

MICHIGAN'S LABOR MARKET NEWS

VOL. 76, NO. 12
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Remote Work Across Michigan

Feature Article pg. 16

Map of the Month: Percent Change in Population Across Michigan Counties, 2010–2019

pg. 15

Occupational Focus: Market Research Analysts and Marketing Specialists

pg. 20

Due to the impact of the pandemic, the 2020 Michigan jobless rate jumped to 9.7 percent. This was the highest annual rate since 2011.

DECEMBER 2020 JOBLESS RATE

MICHIGAN
7.5%
NATIONAL
6.7%

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IT'S BIGGER THAN DATA.

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

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

The Michigan jobless rate increased to 7.5 percent in December, as job losses in *Leisure and hospitality* fueled a 1.6 percent drop in total payroll jobs over the month. Over the year, the Michigan 2020 average jobless rate of 9.7 percent was more than double the 2019 rate.

While remote working arrangements have become increasingly common in the modern workplace, the COVID-19 pandemic has brought even more attention to the topic. This issue of *Michigan's Labor Market News* offers a brief look at how telework jobs vary across occupations and industries, and what that could mean for Michigan's regional economies during and after the pandemic. Our *Map of the Month* displays how the population has changed in each county while categorizing them using the U.S. Department of Agriculture's Rural-Urban designations. To close out the issue, our *Ask the Demographer* section discusses why defining areas as urban, suburban, and rural can be complex.

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.



SCOTT POWELL
DIRECTOR

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MICHIGAN DECEMBER JOBLESS RATE UP SIGNIFICANTLY

2020 RATE JUMPS DUE TO PANDEMIC

Michigan's seasonally adjusted unemployment rate rose by half a percentage point in December to 7.5 percent. This was the highest rate in the state since September. The state's November rate was revised upwards by a tenth of a percentage point, from 6.9 to 7.0 percent.

The national unemployment rate was unchanged in December at 6.7 percent. Michigan's December jobless rate was 0.8 percentage points above the U.S. rate. Over the year, the national jobless rate advanced by 3.1 percentage points, while the state rate moved up sharply by 3.6 percentage points due to the impact of the pandemic.

Michigan's employment total dropped significantly in December by 3.3 percent. The unemployment level in the state advanced by 4.1 percent between November and December, while unemployment edged up by 0.1 percent over the month in the U.S.

Since December 2019, Michigan employment fell sharply by 6.4 percent, a

decline slightly above that recorded nationally (-5.6 percent). The number of unemployed in the state surged by 88.0 percent over the year, reflecting pandemic-related job cuts. The national unemployment total rose by a similar 83.7 percent since December 2019. Michigan's workforce total moved down by 2.8 percent since December 2019, reflecting reductions in labor force participation with the pandemic.

Michigan's Annual Average Unemployment Rate Advances Over Year

The preliminary annual average jobless rate in Michigan during 2020 was 9.7 percent, over double the state jobless rate during 2019 (4.1 percent). This over-the-year jump reflected layoffs caused by the COVID-19 pandemic.

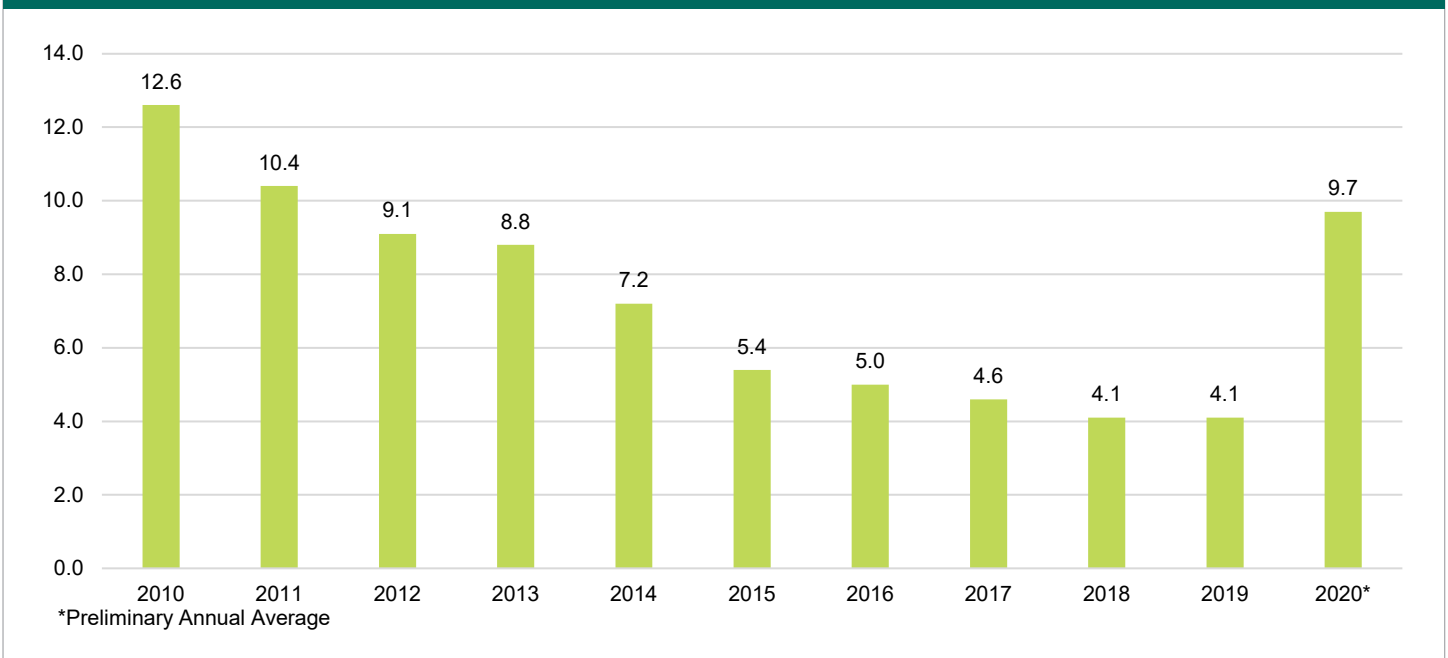
The increase in Michigan's jobless rate during 2020 was the first annual rate gain observed in the state since 2009. It was also the highest rate recorded in the state since 2011 (10.4

percent). The 2020 statewide jobless rate was 4.0 percentage points below the peak 2009 rate during the Great Recession (13.7 percent).

Total annual employment in Michigan plunged by 344,000, or 7.3 percent over the year. The average annual number of unemployed residents in Michigan rose sharply in 2020 by 269,000, or over 133 percent. The total annual workforce in the state moved down by 1.5 percent over the year.

SHIBANI PUTATUNDA
Economic Specialist

MICHIGAN ANNUAL AVERAGE JOBLESS RATE, 2010–2020 (PERCENT)



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

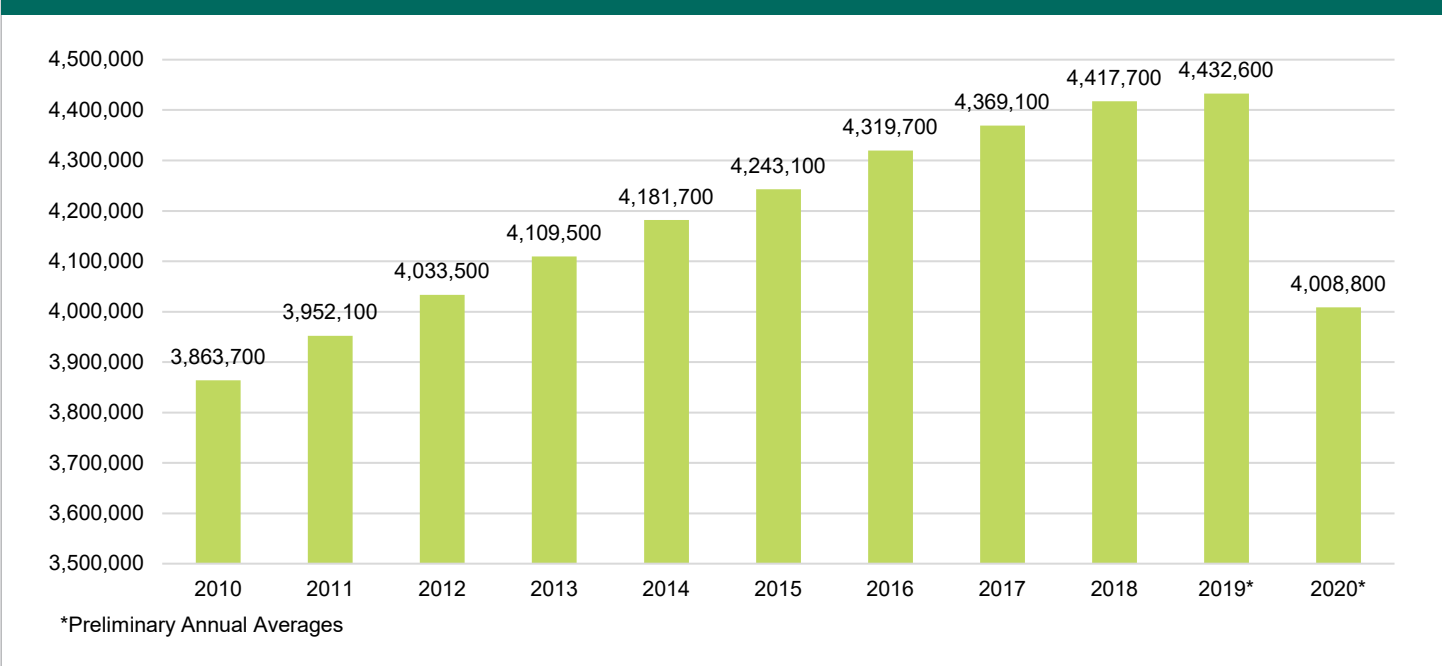


MICHIGAN LABOR FORCE ESTIMATES, DECEMBER 2020 (SEASONALLY ADJUSTED)

	DECEMBER 2020	NOVEMBER 2020	DECEMBER 2019	OVER THE MONTH		OVER THE YEAR	
				NUMERIC	PERCENT	NUMERIC	PERCENT
Civilian Labor Force	4,802,000	4,943,000	4,941,000	-141,000	-2.9%	-139,000	-2.8%
Employed	4,444,000	4,598,000	4,750,000	-154,000	-3.3%	-306,000	-6.4%
Unemployed	359,000	345,000	191,000	14,000	4.1%	168,000	88.0%
Unemployment Rate	7.5	7.0	3.9	0.5	XXX	3.6	XXX

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

MICHIGAN ANNUAL PAYROLL JOBS, 2010–2020



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

In December, Michigan recorded a significant monthly drop of 64,400 payroll jobs (-1.6 percent). This is the second largest monthly drop in employment in over 10 years, behind only April 2020. Nationally, employment declined marginally by 0.1 percent (-140,000 jobs) in December. This was the first month since April 2020 that the United States had a monthly employment drop.

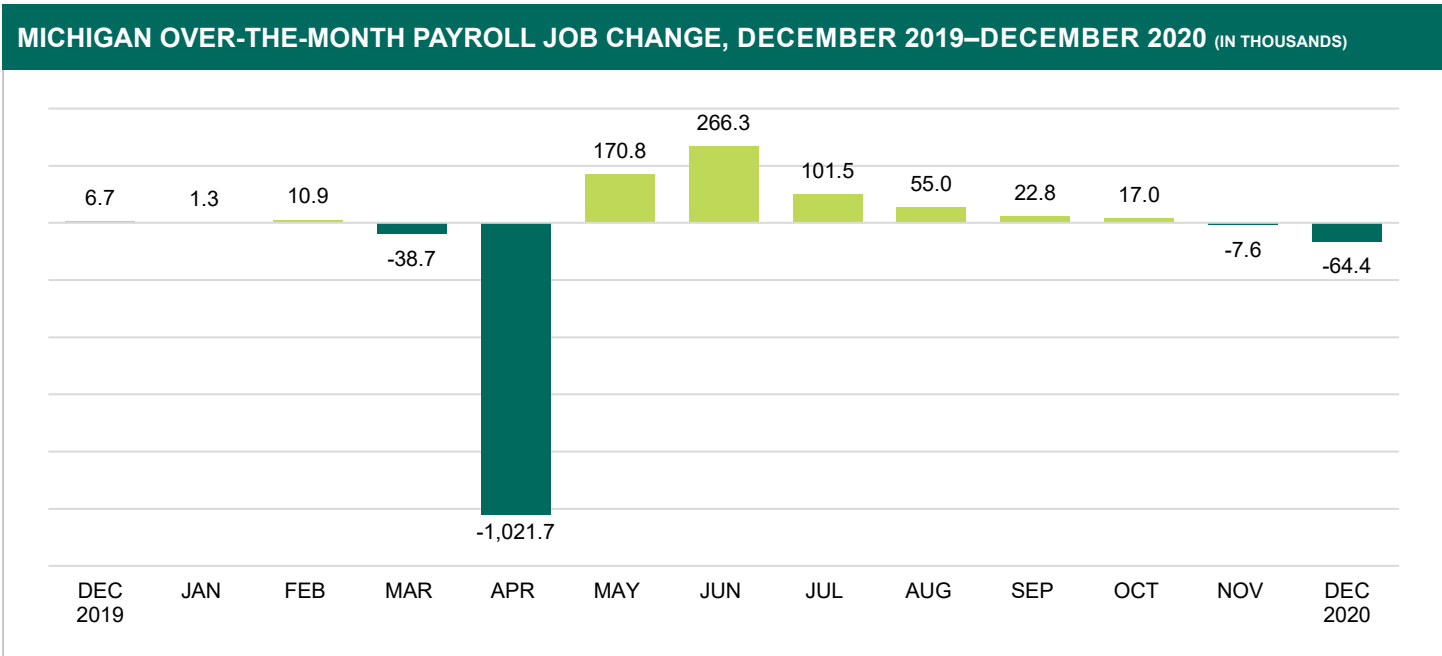
There were four industries that experienced employment growth in December, most notably *Trade, transportation, and utilities*, which moved

up by 8,200 jobs (+1.1 percent), and *Mining and logging*, which grew by 300 jobs (+4.7 percent). Although employment receded in seven major industries over the month, nearly all the December job loss can be attributed to the decline of 59,700 jobs in *Leisure and hospitality* and to a lesser extent, -7,900 in *Government*. These two industries were impacted substantially by efforts to mitigate the recent surge in coronavirus cases.

Over-the-Year Analysis

Since December 2019, Michigan nonfarm employment plunged by 10.9 percent or

486,800 jobs, on a seasonally adjusted basis. This was larger than the 6.2 percent loss of jobs nationally over the year. All major industries registered employment decreases compared to a year ago. The largest employment drop, both numerically and on a percentage basis, was in *Leisure and hospitality* which lost 205,000 jobs or 47.2 percent. Other sectors with sizable over-the-year withdrawals were *Manufacturing* (-9.8 percent) and *Other services* (-9.7 percent). *Construction's* reduction of 1.0 percent since December of 2019 was the smallest of all the major industry sectors.



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

MICHIGAN OVER-THE-YEAR EMPLOYMENT CHANGE BY INDUSTRY

INDUSTRY	ANNUAL AVERAGE EMPLOYMENT CHANGE FROM 2008 TO 2009		ANNUAL AVERAGE EMPLOYMENT CHANGE FROM 2019 TO 2020		
	NUMERIC	PERCENT	NUMERIC	PERCENT	
	TOTAL NONFARM	-291.6	-7.1%	-423.8	-9.6%
Goods Producing	Mining and Logging	-0.9	-12.1%	-0.7	-10.0%
	Construction	-25.9	-18.6%	-6.6	-3.8%
	Manufacturing	-107.8	-20.1%	-66.6	-10.6%
	Trade, Transportation & Utilities	-53.0	-6.9%	-42.4	-5.3%
Service Producing	Information	-3.8	-6.5%	-3.7	-6.6%
	Financial Activities	-10.5	-5.3%	-2.4	-1.1%
	Professional & Business Services	-63.2	-11.4%	-57.8	-8.8%
	Education & Health Services	1.8	0.3%	-52.7	-7.7%
	Leisure & Hospitality Services	-18.2	-4.7%	-139.4	-32.1%
	Other Services	-6.7	-3.9%	-21.7	-13.1%
	Government	-3.3	-0.5%	-29.7	-4.8%

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

HOW 2020 IMPACTED INDUSTRIES COMPARED TO 2009

Employment statewide was hit particularly hard in 2020. Not since the first year of the Great Recession in 2009 has there been this significant of a decline in employment within Michigan industries. By evaluating the change in annual average employment of each industry, comparisons can be made showing how each of the time periods challenged specific sectors.

Overall, the magnitude of the 2020 total nonfarm employment drop was larger than in 2009. However, the two years differ when comparing the broad *Goods producing* and *Service providing* groupings. The *Goods producing*

industries of *Mining and logging*, *Construction*, and *Manufacturing* recorded nearly double the employment declines in their annual average employment during 2009 than compared to the 2020 COVID-19 pandemic.

For most Service providing industries, the employment withdrawals in 2020 were many times greater than in 2009. The close face-to-face interaction within industries such as *Leisure and hospitality*, *Education and health*, and *Other services* made the impact of increased social distancing measures difficult for businesses to remain open. Other *Service providing* industries such as *Trade, transportation, and utilities*, *Financial activities*, and *Professional and*

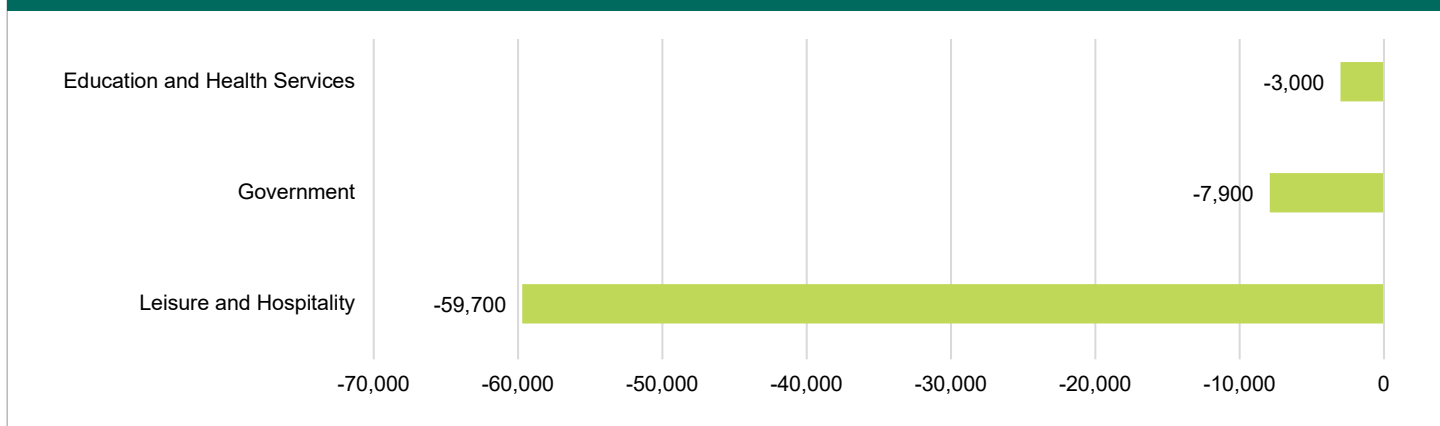
business services logged greater annual average employment decreases in 2009 than in 2020.

Significant Industry Employment Developments

LEISURE AND HOSPITALITY

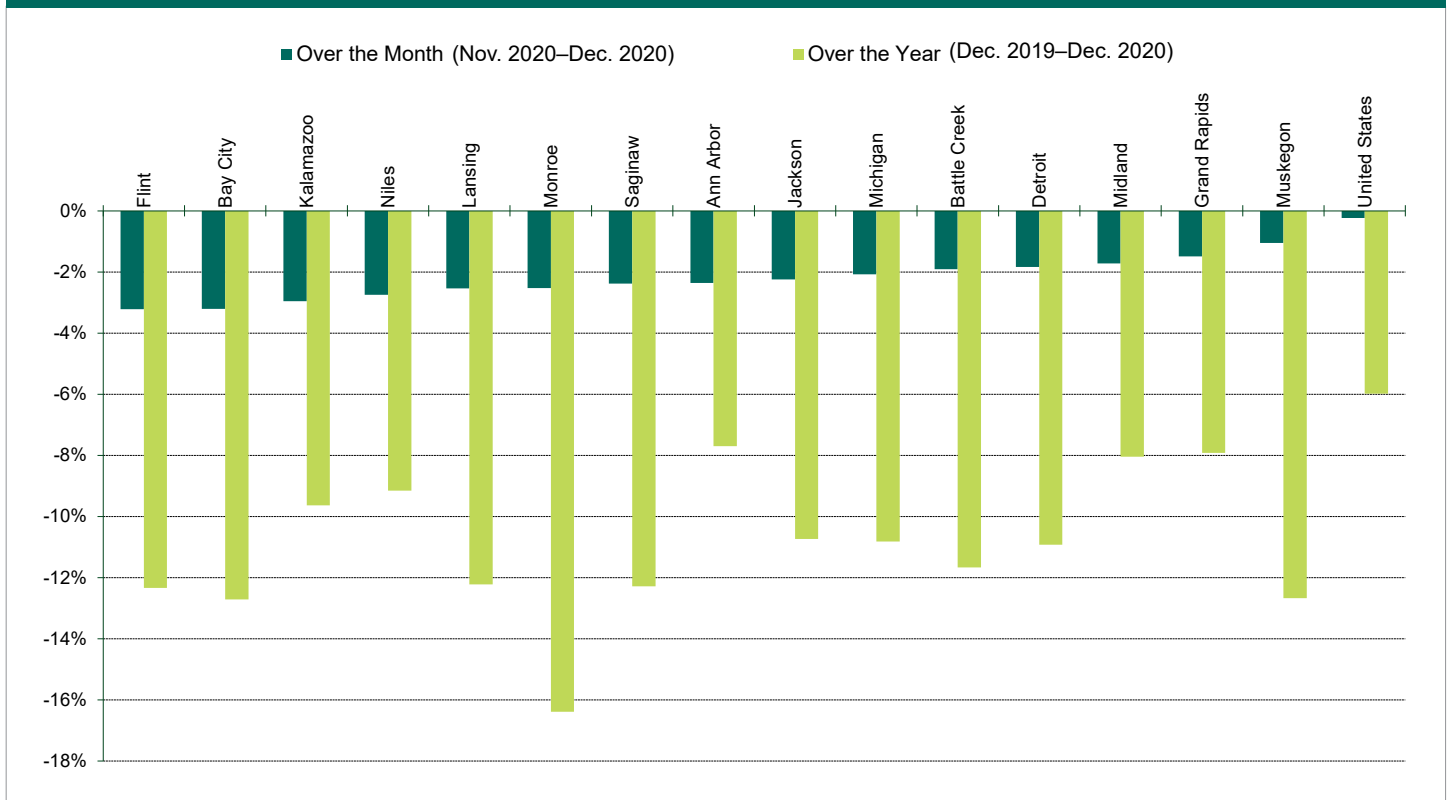
The *Leisure and hospitality* industry, which is made up of two subsectors, suffered substantially under social distancing recommendations that were put in place to help mitigate the spread of the coronavirus. Employment in the *Accommodation and food services* industry fell by 20.0 percent over the month (-52,000), which made up the bulk of the employment decline statewide. Over the year, this industry lost over 45 percent of

MICHIGAN OVER-THE-MONTH JOB CHANGE BY SELECT INDUSTRY, NOVEMBER–DECEMBER 2020



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

MICHIGAN METROPOLITAN AREA JOB CHANGE (NOT SEASONALLY ADJUSTED)



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

its employment. The *Arts, entertainment, and recreation* decrease of 26.4 percent, while larger than the other subsector, accounted for only 7,700 of the 59,700 lost jobs since November 2020. As of December 2019, the *Arts, entertainment, and recreation* sector lost nearly 60.0 percent of its employment.

GOVERNMENT

While smaller than the monthly drop in employment in *Leisure and hospitality*, total jobs in the *Government* sector had the second largest monthly decrease among Michigan major industries. The industry lost 7,900 jobs since November, as all three subsectors within *Government* recorded declines. Total jobs in *Local government* dipped by 6,100 (-1.8 percent) while *State government* employment moved down by 1,000. *Federal government* jobs at the statewide level declined by only 100 (-0.2 percent) over the month. In 2020, employment in *Local government* fell to its lowest level prior to 1990 and stayed near this low point throughout the year. Although *State government* employment reached a new series high of 196,400 jobs in December 2019, total industry jobs have since dropped to job levels similar to those recorded in 2008. Total employment in Michigan's *Federal government* subsector has remained between 50,000 and 55,000, since 2004.

EDUCATION AND HEALTH SERVICES

The December decrease in *Education and health services* was relatively small, showing a drop of 3,000 (-0.5 percent) jobs over the month. The subsector of *Education services* declined by 2,100 (-3.7 percent) since November 2020. Over the year however, this industry's employment tumbled 19,300, or nearly 26 percent. *Educational services* employment is now trending at 20-year job level lows. The *Health care and social assistance* sector accounted for over 14 percent of Michigan's employment in December. This industry dipped by only 900 jobs in December 2020 but fell 39,400 over the year. Typically, Michigan employment in *Health care and social assistance* maintained growth despite shocks to the economy. However, the effects of the COVID-19 pandemic brought annual average employment in this sector down by 6.5 percent over the year, which was the first annual average job decrease for this sector since 1998.

Metropolitan Statistical Areas (MSAs)

All 14 of Michigan's Metropolitan Statistical Areas (MSAs) recorded employment declines in December, on a not seasonally adjusted basis. Total employment declines among all metro

areas in the same month is not an unusual occurrence, as this was last observed between November and December of 2018. However, the magnitude of the over-the-month and over-the-year declines in all areas was substantial.

Since November, Flint and Bay City suffered the greatest employment losses on a percentage basis (-3.2 percent), followed closely by Kalamazoo (-3.0 percent). Like Michigan, all areas saw their greatest declines in the *Leisure and hospitality* industry. Employment decreases in this industry ranged from 10.9 percent in Muskegon to 33.3 percent in Monroe.

Over the year, Michigan's unadjusted employment drop was 10.8 percent. There were nine MSAs that had a decrease greater than this while the other five metro areas had decreases of less than 10.0 percent. Ann Arbor had the lowest over-the-year decrease (-7.7 percent) among Michigan's 14 metro regions, however, this was still greater than the nationwide over-the-year rate of decline (-6.0 percent).

WAYNE ROURKE
Associate Director



MICHIGAN PAYROLL JOBS (SEASONALLY ADJUSTED)

INDUSTRY	DECEMBER 2020	NOVEMBER 2020	DECEMBER 2019	OVER THE MONTH		OVER THE YEAR	
				LEVEL	PERCENT	LEVEL	PERCENT
TOTAL NONFARM	3,962,500	4,026,900	4,449,300	-64,400	-1.6%	-486,800	-10.9%
Total Private	3,399,300	3,455,800	3,833,100	-56,500	-1.6%	-433,800	-11.3%
Private Service-Providing	2,649,800	2,706,600	3,019,800	-56,800	-2.1%	-370,000	-12.3%
GOODS-PRODUCING	749,500	749,200	813,300	300	0.0%	-63,800	-7.8%
Mining, Logging, and Construction	181,900	183,400	184,200	-1,500	-0.8%	-2,300	-1.2%
Mining and Logging	6,700	6,400	7,300	300	4.7%	-600	-8.2%
Construction	175,200	177,000	176,900	-1,800	-1.0%	-1,700	-1.0%
Manufacturing	567,600	565,800	629,100	1,800	0.3%	-61,500	-9.8%
Durable Goods	420,400	417,700	473,000	2,700	0.6%	-52,600	-11.1%
Transportation Equipment Manufacturing	164,200	161,000	187,200	3,200	2.0%	23,000	-12.3%
Non-Durable Goods	147,200	148,100	156,100	-900	-0.6%	-8,900	-5.7%
SERVICE-PROVIDING	3,213,000	3,277,700	3,636,000	-64,700	-2.0%	-423,000	-11.6%
Trade, Transportation, and Utilities	773,000	764,800	803,600	8,200	1.1%	-30,600	-3.8%
Wholesale Trade	163,100	163,500	171,600	-400	-0.2%	-8,500	-5.0%
Retail Trade	445,800	438,300	464,700	7,500	1.7%	-18,900	-4.1%
Transportation, Warehousing, and Utilities	164,100	163,000	167,300	1,100	0.7%	-3,200	-1.9%
Information	50,300	50,800	54,600	-500	-1.0%	-4,300	-7.9%
Financial Activities	222,000	221,300	227,500	700	0.3%	-5,500	-2.4%
Finance and Insurance	170,300	169,900	170,400	400	0.2%	-100	-0.1%
Real Estate and Rental and Leasing	51,700	51,400	57,100	300	0.6%	-5,400	-9.5%
Professional and Business Services	602,900	604,300	652,800	-1,400	-0.2%	-49,900	-7.6%
Professional, Scientific, and Technical Services	287,700	286,500	297,200	1,200	0.4%	-9,500	-3.2%
Management of Companies and Enterprises	68,100	68,800	70,300	-700	-1.0%	-2,200	-3.1%
Administrative and Support and Waste Management and Remediation Services	247,100	249,000	285,300	-1,900	-0.8%	-38,200	-13.4%
Education and Health Services	623,800	626,800	682,500	-3,000	-0.5%	-58,700	-8.6%
Educational Services	55,200	57,300	74,500	-2,100	-3.7%	-19,300	-25.9%
Health Care and Social Assistance	568,600	569,500	608,000	-900	-0.2%	-39,400	-6.5%
Leisure and Hospitality	229,400	289,100	434,400	-59,700	-20.7%	-205,000	-47.2%
Arts, Entertainment, and Recreation	21,500	29,200	53,600	-7,700	-26.4%	-32,100	-59.9%
Accommodation and Food Services	207,900	259,900	380,800	-52,000	-20.0%	-172,900	-45.4%
Other Services	148,400	149,500	164,400	-1,100	-0.7%	-16,000	-9.7%
Government	563,200	571,100	616,200	-7,900	-1.4%	-53,000	-8.6%
Federal Government	51,600	51,700	51,800	-100	-0.2%	-200	-0.4%
State Government	172,900	174,600	196,400	-1,700	-1.0%	-23,500	-12.0%
Local Government	338,700	344,800	368,000	-6,100	-1.8%	-29,300	-8.0%

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

- Although joblessness in the Ann Arbor MSA increased by 0.2 percentage points in December to 3.6 percent, the region continued to retain the lowest unemployment rate among all Michigan metro areas.
- Total labor force in Ann Arbor fell by 7,500 or 3.8 percent over the month due mainly to a decrease in the employment count (-4.0 percent).

MONTHLY INDUSTRY DEVELOPMENTS

- Total nonfarm employment in the Ann Arbor region moved down by 5,200 or 2.4 percent in December, slightly more than the statewide rate of decline (-2.1 percent).

INDUSTRY TRENDS

- Minimal job gains in *Trade, transportation, and utilities* (+500) and *Professional and business services* (+200) were offset by significant job reductions within several major industry sectors including *Leisure and hospitality* and *Government*.

BAY CITY METROPOLITAN AREA

- The jobless rate in the Bay City (5.7 percent) region increased by 0.9 percentage points in December and by 1.5 percentage points over the year.
- The labor force in the area moved down by 3.4 percent this month due to a decline in the total number of employed individuals (-1,900) and an increase in the number of unemployed (+300).

MONTHLY INDUSTRY DEVELOPMENTS

- Total payroll jobs in the Bay City area decreased by 1,000 or 3.2 percent, which was tied for the largest over-the-month percent decline among all Michigan metro areas.

INDUSTRY TRENDS

- The majority of regional job loss occurred within the *Leisure and hospitality* sector, as pandemic-related job cuts resulted in a drop of 700 positions (-20.0 percent).

FLINT METROPOLITAN AREA

- The Flint regional jobless rate rose by 0.6 percentage points to 6.2 percent this month, 1.1 percentage points less than the statewide not seasonally adjusted jobless rate for December.
- The total number of employed residents declined by 7,600 (-4.5 percent) over the month and by 9.0 percent since December 2019.

MONTHLY INDUSTRY DEVELOPMENTS

- In December, total nonfarm payroll jobs in the Flint region decreased by 4,200 or 3.2 percent, tied with the Bay City MSA for the largest over-the-month percent job decline among all 14 metro areas.
- Employment in Flint area *Manufacturing* rose by 200 (+1.7 percent) since last month but was 2,200 below the year-ago level.

INDUSTRY TRENDS

- On a percentage basis, total regional jobs in *Leisure and hospitality* (-32.3 percent) fell by the second largest percent in December among all Michigan metro areas.

BATTLE CREEK METROPOLITAN AREA

- In December, the Battle Creek jobless rate rose by 0.5 percentage points to 5.8 percent.
- The regional labor force declined in December by 1,900 (-3.1 percent). A 6.1 percent metro area workforce drop over the year was well above the Michigan average.

MONTHLY INDUSTRY DEVELOPMENTS

- In the Battle Creek metro area, total nonfarm payroll jobs fell by 1,000 or 1.9 percent over the month.
- The *Leisure and hospitality* sector recorded the largest numeric decline (-600) of any industry within the region.

INDUSTRY TRENDS

- Total regional employment in the *Trade, transportation, and utilities* sector moved up by 200 and matched its year-ago job level (9,400).

DETROIT-WARREN-DEARBORN METRO AREA

- The Detroit MSA unemployment rate increased by 1.3 percentage points to 10.1 percent in December, the highest jobless rate among all major labor markets in Michigan.
- The number of employed persons in the region fell 73,000 (-3.6 percent) over the month, and was down 6.8 percent since December 2019, similar to the statewide over the year decline.

MONTHLY INDUSTRY DEVELOPMENTS

- Total nonfarm payroll jobs in the Detroit labor market dropped by 34,300 or 1.8 percent in December, the fourth lowest percent decline among all Michigan metro areas over the month.
- Major job reductions were recorded in the *Leisure and hospitality* (-29,200) sector this month, reflecting significant pandemic-related layoffs.

INDUSTRY TRENDS

- Over-the-month employment growth occurred for the eighth consecutive month within the *Trade, transportation, and utilities* sector (+1.8 percent), and the industry added 15,400 jobs over the past two months.

GRAND RAPIDS-WYOMING METRO AREA

- In the Grand Rapids MSA, the unemployment rate rose by 0.5 percentage points to 4.2 percent, the second lowest jobless rate among all Michigan metro areas this month.
- Total labor force in the region moved down by 15,700 (-2.7 percent) in December, which tracked with the statewide workforce rate of decline (-3.0 percent).

MONTHLY INDUSTRY DEVELOPMENTS

- Grand Rapids area payroll jobs fell by 7,900 or 1.5 percent since November, relatively less than the rate of decline at the statewide level (-2.1 percent).

INDUSTRY TRENDS

- Total jobs in the *Transportation, warehousing, and utilities* sector rose by 500 (+2.9 percent) over the month, producing a new record high job total of 17,900 in this industry.

CIVILIAN LABOR FORCE AND NONFARM PAYROLL JOBS

	ANN ARBOR			BATTLE CREEK			BAY CITY		
	DEC 2020	NOV 2020	DEC 2019	DEC 2020	NOV 2020	DEC 2019	DEC 2020	NOV 2020	DEC 2019
PLACE OF RESIDENCE									
Civilian Labor Force	192,200	199,700	200,300	58,600	60,500	62,400	45,600	47,200	49,500
Employed	185,300	193,000	196,100	55,200	57,300	60,200	43,000	44,900	47,400
Unemployed	7,000	6,700	4,300	3,400	3,200	2,200	2,600	2,300	2,100
Unemployment Rate	3.6	3.4	2.1	5.8	5.3	3.4	5.7	4.8	4.2
PLACE OF WORK									
Total Nonfarm Jobs	215,800	221,000	233,800	51,500	52,500	58,300	30,200	31,200	34,600
Mining, Logging, and Construction	4,500	4,600	4,900	1,500	1,600	1,600	1,300	1,300	1,300
Manufacturing	14,200	14,100	14,800	9,800	9,700	11,300	3,200	3,300	4,500
Trade, Transportation, and Utilities	26,600	26,100	27,200	9,400	9,200	9,400	7,400	7,300	7,400
Wholesale Trade	6,200	6,200	6,600	*	*	*	*	*	*
Retail Trade	16,000	15,700	16,300	6,100	6,000	6,000	4,600	4,600	4,800
Information	5,500	5,500	5,600	*	*	*	300	300	300
Financial Activities	6,600	6,500	6,900	1,100	1,100	1,200	1,200	1,200	1,300
Professional and Business Services	28,000	27,800	31,100	5,200	5,300	5,900	2,100	2,100	2,300
Educational and Health Services	28,000	28,300	30,100	9,900	10,000	10,800	5,900	6,000	6,500
Leisure and Hospitality	9,500	12,900	17,900	2,600	3,200	4,600	2,800	3,500	4,100
Other Services	5,800	5,900	6,300	1,800	1,800	2,100	1,100	1,100	1,200
Government	87,100	89,300	89,000	9,900	10,300	11,100	4,900	5,100	5,700
DETROIT-WARREN-DEARBORN									
FLINT									
GRAND RAPIDS-WYOMING									
	DEC 2020	NOV 2020	DEC 2019	DEC 2020	NOV 2020	DEC 2019	DEC 2020	NOV 2020	DEC 2019
PLACE OF RESIDENCE									
Civilian Labor Force	2,158,000	2,207,000	2,163,000	171,100	178,000	183,600	557,300	573,000	575,900
Employed	1,940,000	2,013,000	2,082,000	160,400	168,000	176,300	534,000	551,600	561,900
Unemployed	217,000	194,000	81,000	10,700	10,000	7,300	23,300	21,400	13,900
Unemployment Rate	10.1	8.8	3.8	6.2	5.6	4.0	4.2	3.7	2.4
PLACE OF WORK									
Total Nonfarm Jobs	1,833,900	1,868,200	2,058,700	126,500	130,700	144,300	522,100	530,000	567,000
Mining, Logging, and Construction	69,800	74,900	73,300	5,300	5,600	5,700	27,100	27,600	25,800
Manufacturing	234,100	232,200	259,900	11,900	11,700	14,100	105,500	105,200	118,200
Trade, Transportation, and Utilities	376,000	369,400	396,700	30,100	29,800	30,600	95,100	93,200	98,600
Wholesale Trade	79,200	79,800	85,900	5,700	5,700	5,800	30,500	30,300	32,600
Retail Trade	207,500	202,200	217,900	19,900	19,700	19,900	46,700	45,500	48,500
Information	25,300	25,500	26,300	3,100	3,100	3,500	6,000	6,100	6,400
Financial Activities	117,300	116,600	121,200	5,700	5,700	6,200	26,800	26,800	27,000
Professional and Business Services	368,000	372,000	391,500	16,300	16,200	17,300	71,300	73,000	74,500
Educational and Health Services	281,200	282,600	324,300	23,900	24,200	26,800	90,200	90,400	95,100
Leisure and Hospitality	111,300	140,500	197,600	8,400	12,400	15,600	31,700	38,900	48,400
Other Services	71,100	71,300	74,600	5,000	5,100	5,300	21,300	21,400	22,700
Government	179,800	183,200	193,300	16,800	16,900	19,200	47,100	47,400	50,300

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 region increased by 0.6 percentage points in December to 5.2 percent, 2.1 percentage points lower than the statewide rate.
- The total number of employed residents dropped significantly by 2,900 or 4.2 percent since last month, as the number of unemployed edged up by 300.

MONTHLY INDUSTRY DEVELOPMENTS

- Industry jobs in the Jackson metro area moved down by 1,200 or 2.2 percent over the month.
- Area job additions were limited to a seasonal gain in *Trade, transportation, and utilities*.

INDUSTRY TRENDS

- Although the *Leisure and hospitality* sector (-900) had the largest numeric December job drop among all industries in the Jackson MSA, its percent decline (-20.5 percent) was similar to the statewide average for this industry.

KALAMAZOO-PORTAGE METRO AREA

- The unemployment rate in the Kalamazoo metro area moved up by 0.6 percentage points in December to 4.7 percent.
- Unemployment in the region rose by 2,400 or 47.1 percent over the past year, considerably below the sharp jump in the number of unemployed statewide since December 2019 (+98.3 percent).

MONTHLY INDUSTRY DEVELOPMENTS

- In December, total payroll jobs in the Kalamazoo MSA fell by 4,200 or 3.0 percent.
- Significant job reductions in *Leisure and hospitality* (-3,000), *Government* (-800), and *Professional and business services* (-400) contributed the most to the area's total nonfarm employment decline.

INDUSTRY TRENDS

- Since December 2019, total regional jobs in *Mining, logging, and construction* advanced by 6.3 percent (+400).

LANSING-EAST LANSING METRO AREA

- The Lansing regional jobless rate rose by 0.5 percentage points over the month to 4.4 percent.
- Workforce in the metro area declined sharply by 8,900 or 3.7 percent in December. Despite this labor force drop, the number of area unemployed actually moved up by 700, resulting in the jobless rate gain.

MONTHLY INDUSTRY DEVELOPMENTS

- Total nonfarm jobs in the Lansing labor market dropped by 5,500 or 2.5 percent over the month.

INDUSTRY TRENDS

- Regional payroll jobs in the *Professional and business services* sector fell by 1,300 or 5.2 percent in December, the largest percent reduction for this industry among all statewide metro areas.

MIDLAND METROPOLITAN AREA

- The Midland regional unemployment rate increased by 0.7 percentage points in December to 4.5 percent. This was 1.2 percentage points higher than the year-ago rate.
- Employment in the metro area fell by 1,400 (-3.7 percent) this month and was down 2,400 (-6.2 percent) over the year.

MONTHLY INDUSTRY DEVELOPMENTS

- Regional employment in the Midland MSA decreased by 600 or 1.7 percent in December, 0.4 percentage points less than the statewide rate of decline.

INDUSTRY TRENDS

- Total *Government* jobs remained unchanged over the month in the Midland metro area, and were also little changed since December 2019 (+100).

MONROE METROPOLITAN AREA

- Joblessness in the Monroe MSA rose by 0.5 percentage points to 4.7 percent in December, notably higher than its year-ago rate (3.0 percent)
- Total regional labor force declined by 2,200 (-3.1 percent) over the month, which tracked with the statewide workforce reduction (-3.0 percent).

MONTHLY INDUSTRY DEVELOPMENTS

- Total nonfarm employment in the Monroe labor market fell by 900 or 2.5 percent since last month and was down 6,800 (-16.4 percent) over the year.

INDUSTRY TRENDS

- December job reductions in the Monroe metro area were largely pandemic-related layoffs in the *Leisure and hospitality* sector (-900).

MUSKEGON METROPOLITAN AREA

- The unemployment rate in the Muskegon metro area edged up by 0.3 percentage points to 6.7 percent in December.
- Total unemployment in the region stayed relatively unchanged over the month but was still up considerably compared with December 2019 (+2,000).

MONTHLY INDUSTRY DEVELOPMENTS

- Total nonfarm payroll jobs in the Muskegon MSA fell by 600 or 1.1 percent in December, the smallest percent decline among all 14 metro areas in Michigan.

INDUSTRY TRENDS

- Minimal December job gains in *Retail trade* (+300) and *Manufacturing* (+100) were offset by employment cuts in *Leisure and hospitality* (-500).

CIVILIAN LABOR FORCE AND NONFARM PAYROLL JOBS

	JACKSON			KALAMAZOO-PORTAGE			LANSING-EAST LANSING		
	DEC 2020	NOV 2020	DEC 2019	DEC 2020	NOV 2020	DEC 2019	DEC 2020	NOV 2020	DEC 2019
PLACE OF RESIDENCE									
Civilian Labor Force	69,900	72,500	74,000	160,500	167,000	168,900	230,700	239,600	249,700
Employed	66,200	69,100	71,600	153,000	160,100	163,800	220,600	230,200	243,000
Unemployed	3,700	3,400	2,400	7,500	6,800	5,100	10,100	9,400	6,700
Unemployment Rate	5.2	4.6	3.2	4.7	4.1	3.0	4.4	3.9	2.7
PLACE OF WORK									
Total Nonfarm Jobs	52,400	53,600	58,700	137,800	142,000	152,500	211,200	216,700	240,600
Mining, Logging, and Construction	2,100	2,200	2,000	6,700	6,900	6,300	7,200	7,400	7,800
Manufacturing	8,400	8,400	9,500	20,700	20,700	23,400	16,600	16,400	19,000
Trade, Transportation, and Utilities	10,800	10,600	12,500	24,800	24,400	27,100	34,800	34,200	37,900
Wholesale Trade	*	*	*	5,800	5,800	6,300	6,000	6,000	6,400
Retail Trade	6,400	6,400	6,600	14,600	14,300	16,500	20,800	20,400	22,800
Information	200	200	200	600	600	700	2,800	2,900	2,900
Financial Activities	2,200	2,200	2,200	8,100	8,100	8,100	16,700	16,600	17,100
Professional and Business Services	5,900	6,000	6,100	17,500	17,900	18,100	23,500	24,800	24,800
Educational and Health Services	9,200	9,300	10,300	23,100	23,300	25,400	30,300	30,500	33,000
Leisure and Hospitality	3,500	4,400	5,200	11,300	14,300	15,600	11,700	14,700	18,800
Other Services	2,400	2,400	2,600	4,900	4,900	5,200	9,000	9,100	10,000
Government	7,700	7,900	8,100	20,100	20,900	22,600	58,600	60,100	69,300
MIDLAND									
MONROE									
MUSKEGON									
	DEC 2020	NOV 2020	DEC 2019	DEC 2020	NOV 2020	DEC 2019	DEC 2020	NOV 2020	DEC 2019
PLACE OF RESIDENCE									
Civilian Labor Force	37,800	39,000	39,800	69,100	71,300	75,200	72,600	74,500	76,900
Employed	36,100	37,500	38,500	65,800	68,300	72,900	67,700	69,700	74,000
Unemployed	1,700	1,500	1,300	3,200	3,000	2,300	4,900	4,800	2,900
Unemployment Rate	4.5	3.8	3.3	4.7	4.2	3.0	6.7	6.4	3.8
PLACE OF WORK									
Total Nonfarm Jobs	34,300	34,900	37,300	34,700	35,600	41,500	56,500	57,100	64,700
Mining, Logging, and Construction	*	*	*	1,600	1,700	1,800	2,800	2,800	2,600
Manufacturing	*	*	*	4,800	4,800	5,700	11,700	11,600	13,800
Trade, Transportation, and Utilities	*	*	*	10,100	10,000	10,800	13,400	13,300	14,400
Wholesale Trade	*	*	*	1,700	1,700	1,700	*	*	*
Retail Trade	*	*	*	4,300	4,300	4,800	10,700	10,400	11,500
Information	*	*	*	*	*	*	200	200	300
Financial Activities	*	*	*	900	900	900	1,700	1,700	1,800
Professional and Business Services	*	*	*	4,400	4,400	5,700	3,600	3,700	3,600
Educational and Health Services	*	*	*	4,500	4,500	5,000	10,500	10,500	11,800
Leisure and Hospitality	*	*	*	1,800	2,700	4,200	4,100	4,600	7,200
Other Services	*	*	*	1,300	1,300	1,500	1,600	1,700	2,000
Government	3,100	3,100	3,000	5,000	5,000	5,500	6,900	7,000	7,200

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

NILES-BENTON HARBOR METRO AREA

- The Niles-Benton Harbor regional jobless rate advanced by 0.7 percentage points in December to 5.4 percent. The area jobless rate was nearly two percentage points below the Michigan rate.
- The area labor force fell sharply by 2,400 (-3.3 percent) in December, accompanied by a significant reduction in the number of employed.

MONTHLY INDUSTRY DEVELOPMENTS

- Niles-Benton Harbor payroll jobs fell over the month by 1,600 or 2.7 percent.
- Total jobs in the *Leisure and hospitality* sector declined by 800 (-15.7 percent) since last month, the second smallest percent reduction for this industry among all other Michigan metro areas.

INDUSTRY TRENDS

- Nonfarm payroll jobs in the region dropped significantly by 5,700 or 9.1 percent since December 2019, however this was still below the statewide pace of job decline (-10.8 percent).

SAGINAW METROPOLITAN AREA

- Regional joblessness in the Saginaw metro area moved up in December by 0.6 percentage points to 6.0 percent.
- A monthly decrease in the total number of employed residents (-3,200) combined with an increase in the number of unemployed (+400) produced the December rise in the area jobless rate.

MONTHLY INDUSTRY DEVELOPMENTS

- Saginaw nonfarm payroll jobs decreased by 1,900 or 2.4 percent over the month and fell sharply by 12.3 percent over the year.
- Since a sharp pandemic-related drop of 2,200 jobs in April 2020, the *Professional and business services* sector has recalled workers and added jobs in five of the last eight months.

INDUSTRY TRENDS

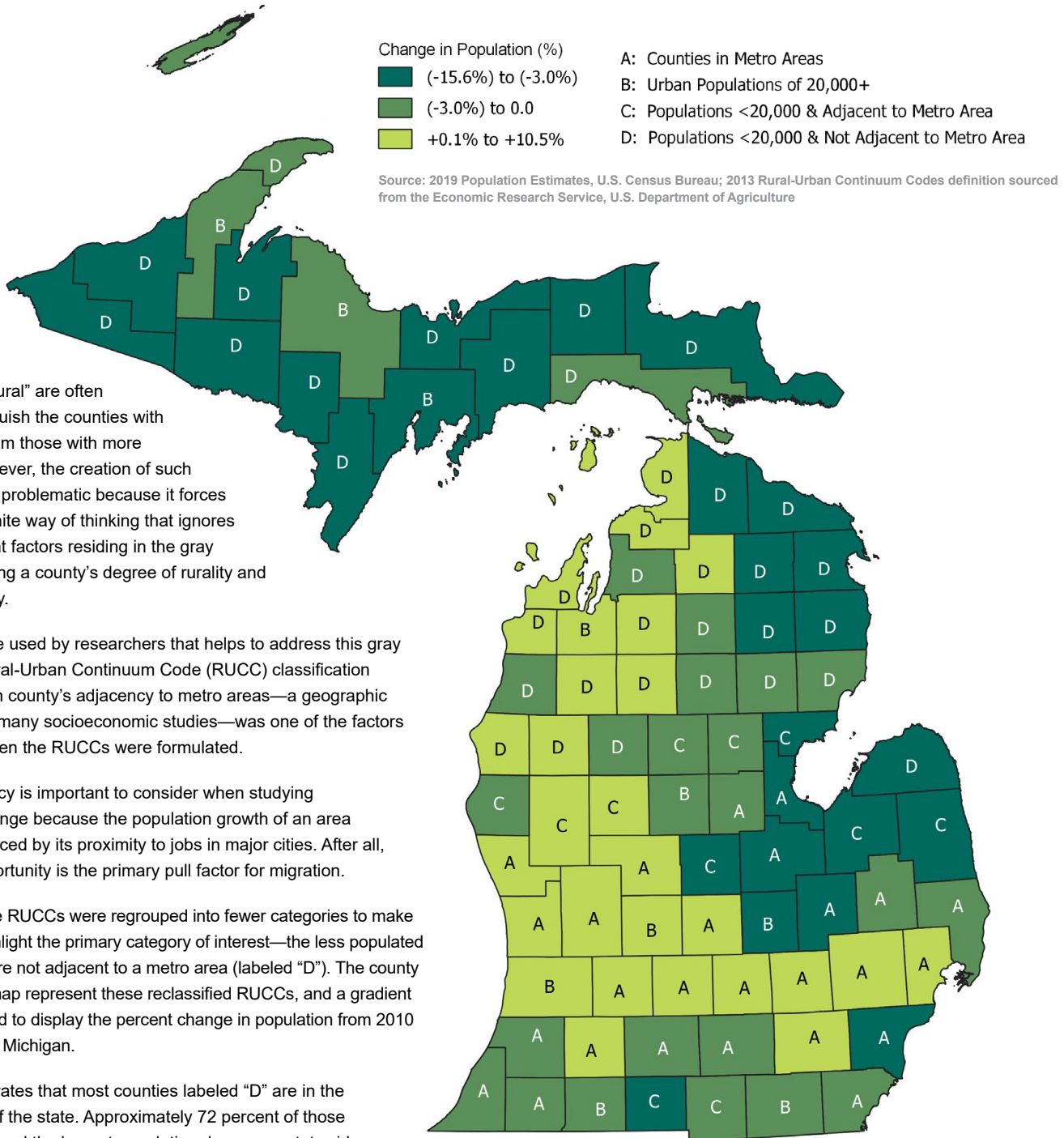
- The majority of monthly job loss in the region occurred within the *Service providing* (-1,600) sector, concentrated among pandemic-related layoffs in *Leisure and hospitality*.

CIVILIAN LABOR FORCE AND NONFARM PAYROLL JOBS

	NILES-BENTON HARBOR			SAGINAW					
	DEC 2020	NOV 2020	DEC 2019	DEC 2020	NOV 2020	DEC 2019			
PLACE OF RESIDENCE									
Civilian Labor Force	69,400	71,800	72,400	80,500	83,400	86,700			
Employed	65,700	68,500	69,800	75,700	78,900	83,100			
Unemployed	3,700	3,400	2,600	4,900	4,500	3,500			
Unemployment Rate	5.4	4.7	3.6	6.0	5.4	4.1			
PLACE OF WORK									
Total Nonfarm Jobs	56,600	58,200	62,300	77,800	79,700	88,700			
Mining, Logging, and Construction	2,700	2,800	2,500	2,700	2,900	3,000			
Manufacturing	13,200	13,000	13,000	10,500	10,600	12,300			
Trade, Transportation, and Utilities	10,100	10,100	11,000	16,100	15,800	17,700			
Wholesale Trade	*	*	*	1,900	1,900	1,900			
Retail Trade	6,000	6,100	7,000	11,400	11,200	12,900			
Information	400	400	500	1,100	1,000	1,200			
Financial Activities	2,400	2,400	2,500	3,600	3,600	3,800			
Professional and Business Services	5,200	5,400	5,300	10,400	10,400	11,500			
Educational and Health Services	8,800	9,300	9,600	14,800	14,700	16,000			
Leisure and Hospitality	4,300	5,100	6,900	5,300	7,100	8,800			
Other Services	2,000	2,000	2,300	3,100	3,100	3,200			
Government	7,500	7,700	8,700	10,200	10,500	11,200			
UPPER PENINSULA									
	DEC 2020	NOV 2020	DEC 2019	NORTHEAST MICHIGAN					
				DEC 2020	NOV 2020	DEC 2019	NORTHWEST MICHIGAN		
				DEC 2020	NOV 2020	DEC 2019	DEC 2020	NOV 2020	DEC 2019
PLACE OF RESIDENCE									
Civilian Labor Force	132,800	137,300	135,700	74,700	79,100	79,700	141,400	151,800	147,000
Employed	125,900	131,500	128,100	69,300	74,700	74,300	133,100	145,500	140,700
Unemployed	7,000	5,800	7,600	5,400	4,300	5,400	8,200	6,300	6,300
Unemployment Rate	5.3	4.3	5.6	7.2	5.5	6.8	5.8	4.2	4.3

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: PERCENT CHANGE IN POPULATION ACROSS MICHIGAN COUNTIES, 2010–2019



“Urban” and “rural” are often used to distinguish the counties with larger cities from those with more farmland. However, the creation of such dichotomies is problematic because it forces a black and white way of thinking that ignores many important factors residing in the gray areas—including a county’s degree of rurality and metro proximity.

One alternative used by researchers that helps to address this gray area is the Rural-Urban Continuum Code (RUCC) classification scheme.* Each county’s adjacency to metro areas—a geographic component of many socioeconomic studies—was one of the factors considered when the RUCCs were formulated.

Metro-adjacency is important to consider when studying population change because the population growth of an area may be influenced by its proximity to jobs in major cities. After all, economic opportunity is the primary pull factor for migration.

In this map, the RUCCs were regrouped into fewer categories to make it easier to highlight the primary category of interest—the less populated counties that are not adjacent to a metro area (labeled “D”). The county labels on the map represent these reclassified RUCCs, and a gradient of green is used to display the percent change in population from 2010 to 2019 across Michigan.

The map illustrates that most counties labeled “D” are in the northern half of the state. Approximately 72 percent of those counties observed the largest population decreases statewide, most prominently seen in the Upper Peninsula and the Northeastern Lower Peninsula.

However, some of least populated counties labeled “D”—located in the Northwest Lower Peninsula—observed a population increase over that time. Overall, this east-west divide shows that population change in a county cannot be explained by metro adjacency alone, and there are other broader, regional factors also at play.

*See “Ask the Demographer” article for RUCC details
Source: 2013 Urban-Rural Continuum Codes, Economic Research Service, U.S. Department of Agriculture,

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Demographic Analyst



REMOTE WORK ACROSS MICHIGAN

The COVID-19 pandemic greatly impacted Michigan businesses and workers in several ways. While a number of jobs were lost that required in-person contact and some businesses were forced to close up shop altogether, a portion of Michigan's workers shifted to telework options as a viable way to remain active in the state labor force. Knowing how many and what type of jobs can be performed from home provides valuable insights that show the impact of the pandemic across occupations, industries, and regions.

Method

In this article, jobs were weighted by the extent the nature of their work could be done from home, then tabulated by Michigan prosperity regions to estimate the share of all jobs that can be done from home. The job weights were adopted from research by Dingel and Neiman, who compiled a list of telework scores quantifying the extent that 765 occupations are unable or able to be done from home on a scale of zero to one, respectively.

They used responses to a selected set of questions from two O*NET surveys to classify the tele-workability of occupations according to the nature of their work. The first O*NET survey (called the Work Context Questionnaire) was designed to capture the "physical and social factors that influence the nature of work." The second survey (titled the Generalized Work Activities Questionnaire) included questions about the "general types of job behaviors occurring on multiple jobs," such as the input of information, interaction with others, mental

processes, and work output (Dingel and Neiman 2020).

For the analysis in this article, each of the 765 scores formulated from these survey responses were multiplied by the corresponding occupation's (pre-pandemic) employment numbers from 2019. The products and the total occupational employment numbers were then tabulated by Michigan prosperity region. A final calculation was then performed to show the share of total jobs where telework was possible for those areas.

Results showed that 33 percent of all Michigan jobs could be done from home, but these results varied across occupations, industries, and regions. Jobs that could be done from home also typically paid more than other jobs, and accounted for 43 percent of all Michigan wages. Although this is primarily an occupational analysis, some limited insight at the industry level is also provided.

Telework Jobs Vary Across Occupations and Industries

Aggregated to the major occupational group level, the share of jobs that can be performed at home varied significantly. Results showed those working in jobs associated with computers, education, law, business, finance, and management are largely able to work from home. Maintenance, construction, farm, and production workers often cannot because their jobs require their presence within a specific type of work environment (Dingel and Neiman 2020).

Figure 1 shows that the largest share of telework jobs in Michigan was in *Office and administrative support occupations* (26.2 percent), followed by *Education, training, and library occupations* (14.8 percent), *Business and financial operations occupations* (13.7 percent), and *Management occupations* (12.4 percent).¹

Within the *Office and administrative support* major occupational group, 26 percent of all telework jobs were *Office clerk occupations*, followed by *Customer service representatives* (15 percent), and *Secretaries/administrative assistants* (13 percent).

The top telework jobs in the *Education, training, and library* group were more evenly spread amongst *Elementary school teachers* (18 percent), *Teaching assistants* (16 percent) and *Secondary school teachers* (11 percent).

In the *Business and financial operations* occupational group, *Accountants and auditors*

FIGURE 1: 10 HIGHEST SHARES OF ALL TELEWORK JOBS AND WAGES IN MICHIGAN BY MAJOR OCCUPATIONAL GROUP, 2019

MAJOR OCCUPATIONAL GROUP	SHARE OF ALL TELEWORK JOBS	SHARE OF ALL TELEWORK WAGES
Office and Admin Support Occupations	26.2%	16.4%
Education, Training, and Library Occupations	14.8%	13.0%
Business and Financial Operations Occupations	13.7%	15.1%
Management Occupations	12.4%	21.0%
Sales and Related Occupations	8.0%	8.0%
Computer and Mathematical Operations Occupations	7.9%	10.0%
Architecture and Engineering Occupations	4.7%	6.5%
Personal Care and Service Occupations	2.9%	1.2%
Arts, Design, Entertainment, Sports, and Media Occupations	2.8%	2.4%
Legal Occupations	1.7%	2.3%
All Others	4.9%	4.1%

Source: 2019 Occupational Employment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget; telework definition determined by Dingel and Neiman (2020)

represented the largest share (18 percent) of telework jobs, followed by *Project management specialists* and *business operations specialists* (16 percent).

Lastly, *General and operations managers* represented over one-third (37 percent) of all *Management* telework jobs. When telework wages were summed by major occupational groups, the largest share was also earned by those working in *Management occupations*, which represented roughly one-fifth of all telework wages in Michigan.

On the other end of the spectrum are the jobs that largely cannot be done from home. Typically, these jobs must be done in a certain location and away from home where the workers must interact directly with customers or other employees. This includes the following major occupational groups representing less than a 0.1 percent share of all telework jobs in Michigan:

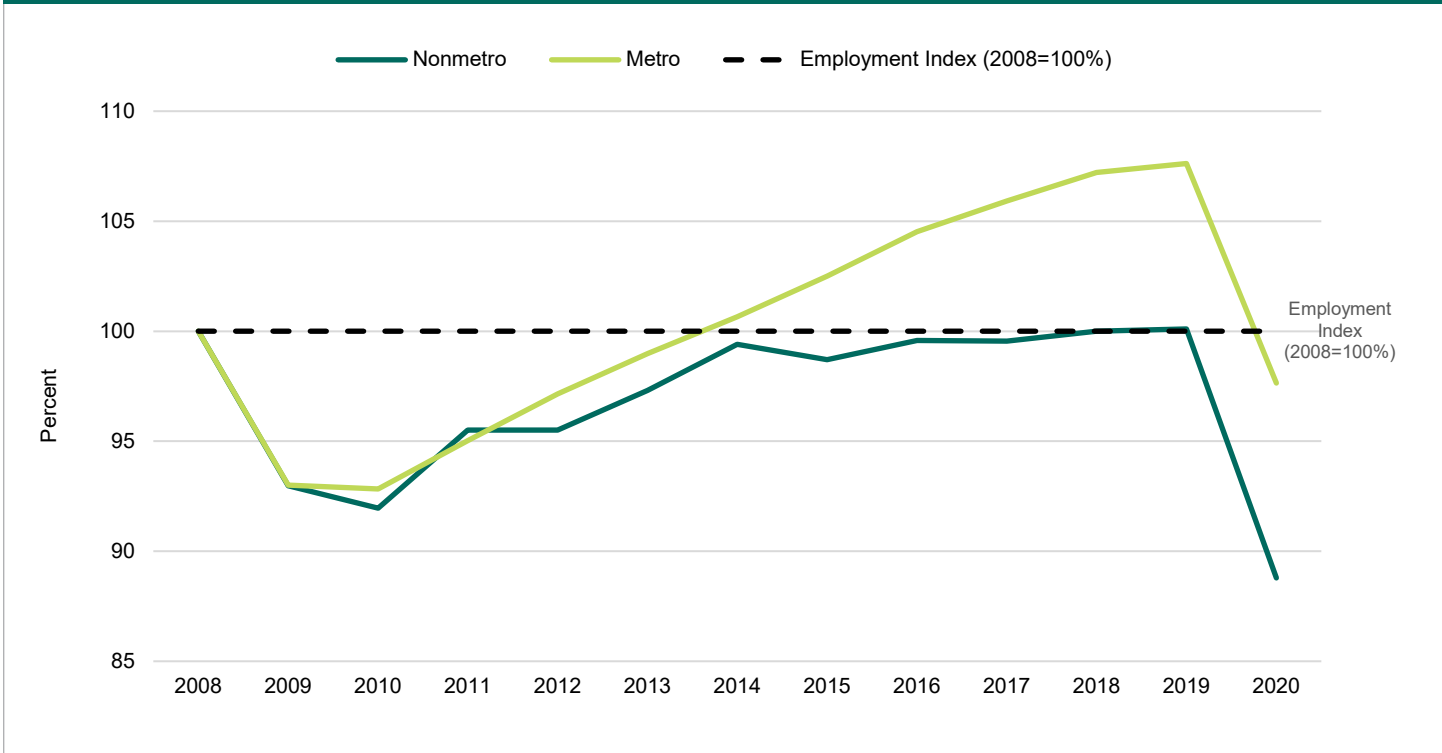
- *Food preparation and serving related occupations,*
- *Farming, fishery, and forestry occupations,*
- *Construction and extraction occupations, and*
- *Building and grounds cleaning and maintenance occupations.*

While a more extensive analysis would be needed in order to examine telework jobs at the industry level, some sectors have been identified at the national level as more or less telework friendly. Many jobs in retail and food service cannot be performed from home, and generally fall under the last two industries ranked in order of telework friendliness from greatest to least below (BLS 2019; Dingel and Neiman 2020).

- *Finance and insurance*
- *Information*
- *Wholesale trade*
- *Real estate*
- *Public administration*
- *Other services*
- *Management services*
- *Health care*
- *Manufacturing*
- *Transportation and warehousing*
- *Construction*
- *Retail trade*
- *Leisure and hospitality*

¹Note the classification used is considered an upper bound on what might be feasible in terms of telework, and the share of remote work jobs that have been performed entirely at home in recent years is likely lower. Only the job characteristics that clearly rule out the possibility of working entirely from home were used for the classification, and many characteristics that would make working from home difficult were neglected.

FIGURE 2: TOTAL NONFARM JOB GROWTH ACROSS METROPOLITAN AND NONMETROPOLITAN STATISTICAL AREAS IN MICHIGAN, 2008–2019, (NOT SEASONALLY ADJUSTED)



Source: 2008–2020 Current Employment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget

Non-Teleworkers Experienced More Job Loss During Pandemic, Earn Lower Wages

Understanding which industries were more or less telework-friendly is important to understanding some of the effects of the pandemic in Michigan. As might be expected, workers employed in industries where jobs cannot be performed from home were more likely to experience job loss during the pandemic.

In the October 2020 issue of *Michigan's Labor Market News*, it was noted that *Manufacturing* and *Leisure and hospitality*, both ranked fairly low on the list of teleworkable sectors, were the two most heavily impacted Michigan industries early on during the pandemic-related shutdowns. In that analysis, it was noted that *Leisure and hospitality* lost half of its job base (dropping roughly a quarter of a million jobs) between February and April 2020. *Manufacturing* lost over 180,000 jobs for the same period, and though recovering a good number of those losses by June, the sector's 70,000 fewer jobs between February and June was the second-largest drop nationally, behind only California (Reffitt and Palmer 2020).

While some of the jobs in *Leisure and hospitality* have been recovered, the industry took another significant hit toward the end of last year, when almost 59,000 jobs were lost over the last two months of 2020. As of December, there were still 193,000 fewer jobs than the pre-pandemic February level. Meanwhile, the state's *Manufacturing* sector remained 52,000 below its February 2020 level in December.

Aside from *Manufacturing* and *Construction*, many of the individuals working jobs that cannot be performed from home also earn relatively lower wages, making them even more vulnerable to the shocks associated with job loss.

On average, *Accommodation and food services* workers earn \$371 each week, the lowest weekly wage of all sectors. *Retail trade* workers had the second lowest, earning an average of \$616 a week. This is significantly lower than the average weekly wage of \$1,054 for all private industries. The combination of these factors indicates that the economic impact of the pandemic could be highly unequal, dramatically impacting some regions and industries while leaving others less severely affected.

Some of the jobs lost during the pandemic are expected to be reclaimed after the virus is contained through widespread vaccination. However, recovery may look different across regions. There are social and economic differences that may affect each region's trajectory toward recovery, but there is also an interdependence between regional economies that adds another layer to the uncertainty. Furthermore, every recession is surrounded by a unique set of circumstances that also influence how the recovery unfolds across regions.

Since the Great Recession, job recovery has been relatively strong across Michigan's metropolitan areas, and the number of 2019 jobs in these areas even exceeded the pre-recession (2008) number by 7.6 percent. Job recovery in nonmetropolitan areas,² on the other hand, has been less stable and much slower. Figure 2 shows that the nonmetropolitan areas only recently reached their (pre-recession) 2008 job totals in 2018—four years later than the metropolitan areas did in 2014. The most recent data shows the 2020 job losses for nonmetropolitan areas across Michigan were even more significant than the lowest level observed during the Great Recession in 2010.

²Nonmetropolitan areas were defined as the difference between the state of Michigan and metropolitan statistical areas

Share of Jobs That Can Be Done From Home Vary Across Michigan Prosperity Regions

Nonmetropolitan regions in the northern half of Michigan also had relatively lower shares of telework jobs when compared to regions in the southern half of the state where the most populated cities are located. This geographic pattern is evident when the shares of telework jobs are mapped across Michigan prosperity regions (see Figure 3).

One factor driving the difference is that northern Michigan and the Upper Peninsula (prosperity regions 1, 2, and 3 in Figure 3) have a dominant number of *Food preparation and serving related occupations* that cannot be performed from home.

These regions also had a less diverse mix of telework occupations than the southern half of Michigan, where *Business and financial operations occupations* were more prevalent. The most diversified mix of telework occupations was in the Detroit Metro area, which also had a relatively large share of *Computer and mathematical operations telework occupations* that were unique to that area.

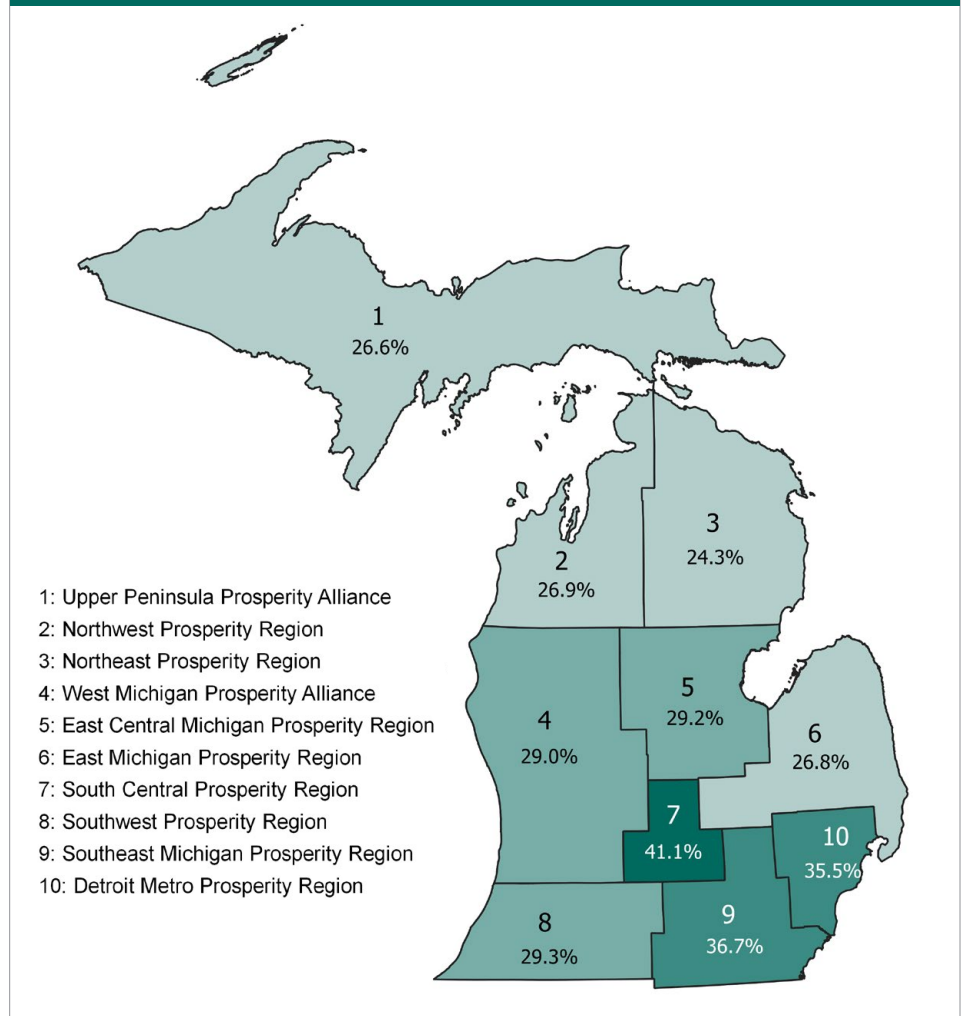
Prosperity regions in northern Michigan and the Thumb area (1, 2, 3, 5, and 6 in Figure 3) had higher than average shares of telework jobs in *Office and administrative support occupations*, although this major occupational group consistently represented the highest share of all telework jobs in every prosperity region.

Conclusion

Overall, the extent that jobs can be done from home varied across occupations, industries, and regions in Michigan, and telework jobs typically earn higher wages than jobs that cannot be performed from home. Although one-third of all Michigan jobs in 2019 could be done from home, it is important to remember that does not necessarily mean those jobs actually were—or will be—done from home.

However, the advent of the pandemic has sped up the normalization of telework, and it is even possible that it may become a more permanent fixture of workplace culture for some companies even after the pandemic ends. Microsoft and Google have already announced plans to permanently embrace remote work culture, although some companies are adopting a hybrid approach while others are going fully remote.

FIGURE 3: SHARE OF JOBS THAT CAN BE DONE FROM HOME ACROSS MICHIGAN PROSPERITY REGIONS



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

Widespread adoption of telework following the pandemic has the potential to influence migration and change the distribution of jobs by making them accessible from any place that has an internet connection. The very nature of telework eliminates the geographic constraint of the commute that has traditionally tied people to settle near the office. This presents an opportunity for some areas to transform their primary geographic disadvantage—job inaccessibility—to their advantage by building an attractive destination needed to compete for remote workers.

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ASHLEY TARVER
Demographic Analyst

OCCUPATIONAL FOCUS

MARKET RESEARCH ANALYSTS AND MARKETING SPECIALISTS

This month's Occupational Focus is on *Market research analysts and marketing specialists*, an occupation that is mostly able to work remotely. Roles for this occupation are primarily found in *Professional, scientific, and technical services; Management of companies and enterprises; Manufacturing; Finance and insurance; and Wholesale trade* industry sectors.

According to the U.S. Bureau of Labor Statistics (BLS), *Market research analysts and marketing specialists* "Research conditions in local, regional, national, or online markets. Gather information to determine potential sales of a product or service, or plan a marketing or advertising campaign. May gather information on competitors, prices, sales, and methods of marketing and distribution. May employ search marketing tactics, analyze web metrics, and develop recommendations to increase search engine ranking and visibility to target markets."

Examples of job titles encompassed by this position include business development specialist, communications specialist, demographic analyst, market analyst, market research analyst, market research consultant, market research specialist.

Some of the responsibilities of this occupation include

- Preparing reports of findings, illustrating data graphically and translating complex findings into written text
- Collecting and analyzing data on customer demographics, preferences, needs, and buying habits to identify potential markets and factors affecting product demand
- Conducting research on consumer opinions and marketing strategies, collaborating with marketing professionals, statisticians, pollsters, and other professionals
- Measuring and assessing customer and employee satisfaction
- Devising and evaluating methods and procedures for collecting data, such as surveys, opinion polls, or questionnaires, or arrange to obtain existing data

According to the BLS, over 80 percent of *Market research analysts and marketing specialists* obtained a bachelor's degree or higher, which is a typical education requirement for entry-level positions, while some research positions may require a master's degree. Strong math and analytical skills are essential. The technology requirements frequently included in employer job postings are analytical or scientific software, customer relationship management (CRM) software, data base user interface and query

software, and graphics or photo imaging software.

Related occupations include

- Marketing managers
- Compensation and benefits managers
- Management analyst
- Compensation, benefits, and job analysis specialist
- Survey researchers

This occupation has one of the brightest outlooks in the state. The long-term projected growth rate through 2028 is 15.1 percent, which is much higher than the Michigan projected 0.1 percent growth rate for all occupations. *Market research analysts and marketing specialists* are projected to have a total of 2,500 annual openings through 2028, which will mostly be driven by an increased use of data and market research across many industries. The median hourly wage for this occupation was \$29.66 which was 58.9 percent higher than the statewide median in 2019.

YAN XU
Economic Analyst

MICHIGAN MARKET RESEARCH ANALYSTS AND MARKETING SPECIALISTS BY THE NUMBERS



18,840

TOTAL
EMPLOYMENT 2019

14TH

NATIONAL
EMPLOYMENT RANK



43

JOB PER
10,000 TOTAL

0.94

LOCATION
QUOTIENT



\$61,690

MEDIAN
ANNUAL WAGE

\$29.66

MEDIAN
HOURLY WAGE



15.1%

2018–2028 PROJECTED
JOB GROWTH

2,500

PROJECTED ANNUAL
OPENINGS



**BACHELOR'S
DEGREE**

REQUIRED
EDUCATION

Source: 2019 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



MICHIGAN MARKET RESEARCH ANALYSTS AND MARKETING SPECIALISTS PER 10,000 EMPLOYED

STATE	MARKET RESEARCH ANALYSTS AND MARKETING SPECIALISTS	PER 10,000 EMPLOYED	LOCATION QUOTIENT	HOURLY MEDIAN WAGE	ANNUAL MEDIAN WAGE
Ann Arbor	1,300	58	1.3	\$31.93	\$66,420
Midland	190	56	1.2	\$21.84	\$45,420
Detroit-Warren-Dearborn	10,800	55	1.2	\$31.81	\$66,170
Grand Rapids-Wyoming	2,670	47	1.0	\$27.27	\$56,710
Michigan	18,840	43	0.9	\$29.66	\$61,690
Jackson	190	34	0.7	*	*
Lansing-East Lansing	680	31	0.7	\$25.96	\$54,000
Monroe	120	31	0.7	\$29.28	\$60,900
Northwest Lower Peninsula	360	29	0.6	\$22.02	\$45,800
Kalamazoo-Portage	400	28	0.6	\$23.25	\$48,360
Flint	320	23	0.5	\$27.4	\$56,990
Bay City	80	23	0.5	\$26.77	\$55,690
Niles-Benton Harbor	140	23	0.5	\$28.38	\$59,030
Battle Creek	120	22	0.5	*	*
Muskegon, MI	130	20	0.4	\$23.36	\$48,600
Upper Peninsula	200	18	0.4	\$20.32	\$42,270
Northeast Lower Peninsula	80	11	0.2	\$24.24	\$50,430
Saginaw	*	*	*	\$22.97	\$47,780

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



ONLINE JOB ADS DROP OVER THE YEAR IN MICHIGAN

Year-Over-Year Review

Looking at the entire year of 2020, there was an understandable drop in advertisements compared to 2019. In 2020, there were 801,691 total online job postings, down 3.5 percent from 830,797 ads in 2019. All levels of required education levels fell as well, ranging from a 6.5 percent drop for high school or vocational training to a decrease of 23.3 percent for associate degree requirements.

Within industries, the largest downturn in online job advertisements was attributed to *Arts, entertainment, and recreation* (-29.1 percent). However, a handful of industries did manage to experience growth in online job postings throughout 2020 with the top three being *Agriculture, forestry, fishing and hunting* (+44.8 percent), *Administrative and support and waste management and remediation services* (+23.9 percent), and *Construction* (+21.2 percent).

Online Job Ads Lower in December

In December 2020, there were 160,724 online job advertisements, a 2.3 percent drop since the previous month's 164,464 ads. A slight 6.8 percent decrease in new postings was shown over the month as December had 53,057 postings specific to the month and November had 56,938. Over the year however, job postings increased by 10.8 percent since December 2019 (145,088 ads).

Supply/Demand Rate Increases

After five-months of a downward trend for the supply/demand rate, December 2020 was the second month in a row in which the rate rose. There were approximately 216 unemployed individuals for every 100 open job advertisements in December, giving a rate of 2.16. This rate is noticeably higher than the rate of 1.21 in December 2019. Though the rate had previously been consistently lowering, the pandemic-related closures in November 2020 were continued throughout December.

Occupations

Burning Glass technologies provides not seasonally adjusted occupational data. The system offers job advertisement information based on broad occupation groups as well as detailed occupations. Three out of the top five occupational groups had a drop in advertisements over the month. *Sales and related* experienced a 4.5 percent decrease, *Office and administrative support* with a 5.0 percent drop, and lastly, *Transportation and material moving* at a 7.0 percent reduction. *Management and Healthcare practitioners and technical* were also in the top five occupational groups and increased by 4.8 percent and 9.3 percent, respectively.

Over the year, four occupational groups expanded by over 50 percent in their online job postings. *Production* had the largest increase with a 57.9 percent rise (+2,535 ads). This

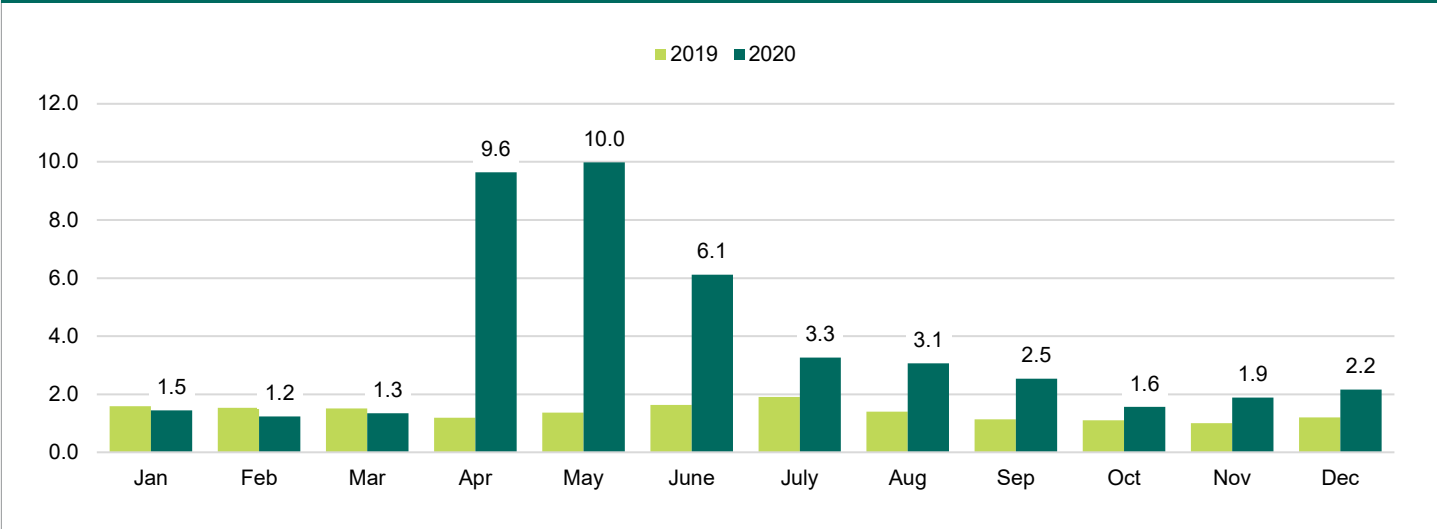
was largely due to many of the top 20 detailed occupations within *Production* growing by more than 100 percent: *Aircraft assemblers* (+194.3 percent), *Team assemblers* (+144.1 percent), *Cutting, punching, and press machine setters, operators, and tenders, metal and plastic* (+124.7 percent). Following behind were *Transportation and material movers* with a jump of 57.5 percent (+3,956 ads), *Building and grounds cleaning maintenance* with a rise of 56.8 percent (+1,887 ads), and *Healthcare support* increased by 55.6 percent (+2,509 ads).

Metropolitan Statistical Areas

In December 2020, seven metropolitan statistical areas (MSAs) witnessed growth in their job advertisements and seven experienced reduction. Grand Rapids-Wyoming had the largest decrease in advertisements at 10.2 percent, with the most notable losses in *Combined food preparation and serving workers, including fast food* (-21.0 percent), *Stock clerks and order fillers* (-19.8 percent), and *Laborers and freight, stock, and material movers, hand* (-18.5 percent). Lansing-East Lansing had the largest increase in job ads, 10.7 percent, with the most prominent improvements in *Managers, all other* (+40.6 percent), *Software developers, applications* (+25.6 percent), and *Management analysts* (+25.0 percent).

TRISHA SCHLEGEL
Economic Analyst

MICHIGAN MONTHLY SUPPLY/DEMAND RATE, 2019 AND 2020



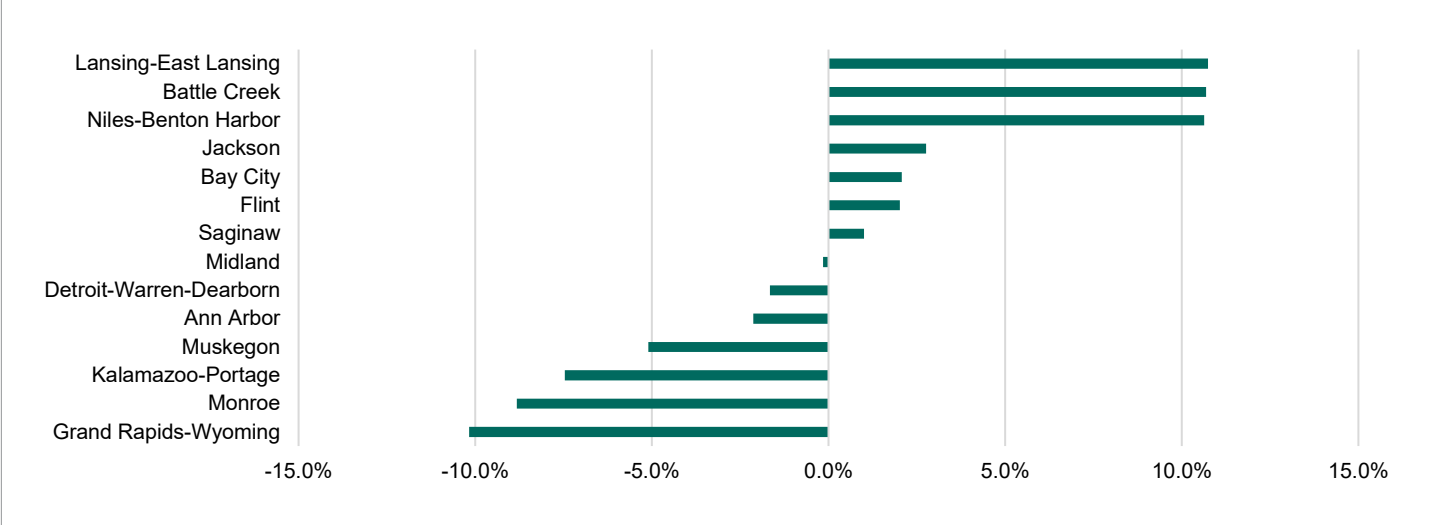
Source: Local Area Unemployment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget; Conference Board Help Wanted OnLine®, Burning Glass Technologies

MICHIGAN ONLINE JOB ADS BY INDUSTRY, DECEMBER 2020



Note: Roughly 33,000 postings did not have specific industry ties in the December 2020 data
 Source: Conference Board Help Wanted OnLine®, Burning Glass Technologies

MONTHLY CHANGE IN JOB ADS BY MICHIGAN METRO AREA, NOVEMBER 2020–DECEMBER 2020



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

RELEVANT RANKINGS

SHARE OF JOBS THAT CAN BE DONE FROM HOME BY METROPOLITAN STATISTICAL AREA, 2019

RANK	METROPOLITAN STATISTICAL AREA	SHARE OF TOTAL JOBS THAT CAN BE DONE FROM HOME	MEDIAN HOUSEHOLD INCOME (IN 2019 INFLATION-ADJUSTED DOLLARS)
1	California-Lexington Park, MD	52.6%	\$87,947
2	San Jose-Sunnyvale-Santa Clara, CA	50.8%	\$130,865
3	Washington-Arlington-Alexandria, DC-VA-MD-WV	50.0%	\$105,659
4	Boulder, CO	48.8%	\$88,535
5	Trenton, NJ	47.4%	\$59,567
6	Bloomington, IL	46.1%	\$68,784
7	San Francisco-Oakland-Hayward, CA	45.0%	\$114,696
8	Austin-Round Rock, TX	44.6%	\$55,143
9	Bridgeport-Stamford-Norwalk, CT	44.5%	\$97,053
10	College Station-Bryan, TX	44.5%	\$55,670
191	Greensboro-High Point, NC	31.5%	\$51,770
192	Winston-Salem, NC	31.5%	\$52,322
193	Lakeland-Winter Haven, FL	31.4%	\$51,833
194	Chattanooga, TN-GA	31.3%	\$55,366
195	Cleveland, TN	31.3%	\$52,178
196	Baton Rouge, LA	31.3%	\$60,746
197	Tyler, TX	31.2%	\$59,584
198	Norwich-New London-Westerly, CT-RI	31.2%	\$75,633
199	Grand Forks, ND-MN	31.2%	\$57,301
200	Atlantic City-Hammonton, NJ	31.2%	\$63,389
397	The Villages, FL	19.6%	\$60,287
396	Gadsden, AL	21.1%	\$41,447
395	Elkhart-Goshen, IN	21.6%	\$54,531
393	Dalton, GA	21.8%	\$51,967
392	Burlington, NC	22.3%	\$58,490
391	Punta Gorda, FL	22.4%	\$54,652
390	Madera, CA	23.0%	\$64,827
389	Morristown, TN	23.3%	\$47,326
388	Kokomo, IN	23.7%	\$53,440
387	Hickory-Lenoir-Morganton, NC	23.7%	\$50,631

Source: Occupational Employment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget; American Community Survey One-Year Datasets, U.S. Census Bureau; telework definition determined by O*NET survey responses describing nature of work for occupations

SHARE OF JOBS THAT CAN BE DONE FROM HOME BY MICHIGAN METROPOLITAN STATISTICAL AREA, 2019

RANK	METROPOLITAN STATISTICAL AREA	SHARE OF TOTAL JOBS THAT CAN BE DONE FROM HOME	MEDIAN HOUSEHOLD INCOME (IN 2019 INFLATION-ADJUSTED DOLLARS)
16	Ann Arbor	43.1%	\$76,576
33	Lansing-East Lansing	40.8%	\$59,117
114	Detroit-Warren-Dearborn	35.0%	\$63,474
130	Midland	34.4%	\$69,872
156	Kalamazoo-Portage	33.2%	\$56,441
211	Jackson	30.7%	\$55,124
228	Grand Rapids-Wyoming	30.4%	\$65,739
252	Flint	29.7%	\$50,389
271	Battle Creek	29.2%	\$49,055
316	Monroe	27.6%	\$62,839
332	Saginaw	26.9%	\$48,303
346	Bay City	26.2%	\$49,610
353	Niles-Benton Harbor	26.0%	\$50,153
356	Muskegon	25.8%	\$50,366

Source: Occupational Employment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget; American Community Survey One-Year Datasets, U.S. Census Bureau; telework definition determined by O*NET survey responses describing nature of work for occupations



ASK THE DEMOGRAPHER

**“Can you send me a list of
Michigan counties designated as
rural, urban, and suburban?”**

This is more complicated than it looks...

The distinctions among rural and urban areas are very important and have meaningful consequences for people who live in various parts of the state. These distinctions are also very important for those involved in providing services and participating in planning activities. That being the case, the real answer to this month's question is, "While providing a list may not be possible, let's talk about what you need so we can figure out a working definition that will help you make sense of the data."

The main reason data users or researchers generally seek out information on rural areas is because they recognize demographic and economic trends in rural and urban areas are usually quite different. This makes defining these areas important. For many data users, the distinction is in terms of population size or population density, but in that case the question becomes how small is rural or how low does the density have to get to distinguish rural from urban. Official definitions, of which there are many, vary widely in this regard. Some definitions set a threshold of 2,500 people to mark the transition from urban to rural, while other definitions set the mark as high as 50,000. There may clearly be a difference between the lifestyle of a person living in a town of 2,499 versus that of a city of 49,999.

Another way this concept is approached is to examine the rurality of an area based on the type of economic activity that is occurring there. Is the population primarily centered in the *Agricultural* sector? That type of criterion begs several questions, the first of which is how to define "primarily." Does that mean more than 50 percent of workers should be working on a farm or ranch? Or could it mean that agriculture is the largest source of net income for the region? Another aspect that confounds this type of definition is deciding how to treat areas that would be considered rural based on a population threshold but whose workers are primarily concentrated in another industry such as *Leisure and hospitality*. This can often be the case in "natural areas" that attract people for leisure activities like hunting, visiting a lake resort, or places with a large proportion of the housing designated for vacation or seasonal use.

Another consideration regarding the identification of counties as "rural, urban, and suburban" is the fact that "suburban" is a transitional geography, which leads to a whole host of new definitional issues. Identifying counties as urban or rural ignores the great

variation that exists within counties and not just between them. Macomb County is an example of a county that has a great deal of variation between urban and rural. As of July 1, 2019, the U.S. Census Bureau estimated the population to be just under 874,000 people. That certainly qualifies it as "urban" under a strict population definition, and indeed Macomb is home to the state's third and fourth largest cities, Warren and Sterling Heights, respectively. However, that would also be ignoring the variation that exists within the county. While the county as a whole is quite populous, that population is weighted heavily to the southern portion of the county. The point here is not that some areas of Macomb should be considered remote rural areas, because that is certainly not the case. The larger point is that large geographies, like counties, are often diverse and multidimensional, and applying the label of "urban" or "rural" erases a large degree of that variation.

One classification scheme, among many, that researchers can utilize when the data needed regarding rurality must be at the county level are the Rural-Urban Continuum Codes published by the U.S. Department of Agriculture (USDA). These codes try to introduce some multidimensional thinking into the process. The codes classify counties by core population size and distance to a metropolitan area into the following nine classifications:

Rural-Urban Continuum Codes (2013)

Metropolitan Counties

1. In metro areas of 1 million population or more
2. In metro areas of 250,000 to 1 million population
3. In metro areas of fewer than 250,000 population

Nonmetropolitan Counties

4. Urban population of 20,000 or more, adjacent to a metro area
5. Urban population of 20,000 or more, not adjacent to a metro area
6. Urban population of 2,500 to 19,999, adjacent to a metro area
7. Urban population of 2,500 to 19,999, not adjacent to a metro area
8. Completely rural or less than 2,500 population, adjacent to a metro area
9. Completely rural or less than 2,500 population, not adjacent to a metro area

Although criticized by some, the codes get away from attempts to drop counties into one of two groups as either urban or rural.

The main point of this article is not to try to dissuade researchers and planners from investigating topics related to the rural/urban question, but to think about the purpose of the study or plan and to apply data that makes sense. Areas can certainly be divided by almost any definition of rurality a researcher or planner has, but the first question to be answered is, "How should I define rural?"

ERIC GUTHRIE
State Demographer



STATE OF MICHIGAN

Department of Technology, Management & Budget

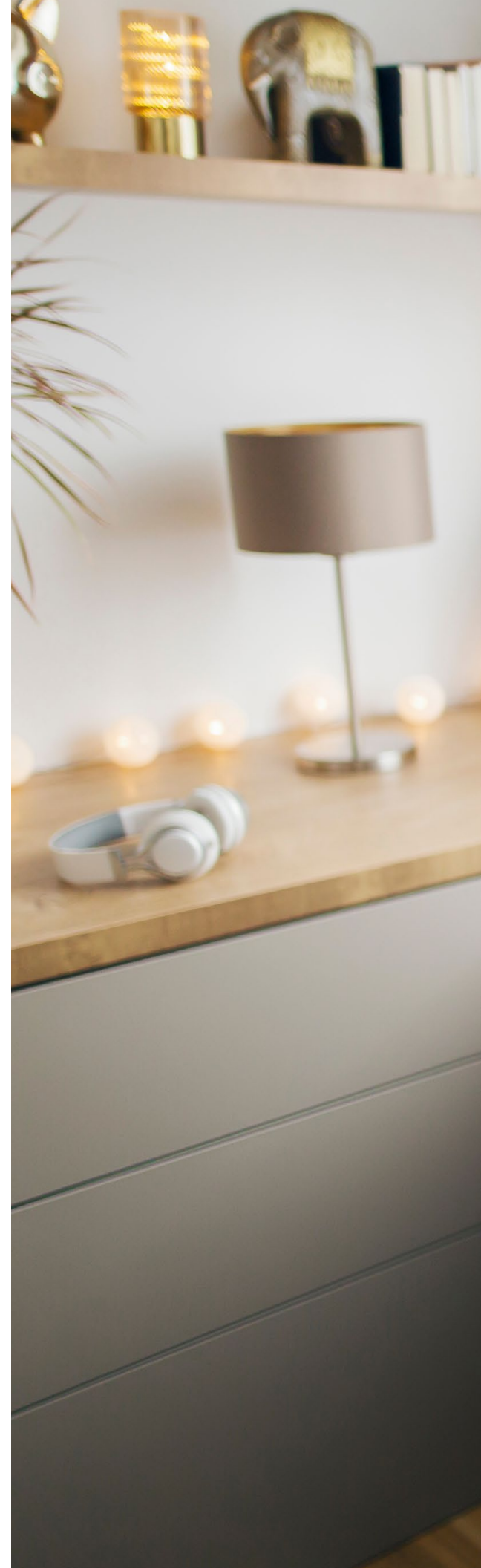
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