

MICHIGAN'S LABOR MARKET NEWS



VOL. 77, NO. 9
NOVEMBER 2021

Registered Apprenticeships in Michigan

Feature Article pg. 16

New Registered Apprentices and New Apprenticeship Programs by County, 2018–2020

pg. 15

Occupational Focus: Operating Engineers and Other Construction Equipment Operators

pg. 26

September payroll jobs edged up slightly in Michigan by 0.2 percent, although jobs have increased for five consecutive months.

SEPTEMBER 2021 JOBLESS RATE

MICHIGAN

4.6%

NATIONAL

4.8%

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IT'S BIGGER THAN DATA.

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

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

The state's jobless rate edged down slightly to 4.6 percent in September, and the state's labor force rose for the second consecutive month. Michigan payroll jobs increased by 8,000 since August and have risen for the fifth month in a row. Despite steady gains so far in 2021, Michigan payroll jobs remain 272,000 below the pre-pandemic February 2020 level.

November 15 begins the seventh annual National Apprenticeship Week. The Bureau of Labor Market Information and Strategic Initiatives has issued an updated and expanded report on registered apprenticeships in Michigan, and a summary of that report is provided as this issue's feature article. The impact of the COVID-19 pandemic caused the number of apprentices to decline nationally, however since 2018, Michigan's 19,100 active apprentices in 2020 is a slight increase. The 19,100 active apprentices in Michigan ranked it in the top five among states in 2020, as shown in our Relevant Rankings section. We also provide a ranking of the top 15 Michigan counties with the most apprentices. As the number of apprenticeship programs have also increased since 2018, our Map of the Month displays where those new programs and apprentices were located. Finally, our Occupational Focus highlights *Operating engineers and other construction equipment operators*. This job typically requires an apprenticeship and has been focusing on increasing the representation of women apprentices.

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



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MICHIGAN UNEMPLOYMENT RATE MOVES DOWN IN SEPTEMBER

Michigan's seasonally adjusted jobless rate edged down by a tenth of a percentage point in September to 4.6 percent.

The jobless rate for the U.S. fell significantly by four-tenths of a percentage point during September to 4.8 percent. Over the year, the national jobless rate decreased by 3.0 percentage points. Michigan's rate also dropped significantly since September 2020.

Total employment in Michigan rose by 0.4 percent over the month, an increase comparable to the national growth rate (+0.3 percent). September was the seventh month in a row with an employment advance in Michigan.

Total unemployment in the state fell significantly over the year. This primarily reflected recalls of residents to jobs after pandemic-related layoffs.

Although Michigan's labor market continued to show improvement over the year, labor force indicators continued to lag behind pre-pandemic levels. Michigan's September employment total remained 4.8 percent below the February 2020 pre-pandemic level. Unemployment in the state was 19.4 percent above February 2020 counts. Additionally, the state's September 2021 jobless rate was above the 3.7 percent rate exhibited during February 2020.

Michigan's Number of Long-Term Unemployed Increases Between September 2019 and 2021

Michigan's Current Population Survey (CPS) provides comprehensive information about the employment status of Michigan residents, including persons who are unemployed long-term. Long-term unemployment is generally defined as persons out of work for 27 weeks or longer. Monthly data from the Michigan Current Population Survey shows a dramatic rise in the number of long-term unemployed due to the impact of the pandemic, peaking in late 2020, and then declining moderately during 2021.

The number of long-term unemployed in the state was quite low (23,400) two years ago, prior to the pandemic. With the onset of the COVID-19 pandemic in April 2020, the number of long-term unemployed was of course little changed, but the very large number of new layoffs resulted in a small share of long-term unemployed in the first months of the pandemic. By September 2020, the long-term unemployed in Michigan comprised 18.6 percent of total state unemployed, similar to the share nationally (20 percent).

The number of long-term unemployed in Michigan peaked at a very high level of 160,700

in January 2021. January 2021 also registered the highest share of long-term unemployed over this period of 52.3 percent. This meant that by January 2021, the pandemic was responsible for more than half of all Michigan unemployed out of work for 27 weeks or more.

The number of long-term unemployed decreased during the first nine months of 2021, dropping by nearly half from January to 83,800 during September 2021. Between September 2019 and September 2021, the number of Michigan long-term unemployed rose by 60,400, an increase of over 250 percent. The percentage of the unemployed characterized as long-term also fell notably between January and September from 52.3 percent to 31.2 percent. Nationally, 37 percent of the unemployed were jobless long-term in September 2021.

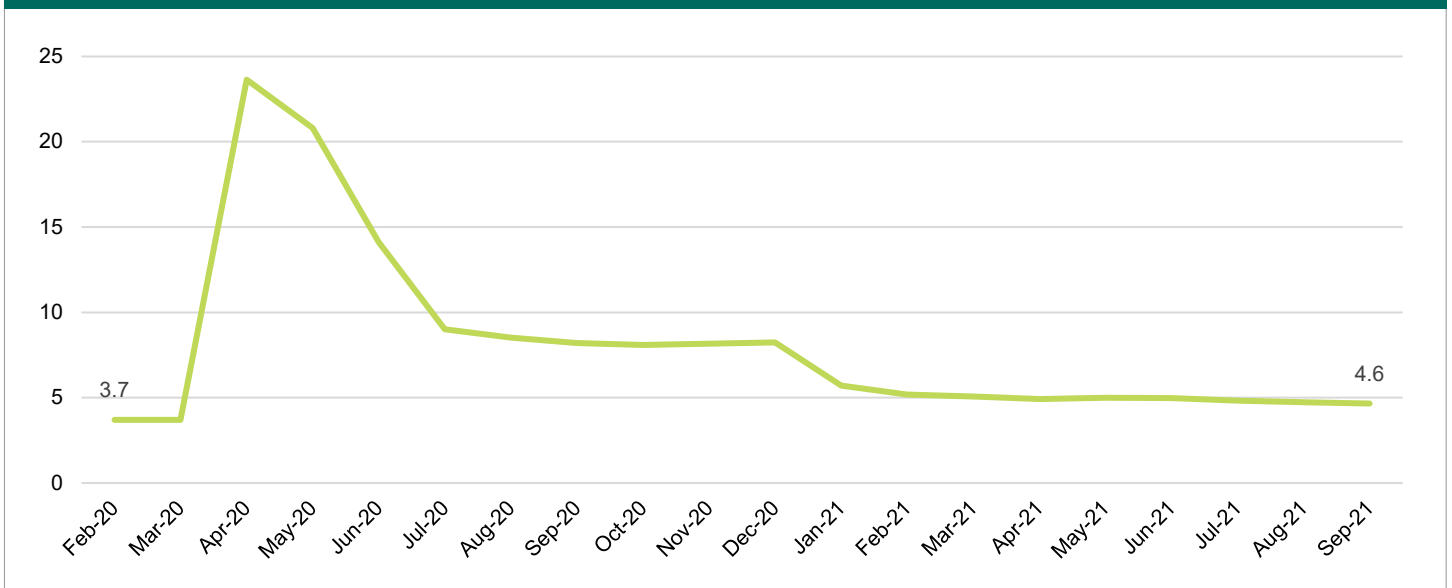
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MICHIGAN LABOR FORCE ESTIMATES, SEPTEMBER 2021 (SEASONALLY ADJUSTED)

	SEPTEMBER 2021	AUGUST 2021	SEPTEMBER 2020	OVER THE MONTH		OVER THE YEAR	
				NUMERIC	PERCENT	NUMERIC	PERCENT
Civilian Labor Force	4,738,000	4,726,000	4,849,000	12,000	0.3%	-111,000	-2.3%
Employed	4,518,000	4,502,000	4,451,000	16,000	0.4%	67,000	1.5%
Unemployed	220,000	224,000	398,000	-4,000	-1.8%	-178,000	-44.7%
Unemployment Rate	4.6	4.7	8.2	-0.1	XXX	-3.6	XXX

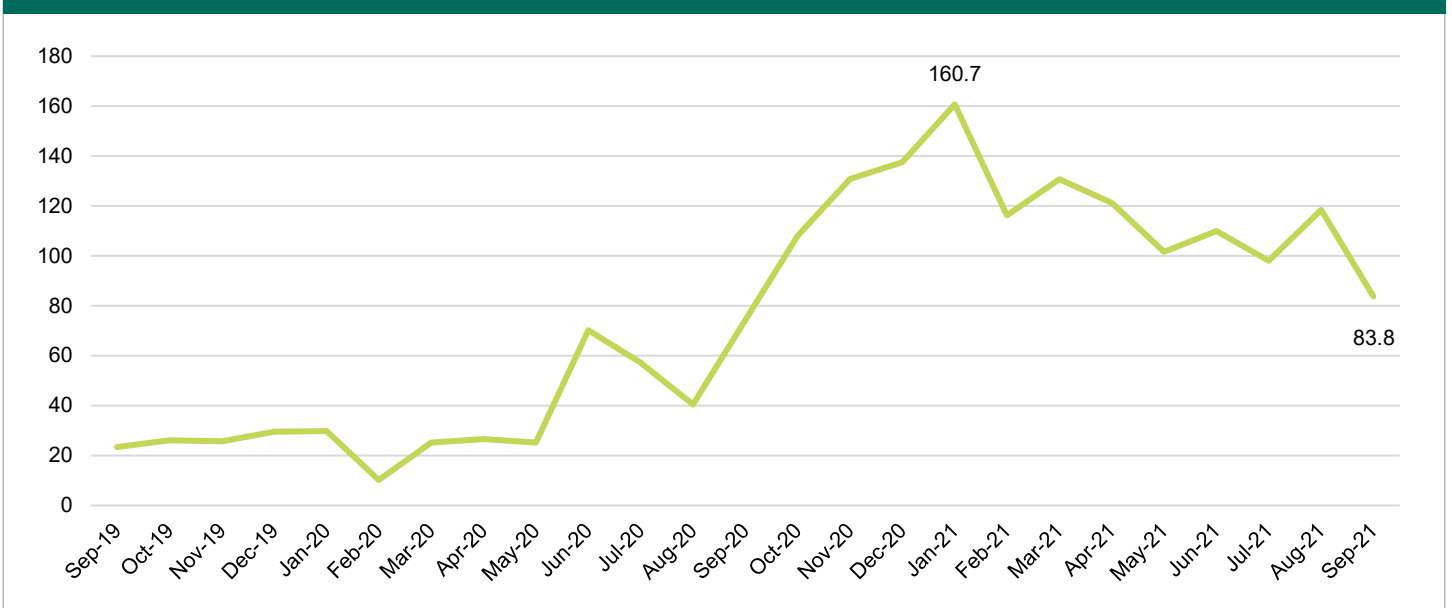
Source: Local Area Unemployment Statistics, Bureau of Labor Market Information and Strategic Initiatives, Department of Technology, Management & Budget

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



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

NUMBER OF LONG-TERM UNEMPLOYED IN MICHIGAN, SEPTEMBER 2019–SEPTEMBER 2021 (IN THOUSANDS)



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

On a seasonally adjusted basis, nonfarm payroll jobs in Michigan stayed relatively unchanged over the month, moving up by only 8,000 (+0.2 percent) to 4,180,900 during September. Employment in Michigan has now risen for five consecutive months, but remains 6.1 percent or 272,000 below February 2020's pre-pandemic nonfarm job level.

Nationwide, seasonally adjusted payroll jobs edged up marginally over the month, by 194,000 or 0.1 percent. Over the year, nonfarm employment was up by 4.0 percent (+5,688,000) but still remained down by 3.3 percent since February 2020 pre-pandemic job levels.

A majority of major industry sectors in Michigan moved up minimally in September. Several sectors across the state recorded more notable monthly job gains however, including Leisure and hospitality (+6,800) and Professional and business services (+2,400). Employment declines were also recorded this month in several industries, as jobs moved down in the Education and health services (-6,100) and Government (-1,300) sectors.

Over the Year

Over the year, seasonally adjusted total nonfarm jobs increased by 99,000 or 2.4

percent, 1.6 percentage points less than the national rate of gain. This advance in statewide employment since September 2020 mainly reflected job recalls of workers impacted by pandemic-related layoffs. Every major industry sector in Michigan recorded over-the-year job additions except for the Education and health services sector, which posted only a minimal job decline. On a percentage basis, the Leisure and hospitality and Mining and logging industries recorded the largest job increases over the year. Several other industries recorded notable yearly job advancements, including Professional and business services (+5.0 percent) and Construction (+3.0 percent).

Six different statewide major industries and subsectors either matched or exceeded pre-pandemic February 2020 job levels as of September 2021. These industries included Transportation, warehousing, and utilities; Federal government; and Mining and logging.

Industry Employment Changes Between Third Quarter 2020 and Third Quarter 2021

On a seasonally adjusted basis, employment in nearly every major industry sector across the United States and Michigan increased over the year. These job additions reflect continued recalls of workers from COVID-19 pandemic-

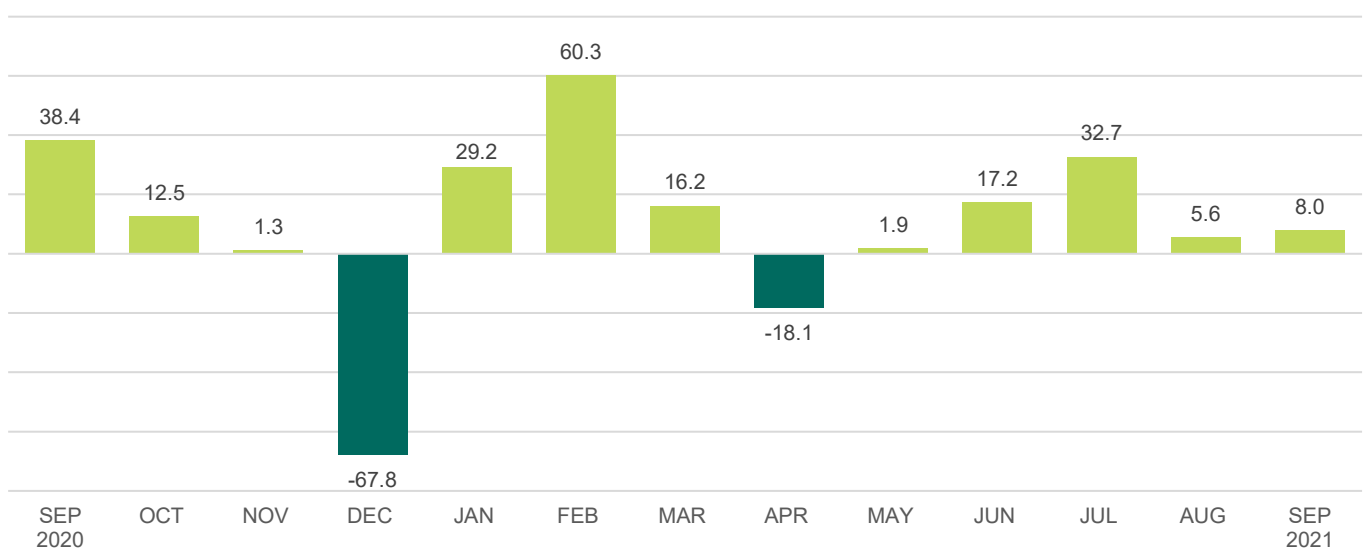
related layoffs. However, the table on page seven provides an industry-specific comparison of job change from the third quarter 2020 to the third quarter 2021 in the U.S. and Michigan.

In both Michigan and the U.S., every major industry sector recorded job growth between the third quarter of 2020 and 2021. However, the national employment rebound slightly outpaced Michigan's recovery during this time frame, as total nonfarm jobs moved up by 4.6 percent nationally compared to only 3.4 percent on the statewide level.

Many national major industry sectors recorded higher rates of job recovery than in Michigan over this period. Notable third quarter U.S. job additions between 2020 and 2021 were recorded in the Leisure and hospitality and Other services sectors, outpacing Michigan industry recovery rates by 5.7 and 2.5 percentage points, respectively.

Only three major industry sectors in Michigan recorded higher-than-national quarterly job growth, including Construction; Professional and business services; and Government.

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



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

MAJOR INDUSTRY SECTOR JOB CHANGE, MICHIGAN VS U.S.

MAJOR INDUSTRY	MICHIGAN EMPLOYMENT (IN THOUSANDS)				UNITED STATES EMPLOYMENT (IN THOUSANDS)			
	Q3 2020	Q3 2021	LEVEL	PERCENT	Q3 2020	Q3 2021	LEVEL	PERCENT
TOTAL NONFARM CHANGE	4,036.6	4,173.7	137.1	3.4%	140,860.0	147,301.7	6,441.7	4.6%
Mining and Logging	6.5	7.0	0.5	7.7%	591.3	642.3	51.0	8.6%
Construction	169.5	176.9	7.4	4.4%	7,225.3	7,432.3	207.0	2.9%
Manufacturing	568.7	571.9	3.2	0.6%	12,076.0	12,418.3	342.3	2.8%
Trade, Transportation, and Utilities	752.8	779.3	26.5	3.5%	26,473.3	27,480.3	1,007.0	3.8%
Wholesale Trade	160.4	164.1	3.8	2.3%	5,553.4	5,725.6	172.2	3.1%
Retail Trade	432.2	445.2	13.0	3.0%	14,921.3	15,371.5	450.1	3.0%
Information	48.9	49.8	0.9	1.8%	2,622.7	2,775.0	152.3	5.8%
Financial Activities	222.8	225.1	2.3	1.0%	8,677.3	8,845.0	167.7	1.9%
Professional and Business Services	594.0	628.2	34.2	5.8%	19,895.0	21,015.7	1,120.7	5.6%
Education and Health Services	633.8	644.0	10.2	1.6%	23,040.3	23,652.7	612.3	2.7%
Leisure and Hospitality	320.8	356.7	35.8	11.2%	13,048.0	15,259.0	2,211.0	16.9%
Other Services	142.1	147.7	5.6	3.9%	5,382.0	5,726.3	344.3	6.4%
Government	576.6	587.2	10.6	1.8%	21,828.7	22,054.7	226.0	1.0%

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

Significant Industry Employment Developments

FINANCIAL ACTIVITIES

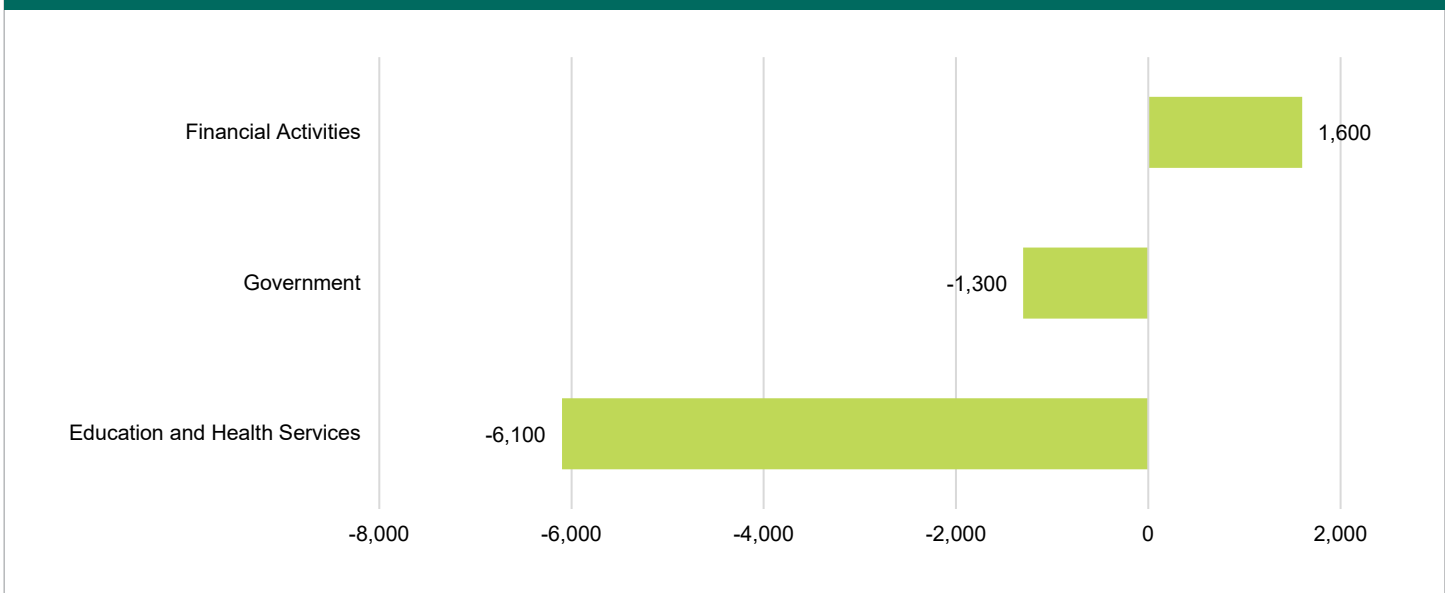
Total statewide *Financial activities* jobs moved up by 1,600 or 0.7 percent in September to 225,800, on a seasonally adjusted basis. Job gains were fastest in the *Real estate and rental*

and leasing (+2.4 percent) subsector. Since September 2020, total jobs in this major industry sector edged up marginally (+700 or 0.3 percent) but remained 1.7 percent lower than February 2020 pre-pandemic levels. On the nationwide level, jobs in this industry remained virtually flat in September and consequently were down 0.3 percent since February 2020.

GOVERNMENT

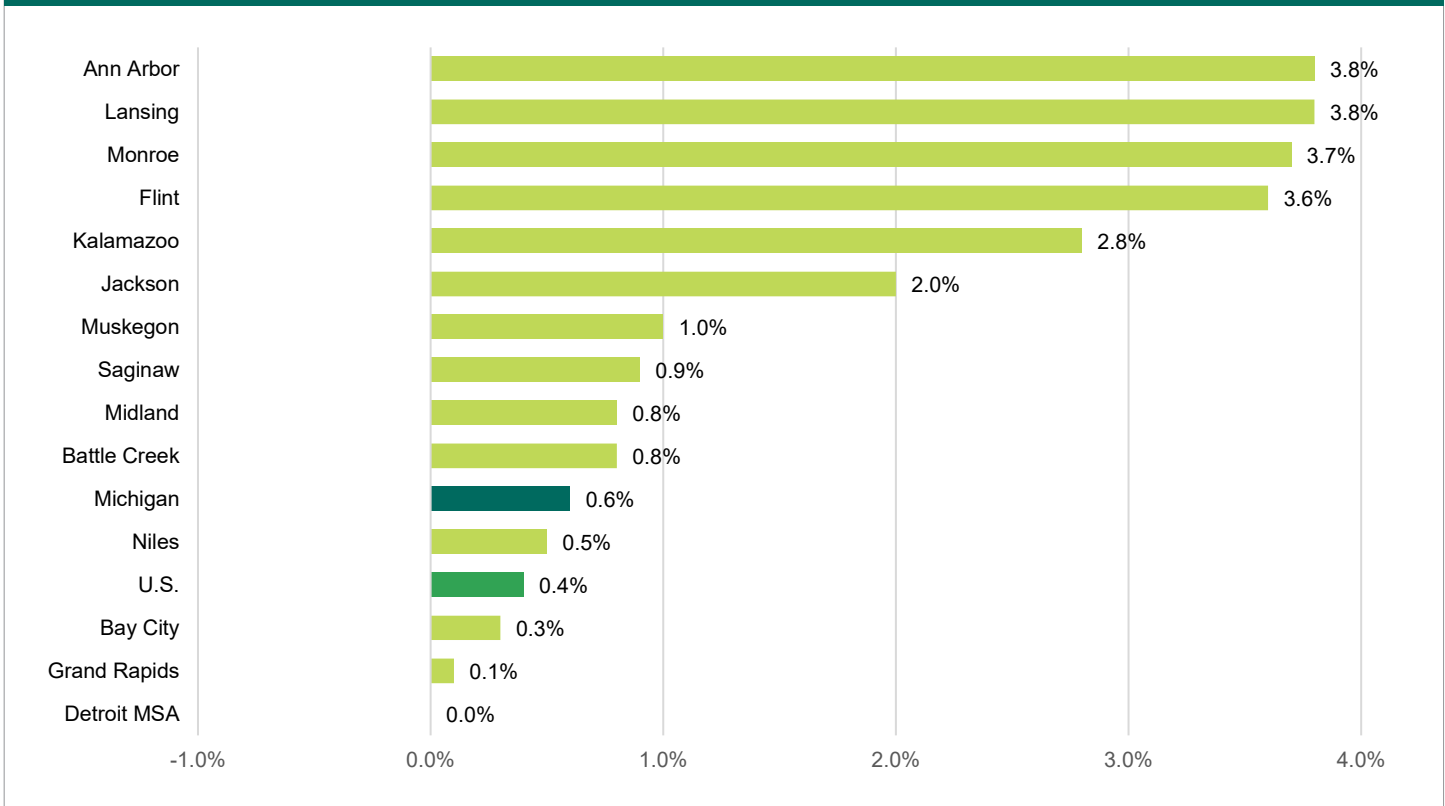
On a seasonally adjusted basis, payroll jobs in the *Government* sector declined by 1,300 or 0.2 percent over the month, to 586,700. Although job additions were recorded within the *Federal* (+0.6 percent) and *Local government* (+0.1 percent) subsectors, these employment gains were offset by a seasonally adjusted job

MICHIGAN OVER-THE-MONTH JOB CHANGE BY SELECT INDUSTRY, AUG–SEP 2021



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

MICHIGAN METRO AREA JOB CHANGE, AUG–SEP 2021 (NOT SEASONALLY ADJUSTED)



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

reduction in *State government* (-1.2 percent). *State government* jobs always advance (unadjusted) in September with the resumption of the academic year at universities, but the job additions in September 2021 were less than typical. Over the year, *Government* jobs rose by 12,700 or 2.2 percent, due to annual gains within *State* and *Local government*. Nationally, employment within the *Government* major industry sector fell by 123,000 or 0.6 percent, down 3.7 percent since its February 2020 pre-pandemic job levels.

EDUCATION AND HEALTH SERVICES

Seasonally adjusted jobs in the *Education and health services* industry sector fell noticeably since last month (-6,100 or 0.9 percent), to 639,900. Job declines were recorded in both of the major industry's subsectors, *Educational services* (-5.3 percent) and *Healthcare and social assistance* (-0.4 percent). Over the year, employment in *Education and health services* remained virtually flat, as job gains in *Educational services* were offset by *Healthcare and social assistance* employment reductions. U.S. employment remained virtually unchanged over the month in this sector, but was noticeably lower than February 2020 pre-pandemic job levels (-900,000 or 3.7 percent).

Metropolitan Statistical Areas (MSAs)

Not seasonally adjusted payroll jobs in 13 of Michigan's 14 Metropolitan Statistical Areas (MSAs) recorded percent increases over the month, as only one metro area stayed flat (Detroit MSA) in September. Of the 13 regions that registered job additions this month, 10 areas reported higher percent growth rates than the statewide rate of gain (+0.6 percent). Over the year, job levels in every metro area in Michigan advanced, ranging from +0.7 percent in Muskegon to +4.0 percent in Lansing.

Government jobs rose in every region in Michigan over the month, due mainly to seasonal hiring in local schools and area universities. Percent job gains ranged from +4.1 percent in Jackson to +20.6 percent in Kalamazoo, as *Government* jobs on the statewide level increased by 44,000 or 8.0 percent. Four metro areas recorded small job declines over the year, including Saginaw, Monroe, Jackson, and Flint. Nationally, unadjusted job levels in the public sector moved up by 4.2 percent in September.

In contrast, the *Leisure and hospitality* sector recorded typical seasonal job declines in September. Percent job cuts among Michigan's 14 metro areas ranged from 1.3 percent in Lansing and Saginaw to 5.3 percent in Muskegon and Benton Harbor.

Over the year, not seasonally adjusted total nonfarm payroll jobs advanced in every metro area in Michigan, as many workers were recalled to jobs from pandemic-related layoffs. However, job levels remained down since pre-pandemic September 2019 in all of Michigan's metro areas, with the largest job drops in the Muskegon (-8.2 percent) and Saginaw (-7.7 percent) regions.

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MICHIGAN PAYROLL JOBS (SEASONALLY ADJUSTED)

INDUSTRY	SEP 2021	AUG 2021	SEP 2020	OVER THE MONTH		OVER THE YEAR	
				LEVEL	PERCENT	LEVEL	PERCENT
TOTAL NONFARM	4,180,900	4,172,900	4,081,900	8,000	0.2%	99,000	2.4%
Total Private	3,594,200	3,584,900	3,507,900	9,300	0.3%	86,300	2.5%
Private Service-Providing	2,837,000	2,829,900	2,757,200	7,100	0.3%	79,800	2.9%
GOODS-PRODUCING	757,200	755,000	750,700	2,200	0.3%	6,500	0.9%
Mining, Logging, and Construction	184,200	183,200	178,600	1,000	0.5%	5,600	3.1%
Mining and Logging	7,000	7,000	6,500	0	0.0%	500	7.7%
Construction	177,200	176,200	172,100	1,000	0.6%	5,100	3.0%
Manufacturing	573,000	571,800	572,100	1,200	0.2%	900	0.2%
Durable Goods	431,400	430,000	430,000	1,400	0.3%	1,400	0.3%
Transportation Equipment Manufacturing	172.8	172.5	177.6	0.3	0.2%	-4.8	-2.7%
Non-Durable Goods	141,600	141,800	142,100	-200	-0.1%	-500	-0.4%
SERVICE-PROVIDING	3,423,700	3,417,900	3,331,200	5,800	0.2%	92,500	2.8%
Trade, Transportation, and Utilities	780,500	779,000	761,800	1,500	0.2%	18,700	2.5%
Wholesale Trade	164,000	164,300	161,400	-300	-0.2%	2,600	1.6%
Retail Trade	444,600	445,200	438,200	-600	-0.1%	6,400	1.5%
Transportation, Warehousing, and Utilities	171,900	169,500	162,200	2,400	1.4%	9,700	6.0%
Information	49,900	49,900	49,200	0	0.0%	700	1.4%
Financial Activities	225,800	224,200	225,100	1,600	0.7%	700	0.3%
Finance and Insurance	174,700	174,300	174,100	400	0.2%	600	0.3%
Real Estate and Rental and Leasing	51,100	49,900	51,000	1,200	2.4%	100	0.2%
Professional and Business Services	630,000	627,600	599,800	2,400	0.4%	30,200	5.0%
Professional, Scientific, and Technical Services	302,600	300,500	290,000	2,100	0.7%	12,600	4.3%
Management of Companies and Enterprises	71,700	71,400	69,800	300	0.4%	1,900	2.7%
Administrative and Support and Waste Management and Remediation Services	255,700	255,700	240,000	0	0.0%	15,700	6.5%
Education and Health Services	639,900	646,000	640,100	-6,100	-0.9%	-200	0.0%
Educational Services	67,300	71,100	66,400	-3,800	-5.3%	900	1.4%
Health Care and Social Assistance	572,600	574,900	573,700	-2,300	-0.4%	-1,100	-0.2%
Leisure and Hospitality	362,400	355,600	336,400	6,800	1.9%	26,000	7.7%
Arts, Entertainment, and Recreation	43,400	40,300	35,500	3,100	7.7%	7,900	22.3%
Accommodation and Food Services	319,000	315,300	300,900	3,700	1.2%	18,100	6.0%
Other Services	148,500	147,600	144,800	900	0.6%	3,700	2.6%
Government	586,700	588,000	574,000	-1,300	-0.2%	12,700	2.2%
Federal Government	54,400	54,100	60,300	300	0.6%	-5,900	-9.8%
State Government	179,600	181,700	171,000	-2,100	-1.2%	8,600	5.0%
Local Government	352,700	352,200	342,700	500	0.1%	10,000	2.9%

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

REGIONAL LABOR MARKET ANALYSIS

ANN ARBOR METROPOLITAN AREA

- The jobless rate in the Ann Arbor MSA moved down slightly over the month (-0.2 percentage points) to 3.6 percent, tied for the second lowest unemployment rate among major Michigan labor market areas during September.
- The total number of employed individuals increased over the month by 1.3 percent to 183,700.

MONTHLY INDUSTRY DEVELOPMENTS

- Nonfarm employment in the Ann Arbor region rose by 8,100 or 3.8 percent over the month, which tied for the highest rate of monthly job gain among Michigan metro areas.

INDUSTRY TRENDS

- Most of the September advance was due to a seasonal job addition in the *Government* sector (+7,900). Employment rose with the opening of local schools and area universities with the beginning of the academic year.

BAY CITY METROPOLITAN AREA

- Joblessness in the Bay City MSA declined by 0.4 percentage points to 4.7 percent in September.
- Despite the rate drop, employment actually fell by 500 in September and was down by 700 over the past year.

MONTHLY INDUSTRY DEVELOPMENTS

- Total nonfarm payroll jobs in the Bay City metro area edged up by only 100 or 0.3 percent in September, to 33,400.

INDUSTRY TRENDS

- Total regional employment in the *Manufacturing* sector increased by 200 or 4.3 percent to 4,900, tying its highest recorded job level in the past 10 years.

FLINT METROPOLITAN AREA

- Although the Flint MSA jobless rate fell by 1.8 percentage points to 6.5 percent in September, it was still the highest recorded unemployment rate among Michigan metro areas.
- Employment rose by 1,800 in the region in September, as workers were recalled from an August layoff in the auto sector.

MONTHLY INDUSTRY DEVELOPMENTS

- In September, nonfarm jobs in the Flint metro area increased by 4,500 or 3.6 percent over the month to 130,800.
- Total jobs in the *Manufacturing* sector jumped sharply by 3,800 or 38 percent, reflecting auto-related recalls from layoffs related to the semiconductor chip shortages.

INDUSTRY TRENDS

- *Professional and business services* recorded typical seasonal job additions this month, moving up by 500 or 3.1 percent to 16,700.

BATTLE CREEK METROPOLITAN AREA

- The Battle Creek unemployment rate moved down in September by 0.5 percentage points to 5.3 percent, still noticeably higher than the statewide rate (3.8 percent).
- This monthly jobless rate cut did not reflect a gain in employed, but instead a monthly drop in area labor force, due to small reductions in both the number of employed and unemployed.

MONTHLY INDUSTRY DEVELOPMENTS

- Regional nonfarm payroll jobs in Battle Creek rose by 400 or 0.8 percent, on pace with typical area September employment gains.
- Over the year, total jobs in the *Trade, transportation, and utilities* sector increased by 400 or 4.5 percent, to 9,200.

INDUSTRY TRENDS

- *Professional and business services* jobs edged up by 200 or 4.1 percent over the year but remain 1,000 lower than September 2019 pre-pandemic job levels.

DETROIT-WARREN-DEARBORN METRO AREA

- Joblessness in the Detroit labor market declined by 0.8 percentage points in September to 2.9 percent.
- The rate drop reflected fewer people in the regional labor market, not a significant gain in employment. The total number of employed residents was little changed in September, but was up over the year.

MONTHLY INDUSTRY DEVELOPMENTS

- Detroit area nonfarm payroll jobs remained virtually flat over the month, moving up by only 500 during September to 1,934,100.
- Total employment in the *Retail trade* sector has now declined in eight of the past nine months, losing 2,900 (-1.5 percent) jobs in September.

INDUSTRY TRENDS

- *Leisure and hospitality* jobs fell seasonally by 6,700 or 3.9 percent in September, similar to the job reductions recorded in September 2018 and 2019. This reflected seasonal job cuts in *Recreational services* and the *Restaurant* industry.

GRAND RAPIDS-WYOMING METRO AREA

- The jobless rate in the Grand Rapids MSA decreased in September by 0.3 percentage points to 3.6 percent.
- Regional labor force fell by 10,200 or 1.8 percent over the month, tied with the Niles-Benton Harbor region for the largest percent decline among Michigan metro areas.

MONTHLY INDUSTRY DEVELOPMENTS

- Total nonfarm payroll jobs in the Grand Rapids region remained virtually flat over the month, rising by only 600 or 0.1 percent, to 543,900.
- The region had seasonal job gains in *Government* in September, but these additions were offset by monthly job cuts in *Leisure and hospitality*, *Retail trade*, and *Manufacturing*.

INDUSTRY TRENDS

- Although typical seasonal job gains were recorded in the *Educational and health services* sector, total employment remained down by 700 or 0.7 percent since September 2019 pre-pandemic job levels.

CIVILIAN LABOR FORCE AND NONFARM PAYROLL JOBS

	ANN ARBOR			BATTLE CREEK			BAY CITY		
	SEP 2021	AUG 2021	SEP 2020	SEP 2021	AUG 2021	SEP 2020	SEP 2021	AUG 2021	SEP 2020
PLACE OF RESIDENCE									
Civilian Labor Force	190,500	188,500	192,300	58,900	59,600	60,800	47,300	48,100	48,800
Employed	183,700	181,300	182,100	55,700	56,100	56,400	45,100	45,600	45,800
Unemployed	6,800	7,200	10,100	3,100	3,500	4,400	2,200	2,500	3,000
Unemployment Rate	3.6	3.8	5.3%	5.3	5.8	7.3	4.7	5.1	6.2
PLACE OF WORK									
Total Nonfarm Jobs	219,300	211,200	211,000	53,500	53,100	52,900	33,400	33,300	33,100
Mining, Logging, and Construction	5,200	5,300	4,700	2,000	2,100	2,000	1,600	1,600	1,400
Manufacturing	13,400	13,600	13,100	10,100	10,100	10,200	4,900	4,700	4,500
Trade, Transportation, and Utilities	26,500	26,500	25,400	9,200	9,100	8,800	6,800	7,000	6,900
Wholesale Trade	6,400	6,500	6,300	*	*	*	*	*	*
Retail Trade	15,400	15,400	14,800	5,900	5,800	5,600	4,500	4,700	4,700
Information	6,200	6,300	5,900	*	*	*	300	300	300
Financial Activities	6,600	6,600	6,400	1,100	1,100	1,100	1,300	1,300	1,300
Professional and Business Services	29,400	28,800	29,000	5,100	4,900	4,900	2,600	2,600	2,500
Educational and Health Services	27,500	27,200	27,700	9,500	9,600	9,800	5,500	5,600	5,900
Leisure and Hospitality	14,600	14,800	13,200	4,000	4,200	3,900	3,900	4,100	3,900
Other Services	5,400	5,500	5,400	1,800	1,800	1,800	1,000	1,000	1,000
Government	84,500	76,600	80,200	10,400	9,900	10,200	5,500	5,100	5,400
DETROIT-WARREN-DEARBORN									
FLINT									
GRAND RAPIDS-WYOMING									
	SEP 2021	AUG 2021	SEP 2020	SEP 2021	AUG 2021	SEP 2020	SEP 2021	AUG 2021	SEP 2020
PLACE OF RESIDENCE									
Civilian Labor Force	2,056,000	2,075,000	2,133,000	172,800	174,000	177,800	560,400	570,600	570,300
Employed	1,996,000	1,998,000	1,917,000	161,500	159,700	163,500	540,000	548,100	539,900
Unemployed	60,000	77,000	216,000	11,300	14,400	14,300	20,400	22,400	30,500
Unemployment Rate	2.9	3.7	10.1	6.5	8.3	8.0	3.6	3.9	5.3
PLACE OF WORK									
Total Nonfarm Jobs	1,934,100	1,933,600	1,868,300	130,800	126,300	129,500	543,900	543,300	528,200
Mining, Logging, and Construction	80,900	82,000	80,800	6,100	6,200	5,800	26,800	27,600	25,900
Manufacturing	237,300	240,200	234,900	13,800	10,000	13,500	108,400	110,100	108,300
Trade, Transportation, and Utilities	366,300	368,100	355,400	25,700	26,100	26,200	97,500	99,500	95,900
Wholesale Trade	79,900	80,400	79,600	5,100	5,100	5,100	31,500	31,900	30,900
Retail Trade	194,200	197,100	192,600	16,500	17,000	17,000	47,100	48,700	46,800
Information	25,200	25,300	25,000	1,000	1,000	1,000	5,600	5,600	5,400
Financial Activities	126,600	127,200	123,200	5,900	5,900	5,900	26,900	26,900	26,400
Professional and Business Services	389,100	387,000	364,200	16,700	16,200	16,400	72,300	72,300	68,900
Educational and Health Services	292,600	294,100	290,400	25,000	25,000	25,000	93,800	91,300	91,000
Leisure and Hospitality	165,900	172,600	149,400	14,200	14,600	13,100	43,900	45,800	39,400
Other Services	66,300	67,100	64,100	4,800	4,900	4,800	20,500	20,600	19,800
Government	183,900	170,000	180,900	17,600	16,400	17,800	48,200	43,600	47,200

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

JACKSON METROPOLITAN AREA

- The unemployment rate in the Jackson metro area decreased by 0.4 percentage points in September to 4.7 percent, well above the statewide jobless rate (3.8 percent).
- The total number of unemployed persons fell both over the month and over the year.

MONTHLY INDUSTRY DEVELOPMENTS

- In September, total nonfarm jobs in the Jackson MSA increased by 1,100 or 2.0 percent, noticeably higher than the statewide rate of gain this month (+0.6 percent).
- Most major industry sectors added jobs over the month, led by gains in the *Professional and business services* (+8.3 percent) and *Government* (+4.1 percent) sectors.

INDUSTRY TRENDS

- The *Leisure and hospitality* sector inched up by 100 jobs this month but was still 1,000 below September 2019 job levels.

LANSING-EAST LANSING METRO AREA

- Joblessness in the Lansing region declined by 0.4 percentage points to 5.0 percent, somewhat above the unemployment rate in Michigan.
- The Lansing region led Michigan metro areas in the percent jump in employment in September (+2.0 percent). This was due to the sharp seasonal gain in jobs at area school districts, colleges, and universities with the start of the new academic year.

MONTHLY INDUSTRY DEVELOPMENTS

- Total nonfarm payroll jobs in the Lansing MSA increased sharply by 8,200 or 3.8 percent in September, to 224,500.

INDUSTRY TRENDS

- Typical seasonal employment additions were recorded in *State* and *Local government*, and job losses occurred locally in September in *Construction*, *Financial activities*, and *Leisure and hospitality*.

MONROE METROPOLITAN AREA

- The Monroe area unemployment rate increased by 0.1 percentage point over the month to 5.3 percent, the only major Michigan labor market with a September jobless rate advance.
- Over the year, the regional workforce moved down by 900 or 1.2 percent due to declines in both the number of employed and unemployed.

MONTHLY INDUSTRY DEVELOPMENTS

- Monroe nonfarm payroll jobs rose by 1,400 or 3.7 percent during September, well above both the statewide (+0.6 percent) and nationwide (+0.4 percent) rates of gain.

INDUSTRY TRENDS

- *Mining, logging, and construction* jobs rose by 200 over the month and matched the pre-pandemic September 2019 levels.
- About half of the monthly job advance was a seasonal addition in *Government*.

KALAMAZOO-PORTAGE METRO AREA

- In September, the Kalamazoo jobless rate decreased by 0.5 percentage points to 4.1 percent, which was well below the year-ago rate.
- Employment levels in the region rose by 0.6 percent over the month and edged up by 0.3 percent since September 2020.

MONTHLY INDUSTRY DEVELOPMENTS

- Over the month, total nonfarm payroll jobs in the Kalamazoo metro area rose by 4,000 or 2.8 percent to 144,400, still 4.3 percent lower than February 2020 pre-pandemic levels.
- Jobs in the *Transportation, warehousing, and utilities* sector advanced for the third consecutive month and recorded a 10-year job level high in September.

INDUSTRY TRENDS

- Slightly higher-than-average seasonal job gains occurred in the *Professional and business services* sector, which added 600 positions in September.

MIDLAND METROPOLITAN AREA

- The jobless rate in the Midland metro area edged down by only 0.1 percentage point to 3.8 percent in September.
- Labor force levels declined in September in the Midland MSA and have also moved down over the past year.

MONTHLY INDUSTRY DEVELOPMENTS

- Over the month, nonfarm employment within the Midland labor market increased marginally by 300 or 0.8 percent, to 36,700.

INDUSTRY TRENDS

- Job gains were only recorded within the area's *Service providing* (+300 or 1.1 percent) sector, as employment in *Goods producing* remained unchanged over the month.
- Over the past year, payroll jobs in Midland rose by 1,300, led by an addition of 1,000 jobs in the *Private service providing* sector.

MUSKEGON METROPOLITAN AREA

- The jobless rate in the Muskegon labor market declined by 0.5 percentage points in September to 6.2 percent. This rate remained well above the statewide rate.
- Decreases in both the total number of employed and unemployed persons contributed to the overall monthly labor force reduction (-1,200 or 1.6 percent).

MONTHLY INDUSTRY DEVELOPMENTS

- In September, nonfarm payroll jobs in the Muskegon region rose by 600 or 1.0 percent, to 59,300.

INDUSTRY TRENDS

- Employment within the *Leisure and hospitality* sector decreased at a slower pace than normal in September, moving down by only 400 or 5.3 percent.

CIVILIAN LABOR FORCE AND NONFARM PAYROLL JOBS

	JACKSON			KALAMAZOO-PORTAGE			LANSING-EAST LANSING		
	SEP 2021	AUG 2021	SEP 2020	SEP 2021	AUG 2021	SEP 2020	SEP 2021	AUG 2021	SEP 2020
PLACE OF RESIDENCE									
Civilian Labor Force	71,300	71,200	72,800	162,900	162,700	165,300	239,400	235,700	238,400
Employed	68,000	67,600	68,000	156,200	155,300	155,700	227,400	222,900	224,900
Unemployed	3,300	3,600	4,700	6,800	7,500	9,600	12,000	12,800	13,500
Unemployment Rate	4.7	5.1	6.5	4.1	4.6	5.8	5.0	5.4	5.7
PLACE OF WORK									
Total Nonfarm Jobs	55,700	54,600	54,600	144,400	140,400	139,700	224,500	216,300	215,900
Mining, Logging, and Construction	2,300	2,300	2,200	7,000	7,200	6,800	9,500	9,700	8,700
Manufacturing	8,700	8,600	8,900	22,200	22,100	21,800	17,200	17,100	18,400
Trade, Transportation, and Utilities	12,700	12,600	12,000	26,600	26,300	25,400	34,800	34,400	33,700
Wholesale Trade	*	*	*	6,500	6,600	6,300	5,900	5,900	5,800
Retail Trade	6,500	6,400	6,500	15,000	14,800	14,700	20,100	20,000	19,800
Information	200	200	200	900	900	800	3,200	3,200	3,200
Financial Activities	2,200	2,200	2,200	7,700	7,800	7,700	17,500	17,700	17,200
Professional and Business Services	5,200	4,800	4,900	16,000	15,400	15,600	21,200	21,000	21,600
Educational and Health Services	10,100	9,900	9,900	24,700	24,700	24,400	30,300	30,100	30,400
Leisure and Hospitality	4,400	4,300	4,300	13,500	13,800	13,300	15,800	16,000	14,300
Other Services	2,200	2,300	2,200	4,700	4,700	4,700	9,000	9,200	8,900
Government	7,700	7,400	7,800	21,100	17,500	19,200	66,000	57,900	59,500
PLACE OF RESIDENCE									
Civilian Labor Force	38,900	39,300	39,500	72,000	71,800	72,900	73,200	74,400	76,500
Employed	37,400	37,800	37,400	68,200	68,000	68,800	68,700	69,400	69,900
Unemployed	1,500	1,500	2,100	3,800	3,800	4,200	4,500	5,000	6,600
Unemployment Rate	3.8	3.9	5.3	5.3	5.2	5.7	6.2	6.7	8.6
PLACE OF WORK									
Total Nonfarm Jobs	36,700	36,400	35,400	38,800	37,400	38,100	59,300	58,700	58,900
Mining, Logging, and Construction	*	*	*	2,000	1,800	1,900	2,400	2,400	2,400
Manufacturing	*	*	*	5,400	5,300	5,300	12,000	12,000	11,500
Trade, Transportation, and Utilities	*	*	*	10,000	9,900	10,100	13,100	13,000	13,400
Wholesale Trade	*	*	*	1,600	1,600	1,600	*	*	*
Retail Trade	*	*	*	4,500	4,400	4,600	10,600	10,600	10,800
Information	*	*	*	*	*	*	200	200	200
Financial Activities	*	*	*	800	800	800	1,700	1,700	1,700
Professional and Business Services	*	*	*	5,300	4,900	4,800	2,900	2,900	3,000
Educational and Health Services	*	*	*	4,400	4,500	4,500	10,700	10,600	10,700
Leisure and Hospitality	*	*	*	4,300	4,300	4,000	7,200	7,600	7,200
Other Services	*	*	*	1,400	1,400	1,400	2,000	2,100	1,900
Government	3,000	2,600	2,900	4,900	4,200	5,000	7,100	6,200	6,900

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

NILES-BENTON HARBOR METRO AREA

- In September, the jobless rate in Niles-Benton Harbor decreased by 0.3 percentage points over the month to 4.5 percent.
- Despite the monthly jobless rate reduction, employment actually fell in September by 1.6 percent. The rate drop occurred due to a regional workforce decline.

MONTHLY INDUSTRY DEVELOPMENTS

- Total payroll jobs within the Niles-Benton Harbor MSA edged up by only 300 or 0.5 percent in September to 59,900.
- Typical seasonal monthly declines were recorded in the *Trade, transportation, and utilities* sector, as total jobs moved down by 200 or 2.0 percent.

INDUSTRY TRENDS

- Regional employment within the *Government* sector recorded seasonal job gains typical of September (+400 or 5.1 percent), as school districts added jobs with the beginning of the new academic year.

SAGINAW METROPOLITAN AREA

- The Saginaw unemployment rate fell by 0.7 percentage points to 5.9 percent in September, significantly lower than its year-ago level (7.3 percent).
- The total number of regional unemployed persons (4,800) was down both over the month (-600) and over the year (-1,300).

MONTHLY INDUSTRY DEVELOPMENTS

- Total payroll jobs in the Saginaw labor market edged up by 700 or 0.9 percent in September, to 81,700.
- Gains in the region were concentrated in *State government* in education-related jobs, with the onset of the fall semester.

INDUSTRY TRENDS

- Although jobs in the *Professional and business services* sector remained flat over the month, total employment was up 400 or 4.0 percent since September 2020.

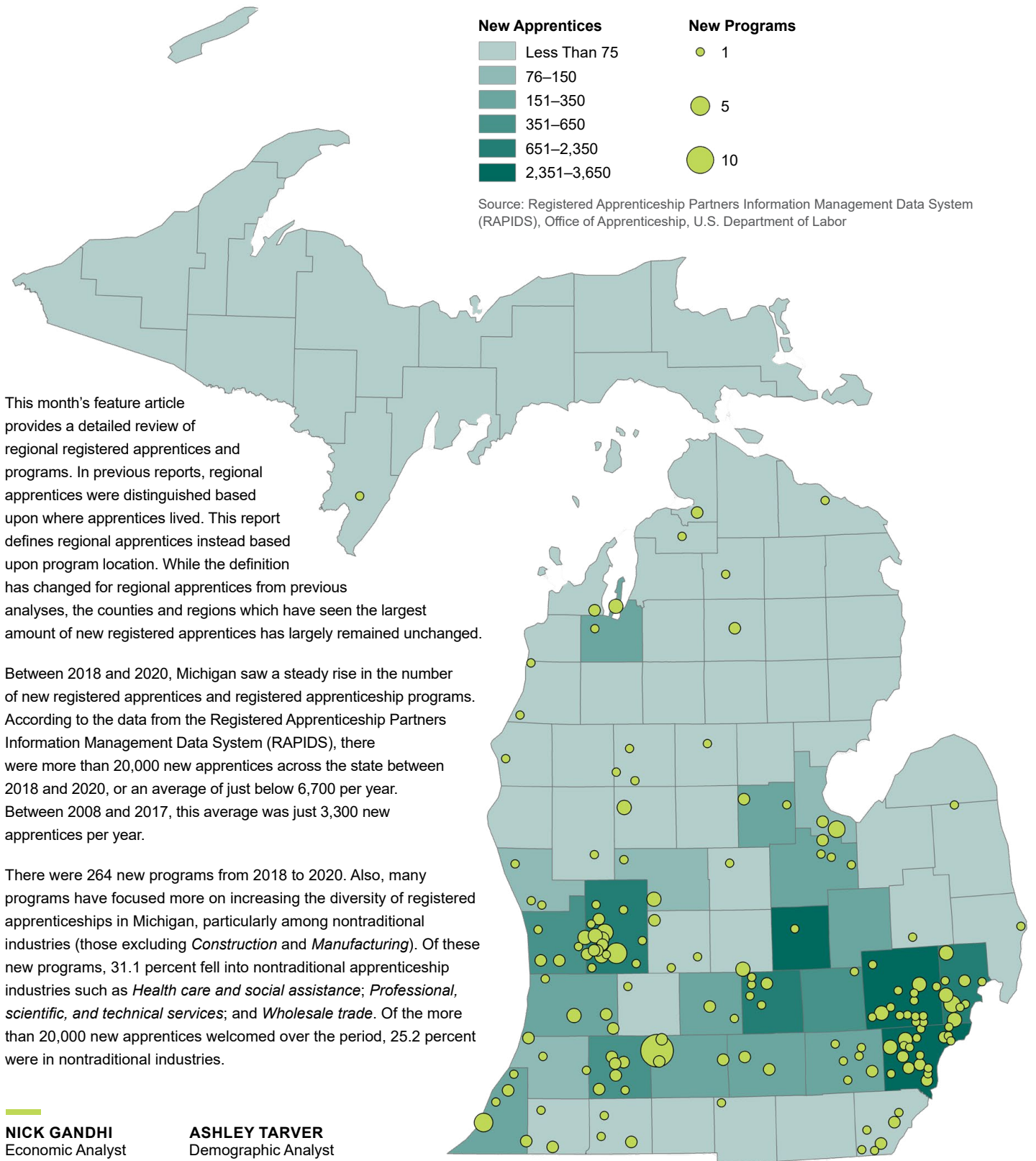
CIVILIAN LABOR FORCE AND NONFARM PAYROLL JOBS

	NILES-BENTON HARBOR			SAGINAW					
	SEP 2021	AUG 2021	SEP 2020	SEP 2021	AUG 2021	SEP 2020			
PLACE OF RESIDENCE									
Civilian Labor Force	70,400	71,700	72,300	81,800	82,900	84,200			
Employed	67,200	68,300	67,600	76,900	77,400	78,000			
Unemployed	3,200	3,400	4,700	4,800	5,400	6,100			
Unemployment Rate	4.5	4.8	6.5	5.9	6.6	7.3			
PLACE OF WORK									
Total Nonfarm Jobs	59,900	59,600	58,700	81,700	81,000	80,700			
Mining, Logging, and Construction	2,500	2,500	2,400	3,300	3,400	3,300			
Manufacturing	12,300	12,200	11,700	10,800	10,800	10,900			
Trade, Transportation, and Utilities	9,700	9,900	10,400	16,700	16,500	15,800			
Wholesale Trade	*	*	*	1,900	1,900	1,900			
Retail Trade	6,200	6,500	6,800	12,000	11,900	11,100			
Information	400	400	400	1,000	1,000	1,000			
Financial Activities	2,500	2,500	2,500	3,700	3,700	3,700			
Professional and Business Services	5,200	4,900	5,200	10,400	10,400	10,000			
Educational and Health Services	9,700	9,600	9,300	15,100	15,100	15,400			
Leisure and Hospitality	7,200	7,600	6,500	7,700	7,800	7,200			
Other Services	2,100	2,100	2,100	2,600	2,600	2,700			
Government	8,300	7,900	8,200	10,400	9,700	10,700			
	UPPER PENINSULA		NORTHEAST MICHIGAN			NORTHWEST MICHIGAN			
	SEP 2021	AUG 2021	SEP 2020	SEP 2021	AUG 2021	SEP 2020	SEP 2021	AUG 2021	SEP 2020
PLACE OF RESIDENCE									
Civilian Labor Force	134,600	135,400	134,800	81,300	83,100	81,800	148,700	153,100	149,100
Employed	129,100	129,500	127,700	77,100	78,500	76,400	142,800	146,600	140,700
Unemployed	5,400	5,900	7,100	4,100	4,500	5,300	5,900	6,400	8,400
Unemployment Rate	4.0	4.4	5.3	5.1	5.4	6.5	4.0	4.2	5.7

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:

NEW REGISTERED APPRENTICES AND NEW APPRENTICESHIP PROGRAMS BY COUNTY, 2018–2020





REGISTERED APPRENTICESHIPS IN MICHIGAN

Apprenticeships provide crucial classroom and on-the-job experience to help train Michigan workers for key occupations in the labor market. While apprentices earn a credential, employers also benefit from apprenticeship programs in a variety of ways, including developing a highly skilled workforce, reducing turnover rates, creating a pipeline of qualified workers, and increasing productivity. Michigan has continued to see an increasing number of registered apprentices and programs, as well as an increase in the diversity of both participants and programs.

In a registered apprenticeship, apprentices earn a paycheck from the first day they work until program completion, and wages increase with skills gained over time. These programs can last anywhere from one to six years with a focus on both education and work experience. Upon completion, apprentices earn a nationally

recognized credential, verifying that they are fully trained for the job.

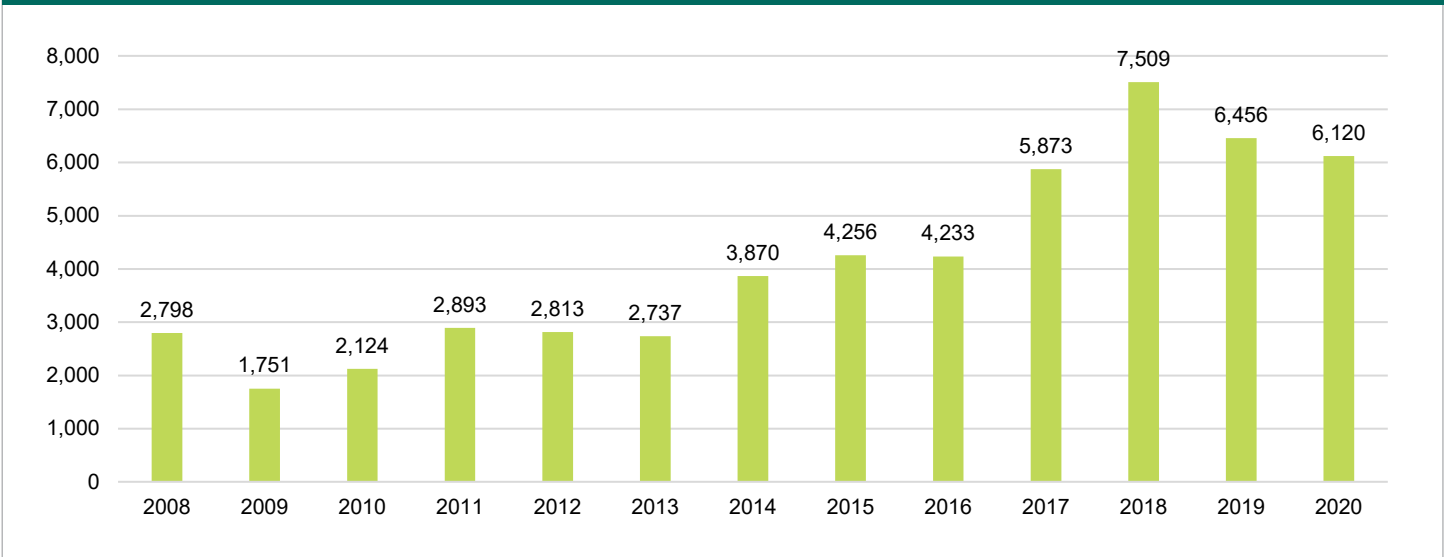
The following sections highlight a variety of resources at the statewide and national scale that help support registered apprenticeships in Michigan. This information is especially important as Michigan continues to invest more resources into registered apprenticeships across the state.

Data and Methodology

Data for this article are primarily from the Registered Apprenticeship Partners Information Management Data System (RAPIDS), managed by the Department of Labor (DOL) Office of Apprenticeship (OA). This is one of the largest databases of its kind. To achieve comparable results to what is published by the DOL, this report follows methodology which is set by the OA.

This study looks at employment and wage outcomes for those who have completed their program during the 2019 fiscal year of analysis across different stages of apprenticeship in Michigan. “New” apprentices are those who have entered a registered apprenticeship program during the fiscal year. Similarly, “new” programs also must have registered during the fiscal year of analysis. An “active” apprentice is defined as those who are registered, suspended, and reinstated during the fiscal year. These conditions also hold true for “active” programs. “Completers” are any registered apprentices who completed their apprenticeship during the fiscal year of analysis. To better understand the impact of apprenticeships on Michigan’s labor market, this study leverages administrative wage record data to measure the employment outcomes of registered apprentices upon completion of their program.

FIGURE 1: NEW REGISTERED APPRENTICES IN MICHIGAN BY YEAR



Source: Registered Apprenticeship Partners Information Management Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

The Current State of Registered Apprenticeships

Despite the significant impact of the COVID-19 pandemic, Michigan saw a favorable number of active registered apprentices in 2020. Over the year, there were 19,130 active apprentices who were spread across more than 1,200 active programs in the state. Of these active programs, 40 were new.

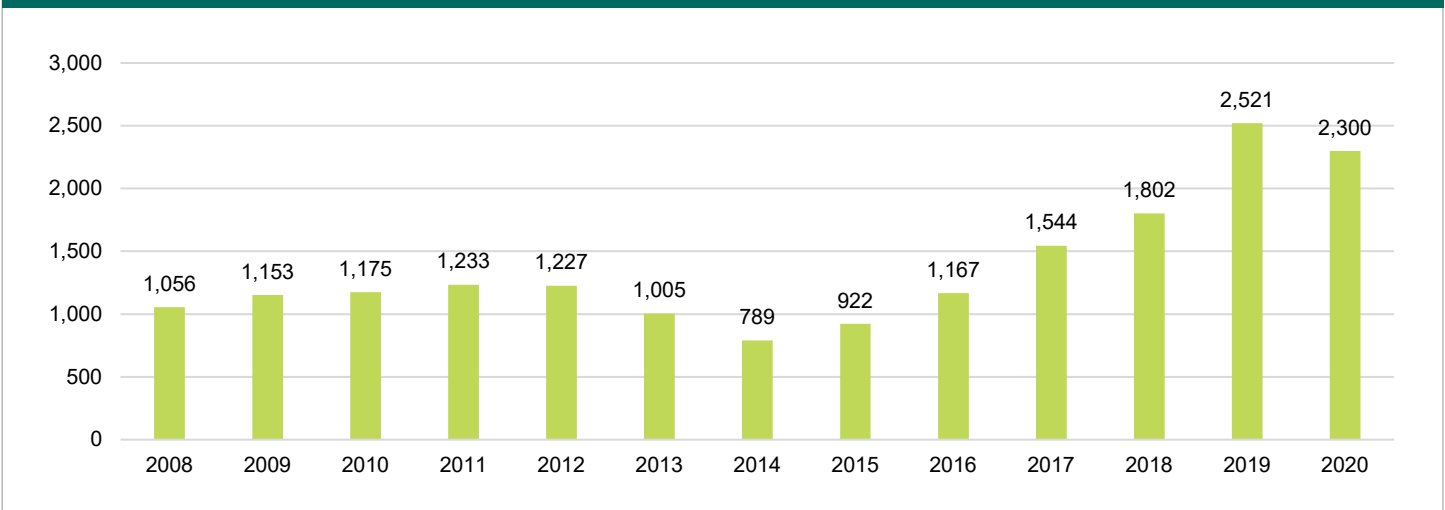
Over 60 percent of active apprentices were in *Construction* and just over 20 percent were in *Manufacturing*—both traditional apprenticeship industries. *Retail trade*, *Utilities*, and *Health*

care and social assistance were the next largest industry sectors, however each had less than 5 percent of active apprentices.

In 2020, there were just over 6,100 new registered apprentices in Michigan. This was down from the previous two years, where there were 7,500 in 2018 and nearly 6,500 in 2019. While this was fewer new apprentices than the previous two years, the number of new apprentices is well above numbers recorded in the early part of the last decade. During this time, new apprentices varied between 2,000 and 3,000 before seeing an uptick in 2014.

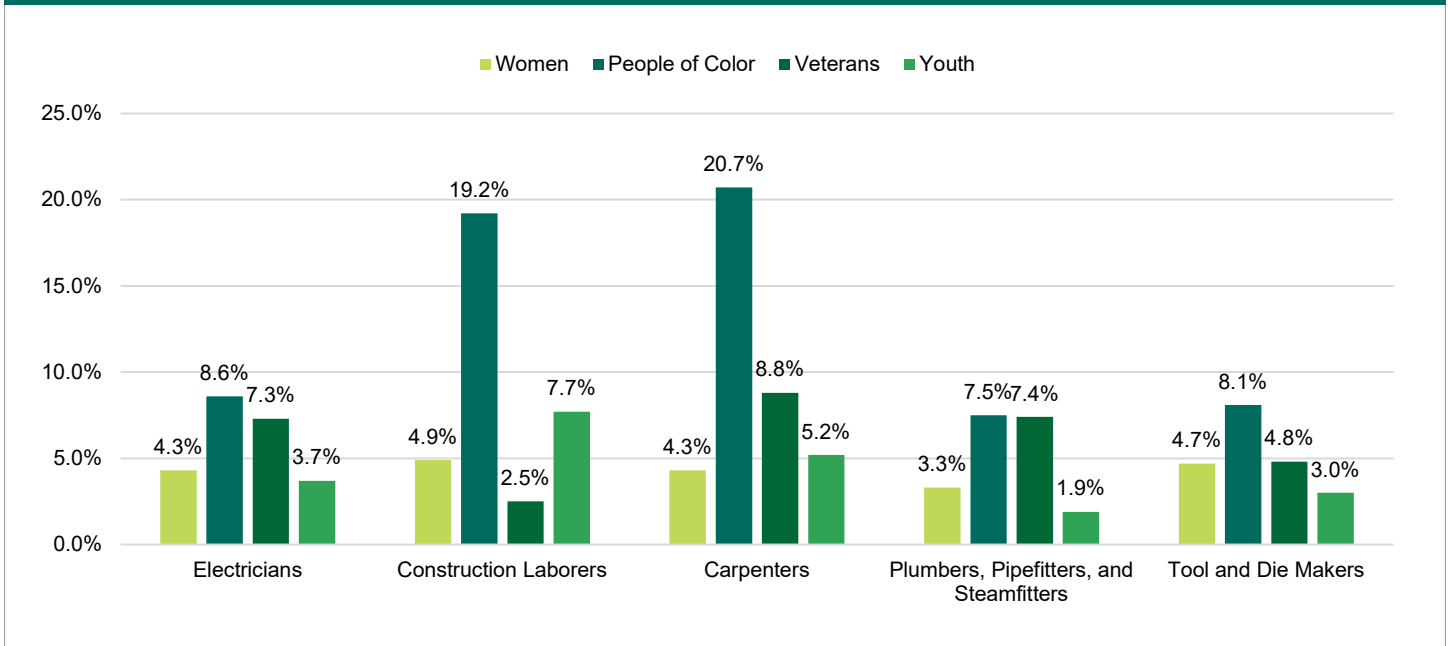
There were 2,300 registered apprenticeship completers in 2020. This was the second highest amount of completers in a year since 2008, only behind 2019 where there were just over 2,500 completers. The number of registered apprenticeship completers rose every year from 2014 through 2019. Before 2017, there had not been a year where there were more than 1,500 completers. Since 2017, the average number of completers per year was just over 2,000. Comparatively, from 2008 to 2016, the average number of completers measured just below 1,100 per year.

FIGURE 2: REGISTERED APPRENTICESHIP COMPLETERS IN MICHIGAN BY YEAR



Source: Registered Apprenticeship Partners Information Management Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

FIGURE 3: DEMOGRAPHIC SHARE AMONG ACTIVE APPRENTICES IN MICHIGAN, SELECT OCCUPATIONS



Source: Registered Apprenticeship Partners Information Management Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

Demographics

Improving representation across various demographic groups is a key focus among those involved with the expansion of the use of the registered apprenticeship training model in Michigan.

GENDER

Among 2020 active registered apprentices across the state, 11.0 percent were women, or just over 2,100 apprentices. Just over one-third of women apprentices were in the traditional apprenticeship industries of *Construction* and *Manufacturing*. However, women made up a small percentage of these industries overall. Women accounted for just 3.9 percent and 6.6 percent of active apprentices in *Construction* and *Manufacturing*, respectively. *Utilities* also had a small representation of women apprentices at just 1.6 percent.

Over half (57.8 percent) of women active apprentices were comprised in the industries of *Health care and social assistance* and *Retail trade*. Women also dominated representation in these industries as well, making up 81.5 percent and 73.2 percent, respectively. *Administrative and support and waste management and remediation services* also had a high participation of women with 27.2 percent.

Just under one-quarter of women active registered apprentices were *First-line supervisors of retail sales workers*, making up 75.5 percent of active apprentices within the occupation. Among

occupations with over 100 active apprentices, women were also very well represented in *Nursing assistants* (91.5 percent), *Pharmacy technicians* (78.8 percent), and *Cooks, restaurant* (67.9 percent). 11.8 percent of active apprentices were women among *Operating engineers and other construction equipment operators*, where increased representation of women has been an intentional focus area.

RACE

Just under 2,400 (12.3 percent) of 2020 active apprentices were people of color (POC). Within this cohort, 83.9 percent identified as Black, 9.3 percent identified as Native American, and 5.5 percent identified as Asian.

Just under two-thirds (62.1 percent) of active apprentices who are POC are in the *Construction* sector. This accounts for 12.5 percent of all active *Construction* apprentices in Michigan in 2020. Additionally, 11.1 percent of all active *Manufacturing* apprentices (another traditional sector) and 30.1 percent of active apprentices in *Retail trade* were POC. Among larger sectors, POC only made up 5.2 percent of active apprentices in *Health care and social assistance*.

Within the largest apprenticeship occupations, POC are well represented among *Carpenters* and *Construction laborers*, making up 20.7 percent and 19.2 percent, respectively. *Electricians* had a participation rate of 8.6 percent and *Plumbers, pipefitters, and*

steamfitters had a rate of 7.5 percent. POC also made up a large portion of both *First-line supervisors of retail sales workers* and *Pharmacy technicians* at 31.1 percent and 28.0 percent of active apprentices, respectively.

VETERAN STATUS

Michigan veterans are a vital group within the workforce and registered apprenticeships across the state. In 2020, veterans accounted for only 6.0 percent of active apprentices statewide. In the traditional industries of *Construction* and *Manufacturing*, veterans made up 6.4 percent and 5.3 percent, respectively. Among all veteran apprentices, 83.6 percent were in traditional apprenticeships. *Utilities* and *Administrative and support and waste management and remediation services* each had a share of veterans with 11.6 percent and 8.8 percent, respectively. There were practically zero veterans in both *Retail trade* and *Health care and social assistance*.

YOUTH STATUS

In 2020, there were just under 800 (4.0 percent) active apprentices in Michigan between the ages of 16 and 18 years old. Three-quarters of youth apprentices are in *Construction* while making up 4.9 percent of all active apprentices in the sector. Just 2.2 percent of *Manufacturing* active apprentices were youth. Those within the youth age range were well represented in *Educational services*, accounting for 13.7 percent of active apprentices in the sector.



Occupations

Just over half (51.0 percent) of active apprentices in Michigan are contained within four occupations. These occupations include *Electricians* (19.8 percent), *Construction laborers* (14.4 percent), *Carpenters* (8.7 percent), and *Plumbers, pipefitters, and steamfitters* (8.2 percent). These occupations also have the largest number of total new apprentices between 2008 and 2020, while *Construction laborers* have just the 12th largest number of completers in the same period.

Between 2008 and 2019, *Carpenters* averaged over 200 new registered apprentices each year. There were over 900 new apprentices in the occupation in 2020, the largest spike of any occupation across Michigan. *Millwrights* also experienced a significant increase in new apprentices in 2020 and was among the top five occupations in 2020 for new apprentices. Between 2008 and 2019, there were just under 100 new apprentices a year in the occupation compared to more than 400 in 2020.

There have been several other occupations which have seen significant growth in the number of new apprentices in the last few years. In fact, 86 occupations experienced growth in the average number of new apprentices in 2018–2020 compared to 2008–2017. Just 39 occupations experienced negative growth. The growing number of new apprentices across this many occupations helps to signify not just growth in apprenticeship participation, but an increase in the diversity of apprenticeship occupations as well.

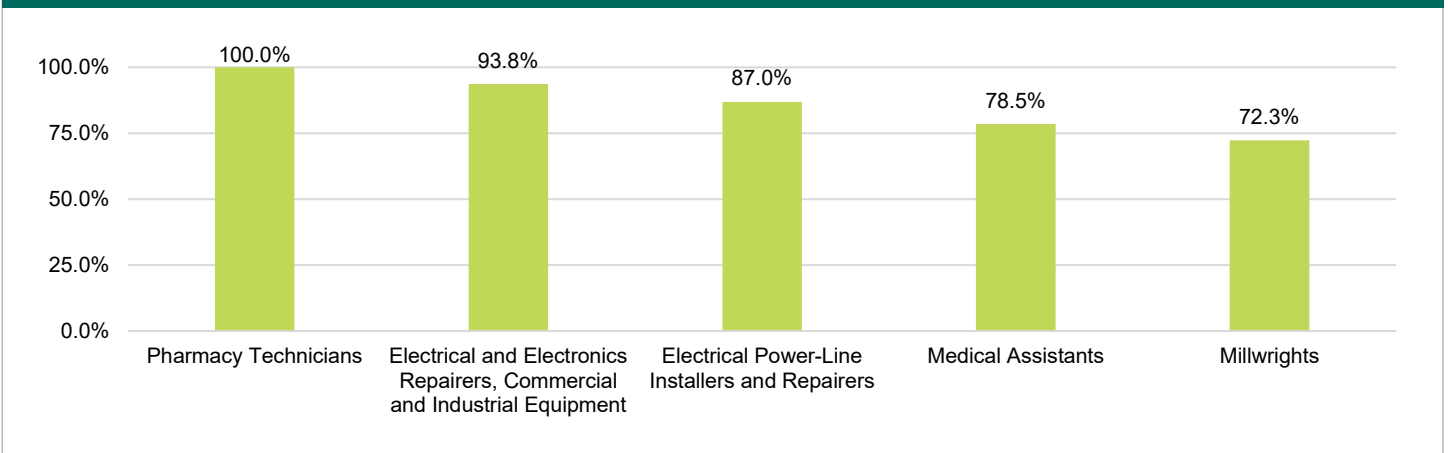
COMPLETION RATES

While looking at the number of completers is an important metric in gauging the progress of the use of the registered apprenticeship training model in Michigan, it is also important to look at occupational completion rates. Completion rates are measured as the percentage of new registered apprentices who complete their program within their expected

time frame. This expected time frame is the length of the program with a 50.0 percent extension. For example, those in a four-year program are given six years to complete. Additionally, these rates are measured taking the most recent cohort of completers for which data is available, this being 2020 completers. Meaning, the earliest year a new apprentice would have started in a four-year program would have been 2014.

For all occupations, the completion rate was 41.0 percent. Among occupations with 10 or more completers, *Pharmacy technicians* had the highest completion rate at 100.0 percent among nearly 400 apprentices. *Electrical and electronics repairers, commercial and industrial equipment* had the second highest at 93.8 percent, followed by *Electrical power-line installers and repairers* at 87.0 percent. Among larger occupations, *Construction laborers* had a completion rate of just 4.3 percent in the most recent cohort and *Electricians* was at 43.9 percent.

FIGURE 4: TOP FIVE OCCUPATIONS WITH THE HIGHEST COMPLETION RATES IN MICHIGAN



Source: Registered Apprenticeship Partners Information Management Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

FIGURE 5: EARNINGS ONE YEAR AFTER COMPLETING AN APPRENTICESHIP IN MICHIGAN, SELECT OCCUPATIONS



Source: Registered Apprenticeship Partners Information Management Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

Employment Outcomes

Administrative wage record data helps paint a picture of post-apprenticeship outcomes among registered apprenticeship completers. This allows for analysis on employment one year after program completion as well as wages earned among those employed one year after completion (this is comparable to a starting wage for any nonapprenticed occupation).

For this report, 2019 registered apprenticeship completers were analyzed to see if they were earning wages one year after completion. Occupations with fewer than 10 completers employed were suppressed. Because of this, data on occupations such as *Carpenters*, *Medical assistants*, and *Welders, cutters, solderers, and brazers* were not available due to the insufficient number of employed. There were 19 occupations which reached the criteria to remain unsuppressed, compared to just 13 in the 2019 report. Figure 5 shows the one-year-after wages for the top 10 occupations in terms of number of completers which were earning wages one year after completion.

For 2019 completers, the median hourly one-year-after wage for all occupations was \$32.22. Comparatively, the 2020 overall 25th percentile hourly wage for all occupations in Michigan (a proxy for starting wages across all occupations

in Michigan) was just \$13.60, nearly \$20.00 per hour less. Of the 19 occupations analyzed, 18 had a median hourly one-year-after wage greater than the 25th percentile hourly wage. *Electrical and electronics repairers, commercial and industrial equipment* completers had a median hourly wage of \$28.22, whereas the 25th percentile wage for the occupation was \$29.89. The other 18 occupations all had a median hourly one-year-after wage that was at least \$2.16 more than the 25th percentile hourly wage. For 11 of these occupations, the one-year-after median wage was at least \$10.00 more than the 25th percentile hourly wage.

Among top occupations, those who completed an apprenticeship in 2019 as *Electricians* earned a median hourly one-year-after wage of \$34.91. This was well over the 25th percentile hourly wage for the occupation of \$21.39. Other top occupations where wages were significantly higher than the 25th percentile wage included *Plumbers, pipefitters, and steamfitters* (\$35.28), *Sheet metal workers* (\$41.60), *Industrial machinery mechanics* (\$33.81), and *Electrical power-line installers and repairers* (\$70.23).

Along with these one-year-after wages, employment percentages allow for the analysis of how many program completers were earning wages one year after completing. Overall, 2019

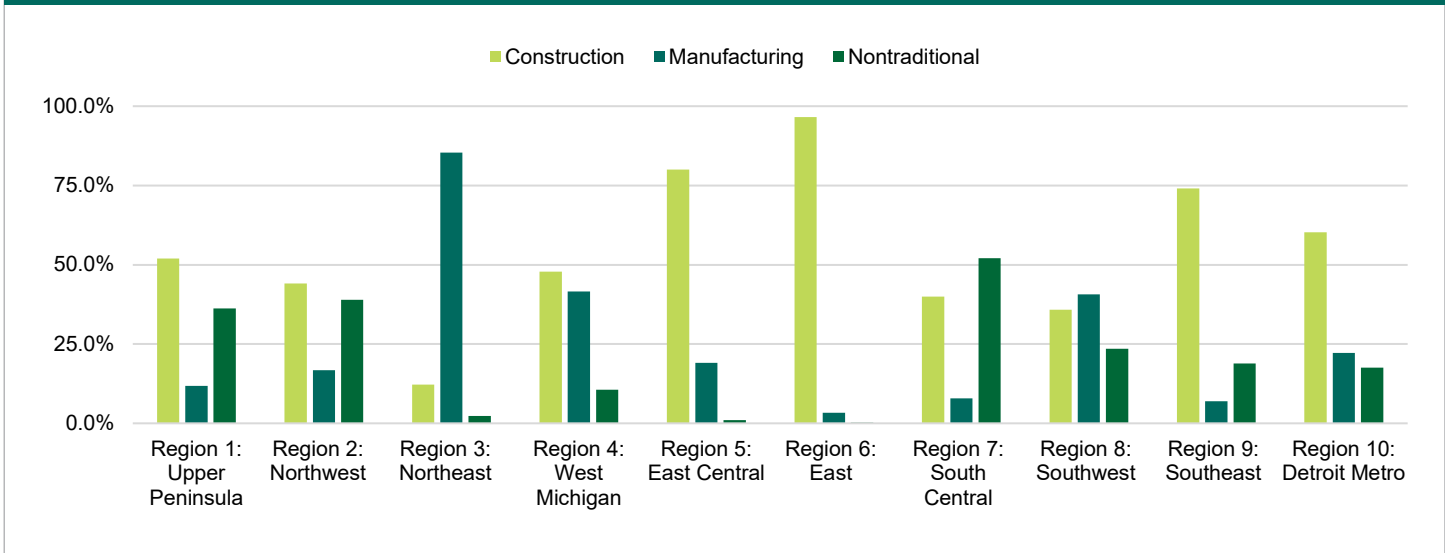
completers had an employment percentage of 95.9 percent. Of the 19 occupations with publishable data, only two (*Construction laborers* and *Heavy and tractor-trailer truck drivers*) had a rate below 90 percent, with both being just below that threshold. Furthermore, five of these occupations had an employment percentage of 100.0 percent. These occupations included *Tree trimmers and pruners*; *Millwrights*; *Machinists*; *Electrical and electronics repairers*; *commercial and industrial equipment*; and *Heating, air conditioning, and refrigeration mechanics and installers*.

Regional Apprentices and Programs

Regional apprentice locations are determined by program location. In previous reports, regional apprentice locations were determined by where the apprentice lived. This section will dive into the makeup of registered apprentices across the 10 prosperity regions in Michigan based on the program location.

There were over 19,100 active registered apprentices in Michigan in 2020. The Detroit Metro region is home to 42.2 percent of these active apprentices. This is followed by East Michigan (15.6 percent), West Michigan (13.3 percent), and South Central Michigan (11.1

FIGURE 6: ACTIVE REGISTERED APPRENTICES BY INDUSTRY AND PROSPERITY REGION



Source: Registered Apprenticeship Partners Information Management Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

percent). Together, the Upper Peninsula, Northwest Michigan, and Northeast Michigan only have 2.7 percent of active apprentices in the state.

Michigan had over 1,200 active registered apprenticeship programs in 2020. While there were the most active apprentices in the Detroit Metro region, West Michigan had the most active programs in the state with just under 400 (30.6 percent). Detroit Metro (21.9 percent) had the second most, followed by Southeast Michigan (15.0 percent).

Among industries, seven of 10 prosperity regions in Michigan had the largest share of apprentices in *Construction*. Notably, 96.5 percent of active apprentices in East Michigan were in the sector. The next highest share was in East Central Michigan with 80.0 percent. Northeast Michigan had an overwhelming majority of *Manufacturing* apprentices with 85.4 percent, albeit with less than 50 total active apprentices in the region. The sector also slightly edged out *Construction* in Southwest Michigan with 40.7 percent. Nontraditional industries made up most apprentices in only South Central Michigan with 52.1 percent.

Among occupations well represented in the largest apprenticeship regions, the Detroit Metro had its largest representation among *Carpenters* (19.3 percent) and *Electricians* (16.5 percent). East Michigan saw *Construction laborers* make up most of their apprentices at 85.1 percent. The region was also home to 92.2 percent of

all *Construction laborers* statewide. In West Michigan, the occupations of *Electricians* (38.1 percent) and *Tool and die makers* (12.1 percent) combined to make up just over half of all active apprentices.

Just under 50 new registered apprenticeship programs commenced in 2020 across the state. These programs were largely contained to the regions of West Michigan (27.3 percent), Southwest Michigan (25.0 percent), Detroit Metro (20.5 percent), and Southeast Michigan (13.6 percent). Of these new programs, 68.2 percent were in traditional industries.

With these new programs, Michigan welcomed more than 6,100 new registered apprentices statewide. Detroit Metro had the largest cohort of new apprentices with a share of 45.9 percent. The next largest were in East Michigan and West Michigan with a share of 16.3 percent and 11.1 percent, respectively. In total, 81.5 percent of all new apprentices statewide were in traditional industries. However, some regions displayed a larger share of nontraditional new apprentices. These regions included Northwest Michigan (56.2 percent), South Central Michigan (44.7 percent), and Southwest Michigan (41.1 percent).

Conclusion

Registered apprenticeships in Michigan have been, and still are a crucial component when it comes to training the labor force skills for critical occupations in Michigan. There has been a heavy investment into these apprenticeship programs in Michigan at both the state and

national level. With these investments, there has been a noticeable bump in the number of new and active registered apprentices across the state. Despite the COVID-19 pandemic, there were more than 19,100 active registered apprentices in Michigan in 2020. Among new registered apprentices, there were more than 6,100 statewide beginning in 2020. This was the third largest cohort of new apprentices since 2008, trailing only 2018 and 2019.

Apprenticeships have shown to produce favorable employment outcomes for those who complete a program. On top of continued wage progression, those who complete a registered apprenticeship program earn significantly more than comparable wages for all who work in the occupation as well as having extremely high employment percentages. In Michigan, registered apprenticeships continue to be a critical training tool for both employers and those who are looking for a career pathway to good and promising jobs.

For more information on apprenticeships in Michigan please see our [full report](#), and view the [Michigan Registered Apprenticeship Dashboard](#) at www.Michigan.gov/Apprenticeship.

NICK GANDHI
Economic Analyst

OCCUPATIONAL FOCUS

OPERATING ENGINEERS AND OTHER CONSTRUCTION EQUIPMENT OPERATORS

This month's Occupational Focus is on *Operating engineers and other construction equipment operators*. Those who work in this occupation drive, maneuver, or control the heavy machinery used to construct roads, bridges, buildings, and other structures.

According to the U.S. Bureau of Labor Statistics, *Operating engineers* "operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors, or front-end loaders to excavate, move, and grade earth, erect structures, or pour concrete or other hard surface pavement. May repair and maintain equipment in addition to other duties."

Examples of job titles encompassed by this position include backhoe operator, engineering equipment operator, equipment operator, forklift operator, heavy equipment operator, hot mix asphalt operator, machine operator, motor grader operator, operating engineer, and track hoe operator.

Some of the responsibilities of this occupation include

- Learning and following safety regulations
- Taking actions to avoid potential hazards or obstructions, such as utility lines, other equipment, other workers, or falling objects

- Starting engines, moving throttles, switches, or levers, or depressing pedals to operate machines, such as bulldozers, trench excavators, road graders, or backhoes
- Coordinating machine actions with other activities, positioning or moving loads in response to hand or audio signals from crew members
- Aligning machines, cutterheads, or depth gauge makers with reference stakes and guidelines or ground or position equipment, following hand signals of other workers

Typical entry-level education required for this occupation is a high school diploma. Some technical skills that could be desirable to employers may include, familiarization with facilities management software, office suite software, operating system software. *Operating engineers* are mostly employed by *Specialty trade contractors*, and *Heavy and civil engineering construction*; accounting for nearly two-thirds of all jobs for this occupation. They can work in unpleasant weather, and some work in remote locations. Some may have irregular schedules, such as working around the clock or late into the night. Most *Operating engineers* work full time, and some work more than 40 hours per week. The work may be seasonal in areas of the country that experience extreme cold.

Related occupations include

- Paving, surfacing, and tamping equipment operators
- Pile driver operators
- Highway maintenance workers
- Excavating and loading machine and dragline operators, surface mining
- Crane and tower operators

The long-term projected job growth rate through 2028 is 0.4 percent, which is faster than the Michigan projected 0.1 percent growth rate for all occupations. Spending on infrastructure is expected to increase, resulting in new jobs over the decade. Improvements to infrastructure may include roads, bridges, water and sewer systems. The state median hourly wage for this occupation was \$27.02 which was \$7.35 higher than the statewide median in 2020.

CHRIS HOLMAN
Economic Analyst

OPERATING ENGINEERS AND OTHER CONSTRUCTION EQUIPMENT OPERATORS BY THE NUMBERS



8,550
TOTAL
EMPLOYMENT 2020

17TH
NATIONAL
EMPLOYMENT RANK



22
JOBS PER
10,000 TOTAL

0.75
LOCATION
QUOTIENT



\$56,190
MEDIAN
ANNUAL WAGE

\$27.02
MEDIAN
HOURLY WAGE



0.4%
2018–2028 PROJECTED
JOB GROWTH

1,000
PROJECTED ANNUAL
OPENINGS



**HIGH SCHOOL
DIPLOMA**
REQUIRED
EDUCATION



MICHIGAN OPERATING ENGINEERS AND OTHER CONSTRUCTION EQUIPMENT OPERATORS PER 10,000 EMPLOYED

STATE	OPERATING ENGINEERS AND CONSTRUCTION EQUIPMENT OPERATORS	PER 10,000 EMPLOYED	LOCATION QUOTIENT	HOURLY MEDIAN WAGE	ANNUAL MEDIAN WAGE
Upper Peninsula	750	74	2.6	\$24.15	\$50,240
Northeast Lower Peninsula	430	65	2.2	\$22.69	\$47,200
Bay City	170	57	2.0	\$27.95	\$58,140
Monroe	130	38	1.3	\$25.74	\$53,530
Northwest Lower Peninsula	380	34	1.2	\$22.61	\$47,030
Balance of Lower Peninsula	800	33	1.1	\$23.61	\$49,100
Jackson	120	26	0.9	\$24.01	\$49,940
Muskegon	140	25	0.9	\$25.19	\$52,400
Lansing-East Lansing	470	24	0.8	\$28.43	\$59,120
Michigan	8,550	22	0.8	\$27.02	\$56,190
Flint	230	19	0.6	\$28.27	\$58,810
Detroit-Warren-Dearborn	3,240	18	0.6	\$29.27	\$60,880
Midland	60	18	0.6	\$27.18	\$56,540
Niles-Benton Harbor	90	17	0.6	\$24.03	\$49,980
Kalamazoo-Portage	230	17	0.6	\$21.68	\$45,090
Saginaw	120	16	0.6	\$23.04	\$47,930
Grand Rapids-Wyoming	760	15	0.5	\$22.59	\$46,990
Ann Arbor	290	14	0.5	\$29.71	\$61,790

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

JOB ADS RISE IN THIRD QUARTER 2021

Third Quarter 2021 Job Advertisements

In the third quarter of 2021, there were 399,500 job advertisements, a considerable 47.6 percent increase over the third quarter of 2020 with 270,700 ads. For an additional comparison, in the third quarter of 2019, there were 283,400 total available job advertisements, slightly above 2020 but still significantly less than in 2021. A 2.8 percent rise in job postings was observed since the second quarter of 2021 (388,800 ads) as well. In addition, demand for all levels of education levels rose. Over the year, high school and associate degree specifications were up 51.2 percent and 102.7 percent, respectively. Comparing the same time frames, bachelor's degrees rose 101.4 percent and master's and above increased by 53.0 percent. Since the third quarter 2020, all industry groups have experienced growth ranging from 9.9 percent in *Agriculture, forestry, fishing and hunting* to more than 100.0 percent in *Information*.

Job Advertisements Reach New Monthly Record

September set a new single-month high for available job openings. The previous record had been in May 2021 with just over 237,000 postings. In September 2021, there were 238,700 total available job advertisements, this was a 3.0 percent increase from the previous month's 231,800 postings. Within these advertisements, more than half specify a minimum education requirement. Over the month, job ads specifying

a minimum of a high school diploma, associate degree, or bachelor's degree increased. During the same time frame, however, job openings for master's degrees and above declined slightly.

Supply/Demand Rate Falls Significantly

The supply/demand rate has fallen for three consecutive months. In August 2021, the rate fell below 1.0 for the first time. In September, this rate dropped even further to 0.75. This means, online job openings outpaced the number of unemployed persons in Michigan for both August and September. The most recent rate of 0.75 represents approximately 75 unemployed persons for every 100 open online job advertisements. This is nearly 70 percent lower than the rate of 2.43 one year prior. Over the third quarter of 2021, the number of people unemployed has consistently lowered while the available job ads have consistently risen. Together, this effectively lowers the rate of labor supply and demand.

Job Openings and Labor Turnover Survey

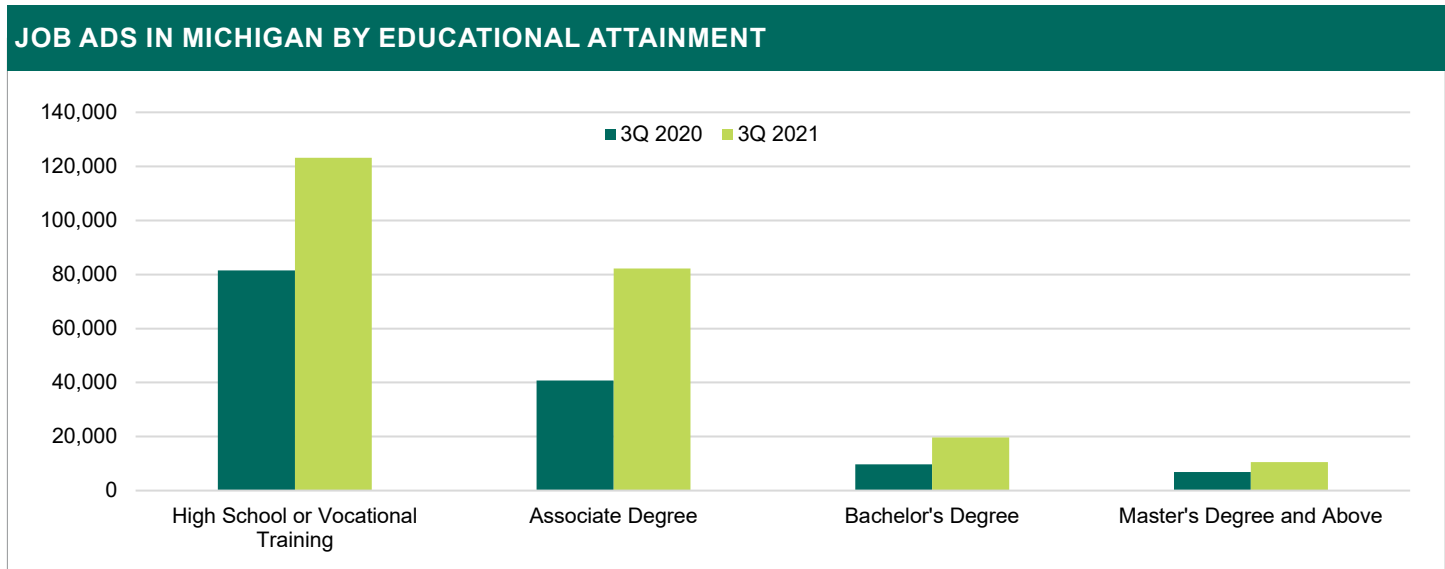
Another demand side indicator estimating the number of jobs available is the Job Openings and Labor Turnover Survey (JOLTS) conducted by the Bureau of Labor Statistics (BLS). As of October 22nd 2021, the BLS released new state level JOLTS data that is similar to and can be compared with the Burning Glass Help Wanted Online (HWOL) data series.

The HWOL and JOLTS data are not perfectly aligned due to different methodology and collection tactics and historically, the JOLTS job openings data are 50,000 to 100,000 greater than HWOL job ads each month. HWOL measures monthly online job postings from a variety of job domains to create an index. They work to de-duplicate any postings of the same job across multiple sites, but include only the number of postings, not the number of positions the ad is looking to hire. JOLTS estimates are collected from 21,000 sampled establishments nationally and are estimated for each state based on a model using each state's proportion of industries. While the JOLTS job openings data is typically more volatile with greater monthly swings, overall these two data series follow the same general trend.

JOLTS data are released with a two-month lag, while HWOL data provides job opening estimates for the previous month. Regardless, both are still worth utilizing to assist in the understanding of the current state of the labor market.

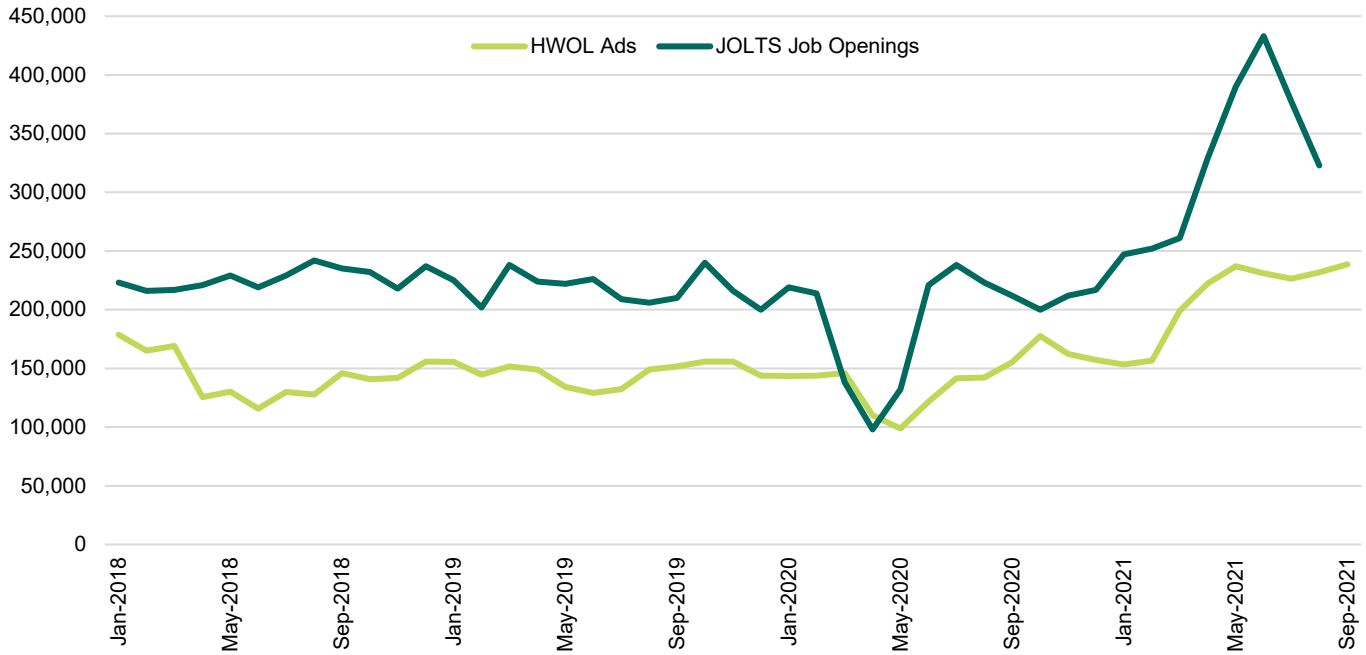
In August 2021, job openings from the JOLTS data totaled 323,000 in Michigan, exactly 100,000 more than one year prior. HWOL data recorded a similar 90,000 increase in job ads over the year. Since January 2021, both of these data series have shown and increased demand for workers.

TRISHA SCHLEGEL
Economic Analyst



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

MICHIGAN JOB ADS AND JOB OPENINGS, JAN 2018–SEP 2021



Source: The Conference Board Help Wanted OnLine®, Burning Glass Technologies; Job Openings and Labor Turnover Survey, U.S. Bureau of Labor Statistics

JOB ADS BY INDUSTRY, THIRD QUARTER 2021



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

RELEVANT RANKINGS

ACTIVE APPRENTICES BY STATE (SEASONALLY ADJUSTED)

RANK	STATE	ACTIVE APPRENTICES	NEW APPRENTICES	COMPLETERS
1	California	96,579	32,252	14,189
2	South Carolina	20,715	5,987	2,079
3	Ohio	20,413	6,902	2,509
4	Texas	20,122	7,089	2,271
5	Michigan	19,130	6,120	2,300
23	Hawaii	7,578	1,546	702
24	Connecticut	6,972	1,559	756
25	Tennessee	6,814	2,354	868
26	Arizona	6,710	2,284	468
27	North Carolina	6,048	2,023	711
46	Delaware	1,490	672	177
47	Nevada	1,074	290	147
48	Massachusetts	988	465	99
49	South Dakota	608	320	92
50	Wyoming	455	199	53

Source: Registered Apprenticeship Partners Information Management Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

Note: The number of registered apprentices reflect fiscal year 2020 counts. Michigan registered apprenticeship counts calculated for this report were compared with counts of other states as reported by the U.S. Department of Labor.

TOP 15 MICHIGAN COUNTIES WITH ACTIVE APPRENTICES (SEASONALLY ADJUSTED)

RANK	COUNTY	ACTIVE APPRENTICES	NEW APPRENTICES	COMPLETERS
1	Oakland County	3,816	1,744	378
2	Wayne County	2,760	440	448
3	Shiawassee County	2,553	853	29
4	Ingham County	1,879	489	256
5	Macomb County	1,496	628	246
6	Kent County	1,310	406	222
7	Livingston County	687	201	49
8	Ottawa County	600	162	97
9	Kalamazoo County	547	201	79
10	Genesee County	347	121	58
11	Calhoun County	292	99	34
12	Washtenaw County	286	62	51
13	Allegan County	260	33	26
14	Saginaw County	229	81	43
15	Eaton County	204	56	25

Source: Registered Apprenticeship Partners Information Management Data System (RAPIDS), Office of Apprenticeship, U.S. Department of Labor

Note: The number of registered apprentices reflect fiscal year 2020 counts and follow updated methodology for regional apprentices. Regional apprentices are determined by program location.



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