

Q1 2017  
January - March

# LIVINGSTON COUNTY

## WIN LABOR MARKET REPORT



# Introduction: Livingston 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 Livingston County with special sections devoted to 5 occupational groups. WIN's analysis of online job postings, a proxy for employer demand, is a pioneering method for tracking the health of the labor market.

Occupational groups include:

- Business and Finance (page 6)
- Customer Service (page 12)
- Health Care (page 17)
- Information Technology (page 22)
- 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



# Introduction: Livingston County

## 2016 Year in Review

Overall job postings experienced a strong growth trend throughout 2016. Demand decreased into Q2 but jumped by nearly 600 postings for Q3, and levels remained high for the rest of the year. Since Q1 2016, Livingston county has gained 220 online job postings, a 9 percent increase. Specific occupation groups varied greatly in demand. Business and Finance postings decreased between Q2 and Q4 2016, falling from 61 postings to 36. However, increases in early 2016 and 2017 more than compensated for this and the occupation group grew by 136 percent by Q1 2017. Customer Service experienced steady growth most quarters, growing by 41 percent from 669 postings in Q1 2016 to 942 in Q1 2017. Health care job postings increased almost every quarter in 2016, experiencing a 30 percent growth in demand from 238 postings in Q1 2016 to 309 in Q1 2017. Employer demand for Information technology jobs was volatile throughout 2016, with a 95 posting peak in Q3 2016. Between Q1 2016 and Q1 2017, postings declined by 6 percent. Skilled trades occupations fared similarly, with 224 postings each in Q1 and Q3 2016 falling 26 percent to 165 in Q1 2017.

The labor force in Livingston County increased 2.1 percent over the course of 2016, gaining 2,061 individuals for a total of 99,520. This increase mainly occurred between Q1 and Q3 2016, as the labor force levels have stabilized during more recent quarters. Employment followed a similar pattern, reaching a peak in Q3 2016 and then declining slightly for an overall 1.9 percent increase between Q1 2016 and Q1 2017. Given that labor force and employment increases behaved similarly this year, the quarterly unemployment rate increased by a scant 0.2 percentage points while the annual rate went unchanged.

## Key Findings for Q1 2017

### **Livingston County's labor market declines in strength.**

After reaching a new high in employment during Q3 2016, employment has declined by 515 workers in Q1 2017. The labor force grown in the area, indicating the Livingston labor market is strengthening. Unemployment did increase as labor force growth outstripped growth, bringing the unemployment rate to 4.5 percent.

### **Most observed occupation groups in the county experienced increases in online job postings.**

Most of the Livingston County occupation groups within this report saw an increase in online job postings in Q1 2017. Customer service postings increased by 32 percent and health care related postings grew by almost 15 percent. While business and finance occupations observed a decrease of 1.9 percent in job postings.

### **Retail Salesperson and Truck Drivers were the highest in-demand occupations during Q1 2017.**

Retail Salesperson grew to be the top job in Q1 2017, while Truck Driver dropped to the second top job. Registered Nurses fell off the top jobs list, while other occupations gained postings within the first quarter, customer service related jobs.

### **The IT occupation group continued to have the highest advertised average salary within the county.**

Most of the postings in the IT occupation group that advertised salaries indicated pay over \$75,000 per year. Jobs in the IT occupation advertised higher salaries and wages compared to other entry-level occupations, while the majority of IT postings desire 0 to 5 years of experience. See page 26 for more details.

### **A majority of employers continue to have entry-level opportunities available.**

Within the occupation groups analyzed in this report. Many employers in the customer service, health care, and skilled trades groups were employers looking for those with 0 to 2 years of experience. The IT and business and finance group both mainly sought applicants with 3 to 5 years of experience. These postings indicate great opportunities for entry-level job seekers in Livingston County.

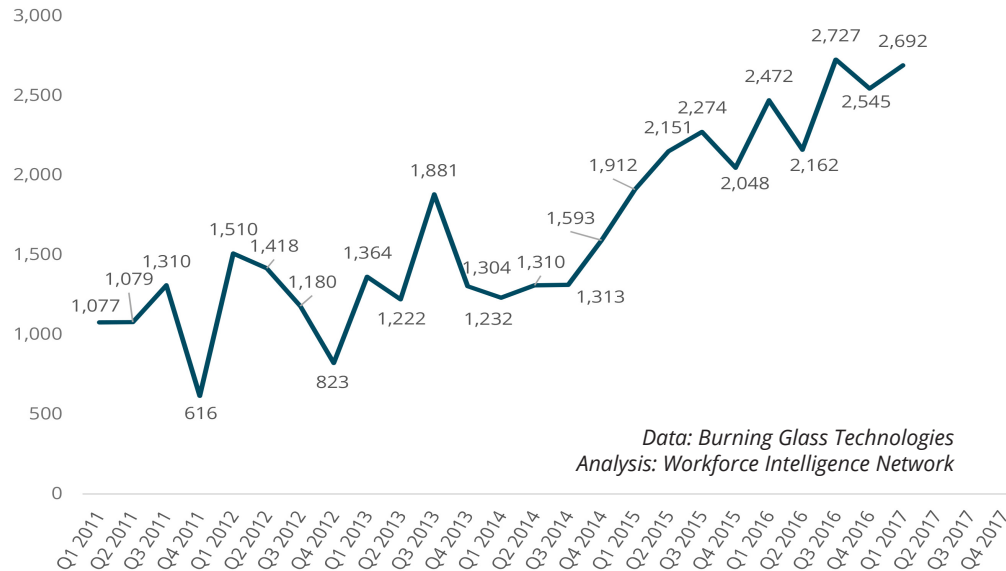


# Workforce and Employer Demand Indicators

## Postings over time

In Q1 2017, Livingston County had 2,692 online job postings, 35 postings (1.2 percent) fewer than the largest quantity in Q3 2016. Online job ads increased by 147 (5.8 percent) to 2,692 in Q1 2017 from 2,545 in Q4 2016.

## Livingston County Online Job Postings

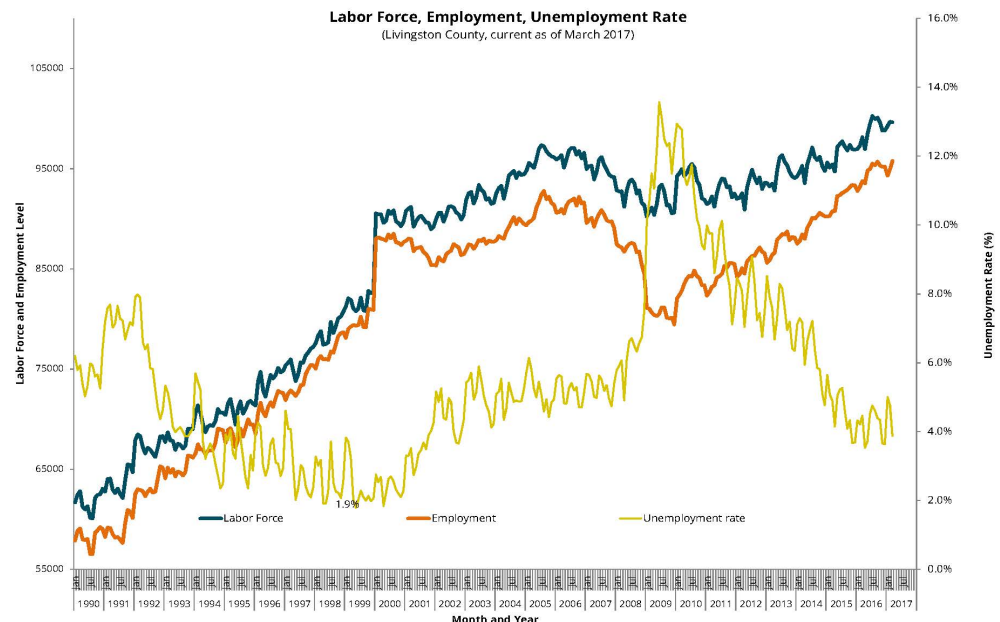


## Labor force/employment/unemployment

The labor force in Livingston County increased by 2,061 individuals (+ 2.1 percent) to 99,520 in Q1 2017. Employment increased by a similar amount, 1.9 percent to 94,992. Since the labor force increased more than employment, unemployment increased about 0.7 percentage points to 4.5 percent. Labor force growth and employment growth are both encouraging indicators of the health of Livingston's economy.

## Labor Force, Employment, Unemployment Rate

Quarter 1 2017



Data: BLS  
Analysis: Workforce Intelligence Network





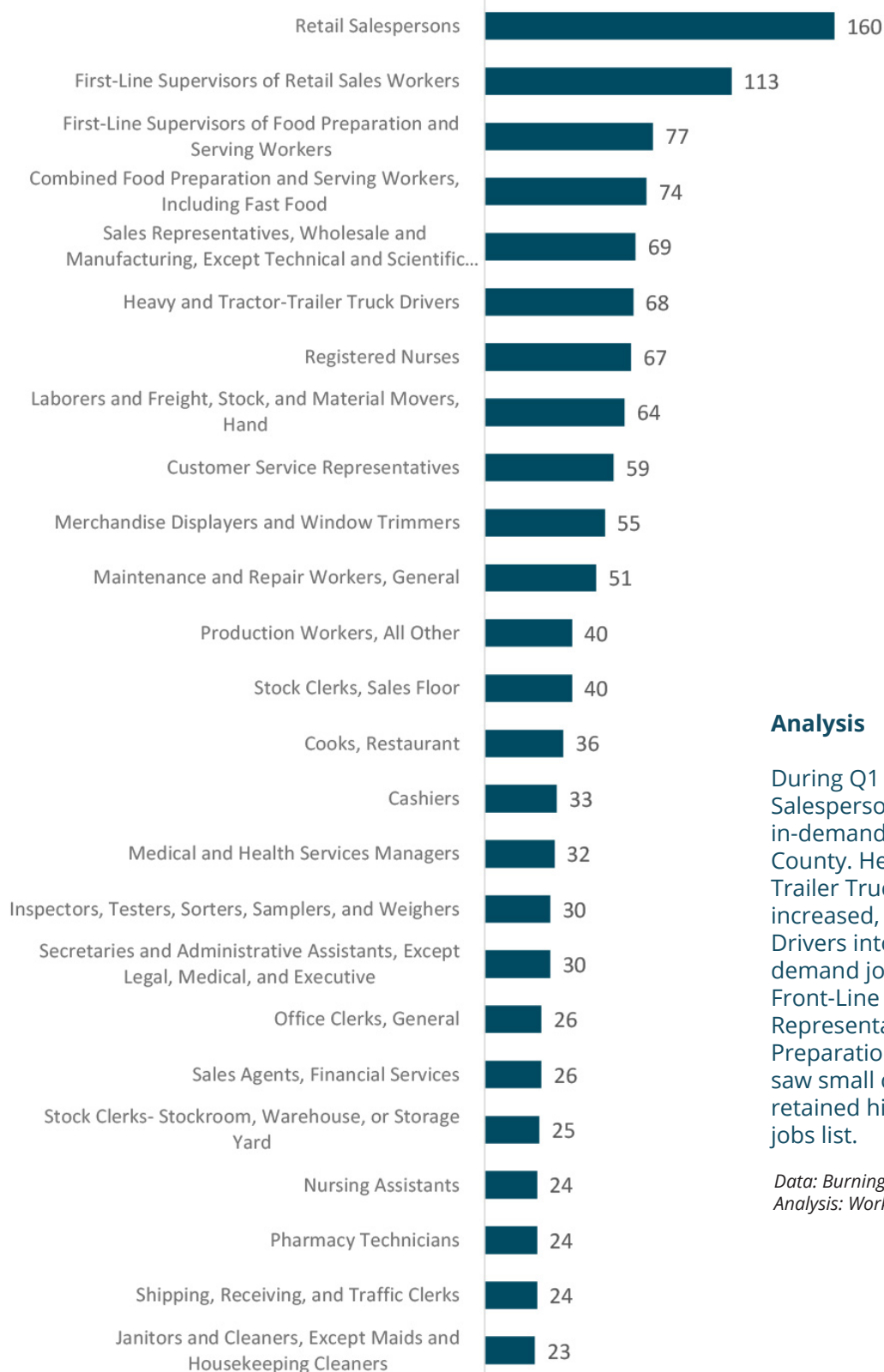
2,692 Total Job Postings

0.8%

increase in Annual Employment

### Top Jobs

Quarter 1 2017



### Analysis

During Q1 2017, Retail Salespersons retained the top in-demand job in Livingston County. Heavy and Tractor-Trailer Truck Driver's postings increased, moving Truck Drivers into the top 5 in-demand jobs within the area. Front-Line Supervisors, Sales Representatives, and Food Preparation and Servers all saw small changes but retained high spots in the top jobs list.

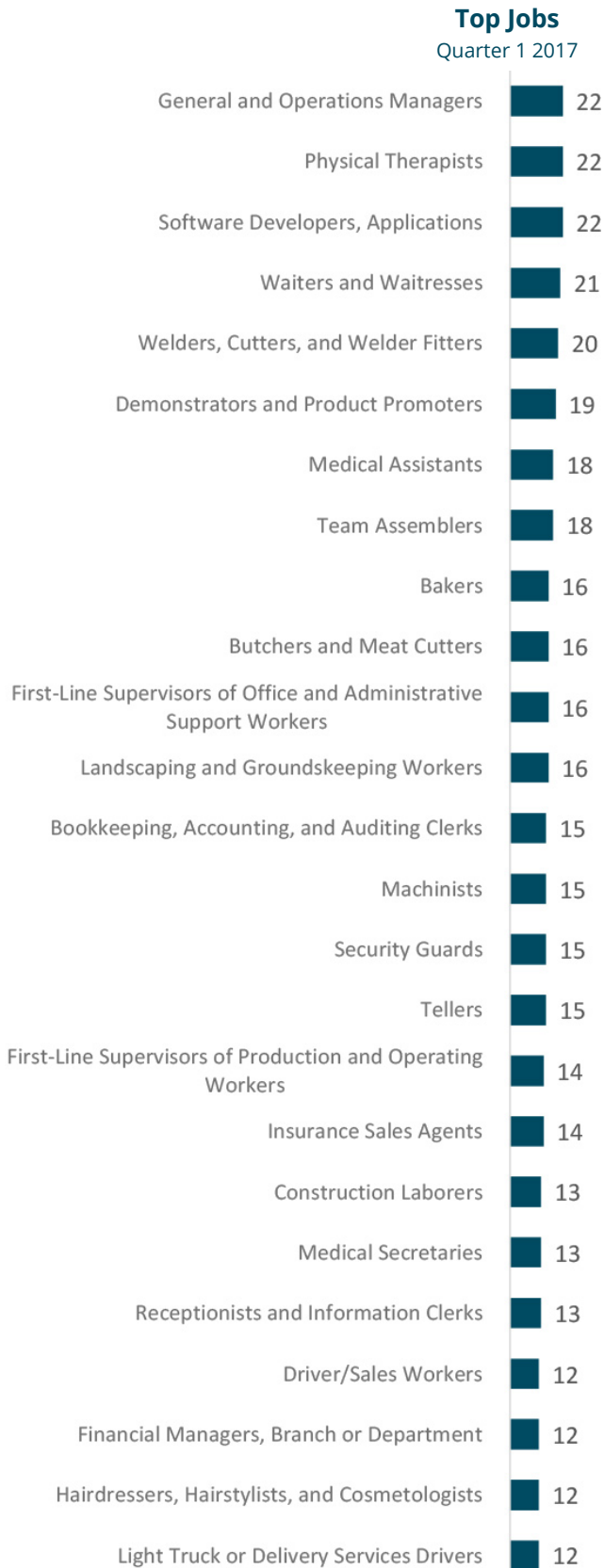
Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Retail Salesperson  
most in-demand job



Unemployment remain  
constant at 4.2%



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



## 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.

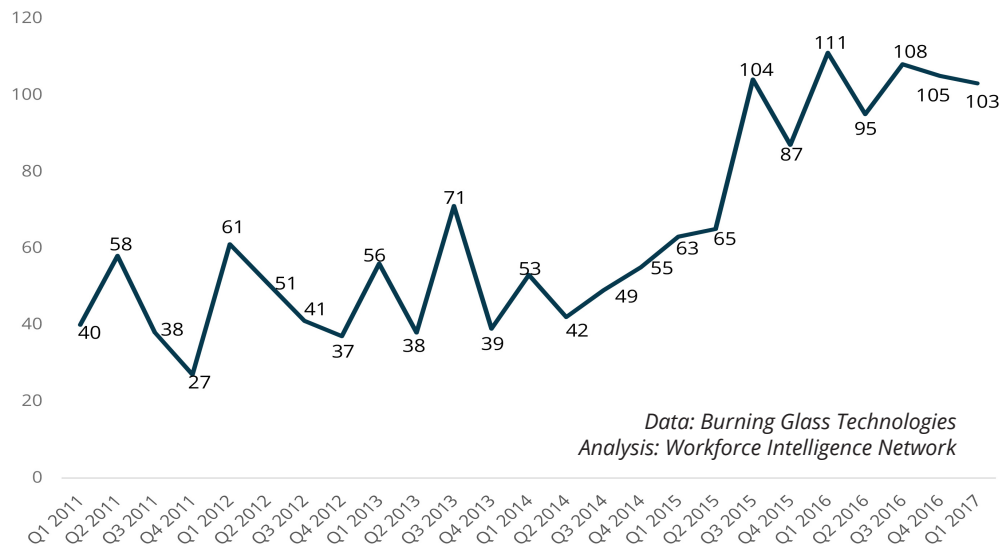
## Job Posting Analysis

Online job postings for business and finance occupation group were down 1.9 percent to 103 during Q1 2017, compared to 105 postings in Q4 2016. This is also a 7.6 percent decrease from Q1 2016 which reported 111 postings within this occupation group.

## Employment Analysis

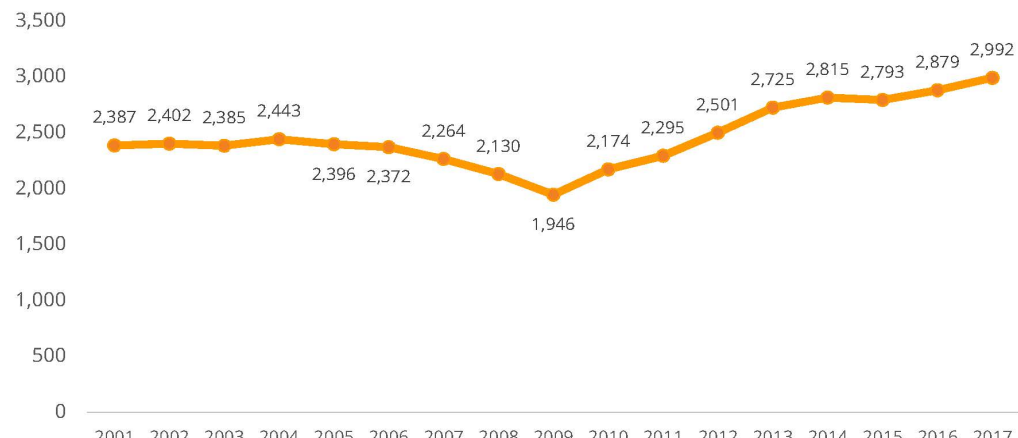
2016 marked the eighth consecutive year of employment growth for business and finance related jobs in Michigan since the Great Recession in 2009. During 2009, employment within this occupation group in Livingston fell to 1,946 workers, but in 2017, there were 2,992 workers employed within the business and finance occupation.

### Online Job Postings



### Employment Over Time

Quarter 1 2017





103 job postings in Q1 2017

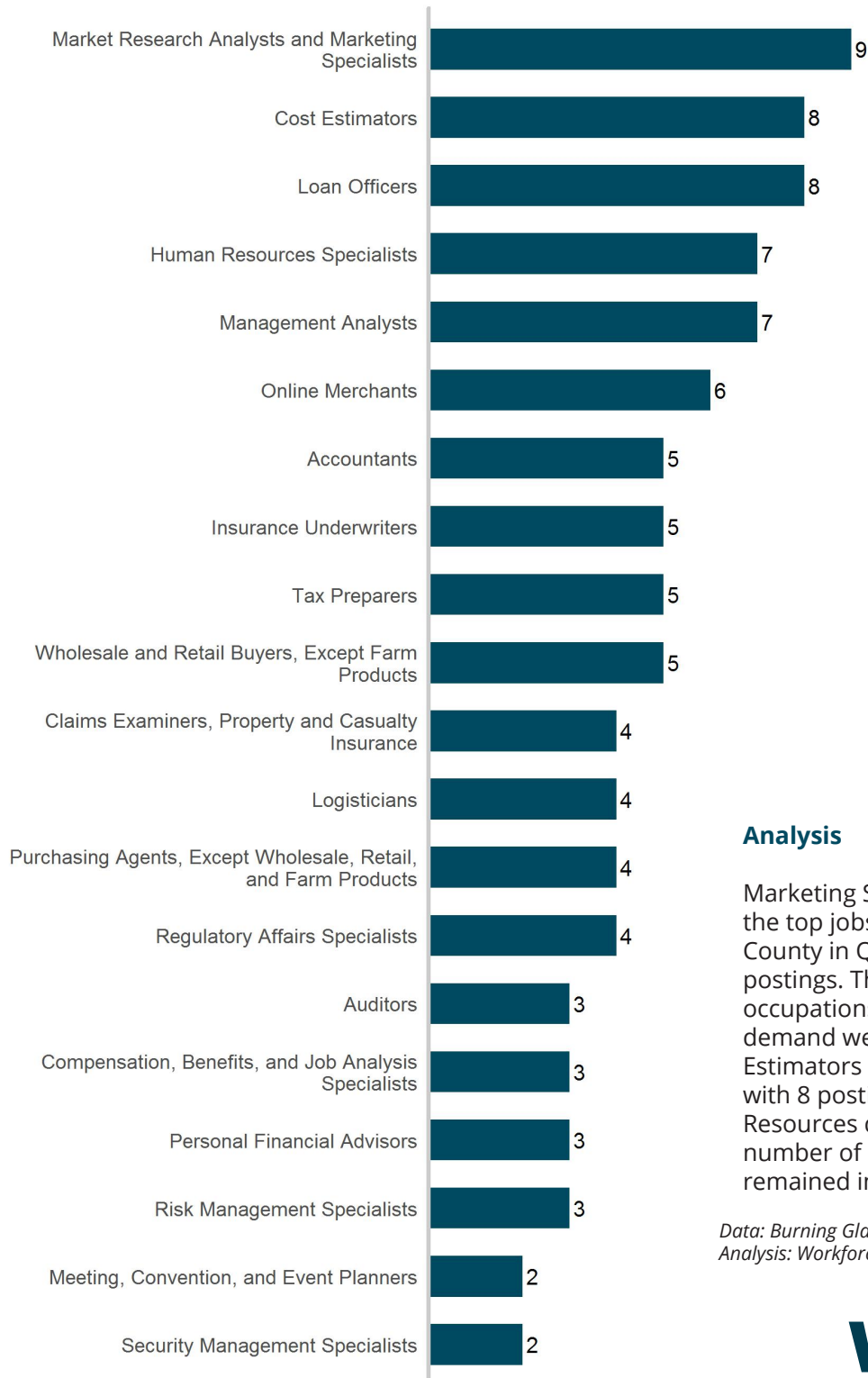


Employment reached its peak  
at 2,992 workers

## Business & Finance

### Top Jobs

Quarter 1 2017



### Analysis

Marketing Specialists were the top jobs in Livingston County in Q1 2017, with 9 postings. The next two occupations with the highest demand were Cost Estimators and Loan Officers with 8 postings each. Human Resources declined in number of postings, but remained in the top 5.

Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



## Marketing Specialists top in-demand job



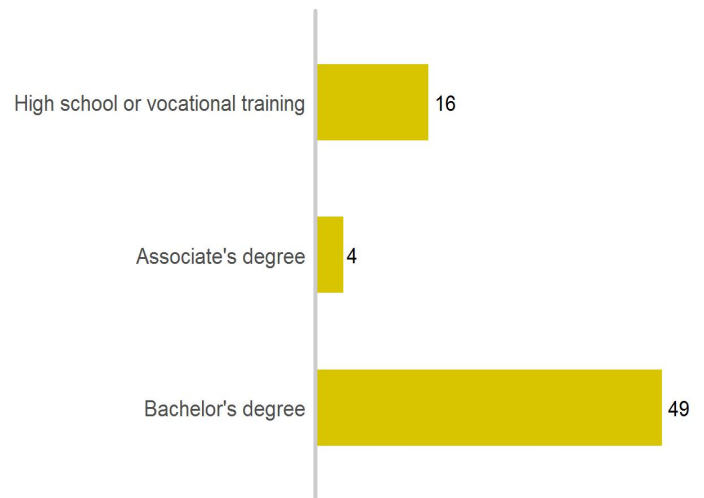
## Management Analysts median wage > \$36 per hour

### Business & Finance Educational Attainment Required

Of the 103 business and finance group job postings, 48 expressed a desired experience level during the Q1 2016 posting period. Forty-six postings were available to workers with less than 5 years of experience, 17 of which were entry-level positions calling for 0-2 years of work experience.

Many of the business and finance jobs posted in Livingston County (48 percent or 49 postings) expressed interest in candidates with a bachelor's degree as a preferred or necessary qualification.

### Educational Attainment

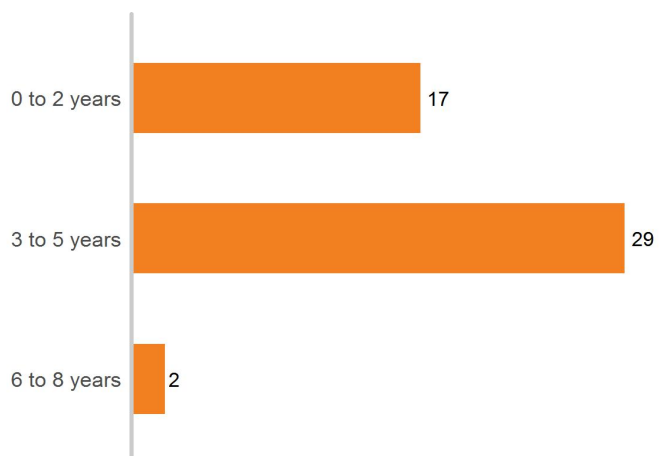


Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### In-Demand Area of Study

- Accounting
- Logistics, Materials and Supply Chain Management
- Finance, General
- Nursing Science
- Business Administration and Management

### Experience Required



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



0-5 Years of experience  
in-demand



Areas of study reflect  
management and accounting

### Business & Finance In-Demand Skills

The occupations in the business and finance group require a variety of skills. Communication skills were highly sought after, such as customer service, relationship building, and teamwork. Management skills are also highly desired over a broad area of business disciplines. Advanced technical skills also show up on this list with a focus in insurance, accounting, and marketing. Traditional business skills appear as well with emphasis on leadership, self-management, and motivational skills for individuals. These skills reflect a desired business environment with an ample amount of managerial skills, with individuals who are strong in communication, analytical thinking, and self-motivated.

#### Technical In-Demand Skills

- Microsoft Office/ Computer Skills
- Customer Service
- Business Development
- Budgeting/ Financial Analysis
- Insurance Underwriting

#### Foundational In-Demand Skills

- Communication
- Writing
- Problem Solving/ Detail Oriented
- Organizational Skills/ Planning
- Leadership/ Management

#### Job Type

- Temporary: 4.9%
- Full-time: 54.4%
- Part-time: 8.9%

#### Certifications Required

- Adjuster Certification
- Mortgage License
- Certified Residential Appraiser
- Certified Public Accountant
- Tax Professional



## Adjuster Certification and Mortgage License highly sought



## Computer and Communication skills demanded

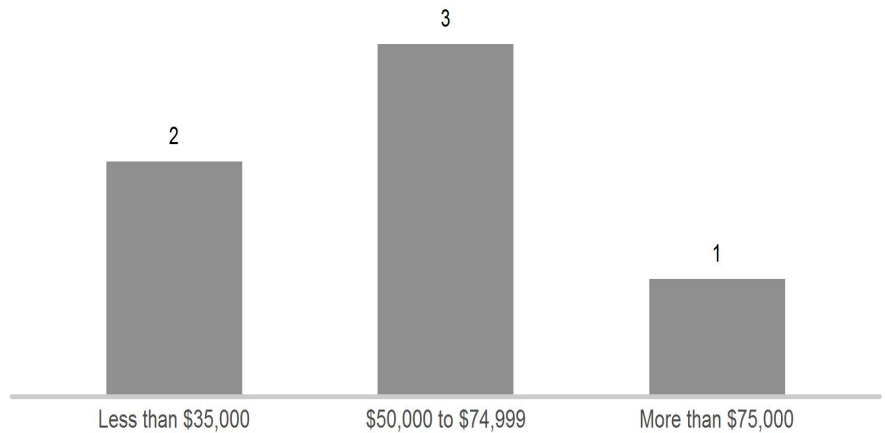
### Business & Finance Wages

It is important to note that 94 percent of the postings within the business and finance group did not include salary information. Of the six postings that did include salary information, four postings advertised compensation over \$50,000 a year.

All the top jobs for this occupation group earned median wages of more than \$20. Management Analysts and Logisticians reported the highest median wages of the occupation group.

### 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
13-1161	Market Research Analysts and Marketing Specialists	\$14.04	\$17.99	\$23.01	\$32.36	\$41.50
13-1051	Cost Estimators	\$15.81	\$20.04	\$26.19	\$34.96	\$41.25
13-2072	Loan Officers	\$11.49	\$16.29	\$22.84	\$32.10	\$44.29
13-1071	Human Resources	\$15.25	\$18.94	\$24.37	\$30.92	\$38.46
13-1111	Management Analysts	\$17.46	\$25.77	\$36.87	\$48.74	\$64.44
13-1199	Online Merchants	\$14.58	\$19.52	\$28.26	\$38.58	\$50.41
13-2011	Accountants	\$17.70	\$21.40	\$28.45	\$36.97	\$49.11
13-2053	Insurance Underwriters	\$18.14	\$22.26	\$26.34	\$32.54	\$49.42
13-2082	Tax Preparers	\$10.84	\$14.50	\$20.28	\$32.11	\$50.70
13-1022	Wholesale and Retail	\$12.73	\$17.28	\$21.49	\$26.97	\$33.69

Data: EMSI, BLS  
Analysis: Workforce Intelligence Network



# Customer Service

## Introduction

The customer service group is the largest occupational group that WIN analyzes, both in terms of employment and online job postings. This group is of very high importance to the region because it is the first to grow when the economy expands and the first to contract in a downturn: it is often a leading indicator. As defined by WIN, this group encompasses all customer service occupations, with skills transferrable across the retail sector, the hotel industry, food and beverage service industry, call centers, and other areas.

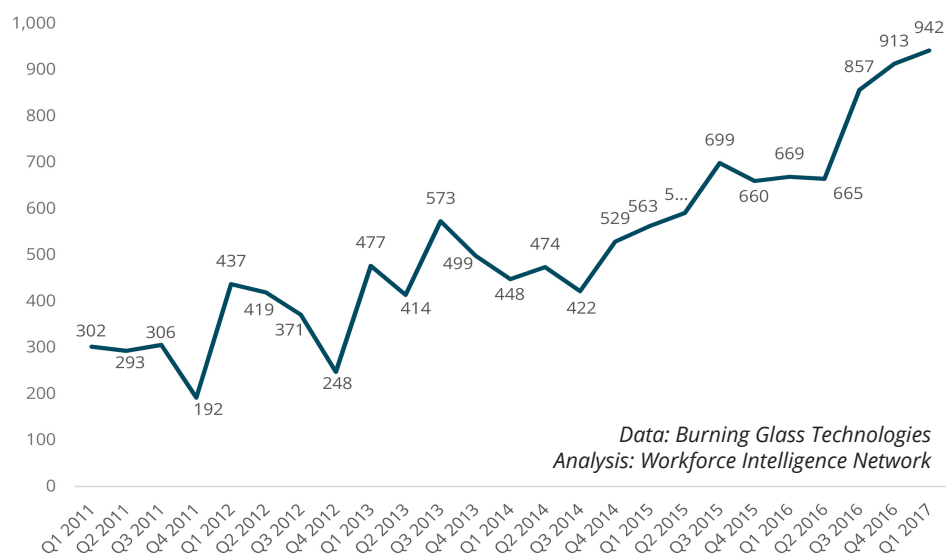
## Job Posting Analysis

Recently, online job advertisements related to customer service witnessed a large, 32 percent increase in postings moving into the 1st quarter of 2017. Overall postings have been increasing since 2011, with a positive trend evident over the past years. This recent quarter indicates the highest demand has been over the past 5 years.

## Employment Analysis

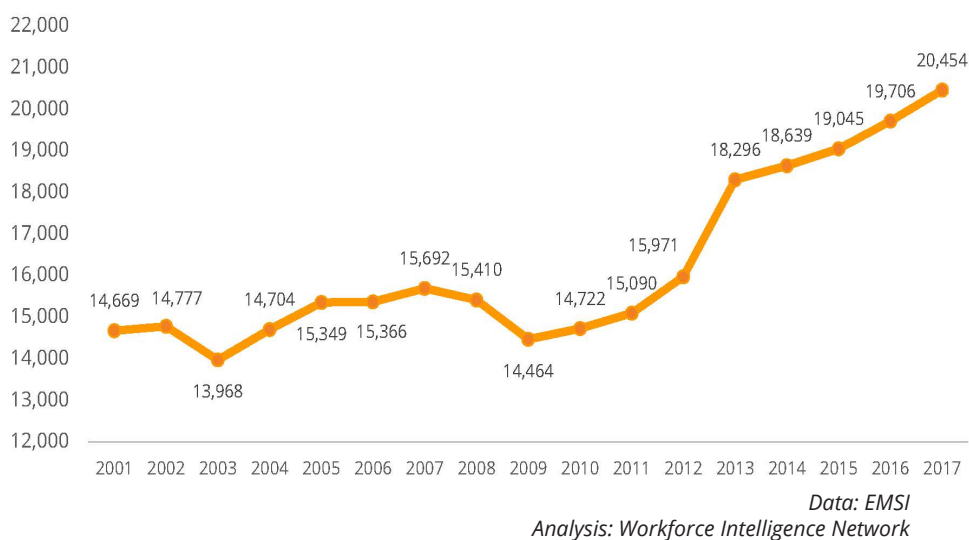
2017 marked the eighth consecutive year of employment growth for customer service related occupations in Livingston County. In 2009, fewer than 14,500 workers were employed in this industry. Yet in 2017, employment reached over 20,000.

## Online Job Postings



## Employment Over Time

Quarter 1 2017







942 total postings in Q1 2017

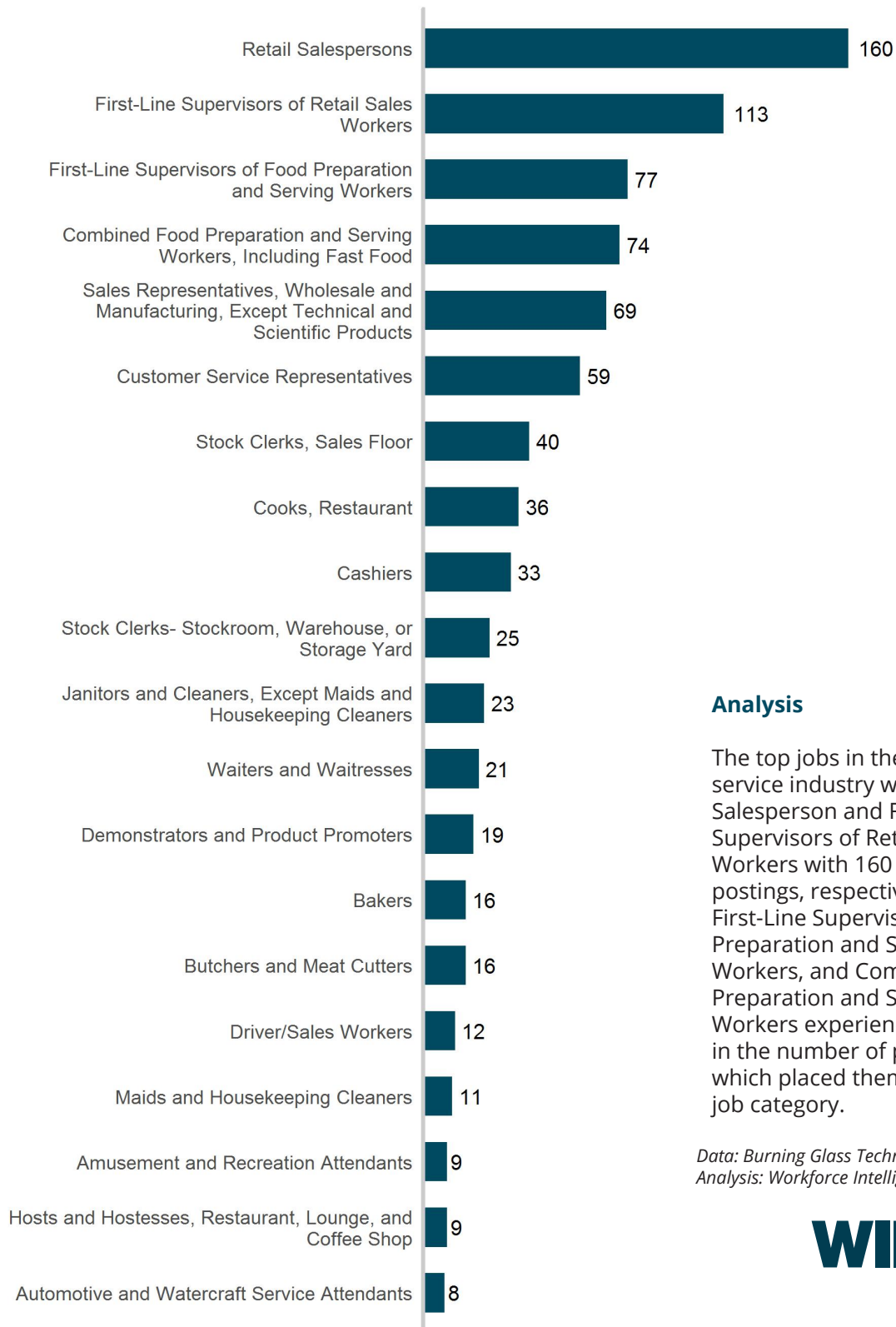


Employment at highest point  
since 2000

### Customer Service

#### Top Jobs

Quarter 1 2017



#### Analysis

The top jobs in the customer service industry were Retail Salesperson and First-Line Supervisors of Retail Sales Workers with 160 and 113 postings, respectively. Both First-Line Supervisors of Food Preparation and Serving Workers, and Combined Food Preparation and Serving Workers experienced growth in the number of postings, which placed them in the top job category.

Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Retail Sales person top in-demand occupation



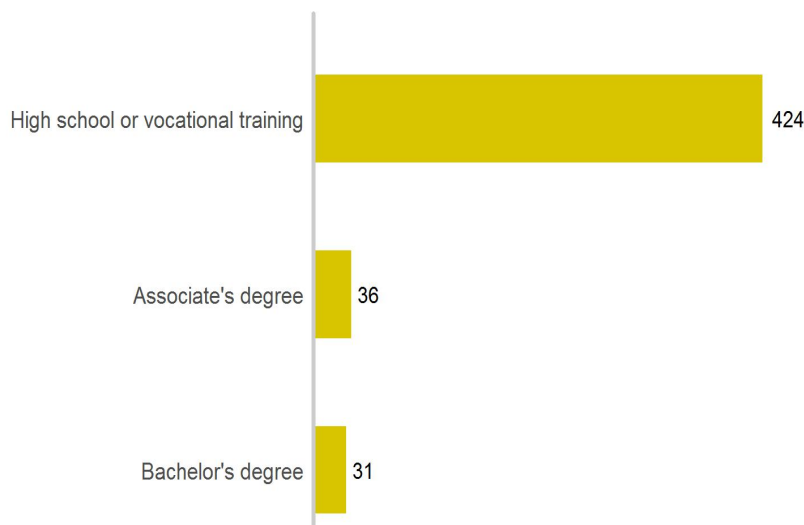
Entry-level Customer Service positions available

### Customer Service Educational Attainment Required

Of the 290 customer service group job postings that specified a desired experience level during Q1 2017, 76.9 percent (233 postings) were available to workers with less than two years of experience. This indicates that a majority of the online ads advertising experience were for entry-level positions.

Further, of the 491 postings that specified a minimum education requirement in Q1 2017, 86.4 percent (424 posting) required only a high school diploma or vocational training

### Educational Attainment

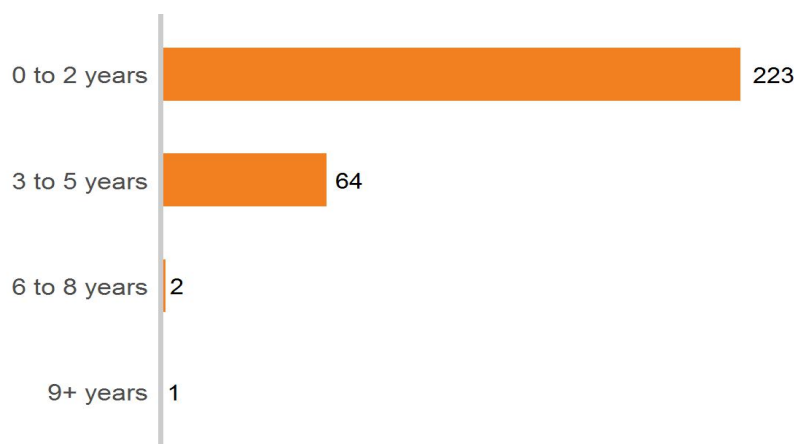


Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### In-Demand Area of Study

- Business Administration and Management, General
- Logistics, materials, and Supply Chain Management
- Culinary Arts/Chef Training
- Marketing/Marketing Management, General
- Advertising

### Experience Required



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Vocational training required



Typical annual salary  
<\$35,000

### Customer Service In-Demand Skills

The postings in the customer service group required a wide array of high-level communication skills. The most demanded skill in this occupation group were sales and customer service. Supervisory skills, such as store management and budgeting, were also present in many of the postings for customer service related jobs. The skills listed below are vital for customer service workers to build a relationship with customers and provide them with particular product to meet their needs.

#### Technical In-Demand Skills

- Sales/Retail Setting
- Customer Service/Building Relationships
- Supervisory Skills/Store Management
- Cleaning
- Product Knowledge

#### Foundational In-Demand Skills

- Communication Skills/Team Work/Collaboration
- Physical Demand
- Organizational Skills/Detail-Oriented
- Writing/English
- Mathematics

#### Job Type

- Temporary: 5.6%
- Full-time: 25.2%
- Part-time: 20.7%

#### Certifications Required

- Servsafe/Alcohol Server Certification
- CDL
- American Production and Inventory Control Society
- Cash Handling Certification
- Certified Sous Chef



## Communications and Management skill in-demand



## CDL and Servsafe Certification in-demand

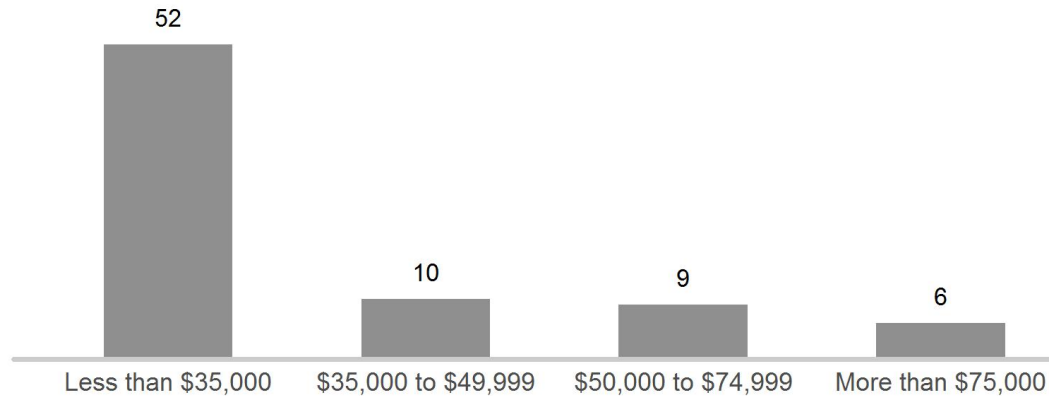
### Customer Service Wages

It is important to note that 92 percent of the postings within the customer service group did not include salary information. Of the 77 postings with salary information, 68 percent (52 postings) indicated the salary to be less than \$35,000 per year.

Most occupations in this group offer median wages below \$17 dollars an hour or \$35,000 a year. The highest median wage of the customer service group were held by Sales Representative, which make a median wage of \$25 an hour.

### Advertised Wages in Job Postings

Quarter 1 2017



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Wage Data from Bureau of Labor Statistics 2016

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
41-2031	Retail Salespersons	\$8.15	\$8.70	\$9.82	\$12.72	\$18.53
41-1011	First-Line Supervisors of Retail Sales Workers	\$11.36	\$14.05	\$17.93	\$23.18	\$29.04
35-1012	First-Line Supervisors of Food Preparation and	\$8.15	\$9.63	\$12.89	\$17.77	\$22.35
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	\$8.15	\$8.49	\$9.06	\$9.65	\$11.76
41-4012	Sales Representatives, Wholesale and Manufacturing, Except	\$11.42	\$16.91	\$25.12	\$37.88	\$53.63
43-4051	Customer Service Representatives	\$8.15	\$10.08	\$13.22	\$16.80	\$21.25
43-5081	Stock Clerks, Sales Floor	\$8.15	\$9.04	\$11.08	\$14.38	\$18.50
35-2014	Cooks, Restaurant	\$8.15	\$9.01	\$10.55	\$12.50	\$13.92
41-2011	Cashiers	\$8.15	\$8.68	\$9.61	\$11.65	\$15.41
43-5081	Stock Clerks- Stockroom, Warehouse, or Storage Yard	\$8.15	\$9.04	\$11.08	\$14.38	\$18.50

Data: EMSI, BLS  
Analysis: Workforce Intelligence Network

## Introduction

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

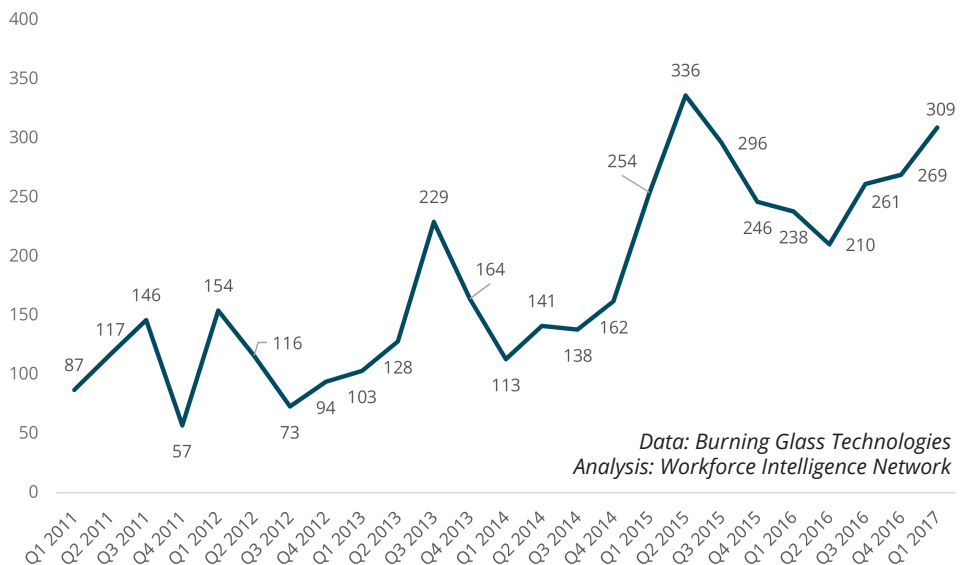
### Job Posting Analysis

Recently, online job advertisements related to health care witnessed a 14.9 percent increase in postings (40 postings) moving into the 1st quarter of 2017. Overall postings have been increasing since 2011, with a positive trend evident over the past years.

### Employment Analysis

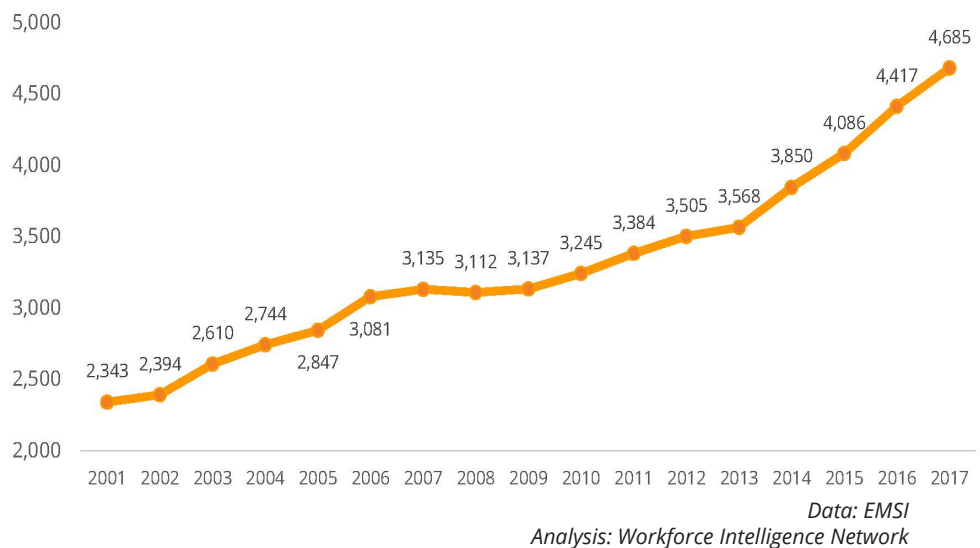
Health care related occupations in Livingston County showed consistent employment growth from 2001 to 2017. In 2001, 2,343 workers were employed in health care related jobs. In 2017, the number of workers employed in occupation group is twice that employed in 2001.

### Online Job Postings



### Employment Over Time

Quarter 1 2017





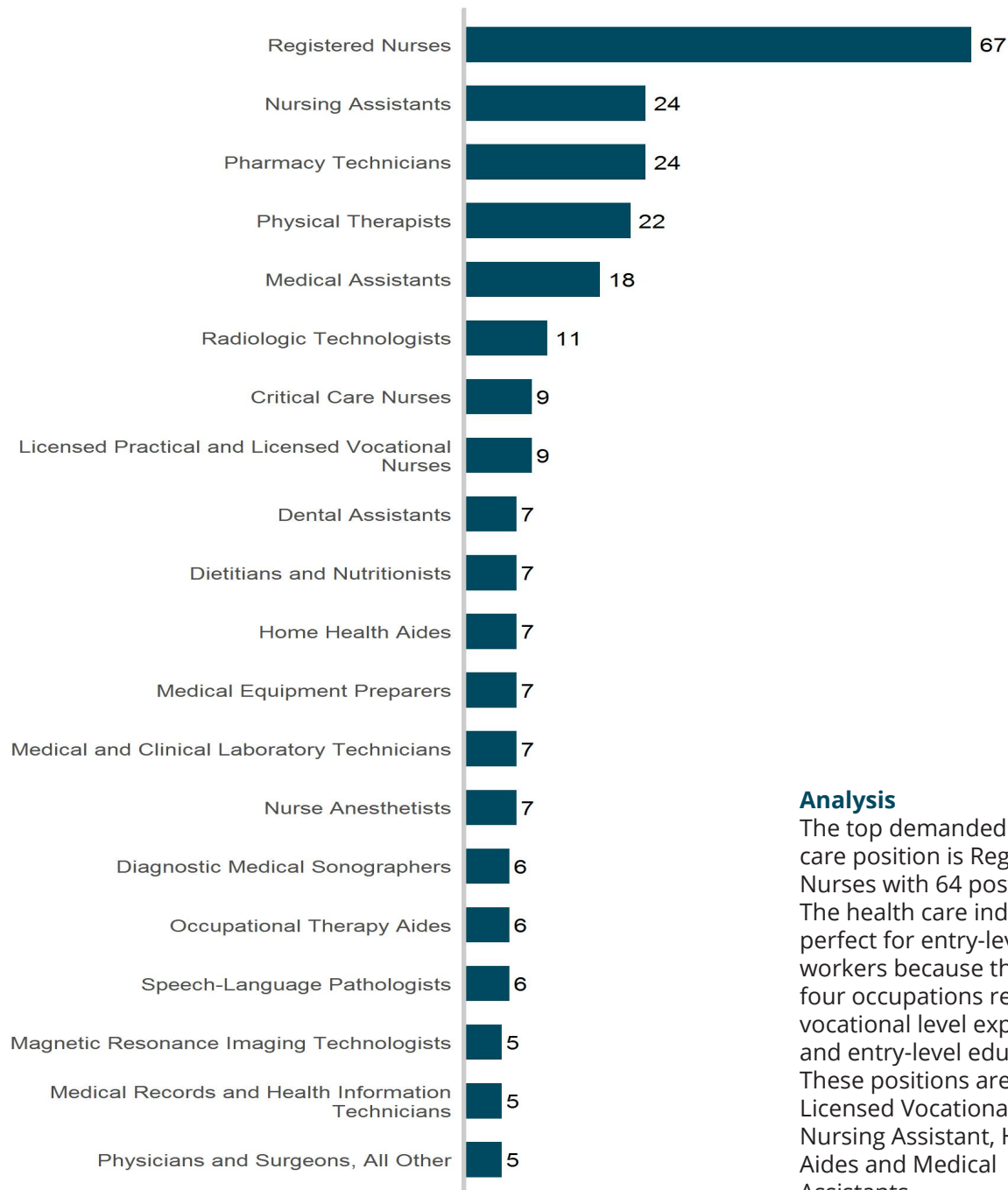
79 Total Job Postings



Entry-level experience highly sought

### Health Care Top Jobs

Quarter 1 2017



### Analysis

The top demanded health care position is Registered Nurses with 64 postings. The health care industry is perfect for entry-level workers because the next four occupations require vocational level experience and entry-level education. These positions are Licensed Vocational Nurse, Nursing Assistant, Health Aides and Medical Assistants.

Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Employment reached  
over 4,650

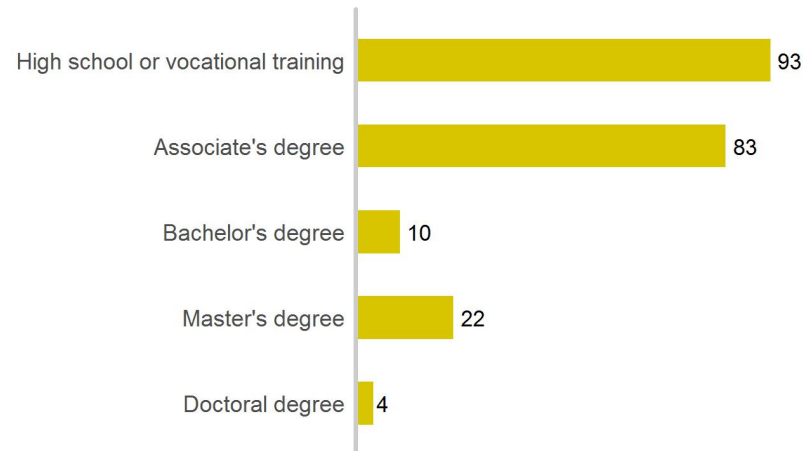
9.7%  
increase in postings  
from Q4 2016

### Health Care Educational Attainment Required

Of the 116 health care group job postings that specified a desired experience level in Q1 2017, 112 (96.6 percent) were available to workers with less than two years of experience. This indicates that a majority of the online ads advertising experience were for entry-level positions.

Moreover, of the 212 health care group job postings that specified a desired degree level, 44 percent and 39 percent required a high school or vocational training and an associate's degree, respectively.

### Educational Attainment

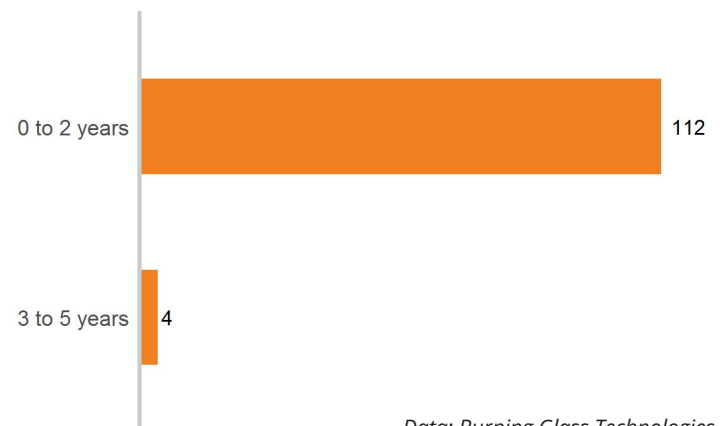


Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### In-Demand Area of Study

- Nursing science
- Physical therapy/therapist
- Radiologic Technology/Science – Radiographer
- Clinical Laboratory Science/Medical Technology/Technologist
- Audiology/Audiologist and Speech-Language Pathology/Pathologist

### Experience Required



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Vocational training  
desired in positions



Communication and medical  
skills in-demand

### Health Care In-Demand Skills

Postings in the health care group required a wide range of skills. The skills specific to this industry were patient care/treatment, CPR, and home health. Some other skills generally applicable skills within the field were communication skills, organizational skills, and problem solving.

#### Technical In-Demand Skills

- Patient Care/Long-Term Care/Infection Control/Patient treatment
- Cardiopulmonary Resuscitation (CPR)
- Treatment Planning/Case Management/Scheduling/Record Keeping
- Pharmacy Technician
- HIPAA

#### Foundational In-Demand Skills

- Communication Skills/Team Work-Collaboration
- Organizational Skills/Detail-Oriented
- Problem Solving/Critical Thinking
- Physical demand
- Quality Assurance and Control

#### Job Type

- Temporary: 9.7%
- Full-time: 43.7%
- Part-time: 18.8%

#### Certifications Required

- Registered Nurse
- First aid CPR AED
- Certified Nursing Assistant
- American Heart Association Certification
- Home Health Aide





Majority of Health Care jobs  
offer full-time work



Registered Nurse and CPR  
certifications in-demand

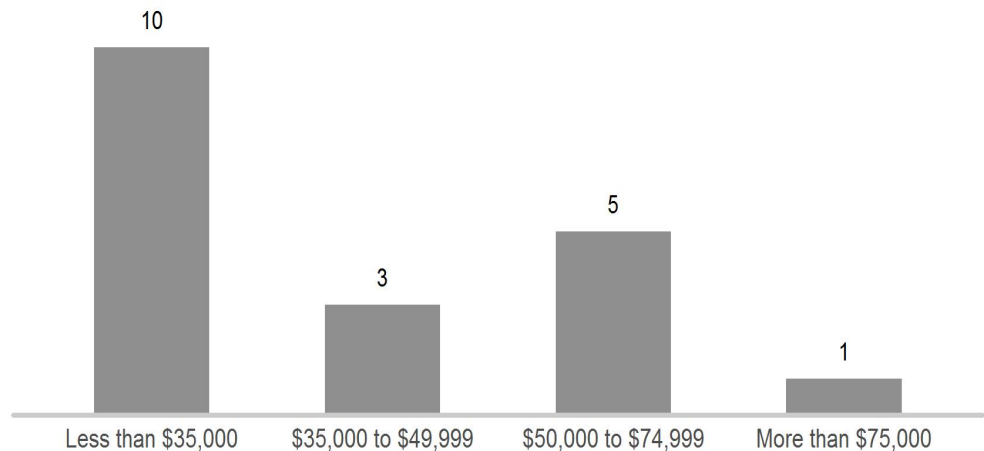
## Health Care Wages

It is important to note that 94 percent of the postings within the health care occupation did not include salary information. Of the 19 postings with salary information, a majority of postings (10 postings or 53 percent) advertised salaries under \$35,000.

The top in-demand job, Registered Nurses, make a median wage of over \$31 per hour. Being the most in-demand occupation of the group, this represents a lucrative opportunity for applicants.

## Advertised Wages in Job Postings

Quarter 1 2017



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

## Wage Data from Bureau of Labor Statistics 2016

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
29-1141	Registered Nurses	\$23.56	\$27.60	\$31.48	\$36.03	\$51.50
31-1014	Nursing Assistants	\$9.27	\$10.77	\$12.69	\$14.77	\$16.52
29-2052	Pharmacy Technicians	\$9.00	\$10.68	\$13.23	\$15.92	\$17.87
29-1123	Physical Therapists	\$25.98	\$32.15	\$39.11	\$49.80	\$71.61
31-9092	Medical Assistants	\$9.57	\$11.02	\$12.50	\$14.60	\$16.28
29-2034	Radiologic Technologists	\$17.79	\$20.06	\$23.66	\$27.10	\$31.66
29-1141	Critical Care Nurses	\$23.56	\$27.60	\$31.48	\$36.03	\$51.50
29-2061	Licensed Practical and Licensed Vocational Nurses	\$15.40	\$18.13	\$21.23	\$24.44	\$26.49
31-9091	Dental Assistants	\$11.06	\$12.88	\$15.28	\$17.25	\$19.58
29-1031	Dietitians and Nutritionists	\$18.50	\$21.44	\$24.05	\$26.58	\$31.15

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.

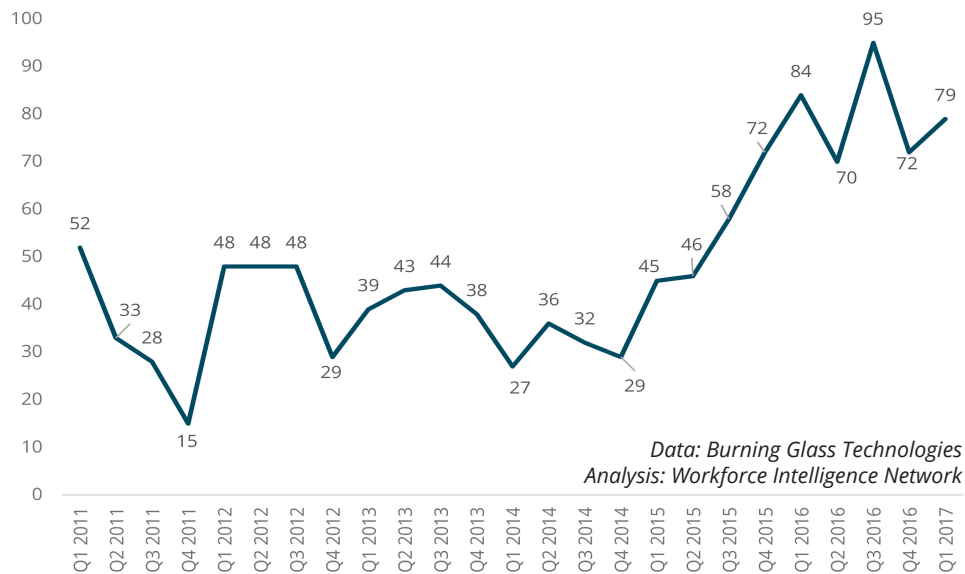
## Job Posting Analysis

Recently, online job advertisements related to IT witnessed a 10 percent increase in postings moving into the 1st quarter of 2017. Overall postings have been increasing since 2011, with a positive trend evident over the past years.

## Employment Analysis

Since the depression in 2009, employment in the IT industry has been overall increasing. In 2009, only 761 workers were employed in the IT industry, compared to 1,204 workers in 2017.

## Online Job Postings



## Employment Over Time

Quarter 1 2017



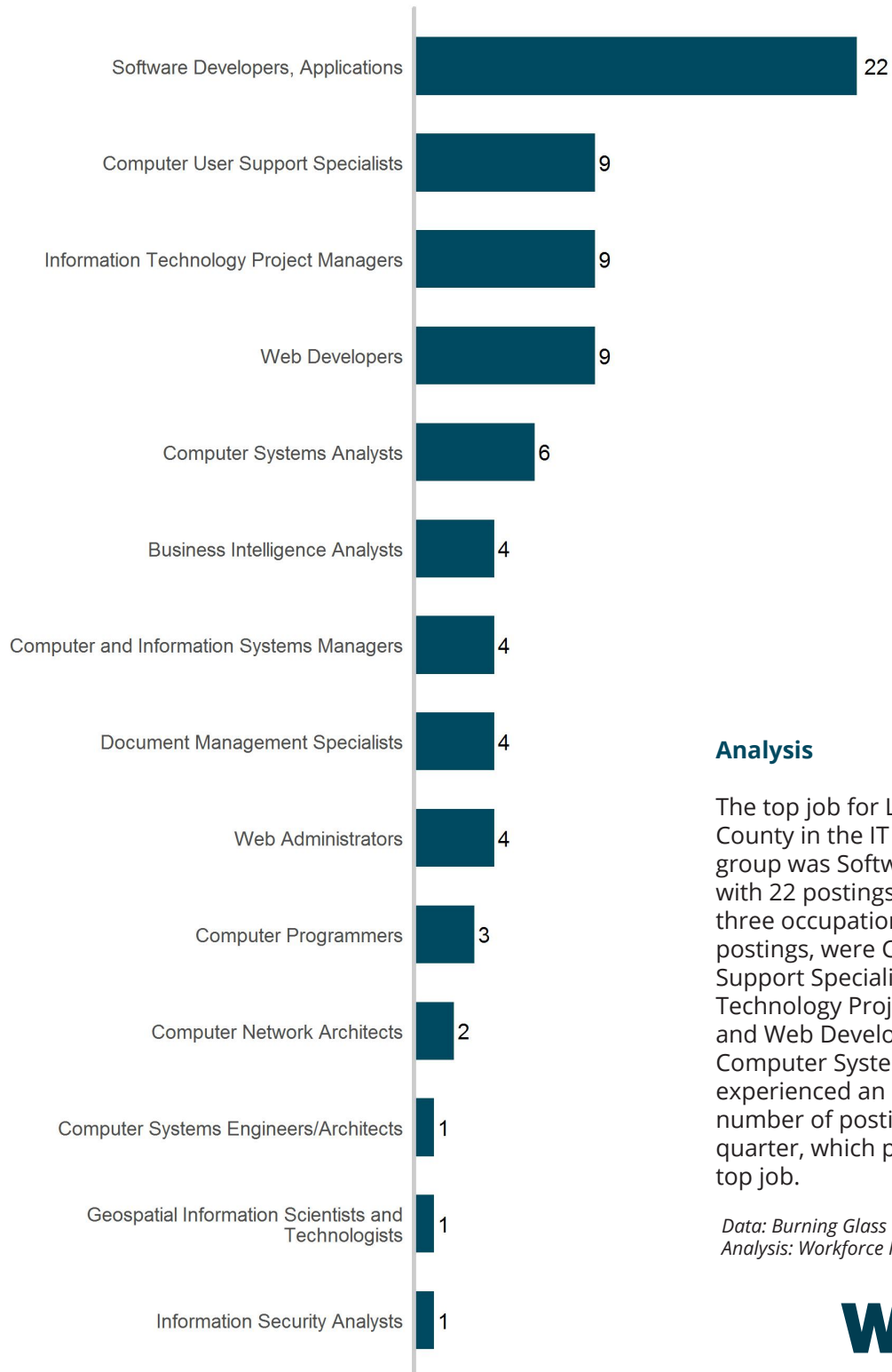


79 Total Job Postings



3-5 years' experience desired

### Information Technology Top Jobs Quarter 1 2017



### Analysis

The top job for Livingston County in the IT occupation group was Software Developer, with 22 postings. The next three occupations, all with 9 postings, were Computer User Support Specialist, Information Technology Project Manager, and Web Developers. Computer Systems Analysts experienced an increase in the number of postings this quarter, which promoted it to a top job.

Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



Employment reached  
over 1,200

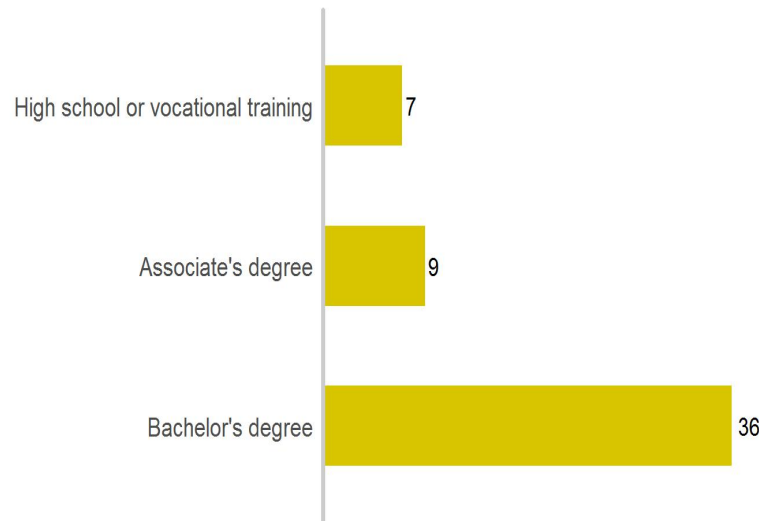
9.7%  
increase in postings from  
Q4 2016

### Information Technology Educational Attainment Required

The majority of the 49 IT group job postings that specified a desired experience level in Q1 2017 preferred 0 to 5 years of experience. 23 postings (47 percent) desired 3 to 5 years of experience and 24 postings (50 percent) desired entry level experience with 0 to 2 years of experience.

Further, among the 52 IT group job postings that specified a desired degree level in Q1 2017, 69 percent desired applicants with a Bachelor's degree.

### Educational Attainment

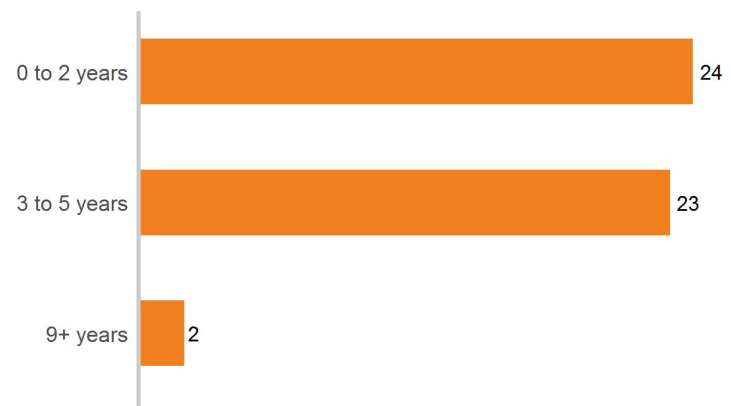


Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### In-Demand Areas of Study

- Computer Science
- Mechanical Engineering
- Electrical and Electronic Engineering Technologies
- Business Administration and Management, General
- Information Technology

### Experience Required



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



\$75,000 typical annual salary



Project Management and  
Microsoft skills in-demand

## Information Technology In-Demand Skills

Postings in the IT group required a wide array of high-level technical skills. Traditional skills like technical support, project management, and understanding of Microsoft Office were present in this industry. Supervisory skills were also prevalent in postings showing demand for leaders and supervisors. The postings also listed some nontechnical skills such as building relationships and decision-making.

### Technical In-Demand Skills

- Project Management/ Business Process
- Microsoft Office/ SharePoint
- Technical Assistant
- Enterprise Resource Planning (ERP)
- Business Systems Analysis

### Foundational In-Demand Skills

- Communication Skills/Team Work-Collaboration
- Problem Solving/Troubleshooting
- Presentation Skills
- Research/ Writing
- Leadership

### Job Type

- Temporary: 7.6%
- Full-time: 68.3%
- Part-time: 2.5%

### Certifications Required

- Cisco Certified Network Professional (CCNP)
- American Heart Association Certification
- Certified Information Security Manager (CISM)
- Certified Information Systems Security Professional (CISSP)
- I-CAR



## Full-time jobs available



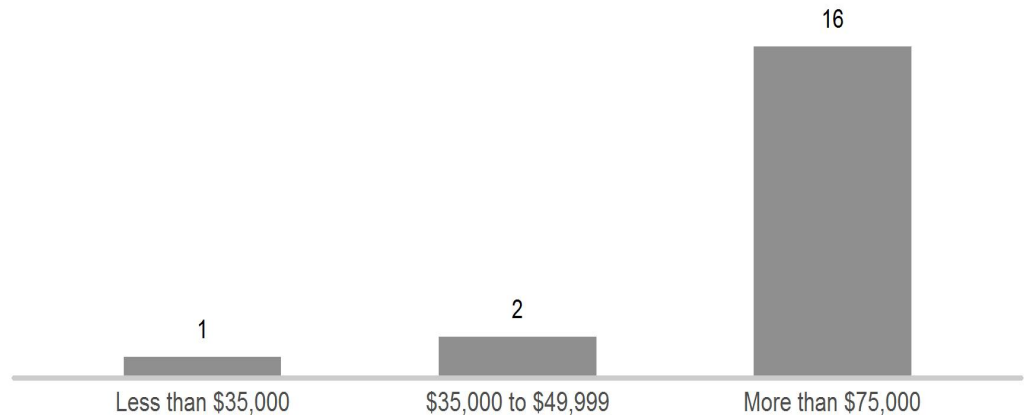
## CNNP and CISSP certification in-demand

### Information Technology Wages

Only 19 postings contained advertised salaries within the IT occupation group. Sixteen of these postings (84 percent) reported salaries offered over \$75,000 a year. Computer and Information Systems Managers saw the highest median wage of \$46.10 make the IT occupation group one of the top earning fields.

### Advertised Wages in Job Postings

Quarter 1 2017



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Wage Data from Bureau of Labor Statistics 2016

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
15-1132	Software Developers, Applications	\$20.86	\$25.40	\$33.11	\$42.94	\$51.65
15-1151	Computer User Support Specialists	\$11.58	\$15.25	\$20.11	\$27.40	\$34.93
15-1199	Information Technology Project Managers	\$22.33	\$28.80	\$35.40	\$43.87	\$51.98
15-1134	Web Developers	\$18.18	\$21.49	\$27.08	\$34.69	\$42.99
15-1121	Computer Systems Analysts	\$19.30	\$26.50	\$34.17	\$43.22	\$52.11
15-1199	Business Intelligence Analysts	\$22.33	\$28.80	\$35.40	\$43.87	\$51.98
11-3021	Computer and Information Systems Managers	\$29.67	\$36.50	\$46.10	\$57.62	\$74.35
15-1199	Document Management Specialists	\$22.33	\$28.80	\$35.40	\$43.87	\$51.98
15-1199	Web Administrators	\$22.33	\$28.80	\$35.40	\$43.87	\$51.98
15-1131	Computer Programmers	\$23.22	\$28.16	\$32.41	\$40.23	\$48.15

Data: EMSI, BLS  
Analysis: Workforce Intelligence Network



# Skilled Trades & Technicians (Manufacturing Focused)

## Introduction

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

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

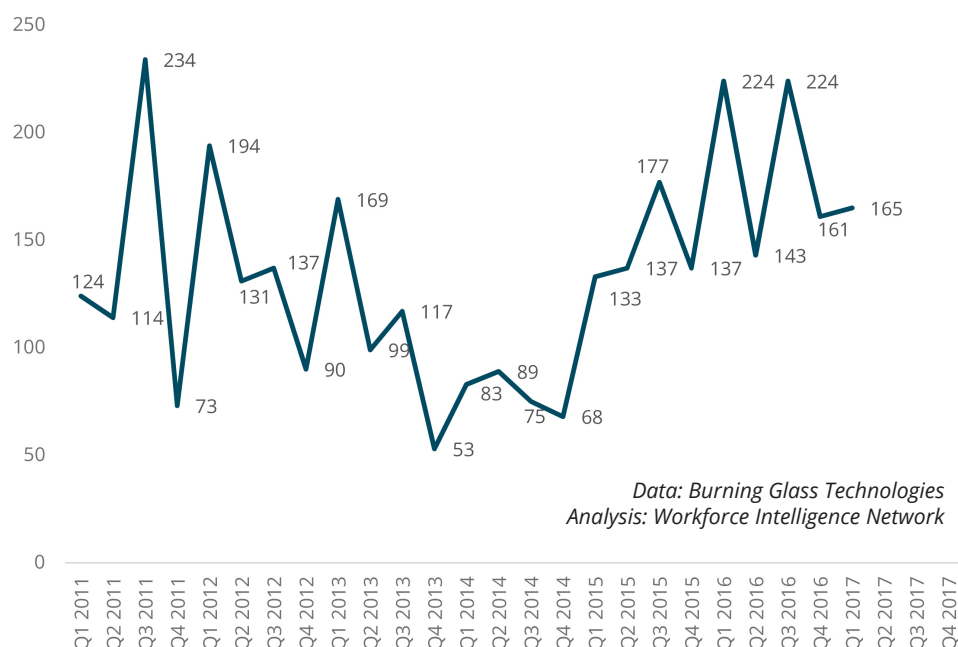
## Job Posting Analysis

Online job postings for occupations related to Skilled Trades increased 2.4 percent to 165 postings during Q1 2017, compared to 161 during Q4 2016. This was a 36 percent decrease from Q1 2016 one-year prior which reported having 224 postings within this occupational group.

## Employment Analysis

2017 marked the eighth consecutive year of employment growth for Skilled Trades related occupations in Livingston County. In 2009, fewer than 1,950 workers were employed in this industry compared to 2017, employment reached over 3,350.

## Online Job Postings



## Employment Over Time

Quarter 1 2017





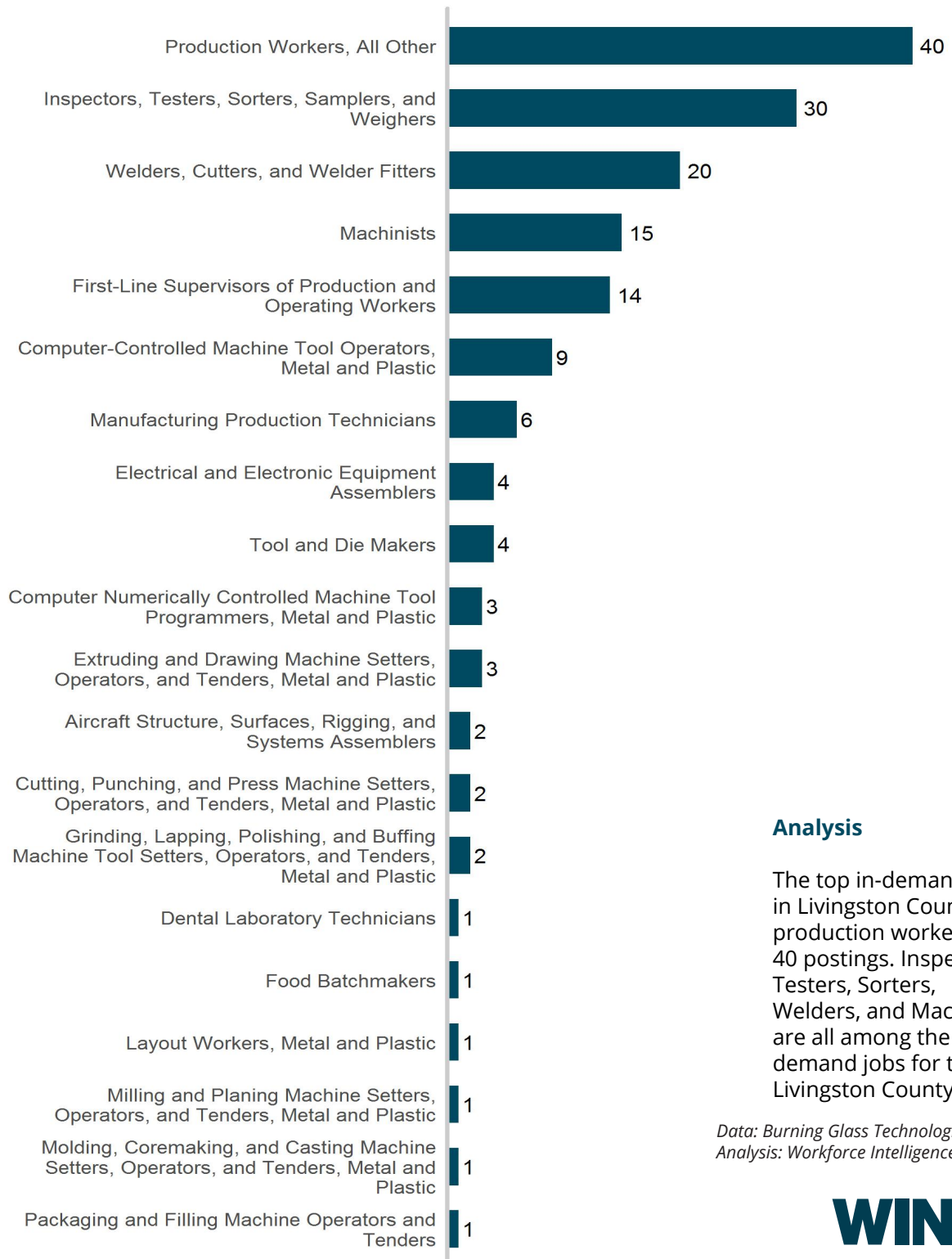


Job postings increased  
to 165 postings



3,350 workers employed in  
Skilled Trades Occupation

**Skilled Trades  
Top Jobs**  
Quarter 1 2017



**Analysis**

The top in-demand jobs in Livingston County are production workers, with 40 postings. Inspectors, Testers, Sorters, Welders, and Machinists are all among the top in-demand jobs for the Livingston County.

Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network





## Entry level positions available



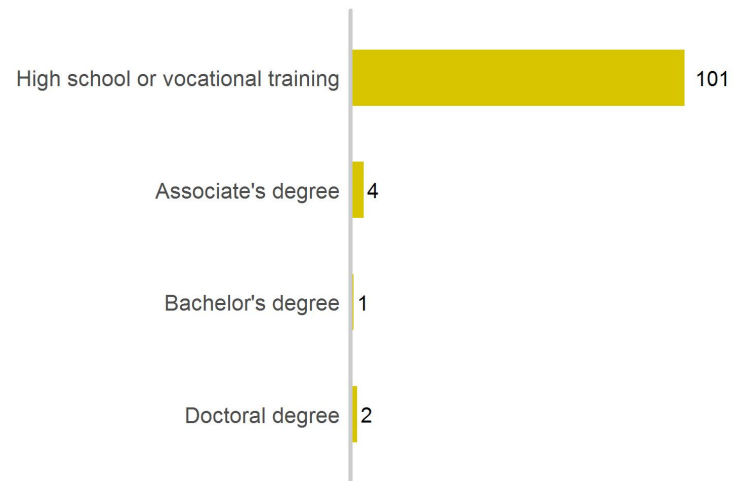
## Vocational Training required in postings

### Skilled Trades Educational Attainment Required

Of the 165 postings for skilled trades group occupations, 42 percent (70 postings) expressed a desired experience level less than 5 years of experience. Fifty-three postings were looking for those with 0-2 years of experience indicating a majority of the online ads advertising experience were for entry-level positions.

Employers of skilled trades occupations in Livingston County most often prefer workers with a high school degree/equivalent or vocational training with 101 (61 percent of postings with desired education) online ads advertising these levels of educational attainment as a preferred or necessary qualification.

### Educational Attainment

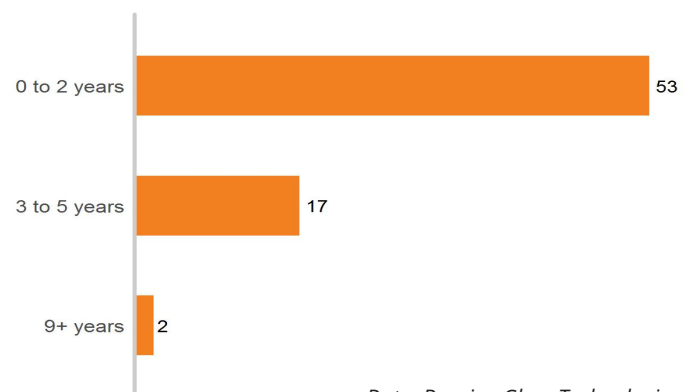


Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### In-Demand Area of Study

- Data Not Available

### Experience Required



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network



## Technical and management skills desired



## ASQ certification in-demand

### Skilled Trades In-Demand Skills

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 many of the skilled labor postings including scheduling, time management, and manufacturing processes. 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
- Machinery operation/ Computer Numerical Control (CNC)
- Welding
- Microsoft Office
- Scheduling

#### Foundational In-Demand Skills

- Troubleshooting/ Problem Solving/ Detail-Oriented
- Physical Demand
- Communication/ Team Work-Collaboration
- Computer Skills
- Organizational Skills/ Supervisory Skills

#### Job Type

- Temporary: 8.4%
- Full-time: 75.2%
- Part-time: 1.8%

#### Certifications Required

- Commercial Driver's License
- Wastewater Treatment Plant Operator
- American Society for Quality (ASQ) Certification
- American Chemical Society (ASC) Certified
- Certified Quality Technician



## Full-time positions available



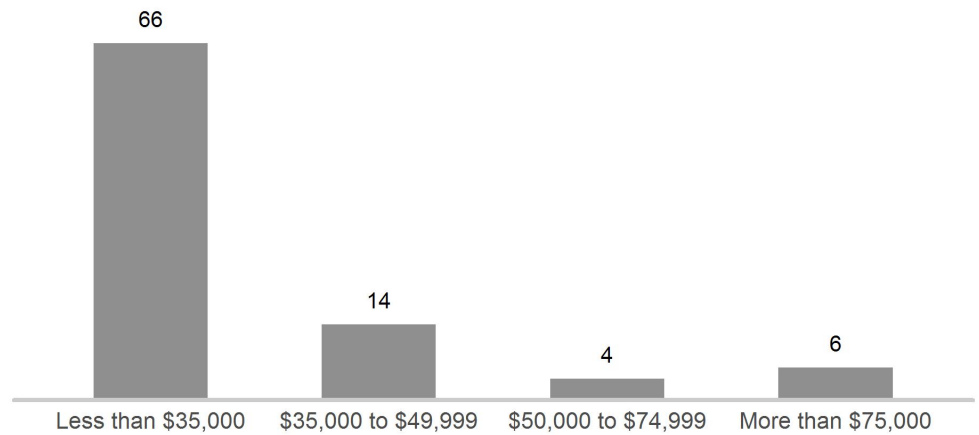
## Manufacturing production technician's highest median wage

### Skilled Trades Wages

The majority of advertised salaries (66 postings or 73 percent of postings that expressed a salary) in the skilled trades group in Q1 2017 were below \$35,000 a year. However, four of the top ten in-demand occupations made median wages over \$20 an hour, which translates to workers making over \$40,000 a year.

### Advertised Wages in Job Postings

Quarter 1 2017



Data: Burning Glass Technologies  
Analysis: Workforce Intelligence Network

### Wage Data from Bureau of Labor Statistics 2016

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
51-9199	Production Workers, All Other	\$9.54	\$12.89	\$15.20	\$16.94	\$20.01
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$8.73	\$10.27	\$13.84	\$20.43	\$25.46
51-4121	Welders, Cutters, and Welder Fitters	\$10.84	\$13.17	\$15.62	\$19.23	\$24.60
51-4041	Machinists	\$10.44	\$13.30	\$17.27	\$22.98	\$27.27
51-1011	First-Line Supervisors of Production and	\$15.71	\$20.11	\$27.37	\$35.62	\$43.56
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$10.05	\$12.45	\$18.25	\$20.85	\$24.92
17-3029	Manufacturing Production	\$14.65	\$19.99	\$27.51	\$33.07	\$42.70
51-2022	Electrical and Electronic Equipment Assemblers	\$8.15	\$9.15	\$11.29	\$16.30	\$21.20
51-4111	Tool and Die Makers	\$14.16	\$17.83	\$22.68	\$29.08	\$31.99
51-4012	Computer	\$13.82	\$16.16	\$20.53	\$25.10	\$29.77

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	94,112	92,626	93,153	94,528	95,379	96,530	98,727	<b>99,520</b>	792	0.8%
Employment	83,600	84,286	85,806	87,521	89,323	92,051	94,599	<b>95,342</b>	743	0.8%
Unemployment	10,512	8,340	7,347	7,008	6,057	4,478	4,128	<b>4,178</b>	49	1.2%
Unemployment Rate	11.2%	9.0%	7.9%	7.4%	6.3%	4.6%	4.2%	<b>4.2%</b>	0.0%	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	97,458	98,279	100,096	99,076	<b>99,520</b>	444	0.4%	2,061	2.1%
Employment	93,234	94,422	95,507	95,233	<b>94,992</b>	-241	-0.3%	1,757	1.9%
Unemployment	4,224	3,857	4,590	3,843	<b>4,528</b>	685	17.8%	304	7.2%
Unemployment Rate	4.3%	3.9%	4.6%	3.9%	<b>4.5%</b>	0.7%	na	0.2%	na

*\*Note: Monthly data averaged by quarter*

Data: Bureau of Labor Statistics













### Monthly Labor Market Data

	January 2016	February 2016	March 2016	April 2016	May 2016	June 2016	July 2016	August 2016	September 2016	October 2016	November 2016	December 2016	January 2017	February 2017	March 2017
Labor Force	96,954	97,286	98,135	96,944	98,452	99,441	100,249	99,955	100,085	99,631	98,796	98,800	99,259	99,671	99,629
Employment	92,762	93,185	93,756	93,521	94,796	94,949	95,477	95,350	95,693	95,305	95,183	95,211	94,291	94,918	95,766
Unemployment	4,192	4,101	4,379	3,423	3,656	4,492	4,772	4,605	4,392	4,326	3,613	3,589	4,968	4,753	3,863
Unemployment Rate	4.3%	4.2%	4.5%	3.5%	3.7%	4.5%	4.8%	4.6%	4.4%	4.3%	3.7%	3.6%	5.0%	4.8%	3.9%

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

Data: Bureau of Labor Statistics

## Livingston County Job Posting Data by Occupation Group\* Over Time

	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Change Over Time	Annual Change Q1 2016-Q1 2017	Quarter Growth Q4 2016-Q1 2017
Total Postings	2,472	2,162	2,727	2,545	2,692		8.9%	24.5%
Agriculture	28	61	51	36	66		135.7%	8.2%
Business & finance	111	95	108	105	103		-7.2%	8.4%
Construction	62	48	40	45	43		-30.6%	-10.4%
Customer service	669	665	857	913	942		40.8%	41.7%
Education	17	16	43	21	18		5.9%	12.5%
Energy	5	4	0	0	2		-60.0%	-50.0%
Engineers & designers	90	44	85	62	66		-26.7%	50.0%
Health care	238	210	261	269	309		29.8%	47.1%
Information technology	84	70	95	72	79		-6.0%	12.9%
Skilled trades & technicians	224	143	224	161	165		-26.3%	15.4%
Transportation, distribution, and logistics	210	307	388	195	194		-7.6%	-36.8%

*\*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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