

OHIO

LEADING INDICATORS

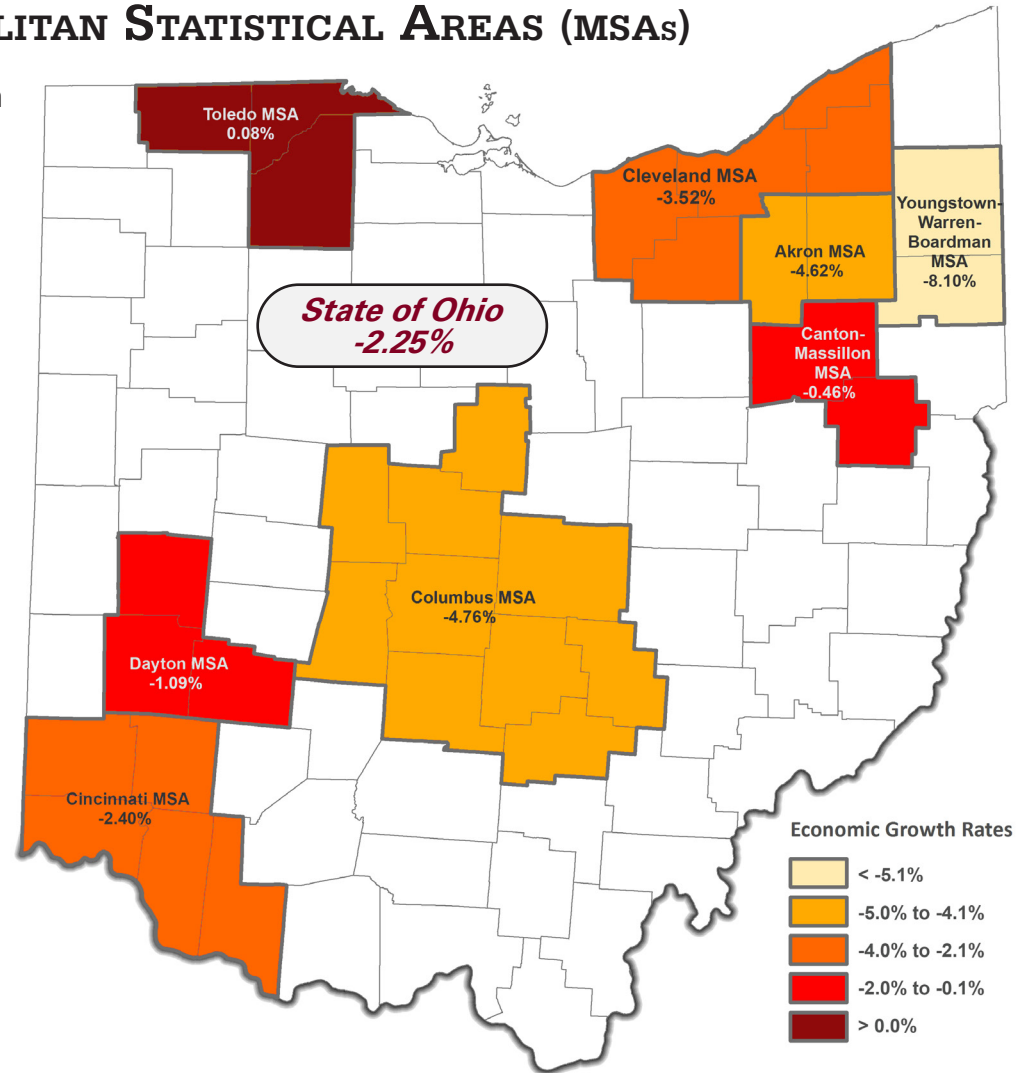
MARCH 2020

PREDICTED ANNUALIZED GROWTH RATES FOR OHIO AND SELECT METROPOLITAN STATISTICAL AREAS (MSAs)

The Ohio Leading Indicators report uses an annualized growth rate to forecast employment growth for Ohio and its eight largest MSAs for the next six months. The model examines seasonally adjusted total nonfarm employment. These data are seasonally adjusted by the leading indicators model and should not be compared to other seasonally adjusted data.

Ohio's forecasted March 2020 annualized employment growth rate is -2.25 percent. The following MSAs are also predicted to decline: the Youngstown-Warren-Boardman MSA at -8.10 percent; the Columbus MSA at -4.76 percent; the Akron MSA at -4.62 percent; the Cleveland-Elyria MSA at -3.52 percent; the Cincinnati MSA at -2.40 percent; the Dayton MSA at -1.09 percent; and the Canton-Massillon MSA at -0.46 percent. The Toledo MSA is predicted to increase by 0.08 percent.

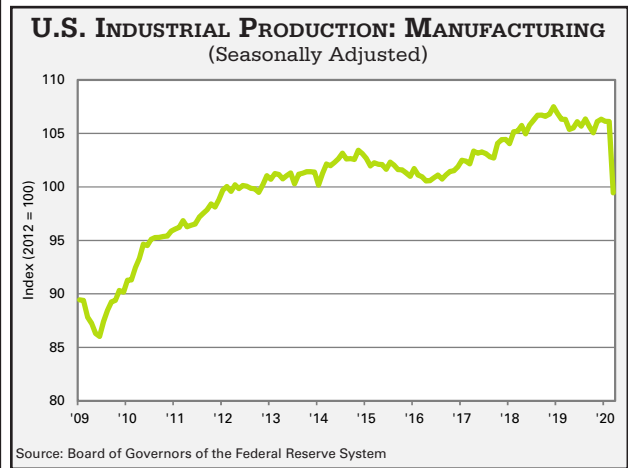
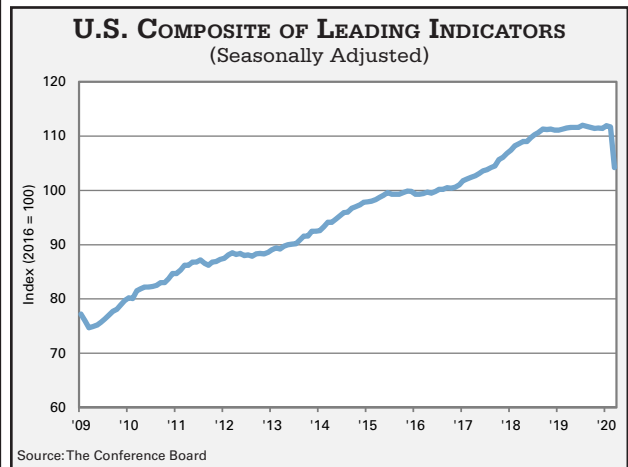
Coronavirus (COVID-19) Impact: The Ohio Leading Indicators are based on changes in five different economic measures (see page 3). COVID-19 has had devastating effects worldwide and as Ohio and the U.S. instituted efforts to contain the spread of the virus, the economic situation changed very quickly. While this report shows the beginning effects of the illness and efforts to contain it, we expect the April Leading Indicators report will more fully represent the effects of those efforts on the short-term employment forecast.



LEADING INDICATORS AND COMPONENTS

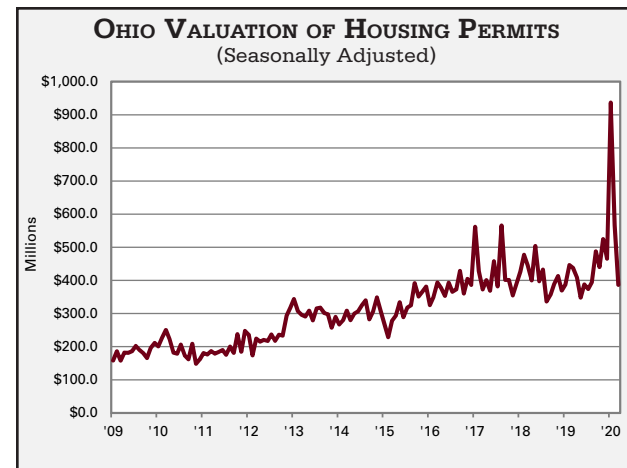
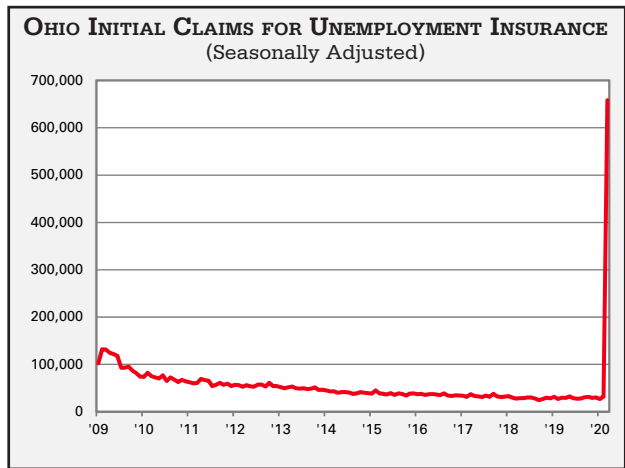
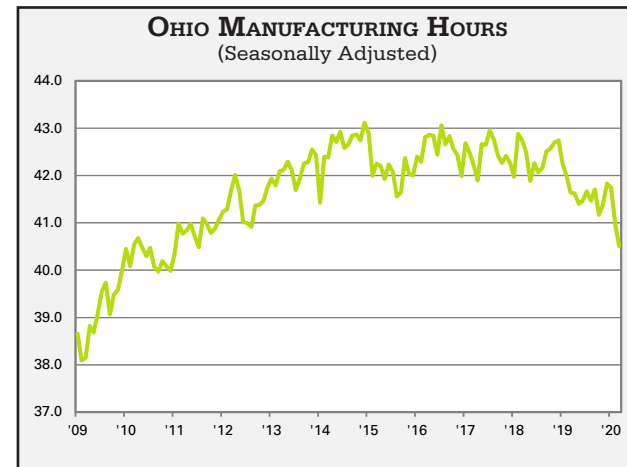
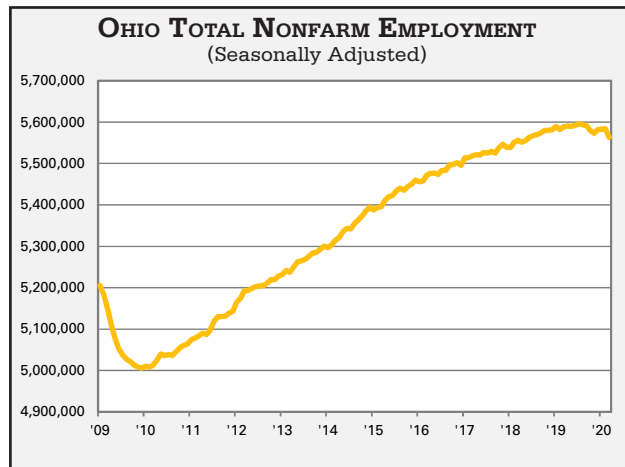
UNITED STATES

The U.S. Composite of Leading Indicators decreased 6.7 percent from February and decreased 6.5 percent from March 2019. The U.S. industrial production in manufacturing decreased 6.2 percent over the month and 6.4 percent over the year.



OHIO

Ohio's seasonally adjusted total nonfarm employment was 5,563,100 in March 2020, down 0.4 percent over the month and down 0.5 percent over the year. Initial unemployment claims increased 1,954.6 percent from February and 2,126.4 percent from March 2019. Ohio's average weekly manufacturing hours decreased to 40.5 in March. Housing permit valuations decreased 31.7 percent from the previous month and decreased 11.6 percent from the previous year.



LEADING INDICATORS AND COMPONENTS

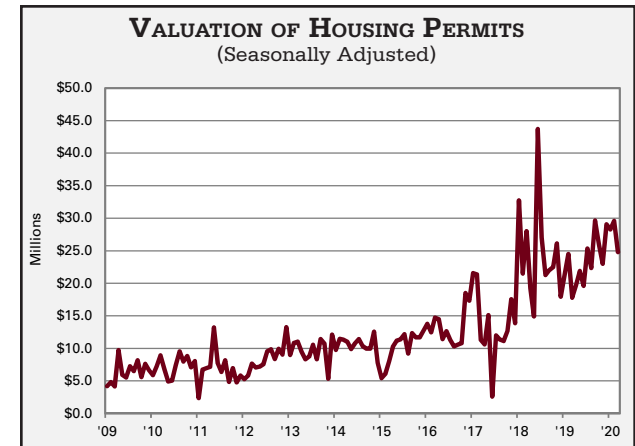
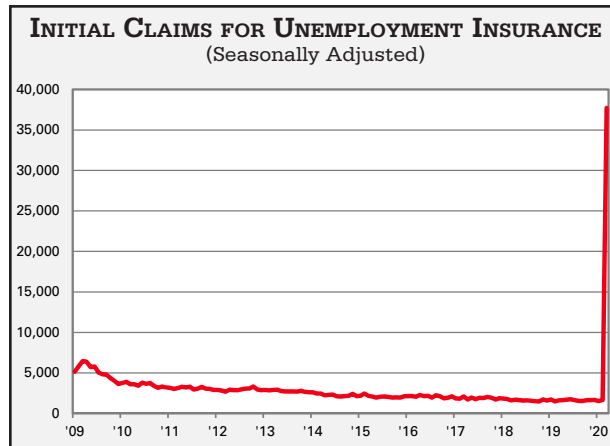
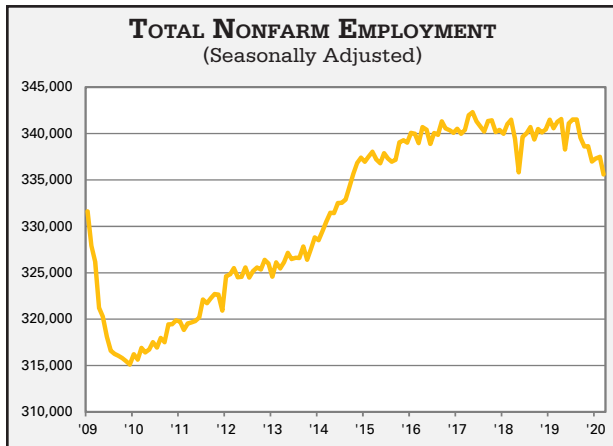
UNITED STATES	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Percent Change	
	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2020	2020	2020	Month	Year
U.S. Composite Index of Leading Indicators (2016 = 100) (Seasonally Adjusted)	111.5	111.6	111.6	111.6	112.0	111.8	111.6	111.4	111.5	111.4	111.9	111.7	104.2	-6.7%	-6.5%
U.S. Industrial Production: Manufacturing (2012 = 100) (Seasonally Adjusted)	106.3	105.4	105.5	106.1	105.7	106.4	105.7	105.1	106.1	106.3	106.1	106.1	99.5	-6.2%	-6.4%
OHIO	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Percent Change	
	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2020	2020	2020	Month	Year
Nonagricultural Wage and Salary Employment (Seasonally Adjusted in Thousands)	5,588.3	5,590.5	5,589.7	5,591.9	5,595.8	5,593.6	5,591.4	5,579.9	5,573.1	5,581.8	5,582.8	5,584.0	5,563.1	-0.4%	-0.5%
Initial Claims for Unemployment Insurance (Seasonally Adjusted)	29,559	29,371	32,542	28,796	27,604	27,765	30,698	31,386	29,377	30,212	26,942	32,031	658,101	1,954.6%	2,126.4%
Average Weekly Hours for Manufacturing (Seasonally Adjusted)	41.6	41.6	41.4	41.5	41.7	41.5	41.7	41.2	41.4	41.8	41.7	41.0	40.5	-1.2%	-2.6%
Valuation of Housing Permits (Seasonally Adjusted in Millions)	\$437.6	\$409.3	\$348.1	\$387.6	\$374.4	\$394.7	\$487.6	\$440.4	\$524.4	\$465.9	\$936.6	\$565.9	\$386.7	-31.7%	-11.6%

AKRON METROPOLITAN STATISTICAL AREA

Portage and Summit Counties

The leading indicator for the Akron metropolitan area for March 2020 forecasts negative employment growth at an annual rate of -4.62 percent for the next six months. Seasonally adjusted nonfarm payroll employment was 335,600 in March, down 0.6 percent from February.

The number of initial claims for unemployment insurance in March was 37,722 claims, 2,155.5 percent more than last month and 2,247.2 percent more than last year. The valuation of permits for new housing construction in March was \$24.8 million, a 16.2 percent decrease from February but a 39.3 percent increase from March 2019.



AKRON	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Percent Change	
	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2020	2020	2020	Month	Year
Nonagricultural Wage and Salary Employment (Seasonally Adjusted in Thousands)	341.3	341.6	338.3	341.1	341.5	341.5	339.6	338.6	338.6	337.0	337.3	337.5	335.6	-0.6%	-1.7%
Initial Claims for Unemployment Insurance (Seasonally Adjusted)	1,607	1,644	1,697	1,757	1,634	1,549	1,539	1,643	1,646	1,668	1,520	1,672	37,722	2,155.5%	2,247.2%
Valuation of Housing Permits (Seasonally Adjusted in Millions)	\$17.8	\$19.7	\$21.9	\$19.6	\$25.3	\$22.3	\$29.6	\$26.0	\$23.0	\$29.1	\$28.3	\$29.6	\$24.8	-16.2%	39.3%
Average Weekly Hours for Manufacturing* (Seasonally Adjusted)	41.6	41.6	41.4	41.5	41.7	41.5	41.7	41.2	41.4	41.8	41.7	41.0	40.5	-1.2%	-2.6%

*In 2005, the BLS stopped producing manufacturing hours for Akron, Canton, Dayton, Toledo, and Youngstown. Starting in February 2005, data for the manufacturing hours for those MSAs are the state values.

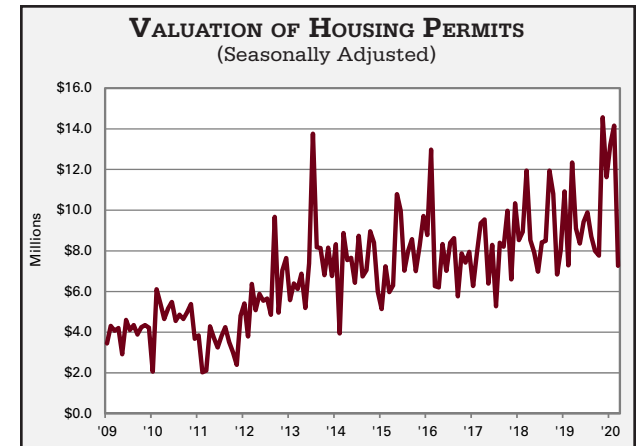
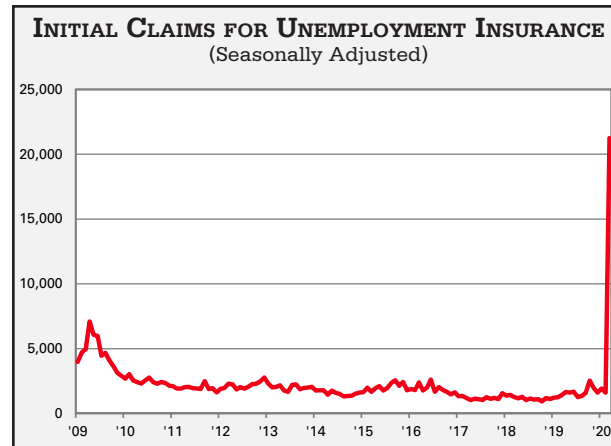
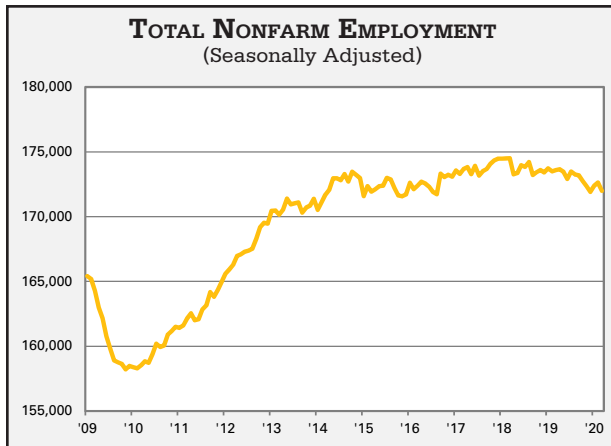
CANTON-MASSILLON METROPOLITAN STATISTICAL AREA

Carroll and Stark Counties



The leading indicator for the Canton-Massillon metropolitan area for March 2020 forecasts negative employment growth at an annual rate of -0.46 percent for the next six months. Seasonally adjusted nonfarm payroll employment was 172,000 in March, down 0.3 percent from February.

The number of initial claims for unemployment insurance in March was 21,244 claims, 1,220.6 percent more than the number of claims filed last month and 1,392.8 percent more than last year. The valuation of permits for new housing construction in March was \$7.3 million, a 48.2 percent decrease from one month ago and a 40.7 percent decrease from one year ago.



CANTON	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Percent Change	
	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2020	2020	2020	Month	Year
Nonagricultural Wage and Salary Employment (Seasonally Adjusted in Thousands)	173.6	173.7	173.5	172.9	173.5	173.3	173.2	172.7	172.4	171.9	172.4	172.6	172.0	-0.3%	-0.9%
Initial Claims for Unemployment Insurance (Seasonally Adjusted)	1,423	1,653	1,601	1,669	1,254	1,335	1,580	2,518	1,959	1,610	1,912	1,609	21,244	1,220.6%	1,392.8%
Valuation of Housing Permits (Seasonally Adjusted in Millions)	\$12.3	\$9.1	\$8.4	\$9.4	\$9.9	\$8.7	\$8.0	\$7.8	\$14.6	\$11.6	\$13.2	\$14.1	\$7.3	-48.2%	-40.7%
Average Weekly Hours for Manufacturing* (Seasonally Adjusted)	41.6	41.6	41.4	41.5	41.7	41.5	41.7	41.2	41.4	41.8	41.7	41.0	40.5	-1.2%	-2.6%

*In 2005, the BLS stopped producing manufacturing hours for Akron, Canton, Dayton, Toledo, and Youngstown. Starting in February 2005, data for the manufacturing hours for those MSAs are the state values.

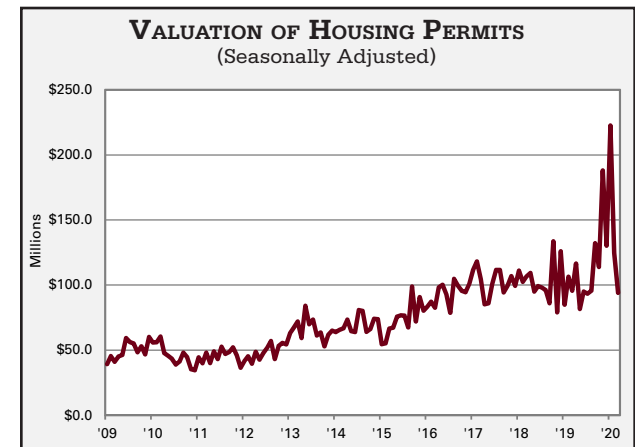
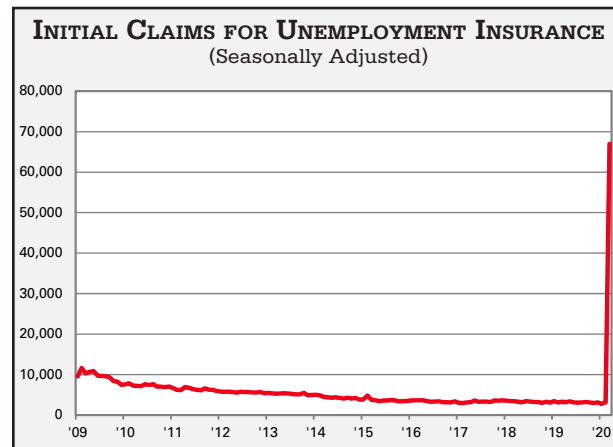
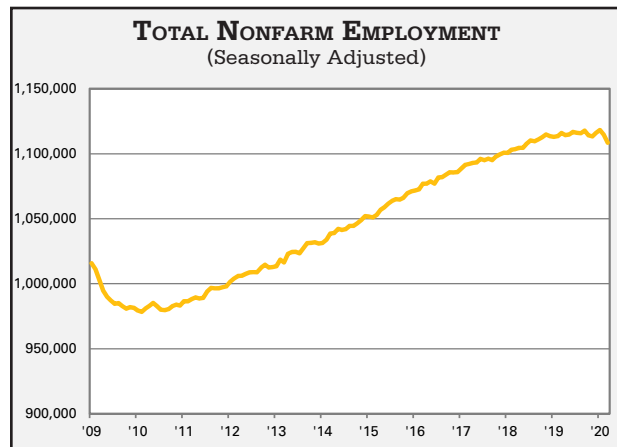
CINCINNATI METROPOLITAN STATISTICAL AREA

Brown, Butler, Clermont, Hamilton, and Warren Counties

This MSA also includes counties in Indiana and Kentucky (see page 12)

The leading indicator for the Cincinnati metropolitan area for March 2020 forecasts negative employment growth at an annual rate of -2.40 percent for the next six months. Seasonally adjusted nonfarm payroll employment was 1,108,500 in March, down 0.5 from February.

The number of initial claims for unemployment insurance in March was 66,991 claims, 2,026.2 percent more than last month and 1,918.6 percent more than last year. The valuation of permits for new housing construction in March was \$94.0 million, a 24.6 percent decrease from February and a 1.7 percent decrease from March 2019.



CINCINNATI	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Percent Change	
	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2020	2020	2020	Month	Year
Nonagricultural Wage and Salary Employment (Seasonally Adjusted in Thousands)	1,115.9	1,114.3	1,114.9	1,116.8	1,116.2	1,115.8	1,117.7	1,114.1	1,113.3	1,116.2	1,118.2	1,114.6	1,108.5	-0.5%	-0.7%
Initial Claims for Unemployment Insurance (Seasonally Adjusted)	3,319	3,169	3,422	3,117	3,106	3,126	3,223	3,136	2,970	3,120	2,770	3,151	66,991	2,026.2%	1,918.6%
Valuation of Housing Permits (Seasonally Adjusted in Millions)	\$95.6	\$116.4	\$81.6	\$95.0	\$93.4	\$95.6	\$132.2	\$113.8	\$188.0	\$130.2	\$222.5	\$124.6	\$94.0	-24.6%	-1.7%
Average Weekly Hours for Manufacturing (Seasonally Adjusted)	44.7	44.7	44.5	43.9	42.9	43.7	44.0	43.7	43.5	44.5	44.6	43.9	41.5	-5.5%	-7.2%

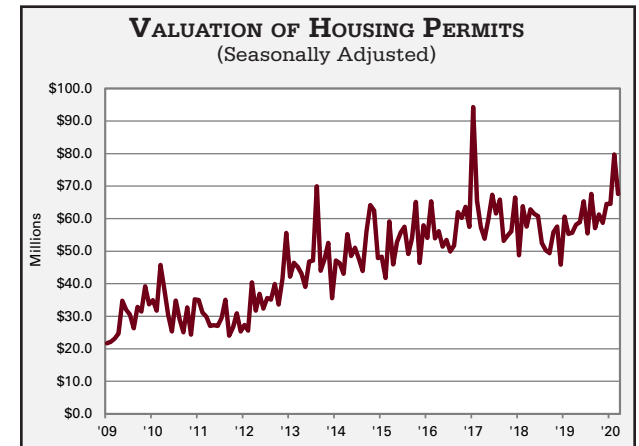
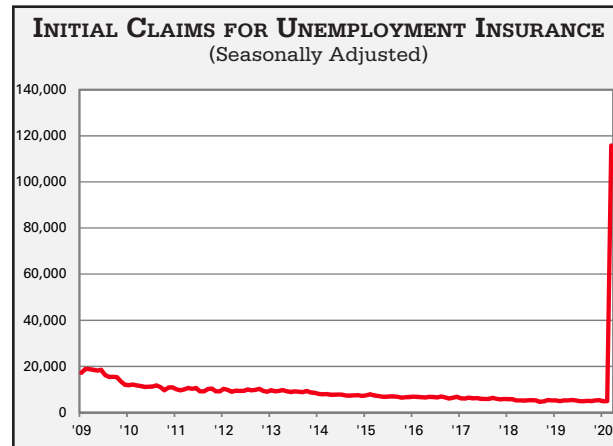
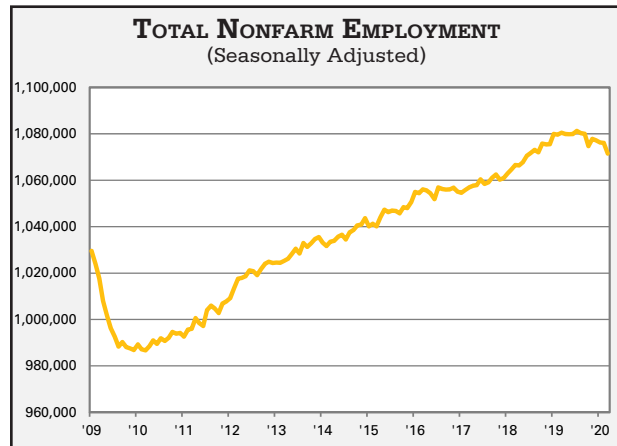
CLEVELAND-ELYRIA METROPOLITAN STATISTICAL AREA

Cuyahoga, Geauga, Lake, Lorain, and Medina Counties



The leading indicator for the Cleveland-Elyria metropolitan area for March 2020 forecasts negative employment growth at an annual rate of -3.52 percent for the next six months. Seasonally adjusted nonfarm payroll employment was 1,071,600 in March, a 0.4 percent decrease from February.

The number of initial claims for unemployment insurance in March was 115,794 claims, 2,238.0 percent more than the number of claims filed last month and 2,125.3 percent more than last year. The valuation of permits for new housing construction in March was \$67.6 million, a 15.2 percent decrease from February but a 21.4 percent increase from March 2019.



CLEVELAND	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Percent Change	
	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2020	2020	2020	Month	Year
Nonagricultural Wage and Salary Employment (Seasonally Adjusted in Thousands)	1,080.4	1,079.9	1,079.9	1,079.9	1,081.3	1,080.3	1,080.0	1,074.7	1,077.8	1,077.2	1,076.3	1,076.1	1,071.6	-0.4%	-0.8%
Initial Claims for Unemployment Insurance (Seasonally Adjusted)	5,204	5,199	5,375	5,195	4,913	4,852	5,072	4,923	5,196	5,355	4,896	4,953	115,794	2,238.0%	2,125.3%
Valuation of Housing Permits (Seasonally Adjusted in Millions)	\$55.7	\$58.1	\$58.9	\$65.3	\$55.5	\$67.6	\$57.1	\$61.3	\$58.7	\$64.5	\$64.5	\$79.7	\$67.6	-15.2%	21.4%
Average Weekly Hours for Manufacturing (Seasonally Adjusted)	41.2	41.4	41.3	41.3	41.1	41.2	41.5	41.2	41.0	40.6	40.4	40.0	39.5	-1.3%	-4.1%

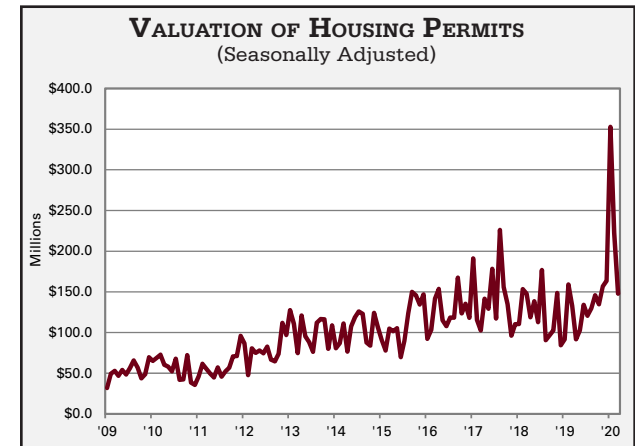
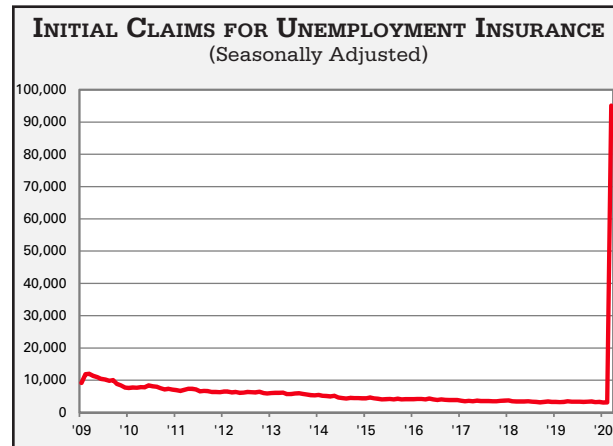
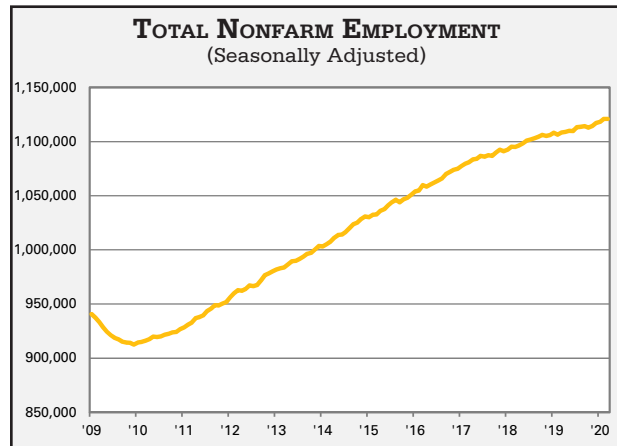
COLUMBUS METROPOLITAN STATISTICAL AREA

Delaware, Fairfield, Franklin, Hocking, Licking, Madison, Morrow, Perry, Pickaway, and Union Counties



The leading indicator for the Columbus metropolitan area for March 2020 forecasts negative employment growth at an annual rate of -4.76 percent for the next six months. Seasonally adjusted nonfarm payroll employment was 1,120,900 in March, unchanged from February.

The number of initial claims for unemployment insurance in March was 95,077 claims, 2,921.4 percent more than the number of claims filed last month and 2,782.7 percent more than last year. The valuation of permits for new housing construction in March was \$147.9 million, 33.5 percent less than February but 11.4 percent more than March 2019.



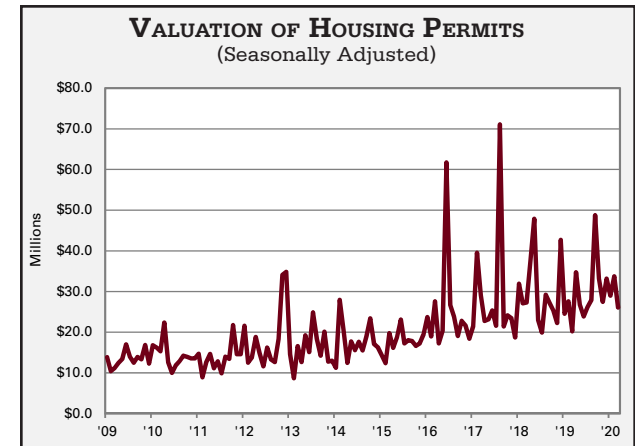
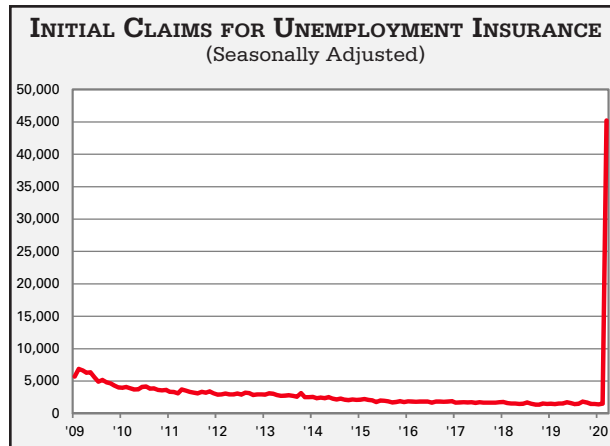
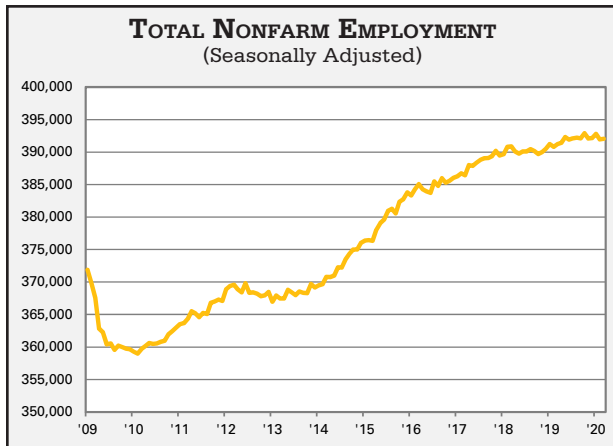
COLUMBUS	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Percent Change	
	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2020	2020	2020	Month	Year
Nonagricultural Wage and Salary Employment (Seasonally Adjusted in Thousands)	1,108.3	1,108.9	1,110.0	1,109.8	1,113.4	1,113.6	1,114.3	1,112.8	1,114.4	1,117.1	1,118.2	1,120.9	1,120.9	0.0%	1.1%
Initial Claims for Unemployment Insurance (Seasonally Adjusted)	3,298	3,477	3,314	3,318	3,346	3,261	3,358	3,375	3,235	3,266	3,079	3,147	95,077	2,921.4%	2,782.7%
Valuation of Housing Permits (Seasonally Adjusted in Millions)	\$132.8	\$91.8	\$102.8	\$133.9	\$120.7	\$129.8	\$145.6	\$134.7	\$156.7	\$163.7	\$352.7	\$222.3	\$147.9	-33.5%	11.4%
Average Weekly Hours for Manufacturing (Seasonally Adjusted)	41.3	41.3	42.2	41.1	40.9	40.9	41.5	38.9	40.0	40.1	38.5	39.0	38.6	-1.0%	-6.5%

DAYTON METROPOLITAN STATISTICAL AREA

Greene, Miami, and Montgomery Counties

The leading indicator for the Dayton metropolitan area for March 2020 forecasts negative employment growth at an annual rate of -1.09 percent for the next six months. Seasonally adjusted nonfarm payroll employment was 392,000 in March, unchanged from February.

The number of initial claims for unemployment insurance in March was 45,208 claims, 2,905.3 percent more than the number of claims filed last month and 2,819.3 percent more than last year. The valuation of permits for new housing construction in March was \$26.0 million, a 22.8 percent decrease from February but a 28.7 percent increase from March 2019.



DAYTON	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Percent Change	
	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2020	2020	2020	Month	Year
Nonagricultural Wage and Salary Employment (Seasonally Adjusted in Thousands)	391.2	391.4	392.3	391.9	392.1	392.2	392.1	392.9	392.1	392.2	392.8	392.0	392.0	0.0%	0.2%
Initial Claims for Unemployment Insurance (Seasonally Adjusted)	1,549	1,525	1,741	1,604	1,433	1,515	1,831	1,689	1,467	1,479	1,397	1,504	45,208	2,905.3%	2,819.3%
Valuation of Housing Permits (Seasonally Adjusted in Millions)	\$20.2	\$34.7	\$26.7	\$23.9	\$26.2	\$27.9	\$48.8	\$33.2	\$27.5	\$33.2	\$29.0	\$33.7	\$26.0	-22.8%	28.7%
Average Weekly Hours for Manufacturing* (Seasonally Adjusted)	41.6	41.6	41.4	41.5	41.7	41.5	41.7	41.2	41.4	41.8	41.7	41.0	40.5	-1.2%	-2.6%

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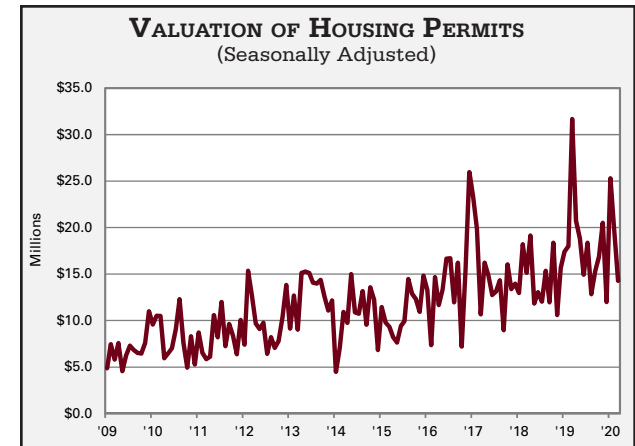
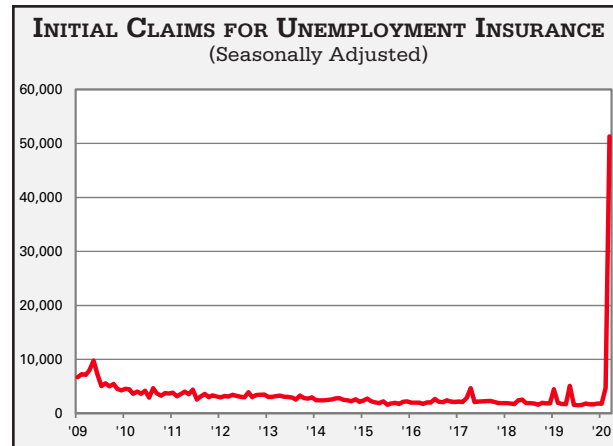
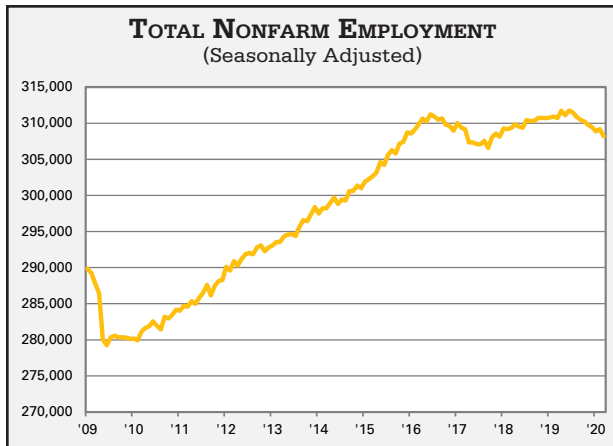
TOLEDO METROPOLITAN STATISTICAL AREA

Fulton, Lucas, and Wood Counties



The leading indicator for the Toledo metropolitan area for March 2020 forecasts employment growth at an annual rate of 0.08 percent for the next six months. Seasonally adjusted nonfarm payroll employment was 308,200 in March, a 0.3 percent decrease from February.

The number of initial claims for unemployment insurance in March was 51,318 claims, 969.1 percent more than the number of claims filed last month and 2,790.3 percent more than last year. The valuation of permits for new housing construction in March was \$14.3 million, a 27.4 percent decrease from February and a 54.9 percent decrease from March 2019.



TOLEDO	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Percent Change	
	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2020	2020	2020	Month	Year
Nonagricultural Wage and Salary Employment (Seasonally Adjusted in Thousands)	310.7	311.7	311.1	311.7	311.5	310.8	310.5	310.2	309.8	309.4	308.9	309.2	308.2	-0.3%	-0.8%
Initial Claims for Unemployment Insurance (Seasonally Adjusted)	1,776	1,732	5,092	1,595	1,524	1,559	1,852	1,680	1,692	1,837	1,788	4,800	51,318	969.1%	2,790.3%
Valuation of Housing Permits (Seasonally Adjusted in Millions)	\$31.7	\$20.7	\$18.8	\$14.9	\$18.4	\$12.8	\$15.3	\$16.9	\$20.5	\$12.0	\$25.3	\$19.7	\$14.3	-27.4%	-54.9%
Average Weekly Hours for Manufacturing* (Seasonally Adjusted)	41.6	41.6	41.4	41.5	41.7	41.5	41.7	41.2	41.4	41.8	41.7	41.0	40.5	-1.2%	-2.6%

*In 2005, the BLS stopped producing manufacturing hours for Akron, Canton, Dayton, Toledo, and Youngstown. Starting in February 2005, data for the manufacturing hours for those MSAs are the state values.

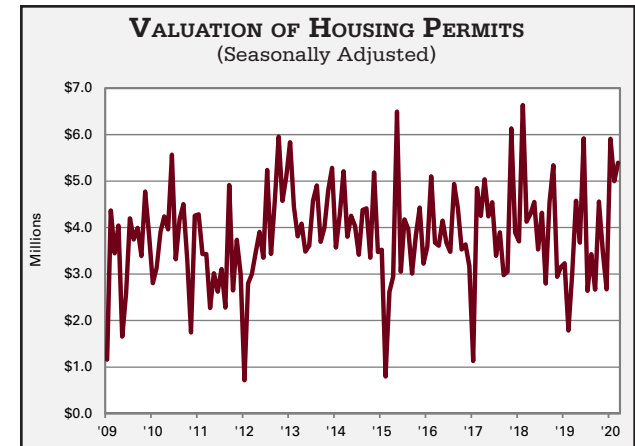
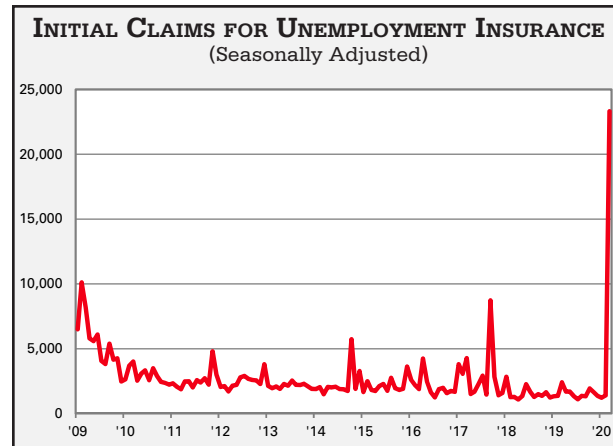
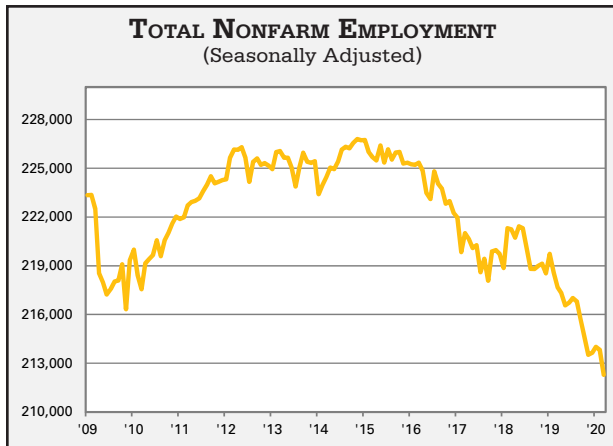
YOUNGSTOWN-WARREN-BOARDMAN METROPOLITAN STATISTICAL AREA

Mahoning and Trumbull Counties in Ohio and Mercer County in Pennsylvania



The leading indicator for the Youngstown-Warren-Boardman metropolitan area for March 2020 forecasts negative employment growth at an annual rate of -8.10 percent for the next six months. Seasonally adjusted nonfarm payroll employment was 212,300 in March, a 0.7 percent decrease from February.

The number of initial claims for unemployment insurance in March was 23,324 claims, 1,585.5 percent more than the number of claims filed last month and 867.9 percent more than last year. The valuation of permits for new housing construction in March was \$5.4 million, an 8.0 percent increase from February and an 80.0 percent increase from March 2019.



YOUNGSTOWN	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Percent Change	
	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2020	2020	2020	Month	Year
Nonagricultural Wage and Salary Employment (Seasonally Adjusted in Thousands)	217.7	217.3	216.6	216.7	217.0	216.8	215.7	214.6	213.5	213.6	214.0	213.8	212.3	-0.7%	-2.5%
Initial Claims for Unemployment Insurance (Seasonally Adjusted)	2,410	1,690	1,681	1,339	1,103	1,361	1,322	1,926	1,634	1,364	1,206	1,384	23,324	1,585.5%	867.9%
Valuation of Housing Permits (Seasonally Adjusted in Millions)	\$3.0	\$4.6	\$3.7	\$5.9	\$2.6	\$3.4	\$2.7	\$4.6	\$3.5	\$2.7	\$5.9	\$5.0	\$5.4	8.0%	80.0%
Average Weekly Hours for Manufacturing* (Seasonally Adjusted)	41.6	41.6	41.4	41.5	41.7	41.5	41.7	41.2	41.4	41.8	41.7	41.0	40.5	-1.2%	-2.6%

*In 2005, the BLS stopped producing manufacturing hours for Akron, Canton, Dayton, Toledo, and Youngstown. Starting in February 2005, data for the manufacturing hours for those MSAs are the state values.

OHIO METROPOLITAN STATISTICAL AREAS (MSAs)

Developed by the U.S. Office of Management and Budget, Metropolitan Statistical Areas are integrated geographic regions comprised of at least one city or urban area (with a population of at least 50,000) and adjacent communities. Metropolitan Statistical Areas make it possible for federal statistical agencies to utilize the same boundaries when publishing statistical data. These are definitions based on analysis of 2010 Census data.

- A. Akron:** Portage and Summit counties
- B. Canton-Massillon:** Carroll and Stark counties
- C. Cincinnati:** Brown, Butler, Clermont, Hamilton, and Warren counties in Ohio; Dearborn, Ohio, and Union counties in Indiana; Boone, Bracken, Campbell, Gallatin, Grant, Kenton, and Pendleton counties in Kentucky
- D. Cleveland-Elyria:** Cuyahoga, Geauga, Lake, Lorain, and Medina counties
- E. Columbus:** Delaware, Fairfield, Franklin, Hocking, Licking, Madison, Morrow, Perry, Pickaway, and Union counties
- F. Dayton:** Greene, Miami, and Montgomery counties
- G. Huntington-Ashland:** Lawrence County in Ohio; Boyd and Greenup counties in Kentucky; Cabell, Lincoln, Putnam, and Wayne counties in West Virginia
- H. Lima:** Allen County
- I. Mansfield:** Richland County
- J. Springfield:** Clark County
- K. Toledo:** Fulton, Lucas, and Wood counties
- L. Weirton-Steubenville:** Jefferson County in Ohio; Brooke and Hancock counties in West Virginia
- M. Wheeling:** Belmont County in Ohio; Marshall and Ohio counties in West Virginia
- N. Youngstown-Warren-Boardman:** Mahoning and Trumbull counties in Ohio; Mercer County in Pennsylvania



TECHNICAL NOTES

The leading economic indicators for Ohio and the eight largest Metropolitan Statistical Areas (MSAs) are designed to anticipate changes in area economies. The Gross National Product is the accepted measure of economic activity at the national level, but there are no monthly measures of the dollar value of goods and services at the state and metropolitan levels. Instead, the Ohio leading indicators forecast the growth rates of total nonfarm employment for each area.

The leading indicators are generated with vector auto regression models using five inputs. The inputs are statistically significant predictors of Ohio total nonfarm growth rates at the 90 percent confidence level.

The five inputs are:

- U.S. Leading Indicator (Source: The Conference Board, <https://www.conference-board.org/data/bcicountry.cfm?cid=1>)
- U.S. Industrial Production in the Manufacturing Sector (Source: Federal Reserve Bank of St. Louis, <https://fred.stlouisfed.org/series/IPMAN>)
- Unemployment Insurance Claims (Source: Ohio Department of Job and Family Services, <https://ohiolmi.com/home/UIclaims>)
- Housing Valuations (Source: U.S. Census Bureau, <https://www.census.gov/construction/bps/>)
- Manufacturing Hours (Source: Current Employment Statistics program, <https://ohiolmi.com/portals/206/CES/LMR.pdf>)

The models forecast growth rates for six time-horizons (one to six months); the published forecast is an annualized average of those forecasts. The models use rolling 120-month windows of data. Each month, a new month of data is added (the most current available) and the oldest month is dropped. This approach allows for possible structural changes in the economy over time. All data series are converted monthly growth rates using the first difference of the natural logarithms multiplied by 100. Seasonal adjustments are made within the models using the U.S. Census' X-13ARIMA-SEATS program; seasonally adjusted data from the leading indicator models will not match data from original sources.

The forecasting models for the Ohio leading indicators are 'real time' processes that do not build on previous forecasts. For this reason, the Ohio leading indicators should not be used as a time series. The models use data as they are available each month, including revisions to older data. For example, monthly data releases may be preliminary and later revised, other series are revised during annual 'benchmarking,' and occasionally a series may be reindexed to new time point. Some of these revisions could be substantial.

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- Partner with the workforce and economic development community.
- Develop and deploy new information solution tools and systems for the workforce and economic development community.
- Provide products and services that are customer- and demand-driven.
- Be known as an important and reliable source for information solutions that support workforce development goals and outcomes.

This periodical is published under the direction of Bureau Chief Coretta Pettway. For further information, visit <http://OhioLMI.com> or call the Ohio Bureau of Labor Market Information at **1-888-296-7541** option 6, or **(614) 752-9494**.

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