

2014 Cluster Workforce Updates *Manufacturing*

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 Manufacturing Cluster includes industries like *Motor vehicle parts manufacturing*, *Motor vehicle manufacturing*, *Machinery manufacturing*, *Plastics product manufacturing*, and *Machine shops*. The key occupations identified in this report are heavily concentrated in these and other industries within the cluster.

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 Manufacturing Cluster

- Due to its strong ties to the automobile industry, the Manufacturing Cluster is of particular importance to the Michigan labor market. Many of the cluster's key occupations are primarily employed directly within the cluster, and therefore, closely tied to the state's economic performance.
- Many occupations in the cluster are projected to have a significant number of openings each year due to both the need to replace existing workers and economic growth. Four of the cluster's key occupations are expected to exceed Michigan's average growth of 8.5 percent between 2010 and 2020.
- Ten of the Manufacturing Cluster's fifteen key occupations earn a median wage of over \$15 per hour. *Industrial engineers* have the highest wages among key occupations, earning a median over \$37 per hour.
- There are today and will continue to be full-time, well-paying employment opportunities in the cluster's middle skills occupations, defined as those which require more than a high school diploma but less than a four-year degree.
- According to The Conference Board's Help Wanted Online database, *Industrial engineers* and *Supervisors / managers* are responsible for the largest share of the cluster's online advertised vacancies. However, *Computer-controlled machine tool operators*, *Helpers-production workers*, and *Welders, cutters, solderers, and brazers* show strong real-time demand relative to their total employment. Paired with expected long-term job growth, these occupations have an especially bright outlook.

“Ten of the cluster's fifteen key occupations earn a median wage of over \$15 per hour.”

- The Manufacturing Cluster continues to evolve, today employing a different mix of occupations than in the past. This trend will continue. Increased technology and other factors will cause an increased share of Professional, Scientific and Engineering occupations to be employed in the cluster.



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OUTLOOK

There are currently 554,200 jobs in the Manufacturing Cluster. The cluster is expected to decline 1.5 percent between 2010 and 2020.

Key Occupations in the Manufacturing Cluster

| Occupation | Total Michigan Employment | Employment in Cluster | Median Wage | Total Annual Openings | Real-Time Demand | Education or Training Required |
|--|---------------------------|-----------------------|-------------|-----------------------|------------------|-----------------------------------|
| Team Assemblers | 87,700 | 59,290 | \$15.96 | 1,049 | 203 | High school diploma or equivalent |
| Machinists | 27,570 | 22,770 | \$18.62 | 539 | 637 | High school diploma or equivalent |
| Industrial Engineers | 24,430 | 13,990 | \$37.17 | 636 | 3,973 | Bachelor's degree |
| First-Line Supervisors/Managers of Production and Operating Workers | 24,410 | 16,860 | \$27.21 | 299 | 2,251 | Postsecondary non-degree award |
| Inspectors, Testers, Sorters, Samplers, and Weighers | 23,420 | 14,700 | \$16.14 | 571 | 354 | High school diploma or equivalent |
| Helpers--Production Workers | 18,590 | 10,340 | \$12.09 | 385 | 832 | Less than high school |
| Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic | 16,080 | 13,420 | \$14.80 | 109 | 145 | High school diploma or equivalent |
| Assemblers and Fabricators, All Other | 15,650 | 13,300 | \$13.01 | 631 | 126 | High school diploma or equivalent |
| Tool and Die Makers | 13,340 | 12,850 | \$24.11 | 55 | 156 | High school diploma or equivalent |
| Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic | 11,200 | 10,170 | \$12.77 | 183 | 150 | High school diploma or equivalent |
| Welders, Cutters, Solderers, and Brazers | 10,770 | 7,440 | \$16.56 | 350 | 462 | High school diploma or equivalent |
| Production Workers, All Other | 10,260 | 6,330 | \$14.87 | 774 | 90 | High school diploma or equivalent |
| Computer-Controlled Machine Tool Operators, Metal and Plastic | 9,270 | 8,840 | \$15.69 | 297 | 430 | High school diploma or equivalent |
| Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic | 5,990 | 5,680 | \$16.51 | 66 | 9 | High school diploma or equivalent |
| Grinding, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic | 3,450 | 3,240 | \$16.37 | 57 | 37 | High school diploma or equivalent |

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

What's New from LMISI?

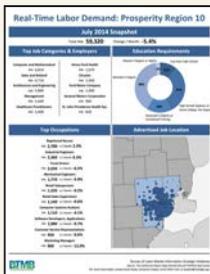
The *2014 Cluster Workforce Updates* are just one example of the many publications by the Bureau of Labor Market Information and Strategic Initiatives. Serving a diverse group of customers, our products range from workforce data to customized products and publications. Highlighted below are some of our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

Regional Career Outlook Brochures (2010 - 2020)



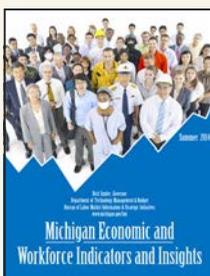
Published for Michigan's 18 Economic Forecast Regions (EFRs), these Career Outlook Brochures use our occupational long-term forecasts to list the top 15 to 20 occupations in the region based on a variety of factors. The lists provided for each region are based on education, annual openings, and real-time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

Regional Prosperity Initiative: Real-Time Labor Demand Snapshots



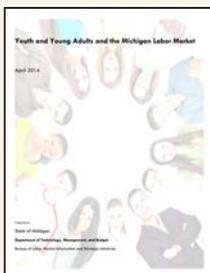
Published for the State's 10 Prosperity Regions, these monthly reports use The Conference Board Help Wanted OnLine® (HWOL) Data Series to provide a high-level overview of in-demand occupations, top advertising employers, education and training requirements, and the location of advertised vacancies for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



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