# MICHIGAN'S LABOR MARKET NEWS

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Michigan payroll jobs edged up by 18,000 in September, the smallest gain in the last five months.

SEPTEMBER 2020 JOBLESS RATE

MICHIGAN **8.5%**NATIONAL

7.9%

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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 September unemployment rate crept down to 8.5 percent, but remains 4.6 percentage points above the rate one year ago. Payroll job growth was somewhat weaker than in recent months, with the state only adding 18,000 in September. While this monthly gain continued the an employment recovery from historic pandemic-related layoffs earlier this year, it was only one-third of August's job growth.

This month's issue of Michigan's Labor Market News discusses the seasonality of the state's labor market. The Feature Article highlights several industries impacted heavily by hiring during certain times of the year, such as Construction, Educational services, and Leisure and hospitality. Some commonly used labor market statistics remove typical seasonal movements by seasonally adjusting the data. Accordingly, this month's Ask the Economist explains why this is done and when to use adjusted or unadjusted data. Additionally, September's Map of the Month displays how the temperature of each state has increased over the last 100 years.

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 SEPTEMBER JOBLESS RATE EDGES DOWN

The national jobless rate fell by five-tenths of a percentage point over the month to 7.9 percent. Michigan's September rate was 0.6 percentage points above the U.S. rate. Over the year, the statewide rate advanced by 4.6 percentage points, while the national rate increased by 4.4 percentage points since September 2019.

Total employment in Michigan edged down by 0.3 percent between August and September, unlike the small increase in employment nationally (+0.2 percent). Unemployment in the state receded by 2.0 percent over the month while the U.S. jobless total fell by 7.2 percent.

Over the year, Michigan employment dropped by 5.7 percent, a decline about one percentage point below the reduction nationally. Unemployment exhibited an over-the-year hike of 115 percent in Michigan, similar to the U.S. unemployment level advance of 119 percent. Michigan's total workforce level fell by one percent since September 2019, demonstrating the withdrawal of workers since the onset of the COVID-19 pandemic.

### Michigan Jobless Rate Falls Between Second and Third Ouarter 2020

An examination of quarterly jobless rates for the three-year period between the third quarter 2017 and the third quarter 2020 reveals the substantial impact of the COVID-19 pandemic on joblessness. The data shows a sharp jobless rate jump in Michigan in the second quarter 2020, followed by some recalls of laid off workers in the third quarter.

Michigan jobless rates in the last half of 2017 hovered around 4.6 percent, and then began to decline through the next several quarters. By the last half of 2018, the state jobless rate had moved down to about 4.0 percent. The Michigan quarterly unemployment rate then briefly rose during the beginning of 2019 with a rate of 4.2 percent for the first two quarters of that year. During the fourth quarter of 2019 and first quarter of 2020, the Michigan jobless rate moved down to 3.9 percent. This was the lowest quarterly jobless rate exhibited by the state since the third quarter 2000 (3.8 percent).

Michigan's quarterly jobless rate surged to a record high 20.0 percent during the second quarter of 2020, due to substantial layoffs related to the COVID-19 pandemic. As workers were slowly recalled in the third quarter 2020, the statewide quarterly jobless rate fell to 8.6 percent, a drop of 11.4 percentage points.

Despite these gains in the third quarter, employment in Michigan in the third quarter remains nearly 300,000 below fourth quarter 2019 levels, and the number of unemployed is 230,000 higher.

SHIBANI PUTATUNDA Economic Specialist

MICHIGAN LABOR FORCE ESTIMATES (SEASONALLY ADJUSTED)								
	SEPTEMBER 2020	AUGUST 2020	SEPTEMBER 2019	CHANGE OVER THE MONTH	CHANGE OVER THE YEAR			
Labor Force	4,891,000	4,914,000	4,940,000	-23,000	-49,000			
Employed	4,474,000	4,489,000	4,747,000	-15,000	-273,000			
Unemployed	417,000	425,000	193,000	-8,000	+224,000			
Jobless Rate	8.5	8.7	3.9	-0.2	+4.6			



### MICHIGAN QUARTERLY JOBLESS RATES, THIRD QUARTER 2017-THIRD QUARTER 2020 (PERCENT)



## **MICHIGAN JOB TRENDS BY INDUSTRY SECTOR**

### **Monthly Overview**

Michigan payroll jobs moved up 18,400 (+0.5 percent) on a seasonally adjusted basis in September. Although statewide job additions continued to occur over the month, the rate of gain has slowed since the large employment rebounds recorded in May and June. September job advancements occurred in several major industry sectors including Leisure and hospitality (+10,400), Professional and business services (+5,600), and Manufacturing (+5,200). Smaller job increases were in Professional, scientific, and technical services (+4,600); Health care and social assistance (+2,400); and Transportation, warehousing, and utilities (+1,800). Despite growth in a majority of industries, September seasonal job losses occurred in State (-4.1 percent), Federal (-1.2 percent), and Local government (-1.1 percent), as well as Education services (-2.5 percent).

### **Over the Year Analysis**

Since September 2020, seasonally adjusted Michigan nonfarm payroll jobs dropped sharply by 425,000 or 9.6 percent. Of the over one million jobs lost in April 2020 due to the impact of the pandemic, only about 600,000 jobs have been recovered over the last five months. The Leisure and hospitality (-144,700) sector continued to lead all major Michigan industries with the largest over the year employment decline, both numerically and on a percentage basis. Several important industries also continued to record substantial job loss since September 2019, including Manufacturing (-61,100), Education and health services (-56,700), and Professional and business services (-53,900). The over-the-year job gain in Federal government (+5,600) primarily reflected workers hired in the late summer for conducting Census 2020 follow-up activities.

### Job Change by Major Industry – Third Quarter 2020

A quarter-by-quarter analysis of job change in Michigan sheds light on the recent dynamics of pandemic-related job reductions and recalls of workers in specific major Michigan industry sectors.

During the second quarter 2020, Michigan nonfarm jobs plunged by 584,600 or -13.2 percent. By the end of the third quarter, statewide total payroll jobs partially recovered, but moved up by only 174,900 or 4.6 percent. Jobs dropped sharply in Michigan in the second quarter 2020 due to pandemicrelated job cuts. These reductions occurred across all major industries, including *Leisure and hospitality* (-174,900), *Professional and business services* (-94,700); *Trade, transportation, and utilities* (-72,700); and *Manufacturing* (-68,300). Minimal employment declines were recorded in both *Mining and logging* (-1,300) and *Information* (-4,200). No job growth occurred for any major industry sector between the first and second quarter.

Between the second and third quarter, workers continued to be recalled from coronavirus-related layoffs. Moderate job recovery was recorded in several sectors including *Leisure and hospitality* (+19.9 percent), *Other services* (+11.6 percent), and *Professional and business services* (+6.7 percent). Total jobs in Michigan at the end of the third quarter (September 2020) remained 448,000 below pre-pandemic February levels.

### Significant Industry Employment Developments

#### ACCOMMODATION AND FOOD SERVICES

On a seasonally adjusted basis, total nonfarm payroll jobs in the *Accommodation and food services* sector rose notably over the month (+9,300) but were still down substantially over the year (-119,700). This industry's September growth rate of 3.7 percent ranked second highest among all seasonally adjusted Michigan subsectors. Monthly job gains in this sector primarily reflected persons recalled from pandemic-related layoffs, and pushed jobs up in the broad category of *Leisure and hospitality* (+10,400). Nationally, total employment in the *Accommodation and food services* industry increased by 251,000 (+2.3 percent) over the month but was still 20.0 percent lower than the year-ago level.

#### PROFESSIONAL AND BUSINESS SERVICES

The number of *Professional and business services* jobs statewide moved up in September by 5,600 or 0.9 percent, due mainly to job additions in the *Professional, scientific, and technical services* industry (+4,600). Monthly job gains were minor in both *Management of companies* (+600) and *Administrative support and waste management services* (+400). Since the large pandemic-related job drop sustained in April (-145,400), this major industry sector has recovered just 88,200 of those positions. Recalls have resulted in payroll job advances for five consecutive months, but at a reduced pace. On the nationwide level, employment in *Professional*  and business services rose by 89,000 or 0.4 percent over the month but was still significantly below its September 2019 job level (-5.8 percent).

#### MANUFACTURING

*Manufacturing* jobs in Michigan increased by 5,200 or 0.9 percent in September. Both major subsectors contributed job gains over the month, with about a 1.0 percent advance in both the *Durable goods* (+3,800) and *Nondurable goods* (+1,400) sectors. On a not seasonally adjusted basis, certain industries recalled workers in September such as *Machinery manufacturing* and *Printing and related support activities*. Despite this modest September job addition, payroll employment in *Manufacturing* was still down 61,100 or 9.7 percent since September 2019. Nationally, total *Manufacturing* jobs advanced by 66,000 (+0.5 percent) since August but dropped significantly by 646,000 (-5.0 percent) over the year.

## Metropolitan Statistical Areas (MSAs)

Total payroll jobs in September moved up in all Michigan Metropolitan Statistical Areas (MSAs), except Muskegon (-0.4 percent). On a not seasonally adjusted basis, metro area percent job growth ranged from 0.5 percent in the Niles-Benton Harbor region to 2.6 percent in Monroe.

Over the past year, however, pandemic-related job cuts have pushed down nonfarm job levels in all Michigan metro areas. Job losses since September 2019 ranged from a decline of 4.9 percent in the Ann Arbor MSA to a drop of 13.1 percent in the Muskegon metro area.

In September, *Government* jobs rose seasonally in all 14 Michigan metro areas, led by Monroe (+16.7 percent) and Kalamazoo (+15.3 percent). These gains in the public sector reflected education-related hiring with the start of the school year. Additionally, total employment within the *Professional and business services* sector advanced in every MSA except for Bay City and Saginaw.

In contrast, all but four metro areas recorded job declines in the *Leisure and hospitality* sector, with the largest job losses occurring in Muskegon (-8.5 percent) and Benton Harbor (-5.0 percent). *Education and health services* jobs moved up over the month in most regions, with the exception of the Saginaw MSA.

JIM BIRNEY Economic Analyst



MICHIGAN PAYROLL JOBS (SEASO	ONALLY ADJUSTED)						
	SEPTEMBER	AUGUST	SEPTEMBER	OVER T	HE MONTH	OVER 1	THE YEAR
INDUSTRY	2020	2020	2019	LEVEL	PERCENT	LEVEL	PERCENT
TOTAL NONFARM	4,013,100	3,994,700	4,438,100	18,400	0.5%	-425,000	-9.6%
Total Private	3,440,400	3,409,900	3,821,900	30,500	0.9%	-381,500	-10.0%
Private Service-Providing	2,692,600	2,670,200	3,012,200	22,400	0.8%	-319,600	-10.6%
GOODS-PRODUCING	747,800	739,700	809,700	8,100	1.1%	-61,900	-7.6%
Mining, Logging, and Construction	181,000	178,100	181,800	2,900	1.6%	-800	-0.4%
Mining and Logging	6,400	6,300	7,300	100	1.6%	-900	-12.3%
Construction	174,600	171,800	174,500	2,800	1.6%	100	0.1%
Manufacturing	566,800	561,600	627,900	5,200	0.9%	-61,100	-9.7%
Durable Goods	419,100	415,300	474,000	3,800	0.9%	-54,900	-11.6%
Transportation Equipment Manufacturing	167,500	106,400	190,000	61,100	57.4%	-22,500	-11.8%
Non-Durable Goods	147,700	146,300	153,900	1,400	1.0%	-6,200	-4.0%
SERVICE-PROVIDING	3,265,300	3,255,000	3,628,400	10,300	0.3%	-363,100	-10.0%
Trade, Transportation, and Utilities	759,000	756,100	796,100	2,900	0.4%	-37,100	-4.7%
Wholesale Trade	162,100	161,700	171,500	400	0.2%	-9,400	-5.5%
Retail Trade	438,800	438,100	462,900	700	0.2%	-24,100	-5.2%
Transportation, Warehousing, and Utilities	158,100	156,300	161,700	1,800	1.2%	-3,600	-2.2%
Information	50,500	50,000	55,200	500	1.0%	-4,700	-8.5%
Financial Activities	221,200	220,700	225,300	500	0.2%	-4,100	-1.8%
Finance and Insurance	168,900	169,300	169,100	-400	-0.2%	-200	-0.1%
Real Estate and Rental and Leasing	52,300	51,400	56,200	900	1.8%	-3,900	-6.9%
Professional and Business Services	598,200	592,600	652,100	5,600	0.9%	-53,900	-8.3%
Professional, Scientific, and Technical Services	286,600	282,000	298,200	4,600	1.6%	-11,600	-3.9%
Management of Companies and Enterprises	68,900	68,300	70,500	600	0.9%	-1,600	-2.3%
Administrative and Support and Waste Management and Remediation Services	242,700	242,300	283,400	400	0.2%	-40,700	-14.4%
Education and Health Services	626,300	625,400	683,000	900	0.1%	-56,700	-8.3%
Educational Services	58,800	60,300	74,600	-1,500	-2.5%	-15,800	-21.2%
Health Care and Social Assistance	567,500	565,100	608,400	2,400	0.4%	-40,900	-6.7%
Leisure and Hospitality	289,700	279,300	434,400	10,400	3.7%	-144,700	-33.3%
Arts, Entertainment, and Recreation	28,600	27,500	53,600	1,100	4.0%	-25,000	-46.6%
Accommodation and Food Services	261,100	251,800	380,800	9,300	3.7%	-119,700	-31.4%
Other Services	147,700	146,100	166,100	1,600	1.1%	-18,400	-11.1%
Government	572,700	584,800	616,200	-12,100	-2.1%	-43,500	-7.1%
Federal Government	58,200	58,900	52,600	-700	-1.2%	5,600	10.6%
State Government	174,800	182,300	195,800	-7,500	-4.1%	-21,000	-10.7%
Local Government	339,700	343,600	367,800	-3,900	-1.1%	-28,100	-7.6%



### MICHIGAN 2020 QUARTERLY TOTAL EMPLOYMENT (IN THOUSANDS)

MAJOR INDUSTRY	FIRST QL JOB CH		SECOND C JOB CH		THIRD QUARTER JOB CHANGE		
	LEVEL	PERCENT	LEVEL	PERCENT	LEVEL	PERCENT	
TOTAL NONFARM	-26.5	-0.6%	-584.6	-13.2%	174.9	4.6%	
Mining and Logging	0.1	1.4%	-1.3	-17.6%	0.3	4.9%	
Construction	1.6	0.9%	-9.9	-5.5%	6.0	3.6%	
Manufacturing	-10.5	-1.7%	-68.3	-11.0%	16.5	3.0%	
Trade, Transportation, and Utilities	1.1	0.1%	-72.7	-9.0%	27.0	3.7%	
Wholesale Trade	0.4	0.2%	-12.1	-7.0%	2.2	1.4%	
Retail Trade	1.7	0.4%	-46.4	-9.9%	18.8	4.5%	
Information	-0.2	-0.4%	-4.2	-7.7%	0.3	0.6%	
Financial Activities	2.0	0.9%	-10.7	-4.7%	2.4	1.1%	
Professional and Business Services	2.6	0.4%	-94.7	-14.4%	37.5	6.7%	
Education and Health Services	-6.2	-0.9%	-66.7	-9.9%	16.7	2.7%	
Leisure and Hospitality	-17.8	-4.1%	-174.9	-42.0%	48.0	19.9%	
Other Services	-0.1	-0.1%	-31.9	-19.4%	15.3	11.6%	
Government	0.9	0.1%	-49.3	-8.0%	4.9	0.9%	





## **REGIONAL LABOR MARKET ANALYSIS**

#### ANN ARBOR METROPOLITAN AREA

- Joblessness in the Ann Arbor region moved down in September by 0.9 percentage points to 6.0 percent. Ann Arbor was tied for the lowest monthly jobless rate among major labor markets in Michigan.
- Total labor force declined by 2,300 (-1.1 percent) in September as the number of unemployed fell by 2,000 over the month.

#### MONTHLY INDUSTRY DEVELOPMENTS

 Ann Arbor total nonfarm jobs moved up by 4,800 or 2.2 percent in September, well above both the statewide (+1.2 percent) and national (+0.8 percent) rates of gain.

#### INDUSTRY TRENDS

 Metro area jobs in *Professional and business services* rose slightly this month (+0.7 percent), despite three consecutive years of over the month employment declines in September.

#### **BAY CITY METROPOLITAN AREA**

- The unemployment rate in the Bay City metro area decreased by 1.0 percentage point in September to 7.5 percent.
- Although the number of unemployed edged down over the month, the total unemployment count was still up 1,800 over year-ago levels.

#### MONTHLY INDUSTRY DEVELOPMENTS

• September nonfarm jobs in the Bay City area rose slightly by 500 or 1.6 percent over the month, 0.4 percentage points above the statewide rate of gain.

#### INDUSTRY TRENDS

• A majority of regional industries remained flat over the month, although typical seasonal job gains were recorded in both the *Manufacturing* (+200) and *Government* (+400) sectors.

#### FLINT METROPOLITAN AREA

- Regional joblessness in the Flint metro area decreased by 1.2 percentage points in September to 9.4 percent, which was tied for the largest monthly jobless rate cut among major Michigan areas.
- Despite this rate decline, the number of employed and the number of unemployed both dropped over the month, as the labor force fell by 2.1 percent.

#### MONTHLY INDUSTRY DEVELOPMENTS

- Total nonfarm payroll jobs in the Flint MSA increased by 2,300 or 1.8 percent in September, one percentage point higher than the national rate of gain.
- Job gains over the month were split equally between the private and public sectors. Over the past year, total jobs fell significantly by 9.4 percent, reflecting job loss from the pandemic.

#### INDUSTRY TRENDS

• Among Flint MSA sectors, *Manufacturing* suffered the largest cut in jobs since September 2019, dropping by 20 percent.

#### **BATTLE CREEK METROPOLITAN AREA**

- The September unemployment rate in the Battle Creek MSA declined by 1.1 percentage points to 8.6 percent.
- This rate cut reflected fewer persons in the workforce (-1,100) in September, and reductions in both the number of employed and unemployed.

#### MONTHLY INDUSTRY DEVELOPMENTS

- Total payroll jobs in the Battle Creek region edged up by 800 or 1.6 percent in September. Over the past year, jobs were down sharply by 6,400 (-11.1 percent), reflecting layoffs related to the pandemic.
- Marginal monthly job gains were recorded in the *Professional* and business services (+300) and *Government* (+400) sectors.

#### INDUSTRY TRENDS

• Nearly 3,000 jobs combined have been lost in the region since September 2019 in the sectors *Durable goods manufacturing* and *Leisure and hospitality*.

#### **DETROIT-WARREN-DEARBORN METRO AREA**

- In September, the jobless rate in the Detroit metro area declined marginally by 0.3 percentage points to 9.8 percent.
- The number of employed residents in the area edged up slightly by 4,000 (+0.2 percent) over the month as the total workforce remained relatively flat in September.

#### MONTHLY INDUSTRY DEVELOPMENTS

- Payroll jobs in the Detroit region increased by 14,100 or 0.8 percent this month. Only two Michigan metro areas had a lower rate of September job change.
- Although *Professional and business services* jobs in the Detroit MSA moved up by 4,700 (+1.3 percent) over the month, jobs in this industry were still down 6.9 percent since September 2019.

#### INDUSTRY TRENDS

• Most major industries experienced marginal job gains since last month, although jobs rose seasonally in *Local government* education and dropped seasonally in *Arts, entertainment, and recreation*.

#### **GRAND RAPIDS-WYOMING METRO AREA**

- The Grand Rapids unemployment rate fell by 1.0 percentage point in September to 6.2 percent, but remained well above the pre-pandemic rate of 2.5 percent in February 2020.
- The jobless rate drop in September primarily was due to fewer persons active in the local labor force (-2.2 percent), as the number of employed actually fell by 6,300 over the month.

#### MONTHLY INDUSTRY DEVELOPMENTS

 In the Grand Rapids region, total jobs advanced by 5,600 or 1.1 percent this month, which tracked closely with the statewide rate of job gain.

#### INDUSTRY TRENDS

 Local government jobs in the metro area moved up 2,600 (+7.9 percent), somewhat lower than the typical September job increase. This primarily reflected hiring at local school districts with the beginning of the new academic year.

CIVILIAN LABOR FORCE AND NONFARM PAYROLL JOBS									
	ANN ARBOR		BAT	BATTLE CREEK			BAY CITY		
	SEP 2020	AUG 2020	SEP 2019	SEP 2020	AUG 2020	SEP 2019	SEP 2020	AUG 2020	SEP 2019
PLACE OF RESIDENCE									
Labor Force	202,400	204,700	197,600	61,200	62,300	61,400	48,400	49,400	49,500
Employment	190,200	190,600	192,200	56,000	56,300	59,200	44,800	45,200	47,700
Unemployment	12,200	14,200	5,400	5,300	6,100	2,200	3,600	4,200	1,800
Rate (percent)	6.0%	6.9%	2.7%	8.6%	9.7%	3.6%	7.5%	8.5%	3.6%
PLACE OF WORK									
Total Nonfarm Jobs	219,200	214,400	230,500	51,200	50,400	57,600	31,400	30,900	35,500
Mining, Logging, and Construction	4,600	4,600	5,200	1,600	1,700	1,900	1,300	1,400	1,500
Manufacturing	14,100	14,000	14,800	9,700	9,700	11,300	3,300	3,100	4,700
Trade, Transportation, and Utilities	25,600	26,200	26,800	8,500	8,600	9,100	7,200	7,100	7,400
Wholesale Trade	6,200	6,200	6,600	*	*	*	*	*	*
Retail Trade	15,300	15,900	16,000	5,500	5,600	5,600	4,500	4,400	4,800
Information	5,500	5,500	5,600	*	*	*	300	300	300
Financial Activities	6,500	6,600	6,800	1,100	1,100	1,200	1,200	1,200	1,300
Professional and Business Services	28,100	27,900	30,400	5,100	4,800	5,800	2,100	2,100	2,400
Educational and Health Services	27,700	27,400	29,500	10,000	9,800	10,700	6,000	6,000	6,500
Leisure and Hospitality	14,000	14,100	18,600	3,300	3,200	4,700	3,700	3,800	4,500
Other Services	5,800	5,900	6,300	1,800	1,800	2,000	1,100	1,100	1,200
Government	87,300	82,200	86,500	9,800	9,400	10,600	5,200	4,800	5,700

	DETROIT-WARREN- DEARBORN			FLINT			GRAND RAPIDS-WYOMING		
	SEP 2020	AUG 2020	SEP 2019	SEP 2020	AUG 2020	SEP 2019	SEP 2020	AUG 2020	SEP 2019
PLACE OF RESIDENCE									
Labor Force	2,093,000	2,096,000	2,177,000	182,700	186,600	180,100	581,300	594,200	574,600
Employment	1,888,000	1,884,000	2,091,000	165,600	166,800	173,000	545,000	551,300	559,800
Unemployment	205,000	212,000	86,000	17,100	19,800	7,000	36,300	42,900	14,800
Rate (percent)	9.8%	10.1%	4.0%	9.4%	10.6%	3.9%	6.2%	7.2%	2.6%
PLACE OF WORK									
Total Nonfarm Jobs	1,841,200	1,827,100	2,041,600	129,500	127,200	142,900	524,200	518,600	567,700
Mining, Logging, and Construction	76,100	76,300	80,700	5,700	5,800	6,200	28,400	28,700	26,600
Manufacturing	232,300	231,100	257,600	11,600	11,200	14,500	105,000	105,700	118,600
Trade, Transportation, and Utilities	355,700	355,900	379,100	28,900	28,900	29,200	91,700	92,300	97,500
Wholesale Trade	79,000	79,100	84,900	5,800	5,800	5,800	30,000	30,300	32,500
Retail Trade	193,600	194,200	207,600	18,900	18,900	19,200	44,600	45,100	48,100
Information	25,100	24,800	26,400	3,200	3,100	3,600	5,900	5,900	6,300
Financial Activities	116,600	118,200	121,800	5,700	5,800	6,100	26,600	26,700	26,900
Professional and Business Services	364,700	360,000	391,700	15,600	15,300	16,700	70,000	67,600	76,000
Educational and Health Services	279,000	278,600	316,900	24,000	23,600	26,600	87,800	85,500	93,900
Leisure and Hospitality	141,300	142,300	201,400	12,600	12,500	15,700	41,000	41,700	50,000
Other Services	70,400	70,200	74,900	5,100	5,100	5,300	21,200	21,200	22,600
Government	180,000	169,700	191,100	17,100	15,900	19,000	46,600	43,300	49,300

\* Data is suppressed

#### **JACKSON METROPOLITAN AREA**

- The September unemployment rate in the Jackson metro area dropped by 1.2 percentage points to 7.6 percent but rose by 4.5 percentage points over the year.
- The large jobless rate drop in September was not a result of an overall monthly employment gain, as total employment inched down by 500. The rate decrease reflected a monthly cut in the size of the regional labor force.

#### MONTHLY INDUSTRY DEVELOPMENTS

- Jackson nonfarm jobs increased by 500 or 1.0 percent over the month, but were still 8.8 percent lower than the September 2019 job level.
- The region has lost 5,100 jobs over the past year, reflecting the impact of the pandemic, with roughly 1,000 jobs cut each in *Manufacturing, Education and health services*, and *Leisure and hospitality.*

#### INDUSTRY TRENDS

• September job gains in *Education and health services* and *Government* largely reflected hiring at private and public schools with the new school year.

#### LANSING-EAST LANSING METRO AREA

- The Lansing jobless rate moved down by 0.8 percentage points to 6.7 percent in September but was still 3.8 percentage points higher than its year-ago rate.
- Due to over-the-month reductions in employment and unemployment, the total regional labor force fell by 4,000 (-1.6 percent) in September.

#### MONTHLY INDUSTRY DEVELOPMENTS

• Metro area jobs in the Lansing MSA increased by only 3,200 or 1.5 percent over the month, considerably lower than the typical payroll job gain in September.

#### INDUSTRY TRENDS

 Regional employment in Lansing *Financial activities* fell by 300 (-1.8 percent) since August, the largest percent decline for this industry among all metropolitan areas in Michigan.

#### **MONROE METROPOLITAN AREA**

- Joblessness in the Monroe labor market moved down by 1.1 percentage points in September to 6.9 percent.
- Total employment stayed virtually flat over the month and was still down 4,200 (-5.8 percent) since September 2019.

#### MONTHLY INDUSTRY DEVELOPMENTS

 Jobs in the Monroe region rose by 900 or 2.6 percent in September, the largest percent increase among all Michigan metro areas.

#### INDUSTRY TRENDS

• Only two industries accounted for the monthly job additions over the month in this region, *Professional and business services* (+300) and *Government* (+700).

#### KALAMAZOO-PORTAGE METRO AREA

- The unemployment rate in the Kalamazoo MSA fell by 1.0 percentage point to 6.7 percent, 1.5 percentage points lower than the statewide rate.
- Total workforce in the region decreased by 2,600 (-1.5 percent) in September due to monthly reductions in both the number of employed and unemployed.

#### MONTHLY INDUSTRY DEVELOPMENTS

- In the Kalamazoo region, total payroll jobs rose by 3,400 or 2.5 percent, the second largest percent job addition among all 14 Michigan metro areas.
- *Retail trade* job levels were unchanged in September, and remained 1,300 below year-ago levels, reflecting pandemic-related layoffs.

#### INDUSTRY TRENDS

• September job losses in the metro area were led by a seasonal reduction in *Leisure and hospitality* (-500).

#### MIDLAND METROPOLITAN AREA

- The unemployment rate in the Midland MSA decreased by 0.7 percentage points over the month to 6.3 percent, notably lower than the statewide rate for September (8.2 percent).
- Over the year, the metro area experienced a modest decline in its total employment count (-1,400), as total workforce stayed virtually flat over this period.

#### MONTHLY INDUSTRY DEVELOPMENTS

• Total nonfarm payroll jobs in the Midland MSA edged up slightly by 400 or 1.2 percent in September.

#### INDUSTRY TRENDS

• This monthly job gain was concentrated entirely in the *Government* sector (+400), as local school districts added jobs seasonally with the start of the new school year.

#### **MUSKEGON METROPOLITAN AREA**

- In September, the unemployment rate in the Muskegon metro area fell by 1.1 percentage points to 10.2 percent.
- The number of unemployed residents in the region declined slightly in September (-1,200) but was still up 5,100 over the past year.

#### MONTHLY INDUSTRY DEVELOPMENTS

 Muskegon payroll jobs edged down by 200 or 0.4 percent in September, and Muskegon was the only metropolitan area to record a monthly job reduction.

#### **INDUSTRY TRENDS**

 Total regional employment in the *Leisure and hospitality* sector moved down seasonally by 500 or 8.5 percent in September, the fastest monthly rate of decline among Michigan metro areas in this industry.

CIVILIAN LABOR FORCE	AND NO	NFARM	PAYROLL	JOBS					
	JACKSON		KALAM	KALAMAZOO-PORTAGE			LANSING-EAST LANSING		
	SEP 2020	AUG 2020	SEP 2019	SEP 2020	AUG 2020	SEP 2019	SEP 2020	AUG 2020	SEP 2019
PLACE OF RESIDENCE									
Labor Force	73,800	75,300	73,000	171,500	174,100	167,500	241,300	245,300	247,100
Employment	68,200	68,700	70,700	160,100	160,700	162,300	225,200	226,800	239,900
Unemployment	5,600	6,600	2,300	11,500	13,400	5,200	16,100	18,400	7,100
Rate (percent)	7.6%	8.8%	3.1%	6.7%	7.7%	3.1%	6.7%	7.5%	2.9%
PLACE OF WORK									
Total Nonfarm Jobs	53,000	52,500	58,100	141,900	138,500	151,100	212,200	209,000	238,800
Mining, Logging, and Construction	2,300	2,300	2,200	6,700	6,800	6,600	7,600	7,700	8,500
Manufacturing	8,400	8,500	9,600	20,700	20,600	23,400	16,300	16,300	19,100
Trade, Transportation, and Utilities	10,500	10,600	12,200	24,200	24,100	26,000	33,100	33,200	36,100
Wholesale Trade	*	*	*	5,800	5,900	6,300	5,900	6,000	6,400
Retail Trade	6,100	6,200	6,400	14,300	14,300	15,600	19,600	19,800	21,300
Information	200	200	200	700	700	700	2,800	2,800	2,900
Financial Activities	2,200	2,200	2,100	8,100	8,200	8,100	16,600	16,900	17,000
Professional and Business Services	5,700	5,400	5,700	17,800	16,800	17,600	23,300	22,600	24,500
Educational and Health Services	9,100	8,800	10,000	23,000	22,700	25,200	29,800	29,300	32,600
Leisure and Hospitality	4,500	4,600	5,400	16,200	16,700	16,400	15,700	16,200	19,600
Other Services	2,400	2,400	2,500	4,900	4,900	5,200	9,100	9,200	10,100
Government	7,700	7,500	8,200	19,600	17,000	21,900	57,900	54,800	68,400

	MIDLAND			MONROE			MUSKEGON		
	SEP 2020	AUG 2020	SEP 2019	SEP 2020	AUG 2020	SEP 2019	SEP 2020	AUG 2020	SEP 2019
PLACE OF RESIDENCE									
Labor Force	39,700	40,500	39,800	72,700	73,900	74,200	77,100	79,900	76,000
Employment	37,200	37,700	38,600	67,700	67,900	71,900	69,200	70,800	73,200
Unemployment	2,500	2,800	1,200	5,000	5,900	2,300	7,900	9,100	2,800
Rate (percent)	6.3%	7.0%	3.1%	6.9%	8.0%	3.1%	10.2%	11.3%	3.7%
PLACE OF WORK									
Total Nonfarm Jobs	34,700	34,300	37,700	35,800	34,900	41,200	56,900	57,100	64,300
Mining, Logging, and Construction	*	*	*	1,800	1,800	2,000	2,800	2,800	2,600
Manufacturing	*	*	*	4,800	4,900	5,700	11,400	11,400	13,700
Trade, Transportation, and Utilities	*	*	*	9,800	9,800	10,500	13,100	13,400	13,600
Wholesale Trade	*	*	*	1,700	1,700	1,700	*	*	*
Retail Trade	*	*	*	4,200	4,200	4,700	10,200	10,400	11,000
Information	*	*	*	*	*	*	200	200	300
Financial Activities	*	*	*	900	900	900	1,700	1,700	1,800
Professional and Business Services	*	*	*	4,500	4,200	5,300	3,600	3,400	3,500
Educational and Health Services	*	*	*	4,500	4,500	4,900	10,100	10,100	11,600
Leisure and Hospitality	*	*	*	3,000	3,000	4,700	5,400	5,900	7,900
Other Services	*	*	*	1,300	1,300	1,500	1,700	1,800	2,100
Government	3,200	2,800	3,000	4,900	4,200	5,300	6,900	6,400	7,200

\* Data is suppressed

#### NILES-BENTON HARBOR METRO AREA

- Joblessness in the Niles-Benton Harbor MSA decreased by 1.1 percentage points to 7.6 percent in September.
- Over the past year, the number of area employed fell by 1,700 while the number of unemployed residents soared by 3,200. The jobless rate jumped from the year-ago rate of 3.3 percent.

#### MONTHLY INDUSTRY DEVELOPMENTS

- Regional jobs in the Niles-Benton Harbor MSA edged up by 300 or 0.5 percent over the month, well below the statewide rate of gain for September.
- Minor job growth in *Educational and health services* (+300) and *Government* (+400) was offset by employment declines in several other area industries.

#### INDUSTRY TRENDS

 Total nonfarm payroll jobs were still down 4,600 or 7.3 percent since September 2019, slightly less than the statewide over-the-year percent decline (-9.5 percent).

#### SAGINAW METROPOLITAN AREA

- The Saginaw metro area jobless rate was 8.6 percent in September, a monthly drop of 1.1 percentage points.
- Over the past year, the regional jobless rate soared by nearly 5 full percentage points. The number of unemployed residents jumped by 4,200 over this period.

#### MONTHLY INDUSTRY DEVELOPMENTS

- Payroll jobs in the Saginaw MSA rose by 800 or 1.0 percent in September.
- Monthly job gains were concentrated in the *Government* sector (+1,300), as colleges, universities, and local school districts added jobs with the onset of the new school year.

#### INDUSTRY TRENDS

 The impact of the pandemic was evident as nearly all area industries registered job losses since September 2019, with *Leisure and hospitality* experiencing the largest percent decrease (-19.8 percent).

CIVILIAN LABOR FORCE AND NONFARM PAYROLL JOBS									
				NILES-BE	ENTON HA	RBOR	S	AGINAW	
				SEP 2020	AUG 2020	SEP 2019	SEP 2020	AUG 2020	SEP 2019
PLACE OF RESIDENCE									
Labor Force				74,400	76,500	72,800	85,100	87,100	85,600
Employment				68,800	69,900	70,500	77,700	78,700	82,400
Unemployment				5,600	6,700	2,400	7,400	8,400	3,200
Rate (percent)				7.6%	8.7%	3.3%	8.6%	9.7%	3.7%
PLACE OF WORK									
Total Nonfarm Jobs				58,600	58,300	63,200	78,700	77,900	88,300
Mining, Logging, and Construction				2,900	2,900	2,700	3,000	3,000	3,300
Manufacturing				12,900	12,900	13,100	10,600	10,600	12,400
Trade, Transportation, and Utilities				9,900	10,100	10,600	14,800	15,300	16,600
Wholesale Trade				*	*	*	1,900	1,900	2,000
Retail Trade				6,000	6,100	6,800	10,300	10,800	11,900
Information				400	400	500	1,000	1,100	1,200
Financial Activities				2,400	2,400	2,500	3,600	3,600	3,800
Professional and Business Services				5,300	5,100	5,500	10,200	10,200	11,500
Educational and Health Services				9,100	8,800	9,500	14,600	14,700	15,900
Leisure and Hospitality				5,700	6,000	7,900	7,300	7,200	9,100
Other Services				2,000	2,100	2,300	3,200	3,100	3,100
Government				8,000	7,600	8,600	10,400	9,100	11,400
	UPPE	R PENINS	ULA	NORTHE	EAST MICH	IIGAN	NORTH	VEST MICH	HIGAN
	SEP 2020	AUG 2020	SEP 2019	SEP 2020	AUG 2020	SEP 2019	SEP 2020	AUG 2020	SEP 2019
PLACE OF RESIDENCE									
Labor Force	141,400	144,700	137,300	82,400	84,600	82,300	157,700	162,300	150,700
Employment	132,900	134,700	132,300	76,000	77,100	79,000	147,600	150,500	145,900
Unemployment	8,500	10,000	5,000	6,400	7,400	3,300	10,100	11,800	4,700
Rate (percent)	6.0%	6.9%	3.7%	7.8%	8.8%	4.1%	6.4%	7.3%	3.1%

\* Data is suppressed

### MAP OF THE MONTH:

## INCREASE IN STATEWIDE 10-YEAR AVERAGE TEMPERATURES, 1910–1919 TO 2010–2020



According to data retrieved from the National Oceanic and Atmospheric Administration (NOAA) National Centers for Environmental Information, Michigan has experienced among the largest change in its 10-year average temperatures over the last 100 years (1910– 1919 to 2010–2019). Ten-year averages were taken to account for year-to-year volatility.

From 1910 to 1919, Michigan had an average annual temperature of 42.6 degrees Fahrenheit. In the last ten years, this has increased nearly three degrees to 45.5 degrees. In terms of percentage increase, Michigan's 10-year average temperature has increased by 6.8 percent. This percentage change ranked 13th highest out of 48 states which had comparable data. The largest temperature increases were largely concentrated to the northeast region of the United States, making up the top eight in terms of percent change. Maine recorded the largest percent change, increasing 8.1 percent (+3.2 degrees Fahrenheit) over the period. Rhode Island recorded the largest numeric increase in temperature, increasing by 3.8 degrees (+7.9 percent).

States in the southern part of the country have not quite experienced the same change in temperatures in the last 100 years. Alabama had the smallest numeric and percentage change, increasing by 0.8 degrees (+1.3 percent) from 1910–1919 to 2010–2019. Mississippi and Louisiana were right behind, having increased by one degree (+1.6 percent) and 1.1 degrees (+1.7 percent), respectively.

Increases in average temperatures could impact the economies and seasonality of a state's workforce, especially if the rising temperature trend continues.

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## WHAT IS SEASONALITY IN MICHIGAN?

It is often said that Michigan is one of a handful of states with four distinct seasons. As a result, seasonal industries are a huge part of Michigan's economy. However, which industries are considered seasonal is also influenced by where within the state a Michigander resides.

This article will investigate what is meant by a seasonal industry and how these industries impact both regional economies and the statewide labor market throughout the course of a year.

#### What is a Seasonal Industry?

A seasonal industry in the context of this article refers to a group of firms where employment fluctuates based on the months of the year or the weather. Since the Great Recession and prior to 2020, employment in many industries had been on the road to recovery. When looking at the data behind employment trends from the early 2010s through 2019, it indicated that employment levels in most industries had been increasing on a year to year basis. This has certainly been true in Michigan prior to 2020, as many industries had been steadily recovering since 2009 or had fully recovered to pre-Great Recession levels. However, what is lost on the surface are the trends in employment within each year.

Employment in several industries tend to fluctuate throughout the course of a year, even though the industry may be expanding or contracting annually. Some sectors, such as *Construction*, are heavily dependent on the weather and employ more people during the warmer months while reducing in size during the colder months. There are also industries, in some of the more heavily populated areas, such as *Retail trade* which fluctuate around holidays and busy shopping seasons.

The common theme between these industries, however, is that these swings in employment form a pattern each year. It is especially prevalent when viewing a graph of the data, as there are clear peaks and troughs each year. Examples of this will be shown throughout the article.

### **Statewide Seasonal Industries**

Throughout the state, there are many industries which Michiganders can point to as a seasonal industry, no matter where in the state they are located.

An example of one of these industries is *Construction*. Employment in *Construction*, as mentioned earlier, is heavily dependent on the changing weather. As temperatures warm during the spring and summer months, construction projects begin to ramp up and more workers are hired.

Because of this, every region of the state observes a sharp increase in sector employment during the second quarter followed by small gains in the third quarter each year. As the seasons begin to change and temperatures



#### FIGURE 1: MICHIGAN VS. FLORIDA CONSTRUCTION EMPLOYMENT, 2010–2019

Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics



Photo Courtesy of Pure Michigan

begin to fall, employment in Construction slowly drops off in the fourth quarter and is typically followed by a steeper decline in the first quarter of the new year.

Figure 1 uses data from the Quarterly Census of Employment and Wages (QCEW) and displays statewide employment from 2010 to 2019 for Construction in Michigan as well as Florida. Comparing against a state which has typically warm temperatures year-round helps to signify that this industry is not universally seasonal across the rest of the country. When looking at the graph, it becomes obvious that the warmer months of each year contain employment peaks in Michigan. This is then followed by employment troughs in the colder months each year. Whereas in Florida, it is not clear that there are any seasonal trends in the data.

Another universally seasonal industry across Michigan is Educational services. However, employment in this sector tends to follow closely to that of the typical school year in the state rather than weather fluctuation. This means that employment increases in the months in which school is typically in session (second and fourth quarter) and declines in the months school is usually not in session (first and third quarter). The variability in this industry is displayed in Figure 2.

The largest spike in *Educational services* tends to occur at the beginning of the school year in the fourth quarter. Meanwhile the largest cut in employment tends to occur during the summer months in the third quarter of each year.

Seasonality in Educational services does not just occur in Michigan, either. It is a very common trend across that of the United States and follows similar trends to what is shown in Figure 2. According to national QCEW data since 2010, employment in the sector slightly dips during the months of December and January and cuts the most jobs during the non-typical school year months of May, June, and July before recovering.

#### Northern Seasonal Industries

Seasonality, in some cases, has different meanings in different parts of Michigan. This is largely due to how diverse Michigan's geography is. One example of this is in the northern reaches of the state.

The Upper Peninsula, Northeast, and Northwest Prosperity Regions are all much less populated than that of the more urban areas across the lower sections of Michigan. These regions also happen to be home to some of the most scenic and beautiful parts of Michigan. Because of this, Leisure and hospitality make up a significant portion of jobs in these areas.

This supersector includes industries such as Other amusement and recreation industries which comprises many important industries in Northern Michigan. This includes golf courses and country clubs, skiing facilities, and marinas. Another industry included in this



#### FIGURE 2: MICHIGAN QUARTERLY EDUCATIONAL SERVICES EMPLOYMENT, 2015-2019

Source: Quarterly Census of Employment and Wages, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget

#### FIGURE 3: NORTHERN MICHIGAN QUARTERLY LEISURE AND HOSPITALITY EMPLOYMENT, 2015-2019



Source: Quarterly Census of Employment and Wages, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget



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

supersector is *RV* (recreational vehicle) parks and recreation camps which serves outdoor enthusiasts, a main attraction of up north.

Depending on the time of year, this supersector makes up 15 to 20 percent of total private employment across the three regions. Comparatively, Leisure and hospitality typically make up only 11 to 12 percent of total private employment across the entire state, showing how important the supersector is to these regions. Because of this, there is potential to see large swings in employment. Most years, the sector begins hiring in the second quarter before peaking in the third quarter. Employment then falls drastically in the fourth quarter as it becomes cooler before bottoming out in the first quarter of the new year as shown in Figure 3. Of note, while skiing facilities and other winter recreation activities are an important part of the Northern Michigan economy, they are heavily outweighed by summer tourism.

#### **Metro Area Seasonal Industries**

One of the most seasonal industry sectors in Michigan is *Retail trade*. The *Retail trade* sector is comprised of stores with fixed locations that sell merchandise to buyers, as well as non-store businesses that reach customers through advertising and marketing methods, such as infomercials. During the holiday season consumers are inclined to shop more, resulting in higher employment levels in the retail sector.

A breakdown of Current Employment Statistics (CES) non-seasonally adjusted data reveals that the Detroit Metropolitan Statistical Area (MSA) overwhelmingly exhibited the largest percentage of *Retail trade* employment out of all metropolitan areas from 2015 to 2019.

As is evident in Figure 4, peak levels of *Retail trade* employment in the Detroit region were exhibited during the November and December months for the past five years, thus illustrating the hiring need during the holiday season. A sector that can be described as the complement to *Retail trade* is the *Transportation and warehousing* industry. This sector encompasses package delivery services, where employment has boomed during the past several years. Additionally, several online shopping retailers and the e-commerce industry are classified under *Warehousing and storage*, a subsector of the *Transportation and warehousing* industry.

CES data for the past five years demonstrates that, as shown in Figure 5, although the peaks and troughs may not be as pronounced as other industries, there is absolutely a seasonal component to the *Transportation and warehousing* sector employment in the Detroit metropolitan region. Peak employment occurred during the fourth quarter of each year for the past five years, similar to the trend exhibited in *Retail trade*. Intuitively this makes sense, since during the holiday season more packages are delivered and more consumers choose to shop online, resulting in a need for more workers in the sector.



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

#### FIGURE 6: WEST AND SOUTHWEST QUARTERLY CROP PRODUCTION EMPLOYMENT, 2015–2019



Source: Quarterly Census of Employment and Wages, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget

## West and Southwest Michigan Seasonal Industries

In the western reaches of the Lower Peninsula, a seasonal industry may take up a completely different meaning than Northern Michigan and Metro Detroit. While the area is home to some of the state's most popular beaches along Lake Michigan, the seasonal industry of *Crop production* makes up a larger share of total private regional employment compared to other areas of the state. According to the U.S. Bureau of Labor Statistics, this subsector is comprised of industries that "grow crops mainly for food and fiber."

This industry is understandably heavily dependent on weather and temperature trends. Employment in this sector typically increases in the second quarter and peaks in the third quarter of each year. Sharp drops are typically accounted for in the fourth quarter while bottoming out in the first quarter, as shown in Figure 6. Within the seasonality trends in these two regions for *Crop production*, however, is the quarter in which employment dramatically spikes. Employment in the third quarter of each year between 2015 and 2019 had the largest spike in Southwest Michigan. Meanwhile, employment in the industry had the largest quarterly employment increase each year in the second quarter of each year during the same time frame for West Michigan.

Part of the reason for these alternating spikes is that the West Michigan seasonal agricultural job count is impacted by the employment of corn detasslers during the summer months. These workers pull the tassles from rows of corn so that the corn does not pollinate itself. Corn crop production is a thriving industry in southwest Michigan, and thus hundreds of corn detasslers are hired in counties such as Kalamazoo, Allegan, St. Joseph, Van Buren, and several others, to assist in crop production during the July and August months. This results in a notable spike in employment during the mid-to-late summer every year in this industry as shown by the third quarter spike in Southwest Michigan.

#### Conclusion

Seasonal industries in Michigan play an important role in the state's economy. Trends in employment for such sectors vary depending on where a person is in the state. Some industries depict universally seasonal job patterns, while others revolve around other factors such as weather, holidays, or the school year. Overall, the industries discussed in this article demonstrate the impact the weather or time of the year has on Michigan and the state's regional labor markets.

#### NICK GANDHI

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SHIBANI PUTATUNDA Economic Specialist



## AMUSEMENT AND RECREATION ATTENDANTS

This month's Occupational Focus highlights Amusement and recreation attendants, which are mostly employed in the weather effected industries, such as: Amusement, gambling, and recreation; and Federal, state, and local parks.

According to the Bureau of Labor Statistics, *Amusement and recreation attendants* "perform variety of attending duties at amusement or recreation facility. They may schedule use of recreation facilities, maintain and provide equipment to participants of sporting events or recreational pursuits, or operate amusement concessions and rides."

Examples of job titles encompassed by this position include: activities attendant, coaster attendant, golf course ranger and starter, recreation attendant, recreation clerk, ride operator, ski lift operator, sports complex attendant. In Michigan, 57 percent of all *Amusement* and recreation attendants are employed by *Amusement parks and arcades* and *Other amusement and recreation*. The employment is highly concentrated in the Northwest Lower Peninsula of Michigan and the Upper Peninsula. These two areas of the state are known popular tourist locations.

Some of the responsibilities of this occupation include

- Selling tickets and collecting fees from customers
- Providing information about facilities, entertainment options, and rules and regulations
- Keeping informed of shutdown and emergency evacuation procedures
- Directing patrons to rides, seats, or attractions

 Monitoring activities to ensure adherence to rules and safety procedures, or arrange for the removal of unruly patrons

This is an entry-level occupation and does not require formal education credentials. Some skills that may be required are speaking, service orientation, active listening, and social perceptiveness. Short-term onboard training from employers may also be needed. This occupation may require work during the holiday and weekend, and often entails long hours spent standing.

Related occupations include

- Recreation workers
- Combined food preparation and serving workers, including fast food
- · Waiters and waitresses
- Cashiers
- · Counter and rental clerks



Source: May 2019 Occupational Employment and Wage Estimates, U.S. Bureau of Labor Statistics; 2018–2028 Employment Projections; Bureau of Labor Market Information and Strategic Initiatives, Michigan Department of Technology, Management & Budget

There are 2,120 projected total annual openings from 2018 to 2028 in Michigan for *Amusement and recreation attendants*, but most of those are from replacements or job transfers, as there is expected to be a small decrease in total employment. While a median wage of \$10.83 makes this one of the lowest wage occupations in the state, Michigan compared well with the rest of the U.S. ranking 19th for this occupation compared to 24th for overall statewide median. The area with the highest concentration, the Northwest Lower Peninsula, also had higher than normal wages for this occupation, ranking 141st out of 530 metropolitan and nonmetropolitan statistical areas in the U.S. compared to 287th for overall median wage.

**YAN XU** Economic Analyst

### MICHIGAN AMUSEMENT AND RECREATION ATTENDANTS PER 10,000 EMPLOYED

AREA	JOBS	JOBS PER 10,000 EMPLOYED	MEDIAN ANNUAL WAGE
Northwest Lower Peninsula	710	57.6	\$23,270
Upper Peninsula	410	36.9	\$22,450
Monroe	140	35.0	\$21,190
Jackson	160	29.1	\$22,350
Niles-Benton Harbor	170	27.4	\$23,730
Detroit-Warren-Dearborn	4,930	24.9	\$22,460
Michigan	10,270	23.7	\$22,520
Ann Arbor	530	23.6	\$21,140
Northeast Lower Peninsula	170	22.7	\$20,730
Bay City	70	22.5	\$22,230
Flint	290	21.0	\$21,990
Kalamazoo-Portage	300	20.7	\$26,110
Saginaw	170	20.1	\$22,250
Grand Rapids-Wyoming	1,040	18.2	\$22,060
Balance of Lower Peninsula	490	18.0	\$23,900
Lansing-East Lansing	340	15.8	\$22,270
Midland	50	14.1	\$22,710
Muskegon	*	*	\$22,220

Source: May 2019 Occupational Employment and Wage Estimates, U.S. Bureau of Labor Statistics \* Data is suppressed



## MICHIGAN ONLINE JOB ADS RISE IN SEPTEMBER

September 2020 had 156,807 total online job advertisements; this was up 9.7 percent (+13,897 ads) from the previous month. However, there was a slight downtick in new advertisements over the month as August had 66,669 and September had 62,514 new postings. Last September, there were 152,086 online ads, giving September 2020 a 3.1 percent increase (+4,721 ads) over the year.

## Supply/Demand Rate Continues to Inch Down

Michigan's supply/demand rate has been decreasing steadily each month bringing September 2020 to a rate of 2.54, the lowest rate since the peak of 9.97 in May. This shows there were approximately 254 unemployed individuals for every 100 open online job postings. Though this September brings another reduction in supply/demand rate, it remains more than double the rate of 1.14 in September 2019.

## Advertisements Advance for all Education Levels in September

In September 2020, 52 percent of online job ads specified an educational requirement. Over the month, all education levels experienced an uptick in request by employers. A bachelor's degree was requested in 24,736 online advertisements, a 13.7 percent increase (+2,985 ads) from August. Following behind was an associate degree with 5,802 ads requiring this level of educational attainment, a 12.0 percent growth (+623 ads) from August. Master's and higher was specified in 4,151 ads, an 11.3 percent rise (+423 ads), and high school diploma or vocational training was listed in 46,596 postings, an 8.3 percent increase (+3,563 ads) since August 2020. While all educational levels experienced a boost in request over the month, high school diploma or vocational training was the only level that had a positive change over the year with an 11.7 percent increase (+4,895 ads) since September 2019.

### All Occupation Groups Increase Job Postings

Non-seasonally adjusted occupational data is available through Burning Glass Technologies. The system offers job advertisement information based on broad occupation groups as well as detailed occupations. The top five most advertised occupational groups remained the same over the month; *Sales and related* (18,417 ads), *Office and administrative support* (16,300 ads), *Healthcare practitioners and technical* (14,441 ads), *Management* (13,090 ads), and *Transportation and material moving* (11,762 ads). Every occupational group observed a positive percent change over the month, ranging from 1.1 percent for *Personal care and service* to 22.9 percent for *Life, physical, and social science.* 

Over the year, three occupational groups expanded by over 50 percent in their online job postings. *Building and grounds cleaning and maintenance* experienced the largest rise in ads with 71.6 percent increase (+2,458 ads). Following behind were *Transportation and*  *material moving* with 69.9 percent gain (+4,838 ads), and *Construction and extraction* at 51.6 percent growth (+824 ads).

Once again, the *Sales and related* occupational group holds four out of the top five most advertised detailed occupations. Over the month, 18 of the top 20 detailed occupations had an increase in online job postings ranging from 1.4 percent for *Heavy and tractor-trailer truck drivers* to 15.0 percent for *Managers, all other*. The two groups that experienced a negative change were *Driver/sales workers* with a 10.0 percent decrease (-274 ads), and *First-line supervisors* with a 4.9 percent drop (-198 ads).

### Job Ads Climb Over the Month for Most Michigan Regions

In August, nine out of the 14 metropolitan statistical areas (MSAs) realized a reduction in job advertisements, in September however, 11 out of 14 witnessed growth in their job advertisements. Grand Rapids-Wyoming had a 19.6 percent increase with gains in many occupations, the most notable belonging to *Retail salespersons; Laborers and freight, stock, and material movers;* and *Customer service representatives.* Battle Creek had a 12.3 percent decrease with the biggest losses belonging to *Registered nurses, Customer service representatives,* and *Medical assistants.* 

TRISHA SCHLEGEL Economic Analyst

#### CHANGE IN JOB AD EDUCATION REQUIREMENT, SEPTEMBER 2019-SEPTEMBER 2020



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



Note: Roughly 34,000 postings did not have specific industry ties in the September 2020 data Source: Conference Board Help Wanted OnLine®, Burning Glass Technologies



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

## **RELEVANT RANKINGS**

### 2019 LEISURE AND HOSPITALITY AS PERCENT OF TOTAL PRIVATE JOBS BY STATE

RANK	STATE	LEISURE AND HOSPITALITY JOBS	PERCENT OF TOTAL PRIVATE JOBS
1	Nevada	355,000	28.4%
2	Hawaii	127,000	23.6%
3	Wyoming	37,000	17.5%
4	Montana	67,000	17.3%
5	Florida	1,257,000	16.1%
23	Idaho	83,000	13.1%
24	Texas	1,394,000	13.0%
25	Georgia	499,000	12.9%
26	Missouri	309,000	12.9%
27	Alabama	208,000	12.8%
42	Michigan	434,000	11.5%
46	New Jersey	392,000	11.2%
47 P	ennsylvania	578,000	11.0%
48	Iowa	144,000	11.0%
49	Minnesota	276,000	11.0%
50	Connecticut	158,000	10.9%

Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics



### 2019 LEISURE AND HOSPITALITY AS PERCENT OF TOTAL PRIVATE JOBS BY COUNTY

RANK	COUNTY	LEISURE AND HOSPITALITY JOBS	PERCENT OF TOTAL PRIVATE JOBS
1	Keweenaw	150	48.0%
2	Mackinac	1,650	45.9%
3	Benzie	1,300	35.0%
4	Cheboygan	1,400	26.7%
5	Antrim	1,100	25.6%
40	Schoolcraft	250	13.8%
41	Muskegon	7,400	13.4%
42	Washtenaw	18,100	13.3%
43	Wexford	1,550	13.1%
44	Alpena	1,150	13.1%
79	Hillsdale	750	6.9%
80	Ionia	1,150	6.8%
81	Gratiot	700	6.6%
82	Osceola	300	4.9%
83	Missaukee	100	3.7%

Source: Quarterly Census of Employment and Wages, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget

## ASK THE ECONOMIST

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Why is Economic Data Seasonally Adjusted and How Can Seasonally Adjusted Data be Used?

## Here's what you need to know...

Throughout the year, employment and unemployment, the size of the labor force, industry jobs, and other metrics of the labor market are affected by seasonal factors such as the weather, holidays, school schedules, and others. In Michigan for example, jobs in the Construction industry rise in the spring and peak in early summer. Construction employment starts to decline in early fall and bottoms out in the winter months. These employment changes are due to weather conditions, not underlying economic conditions. How can shifts in Construction jobs due to economic conditions be identified? One technique is called "seasonal adjustment." Seasonally adjusted data, when available, can be useful to users of economic information by providing a better look at the amount of monthly change that may have occurred beyond such seasonal influences.

Seasonal adjustment is a statistical method that measures and removes the effects of predictable seasonal patterns. This makes it easier to identify the true monthly movements in employment and unemployment due to economic factors.

## What Michigan Employment Data is Seasonally Adjusted?

Michigan labor market metrics that are seasonally adjusted each month come from two statistical programs: Local Area Unemployment Statistics (LAUS) and the Current Employment Statistics (CES).

LAUS produces estimates of civilian labor force, employment, unemployment, and the unemployment rate.

- Seasonally adjusted data is produced monthly for Michigan and for the Detroit-Warren-Dearborn metro area.
- Only unadjusted data is produced monthly for Michigan counties from this program. Unadjusted data is also available for Michigan and the Detroit-Warren-Dearborn region.

The CES program publishes monthly estimates of the number of jobs in Michigan and all metro areas for a wide variety of industries. The program also publishes data on average weekly hours, average hourly earnings, and average weekly earnings by industry.

 Seasonally adjusted data is published monthly for a number of Michigan detailed industries.

- For metro areas, only total nonfarm jobs are seasonally adjusted, but individual industry data for metro areas is only available on an unadjusted basis.
- Unadjusted data is available for all published industries for Michigan and state metro areas.

## How is Seasonal Adjustment Done?

The LAUS program uses time-series models to produce employment and unemployment estimates for Michigan and the Detroit-Warren-Dearborn metro area. Estimates for all states are forced to sum to national unadjusted estimates from the Current Population Survey (BLS 2001). The estimates are then seasonally adjusted using an X-11 type of seasonal adjustment filter. Then, the adjusted data are smoothed using a Reproducing Kernel Hilbert Space (RKHS) filter.

The CES program publishes seasonally adjusted data for nonfarm payroll employment series at the supersector and sector levels, as well as total nonfarm jobs for published metropolitan areas that have sufficient sample history and satisfy criteria for seasonal adjustment. Revisions of historical seasonal adjusted data for the most recent five years are made during the annual benchmark adjustment process.

CES uses a two-step seasonal adjustment method to address the hybrid nature of the CES time series. CES estimates reflect adjusted historical data from the Quarterly Census of Employment and Wages (QCEW), as well as current year data developed from a large sample survey of businesses. The seasonal variations of these two data sources can differ and cause distortions in the seasonally adjusted data unless adjusted separately.

This issue is addressed by using the seasonal trends found in universe-derived employment counts to adjust historical benchmark employment data while also incorporating sample-based seasonal trends to adjust samplebased current-year employment estimates. These two series are independently adjusted and then spliced together. By accounting for the differing seasonal patterns found in historical benchmark employment data and the samplebased employment estimates, this technique yields improved seasonally adjusted series with respect to analysis of month-to-month employment change. In 2018, the CES program converted to concurrent seasonal adjustment, which uses all available estimates, including those for the current month, in developing sample-based seasonal factors.

### When is it Best to Use Seasonally Adjusted Versus Unadjusted Data?

Seasonally adjusted data are useful when comparing data that span months with different seasonal influences, such as jobs in *Recreational services* from January to June. If *Retail* jobs drop sharply in January with the end of the holiday shopping season, seasonally adjusted data can help to see more clearly the underlying monthly job trend in that industry.

Unadjusted employment data is best to use when attempting to determine how many seasonal jobs are added to the Michigan economy in different industries. Since county LAUS data or metro area CES data is only available on an unadjusted basis, it should always be compared to unadjusted Michigan data, not the seasonally adjusted Michigan series.

When comparing Michigan data to information for the nation, it is important that the data used is consistent. Use seasonally adjusted or unadjusted data for Michigan and the U.S. for such a comparison, but be sure the data type is equivalent.

#### **References:**

U.S. Bureau of Labor Statistics (BLS). Last Modified October 16, 2001. "Labor Force Statistics from the Current Population Survey: What Is Seasonal Adjustment?" https://www.bls. gov/cps/seasfaq.htm,

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