Prepared by:

State of Michigan

Department of Technology, Management and Budget

Bureau of Labor Market Information and Strategic Initiatives

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Dear Colleagues:

As our official unemployment rate continues to improve, we recognize that there are many people who continue to struggle finding employment. I hope that by drilling down into the data we are able to begin identifying and reaching out to this population to help reconnect them to jobs. This will be challenging. We know that many of these people do not have or have not retained the skills, knowledge, and abilities required to meet current demand. Others face significant barriers to employment. It will be necessary to inventory the current skills of this population and compare those to indemand skills, with an aim to bridge gaps. It will also be important to work with employers to eliminate any barriers, real or perceived, to opportunities. Finally the talent system will have to step up to create new and seamless pathways for our customers.

Please use the following report as a starting point for better understanding of this population of Michiganders and to take action in filling the many skilled jobs available today.

Respectfully,

Christine Quinn, Director Workforce Development Agency

MICHIGAN'S LONG-TERM UNEMPLOYED

State of Michigan

Department of Technology, Management and Budget

Bureau of Labor Market Information and Strategic Initiatives

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Executive Summary

- Today, nearly one in three of the unemployed have been looking for work for 27 weeks or more in Michigan. While this is under levels registered during the Great Recession, it is quite elevated from 2000 levels, when only 1 in 20 of the unemployed were long-term unemployed.
- Michigan and the U.S. have displayed relatively similar trends over the past fifteen years in the share of unemployed that are long-term unemployed. A major difference between the two is in the gender distribution of the longterm unemployed, as in Michigan men make up nearly two thirds, while at a national level men comprise just over half.
- Multiple occupational groups are more associated with long-term unemployment including Management, business, and financial occupations, Production occupations, and Office and administrative support occupations.
- Demand in each occupational group is present, both today and in the future. However, in order for long-term unemployed individuals to turn an opportunity into a job they will need to be equipped with the necessary skills, knowledge, and education each occupational group requires.

Box 1: Long-Term Unemployed Key Findings			
Number of Unemployed	2006	2015	
Unemployed, MI	353,000	283,600	$\mathbf{\Psi}$
Long-Term Unemployed, MI	75,000	85,000	♠
Long-Term Share of Total, MI	21.2%	30.0%	♠
Unemployed, U.S.	7,009,000	8,787,000	♠
Long-Term Unemployed, U.S.	1,237,000	2,646,000	♠
Long-Term Share of Total, U.S.	17.6%	30.1%	♠
Average Duration of Unemployment, Weeks	2006	2015	
Michigan	19.0	31.7	♠
U.S.	17.0	31.5	♠
Share of Long-Term Unemployed	2006	2015	
Men, MI	53.3%	64.3%	♠
Women, MI	46.7%	35.7%	$\mathbf{\Psi}$
Men, U.S.	56.7%	53.0%	$\mathbf{\Psi}$
Women, U.S.	43.3%	47.0%	♠
Percent of Unemployed that are Long- Term Unemployed, U.S.	2006	2015	
Total	17.6%	30.1%	♠
Management, business, and financial	20.9%	34.4%	♠
Production	19.3%	33.0%	♠
Office and administrative support	19.2%	32.9%	♠
Installation, maintenance and repair	21.9%	32.4%	♠
Sales and related	16.6%	30.9%	♠
Transportation and material moving	17.4%	30.0%	♠
Professional and related	18.2%	29.6%	♠
Service	16.7%	29.3%	♠
Construction and extraction	12.6%	24.6%	↑

Introduction

Over the last 15 years, the number and composition of Michigan's unemployed has undergone radical changes. In 2000, the majority of unemployment in Michigan was frictional and short-term. At that time, less than 1 in 20 workers were out of work for 27 or more weeks. Workers left jobs with a confidence that they could find a better opportunity in a short time. Fast forward to today. Fifteen years and two recessions later, unemployment has become far more structural and lasting. Many unemployed individuals can no longer find work as readily. This is cause for significant concern. According to a body of research, those unemployed for 27 or more weeks face a number of alarming consequences, including:

- Lost income In the Great Recession, family incomes declined 40 percent or more for the majority of the long-term unemployed (Johnson and Feng, 2013).
- Lost benefits The Michigan Unemployment Insurance Agency (UIA) provides up to 20 weeks of unemployment insurance benefits for those unemployed through no fault of their own. However, the long-term unemployed, who have been out of work for 27 or more weeks, have already exhausted those benefits, and as a result do not have access to this temporary source of income while continuing their search for employment.
- Poverty A long-term unemployed worker was nearly twice as likely to be in poverty as a short-term unemployed worker (Nichols, 2012).
- Reemployment The long-term unemployed have a 20 to 40 percent lower probability of being employed in 1 to 2 years as opposed to the short-term unemployed (Krueger, Cramer, and Cho, 2014).
- Discrimination Researchers demonstrate clear evidence of a negative relationship between interview requests and duration of unemployment that significantly worsens after 26 weeks of unemployment. Specifically, after six months of unemployment the rate of interview requests drops by 8 percentage points. There is also evidence that discrimination against the long-term unemployed may occur even if a long-term unemployed individual's resume is superior to that of a short-term unemployed applicant (Ghayad, 2013).
- Skill depreciation Long-term unemployment is also associated with declining "human capital" and "social capital" or the depreciation of one's productive skills and business network as the unemployment spell continues (Nichols, Mitchell, and Linder, 2013).
- Discouragement As unemployment persists, workers may become more and more discouraged which then may lead the unemployed individual to become less intensive in their job search (Krueger, Cramer, and Cho, 2014).

These challenges and others make the long-term unemployed an especially difficult to serve population with significant barriers to reemployment. This study will examine the nature of long-term unemployment in the state's labor market and will explore the occupational categories that are associated with longer spells of joblessness. Finally, this study will seek to shed light on current and future labor demand, in order for long-term jobseekers to have a more targeted job search.

Methodology

This study uses the Bureau of Labor Statistics' (BLS) criteria to define an individual as unemployed, which states "people are classified as unemployed if they do not have a job, have actively looked for work in the prior 4 weeks, and are currently available for work." This study also uses the BLS definition of long-term unemployment, where an individual is defined as long-term unemployed if they are unemployed and have been "looking for work 27 weeks or more."

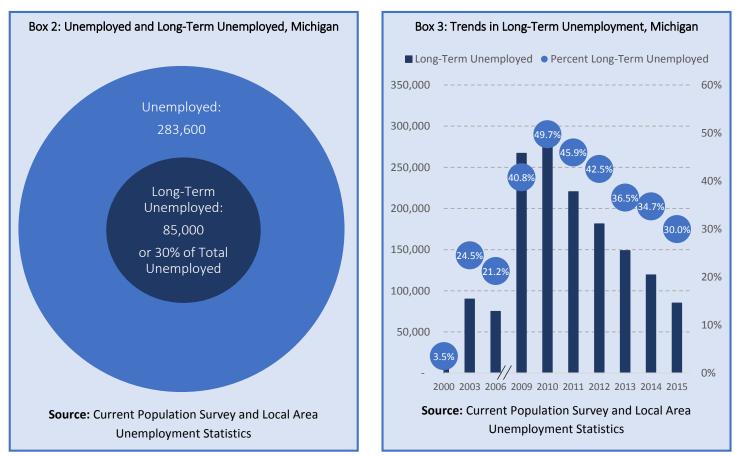
In order to estimate the number of long-term unemployed at a state and regional level this study combines data from the Current Population Survey (CPS), Local Area Unemployment Statistics (LAUS), and the Unemployment Insurance Agency (UIA). First, the CPS is used to estimate the number of individuals who have been unemployed for more than 26 weeks. Then, these data are combined with UIA's number of unemployment insurance benefit exhaustees and regional LAUS data on how often individuals stay unemployed in a certain area. Together, these produce robust estimates on a state and regional level.

Finally, in this study, unless otherwise noted, 2015 denotes the 12 month moving average from August 2014 to July 2015 in order to present the most current data possible.

Long-Term Unemployment: Number and Characteristics

According to the Bureau of Labor Statistics an individual is defined as being long-term unemployment if they are unemployed and have been "looking for work 27 weeks or more." This section will provide some general information about this group of jobseekers.

- In 2015, there were an estimated 283,600 unemployed individuals in the Michigan labor market. Of particular concern are the 85,000 individuals, representing 30 percent of the unemployed, who have been out of work for 27 weeks or more. Moreover, the data suggest when you are out of work for a long time, you are likely to be out of work for a very long time. Indeed, 3 in 4 of the state's long-term unemployed have been out of work for longer than a year. (Box 2)
- Despite being elevated today, long-term unemployment levels have recovered from historic highs recorded just after the Great Recession. In 2010, 293,000 individuals or half of all unemployed, were jobless for 27 or more weeks. Of them, 212,000 individuals (72 percent) were unemployed for longer than a year. (Box 3)
- However, long-term unemployment has yet to return to levels last seen before the Great Recession, despite other labor market indicators surpassing pre recessionary levels. For example, the unemployment rate is below 2006 levels (6.9 percent), while private sector jobs have recently surpassed their 2006 levels (3,661,200). However, the number of long-term unemployed in 2015 remains 13 percent higher than 2006, and the share of unemployed that are out of work 27 weeks or more is 9 percentage points higher.



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- Looking back even further, the unemployed are systematically different than in 2000. In that year, only 6,500 individuals (or 3.5 percent of the total unemployed) were out-of-work for 27 or more weeks and just 2,200 of them were unemployed for longer than a year.
- Nationally, the long-term unemployed tend to be older.
 In 2014, 44.6 percent of the unemployed 55 and older were long-term unemployed, over 8 percentage points higher than those aged from 25 to 54 (36.4 percent).
- Interestingly, the Great Recession had a greater impact on the length of joblessness for men in Michigan. In 2006, about 40,000 more men were counted as unemployed, yet the share of long-term unemployed was divided roughly equally between men and women. By 2010, two-thirds of the long-term unemployed were men. One explanation for this dramatic change is the overrepresentation of men in *Production* occupations. These job titles were especially hard-hit by job losses during the last two recessions and are today associated with a higher incidence of long-term unemployment.
- Another measure that helps to illuminate the current situation of the unemployed is the average duration of unemployment. In 2015, the average duration of unemployment in Michigan was 31.7 weeks, over five months longer than in 2000 when this measure stood at 9 weeks. (Box 4)
- In 2015, the share of long-term unemployed is essentially equal in the U.S. and Michigan, standing near 30 percent in both. While the two have followed similar trends over the past 15 years, one difference is Michigan's slightly elevated share of those unemployed for more than a year, measuring 72.1 percent in Michigan and 68.0 percent in the U.S.

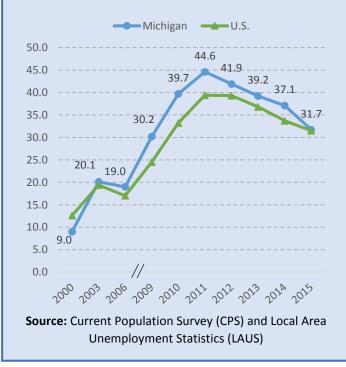
Box 4: Average Duration of Unemployment

A closely related measure that sheds light on the current situation of the unemployed is the average duration of unemployment. In 2015, the average spell of unemployment in Michigan lasted 31.7 weeks, over five months longer than in 2000 when this measure stood at 9 weeks.

Like other labor market variables, the significant rise in the average length of joblessness can be blamed at least in part on the structural changes in the labor market. These same factors explain why periods of unemployment are higher for men than for women. In Michigan, the average unemployed male in 2015 was unemployed for 40.1 weeks compared to 22.9 weeks for the average unemployed female.

Although slightly higher in Michigan since the 2001 recession, the state and the U.S. have followed similar trends in the average duration of unemployment. Notably, the small gap between Michigan and the U.S. had nearly vanished by 2015. The chart below summarizes these trends.

Figure: Average Duration of Unemployment (Weeks)



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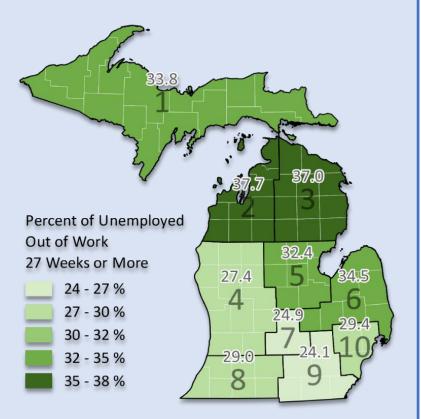
One stark difference between Michigan and the U.S. is the share of men in the ranks of the long-term unemployed.
 While in Michigan men account for almost two thirds of the long-term unemployed, nationally men only make up around half. This is likely due to the higher concentration of men in the hard-hit manufacturing industry and production occupations along with Michigan's overrepresentation of workers in production occupations.

Box 5: Long-Term Unemployed by Region

Understanding the geographic distribution of the long-term unemployed is useful for workforce and economic developers. While much of this report has a statewide focus, this analysis will highlight the number and share of long-term unemployed in Michigan's 10 Prosperity Regions ("Regions").

Statewide, the number of long-term unemployed measures 85,000 or 30 percent of total unemployment. Five regions report a higher share of long-term unemployed and five regions report a lower share. The regions with the highst share of jobless residents out-of-work for 27 or more weeks are Region 2 (37.7 percent), Region 3 (37.0 percent), and Region 6 (34.5 percent). The two lowest regions in this metric are Region 9 (24.1 percent), and Region 7 (24.9 percent). The map below summarizes these relationships.

It is no coincidence that the labor markets in Region 9 and Region 7 have been two of the better-performing labor markets since 2014. Both Regions fared better than most in the number of jobs lost during the Great Recession and both have since seen private sector job counts approach pre-recessionary levels. With relatively fewer individuals losing jobs during the recession and more returning to work since, the problem of long-term unemployed may be somewhat mitigated. In contrast, Region 2 and Region 3 both experienced large declines in jobs during the Great Recession and have had a slower labor market recovery since. In fact, Region 3 lost the largest share of jobs of any other region between 2006 and 2014, while during the recovery, a majority of jobs that returned to Region 2 were at Leisure and hospitality establishments.



Source: Current Population Survey and Local Area Unemployment Statistics

Long-Term Unemployment by Occupational Category

The previous section outlined the current number of and trends in long-term unemployment in Michigan. This section will examine both the amount of long-term unemployed in each occupational group and which occupational groups are correlated with higher shares of long-term unemployment. These important metrics can be ascertained by two specific questions asked in the Current Population Survey (CPS). First, the survey asks how long an individual, if unemployed, has been looking for work; second, it asks the individual about their most recent occupation. This allows us to identify the number and share of unemployed in an occupational category that are long-term unemployed at a national level. Using these data as a proxy for Michigan, we can combine these figures with the number of unemployed in each occupational category. These data differ slightly from that presented in the previous part of this study, as this part solely relies on data from the CPS. Table 1 summarizes these two metrics for each occupational category.

Occupational Category	Percent (%) of unemployed jobseekers out of work for 27 or more weeks by occupational category (U.S.)	Estimated number (#) of long-term unemployed in occupational category (Michigan, 2014)	Share of all long-term unemployed by occupational category (Michigan, 2014)
Total	30.1%	92,500	100.0%
Management, Business, and Financial	34.4%	5,200	5.7%
Production	33.0%	8,600	9.5%
Office and Administrative Support	32.9%	13,500	14.9%
Installation, Maintenance, and Repair	32.4%	1,300	1.4%
Sales and Related	30.9%	10,200	11.3%
Transportation and Material Moving	30.0%	7,800	8.6%
Professional and Related	29.6%	11,250	12.4%
Service	29.3%	26,050	28.8%
Construction and Extraction	24.6%	5,900	6.5%
Farming, Fishing, and Forestry	18.1%	700	0.8%

Table 1: Estimated Long-Term Unemployed in Michigan by Occupational Category

Source: Current Population Survey, Local Area Unemployment Statistics, and BLS Geographic Profile of Employment and Unemployment, 2013

- Nationally, three occupational groups stand out as being associated with long-term unemployment, with each tallying over 1 in 3 out-of-work individuals jobless for 27 or more weeks. These job titles were: *Management, business, and financial* (34.4 percent); *Production* (33.0 percent); and *Office and administrative support* (32.9 percent) occupations.
- On the opposite side of the spectrum, three occupational groups report the lowest share of long-term unemployed: *Farming, fishing, and forestry* (18.1 percent); *Construction and extraction* (24.6 percent); and *Service* (29.3 percent). Importantly, these occupational categories contain many seasonal job titles.
- Today, all occupational categories have a higher percentage of unemployed that have been out of work for 27 or more weeks than in 2006. If an occupational category had an above average percent of long-term unemployment in 2006 it tended to remain above average in 2015.
- There have been a number of interesting changes in the share each occupational category makes up of the total long-term unemployed since 2006. Overall, *Service, Office and administrative support,* and *Professional and related* occupations all comprised more of the total long-term unemployed in 2015. On the other hand, *Production* and *Installation, maintenance, and repair* occupations declined in the share of the long-term unemployed.
- The two occupational categories with the largest *numbers* of long-term unemployed in Michigan are *Service* (26,050 or 28.8 percent) and *Office and administrative support* (13,500 or 14.9 percent).

Box 6: State Unemployment Insurance Benefits and the Number of Unemployed

State unemployment insurance programs were designed to provide temporary monetary benefits to workers who became unemployed through no fault of their own. In Michigan, unemployed workers who are actively seeking employment and meet other requirements may receive benefits for up to 20 weeks while seeking a new job. The Michigan Unemployment Insurance Agency tracks the number of individuals receiving unemployment insurance benefits. (Importantly, individuals receiving state unemployment benefits and the number of unemployed are derived from different sources and should not be confused with one another.)

The chart below shows the number of people claiming unemployment benefits since 2000. The number of continued claims (blue) is 10 percent lower in 2015 than in 2000 (73,200), even though unemployment (green) overall is over 50 percent higher than 2000. This may suggest that a larger number of unemployed individuals are not receiving benefits and, without other income, may be struggling to provide for themselves and their families.¹

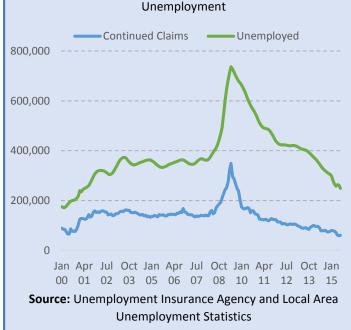


Figure: Continued Unemployment Insurance Claims and

- Accounting for 39,550 long-term unemployed (43.7 percent of total long-term unemployment in Michigan), Service
 and Office and administrative support include many job titles with low to moderate skill and education requirements.
 As a result, many of these long-term unemployed may need additional education or training to find a new job. If
 investments in education and training are not possible, these jobseekers may have to rely on job opportunities in
 similar occupations with lower skill requirements. However, many positions in these occupations may have below
 average wage rates.
- There is still a large number of long-term unemployed in *Production* occupations. An estimated 8,600 long-term unemployed, representing approximately 1 in 10 of total long-term unemployed, were formerly employed in this occupational category. Out-of-work individuals from *Production* jobs continue to be disproportionately affected by the effects of long-term joblessness. However, it is estimated there are only a couple hundred more long-term unemployed *Production* workers today than in 2006. This moderation in the number of Michigan long-term unemployed in *Production* is likely being influenced by a few factors including, early retirement of those laid off over the past decade, strong payroll job growth in the *Manufacturing* industry over the last year, and a reemerging demand for work in the skilled trades.
- Those unemployed in *Management, business, and financial occupations* become long-term unemployed less often in Michigan than their national counterparts. This is supported by strong payroll job growth in the *Professional & business services* and *Financial activities* industries over the last year, outpacing national growth. Additionally, out-of-work individuals from job titles in these occupational groups benefit from relatively higher education and training requirements for many of those jobs, providing additional employment opportunities during periods of unemployment.

Current and Future Labor Demand

One critical component in reconnecting the long-term unemployed to jobs is an understanding of where there will be job demand, both today and in the future. This will help jobseekers and workforce developers have the information they need to start the job search and reemployment process. This section will identify current and future labor demand in Michigan.

Information in this section is obtained from three separate demand measures: Michigan's occupational long-term employment projections, the 2015 Job Vacancy Survey (JVS), and an analysis of online advertised job vacancies from The Conference Board's Help Wanted Online database. It is important to note that the potential labor supply the long-term unemployed present is only a part of the entire labor pool. Long-term jobseekers are also competing for the opportunities noted in this section with other unemployed jobseekers, new labor market entrants, labor market reentrants, and those seeking to change jobs.

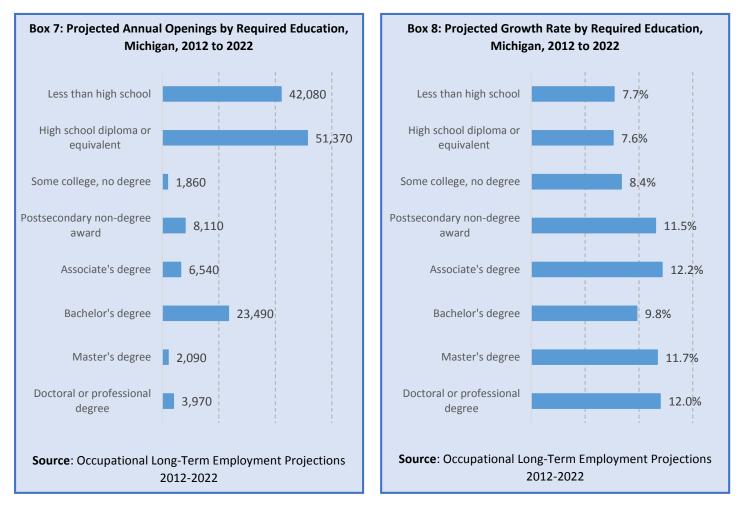
Table 2 displays long-term employment projections, which estimate the employment level and growth through 2022 in each of the occupational categories.

Occupational Category	Job Growth (2012-2022)		Annual Openings		
	#	%	Total	Growth	Replacement
Total	371,460	8.7%	139,520	39,260	100,260
Management, Business, and Financial	44,520	9.9%	13,390	4,500	8,890
Production	35,010	8.6%	11,540	3,840	7,710
Office and Administrative Support	22,640	3.6%	17,690	3,600	14,090
Installation, Maintenance, and Repair	16,390	10.4%	5,270	1,650	3,620
Sales and Related	23,860	5.5%	15,350	2,410	12,940
Professional and Related	99,770	10.6%	30,080	10,190	19,890
Transportation and Material Moving	20,600	8.3%	7,850	2,140	7,710
Service	87,490	10.2%	32,920	8,810	24,110
Construction and Extraction	20,120	15.2%	4,290	2,020	2,270

Table 2: Michigan Long-Term Occupational Projections, 2012-2022

Source: Occupational Long-Term Employment Projections 2012-2022

- Overall, Michigan occupational employment is projected to grow by 371,460 or 8.7 percent between 2012 and 2022.
 Each year during that time, employers are projected to generate 139,520 annual openings, with over two thirds of those opportunities being due to replacement of current workers and just under one third due to job growth.
- The occupational categories projected to generate the largest *number* new jobs over the period include *Professional and related* (99,770), *Service* (87,490), and *Management, business, and financial* (44,520) occupations. *Construction and extraction* (15.2 percent), *Professional and related* (10.6 percent), and *Installation, maintenance, and repair* (10.4 percent) are expected to have the highest growth *rates* over the time period.
- While some occupational groups may not be projected to grow aggressively over the projection period, this does not mean they do not produce a high number of opportunities each year. For instance, *Office and administrative support* occupations have the lowest projected growth rate among the occupational categories, but due to high replacement needs, this occupational group will generate the third highest number of openings each annually.
- Production as well as Sales and related occupations are both in a similar situation, as these occupational categories
 have a lower than average growth rate, but will still present a healthy number of annual openings due to replacement
 needs.



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- In addition to analyzing projections by occupational categories, there is also value in examining projections by required education levels. First, over two thirds of annual openings through 2022 in Michigan will require a high school diploma or less, or over 90,000 jobs. These positions may present job opportunities for lower skilled long-term jobseekers. (Box 7)
- While there are a high number of projected annual openings that do not require high education and training, there will also be opportunities for those who have higher education levels. In fact, the education cohorts that are expected to grow the fastest by 2022 are the ones which require at least one post-secondary credential. (Box 8)

Two other demand measures, the 2015 Job Vacancy Survey and an analysis of The Conference Board's Help Wanted Online database, also display that Michigan has a healthy amount of employment opportunities that currently exist. Table 3 shows existing labor demand according to these sources.

- The JVS estimates a large number of current vacancies in *Service* occupations, more so than both the occupational projections and online advertisements. This category includes large occupations such as *Home health aides* and *Childcare workers*.
- The Help Wanted Online database suggests more jobs in *Transportation and material moving* occupations are currently available than either the JVS or long-term occupational projections estimate. Particularly large occupations in this category include *Heavy and tractor-trailer truck drivers* and *Light truck or delivery services drivers*.

Box 9: 2015 Job Vacancy Survey

In 2015, the Michigan Workforce Development Agency (WDA) asked the Bureau of Labor Market Information and Strategic Initiatives to prepare a study on the number and characteristics of job openings in the state's labor market. In response, a Job Vacancy Survey (JVS) was conducted in the 2nd Quarter of 2015. This scientific survey was sent to over 11,500 Michigan employers from a sample stratified by firm size, by industry, and by region. Over 7,150 employers responded, for an overall response rate of 62 percent.

Employers were asked several questions about their current vacancies, including: the job titles for open positions; the education and work experience required; the wages and benefits offered; the length of time the job had been open; whether the position was part-time or full-time; and whether the position was permanent or temporary or seasonal.

The JVS estimated that at the time of the survey there were roughly 145,000 job vacancies in Michigan. As expected, the largest <u>number</u> of vacancies were in *Service, Sales,* and *Healthcare* occupations. However, high job vacancy <u>rates</u> (vacancies ÷ employment) were seen in *Engineering, Healthcare, Construction,* and *IT* occupations. For more information or to view the entire report, please visit www.michigan.gov/lmi.



Source: Bureau of Labor Market Information and Strategic Initiatives, 2015 Job Vacancy Survey

• These two datasets also suggest that there are a large number of current openings in *Professional and related* occupations. In both sources, over 1 in 4 of all job openings are concentrated in job titles in this category. While the long-term unemployed are competing with other groups for these positions the data suggest that demand in this occupational category outstrips the number of long-term jobseekers. Because many of these opportunities require particularized education and training, the key to helping these jobseekers may be equipping them with the necessary skills and knowledge that these opportunities require. (Box 10)

Occupational Category	Job Vacancies (2 nd Quarter 2015)	Online Advertisements (2 nd Quarter 2015)
Total	144,600	184,900
Service	42,600	23,400
Professional and Related	35,100	59,900
Office and Administrative Support	14,700	18,600
Sales and Related	14,400	17,500
Management, Business, and Financial	11,500	9,550
Transportation and Material Moving	7,500	16,850
Production	7,300	10,100
Installation, Maintenance, and Repair	6,200	9,350
Construction and Extraction	5,200	6,200

Table 3: Current Job Vacancies and Online Advertisements in Michigan (2nd Quarter 2015)

Source: 2015 Job Vacancy Survey and The Conference Board's Help Wanted Online Database

Many of the advertised positions in both *Production* and *Construction* occupations are in the skilled trades. A number
of these occupations are high demand, high wage positions. While some long-term unemployed may not wish to enroll
in lengthy educational programs, the skilled trades can present opportunities after only a few months of training. Indemand occupations in the skilled trades include *Carpenters*, *Electricians*, and *Millwrights*.

Box 10: Top Necessary Skills and Knowledge for Employment

In addition to requiring a certain amount of education and training, employers also look for certain skills and knowledge in their job candidates. Combining the top five skill and knowledge requirements for each occupation from the O*Net database with projected employment, it is possible to identify the skills most frequently required among all occupations in the state's labor market. Each chart below displays the percent of job opportunities by 2022 that will require a specific skill or knowledge. These can be used to help equip the long-term unemployed with either skills or knowledge that will be transferable across occupations.

First, skills can range from so-called "soft skills" such as Active Listening and Critical Thinking to "hard skills" such as Engineering, depending on the specific occupation. It quickly becomes apparent how integral the skills of Active Listening and Speaking are to nearly all future job opportunities.

Second, knowledge tends to be more specific to the occupation than skills, although information can be generated on specific knowledge types that may be transferable across occupations. The English Language and Customer and Personal Service stand out as the top two knowledge types, both required in about 3 in 4 job opportunities.

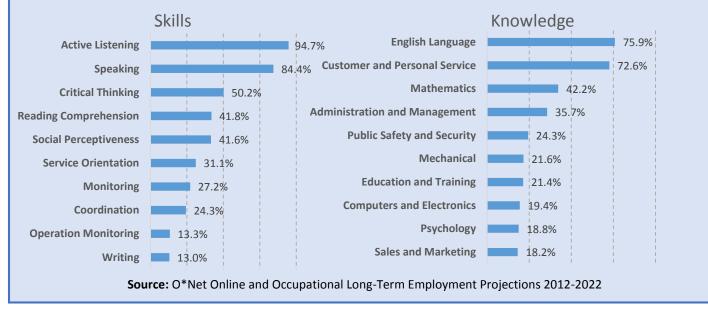


Figure: Percent that a Skill and Knowledge is Required in Michigan Job Opportunties

Conclusion

As this study has sought to explain, unemployment in Michigan is no longer primarily short-term and frictional. Rather, over the past decade and a half unemployment has transformed and become far more lasting and structural. Some of this study's findings include:

- In 2015, 85,000 Michigan individuals found themselves unemployed for 27 weeks or more, or 30 percent of the total unemployed. The substantial increase in the prevalence of long-term unemployment was a hallmark of the Great Recession, and Michigan in 2015 remains with a sharply higher level than in 2000, when only 6,500 Michigan individuals, or 3.5 percent of the total unemployed, were long-term unemployed.
- In addition, the average number of weeks unemployment lasts has also dramatically increased from 9 weeks in 2000 to 31.7 weeks in 2015.
- Men are more likely to become long-term unemployed should they lose their jobs, as nearly two thirds of the long-term unemployed are men.
- Certain occupational categories are more correlated with long-term unemployment, such as *Production*, *Management, business, and financial*, and *Installation, maintenance, and repair*.

Long-term unemployment presents the Michigan economy with a new challenge in order to fully recover from the two recessions over the past fifteen years. The key to solving this problem will be viewing the long-term unemployed as a unique group with unique needs, and then helping those long-term unemployed individuals obtain the skills, education, and training necessary for existing and emerging in-demand industries and occupations.

Appendix I – References

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Appendix II – Occupational Categories to Standard Occupational Code (SOC) Crosswalk

Occupational Category	SOC Major Groups that Comprise Occupational Category
Management, Business, and Financial	11, 13
Production	51
Office and Administrative Support	43
Installation, Maintenance, and Repair	49
Sales and Related	41
Professional and Related	15, 17, 19, 21, 23, 25, 27, 29
Transportation and Material Moving	53
Service	31, 33, 35, 37, 39
Construction and Extraction	47
Farming, Fishing, and Forestry	45

Table A1: Occupational Categories to Standard Occupational Code (SOC) Crosswalk

Source: Current Population Survey

Appendix III – End Notes

 Between July 2008 and December 2013, Michiganders who exhausted their state unemployment insurance benefits were eligible for extended federal benefits through the Emergency Unemployment Compensation Program (EUC08). The number of continued claims in this figure does not represent the individuals during that time period who exhausted their state benefits but were collecting federal benefits. However, since January 1, 2014 only state unemployment insurance benefits are available. For more information on this federal program please view this report from the *Congressional Research Service*. https://www.fas.org/sgp/crs/misc/RL33362.pdf