

MICHIGAN'S LABOR MARKET NEWS

VOL. 77, NO. 5
JULY 2021

Exploring Michigan's Blue Labor Market

Feature Article pg. 16

Map of the Month: Accommodation and Food Services Jobs in Michigan's Coastal Areas

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Occupational Focus: Environmental Scientists and Specialists, Including Health

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Michigan's jobless rate inched up slightly by 0.1 percentage point to 5.0 percent in May, and payroll jobs were little changed over the month.

MAY 2021 JOBLESS RATE

MICHIGAN
5.0%
NATIONAL
5.8%

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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 Analytics division conducts workforce research and program evaluation, giving you the insight you need to make smarter decisions.

Michigan's unemployment rate climbed by one tenth of a percentage point to 5.0 in May, the first increase since November 2020. The state's labor force, total employment, and number of unemployed all had small increases over the month, while payroll jobs declined marginally. This was the second month in a row showing a drop in payroll jobs and only the third month with a job decline in the past year. A majority of May's job loss was caused by a 1.5 percent drop in *Retail trade* employment.

This issue of *Michigan's Labor Market News* focuses on one of our state's most important resources: freshwater. Our *Feature article* highlights some of the industries and occupations more directly tied to water in Michigan, though its impact goes beyond just these jobs. The *Map of the Month* illustrates how the state's *Accommodation and food services* industry is more prevalent near the Great Lakes, while our *Occupational Focus* covers the work of *Environmental scientists and specialists*. Finally, our *Relevant Rankings* section compares Michigan's shoreline totals and non-resident fishing license data, each of which brings tourism dollars to the state's regional economies, to other states nationally.

We hope you enjoy this issue 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 JOBLESS RATE INCHES UP DURING MAY

The Michigan seasonally adjusted unemployment rate edged up by a tenth of a percentage point between April and May to 5.0 percent. Total employment moved up by 6,000 while the number of unemployed was little changed (+3,000), resulting in a modest labor force advance of 9,000 over the month. The May rate gain ended a period of four consecutive months of jobless rate reductions in Michigan.

Nationally, the jobless rate fell significantly by three-tenths of a percentage point in May to 5.8 percent. The Michigan unemployment rate was 0.8 percentage points below the U.S. rate during May. Over the year, the national rate dropped by 7.5 percentage points while Michigan's rate plunged by 15.8 percentage points. Michigan's rate drop since May 2020 was the second highest decline in the nation, and reflected the recalls of workers following the very high levels of pandemic-related layoffs one year ago.

Michigan's employment level was little changed in May for the second consecutive month (+0.1 percent), below the 0.3 percent employment gain nationally. The state's unemployment total rose by 1.3 percent since April while unemployment nationally fell by 5.1 percent. Michigan's labor force was nearly unchanged over the month, inching up by 0.2 percent.

The statewide employment total advanced by 20.4 percent over the year, an increase nearly double the gain nationally. Michigan's number of unemployed plunged by 75.9 percent since May 2020, while the national unemployment total fell by 55.6 percent. These large shifts over the past year reflect the recalls of workers to jobs since the very large numbers of persons on pandemic-related layoff in May 2020.

Despite pronounced statewide labor market improvements over the year, Michigan's May employment level was 268,000, or 5.6 percent, below the pre-pandemic February 2020 employment total. Michigan's total number of unemployed remained 50,000, or 27.0 percent, above pre-pandemic counts. Furthermore, the May unemployment rate of 5.0 percent was 1.3 percentage points higher than Michigan's February 2020 rate of 3.7 percent.

Detroit Metro Region Employment Remains Below Pre-Pandemic Levels

An examination of May 2021 Detroit metro region workforce indicators compared with the area's pre-pandemic February 2020 levels reveals that the primary difference is a continuing shortfall in the number of employed residents.

The Detroit metro region employment level in February 2020 was 2,062,000. By April 2020, with the massive layoffs caused by the pandemic, employment in the metro area plunged by an unprecedented 594,000. Since April 2020, the region has added jobs in most months as workers have been recalled. However, as of May 2021, employment in the Detroit metro area remains 127,000 below the pre-pandemic level.

In terms of the number of unemployed, the region has averaged about 90,000 unemployed over the last four months, which is similar to the levels recorded in the first quarter of 2020. The Detroit region's labor force in May was 5.9 percent below the workforce level during February of last year. Finally, the Detroit metro region unemployment rate over the last three months remained only slightly above first quarter 2020 levels.

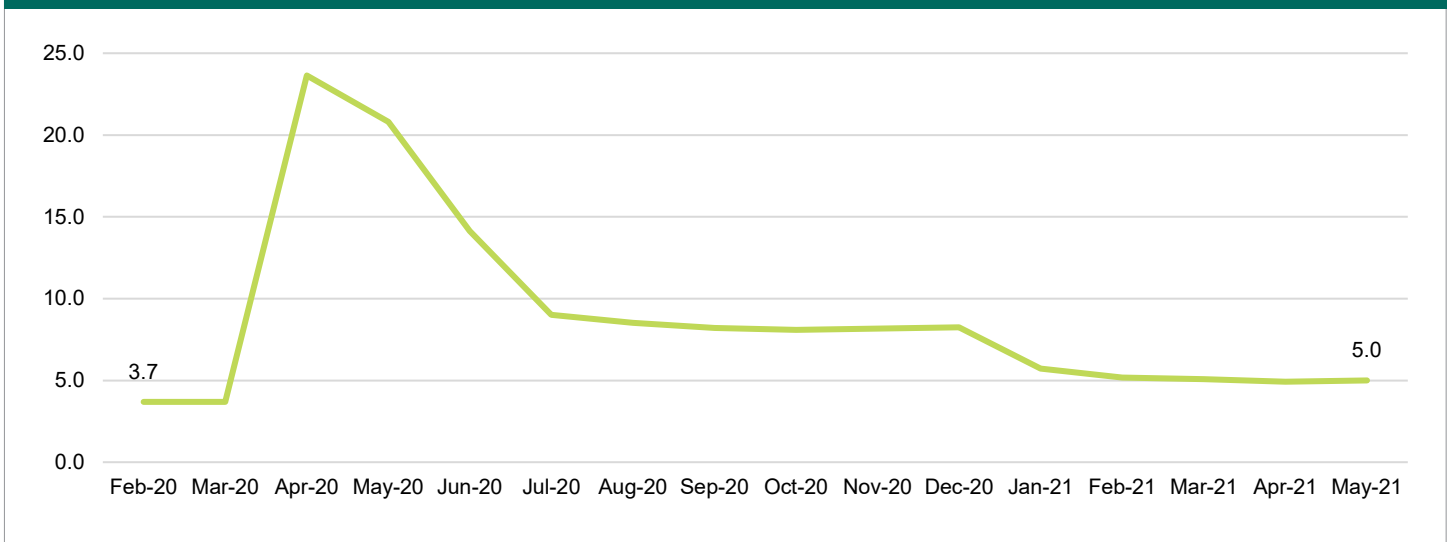
SHIBANI PUTATUNDA
Economic Specialist

MICHIGAN LABOR FORCE ESTIMATES, MAY 2021 (SEASONALLY ADJUSTED)

	MAY 2021	APRIL 2021	MAY 2020	OVER THE MONTH		OVER THE YEAR	
				NUMERIC	PERCENT	NUMERIC	PERCENT
Civilian Labor Force	4,710,000	4,701,000	4,695,000	9,000	0.2%	15,000	0.3%
Employed	4,476,000	4,470,000	3,718,000	6,000	0.1%	758,000	20.4%
Unemployed	235,000	232,000	977,000	3,000	1.3%	-742,000	-75.9%
Unemployment Rate	5.0	4.9	20.8	0.1	XXX	-15.8	XXX

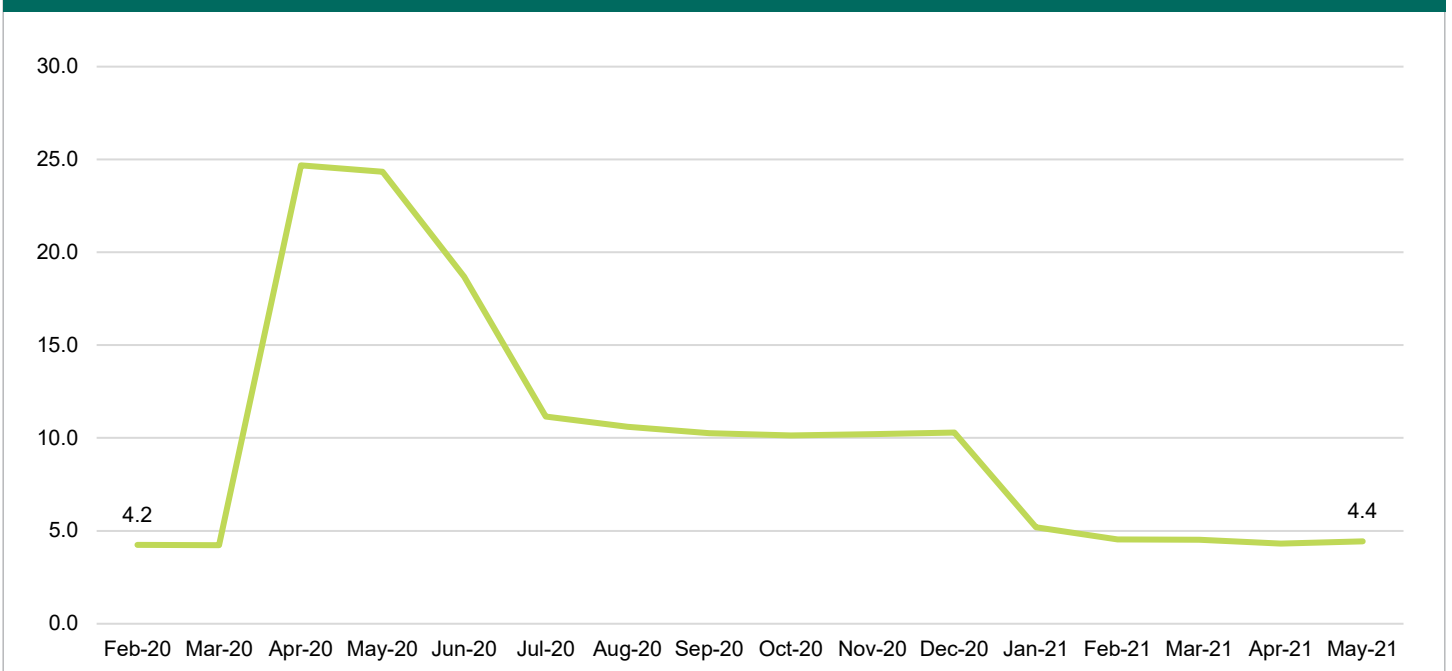
Source: Local Area Unemployment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget

MICHIGAN UNEMPLOYMENT RATE, FEBRUARY 2020–MAY 2021 (PERCENT)



Source: Local Area Unemployment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget

DETROIT METRO REGION UNEMPLOYMENT RATE, FEBRUARY 2020–MAY 2021 (PERCENT)



Source: Local Area Unemployment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget

MICHIGAN JOB TRENDS BY INDUSTRY SECTOR

Monthly Overview

Total seasonally adjusted nonfarm payroll jobs in Michigan remained little changed in May, moving down by only 2,200 or 0.1 percent over the month. Consequently, total payroll employment was still 339,600 or 7.6 percent below February 2020 pre-pandemic job levels. Nationally, nonfarm payroll jobs rose in May by 559,000 or 0.4 percent, as job levels continue to rebound.

Job gains in Michigan were recorded in several major industry sectors in May, led by additions in *Manufacturing* (+4,600), *Other services* (+1,800), and *Construction* (+1,600). Notable employment declines were recorded in several Michigan industry sectors as well, including *Trade, transportation, and utilities* (-5,900), *Leisure and hospitality* (-2,500), and *Professional and business services* (-2,300).

Over the Year Analysis

Over the year, seasonally adjusted payroll jobs in Michigan advanced substantially by 592,500 or 16.8 percent, well above the nationwide rate of job gain since May 2020 (+8.9 percent). All major industry sectors in Michigan added jobs over the year, led by *Leisure and hospitality* (+59.8 percent), *Manufacturing* (+29.1 percent), *Other services* (+22.4 percent), and *Construction* (+20.8 percent). Minimal job additions were recorded within the *Information* (+3.5 percent) and *Government* (+2.4 percent) sectors. Despite these industry-wide job advances recorded since May 2020, most

industries had current job levels that were lower than February 2020 pre-pandemic counts.

It is important to analyze industry job loss and recovery, on both the statewide and national level, in order to observe how Michigan compared to the United States throughout the initial and lingering economic effects of the COVID-19 pandemic.

The percent decline in total nonfarm jobs in April 2020 with the onset of the pandemic was significantly higher in Michigan than the United States. As the table illustrates, jobs in all Michigan major industry sectors fell at rates above national averages in April 2020. In some cases, the higher rates of job loss in Michigan compared with the nation were quite dramatic, including *Construction* (-40.1 percent), *Manufacturing* (-32.7 percent), *Retail trade* (-23.6 percent), and *Professional and business services* (-22.1 percent). However, there were other major industry sectors with similar rates of job change in April 2020 between Michigan and the U.S., including *Information*, *Financial activities*, and *Government*.

It is of particular interest to compare the share of these lost pandemic-related jobs that have since been recovered in Michigan across major industries, and how these trends compare with the nation. As the table displays, Michigan industries have not all recovered lost jobs at the same pace, and the rates of job recovery do not always match national trends.

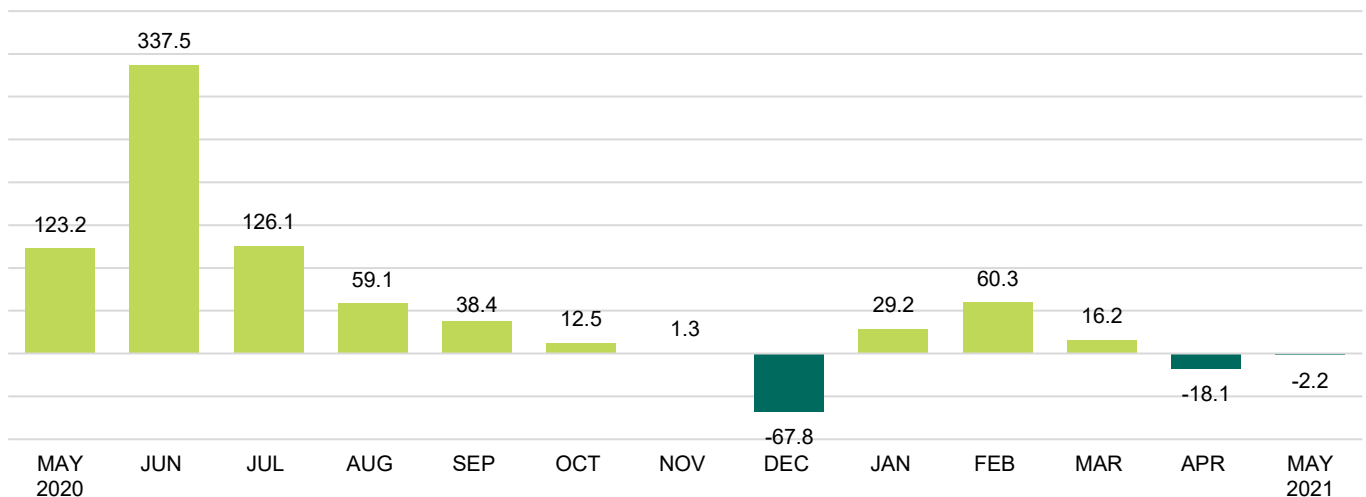
Between April 2020 and May 2021, the share of jobs recovered in Michigan and the United States have been similar at about 70 percent. However, several major Michigan industry sectors have recovered a higher share of the jobs lost in April 2020 than has occurred nationally. For example, Michigan's *Mining and logging* sector has fully recovered the 800 jobs cut temporarily in April 2020 due to the pandemic, whereas nationwide only about 15 percent of jobs lost were regained by May 2021. Other notable Michigan industries which have recovered a larger percent of jobs than nationally include *Construction* (+98.6 percent), *Manufacturing* (+76.8 percent), and *Wholesale trade* (+67.6 percent). Several industries in Michigan have only managed to recover smaller shares of the jobs lost in April 2020, such as *Information* and *Education and health services*. *Government* stands out as a sector in both Michigan and the U.S. in which job levels in May 2021 actually remain below April 2020 levels.

Significant Industry Employment Developments

MANUFACTURING

On a seasonally adjusted basis, total payroll jobs in the *Manufacturing* sector advanced by 4,600 or 0.8 percent in May to 570,300, the third largest monthly percent increase recorded among major industry sectors in Michigan. Despite this monthly advance, employment within this sector was still 48,900 or 7.9 percent

MICHIGAN OVER-THE-MONTH PAYROLL JOB CHANGE (IN THOUSANDS)



Source: Current Employment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget

SHARES OF PANDEMIC-RELATED JOBS LOST IN APRIL 2020 THAT WERE RECOVERED BY MAY 2021

MAJOR INDUSTRY	APRIL 2020 JOBS LOST DUE TO COVID-19 PANDEMIC				SHARE OF JOBS LOST IN APRIL 2020 THAT WERE RECOVERED BY MAY 2021			
	MICHIGAN		UNITED STATES		MICHIGAN		UNITED STATES	
	LEVEL CHANGE	PERCENT CHANGE	LEVEL CHANGE	PERCENT CHANGE	LEVEL CHANGE	PERCENT CHANGE	LEVEL CHANGE	PERCENT CHANGE
TOTAL NONFARM	-1,017.1	-23.0%	-20,679.0	-13.7%	715.7	70.4%	14,733.0	71.2%
Mining and Logging	-0.8	-11.6%	-52.0	-7.7%	0.8	100.0%	-8.0	-15.4%
Construction	-71.3	-40.1%	-1,022.0	-13.5%	70.3	98.6%	888.0	86.9%
Manufacturing	-201.5	-32.7%	-1,304.0	-10.3%	154.7	76.8%	876.0	67.2%
Trade, Transportation, and Utilities	-158.4	-19.9%	-3,216.0	-11.6%	131.5	83.0%	2,633.0	81.9%
Wholesale Trade	-24.7	-14.4%	-390.6	-6.6%	16.7	67.6%	198.1	50.7%
Retail Trade	-108.9	-23.6%	-2,248.3	-14.5%	87.8	80.6%	1,963.3	87.3%
Information	-6.4	-11.6%	-265.0	-9.1%	0.9	14.1%	88.0	33.2%
Financial Activities	-12.9	-5.6%	-254.0	-2.9%	10.5	81.4%	206.0	81.1%
Professional and Business Services	-143.4	-22.1%	-2,236.0	-10.5%	111.3	77.6%	1,679.0	75.1%
Education and Health Services	-103.6	-15.1%	-2,625.0	-10.8%	59.7	57.6%	1,786.0	68.0%
Leisure and Hospitality	-224.8	-53.7%	-7,442.0	-46.1%	145.8	64.9%	5,686.0	76.4%
Other Services	-51.0	-30.9%	-1,315.0	-22.5%	31.8	62.4%	1,057.0	80.4%
Government	-43.0	-7.0%	-948.0	-4.2%	-1.6	-3.7%	-158.0	-16.7%

Source: Current Employment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget

lower than the February 2020 pre-pandemic job level. Jobs within *Manufacturing's* seasonally adjusted subsectors also rose over the month. The *Durable goods* sector accounted for a majority of the job gain, rising by 4,100 over the month, while *Nondurable goods* jobs edged up by only 500. On the nationwide level, total payroll jobs in the *Manufacturing* sector moved

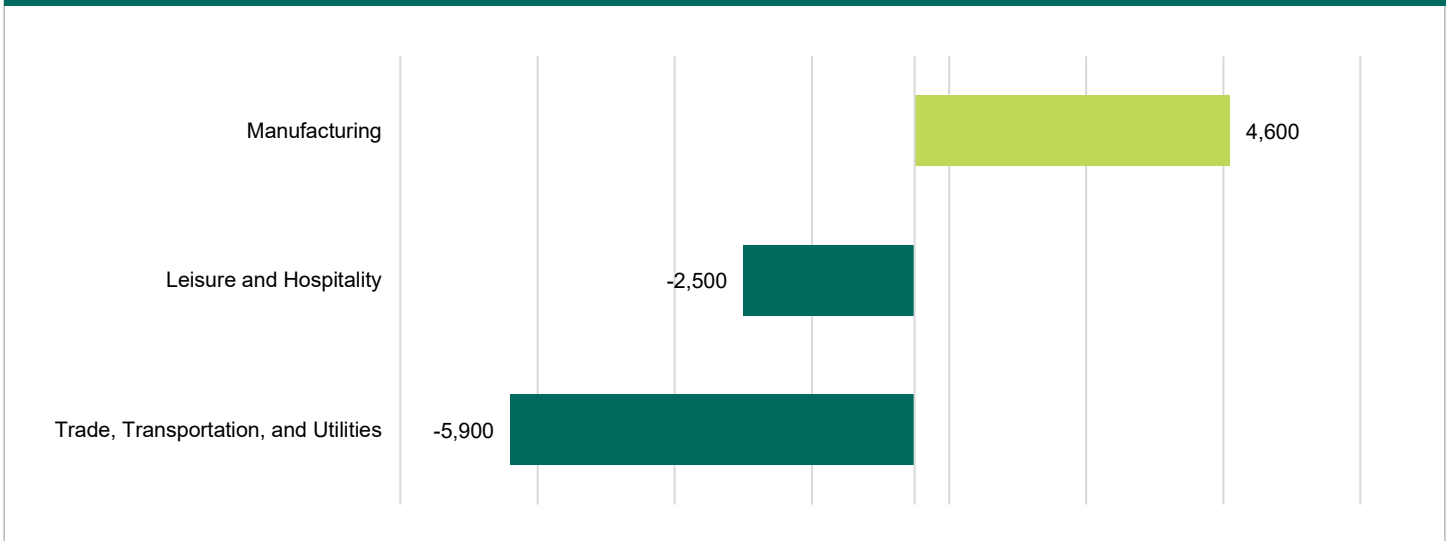
up both over the month (+23,000 or 0.2 percent) and over the year (+633,000 or 5.4 percent).

LEISURE AND HOSPITALITY

Seasonally adjusted jobs in the *Leisure and hospitality* sector declined marginally in May by 2,500 or -0.7 percent. Although employment in this major industry sector has rebounded by

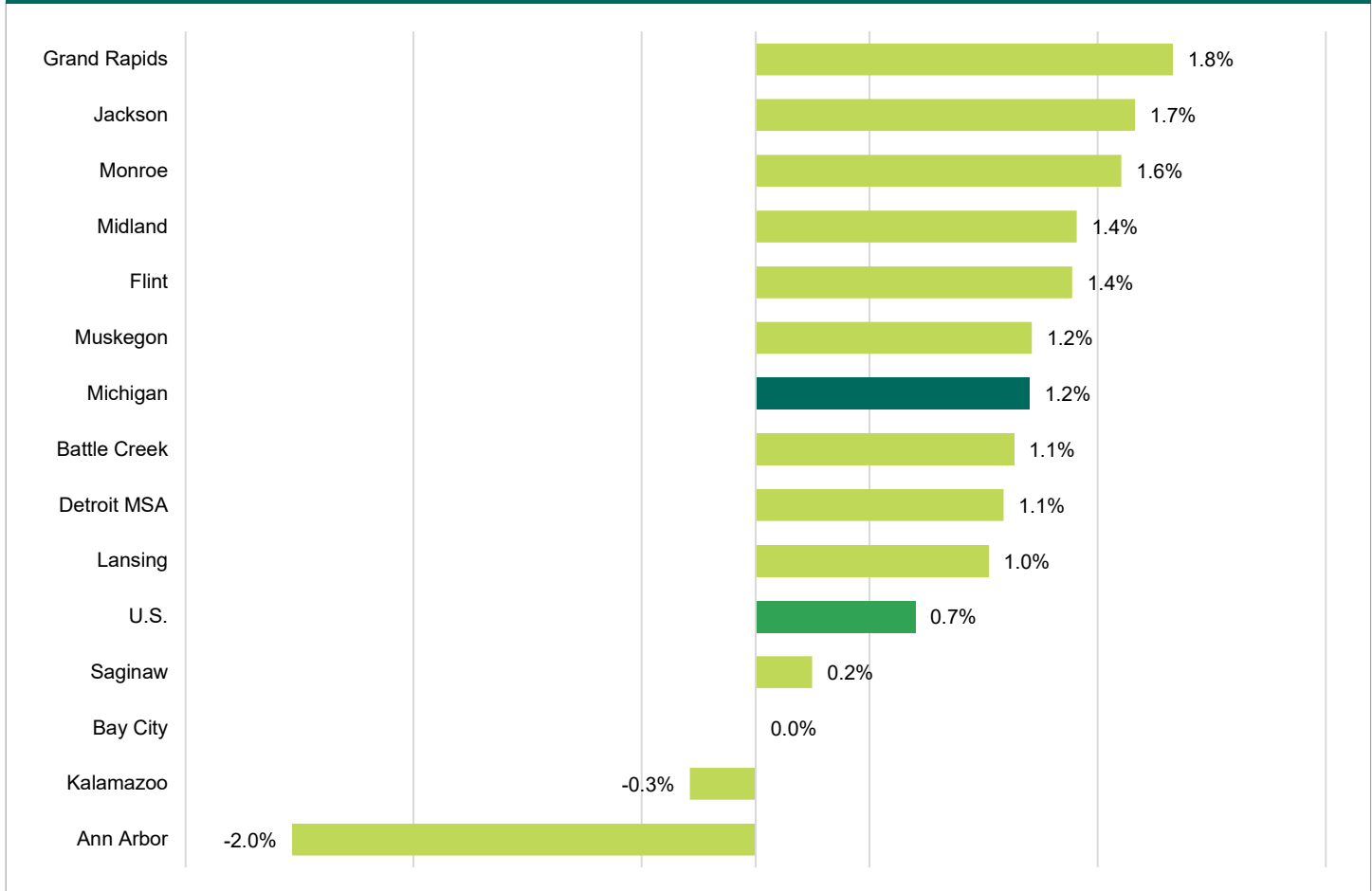
127,000 from the very low levels in May 2020, this sector remains one of the hardest hit by job loss due to the pandemic. Payroll jobs in *Leisure and hospitality* in Michigan remain sharply down by 96,200 or 22.1 percent since the February 2020 pre-pandemic level. Both of the industry's seasonally adjusted subsectors failed to add jobs in May, with *Arts, entertainment, and*

MICHIGAN OVER-THE-MONTH JOB CHANGE BY SELECT INDUSTRY, APRIL–MAY 2021



Source: Current Employment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget

MICHIGAN METRO AREA JOB CHANGE, APRIL–MAY 2021 (NOT SEASONALLY ADJUSTED)



Source: Current Employment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget

recreation declining by 2,300 (-5.8 percent) and *Accommodation and food services* positions essentially flat (-0.1 percent). Nationally, total payroll jobs rose both over the month (+2.1 percent) and over the year (+41.7 percent), but like Michigan were down since February 2020 (-15.0 percent).

TRADE, TRANSPORTATION, AND UTILITIES

Jobs in the *Trade, transportation, and utilities* sector declined noticeably over the month by 5,900 or 0.8 percent, to 767,700 in May. Over the year, jobs in this major industry sector rebounded sharply by 99,600 or 14.9 percent, however, like other Michigan industries, remained considerably below the February 2020 pre-pandemic job level (-30,700 or 3.8 percent). Of the three seasonally adjusted subsectors, *Retail trade* recorded the entirety of the May job decline within *Trade, transportation, and utilities*. Conversely, jobs in both *Wholesale trade and Transportation, warehousing, and utilities* increased minimally over the month. In the U.S.,

total jobs in this major industry sector edged up marginally by 0.1 percent over the month but remained 2.6 percent lower than the February 2020 pre-pandemic job level.

Metropolitan Statistical Areas (MSAs)

On a not seasonally adjusted basis, total nonfarm payroll jobs rose in 11 of Michigan's 14 Metropolitan Statistical Areas (MSAs) during May. Seven metro areas recorded a growth rate greater than or equal to that of the statewide rate of gain (+1.2 percent) this month, whereas 10 Michigan metro areas had a job increase greater than that of the national rate (+0.7 percent). Conversely, both Kalamazoo and Ann Arbor reported total payroll declines while Bay City remained flat over the month.

On an industry level, *Mining, logging, and construction* and *Leisure and hospitality* jobs advanced in every Michigan metro area in May. Likewise, all 14 Michigan MSAs recorded

growth within their *Goods producing* sector, led by Lansing (+12.2 percent) and Saginaw (+4.5 percent).

Although May not seasonally adjusted job gains in the *Trade, transportation, and utilities* sector were below average in the Detroit and Kalamazoo metro areas, Lansing (-0.6 percent) was the only metro area to post a job reduction in this sector over the month. On the contrary, most areas reported job declines in *Government* in May, led by seasonal education-related cuts in Kalamazoo (-11.1 percent) and Ann Arbor (-7.5 percent).

Total nonfarm payroll jobs remained down in all 14 Michigan metro areas since February 2020. Notable employment declines ranged from 23,800 (-10.3 percent) in Ann Arbor and 21,700 (-9.1 percent) in Lansing, to 400 (-1.1 percent) in Midland.

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Economic Analyst



MICHIGAN PAYROLL JOBS (SEASONALLY ADJUSTED)

INDUSTRY	MAY 2021	APR 2021	MAY 2020	OVER THE MONTH		OVER THE YEAR	
				LEVEL	PERCENT	LEVEL	PERCENT
TOTAL NONFARM	4,113,300	4,115,500	3,520,800	-2,200	-0.1%	592,500	16.8%
Total Private	3,542,200	3,544,800	2,963,100	-2,600	-0.1%	579,100	19.5%
Private Service-Providing	2,788,100	2,796,900	2,369,000	-8,800	-0.3%	419,100	17.7%
GOODS-PRODUCING	754,100	747,900	594,100	6,200	0.8%	160,000	26.9%
Mining, Logging, and Construction	183,800	182,200	152,300	1,600	0.9%	31,500	20.7%
Mining and Logging	6,900	6,900	5,800	0	0.0%	1,100	19.0%
Construction	176,900	175,300	146,500	1,600	0.9%	30,400	20.8%
Manufacturing	570,300	565,700	441,800	4,600	0.8%	128,500	29.1%
Durable Goods	427,000	422,900	317,300	4,100	1.0%	109,700	34.6%
Transportation Equipment Manufacturing	172,300	166,100	95,800	6,200	3.7%	76,500	79.9%
Non-Durable Goods	143,300	142,800	124,500	500	0.4%	18,800	15.1%
SERVICE-PROVIDING	3,359,200	3,367,600	2,926,700	-8,400	-0.2%	432,500	14.8%
Trade, Transportation, and Utilities	767,700	773,600	668,100	-5,900	-0.8%	99,600	14.9%
Wholesale Trade	163,400	163,200	149,600	200	0.1%	13,800	9.2%
Retail Trade	439,600	446,500	374,700	-6,900	-1.5%	64,900	17.3%
Transportation, Warehousing, and Utilities	164,700	163,900	143,800	800	0.5%	20,900	14.5%
Information	49,700	50,300	48,000	-600	-1.2%	1,700	3.5%
Financial Activities	226,200	226,700	215,800	-500	-0.2%	10,400	4.8%
Finance and Insurance	174,900	175,800	169,300	-900	-0.5%	5,600	3.3%
Real Estate and Rental and Leasing	51,300	50,900	46,500	400	0.8%	4,800	10.3%
Professional and Business Services	617,800	620,100	522,600	-2,300	-0.4%	95,200	18.2%
Professional, Scientific, and Technical Services	300,200	298,800	264,000	1,400	0.5%	36,200	13.7%
Management of Companies and Enterprises	71,100	71,100	62,600	0	0.0%	8,500	13.6%
Administrative and Support and Waste Management and Remediation Services	246,500	250,200	196,000	-3,700	-1.5%	50,500	25.8%
Education and Health Services	641,800	640,600	583,200	1,200	0.2%	58,600	10.0%
Educational Services	67,100	67,600	60,600	-500	-0.7%	6,500	10.7%
Health Care and Social Assistance	574,700	573,000	522,600	1,700	0.3%	52,100	10.0%
Leisure and Hospitality	339,300	341,800	212,300	-2,500	-0.7%	127,000	59.8%
Arts, Entertainment, and Recreation	37,400	39,700	21,800	-2,300	-5.8%	15,600	71.6%
Accommodation and Food Services	301,900	302,100	190,500	-200	-0.1%	111,400	58.5%
Other Services	145,600	143,800	119,000	1,800	1.3%	26,600	22.4%
Government	571,100	570,700	557,700	400	0.1%	13,400	2.4%
Federal Government	54,100	54,100	52,300	0	0.0%	1,800	3.4%
State Government	171,200	170,900	174,400	300	0.2%	-3,200	-1.8%
Local Government	345,800	345,700	331,000	100	0.0%	14,800	4.5%

Source: Current Employment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget

REGIONAL LABOR MARKET ANALYSIS

ANN ARBOR METROPOLITAN AREA

- The Ann Arbor unemployment rate rose over the month by 0.7 percentage points to 4.7 percent. This tied with the Grand Rapids metro area for the second lowest May jobless rate among major Michigan labor market areas.
- Workforce in the region declined seasonally by 1,800 or 1.0 percent since last month, the only metro area in Michigan to record a monthly labor force reduction.

MONTHLY INDUSTRY DEVELOPMENTS

- In May, nonfarm payroll jobs in the Ann Arbor region fell by 4,300 (-2.0 percent) to 207,200, one of only two metro areas across the state that recorded total nonfarm job declines.

INDUSTRY TRENDS

- Regional jobs in the *Manufacturing* sector stayed unchanged during May and were consequently 700 or 5.0 percent lower than the February 2020 pre-pandemic job level.

BAY CITY METROPOLITAN AREA

- Joblessness in the Bay City labor market rose slightly over the month by 0.3 percentage points to 6.1 percent.
- The total number of employed persons advanced marginally this month (+0.4 percent) but was up by 11.3 percent since May 2020. This reflected recalls of workers since the high year-ago levels of pandemic-related layoffs.

MONTHLY INDUSTRY DEVELOPMENTS

- Payroll jobs in the Bay City MSA stayed flat in May but rose sharply by 3,200 or 10.8 percent over the year.

INDUSTRY TRENDS

- Total regional jobs in *Leisure and hospitality* increased slightly (+100) over the month and advanced by 1,200 (+46.2 percent) over the year.

FLINT METROPOLITAN AREA

- In May, regional joblessness in Flint advanced by 0.6 percentage points to 7.5 percent, the second highest unemployment rate among all 14 Michigan metro areas.
- The total number of employed persons rose by 1,700 (+1.0 percent) in May, however the number of unemployed advanced by 10 percent, as more persons entered the workforce.

MONTHLY INDUSTRY DEVELOPMENTS

- Nonfarm employment in the Flint MSA increased by 1,800 or 1.4 percent in May, slightly higher than the statewide rate of gain (+1.2 percent).
- *Government* was the only major industry sector with a small over the month job reduction (-100) in Flint.

INDUSTRY TRENDS

- *The Trade, transportation, and utilities* sector recorded a job gain (+300 or 1.2 percent) for the first time this year, moving up to 26,300 total jobs.

BATTLE CREEK METROPOLITAN AREA

- The jobless rate in the Battle Creek MSA moved up by 0.8 percentage points in May to 6.8 percent.
- Total labor force in the area grew by 1,100 (+1.9 percent) over the month due to increases in both the number of employed (+500) and unemployed (+600) individuals.

MONTHLY INDUSTRY DEVELOPMENTS

- Battle Creek area payroll jobs advanced by 1.1 percent over the month to 53,600, which was on pace with the statewide rate of gain (+1.2 percent) during May.
- The *Professional and business services* sector stayed flat over the month and remained down by 1,200 since February 2020 pre-pandemic job levels.

INDUSTRY TRENDS

- Fairly typical job gains were recorded in the *Mining, logging, and construction; Leisure and hospitality; and Government* industry sectors, which all added 200 jobs since April 2021.

DETROIT-WARREN-DEARBORN METRO AREA

- The not seasonally adjusted unemployment rate in the Detroit MSA rose noticeably by 0.9 percentage points in May to 4.6 percent but was still the lowest jobless rate recorded among all Michigan metro areas.
- Total workforce in the six-county region increased by 34,000 (+1.7 percent) over the month to 2,027,000.

MONTHLY INDUSTRY DEVELOPMENTS

- Over the month, Detroit metro area nonfarm payroll jobs increased by 20,500 or 1.1 percent, to 1,905,900.
- Total jobs in the *Trade, transportation, and utilities* sector remained virtually flat over the month (+100). From 2016 to 2019, jobs in this industry rose by an average of 4,100 in May.

INDUSTRY TRENDS

- *Professional and business services* jobs in the Detroit MSA moved up by 4,400 or 1.2 percent in May, slightly lower than the typical May job addition for this industry.

GRAND RAPIDS-WYOMING METRO AREA

- The Grand Rapids MSA unemployment rate increased by 0.5 percentage points in May to 4.7 percent, somewhat below the statewide average rate this month (5.2 percent).
- The regional workforce rose noticeably over the month by 11,700 or 2.1 percent, which was the largest percent gain among Michigan metro areas during May.

MONTHLY INDUSTRY DEVELOPMENTS

- In May, total nonfarm payroll jobs in the Grand Rapids region advanced by 9,700 or 1.8 percent, to 539,900. Payroll jobs were above year-ago levels but remained well below pre-pandemic counts.

INDUSTRY TRENDS

- *Retail trade* jobs moved up by 700 or 1.5 percent over the month, significantly larger than the statewide rate of gain (+0.3 percent) for this industry in May.

CIVILIAN LABOR FORCE AND NONFARM PAYROLL JOBS

	ANN ARBOR			BATTLE CREEK			BAY CITY		
	MAY 2021	APR 2021	MAY 2020	MAY 2021	APR 2021	MAY 2020	MAY 2021	APR 2021	MAY 2020
PLACE OF RESIDENCE									
Civilian Labor Force	187,000	188,800	192,400	60,500	59,400	64,300	48,200	47,800	50,400
Employed	178,300	181,200	166,000	56,400	55,900	50,300	45,300	45,100	40,700
Unemployed	8,700	7,600	26,400	4,100	3,500	14,000	2,900	2,800	9,700
Unemployment Rate	4.7	4.0	13.7	6.8	6.0	21.8	6.1	5.8	19.3
PLACE OF WORK									
Total Nonfarm Jobs	207,200	211,500	194,700	53,600	53,000	46,800	32,900	32,900	29,700
Mining, Logging, and Construction	4,900	4,600	4,100	2,000	1,800	1,600	1,500	1,400	1,300
Manufacturing	13,300	13,300	9,900	10,100	10,100	8,700	4,600	4,600	3,800
Trade, Transportation, and Utilities	26,200	26,100	22,400	9,100	9,000	8,000	6,900	6,900	6,400
Wholesale Trade	6,500	6,400	6,000	*	*	*	*	*	*
Retail Trade	15,200	15,300	12,300	5,800	5,700	4,900	4,600	4,600	4,300
Information	6,200	6,100	5,800	*	*	*	300	300	300
Financial Activities	6,600	6,400	6,300	1,100	1,100	1,100	1,300	1,300	1,200
Professional and Business Services	29,500	29,300	27,800	4,900	4,900	4,800	2,600	2,600	2,400
Educational and Health Services	27,700	27,700	25,200	9,900	10,000	9,200	5,700	5,800	5,600
Leisure and Hospitality	13,300	12,700	9,500	4,000	3,800	2,700	3,800	3,700	2,600
Other Services	5,500	5,300	4,900	1,800	1,800	1,600	1,000	1,000	900
Government	74,000	80,000	78,800	10,500	10,300	8,900	5,200	5,300	5,200
	DETROIT-WARREN-DEARBORN			FLINT			GRAND RAPIDS-WYOMING		
	MAY 2021	APR 2021	MAY 2020	MAY 2021	APR 2021	MAY 2020	MAY 2021	APR 2021	MAY 2020
PLACE OF RESIDENCE									
Civilian Labor Force	2,027,000	1,993,000	1,944,000	177,500	174,500	182,600	571,700	560,000	575,900
Employed	1,935,000	1,919,000	1,462,000	164,300	162,600	136,600	544,600	536,400	479,500
Unemployed	93,000	74,000	482,000	13,200	12,000	46,100	27,100	23,600	96,300
Unemployment Rate	4.6	3.7	24.8	7.5	6.9	25.2	4.7	4.2	16.7
PLACE OF WORK									
Total Nonfarm Jobs	1,905,900	1,885,400	1,587,400	131,400	129,600	106,800	539,900	530,200	467,500
Mining, Logging, and Construction	79,600	74,300	63,900	5,700	5,400	4,900	27,300	25,400	24,100
Manufacturing	230,700	229,500	163,600	13,400	13,200	6,500	108,600	107,400	91,000
Trade, Transportation, and Utilities	363,700	363,600	309,000	26,300	26,000	22,600	97,500	96,200	86,400
Wholesale Trade	80,900	80,600	74,100	5,100	5,100	4,100	31,600	31,300	29,300
Retail Trade	195,400	196,100	162,200	17,300	17,100	15,000	47,600	46,900	40,300
Information	25,300	25,300	24,200	1,000	1,000	1,100	5,600	5,500	5,400
Financial Activities	124,300	124,700	116,600	6,000	6,000	5,700	27,000	26,700	26,300
Professional and Business Services	380,900	376,500	319,700	17,500	17,300	13,700	71,100	70,300	61,300
Educational and Health Services	294,700	294,300	264,300	25,200	25,200	22,300	93,200	93,000	86,600
Leisure and Hospitality	161,200	151,200	96,400	13,700	12,900	9,000	42,200	38,500	24,500
Other Services	65,900	64,400	51,200	4,900	4,800	3,900	20,300	19,800	16,700
Government	179,600	181,600	178,500	17,700	17,800	17,100	47,100	47,400	45,200

Source: Current Employment Statistics and Local Area Unemployment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget
 * Data is suppressed

JACKSON METROPOLITAN AREA

- Joblessness in the Jackson metro area increased by 0.5 percentage points in May to 5.9 percent, notably higher than the statewide rate (5.2 percent).
- Total regional workforce rose over the month by 1,000 or 1.4 percent but was still down by 5.0 percent over the year.

MONTHLY INDUSTRY DEVELOPMENTS

- Total nonfarm payroll jobs in Jackson increased in May by 900 or 1.7 percent, above the nationwide rate of gain (+0.7 percent).
- Both the *Service providing* (+700) and *Goods producing* (+200) sectors recorded job additions over the month.

INDUSTRY TRENDS

- Regional employment in the *Trade, transportation, and utilities* industry moved up by 400 or 3.4 percent, the largest May percent increase for this industry among Michigan metro areas.

LANSING-EAST LANSING METRO AREA

- In May, the jobless rate in Lansing edged up by only 0.1 percentage point over the month to 5.6 percent.
- Workforce in the region moved up by 1.0 percent since last month to 237,400 but was still 3.7 percent lower than its year-ago level.

MONTHLY INDUSTRY DEVELOPMENTS

- Lansing area nonfarm jobs rose by 2,200 or 1.0 percent in May to 217,500.

INDUSTRY TRENDS

- Most of this overall gain in regional jobs occurred as auto workers were recalled from temporary layoffs in April due to the global shortage of microprocessors.

MONROE METROPOLITAN AREA

- Joblessness in the Monroe MSA moved up by 0.6 percentage points in May to 6.7 percent, the highest unemployment rate since July 2020.
- The monthly rate hike primarily reflected a workforce increase in the region, as the number of employed and the number of unemployed both advanced over the month.

MONTHLY INDUSTRY DEVELOPMENTS

- Nonfarm payroll jobs in the Monroe labor market rose by 600 or 1.6 percent in May, to 38,000.

INDUSTRY TRENDS

- All major industries in Monroe stayed flat or increased marginally over the month, led by job gains in the *Manufacturing* and *Leisure and hospitality* (+200) sectors.

KALAMAZOO-PORTAGE METRO AREA

- The Kalamazoo MSA unemployment rate advanced by 0.7 percentage points in May to 5.5 percent. The jobless rate plunged by 9.7 percentage points since May 2020, when pandemic-related layoffs were numerous in the region.
- The number of unemployed persons rose by 1,000 or 12.8 percent in May, relatively less than the statewide rate of increase in the number of unemployed (+15.0 percent).

MONTHLY INDUSTRY DEVELOPMENTS

- Kalamazoo total nonfarm payroll jobs declined by 400 or 0.3 percent, one of only two metro areas in Michigan to record a payroll job cut in May.
- The largest monthly job gains were noted in the *Leisure and hospitality* (+400) and *Manufacturing* (+300) sectors. Most of the monthly job reduction was a seasonal drop in *State government education*.

INDUSTRY TRENDS

- Total jobs in the *Professional and business services* sector remained virtually flat in May and were down 1,700 or 9.6 percent since February 2020 pre-pandemic job levels.

MIDLAND METROPOLITAN AREA

- The Midland regional jobless rate increased by 0.4 percentage points in May to 4.9 percent, 0.3 percentage points lower than the statewide rate this month.
- Both the number of employed (+500) and unemployed (+200) residents rose over the month which led to a 1.5 percent increase in the total labor force count.

MONTHLY INDUSTRY DEVELOPMENTS

- Total payroll jobs in the Midland MSA advanced for the fourth consecutive month, up by 500 in May (+1.4 percent) and by 10.8 percent over the year.

INDUSTRY TRENDS

- Employment in the *Government* sector remained virtually unchanged since May 2020, moving up by only 100 jobs over the year.

MUSKEGON METROPOLITAN AREA

- The unemployment rate in the Muskegon region advanced by 1.0 percentage point in May to 7.9 percent, the largest percentage point increase among Michigan's major labor market areas.
- Total labor force moved up by 1,400 or 1.9 percent over the month but was still down by 7.1 percent since May 2020. The number of unemployed plunged by 70.4 percent over the year with worker recalls from high pandemic-related layoff levels.

MONTHLY INDUSTRY DEVELOPMENTS

- In May, regional nonfarm payroll jobs in the Muskegon MSA edged up by 700 or 1.2 percent, matching the Michigan rate of monthly job gain.

INDUSTRY TRENDS

- The *Leisure and hospitality* (+500) sector produced most of the job additions in Muskegon during May.

CIVILIAN LABOR FORCE AND NONFARM PAYROLL JOBS

	JACKSON			KALAMAZOO-PORTAGE			LANSING-EAST LANSING		
	MAY 2021	APR 2021	MAY 2020	MAY 2021	APR 2021	MAY 2020	MAY 2021	APR 2021	MAY 2020
PLACE OF RESIDENCE									
Civilian Labor Force	72,000	71,000	75,800	161,000	160,600	166,600	237,400	235,100	246,500
Employed	67,800	67,200	60,800	152,100	152,800	141,200	224,100	222,200	206,800
Unemployed	4,300	3,800	15,000	8,800	7,800	25,400	13,300	12,900	39,700
Unemployment Rate	5.9	5.4	19.8	5.5	4.8	15.2	5.6	5.5	16.1
PLACE OF WORK									
Total Nonfarm Jobs	55,000	54,100	48,100	138,400	138,800	126,800	217,500	215,300	198,300
Mining, Logging, and Construction	2,200	2,100	1,800	7,000	6,500	5,900	9,200	8,300	7,700
Manufacturing	8,700	8,600	7,400	21,900	21,600	19,900	18,300	16,200	12,900
Trade, Transportation, and Utilities	12,200	11,800	10,900	25,500	25,400	23,400	34,100	34,300	30,300
Wholesale Trade	*	*	*	6,400	6,400	6,100	5,900	5,800	5,500
Retail Trade	6,400	6,300	5,800	14,500	14,600	13,300	19,900	20,200	17,300
Information	200	200	200	800	800	800	3,200	3,200	3,100
Financial Activities	2,200	2,200	2,100	7,900	7,800	7,600	17,300	17,200	16,900
Professional and Business Services	5,400	5,400	3,900	16,100	16,000	13,800	20,600	21,000	20,200
Educational and Health Services	10,100	10,100	9,400	24,800	24,700	22,800	30,600	30,600	28,700
Leisure and Hospitality	4,000	3,900	2,900	12,800	12,400	9,600	14,900	13,900	10,100
Other Services	2,300	2,200	1,800	4,700	4,600	4,400	9,000	8,900	7,900
Government	7,700	7,600	7,700	16,900	19,000	18,600	60,300	61,700	60,500
MIDLAND									
MONROE									
MUSKEGON									
	MAY 2021	APR 2021	MAY 2020	MAY 2021	APR 2021	MAY 2020	MAY 2021	APR 2021	MAY 2020
PLACE OF RESIDENCE									
Civilian Labor Force	39,400	38,800	40,200	72,900	72,000	76,700	74,900	73,500	80,600
Employed	37,500	37,000	34,000	68,000	67,600	60,600	69,000	68,400	60,700
Unemployed	1,900	1,700	6,200	4,900	4,400	16,100	5,900	5,100	19,900
Unemployment Rate	4.9	4.5	15.4	6.7	6.1	21.0	7.9	6.9	24.7
PLACE OF WORK									
Total Nonfarm Jobs	36,000	35,500	32,500	38,000	37,400	33,800	58,500	57,800	50,500
Mining, Logging, and Construction	*	*	*	1,900	1,800	1,600	2,500	2,400	2,100
Manufacturing	*	*	*	5,300	5,100	4,600	11,800	11,700	9,700
Trade, Transportation, and Utilities	*	*	*	9,900	9,800	9,700	13,100	13,100	12,200
Wholesale Trade	*	*	*	1,600	1,600	1,700	*	*	*
Retail Trade	*	*	*	4,500	4,400	4,100	10,600	10,500	9,700
Information	*	*	*	*	*	*	200	200	200
Financial Activities	*	*	*	800	800	900	1,700	1,700	1,600
Professional and Business Services	*	*	*	5,200	5,200	3,500	3,100	3,100	2,600
Educational and Health Services	*	*	*	4,400	4,400	4,100	10,700	10,700	9,200
Leisure and Hospitality	*	*	*	3,900	3,700	2,800	6,800	6,300	4,600
Other Services	*	*	*	1,400	1,400	1,200	1,900	1,800	1,400
Government	2,900	2,800	2,800	4,900	4,900	5,100	6,700	6,800	6,900

Source: Current Employment Statistics and Local Area Unemployment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget
 * Data is suppressed

NILES-BENTON HARBOR METRO AREA

- In May, joblessness in the Niles-Benton Harbor MSA rose notably over the month by 0.5 percentage points to 5.7 percent.
- Despite the jobless rate increase, the number of employed residents moved up in May by 900, and jumped significantly by 8,600 since May 2020.

MONTHLY INDUSTRY DEVELOPMENTS

- Total nonfarm payroll jobs in the Niles-Benton Harbor labor market advanced by 1,100 or 1.9 percent, the largest percent increase among all Michigan metro areas during May.
- The *Leisure and hospitality* (+600) sector produced most of the local job expansion in May and added jobs for the fourth consecutive month.

INDUSTRY TRENDS

- Total jobs in the *Mining, logging, and construction* sector edged up by 100 or 4.2 percent in May. Jobs are comparable with May 2019 levels.

SAGINAW METROPOLITAN AREA

- The Saginaw metro area jobless rate advanced by 0.5 percentage points in May to 7.0 percent.
- Labor force in the region moved up during May mainly due to a significant increase in the number of unemployed (+500 or +9.3 percent).

MONTHLY INDUSTRY DEVELOPMENTS

- Total nonfarm jobs remained relatively unchanged in Saginaw during May, inching up by only 200 or 0.2 percent.
- Job gains within *Manufacturing* (+400) in May were offset by seasonal employment reductions in the *Government* (-700) sector.

INDUSTRY TRENDS

- Both the *Service providing* (+10,200) and *Goods producing* (+2,500) sectors added jobs over the past year in Saginaw, as workers were recalled to positions since the high pandemic-related layoff activity in May 2020.

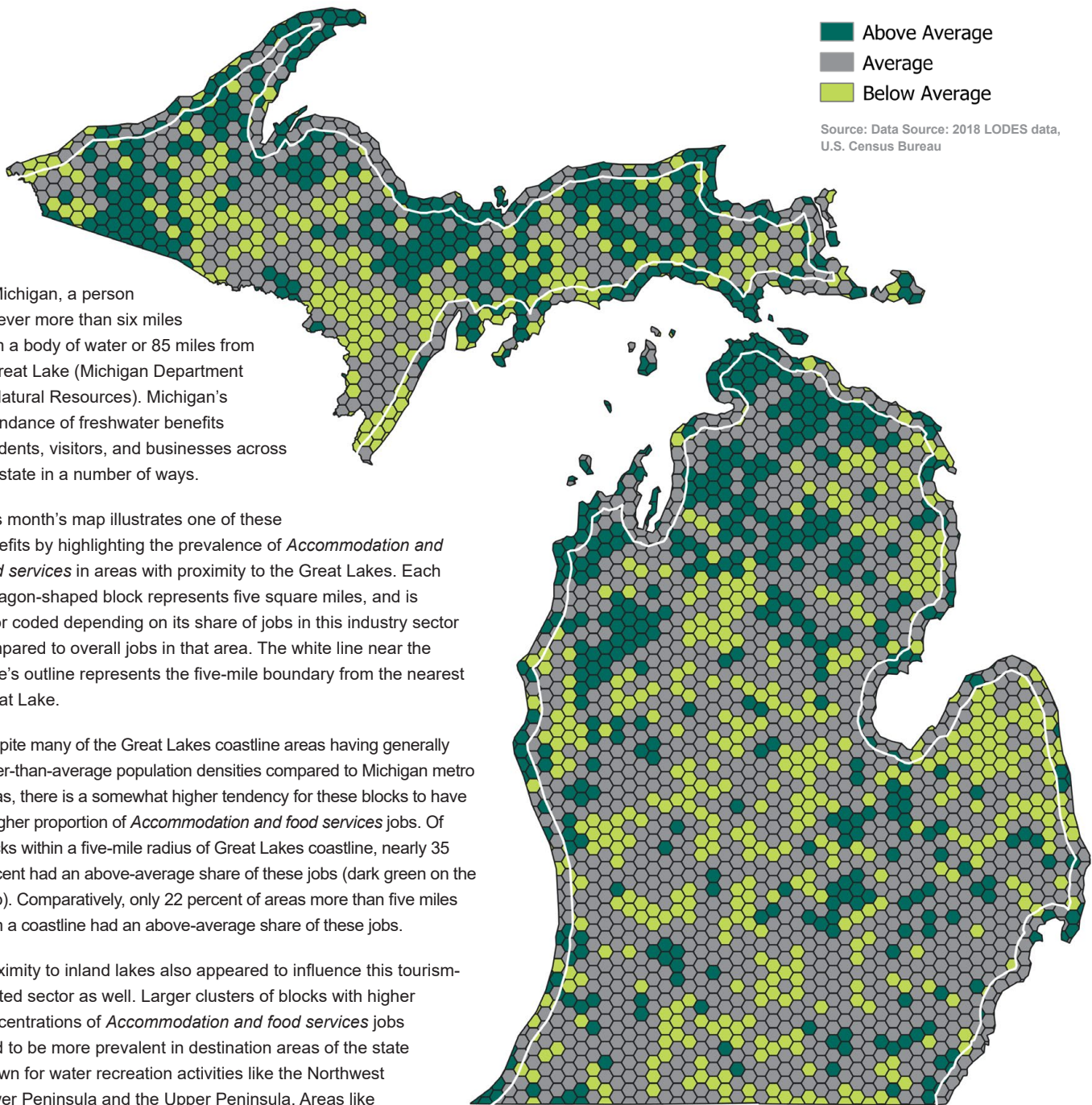
CIVILIAN LABOR FORCE AND NONFARM PAYROLL JOBS

	NILES-BENTON HARBOR			SAGINAW					
	MAY 2021	APR 2021	MAY 2020	MAY 2021	APR 2021	MAY 2020			
PLACE OF RESIDENCE									
Civilian Labor Force	71,700	70,400	72,500	83,200	82,500	84,400			
Employed	67,600	66,700	59,000	77,300	77,200	66,500			
Unemployed	4,100	3,700	13,500	5,900	5,400	17,900			
Unemployment Rate	5.7	5.2	18.6	7.0	6.5	21.2			
PLACE OF WORK									
Total Nonfarm Jobs	59,300	58,200	50,100	80,700	80,500	68,000			
Mining, Logging, and Construction	2,500	2,400	1,900	3,100	2,900	2,800			
Manufacturing	12,000	12,000	9,500	10,800	10,400	8,600			
Trade, Transportation, and Utilities	9,900	9,800	9,700	16,300	16,200	12,600			
Wholesale Trade	*	*	*	1,900	1,900	1,800			
Retail Trade	6,400	6,300	6,100	11,700	11,700	8,300			
Information	400	400	400	1,000	1,000	1,000			
Financial Activities	2,500	2,500	2,500	3,700	3,700	3,500			
Professional and Business Services	5,400	5,300	4,500	10,300	10,300	8,800			
Educational and Health Services	9,600	9,600	8,900	15,200	15,300	14,300			
Leisure and Hospitality	6,800	6,200	4,200	7,300	7,000	4,400			
Other Services	2,100	2,000	1,700	2,600	2,600	2,200			
Government	8,100	8,000	6,800	10,400	11,100	9,800			
UPPER PENINSULA									
	MAY 2021	APR 2021	MAY 2020	NORTHEAST MICHIGAN					
				MAY 2021	APR 2021	MAY 2020	NORTHWEST MICHIGAN		
							MAY 2021	APR 2021	MAY 2020
PLACE OF RESIDENCE									
Civilian Labor Force	132,400	130,500	133,200	81,000	78,600	83,500	148,100	142,900	148,700
Employed	124,800	122,900	111,000	75,400	72,700	65,500	139,800	134,900	117,800
Unemployed	7,600	7,600	22,200	5,700	5,900	18,000	8,300	8,000	30,900
Unemployment Rate	5.8	5.8	16.7	7.0	7.5	21.5	5.6	5.6	20.8

Source: Current Employment Statistics and Local Area Unemployment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget
* Data is suppressed

MAP OF THE MONTH:

ACCOMMODATION AND FOOD SERVICES JOBS IN MICHIGAN'S COASTAL AREAS



In Michigan, a person is never more than six miles from a body of water or 85 miles from a Great Lake (Michigan Department of Natural Resources). Michigan's abundance of freshwater benefits residents, visitors, and businesses across the state in a number of ways.

This month's map illustrates one of these benefits by highlighting the prevalence of *Accommodation and food services* in areas with proximity to the Great Lakes. Each hexagon-shaped block represents five square miles, and is color coded depending on its share of jobs in this industry sector compared to overall jobs in that area. The white line near the state's outline represents the five-mile boundary from the nearest Great Lake.

Despite many of the Great Lakes coastline areas having generally lower-than-average population densities compared to Michigan metro areas, there is a somewhat higher tendency for these blocks to have a higher proportion of *Accommodation and food services* jobs. Of blocks within a five-mile radius of Great Lakes coastline, nearly 35 percent had an above-average share of these jobs (dark green on the map). Comparatively, only 22 percent of areas more than five miles from a coastline had an above-average share of these jobs.

Proximity to inland lakes also appeared to influence this tourism-related sector as well. Larger clusters of blocks with higher concentrations of *Accommodation and food services* jobs tend to be more prevalent in destination areas of the state known for water recreation activities like the Northwest Lower Peninsula and the Upper Peninsula. Areas like Mid-Michigan and the Thumb, which tend to have fewer lakes, appear more like to have average or less-than-average shares of jobs in this industry.

ASHLEY TARVER
Demographic Analyst

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Economic Specialist



EXPLORING MICHIGAN'S BLUE LABOR MARKET

To some, it's a tourist sanctuary, to others it's the lifeblood of the local economy. Michigan's matrix of freshwater means that, from expansive Great Lakes to inland lakes and rivers, every region of the state is connected through lakes and watersheds. Across nearly 3,230 miles of shoreline and more than 11,000 large inland lakes, Michiganders' lives and livelihoods are similarly intertwined with Michigan's blue economy.

It's clear why Michigan has the nickname "Great Lakes State," with the word "Michigan" even coming from a Native American word for great or large lake. Yet, Michigan's freshwater resources not only define the landscape and leisure activities of the state's residents and visitors, Michigan's blue economy also shapes the nature of the state's jobs and opportunity for regional prosperity. Both industries and occupations directly and indirectly tied to water can be thought of as part of the blue economy. In some form or another, much of the Michigan

economy (both jobs and workers) can be tied to water, making the quality of water in the state crucial to economic health.

Michigan's blue economy includes economic sectors as varied as *Accommodation and food services*; *Agriculture, forestry, fishing & hunting*; and *Manufacturing* among others. In fact, these sectors account for 9 percent, 1 percent, and 16 percent of statewide employment, respectively. While these industries don't fully encapsulate the importance of freshwater systems to the Michigan labor economy, the state's freshwater systems are crucial to tourism, transportation, and production-related jobs, among others, across the state.

Blue economy occupations encompass jobs that in some cases are directly related to lakes, and watersheds as well as occupations that are indirectly dependent on the health and vitality of fresh water systems. Blue economy reports are typically built around definitions

focused on the ocean (National Oceanic and Atmospheric Administration, The World Bank, Conservation International), but Michigan has a freshwater blue economy and varies from these definitions. The impact of the state's lakes and waterways on local and regional economies cannot be overstated. As a starting point, this article looks at a set of narrowly defined niche industries and occupations within the blue economy by focusing on industries employing nearly 57,000. This is about 1.6 percent of statewide employment. This is not a full round up of the blue economy, but serves as a starting point in the conversation. More than 23,000 individuals work in the occupations highlighted in this article. These numbers from 2020 are the latest data available, but are likely impacted by the pandemic. Using a case study approach, several of the industries and occupations related to the blue economy are discussed below in non-exhaustive lists. Each industry and occupation is defined with related data points given as context.

The name "Detroit" comes from the Detroit River (French: le détroit du Lac Érie), meaning "the strait of Lake Erie," linking Lake Huron and Lake Erie; in the historical context, the strait included Lake St. Clair and the St. Clair River.

Source: <https://www.michigan.org/article/trip-idea/how-did-michigan-cities-get-their-names>



Industries

Numerous industries in the Michigan economy are directly tied to water. While not an exhaustive list of all blue economy employment, sectors such as *Animal aquaculture*, *Ship and boat building* and *Water transportation* illustrate some trends in areas that are most directly related to the state's water systems and more importantly, serve a role in facilitating further discussion on the topic. These industries vary in size, pay, and gender breakdown (among other factors) but they all have water in common.

Animal aquaculture is made up of establishments primarily engaged in the farm raising and production of aquatic animals or plants in controlled or selected aquatic environments. These establishments use some form of intervention in the rearing process to enhance production, such as holding in captivity, regular stocking, feeding, and protecting from predators, pests, and disease. This is one of the smaller related private industries, as portions of this work are done in the public sector. The Department of Natural Resources also runs a number of fish hatcheries across the state.

Statewide, there are 23 private *Animal aquaculture* establishments paying an average weekly wage of \$637, and employing 60 workers (though more are employed in the public sector).

Ship and boat building comprises establishments primarily engaged in operating shipyards or boat yards (such as ship or boat manufacturing facilities). Shipyards are fixed facilities with dry docks and fabrication equipment capable of building a ship, defined

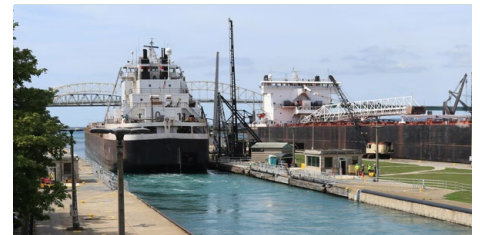
as "watercraft typically suitable or intended for other than personal or recreational use." Boats are defined as "watercraft typically suitable or intended for personal use." Shipyard activities include the construction of ships; repair, conversion and alteration, production of prefabricated ship and barge sections; and specialized services, such as ship scaling. In 2020 this industry had more than 150 job postings and among those employed, nearly 77 percent identified as male.

Statewide, there are 31 private *Ship and boat building* establishments with an average weekly wage of \$999 and employing more than 2,000 workers.

The **Water transportation** subsector provides water transportation of passengers and cargo using watercraft, such as ships, barges, and boats. This subsector is composed of two industry groups: one for deep sea, coastal, and Great Lakes; and one for inland water transportation. This industry may transport individuals, cars, bikes, and more across the Great Lakes to national parks, islands within the state, or even to other states. Roughly 69 percent of individuals working in this industry are male.

Statewide, there are 45 private *Water transportation* establishments paying an average weekly wage nearly \$1,250 dollars and employing nearly 1,000 workers.

There are also numerous blue economy industries that are indirectly related to Michigan's water system. Despite the indirect nature of these industries, the impact of Michigan's



Michigan's economy is historically deeply tied to water as the region's economy has been tied to natural resources such as furs, logging, mining, and more. People have lived in Michigan for hundreds and hundreds of years using the water to facilitate trade as well as movement.

Sault Ste. Marie is the oldest city in Michigan, and among the oldest cities in the United States. Over 2,000 years ago, Native Americans began to gather here for the wealth of fish and fur found along the river that linked the Great Lakes of Superior and Huron. In 1668, the missionary and explorer Fr. Jacques Marquette renamed this European settlement Sault Ste. Marie, in honor of the Virgin Mary—the first "city" in the Great Lakes region. Due to the strategic location of the river and the abundant natural resources found here, the French and British often fought over the area and the right to trade with Native Americans in the 1700's.

Source: www.saultstemarie.com

freshwater systems inherently impact growth or decline. These industries and more are integral to the Michigan economy and also vary in size, pay, and gender breakdowns among other factors but they all have water in common.

Beverage manufacturing consists of establishments primarily engaged in manufacturing soft drinks and ice; purifying and bottling water; and manufacturing brewery, winery, and distillery products. With a projected growth rate from 2018–2028 of 6.8 percent, this is projected to be one of the most rapidly growing areas of manufacturing. In 2020, there were 937 job ads posted in this industry.

Statewide, there are 437 private *Beverage manufacturing* establishments paying an average weekly wage of \$883 and employing just under 8,160 people.

The **Other motor vehicle dealers** industry sector is made up of establishments primarily engaged in retailing new and used vehicles (except automobiles, light trucks, such as sport utility vehicles, and passenger and cargo vans). Recreational, motorcycle and boat dealers are included in this industry. It should be noted that boats are directly related to the blue economy, but other vehicles are often used in connection with the water such as riding a side-by-side on sand dunes or a four-wheeler to a lake.

Statewide there are about 480 private establishments paying an average weekly wage of \$1,127 and employing more than 6,600 workers.

Sporting goods, hobby, and musical instrument stores comprises establishments primarily engaged in retailing new sporting goods, games and toys, and musical instruments. These stores may be selling goods directly related to water such as kayaks or fishing bait, but they could be more loosely connected to the blue economy, such as a store that sells golfing equipment. Michigan has an estimated 650 golf courses in part because of an abundance of water needed to maintain courses. Despite the pandemic, this industry had nearly 3,100 job postings in 2020.

Statewide there are 1,335 private *Sporting goods, hobby, and musical instrument* establishments paying an average weekly wage of \$475 and employing nearly 12,700 workers.



The **Traveler accommodation** industry group includes establishments primarily engaged in providing short-term lodging in facilities, such as hotels, motels, casino hotels, and bed-and-breakfast inns. In addition to lodging, these establishments may provide a range of other services to their guests. This is among the largest blue economy job providers in Michigan, employing one in every 130 people (0.77 percent of all employment) in Michigan. Even in the economically down year of 2020 this industry had 9,346 online job postings. This industry skews female with 57.5 percent of employees identifying as female.

Statewide, there are more than 1,500 *Traveler accommodation* establishments paying an average weekly wage of \$518 and employing almost 26,600 workers.

Occupations

Blue economy occupations vary in size, pay, and typical education/training needed to do the job among other factors, but they all have water in common. To illustrate occupational trends we

examined *Captains, mates, and pilots of water vessels; Environmental scientists and specialists; Motorboat mechanics and service technicians; Water and wastewater treatment plant and system operators* and *Environmental engineers*. These blue economy occupations are some of those most directly related to Michigan's waters.

Captains, mates, and pilots of water vessels command or supervise operations of ships and water vessels, such as tugboats and ferryboats. The typical education and training for this occupation is a postsecondary nondegree award nationwide and requires a license issued by U.S. Coast Guard.

Michigan has roughly 220 employed *Captains, mates, and pilots of water vessels* earning a median hourly wage of \$27.24, with the 75th percentile of earners making \$52.80 and the 90th percentile making more than \$100.00 an hour.

Environmental scientists and specialists, including health conduct research or perform investigation for the purpose of identifying, abating, or eliminating sources of pollutants

Grand Rapids, built on the banks of the Grand River, has been known for both furniture and beer production largely due to the connection to water and other natural resources.

Source: <https://www.experiencegr.com/about-grand-rapids/history/>

Alpena had between 1,500 and 2,000 ships pass through Thunder Bay in the busiest years (late 1800's).

Source: <https://www.visitalpena.com/about-alpena/>

or hazards that affect either the environment or public health. Using knowledge of various scientific disciplines, they may collect, synthesize, study, report, and recommend action based on data derived from measurements or observations of air, food, soil, water, and other sources. The typical education for this occupation nationwide is a bachelor's degree, with roughly 36.2 percent earning a master's degree or above. In Michigan there are about 2,700 environmental scientists earning a median hourly wage of \$33.17.

Motorboat mechanics and service technicians

repair and adjust electrical and mechanical equipment of inboard or inboard-outboard boat engines. The typical education and training nationwide for this occupation nationwide is a high school diploma and long-term, on-the-job training with roughly 29.4 percent completing some postsecondary education but less than an associate degree. In Michigan there are about 900 employed, earning a median wage of \$19.48.

Water and wastewater treatment plant and system operators operate or control an entire process or system of machines, often through the use of control boards, to transfer or treat water or wastewater. The typical education and training for this occupation is a high school diploma and long-term, on-the-job training with roughly 47 percent in the range of some college to an associate degree. Statewide, there are near 3,210 employed, earning a median wage of \$24.08.

There are also occupations that are partially related or less visibly related to the blue economy. These jobs and more are integral to the Michigan economy but may be more important in tourism, the general outdoor economy, environmental health, or even policymaking.

Environmental engineers research, design, plan, or perform engineering duties in the prevention, control, and remediation of environmental hazards using various engineering disciplines. Work may include waste treatment, site remediation, or pollution control technology. The typical education for this occupation is a bachelor's degree while roughly

40.8 percent of workers earn a master's degree or above. Statewide, Michigan has 1,280 jobs in this occupation with a median wage of \$45.66.

Hotel, motel, and resort desk clerks

accommodate hotel, motel, and resort patrons by registering and assigning rooms to guests, issuing room keys or cards, transmitting and receiving messages, keeping records of occupied rooms and guests' accounts, making and confirming reservations, and presenting statements to and collecting payments from departing guests. In Michigan, there are about 4,840 clerks earning an hourly median wage of \$11.71.

Recreation workers conduct recreation activities with groups in public, private, or volunteer agencies or recreation facilities. They organize and promote activities, such as arts and crafts, sports, games, music, dramatics, social recreation, camping, and hobbies, taking into account the needs and interests of individual members. Both the Detroit and Ann Arbor metropolitan statistical areas have more than 3,000 *Recreation workers*. Statewide, there are around 10,540 employed, earning an hourly median wage of \$12.56.

Conclusion

The Michigan economy is directly tied to both the amount and quality of its water. The area economy has been directly linked with water for its entire history and this is no different today. Although water is critical, the exact impact is not simple to define. Occupations like *Motorboat mechanic*, *Water and waste water treatment plant operators*, and *Captains, mates, and pilots of water vessels* are obvious examples of blue economy jobs.

Other occupations straddle this line in less obvious ways. Occupations like *Recreation workers*, *Hotel clerks*, and *Environmental engineers* may not be the first thing that comes to mind in a conversation about the blue economy, but this work is often related to and/or increased in water rich areas. Other jobs including those in real estate, jobs built around reinforcing seawalls, and nearly any

accommodations as travelers move through Michigan are deeply and inherently dependent on the state's freshwater system. Moreover, occupations such as *Environmental scientists* can fall within several industries, such as *Management and technical consulting*, local or state government, and private or public education among others.

In Michigan, all of the aforementioned are tied to the blue economy. While not the focus of this article, a more comprehensive exploration of these occupations warrants further analysis. In a state where a person is never more than six miles from a body of water or 85 miles from a Great Lake, defining the blue economy is difficult. Even so, it is known that many of Michigan's industries and occupations are directly related to water. These connected parts of the economy are incredibly diverse in what they do as well as who does the work. Known as the Great Lakes State, the health of Michigan's labor market goes hand-in-hand with the health of its waters.

EVAN LINSKEY
Economic Analyst

Marquette has always been a shipping port for hematite ores and now enriched iron ore pellets from nearby mines and pelletizing plants.

Source: <https://www.downtownmarquette.org/history>

OCCUPATIONAL FOCUS

ENVIRONMENTAL SCIENTISTS AND SPECIALISTS, INCLUDING HEALTH

This month's *Occupational Focus* is on *Environmental scientists and specialists, including health*. Employees who serve in this occupation utilize their knowledge of the natural sciences to protect the environment and human health. They may clean up polluted areas, make advisements to policymakers, or work with industries to reduce waste.

According to the U.S. Bureau of Labor Statistics, *Environmental scientists and specialists* "Conduct research or perform investigation for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or public health. Using knowledge of various scientific disciplines, may collect, synthesize, study, report, and recommend action based on data derived from measurements or observations of air, food, soil, water, and other sources."

Examples of job titles encompassed by this position include environmental analyst, environmental health and safety specialist, environmental programs specialist, environmental protection specialist, environmental scientist, hazardous substances scientist, registered environmental

health specialist (REHS), research environmental scientist.

Some of the responsibilities of this occupation include

- Providing scientific or technical guidance, support, coordination, or oversight to governmental agencies, environmental programs, industry, or the public.
- Reviewing and implementing environmental technical standards, guidelines, policies, and formal regulations that meet all appropriate requirements.
- Collecting, synthesizing, analyzing, managing, and reporting environmental data, such as pollution emission measurements, atmospheric monitoring measurements, meteorological or mineralogical information, or soil or water samples.
- Communicating scientific or technical information to the public, organizations, or internal audiences through oral briefings, written documents, workshops, conferences, training sessions, or public hearings.
- Providing advice on proper standards and regulations or the development of

policies, strategies, or codes of practice for environmental management.

The typical entry-level education required for this occupation is a bachelor's degree in a natural science or science-related field. Some technical skills may be required based on employer job postings, such as analytical or scientific software, compliance software, database user interface and query software, and map creation software. *Environmental scientists and specialists* mostly work in *Federal, state, and local governments or Professional, scientific, and technical services*. They generally work in offices and laboratories. Some may spend time in the field gathering data and monitoring environmental conditions firsthand. Most *Environmental scientists and specialists* work full time.

Related occupations include:

- Environmental compliance inspectors
- Environmental engineers
- Conservation scientists
- Geoscientist, except hydrologists and geographers
- Hydrologists

MICHIGAN ENVIRONMENTAL SCIENTISTS AND SPECIALISTS, INCLUDING HEALTH BY THE NUMBERS



2,700
TOTAL
EMPLOYMENT 2020

9TH
NATIONAL
EMPLOYMENT RANK



6.88
JOBS PER
10,000 TOTAL

1.13
LOCATION
QUOTIENT



\$69,000
MEDIAN
ANNUAL WAGE

\$33.17
MEDIAN
HOURLY WAGE



0.4%
2018–2028 PROJECTED
JOB GROWTH

350
PROJECTED ANNUAL
OPENINGS



**BACHELOR'S
DEGREE**
REQUIRED
EDUCATION

Source: 2020 Occupational Employment and Wage Estimates and U.S. Bureau of Labor Statistics; 2018–2028 Employment Projections, Bureau of Labor Market Information and Strategic Initiatives, Michigan Department of Technology, Management & Budget



This occupation has a bright outlook. The long-term projected growth rate through 2028 is 0.4 percent, which is faster than the Michigan projected 0.1 percent growth rate for all occupations. Heightened public interest in

the hazards facing the environment, as well as increasing demands placed on the environment by population growth, are expected to spur demand for *Environmental scientists and specialists*. The median hourly wage for this

occupation was \$33.17 which was 68.6 percent higher than the statewide median in 2020.

YAN XU
Economic Analyst

MICHIGAN ENVIRONMENTAL SCIENTISTS AND SPECIALISTS, INCLUDING HEALTH PER 10,000 EMPLOYED

AREA	ENVIRONMENTAL SCIENTISTS AND SPECIALISTS, INCLUDING HEALTH	PER 10,000 EMPLOYED	LOCATION QUOTIENT	HOURLY MEDIAN WAGE	ANNUAL MEDIAN WAGE
Monroe	130	38.36	6.31	\$43.04	\$89,520
Lansing-East Lansing	580	29.40	4.83	\$34.08	\$70,890
Ann Arbor	350	16.64	2.74	\$35.36	\$73,550
Bay City	50	15.00	2.47	\$31.23	\$64,970
Northwest Lower Peninsula	110	9.68	1.59	\$29.99	\$62,370
Northeast Lower Peninsula	50	7.63	1.25	\$32.36	\$67,310
Jackson	30	6.97	1.15	\$35.23	\$73,280
Michigan	2,700	6.88	1.13	\$33.17	\$69,000
Kalamazoo-Portage	90	6.68	1.1	\$27.13	\$56,440
Upper Peninsula of Michigan	60	6.07	1	\$32.53	\$67,660
Balance of Lower Peninsula	130	5.43	0.89	\$22.83	\$47,490
Detroit-Warren-Dearborn	790	4.44	0.73	\$33.99	\$70,700
Grand Rapids-Wyoming	230	4.40	0.72	*	*
Flint	*	*	*	\$32.14	\$66,860

Source: 2020 Occupational Employment and Wage Estimates, U.S. Bureau of Labor Statistics

Note: Employment is rounded to the nearest ten. Employment change values and percents are based on rounded data.

* Non-disclosure of data due to data quality or confidentiality.



JOB ADS REACH NEW HIGH POINT

In May, there were 237,429 online job advertisements in Michigan, an all-time high. This is up 6 percent over the month from 233,304 ads in April and up 140 percent over the year from May 2020 (99,008 ads). The dramatic growth in ads over the year is due to the pandemic causing May 2020 ads to fall to near record lows. April 2021 was the second highest online ads recorded and prior to this, the highest point for online postings had been in October 2017 (207,448 ads).

Supply/Demand Rate Increases

The supply/demand rate for May 2021 was 1.04. This represents approximately 104 unemployed people for every 100 open job advertisements. Despite the record high job ads, the supply/demand rate rose over the month due to a rise in unemployed individuals by 32,000. The increase in unemployed individuals was more than double the uptick in job ads (+14,125).

Growth in Industry Advertisements

Over the month, each industry experienced growth in job postings except for *Wholesale trade*, which experienced a loss of nearly 5 percent. The largest rise in industry ads was 18 percent in *Arts, entertainment, and recreation*. Following behind were *Educational services* and *Accommodation and food services* with growth rates of 14 percent and 12 percent, respectively. However, over the year every industry experienced large increases in job postings as a result of going from one of the lowest points in online job ads to the recent high point.

Within *Arts, entertainment, and recreation*, many occupations rose over the month. The largest numerical increases were for *Cooks, restaurant; Waiters and waitresses*; and *Chefs and head cooks*. The largest losses within *Arts, entertainment, and recreation* were attributed

to *Production workers, all other; Health educators*; and *Inspectors, testers, sorters, samplers, and weighers*.

Job Ads Rise in Most Metropolitan Statistical Areas

All but one Metropolitan Statistical Area (MSA) experienced positive growth in ads over the month. The Battle Creek MSA had the largest percent growth since April, while the Bay City MSA was the only area to have a decrease in ads. In Battle Creek, the largest numerical increases for occupations were in *Registered nurses, Coaches and scouts*, and *Managers, all other*. For Bay City, the largest numerical decreases for occupations were in *Cooks, restaurant; Medical and health services managers*, and *Nursing assistants*.

TRISHA SCHLEGEL
Economic Analyst

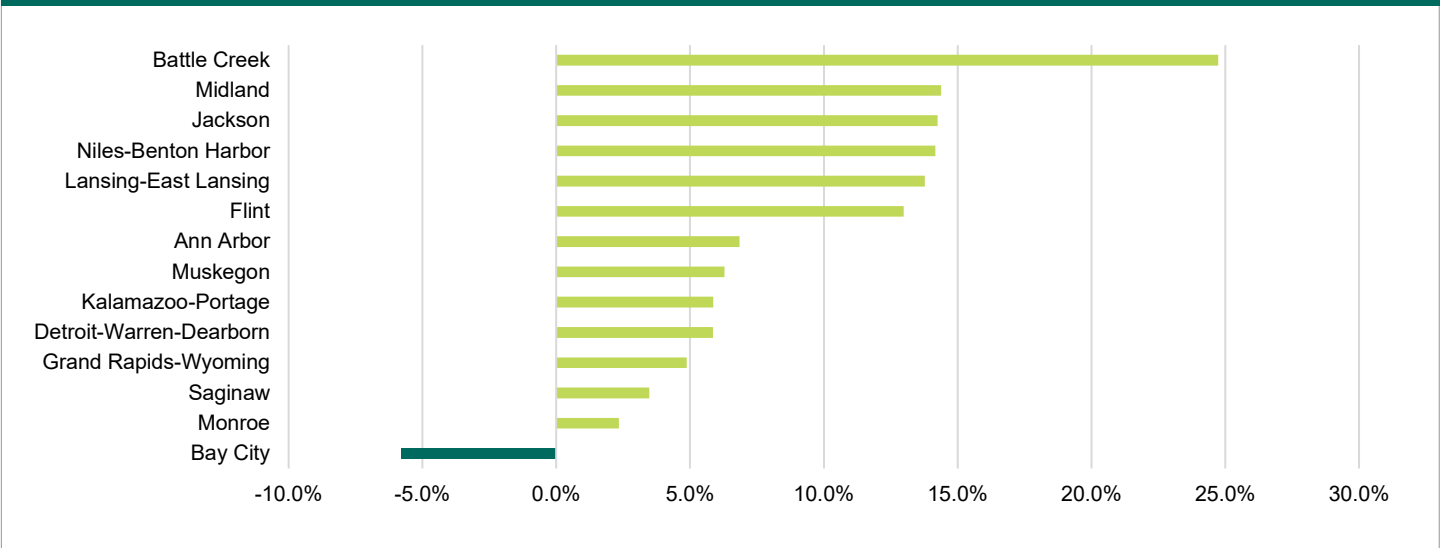
MICHIGAN ONLINE JOB ADS BY INDUSTRY, MAY 2021



Note: Roughly 54,000 postings did not have specific industry ties.

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

MONTHLY CHANGE IN JOB ADS BY MICHIGAN METRO AREA, APRIL–MAY 2021



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

TOTAL MICHIGAN JOB ADVERTISEMENTS, JAN 2014–MAY 2021



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

RELEVANT RANKINGS

SHORELINE MILEAGE RANKINGS BY STATE				
RANK	AREA	FEET OF SHORELINE	POPULATION	FEET OF SHORELINE PER CAPITA
	UNITED STATES	503,917,920	328,239,523	1.54
1	Alaska	179,013,120	731,545	244.71
2	Florida	44,542,080	21,477,737	2.07
3	Louisiana	40,766,880	4,648,794	8.77
4	Maine	18,363,840	1,344,212	13.66
5	California	18,094,560	39,512,223	0.46
6	North Carolina	17,820,000	10,488,084	1.70
7	Texas	17,735,520	28,995,881	0.61
8	Florida	17,640,480	21,477,737	0.82
9	Virginia	17,503,200	8,535,519	2.05
10	Michigan	17,022,720	9,986,857	1.70
11	Maryland	16,843,200	6,045,680	2.79
12	Washington	15,977,280	7,614,893	2.10
13	South Carolina	15,185,280	5,148,714	2.95
14	New York	13,860,000	19,453,561	0.71
15	Georgia	12,376,320	10,617,423	1.17

Sources: NOAA Office for Coastal Management; U.S. Census Bureau, Population Division

NON-RESIDENT FISHING LICENSES AND PERMITS SOLD BY STATE, 2020

RANK	STATE	NON-RESIDENT FISHING LICENSES AND PERMITS	REVENUE FROM NON-RESIDENT FISHING LICENSES AND PERMITS	TOTAL FISHING LICENSES AND PERMITS	TOTAL REVENUE FROM FISHING LICENSES AND PERMITS
	UNITED STATES	7,657,688	\$207,387,254	38,487,744	\$752,108,909
1	Florida	697,729	\$19,330,557	2,096,592	\$38,513,377
2	Colorado	512,361	\$8,481,926	1,337,120	\$20,809,483
3	Wisconsin	419,239	\$11,229,441	1,691,201	\$38,382,215
4	Alaska	409,466	\$19,057,964	640,587	\$23,593,974
5	Montana	392,550	\$11,640,715	885,481	\$17,403,899
6	Minnesota	348,318	\$10,475,187	1,637,178	\$33,537,441
7	Louisiana	266,411	\$4,776,613	1,004,826	\$11,908,913
8	Idaho	245,465	\$5,704,225	1,112,409	\$12,660,589
9	Michigan	242,060	\$7,847,217	1,166,148	\$28,813,612
10	Wyoming	241,046	\$4,768,785	355,492	\$6,811,359
11	North Carolina	237,796	\$4,637,667	934,996	\$22,053,028
12	Arkansas	191,799	\$3,800,135	665,240	\$8,258,602
13	New York	182,653	\$5,247,754	1,207,995	\$20,908,120
14	Tennessee	168,922	\$5,657,178	769,008	\$19,952,374
15	Missouri	167,147	\$3,565,070	1,275,421	\$12,799,375

Source: U.S. Fish And Wildlife Service



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