

2023 Michigan Economic Analysis Report



MICHIGAN
Center for Data
and Analytics



2023 Michigan Economic Analysis Report

September 2024

About the Cover

In operation since 1876, Tawas Point Lighthouse is a fascinating attraction for maritime buffs. Tawas Point is a destination for birdwatchers; it also offers spectacular views of sunrises over Lake Huron and sunsets over Tawas Bay. The lighthouse is open for tours seasonally and during special events in the off-season.

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Table of Contents

3	Executive Summary
4	Michigan's Labor Force, Employment, and Unemployment
10	Michigan Labor Market Participation by Demographic Group
14	Recent Industry Job Trends
19	Wage Changes in Michigan
23	Income Changes in Michigan
26	Wage Growth by Demographic Group
29	Demand for Workers in Michigan
32	Michigan's Employment Outlook Through 2032
37	Michigan Population Projections

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Executive Summary

Michigan's labor market continued to improve in 2023, surpassing 2019 levels for most major labor market indicators. Initial data through the first half of 2024 indicate continued growth, although at a slower pace. Early indicators such as job openings and online job advertisements point to a softening of labor demand in Michigan. While Michigan's labor market has showed signs of slowing, it is still largely positive with many indicators outperforming the nation.

Labor Market and Wages

- Annual average data for 2023 showed that Michigan had its highest payroll job level and lowest unemployment rate in over 20 years.
- Both total employment and total workforce levels reached 15-year highs during 2023, while the number of unemployed reached a low last seen in 2000.
- Current Population Survey metrics indicated persons on temporary layoff and permanent job losers fell since 2022, while the percentage of job leavers advanced over the year.
- The state's average hour wage rose above \$32 for the private sector in 2024. Despite this increase, real earnings have remained stagnant compared to 2019.
- The Michigan job market is experiencing a shift towards mid-range and higher-paying jobs, with a notable decline in low-wage jobs.
- The size of Michigan's middle class ranks near the middle (28th in 2022) among states.

Differences by Demographic Group

- Unemployment rates for males and females ages 16 and older receded from 2020 to 2023, with the male jobless rate reaching a five-year low of 3.8 percent during 2023, and the female rate matching its 2019 rate of 3.9 percent.
- Jobless rates for white and Black workforce participants fell to five-year lows during 2023.

- The percentage of individuals available to work now but identified as discouraged workers fell to a five-year low during 2023.
- Earnings gaps with white non-Hispanic workers narrowed across race and ethnicities in Michigan through 2022.
- Michigan's gender earnings gap has decreased, though it is still larger than the gap nationally.

Employment and Population Outlook

- Job openings and online job advertisements are down over the year, and labor turnover is the lowest in over a decade.
- Overall, employment growth is expected to be modest, increasing by 25,010, or 0.6 percent, over the 10-year period.
- *Private education and health services* is projected to add 50,000 jobs, the largest major industry increase.
- Goods-producing industries are projected to decline by 17,000 jobs from 2022-2032, led by an 18,000 (-3.0 percent) drop in *Manufacturing* jobs over the decade.
- Without net positive migration, Michigan's projected population will be significantly lower by 2050. This includes the 25-to-54-year-old population who are critical to the state's labor market.

Michigan's Labor Force, Employment, and Unemployment

■ **Shibani Putatunda**, Economic Specialist

Michigan's workforce has made remarkable strides in the past several years. After severe losses in employment and total workforce during the COVID-19 pandemic, Michigan's labor market indicators have steadily improved from 2021 onwards and have surpassed most 2019 levels during 2023. The statewide employment and workforce totals both demonstrated record high levels in 2023, while unemployment reached a 20-year low. Preliminary data for the first six months of 2024 indicate a strong labor market as well.

This section examines the health of Michigan's labor market through some of the state's broad workforce measures, such as the unemployment

rate, total employment, and labor force.

Additionally, this section analyzes some in-depth metrics, such as job losers, job leavers, and those on temporary layoff.

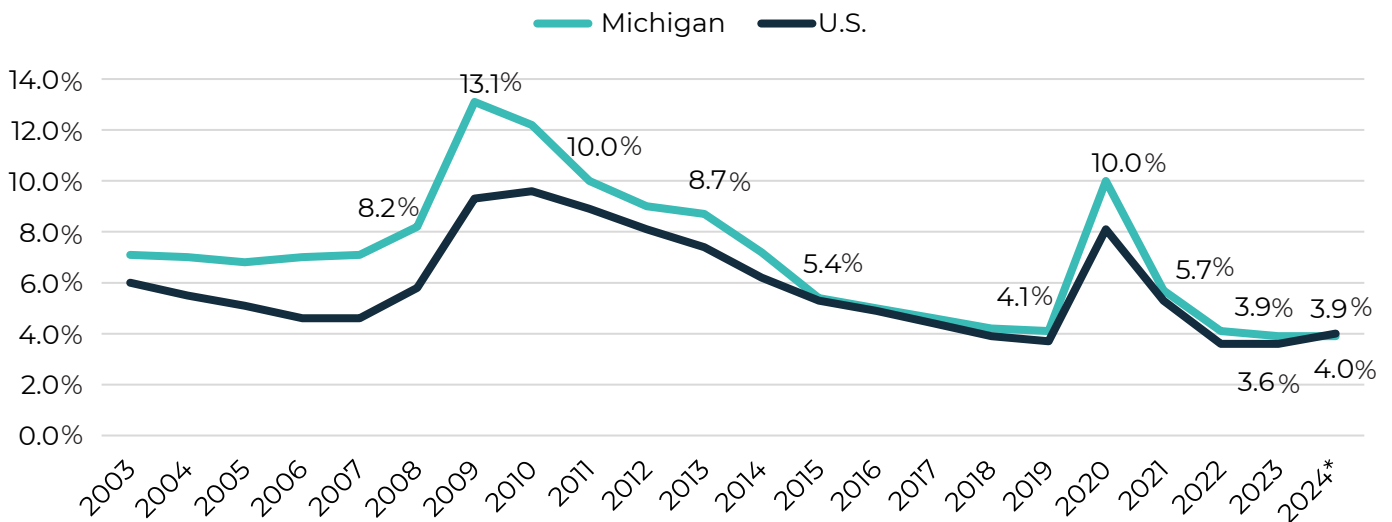
Unemployment Rate

Data Note: Michigan's Local Area Unemployment Statistics program (LAUS) provides economic indicators for the state, including employment, unemployment, labor force, and official unemployment rate estimates.

Michigan's jobless rate remained consistently higher than the national unemployment rate for the 20-year period from 2003 to 2023. The gap between the two metrics narrowed substantially during 2015 and 2016, but began deviating during later years, culminating in a

The gap between unemployment rates for the U.S. and Michigan has narrowed in recent years.

Michigan and U.S. Unemployment Rates, 2003–2023

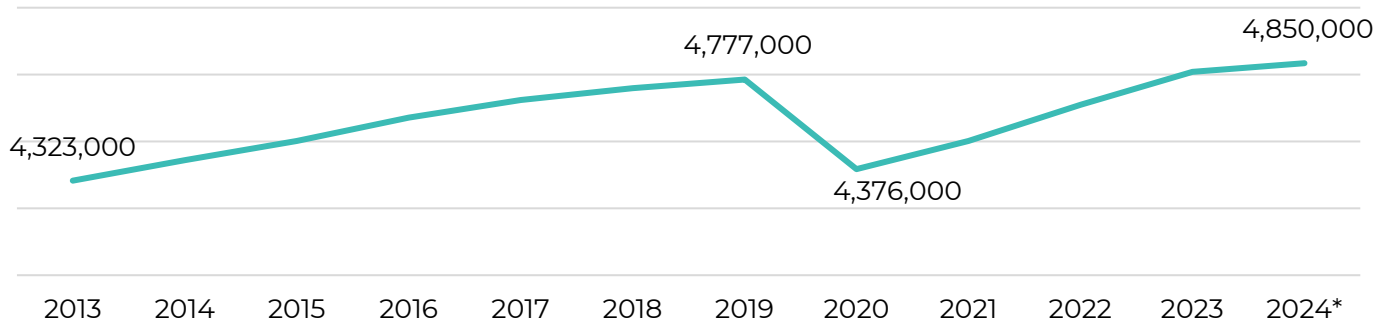


*First six months of 2024

Source: Local Area Unemployment Statistics, U.S. Bureau of Labor Statistics

Michigan Employment in 2023 exceeded pre-pandemic levels.

Michigan Annual Average Total Employment, 2013–2023



Source: Local Area Unemployment Statistics, Michigan Center for Data and Analytics

*First six months of 2024

1.9-percentage point difference during 2020 (with a Michigan rate of 10.0 percent versus a national rate of 8.1 percent, respectively). Since then, Michigan's rate fell 6.1 percentage points, down to 3.9 percent in 2023 and returning close to the national rate of 3.6 percent.

While Michigan has been narrowing the gap with the national unemployment rate in recent years, the state still exhibited one of the largest annual average jobless rates out of all states during 2023. Michigan was tied with Arizona, Texas, and West Virginia in having the 10th highest unemployment rate in the nation in 2023. Nevada had the largest unemployment rate out of all states, at 5.1 percent.

Preliminary 2024 six-month average labor force data reveals that Michigan's unemployment rate was one-tenth of a percentage point below the national six-month average rate (3.9 percent versus 4.0 percent, respectively).

Employment

For the six-year period from 2013 to 2019, Michigan's total annual average employment¹ rose consistently, with an average employment gain of 74,000 every year. After the large fluctuations due to the pandemic, Michigan's

annual average employment total advanced by 436,000, or 10.0 percent, between 2020 and 2023, recovering from pandemic losses. Michigan's 2023 employment total surpassed the 2019 pre-pandemic level by 35,000, or 0.7 percent. The state's 2024 six-month annual average employment level is even larger, at 4,850,000. This is the highest average employment total for Michigan since 2001's annual average of 4,872,000.

Workforce

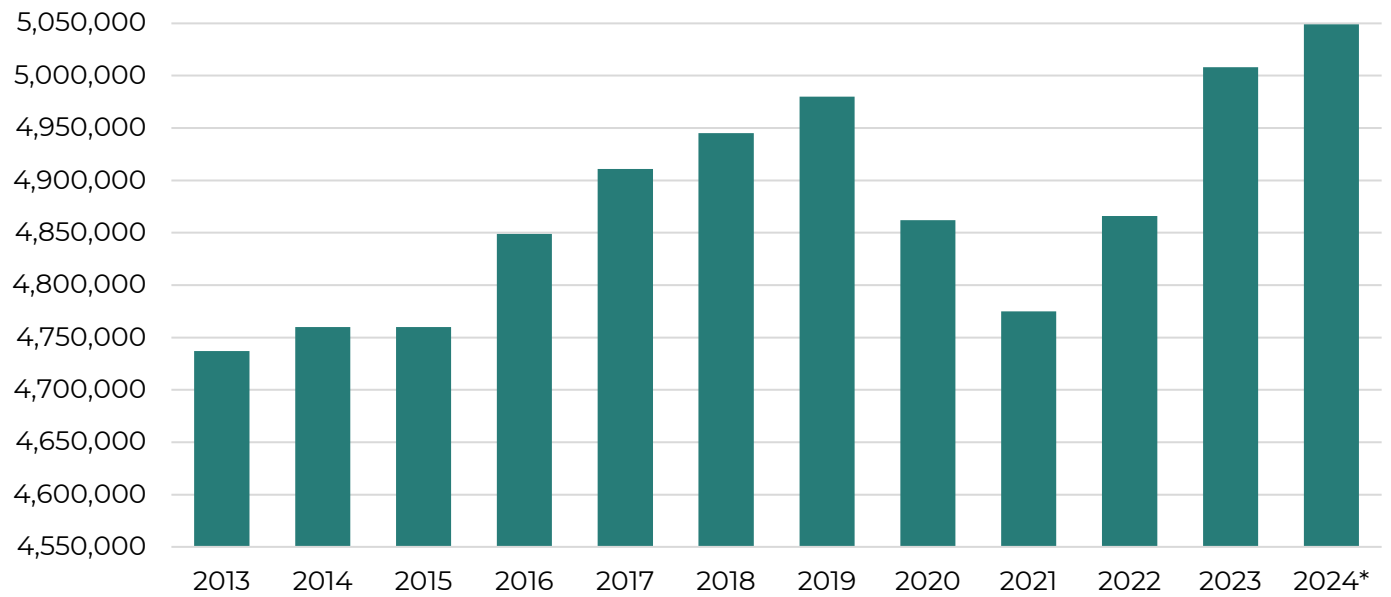
Data Note: Michigan's labor force includes individuals in the civilian noninstitutionalized population who are 16 or older and are employed or are unemployed and actively seeking employment.

Between 2013 and 2019, Michigan's workforce expanded by 243,000, or 5.1 percent. This was similar to the expansion seen in statewide employment during that period. From 2019 to 2021, the state labor force fell notably by 205,000, or 4.1 percent, before advancing steadily during 2022 and 2023. Michigan's 2023 labor force level of 5,008,000 was the largest workforce total seen in the state since 2006 (5,057,000). Michigan's 2024 six-month average workforce total was slightly larger than 2023's level at 5,049,000.

¹The total number of employed includes a combination of payroll employment, agricultural jobs, unpaid family workers, and the self-employed.

Michigan's 2023 labor force level was the highest since 2006.

Michigan's Annual Average Workforce, 2013–2023



Source: Local Area Unemployment Statistics, Michigan Center for Data and Analytics

*First six months of 2024

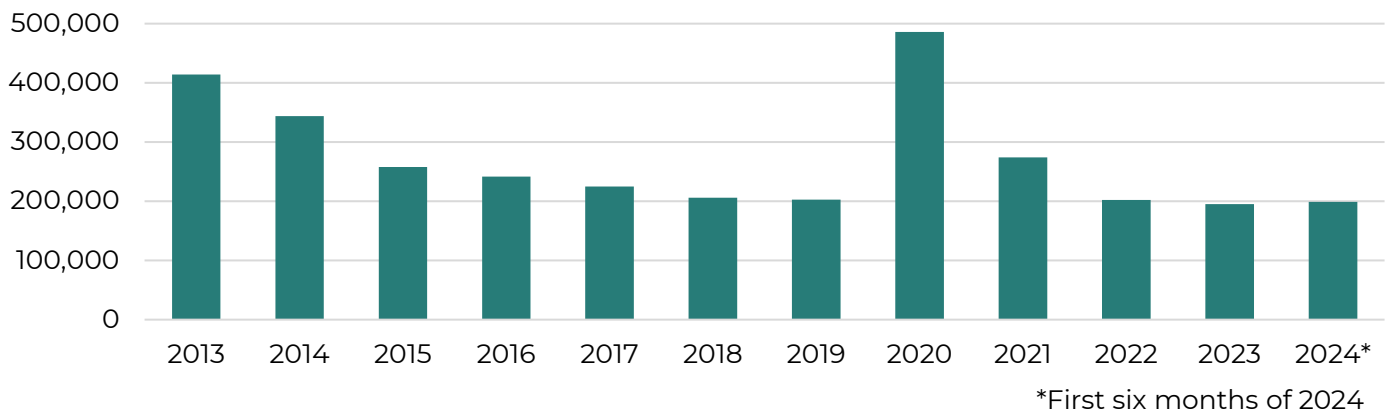
Unemployment

Data Note: The number of unemployed includes Michigan residents who are not currently working but are actively seeking employment. Individuals who are not actively looking for work are not counted as unemployed, but instead are considered “out of the labor force.”

Aside from the years most strongly impacted by the pandemic, Michigan’s unemployment has continued to trend downwards during the past decade. Michigan’s unemployment level receded from 2013 to 2019, with unemployment decreasing by 211,000, or 51.0 percent. Joblessness in the state expanded by 283,000

Unemployment levels continued to decline in 2023.

Michigan's Annual Average Total Unemployment, 2013–2023



Source: Local Area Unemployment Statistics, Michigan Center for Data and Analytics

*First six months of 2024

during the 2020 recession but bounced back completely with an unemployment reduction of 291,000 between 2020 and 2023. Michigan's 2023 unemployment level was 7,000 below the 2022 level of 202,000. The 2023 unemployment total was the lowest annual unemployment level seen in the state since the year 2000. Michigan's preliminary six-month average unemployment total of 199,000 was slightly larger than the 2023 annual average unemployment level.

Note: The data in the following section comes from the Current Population Survey, a separate data source than the Local Area Unemployment Statistics (LAUS) program that was used for the previous analysis. This data is not comparable to the LAUS data. Additionally, data for these groups must be analyzed as an average over multiple months due to error ranges and month-to-month volatility.

Persons on Temporary Layoff

Data Note: Persons on temporary layoff include people who are currently unemployed and have been given a date to return to work as well as those who expect to return to work during the next six months.

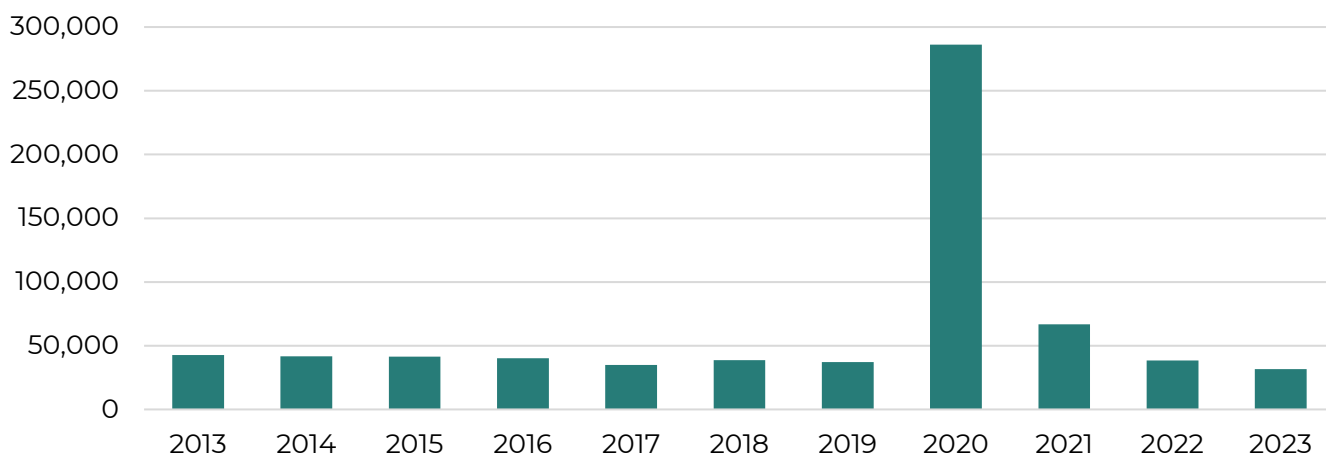
Analysis of temporary layoff data for Michigan during the 10-year period from 2013 to 2023 demonstrates the decrease of persons on temporary layoff from 2020 to 2023. Michigan's 2023 level of 31,700 people on temporary layoff was the lowest total seen in the 10-year period from 2013 to 2023. However, averaging the first six months of 2024 shows the number of individuals on temporary layoff increased slightly to 38,500, similar to the levels seen in 2018, 2019 and 2022.

Permanent Job Losers

Data Note: Permanent job losers are individuals whose employment ended involuntarily. The number of individuals on temporary layoff and the amount of permanent job losers together make up the total amount of job losers in the CPS.

The number of individuals on temporary layoff has declined in recent years.

Michigan Annual Persons Unemployed and on Temporary Layoff, 2013–2023



Source: Current Population Survey, U.S. Bureau of Labor Statistics

Michigan's number of permanent job losers fell progressively between 2013 and 2018 before edging up in 2019. Following large fluctuations during and post pandemic, Michigan's 2023 level of job losers was just above 2018 levels, making it the second lowest total seen in the state in the 10-year period from 2013 to 2023. Average data from January to June of 2024 demonstrated an uptick in permanent job losers, with the metric advancing to 46,900, closer to levels last seen in 2017.

Job Leavers

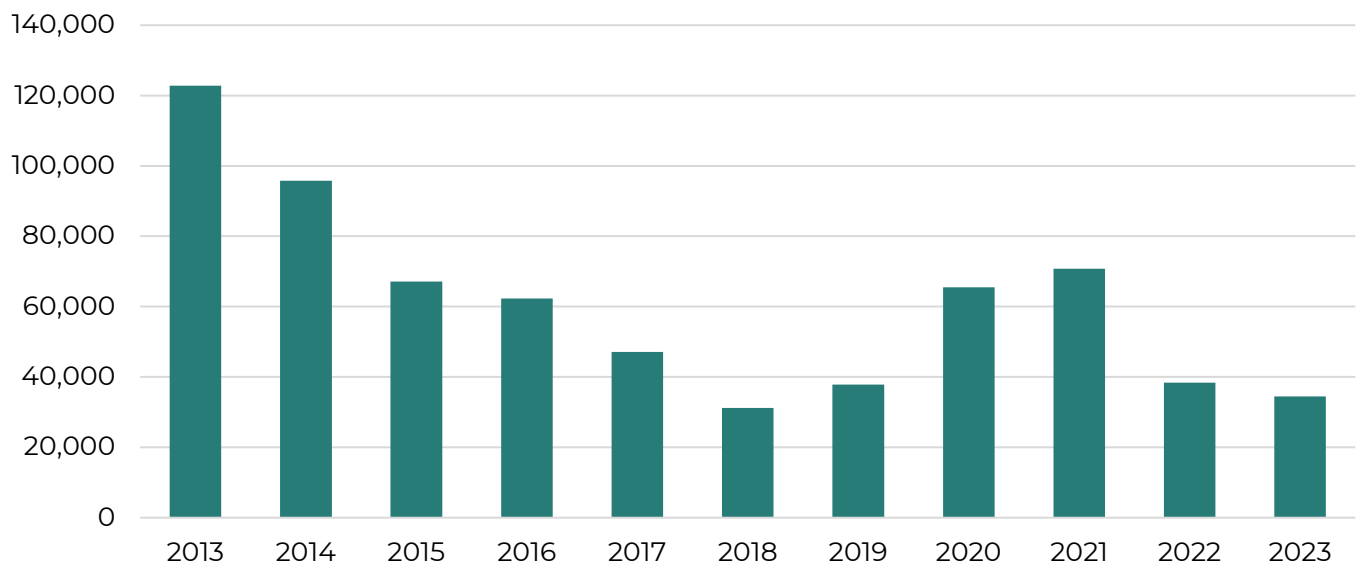
Data Note: Job leavers are individuals who are unemployed and who voluntarily left their previous job and began searching for new employment.

The percentage of unemployed who are characterized as job leavers can provide valuable insights on the health of the statewide economy. When the unemployment rate is low, people may be more likely to voluntarily leave their current job for new employment opportunities.



Michigan's number of permanent job losers in 2023 was the second lowest level in the past 10 years.

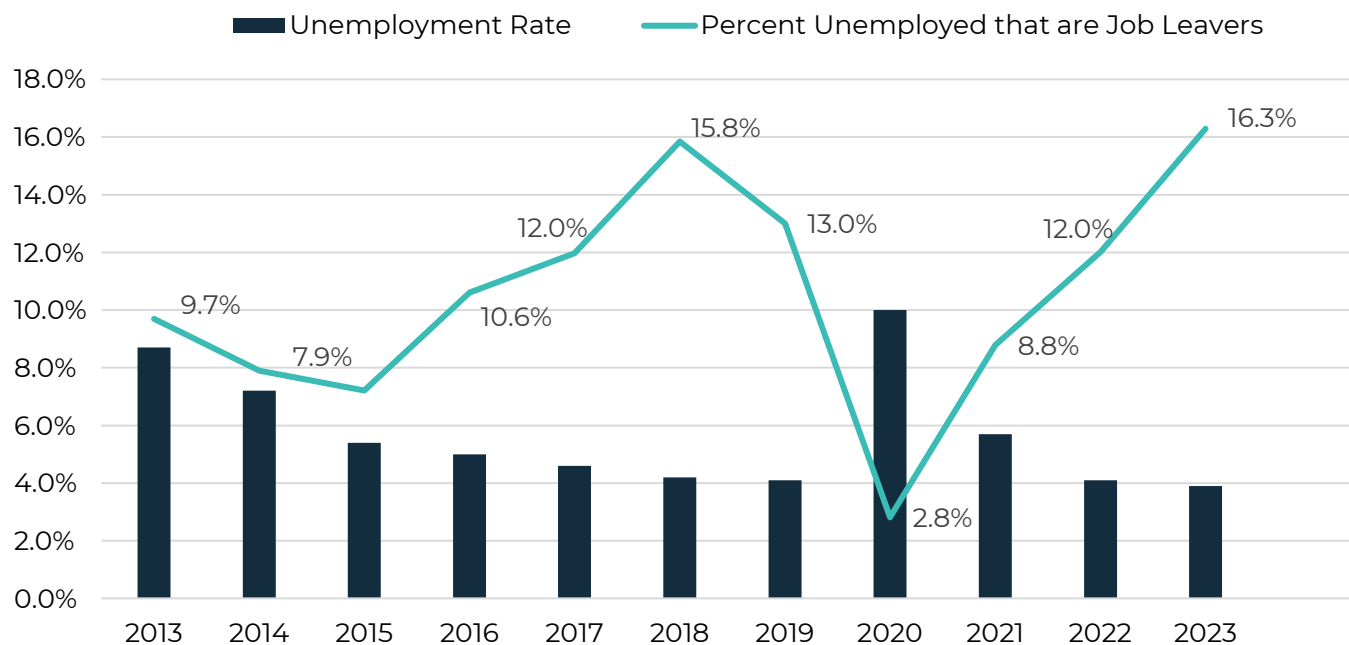
Michigan Annual Number of Permanent Job Losers, 2013–2023



Source: Current Population Survey, U.S. Bureau of Labor Statistics

Michigan's unemployment rate and the share of unemployed job leavers exhibit an inverse relationship.

Michigan Unemployment Rate and Percent of Job Leavers, 2013–2023



Source: Current Population Survey, U.S. Bureau of Labor Statistics

Annual average Michigan Current Population Survey data over the 10-year period between 2013 and 2023 displays an inverse relationship between the statewide unemployment rate and the percentage share of the unemployed who are job leavers. During 2023, Michigan's jobless rate fell from 4.1 to 3.9 percent and the percentage of job leavers rose from 12.0 percent to 16.3 percent, demonstrating the contrasting relationship between the two metrics. The percent of job leavers declined slightly during the first six months of 2024, at 15.1 percent.

Conclusion

Michigan's 2023 labor market demonstrated improved labor market performance since the prior year. The annual unemployment rate fell as both the employment and workforce totals demonstrated record high levels. Metrics from the Current Population Survey also showed marked improvement in the state workforce, with indicators like persons on temporary layoff and

permanent job losers falling since 2022, while the percentage of job leavers advanced over the year. Preliminary average labor force data indicated a strong labor market during the first half of 2024 as well. The statewide 2024 six-month annual average employment level and workforce total both reached levels slightly higher than those seen during 2023. However, Michigan's preliminary six-month average unemployment total during 2024 was slightly larger than the 2023 annual average unemployment level, and metrics like individuals on temporary layoff and permanent job losers advanced during the first six months of 2024 as well.

Michigan Labor Market Participation by Demographic Group

■ **Shibani Putatunda**, Economic Specialist

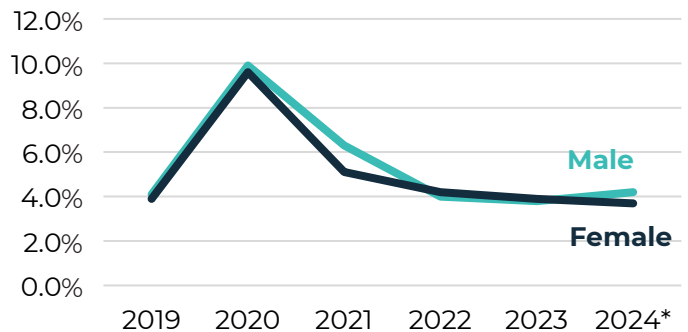
Reviewing labor market trends among different demographic populations can highlight disparities among these groups. Demographic data for all states are published as an annual average by the U.S. Bureau of Labor Statistics once a year. This data comes from the CPS, which is a different source than the standard monthly labor market information containing Michigan's official unemployment rate, labor force, and payroll jobs. Comparisons should not be made with monthly data, as the demographic information presented here is a December 12-month average from 2019 to 2023, as well as annual average data from July 2023 to June 2024.

Unemployment Rates by Gender

Michigan's CPS contains descriptive data about gender participation in the statewide workforce. Annual average CPS data shows that, for male and female workforce participants ages 16

Female jobless rates have typically been lower than male rates, but the gap has narrowed in recent years.

Michigan Annual Average Unemployment Rates by Gender



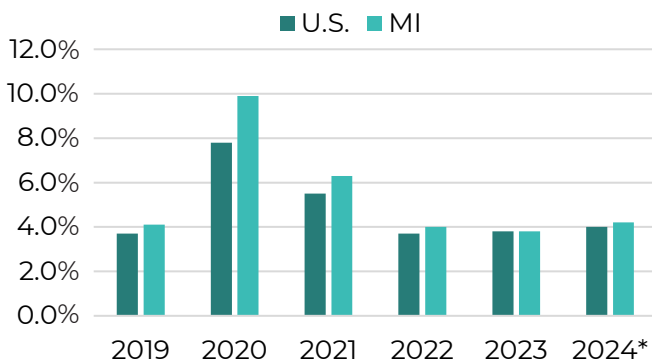
Source: Current Population Survey, U.S. Bureau of Labor Statistics

*June Annual Average

and older, jobless rates receded considerably between 2020 and 2023, with the male jobless rate edging up during the period from July 2023 to June 2024. The female jobless rate continued to decline into 2024. Jobless rates for females

The gap between the U.S. and Michigan male jobless rate closed during 2023.

Michigan and U.S. Male Unemployment Rates

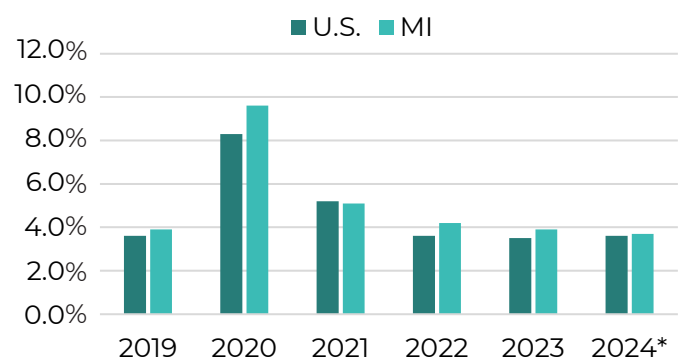


Source: Current Population Survey, U.S. Bureau of Labor Statistics

*June Annual Average

The female unemployment rate rose nationally, but fell in Michigan during 2024.

Michigan and U.S. Female Unemployment Rates



Source: Current Population Survey, U.S. Bureau of Labor Statistics

*June Annual Average

were lower than rates for males during 2019, 2020, 2021, and in 2024.¹ However, workforce participation for males continuously remained higher than for females during this entire period.

The Michigan jobless rate for males ages 16 and older was consistently larger than the national unemployment rate for males from 2019 to 2022. The largest deviation between both indicators occurred in 2020, with Michigan's male unemployment rate exceeding those on the national level by 2.1 percentage points. Rates fell for both groups during 2021 and 2022 before matching during 2023, at 3.8 percent. This was the lowest rate for males in Michigan seen during the five-year period from 2019 to 2023. During the period from July 2023 to June 2024, both jobless rate indicators increased. While the national unemployment rate for males edged up by only two-tenths of a percentage point, Michigan's male jobless rate rose by 0.4 percentage points during the same period.

In contrast to the trends seen by their male counterparts, the gap between jobless rates for females statewide and at the national level was narrower on average from 2019 to 2023. The unemployment rate for females in the state fell from 4.2 to 3.9 percent between 2022 and 2023, an over-the-year loss of 0.3 percentage points. The rate fell by only one-tenth of a percentage point for females in the U.S., resulting in a gap between the U.S. and Michigan unemployment rates of only 0.4 percentage points. The female national jobless rate increased by a tenth of a percentage point during the first half of 2024, while the statewide rate fell by 0.2 percentage points during the same period.

Labor Force Participation by Gender

Workforce participation in the state has remained consistently higher for males than females. Female labor force participation was on average

Michigan's 2023 male labor force participation rate surpassed its 2019 rate, while the U.S. male rate remains below its 2019 rate.

Michigan and U.S. Labor Force Participation by Gender

Year	Male 16+ U.S.	Male 16+ MI	Female 16+ U.S.	Female 16+ MI
2019	69.2%	66.8%	57.4%	57.4%
2020	67.7%	65.3%	56.2%	56.3%
2021	67.6%	63.8%	56.1%	54.1%
2022	68.0%	65.2%	56.8%	54.8%
2023	68.1%	67.2%	57.3%	57.3%
2024*	68.0%	67.0%	57.5%	58.0%

Source: Current Population Survey, U.S. Bureau of Labor Statistics

*June Annual Average

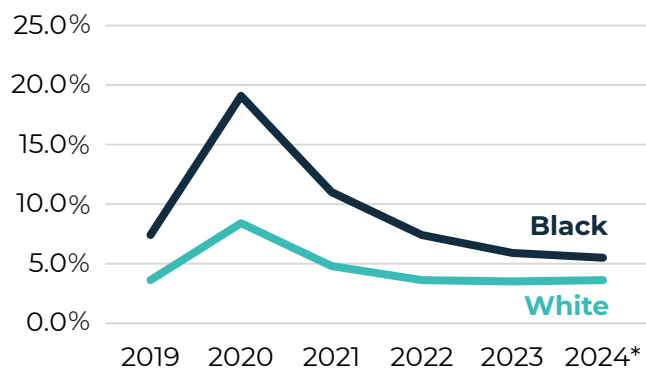
9.6 percentage points below male workforce participation from 2019 to 2024. Between 2023 and the most recent 2024 data, workforce participation for males fell by 0.2 percentage points, while female labor force participation rose by seven-tenths of a percentage point.

Michigan's male workforce participation was consistently lower than national male workforce participation from 2019 to 2024. The gap between the statewide and national male participation rate was the smallest during 2023 at 0.9 percentage points, but advanced again slightly in 2024 (-1.0 percentage points). Female workforce participation in Michigan, on the other hand, matched the national participation for females during 2019 and 2023. Female workforce participation advanced both nationally and statewide during 2023 and 2024.

¹ Utilizing annual average data from July 2023 to June 2024 when referencing any data from 2024

In recent years, the disparity between Black and white unemployment rates has decreased.

Michigan Unemployment Rates by Race

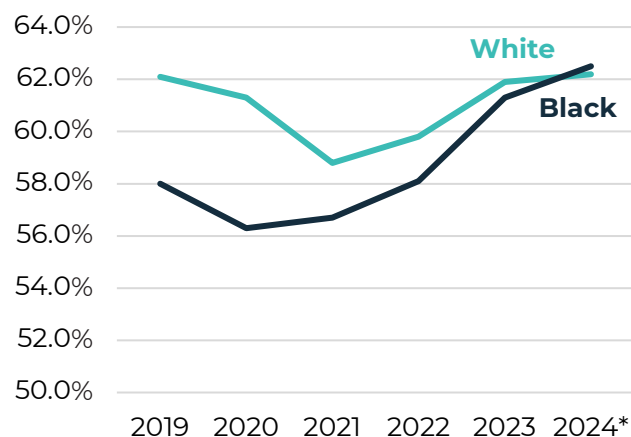


Source: Current Population Survey, U.S. Bureau of Labor Statistics

*June Annual Average

Labor force participation rates for Black individuals continues to improve into 2024.

Michigan Labor Force Participation by Race



Source: Current Population Survey, U.S. Bureau of Labor Statistics

*June Annual Average

Unemployment Rates by Race

Michigan CPS annual average data reveals that workforce participants who identified as Black or African American consistently had larger unemployment rates than white individuals for those ages 16 and older from 2019 to 2024.

However, the gap between the two racial groups narrowed considerably during 2023, and further tightened through the first half of 2024, with the Black jobless rate 1.9 percentage points larger than the white rate (5.5 percent versus 3.6 percent). A significant drop from the 3.9 percentage point gap from 2019 (7.4 percent versus 3.6 percent).

Michigan jobless rates for white and Black workforce participants exceeded those on a national level consistently from 2019 to 2023. However, the unemployment rate for Black participants fell below the national jobless rate for the same group during 2024 (5.5 percent for Michigan versus 5.8 percent for the U.S.). The last time Michigan's Black unemployment rate fell below the national rate was in 2018.

Workforce Participation by Race

Workforce participation for white individuals exceeded participation for Black persons from 2019 to 2023. However, the gap between white and Black labor force participation narrowed considerably during 2023, and Black workforce participation edged higher than the same metric for white individuals during 2024.

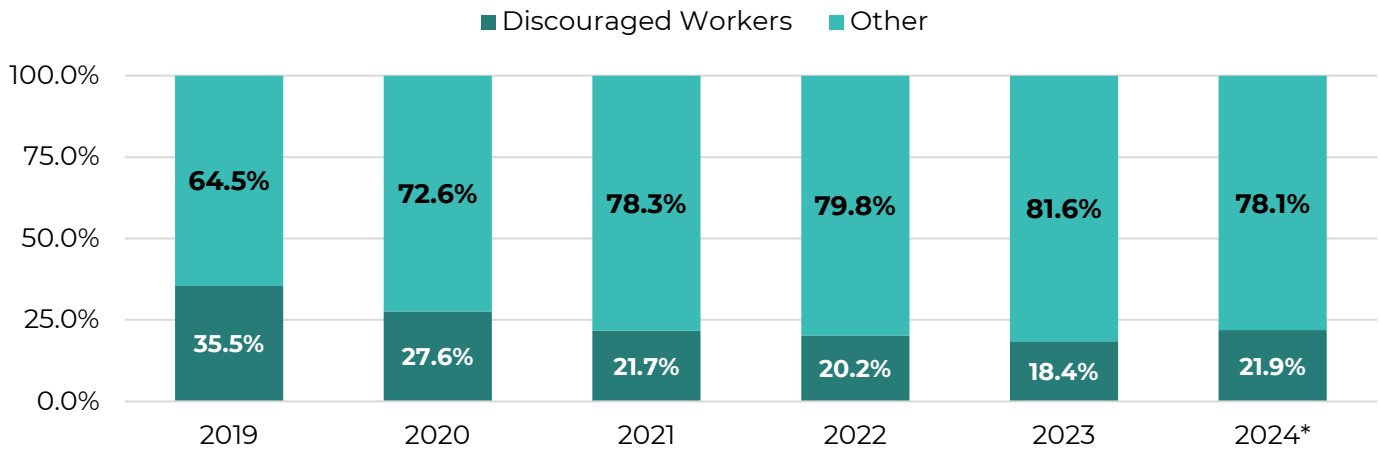
Michigan Individuals Not in the Labor Force

Data Note: Individuals who are not in the labor force are defined as those who are not employed and are not looking for employment. A variety of reasons can contribute to why one may choose not to participate in the labor force, including factors like age, personal responsibilities, or discouragement over job prospects.

CPS data from 2019 to 2024 demonstrated that the percentage of male individuals not in the labor force was much lower than the percentage who were female. On average from 2019 to 2024, male individuals accounted for

Discouraged workers make up a small portion of those not in the labor force in Michigan.

Michigan Individuals Not in Labor Force but Available to Work Now



Source: Current Population Survey, U.S. Bureau of Labor Statistics

*June Annual Average

42.7 percent of those not in the labor force, while females made up the remaining 57.3 percent. That is a nearly 15 percentage point difference between the two groups.

Discouraged Workers

Data Note: Discouraged workers are defined as those who are not in the labor force but are available for work, and have looked for a job sometime in the prior 12 months, but not in the four weeks prior to the CPS survey. In addition, discouraged workers are not currently looking for work because they believe no jobs are available for them, or they do not qualify for any available jobs.

Individuals who are not in the labor force but are available to work now are categorized as either discouraged workers or have another reason for not looking for work in the four weeks prior to the CPS survey. These two metrics display an inverse relationship. The percentage of those not in the labor force who identified as discouraged workers decreased consistently from 2019 to 2023, while those who had other reasons for not working but were available to work at the time

advanced during the same period. However, discouraged workers expanded during 2024.

Conclusion

Multiple demographic indicators from the CPS reveal improved labor market performance in the state during 2023, compared to the prior few years. Jobless rates for both males and females receded over the year, while workforce participation for both genders advanced. In addition, unemployment rates fell for both Black and white workforce participants between 2022 and 2023, while workforce participation increased. However, annual average data from July 2023 to June 2024 saw more mixed trends. The female unemployment rate edged down in 2024 while the male jobless rate advanced. Workforce participation for both white and Black individuals rose between 2023 and 2024. Additionally, the percent of individuals who identify as discouraged workers rose slightly during 2024.

Recent Industry Job Trends

■ **Reima Nasser**, Economic Analyst

Michigan's seasonally adjusted job trends by industry through June 2024 reveal changes in the state's economic landscape. After fully recovering the jobs lost during the COVID-19 recession, major statewide industry sectors across Michigan have continued to show growth through mid-2024. A comprehensive look at 2023 annual average job changes and share of jobs by major industry sector further provides insight on the ongoing recovery of Michigan's labor market.

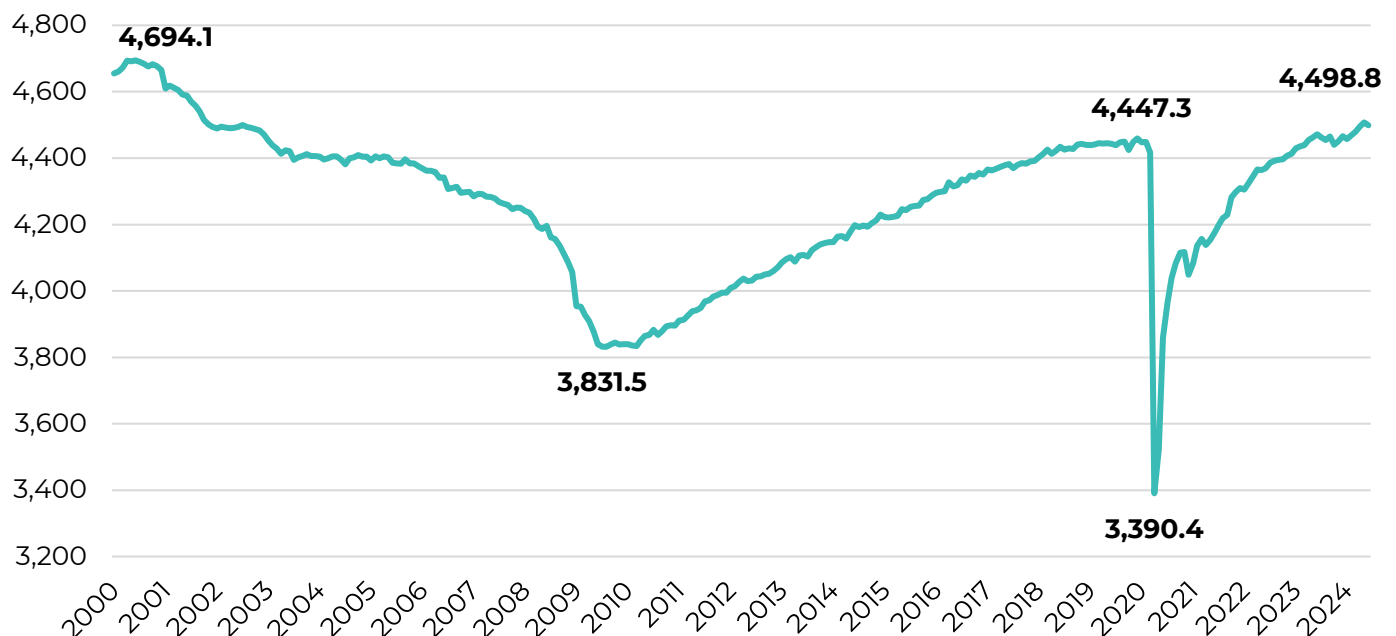
Data Note: Data on employment by industry is produced through the Current Employment Statistics (CES) program, which is published by the U.S. Bureau of Labor Statistics in cooperation with the Michigan Center for Data and Analytics.

Statewide Nonfarm Job Trends

Following the unprecedented impact of the COVID-19 pandemic on Michigan's economy, recent years marked historic highs for total payroll jobs statewide. Seasonally adjusted nonfarm payroll jobs in Michigan surpassed pre-pandemic February 2020 levels (4,448,500) in April 2023 (4,454,600), indicating a complete rebound of total payroll jobs lost during the pandemic in just three years. In contrast, jobs lost during the Great Recession took nearly eight years to recover to employment levels seen at the start of the 2007 recession. As of June 2024, seasonally adjusted payroll jobs totaled 4,498,800 as Michigan continues to record the highest payroll jobs levels seen since 2002. However, statewide payroll jobs remained 4.2 percent below their June 2000 all-time high (4,694,100).

Michigan is at its highest payroll jobs level in more than 20 years.

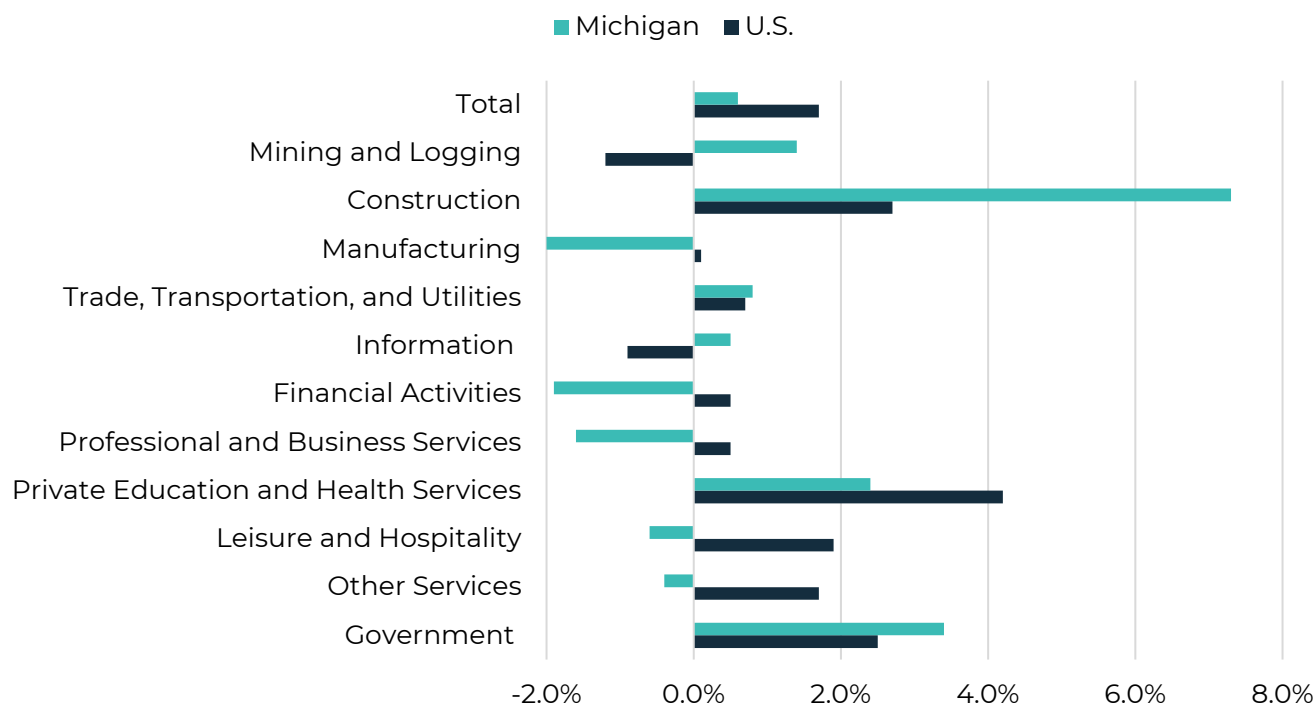
Seasonally Adjusted Total Nonfarm Payroll Jobs in Michigan (In Thousands)



Source: Current Employment Statistics, Michigan Center for Data and Analytics

The majority of Michigan industry sectors demonstrated strong employment growth since June 2023.

Michigan and U.S. Job Change, June 2023 – June 2024 (Seasonally Adjusted)



Source: Current Employment Statistics, U.S. Bureau of Labor Statistics

June 2024 Industry Job Trends

Since June 2023, seasonally adjusted jobs increased in six of Michigan's 11 major industry sectors, with strong employment gains seen in *Government* (+20,500), *Private education and health services* (+16,600), and *Construction* (+13,800). Job additions in the *Government* sector were largely driven by increases in the *State government* (+9,600) and *Local government* (+9,200) subsectors. Nearly all employment growth within *Private education and health services* was the result of job expansion within the *Health care and social assistance* (+15,900) subsector. Over the year, *Manufacturing* observed the greatest decline (-12,500), as both *Durable goods* (-6,900) and *Nondurable goods* (-5,600) reported job losses.

The U.S. observed similar payroll job growth to Michigan in select industry sectors over the year.

On a percentage basis, *Private education and health services* (+4.2 percent), *Construction* (+2.7 percent) and *Government* (+2.5 percent) also showed the most pronounced over-the-year rate changes nationally. Since June 2023, U.S. *Manufacturing* jobs were relatively unchanged, while Michigan *Manufacturing* jobs declined by 2.0 percent. Overall, rate changes in five major Michigan industry sectors, including *Mining and logging*; *Construction*; *Trade, transportation, and utilities*; *Information*; and *Government* surpassed national rates over the year.

Despite strong employment trends, the pace of job growth is slowing down. On a seasonally adjusted basis, statewide jobs grew by 0.7 percent during the first six months of 2024. This was six-tenths of a percentage point less than the job growth seen during the first half of 2023. December to June change rates have been

increasing at smaller rates since 2021, following the unprecedented drop in payroll jobs during the first six months of 2020 (-13.5 percent). Similarly, U.S. payroll jobs grew minimally during the first half of 2024 and have also been shrinking since 2021.

Michigan Annual Average Jobs

According to the CES survey, on a not seasonally adjusted basis, Michigan's annual average nonfarm payroll employment increased by 1.8 percent (+79,300) in 2023. This gain marked the third consecutive year of employment expansion in Michigan. Despite annual average gains in 2023, this rate of advance was 2.3 percentage points below Michigan's 2022 annual growth rate (4.1 percent), indicating a potential slowdown of the economy following substantial job recovery from the pandemic. A similar trend was seen nationwide as annual average employment rose 2.3 percent in 2023, 2.0 percentage points lower than the annual rate increase in 2022.

Every Michigan major industry sector, except *Professional and business services* (-0.8 percent) and *Financial activities* (-0.6 percent), recorded

Michigan and U.S. job growth rates have been shrinking since 2021.

Michigan and U.S. Job Growth Rates During the First Six Months, 2019–2024 (Seasonally Adjusted)

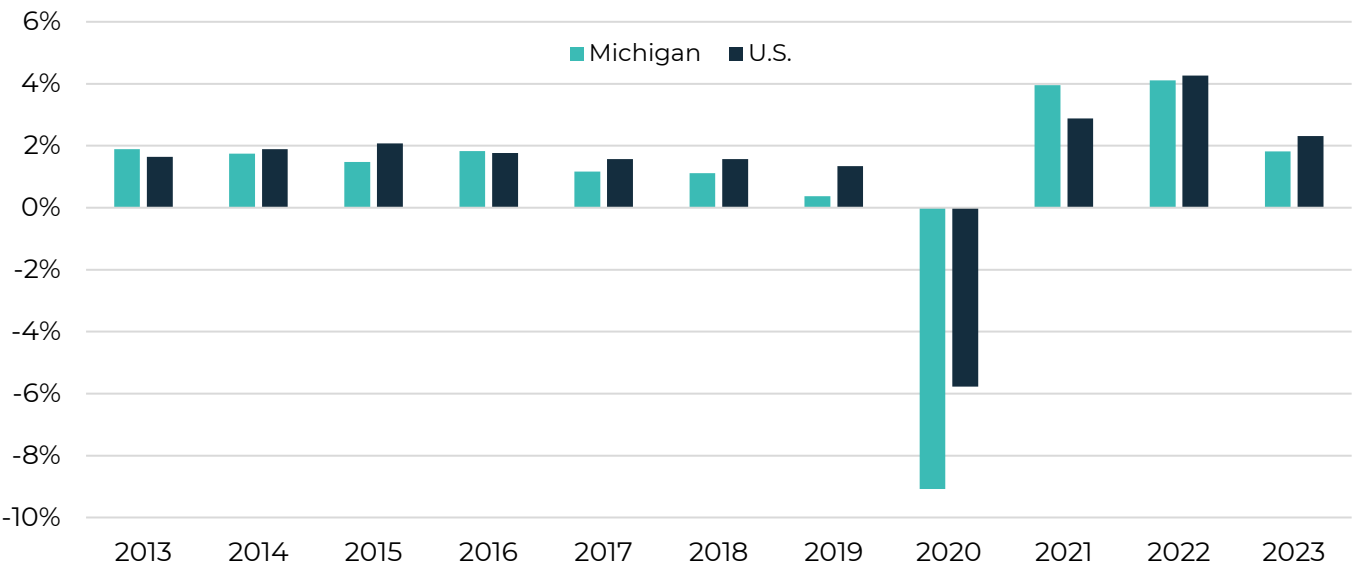
Year	Michigan	U.S.
2019	0.1%	0.7%
2020	-13.5%	-9.3%
2021	3.1%	2.3%
2022	1.4%	1.7%
2023	1.3%	1.1%
2024	0.7%	0.8%

Source: Current Employment Statistics, U.S. Bureau of Labor Statistics

annual average job growth in 2023. On an annual average basis, the *Leisure and hospitality* (+4.7 percent) and *Private education and health services* (+3.8 percent) sectors recorded the greatest percent increase in employment over the year. The *Leisure and hospitality*

Michigan sees slower rates of job growth during 2023.

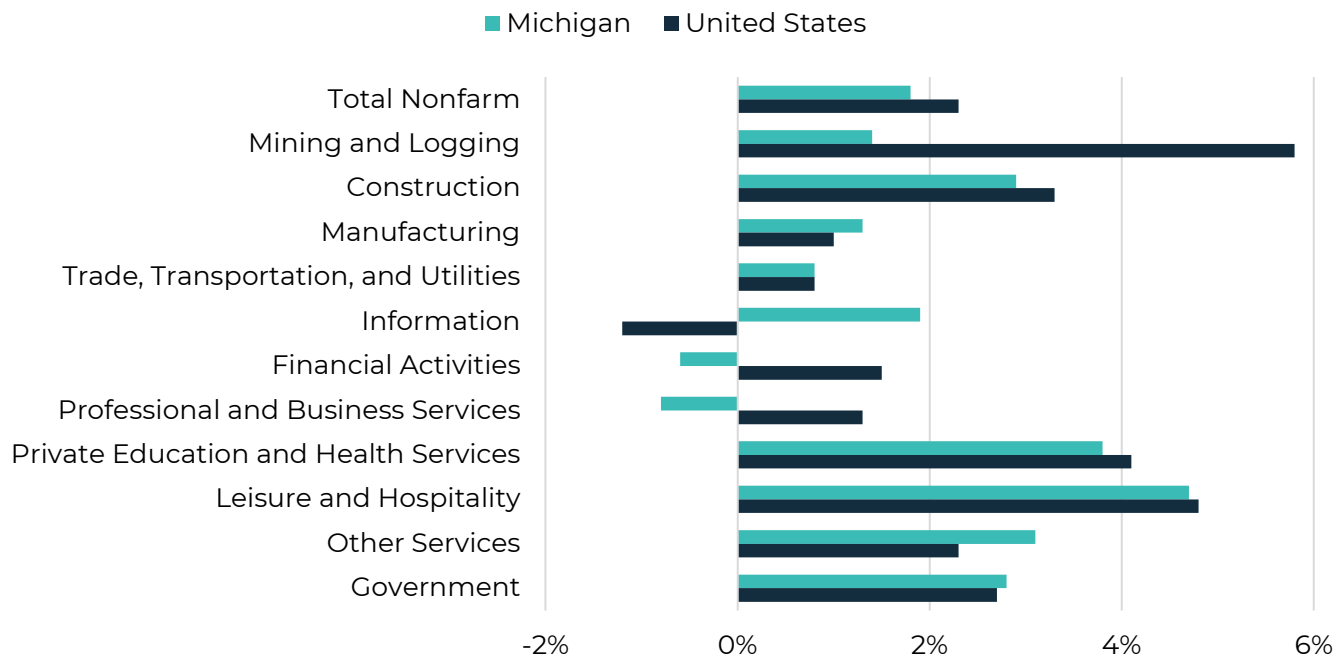
Michigan and U.S. Annual Average Job Change, 2013–2023



Source: Current Employment Statistics, U.S. Bureau of Labor Statistics

Annual average job growth for four Michigan industries (*Other services, Government, Information, and Manufacturing*) outpaced the national average.

Michigan and U.S. Annual Average Job Change by Industry Sector, 2022–2023



Source: Current Employment Statistics, U.S. Bureau of Labor Statistics

sector's annual increase can largely be attributed to a large numeric growth within the *Accommodation and food services* subsector, while the *Health care and social assistance* subsector greatly contributed to the increase in *Private education and health services*.

On a percentage basis, only four of 11 statewide major industry sectors outpaced their national sector counterparts, including *Other services, Government, Information, and Manufacturing*. The *Trade, transportation, and utilities* industry in Michigan and the U.S. recorded a similar change rate between 2022 and 2023, at 0.8 percent. The remaining six major sectors observed slower rates of job growth in Michigan than nationally.



Michigan's job industry make-up is comparable to the nation.

Share of Jobs by Major Industry Sector, Annual Average Job Change, 2022–2023

Major Industry	Michigan	U.S.
Total Nonfarm	100.0%	100.0%
Mining and Logging	0.2%	0.4%
Construction	4.2%	5.1%
Manufacturing	13.8%	8.3%
Trade, Transportation, and Utilities	18.3%	18.5%
Information	1.3%	1.9%
Financial Activities	5.2%	5.9%
Professional and Business Services	14.7%	14.6%
Private Education and Health Services	15.5%	16.2%
Leisure and Hospitality	9.5%	10.6%
Other Services	3.8%	3.7%
Government	13.5%	14.6%

Source: Current Employment Statistics, Bureau of Labor Statistics

Industry Job Concentration

Michigan's job industry make-up is comparable to the nation. For instance, on the statewide and national level, nearly 50 percent of all total nonfarm payroll jobs were concentrated within three major industry sectors: *Trade, transportation, and utilities*; *Private education and health services*; and *Professional and business services*. Additionally, these major industry sectors were the three largest industries in terms of employment share by sector in both Michigan and the U.S.

Three Michigan industry sectors, including *Manufacturing*, *Professional and business services*, and *Other services*, exceeded the share of jobs in comparable industries nationally. In Michigan, 13.8 percent of all total nonfarm payroll jobs belonged to the *Manufacturing*

sector, a 5.5 percentage point difference from the share of *Manufacturing* jobs in the U.S. (8.3 percent). While the remaining eight major industry sectors recorded a greater share of jobs nationwide, the differences were minimal, suggesting a strong correlation between Michigan and U.S. employment concentrations.

Conclusion

Within three years of the COVID-19 recession, Michigan total nonfarm payroll jobs have completely rebounded. Payroll jobs have continued to rise, matching levels last seen more than 20 years ago. However, an analysis of June 2024 seasonally adjusted employment trends as well as 2023 annual average job change reveals that the rate of job growth is slowing down in Michigan and across the nation.

Wage Changes in Michigan

■ **Yan Xu**, Economic Analyst

Inflation's Impact on Wages

While wages for Michigan workers have increased in recent years, inflation-adjusted earnings remain relatively stagnant, indicating a reduction in purchasing power. Average hourly earnings in Michigan's private sector rose steadily from \$26.40 in June 2019 to \$32.13 in June 2023. However, this substantial rise was significantly offset by inflation, resulting in a real earnings decrease of 0.7 percent. Inflation-adjusted earnings fluctuated, peaking above \$28.00 per hour in April 2020 before declining and stabilizing around \$26.21 per hour by June 2023. Since March 2022, inflation-adjusted earnings dropped and remained below \$27.00 per hour. From June 2023 to June 2024, the average hourly earnings for Michigan workers in private sectors increased by 4.6 percent, while inflation-adjusted earnings fluctuated slightly with an increase of 1.5 percent,

suggesting that the increases in nominal wages were offset by rising inflation. In this period, the gap between nominal and real earnings widened, emphasizing the persistent challenge of inflation eroding purchasing power.

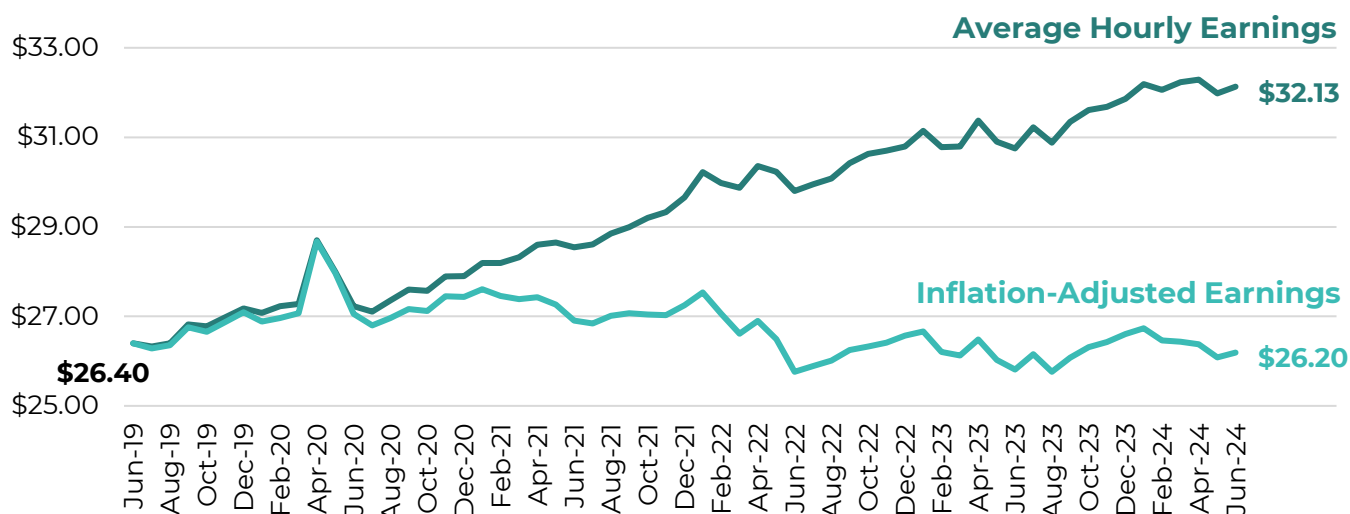
Industry Distribution by Wages

An analysis of various sectors identified the industries with the most low-wage jobs (under \$17 per hour—the statewide 25th percentile) and the industries with the most high-wage jobs (above \$34.75 per hour—the 75th percentile). Almost half of all low-wage jobs were consolidated in two industries: *Retail trade* and *Accommodation and food services*. The chart shows that 23.4 percent of jobs in the *Retail trade* sector paid less than the 25th percentile of state wages (\$17 per hour), likely indicating the prevalence of part-time and entry-level positions.

Jobs paying more than \$34.75 per hour (the 75th percentile of state wages) were most common in

Despite an increase in the average hourly wage, real earnings have remained stagnant due to inflation.

Michigan Private Sector Earnings: Average Hourly and Inflation-Adjusted



Source: Current Employment Statistics, Michigan Center for Data and Analytics; Consumer Price Index, U.S. Bureau of Labor Statistics



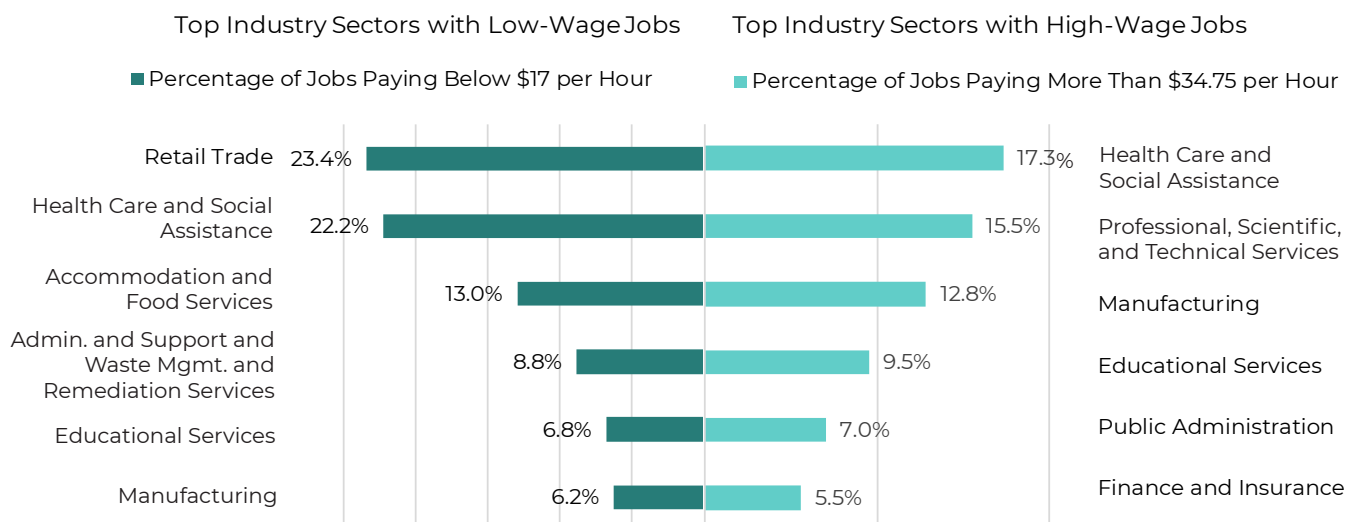
Health care and social assistance (17.3 percent) and *Professional, scientific, and technical services* (15.5 percent), reflecting occupations that typically require advanced education and specialized skills.

Notably, *Health care and social assistance*, *Manufacturing*, and *Education services* were in both low-wage and high-wage categories, indicating a wide range of job types and pay scales within the sectors.

The next chart highlights the distribution of Michigan's industry sectors by median wage

in 2023. A substantial 46.3 percent of jobs were in industries that had a median wage from \$20 per hour to \$25 per hour, mostly distributed among *Health care and social assistance*, *Manufacturing*, and *Education services*. Additionally, 23.3 percent of jobs were in industries that fell within the \$15-\$20 per hour wage range and 23.0 percent fell between \$25 per hour and \$30 per hour, reflecting a significant portion of mid-level wage positions. Only 8.6 percent of jobs were in an industry that had a median wage under \$15 per hour, all within the *Accommodation and food services* industry sector.

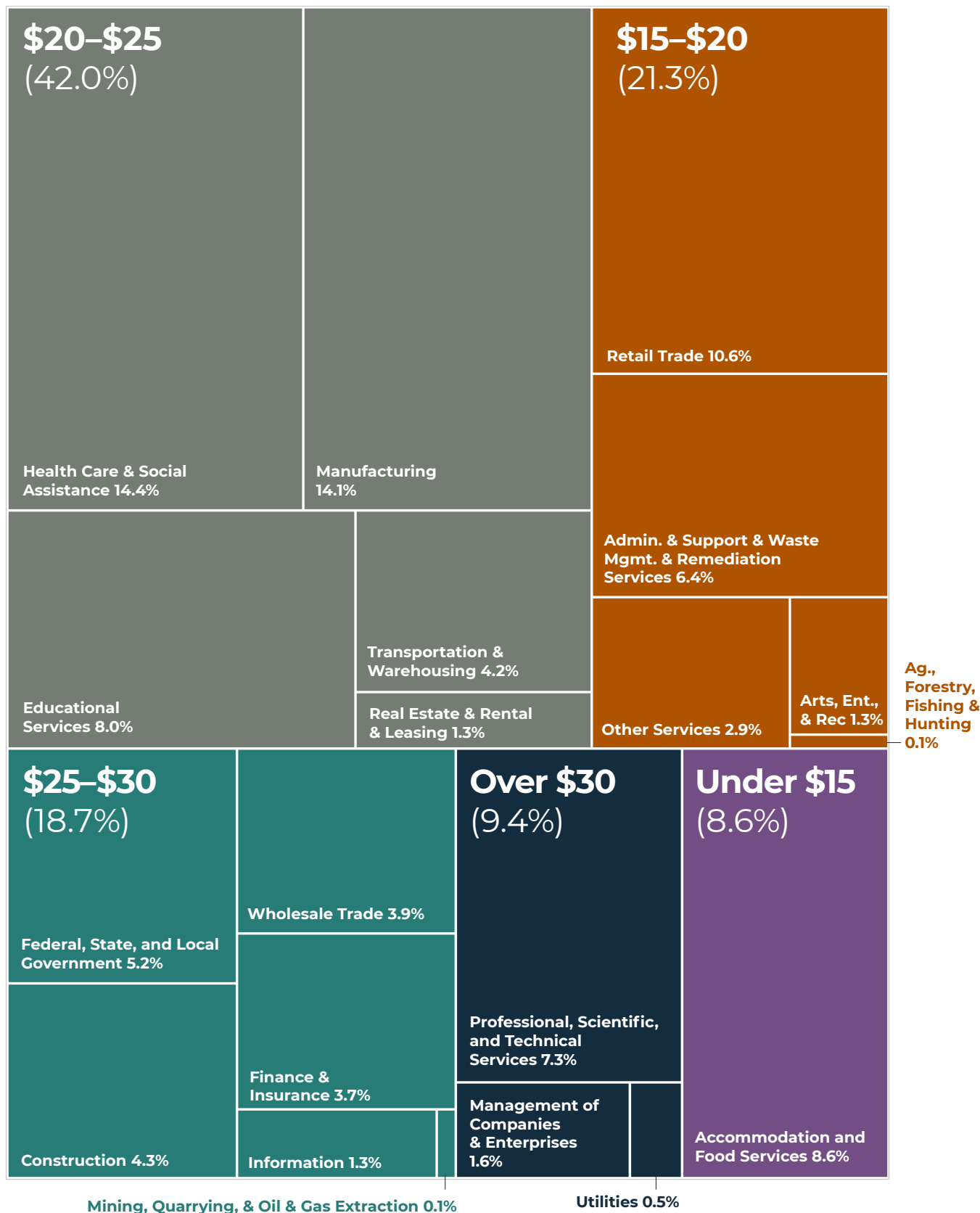
Health care and social assistance, Manufacturing, and Education services encompass both low and high wage jobs, highlighting the diverse pay scales within these sectors.



Source: Occupational Employment and Wage Statistics, Michigan Center for Data and Analytics

The largest share of Michigan jobs were in industries that had a median wage between \$20 and \$25 per hour.

2023 Job Distribution by Median Wage Across Michigan Industries



*Excluding State & Local Govt., Schools & Hospitals & the U.S. Postal Service

Source: Occupational Employment and Wage Statistics, Michigan Center for Data and Analytics

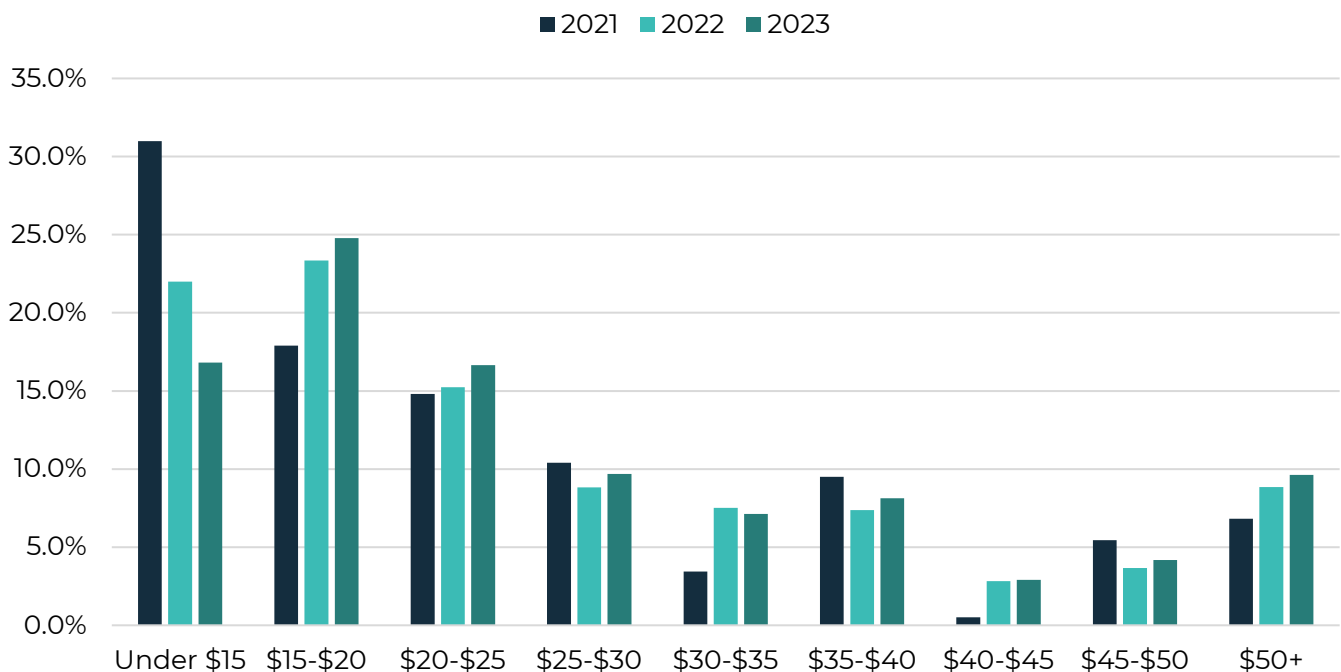
Distribution of Jobs by Wage Ranges

The Michigan job market has been trending towards mid-range and higher wages over the years. Jobs paying \$15 per hour or less have declined significantly over the past three years, indicating a shift towards higher-paying jobs that are outpacing the increase in minimum wage. The largest segment of the job market comprised occupations paying under \$20 per hour. This segment accounted for over 41 percent of total statewide occupations, representing over 1.8 million jobs. The portion of occupations that paid between \$20 per hour and \$40 per hour has generally remained stable from 2021 to 2023, except a large increase in the number of jobs in the \$30 to \$35 per hour wage (+ 3.7 percentage points). High-wage jobs have been constantly rising. Occupations paying more than \$40 per hour grew by 3.9 percentage points overall in the last three years, capturing 727,000 jobs in the market.



The Michigan job market is experiencing a shift towards mid-range and higher-paying jobs, with a notable decline in low-wage jobs and a consistent increase in high-wage occupations.

Distribution of Michigan Jobs by Hourly Wage, 2021-2023



Source: Occupational Employment and Wage Statistics, Michigan Center for Data and Analytics



Income Changes in Michigan

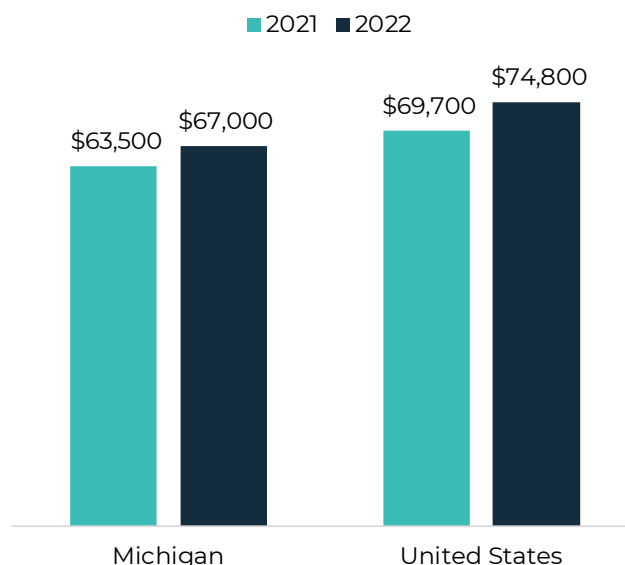
■ **Brandon Fuller**, Economic Analyst

According to the American Community Survey, the median household income in Michigan was just under \$67,000 in 2022, ranking 38th among the 50 states. Increasing 5.5 percent from 2021, growth in the state's household median income lagged the national growth rate of 7.2 percent and was among the lowest in the nation.

While the median household income is a useful metric of overall wellbeing, considering the size of the state's middle class can provide a broader view of the income distribution of the population. There are many ways to define who is in the "middle class." In this analysis, middle income households are defined as those with income between two-thirds and double the statewide median. In Michigan, this would include households with income between \$44,700 and \$134,000. Similarly, households with income less than \$44,700 are considered lower income while those with income greater than \$134,000 are considered upper income.

In 2022, 47.0 percent of Michigan households were classified as middle income while another 19.7 percent were considered upper income. By

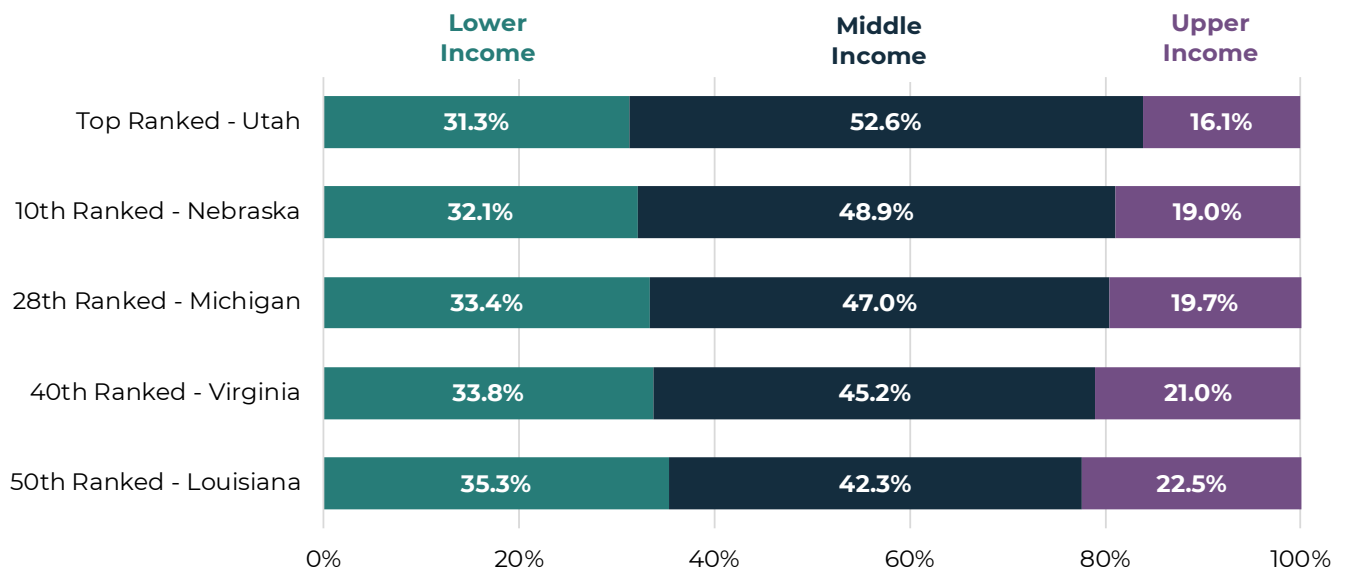
Michigan median household income lagged the U.S. in both growth and income levels.



Source: 2021 and 2022 American Community Survey 1-Year Estimates, U.S. Census Bureau

share, Michigan had the 28th largest middle income group and the 23rd largest upper income group among states. Middle income shares ranged from 42.3 percent for Louisiana to 52.6 for Utah with just 3.7 percentage points

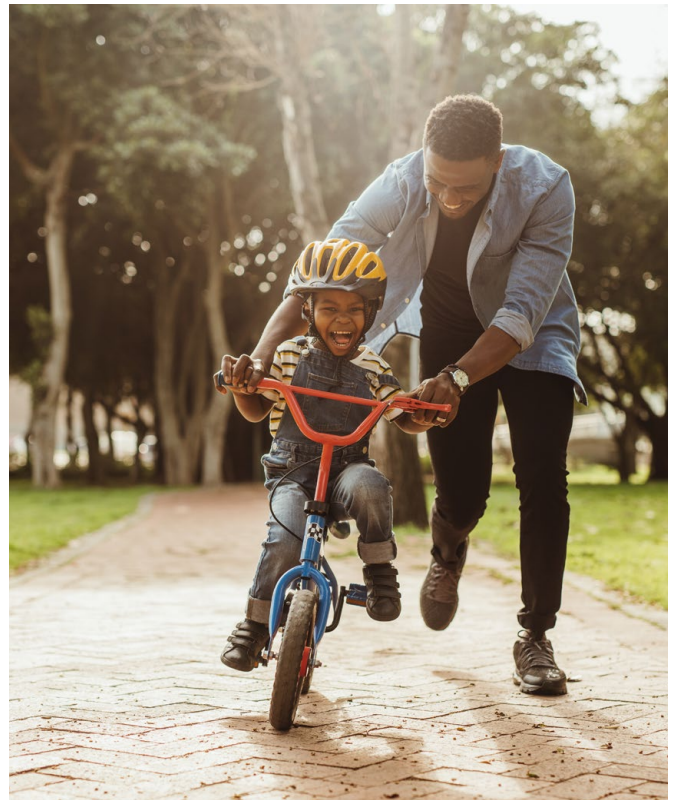
Approximately 47 percent of Michigan households were middle income in 2022, ranking 28th among states.



Source: 2022 American Community Survey 1-Year Public Use Microdata Sample, U.S. Census Bureau

separating the 40th ranked state (Virginia, 45.2 percent) from the 10th ranked state (Nebraska, 48.9 percent). For Michigan to be a top 10 state (and if the number of households in each category remained the same in all other states), 75,000 households (approximately 5.5 percent of the state’s lower income households) would have to move into the middle income group.

For progress tracking, it is also important to be mindful of the size of the lower income group, or conversely the size of the combined middle and upper income groups. While increases in the size of the middle class can occur for a variety of reasons (both positive and negative), a reduction in the size of the lower income group would mean a greater share of households are in the middle or upper income groups, a positive development. At 33.4 percent, Michigan had the 22nd smallest lower income group.



Michigan's share of households considered lower income ranked 22nd among states.

Rank	State	Lower Income Share	Total Lower Income Households
1	Utah	31.3%	353,191
2	Idaho	31.8%	227,906
3	Nebraska	32.1%	258,159
4	Alaska	32.3%	88,642
5	North Dakota	32.4%	107,281
6	New Hampshire	32.4%	180,413
7	South Dakota	32.4%	119,264
8	Wisconsin	32.6%	812,056
9	Arizona	32.6%	929,898
10	Nevada	32.7%	391,480
22	Michigan	33.4%	1,364,368
41	New Jersey	34.3%	1,205,985
42	South Carolina	34.4%	733,779
43	New Mexico	34.5%	292,378
44	Mississippi	34.7%	398,031
45	Montana	34.7%	161,211
46	West Virginia	34.9%	256,746
47	Alabama	35.0%	705,635
48	Louisiana	35.3%	640,534
49	New York	35.4%	2,752,397
50	Massachusetts	35.5%	993,249

Source: 2022 American Community Survey 1-Year Public Use Microdata Sample, U.S. Census Bureau

Wage Growth by Demographic Group

■ **Brandon Fuller**, Economic Analyst

■ **Trisha Schlegel**, Economic Analyst

From 2021 to 2022, earnings growth in Michigan varied by gender, race, and ethnicity; however, long-standing disparities in earnings between groups do not appear to have been exacerbated for full-time, year-round employed workers. In fact, although earnings gaps persisted, many closed slightly over the period. This section uses the most recently available American Community Survey (ACS) data to analyze how real (inflation-adjusted) personal earnings of Michigan's full-time, year-round employed have evolved in recent years for various demographic groups. Additionally, earnings data by state is used to compare Michigan to other regional states.

Great Lakes Region Earnings Comparisons

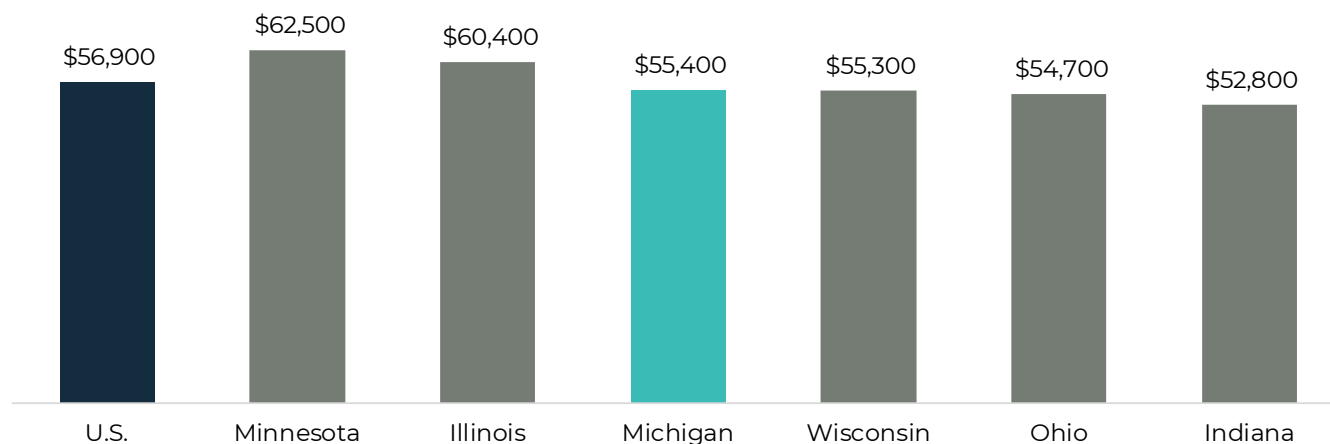
At \$55,400, median earnings in Michigan were slightly below the U.S. median of \$56,900 in 2022. Among the Great Lakes states, Michigan ranked behind Minnesota and Illinois who had the highest median earnings regionally. Michigan was essentially tied with Wisconsin and Ohio while Indiana's median earnings were not far behind.

Racial and Gender Earnings Gaps

Earnings gaps show how much a full-time, year-round worker for one group earns relative to another. Tracking these gaps over time can provide insight into differences in pay between groups, but they may also reflect changes in other factors such as labor supply. For example,

Median earnings for Michigan workers were slightly below the national median in 2022.

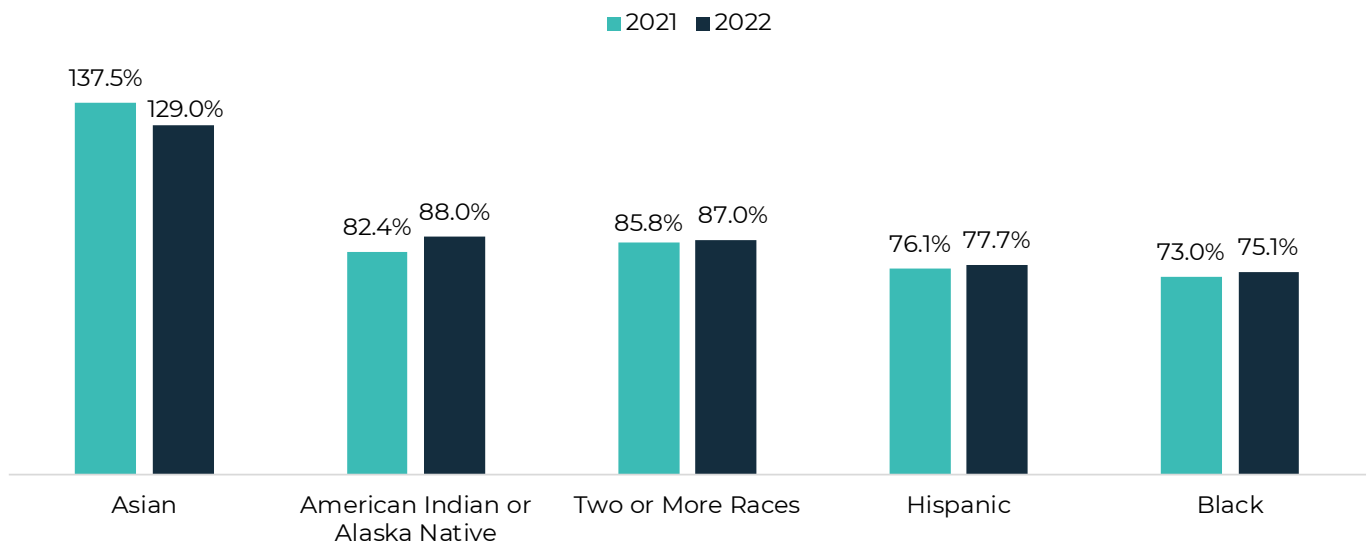
Median Earnings (Ages 16+, Full-Time, Year-Round Employed)



Source: 2022 American Community Survey 1-Year Estimates, U.S. Census Bureau

Earnings gaps with white non-Hispanic workers narrowed across race and ethnicities in Michigan.

Earnings as a Percentage of white Non-Hispanic Worker's (Ages 16+, Full-Time, Year-Round Employed)



Source: 2021 and 2022 American Community Survey 1-Year Estimates, U.S. Census Bureau

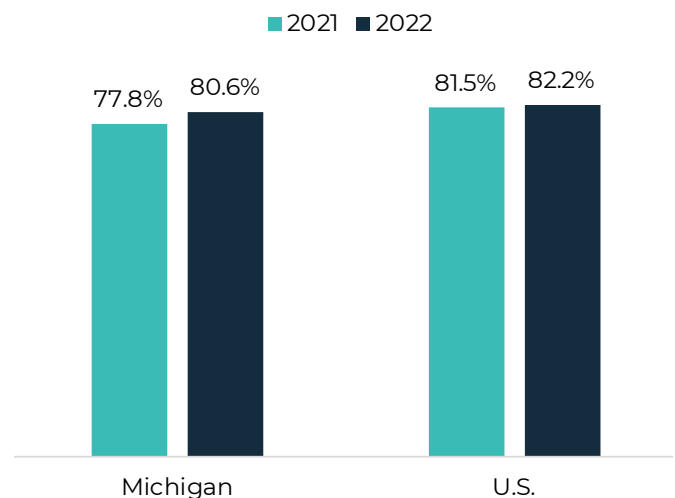
the median full-time, year-round earnings for a group could increase due to relatively more lower earning workers working part-time or exiting the labor force, all else being equal. Caution should be exercised in attributing changes in earnings gaps solely to changes in pay for individuals.

In terms of race and ethnicity, earnings gaps relative to white non-Hispanic workers have largely made some progress towards closing. The gap for American Indian or Alaska Native workers closed the most as their median earnings increased from 82.4 to 88.0 percent of the median earnings for white workers. Changes in the earnings gap for Black, Hispanic, and multiracial workers in Michigan were much smaller as each gap closed by about 1-2 percentage points.

Female median earnings as a percent of male median earnings increased from 77.8 percent to 80.6 percent in Michigan from 2021 to 2022,

The gender earnings gap in Michigan has decreased, though it is still larger than the gap nationally.

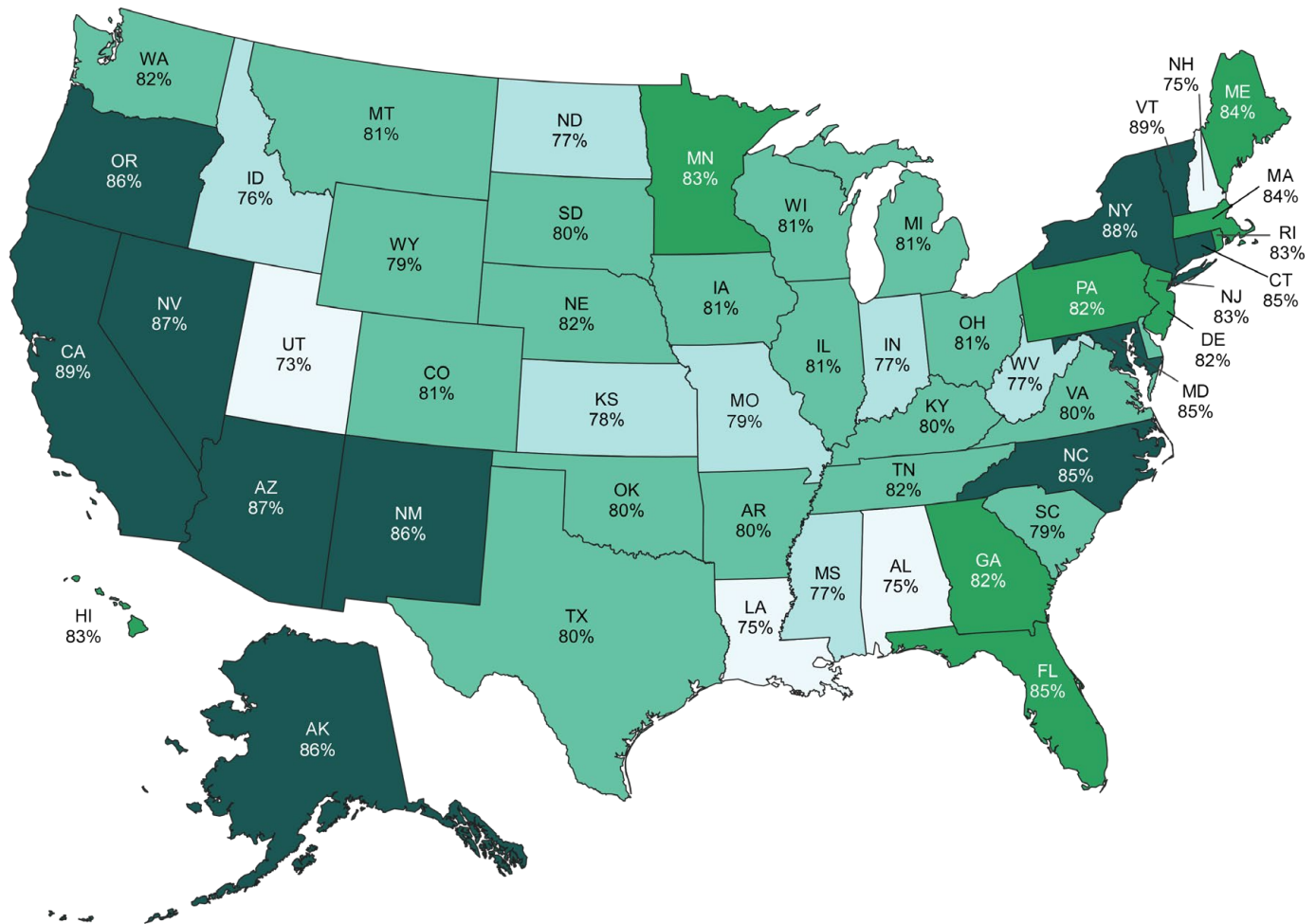
Earnings for Women as a Percentage of Men's (Ages 16+, Full-Time, Year-Round Employed)



Source: 2021 and 2022 American Community Survey 1-Year Estimates, U.S. Census Bureau

Women who worked full-time, year-round in 2022 earned notably less than their male counterparts across the U.S.

Earnings for Women as a Percentage of Men's by State (Ages 16+, Full-Time, Year-Round)



Source: 2022 American Community Survey 1-Year Estimates, U.S. Census Bureau

closing the gap by nearly 3 percentage points. Smaller progress was experienced at the national level where female earnings increased from 81.5 percent to 82.2 percent of male earnings.

The gender earnings gap is prevalent across the United States. Despite making up roughly half the population in each state, women earned notably less than men. In 2022, Michigan ranked 30th out of all 50 states for smallest gap in women's earnings as a percentage of men's. There is a notable difference in earning disparities across states, with gaps ranging from 73 to 89

percent. Utah, Louisiana, and Alabama had the largest gaps in earnings between their male and female workers. Noticeably, the states with the closest gaps are typically concentrated on the East and West coasts. The top three states for smallest gender gaps were Vermont, California, and New York. Even with gaps that were closer than all other U.S. states, women earned over 10 percent less than their male counterparts in these states.

Demand for Workers in Michigan

■ **Krystal Jones**, Economic Analyst

■ **Trisha Schlegel**, Economic Analyst

This section examines Help Wanted Online (HWOL) data from Lightcast Developer and the Job Openings and Labor Turnover Survey (JOLTS) data from the Bureau of Labor Statistics. HWOL is real-time online job advertisement data that can be broken down by occupation and industry information. JOLTS provides information on job openings, labor turnover, hires, separations, and more.

Many indicators in Michigan's job market have pointed to a slowdown of labor demand in recent months. This comes as both job openings and job advertisements fell, coupled with a decreasing number of employees voluntarily leaving their current positions.

Job Openings

Job openings were down between June 2023 and June 2024 according to data from the JOLTS. There were approximately 50,000 less available

jobs in June of 2024 (193,000) than the year prior (243,000). As a result, Michigan's job openings rate decreased from 5.2 percent to 4.1 percent. Notably, this was Michigan's lowest recorded openings rate since May 2020 (3.6 percent). Michigan was below the national rate (4.9 percent) and registered the third lowest among states in June 2024, a drop from ninth lowest in June 2023.

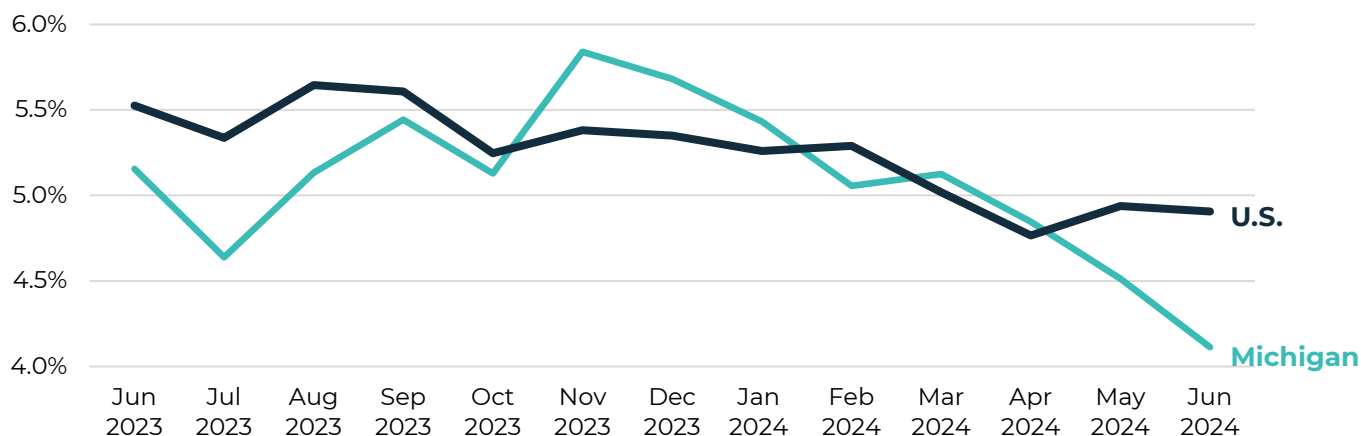
Total Online Advertisements

According to HWOL data, there were roughly 179,700 total online job advertisements available in Michigan in June 2024. Compared to June 2023 (226,900 ads), this was a 21 percent decrease in total online postings. Due to the smaller volume of overall ads, there were notable downturns in occupational advertisements over the year as well.

The largest percent loss in occupational advertisements since June 2023 was for *Software developers* (-51 percent). There was still a notable number of ads for the job in the state for June 2024 (2,300 ads), however, there were over 4,600 available postings one year prior. The remaining two largest percent losses were in ads for

The job openings rate trended downward in Michigan as openings fell in June.

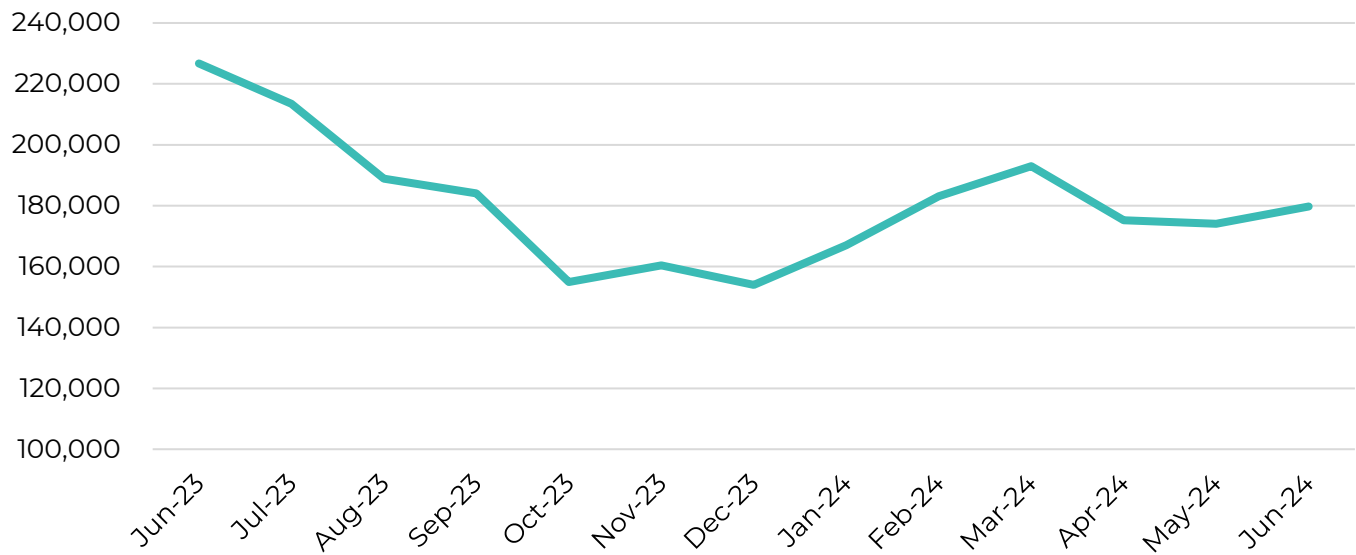
Job Openings Rate, Michigan and U.S.



Source: Job Openings and Labor Turnover Survey, U.S. Bureau of Labor Statistics

Total online advertisements in Michigan are down over the year.

Total Michigan Job Advertisements



Source: Help Wanted OnLine, Lightcast Developer

Industrial engineers (-48 percent) and *Project management specialists* (-41 percent).

Software developers (-2,300 ads) also experienced the largest numerical loss over the time period. The second largest loss was in *Registered nurses* (-1,900 ads). This occupation is among the most frequently posted each month and is often the topmost requested occupation across the state. Despite the decrease in total ads over the year, it was still the number one requested job in both June 2023 and 2024. Lastly, the occupation with the third largest downturn in total advertisements was *Laborers and freight, stock, and material movers, hand*.

A small number of occupations experienced increases in advertisements over the year. The largest and most notable was *Home health and personal care aides* (+890 ads). This occupation increased from 2,500 ads in June 2023 to 3,400 ads one year later, an increase by 35 percent. Lastly, *Heavy and tractor-trailer truck drivers* (+127 ads) and *Pharmacy technicians* (+35

ads) also experienced an uptick in online advertisements.

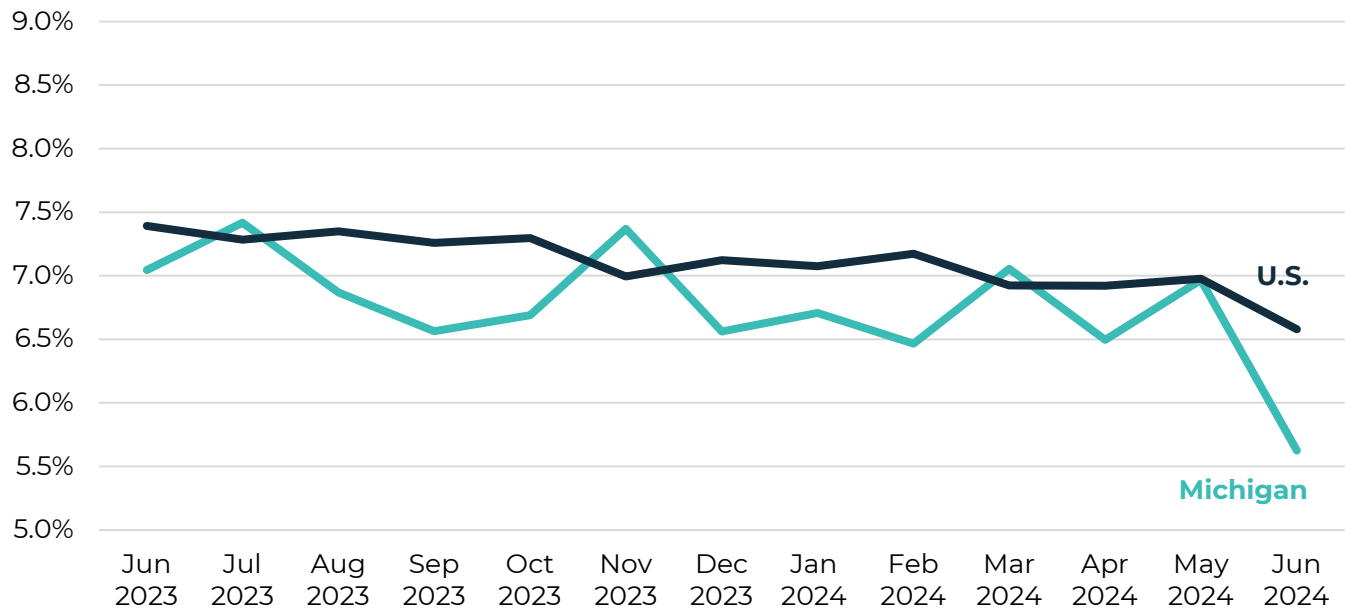
Labor Turnover

The JOLTS data on labor turnover paints a similar picture. In June 2024, Michigan recorded a 5.6 percent turnover rate, a significant drop from 7.0 percent in both the month prior and in June 2023. The steep drop over the month moved Michigan to the fourth lowest among states and was Michigan's lowest turnover rate since December 2013 (5.5 percent).

This fall can be attributed to a decline in both hires and separations, the two components which are combined to produce the labor turnover rate. Examining hires, approximately 20,000 less individuals were hired in June 2024 (134,000) compared to June 2023 (154,000). This translated to a 0.4 percentage point drop in the hires rate from 3.4 percent to 3.0 percent. This was Michigan's lowest hires rate since July 2014 (2.9 percent). It was also below the national rate at the time (3.4 percent) and was the third

Labor turnover saw a steep drop in June 2024, reaching its lowest rate in over a decade.

Labor Turnover Rates, Michigan and U.S.



Source: Job Openings and Labor Turnover Survey, U.S. Bureau of Labor Statistics

lowest in the country. The decline in separations was much more substantial, as approximately 42,000 less employees separated in June 2024 compared to June 2023. Subsequently, separations fell to 2.6 percent, its lowest in over a decade (August 2013, 2.5 percent). Michigan was below the national rate in separations (3.2 percent) as well as ranked third lowest among states in June 2024.

Job Quitters

The number of job quitters declined between June 2023 (107,000) and June 2024 (81,000) by approximately 26,000. As a result, Michigan's quits rate fell from 2.4 percent to 1.8 percent during this time. Michigan had the ninth lowest quits rate among states and remained below the national quits rate in June 2024 (2.1 percent). The state's 1.8 percent quits rate was the lowest since May 2020 (1.5 percent). Another component of separations are layoffs/discharges, which measures employees who involuntarily separate from their jobs. Though

not as significant as the fall in quits, layoffs/discharges declined by 0.2 percentage points to 0.7 percent since the year prior.

Conclusion

Demand for workers has cooled over the past year according to data from both HWOL and the JOLTS. Labor turnover reached its lowest in over a decade in June 2024. Separations experienced a similarly significant decline in the wake of historically low levels of job quitters in recent months. Continuing downward trends in the number of job openings and their subsequent advertisements month after month indicates a softening labor demand for Michigan workers.



Michigan's Employment Outlook Through 2032

■ **Matt Dotson**, Economic Projections Specialist

The Michigan Center for Data and Analytics calculates long-term, 10-year employment projections every year. These alternate between projections for the entire state (even years) and for the 10 Prosperity Regions (odd years). July 2024 saw the release of the 2022-2032 long-term projections for the state overall. After historic job losses in 2020, Michigan employment rose to a three-year high in 2022. This 10-year outlook builds off those totals in 2022 and assumes a full employment scenario in the projected year of 2032. It also considers Michigan's population and labor force constraints in the coming years. This allows a clearer picture of how occupations and industries are likely to change in Michigan over time.

Employment projections are broken down to show changes for detailed occupations and industries. Using 2022 as a base year, projections are made using historical industry and occupation trends, applying change factors, accounting for population and labor force forecasts, and assuming a full employment scenario in 2032. Reviewing changes for these categories over a 10-year period can help groups such as students, job seekers, and training

providers make long-term decisions. Knowing what occupations or industries are expected to have annual openings throughout the projection period can be a good indicator of future demand when choosing careers.

Michigan Population and Labor Force

The size and make-up of Michigan's population feeds into its employment outcomes. The state's total population was just over 10 million people in 2022. Within that is a civilian noninstitutional population of people age 16 and over who are eligible to work. This stood at 8.12 million people in 2022 and is projected to increase to 8.45 million people in 2032, an increase of 4.1 percent. Despite this growth, younger people age 16 to 24 are expected to decrease both in population and in workforce participation over the next 10 years. People in their prime working years, age 25 to 54, are expected to increase in both population and total labor force between 2022 and 2032 even though their labor force participation rate is projected to decline slightly over that span. Meanwhile, growth is expected in the number of individuals age 65 and above. The civilian labor force (those working or actively seeking a job) stood at 4.88 million in 2022 and is projected to rise to 4.93 million in 2032, an increase of 0.9 percent. Michigan's unemployment rate

in 2022 averaged 4.1 percent and under a full employment scenario in 2032, an unemployment rate of 4.3 percent is expected.

Top Line Data

Overall, employment growth is expected to be modest, increasing by 25,010, or 0.6 percent, over the 10-year period. These 2022-2032 projections started from a full employment scenario in 2022 and projections methodology assumes full employment at the end of the period as well. Deviation from this can occur, particularly in the middle of the period as employment trends will likely fluctuate over a decade.

Industry Projections

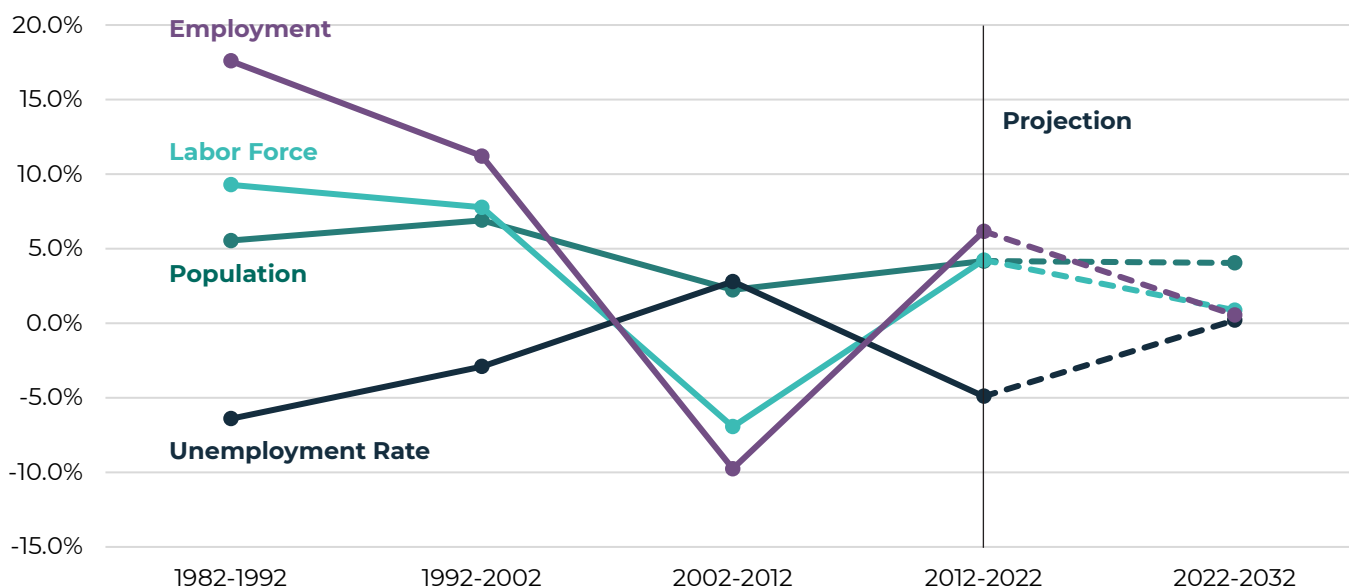
In 2032, there are expected to be more jobs in service-providing industries and fewer goods-producing jobs than in 2022. Service-providing jobs are projected to increase 49,710, or 1.4 percent between 2022 and 2032, driving total job gains. Increases were greatest for the major

industry sector of *Private education and health services*, which is projected to add 50,000 jobs. This increase is led by the subsector industry of *Health care and social assistance* with a predicted gain of 46,620 jobs (+7.5 percent). An anticipated rise in the elderly population in Michigan from 2022-2032 causes demand for additional healthcare jobs. Employment is expected to increase the most in *Ambulatory health care services*, and *Social assistance*, while also rising for *Hospitals*, and *Nursing and residential care facilities*.

Education services is the other subsector within this major group, and it is projected to increase by 3,380, or 0.9 percent. *Colleges, universities, and professional schools* are expected to lead the growth with an employment gain of 5,330, or 4.0 percent. Conversely, there are likely to be fewer young people enrolled in *Elementary and secondary schools* causing predicted employment in that sector to decline by 1,880, or 1.0 percent.

Michigan's labor force and employment project slight growth from 2022 to 2032.

Real and Projected Labor Market Changes Over 10-Year Periods



Source: Local Area Unemployment Statistics, Michigan Center for Data and Analytics

*The unemployment rate is expressed in percentage point change. All others are expressed in percent change. The 2032 unemployment rate is a model assumption, not a projected level.

Trade, transportation, and utilities led declines for service-providing industries, with a projected employment decrease of 20,670, or 2.6 percent. *Retail trade* drove this decline with a predicted drop of 27,400 jobs (-6.0 percent) spread throughout multiple subsectors. *General merchandise retailers* led these forecasted declines with a drop of 8,490. On a percentage basis, employment in *Furniture, home furnishings, electronics, and appliance retailers* is expected to fall the most, with a drop of 19.5 percent. The only *Retail trade* industry predicted to increase employment is *Building material and garden equipment and supplies dealers* (730 jobs, +1.5 percent).

The *Transportation and warehousing* industry countered some of the *Retail trade* job losses in the *Trade, transportation, and utilities* major sector, with an anticipated employment increase of 11,130. The *Couriers and messengers* sector projects an employment gain of 3,920, or 17.8 percent as demand for the delivery of products rises. Related to this, employment in the *Warehousing and storage* sector is expected to rise 5,080 (+12.7 percent). *Truck transportation* also etched out an employment increase in this category with a predicted gain of 1,030 (+2.1 percent).

Two of the top three Michigan industries for job gains are from *Healthcare and social assistance*.

Top Michigan Industries by Employment Growth

Industry	2022 Employment	2032 Employment	10-Year Numeric Change	10-Year Numeric Change
Ambulatory Health Care Services	210,050	237,480	27,430	13.1%
Professional, Scientific, and Technical Services	314,510	334,410	19,900	6.3%
Social Assistance	78,960	90,770	11,810	15.0%
Management of Companies and Enterprises	72,590	79,300	6,710	9.2%
Colleges, Universities, and Professional Schools	132,410	137,740	5,330	4.0%
Computer Systems Design and Related Services	48,970	54,290	5,320	10.9%
Warehousing and Storage	39,970	45,050	5,080	12.7%
Other Professional, Scientific, and Technical Services	w36,620	41,610	4,990	13.6%
Food Services and Drinking Places	313,220	318,060	4,840	1.5%
Hospitals	240,360	244,870	4,510	1.9%

Source: 2022–2032 Michigan Long-Term Employment Projections, Michigan Center for Data and Analytics

Goods-producing industries are projected to decline by 17,330 jobs from 2022 to 2032, led by an 18,250 (-3.0 percent) drop in *Manufacturing* jobs over the decade. *Transportation equipment manufacturing* is a significant industry within the *Manufacturing* sector, and employment is expected to decline by 9,480 (- 5.1 percent), between 2022 and 2032. This is primarily due to increased automation within the industry. Losses are also projected for *Fabricated metal product manufacturing* (-3,080 jobs), *Machinery manufacturing* (-2,040 jobs), and *Printing and related support activities* (-2,020 jobs), among others. A handful of *Manufacturing* industries are projected to increase from 2022 to 2032, including *Food manufacturing*, which is expected to add 1,970 jobs; and *Electrical equipment, appliance, and component manufacturing* which is predicted to add 1,490 jobs.

Another goods-producing industry, *Construction*, projects a small gain of 290 jobs, or 0.2 percent, from 2022 to 2032. This is led by an increase of 1,210 jobs for *Specialty trade contractors*. These were partially offset by projected employment for *Construction of buildings* (-580 jobs) and *Heavy and civil engineering construction* (-340 jobs).

Occupational Projections

The overall projected employment increase of 25,010 jobs is spread throughout multiple occupation groups. Among these groups, employment is expected to experience the greatest gains for *Healthcare support* (+21,810 jobs) and *Healthcare practitioners and technical occupations* (+16,020 jobs). *Home health and personal care aides*, the largest occupation within the *Healthcare support* occupational group, is expected to add the most jobs over the 10-year period, with a gain of 14,840. *Nurse practitioners* are predicted to post the fastest growth among all occupations with an increase of 41.2 percent on 3,040 jobs added. This job paid an annual median salary of \$122,040 in 2023.

Job growth is also anticipated for the *Computer and mathematical* occupational group, which is expected to add 13,750 jobs and rise 11.3 percent from 2022 to 2032. Leading this group are *Software developers* who are projected to add 8,700 jobs. *Data scientists* expect to add 1,400 jobs and post the highest job growth of all occupations in this group with an increase of 34.8 percent. *Computer systems analysts* is another occupation that predicts job growth above 1,000, with an increase of 1,060. This occupation paid an annual median wage in 2023 of \$100,100.

Skilled trades occupations are another group of occupations that appear to be high-demand, high-wage jobs. They are a set of jobs expected to show above-average growth (+1.9 percent) over the projection period. Growth in this group is led by *Industrial machinery mechanics*, which are predicted to add 2,970 jobs and have 2,000 total annual job openings. *Occupational therapy assistants* (+27.0 percent) and *Physical therapy assistants* (+21.1 percent) expect to experience the fastest growth among skilled trades jobs from 2022 to 2032.

There are approximately 100 jobs classified within STEM – science, technology, engineering, and math. Employment for this group of jobs is projected to grow by 24,700 jobs, or 7.8 percent, from 2022 to 2032, reaching a total employment level of 343,060. Within STEM jobs, *Software developers* are expected to add the most jobs of the group. Two engineering occupations, *Industrial engineers* and *Mechanical engineers*, are each expected to add over 2,600 workers by 2032. In 2023, these jobs paid annual median wages of \$98,340 and \$98,760, respectively. Several major occupational groups are expected to lose over 10,000 jobs between 2022 and 2032, including *Office and administrative support* (-40,020 jobs), *Production* (-27,040 jobs), and *Sales and related* (-18,650 jobs) occupational groups. Specific occupations with large declines in the *Office and administrative support* group

Healthcare occupations lead Michigan employment gains among all occupational groups.

Top Michigan Occupational Groups by Employment Growth

Occupational Group	2022 Employment	2032 Employment	10-Year Numeric Change	10-Year Numeric Change	Total Annual Openings
Healthcare Support	190,280	212,090	21,810	11.5%	30,845
Healthcare Practitioners and Technical	294,870	310,890	16,020	5.4%	18,180
Computer and Mathematical	122,140	135,890	13,750	11.3%	8,845
Management	303,930	317,620	13,690	4.5%	24,660
Business and Financial Operations	267,270	276,810	9,540	3.6%	22,300
Transportation and Material Moving	394,400	403,940	9,540	2.4%	51,555
Architecture and Engineering	130,360	137,150	6,790	5.2%	9,055
Community and Social Service	68,150	73,320	5,170	7.6%	6,450
Educational Instruction and Library	216,090	220,910	4,820	2.2%	20,460
Installation, Maintenance, and Repair	177,940	182,030	4,090	2.3%	15,905

Source: 2022–2032 Michigan Long-Term Employment Projections, Michigan Center for Data and Analytics

were *General office clerks* (-8,030 jobs); *Customer service representatives* (-6,470 jobs); and *Secretaries and administrative assistants, except legal, medical, and executive* (-5,300 jobs). Within the *Production* group, *Miscellaneous assemblers and fabricators* are expected to have a sizable job loss of 8,980. The job declines in the *Sales and related* occupational group were led by *Cashiers*, which is expected to fall 11,380 jobs. Much smaller losses are projected for the *Protective service* (-3,100 jobs) and *Building and grounds cleaning and maintenance* (-1,850 jobs) occupational groups.

Conclusion

Michigan is projected to show only a small increase in employment between 2022 and 2032. Much of this is due to relatively flat growth in the state's population and labor force over this time. Employment increases are expected to be strongest in service-producing industries and healthcare-related occupations, while industries such as *Manufacturing* and its supporting production occupations are projected to decline. There will continue to be opportunities for job seekers in many industries and occupations as turnover will create annual openings even if overall growth is low, particularly in fields with many individuals ready to enter retirement.

Michigan Population Projections

■ **Alan Leach**, Demographic Analyst

A population can grow through two non-mutually exclusive avenues: 1) natural increase (i.e., more births than deaths) or 2) net positive migration.

Historical Population Growth

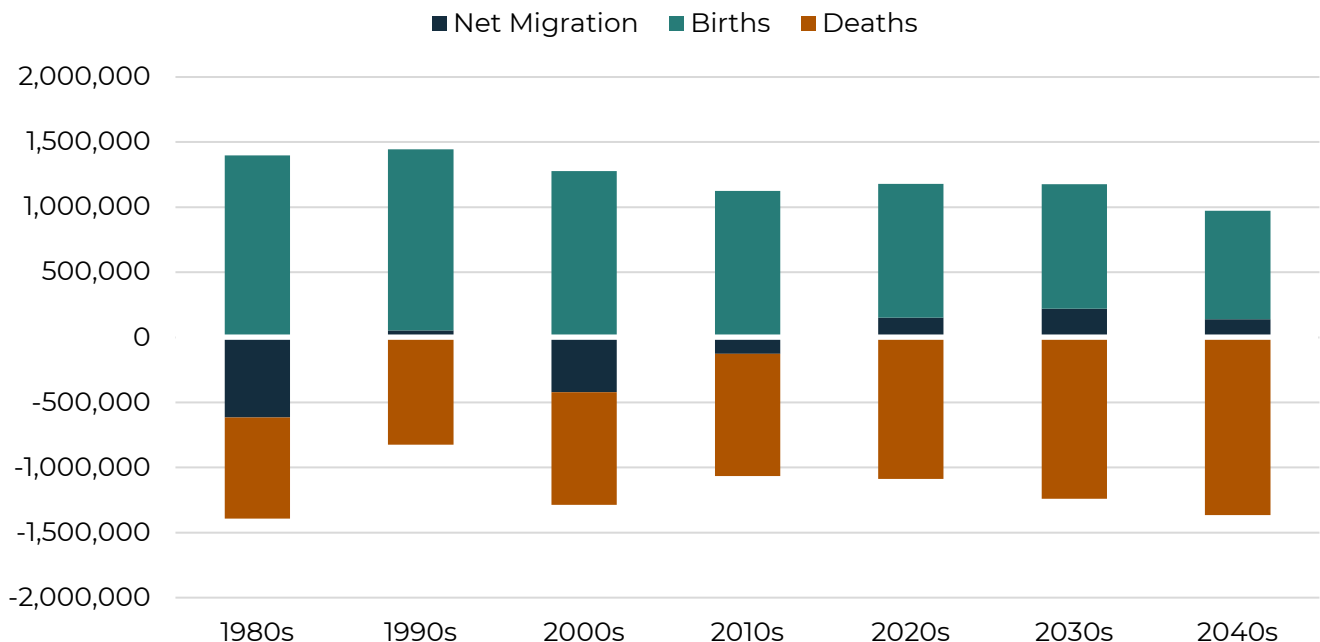
Michigan's population growth has been slow since the late-twentieth century. In fact, between the 2000 and 2010 censuses Michigan lost population. The 2020 census indicated that Michigan's population increased marginally since the 2010 census, by about two percent to 10,077,331. Two factors have largely contributed to slow population growth in Michigan the past few decades. First, total fertility rates have sharply declined since the peak of the baby boom in the 1950s. Second, the state has experienced net

out-migration most years since 1970, particularly during the recession in the early 1980s and the more recent Great Recession.

Like the nation, Michigan experienced an exceptional baby boom from the mid-1940s through early 1960s. However, by the early 1970s, fertility rates had dropped below "replacement levels" (i.e., about 2.1 children per woman, the rate necessary for stable generation sizes). As a result, births have declined and each generation of Michiganders born since the baby boom has been smaller than the last. This trend will continue if birth rates remain below replacement. However, despite low birth rates, Michigan's population did grow from the 1970s until around 2004 and has fluctuated around 10 million since. Michigan's growth during this period is attributable in part to the

Deaths are projected to increase, while births continue to decline. Michigan's population growth depends on positive migration.

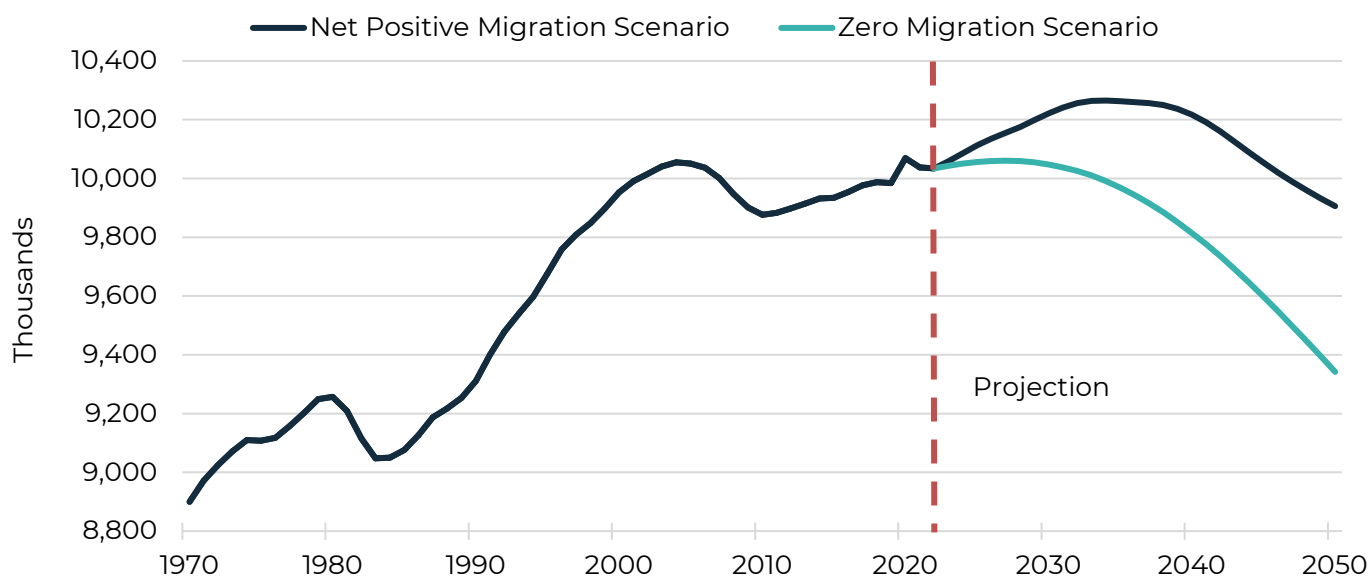
Michigan Components of Change, Historical and Projected



Source: 1920–2022 Michigan Resident Death Files, Michigan Department of Health and Human Services; 1970–2022 Migration Estimates and 2024 Vintage Population Projections (Net Positive Migration Scenario), Michigan Center for Data and Analytics

Without net positive migration, Michigan's projected population will be significantly lower by 2050.

Michigan Total Population, Historical and Projected



Source: WONDER Database, Centers for Disease Control; 2024 Vintage Population Projections, Michigan Center for Data and Analytics; Population Estimates Program, U.S. Census Bureau

“momentum” provided by the large numbers of reproductive-age people at the time (i.e., baby boomers). However, the positive population momentum provided by the baby boomers in the 1970s through the early 2000s is shifting downward as the baby boomers age into their seventies and beyond.

The long-term decline in births and steady rise in deaths illustrates Michigan’s slowing population momentum and transition toward natural decrease (i.e., more deaths than births). This trend reached an inflection point in 2020 when Michigan experienced natural decrease for the first time since at least 1900. The trend of increasing deaths and decreasing births is likely to continue for the next several decades as baby boomers continue aging and fertility rates likely remain low. Thus, potential population growth in Michigan will be reliant on greater levels of positive net migration to mitigate steepening natural decrease.

However, maintaining positive migration may be challenging. Since at least the 1970s, net migration into Michigan has often been negative. This was acute during the recession of the early 1980s and during the more recent Great Recession. This out-migration during the Great Recession largely contributed to Michigan’s population decline between the 2000 and 2010 censuses. However, net migration has recovered and has even been positive in recent years.

Population Projections

MCDA is projecting net positive migration through 2050. Migration projections in this net positive scenario are influenced by Michigan’s median age continuing to climb. This could potentially result in younger people moving to the state for available jobs as workers retire. In this net positive migration scenario Michigan’s population is expected to grow modestly until the mid-2030s and then begin declining. Alternatively, under a zero-migration scenario Michigan’s



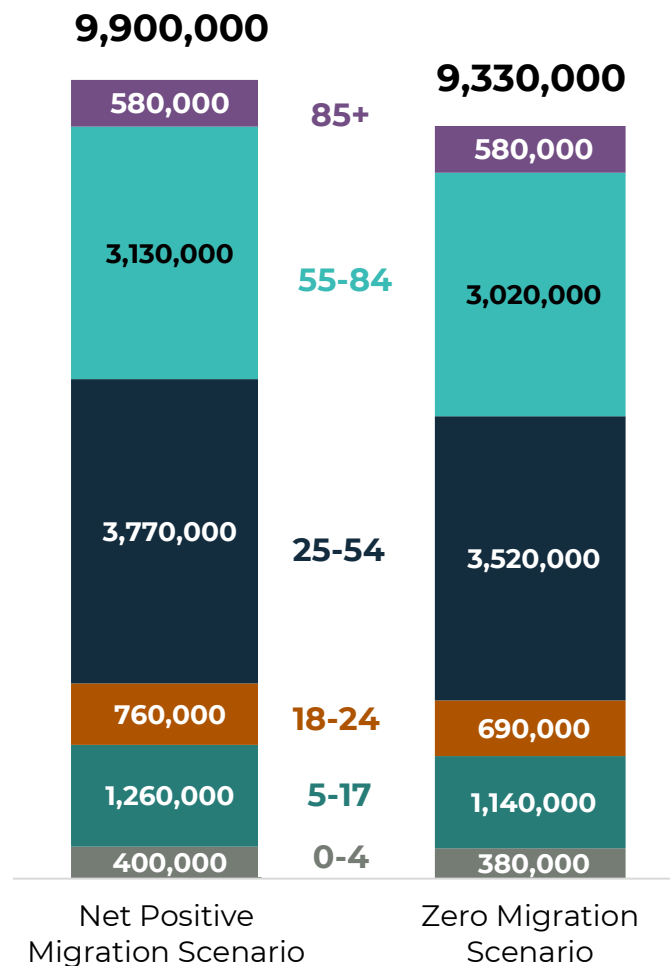
population would begin declining as soon as the late 2020s. By 2050, the more severe decline in the zero migration scenario could result in a statewide population that was 560,000 lower than the statewide population in the net positive migration scenario. Since much of the migration is expected to be among young and middle-aged adults, the net zero-migration scenario would also result in about 250,000 fewer people 25–54 years of age. Because this age group is of working “prime age,” it is likely this scenario would put downward pressure on Michigan’s labor force.

Conclusion

For at least 120 years, the state could count on growth potential from natural increase. Since the peak of Michigan’s baby boom in 1957, natural increase has been declining and finally crossed to natural decrease in 2020. Michigan’s population dynamics are beginning to enter a new phase, one in which, for the foreseeable future, Michigan likely has only one potential lever of significant growth, migration. Michigan has the potential, as it has in the past, to draw large numbers of people to the state. However, without natural increase the state’s population is less “resilient” to periods of steep out-migration that have typically occurred around recessions. Previously after such events, Michigan’s population was able to recover largely due to natural increase. Moving forward, Michigan would be dependent on positive migration for recovery.

Without positive net migration Michigan cannot maintain its 25–54 year-old population, a critical age group for the labor force.

Projected 2050 Population by Age



Source: 2024 Vintage Population Projections, Michigan Center for Data and Analytics



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