CITY OF DETROIT
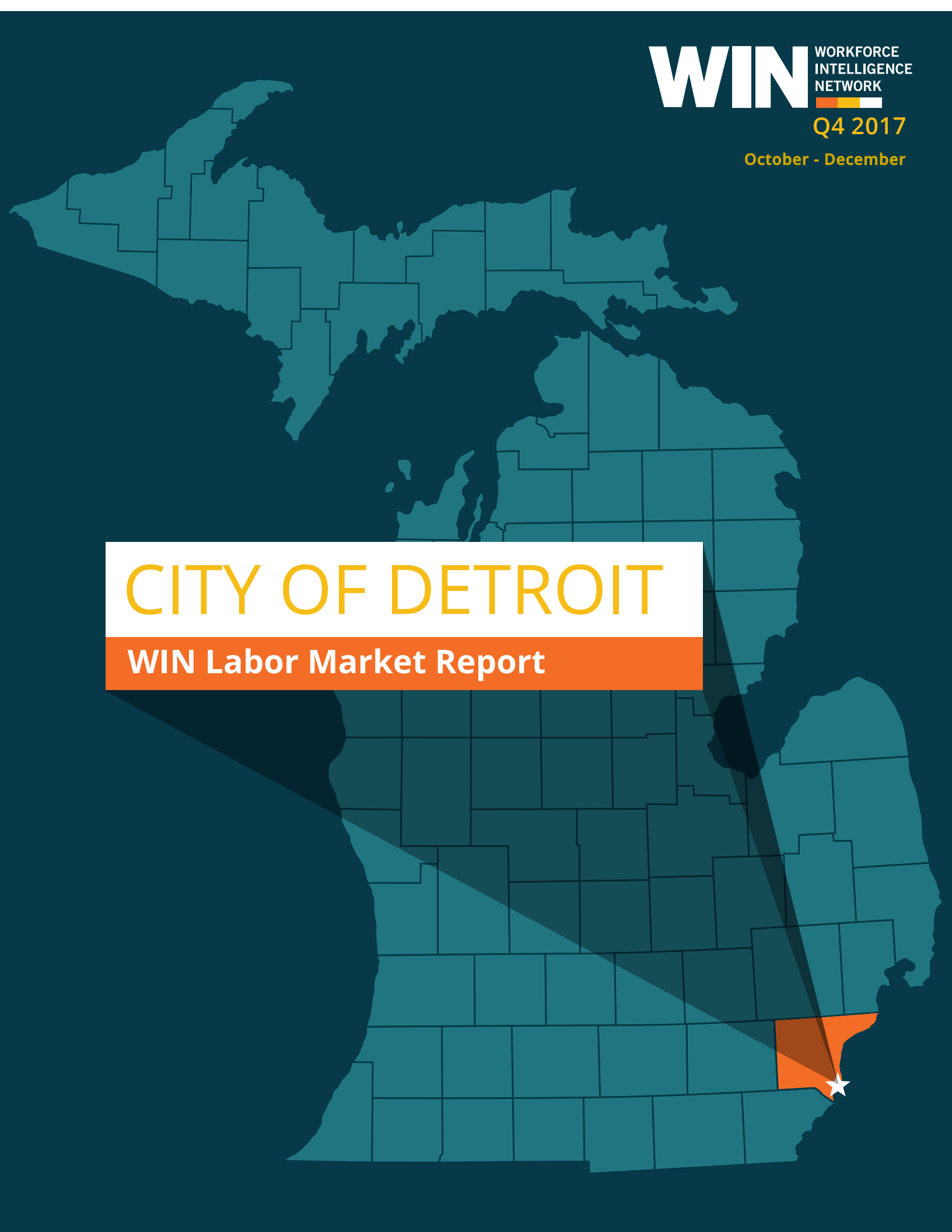
WIN Labor Market Report

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 Detroit as a whole 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 7)
- Energy (page 13)
- Health care (page 19)

- Information technology (page 25)
- Skilled trades & technicians (manufacturing focused) (page 31)

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

Key Findings for Quarter 4 2017

Online job postings within Detroit remain relatively high during Q4 2017.

During Q4 2017, employer demand for all occupations decreased by 24 percent to 26,062 online job postings. Despite quarter to quarter variation, demand within Detroit has shown strong annual growth over the last six years. In Q4 2017 demand was 22 percent higher than the 20,282 postings in Q1 2011, the start of WIN's analysis.

Registered Nurses retains spot as top in-demand job with large volume of postings.

Always a top occupation within the Health Care group, Registered Nurses continues to be Detroit's most in-demand job overall. Employers posted 2,159 job ads for Registered Nurses in Q4 2017, which is an 14 percent decline from Q3 2017 postings. Many other Health Care occupations offer opportunities for job and wage advancement proportional to education and experience, in addition to consistent employment growth. See page 19 for more details.

Lucrative opportunities in Engineering and Design and IT group.

The IT occupation groups offered higher than average advertised salaries compared to other groups. IT reported an average salary of $96,000 per year. Those willing to overcome the education barriers in these fields can expect higher potential earnings.

Unemployment rate decreased in Detroit, dropping 1.0 percent during Q4 2017.

Despite a drop in the number of people employed, the unemployment rate fell by 1.0 percentage points to 8.5% Q4 2017 . The labor force in Detroit fell by 3,205 workers, likely causing the drop in employment. This milestone employment rate shows continued recovery in Detroit, after the recessionary high of 2010. The annual unemployment rate fell by 1.7 percentage points, showing long term improvements. See page 4 for more details.

Many growing occupations in City of Detroit require a bachelor's degree.

Most postings in the Business and Finance, Engineering and Design, and IT occupation groups require a bachelor's degree. Each of these occupations groups report generally growing demand as well as relatively high salaries. There are opportunities, however, in most groups for a variety of education levels. Many Health Care occupations are attainable with an associate's degree and most entry-level Skilled Trades and Construction jobs prefer a high school diploma paired with on-the-job training.

Postings over time

Online job ads for occupations in Detroit declined by 24 percent (6,270 postings) from 32,332 in Q3 2017 to 26,062 in Q4. This level of demand is still a relatively high point over the past six years for Detroit, with the last peak of 32,332 postings occurring during Q3 2017. Postings have generally increased over recent years from the 20,282 online job ads posting in the city of Detroit in Q1 2011, the first quarter of WIN's analysis.
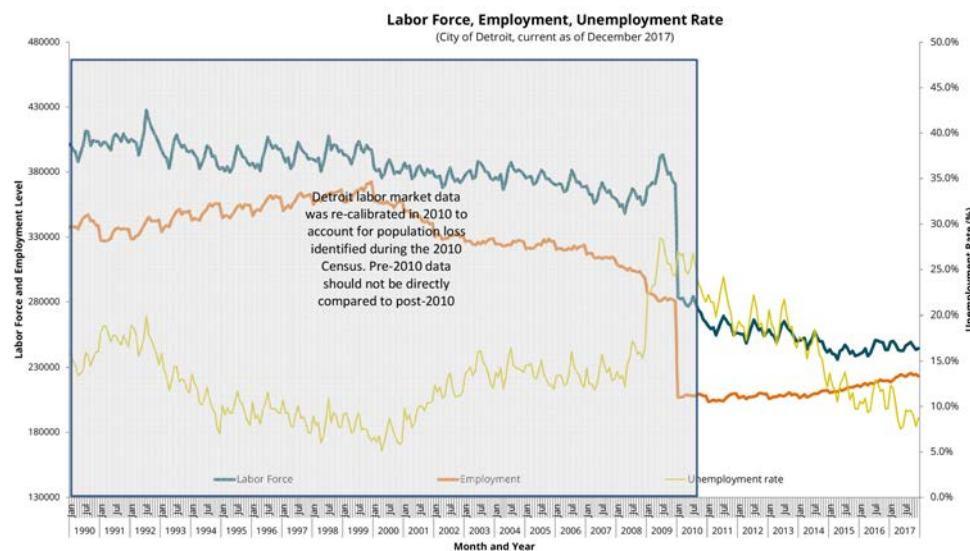
City of Detroit Online Job Postings
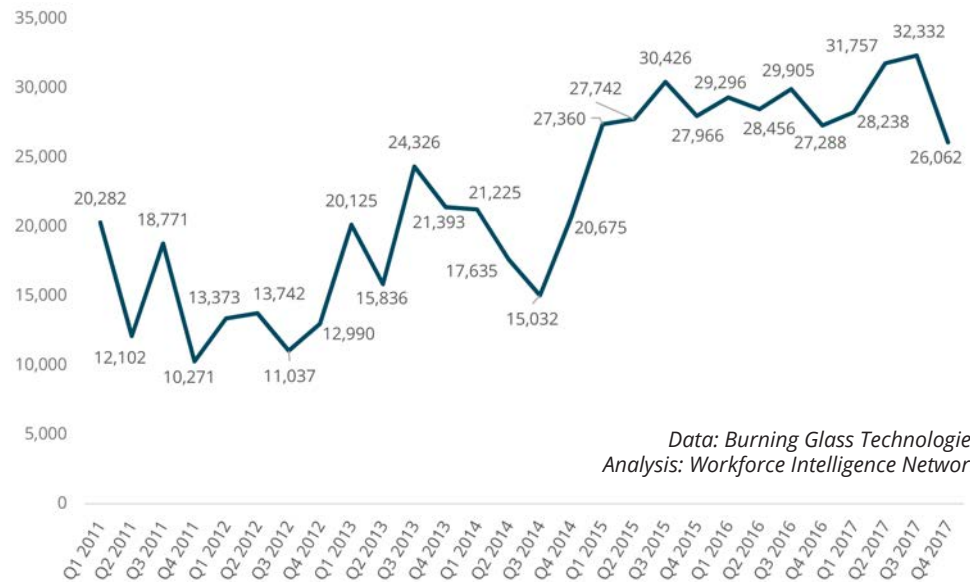
Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Labor force/employment/unemployment

The labor market in the City of Detroit has experienced relative stability since 2014. The labor force decreased by 3,205 workers (-1.3 percent) between Q3 2017 and Q4 2017. Annually however, it has increased by 1,366 individuals (+0.6 percent) from 245,014 in 2016 to 246,380 in 2017. Employment in Detroit has decreased slightly from Q3 2017, dropping by 384 workers (-0.2 percent). Yearly employment grew by 4,533 (+2.4 percent) from 218,295 in 2016 to 223,628 in 2017. The annual unemployment rate in this region has also seen improvement, experiencing a decrease over the past seven years to its lowest annual point of 9.2%. The quarterly unemployment rate dropped by 1.0 percentage points between Q3 2017 and Q4 2017 to 8.5 percent.

Labor Force, Employment, Unemployment Rate
2001- 2017

Data: BLS
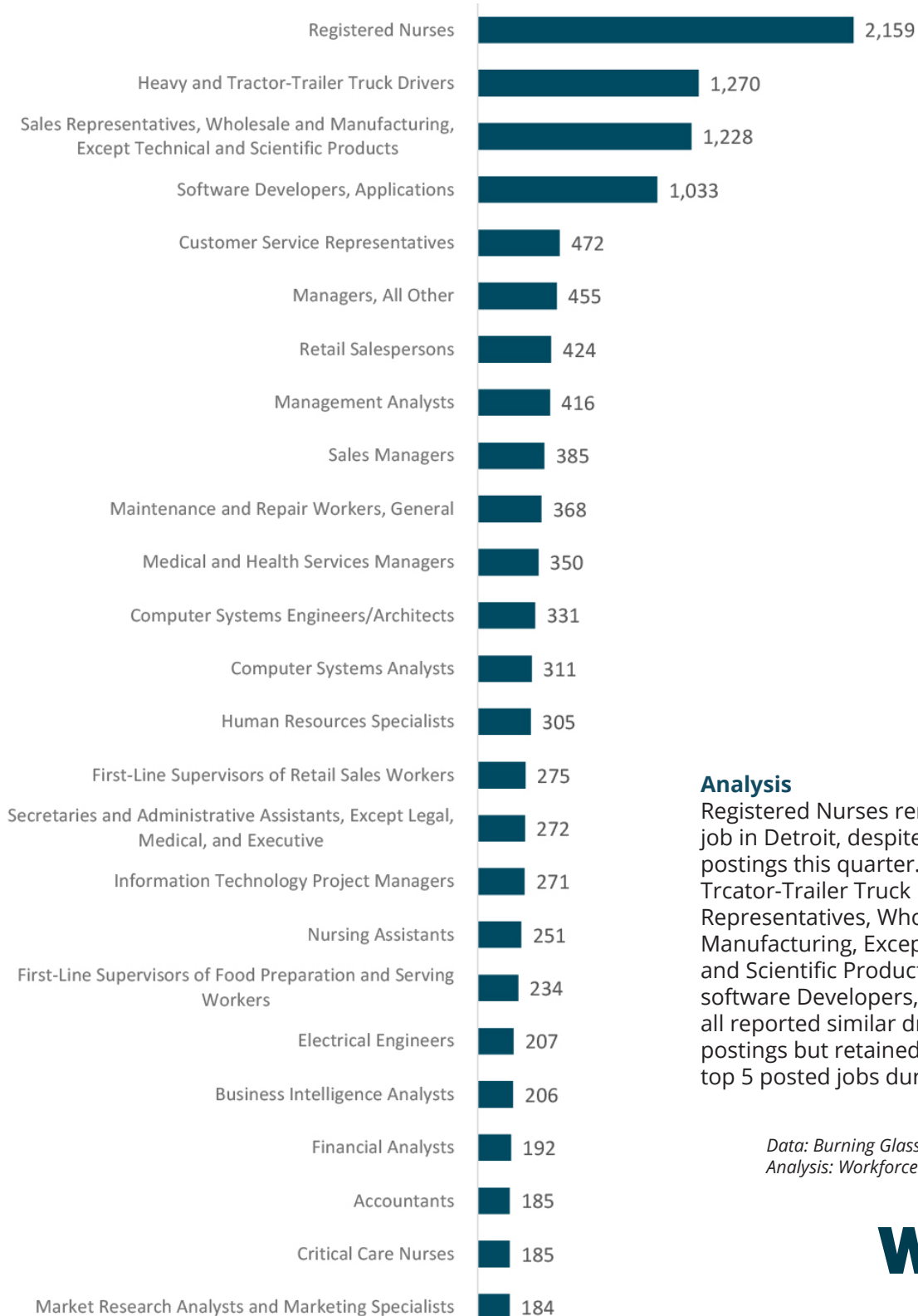*Analysis: Workforce Intelligence Network*

Top Posted Jobs

Quarter 4 2017

Job	Postings
Registered Nurses	2,159
Heavy and Tractor-Trailer Truck Drivers	1,270
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1,228
Software Developers, Applications	1,033
Customer Service Representatives	472
Managers, All Other	455
Retail Salespersons	424
Management Analysts	416
Sales Managers	385
Maintenance and Repair Workers, General	368
Medical and Health Services Managers	350
Computer Systems Engineers/Architects	331
Computer Systems Analysts	311
Human Resources Specialists	305
First-Line Supervisors of Retail Sales Workers	275
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	272
Information Technology Project Managers	271
Nursing Assistants	251
First-Line Supervisors of Food Preparation and Serving Workers	234
Electrical Engineers	207
Business Intelligence Analysts	206
Financial Analysts	192
Accountants	185
Critical Care Nurses	185
Market Research Analysts and Marketing Specialists	184

Analysis
Registered Nurses remain the top job in Detroit, despite the drop in postings this quarter. Heavy and Trcator-Trailer Truck Drivers, Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products, and software Developers, Applications all reported similar drops in postings but retained spots in the top 5 posted jobs during Q4 2017.

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

WIN WORKFORCE INTELLIGENCE NETWORK

Top Posted Jobs

Quarter 4 2017

Job	Postings
Information Security Analysts	177
General and Operations Managers	169
Web Developers	167
Financial Managers, Branch or Department	162
Marketing Managers	161
Mechanical Engineers	143
Combined Food Preparation and Serving Workers, Including Fast Food	142
Insurance Sales Agents	139
Security Guards	139
Bookkeeping, Accounting, and Auditing Clerks	135
Medical Assistants	128
Database Administrators	125
Medical and Clinical Laboratory Technicians	122
Construction Managers	120
Network and Computer Systems Administrators	120
Medical Records and Health Information Technicians	118
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	118
Auditors	116
Engineers, All Other	114
First-Line Supervisors of Mechanics, Installers, and Repairers	114
Architectural and Engineering Managers	110
Lawyers	108
Computer Occupations, All Other	106
Pharmacists	102
Computer User Support Specialists	101

WIN 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.
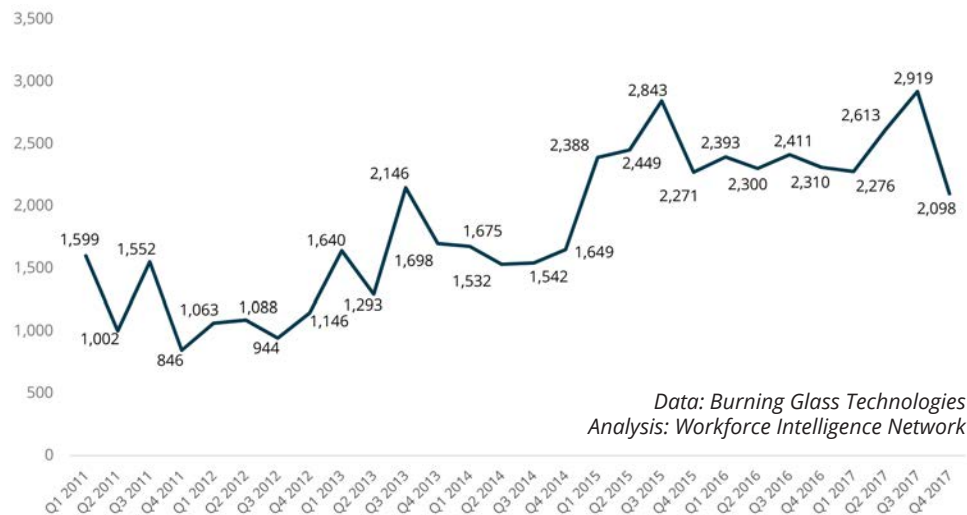
Job Posting Analysis

Business and Finance postings fell by 28 percent between Q3 and Q4 2017, a decline of 821 job ads for a total of 2,098 online job ads during the quarter. Employers posted 2,012 fewer online job ads in Q4 2017 than the 2,310 postings during Q4 2016. Despite this drop, postings have increased over the past several years from the 846 postings reported during Q4 2011.

Employment Analysis

Employment in Business and Finance related occupations has remained relatively stable since the Great Recession in 2009, when it fell to a minimum level of 12,356 individuals. In 2017, employment has grown modestly to 13,905 individuals, but this is the highest level since 2009.
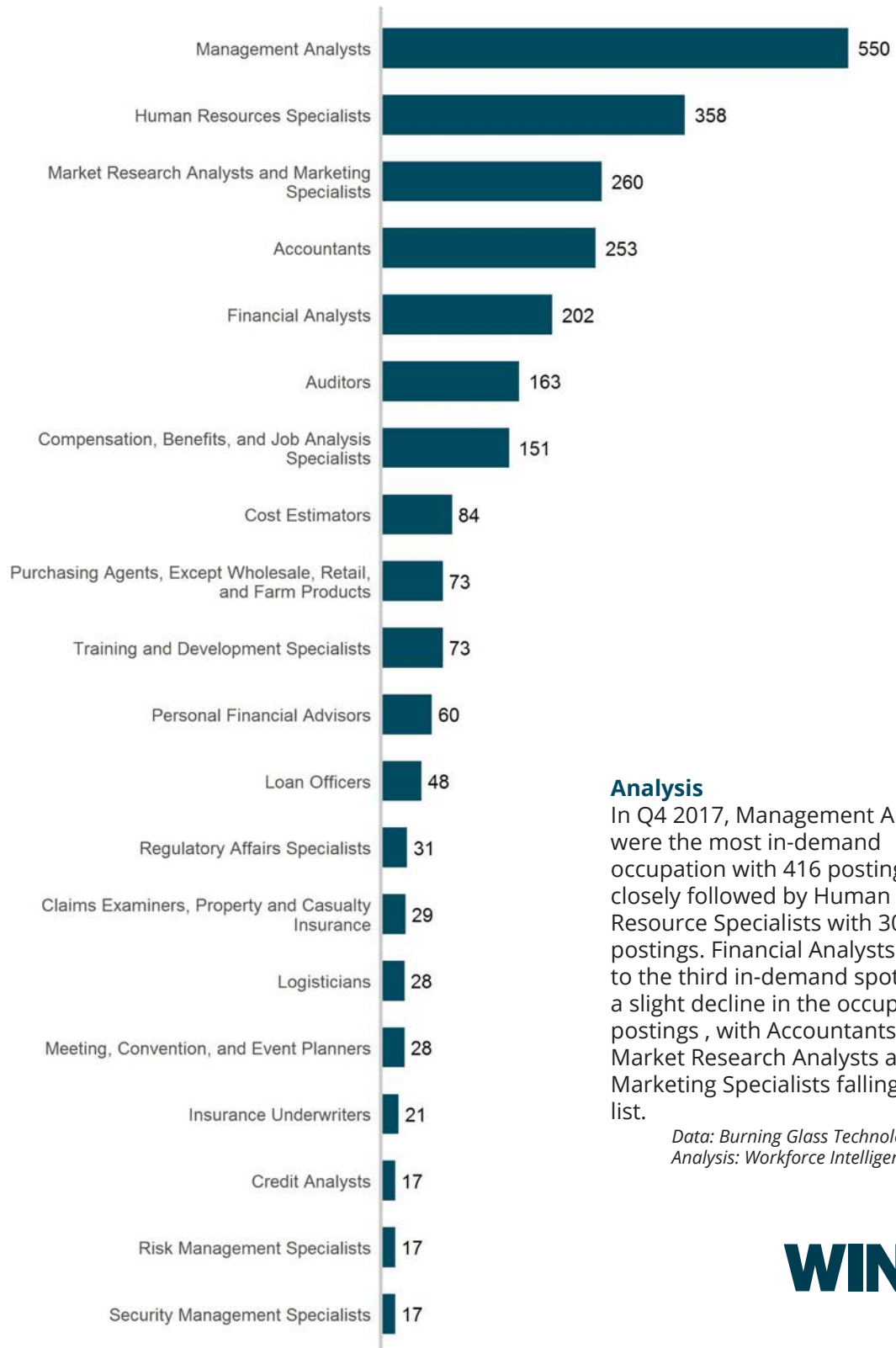
Online Job Postings

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Employment Over Time
2017

Data: EMSI
Analysis: Workforce Intelligence Network

**Business & Finance
Top Jobs Posted**
Q4 2017

Job	Postings
Management Analysts	550
Human Resources Specialists	358
Market Research Analysts and Marketing Specialists	260
Accountants	253
Financial Analysts	202
Auditors	163
Compensation, Benefits, and Job Analysis Specialists	151
Cost Estimators	84
Purchasing Agents, Except Wholesale, Retail, and Farm Products	73
Training and Development Specialists	73
Personal Financial Advisors	60
Loan Officers	48
Regulatory Affairs Specialists	31
Claims Examiners, Property and Casualty Insurance	29
Logisticians	28
Meeting, Convention, and Event Planners	28
Insurance Underwriters	21
Credit Analysts	17
Risk Management Specialists	17
Security Management Specialists	17

Analysis
In Q4 2017, Management Analysts were the most in-demand occupation with 416 postings, closely followed by Human Resource Specialists with 305 postings. Financial Analysts moved to the third in-demand spot despite a slight decline in the occupations postings , with Accountants and Market Research Analysts and Marketing Specialists falling on the list.

*Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network*

WIN WORKFORCE INTELLIGENCE NETWORK

Business & Finance
Education and Experience

Of the 1,524 Business and Finance job postings that specified a desired educational attainment level, 83 percent preferred candidates with a bachelor's degree. High school or vocational training was the next most in-demand level of education.

There were 1,315 postings that specified a desired level of experience. These were mostly split between zero to two years of experience and three to five years of experience, with 440 and 678 ads respectively. In Q4 2017, entry-level Business and Finance positions were available to Detroit workers willing to pursue a bachelor's degree.

In-Demand Areas of Study

- Business Administration and Management, General
- Accounting
- Finance, General
- Economics, General
- Engineering, General

Educational Attainment

High school or vocational training	137
Associate's degree	61
Bachelor's degree	1,260
Master's degree	48
Doctoral degree	18

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Experience Required

0 to 2 years	440
3 to 5 years	678
6 to 8 years	148
9+ years	49
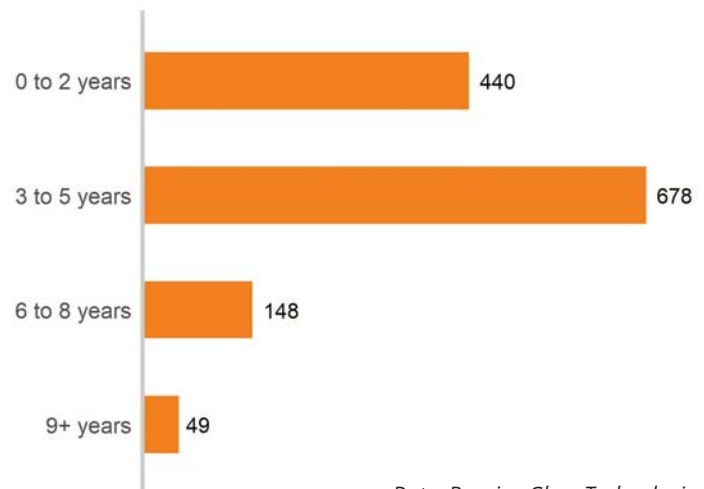
Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

WIN WORKFORCE INTELLIGENCE NETWORK

Business & Finance In-Demand Skills

Occupations in Business and Finance require a variety of skills for effective fiscal management. These include interpersonal abilities like customer service alongside accounting and software familiarity. Leadership skills and project management were also highly sought after during Q4 2017. Employers hiring Business and Finance workers also specify common employability skills like communication, writing, and research abilities.

Technical In-Demand Skills

- Microsoft Office
- Accounting
- Project Management
- Budgeting
- Scheduling

Foundational In-Demand Skills

- Communication Skills
- Problem Solving
- Writing
- Planning
- Organizational Skills

Job Type

- Full-time: 40.4%
- Part-time: 1.9%
- Temporary: 2.8%

Certifications Required

- Certified Public Accountant (CPA)
- Certified Information Systems Auditor (CISA)
- Project Management Certification (e.g. PMP)
- Certified Information Systems Security Professional (CISSP)
- Mortgage License

WIN WORKFORCE INTELLIGENCE NETWORK

Accounting and software skills
in high demand

Average advertised salary:
$71,000
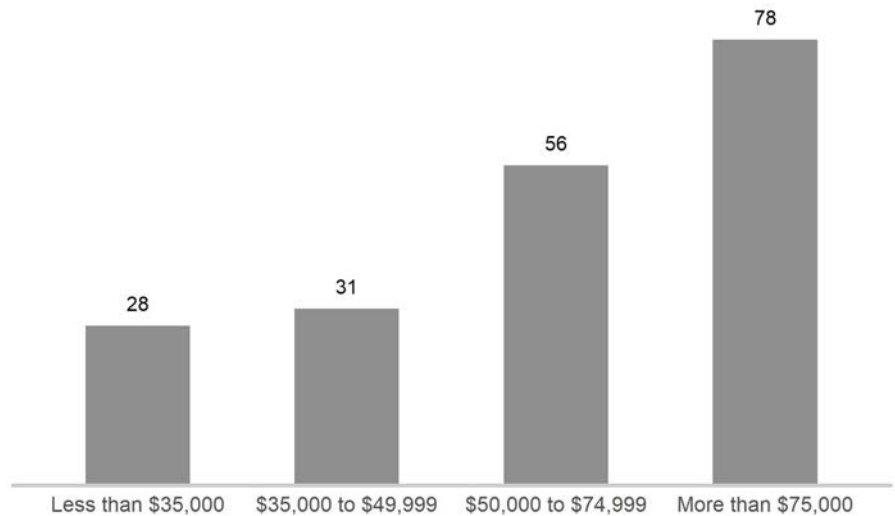
WORKFORCE
INTELLIGENCE
NETWORK

Advertised Salary in Job Postings

Q4 2017

**Business & Finance
Wages and Advertised Salary**

Only 193 postings in Business and Finance specified an annual advertised salary during Q4 2017, but those that did painted an optimistic picture. Of those postings, 29 percent were between $50,000 and $75,000 annually with a mean advertised salary of $71,000. Better yet, 40 percent posted salaries with annual earnings above $75,000. Lucrative positions in the field exist to suit the high education requirements. Entry level (tenth percentile) wages for each of the top ten Business and Finance jobs are over $17 per hour, and seven climb past $30 at the median.

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Wage Data from Bureau of Labor Statistics 2016

Occupation Code	Occupation Name	10th Percentile Wages	25th Percentile Wages	Median Wages	75th Percentile Wages	90th Percentile Wages
13-1111	Management Analysts	$25.35	$30.43	$38.33	$52.97	$71.75
13-1071	Human Resources Specialists	$17.09	$21.89	$29.22	$38.00	$50.89
13-2051	Financial Analysts	$25.61	$31.12	$40.77	$48.94	$59.19
13-2011	Accountants	$20.99	$26.11	$32.93	$42.01	$53.97
13-1161	Market Research Analysts and Marketing Specialists	$22.07	$28.76	$40.49	$53.79	$63.16
13-2011	Auditors	$20.99	$26.11	$32.93	$42.01	$53.97
13-2052	Personal Financial Advisors	$19.97	$27.93	$51.35	$77.94	$101.65
13-1151	Training and Development Specialists	$17.69	$23.27	$31.55	$39.47	$48.93
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	$19.60	$24.18	$30.65	$40.28	$52.03
13-1141	Compensation, Benefits, and Job Analysis Specialists	$21.17	$24.44	$29.30	$35.47	$42.79

Data: EMSI, BLS
Analysis: Workforce Intelligence Network

WIN WORKFORCE INTELLIGENCE NETWORK

Custom Occupation Group

Jobs in the Business and Finance occupation group can be found in nearly every type of business and industry. The following occupations are used by WIN researchers to provide custom analysis: The Workforce Intelligence Network for Southeast Michigan should be cited any time the analysis, graphics, or custom occupation group from this report are used.

SOC Code	Description
13-1011	Agents and Business Managers of Artists, Performers, and Athletes
13-1021	Buyers and Purchasing Agents, Farm Products
13-1022	Wholesale and Retail Buyers, Except Farm Products
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products
13-1031	Claims Adjusters, Examiners, and Investigators
13-1032	Insurance Appraisers, Auto Damage
13-1041	Compliance Officers
13-1051	Cost Estimators
13-1071	Human Resources Specialists
13-1074	Farm Labor Contractors
13-1075	Labor Relations Specialists
13-1081	Logisticians
13-1111	Management Analysts
13-1121	Meeting, Convention, and Event Planners
13-1131	Fundraisers
13-1141	Compensation, Benefits, and Job Analysis Specialists
13-1151	Training and Development Specialists
13-1161	Market Research Analysts and Marketing Specialists
13-1199	Business Operations Specialists, All Other
13-2011	Accountants and Auditors
13-2021	Appraisers and Assessors of Real Estate
13-2031	Budget Analysts
13-2041	Credit Analysts
13-2051	Financial Analysts
13-2052	Personal Financial Advisors
13-2053	Insurance Underwriters
13-2061	Financial Examiners
13-2071	Credit Counselors
13-2072	Loan Officers
13-2081	Tax Examiners and Collectors, and Revenue Agents
13-2082	Tax Preparers
13-2099	Financial Specialists, All Other

Introduction

Energy-related occupations encompass jobs in engineering, science, mining, and extraction. Workers in this field have a range of skills all related to keeping businesses and homes powered. Energy companies employ workers in a variety of occupations, many of which are also included in other WIN occupation groups. Data referenced in this section pertain only to job postings from energy-related businesses.
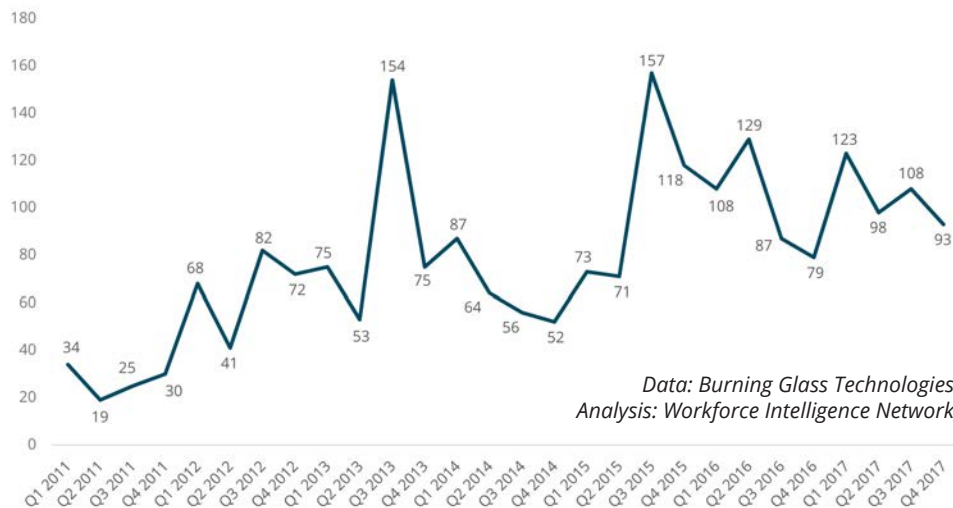
Job Posting Analysis

Online job ads for Energy workers saw a slight decrease during Q4 2017 following a few quarters of instability and general decline. Decreasing by 15 postings for a total of 93, demand has been fluctuating each quarter. Postings in the Energy group tend to be quite volatile relative to the small number of postings. Employer demand in Q4 2017 is 18 percent higher than during Q4 2016.

Employment Analysis

The data presented in the graph to the right represents total employment in the Energy industries (NAICS 2111, 2131, 2211, 2212, 2371), not just WIN-designated Energy occupations. In 2017, 2,119 Detroit workers are employed in these industries. Overall employment has typically grown over the past 16 years, quickly rebounding from a drop in workers in 2009 and remaining stable around 2,100 individuals over the last four years.
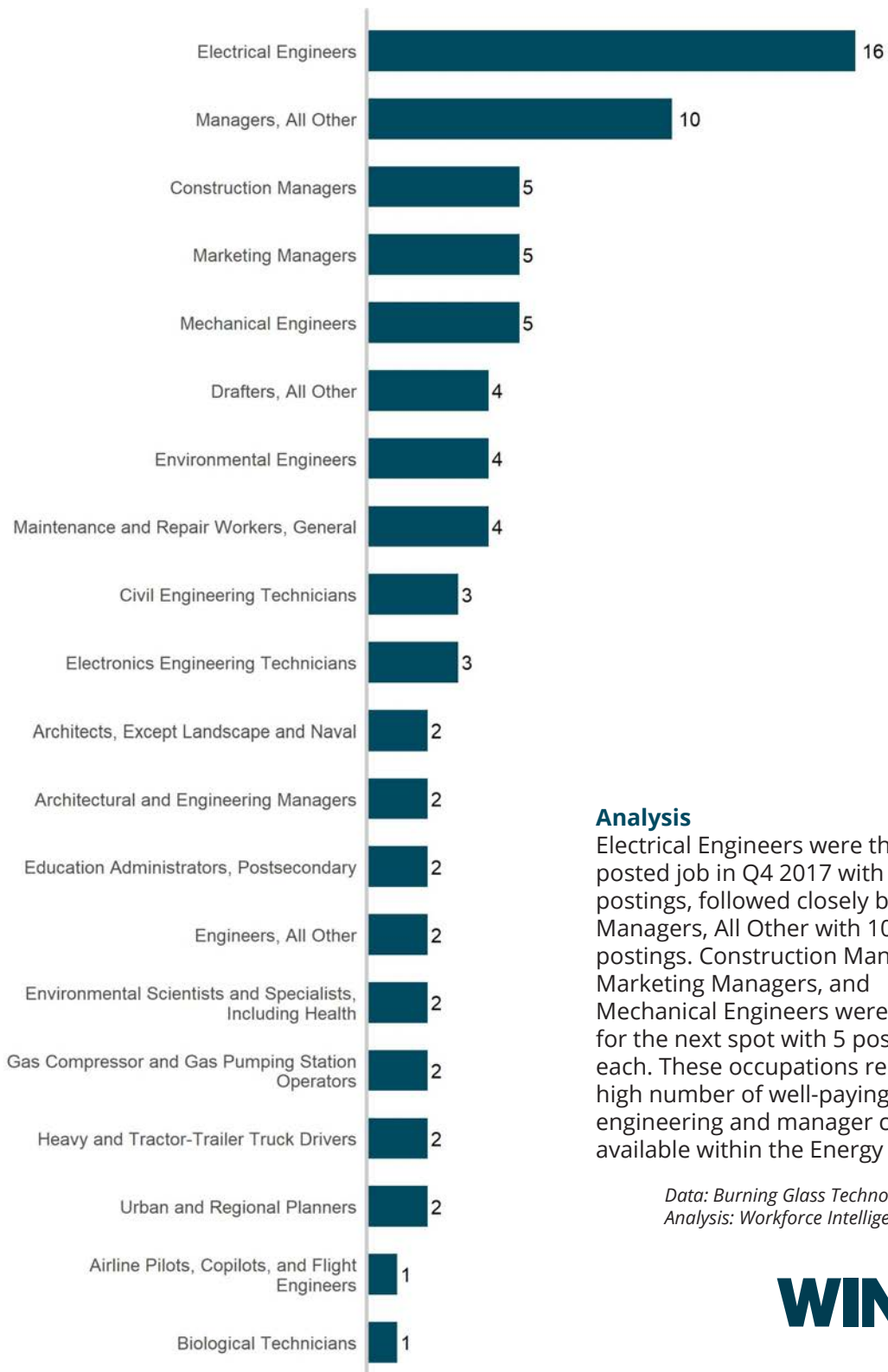
Online Job Postings

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Employment Over Time
2017

Data: EMSI
Analysis: Workforce Intelligence Network
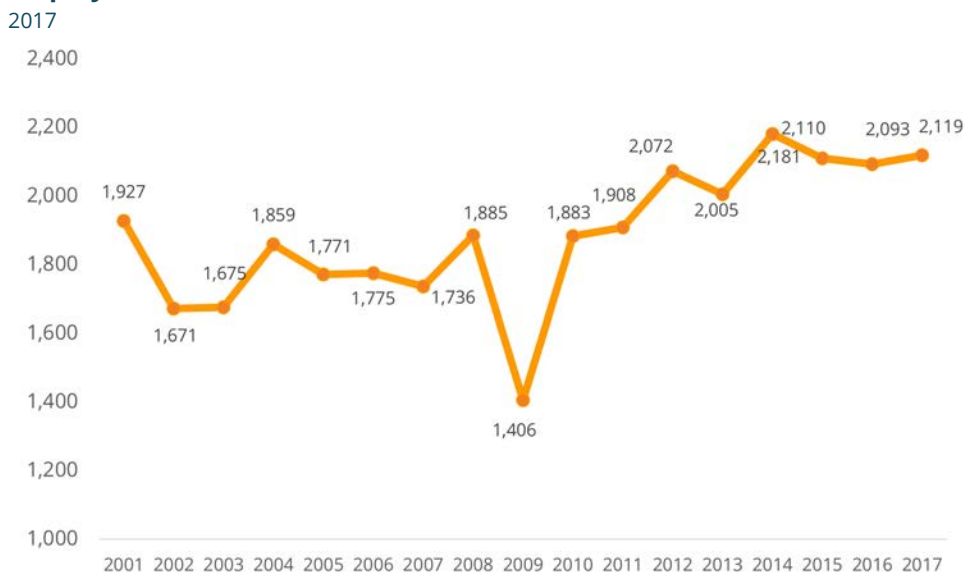
Energy
Top Jobs Posted
Q4 2017

Job	Postings
Electrical Engineers	16
Managers, All Other	10
Construction Managers	5
Marketing Managers	5
Mechanical Engineers	5
Drafters, All Other	4
Environmental Engineers	4
Maintenance and Repair Workers, General	4
Civil Engineering Technicians	3
Electronics Engineering Technicians	3
Architects, Except Landscape and Naval	2
Architectural and Engineering Managers	2
Education Administrators, Postsecondary	2
Engineers, All Other	2
Environmental Scientists and Specialists, Including Health	2
Gas Compressor and Gas Pumping Station Operators	2
Heavy and Tractor-Trailer Truck Drivers	2
Urban and Regional Planners	2
Airline Pilots, Copilots, and Flight Engineers	1
Biological Technicians	1

Analysis
Electrical Engineers were the top posted job in Q4 2017 with 16 postings, followed closely by Managers, All Other with 10 postings. Construction Managers, Marketing Managers, and Mechanical Engineers were all tied for the next spot with 5 postings each. These occupations represent a high number of well-paying engineering and manager careers available within the Energy group.

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

WIN WORKFORCE INTELLIGENCE NETWORK

14

Energy
Education and Experience

Many jobs in Energy have an engineering focus and thus require a bachelor's degree for employment. However, there are also a great number of technician level positions that require vocational training such as an apprenticeship.

As seen in 51 percent of the postings that specified an experience level, energy companies posting in Q4 2017 preferred three to five years of experience, with an additional 72 percent of job ads desiring 6 to 8 years of experience. Demand for both entry level and highly experienced workers was lower, with around 12 percent each.

Educational Attainment
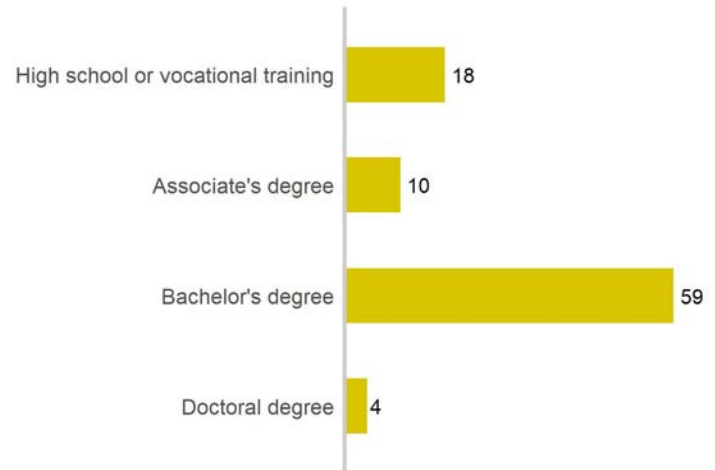
Category	Value
High school or vocational training	18
Associate's degree	10
Bachelor's degree	59
Doctoral degree	4

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

In-Demand Area of Study

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

Experience Required
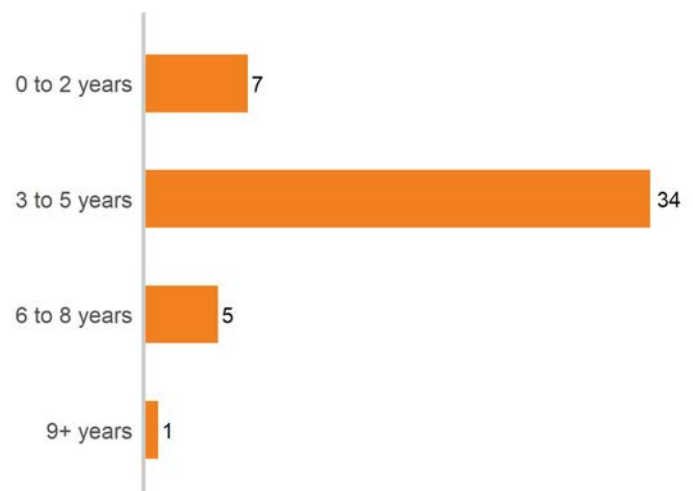
Category	Value
0 to 2 years	7
3 to 5 years	34
6 to 8 years	5
9+ years	1

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Energy In-Demand Skills

Employers in the Energy group need workers to have diverse skill sets to suit the wide range of occupations included. Planning, writing, problem solving, and communications skills are key for Energy workers as in many other occupation groups. Since most positions are highly technical, more specific abilities required for Energy jobs reflect engineering and management needs and range from contract management and procurement to repair and schematic diagrams.

Technical In-Demand Skills

- Project Management/ Supervisory Skills
- Scheduling/ Budgeting
- Cost Estimation/ Procurement
- Schematic Diagrams
- Contract Management

Foundational In-Demand Skills

- Planning
- Mathematics
- Computer Skills
- Problem Solving
- Communication Skills

Job Type

- Full-time: 40.9 %
- Part-time: Data Not Available
- Temporary: Data Not Available

Certifications Required

- Project Management Certification (e.g. PMP)
- Series 3
- American Board for Engineering and Technology (ABET) Accredited
- CDL Class A
- Professional Engineer

WIN
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Energy
Wages and Advertised Salary

Only two Q4 2017 Energy postings advertised a salary. One offered wages over $75,000 annually, while the other offered less than $35,000 annually. According to BLS data, wages for energy workers are high and offer upward growth. This is especially true for engineers and managers. As shown in the table of BLS data below, seven of the top ten jobs have median wages over $40 hourly.

Advertised Salary in Job Postings
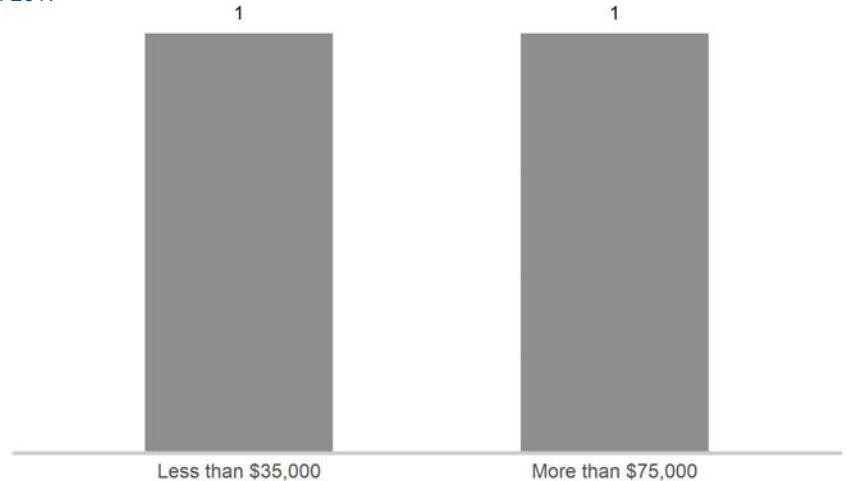
Quarter 4 2017

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
17-2071	Electrical Engineers	$31.01	$36.43	$44.02	$51.52	$63.92
11-9199	Managers, All Other	$31.57	$38.13	$48.59	$60.25	$76.68
11-9021	Construction Managers	$33.09	$38.88	$46.58	$56.73	$71.61
11-2021	Marketing Managers	$34.33	$52.37	$68.92	$83.48	$118.47
17-2141	Mechanical Engineers	$28.73	$36.16	$44.16	$52.00	$60.61
17-3019	Drafters, All Other	Data Not Available	Data Not Available	Data Not Available	Data Not Available	Data Not Available
17-2081	Environmental Engineers	$30.27	$38.48	$47.70	$57.00	$63.54
49-9071	Maintenance and Repair Workers, General	$10.05	$12.93	$17.73	$23.04	$28.36
17-3022	Civil Engineering Technicians	$14.49	$16.98	$21.54	$26.54	$30.32
17-3023	Electronics Engineering Technicians	$19.70	$26.34	$31.83	$36.11	$40.01

Data: EMSI, BLS
Analysis: Workforce Intelligence Network

Custom Occupation Group

Jobs in the WIN Energy occupation group are associated with the skilled trades, engineering, management, and planning. Due to the nature of these jobs and the broad industry of Energy as a whole, NAICS codes are used instead of SOC codes to encompass all those employed in Energy related fields. The following occupations are used by WIN researchers to provide custom analysis: The Workforce Intelligence Network for Southeast Michigan should be cited any time the analysis, graphics, or custom occupation group from this report are used.

NAICS Code	Industry
2111	Oil and Gas Extraction
2131	Support Activities for Mining
2211	Electric Power Generation, Transmission and Distribution
2212	Natural Gas Distribution
2371	Utility System Construction

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 continued to decrease, dropping to 4,753 postings during Q4 2017. This is a 20 percent decline from the 5,977 postings during Q3 2017. Current demand is 378 fewer postings than one year ago, in Q4 2016, but is over 2,157 more than in Q2 2011. Overall, this is an 83 percent increase in demand.

Employment Analysis

With 25,917 jobs, 2017 continues to set peak employment in Health Care, exceeding the previous high of 25,507 jobs in 2016. Employment has shown consistent growth since 2009, and is now 12 percent higher than the 23,160 persons employed in healthcare that year.

Online Job Postings
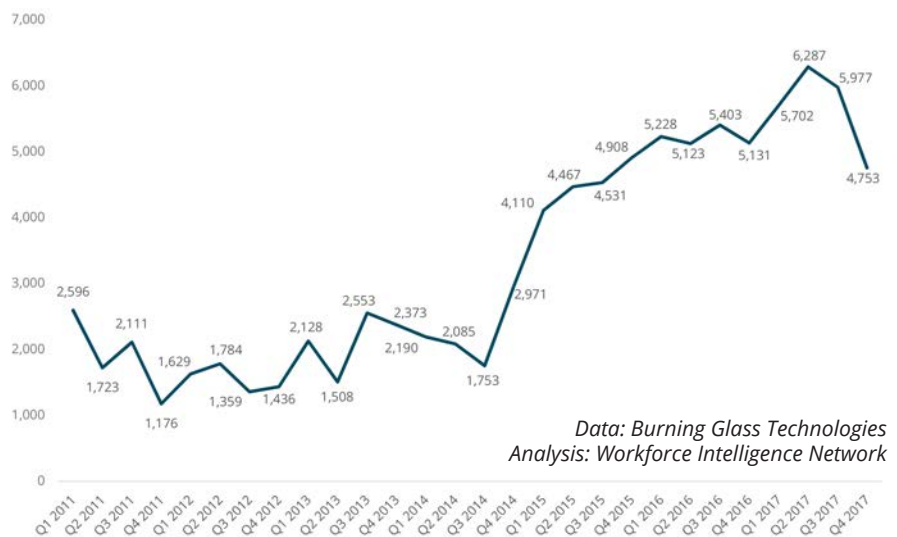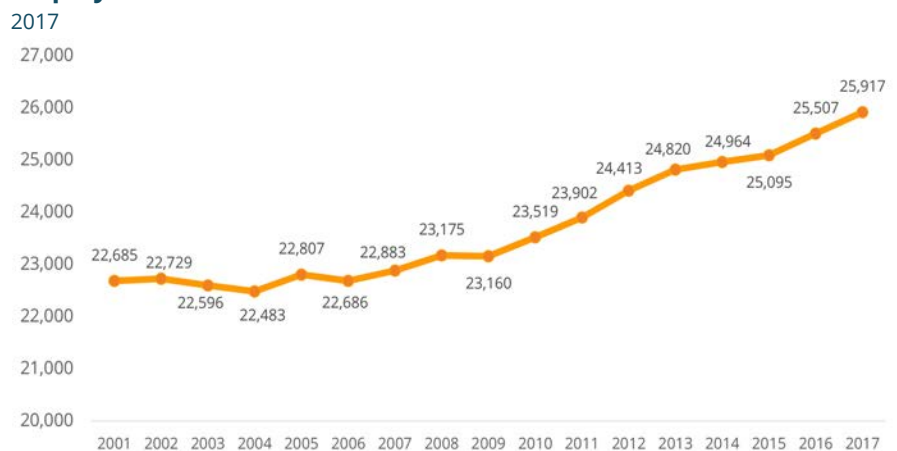
Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Employment Over Time
2017

Data: EMSI
Analysis: Workforce Intelligence Network

**Health Care
Top Jobs Posted**
Quarter 4 2017

Job	Postings
Registered Nurses	2,691
Nursing Assistants	297
Critical Care Nurses	225
Medical Assistants	171
Medical Records and Health Information Technicians	170
Physicians and Surgeons, All Other	162
Medical and Clinical Laboratory Technicians	159
Nurse Practitioners	154
Speech-Language Pathologists	135
Pharmacy Technicians	133
Pharmacists	125
Physical Therapists	123
Medical and Clinical Laboratory Technologists	122
Surgical Technologists	94
Occupational Therapists	88
Respiratory Therapists	80
Home Health Aides	75
Internists, General	75
Licensed Practical and Licensed Vocational Nurses	75
Radiologic Technologists	73

Analysis
Registered Nurses remain by far the
most popular occupation in the
Health Care group, with 2,159 online
job postings for this position in Q4
2017. Nursing Assistants, Clinical
Care Nurses, and Medical Assistants
were also in high demand,
respectively.

*Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network*

20

⊘

0-2 years: most desired
experience level

63%
of postings request
associate's degree or less

**Health Care
Education and Experience**

Almost all the Health Care job postings that specified a desired experience level during Q4 2017 were available to workers with under two years of experience.

Moreover, 63 percent of postings indicating a desired educational attainment level were open to workers with an associate's degree or less. The high proportion of positions requiring limited education and experience combined with the steady employment growth make health care occupations a worthwhile prospect for many workers.

Educational Attainment
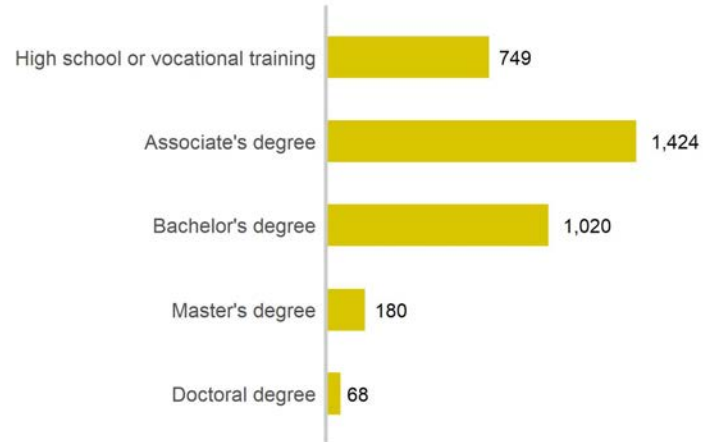
High school or vocational training	749
Associate's degree	1,424
Bachelor's degree	1,020
Master's degree	180
Doctoral degree	68

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

In-Demand Area of Study

- Nursing Science
- Physical Therapy/ Therapist
- Business Administration and Management, General
- Biology/ Biological Sciences, General
- Occupational Theraypy/Therapist

Experience Required

0 to 2 years	1,790
3 to 5 years	414
6 to 8 years	15
9+ years	29

Data: Burning Glass Technologies

Analysis: Workforce Intelligence Network

WIN WORKFORCE INTELLIGENCE NETWORK

Health Care In-Demand Skills

The occupations in the Health Care group require a wide array of high-level technical skills necessary to effectively provide care. These skills range from technical medical expertise such as CPR, surgery and disease knowledge to interpersonal and organizational skills like patient care and case management. Employers hiring Health Care workers often post complementary employability skills seeking effective communicators and planners.

Technical In-Demand Skills

- Patient Care
- Treatment Planning
- Teaching/ Supervisory Skills
- Patient Monitoring/ Evaluation/ Preparation
- Cardiopulmonary Resuscitation (CPR)

Foundational In-Demand Skills

- Communication Skills
- Mentoring/ Collaboration/ Relationship Building
- Planning/ Research
- Quality Assurance and Control
- Computer Skills

Job Type

- Full-time: 53.4%
- Part-time: 7.2%
- Temporary: 10.2%

Certifications Required

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

WIN WORKFORCE INTELLIGENCE NETWORK

Health Care
Wages and Advertised Salary

Salary data, where advertised, reflects the number of well-paying top jobs. Of the 4,753 postings, only 308 specified a salary. The mean advertised salary was $74,000 annually, with 33 percent of postings offering below $50,000 and 67 percent above. The high salary levels, coupled with modest education and experience requirements for entry, provide promising opportunity. There is plenty of room for advancement in the field. Both Registered and Critical Care Nurses have strong wage opportunities, offering $33.22 hourly at the median and $40.42 at the 90th percentile.

Advertised Salary in Job Postings
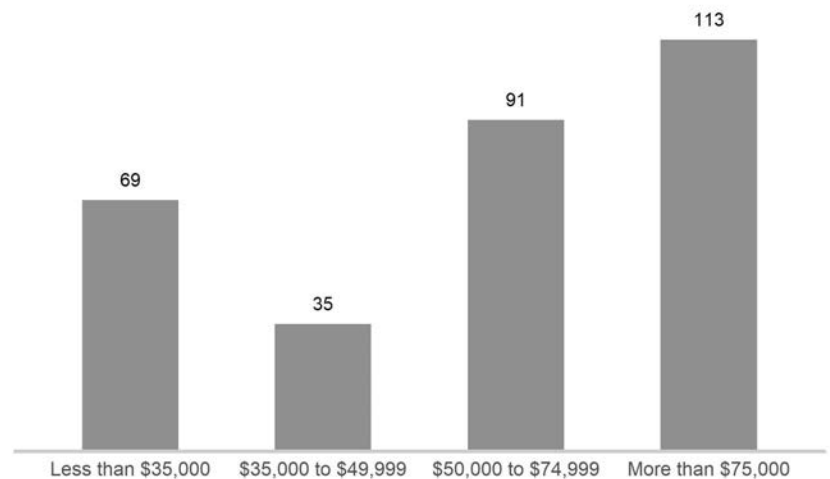
Quarter 4 2017

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	$25.58	$28.60	$33.22	$37.36	$40.42
31-1014	Nursing Assistants	$10.13	$11.96	$13.69	$15.41	$17.84
29-1141	Critical Care Nurses	$25.58	$28.60	$33.22	$37.36	$40.42
31-9092	Medical Assistants	$10.60	$12.28	$13.97	$16.21	$18.48
29-2012	Medical and Clinical Laboratory Technicians	$9.43	$13.56	$15.86	$18.10	$21.41
29-2071	Medical Records and Health Information Technicians	$12.24	$14.06	$17.33	$22.53	$28.01
29-1051	Pharmacists	$49.05	$52.74	$56.97	$61.14	$64.82
29-1123	Physical Therapists	$31.07	$36.50	$42.61	$47.96	$58.56
29-1069	Physicians and Surgeons, All Other	$21.55	$26.69	$72.89	$90.00	$136.29
29-2099	Health Technologists and Technicians, All Other	$12.61	$14.38	$18.36	$25.93	$30.44

Data: EMSI, BLS
Analysis: Workforce Intelligence Network

WIN WORKFORCE INTELLIGENCE NETWORK

Custom Occupation Group

WIN's Health Care occupation group includes jobs related to health care support and practitioners. The following occupations are used by WIN researchers to provide custom analysis: The Workforce Intelligence Network for Southeast Michigan should be cited any time the analysis, graphics, or custom occupation group from this report are used.

| SOC Code	Occupation	SOC Code	Occupation
29-1011	Chiropractors	29-2035	Magnetic Resonance Imaging Technologists
29-1021	Dentists, General		
29-1022	Oral and Maxillofacial Surgeons	29-2041	Emergency Medical Technicians and Paramedics
29-1023	Orthodontists		
29-1024	Prosthodontists	29-2051	Dietetic Technicians
29-1029	Dentists, All Other Specialists	29-2052	Pharmacy Technicians
29-1031	Dietitians and Nutritionists	29-2053	Psychiatric Technicians
29-1041	Optometrists	29-2054	Respiratory Therapy Technicians
29-1051	Pharmacists	29-2055	Surgical Technologists
29-1061	Anesthesiologists	29-2056	Veterinary Technologists and Technicians
29-1062	Family and General Practitioners	29-2057	Ophthalmic Medical Technicians
29-1063	Internists, General	29-2061	Licensed Practical and Licensed Vocational Nurses
29-1064	Obstetricians and Gynecologists		
29-1065	Pediatricians, General	29-2071	Medical Records and Health Information Technicians
29-1066	Psychiatrists		
29-1067	Surgeons	29-2081	Opticians, Dispensing
29-1069	Physicians and Surgeons, All Other	29-2091	Orthotists and Prosthetists
29-1071	Physician Assistants	29-2092	Hearing Aid Specialists
29-1081	Podiatrists	29-2099	Health Technologists and Technicians, All Other
29-1122	Occupational Therapists		
29-1123	Physical Therapists	29-9011	Occupational Health and Safety Specialists
29-1124	Radiation Therapists		
29-1125	Recreational Therapists	29-9012	Occupational Health and Safety Technicians
29-1126	Respiratory Therapists		
29-1127	Speech-Language Pathologists	29-9091	Athletic Trainers
29-1128	Exercise Physiologists	29-9092	Genetic Counselors
29-1129	Therapists, All Other	29-9099	Healthcare Practitioners and Technical Workers, All Other
29-1131	Veterinarians		
29-1141	Registered Nurses	31-1011	Home Health Aides
29-1151	Nurse Anesthetists	31-1013	Psychiatric Aides
29-1161	Nurse Midwives	31-1014	Nursing Assistants
29-1171	Nurse Practitioners	31-1015	Orderlies
29-1181	Audiologists	31-2011	Occupational Therapy Assistants
29-1199	Health Diagnosing and Treating Practitioners, All Other	31-2012	Occupational Therapy Aides
		31-2021	Physical Therapist Assistants
29-2011	Medical and Clinical Laboratory Technologists	31-2022	Physical Therapist Aides
		31-9011	Massage Therapists
29-2012	Medical and Clinical Laboratory Technicians	31-9091	Dental Assistants
		31-9092	Medical Assistants
29-2021	Dental Hygienists	31-9093	Medical Equipment Preparers
29-2031	Cardiovascular Technologists and Technicians	31-9094	Medical Transcriptionists
		31-9095	Pharmacy Aides
29-2032	Diagnostic Medical Sonographers	31-9096	Veterinary Assistants and Laboratory Animal Caretakers
29-2033	Nuclear Medicine Technologists		
29-2034	Radiologic Technologists	31-9097	Phlebotomists
		31-9099	Healthcare Support Workers, All Other

Information Technology Occupation Group

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.
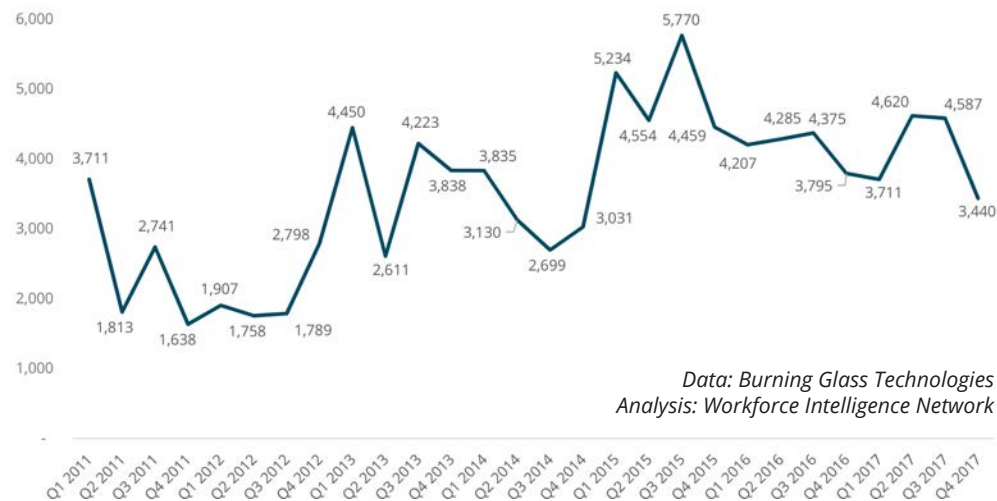
Job Posting Analysis

Online job ads for occupations related to IT decreased 25 percent to 3,440 during Q4 2017, compared to 4,587 postings during Q3 2017. Employer demand for IT occupations in Detroit last peaked at 5,770 postings in Q3 2015. Since Q4 2016, there has been a 9 percent decrease in online job postings.

Employment Analysis

Detroit employment in IT related fields has enjoyed consistent growth since 2010, the lowest point in the previous 16 years. To continue this pattern, 2017 reported 7,277 jobs in IT, adding about 106 jobs from 2016 levels.

Online Job Postings

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Employment Over Time
2017

Data: EMSI
Analysis: Workforce Intelligence Network

👥
Software Developers, Applications:
top in-demand job

25%
decrease in number of
online IT job postings

Information Technology
Top Posted Jobs
Quarter 4 2017

Job Title	Postings
Software Developers, Applications	1,033
Computer Systems Engineers/Architects	331
Computer Systems Analysts	311
Information Technology Project Managers	271
Business Intelligence Analysts	206
Information Security Analysts	177
Web Developers	167
Database Administrators	125
Network and Computer Systems Administrators	120
Computer Occupations, All Other	106
Computer User Support Specialists	101
Software Quality Assurance Engineers and Testers	99
Computer and Information Systems Managers	75
Computer Network Architects	72
Computer Programmers	60
Database Architects	42
Search Marketing Strategists	27
Data Warehousing Specialists	24
Computer and Information Research Scientists	21
Document Management Specialists	15

Analysis
The most in-demand occupation in the IT group in Q4 of 2017 continued to be Software Developers, Applications with 1,033 online job postings. Computer Systems Engineers/ Architects were the second most popular with 331 postings, followed by Computer Systems Analysts with 311 postings, and IT Project Mangers with 271 postings.

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

WIN WORKFORCE INTELLIGENCE NETWORK

Information Technology
Educational Attainment Required

Of the 2,362 IT job postings that specified a desired experience level during Q4 2017, 73 percent were available to workers with under five years of experience. Most of those postings request three to five years, perhaps reflecting the high number of openings for project managers. Entry level experience represents the second highest proportion of job ad criteria.

Educational requirements were less flexible: 86 percent of postings that reported minimum education require a bachelor's degree. The premium put on education over experience illustrates that workers willing to pursue the necessary education will find ample opportunity in IT-related fields.
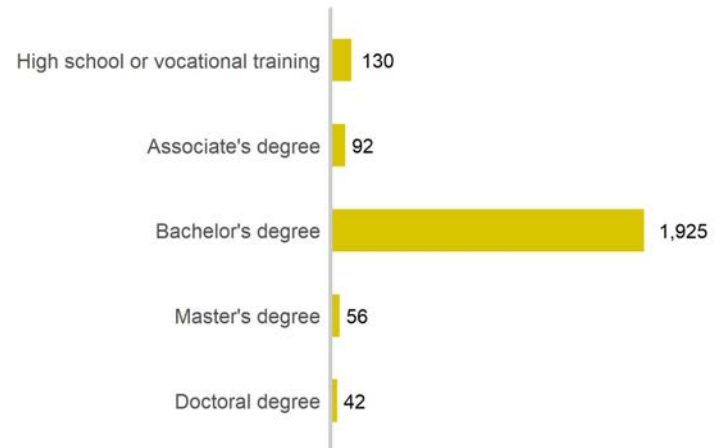
In-Demand Area of Study

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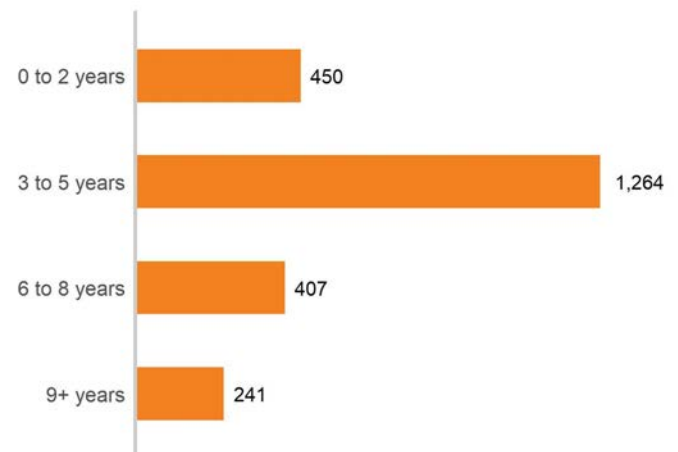
Educational Attainment

High school or vocational training	130
Associate's degree	92
Bachelor's degree	1,925
Master's degree	56
Doctoral degree	42

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Experience Required

0 to 2 years	450
3 to 5 years	1,264
6 to 8 years	407
9+ years	241

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Information Technology In-Demand Skills

IT occupations require highly technical software proficiency, reflecting the high-levels of education for entry. WIN region employers hiring during Q4 2017 sought prowess with specific applications like SQL, JAVA, and software development. These employers also sought candidates with the ability to effectively problem solve, conduct research, and communicate their solutions to clients.

Technical In-Demand Skills

- SQL
- Project Management
- Software Development
- JAVA/ JavaScript/ Oracle
- Information Systems

Foundational In-Demand Skills

- Communication Skills
- Problem Solving/ Research
- Writing
- Planning/ Creativity
- Troubleshooting

Job Type

- Full-time: 40.2%
- Part-time: 0.6%
- Temporary: 3.4%

Certifications Required

- Certified Information Systems Security Professional (CISSP)
- Cisco Certified Network Associate
- Project Management Certification (e.g. PMP)
- Security Clearance
- Cisco Certified Network Professional (CCNP)

WIN WORKFORCE INTELLIGENCE NETWORK

Information Technology Wages and Advertised Salary

Advertised salaries for IT occupations during Q4 2017 were typically above $75,000 per year, with 72 percent of postings in this category and a mean real-time salary of $96,000. The high salaries despite modest experience requirements makes IT a lucrative field in Detroit for those willing to pursue the necessary education for entry.

Advertised Salary in Job Postings
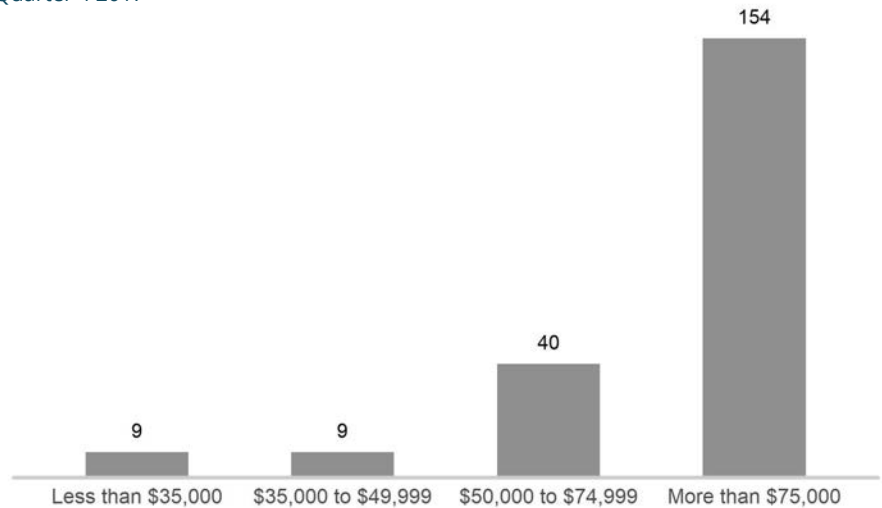
Quarter 4 2017

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	$27.06	$34.36	$44.72	$56.45	$68.02
15-1199	Computer Systems Engineers/Architects	$20.43	$26.97	$39.31	$50.06	$58.43
15-1121	Computer Systems Analysts	$26.96	$33.33	$42.18	$51.27	$61.77
15-1199	Information Technology Project Managers	$20.43	$26.97	$39.31	$50.06	$58.43
15-1199	Business Intelligence Analysts	$20.43	$26.97	$39.31	$50.06	$58.43
15-1122	Information Security Analysts	$24.48	$30.34	$40.30	$51.19	$62.50
15-1134	Web Developers	$20.76	$24.77	$29.90	$39.78	$47.21
15-1141	Database Administrators	$25.89	$32.95	$43.45	$52.74	$60.81
15-1142	Network and Computer Systems Administrators	$22.39	$28.43	$37.54	$46.61	$54.36
15-1199	Computer Occupations, All Other	$20.43	$26.97	$39.31	$50.06	$58.43

Data: EMSI, BLS
Analysis: Workforce Intelligence Network

WIN WORKFORCE INTELLIGENCE NETWORK

Custom Occupation Group

WIN's Information Technology (IT) occupation group looks at workers tasked to work with and develop programs, websites, and other computer system processes. The following occupations are used by WIN researchers to provide custom analysis: The Workforce Intelligence Network for Southeast Michigan should be cited any time the analysis, graphics, or custom occupation group from this report are used.

SOC Code	Occupation	SOC Code	Occupation
11-3021	Computer and Information Systems Managers	15-1134	Web Developers
15-1111	Computer and Information Research Scientists	15-1141	Database Administrators
		15-1142	Network and Computer Systems Administrators
15-1121	Computer Systems Analysts	15-1143	Computer Network Architects
15-1122	Information Security Analysts	15-1151	Computer User Support Specialists
15-1131	Computer Programmers	15-1152	Computer Network Support Specialists
15-1132	Software Developers, Applications	15-1199	Computer Occupations, All Other
15-1133	Software Developers, Systems Software		

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 Skilled Trades decreased by a substantial 38.2 percent to 403 postings during Q4 2017, following relatively flat posting performance throughout 2016. Compared to Q4 2016, Skilled Trades occupation job ads are down 14 percent (57 postings).

Employment Analysis

Employment in Skilled Trades declined steeply between 2001 and 2009, but has seen some improvement since the Recession low of 4,469 employed workers. Employment levels recently have been declining slightly, with only 5,841 workers in Skilled Trades during 2017 compared to the 5,866 workers last year

Online Job Postings
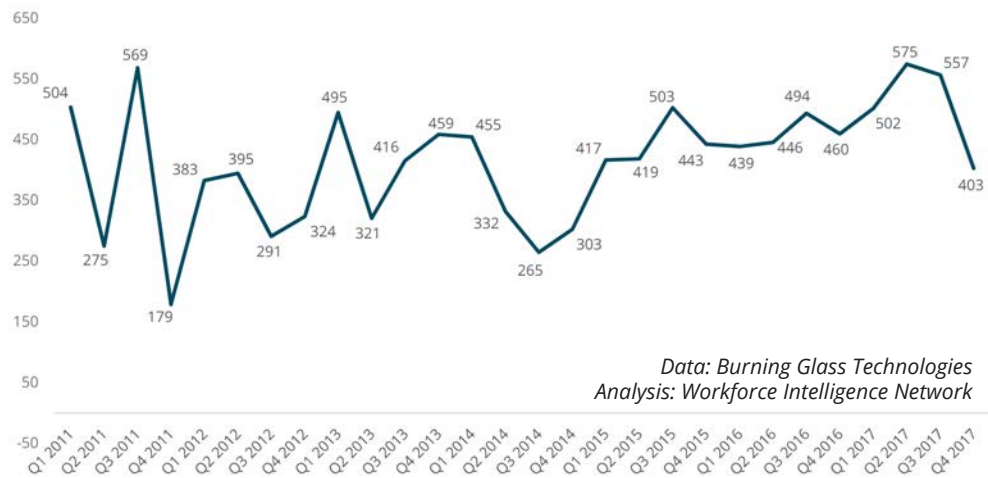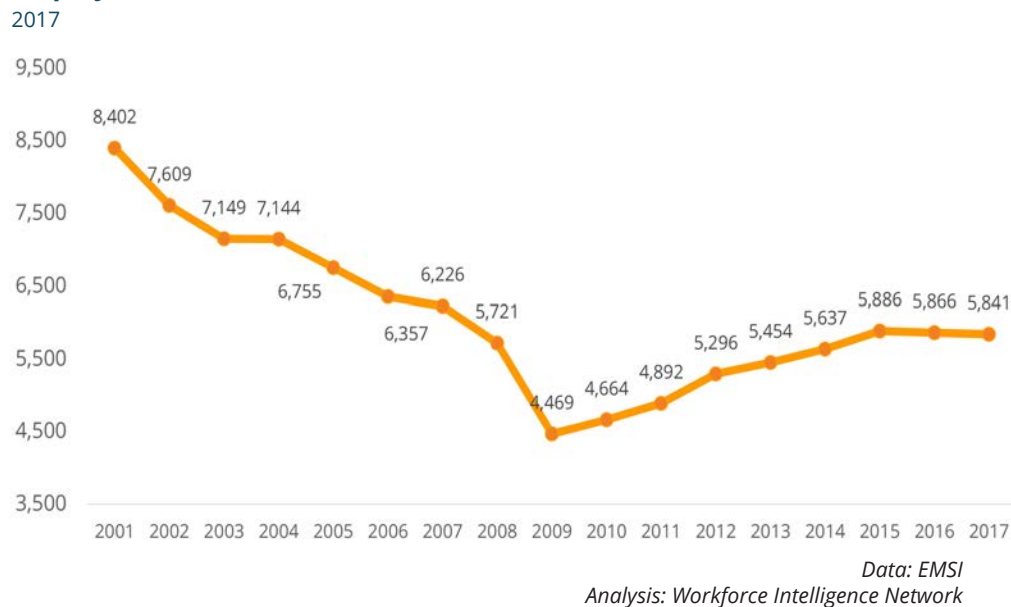
Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Employment Over Time
2017

Data: EMSI
Analysis: Workforce Intelligence Network

Skilled Trades & Technicians
Top Jobs Posted
Quarter 4 2017

Occupation	Postings
First-Line Supervisors of Production and Operating Workers	82
Electronics Engineering Technicians	41
Inspectors, Testers, Sorters, Samplers, and Weighers	40
Production Workers, All Other	39
Welders, Cutters, and Welder Fitters	26
Machinists	22
Computer-Controlled Machine Tool Operators, Metal and Plastic	16
Manufacturing Production Technicians	14
Civil Engineering Technicians	12
Tool and Die Makers	12
Stationary Engineers and Boiler Operators	10
Chemical Equipment Operators and Tenders	8
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	6
Water and Wastewater Treatment Plant and System Operators	6
Layout Workers, Metal and Plastic	5
Meat, Poultry, and Fish Cutters and Trimmers	5
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	4
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	4
Manufacturing Engineering Technologists	4
Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	3

Analysis

In Q4 2017, the most in-demand Skilled Trades Occupation was First-Line Supervisors of Production and Operating Workers, with 82 postings. With about half as many postings, Electronic Engineering Technicians were also sought after. Inspectors, Testers, Sorters, Samplers, and Weighers, Production Workers, and Tool and Die Makers round out the top five.

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

WIN WORKFORCE INTELLIGENCE NETWORK

Skilled Trades & Technicians
Educational Attainment Required

Desired experience levels vary greatly among skilled trades occupations. The most requested level was zero to two years, with 43 percent of specified experience in this range, but experienced level positions represent another forty percent. The rest would like very experienced workers.

Education requirements are not as variable. A majority (60 percent) of job postings required only a high school diploma or, more commonly, vocational training. The low educational requirements in the Skilled Trades occupations make many positions accessible to entry-level workers willing to put time into on the job training and practice.

Educational Attainment
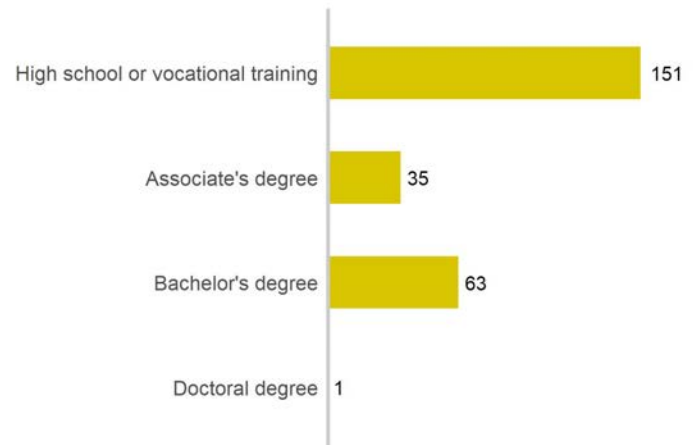
High school or vocational training	151
Associate's degree	35
Bachelor's degree	63
Doctoral degree	1

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

In-Demand Area of Study
- Engineering , General
- Electrical and Electronic Engineering Technologies/ Technicians, Other
- Mechanical Engineering
- Business Administration and Management, General
- Physics

Experience Required
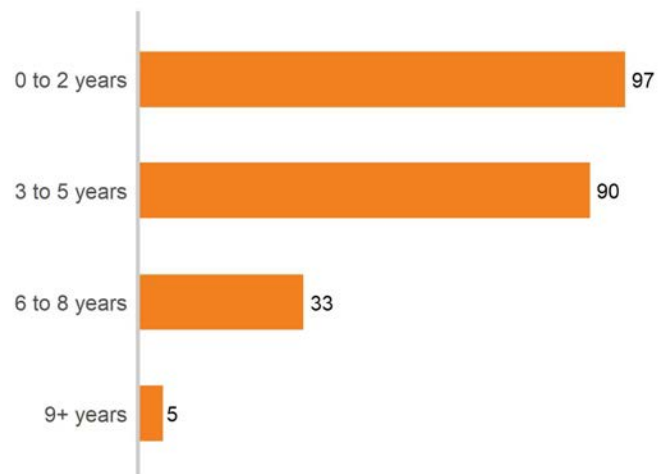
0 to 2 years	97
3 to 5 years	90
6 to 8 years	33
9+ years	5

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

WIN WORKFORCE INTELLIGENCE NETWORK

Skilled Trades & Technicians In-Demand Skills

Skilled Trades occupations mainly require manufacturing focused skills and specific tool proficiencies. Employer demand for skills such as CNC milling and repair abilities showcases the technical nature of these positions. Workers will also need more general skills like physical ability, mathematics and effective communication to succeed in the workplace.

Technical In-Demand Skills

- Computer Numerical Control (CNC)
- Repair/ Inspection
- Supervisory Skills
- Microsoft Office
- Machining, Welding

Foundational In-Demand Skills

- Communication Skills
- Troubleshooting
- Ability to Perform Physical Labor
- Mathematics
- Preventative Maintenance

Job Type

- Full-time: 49.9%
- Part-time: 2.0%
- Temporary: 4.0%

Certifications Required

- Boiler Operator License
- Civil Service Certification
- Forklift Operator Certification
- Air Brake Certified
- Certified A+ Technician

WIN | WORKFORCE INTELLIGENCE NETWORK

Skilled Trades & Technicians Wages and Advertised Salary

Skilled Trades are among the lowest paid occupations across southeast Michigan. Thirty-eight percent of advertised salaries in the Skilled Trades in Q4 2017 were below $35,000 per year. The mean advertised salary was $54,000 annually, although this may reflect the high number of entry-level jobs represented in online job postings. Wage data from the BLS, shown below, reports that nine of the top ten in-demand Skilled Trades jobs during Q4 2017 have median wages over $15 per hour with strong growth potential following additional experience.

Advertised Salary in Job Postings
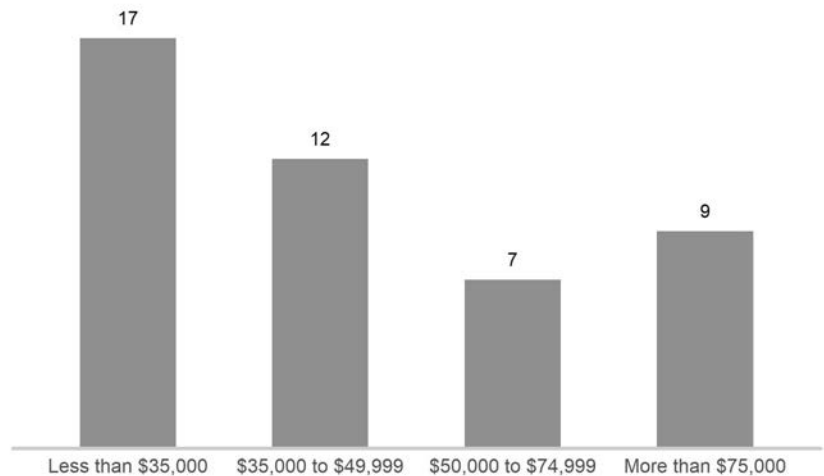
Quarter 4 2017

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	$18.63	$24.38	$32.23	$43.40	$50.79
17-3023	Electronics Engineering Technicians	$19.70	$26.34	$31.83	$36.11	$40.01
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	$9.29	$11.09	$15.92	$23.68	$30.09
51-9199	Production Workers, All Other	$10.98	$15.54	$17.58	$19.96	$23.30
51-4121	Welders, Cutters, and Welder Fitters	$14.54	$16.53	$18.99	$24.36	$33.77
51-4041	Machinists	$13.60	$16.39	$20.39	$24.93	$30.41
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	$10.26	$11.53	$13.39	$16.75	$24.14
17-3029	Manufacturing Production Technicians	$15.50	$18.17	$26.95	$36.58	$45.51
17-3022	Civil Engineering Technicians	$14.49	$16.98	$21.54	$26.54	$30.32
51-4111	Tool and Die Makers	$18.64	$23.88	$30.23	$34.97	$37.76

Data: EMSI, BLS
Analysis: Workforce Intelligence Network

Custom Occupation Group

The Skilled Trades Occupations group encompasses many workers within technical fields and manufactruing. With the automotive industry presence in Southeast Michigan, the Skilled Trades occupation group covers many local workers. The following occupations are used by WIN researchers to provide custom analysis: The Workforce Intelligence Network for Southeast Michigan should be cited any time the analysis, graphics, or custom occupation group from this report are used.

SOC Code	Occupation
11-3051	Industrial Production Managers
17-3021	Aerospace Engineering and Operations Technicians
17-3022	Civil Engineering Technicians
17-3023	Electrical and Electronics Engineering Technicians
17-3024	Electro-Mechanical Technicians
17-3025	Environmental Engineering Technicians
17-3026	Industrial Engineering Technicians
17-3027	Mechanical Engineering Technicians
17-3029	Engineering Technicians, Except Drafters, All Other
17-3031	Surveying and Mapping Technicians
51-1011	First-Line Supervisors of Production and Operating Workers
51-2021	Coil Winders, Tapers, and Finishers
51-2041	Structural Metal Fabricators and Fitters
51-2091	Fiberglass Laminators and Fabricators
51-3099	Food Processing Workers, All Other
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic
51-4012	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic

SOC Code	Occupation
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic
51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic
51-4041	Machinists
51-4051	Metal-Refining Furnace Operators and Tenders
51-4052	Pourers and Casters, Metal
51-4061	Model Makers, Metal and Plastic
51-4062	Patternmakers, Metal and Plastic
51-4071	Foundry Mold and Coremakers
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic
51-4111	Tool and Die Makers
51-4121	Welders, Cutters, Solderers, and Brazers
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic
51-4192	Layout Workers, Metal and Plastic
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic
51-4194	Tool Grinders, Filers, and Sharpeners
51-4199	Metal Workers and Plastic Workers, All Other
51-5111	Prepress Technicians and Workers
51-9199	Production Workers, All Other

Annual Labor Market Data

	2010 Annual	2011 Annual	2012 Annual	2013 Annual	2014 Annual	2015 Annual	2016 Annual	2017 Annual	Change from 2016	Percent Change from 2016
Labor Force	276,884	261,343	257,730	256,910	249,786	241,774	245,014	**246,380**	1,366	0.6%
Employment	208,289	206,226	208,119	208,352	209,599	213,234	218,295	**223,628**	5,333	2.4%
Unemployment	68,596	55,117	49,611	48,558	40,187	28,541	26,720	**22,752**	-3,967	-14.8%
Unemployment Rate	24.8%	21.1%	19.2%	18.9%	16.1%	11.8%	10.9%	**9.2%**	-1.7%	na

Note: Monthly data averaged by year
Data: Bureau of Labor Statistics

Quarterly Labor Market Data

	4th Quarter 2016	1st Quarter 2017	2nd Quarter 2017	3rd Quarter 2017	4th Quarter 2017	Change from 3rd Quarter 2017	Percent Change from 3rd Quarter 2017	One-Year Change from 4th Quarter 2016	One-Year Percent Change from 4th Quarter 2016
Labor Force	245,517	249,292	243,107	248,164	244,959	-3,205	-1.3%	-558	-0.2%
Employment	219,797	220,501	223,862	224,486	224,102	-384	-0.2%	4,305	2.0%
Unemployment	25,720	28,791	19,245	23,678	20,857	2,821	14.7%	-4,863	-18.9%
Unemployment Rate	10.5%	11.5%	7.9%	9.5%	8.5%	1.0%	na	-2.0%	na

Note: Monthly data averaged by quarter
Data: Bureau of Labor Statistics
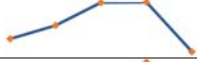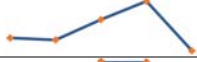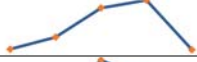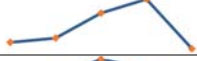
Monthly Labor Market Data

	October 2016	November 2016	December 2016	January 2017	February 2017	March 2017	April 2017	May 2017	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017	December 2017
Labor Force	249,306	243,534	243,710	249,773	250,332	247,771	243,532	242,920	242,869	246,828	248,106	249,558	246,422	243,780	244,674
Employment	219,660	219,848	219,883	218,947	220,348	222,209	223,133	224,634	223,820	223,110	224,713	225,636	224,223	224,761	223,322
Unemployment	29,646	23,686	23,827	30,826	29,984	25,562	20,399	18,286	19,049	23,718	23,393	23,922	22,199	19,019	21,352
Unemployment Rate	11.9%	9.7%	9.8%	12.3%	12.0%	10.3%	8.4%	7.5%	7.8%	9.6%	9.4%	9.6%	9.0%	7.8%	8.7%

* Note: Data shown for 15 most recently available months
Data: Bureau of Labor Statistics

City of Detroit Job Posting Data by Occupation Group* Over Time

	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Change Over Time	Annual Change Q4 2016-Q4 2017	Quarter Growth Q3 2017-Q4 2017
Total Postings	27,288	28,238	31,757	32,332	26,062		-4.5%	-19.4%
Agriculture	358	386	434	435	331		-7.5%	-23.9%
Business & finance	2,310	2,276	2,613	2,919	2,098		-9.2%	-28.1%
Construction	253	235	304	303	269		6.3%	-11.2%
Customer service	4,888	5,044	5,422	5,524	4,882		-0.1%	-11.6%
Education	538	491	629	575	523		-2.8%	-9.0%
Energy	79	123	98	108	93		17.7%	-13.9%
Engineers & designers	977	1,001	1,140	1,218	942		-3.6%	-22.7%
Health care	5,131	5,702	6,287	5,977	4,753		-7.4%	-20.5%
Information technology	3,795	3,711	4,620	4,587	3,440		-9.4%	-25.0%
Skilled trades & technicians	460	502	575	557	403		-12.4%	-27.6%
Transportation, distribution, and logistics	1,541	1,339	1,495	1,739	1,710		11.0%	-1.7%

*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.

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Total Job Postings: WIN Partnership

	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Share of Q4 2017 Total	Change Over Time	Annual Change Q4 2016-Q4 2017	Quarter Growth Q3 2017-Q4 2017
WIN-Region Total	141,413	160,628	161,940	159,191	129,634	100.0%		-8.3%	-18.6%
Detroit	27,288	28,238	31,757	32,332	26,062	20.1%		-4.5%	-19.4%
Genesee & Shiawassee	6,261	7,102	6,463	6,468	5,960	4.6%		-4.8%	-7.9%
Hillsdale & Lenawee	1,848	1,952	2,056	3,261	2,362	1.8%		27.8%	-27.6%
Jackson	2,634	3,432	3,260	3,311	3,141	2.4%		19.2%	-5.1%
Livingston	2,545	2,692	2,539	2,688	2,565	2.0%		0.8%	-4.6%
Macomb	14,694	18,850	17,431	14,601	12,026	9.3%		-18.2%	-17.6%
Monroe	2,940	2,494	2,512	2,541	2,066	1.6%		-29.7%	-18.7%
Oakland	40,027	48,075	47,454	46,790	38,283	29.5%		-4.4%	-18.2%
St. Clair	2,163	2,297	2,210	2,344	1,912	1.5%		-11.6%	-18.4%
Thumb Area	1,608	1,919	1,871	2,004	1,720	1.3%		7.0%	-14.2%
Washtenaw	11,328	12,912	12,921	14,002	10,892	8.4%		-3.8%	-22.2%
Wayne	55,365	58,903	63,223	61,181	48,707	37.6%		-12.0%	-20.4%
Outer Wayne	28,077	30,665	31,466	28,849	22,645	17.5%		-19.3%	-21.5%
Prosperity Region 6	10,032	11,318	10,544	10,816	9,592	7.4%		-4.4%	-11.3%
Prosperity Region 9	21,295	23,482	23,288	25,803	21,026	16.2%		-1.3%	-18.5%
Prosperity Region 10	110,086	125,828	128,108	122,572	99,016	76.4%		-10.1%	-19.2%

Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

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