


2014 Cluster Workforce Updates *Information Technology*

Bureau of Labor Market Information and Strategic Initiatives



Michigan Bureau of Labor Market Information and Strategic Initiatives

September 2014

Introduction

Produced through a partnership between the Bureau of Labor Market Information and Strategic Initiatives (LMISI) and the Workforce Development Agency (WDA), the 2014 Cluster Workforce Updates are intended to revise the key occupation tables found in the [Cluster Workforce Analysis](#) publications released in January 2013.

Key occupations include job titles that show a favorable mix of employment indicators as measured by LMISI and that were identified by the WDA Industry Talent Directors as being important to their respective clusters today and in the future.



The Information Technology and Media Cluster includes industries like *Computer systems design, Telecommunications, Software publishers, Marketing consulting services, and Data processing and hosting*. While many of the key occupations identified in this report are concentrated in the industries within the cluster, they are also found throughout the economy in virtually all industries.

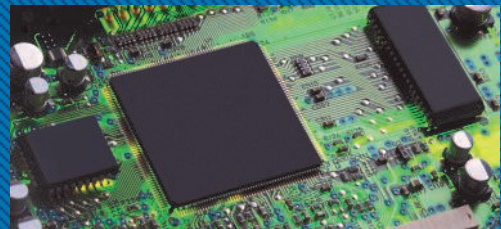
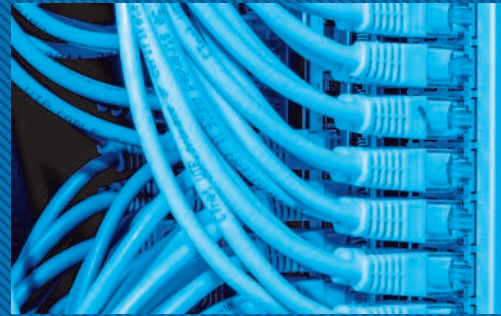
With an emphasis on occupations, this report provides an analysis of important indicators, including employment, earnings, education and training requirements, and real-time and projected demand. For additional demographic or labor market information and resources, please visit our website at www.michigan.gov/lmi

The IT Cluster

- Because many occupations in the Information Technology Cluster are scattered across a diverse range of firms and industries, they are essential to Michigan's workforce. Occupations within the cluster are expected to show an abundance of job openings over the coming years, led by *Customer service representatives* with 2,334 annual openings. As a whole, job titles in the IT Cluster are estimated to grow 13.7 percent between 2010 and 2020.
- Due to the highly-skilled nature of jobs in the IT Cluster, many of these occupations tend to pay better than the Michigan median wage of \$16.67 per hour. Specifically, *Computer software engineers (Systems software or Applications)* have median hourly wages of \$41 and \$36, respectively, placing them among the highest paid non-management positions within the cluster.
- Most key occupations within the IT Cluster generally require higher education and specialized skills. All but three of the cluster's high-paying positions require a bachelor's degree.
- Because many of its occupations require specific education, knowledge and skills, there is often high demand for workers within the cluster. This is reflected in a significant number of current IT-related job advertisements. According to The Conference Board's Help Wanted Online database, *Computer systems analysts* were in high demand with over 2,200 job advertisements in Michigan, a strong showing even relative to the occupation's high employment level of 14,000 in 2013. *Computer software engineers, applications* and *Computer user support specialists* were also highly sought after by employers, with over 1,800 and 1,600 ads, respectively.

“Because many of its occupations require specific education, knowledge and skills, there is often high demand for workers within the cluster.”

- Even though IT occupations are generally concentrated in *Communications* and *Professional and business services*, the prevalence of technology in almost all facets of the economy drives demand for the cluster's occupations in other industries as well. For example, IT-related jobs can be readily found in industries such as *Manufacturing, Finance and insurance, and Hospitals*.



INFORMATION TECHNOLOGY

OUTLOOK

There are currently 91,200 jobs in the IT Cluster. The cluster is expected to grow 13.7 percent between 2010 and 2020.

Key Occupations in the Information Technology Cluster

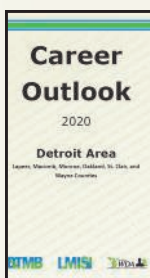
Occupation	Total Michigan Employment	Employment in Cluster	Median Wage	Total Annual Openings	Real-Time Demand	Education or Training Required
Customer Service Representatives	77,850	12,100	\$14.59	2,334	3,641	High school diploma or equivalent
Computer User Support Specialists	19,630	6,740	\$20.17	751	1,632	Some college, no degree
Computer Software Engineers, Applications	14,580	6,670	\$36.81	346	1,817	Bachelor's degree
Computer Systems Analysts	14,130	6,640	\$36.69	478	2,220	Bachelor's degree
Network and Computer Systems Administrators	10,030	3,600	\$34.16	315	1,196	Bachelor's degree
Computer Software Engineers, Systems Software	9,410	5,450	\$41.54	310	424	Bachelor's degree
Computer Programmers	7,920	4,270	\$32.62	329	632	Bachelor's degree
Computer and Information Systems Managers	7,910	2,370	\$47.77	199	411	Bachelor's degree
Telecommunications Equipment Installers and Repairers, Except Line Installers	5,110	3,970	\$22.50	108	378	Postsecondary non-degree award
Database Administrators	2,820	690	\$35.76	104	337	Bachelor's degree
Web Developers	2,400	780	\$26.29	164	1,236	Associate's degree

Source: Bureau of Labor Market Information and Strategic Initiatives / The Conference Board Help Wanted Online®

What's New from LMISI?

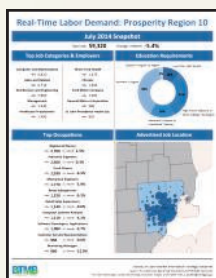
The *2014 Cluster Workforce Updates* are just one example of the many publications by the Bureau of Labor Market Information and Strategic Initiatives. Serving a diverse group of customers, our products range from workforce data to customized products and publications. Highlighted below are some of our more recent products. These and more can be found on our website at: www.michigan.gov/lmi.

Regional Career Outlook Brochures (2010 - 2020)



Published for Michigan's 18 Economic Forecast Regions (EFRs), these Career Outlook Brochures use our occupational long-term forecasts to list the top 15 to 20 occupations in the region based on a variety of factors. The lists provided for each region are based on education, annual openings, and real-time demand using the data series from The Conference Board Help Wanted OnLine® (HWOL).

Regional Prosperity Initiative: Real-Time Labor Demand Snapshots



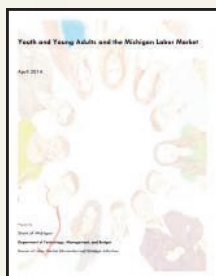
Published for the State's 10 Prosperity Regions, these monthly reports use The Conference Board Help Wanted OnLine® (HWOL) Data Series to provide a high-level overview of in-demand occupations, top advertising employers, education and training requirements, and the location of advertised vacancies for each of Michigan's 10 Prosperity Regions.

Michigan Economic and Workforce Indicators and Insights—Summer 2014



These profiles provide labor market information to support the Regional Prosperity Initiative. Included is information and analysis on the topics of population and demographics, labor force, employment, and unemployment, commuting patterns, industry employment and job trends, occupational employment and wages, and occupational demand, both real-time and forecasted.

Youth and Young Adults and the Michigan Labor Market



This study examines the important topic of teens and young adults in the labor market. This report provides workforce development professionals with timely, relevant, and accurate information on subjects including: demographics, labor force, and unemployment; industry and occupational employment; educational attainment and job market success; migration of youth; and employment and skill outlook.



State of Michigan

Department of Technology, Management, and Budget
Bureau of Labor Market Information and Strategic Initiatives

Detroit Office

Cadillac Place
3032 West Grand Blvd. Suite 9-100
Detroit MI 48202
Phone: (313) 456-3100

Lansing Office

Victor Office Center
201 North Washington Square
Lansing, MI 48913
Phone: (517) 241-9857

September 2014