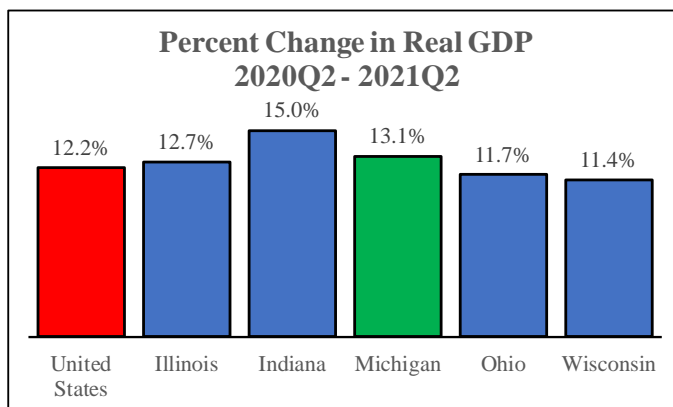


MICHIGAN ECONOMIC UPDATE

Office of Revenue and Tax Analysis
Michigan Department of Treasury
<http://www.michigan.gov/treasury>
Summarizing Economic Data for September 2021
(Published 10/29/2021)

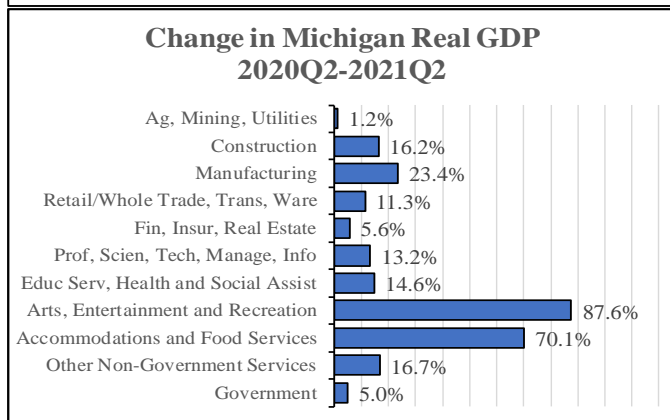
State Gross Domestic Product Release

On October 1, 2021, the Bureau of Economic Analysis released 2021Q2 state gross domestic product (GDP) data along with revised historical data. Below are some highlights of that release ^(c):



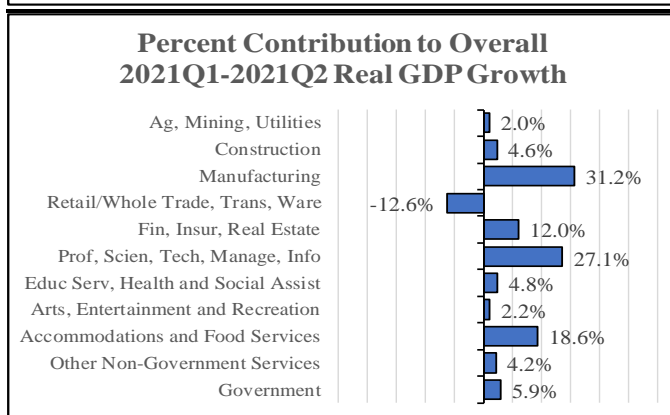
Interstate Comparisons, Y-O-Y Changes

- Michigan real (inflation adjusted) total GDP increased 13.1 percent over the past year.
- Michigan's y-o-y percent change in total GDP ranked 8th largest among all states.
- State y-o-y real GDP changes ranged from 6.6 percent (Alaska) to 18.1 percent (Tennessee).
- Among Great Lakes states, y-o-y percent changes ranged from 11.4 percent (Wisconsin) to 15.0 percent (Indiana).



Sectoral Michigan Real GDP Y-O-Y Change

- Across all broad industry groupings in Michigan, real GDP increased between 2020Q2 (the onset of the pandemic) and 2021Q2.
- The sectors hit the hardest by the pandemic a year ago saw the largest y-o-y percentage gains. Year-over-year, real GDP rose 87.6 percent in the arts, entertainment and recreation industry and increased 70.1 percent in accommodations and food services.
- Manufacturing real GDP grew 23.4 percent from a year ago.



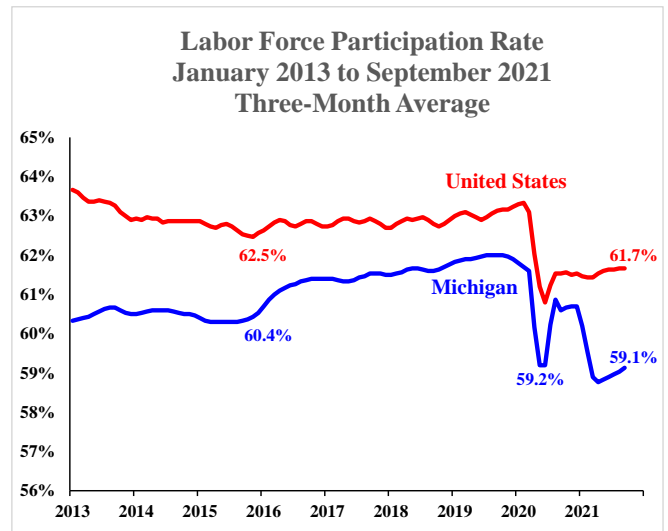
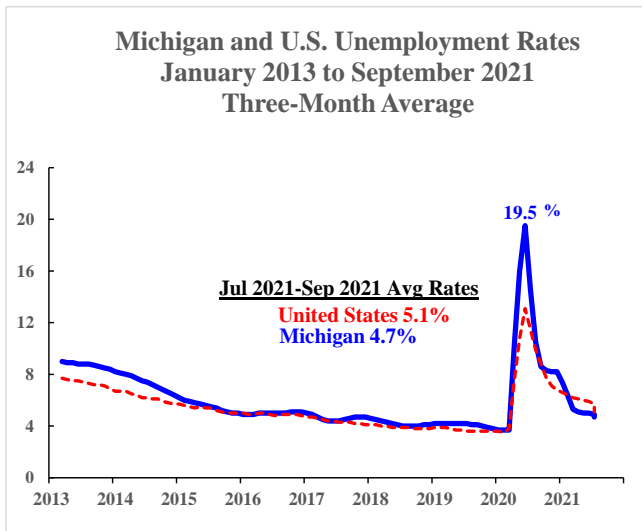
Sectoral Michigan Real GDP 2021Q2 Change

- In 2021Q2, real Michigan GDP grew at an 8.3 percent annual rate from 2021Q1.
- The manufacturing sector accounted for 31.2 percent of the overall 2021Q2 real Michigan GDP increase. The combined professional, scientific, technical, management and information sector comprised 27.1 percent of the overall increase.
- Other sectors responsible for large shares of the overall 2021Q1 increase included the accommodations and food services sector and the finance, insurance and real estate sector.

September 2021 Summary

Household Unemployment and Employment

- The monthly Michigan unemployment rate estimate fell to 4.6 percent in September. The three-month average of the Michigan unemployment rate dropped to 4.7 percent in September. Compared to last September, the three-month average is down 3.9 percentage points. Compared to pre-pandemic February 2020 rate, the current average is up 1.0 percentage point.
- The average number of people employed in Michigan between July 2021-September 2021 was 240,800 lower than the number employed in February 2020. Compared to the three-month average of people employed between July 2020-September 2020, the current three-month average is up 76,200 people. The July 2021-September 2021 average of people unemployed is 39,300 people higher than the number of unemployed in February 2020.
- The U.S. unemployment rate fell 0.4 of a percentage point to 4.8 percent in September. September's national jobless rate is 3.0 percentage points lower than the September 2020 rate (7.8 percent), but 1.3 percentage points higher than its February 2020 rate (3.5 percent).
- Both the Michigan and U.S. labor force participation rates remain significantly lower than their pre-pandemic participation rates.



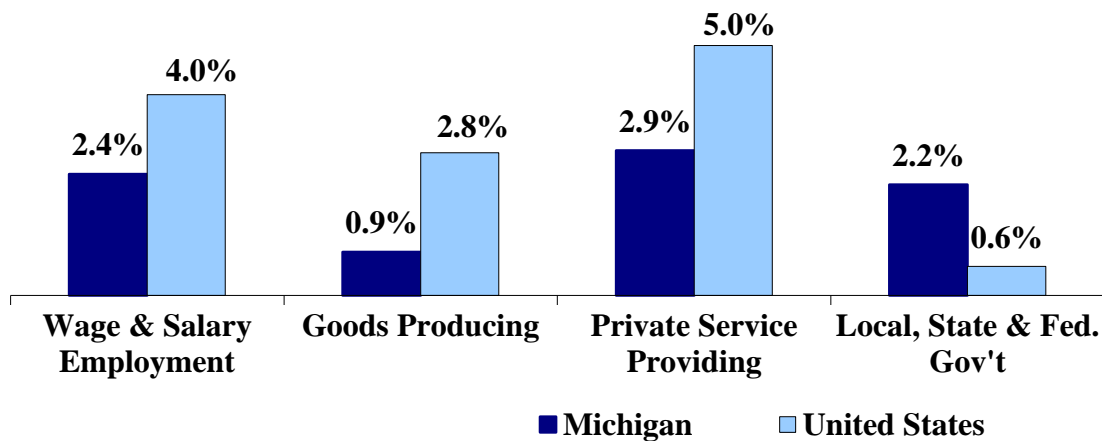
Employment by Place of Residence (in Thousands)^(a)

	<u>Annual</u> <u>2020</u>	<u>Jul</u> <u>2020</u>	<u>Aug</u> <u>2020</u>	<u>Sep</u> <u>2021</u>	<u>Chg Fr</u> <u>Mo Ago</u> <u>Level</u>	<u>Chg Fr</u> <u>Mo Ago</u> <u>%</u>	<u>Chg Fr</u> <u>Yr Ago</u> <u>Level</u>	<u>Chg Fr</u> <u>Yr Ago</u> <u>%</u>	<u>Three</u> <u>Month</u> <u>Average</u>
Michigan									
Labor Force	4,841	4,715	4,726	4,738	12	0.3%	-111	-2.3%	4,726
Employed	4,363	4,488	4,502	4,518	16	0.4%	67	1.5%	4,503
Unemployed	478	227	224	220	-4	-1.8%	-178	-44.7%	224
Unemployment Rate	9.9%	4.8%	4.7%	4.6%	n.a.	-0.1% pts	n.a.	-3.6% pts	4.7%
United States									
Labor Force	160,742	161,347	161,537	161,354	-183	-0.1%	1,276	0.8%	161,413
Employed	147,795	152,645	153,154	153,680	526	0.3%	6,137	4.2%	153,160
Unemployed	12,947	8,702	8,384	7,674	-710	-8.5%	-4,861	-38.8%	8,253
Unemployment Rate	8.1%	5.4%	5.2%	4.8%	n.a.	-0.4% pts	n.a.	-3.0% pts	5.1%

Source: Michigan Department of Technology, Management & Budget and Bureau of Labor Statistics, U.S. Department of Labor

- Compared to September 2020, Michigan payroll employment was up by 99,000 jobs (2.4 percent). State payroll employment rose by 8,000 jobs in September 2021 from August 2021. Nationally, September 2021 payroll employment was up by 5.7 million jobs (4.0 percent) from a year ago. National employment rose 194,000 jobs in September.

Payroll Employment Growth September 2020 to September 2021



- In the goods-producing sector, Michigan payroll employment increased 0.9 percent in September from a year ago; employment in the private service-providing sector rose 2.9 percent. From a year ago, September national payroll employment rose 2.8 percent in the goods-producing sector and increased 5.0 percent in the private service-providing sector.
- At 39.5 hours, manufacturing weekly hours in Michigan were down 0.4 of an hour from last year.

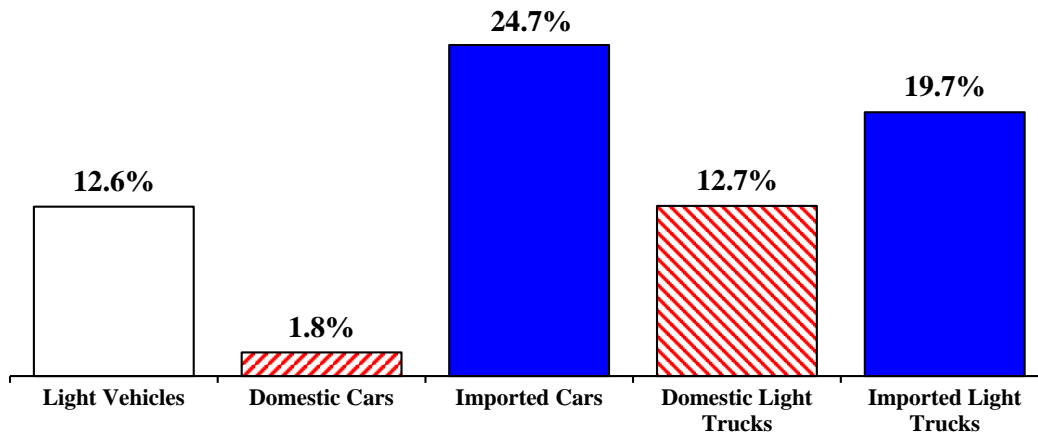
Wage and Salary (Payroll) Employment (in Thousands)^(b)

	MI				US			
	2020 <u>Annual</u>	MI Sep <u>2020</u>	MI Sep <u>2021</u>	Percent <u>Change</u>	2020 <u>Annual</u>	US Sep <u>2020</u>	US Sep <u>2021</u>	Percent <u>Change</u>
Wage & Salary Employment	4,032.5	4,081.9	4,180.9	2.4%	142,185	141,865	147,553	4.0%
Goods Producing	728.5	750.7	757.2	0.9%	20,068	19,971	20,540	2.8%
Manufacturing	557.1	572.1	573.0	0.2%	12,179	12,123	12,446	2.7%
Private Service Providing	2,722.5	2,757.2	2,837.0	2.9%	100,209	100,037	105,029	5.0%
Trade, Trans. & Utilities	746.5	761.8	780.5	2.5%	26,590	26,662	27,576	3.4%
Services	1,702.4	1,721.1	1,780.8	3.5%	62,202	62,004	65,797	6.1%
Local, State & Fed. Gov't	581.5	574.0	586.7	2.2%	21,909	21,857	21,984	0.6%
Manufacturing Weekly Hours	40.7	39.9	39.5	-0.4 hrs	40.7	41.2	41.4	0.2 hrs

Motor Vehicle Sales

- After peaking at 18.3 million units in April, the U.S. light vehicle sales rate, constrained by supply chain shortages, fell for the fifth straight month in September to 12.2 million units. Compared to last September, sales were down substantially (-25.2 percent).
- U.S. sales of domestic light vehicles fell 28.4 percent from last September while foreign sales declined 13.9 percent. The foreign share of U.S. light vehicle sales rose to 25.4 percent in September 2021 – up 3.3 percentage points.
- Auto sales decreased 30.1 percent compared to last September, while light truck sales declined 23.8 percent from September 2020. Year-over-year (y-o-y), heavy truck sales fell 1.5 percent from last September.
- In August 2021 (the most recent month for which inventory data are available), retail vehicle inventories were down 16.7 percent from last August – the 17th straight year-over-year drop.

Year-to-Date September 2021 Light Vehicle Sales Still Up from Last Year



Motor Vehicle Sales Statistics

(Millions, Seasonally Adjusted Rates, unless otherwise specified)

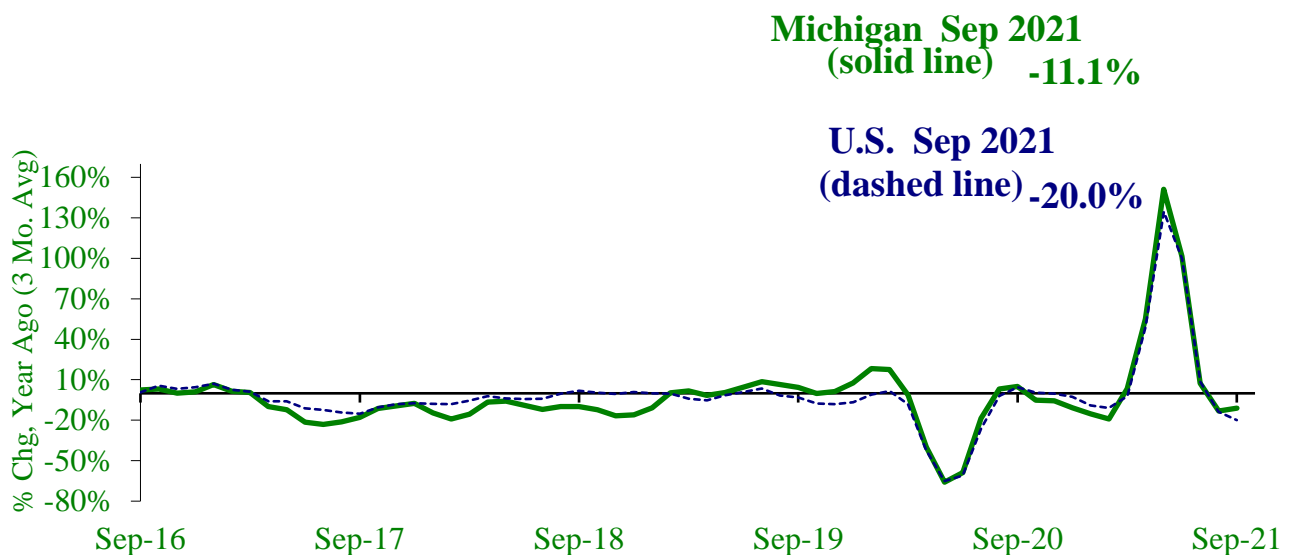
Motor Vehicle Sales ^(c)	2020	Jul	Aug	Sep	3 Month	Sep	Sep
	Total	2021	2021	2021	Average	Chg fr Yr Ago Level	Chg fr Yr Ago %
Autos	3.4	3.5	3.0	2.6	3.0	(1.1)	-30.1%
Domestics	2.6	2.5	2.1	1.8	2.1	(1.1)	-37.7%
Imports	0.8	1.0	0.9	0.8	0.9	(0.1)	-6.0%
Import Share	24.3%	28.5%	30.2%	32.4%	30.2%	8.3% pts	
Light Trucks	11.1	11.2	10.0	9.6	10.3	(3.0)	-23.8%
Domestics	8.6	8.6	7.7	7.3	7.9	(2.5)	-25.7%
Imports	2.4	2.6	2.3	2.2	2.4	(0.4)	-16.5%
Import Share	22.1%	23.5%	22.9%	23.5%	23.3%	2.0% pts	
Total Light Vehicles	14.5	14.7	13.0	12.2	13.3	(4.1)	-25.2%
Heavy Trucks	0.4	0.4	0.4	0.4	0.4	(0.0)	-1.5%
Total Vehicles	14.9	15.1	13.4	12.6	13.7	(4.1)	-24.6%

Retail Inventories, Motor Vehicle and Parts Dealers (billions of dollars) ^(d)

	2020	Jun-21	Jul-21	Aug-21	3 Month	Chg fr	Chg fr
	Average	Jun-21	Jul-21	Aug-21	Average	Year Ago Level	Year Ago %
Inventories	\$200.9	\$152.9	\$153.2	\$151.1	\$152.4	-\$30.3	-16.7%
Inventory/Sales Ratio	2.01	1.16	1.21	1.24	1.20	-0.41	

- Michigan vehicle production declined 1.1 percent from September 2020 while national vehicle production fell 24.5 percent from last September. In September 2021, Michigan vehicle production totaled 141,830 units.
- The impact of the semi-conductor shortage continues to be evident in the three-month average year-over-year comparison.
- Comparing the three-month average of vehicle production in July-September 2021 to production in July-September 2020, Michigan's average production was down 11.1 percent and average production was down 20.0 percent nationally.

Michigan Three-Month Average Vehicle Production Down from Last Year



Motor Vehicle Production Statistics

(Thousands, unless otherwise specified)

	2020 Monthly <u>Average</u>	Jul <u>2021</u>	Aug <u>2021</u>	Sep <u>2021</u>	3 Month <u>Average</u>	Sep Level Chg <u>fr Yr Ago</u>	Sep % Chg <u>fr Yr Ago</u>
U.S. Production ^(e)							
Autos	161.9	123.0	135.2	97.3	118.5	(106.9)	-52.4%
Trucks	571.7	509.5	683.1	576.6	589.7	(111.4)	-16.2%
Total	733.6	632.5	818.3	673.9	708.2	(218.3)	-24.5%
Michigan Production ^(f)							
Autos	14.0	9.6	12.6	6.3	9.5	(13.8)	-68.5%
Trucks	222.7	110.9	141.5	135.5	129.3	12.2	9.9%
Total	236.7	120.5	154.1	141.8	138.8	(1.6)	-1.1%
Michigan as % of U.S.	32.3%	19.0%	18.8%	21.0%	19.6%	4.9% pts	

U.S. Economic Conditions

Page 6

	<u>Jun-21</u>	<u>Jul-21</u>	<u>Aug-21</u>	<u>Sep-21</u>	<u>Change from Year Ago</u>
KEY ECONOMIC INDICATORS					
Consumer Sentiment ^(h)	85.5	81.2	70.3	72.8	-7.6 points
ISM Manufacturing Index ⁽ⁱ⁾	60.6	59.5	59.9	61.1	5.4 points
ISM Non Manufacturing Index ⁽ⁱ⁾	60.1	64.1	61.7	61.9	4.7 points
INFLATION ^(k)					
1982-84 = 100 (CPI)	<u>Jun-21</u>	<u>Jul-21</u>	<u>Aug-21</u>	<u>Sep-21</u>	<u>Change from Year Ago</u>
Nov 2009 = 100 (PPI)					
U.S. Consumer Price Index	271.7	273.0	273.6	274.3	5.4%
Detroit CPI	248.9	NA	250.0	NA	3.9%
U.S. Producer Price Index	126.3	127.6	128.3	128.9	8.6%
INTEREST RATES					
90 Day T-Bill ^(l)	0.04%	0.05%	0.05%	0.04%	-0.07% points
10 Year Treasury Securities ^(l)	1.52%	1.32%	1.28%	1.37%	0.69% points
INDUSTRIAL PRODUCTION ^(l)	100.4	101.4	101.3	100.0	4.6%
CAPACITY UTILIZATION ^(l)	75.6%	76.3%	76.2%	75.2%	3.1% points
RETAIL SALES ^(d)	\$625.4	\$615.3	\$620.9	\$625.4	13.9%
HOUSING STARTS and SALES					
(Millions Annual Rate)	<u>Jun-21</u>	<u>Jul-21</u>	<u>Aug-21</u>	<u>Sep-21</u>	<u>% Change From Year Ago</u>
Housing Starts ^(d)	1.657	1.562	1.580	1.555	7.4%
Existing Home Sales ^(m)	5.870	6.000	5.880	6.290	-2.3%
DURABLE GOODS ORDERS ^(d)	\$257.7	\$258.8	\$262.3	\$261.3	15.3%
PERSONAL INCOME ^(c)					
(Billions, Seasonally Adj & Annualized)	<u>2020.3</u>	<u>2020.4</u>	<u>2021.1</u>	<u>2021.2</u>	<u>% Change From Year Ago</u>
Michigan	\$530.8	\$517.8	\$590.0	\$545.8	-5.8%
U.S.	\$19,755.2	\$19,522.9	\$21,849.0	\$20,548.9	1.1%
GROSS DOMESTIC PRODUCT ^(c)					
(Billions of Chained 2012 Dollars, Seasonally Adj & Annualized)	<u>2020.4</u>	<u>2021.1</u>	<u>2021.2</u>	<u>2021.3</u>	<u>Annualized % Chg From Last Qtr</u>
	\$18,767.8	\$19,055.7	\$19,368.3	\$19,465.2	2.0%

SOURCES AND NOTES

- (a) Seasonally adjusted. Sources: Bureau of Labor Statistics, U.S. Department of Labor and Michigan Department of Technology, Management and Budget.
- (b) Bureau of Labor Statistics, U.S. Department of Labor (BLS 790).
- (c) Bureau of Economic Analysis, U.S. Department of Commerce.
- (d) Bureau of the Census, U.S. Department of Commerce. Seasonally adjusted.
- (e) Automotive News.
- (f) Michigan Department of Treasury.
- (g) Michigan Department of Technology, Management and Budget.
- (h) University of Michigan Survey of Consumers.
- (i) Institute for Supply Management (ISM), formerly NAPM.
- (j) The Conference Board.
- (k) Bureau of Labor Statistics, U.S. Department of Labor.
- (l) Seasonally adjusted rates (except interest rates). Federal Reserve System Board of Governors. 2017 equals 100. Treasury bill rate (secondary market).
- (m) National Association of Realtors.