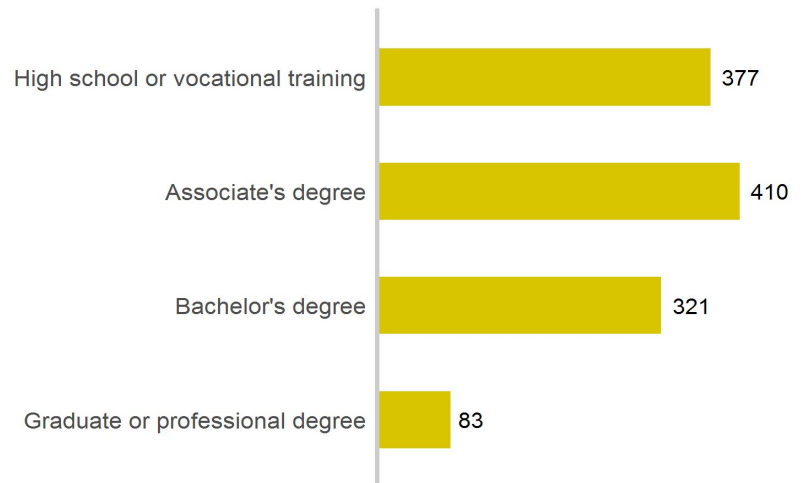
Areas of Study: Nursing and Physical Therapy

Health Care Educational Attainment & Experience Required

Unlike other occupation groups, one particular form of educational attainment does not dominate postings for Health Care occupations. A high school diploma or vocational training was highly sought education asked for by employers via online ads with over 350 online ads. The largest majority (410 postings) asked for a Associate's degree. Meanwhile, another 321 postings required an Bachelor's degree. The 83 ads asking for graduate or professional degrees were most likely for occupations like physicians and pharmacists which require years of education and training beyond a Bachelor's.

Also dissimilar to other occupation groups was the distribution of experience requirements for Health Care workers. An overwhelming majority of employers in Macomb County asked for little to no experience from prospective candidates. This indicates that with enough training or education individuals can immediately begin working in one of many in-demand Health Care fields.

Minimum Educational Attainment Required Q3 2016

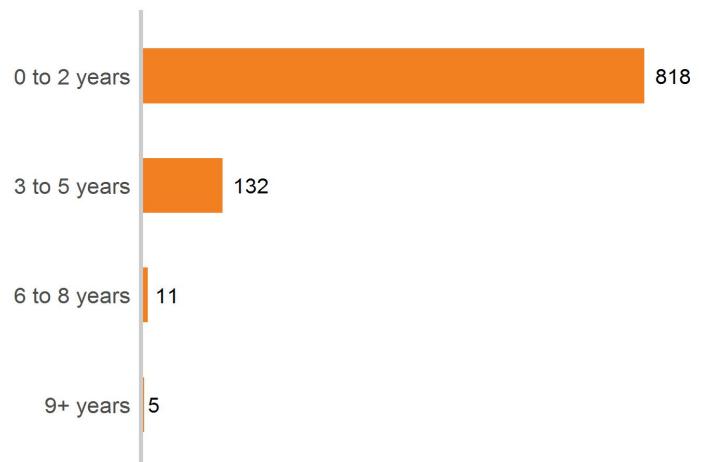


Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Areas of Study in-Demand Q3 2016

- Nursing science
- Physical Therapy/Therapist
- Public Health
- Engineering, general
- Social work

Experience Required Q3 2016



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Average salary 83% above
than state's average

Skills desired: Patient Care/
Treatment Planning

Health Care in-Demand Skills Q3 2016

The most often advertised baseline and specialized skills for Health Care occupations demonstrate that Macomb County employers seek workers with well-rounded foundational skills along with expertise of a specific health care skill, most often related to patients. In addition to having an excellent grasp on patient care, health care workers must also be able to communicate effectively, provide customer service, and supervise others.

Technical in-Demand Skills

- Patient Care/Treatment Planning
- Cardiopulmonary Resuscitation (CPR)
- Teaching/ Customer Service
- Surgery
- Advanced Cardiac Life Support (ACLS)

Foundational In-Demand Skills

- Planning
- Communication
- Teamwork/collaboration
- Customer Service
- Computer Skills

Job Type

- Temporary: 10%
- Full-time: 41%
- Part-time: 5.7%

Certifications In-Demand

- Registered Nurse
- First Aid CPR AED
- American Heart Association Certificate
- Critical Care Registered Nurse (CCRN)
- Certified Nursing Assistant



In-demand areas of study: Nursing and Therapy

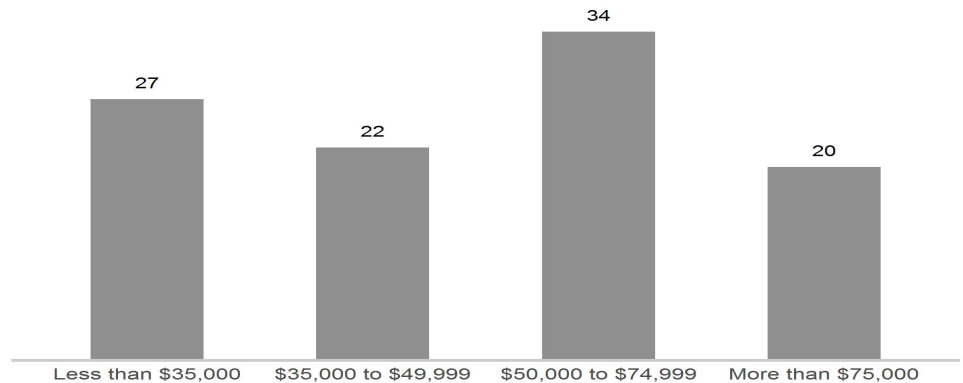


Hot certification: Registered Nurse

Health Care Wages

For job postings in the Health Care occupations group in Q3 2016 the majority were above \$50,000 a year. The average advertised salary for this occupation group in Macomb during Q3 2016 was \$60,131. This is 83% more than the state's median earnings for all workers, \$34,000.

Advertised Salaries Quarter 2 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	\$24.42	\$28.60	\$32.63	\$37.34	\$53.37
29-1141	Critical Care Nurses	\$24.42	\$28.60	\$32.63	\$37.34	\$53.37
31-1014	Nursing Assistants	\$9.72	\$11.29	\$13.30	\$15.48	\$17.31
29-2071	Medical Records and Health Information Technicians	\$10.48	\$12.69	\$16.39	\$20.27	\$23.20
31-9092	Medical Assistants	\$10.63	\$12.24	\$13.89	\$16.22	\$18.09
29-2061	Licensed Practical and Licensed Vocational Nurses	\$16.62	\$19.57	\$22.92	\$26.38	\$28.59
29-2012	Medical and Clinical Laboratory Technicians	\$11.27	\$12.88	\$15.55	\$20.03	\$26.13
29-2052	Pharmacy Technicians	\$8.98	\$10.66	\$13.20	\$15.88	\$17.83
29-1123	Physical Therapists	\$24.82	\$30.70	\$37.36	\$47.57	\$68.40
29-2099	Health Technologists and Technicians, All Other	\$11.81	\$13.29	\$15.98	\$19.56	\$25.54

Data: EMSI, BLS
Analysis: Workforce Intelligence Network

Introduction

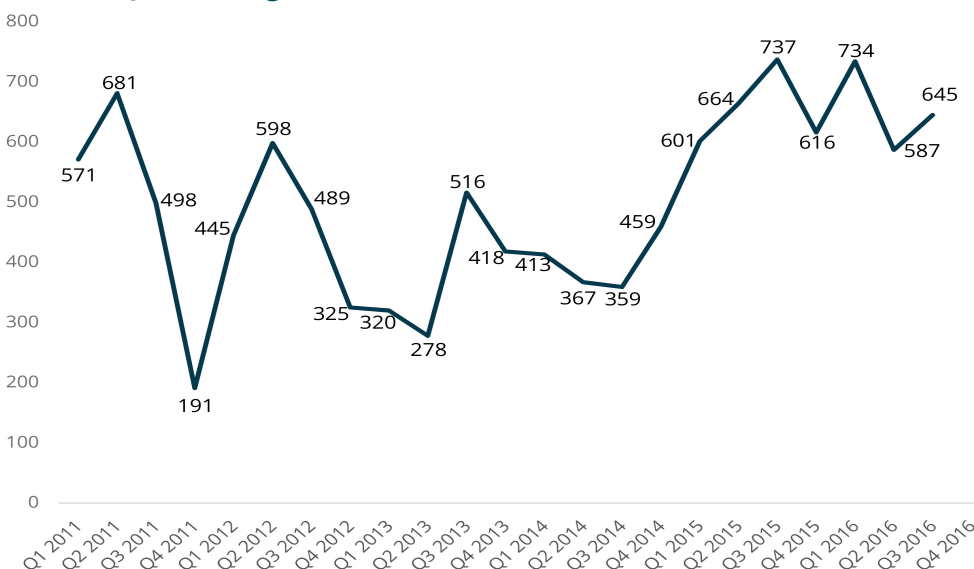
Business & Finance

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

Postings Over Time

Online job postings for Business and Finance occupations witnessed a increase moving into Q3 2016. The 645 online ads for this occupation group represented a 10% increase over Q2 2016.

Online Job Postings



Source: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Employment Over Time

Employment of Business and Finance workers increased to 14,800 workers (+3.9%) thus far in 2016. This occupation group has now surpassed 2001 levels of employment. The increasing demand for these workers should lead to steady employment growth in years to come—employment has grown in six of the past seven years.

Employment Over Time



Data: EMSI, BLS
Analysis: Workforce Intelligence Network



Postings increased by
10%

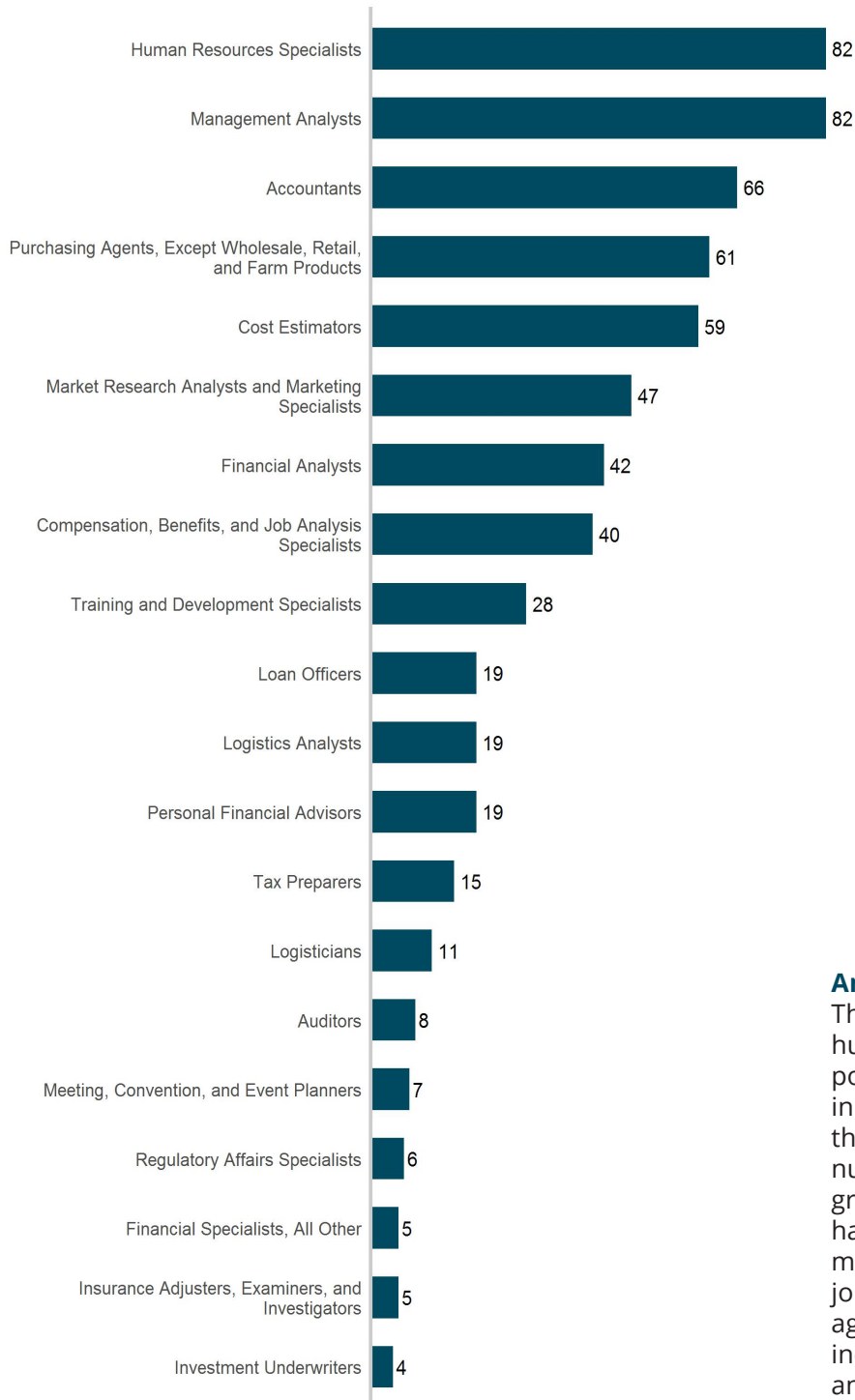


Most in-demand experience:
0-5 years

Business & Finance

Top Jobs

Quarter 3 2016



Analysis

The top in-demand occupation of human resource specialist fell in postings from 110 in Q2 2016 to 82 in Q3 2016 but retained its spot as the occupation with the greatest number of postings within the group. Additionally, accountants have seen a large jump in postings moving to the second spot of top job postings, with other purchasing agents and cost estimators increasing in demand. This pushed analysts down in rank.



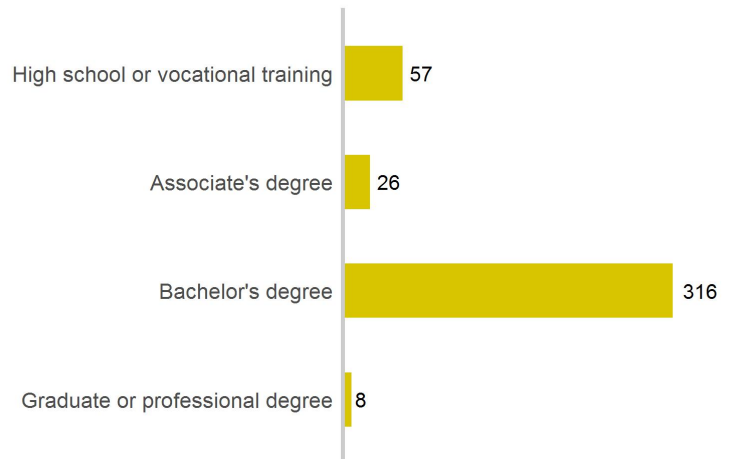
Most desired education:
bachelor degree

Analysts positions increasing
in demand

Business & Finance Educational Attainment & Experience Required

Of the 645 Business and Finance group job postings, 378 expressed a desired experience level during the Q3 2016 posting period. 330 postings were available to workers with less than 5 years of experience, 155 (or 41%) of which were entry-level positions calling for 0-2 years of work experience. A majority of the Business and Finance jobs posted in Macomb County (78% or 316 postings) expressed interest in candidates with a Bachelor's degree as a preferred or necessary qualification.

Minimum Educational Attainment Required Q3 2016

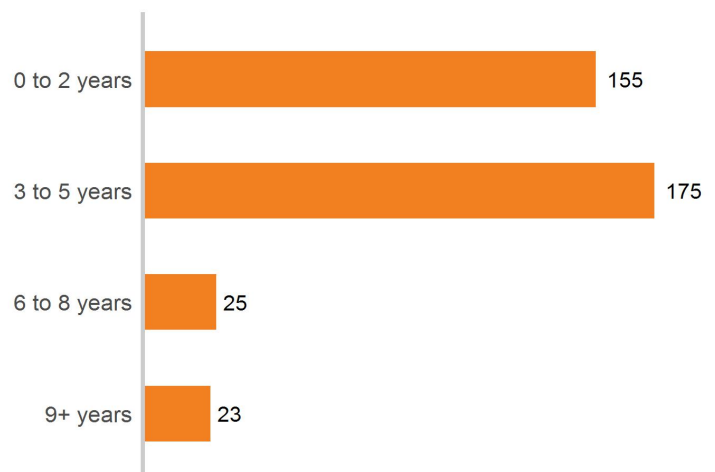


Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Areas of Study in-Demand Q3 2016

- Business administration and management, general
- Accounting
- Finance, general
- Human resources development
- Engineering, general

Experience Required Q3 2016



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Skills in-demand: management
and communication

Areas of Study in demand:
management and accounting

Business & Finance in-Demand Skills Q3 2016

The most often advertised baseline and specialized skills for Business and Finance occupations demonstrate that Macomb County employers seek workers with well-rounded foundational skills along with expertise in a specific, specialized skill. In addition to having expertise in accounting or financial analysis, Business and Finance professionals need to also have strong communication, writing, and problem solving skills.

Technical in-Demand Skills

- Project Management/ Scheduling
- Budgeting/ Accounting
- Purchasing
- Recruiting
- Financial Analysis

Foundational In-Demand Skills

- Communication
- Microsoft Office
- Writing
- Organizational
- Problem Solving

Job Type

- Temporary: 2.2%
- Full-time: 59.6%
- Part-time: 6.4%

Certifications In-Demand

- Certified Public Accountant (CPA)
- Security Clearance
- Series 6 and 7
- Insurance License
- Project Management Certification



In-demand credential: Certified
Public Accountant (CPA)

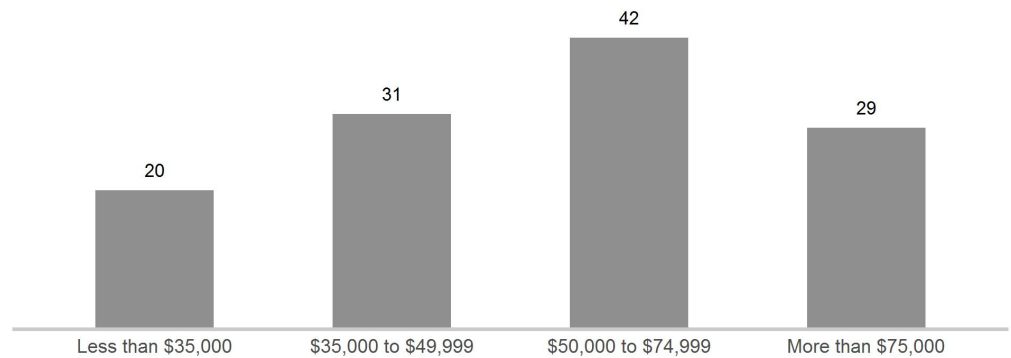


Full-time positions
available

Business & Finance Wages

A majority of advertised salaries were above \$50,000 a year. The average advertised salary for this occupation group in Macomb during Q3 2016 was \$61,026. This is 79% more than the state's median earnings for all workers, \$34,000.

Advertised Salaries Quarter 3 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
13-1071	Human Resources Specialists	\$15.48	\$19.23	\$24.74	\$31.39	\$39.05
13-1141	Compensation, Benefits, and Job Analysis Specialists	\$18.94	\$23.29	\$27.92	\$36.38	\$42.79
13-1111	Management Analysts	\$18.47	\$27.26	\$38.99	\$51.54	\$68.14
13-1161	Market Research Analysts and Marketing Specialists	\$14.03	\$17.97	\$22.98	\$32.32	\$41.45
13-1051	Cost Estimators	\$16.78	\$21.26	\$27.79	\$37.09	\$43.76
13-2051	Financial Analysts	\$20.55	\$24.43	\$30.84	\$38.85	\$46.51
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	\$18.72	\$24.32	\$31.39	\$38.81	\$47.67
13-1151	Training and Development Specialists	\$14.12	\$18.13	\$24.21	\$33.22	\$41.68
13-2011	Accountants	\$17.64	\$21.33	\$28.36	\$36.86	\$48.96
13-2052	Personal Financial Advisors	\$17.86	\$22.61	\$29.47	\$47.34	\$83.26

Data: EMSI, BLS
Analysis: Workforce Intelligence Network

Annual Labor Market Data

	2010 Annual	2011 Annual	2012 Annual	2013 Annual	2014 Annual	2015 Annual	2016 to- date (through May 2016)	Change from 2015	Percent Change from 2015
Labor Force	420,802	409,066	410,251	416,831	417,309	415,825	424,329	8,504	2.0%
Employment	362,380	363,484	370,004	377,093	383,811	390,572	402,053	11,482	2.9%
Unemployment	58,423	45,581	40,247	39,738	33,498	25,253	22,276	-2,978	-11.8%
Unemployment Rate	13.9%	11.1%	9.8%	9.5%	8.0%	6.1%	5.2%	-0.8%	na

**Note: Monthly data averaged by year*

Data: Bureau of Labor Statistics

Quarterly Labor Market Data

	2nd Quarter 2015	3rd Quarter 2015	4th Quarter 2015	1st Quarter 2016	2nd Quarter 2016 (through May 2016)	Change from 1st Quarter 2016	Percent Change from 1st Quarter 2016
Labor Force	415,300	419,638	416,855	423,544	425,507	1,963	0.5%
Employment	390,038	393,309	394,284	399,770	405,478	5,708	1.4%
Unemployment	25,262	26,328	22,571	23,773	20,029	-3,744	-15.8%
Unemployment Rate	6.1%	6.3%	5.4%	5.6%	4.7%	-0.9%	na

**Note: Monthly data averaged by quarter*

Data: Bureau of Labor Statistics










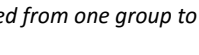


Monthly Labor Market Data

	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	April 2016	May 2016
Labor Force	410,480	408,300	418,329	419,272	422,992	420,114	415,807	418,642	414,550	417,372	419,680	422,888	428,063	428,063	428,063
Employment	385,248	386,481	391,237	392,396	392,450	394,237	393,241	394,182	393,834	394,836	395,729	399,813	403,769	403,769	403,769
Unemployment	25,232	21,819	27,092	26,876	30,542	25,877	22,566	24,460	20,716	22,536	23,951	23,075	24,294	24,294	24,294
Unemployment Rate	6.1%	5.3%	6.5%	6.4%	7.2%	6.2%	5.4%	5.8%	5.0%	5.4%	5.7%	5.5%	5.7%	5.7%	5.7%

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


















Data: Bureau of Labor Statistics

Macomb County Job Posting Data by Occupation Group* Over Time

	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Change Over Time	Annual Change Q2 2015-Q2 2016	Quarter Growth Q1 2016-Q2 2016
Total Postings	13,586	14,136	12,658	14,754	14,257		4.9%	-3.4%
Agriculture	148	134	119	188	187		26.4%	-0.5%
Business & finance	664	737	616	734	587		-11.6%	-20.0%
Construction	147	162	102	151	176		19.7%	16.6%
Customer service	2,609	3,171	2,826	3,406	3,260		25.0%	-4.3%
Education	1,875	196	217	182	161		-91.4%	-11.5%
Energy	12	6	10	5	17		41.7%	240.0%
Engineers & designers	1,584	1,266	1,294	1,311	1,181		-25.4%	-9.9%
Health care	1,875	1,933	1,936	1,996	1,839		-1.9%	-7.9%
Information technology	1,337	1,169	1,039	1,160	1,336		-0.1%	15.2%
Skilled trades & technicians	769	767	615	869	820		6.6%	-5.6%
Transportation, distribution, and logistics	1,008	976	811	1,195	1,365		35.4%	14.2%

**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

	Q2 2015	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Share of Q2 2016 Total	Change Over Time	Annual Change Q2 2015-Q2 2016	Quarter Growth Q1 2016-Q2 2016
WIN-Region Total	129,794	140,225	126,959	143,199	139,765	100.0%		7.7%	-2.4%
Detroit	27,742	30,426	27,966	29,296	28,456	20.5%		2.6%	-2.9%
Genesee & Shiawassee	5,071	5,465	4,721	5,711	5,631	4.0%		11.0%	-1.4%
Hillsdale & Lenawee	1,495	1,467	1,580	1,678	1,606	1.2%		7.4%	-4.3%
Jackson	2,415	2,373	2,099	2,557	2,181	1.8%		-9.7%	-14.7%
Livingston	2,151	2,274	2,048	2,472	2,162	1.7%		0.5%	-12.5%
Macomb	13,586	14,136	12,658	14,754	14,257	10.3%		4.9%	-3.4%
Monroe	1,871	1,778	1,662	1,841	1,694	1.3%		-9.5%	-8.0%
Oakland	40,219	44,474	39,030	45,418	43,058	31.7%		7.1%	-5.2%
St. Clair	1,807	1,697	1,461	1,730	1,788	1.2%		-1.1%	3.4%
Thumb Area	1,208	1,199	1,561	1,673	1,598	1.2%		32.3%	-4.5%
Washtenaw	11,192	11,812	10,540	11,951	11,020	8.3%		-1.5%	-7.8%
Wayne	50,930	55,824	51,993	55,886	54,770	39.0%		7.5%	-2.0%
Outer Wayne	23,188	25,398	24,027	26,590	26,314	18.6%		13.5%	-1.0%
Prosperity Region 6	8,086	8,361	7,743	9,114	9,017	6.4%		11.5%	-1.1%
Prosperity Region 9	19,124	19,704	17,929	20,499	18,663	14.3%		-2.4%	-9.0%
Prosperity Region 10	104,735	114,434	103,681	116,058	112,085	81.0%		7.0%	-3.4%

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

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