

Introduction: Lenawee and Hillsdale 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 Lenawee and Hillsdale County as a whole 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:

- Agriculture (page 6)
- Business and Finance (page 11)
- Health Care (page 16)
- Information Technology (page 21)
- Skilled Trades and 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



1



2016 Year in Review

Overall job postings grew moderately throughout 2016, with a 723 posting spike between Q2 and Q3 2016. Since Q1 2016, Lenawee and Hillsdale counties have gained about 300 online job ads, a 16 percent increase for a total of 1,952 ads. Specific occupation groups varied greatly in demand. Agriculture demand generally decreased during 2016, but postings nearly tripled between Q4 2016 and Q1 2017 for a total of 29, 3.6 percent higher than Q1 2016 levels. Business and Finance postings increased or remained stable in each quarter of 2016, growing from 51 postings to 97. Postings for Health care jobs remained relatively low between Q2 and Q4 2016. The 65 posting increase between Q4 2016 and Q1 2017 was insufficient to meet Q1 2016 levels, and overall demand in this group declined by 0.4 percent. Employer demand for Information technology jobs was generally steady around 40 postings throughout 2016, with an exceptional jump to 67 postings during Q3. Skilled trades occupations performed similarly, with steady moderate growth following a large increase and subsequent decline in Q2 2016. Overall this group grew by 4.4 percent between Q1 2016 and Q1 2017.

The labor force in Lenawee and Hillsdale counties increased 1.5 percent over the course of 2016, gaining 1,028 individuals for a total of 69,090. This increase mainly occurred between Q1 and Q2 2016, as the labor force levels have been slightly lower since Q3 2016. Employment varied by about 1,000 individuals each quarter, ultimately experiencing a modest 1.2 percent gain between Q1 2016 and Q1 2017. Given labor force increases during 2016 as well as employment volatility, the annual unemployment rate decreased by 0.1 percentage points while the quarterly rate increased by 0.3 points.

Key Findings for Q1 2017

Online job postings within Lenawee and Hillsdale County reached a new high during Q1 2017.

During Q1 2017, employer demand grew by 5.6 percent to 1,952 online job postings. While lower than the unprecedented Q3 2016 record high, this level of demand is in line with the general pattern of growth in these counties. See page 3 for more details.

Overall employment within the two counties experienced slight growth, stability.

Although quarterly employment fell during Q1 2017, annual employment sits at a 6-year high of nearly 66,000 workers. With higher employment, the unemployment rate has reached its lowest annual rate, 4.5%. See page 3 for more details.

Large demand for heavy and tractor-trailer truck drivers.

During Q1 2017, 233 of the 1,952 online job ads sought truck drivers in the two counties. This makes up 12 percent of the total postings, indicating high demand for drivers and a great opportunity for those who have CDL certification.

All occupation groups witnessed increases in online job postings.

The Agriculture, Health Care, and Business and Finance occupation groups all reported increases in job postings greater than 30 percent between Q4 2016 and Q1 2017. The IT and Skilled trades occupation group saw growth as well, albeit by fewer than five postings each, but overall demand remains high.

Many job postings oriented toward those with fewer than 5 years' experience in Q1 2017

Within the five occupation groups analyzed by WIN for Hillsdale and Lenawee counties, a large majority of employers expressed interest in individuals with 0 to 5 years of experience. This would indicate a desire for entry-level workers that will later have opportunities for advancement within the companies that hire them. See pages 8, 13, 18, 23, and 28 for more





Workforce and Employer Demand Indicators

Postings over time

Online job ads for occupations within Hillsdale and Lenawee increased by 104 postings from 1,848 in Q4 2016 to 1,952 in Q1 2017. This level of postings was 16 percent higher than the 1,678 online postings in Q1 2016, a year ago. Postings have been generally increasing over recent years.

Labor force/employment/unemployment

The labor force has been relatively stable since 2010. The labor force decreased by 64 workers (-0.1 percent) Annually however, it has increased by 141 individuals (+0.2 percent) from 68,949 in 2016 to 69,090 so far in 2017. Employment in Hillsdale and Lenawee has declined slightly from Q4 2016, losing 795 workers (1.2 percent). Yearly employment grew by 804 (1.2) percent) from 64,739 in Q1 2016 to 65,543 in Q1 2017. The annual unemployment rates in these two counties have also seen improvement, experiencing a decrease over the past seven years to its lowest annual point. The quarterly unemployment rate grew by 1.1 percentage points between Q4 2016 and Q1 2017 (5.1 percent).

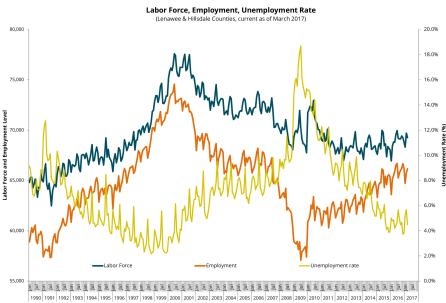
WIN Region Online Job Postings



Data: Burning Glass Technologies Analysis: Workforce Intelligence Network

Labor Force, Employment, Unemployment Rate

Quarter 1 2017



Data: BLS Analysis: Workforce Intelligence Network

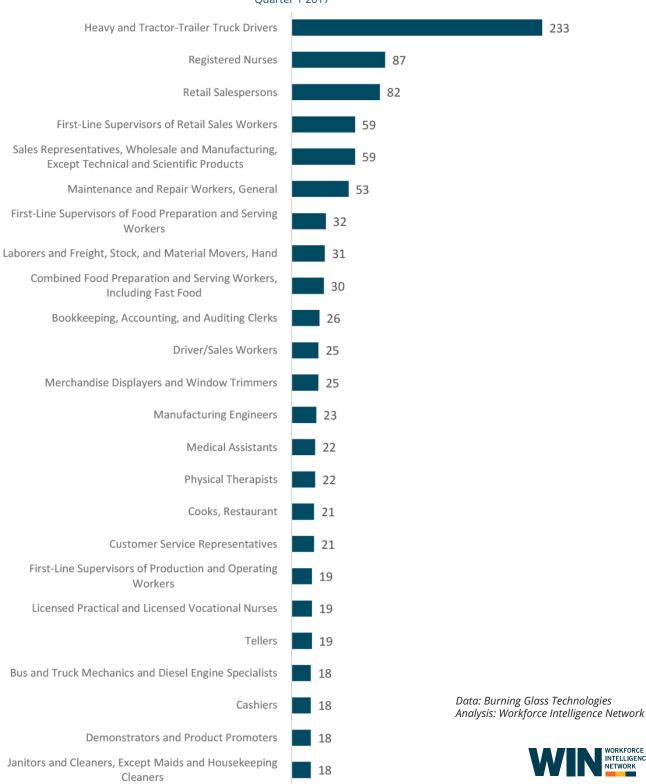




increase in online job positngs

Top Jobs





18

Production Workers, All Other



Top job: Truck drivers



All occupation groups saw increase in job postings

Top Jobs

Quar	ter 1 2017
Hairdressers, Hairstylists, and Cosmetologists	17
Personal Financial Advisors	17
Insurance Sales Agents	16
Management Analysts	16
Electrical Engineers	15
Sales Agents, Financial Services	15
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	14
Home Health Aides	13
Managers, All Other	13
Nursing Assistants	12
Welders, Cutters, and Welder Fitters	12
General and Operations Managers	11
HelpersProduction Workers	11
Industrial Engineers	11
Pharmacy Technicians	11
Receptionists and Information Clerks	11
Software Developers, Applications	11
First-Line Supervisors of Mechanics, Installers, and Repairers	10
Loan Officers	10
Medical and Clinical Laboratory Technicians	10
Construction Laborers	9
Human Resources Specialists	9
Inspectors, Testers, Sorters, Samplers, and Weighers	9
Light Truck or Delivery Services Drivers	9

Machinists

9

Data: Burning Glass Technologies Analysis: Workforce Intelligence Network





Introduction

WIN's Agriculture group brings together occupations that require knowledge of the farming, livestock, the environment, and natural sciences. Occupations range from farm workers, to environmental engineers, to meat butchers, and recreation workers.

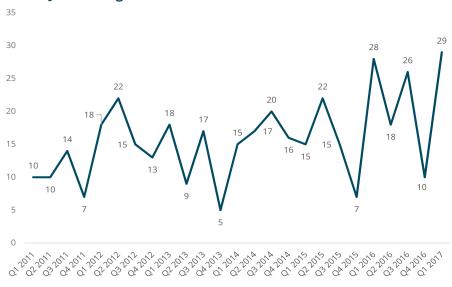
Job Posting Analysis

Online job ads for occupations related to Agriculture nearly tripled between Q4 2016 and Q1 2017, for a new high of 29 postings. Demand as shown through these postings is generally small and volatile in this occupation group, but has demonstrated a slow overall trend of growth; this level is one posting greater than Q1 2016, and fourteen greater than Q1 2015.

Employment Analysis

Agriculture employment has seen stable growth within the recent years, after a drop between 2010 and 2012. In fact, current employment in the area is at its highest point in at least 16 years, with 3,191 individuals employed in agriculture occupations.

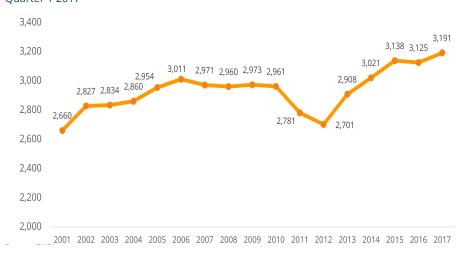
Online Job Postings



Data: Burning Glass Technologies Analysis: Workforce Intelligence Network

Employment Over Time

Quarter 1 2017



Data: EMSI Analysis: Workforce Intelligence Network



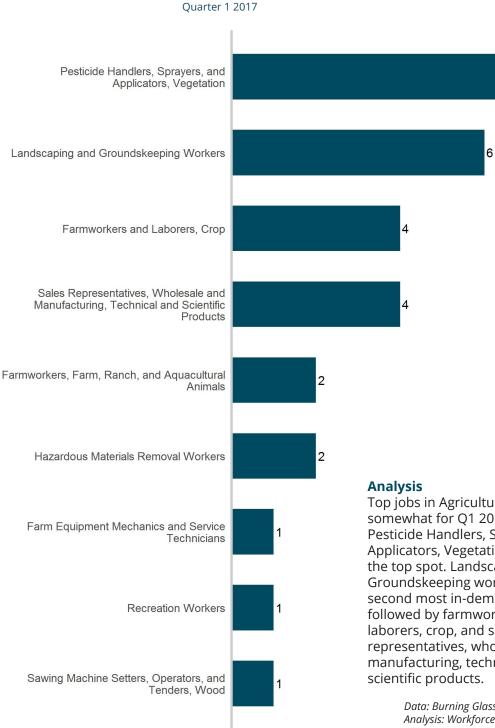


29 total online job ads



19 more postings than Q4 2016

Agriculture Top Jobs



Water and Wastewater Treatment Plant and

System Operators

Top jobs in Agriculture varied somewhat for Q1 2017, with Pesticide Handlers, Sprayers, and Applicators, Vegetation moving into the top spot. Landscaping and Groundskeeping workers were the second most in-demand occupation, followed by farmworkers and laborers, crop, and sales representatives, wholesale and manufacturing, technical and

> Data: Burning Glass Technologies Analysis: Workforce Intelligence Network







Growing fields of study: Marketing and Agronomy

Agriculture **Educational and Experience**

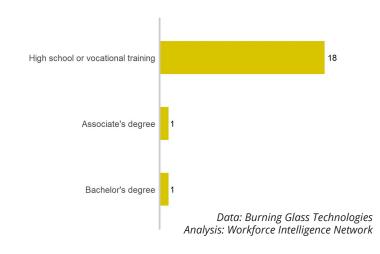
Of the twenty Agriculture job postings that specified a desired educational attainment level in Q1 2017, almost all preferred workers with high school or vocational training.

There were only ten postings that specified a desired experience level in Q1 2017, all available to workers with under five years of experience. Many entry-level Agriculture positions are available to entry level Hillsdale and Lenawee County workers.

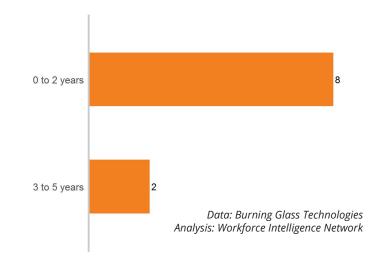
In-Demand Area of Study

- Marketing/Marketing Management
- Soil Science and Agronomy

Educational Attainment



Experience Required









Agriculture In-Demand Skills

Occupations in Agriculture required an array of both technical and employability skills. Agriculture specific skills ranged from repair and customer service to irrigation and agronomy. Employers also prefer individuals with physical strength and energetic personalities, alongside strong writing, math, and computer skills. This combination of skills helps facilitate business transactions within this industry.

Technical In-Demand Skills

- Repair
- Customer contact/customer service
- Irrigation
- Laundry
- Agronomy

Job Type

Data not available

Foundational In-Demand Skills

- Ability to perform physical labor
- Writing
- Computer skills
- Mathematics
- Energetic/positive disposition

Certifications Required

- Commercial Driver's License
- Commercial Applicator License
- Hazardous Materials Certification





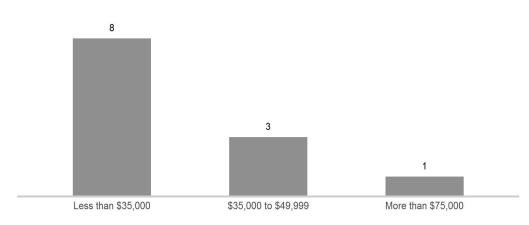
0-5 years experience in-demand

Agriculture Wages

Of the 29 postings in Agriculture in Q1 2017, 12 specified an annual salary. Among them, three quarters were below \$35,000 per year, and the mean salary was \$35,271. The table below containing data from BLS, estimates that four out of the seven occupations with wage data have a median salary of less than \$35,000 per year, while the rest earn over \$50,000 per year.

Advertised Wages in Job Postings

Quarter 1 2017



Data: Burning Glass Technologies Analysis: Workforce Intelligence Network

Wage Data from Bureau of Labor Statistics 2016

Occupation		10th	25th		75th	90th
Code	Occupation Name	Percentile	Percentile	Median Wages	Percentile	Percentile
Code		Wages		Wages	Wages	
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation	\$11.50	\$12.98	\$14.80	\$16.71	\$18.97
37-3011	Landscaping and Groundskeeping Workers	\$9.02	\$10.00	\$11.35	\$13.87	\$17.05
45-2092	Farmworkers and Laborers, Crop	\$9.14	\$10.05	\$12.85	\$16.06	\$18.93
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$21.61	\$27.46	\$37.97	\$52.59	\$68.37
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	\$8.78	\$9.40	\$10.42	\$11.81	\$14.93
47-4041	Hazardous Materials Removal Workers	\$14.78	\$18.28	\$22.45	\$26.17	\$28.55
49-3041	Farm Equipment Mechanics and Service Technicians	\$11.72	\$14.77	\$18.31	\$22.44	\$26.05
39-9032	Recreation Workers	\$8.56	\$9.01	\$10.07	\$12.43	\$15.44
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	\$11.21	\$12.70	\$15.33	\$18.88	\$21.08
51-8031	Water and Wastewater Treatment Plant and System Operators	\$16.95	\$20.25	\$23.17	\$26.79	\$30.10

Data: EMSI, BLS

Analysis: Workforce Intelligence Network



Business & Finance

Introduction

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.

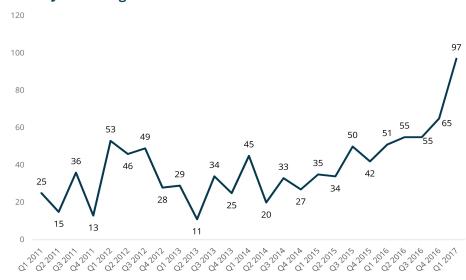
Job Posting Analysis

Business and Finance postings increased by 49 percent between Q4 2016 and Q1 2017, resulting in 97 job ads. Demand in this occupation group has shown a pattern of strong growth since 2013.

Employment Analysis

Employment in Business and Finance related occupations remained relatively stable since the Great Recession in 2009. Surprisingly, employment did not hit its lowest point in the Recession, but rather two years later in 2011. In 2011, the Business and Finance industry employed only 1,100 workers. In 2017, employment remained similar at 1,121 individuals, but this is the highest level since 2013.

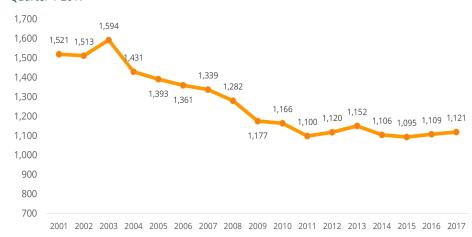
Online Job Postings



Data: Burning Glass Technologies Analysis: Workforce Intelligence Network

Employment Over Time

Quarter 1 2017



Data: EMSI Analysis: Workforce Intelligence Network





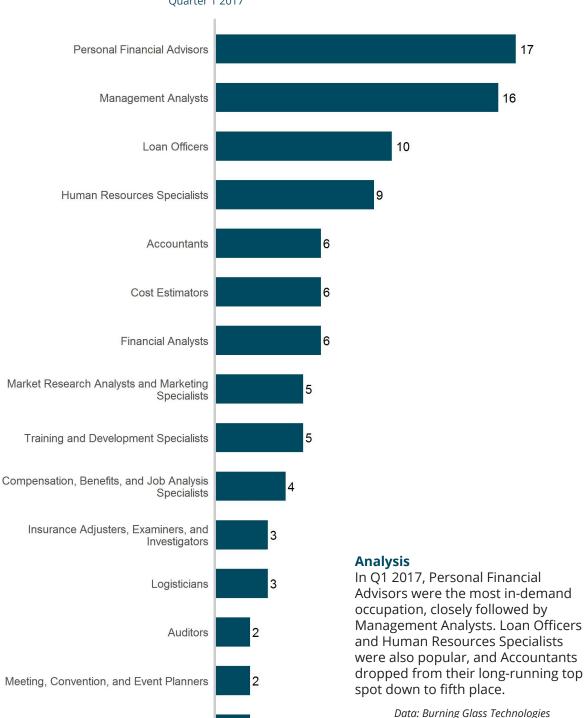




1,121 workers employed, highest since 2013

Business & Finance Top Jobs

Quarter 1 2017



Tax Preparers

Online Merchants





Personal Financial Advisors new top job



Bachelor's degree preferred

Business & Finance Education and Experience

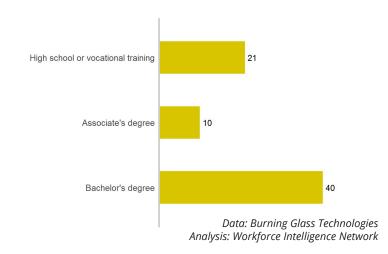
Of the 71 Business and Finance job postings that specified a desired educational attainment level, 56 percent preferred candidates with a bachelor's degree, with high school or vocational training as the next most in-demand level.

Fifty-four postings specified desired experience, and these were almost evenly split between 0 to 2 years of experience and 3 to 5 years of experience with 25 and 26 ads respectively. In Q1 2017, entry-level Business and Finance positions were available to Hillsdale and Lenawee County workers that are willing to pursue a bachelor's degree.

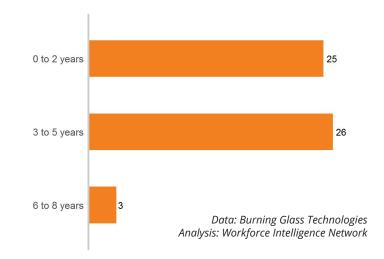
In-Demand Area of Study

- Accounting
- Business Administration and Management
- Finance
- Mechanical Engineering
- Human Resources Development

Educational Attainment



Experience Required







Entry level available: 0-5 years experience desired



Business & Finance In-Demand Skills

Occupations in Business and Finance required an array of skills focused on fiscal management. These skills include interpersonal abilities like customer service, alongside accounting and software familiarity. Employers hiring Business and Finance workers also posted common employability skills like communication, writing, and organization.

Technical In-Demand Skills

- Microsoft Office
- Customer service/customer contact
- Accounting
- Systems analysis
- Project management

Foundational In-Demand Skills

- Communication skills
- Writing
- Problem solving
- Organizational skills
- Computer skills

Job Type

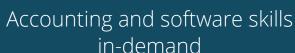
Temporary: 5.2%Full-time: 70.1%Part-time: 1.0%

Certifications Required

- Certified Public Accountant (CPA)
- Series 7
- Chief Financial Officer Certification
- Certified Employee Benefit Specialist (CEBS)
- Human Resources (E.G. GPHR)









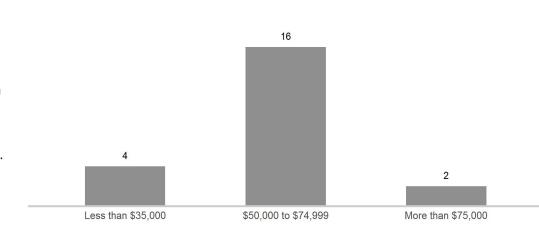
Typical annual salary between \$50,000 and \$75,000

Business & Finance Wages

Only 22 postings in Business and Finance specified an annual salary during Q1, but those that did painted an optimistic picture. Of those postings, 73 percent were between \$50,000 and \$75,000 with a mean advertised salary of \$58,636. For workers willing to pursue the necessary education, lucrative positions in the field exist.

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
13-2052	Personal Financial Advisors	\$20.28	\$26.19	\$33.25	\$57.74	\$79.47
13-1111	Management Analysts	\$23.72	\$30.57	\$39.02	\$49.68	\$63.66
13-2072	Loan Officers	\$13.34	\$18.11	\$23.63	\$32.62	\$49.76
13-1071	Human Resources Specialists	\$16.68	\$21.42	\$27.91	\$35.97	\$46.11
13-2011	Accountants	\$19.32	\$23.86	\$31.72	\$42.09	\$54.49
13-1051	Cost Estimators	\$18.21	\$22.31	\$29.04	\$37.54	\$45.69
13-2051	Financial Analysts	\$23.91	\$29.53	\$38.05	\$46.71	\$56.41
13-1161	Market Research Analysts and Marketing Specialists	\$18.52	\$23.66	\$32.02	\$42.59	\$52.77
13-1151	Training and Development Specialists	\$13.98	\$18.67	\$25.22	\$34.91	\$44.20
13-1141	Compensation, Benefits, and Job Analysis Specialists	\$20.53	\$24.42	\$29.83	\$38.27	\$47.33

Data: EMSI, BLS

Analysis: Workforce Intelligence Network



Health Care

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

Online job ads for Health Care were up 30.5 percent to 278 postings in Q1 2017, from 213 postings in Q4 2016. This demand level approximates the numbers achieved in Q1 2016 (279 postings) and is the highest level since then.

Employment Analysis

With 3,458 jobs, 2017 marked a 17 year high in Health Care employment, exceeding the previous high of 3,373 in 2016. This is due to an employment growth of 2.5 percent, with an additional 85 workers finding employment in Health Care related occupations. This continues the upward trajectory started in 2010. 3031 individuals were employed in Health Care occupations in 2010, and this number has increased in all but one year since then.

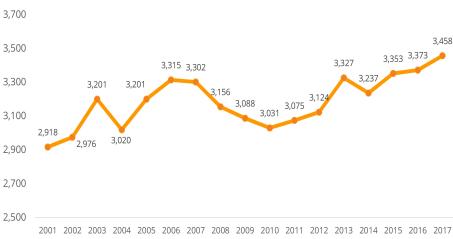
Online Job Postings



Data: Burning Glass Technologies Analysis: Workforce Intelligence Network

Employment Over Time

Quarter 1 2017



Data: EMSI Analysis: Workforce Intelligence Network



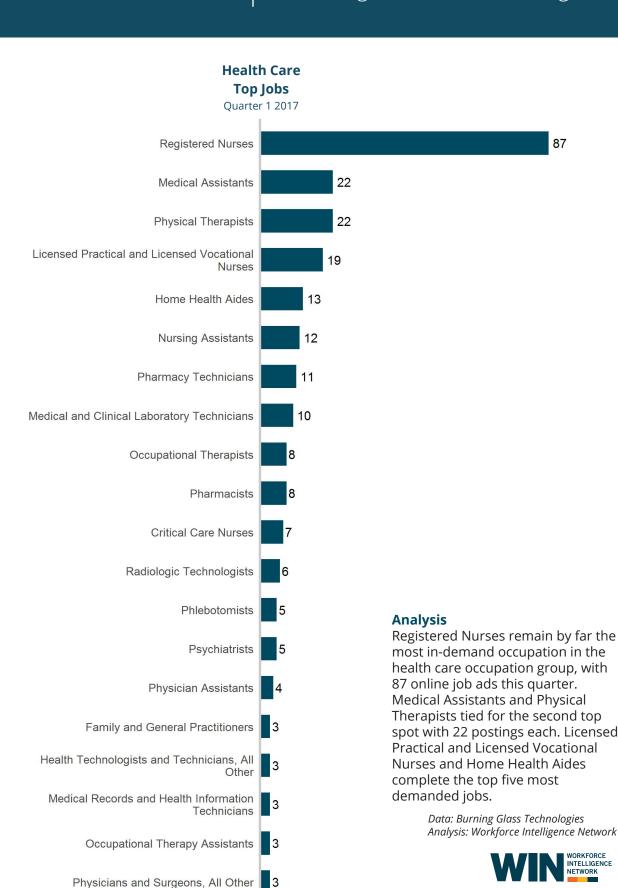






Openings for those with vocational training or an associates degree

87





3,458 individuals: 17 year high in employment

31% increase in postings from Q4 2016

Health Care Education and Experience

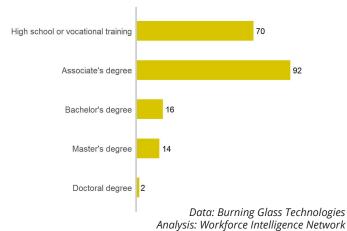
Of the 194 Health Care job postings that specified a desired educational attainment level in Q1 2017, 47 percent preferred an associate's degree, while another 36 percent indicated a high school degree or vocational training was necessary.

Almost all of the 115 postings specifying desired experience were open to candidates with 0 to 2 years of experience.

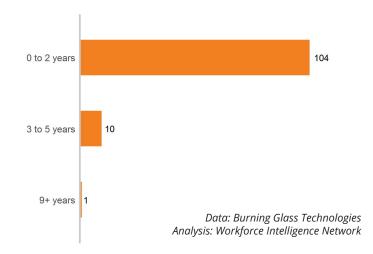
In-Demand Area of Study

- **Nursing Science**
- Physical Therapy/Therapist
- Radiologic Technology/Science-Radiographer
- Occupational Therapy/Therapist
- Audiology/Audiologist and Speech-Language Pathology/Pathologist

Educational Attainment



Experience Required









Health Care In-Demand Skills

The occupations in the Health Care group required a wide array of varying skills including technical and employability skills. These technical skills include patient care, treatment planning, critical care, rehabilitation, and CPR. Employers hiring Health Care workers also posted employability skills like communication skills, team work/collaboration, organizational skills, computer skills, and customer service. The blend of technical and employability skills would underscore the need for Health Care workers to be multi-talented employees capable of working comfortably with others, from patients to coworkers.

Technical In-Demand Skills

- Patient Care
- Treatment Planning
- Scheduling
- Supervisory skills
- Cardiopulmonary Resuscitation (CPR)

Foundational In-Demand Skills

- Communication Skills/building effective relationships
- Team Work/Collaboration
- Multi-tasking
- Ability to perform physical labor
- Work area maintenance

Job Type

Temporary: 9.0%Full-time: 54.0%Part-time: 11.9%

Certifications Required

- Registered Nurse
- First aid CPR AED
- Home Health Aide
- Advanced Cardiac Life Support (ACLS)
- Basic Cardiac Life Support Certification





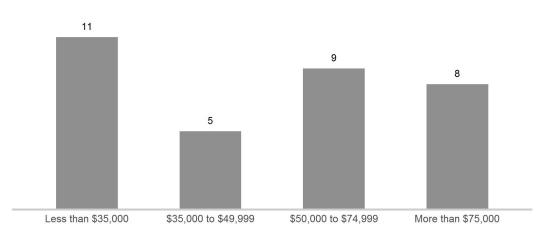
Top area of study: Nursing science

Health Care Wages

The 12 percent of Health Care job postings in Lenawee and Hillsdale counties this quarter that specified salary information had those offers spread fairly evenly throughout the spectrum. This is indicative of the wide range of positions available. While 33 percent of positions indicate a salary under \$35,000 annually, another quarter each offer \$50,000 to \$75,000 and over \$75,000. The mean real-time salary this quarter was \$53,670.

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		10th	25th		75th	90th	
Code	Occupation Name	Percentile	Percentile	Median Wages	Percentile	Percentile	
Code		Wages	Wages		Wages	Wages	
29-1141	Registered Nurses	\$25.13	\$28.55	\$33.18	\$38.42	\$46.58	
31-9092	Medical Assistants	\$10.78	\$12.34	\$14.06	\$16.32	\$18.78	
29-1123	Physical Therapists	\$27.34	\$33.06	\$39.92	\$49.33	\$62.25	
	Licensed Practical and						
29-2061	Licensed Vocational	\$18.51	\$20.51	\$23.28	\$26.23	\$28.45	
	Nurses						
31-1011	Home Health Aides	\$8.50	\$9.07	\$9.98	\$11.41	\$13.84	
31-1014	Nursing Assistants	\$9.96	\$11.65	\$13.46	\$15.52	\$17.56	
29-2052	Pharmacy Technicians	\$10.04	\$11.90	\$14.61	\$17.31	\$19.25	
29-2012	Medical and Clinical	\$10.79	\$12.75	\$15.28	\$19.12	¢27.00	
29-2012	Laboratory Technicians	\$10.79	\$12.75	⊅13.20	\$19.12	\$27.00	
29-1122	Occupational Therapists	\$25.38	\$29.93	\$35.29	\$44.02	\$56.49	
29-1051	Pharmacists	\$42.61	\$50.21	\$55.49	\$60.30	\$66.40	

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.

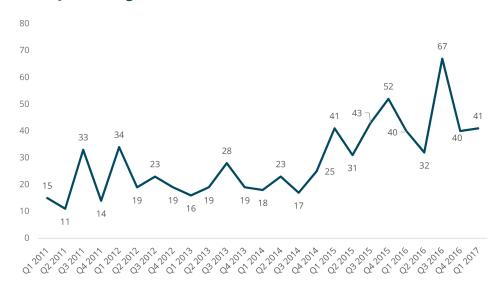
Job Posting Analysis

Online job ads for occupations related to IT remained stable this quarter, with 41 postings in Q1 2017 after 40 in Q4 2016. This follows considerable volatility in the occupation group in 2016, and may suggest a return to stability in the future. One year ago, there were 40 online job ads for IT positions.

Employment Analysis

Following logically from the relatively consistent average number of job postings, employment in IT related fields has remained generally stable in Hillsdale and Lenawee Counties. IT currently employs 443 individuals in the region.

Online Job Postings



Data: Burning Glass Technologies Analysis: Workforce Intelligence Network

Employment Over Time

Quarter 1 2017

800

700

589 596

600 607

500 517 494 479 466 460 443 442 438 432 451 424 421 434 443

400

300

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Data: EMSI Analysis: Workforce Intelligence Network



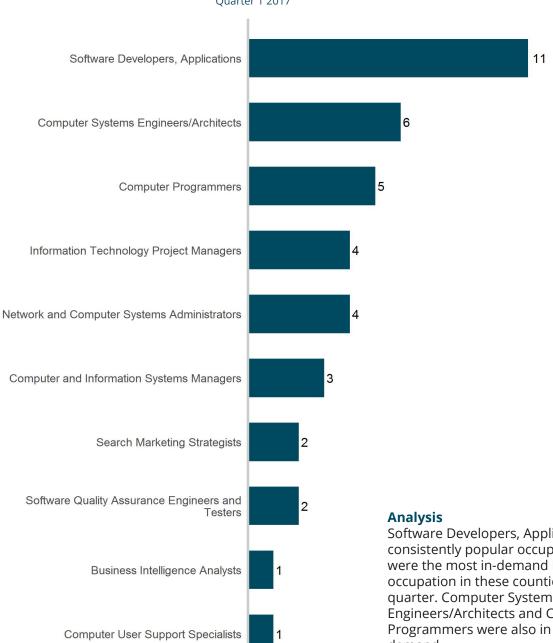


443 individuals employed in IT



Information Technology Top Jobs

Quarter 1 2017



Document Management Specialists

Information Security Analysts

Software Developers, Applications, a consistently popular occupation, were the most in-demand IT occupation in these counties this quarter. Computer Systems Engineers/Architects and Computer Programmers were also in high demand.

> Data: Burning Glass Technologies Analysis: Workforce Intelligence Network





Top job: Software Developers, Applications



Key skills: Project Management and Technical Support

Information Technology Education and Experience

Of the 26 IT job postings that specified a desired educational attainment level, 65 percent indicated a preference for a bachelor's degree in Q1 2017.

There were 24 postings that specified a desired experience level, and all were available to workers with less than 5 years of experience. Despite the general preference for bachelor's degrees, the minimal experience required for entry into IT related jobs made it a favorable industry for workers seeking entry-level jobs in Q1 2017.

In-Demand Area of Study

- Mechanical Engineering
- Computer Science
- Electrical and Electronic Engineering Technologies/Technicians, Other
- Engineering, General
- Nursing Science

Educational Attainment



Data: Burning Glass Technologies Analysis: Workforce Intelligence Network

Experience Required





85% of postings for full-time IT jobs

Information Technology In-Demand Skills

IT occupations require a blend of both highly specialized computer skills and more general project management capability. Sought after IT skills include technical support and ISO 14001 standards alongside customer service. Employers also look for candidates with strong communication and leadership skills to work on teams.

Technical In-Demand Skills

- Project Management
- Technical Support
- Customer Service
- ISO 14001 Standards
- Inspection

Foundational In-Demand Skills

- Quality Assurance and Control
- Problem Solving
- Communication skills/building effective relationships
- Leadership
- Organizational skills/work area maintenance

Job Type

Temporary: 2.5%Full-time: 85%

Part-time: Data not available

Certifications Required

- Certified Quality Engineer
- Salesforce.com Developer





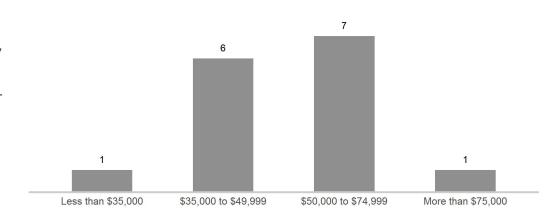
All postings require under five years' experience

Information Technology Wages

Eight of the fifteen postings listing wage information this quarter advertised an annual salary above \$50,000 annually. The mean salary was \$57,024. The high salaries offered for jobs with modest experience requirements makes IT a lucrative field in Hillsdale and Lenawee counties.

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	\$24.49	\$31.41	\$41.29	\$52.84	\$62.33
15-1199	Computer Systems Engineers/Architects	\$19.41	\$26.22	\$35.31	\$46.22	\$55.56
15-1131	Computer Programmers	\$21.82	\$26.55	\$33.45	\$41.75	\$48.88
15-1199	Information Technology Project Managers	\$19.41	\$26.22	\$35.31	\$46.22	\$55.56
15-1142	Network and Computer Systems Administrators	\$22.44	\$28.27	\$36.76	\$44.60	\$52.88
11-3021	Computer and Information Systems Managers	\$36.42	\$43.91	\$54.88	\$69.01	\$83.67
15-1199	Search Marketing Strategists	\$19.41	\$26.22	\$35.31	\$46.22	\$55.56
15-1199	Software Quality Assurance Engineers and Testers	\$19.41	\$26.22	\$35.31	\$46.22	\$55.56
15-1199	Business Intelligence Analysts	\$19.41	\$26.22	\$35.31	\$46.22	\$55.56
15-1151	Computer User Support Specialists	\$12.93	\$16.14	\$21.67	\$29.23	\$37.27

Data: EMSI, BLS

Analysis: Workforce Intelligence Network





K Skilled Trades & Technicians (Manufacturing Focused)

Introduction

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

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

Job Posting Analysis

Online job ads for occupations related to Skilled Trades increased by five postings for a total of 119 in Q1 2017. Following a dramatic spike in demand and subsequent decline to more stable levels during 2016, this level of postings continues the slow but steady growth experienced since Q3 2016.

Employment Analysis

Employment in Skilled Trades declined steeply between 2001 and 2009, but has made modest gains since the Recession low of 2,453 employed workers. Growth has been small but consistent since 2009, and in 2017, there were 3,187 individuals employed in these occupations.

Online Job Postings

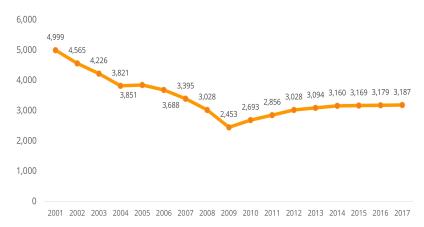


Source: Burning Glass Technologies Analysis: Workforce Intelligence Network

> Data: Burning Glass Technologies Analysis: Workforce Intelligence Network

Employment Over Time

Quarter 1 2017



Analysis: Workforce Intelligence Network

υατα: EMSI Analysis: Workforce Intelligence Network





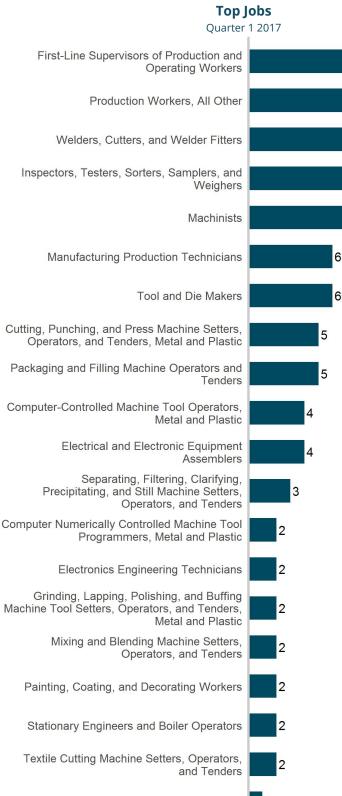


3,187 individuals employed, highest since 2007



19

Skilled Trades & Technicians Top Jobs



Chemical Equipment Operators and Tenders

Analysis

First-line Supervisors of Production and Operating Workers and **Production Workers themselves** were the most in-demand jobs this quarters. Welders, Cutters, and Welder Fitters were also a soughtafter occupation.

> Data: Burning Glass Technologies Analysis: Workforce Intelligence Network





Now hiring: Production workers and supervisors



Under two years experience necessary

Skilled Trades & Technicians Education and Experience

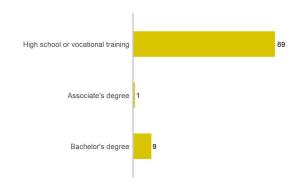
Of the 79 job postings that specified a desired educational attainment level in Q1 2017, 87 percent indicated demand for a high school diploma or some vocational training.

There were fewer postings that specified a desired experience level this quarter (51 postings). Almost all of these postings were available to workers with less than 5 years of experience, and 49 percent were available to workers with 0 to 2 years of experience. The low education and experience requirements indicate many entry-level availabilities in Skilled Trades.

In-Demand Area of Study

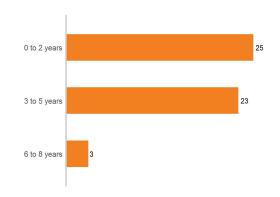
- Business Administration and Management
- Food Science
- · Mechanical Engineering
- Accounting
- Chemistry

Educational Attainment



Data: Burning Glass Technologies Analysis: Workforce Intelligence Network

Experience Required



Data: Burning Glass Technologies Analysis: Workforce Intelligence Network





High school or vocational training required



Inspection, repair, and measurement skills in-demand

Skilled Trades & Technicians In-Demand Skills

The occupations in the Skilled Trades mainly required equipment-specific manufacturing skills. These include skillsets like inspection, repair, and use of various measurement and hand tools. Employers hiring Skilled Trades workers also seek general employability skills like physical ability and workplace organization.

Technical In-Demand Skills

- Inspection/Repair
- Micrometers/calipers
- Welding
- Hand Tools
- Forklift operation

Foundational In-Demand Skills

- Ability to perform physical tasks
- Work area maintenance/ organizational skills
- Mathematics
- Quality assurance and control
- Communication Skills

Job Type

Temporary: 11.8%Full-time: 79.8%Part-time: 1.7%

Certifications Required

- Certified Quality Engineer
- Forklift Operator Certification
- Certified Information Security Manager (CISM)
- Certified Information Systems Auditor (CISA)
- Certified Information Systems Security Professional (CISSP)





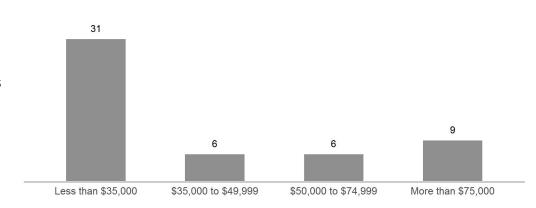


Skilled Trades & Technicians Wages

60 percent of advertised salaries in postings that stated them in the Skilled Trades in Q1 2017 were below \$35,000 per year. However, another 17 percent offered over \$75,000 annually (likely with the jobs requiring over 9 years of experience among them) and the mean realtime salary was \$51,343. Between the potential for salary growth and the minimal entry requirements, Skilled Trades occupations have the potential to be opportunities for long-term careers, if individuals are willing to put in the education and training necessary.

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	\$17.40	\$22.18	\$29.48	\$38.86	\$47.50
51-9199	Production Workers, All Other	\$10.77	\$13.64	\$16.54	\$18.93	\$24.89
51-4121	Welders, Cutters, and Welder Fitters	\$12.73	\$15.15	\$17.87	\$22.25	\$28.27
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$9.81	\$11.55	\$15.46	\$21.68	\$28.32
51-4041	Machinists	\$12.71	\$15.79	\$19.49	\$24.55	\$29.91
17-3029	Manufacturing Production Technicians	\$20.49	\$26.65	\$31.91	\$36.96	\$44.69
51-4111	Tool and Die Makers	\$16.99	\$21.20	\$26.38	\$32.46	\$36.25
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	\$10.39	\$12.37	\$16.35	\$24.00	\$27.39
51-9111	Packaging and Filling Machine Operators and Tenders	\$8.86	\$9.91	\$12.78	\$16.97	\$21.72
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$11.38	\$13.62	\$18.70	\$23.08	\$28.44

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	71,299	68,920	67,956	68,340	68,429	68,470	68,949	69,090	141	0.2%
Employment	61,895	61,715	62,108	62,720	63,883	65,008	65,777	65,952	175	0.3%
Unemployment	9,403	7,205	5,848	5,620	4,546	3,462	3,173	3,138	-35	-1.1%
Unemployment Rate	13.2%	10.5%	8.6%	8.2%	6.6%	5.1%	4.6%	4.5%	-0.1%	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	68,062	69,440	69,140	69,154	69,090	-64	-0.1%	1,028	1.5%
Employment	64,739	66,365	65,664	66,338	65,543	-795	-1.2%	804	1.2%
Unemployment	3,323	3,076	3,476	2,816	3,547	731	26.0%	224	6.7%
Unemployment Rate	4.9%	4.4%	5.0%	4.1%	5.1%	1.1%	na	0.3%	na

*Note: Monthly data averaged by quarter

Data: Bureau of Labor Statistics

Monthly Labor Market Data

Total Labor Ivia															
	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	66,939	68,428	68,820	68,796	69,566	69,959	69,167	69,126	69,128	69,419	69,248	68,794	68,308	69,701	69,261
Employment	63,591	65,146	65,481	65,903	66,501	66,690	65,245	65,712	66,036	66,185	66,673	66,156	64,726	65,752	66,152
Unemployment	3,348	3,282	3,339	2,893	3,065	3,269	3,922	3,414	3,092	3,234	2,575	2,638	3,582	3,949	3,109
Unemployment Rate	5.0%	4.8%	4.9%	4.2%	4.4%	4.7%	5.7%	4.9%	4.5%	4.7%	3.7%	3.8%	5.2%	5.7%	4.5%

* Note: Data shown for 15 most recently available months

Data: Bureau of Labor Statistics

Lenawee & Hillsdale Counties 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	1,678	1,606	2,329	1,848	1,952		16.3%	21.5%
Agriculture	28	18	26	10	29	\	3.6%	61.1%
Business & finance	51	55	55	65	97		90.2%	76.4%
Construction	26	13	32	13	24	\\\\	-7.7%	84.6%
Customer service	363	339	464	485	467		28.7%	37.8%
Education	27	29	68	61	14		-48.1%	-51.7%
Energy	1	0	0	0	1		0.0%	#DIV/0!
Engineers & designers	43	49	70	57	82		90.7%	67.3%
Health care	279	199	234	213	278	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	-0.4%	39.7%
Information technology	40	32	67	40	41		2.5%	28.1%
Skilled trades & technicians	114	174	110	114	119		4.4%	-31.6%
Transportation, distribution, and logistics	290	418	804	282	288		-0.7%	-31.1%

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

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