



# GENESEE COUNTY & SHIAWASSEE COUNTY

WIN Quarterly Report



# Introduction: Genesee & Shiawassee Counties

## About this report

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

This report highlights labor market information and real-time job posting data for Genesee and Shiawassee Counties combined, 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:

- Business & Finance (page 6)
- Engineers & Designers (manufacturing focused) (page 11)
- Health Care (page 16)
- Information Technology (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: Genesee & Shiawassee Counties

## Key Findings: State of the Labor Market in Genesee & Shiawassee Counties

### **Heavy and tractor-trailer truck drivers remain top in-demand job with large jump in postings.**

Truck drivers maintained its top in-demand job spot in Genesee and Shiawassee counties for another quarter. Between the first and second quarter of 2016, truck driver postings increased by 57.5% (210 postings).

### **A majority of occupation groups saw decreases in job postings through Q2 2016.**

During Q2 2016, the Health Care and IT occupational groups were the only two groups to see increases in job postings. Skilled Trades, Business and Finance, and Engineers and Designers postings decreased moving through the first half of 2016.

### **The IT occupation group contained the highest mean advertised salary of over \$70,000.**

A majority of the postings in the IT occupation group that advertised salaries were over \$75,000. In addition to having high advertised salaries and wages, a large majority of IT postings desire 0 to 5 years of experience. This presents a lucrative opportunity for job seekers who are willing to overcome the educational attainment demanded by employers. See page 25 for more details.

### **A majority of postings expressing desired experience are searching for applicants with 3 to 5 years of experience.**

Most of the occupation groups observed witnessed postings focusing on applicants with 3 to 5 years of experience. The Health Care group did not follow this trend and sought mainly entry level jobseekers (those with 0-2 years of experience) to fill positions.

### **Candidates with a bachelor's degree are highly sought out within Genesee and Shiawassee Counties.**

Business and Finance, Engineer and designers, and IT occupation group postings were searching for applicants with a bachelor's degree. Associate's degrees were in-demand within the Health Care occupation group, while Skilled Trade postings desired those with at least vocational training.



# Executive Summary

## Postings Over Time

Online job postings in Q2 2016 for all occupations in Genesee and Shiawassee Counties saw a decrease of 1.4% (80) from the previous quarter. This level of posting is 11% (560 postings) higher than the 5,071 postings in Q2 2015, a year ago. Overall, posting data has been increasing over the past 5 years with numbers fluctuation around 5,500 postings more recently.

## Total Online Job Postings

2008 - June 2016



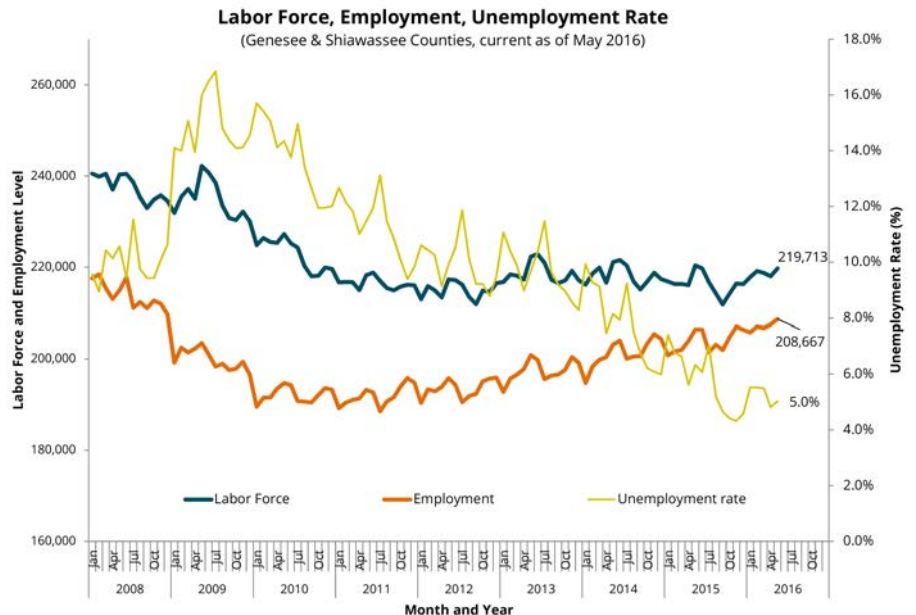
Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

## Labor Force, Employment, & Unemployment

The labor force in Genesee and Shiawassee Counties increased by 286 individuals (+0.1%) to 219,713 in Q2 2016. Employment also increased by 0.8% to 208,667. Since employment increased by more than the labor force, unemployment fell 0.6 percentage points to a rate of 4.7%. Labor force growth and employment growth are both encouraging signs pointing to the health of Genesee and Shiawassee's economy.

## Labor Force, Employment, Unemployment Rate

2008 - May 2016



Data: BLS  
Analysis: Workforce Intelligence Network





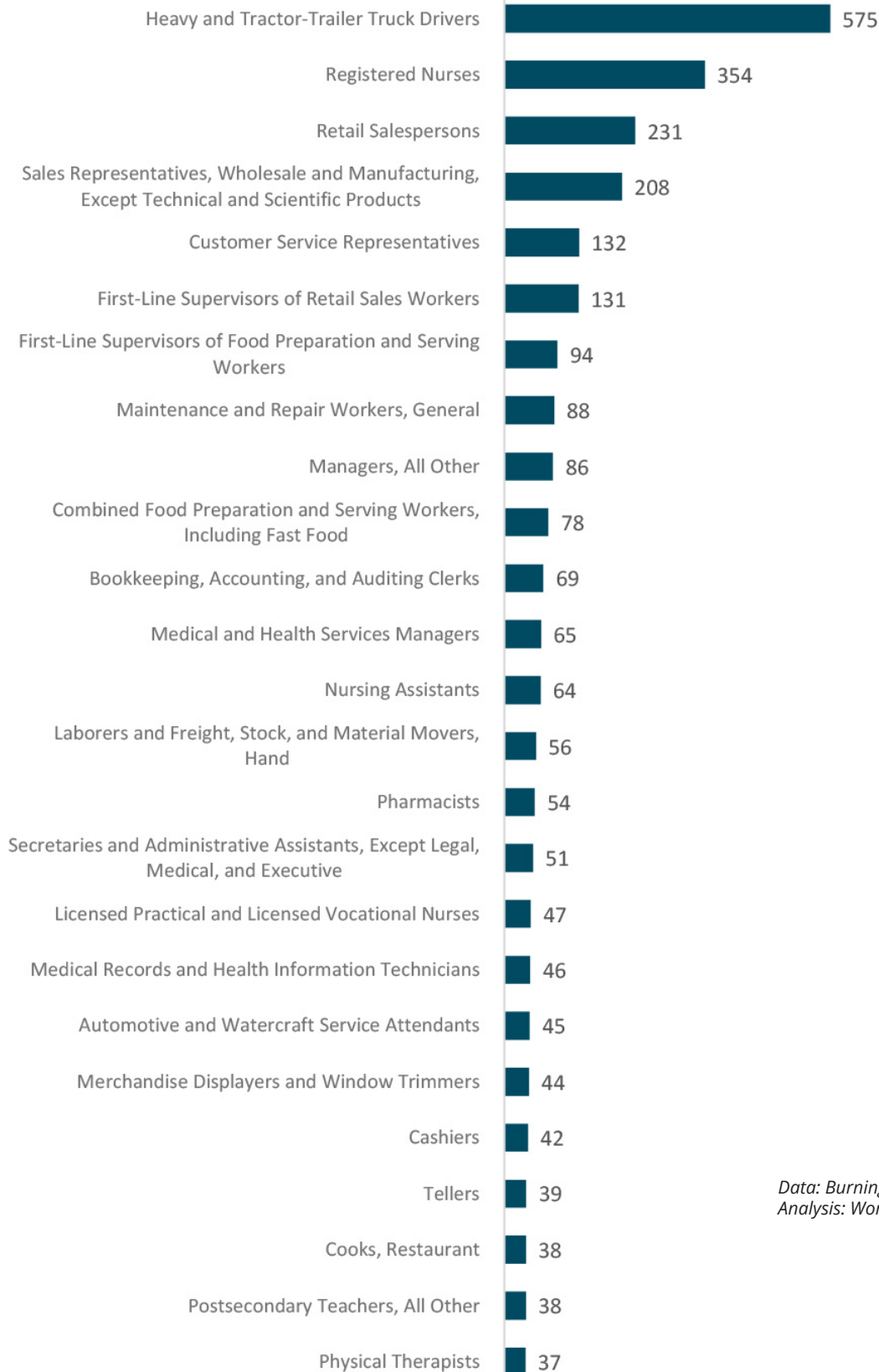
1.4% decline in postings

1.3%

The labor force increased by  
286 individuals

### Top Jobs In Demand

Quarter 2 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Unemployment  
decreased 10.7%



Employment increased by  
1,571 workers

### Top Jobs In Demand

Quarter 2 2016

Computer User Support Specialists	36
Sales Managers	36
Food Service Managers	35
Medical Secretaries	35
Speech-Language Pathologists	35
Sales Agents, Financial Services	34
Human Resources Specialists	32
Production Workers, All Other	31
Accountants	30
Web Developers	30
Electricians	28
Insurance Sales Agents	28
Light Truck or Delivery Services Drivers	28
Office Clerks, General	28
Security Guards	27
Software Developers, Applications	27
Home Health Aides	26
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	25
First-Line Supervisors of Mechanics, Installers, and Repairers	24
Education Administrators, Postsecondary	23
Medical Assistants	23
Office and Administrative Support Workers, All Other	23
Teachers and Instructors, All Other	23
Critical Care Nurses	21
Heating and Air Conditioning Mechanics and Installers	21

Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



# Business & Finance

## 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.

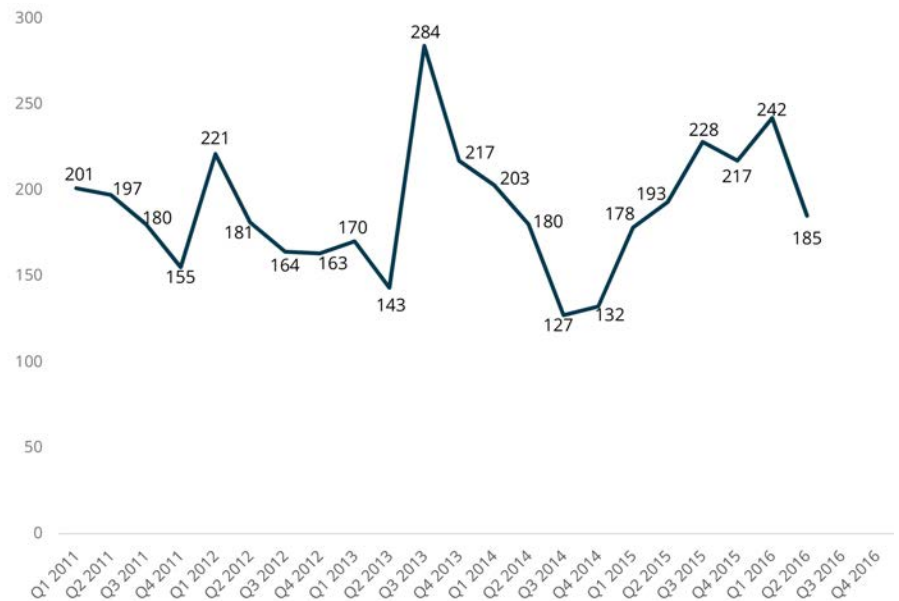
### Postings Over Time

Online job ads for occupations related to Business and Finance were down 24% to 185 during Q2 2016, compared to 242 during Q1 2016. This level of posting is 4% lower than the 193 online postings for Business and Finance-related occupations in Q2 2015, a year ago.

### Employment Over Time

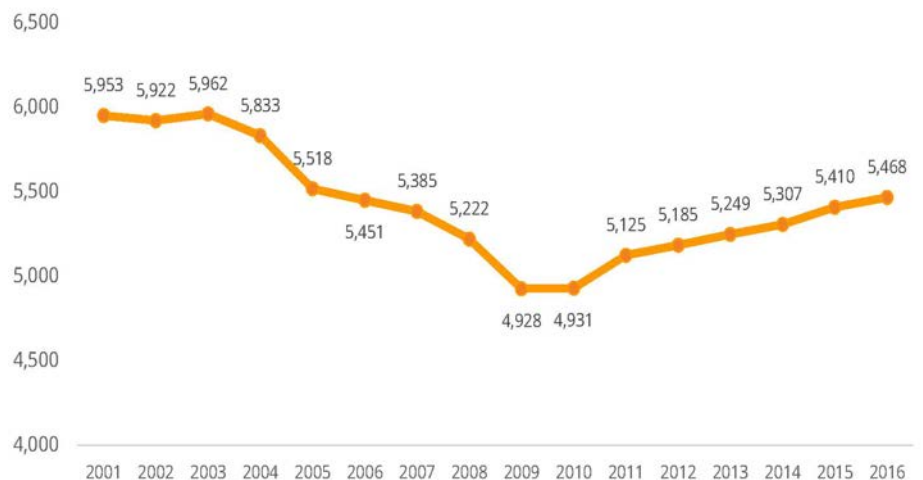
Employment in Business and Finance related occupations has continued an upward trajectory for the sixth consecutive year since the depths of the Great Recession in 2009. In 2009, only 4,928 workers were employed in Business and Finance jobs, and in 2016 employment reached 5,468, an 11% increase.

### Online Job Postings



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Employment Over Time



Data: EMSI, BLS  
Analysis: Workforce Intelligence Network



Job postings decreased  
24%

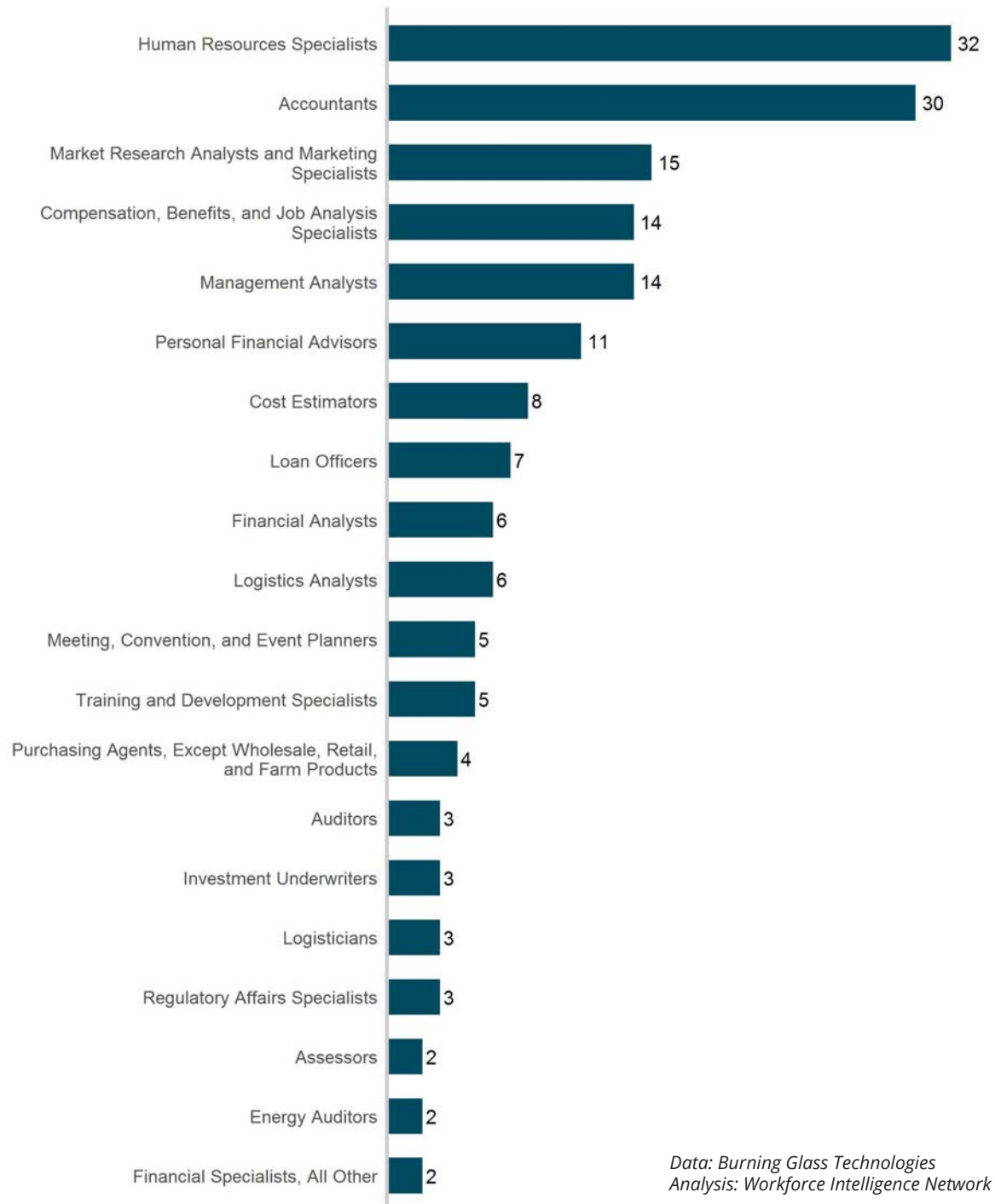


Most desired experience: less  
than 5 years

## Business & Finance

### Top Jobs

Quarter 2 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Education desired:  
Bachelor's degree

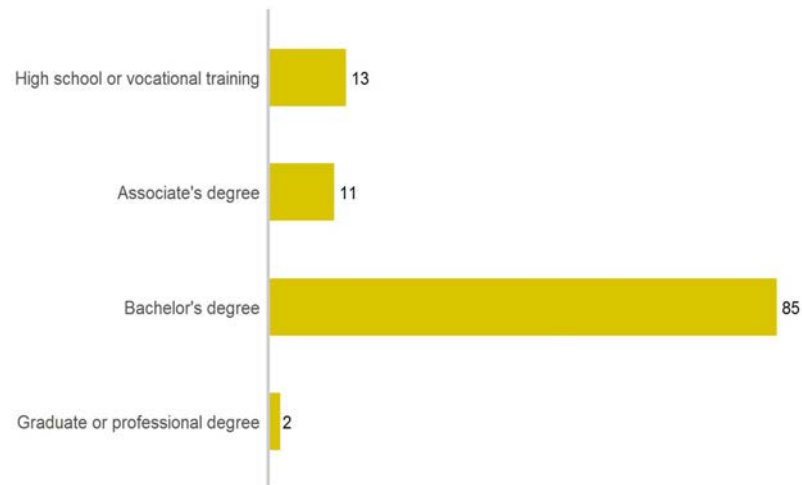
59%

Postings with advertised salaries  
were below \$50,000 per year

### Business & Finance Educational Attainment & Experience Required

Of the 101 Business and Finance group job postings that specified a desired experience level during Q2 2016, 92% were available to workers with less than 5 years of experience. Entry-level Business and Finance positions are available to Genesee and Shiawassee county workers who are willing to pursue a bachelor's degree, with 77% of postings that specified educational requirements necessitating a bachelor's degree.

### Minimum Educational Attainment Required Q2 2016

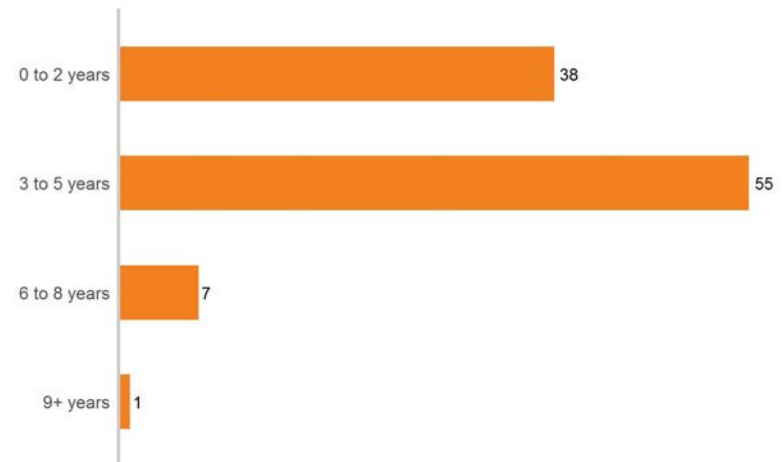


Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Areas of Study in-Demand Q2 2016

- Accounting
- Business administration and management, general
- Finance, general
- Computer science
- Economics, general

### Experience Required Q2 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Skills: accounting, customer service, project management



Top area of study:  
Accounting

### Business & Finance in-Demand Skills Q2 2016

Occupations in Business and Finance require an array of skills important to managing and growing a business efficiently. These skills include accounting, customer service, project management, budgeting, and scheduling. Employers hiring Business and Finance workers often post employability skills like communication skills, Microsoft Office proficiency, writing, being detail oriented, and computer skills.

#### Technical in-Demand Skills

- Accounting
- Customer Service
- Project Management
- Budgeting
- Scheduling

#### Foundational In-Demand Skills

- Communication Skills
- Microsoft Office
- Writing
- Detail Oriented
- Computer Skills

#### Job Type

- Temporary: 3.8%
- Full-time: 46%
- Part-time: 2.7%

#### Certifications In-Demand

- Series 7
- Certified public accountant (CPA)
- Certified financial planner
- Securities license
- Series 66



Top certification:  
Series 7



46% of postings were for  
full-time positions

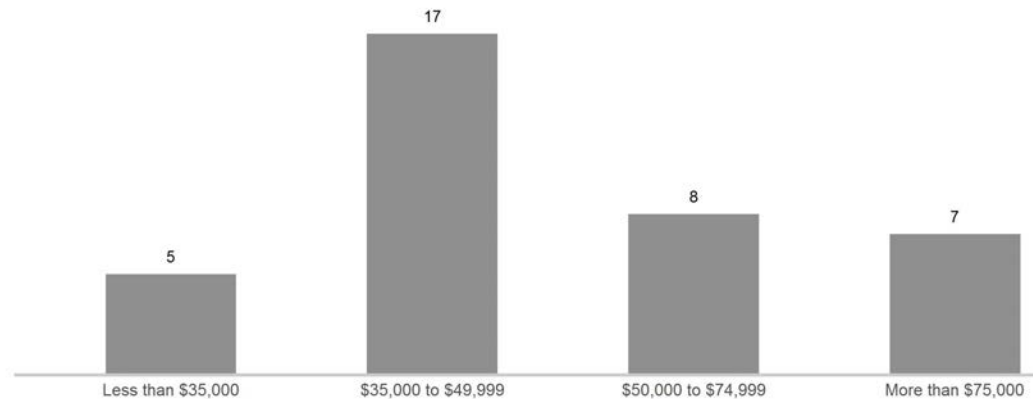
## Business & Finance

### Wages

Of the postings with advertised salaries in Business and Finance in Q2 2016, 59% were below \$50,000 per year. Of the 185 postings, 148 did not specify a salary. Salaries for entry-level jobs in Business and Finance are competitive across all industries throughout Genesee and Shiawassee counties, although education requirements may be entry-prohibitive.

## 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
13-1071	Human Resources Specialists	\$15.48	\$19.23	\$24.74	\$31.39	\$39.05
13-2011	Accountants	\$17.64	\$21.33	\$28.36	\$36.86	\$48.96
13-1161	Market Research Analysts and Marketing Specialists	\$14.03	\$17.97	\$22.98	\$32.32	\$41.45
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
13-2052	Personal Financial Advisors	\$17.86	\$22.61	\$29.47	\$47.34	\$83.26
13-1051	Cost Estimators	\$16.78	\$21.26	\$27.79	\$37.09	\$43.76
13-2072	Loan Officers	\$11.01	\$15.61	\$21.88	\$30.74	\$42.43
13-2051	Financial Analysts	\$20.55	\$24.43	\$30.84	\$38.85	\$46.51
13-1081	Logistics Analysts	\$24.72	\$30.91	\$39.43	\$46.94	\$54.72

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

Online job ads for Engineers and Designers were down 17% to 123 during Q2 2016, compared to 149 during Q1 2016. This level of posting is 21.8% higher than the 101 online postings for Engineers and Designers in Q2 2015, a year ago.

### Online Job Postings

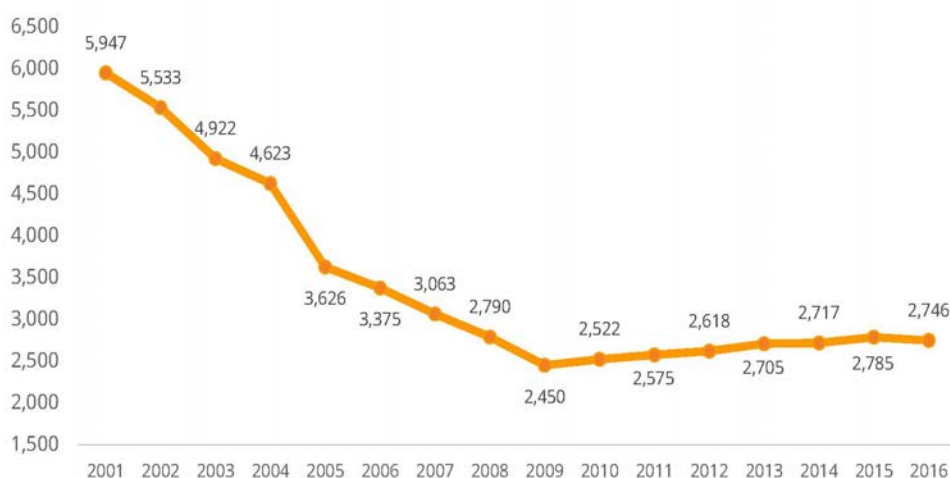


Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Employment Over Time

Employment in occupations related to Engineering and Design fell modestly between 2015 and Q2 2016, with a loss of 39 positions. A downward trend of employment in Genesee and Shiawassee Counties began in 2001 when employment peaked at 5,947 jobs, well before the Great Recession of 2009. The consistently modest employment rates since 2001 reflects the realities associated with losing the region's historically strong manufacturing presence.

### Employment Over Time



Data: EMSI, BLS  
Analysis: Workforce Intelligence Network





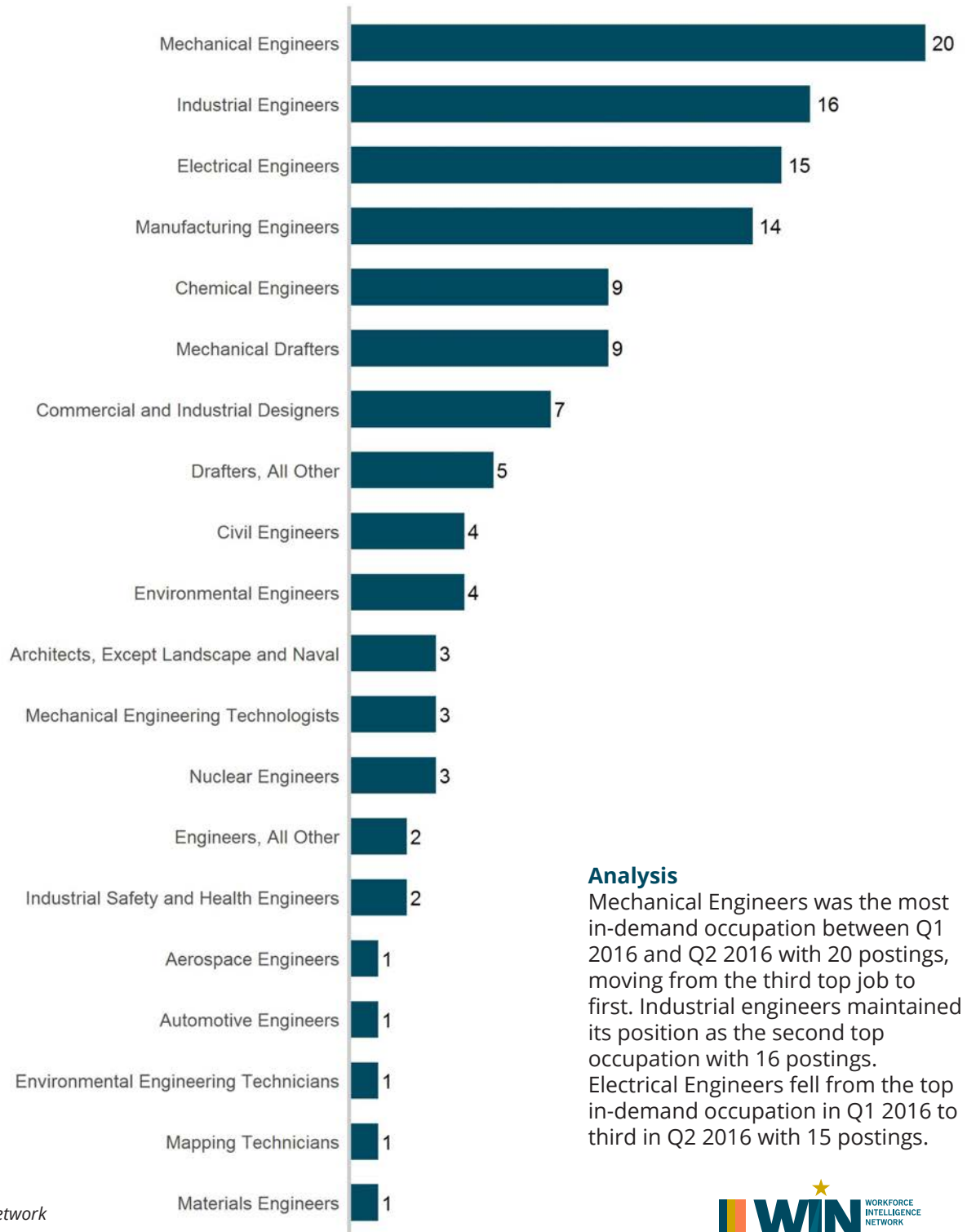
Job postings decreased  
17%



Most desired experience:  
5 years or less

### Engineers & Designers Top Jobs

Quarter 2 2016



#### Analysis

Mechanical Engineers was the most in-demand occupation between Q1 2016 and Q2 2016 with 20 postings, moving from the third top job to first. Industrial engineers maintained its position as the second top occupation with 16 postings. Electrical Engineers fell from the top in-demand occupation in Q1 2016 to third in Q2 2016 with 15 postings.



Education desired:  
Bachelor's degree

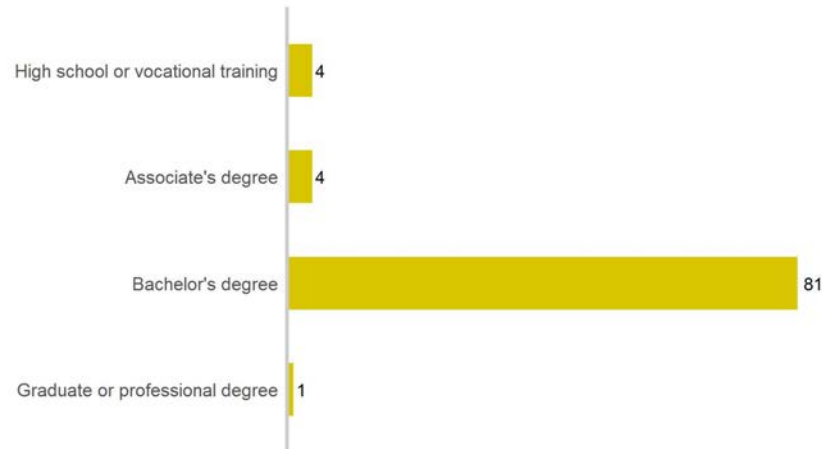
83%

of postings with advertised  
salaries were \$50,000+/yr

### Engineers & Designers Educational Attainment & Experience Required

Of the 73 Engineers and Designer job postings that specified a desired experience level during Q2 2016, 86% required five years of experience or less. 50 postings did not specify a required level of experience. 90% of job postings required a bachelor's degree, with 81 postings. The near universal requirement for moderate experience and a college education matches industry trends for engineering related occupations.

### Minimum Educational Attainment Required Q2 2016

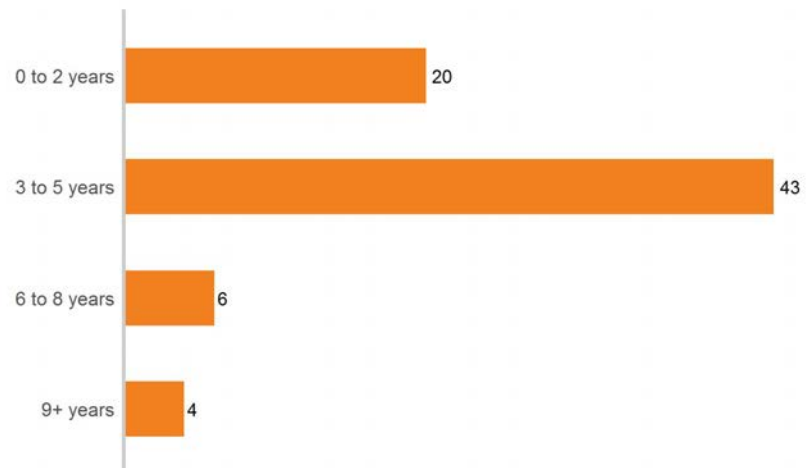


Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Areas of Study in-Demand Q2 2016

- Engineering, general
- Mechanical engineering
- Engineering technology, general
- Electrical and electronic engineering technologies/technicians, other
- Manufacturing engineering

### Experience Required Q2 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Top area of study:  
Engineering, general

%

Skills: Technical support,  
manufacturing processes, CAD

### Engineers & Designers in-Demand Skills Q2 2016

Engineer and Design occupations require a wide array of high-level technical skills, befitting the educational requirements necessary for entry into the field. Advanced knowledge of technical support, manufacturing processes, computer aided drafting/design (CAD), mechanical engineering, and AutoCad underscore the highly technical nature of Engineering and Design occupations. Employers hiring Engineers and Designers often post employability skills like problem solving, communications skills, writing, planning, and Microsoft Office proficiency.

#### Technical in-Demand Skills

- Technical Support
- Manufacturing Processes
- Computer Aided Drafting/Design (CAD)
- Mechanical Engineering
- AutoCAD

#### Foundational In-Demand Skills

- Problem Solving
- Communication Skills
- Writing
- Planning
- Microsoft Office

#### Job Type

- Temporary: 4.9%
- Full-time: 53.7%
- Part-time: data not available

#### Certifications In-Demand

- Six sigma green belt
- Microsoft certified systems administrator (MCSA)
- Certified quality engineer
- Certified safety professional
- Civil engineering certificate



Top certification: Six sigma green belt



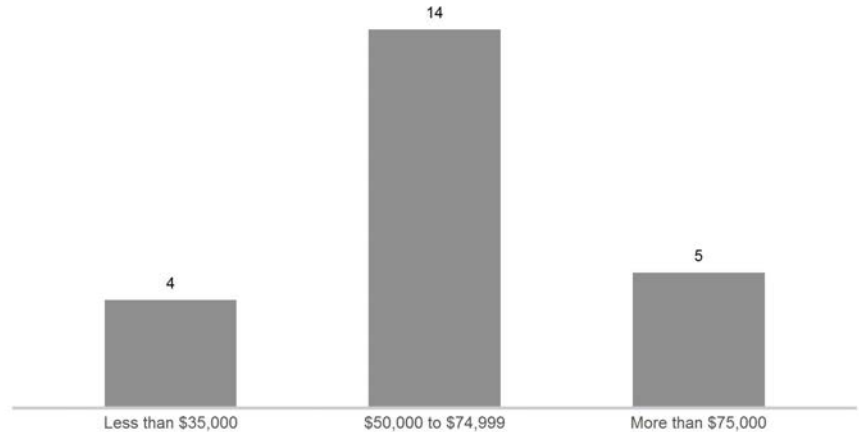
53.7% of job ads for full-time employment

## Engineers & Designers Wages

The majority of advertised salaries for Engineers and Designers in Q2 2016 were \$50,000 or more per year, with 83% of the postings. Of the 123 online job postings, 100 did not specify a salary. With a mean real-time salary for Engineers and Designers of \$64,440, it remains a field well worth the educational investment necessary for entry.

## 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
17-2141	Mechanical Engineers	\$28.93	\$35.72	\$43.13	\$51.96	\$58.13
17-2112	Industrial Engineers	\$26.40	\$32.78	\$40.15	\$46.89	\$55.44
17-2071	Electrical Engineers	\$26.23	\$31.59	\$38.94	\$45.43	\$54.27
17-2199	Manufacturing Engineers	\$19.79	\$34.86	\$44.84	\$55.52	\$68.19
17-2041	Chemical Engineers	\$23.70	\$27.59	\$33.06	\$39.07	\$44.32
17-3013	Mechanical Drafters	\$15.38	\$19.71	\$25.04	\$30.99	\$36.23
27-1021	Commercial and Industrial Designers	\$24.99	\$30.84	\$37.09	\$41.87	\$45.16
17-3019	Drafters, All Other	\$13.54	\$14.68	\$16.51	\$21.05	\$25.82
17-2051	Civil Engineers	\$21.61	\$26.65	\$32.07	\$36.39	\$43.49
17-2081	Environmental Engineers	\$20.86	\$30.61	\$38.73	\$46.29	\$56.28

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

Online job ads for Health Care were up 6% to 976 during Q2 2016, compared to 925 during Q1 2016. This level of posting is 10% higher than the 865 online postings for Health Care in Q2 2015, a year ago.

### Online Job Postings

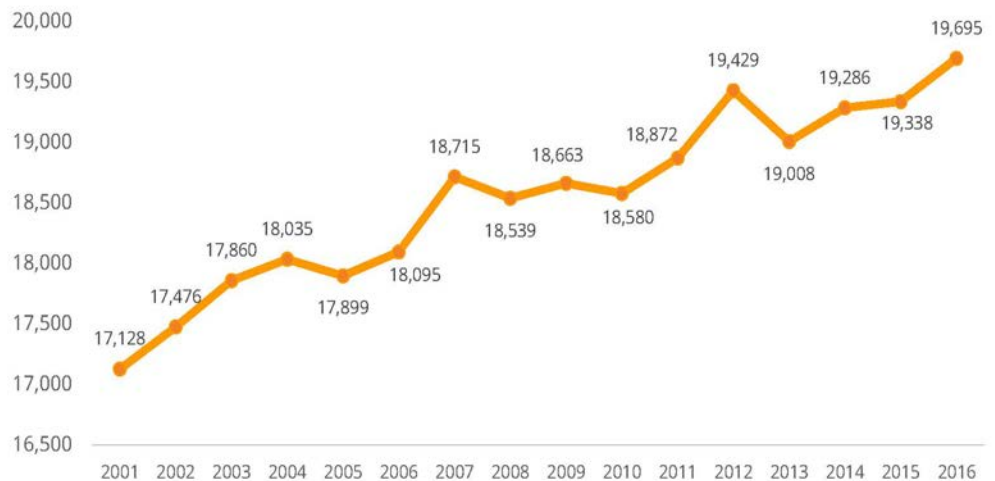


Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Employment Over Time

With 19,695 jobs, 2016 marked peak employment in Health Care since the Great Recession in 2009, exceeding the previous high of 19,429 jobs in 2012. Employment also saw a 1.8% increase since 2015, with 357 more persons finding employment in Health Care related occupations.

### Employment Over Time



Data: EMSI, BLS  
Analysis: Workforce Intelligence Network

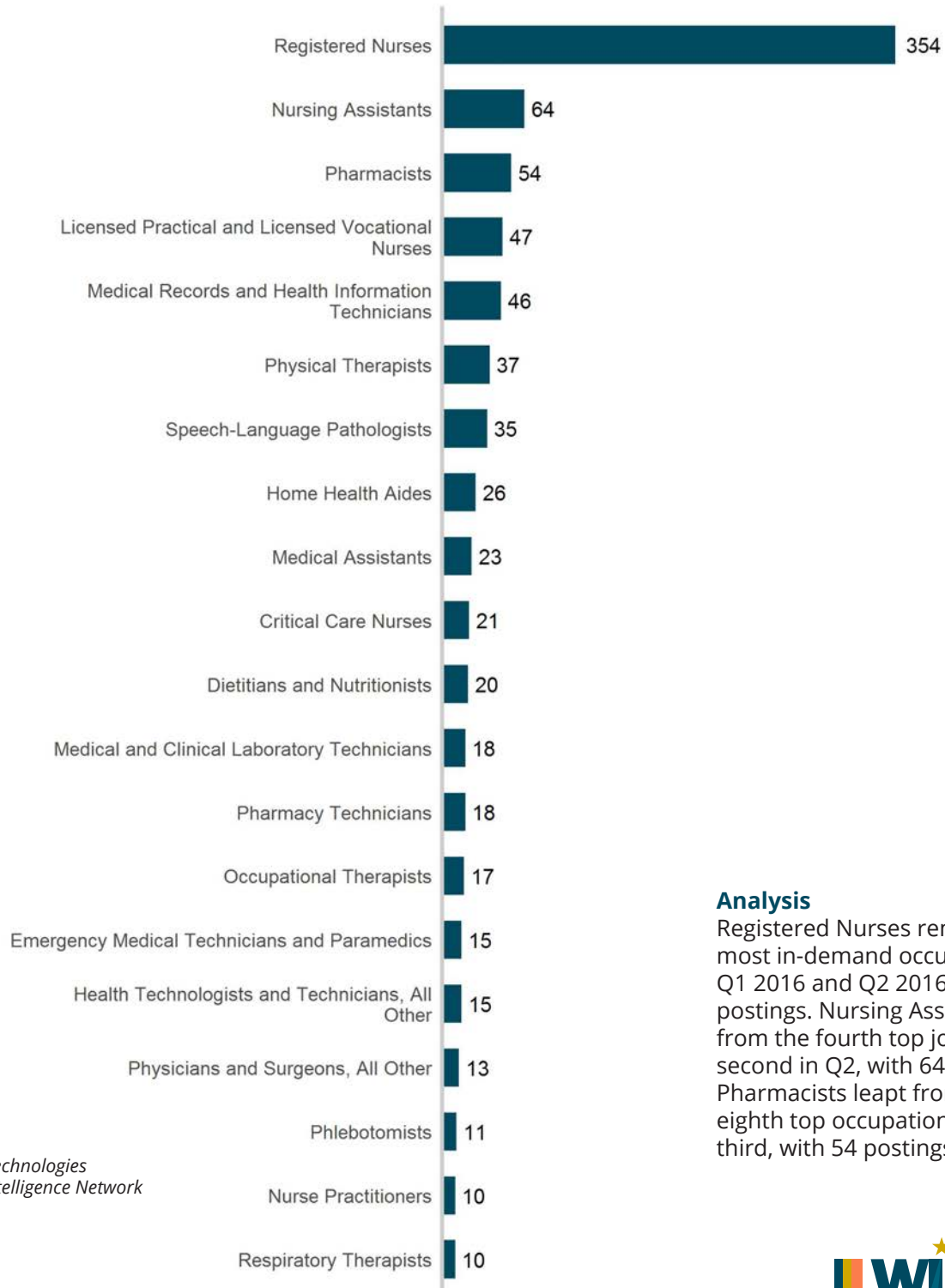


Job postings increased 6%



Top in-demand occupation:  
Registered Nurses

### Health Care Top Jobs Quarter 2 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

#### Analysis

Registered Nurses remained the most in-demand occupation between Q1 2016 and Q2 2016 with 354 postings. Nursing Assistants moved from the fourth top job in Q1 2016 to second in Q2, with 64 postings. Pharmacists leapt from being the eighth top occupation last quarter to third, with 54 postings.



Most desired experience  
level: 0 to 2 years

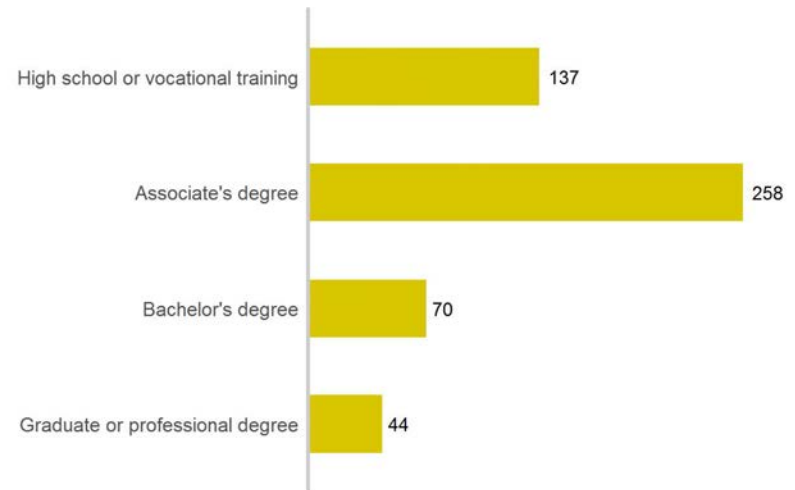
78%

of jobs required an  
associate's degree or less

### Health Care Educational Attainment & Experience Required

Of the 441 Health Care job postings that specified a desired experience level during Q2 2016, 79% were available to workers with 0 to 2 years of experience. 78% of postings indicating a desired educational attainment level were open to workers with an associate's degree or less. The high rate of positions requiring minimal education and experience indicates the majority of the job postings were for non-technical, entry-level positions.

### Minimum Educational Attainment Required Q2 2016

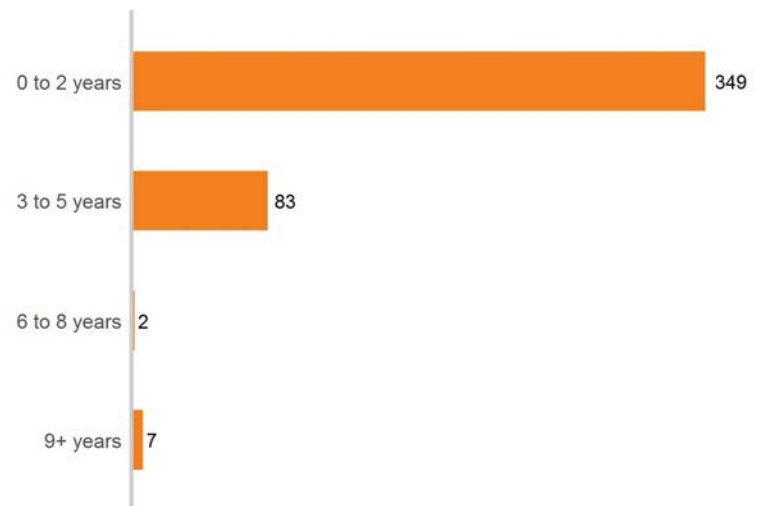


Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Areas of Study in-Demand Q2 2016

- Nursing science
- Physical therapy/therapist
- Health/health care administration/management
- Occupational therapy/therapist
- Clinical/medical laboratory technician

### Experience Required Q2 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



53% of advertised salaries  
were \$50,000+ per year

%

Top area of study:  
Nursing Science

### Health Care in-Demand Skills Q2 2016

The occupations in the Health Care group require a wide array of high-level technical skills. These skills include patient care, treatment planning, supervisory skills, home health, and CPR. Employers hiring Health Care workers often post employability skills like communication skills, supervisory skills, planning, being detail-oriented, and physical demand. The high-demand for supervisory skills, found both in technical and employability skills desired by employers, underscores the need for workers capable of overseeing the varied and complicated operations required in Health Care work.

#### Technical in-Demand Skills

- Patient Care
- Treatment Planning
- Supervisory Skills
- Home Health
- Cardiopulmonary Resuscitation (CPR)

#### Foundational In-Demand Skills

- Communication Skills
- Supervisory Skills
- Planning
- Detail-Oriented
- Physical Demand

#### Job Type

- Temporary: 11%
- Full-time: 46%
- Part-time: 6%

#### Certifications In-Demand

- Registered nurse
- First aid CPR AED
- Certified nursing assistant
- Critical care registered nurse (CCRN)
- Registered dietitian





Top certification:  
Registered nurse

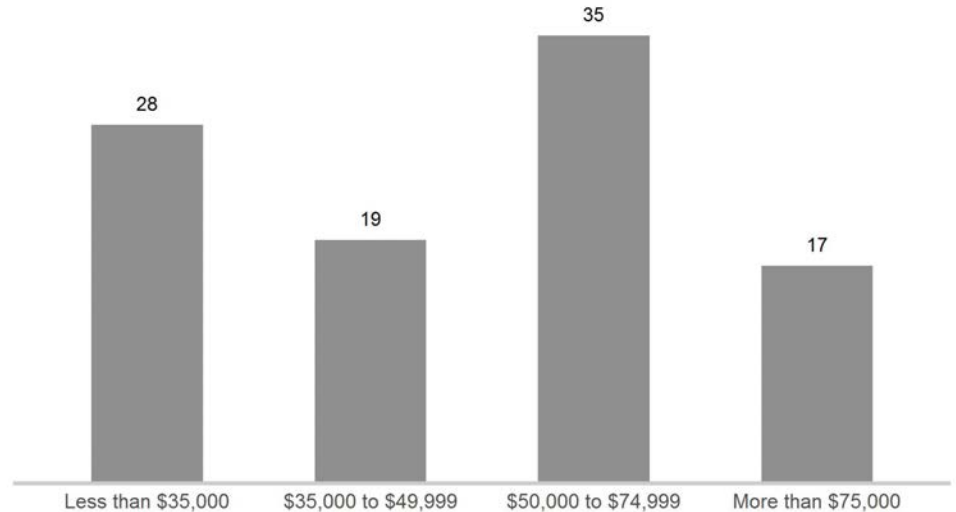


46% of jobs were full-time

## Health Care Wages

53% of advertised salaries in Health Care in Q2 2016 were \$50,000 or more per year, with 47% falling below \$50,000 a year. Of the 976 postings, 877 did not specify a salary. The near equal grouping of salary levels above and below \$50,000 per year shows that despite low education and experience requirements for entry into Health Care occupations, there is plenty of room for advancement in the field.

## 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
29-1141	Registered Nurses	\$24.42	\$28.60	\$32.63	\$37.34
31-1014	Nursing Assistants	\$9.72	\$11.29	\$13.30	\$15.48
29-1051	Pharmacists	\$45.20	\$49.15	\$54.31	\$60.30
29-2061	Licensed Practical and Licensed Vocational Nurses	\$16.62	\$19.57	\$22.92	\$26.38
29-2071	Medical Records and Health Information Technicians	\$10.48	\$12.69	\$16.39	\$20.27
29-1123	Physical Therapists	\$24.82	\$30.70	\$37.36	\$47.57
29-1127	Speech-Language Pathologists	\$25.11	\$30.06	\$35.61	\$48.43
31-1011	Home Health Aides	\$8.15	\$8.86	\$10.02	\$11.35
31-9092	Medical Assistants	\$10.63	\$12.24	\$13.89	\$16.22
29-1141	Critical Care Nurses	\$24.42	\$28.60	\$32.63	\$37.34

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.

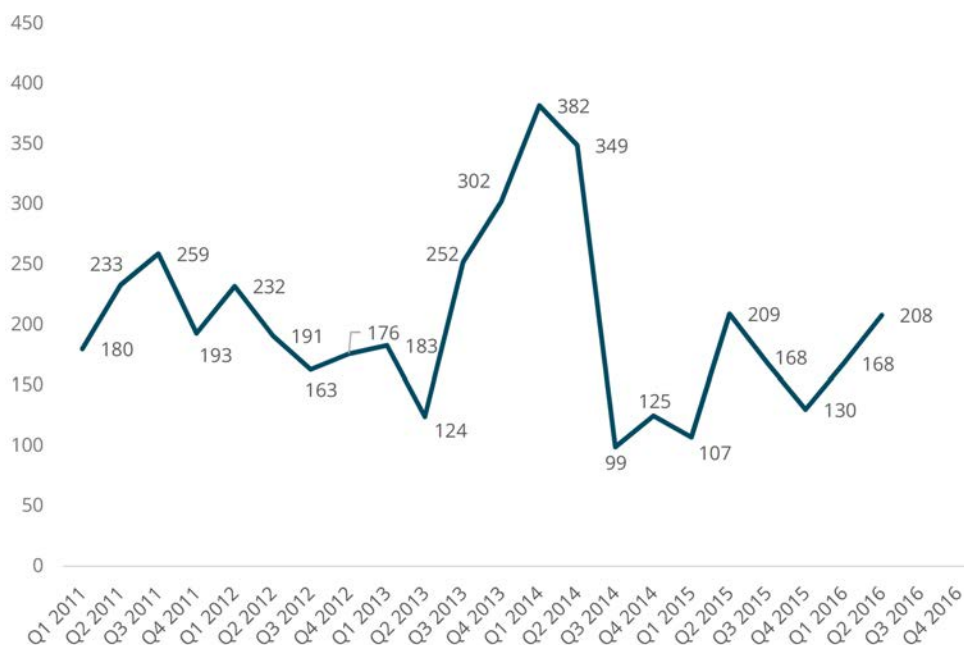
### Postings Over Time

Online job ads for occupations related to IT were up 24% to 208 during Q2 2016, compared to 168 during Q1 2016. This level of posting is near equal to the 209 postings of Q2 2015, a year ago.

### Employment Over Time

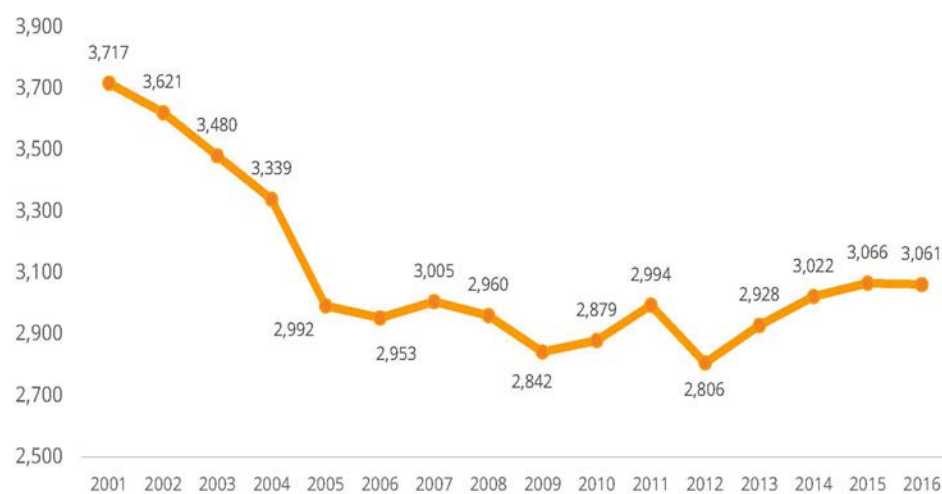
Employment in IT related fields has enjoyed general growth since 2012, the lowest point in the previous 15 years. However, despite this upward trajectory, Q2 2016 saw a loss of 5 jobs since 2015, going from 3,066 jobs to 3,061.

### Online Job Postings



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Employment Over Time



Data: EMSI, BLS  
Analysis: Workforce Intelligence Network



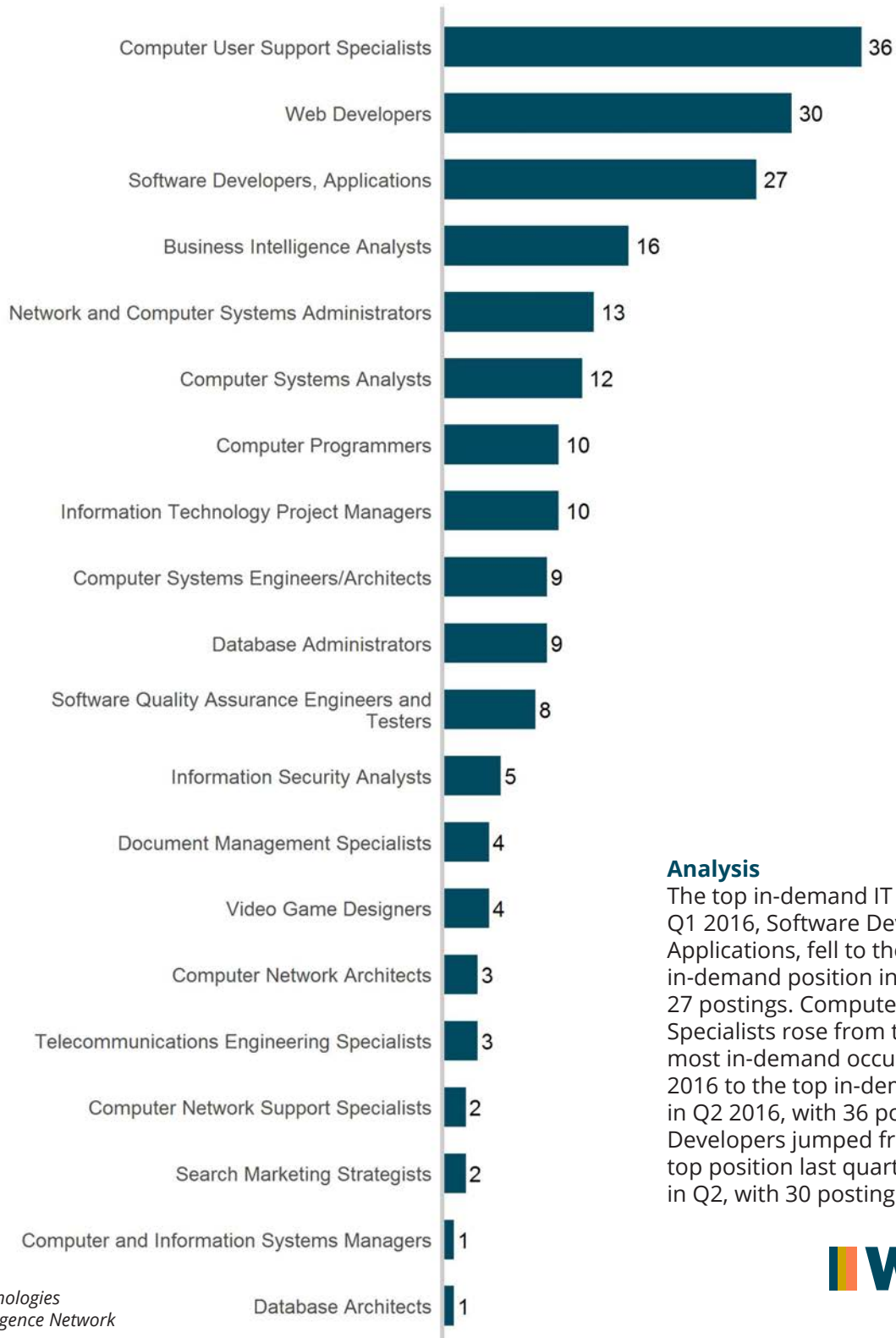
Job postings increased 24%



Most in-demand occupation:  
Computer User Support Specialists

### Information Technology (IT) Top Jobs

Quarter 2 2016



#### Analysis

The top in-demand IT occupation in Q1 2016, Software Developers, Applications, fell to the third most in-demand position in Q2 2016, with 27 postings. Computer User Support Specialists rose from the second most in-demand occupation in Q1 2016 to the top in-demand position in Q2 2016, with 36 postings. Web Developers jumped from the fifth top position last quarter to second in Q2, with 30 postings.



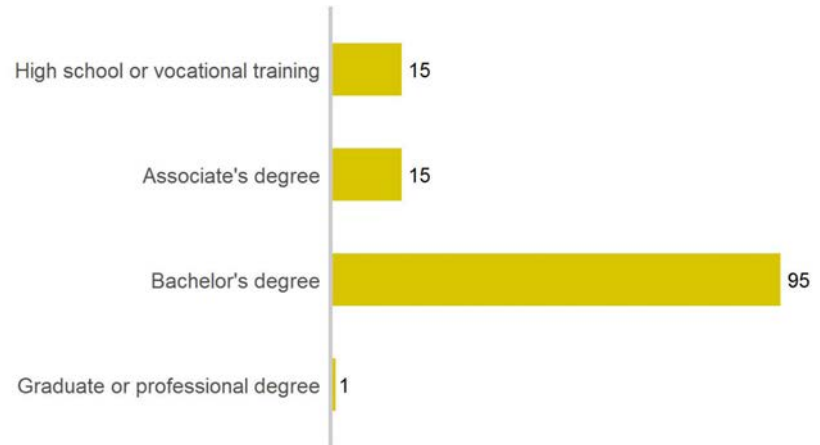
Most desired experience:  
5 years or less

75%  
required attainment of a  
bachelor's degree

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

Of the 106 IT job postings that specified a desired experience level during Q2 2016, 83% were available to workers with less than 5 years of experience. 75% of jobs specifying educational attainment levels required a bachelor's degree. The premium put on education over experience illustrates that if workers are willing to pursue the necessary education, there is little difficulty in finding employment in IT-related fields.

### Minimum Educational Attainment Required Q2 2016

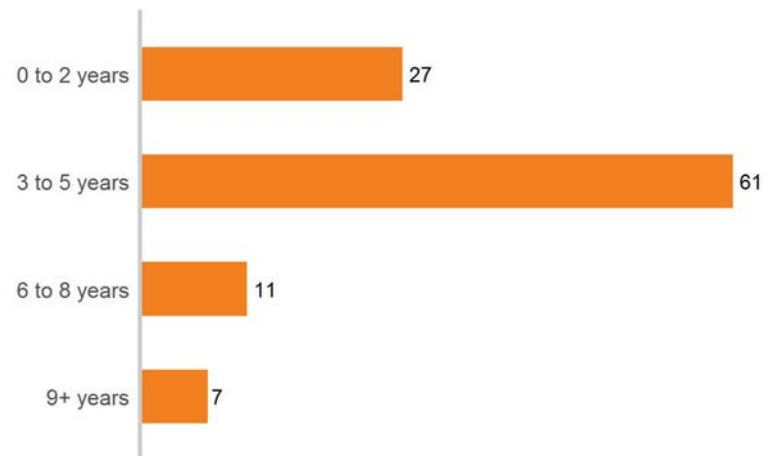


Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Areas of Study in-Demand Q2 2016

- Computer science
- Business administration and management, general
- Information technology
- Management information systems, general
- Engineering, general

### Experience Required Q2 2016



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



62% of jobs advertising salary  
were \$75,000+ per year

%

Top area of study:  
Computer Science

### Information Technology (IT) in-Demand Skills Q2 2016

IT occupations require a wide range of skills, both those that are specialized to the industry and those generally applicable to other fields. Skills specific to IT were technical support, SQL, and Voice over IP, while the top two desired skills were customer service and project management. Employers hiring IT workers often post employability skills like communication skills, problem solving, customer service, planning, and computer skills.

#### Technical in-Demand Skills

- SQL
- Project Management
- Technical Support
- JavaScript
- Information Systems

#### Foundational In-Demand Skills

- Communication Skills
- Problem Solving
- Troubleshooting
- Writing
- Planning

#### Job Type

- Temporary: 2.9%
- Full-time: 50%
- Part-time: 2.4%

#### Certifications In-Demand

- Help desk certification (e.g. COMPTIA)
- Microsoft certified professional (MCP)
- Apple certified Macintosh technician
- IT infrastructure library
- Network+ certified



## Top Certification: Help Desk Certification

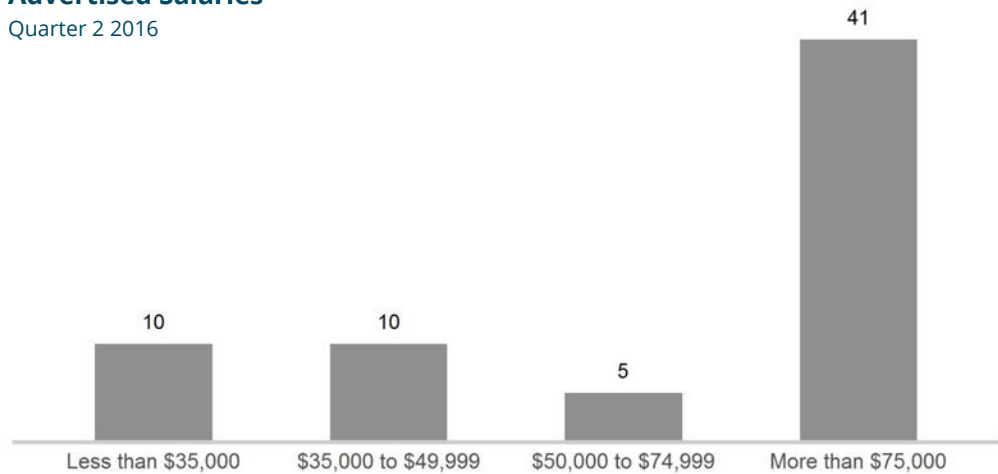


50% of jobs ads for  
were full-time

### Information Technology (IT) Wages

62% of advertised salaries for IT occupations were above \$75,000 per year. The high salaries despite modest experience requirements makes IT a lucrative field in Genesee and Shiawassee counties for those willing to pursue the necessary training desired by employers.

### 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
15-1151	Computer User Support Specialists	\$11.98	\$15.78	\$20.80	\$28.34	\$36.13
15-1134	Web Developers	\$18.74	\$22.15	\$27.92	\$35.76	\$44.31
15-1132	Software Developers, Applications	\$22.42	\$27.30	\$35.58	\$46.15	\$55.52
15-1199	Business Intelligence Analysts	\$24.20	\$31.22	\$38.36	\$47.54	\$56.34
15-1142	Network and Computer Systems Administrators	\$20.75	\$26.01	\$33.24	\$40.72	\$48.27
15-1121	Computer Systems Analysts	\$20.55	\$28.21	\$36.38	\$46.01	\$55.47
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
15-1199	Computer Systems Engineers/Architects	\$24.20	\$31.22	\$38.36	\$47.54	\$56.34
15-1141	Database Administrators	\$20.54	\$27.09	\$36.87	\$46.57	\$55.97

Data: EMSI, BLS  
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.

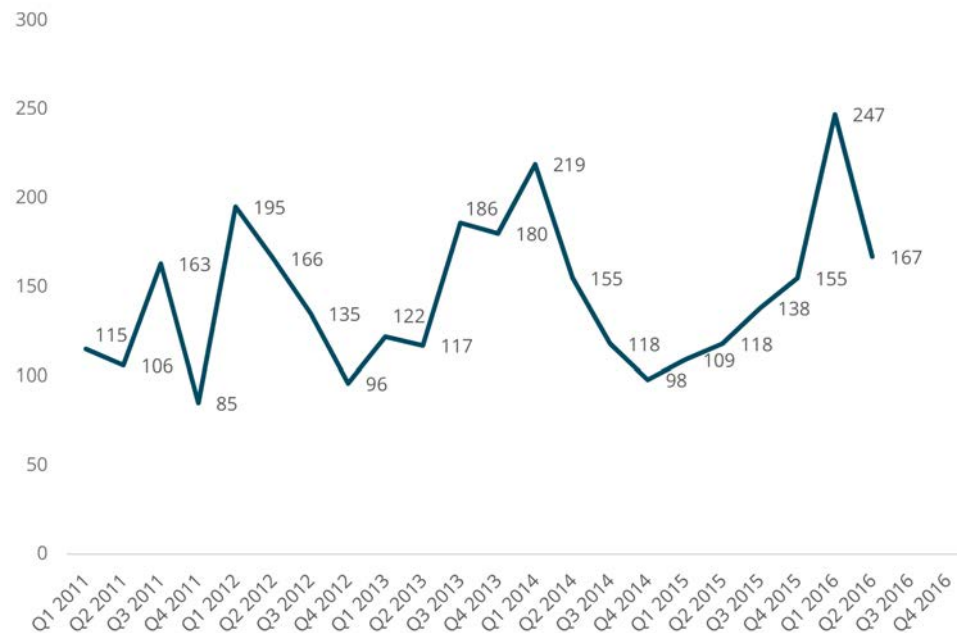
### Postings Over Time

Online job ads for occupations related to Skilled Trades were down 32% to 167 postings during Q2 2016, compared to 247 during Q1 2016. This level of posting is 32% higher than the 118 online postings for skilled trades related occupations in Q2 2015, a year ago.

### Employment Over Time

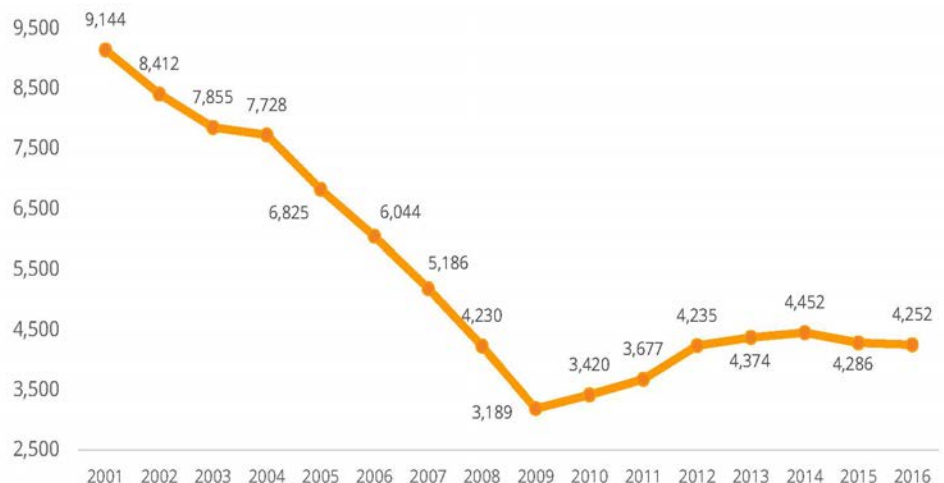
Employment in Skilled Trades declined steeply between 2003 and 2009, but has made modest gains since the Recession low of 3,189 employed workers. However, Q2 2016 saw a loss of 34 jobs since 2015, dropping from 4,286 employed workers in 2015 to 4,252, an 8% loss.

### Online Job Postings



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Employment Over Time



Data: EMSI, BLS  
Analysis: Workforce Intelligence Network



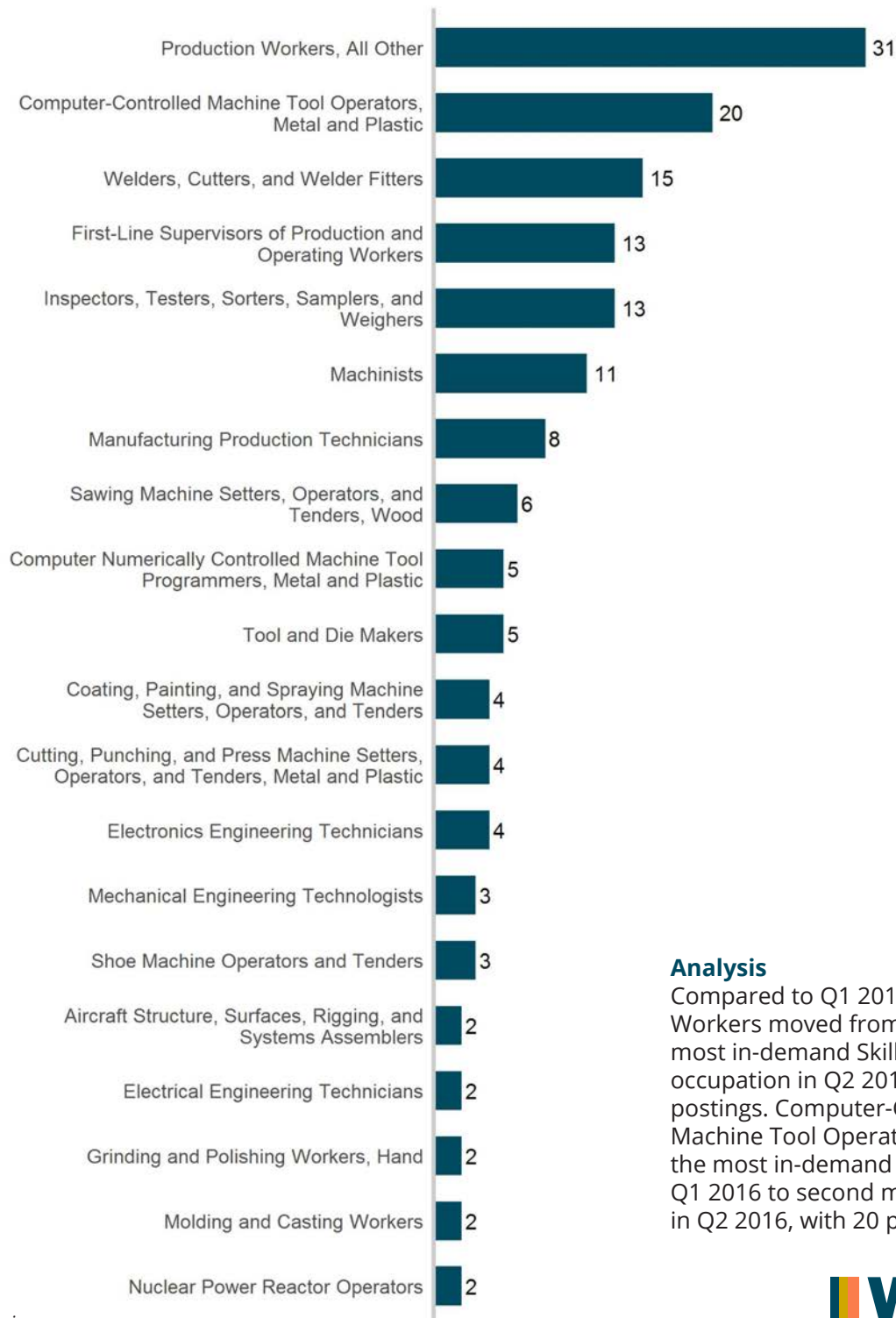
Job postings decreased 32%



Most in-demand occupation:  
Production Workers

### Skilled Trades & Technicians Top Jobs

Quarter 2 2016



#### Analysis

Compared to Q1 2016, Production Workers moved from third to first most in-demand Skilled Trades occupation in Q2 2016, with 31 postings. Computer-Controlled Machine Tool Operators fell from the most in-demand occupation in Q1 2016 to second most in-demand in Q2 2016, with 20 postings.





92% of postings required 5 years or less of experience

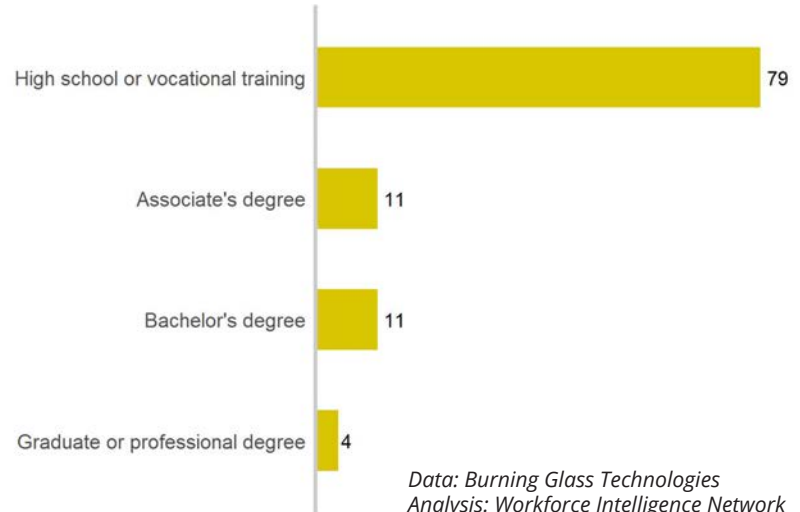
60%

of advertised salaries were \$35,000 or less per year

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

Of the 59 Skilled Trades job postings that specified a desired experience level during Q2 2016, 92% were available to workers with five years of experience or less. 108 postings did not specify a required level of experience. 75% of job postings required only a high school diploma or vocational training, with 79 postings. 62 postings did not specify a required level of degree attainment. The lack of need for high education among postings where education was listed indicates the majority of positions are non-technical or entry-level.

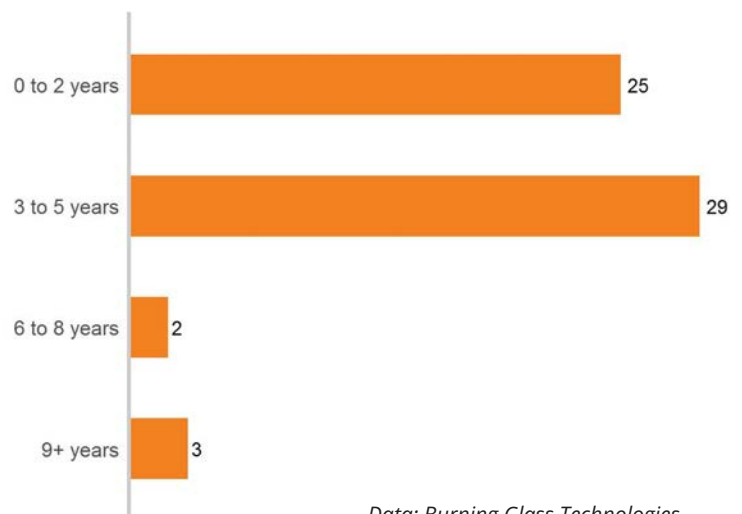
### Minimum Educational Attainment Required Q2 2016



### Areas of Study in-Demand Q2 2016

- Engineering, general
- Electrical and electronic engineering technologies/technicians, other
- Business administration and management, general
- Engineering technology, general
- Logistics, materials, and supply chain management

### Experience Required Q2 2016





Top area of study:  
Engineering, general

79%

of jobs required only a high school diploma or vocational training

### Skilled Trades & Technicians in-Demand Skills Q2 2016

The occupations in the Skilled Trades mainly require entry-level, manufacturing focused skills. The demand for entry-level positions in Skilled Trades job postings is demonstrated in the posting for skillsets like CNC, inspection, machining, repair, and micrometers. Employers hiring Skilled Trades occupations often post employability skills like communication skills, writing, being detail-oriented, organizational skills, and proficiency in mathematics.

#### Technical in-Demand Skills

- Computer Numerical Control (CNC)
- Inspection
- Machining
- Repair
- Micrometers

#### Foundational In-Demand Skills

- Communication Skills
- Writing
- Detail-Oriented
- Organizational Skills
- Mathematics

#### Job Type

- Temporary: 10.2%
- Full-time: 59%
- Part-time: 0.6%

#### Certifications In-Demand

- Certified brand protection professional
- Commercial driver's license (CDL)
- Contractors' license
- Electrician certification
- Electronic technician certification



Top certification: Certified brand protection professional

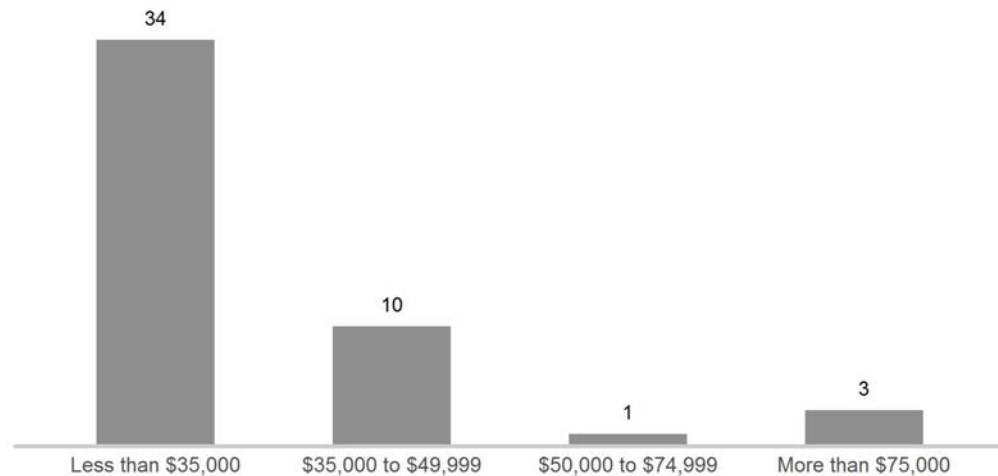


59% of jobs were full-time

## Skilled Trades & Technicians Wages

The majority of advertised salaries in the Skilled Trades in Q2 2016 were below \$35,000 per year, with 60% of the postings. Of the 167 postings, 119 did not specify a salary. With the majority of salaries falling below \$35,000, it strengthens the likelihood that the available postings are for non-technical or entry-level positions.

## 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
51-9199	Production Workers, All Other	\$9.94	\$13.44	\$15.85	\$17.67	\$20.86
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$10.69	\$13.23	\$19.40	\$22.17	\$26.49
51-4121	Welders, Cutters, and Welder Fitters	\$11.56	\$14.05	\$16.66	\$20.51	\$26.23
51-1011	First-Line Supervisors of Production and Operating Workers	\$16.34	\$20.91	\$28.46	\$37.04	\$45.29
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$9.57	\$11.26	\$15.17	\$22.40	\$27.91
51-4041	Machinists	\$10.86	\$13.84	\$17.96	\$23.91	\$28.37
17-3029	Manufacturing Production Technicians	\$16.01	\$21.84	\$30.06	\$36.13	\$46.65
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	\$12.33	\$14.01	\$17.06	\$20.03	\$23.52
51-4012	Computer Numerically Controlled Machine Tool	\$14.41	\$16.85	\$21.42	\$26.19	\$31.06
51-4111	Tool and Die Makers	\$15.55	\$19.58	\$24.91	\$31.93	\$35.13

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	222,897	216,445	214,929	218,651	218,278	216,278	<b>218,680</b>	2,402	1.1%
Employment	192,152	191,942	193,510	197,422	201,234	203,822	<b>207,142</b>	3,320	1.6%
Unemployment	30,746	24,504	21,419	21,229	17,044	12,456	<b>11,538</b>	-918	-7.4%
Unemployment Rate	13.8%	11.3%	10.0%	9.7%	7.8%	5.8%	<b>5.3%</b>	-0.5%	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	218,720	214,271	215,633	218,566	<b>218,852</b>	286	0.1%
Employment	205,573	202,190	206,059	206,513	<b>208,084</b>	1,571	0.8%
Unemployment	13,147	12,081	9,574	12,052	<b>10,768</b>	-1,285	-10.7%
Unemployment Rate	6.0%	5.6%	4.4%	5.5%	<b>4.9%</b>	-0.6%	na

*\*Note: Monthly data averaged by quarter*

Data: Bureau of Labor Statistics












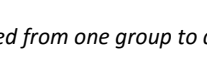
### Monthly Labor Market Data

	March 2015	April 2015	May 2015	June 2015	July 2015	August 2015	Septembe r 2015	October 2015	November 2015	December 2015	January 2016	February 2016	March 2016	April 2016	May 2016
Labor Force	216,322	216,054	220,375	219,731	216,723	214,259	211,832	214,219	216,413	216,268	217,804	219,159	218,734	218,734	218,734
Employment	201,958	203,912	206,422	206,384	201,480	203,114	201,976	204,763	207,052	206,362	205,774	207,049	206,717	206,717	206,717
Unemployment	14,364	12,142	13,953	13,347	15,243	11,145	9,856	9,456	9,361	9,906	12,030	12,110	12,017	12,017	12,017
Unemployment Rate	6.6%	5.6%	6.3%	6.1%	7.0%	5.2%	4.7%	4.4%	4.3%	4.6%	5.5%	5.5%	5.5%	5.5%	5.5%

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


















Data: Bureau of Labor Statistics

# Genesee & Shiawassee Counties 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	5,071	5,465	4,721	5,711	5,631		11.0%	-1.4%
Agriculture	90	73	50	75	94		4.4%	25.3%
Business & finance	193	228	217	242	185		-4.1%	-23.6%
Construction	37	81	46	64	87		135.1%	35.9%
Customer service	1,206	1,570	1,170	1,458	1,417		17.5%	-2.8%
Education	122	231	201	205	207		69.7%	1.0%
Energy	7	3	0	44	49		600.0%	11.4%
Engineers & designers	101	108	97	149	123		21.8%	-17.4%
Health care	889	865	868	925	976		9.8%	5.5%
Information technology	209	168	130	168	208		-0.5%	23.8%
Skilled trades & technicians	118	138	155	247	167		41.5%	-32.4%
Transportation, distribution, and logistics	791	595	537	607	732		-7.5%	20.6%

*\*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%

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