

MICHIGAN'S LABOR MARKET NEWS

VOL. 76, ISSUE NO. 2
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Michigan's 2019 Occupational Employment and Wage Trends

Feature Article pg. 16

Map of the Month: Number of Healthcare-Related Workers Per 100 People by Michigan County

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Occupational Focus: Respiratory Therapists

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Nonfarm payroll jobs in Michigan rose nearly 13,000 in February 2020.

FEBRUARY 2020 JOBLESS RATE

MICHIGAN
3.6%
NATIONAL
3.5%

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IT'S BIGGER THAN DATA.

The Bureau of Labor Market Information and Strategic Initiatives is your one-stop shop for information and analysis on Michigan's population, labor market, and more.

- Our Federal-State Programs division runs the state's cooperative agreements with the U.S. Bureau of Labor Statistics and the U.S. Census Bureau, making us the official source for this information.
- Our Research and Evaluation division conducts workforce research and program evaluation, giving you the insight you need to make smarter decisions.

Michigan's jobless rate fell in February to 3.6 percent, nearly keeping pace with the national unemployment rate of 3.5 percent. Total labor force edged higher while payroll jobs rose by almost 13,000 over the month. Importantly, these February numbers do not reflect the impact of the COVID-19 pandemic on the Michigan labor market. We will see the early impact in the March numbers and the full effect in April numbers.

This month, we are excited to feature newly-released information from Michigan's Occupational Employment and Wages (OES) program. These important data provide critical information on the jobs that people do in our great state. Our *Feature Article* summarizes the results from the 2019 OES survey, highlighting key occupational groups and individual occupations in terms of employment, wages, and education. Recognizing those who are on the front lines of the recent global pandemic, Our *Map of the Month* and *Relevant Rankings* focus on healthcare-related occupations in Michigan and nationally and our *Occupational Focus* features information on *Respiratory therapists*. Rounding out our issue is our Michigan short-term occupational projections, released at the end of February.

We hope you enjoy this edition of *Michigan's Labor Market News*. Please let us know if there is something you would like to know more about.



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MICHIGAN'S UNEMPLOYMENT RATE DECLINES IN FEBRUARY

Michigan's seasonally adjusted unemployment rate fell by two-tenths of a percentage point to 3.6 percent between January and February 2020. Total employment advanced by 10,000 over the month while unemployment receded by 7,000, resulting in a labor force increase of 3,000 in February.

The national jobless rate inched down by a tenth of a percentage point over the month to 3.5 percent. Michigan's rate was a tenth of a percentage point above the U.S. rate. Over the year, the national jobless rate moved down by three-tenths of a percentage point and the Michigan rate fell by six-tenths of a percentage point.

The state workforce edged up by 11,000, or 0.2 percent, over the year. The national labor force rose by 0.9 percent during the same period. Total employment in Michigan advanced by 41,000, or 0.9 percent, since February 2019, while U.S. employment increased by 1.2 percent. Michigan's

total number of unemployed fell by 14.1 percent over the year, over double the rate of the national unemployment decline (-6.4 percent).

Michigan's Total Employment Level Trends Upward Over Past Three Years

Michigan's total employment level is defined as the number of people in the state 16 years of age or older in the civilian noninstitutionalized population who either, during the reference week, did any work (at least one hour) where they were paid, did at least 15 hours of unpaid work in a family business, or were temporarily absent from their current job due to various reasons, including bad weather, illness, or vacation.

The second chart on the following page displays the Michigan total employment count from February 2017 to February 2020. With a few exceptions, Michigan's number of employed generally expanded during this three-year period.

From February 2017 to February 2018, employment increased by 39,000, or 0.8 percent. The largest over-the-month advance in employment occurred during March of 2018, when the statewide total rose by 9,000 over the month to 4,689,000. Employment continued to edge up incrementally on a monthly basis for the remainder of 2018.

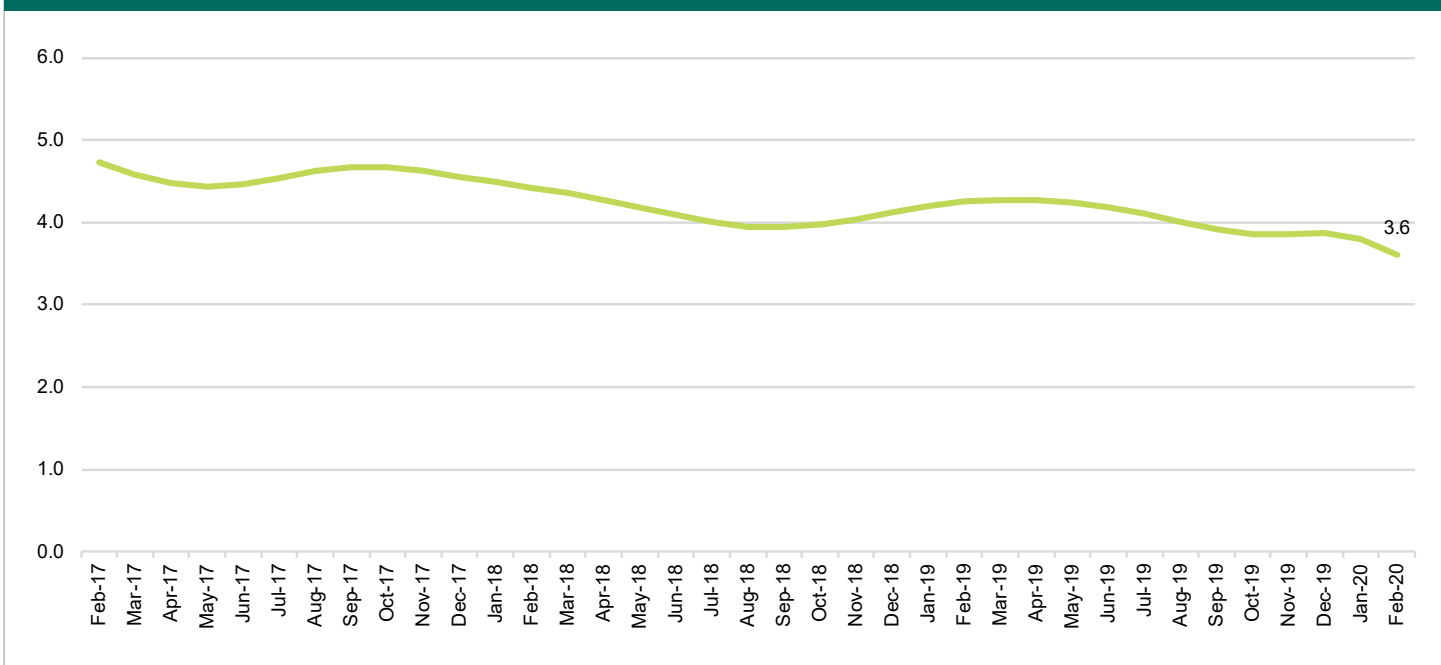
The beginning of 2019 revealed minor monthly employment declines. Between February and April, employment fell by 8,000. However, the employment total expanded by an additional 29,000 through the end of the year. The beginning of 2020 saw additional monthly employment additions, culminating in an employment total of 4,770,000 in February 2020. This was the highest level seen by the state since October 2001.

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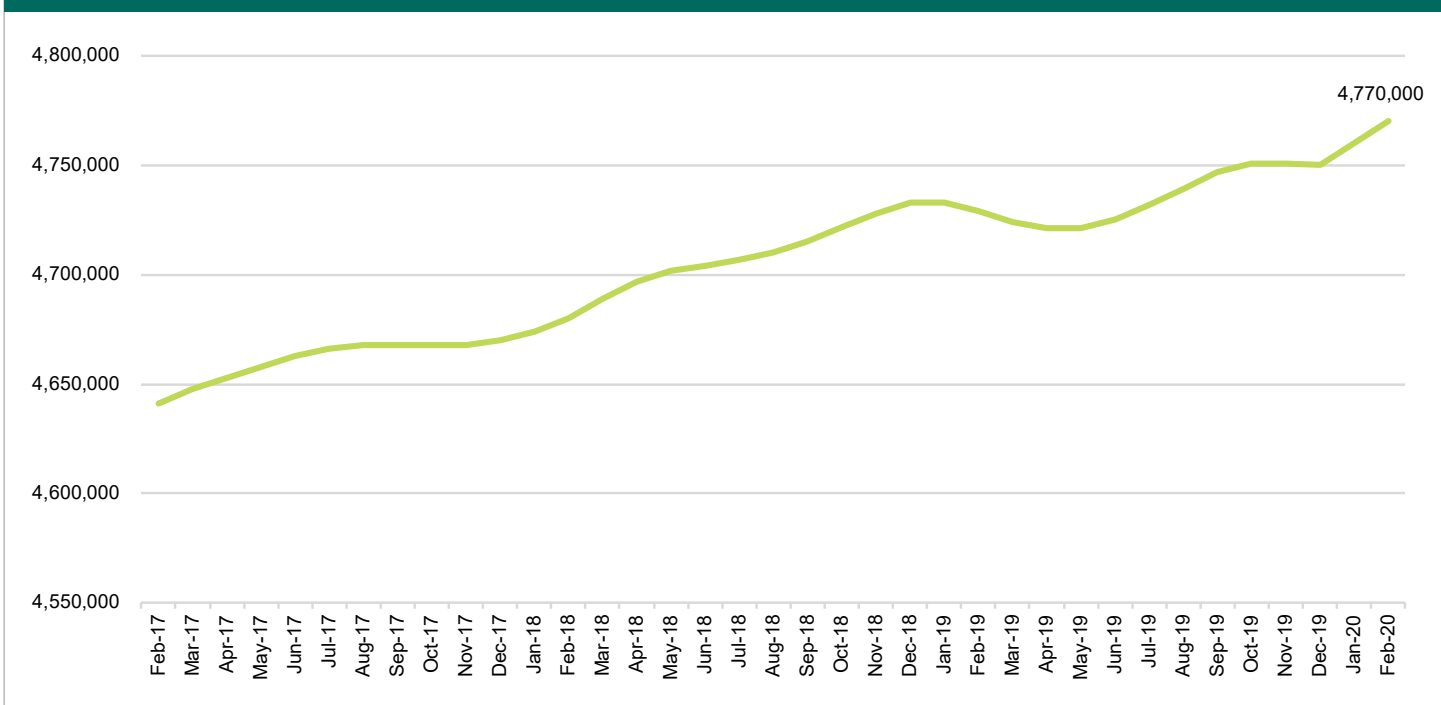
MICHIGAN LABOR FORCE ESTIMATES (SEASONALLY ADJUSTED)

	FEBRUARY 2020	JANUARY 2020	FEBRUARY 2019	CHANGE OVER THE MONTH	CHANGE OVER THE YEAR
Labor Force	4,950,000	4,947,000	4,939,000	+3,000	+11,000
Employed	4,770,000	4,760,000	4,729,000	+10,000	+41,000
Unemployed	180,000	187,000	210,000	-7,000	-30,000
Jobless Rate	3.6	3.8	4.2	-0.2	-0.6

MICHIGAN JOBLESS RATE (PERCENT), FEBRUARY 2017–FEBRUARY 2020



MICHIGAN TOTAL EMPLOYMENT, FEBRUARY 2017–FEBRUARY 2020



MICHIGAN JOB TRENDS BY INDUSTRY SECTOR

Monthly Overview

Total nonfarm payroll job levels rose in Michigan in February by 12,900 to 4,463,500. Job advances were widespread, led by *Professional and business services* and *Education and health services* (+3,000 each), *Trade, transportation, and utilities* (+2,700), and *Other services* (+2,400). Jobs rose modestly in *Government* (+2,000), *Construction* (+1,500) and *Leisure and hospitality* (+1,000). Job levels in the *Manufacturing* sector declined by 3,300 and remained unchanged in *Mining and logging*. Jobs were little changed in *Transportation equipment manufacturing* (-300) during February.

Over the Year Analysis

Over the past year, Michigan nonfarm jobs moved up by 32,000, or 0.7 percent. This was nearly a full percentage point below the 1.6 percent U.S. job expansion over this period. In Michigan, the broad sectors with the most over-the-year job additions were *Trade, transportation, and utilities* (+10,900), *Construction* (+10,800), *Financial activities* (+6,600), *Government* (+6,100), and *Education and health services* (+5,300).

Jobs dropped in *Manufacturing* (-8,500) and edged down slightly in *Information* (-400), and *Other services* (-400) since February 2019, while *Mining and logging* employment remained unchanged.

2019 Industry Comparison: Michigan vs. U.S.

In Michigan, total nonfarm payrolls grew by a modest 0.3 percent during 2019. This was more than a full percentage point below the 1.4 percent U.S. growth rate.

Out of the eleven broad industry sectors, Michigan experienced rates of job expansion that were slightly above the nation in only two major industry sectors during 2019. These were *Trade, transportation, and utilities* (+0.6 percent) and *Government* (+0.8 percent).

Industry sectors in Michigan with 2019 job performance that significantly lagged national trends included *Professional and business services*, *Information*, *Educational and health services*, *Leisure and hospitality*, and *Manufacturing*.

Significant Industry Employment Developments

PROFESSIONAL AND BUSINESS SERVICES

Job levels in this broad sector increased by 3,000 in February. This gain was concentrated in the subsector of *Professional, scientific, and technical services* (+2,300). Among the more detailed industries in this sector, atypically large monthly job gains occurred in *Architectural, engineering and related services*, *Other professional, scientific, and technical services*, and *Services to buildings*. This broad sector has been a significant source of jobs in Michigan for much of the past decade. Job expansion exceeded 9,000 per year in four of the five years from 2014 through 2018, but jobs fell by 5,400 during 2019. Since February 2019, a modest 800 jobs have been added, an increase of 0.1 percent. Nationally, employment rose by 41,000 over the month and by 1.9 percent over the year.

HEALTH CARE AND SOCIAL ASSISTANCE

Employment levels rose by 2,500 during February after dropping by 2,000 in January. This one-month swing in jobs primarily took place in the subsectors of *Individual and family services*, *Hospitals, Offices of physicians, and Out-patient care centers*. The February job gain also reflected a modest rise in jobs in the *Nursing and residential care facilities* industry. Between February 2019 and February 2020, payrolls have expanded by 3,600 jobs or by 0.6 percent with *Hospitals* and *Individual and family services* being primary contributors to this gain. Nationally, payrolls rose by 56,500 in February and by 2.8 percent over the year.

TRANSPORTATION, WAREHOUSING, AND UTILITIES

Payroll jobs in this sector increased by 2,200 in February. On an unadjusted basis, job levels will typically move down in this industry in February. This year, however, employers added jobs during February. This job addition was partially due to employers in *Warehousing and storage* adjusting payrolls from the larger than typical seasonal decline in January. Since February 2019, job levels have increased significantly by 11,500 or by 7.4 percent, among the fastest job advances in the state. In fact, this sector accounted for over one-third of total nonfarm

jobs added during this period, with these gains primarily focused in *Warehousing and storage*. Nationally, employment declined by 3,500 over the month but rose by 1.6 percent over the year.

Metropolitan Statistical Areas (MSAs)

On a not seasonally adjusted basis, total nonfarm jobs advanced in 12 of the 14 Michigan Metropolitan Statistical Areas (MSAs) in February. The exceptions were Muskegon and Monroe which recorded small 0.2 percent job reductions.

Five metro areas reported job increases above the Michigan advance of 0.8 percent. The top job gains occurred in the Ann Arbor (+2.0 percent) and Lansing (+1.5 percent) metro areas.

Seven MSAs recorded job additions below the statewide average, ranging from 0.2 percent in Jackson to 0.7 percent in Grand Rapids and Kalamazoo.

Nonfarm job additions in many of the metro areas were related to job gains in *Educational and health services* and seasonal payroll increases in the education components of *State* and *Local government*.

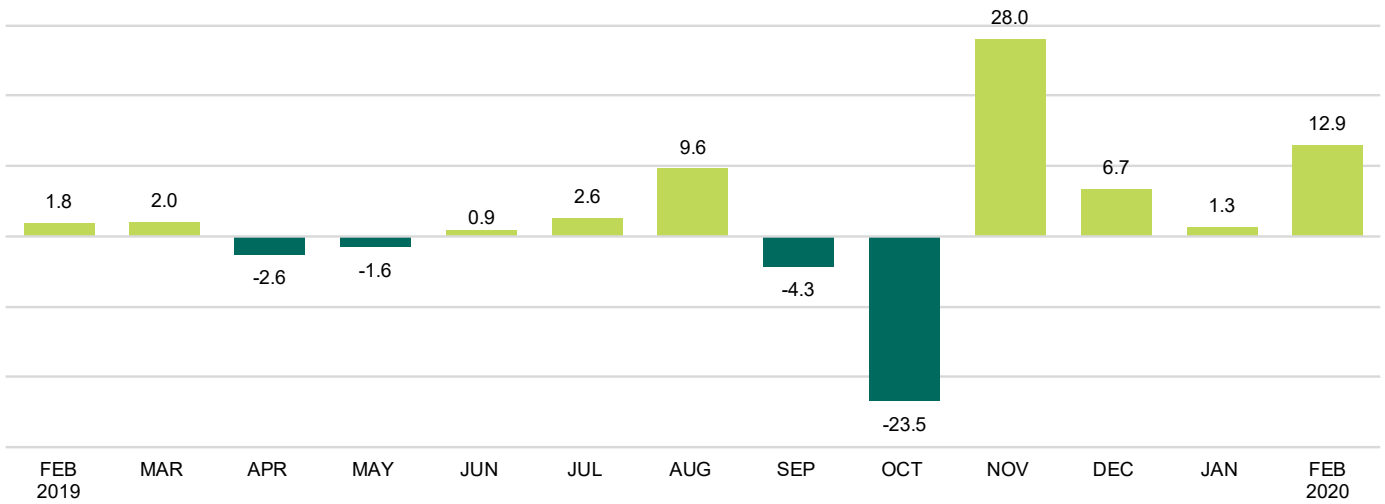
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MICHIGAN PAYROLL JOBS (SEASONALLY ADJUSTED)

INDUSTRY	FEBRUARY 2020	JANUARY 2020	FEBRUARY 2019	OVER THE MONTH		OVER THE YEAR	
				LEVEL	PERCENT	LEVEL	PERCENT
TOTAL NONFARM	4,463,500	4,450,600	4,431,500	12,900	0.3%	32,000	0.7%
Total Private	3,847,800	3,836,900	3,821,900	10,900	0.3%	25,900	0.7%
Private Service-Providing	3,032,900	3,020,200	3,009,300	12,700	0.4%	23,600	0.8%
GOODS-PRODUCING	814,900	816,700	812,600	-1,800	-0.2%	2,300	0.3%
Mining, Logging, and Construction	189,500	188,000	178,700	1,500	0.8%	10,800	6.0%
Mining and Logging	7,400	7,400	7,400	0	0.0%	0	0.0%
Construction	182,100	180,600	171,300	1,500	0.8%	10,800	6.3%
Manufacturing	625,400	628,700	633,900	-3,300	-0.5%	-8,500	-1.3%
Durable Goods	471,000	473,100	479,500	-2,100	-0.4%	-8,500	-1.8%
Transportation Equipment Manufacturing	188,400	188,700	193,700	-300	-0.2%	-5,300	-2.7%
Non-Durable Goods	154,400	155,600	154,400	-1,200	-0.8%	0	0.0%
SERVICE-PROVIDING	3,648,600	3,633,900	3,618,900	14,700	0.4%	29,700	0.8%
Trade, Transportation, and Utilities	805,600	802,900	794,700	2,700	0.3%	10,900	1.4%
Wholesale Trade	171,400	171,700	172,100	-300	-0.2%	-700	-0.4%
Retail Trade	466,800	466,000	466,700	800	0.2%	100	0.0%
Transportation, Warehousing, and Utilities	167,400	165,200	155,900	2,200	1.3%	11,500	7.4%
Information	55,300	54,900	55,700	400	0.7%	-400	-0.7%
Financial Activities	229,000	228,800	222,400	200	0.1%	6,600	3.0%
Finance and Insurance	171,200	170,600	166,700	600	0.4%	4,500	2.7%
Real Estate and Rental and Leasing	57,800	58,200	55,700	-400	-0.7%	2,100	3.8%
Professional and Business Services	658,400	655,400	657,600	3,000	0.5%	800	0.1%
Professional, Scientific, and Technical Services	298,000	295,700	299,700	2,300	0.8%	-1,700	-0.6%
Management of Companies and Enterprises	71,100	70,800	70,200	300	0.4%	900	1.3%
Administrative and Support and Waste Management and Remediation Services	289,300	288,900	287,700	400	0.1%	1,600	0.6%
Education and Health Services	684,000	681,000	678,700	3,000	0.4%	5,300	0.8%
Educational Services	75,500	75,000	73,800	500	0.7%	1,700	2.3%
Health Care and Social Assistance	608,500	606,000	604,900	2,500	0.4%	3,600	0.6%
Leisure and Hospitality	435,400	434,400	434,600	1,000	0.2%	800	0.2%
Arts, Entertainment, and Recreation	53,900	54,200	53,900	-300	-0.6%	0	0.0%
Accommodation and Food Services	381,500	380,200	380,700	1,300	0.3%	800	0.2%
Other Services	165,200	162,800	165,600	2,400	1.5%	-400	-0.2%
Government	615,700	613,700	609,600	2,000	0.3%	6,100	1.0%
Federal Government	52,200	52,200	52,500	0	0.0%	-300	-0.6%
State Government	193,800	192,800	193,800	1,000	0.5%	0	0.0%
Local Government	369,700	368,700	363,300	1,000	0.3%	6,400	1.8%

MICHIGAN OVER THE MONTH PAYROLL JOB CHANGE, FEBRUARY 2019–FEBRUARY 2020 (IN THOUSANDS)



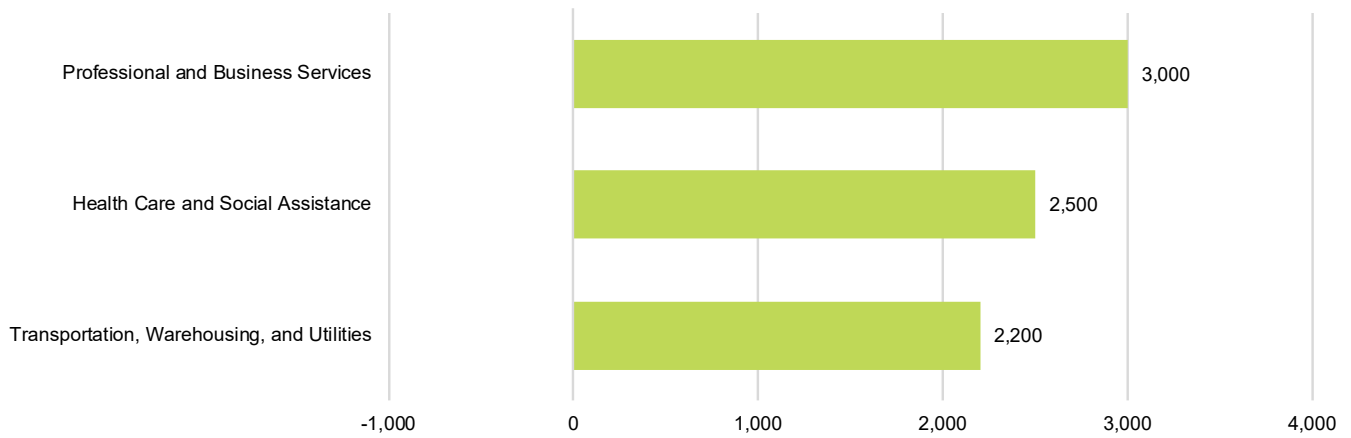
2019 ANNUAL AVERAGE JOB CHANGE, MICHIGAN VS. U.S.

INDUSTRY	MICHIGAN		U.S.	
	LEVEL	PERCENT	LEVEL	PERCENT
TOTAL NONFARM	14,900	0.3%	2,031,000	1.4%
Mining and Logging	100	1.1%	8,000	1.1%
Construction	4,300	2.5%	204,000	2.8%
Manufacturing	-1,400	-0.2%	152,000	1.2%
Trade, Transportation, and Utilities	5,000	0.6%	108,000	0.4%
Information	-800	-1.4%	21,000	0.7%
Financial Activities	3,700	1.7%	156,000	1.8%
Professional and Business Services	-5,400	-0.8%	363,000	1.7%
Educational and Health Services	4,100	0.6%	539,000	2.3%
Leisure and Hospitality	500	0.1%	281,000	1.7%
Other Services	0	0.0%	62,000	1.1%
Government	4,700	0.8%	139,000	0.6%

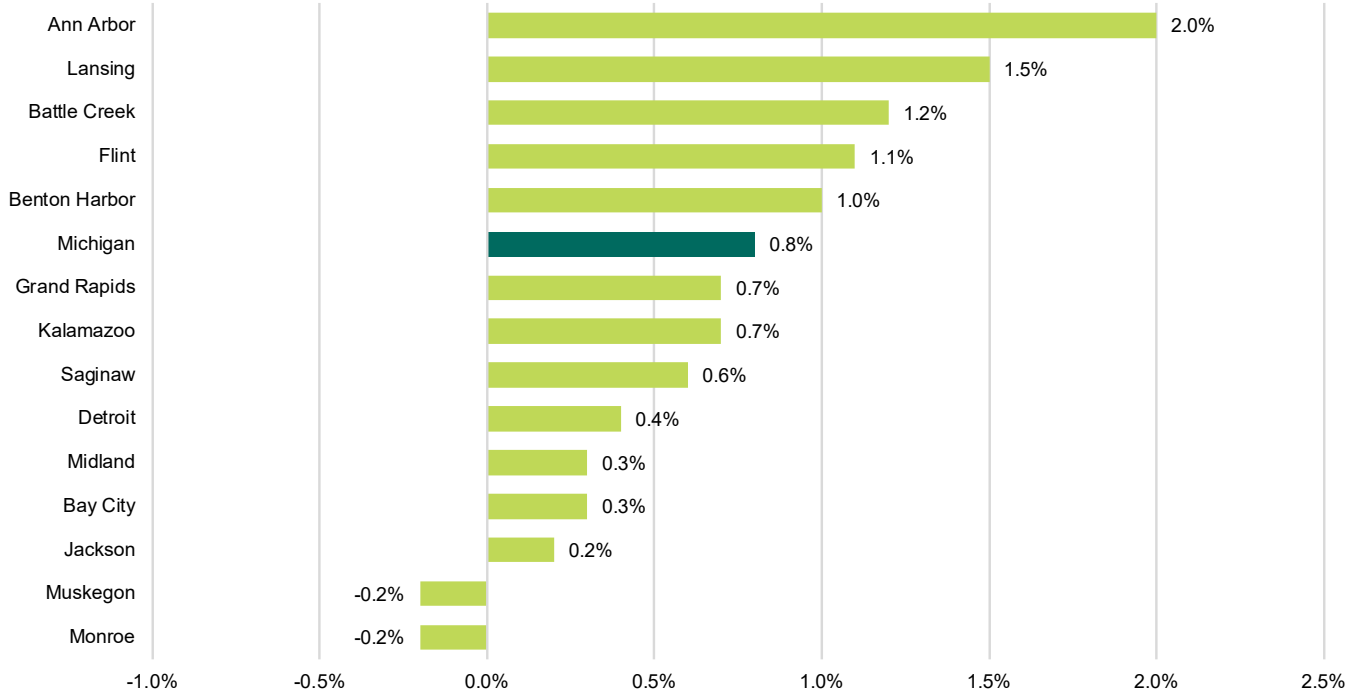




MICHIGAN OVER THE MONTH JOB CHANGE BY SELECT INDUSTRY, JANUARY 2020–FEBRUARY 2020



METROPOLITAN AREA JOB CHANGE, JANUARY 2020–FEBRUARY 2020 (NOT SEASONALLY ADJUSTED)



REGIONAL LABOR MARKET ANALYSIS

ANN ARBOR METROPOLITAN AREA

- The jobless rate in the Ann Arbor region fell by three-tenths of a percentage point to 2.2 percent in February.
- Area employment grew by 5,500, or 2.8 percent over the month.

MONTHLY INDUSTRY DEVELOPMENTS

- Total payroll jobs in the region rose by 4,500 or 2.0 percent in February. On a percentage basis, this was the largest February nonfarm job gain among all metro areas.

INDUSTRY TRENDS

- February jobs in *Professional and business services* were flat over the month but increased by 700 or 2.3 percent over the year. Total jobs in this industry are now at the highest February total (30,900) in the past 10 years.

BAY CITY METROPOLITAN AREA

- The unemployment rate in the Bay City region declined by 0.9 percentage points to 4.6 percent in February. This was the highest jobless rate among the 14 metro areas within the state.
- The labor force within the area remained relatively flat, rising by 300 or 0.6 percent over the month.

MONTHLY INDUSTRY DEVELOPMENTS

- The total nonfarm job count in the Bay City MSA remained virtually unchanged, edging up by only 100 or 0.3 percent since last month.

INDUSTRY TRENDS

- Total *Service providing* jobs have fallen 500 or 1.7 percent over the year due to declines in several sectors.

FLINT METROPOLITAN AREA

- The Flint regional unemployment rate moved down by 0.9 percentage points to 4.1 percent in February.
- Total workforce in the area grew by 3,000 or 1.6 percent over the year.

MONTHLY INDUSTRY DEVELOPMENTS

- Flint total nonfarm job levels increased by 1,500 or 1.1 percent since last month. This was more than the area's typical over the month February job expansion.
- The region recorded monthly job gains in several major industries, such as *Manufacturing* and *Professional and business services*.

INDUSTRY TRENDS

- *Manufacturing* jobs rose 3.7 percent over the month and by 7.7 percent since February 2019.

BATTLE CREEK METROPOLITAN AREA

- In February, the unemployment rate in the Battle Creek metro area was 3.6 percent, down by 0.5 percentage points. Employment rose seasonally by 1,400, while the number of unemployed inched down by 200.
- Since February 2019, unemployment declined by 600, while employment was up by 600. The jobless rate fell by 0.9 percentage points over the past year.

MONTHLY INDUSTRY DEVELOPMENTS

- February payroll jobs in the Battle Creek metro area advanced by 1.2 percent (+700), with seasonal job additions concentrated in private and public *Education*.
- Over the past year, jobs in the Battle Creek MSA dropped by 300, mostly from employment reductions in *Manufacturing* and *Professional and business services*.

INDUSTRY TRENDS

- Since February 2011, *Government* jobs in the Battle Creek MSA have expanded by 6.8 percent; statewide, the sector contracted by 1.5 percent.

DETROIT-WARREN-DEARBORN METRO AREA

- The Detroit MSA jobless rate decreased by 0.7 percentage points since last month to 3.7 percent.
- The region's total unemployment fell 14,000, or 14.9 percent, in February.

MONTHLY INDUSTRY DEVELOPMENTS

- February jobs in the Detroit metro area rose marginally by 0.4 percent or 8,000. This job growth exceeded the monthly February gain in four of the last five years.
- February job declines in the *Trade, transportation, and utilities* and *Leisure and hospitality* sectors were offset by increases in the *Educational and health services* and *Professional and business services* sectors.

INDUSTRY TRENDS

- *Educational and health services* jobs moved up 3,800 over the month and 8,500 over the year.

GRAND RAPIDS-WYOMING METRO AREA

- Joblessness in the Grand Rapids MSA fell by four-tenths of a percentage point to 2.5 percent in February. The area has the second lowest unemployment rate among the 14 metro areas within Michigan.
- Regional employment advanced by 8,800 or 1.6 percent over the year.

MONTHLY INDUSTRY DEVELOPMENTS

- The total job count in the Grand Rapids area rose by 4,100 or 0.7 percent in February.

INDUSTRY TRENDS

- *Educational services* added 1,200 jobs (+8.8 percent) this month, slightly higher than typical for this industry in February.

CIVILIAN LABOR FORCE AND NONFARM PAYROLL JOBS

	ANN ARBOR			BATTLE CREEK			BAY CITY		
	FEB 2020	JAN 2020	FEB 2019	FEB 2020	JAN 2020	FEB 2019	FEB 2020	JAN 2020	FEB 2019
PLACE OF RESIDENCE									
Labor Force	203,700	198,800	199,400	63,100	61,900	63,100	50,000	49,700	50,300
Employment	199,300	193,800	193,500	60,800	59,400	60,200	47,700	47,000	47,500
Unemployment	4,500	5,000	5,900	2,300	2,500	2,900	2,300	2,700	2,800
Rate (percent)	2.2%	2.5%	3.0%	3.6%	4.1%	4.5%	4.6%	5.5%	5.7%
PLACE OF WORK									
Total Nonfarm Jobs	231,300	226,800	227,300	57,300	56,600	57,600	34,000	33,900	34,600
Mining, Logging, and Construction	4,500	4,500	4,300	1,400	1,400	1,400	1,100	1,100	1,100
Manufacturing	14,500	14,700	15,000	11,200	11,300	11,700	4,500	4,400	4,600
Trade, Transportation, and Utilities	26,600	26,700	26,400	9,000	9,100	8,800	7,300	7,300	7,100
Wholesale Trade	6,600	6,500	6,600	*	*	*	*	*	*
Retail Trade	15,800	16,000	15,900	5,800	5,900	5,500	4,800	4,800	4,600
Information	5,700	5,600	5,500	*	*	*	300	300	400
Financial Activities	6,800	6,900	6,700	1,200	1,200	1,200	1,200	1,200	1,300
Professional and Business Services	30,900	30,900	30,200	5,900	5,800	6,400	2,200	2,300	2,300
Educational and Health Services	30,100	29,600	29,500	10,800	10,600	10,700	6,400	6,400	6,400
Leisure and Hospitality	17,600	17,500	17,800	4,400	4,400	4,400	4,200	4,100	4,400
Other Services	6,300	6,200	6,300	2,100	2,100	2,000	1,200	1,200	1,300
Government	88,300	84,200	85,600	11,000	10,400	10,700	5,600	5,600	5,700
DETROIT-WARREN-DEARBORN									
FLINT									
GRAND RAPIDS-WYOMING									
	FEB 2020	JAN 2020	FEB 2019	FEB 2020	JAN 2020	FEB 2019	FEB 2020	JAN 2020	FEB 2019
PLACE OF RESIDENCE									
Labor Force	2,149,000	2,159,000	2,152,000	185,800	183,300	182,800	588,900	580,300	584,300
Employment	2,069,000	2,064,000	2,057,000	178,200	174,200	172,900	574,500	563,500	565,700
Unemployment	80,000	94,000	96,000	7,600	9,100	9,900	14,500	16,800	18,600
Rate (percent)	3.7%	4.4%	4.4%	4.1%	5.0%	5.4%	2.5%	2.9%	3.2%
PLACE OF WORK									
Total Nonfarm Jobs	2,030,600	2,022,600	2,014,800	141,900	140,400	139,100	564,200	560,100	563,400
Mining, Logging, and Construction	72,100	71,200	67,400	5,400	5,500	5,100	25,700	25,800	23,700
Manufacturing	257,300	257,600	261,100	14,000	13,500	13,000	117,200	117,000	119,100
Trade, Transportation, and Utilities	381,200	382,500	374,200	29,000	28,800	28,700	96,100	96,200	96,400
Wholesale Trade	85,600	85,400	85,900	5,900	5,800	5,400	32,400	32,300	32,200
Retail Trade	207,000	208,100	207,000	18,600	18,900	19,100	46,700	46,900	47,900
Information	26,100	26,100	26,800	3,500	3,600	3,700	6,400	6,400	6,400
Financial Activities	120,300	120,700	118,500	6,200	6,100	5,900	27,400	27,200	26,700
Professional and Business Services	391,800	388,200	392,500	17,300	16,900	16,700	74,800	75,000	78,700
Educational and Health Services	324,900	321,100	316,400	26,800	26,600	26,800	94,700	93,100	93,300
Leisure and Hospitality	191,500	192,300	193,600	15,500	15,300	15,100	49,200	48,100	47,600
Other Services	73,800	73,400	74,500	5,300	5,300	5,400	22,500	22,500	22,300
Government	191,600	189,500	189,800	18,900	18,800	18,700	50,200	48,800	49,200

JACKSON METROPOLITAN AREA

- In the Jackson MSA in February, employment levels advanced by 1,100, and the number of unemployed edged down slightly. This led to a jobless rate decline of five tenths of a percentage point to 3.4 percent.
- Over the past year, labor market conditions improved, with an employment gain of 1,000 and a jobless rate cut of nine tenths of a percentage point.

MONTHLY INDUSTRY DEVELOPMENTS

- Payroll jobs in the Jackson metro area were virtually flat in February, inching up by 100. Jobs moved up in *Professional and business services* but remained unchanged in all other sectors.
- Since February 2019, jobs in the Jackson MSA inched down by 200, with job cuts concentrated in *Manufacturing* (-500).

INDUSTRY TRENDS

- Job levels in *Professional and business services* advanced in the region by 900 from 2017 to 2019.

LANSING-EAST LANSING METRO AREA

- The Lansing area unemployment rate declined by 0.5 percentage points over the month to 2.7 percent.
- Total labor force within the region grew by 5,600 or 2.2 percent in February. This was the second highest seasonal monthly workforce growth rate among all Michigan metro areas.

MONTHLY INDUSTRY DEVELOPMENTS

- February nonfarm payroll jobs in the Lansing MSA advanced by 3,600 or 1.5 percent.

INDUSTRY TRENDS

- Total jobs in the *Service providing* sector rose 2,900 or 1.4 percent in February, due mainly to a seasonal education-related job gain in *Government*.

MONROE METROPOLITAN AREA

- Joblessness in the Monroe region moved down by 0.9 percentage points over the month to 3.4 percent. This was tied for the largest monthly rate decline among all Michigan metro areas.
- The metro area's unemployment total fell by 600 over the month and by 900 over the year.

MONTHLY INDUSTRY DEVELOPMENTS

- Monroe payroll jobs edged down by 100 or 0.2 percent in February, as most industry sectors recorded little job change.

INDUSTRY TRENDS

- In the Monroe MSA, jobs in *Retail trade* decreased by 2.1 percent this month and 4.2 percent over the year.

KALAMAZOO-PORTAGE METRO AREA

- The Kalamazoo-Portage metro area jobless rate in February moved down by half a percentage point to 3.1 percent. The local rate remained below the Michigan unemployment rate of 3.6 percent.
- Over the past year, the number of local area unemployed decreased by 1,400, while employment improved by 2,900.

MONTHLY INDUSTRY DEVELOPMENTS

- Nonfarm payroll jobs in the Kalamazoo-Portage region rose in February by 1,000 (+0.7 percent), mainly from seasonal job additions in *Local and state education* (+900).
- Since February 2019, jobs in *Leisure and hospitality*, and *Wholesale trade* were down. Employment was up in *Educational and health services* and in *Professional and business services*.

INDUSTRY TRENDS

- *Manufacturing* jobs in the Kalamazoo-Portage MSA have increased steadily over the last decade, reaching 23,300 in 2019.

MIDLAND METROPOLITAN AREA

- The February jobless rate in the Midland MSA edged down by 0.6 percentage points to 3.7 percent.
- Area employment advanced over the month by 600 or 1.6 percent but has remained flat over the year.

MONTHLY INDUSTRY DEVELOPMENTS

- Payroll jobs in Midland were virtually unchanged in February, as total jobs only increased by 100 or 0.3 percent.

INDUSTRY TRENDS

- Most industries in the region rose marginally or remained flat over the month, whereas jobs in nearly all sectors declined since February of 2019.

MUSKEGON METROPOLITAN AREA

- The Muskegon regional unemployment rate fell by 0.6 percentage points in February to 3.8 percent.
- Total area workforce advanced over the month, as employment rose by 1,100 or 1.5 percent.

MONTHLY INDUSTRY DEVELOPMENTS

- Total job levels in the Muskegon metro area stayed relatively flat in February, inching down by only 100 or 0.2 percent.

INDUSTRY TRENDS

- Jobs in the *Trade, transportation, and utilities* industry moved down by 300 or 2.2 percent since January but rose by 2.3 percent over the year.

CIVILIAN LABOR FORCE AND NONFARM PAYROLL JOBS

	JACKSON			KALAMAZOO-PORTAGE			LANSING-EAST LANSING		
	FEB 2020	JAN 2020	FEB 2019	FEB 2020	JAN 2020	FEB 2019	FEB 2020	JAN 2020	FEB 2019
PLACE OF RESIDENCE									
Labor Force	75,000	74,200	74,600	171,500	168,900	169,900	255,200	249,600	253,400
Employment	72,400	71,300	71,400	166,200	162,800	163,300	248,200	241,700	244,200
Unemployment	2,600	2,900	3,200	5,300	6,100	6,700	7,000	7,900	9,100
Rate (percent)	3.4%	3.9%	4.3%	3.1%	3.6%	3.9%	2.7%	3.2%	3.6%
PLACE OF WORK									
Total Nonfarm Jobs	57,600	57,500	57,800	150,400	149,400	149,900	239,200	235,600	238,500
Mining, Logging, and Construction	1,900	1,900	1,800	6,000	6,100	5,900	7,400	7,400	7,300
Manufacturing	9,500	9,500	10,000	23,200	23,200	23,100	18,900	18,200	20,100
Trade, Transportation, and Utilities	11,900	11,900	11,900	26,100	26,400	26,000	36,800	36,900	36,500
Wholesale Trade	*	*	*	6,200	6,200	6,500	6,300	6,300	6,500
Retail Trade	6,200	6,200	6,300	15,800	16,000	15,600	22,200	22,400	21,400
Information	200	200	300	700	700	800	2,900	2,900	2,700
Financial Activities	2,200	2,200	2,100	8,100	8,100	8,200	17,100	17,100	16,800
Professional and Business Services	6,100	6,000	6,000	18,000	17,800	17,600	24,100	24,000	24,200
Educational and Health Services	10,100	10,100	10,100	25,300	25,100	25,000	33,000	32,700	32,800
Leisure and Hospitality	5,100	5,100	5,000	15,400	15,300	15,700	18,500	18,500	18,600
Other Services	2,600	2,600	2,500	5,200	5,200	5,200	9,900	9,800	10,000
Government	8,000	8,000	8,100	22,400	21,500	22,400	70,600	68,100	69,500
MIDLAND									
	FEB 2020	JAN 2020	FEB 2019	FEB 2020	JAN 2020	FEB 2019	FEB 2020	JAN 2020	FEB 2019
PLACE OF RESIDENCE									
Labor Force	40,300	39,900	40,600	76,000	75,400	76,100	77,800	77,200	76,800
Employment	38,800	38,200	38,800	73,400	72,200	72,500	74,900	73,800	73,100
Unemployment	1,500	1,700	1,800	2,600	3,200	3,500	2,900	3,400	3,600
Rate (percent)	3.7%	4.3%	4.3%	3.4%	4.3%	4.6%	3.8%	4.4%	4.8%
PLACE OF WORK									
Total Nonfarm Jobs	36,800	36,700	37,400	40,300	40,400	40,500	63,400	63,500	62,900
Mining, Logging, and Construction	*	*	*	1,800	1,700	1,800	2,400	2,400	2,200
Manufacturing	*	*	*	5,600	5,600	5,600	13,700	13,800	13,900
Trade, Transportation, and Utilities	*	*	*	10,500	10,600	10,600	13,600	13,900	13,300
Wholesale Trade	*	*	*	1,700	1,700	1,700	*	*	*
Retail Trade	*	*	*	4,600	4,700	4,800	10,900	11,100	10,700
Information	*	*	*	*	*	*	300	300	300
Financial Activities	*	*	*	900	900	900	1,800	1,800	1,700
Professional and Business Services	*	*	*	5,600	5,600	5,400	3,700	3,700	3,700
Educational and Health Services	*	*	*	4,800	4,800	5,000	11,700	11,600	11,700
Leisure and Hospitality	*	*	*	4,000	4,100	4,100	7,000	7,000	6,700
Other Services	*	*	*	1,500	1,500	1,400	2,000	2,000	2,100
Government	3,000	3,000	3,000	5,300	5,200	5,400	7,200	7,000	7,300

NILES-BENTON HARBOR METRO AREA

- The jobless rate in the Niles-Benton Harbor MSA was 3.8 percent in February 2020. This was a monthly rate decline of 0.7 percentage points. Employment in the region rose by 1,500.
- Since February 2019, employment advanced by 1,700, while unemployment decreased by 700. The jobless rate dropped by a full percentage point.

MONTHLY INDUSTRY DEVELOPMENTS

- Niles-Benton Harbor regional job levels rose in February by 1.0 percent (+600), primarily from a seasonal job addition in private and public *Education*, and a job gain in *Construction and mining* (+200).
- Over the past year, job levels in the region were up slightly in many industry sectors. This led to a 1.6 percent job advance since February 2019.

INDUSTRY TRENDS

- Since February 2011, *Government* jobs in the Niles-Benton Harbor MSA were flat at 8,600. Statewide, employment in this sector fell by 1.5 percent over this period.

SAGINAW METROPOLITAN AREA

- The Saginaw jobless rate was 4.4 percent in February, down by 0.7 percentage points over the month.
- The region's employment count grew by 1,400 or 1.7 percent over the month and rose 1.3 percent over the year.

MONTHLY INDUSTRY DEVELOPMENTS

- Metro area job levels advanced by 500 or 0.6 percent in February, mainly due to job gains in both the *Manufacturing* and *Government* sectors.
- A majority of industries registered little job change in February but had job losses over the year.

INDUSTRY TRENDS

- *Goods producing* jobs in the Saginaw area fell by 700 or 4.6 percent since February 2019.

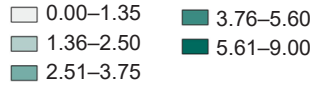
CIVILIAN LABOR FORCE AND NONFARM PAYROLL JOBS

	NILES-BENTON HARBOR			SAGINAW					
	FEB 2020	JAN 2020	FEB 2019	FEB 2020	JAN 2020	FEB 2019			
PLACE OF RESIDENCE									
Labor Force	74,000	73,000	72,900	87,200	86,400	87,200			
Employment	71,200	69,700	69,500	83,400	82,000	82,300			
Unemployment	2,800	3,300	3,500	3,800	4,400	4,800			
Rate (percent)	3.8%	4.5%	4.8%	4.4%	5.1%	5.6%			
PLACE OF WORK									
Total Nonfarm Jobs	62,000	61,400	61,000	86,200	85,700	86,600			
Mining, Logging, and Construction	2,600	2,400	2,600	2,600	2,600	2,700			
Manufacturing	13,100	13,100	13,200	11,900	11,600	12,500			
Trade, Transportation, and Utilities	10,700	10,700	10,200	16,700	16,900	16,400			
Wholesale Trade	*	*	*	1,900	1,900	2,000			
Retail Trade	6,700	6,800	6,400	12,100	12,300	11,700			
Information	500	500	400	1,200	1,200	1,300			
Financial Activities	2,500	2,500	2,400	3,700	3,700	3,700			
Professional and Business Services	5,500	5,400	5,500	11,300	11,300	11,100			
Educational and Health Services	9,600	9,400	9,500	15,900	15,800	15,800			
Leisure and Hospitality	6,600	6,600	6,500	8,500	8,500	8,800			
Other Services	2,300	2,300	2,200	3,100	3,100	3,100			
Government	8,600	8,500	8,500	11,300	11,000	11,200			
UPPER PENINSULA									
	FEB 2020	JAN 2020	FEB 2019	NORTHEAST MICHIGAN					
				FEB 2020	JAN 2020	FEB 2019	NORTHWEST MICHIGAN		
				FEB 2020	JAN 2020	FEB 2019	FEB 2020	JAN 2020	FEB 2019
PLACE OF RESIDENCE									
Labor Force	137,700	134,700	137,500	80,800	81,000	80,500	148,100	147,600	146,300
Employment	130,000	125,900	128,100	74,600	73,700	73,000	141,000	139,400	137,200
Unemployment	7,600	8,800	9,500	6,200	7,300	7,500	7,100	8,200	9,100
Rate (percent)	5.5%	6.5%	6.9%	7.6%	9.0%	9.3%	4.8%	5.5%	6.2%

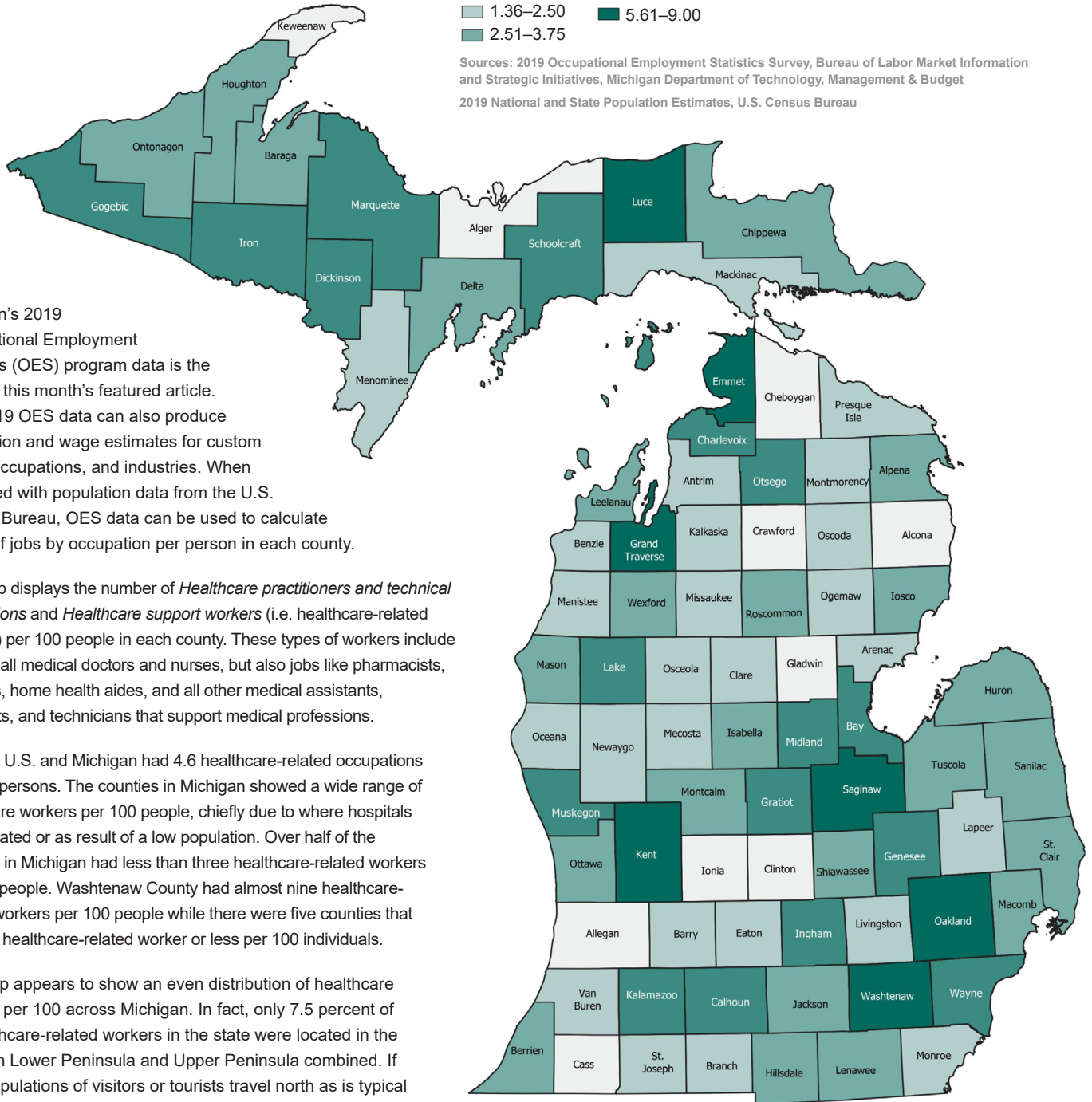
MAP OF THE MONTH:

NUMBER OF HEALTHCARE-RELATED WORKERS PER 100 PEOPLE BY MICHIGAN COUNTY

Number of Healthcare-Related Workers Per 100 People



Sources: 2019 Occupational Employment Statistics Survey, Bureau of Labor Market Information and Strategic Initiatives, Michigan Department of Technology, Management & Budget
2019 National and State Population Estimates, U.S. Census Bureau



Michigan's 2019 Occupational Employment Statistics (OES) program data is the focus of this month's featured article. This 2019 OES data can also produce occupation and wage estimates for custom areas, occupations, and industries. When combined with population data from the U.S. Census Bureau, OES data can be used to calculate a ratio of jobs by occupation per person in each county.

This map displays the number of *Healthcare practitioners and technical occupations* and *Healthcare support workers* (i.e. healthcare-related workers) per 100 people in each county. These types of workers include not only all medical doctors and nurses, but also jobs like pharmacists, orderlies, home health aides, and all other medical assistants, therapists, and technicians that support medical professions.

Both the U.S. and Michigan had 4.6 healthcare-related occupations per 100 persons. The counties in Michigan showed a wide range of healthcare workers per 100 people, chiefly due to where hospitals were located or as result of a low population. Over half of the counties in Michigan had less than three healthcare-related workers per 100 people. Washtenaw County had almost nine healthcare-related workers per 100 people while there were five counties that had one healthcare-related worker or less per 100 individuals.

This map appears to show an even distribution of healthcare workers per 100 across Michigan. In fact, only 7.5 percent of all healthcare-related workers in the state were located in the Northern Lower Peninsula and Upper Peninsula combined. If large populations of visitors or tourists travel north as is typical in the spring and summer, these ratios of healthcare-related workers to population quickly fall to extremely low levels.

WAYNE ROURKE
Associate Director

ASHLEY TARVER
Demographic Analyst



MICHIGAN'S 2019 OCCUPATIONAL EMPLOYMENT AND WAGE TRENDS

Each year, the Bureau of Labor Market Information and Strategic Initiatives conducts the Occupational Employment Statistics (OES) survey, which is a federal-state cooperative program with the U.S. Bureau of Labor Statistics. This program annually surveys approximately 400,000 nonfarm establishments nationwide (including 11,000 in Michigan) to collect employment and wage information for over 800 Standard Occupational Classification job titles. This is the only official survey that provides employment levels and annual and hourly wages for individual occupations for the nation, states, and local areas.

Michigan and the U.S.

In 2019, Michigan's occupational employment was 4,344,200, a 0.6 percent increase over last year, which was smaller than the 1.5 percent gain recorded nationally. Michigan's occupational employment made up 3.0 percent of the total employment in the nation (146,875,500).

The overall statewide median hourly wage was \$18.60, slightly lower than the national

median of \$19.14. Michigan's median wage ranked 24th among all states and territories, unchanged since 2016. The average wage, or mean wage, is another indicator from the OES survey, but one limitation of this measure is that it can be heavily influenced by a relatively small number of extremely high-wage jobs. Michigan's overall average wage was \$24.42, which trailed the national average of \$25.72, and ranked 22nd in the U.S.

Wage Ranges

Looking at the wage range in Michigan provides a broader look at the overall state wage structure. Wages ranged from \$10.30 at the 10th percentile to \$45.00 at the 90th percentile. This means that 80 percent of all jobs in Michigan had wages that fell between these two points, with 10 percent below \$10.30 and 10 percent above \$45.00. U.S. occupations ranged in wage from \$10.35 to \$48.57. Michigan wages were similar at the 10th percentile level but lagged in the higher wage ranges. This was likely due to Michigan's increase in the minimum wage. The 10th percentile wage rose faster than any other group in the state—by around 6 percent over

last year—while all other wage ranges moved up by only about 2.5 percent.

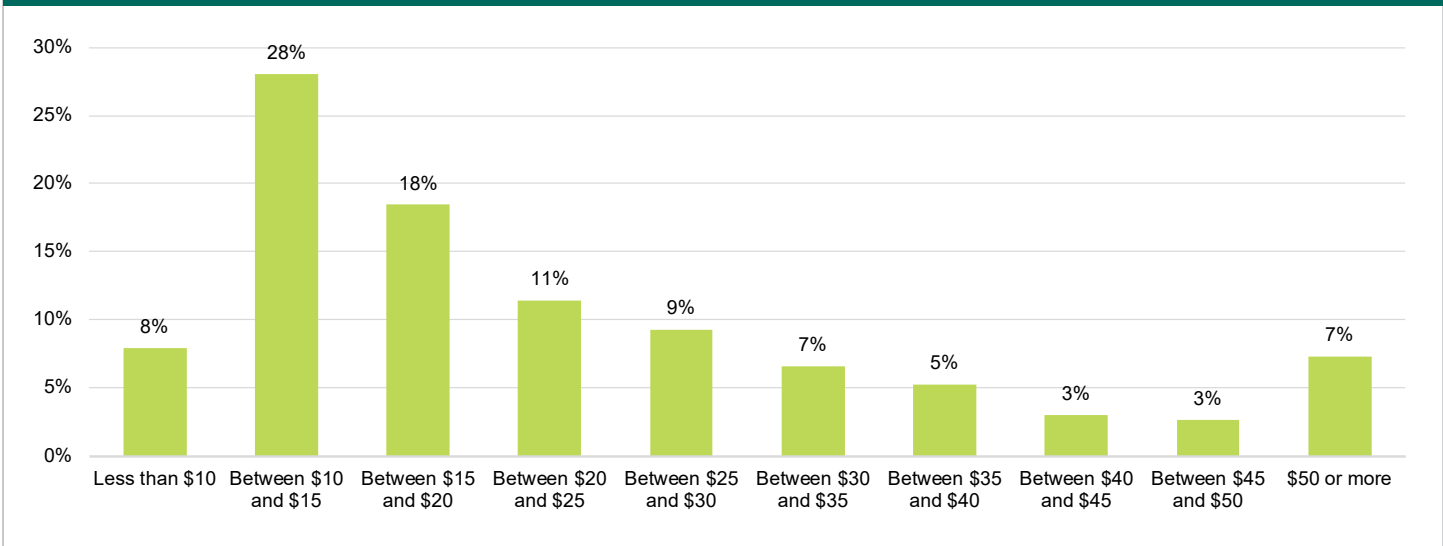
Management occupations had the highest wage range, from \$24.01 to \$94.59—a slight decrease from last year. *Food preparation and service occupations* had the lowest range from \$10.02 to \$17.35, which was an increase of about 6 percent over last year. This followed the overall statewide trends which displayed modest wage gains at the higher wage levels, and larger increases at the lowest wage levels.

There were also detailed occupations that had wide wage ranges. The occupation with the highest variance was *Business teachers, postsecondary* with a 90th percentile wage that was almost seven times higher than the 10th percentile wage (\$30,660 to \$205,200 per year¹). Postsecondary teachers in general had wide variances, making up eight of the top 10 occupations by largest range. The wide ranges in these occupations were likely due to the large differences in pay between adjunct and part-time teachers compared to the pay of permanent or tenured professors. The only

¹All teachers are reported only with annual wages instead of hourly rates due to their non-standard schedules.



FIGURE 1: DISTRIBUTION OF JOBS BY HOURLY WAGE IN MICHIGAN, 2019



Source: 2019 Occupational Employment Statistics Survey, Bureau of Labor Market Information and Strategic Initiatives, Michigan Department of Technology, Management & Budget

two occupations with wide pay ranges that were not teachers were *Personal financial advisors* (\$17.36 to \$100+²), and *Musicians and singers* (\$12.55 to \$66.77). The wide range for *Personal financial advisors* was likely due to the many employees in this role that were paid on commission, and those working for the wealthiest of clients earned much higher wages than most in this position. This is typical in occupations that rely on commission for wages,

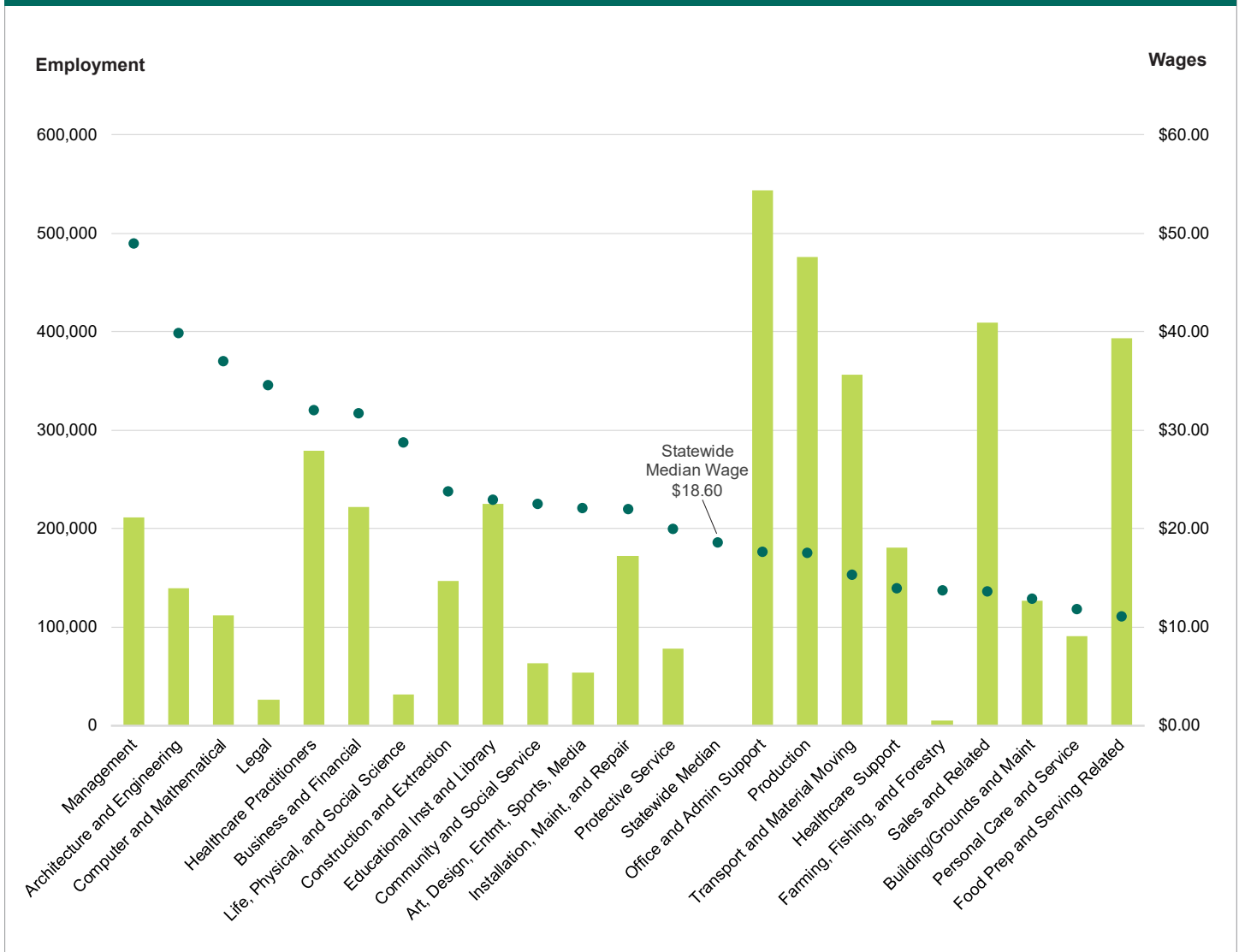
and many sales positions also had wide variances. The wide range for *Musicians and singers* was likely due to the nature of many of the jobs in this occupation. Many of the higher earners in this category had jobs working special functions with very high hourly earnings that were typically not full-time.

Figure 1 shows the percentage of jobs in each wage interval. The percentages in each

category have remained stable over the past few years except for the percentage of jobs paying under \$10 per hour. This category has been cut in half from 16 to 8 percent over the last two years, likely due to the minimum wage rising each year. Most of the gains have gone to the \$10–15 wage range, but there have been slight increases in the other categories as well.

²Because OES allows respondents to report wage ranges instead of point data, the highest wage percentiles are not always calculable because the highest wage range is just “over \$100.”

FIGURE 2: MAJOR OCCUPATIONAL GROUPS IN MICHIGAN BY MEDIAN WAGE, 2019



Source: 2019 Occupational Employment Statistics Survey, Bureau of Labor Market Information and Strategic Initiatives, Michigan Department of Technology, Management & Budget

Major Occupational Groups

Figure 2 shows the employment level and median wage of each major occupational group. Many groups had a median wage above the statewide level, but the five largest groups by the number of jobs all had below average median wages. Most of the detailed occupations in these large groups have lower education or training requirements which leads to lower wages.

Office and administrative support occupations had the most employment in Michigan, which was also true in all other states. This group accounted for about 13 percent of all jobs in Michigan and had a median wage of \$17.68, only slightly below the statewide median.

Production occupations had the second highest job count in Michigan, which was above

the ranking in most other states because of Michigan’s strong manufacturing sector. Despite having the 10th most employees overall, Michigan had the fourth most *Production occupations* in the nation. *Production occupations* accounted for approximately 11 percent of all jobs in Michigan.

Management occupations had the highest median wage of any group in Michigan at \$48.97, over 2.5 times higher than the statewide median. The next highest were two groups dominated by STEM occupations: *Architecture and engineering* (\$39.92) and *Computer and mathematical occupations* (\$37.01). *Architecture and engineering occupations* is particularly important in Michigan since it is a leader in the nation for this occupational group. Michigan had 32 *Architecture and engineering occupations*

per 1,000, which was the highest share in the U.S. Michigan also ranked first for jobs per thousand for both *Mechanical engineers* (10), and *Industrial engineers* (7). These numbers were not just the highest for those specific occupations, but were higher than any jobs per thousand value for any engineering occupation in any state.

Education

Figure 4 shows the wage ranges (10th to 90th percentile) for occupations by required education. The chart shows that there was a benefit to having a job that requires at least a high school diploma, with an increase of over 10 percent in starting wages, over 50 percent in median wages, and over 70 percent in experienced level wages at the 90th percentile level. Wage rates were relatively similar for

FIGURE 3: TOP OCCUPATIONS (BY EMPLOYMENT) AND THEIR WAGES BY SELECT CATEGORIES, 2019



Source: 2019 Occupational Employment Statistics Survey, Bureau of Labor Market Information and Strategic Initiatives, Michigan Department of Technology, Management & Budget

jobs requiring a high school diploma, some college with no degree, and postsecondary nondegree awards. They all had similar wage level outcomes, apart from postsecondary nondegree awards having had a higher starting wage level. It is important to remember that this data looks at educational attainment and not training requirements. Many detailed occupations that have extensive on-the-job training or require an apprenticeship can earn higher wages.

The next big jump in potential earnings comes with having had a bachelor's degree or higher. The median wage for jobs requiring a bachelor's

degree was higher than the 90th percentile wage for any lower educational attainment level except associate degree. The top-level earnings with at least a bachelor's degree far outpaced the earnings of any of the lower educational levels. Attaining a bachelor's degree or higher clearly unlocks the potential for the highest average wages.

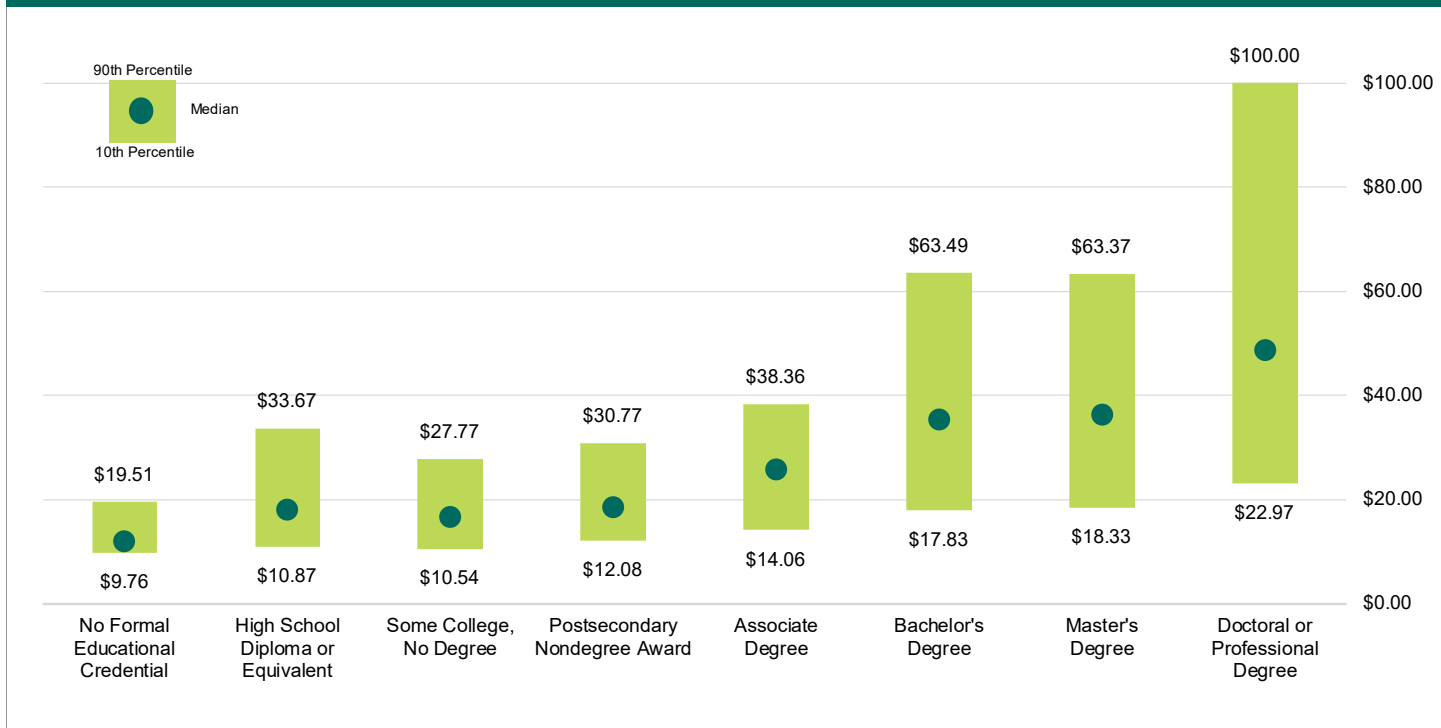
Figure 5 shows the percentage of jobs in Michigan that required each education level (not the percentage of workers that had that attainment level). Almost two-thirds of all jobs in Michigan required only a high school diploma or no formal education. This aligns

with Figure 2 which indicates that the largest occupational groups in the state were those with wages below the statewide median.

Michigan was about average in terms of the percentage of jobs that required a bachelor's degree. Statewide, there were almost one million jobs that required a bachelor's degree, which at 22 percent of all jobs matched the national share. This percentage ranked Michigan 21st in the nation, unchanged from the last few years.

Despite being average overall, Michigan had several metropolitan areas with high national

FIGURE 4: MICHIGAN WAGE RANGES FOR JOBS BY EDUCATIONAL REQUIREMENT, 2019



Source: 2019 Occupational Employment Statistics Survey, Bureau of Labor Market Information and Strategic Initiatives, Michigan Department of Technology, Management & Budget

ranks in the percentage of jobs requiring a bachelor's degree. Ann Arbor was the highest in the state, and ranked 9th nationally with 30.3 percent of all jobs requiring a bachelor's degree. Midland, Lansing, and Detroit also ranked in the top 50 metro areas nationwide, with over 24 percent of jobs requiring a bachelor's degree. The area with the lowest concentration

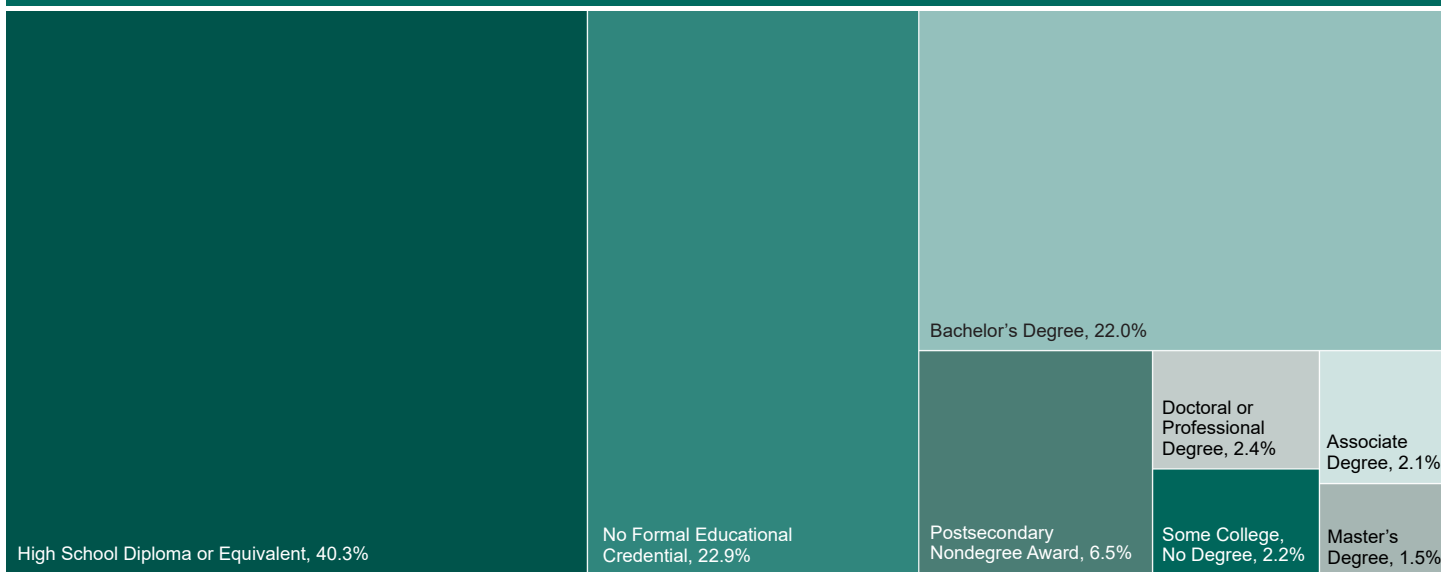
of jobs requiring a bachelor's degree was the Northeast Lower Peninsula nonmetropolitan area at only 14.4 percent, ranking 500th out of 528 qualifying areas. These Michigan areas illustrate the importance of having a high share of jobs requiring advanced education. The Michigan areas with the highest shares of jobs requiring a bachelor's degree also comprised four of the top

five areas in terms of median wage. Northeast Lower Michigan had the lowest share of these jobs and the lowest median wage in the state.

STEM

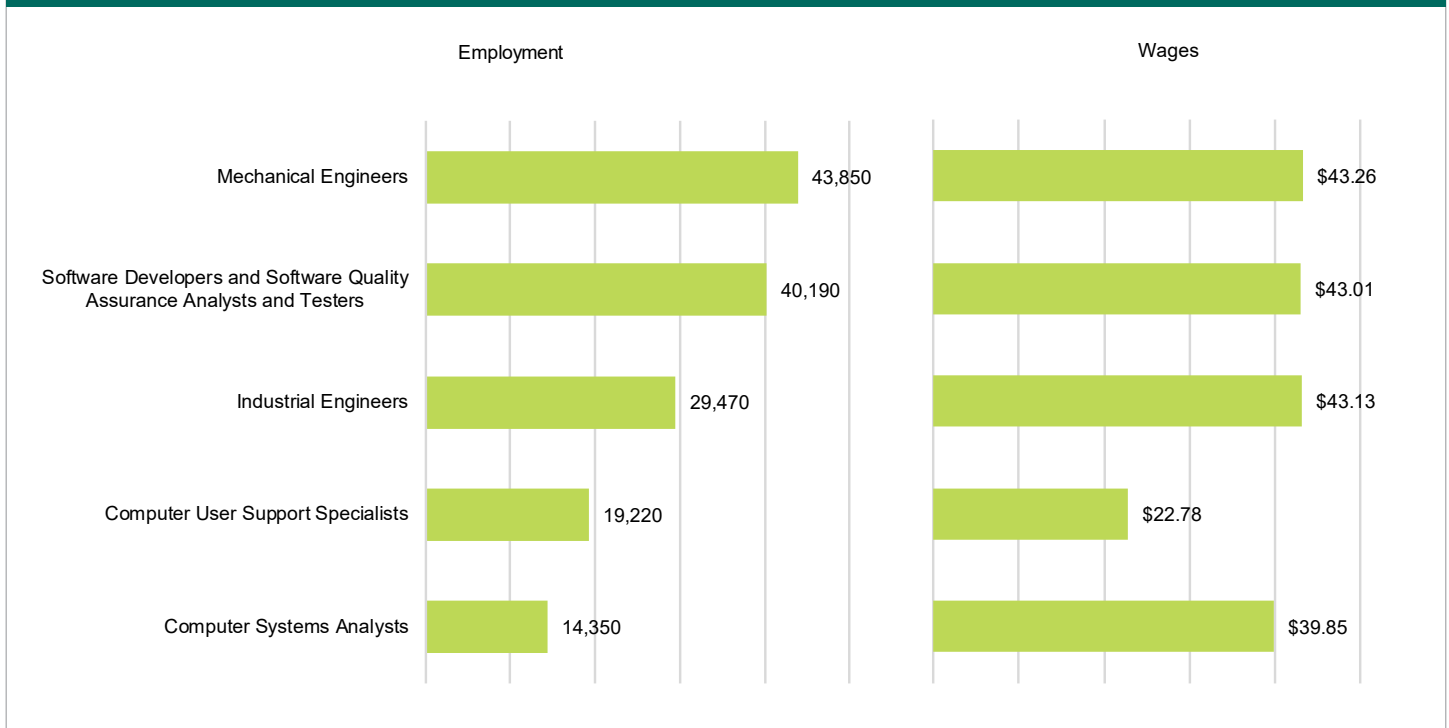
STEM is a subgroup of occupations that requires some postsecondary education, most of which require at least a bachelor's degree.

FIGURE 5: MICHIGAN EMPLOYMENT CONCENTRATION BY EDUCATIONAL ATTAINMENT



Source: 2019 Occupational Employment Statistics Survey, Bureau of Labor Market Information and Strategic Initiatives, Michigan Department of Technology, Management & Budget

FIGURE 6: TOP MICHIGAN STEM OCCUPATIONS BY EMPLOYMENT



Source: 2019 Occupational Employment Statistics Survey, Bureau of Labor Market Information and Strategic Initiatives, Michigan Department of Technology, Management & Budget

These occupations tend to be well paid and in demand with a median wage of \$39.25—more than double the statewide median but below the national wage of \$41.82.

Michigan ranked much higher in percentage of STEM jobs than it did jobs requiring a bachelor’s degree. Michigan ranked 10th overall with 7.2 percent of jobs in STEM, though that was down slightly from eighth last year. Michigan’s strength in STEM primarily comes from its strength in engineering. The U.S. had one and a half times the number of *Computer occupations* as it did *Engineering occupations*. For the U.S., the number of jobs in *Computer occupations* was about 80 percent higher than *Engineering occupations* overall, but in Michigan, employment in *Engineering occupations* was slightly higher than *Computer occupations*. Michigan was one of only a few states where this was true.

Michigan had several metro areas that ranked high nationally in the percentage of STEM jobs. Ann Arbor was the highest, ranking 20th in the nation with 10.7 percent of all jobs in the STEM field. The other areas were the same as the high-ranking areas by bachelor’s degree or higher but in a different order. Detroit, Midland, and Lansing were all in the top 50 with at least 8 percent of jobs in the STEM field. However, the bulk of Michigan’s STEM jobs were in the Detroit metro area, which had about 188,000

STEM jobs, accounting for 60 percent of the Michigan total, despite having only 46 percent of all jobs in the state.

Conclusion

In 2019, Michigan’s occupational employment and wages remained consistent with national trends. Michigan’s statewide and metro area rankings in measures such as median wage, jobs requiring a bachelor’s degree, and STEM percentage have all remained consistent with prior year rankings. Michigan’s labor market continues to be distinguished by relative strength in *Engineering occupations*, with the highest jobs per thousand in both *Mechanical* and *Industrial engineers*. One area that continues to change is the more rapid wage gains among low-wage jobs in the state. Wages rose faster in the 10th percentile category than the median or the 90th percentile groups, and the share of Michigan workers earning under \$10 per hour continues to decline.

ROB WALKOWICZ
Economic Manager



OCCUPATIONAL FOCUS

RESPIRATORY THERAPISTS

Many healthcare workers are on the front lines of patient care during an emergency or pandemic. However, when an illness or condition effects a person's ability to breathe, the essential work performed by *Respiratory therapists* is especially critical to the care and recovery of each patient.

According to the Bureau of Labor Statistics, *Respiratory therapists* "Assess, treat, and care for patients with breathing disorders. Assume primary responsibility for all respiratory care modalities, including the supervision of respiratory therapy technicians. Initiate and conduct therapeutic procedures; maintain patient records; and select, assemble, check, and operate equipment."

Examples of job titles encompassed by this position include: inhalation therapist, certified respiratory therapist (CRT), respiratory care practitioner (RCP), oxygen therapist, registered respiratory therapist (RRT)

Respiratory therapists are primarily employed in the health care industry and typically work alongside a team of physicians, nurses, or other healthcare professionals to manage patient care. Their tasks include providing emergency care, monitoring patients, setting up and operating ventilators, maintaining medical charts, and therapy of patients. Hospitals employ about 85 percent of *Respiratory therapists*, while the remainder are employed by *Nursing and residential care facilities* and *Ambulatory health care services*.

Some of the detailed work activities of people in this occupation include:

- Inspect, clean, test, and maintain respiratory therapy equipment to ensure equipment is functioning safely and efficiently, and ordering repairs when necessary.
- Explain treatment procedures to patients to gain cooperation and allay fears.
- Demonstrate respiratory care procedures to trainees or other healthcare personnel.
- Determine requirements for treatment, such as type, method and duration of therapy, precautions to be taken, or medication and dosages, compatible with physicians' orders.

Eighty-three percent of *Respiratory therapist* jobs require an associate degree. The other

MICHIGAN RESPIRATORY THERAPISTS BY THE NUMBERS



4,520
TOTAL
EMPLOYMENT 2019

7TH
NATIONAL
EMPLOYMENT RANK



10.42
JOBS PER
10,000 TOTAL

1.16
LOCATION
QUOTIENT



\$58,540
MEDIAN
ANNUAL WAGE

\$28.14
MEDIAN
HOURLY WAGE



+23.1%
2016-2026 PROJECTED
JOB GROWTH

330
PROJECTED ANNUAL
OPENINGS



**ASSOCIATE
DEGREE**
REQUIRED
EDUCATION

17 percent of these occupations require a bachelor's degree or higher. This occupation also requires a license in Michigan, which is granted by the Michigan Department of Licensing and Regulatory Affairs.

The requirements to obtain a *Respiratory therapist* license include:

- Graduate from an accredited respiratory therapy educational program
- Obtain at least a two-year associate degree from an accredited college or university
- Pass the National Board of Respiratory Care examination
- Arrange for submission of verification of licensure in any state or province where licensed

- Submit the *Respiratory therapist* application along with the application fee (about \$100)
- A fingerprint report and criminal background check are also required

Related occupations include radiation therapists; respiratory therapy technicians; diagnostic medical sonographers; cardiovascular technologists and technicians; and licensed practical and licensed vocational nurses

The *Respiratory therapist* occupation has a bright long-term outlook. The projected annual job growth rate of 2.1 percent is three times the Michigan average projected gain of 0.7 percent for all occupations. The \$28.14 per hour median wage for *Respiratory therapist* is also nearly

ten dollars an hour greater than the overall statewide median wage.

WAYNE ROURKE
Associate Director

MICHIGAN RESPIRATORY THERAPISTS PER 10,000 EMPLOYED

AREA	RESPIRATORY THERAPIST JOBS	JOBS PER 10,000 EMPLOYED	PROJECTED GROWTH RATE 2016–2026	MEDIAN ANNUAL WAGE
Saginaw	170	19.6	19.0	\$59,920
Ann Arbor	360	15.9	22.5	\$61,530
Battle Creek	<100	13.9	18.0	\$58,750
Grand Rapids-Wyoming	730	12.9	25.2	\$57,700
Upper Peninsula	140	12.8	15.0	\$51,550
Northwest Michigan	140	11.5	26.9	\$58,740
Michigan	4,520	10.4	23.1	\$58,540
Detroit-Warren-Dearborn	1850	9.4	23.5	\$58,180
Northeast Michigan	<100	9.1	16.7	\$55,320
Lansing-East Lansing	200	9.0	25.8	\$59,770
Niles-Benton Harbor	<100	7.3	18.0	\$58,570

SMALL ADVANCE IN FEBRUARY MICHIGAN ONLINE JOB ADS

Online job advertisements in Michigan in February 2020 totaled 160,566, which was a minor 0.5 percent increase from the January level (159,742 ads). Since February 2019, online job ads edged up by 0.4 percent.

Michigan Supply/Demand Rate

The supply/demand rate is defined as the ratio of unemployed persons per job advertisement. In Michigan, the February 2020 supply/demand rate was 1.12, which indicates an average of 112 available job seekers per 100 online job advertisements. This was down considerably since January when the rate was 1.32. The rate drop resulted from a steady number of ads over the month and a decline in the number of unemployed. In February of 2019, the supply/demand rate was 1.39.

Job Ad Posting Length

The duration that online ads are posted can be a measure of the difficulty of filling and finding jobs. In February, 35 percent of online ads were relatively new (posted for less than 30 days). Medium-term job postings (posted for more than 30 days but less than 60) comprised 31 percent of the total. The remaining 34 percent of ads were posted for more than 60 days.

Minimum Education Requirements

More than 57 percent of job ads (91,724 ads) have a minimum educational requirement explicitly stated. Of those, 44 percent list a high school degree or equivalency as the minimum education

needed. A similar 42 percent of ads list a bachelor's degree. The third most listed education was an associate degree (8 percent), while roughly 6 percent of ads list something higher than a bachelor's degree. These percentages were unchanged from January.

Job Ads by Occupation

Information is available on advertised jobs by detailed occupation as well as broad occupation groups from the Conference Board Help Wanted OnLine® data series. Among broad occupational groups, job postings for *Sales and related* positions led the way, with 18,763 ads. *Healthcare practitioners and technical* occupations ranked second (17,679 ads) while *Management* ranked third with 16,346 ads.

Most major occupational groups in Michigan recorded minimal change in total job ads in February. None of the top ten occupational groups had more than a 2.5 percent monthly change in ad levels. The *Computer and mathematical* category registered the largest change among major groups, up 2.5 percent or 365 ads in February.

Among detailed occupations, *Registered nurses* led the way for the third consecutive month with over 6,400 job ads in February in Michigan. *Retail salespersons* again ranked second with over 5,700 ads. Overall, 756 unique occupations had at least one job posting this month. These occupations were unique and varied, such as *Fashion designers* and *Genetic counselors*, which each had 10 postings.

Job Postings for High Wage Occupations Outlined in this Month's Feature Article

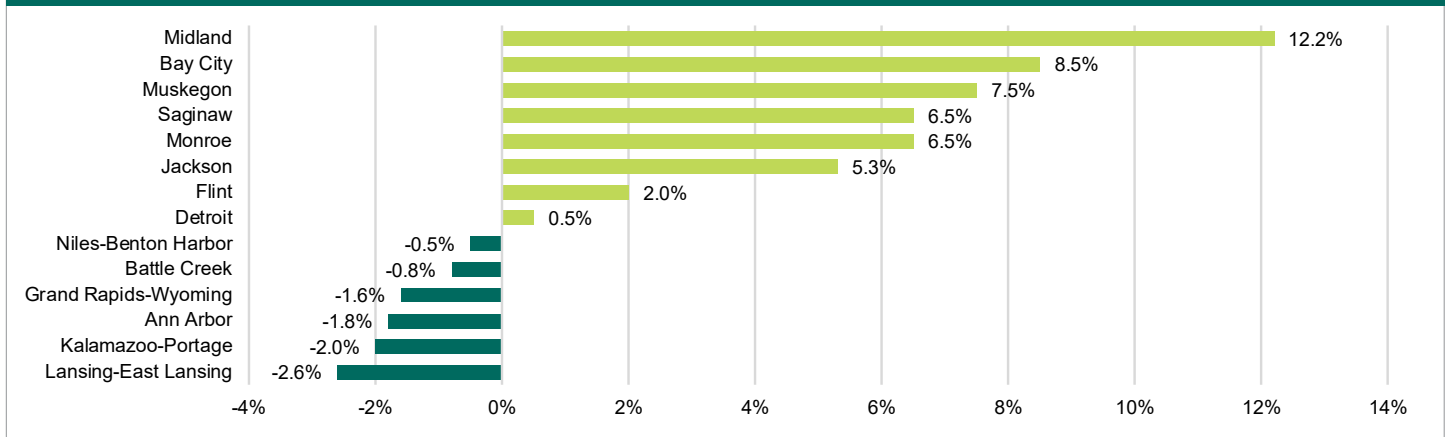
As was outlined in the feature article of this issue of *Michigan's Labor Market News*, some of the highest paid occupations in Michigan are found in the *Management* occupational category and the *Architecture and engineering* major group. Overall, these two occupational groups had nearly 23,000 online job postings in Michigan in February. Notably, 43 of the 66 detailed occupations in these two groups, according to U.S. Census data, have more than 50 percent of currently employed workers with a bachelor's degree or higher. Among the occupations with the most job postings were *Medical and health services managers*, *Sales managers*, and *Mechanical engineers*.

The Bureau of Labor Market Information and Strategic Initiatives publishes job advertisement data through the The Conference Board Help Wanted OnLine® data series. In January 2020 this service partnered with Burning Glass Technologies and revised its job advertisement data collection methodology. Consequently, this month's data may demonstrate significant variation from prior publications, which may be related to methodology changes and not necessarily indicative of actual changes in job advertisement levels.

Through the end of February, job ad data did not appear to be heavily impacted yet by the COVID-19 pandemic.

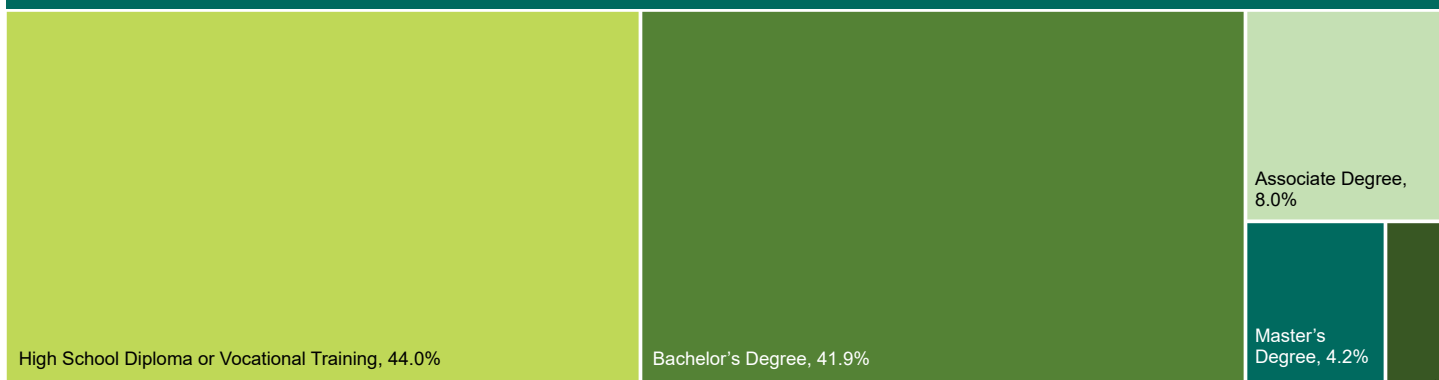
EVAN LINSKEY
Economic Analyst

MONTHLY CHANGE IN JOB ADS BY MICHIGAN METRO AREA, JANUARY 2020–FEBRUARY 2020



Source: Conference Board Help Wanted OnLine®, Burning Glass Technologies

MINIMUM EDUCATION REQUIREMENT FOR JOB POSTINGS IN MICHIGAN, FEBRUARY 2020



Source: Conference Board Help Wanted OnLine®, Burning Glass Technologies

Note: 43% of records have been excluded because they do not include a degree level. As a result, the data may not be representative of the full sample.

Doctoral Degree, 1.9%

LABOR DEMAND BY OCCUPATION (NOT SEASONALLY ADJUSTED)

OCCUPATION CATEGORIES	FEB 2020	JAN 2020	FEB 2019	OVER THE MONTH	
				LEVEL	PERCENT
TOTAL	153,449	152,345	152,318	1,104	0.7%
Administrative Support	15,259	15,171	15,908	88	0.6%
Office and Administrative Support	15,259	15,171	15,908	88	0.6%
Construction and Repair	7,624	7,468	7,889	156	2.1%
Construction and Extraction	1,929	1,781	1,957	148	8.3%
Installation, Maintenance, and Repair	5,695	5,687	5,932	8	0.1%
Farming, Fishing, and Forestry	210	153	261	57	37.3%
Farming, Fishing, and Forestry	210	153	261	57	37.3%
Healthcare	22,325	22,086	20,770	239	1.1%
Healthcare Practitioners and Technical	17,679	17,524	16,204	155	0.9%
Healthcare Support	4,646	4,562	4,566	84	1.8%
Management	16,346	16,171	15,890	175	1.1%
Management	16,346	16,171	15,890	175	1.1%
Production	5,473	5,416	7,106	57	1.1%
Production	5,473	5,416	7,106	57	1.1%
Professional	43,435	42,975	40,923	460	1.1%
Architecture and Engineering	6,628	6,690	7,400	-62	-0.9%
Arts, Design, Entertainment, Sports, and Media	4,390	4,350	3,485	40	0.9%
Business and Financial Operations	8,644	8,476	8,612	168	2.0%
Community and Social Services	2,204	2,159	1,924	45	2.1%
Computer and Mathematical	15,186	14,821	13,877	365	2.5%
Education, Training, and Library	4,196	4,355	3,578	-159	-3.7%
Legal	752	761	647	-9	-1.2%
Life, Physical, and Social Science	1,435	1,363	1,400	72	5.3%
Sales	18,763	18,785	18,064	-22	-0.1%
Sales and Related	18,763	18,785	18,064	-22	-0.1%
Service	17,078	17,072	17,143	6	0.0%
Building and Grounds Cleaning and Maintenance	3,637	3,511	3,819	126	3.6%
Food Preparation and Serving Related	8,321	8,489	7,848	-168	-2.0%
Personal Care and Service	3,433	3,372	3,610	61	1.8%
Protective Service	1,687	1,700	1,866	-13	-0.8%
Transportation	6,936	7,048	8,364	-112	-1.6%
Transportation and Material Moving	6,936	7,048	8,364	-112	-1.6%

Note: Some job ads do not fit in a major group designation, so topline numbers may appear different between the analysis and the table.

RELEVANT RANKINGS

HEALTHCARE PRACTITIONERS, TECHNICAL, AND SUPPORT OCCUPATIONS PER 1,000 PEOPLE BY STATE

RANK	STATE	HEALTHCARE WORKERS	POPULATION	HEALTHCARE WORKERS PER 1,000 PEOPLE	HEALTHCARE WORKERS PER SQUARE MILE
1	Minnesota	353,960	5,639,600	63	4.4
2	Massachusetts	431,200	6,892,500	63	55.3
3	New York	1,175,990	19,453,600	60	25
4	North Dakota	44,970	762,100	59	0.7
5	Maine	77,990	1,344,200	58	2.5
21	New Jersey	410,990	8,882,200	46	55.9
22	Iowa	145,360	3,155,100	46	2.6
23	Michigan	460,000	9,986,900	46	8.1
24	Indiana	307,970	6,732,200	46	8.6
25	California	1,790,630	39,512,200	45	11.5
46	Florida	842,460	21,477,700	39	15.7
47	Hawaii	54,200	1,415,900	38	8.4
48	Utah	115,100	3,206,000	36	1.4
49	Georgia	381,060	10,617,400	36	6.6
50	Nevada	105,620	3,080,200	34	1

Source: 2019 Occupational Employment Statistics Survey, Bureau of Labor Market Information and Strategic Initiatives, Michigan Department of Technology, Management & Budget

MICHIGAN'S HEALTHCARE PRACTITIONERS, TECHNICAL, AND SUPPORT OCCUPATIONS PER 1,000 PEOPLE BY REGION

RANK	REGION	HEALTHCARE WORKERS	POPULATION	HEALTHCARE WORKERS PER 1,000 PEOPLE	HEALTHCARE WORKERS PER SQUARE MILE
1	Ann Arbor	34,340	367,600	93	47.6
2	Saginaw	11,680	190,500	61	14.3
3	Battle Creek	7,130	134,200	53	9.9
4	Midland	4,390	83,200	53	8.3
5	Grand Rapids-Wyoming	55,010	1,074,200	51	20.0
6	Flint	19,670	405,800	48	30.3
7	Detroit-Warren-Dearborn	204,290	4,319,600	47	50.9
8	Northwest Michigan	14,490	306,800	47	2.9
9	Kalamazoo-Portage	15,730	340,700	46	13.1
10	Bay City	4,720	103,100	46	10.5
11	Lansing-East Lansing	18,960	482,300	39	11.1
12	Upper Peninsula	11,710	298,900	39	0.7
13	Jackson	6,180	158,500	39	8.5
14	Niles-Benton Harbor	5,420	153,400	35	9.3
15	Northeast Michigan	8,160	274,400	30	1.0
17	Monroe	3,610	150,500	24	6.5
18	Muskegon	2,880	173,600	17	5.5

Source: 2019 Occupational Employment Statistics Survey, Bureau of Labor Market Information and Strategic Initiatives, Michigan Department of Technology, Management & Budget



NUMBER OF FOOD PREPARATION AND SERVING RELATED OCCUPATIONS BY STATE

RANK	STATE	FOOD PREP. AND SERVING WORKERS	PERCENT OF TOTAL OCCUPATIONS	MEDIAN WAGE
1	California	1,627,490	0.4%	\$13.08
2	Texas	1,175,750	0.6%	\$10.07
3	Florida	950,180	0.9%	\$10.46
4	New York	768,040	0.7%	\$13.84
5	Illinois	516,360	0.9%	\$10.98
6	Pennsylvania	509,330	0.8%	\$10.72
7	Ohio	501,990	0.7%	\$9.93
8	North Carolina	429,910	0.8%	\$9.86
9	Georgia	416,960	1.0%	\$9.55
10	Michigan	393,970	0.8%	\$11.05
46	South Dakota	41,620	1.5%	\$10.63
47	North Dakota	35,070	1.9%	\$11.94
48	Alaska	27,470	2.3%	\$12.53
49	Vermont	26,280	2.9%	\$13.79
50	Wyoming	25,320	2.8%	\$10.77

Source: 2019 Occupational Employment Statistics Survey, Bureau of Labor Market Information and Strategic Initiatives, Michigan Department of Technology, Management & Budget

SHORT-TERM EMPLOYMENT PROJECTIONS

The Bureau of Labor Market Information and Strategic Initiatives published new short-term employment projections this month. This new set of projections covers the period of the second quarter of 2019 through the second quarter of 2021. They contain Michigan statewide data for both industries and occupations.

Because these projections have a base period of the second quarter of 2019, the projected employment levels will not reflect any economic changes that may occur in the intervening time period, including the effects of the COVID-19 pandemic. While the full effects of the pandemic on the Michigan economy are still unknown as of writing, it is clear that the impact will be significant.

Industries

Overall employment in Michigan was expected to grow by about 52,800 jobs, or 1.1 percent, over this two-year time period. About half of the net gain in employment was expected to be contributed by the *Educational and health services* and *Leisure and hospitality*

sectors, due to their large size (the pandemic will dampen job levels in 2020 in *Leisure and hospitality*, but that is not factored into these projections). The *Construction* sector was projected to see the fastest percent job expansion over this time period.

Within the *Education and health services* sector, expectations were for almost 14,000 new Michigan jobs, or 1.4 percent growth. These gains were projected to be led by *Hospitals; Colleges, universities, and professional schools*; and *Social assistance*. Together, these three industries should provide about eight of every 10 new jobs in the sector. Two industries in this sector were expected to record small reductions in employment: *Junior colleges*, one of the smallest education industries, down 0.3 percent, and *Elementary and secondary schools*, down 0.6 percent.

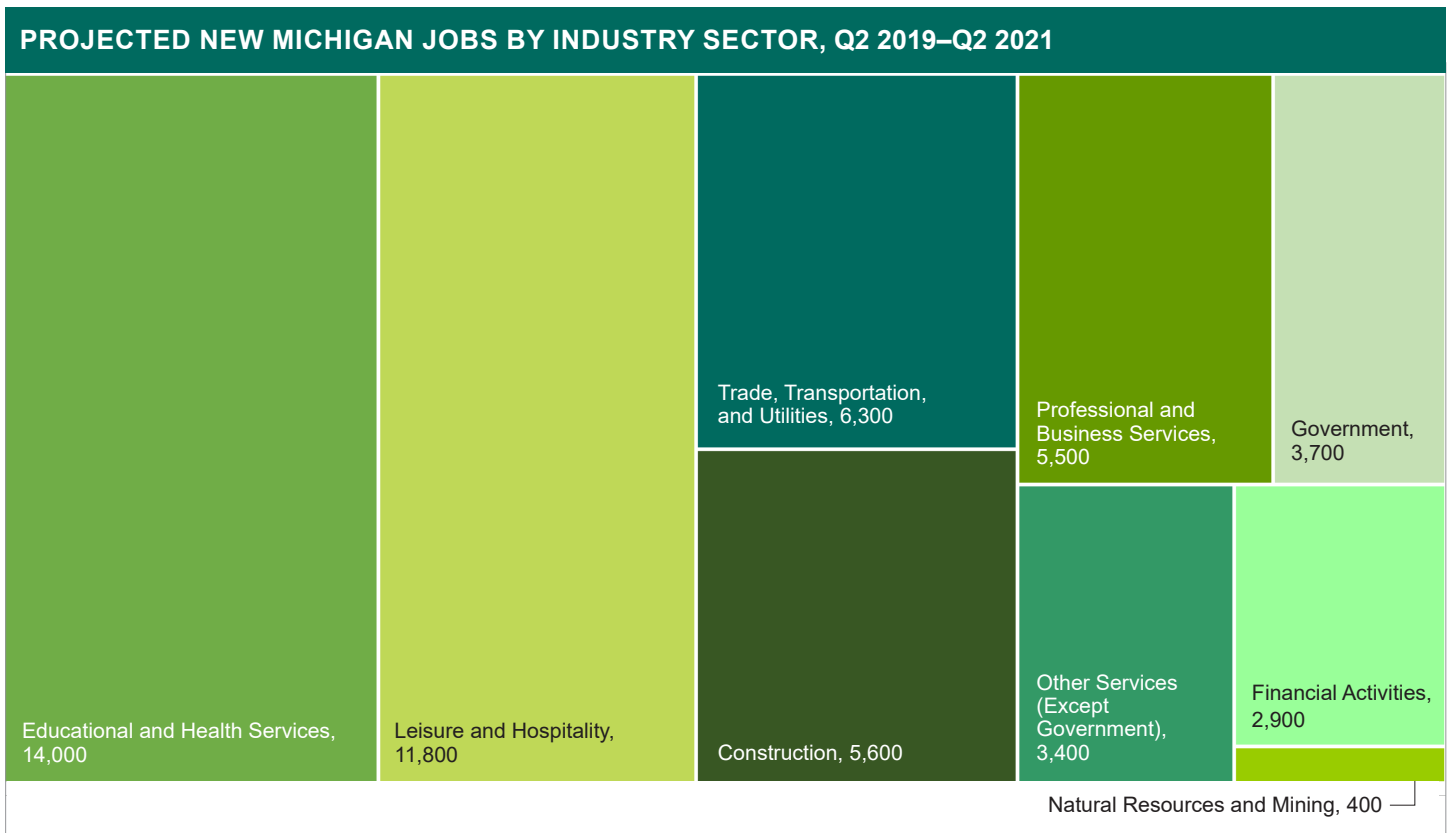
The expected job growth in the *Construction* industry, up 3.2 percent, was a reflection of its steady increase since the 2010 trough.

Gains in this sector were projected to be split relatively evenly between *Specialty trade contractors* and *Construction of buildings*. *Heavy and civil engineering construction*, the slowest-growing of the three industries in the sector, was projected to add just over 500 jobs in the two-year period.

The *Manufacturing* sector, an important contributor to the state economy, was expected to register a mild downtick in employment, dropping 0.4 percent over the two-year period. Industries within the sector should see a wide variation in their job outlook, however.

Transportation equipment manufacturing, one of the state's core manufacturing industries, was projected to show a slight decrease in jobs over the two-year period, down by 0.4 percent.

The *Miscellaneous manufacturing* industry was expected to add nearly 2,000 jobs, a 7.2 percent advance. This diverse industry is split into *Medical equipment and supplies manufacturing* and *All other manufacturing*. Although more



Source: 2019–2021 Q2 Michigan Employment Projections, Michigan Bureau of Labor Market Information and Strategic Initiatives

detailed projections are not available, the latest data from the Bureau of Labor Statistics, shows that about half of the *Miscellaneous manufacturing* industry employment comes from these two detailed industries.

Occupations

New jobs stemming from high-growth industries would normally influence the fastest-growing groups of occupations in the Michigan economy. The greatest number of new jobs among all occupational groups would typically be expected in *Food preparation and serving-related* occupations (although the impact of the pandemic on these occupations could be substantial in 2020). Under normal circumstances, this group of occupations would be expected to record one of the highest rates of job growth at 2.7 percent.

Construction and extraction occupations, those closely related to the *Construction* industry, were expected to grow by 2.6 percent over the projection period. The greatest number of new jobs in this occupational group were expected to come from *Construction laborers* (up 3.3 percent), *Carpenters* (3.1 percent), and *Electricians* (2.1 percent). Together, these three occupations were expected to produce nearly 11,000 job openings annually through a

combination of occupational growth, labor force exits, and job-holders transferring to other occupational areas.

Some occupational groups have a projected decline in employment over the two-year period. *Production* occupations, those that are primarily employed in *Manufacturing* industries, were expected to see the greatest percent drop at 0.8 percent over the two-year period. Not all jobs in the group were expected to register a job reduction, however. *Dental laboratory technicians* were one of the fastest-growing *Production* occupations, adding 120 new jobs, or 7.2 percent over the period. Many larger *Production* occupations were expected to add positions as well. *Electrical, electronic, and electromechanical assemblers* were one such example, adding 370 new jobs to its employment base of over 14,600 for about 2.5 percent growth.

Other than *Production* occupations, two additional groups were expected to see employment decreases: *Office and administrative support* (-0.4 percent) and *Sales and related occupations* (-0.3 percent).

Job additions in the *Education and health services* sector, primarily in *Healthcare-related*

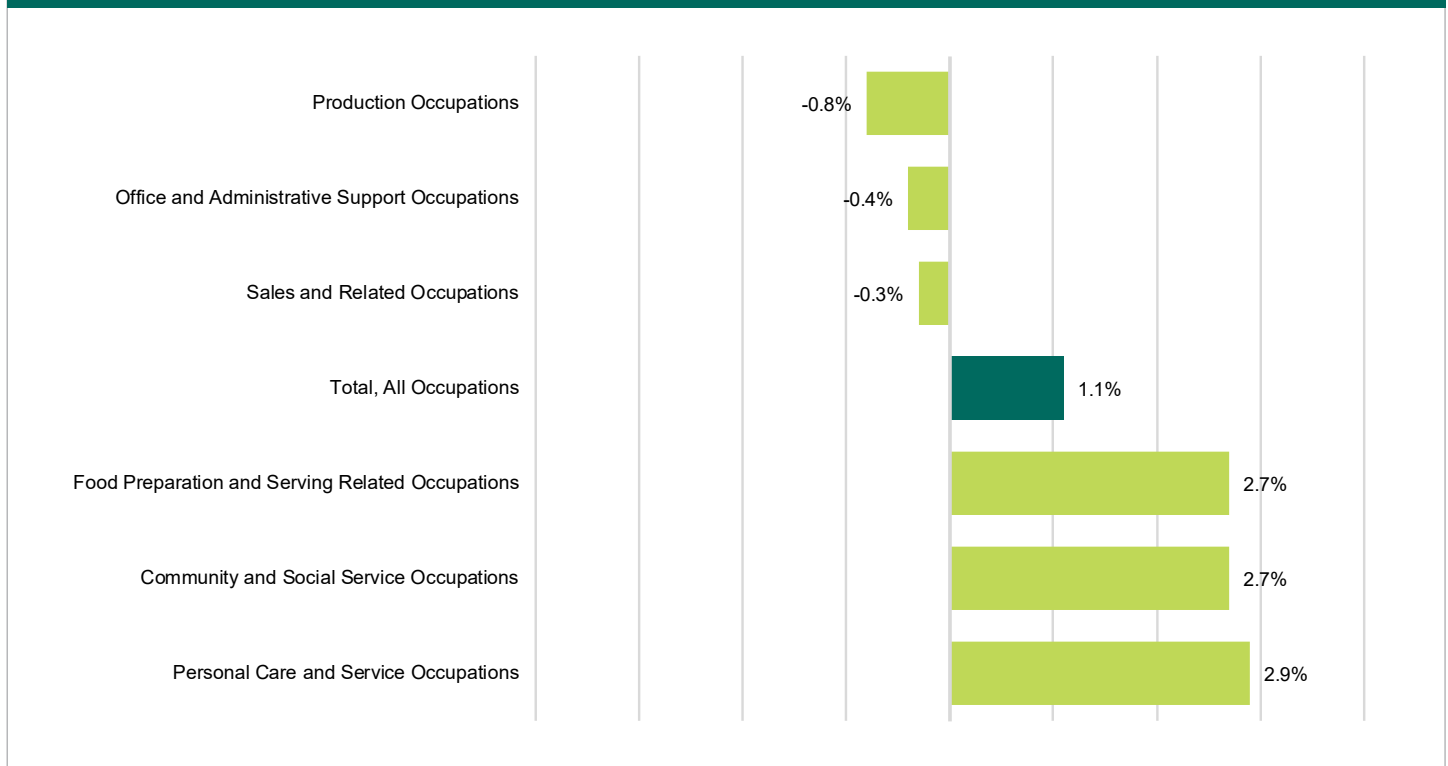
occupations, will be important not just in the next two years, but for many years to come. Among expected high-growth occupations in this group were *Orthotists and prosthetists*, *Respiratory therapists*, and *Home health aides*, each expected to add jobs at around four times the pace of all Michigan jobs.

The aging of Michigan's population, a topic discussed in the March issue of *Michigan's Labor Market News*, will drive both short- and long-term changes in the labor force and generate demand for jobs needed to support aging Michiganders.

KEVIN DOYLE

Employment Projections Specialist

SELECTED MICHIGAN OCCUPATIONAL GROUPS BY PROJECTED PERCENT CHANGE, Q2 2019–Q2 2021



Source: 2019–2021 Q2 Michigan Employment Projections, Michigan Bureau of Labor Market Information and Strategic Initiatives



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